

Mr. Peter Campbell  
Division of Spill Prevention and Response  
Alaska Department of Environmental Conservation  
43335 Kalifornsky Beach Road  
Suite 11  
Soldotna, Alaska 99669

Arcadis U.S., Inc.  
801 Corporate Center Drive  
Suite 300  
Raleigh  
North Carolina 27607  
Tel 919 854 1282  
Fax 919 854 5448

Subject:  
Response to Comments  
ART Third Annual Monitoring Report  
General Electric Company, Kenai (Nikiski), Alaska

ENVIRONMENT

Date:  
February 28, 2019

Dear Mr. Campbell

Contact:  
Matthew Pelton

Arcadis U.S., Inc. (Arcadis) prepared this letter on behalf of the General Electric Company (GE) to respond to the Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) comments to the *ART Third Annual Monitoring Report, Former TBE Machine Shop Property, Mile 22.5 Kenai Spur Highway, Nikiski, Alaska* (Report). Upon review of the Report, ADEC noted that the cleanup levels presented in Table 2 were outdated. The Report has been revised to reflect the current cleanup levels found in 18 AAC 75 Article 3. The revised report is provided as an attachment to this letter

Phone:  
919.415.2308

Email:  
Matthew.Pelton  
@arcadis.com

Please do not hesitate to contact either myself or Bob Witsell with any questions regarding this revised Report.

Our ref:  
AP087239.2000

Sincerely,

**ARCADIS U.S., Inc.**

Arcadis U.S., Inc.



Matthew T. Pelton, P.E.  
Principal Environmental Engineer

Copies:

Bob Witsell (GE)

Enclosures:  
ART Third Annual Monitoring Report, Revision No. 1

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

Arcadis U.S., Inc.  
801 Corporate Center Drive  
Suite 300  
Raleigh  
North Carolina 27607  
Tel 919 854 1282  
Fax 919 854 5448

Subject:

ART Third Annual Monitoring Report, Revision No. 1  
Former TBE Machine Shop Property  
Mile 22.5 Kenai Spur Highway  
Nikiski, Alaska

ENVIRONMENT

Date:  
February 28, 2019

Dear Mr. Campbell:

Contact:  
Matthew Pelton

This letter report (Revision No. 1) has been prepared on behalf of the General Electric Company (GE) to document groundwater monitoring from September 2016 to March 2018 following shut down of the Accelerated Remediation Technologies (ART) in-well treatment system installed at the Former TBE Machine Shop Property located at 49200 Kenai Spur Highway (milepost 22.5) in Nikiski, Alaska (Figure 1). Monitoring included routine system inspections, maintenance, and groundwater gauging/sampling. Semi-annual monitoring was performed in accordance with the Alaska Department of Environmental Conservation- (ADEC-) approved *ART Second Annual Monitoring Report* (Arcadis U.S., Inc., August 2016). Pursuant to 18 Alaska Administrative Code 75.335, the work described in this report was conducted under the supervision of a Qualified Person. The report is organized to provide a summary of activities in the following sections:

Phone:  
919 415 2308

Email:  
Matthew.Pelton  
@arcadis.com

Our ref:  
B0031255

- System Operation and Maintenance
- Semi-annual Groundwater Monitoring
- Investigation-derived Waste (IDW) Management
- Data Quality Assurance (QA)/Quality Control (QC) Summary
- Recommendations
- Summary

## SYSTEM OPERATION AND MAINTENANCE

As presented in the *ART Post-System Startup Report* (Arcadis U.S., Inc. [Arcadis], August 2014), the ART system was installed in May 2014 and system startup activities were conducted in June 2014. The system was in continuous operation from June 18, 2014 to June 6, 2016, when the system was shutdown, with no significant issues noted and no down time, aside from routine maintenance periods. During the operation of the ART system, groundwater was sampled for volatile organic compounds (VOCs), diesel-range organics (DRO), gasoline-range organics (GRO), and field measurements of water quality parameters and ferrous iron on a quarterly basis. Based on these results, the system was shut down and post-shutdown monitoring was proposed in the *ART Second Annual Monitoring Report, Former TBE Machine Shop Property* (Arcadis, 2016). ADEC concurred with proposed post-shutdown monitoring in an e-mail from Mr. Pete Campbell (ADEC) to Mr. Matthew Pelton (Arcadis) dated September 9, 2016.

## SEMI-ANNUAL GROUNDWATER MONITORING

Semi-annual monitoring during the September 2016 to March 2018 reporting period included the following:

- Routine equipment servicing, as needed, including oil and filter changes and equipment cleaning; and
- Groundwater monitoring, as described further below.

Semi-annual groundwater sampling was conducted in September 2016, March 2017, September 2017, and March 2018. Each event included static water level measurements at all 11 monitoring wells shown on Figure 1, as well as groundwater sampling of five of the wells which have shown more frequent detections of constituents of concern and were monitored quarterly prior to system shutdown (MW-1, MW-2, MW-4, MW-5, and MW-7). These five wells were analyzed for VOCs, DRO, GRO, and field measurements of water quality parameters and ferrous iron. Additional samples were taken at the remaining six monitoring wells (MW-3, MW-6, MW-8, MW-9, MW-10, and MW-11) in March 2017 and 2018 for the constituents listed above.

Static water level measurements were recorded at each monitoring well prior to 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 VOCs by United States Environmental Protection Agency (USEPA) SW-846 Method 8260B, GRO by AK Method 101, and DRO by AK Method 102. A summary of all groundwater data to date since baseline sampling in 2014, conducted shortly before system start is provided in Table 2. Copies of the laboratory reports from the September 2016 – March 2018 monitoring period are provided in Attachment 1. Laboratory Data Review Checklists are provided in Attachment 2.

Recent groundwater data are generally consistent with historical groundwater concentrations for VOCs in monitoring wells MW-1, MW-4, and MW-7. Groundwater concentrations at most wells remain below or within one order of magnitude of the cleanup levels. Tetrachloroethene (PCE) and trichloroethene (TCE)

decreased in monitoring wells MW-2 and MW-5 concurrent with the first year of the ART remedial program. However, increases in cis-1,2-dichloroethene (cis-DCE) concentration in these same wells indicates PCE and TCE concentration reductions were likely due primarily to anaerobic reductive dechlorination, not removal via the ART system. The anaerobic nature of the reductive dechlorination process indicates that these concentration changes are likely not directly related to the operation of the ART system, which would be expected to create more aerobic conditions in the treated wells (and therefore inhibit reductive dechlorination). The cis-DCE values, except possibly at MW-1, have remained stable during the September 2016 – March 2018 monitoring period. At MW-1, cis-DCE appears to be increasing since shutdown of the ART system. This is consistent with maintenance of a more consistently anaerobic environment due to the lack of oxygen introduction via the ART system operation. GRO and DRO have remained below regulatory levels in MW-5 through this monitoring period. MW-5 is the primary well where these compounds have historically been present at elevated levels. Concentrations of VOCs, GRO, and DRO remained below regulatory levels in all wells sampled on an annual basis (MW-3, MW-6, and MW-8 through -11).

## **IDW MANAGEMENT**

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

## **DATA QA/QC SUMMARY**

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

### **Sample Handling**

Samples collected as part of the sampling program were either hand delivered to the TestAmerica receiving office in Anchorage, Alaska; or shipped overnight via FedEx to TestAmerica 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 for the sampling program to check for contributions to the analytical results possibly attributable to laboratory-based contamination. 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. Equipment rinsate blanks were submitted during the September 2016, September 2017, and March 2018 groundwater sampling events for DRO, GRO, and VOC analysis to verify that proper equipment decontamination procedures were performed. There was a DRO detection in the equipment blank collected in March 2018, resulting in a “UB” qualification for the DRO results associated with samples MW-1, MW-2, MW-3, MW-5, and BD-2.

### Precision

Field duplicate samples were collected at a frequency of approximately 10 percent of the overall number of samples collected during the groundwater monitoring activities. The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) relative percent differences (RPDs) were outside the laboratory upper control limit for four and 28 analytes for groundwater collected during the March 2017 and April 2018 sampling events, respectively. The associated sample results for the analytes were non-detections and qualification was not necessary, with the following exception: samples MW-1 through MW-11, BD-1, BD-2, and the equipment blank collected in March 2018 were qualified “J” as estimated for DRO. The data meet precision objectives for field duplicate and matrix spike (MS) and matrix spike duplicate (MSD) RPDs.

### Accuracy

Accuracy is evaluated using percent recoveries for laboratory control samples such as LCS, LCSD, MS, and MSD. The LCS and/or LCSD percent recoveries were outside the laboratory upper control limit for at least one analyte for the September 2016, March 2017, September 2017, and March 2018 groundwater sampling events. However, the associated sample result was a non-detection, and qualification was not necessary. The MS and/or MSD percent recoveries were outside laboratory control limits for at least one analyte for the September 2016, March 2017, and September 2017 groundwater sampling events. However, the associated sample result was a non-detection, and qualification was not necessary, with the following exceptions:

- September 2016: 1,2,4-trimethylbenzene and 1,3,5-trimethylbenzene were qualified as “J” for estimated for sample MW-5-W-091316.
- March 2017: DRO was qualified as “UJ” for estimated due to recovery outside the laboratory lower control limit for sample MW-7.
- September 2017: DRO was qualified as “J” for estimated for sample MW-2-W-090617.

The data meet accuracy objectives as indicated by the laboratory QC samples.

### Completeness

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

A review of the laboratory data packages 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 evidence of significant rebound was observed during the September 2016 – March 2018 post-ART system shutdown monitoring period. Based on the limited changes in groundwater quality observed during this monitoring period, GE proposes annual monitoring for groundwater rebound and long-term groundwater quality trends with the ART system off. This is consistent with the recommendations outlined in the *ART Second Annual Monitoring Report* (Arcadis U.S., Inc., August 2016).

Additional groundwater sampling will be conducted annually for the next 2 years (with annual reporting) with samples collected at wells MW-1 through MW-11 during each event. Sampling will be performed in late summer/early fall 2019 and 2020, which is historically the time of year in which higher concentrations are observed in groundwater. Wells will be sampled for VOCs, DRO, and GRO. Field parameters to be collected include dissolved oxygen, oxidation-reduction potential, pH, specific conductivity, temperature, and turbidity. No collection of ferrous iron or HPC data is proposed.

The ART system wells did not reduce concentrations of contaminants to below standards 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-DCE is indicative of anaerobic degradation of PCE and TCE; something which would not be expected to be enhanced, but rather hindered by, the ART system. At the present time the predominate remaining chlorinated VOC is cis-DCE, which is amenable to both aerobic and anaerobic biodegradation. As the site conditions are amenable to cis-DCE formation, it is recommended that nothing be done to interfere with anaerobic reductive chlorination processes. Operation of the ART system may be counterproductive in that it produces, at least locally, conditions that are not favorable for anaerobic reductive dechlorination. All of the remaining constituents are amenable to non-biological attenuation mechanisms. Given the current concentrations and types of VOCs that now predominate, conditions are well suited to monitored natural attenuation as the sole remedy going forward.

## SUMMARY

Semi-annual groundwater monitoring has been conducted on site since the shutdown of the ART system in June 2016. Results have remained consistent with historical data and annual monitoring is proposed for the next two years.

Mr. Campbell  
February 28, 2019

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 U.S., Inc.



Matthew Pelton  
Project Manager

Copies:

Bob Witsell (GE)  
Rebecca Andresen (Arcadis)

Enclosures:

**Tables**

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

**Figure**

- 1 Site Plan

**Attachments**

- 1 Laboratory Reports
- 2 Laboratory Data Review Checklists

**Tables**



**TABLE 1**  
**MONITORING WELL CONSTRUCTION INFORMATION AND GROUNDWATER ELEVATIONS**  
**ANNUAL MONITORING REPORT**  
**FORMER TBE MACHINE SHOP, NIKISKI, AK**

Location ID	Ground Surface Elevation (ft amsl)	Top of Casing Elevation (ft amsl)	June 10, 2014		September 9, 2014		December 3, 2014		March 2, 2015	
			Depth to Water (ft btoc)	GW Elevation (ft amsl)	Depth to Water (ft btoc)	GW Elevation (ft amsl)	Depth to Water (ft btoc)	GW Elevation (ft amsl)	Depth to Water (ft btoc)	GW Elevation (ft amsl)
MW-1	127.46	130.16	41.24	88.92	41.35	88.81	41.24	88.92	42.18	87.98
MW-2	127.72	130.61	41.68	88.93	41.78	88.83	41.69	88.92	42.62	87.99
MW-3	128.44	131.42	42.43	88.99	42.58	88.84	42.48	88.94	43.42	88.00
MW-4	128.45	131.33	42.38	88.95	42.48	88.85	42.35	88.98	43.32	88.01
MW-5	127.93	131.07	41.2	89.87	42.23	88.84	42.1	88.97	43.06	88.01
MW-6	127.68	130.82	41.87	88.95	41.97	88.85	41.89	88.93	42.82	88.00
MW-7	128.44	131.75	42.82	88.93	42.93	88.82	42.81	88.94	43.75	88.00
MW-8	128.65	131.33	42.39	88.94	42.52	88.81	42.36	88.97	43.33	88.00
MW-9	129.07	131.89	42.94	88.95	43.08	88.81	42.95	88.94	43.9	87.99
MW-10	126.67	129.3	40.34	88.96	40.45	88.85	40.36	88.94	41.28	88.02
MW-11	125.3	128.3	39.32	88.98	39.42	88.88	39.35	88.95	40.25	88.05

**Notes:**

TOC Elevations are taken from the 2011 land survey reported by URS in the 2011 Groundwater Characterization Report.

Survey coordinates provided in Alaska State Plane Zone 4, NAD 27.

**TABLE 1**  
**MONITORING WELL CONSTRUCTION INFORMATION AND GROUNDWATER ELEVATIONS**  
**ANNUAL MONITORING REPORT**  
**FORMER TBE MACHINE SHOP, NIKISKI, AK**

Location ID	Ground Surface Elevation (ft amsl)	Top of Casing Elevation (ft amsl)	May 27, 2015		September 9, 2015		December 1, 2015		March 15, 2016	
			Depth to Water (ft btoc)	GW Elevation (ft amsl)	Depth to Water (ft btoc)	GW Elevation (ft amsl)	Depth to Water (ft btoc)	GW Elevation (ft amsl)	Depth to Water (ft btoc)	GW Elevation (ft amsl)
MW-1	127.46	130.16	42.29	87.87	43.10	87.06	40.82	89.34	41.96	88.20
MW-2	127.72	130.61	42.67	87.94	44.51	86.10	41.27	89.34	42.39	88.22
MW-3	128.44	131.42	43.51	87.91	44.33	87.09	42.05	89.37	43.20	88.22
MW-4	128.45	131.33	43.47	87.86	44.27	87.06	41.96	89.37	43.09	88.24
MW-5	127.93	131.07	43.18	87.89	44.00	87.07	41.70	89.37	42.84	88.23
MW-6	127.68	130.82	42.89	87.93	43.71	87.11	41.47	89.35	42.60	88.22
MW-7	128.44	131.75	43.65	88.10	44.67	87.08	42.42	89.33	43.53	88.22
MW-8	128.65	131.33	43.48	87.85	44.30	87.03	42.00	89.33	42.09	89.24
MW-9	129.07	131.89	43.97	87.92	44.78	87.11	42.57	89.32	43.65	88.24
MW-10	126.67	129.3	41.36	87.94	42.23	87.07	39.96	89.34	41.07	88.23
MW-11	125.3	128.3	40.21	88.09	41.11	87.19	38.91	89.39	46.07	82.23

**Notes:**

TOC Elevations are taken from the 2011 land survey reported by URS in the 2011 Groundwater Characterization Report.

Survey coordinates provided in Alaska State Plane Zone 4, NAD 27.

**TABLE 1**  
**MONITORING WELL CONSTRUCTION INFORMATION AND GROUNDWATER ELEVATIONS**  
**ANNUAL MONITORING REPORT**  
**FORMER TBE MACHINE SHOP, NIKISKI, AK**

Location ID	Ground Surface Elevation (ft amsl)	Top of Casing Elevation (ft amsl)	June 8, 2016		September 12, 2016		March 1, 2017		September 5, 2017		March 19, 2018	
			Depth to Water (ft btoc)	GW Elevation (ft amsl)	Depth to Water (ft btoc)	GW Elevation (ft amsl)	Depth to Water (ft btoc)	GW Elevation (ft amsl)	Depth to Water (ft btoc)	GW Elevation (ft amsl)	Depth to Water (ft btoc)	GW Elevation (ft amsl)
MW-1	127.46	130.16	43.20	86.96	42.11	88.05	42.87	87.29	43.40	86.76	42.77	87.39
MW-2	127.72	130.61	42.24	88.37	42.50	88.11	42.28	88.33	43.83	86.78	43.20	87.41
MW-3	128.44	131.42	43.06	88.36	42.65	88.77	44.10	87.32	44.25	87.17	44.00	87.42
MW-4	128.45	131.33	43.00	88.33	43.22	88.11	44.02	87.31	44.55	86.78	43.90	87.43
MW-5	127.93	131.07	42.67	88.40	42.93	88.14	43.72	87.35	44.28	86.79	43.65	87.42
MW-6	127.68	130.82	42.45	88.37	42.09	88.73	43.50	87.32	44.03	86.79	43.40	87.42
MW-7	128.44	131.75	43.40	88.35	43.64	88.11	44.40	87.35	44.98	86.77	44.34	87.41
MW-8	128.65	131.33	43.00	88.33	42.90	88.43	44.03	87.30	44.60	86.73	43.90	87.43
MW-9	129.07	131.89	46.32	85.57	43.75	88.14	44.50	87.39	45.08	86.81	44.44	87.45
MW-10	126.67	129.3	43.45	85.85	41.14	88.16	41.94	87.36	42.49	86.81	41.86	87.44
MW-11	125.3	128.3	42.95	85.35	40.09	88.21	40.87	87.43	42.41	85.89	40.81	87.49

**Notes:**

TOC Elevations are taken from the 2011 land survey reported by URS in the 2011 Groundwater Characterization Report.

Survey coordinates provided in Alaska State Plane Zone 4, NAD 27.

TABLE 2  
 GROUNDWATER ANALYTICAL RESULTS - DETECTED ANALYTES  
 ANNUAL MONITORING REPORT  
 FORMER TBE MACHINE SHOP, NIKISKI, AK



Location ID:	Groundwater Date Collected:	Cleanup Level	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	
			06/10/14	09/09/14	12/05/14	03/02/15	05/27/15	09/09/15	12/02/15	03/15/16	06/07/16	09/13/16	03/02/17	09/05/17	03/21/18	06/10/14	09/09/14	12/05/14	03/02/15	05/27/15	09/09/15	
			Art System Operating										Post-ART Shutdown				ART System Operating					
			Baseline															Baseline				
<b>Detected Volatile Organics</b>																						
m-Xylene & p-Xylene	--	ug/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	3.6	36 *	230	310	3 U	4.2	
1,1,1-Trichloroethane	8,000	ug/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	1.5	1.6	2	3 U	3 U	3 U	
1,1-Dichloroethane	28	ug/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	7.1	6.5	6.1	4.9	4.7	4.4	
1,1-Dichloroethene	280	ug/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	1 U	1 U	1 U*	2 U	2 U^	2 U	
1,2,4-Trimethylbenzene	56	ug/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	9.3	39 *	96	84	14	7.1	
1,2-Dichlorobenzene	300	ug/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	1.3	2.8 *	5.6	5.8	2.2	2 U	
1,2-Dichloroethene (cis) (DCE)	36	ug/L	5.3 [5.6]	17 [17]	22 [18]	27 [25]	56	57	1 U	56	35 [30]	130	140	420	180	84	110	150	170	78	52	
1,3,5-Trimethylbenzene	60	ug/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	1 U	7 *	20	24	3 U	3 U	
1,4-Dichlorobenzene	4.8	ug/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	1 U	1 U*	1 U	2	2 U	2 U	
2-Phenylbutane	2,000	ug/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	1.1	1 U*	1 U	4.7	3 U	3 U	
Cymene	--	ug/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	1 U	1 U*	2.4	3.1	3 U	3 U	
Ethylbenzene	15	ug/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	10	92 *	350	420	18	6.2	
Isopropylbenzene (Cumene)	450	ug/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	2.8	5.9 *	9.9	9.3	4.9	3.8	
Naphthalene	1.7	ug/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	3 U	3 *	6.6	6	2 U*	2 U	
n-Butylbenzene	1,000	ug/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	2 U	3.7 *	2 U	3 U	3 U	3 U	
n-Propylbenzene	660	ug/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	1 U	2.1 *	7	6.7	3 U	3 U	
tert-Butylbenzene	690	ug/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	1 U	1 U*	1.1	3 U	3 U	3 U	
Tetrachloroethene (PCE)	41	ug/L	34 [31]	38 * [41]	58 [57]	59 [51]	71	59	3 U	56	22 [21]	58	50	51	40	6.6	5.7 *	15	3 U	3 U	3 U	
Toluene	1,100	ug/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	1 U	1 U*	11	9.3	2 U	2 U	
Trichloroethene (TCE)	2.8	ug/L	18 [18]	19 [21]	20 [19]	21 [21]	26	27	3 U*	21	9.8 [9.2]	32	22	33	19	12	8.4	14	3 U	3 U	3 U	
Vinyl chloride	0.19	ug/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	1 U	1 U	1 U	1 U	1 U	1 U	
Xylenes (o)	--	ug/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	90	150 *	380	370	31	9.3	
Xylenes (total)	190	ug/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	1,070	29.8	93.6	186	610	680	31	13.5	
<b>Detected Miscellaneous</b>																						
Ferrous Iron	--	mg/L	2.8	NA	0.4	0.6	3.6	3.3	3.1	3	2.4	NA	NA	NA	NA	3.2	NA	2.8	2	5.8	5.5	
Heterotrophic Plate Count	--	CFU/mL	210 Hcn	NA	NA	NA	3,100 H	NA	NA	NA	760 H	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
<b>Detected Gasoline Range Organics</b>																						
Gasoline Range Organics (GRO)-C6-C10	2.2	mg/L	0.05 U [0.05 U]	0.05 U [0.05 U]	NA	NA	0.18	NA	NA	NA	0.066 [0.05 U]	NA	1.2	3.6	1 U	0.3	0.56	NA	NA	0.18	NA	
<b>Detected Diesel Range Organics</b>																						
DRO (nC10-<nC25)	1.5	mg/L	0.38 U [0.39 U]	0.66 Y [0.78 Y]	NA	NA	0.94 Y	NA	NA	NA	0.48 [0.36]	NA	1.2	3.5	0.92 *	1.3	0.8 Y	NA	NA	0.58 Y	NA	
<b>Detected Field Parameters</b>																						
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	3.31	0.63	0.99	0.58	1.69	0.74	
ORP	--	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	30.3	4.4	73.8	74.3	87.2	-18.5	
pH	--	SU	3.77	5.63	5.78	5.66	5.9	6	6.11	6	6.42	6.29	NA	6.25	5.99	6.43	6.25	6.31	6.19	6.13	6.14	
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	0.549	0.449	0.391	0.373	0.381	0.361	
Temperature	--	°C	5.94	8.07	4.53	4.55	5.97	6.61	5.08	5.69	9.15	9.15	4.33	7.69	2.17	5.88	8.81	4.58	4.65	6.27	6.27	
Turbidity	--	NTU	4.39	45.1	1.3	4.8	2.9	5.46	13.9	28.9	66.1	37.6	0	NM	11.65	6.43	6.5	26.2	4.2	4.8	4.93	

- Notes:**
- 1. Groundwater cleanup levels are the Alaska Department of Environmental Conservation's Groundwater Cleanup Levels (Article 3 - 18 AAC 75.345).
  - Duplicate sample concentrations are presented in brackets.
  - Exceedances are bolded and shaded.**
  - = No cleanup level available
  - B = Compound was found in the blank and the sample.
  - F1 - MS and/or MSD Recovery exceeds the control limits.
  - H = sample was prepped or analyzed beyond the specified hold time
  - J = estimated value
  - U = not detected
  - Y = The chromatographic response resembles a typical fuel pattern.
  - NA = not analyzed
  - Hcn = Sample was prepped or analyzed beyond the specified holding time. Due to the very short holding time of 8 hours, samples could not be analyzed within the hold time.
  - \* = LCS or LCSD exceeds the control limits
  - µg/L = micrograms per liter
  - mg/L = milligrams per liter
  - CFU/mL = colony forming units per milliliter
  - mV = Millivolts
  - S.U. = Standard unit
  - mS/cm = MilliSiemen per centimeter
  - °C = Degree Celsius
  - NTU = Nephelometric turbidity units

TABLE 2  
GROUNDWATER ANALYTICAL RESULTS - DETECTED ANALYTES  
ANNUAL MONITORING REPORT  
FORMER TBE MACHINE SHOP, NIKISKI, AK

Location ID:	Groundwater		MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2	MW-3	MW-3	MW-3	MW-3	MW-3	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	
Date Collected:	Cleanup Level		12/02/15	03/15/16	06/08/16	09/13/16	03/01/17	09/06/17	03/21/18	06/10/14	05/27/15	06/08/16	03/02/17	03/21/18	06/10/14	09/09/14	12/05/14	03/02/15	05/27/15	09/08/15	
			ART System Operating				Post-ART Shutdown			Baseline	ART System Operating		Post-ART		Baseline	ART System Operating					
<b>Detected Volatile Organics</b>																					
m-Xylene & p-Xylene	--	ug/L	3 U [3 U]	760	96	7.2 [7.6]	110	3 U	96	2 U	3 U	3 U	3 U [3 U]	3 U	2 U	2 U	2 U	3 U	3 U [3 U]	3 U	
1,1,1-Trichloroethane	8,000	ug/L	3 U [3 U]	20 U	3 U	3 U [3 U]	3 U	3 UF1*	3 U	2.6	3 U	3 U	3 U [3 U]	3 U	2.9	5.7	3.4	3.2	3.9 [4]	3.8	
1,1-Dichloroethane	28	ug/L	5.1 [4.9]	20 U	6.2	4.8 [4.8]	5.5	3.9	7	3.2	3.9	6.1	5.4 [5.6]	5.2	1 U	1 U	1 U	2 U	2 U [2 U]	2 U	
1,1-Dichloroethene	280	ug/L	2 U [2 U]	20 U	2 U	2 U [2 U]	2 U	4 U	4 U	1 U	2 U^	2 U^F1	2 U [2 U]	4 U	1 U	1 U	1 U*	2 U	2 U^ [2 U^]	2 U	
1,2,4-Trimethylbenzene	56	ug/L	3 U [3 U]	<b>88</b>	19	3 [3]	22	3 U	17	1 U	3 U	3 U	3 U [3 U]	3 U	1 U	1 U*	1 U	3 U	3 U [3 U]	3 U	
1,2-Dichlorobenzene	300	ug/L	2 U [2 U]	20 U	2 U	2 U [2 U]	2 U	2 U	2 U	1 U	2 U	2 U	2 U [2 U]	2 U	1 U	1 U*	1 U	2 U	2 U [2 U]	2 U	
1,2-Dichloroethene (cis) (DCE)	36	ug/L	25 [25]	<b>430</b>	<b>160</b>	<b>61 [62]</b>	<b>110</b>	30	<b>72</b>	2	3	4.6 F1	4.9 [4.5]	5.3	1 U	1 U	1 U	1 U	1 U [1 U]	1 U	
1,3,5-Trimethylbenzene	60	ug/L	3 U [3 U]	25	4.7	3 U [3 U]	6.7	3 U	5.6	1 U	3 U	3 U	3 U [3 U]	3 U	1 U	1 U*	1 U	3 U	3 U [3 U]	3 U	
1,4-Dichlorobenzene	4.8	ug/L	2 U [2 U]	20 U	4 U	4 U [4 U]	4 U	4 U	4 U	1 U	2 U	4 U	4 U [4 U]	4 U	1 U	1 U*	1 U	2 U	2 U [2 U]	2 U	
2-Phenylbutane	2,000	ug/L	3 U [3 U]	20 U	3 U	3 U [3 U]	3 U	3 U	3 U	1 U	3 U	3 U	3 U [3 U]	3 U	1 U	1 U*	1 U	3 U	3 U [3 U]	3 U	
Cymene	--	ug/L	3 U [3 U]	20 U	3 U	3 U [3 U]	3 U	3 U	3 U	1 U	3 U	3 U*	3 U [3 U]	3 U	1 U	1 U*	1 U	3 U	3 U [3 U]	3 U	
Ethylbenzene	15	ug/L	3 U [3 U]	<b>590</b>	<b>95</b>	8.6 [9.1]	<b>91</b>	3 U	<b>83</b>	1 U	3 U	3 U	3 U [3 U]	3 U	1 U	1 U	1 U	3 U	3 U [3 U]	3 U	
Isopropylbenzene (Cumene)	450	ug/L	2 U [2 U]	20 U	2.4	2 U [2 U]	2.3	2 U	2 U	1 U	2 U	2 U	2 U [2 U]	2 U	1 U	1 U	1 U	2 U	2 U [2 U]	2 U	
Naphthalene	1.7	ug/L	2 U [2 U]	20 U	2 U	2 U [2 U]	2 U	4 U	4 U	3 U	2 U*	2 U	2 U [2 U]	4 U	3 U	3 U*	3 U	2 U	2 U* [2 U*]	2 U	
n-Butylbenzene	1,000	ug/L	3 U [3 U]	20 U	3 U	3 U [3 U]	3 U	3 U	3 U	2 U	3 U	3 U	3 U [3 U]	3 U	2 U	2 U*	2 U	3 U	3 U [3 U]	3 U	
n-Propylbenzene	660	ug/L	3 U [3 U]	20 U	3 U	3 U [3 U]	3 U	3 U	3 U	1 U	3 U	3 U	3 U [3 U]	3 U	1 U	1 U*	1 U	3 U	3 U [3 U]	3 U	
tert-Butylbenzene	690	ug/L	3 U [3 U]	20 U	3 U	3 U [3 U]	3 U	3 U	3 U	1 U	3 U	3 U	3 U [3 U]	3 U	1 U	1 U*	1 U	3 U	3 U [3 U]	3 U	
Tetrachloroethene (PCE)	41	ug/L	3 U [3 U]	20 U	3 U	3 U [3 U]	3 U	3 U	3 U	2.4	3 U	3 U	3 U [3 U]	3 U	11	14	14	13	16 [16]	14	
Toluene	1,100	ug/L	2 U [2 U]	20 U	2	2 U [2 U]	2.3	2 U	2 U	1 U	2 U	2 U	2 U [2 U]	2 U	1 U	1 U	1 U	2 U	2 U [2 U]	2 U	
Trichloroethene (TCE)	2.8	ug/L	3 U [3 U]	20 U	3 U	3 U [3 U]	3 U	3 U	3 U	1.2	3 U	3 U	3 U [3 U]	3 U	<b>3.2</b>	<b>4.9</b>	<b>3.4</b>	<b>3.3</b>	<b>4.5 [4.3]</b>	<b>3.7</b>	
Vinyl chloride	0.19	ug/L	1 U [1 U]	20 U	1 U	1 U [1 U]	1 U	1 U	1 U	1 U	1 U	1 UF1	1 U [1 U]	1 U	1 U	1 U	1 U	1 U	1 U [1 U]	1 U	
Xylenes (o)	--	ug/L	2 U [2 U]	410	70	5.6 [5.8]	65	2 U	30	1 U	2 U	2 U	2 U [2 U]	2 U	1 U	1 U	1 U*	2 U	2 U [2 U]	2 U	
Xylenes (total)	190	ug/L	3 U [3 U]	<b>1,170</b>	166	12.8 [13.4]	175	3 U	126	2 U	3 U	3 U	3 U [3 U]	3 U	2 U	2 U	2 U	3 U	3 U [3 U]	3 U	
<b>Detected Miscellaneous</b>																					
Ferrous Iron	--	mg/L	5.5	4.5	4.6	NA	NA	NA	NA	0.6	0.2	0.2	NA	NA	0.6	NA	0	0	0.2	0.2	
Heterotrophic Plate Count	--	CFU/mL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	110 Hcn	NA	NA	NA	130 H	NA	
<b>Detected Gasoline Range Organics</b>																					
Gasoline Range Organics (GRO)-C6-C10	2.2	mg/L	NA	NA	0.58	NA	0.65	1 U	1 U	0.05 U	0.05 U	0.05 U	.05 U [0.05 U]	1 U	0.05 U	0.05 U	NA	NA	.05 U [0.05 U]	NA	
<b>Detected Diesel Range Organics</b>																					
DRO (nC10-<nC25)	1.5	mg/L	NA	NA	0.53	NA	0.47	0.89 F1	0.33 *	0.39 U	0.37 Y	0.29	0.3 [0.28]	0.19 *	0.38 U	0.23 Y	NA	NA	.33 Y [0.37 Y]	NA	
<b>Detected Field Parameters</b>																					
Dissolved oxygen	--	mg/L	0.54	0.54	0.88	4.82	1.15	0.73	0.83	1.09	0.52	0.68	3.15	0.91	2.54	1.42	3.52	2.83	1.39	2.89	
ORP	--	mV	-125.6	15.2	29.6	52.6	61.9	-14.9	-58.2	184.9	150.9	-59.1	103.1	162.1	214	155.5	198.5	119.2	203	231	
pH	--	SU	6.02	6.23	7.13	6.07	NA	6.04	6.02	5.33	5.37	5.66	NA	5.39	5.55	5.51	4.18	5.48	5.25	5.38	
Specific conductivity	--	mS/cm	0.52	0.61	0.529	0.475	0.628	0.484	0.293	0.098	0.111	0.175	0.315	0.189	0.085	0.119	0.082	0.067	0.104	0.104	
Temperature	--	°C	4.24	5.66	14.32	9.42	3.85	7.53	2.44	5.85	5.84	6.12	3.51	2.36	5.89	7.54	4.17	4.33	6.17	6.1	
Turbidity	--	NTU	15.5	5.7	9.47	12	45.7	NM	12.11	4.87	15.9	102	0.01	55.32	30.9	28.5	104.7	47.1	32.2	9.95	

**Notes:**

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

Duplicate sample concentrations are presented in brackets.

**Exceedances are bolded and shaded.**

-- = No cleanup level available

B = Compound was found in the blank and the sample.

F1 - MS and/or MSD Recovery exceeds the control limits.

H = sample was prepped or analyzed beyond the specified hold time

J = estimated value

U = not detected

Y = The chromatographic response resembles a typical fuel pattern.

NA = not analyzed

Hcn = Sample was prepped or analyzed beyond the specified holding time. Due to the very short holding time of 8 hours, samples could not be analyzed within the hold time.

\* = LCS or LCSD exceeds the control limits

µg/L = micrograms per liter

mg/L = milligrams per liter

CFU/mL = colony forming units per milliliter

mV = Millivolts

S.U. = Standard unit

mS/cm = Millisiemen per centimeter

°C = Degree Celsius

NTU = Nephelometric turbidity units

TABLE 2  
GROUNDWATER ANALYTICAL RESULTS - DETECTED ANALYTES  
ANNUAL MONITORING REPORT  
FORMER TBE MACHINE SHOP, NIKISKI, AK



Location ID: Date Collected:	Groundwater Cleanup Level		MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-4	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5
			12/02/15	12/02/15	03/15/16	06/07/16	09/13/16	03/01/17	09/05/17	03/20/18	06/10/14	09/09/14	12/05/14	03/02/15	05/27/15	09/09/15	12/01/15	03/15/16	06/08/16	09/13/16	03/01/17
			ART System Operating						Post-ART Shutdown			Baseline	ART System Operating						Post-ART Shutdown		
<b>Detected Volatile Organics</b>																					
m-Xylene & p-Xylene	--	ug/L	130	3 UH	1 U	3 U	3 U	3 U [3 U]	3 U [3 U]	3 U	250	320	390	250 F1	330 H	310 H [310 H]	340 [310]	230 [240]	230 [230]	330	240
1,1,1-Trichloroethane	8,000	ug/L	4.8	4.1 H	3.6	3	3	3 U [3 U]	3.3 [3.4]	3.3	1.7	1 U	1 U*	3 U	3 U	3 U [3 U]	3 U [3 U]	5 U [5 U]	3 U [3 U]	3 U	3 U
1,1-Dichloroethane	28	ug/L	11	2 UH	1 U	2 U	2 U	2 U [2 U]	2 U [2 U]	2 U	1 U	1 U	1 U	2 U	2 U	2 U [2 U]	2 U [2 U]	5 U [5 U]	2 U [2 U]	2 U	2 U
1,1-Dichloroethene	280	ug/L	2 U	2 UH	1 U	2 U	2 U	2 U [2 U]	4 U [4 U]	4 U	1.8	1 U	1 U*	2 U	2 U^	2 U [2 U]	2 U [2 U]	5 U [5 U]	2 U [2 U]	2 UF1	2 U
1,2,4-Trimethylbenzene	56	ug/L	24	3 UH	1 U	3 U	3 U	3 U [3 U]	3 U [3 U]	3 U	6.7	28	35	32 F1	55	24 [22]	21 [24]	16 [16]	11 [12]	20 F1	15
1,2-Dichlorobenzene	300	ug/L	2 U	2 UH	1 U	2 U	2 U	2 U [2 U]	2 U [2 U]	2 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]	2 U	2 U
1,2-Dichloroethene (cis) (DCE)	36	ug/L	<b>88</b>	1 UH	1 U	1 U	1 U*	1 U [1 U]	1 U [1 U]	3 U	<b>370</b>	<b>88</b>	<b>140</b>	<b>520 F1</b>	<b>520 H</b>	<b>430 H [440 H]</b>	<b>120 [120]</b>	<b>120 [120]</b>	<b>230 [240]</b>	<b>500</b>	<b>290</b>
1,3,5-Trimethylbenzene	60	ug/L	6.7	3 UH	1 U	3 U	3 U	3 U [3 U]	3 U [3 U]	3 U	15	17	23	22 F1	29	18 [17]	15 [17]	13 [13]	9.4 [9.8]	14 F1	12
1,4-Dichlorobenzene	4.8	ug/L	2 U	2 UH	1 U	4 U	4 U	4 U [4 U]	4 U [4 U]	4 U	<b>10</b>	1 U	1 U	<b>5 F1</b>	<b>6.6</b>	<b>7.5 [7]</b>	<b>5.2 [2 U]</b>	5 U [5 U]	4 U [4 U]	4.2	4 U
2-Phenylbutane	2,000	ug/L	3 U	3 UH	1 U	3 U	3 U	3 U [3 U]	3 U [3 U]	3 U	1 U	1 U	1 U	3 U	3 U	3 U [3 U]	3 U [3 U]	5 U [5 U]	3 U [3 U]	3 U	3 U
Cymene	--	ug/L	3 U	3 UH	1 U	3 U	3 U	3 U [3 U]	3 U [3 U]	3 U	1 U	1.5	1.7	3 U	3.3	3 U [3 U]	3 U [3 U]	5 U [5 U]	3 U [3 U]	3 U	3 U
Ethylbenzene	15	ug/L	<b>130</b>	3 UH	1 U	3 U	3 U	3 U [3 U]	3 U [3 U]	3 U	<b>200</b>	<b>230</b>	<b>280</b>	<b>180 F1</b>	<b>310 H</b>	<b>220 H [220 H]</b>	<b>250 [220]</b>	<b>150 [160]</b>	<b>170 [170]</b>	<b>240</b>	<b>180</b>
Isopropylbenzene (Cumene)	450	ug/L	3.6	2 UH	1 U	2 U	2 U	2 U [2 U]	2 U [2 U]	2 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]	2 U	2 U
Naphthalene	1.7	ug/L	2 U	2 UH	1 U	2 U	2 U	2 U [2 U]	4 U [4 U]	4 U	<b>3.1</b>	<b>4.2</b>	<b>3.4</b>	2 U	<b>5.8 H</b>	<b>2.4 [2.3]</b>	<b>2 [2.4]</b>	5 U [5 U]	2 U [2 U]	<b>3.2</b>	2 U
n-Butylbenzene	1,000	ug/L	3 U	3 UH	1 U	3 U	3 U	3 U [3 U]	3 U [3 U]	3 U	2	10	2 U	3 U	3 U	12 [11]	9.1 [9.8]	5 U [5 U]	8.3 [8.2]	10	3 U
n-Propylbenzene	660	ug/L	3 U	3 UH	1 U	3 U	3 U	3 U [3 U]	3 U [3 U]	3 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]	3 U	3 U
tert-Butylbenzene	690	ug/L	3 U	3 UH	1 U	3 U	3 U	3 U [3 U]	3 U [3 U]	3 U	1.2	1 U	1.1	3 U	3 U	3 U [3 U]	3 U [3 U]	5 U [5 U]	3 U [3 U]	3 U	3 U
Tetrachloroethene (PCE)	41	ug/L	<b>52</b>	15 H	14	14	13	12 [12]	14 [12]	14	<b>98</b>	<b>59</b>	<b>50</b>	3	3 U	3 U [3 U]	6.7 [6.4]	5 U [5 U]	3 U [3 U]	3 U	3 U
Toluene	1,100	ug/L	8.2	2 UH	1 U	2 U	2 U	2 U [2 U]	2 U [2 U]	2 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]	3.1	2 U
Trichloroethene (TCE)	2.8	ug/L	<b>4.6 H</b>	NA	<b>3.5</b>	<b>3.9</b>	<b>4.2</b>	<b>3.5 [3.6]</b>	<b>4.9 [4.5]</b>	<b>4.6</b>	<b>20</b>	<b>23</b>	<b>16</b>	3 UF1	3 U	3 U [3 U]	<b>3.1 [3.2]</b>	5 U [5 U]	3 U [3 U]	3 U	3 U
Vinyl chloride	0.19	ug/L	1 U	NA	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]	<b>1.7 [1.5]</b>	5 U [5 U]	1 U [1 U]	1 U	1 U
Xylenes (o)	--	ug/L	76	2 UH	1 U	2 U	2 U	2 U [2 U]	2 U [2 U]	2 U	160	120	120	99 F1	290 H	140 H [140 H]	120 [130]	82 [85]	86 [89]	160	100
Xylenes (total)	190	ug/L	<b>306</b>	3 U	1 U	3 U	3 U	3 U [3 U]	3 U [3 U]	3 U	<b>410</b>	<b>440</b>	<b>510</b>	<b>349</b>	<b>620</b>	<b>450 [450]</b>	<b>460 [440]</b>	<b>312 [325]</b>	<b>316 [319]</b>	<b>490</b>	<b>340</b>
<b>Detected Miscellaneous</b>																					
Ferrous Iron	--	mg/L	0	NA	0	0	NA	NA	NA	NA	2.2	NA	2.4	2.2	4	4.2	5	3.8	3	NA	NA
Heterotrophic Plate Count	--	CFU/mL	NA	NA	NA	3,700 H	NA	NA	NA	NA	790 Hcn	NA	NA	NA	130 H	NA	NA	NA	620 H	NA	NA
<b>Detected Gasoline Range Organics</b>																					
Gasoline Range Organics (GRO)-C6-C10	2.2	mg/L	NA	NA	NA	0.05 U	NA	.05 U [0.05 U]	1 U [1 U]	1 U	1.7	1.8 B	1.4	1.3	<b>2.9</b>	2.1 [2]	1.6 [1.7]	1.2 [1.2]	1.2 [1.2]	1.7	1.4
<b>Detected Diesel Range Organics</b>																					
DRO (nC10-<nC25)	1.5	mg/L	NA	NA	NA	0.57	NA	0.44 [0.5]	0.33 [0.34]	0.27 *	<b>1.6</b>	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]	1.3	0.96
<b>Detected Field Parameters</b>																					
Dissolved oxygen	--	mg/L	3.02	NA	3.9	3	4.25	4.3	1.42	5.12	0.51	0.54	1.61	0.62	0.67	0.44	0.89	0.49	0.46	5.81	1.31
ORP	--	mV	-108.6	NA	168.7	72.15	91.6	101.9	194.8	220.7	-95.2	-1.3	19.5	58.7	32.7	-32.6	-231.2	-40.6	-100.9	52.1	6.32
pH	--	SU	5.61	NA	5.6	5.46	5.55	NA	5.26	5.52	5.52	5.97	6.04	5.98	6.01	6.12	6.28	6.07	7.29	6.13	NA
Specific conductivity	--	mS/cm	0.134	NA	0.112	0.144	0.177	0.146	0.191	0.06	0.18	0.157	0.122	0.132	0.115	0.149	0.209	0.259	0.225	0.29	0.36
Temperature	--	°C	4.56	NA	4.97	7.69	8.42	3.52	7.68	2.81	6.37	10.02	8.25	8.51	10.73	10.52	8.63	10.62	13.25	9.71	3.27
Turbidity	--	NTU	45.2	NA	21.2	95.1	214	149	NM	90.1	31.9	43.1	4.7	3.1	0.9	6.82	10.9	29.5	7.91	29.6	95.2

**Notes:**  
1. Groundwater cleanup levels are the Alaska Department of Environmental Conservation's Groundwater Cleanup Levels (Article 3 - 18 AAC 75.345).  
Duplicate sample concentrations are presented in brackets.  
**Exceedances are bolded and shaded.**  
-- = No cleanup level available  
B = Compound was found in the blank and the sample.  
F1 - MS and/or MSD Recovery exceeds the control limits.  
H = sample was prepped or analyzed beyond the specified hold time  
J = estimated value  
U = not detected  
Y = The chromatographic response resembles a typical fuel pattern.  
NA = not analyzed  
Hcn = Sample was prepped or analyzed beyond the specified holding time. Due to the very short holding time of 8 hours, samples could not be analyzed within the hold time.  
\* = LCS or LCSD exceeds the control limits  
µg/L = micrograms per liter  
mg/L = milligrams per liter  
CFU/mL = colony forming units per milliliter  
mV = Millivolts  
S.U. = Standard unit  
mS/cm = Millisiemen per centimeter  
°C = Degree Celsius  
NTU = Nephelometric turbidity units

**TABLE 2  
GROUNDWATER ANALYTICAL RESULTS - DETECTED ANALYTES  
ANNUAL MONITORING REPORT  
FORMER TBE MACHINE SHOP, NIKISKI, AK**

Location ID:	Groundwater Date Collected:	Cleanup Level	MW-5	MW-5	MW-6	MW-6	MW-6	MW-6	MW-6	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7
			09/06/17	03/21/18	06/10/14	05/27/15	06/08/16	03/01/17	03/21/18	06/11/14	09/10/14	12/05/14	03/02/15	05/27/15	09/09/15	12/01/15	03/15/16	06/08/16	09/13/16	03/01/17	09/05/17	03/20/18
			Post-ART Shutdown	Shutdown	Baseline	ART System Operating	Post-ART	Baseline	ART System Operating			ART System Operating			Post-ART Shutdown							
<b>Detected Volatile Organics</b>																						
m-Xylene & p-Xylene	--	ug/L	310 [310]	350 [390]	2 U	3 U	3 U	3 U	3 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	3 U
1,1,1-Trichloroethane	8,000	ug/L	3 U* [3 U*]	3 U [3 U]	1 U	3 U	3 U	3 U	3 U	2.4	1 U	1 U*	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U*	3 U
1,1-Dichloroethane	28	ug/L	200 U [200 U]	2 U [2 U]	1 U	2 U	2 U	2 U	2 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethene	280	ug/L	4 U [4 U]	4 U [4 U]	1 U	2 U^	2 U	2 U	4 U	1 U	1 U	1 U*	2 U	2 U^	2 U	2 U	1 U	2 U	2 U	2 U	4 U	4 U
1,2,4-Trimethylbenzene	56	ug/L	300 U [300 U]	32 [29]	1 U	3 U	3 U	3 U	3 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	3 U
1,2-Dichlorobenzene	300	ug/L	2 U [2 U]	2 U [2 U*]	1 U	2 U	2 U	2 U	2 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U
1,2-Dichloroethene (cis) (DCE)	36	ug/L	<b>220 [210]</b>	<b>150 [170]</b>	1 U	1 U	1 U	1 U	3 U	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
1,3,5-Trimethylbenzene	60	ug/L	300 U [300 U]	17 [17 *]	1 U	3 U	3 U	3 U	3 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	3 U
1,4-Dichlorobenzene	4.8	ug/L	400 U [400 U]	4.4 [4.5]	1 U	2 U	4 U	4 U	4 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	1 U	4 U	4 U	4 U	4 U	4 U
2-Phenylbutane	2,000	ug/L	3 U [3 U]	3 U [3 U]	1 U	3 U	3 U	3 U	3 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	3 U
Cymene	--	ug/L	3 U [3 U]	3.4 [3.2 *]	1 U	3 U	3 U	3 U	3 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	3 U
Ethylbenzene	15	ug/L	300 U [300 U]	<b>240 [270]</b>	1 U	3 U	3 U	3 U	3 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	3 U
Isopropylbenzene (Cumene)	450	ug/L	2 U [2 U]	2 U [2 U]	1 U	2 U	2 U	2 U	2 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U
Naphthalene	1.7	ug/L	4 U [4 U]	4 U [4 U*]	3 U	2 U*	2 U	2 U	4 U	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
n-Butylbenzene	1,000	ug/L	300 U [300 U]	3 U [3 U]	2 U	3 U	3 U	3 U	3 U	2 U	2 U	2 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	3 U
n-Propylbenzene	660	ug/L	3 U [3 U]	3 U [3 U*]	1 U	3 U	3 U	3 U	3 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	3 U
tert-Butylbenzene	690	ug/L	3 U [3 U]	3 U [3 U*]	1 U	3 U	3 U	3 U	3 U	1 U	1 U	1 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	3 U
Tetrachloroethene (PCE)	41	ug/L	3 U [3 U]	3 U [3 U]	1 U	3 U	3 U	3 U	3 U	24	17	21	18	25	24	23	24	18	13	14	17	12
Toluene	1,100	ug/L	200 U [200 U]	2 U [2 U*]	1 U	2 U	2 U	2 U	2 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U
Trichloroethene (TCE)	2.8	ug/L	3 U [3 U]	3 U [3 U]	1 U	3 U	3 U	3 U	3 U	1.7	2.8	2.1	3 U	3 U	3 U	<b>3.1</b>	2.3	3 U	3 U	3 U	3 U	3 U
Vinyl chloride	0.19	ug/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	1 U	1 U	1 U	1 U
Xylenes (o)	--	ug/L	200 U [200 U]	84 [88]	1 U	2 U	2 U	2 U	2 U	1 U	1 U	1 U*	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U
Xylenes (total)	190	ug/L	<b>310 [310]</b>	<b>434 [478]</b>	2 U	3 U	3 U	3 U	3 U	3 U	2 U	2 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	3 U
<b>Detected Miscellaneous</b>																						
Ferrous Iron	--	mg/L	NA	NA	0.2	0.6	3.2	NA	NA	0.4	1.2	0	0.2	0.2	0.2	0	0	0	NA	NA	NA	NA
Heterotrophic Plate Count	--	CFU/mL	NA	NA	NA	NA	NA	NA	NA	18 Hcn	NA	NA	NA	7.5 H	NA	NA	NA	93 H	NA	NA	NA	NA
<b>Detected Gasoline Range Organics</b>																						
Gasoline Range Organics (GRO)-C6-C10	2.2	mg/L	1.7 [1.7]	1.7 [1.7]	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	NA	NA	0.05 U	NA	NA	NA	0.05 U	NA	0.05 U	1 U	1 U
<b>Detected Diesel Range Organics</b>																						
DRO (nC10-<nC25)	1.5	mg/L	1.4 [1.4]	0.65 * [0.35 *]	0.38 U	0.21 Y	0.15	0.2	0.13 U*	0.39 U	0.15 Y	NA	NA	0.2 U	NA	NA	NA	0.1 U	NA	0.1 UF1	0.11 U	0.12 U*
<b>Detected Field Parameters</b>																						
Dissolved oxygen	--	mg/L	0.71	2.19	1.75	3.31	0.81	1.95	1.91	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
ORP	--	mV	-40.2	6.9	217.9	163	-40.3	81.5	176.5	212.1	82.9	184.7	119.2	102.4	150.1	-165.3	-150.1	-86.2	161.6	105.9	155	194
pH	--	SU	6.07	5.99	5.28	5.28	6.98	NA	5.55	4.8	5.97	5.93	5.92	5.5	6.02	6.02	6.1	6.95	4.76	NA	5.7	5.87
Specific conductivity	--	mS/cm	0.432	0.178	0.126	0.115	0.137	0.217	0.102	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
Temperature	--	°C	7.6	2.61	5.47	6.27	14.1	3.3	1.4	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
Turbidity	--	NTU	NM	15.07	177	149.3	229	3.2	12.21	36	23	26.7	13.6	0	10.1	158.2	181.2	196	67.7	159	NM	5.2

**Notes:**

- 1. Groundwater cleanup levels are the Alaska Department of Environmental Conservation's Groundwater Cleanup Levels (Article 3 - 18 AAC 75.345).
- Duplicate sample concentrations are presented in brackets.
- Exceedances are bolded and shaded.**
- = No cleanup level available
- B = Compound was found in the blank and the sample.
- F1 - MS and/or MSD Recovery exceeds the control limits.
- H = sample was prepped or analyzed beyond the specified hold time
- J = estimated value
- U = not detected
- Y = The chromatographic response resembles a typical fuel pattern.
- NA = not analyzed
- Hcn = Sample was prepped or analyzed beyond the specified holding time. Due to the very short holding time of 8 hours, samples could not be analyzed within the hold time.
- \* = LCS or LCSD exceeds the control limits
- µg/L = micrograms per liter
- mg/L = milligrams per liter
- CFU/mL = colony forming units per milliliter
- mV = Millivolts
- S.U. = Standard unit
- mS/cm = Millisiemen per centimeter
- °C = Degree Celsius
- NTU = Nephelometric turbidity units

TABLE 2  
GROUNDWATER ANALYTICAL RESULTS - DETECTED ANALYTES  
ANNUAL MONITORING REPORT  
FORMER TBE MACHINE SHOP, NIKISKI, AK



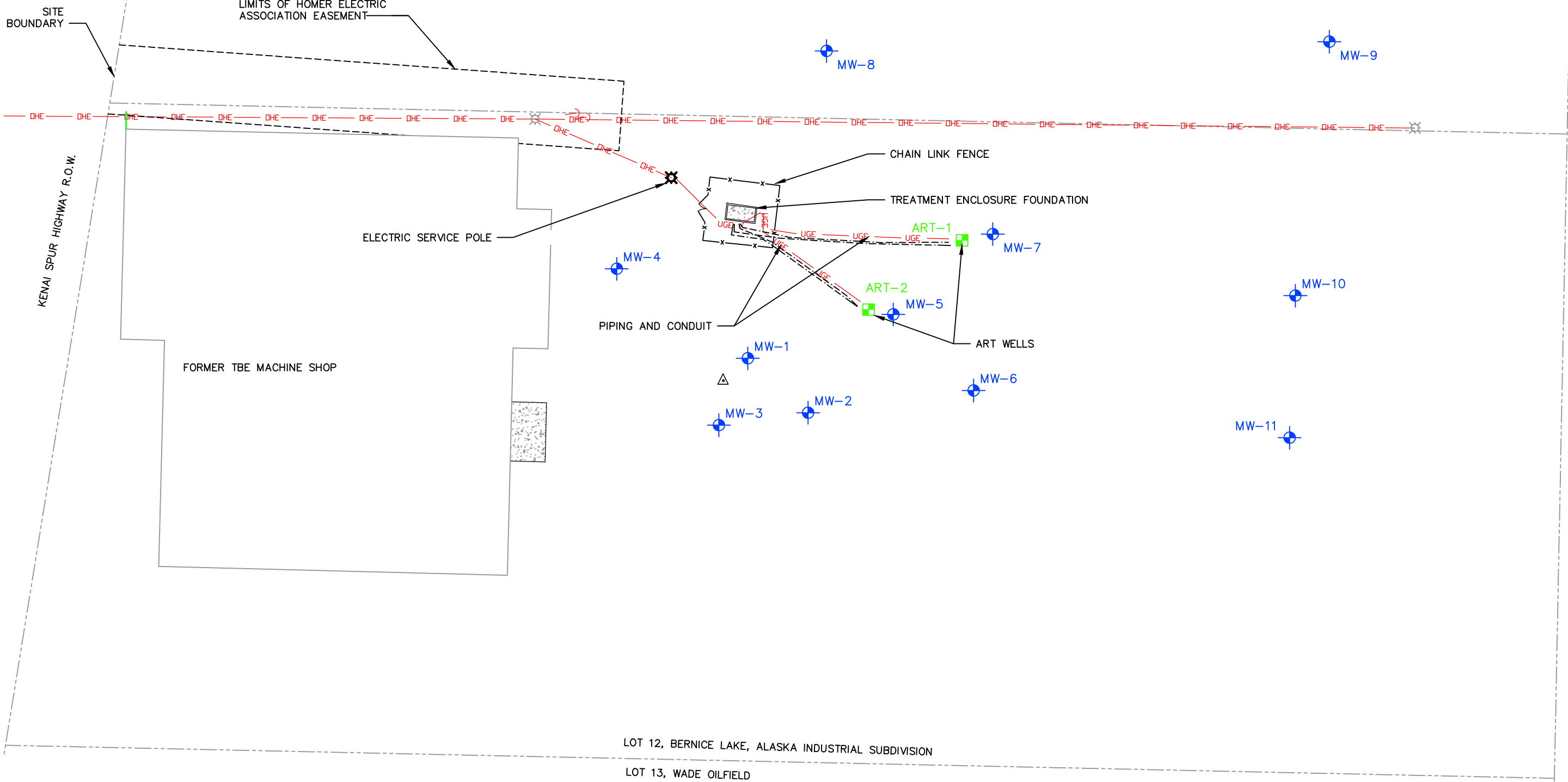
Location ID:	Groundwater Date Collected:	Cleanup Level	MW-8	MW-8	MW-8	MW-8	MW-8	MW-9	MW-9	MW-9	MW-9	MW-9	MW-10	MW-10	MW-10	MW-10	MW-10	MW-11	MW-11	MW-11	MW-11	MW-11
			06/11/14	05/27/15	06/07/16	03/01/17	03/20/18	06/11/14	05/27/15	06/08/16	03/02/17	03/20/18	06/11/14	05/27/15	06/08/16	03/02/17	03/20/18	06/11/14	05/27/15	06/08/16	03/02/17	03/20/18
			Baseline	ART System Operating			Post-ART			Baseline	ART System Operating			Post-ART			Baseline	ART System			Post-ART	
<b>Detected Volatile Organics</b>																						
m-Xylene & p-Xylene	--	ug/L	2 U	3 U [3 U]	3 U	3 U	3 U [3 U*]	2 U	3 U	3 U	3 U	3 U	2 U	3 U	3 U	3 U	3 U	2 U	3 U	3 U	3 U	3 U
1,1,1-Trichloroethane	8,000	ug/L	1 U	3 U [3 U]	3 U	3 U	3 U [3 U]	1 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U
1,1-Dichloroethane	28	ug/L	1 U	2 U [2 U]	2 U	2 U	2 U [2 U]	1 U	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U
1,1-Dichloroethene	280	ug/L	1 U	2 U^ [2 U^]	2 U	2 U	4 U [4 U]	1 U	2 U^	2 U*	2 U	4 U	1 U	2 U^	2 U*	2 U	4 U	1 U	2 U^	2 U*	2 U	4 U
1,2,4-Trimethylbenzene	56	ug/L	1 U	3 U [3 U]	3 U	3 U	3 U [3 U*]	1 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U
1,2-Dichlorobenzene	300	ug/L	1 U	2 U [2 U]	2 U	2 U	2 U [2 U*]	1 U	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U
1,2-Dichloroethene (cis) (DCE)	36	ug/L	1 U	1 U [1 U]	1 U	1 U	3 U [3 U*]	1 U	1 U	1 U	1 U	3 U	1 U	1 U	1 U	1 U	3 U	1 U	1 U	1 U	1 U	3 U
1,3,5-Trimethylbenzene	60	ug/L	1 U	3 U [3 U]	3 U	3 U	3 U [3 U*]	1 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U
1,4-Dichlorobenzene	4.8	ug/L	1 U	2 U [2 U]	4 U	4 U	4 U [4 U*]	1 U	2 U	4 U	4 U	4 U	1 U	2 U	4 U	4 U	4 U	1 U	2 U	4 U	4 U	4 U
2-Phenylbutane	2,000	ug/L	1 U	3 U [3 U]	3 U	3 U	3 U [3 U*]	1 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U
Cymene	--	ug/L	1 U	3 U [3 U]	3 U	3 U	3 U [3 U*]	1 U	3 U	3 U*	3 U	3 U	1 U	3 U	3 U*	3 U	3 U	1 U	3 U	3 U*	3 U	3 U
Ethylbenzene	15	ug/L	1 U	3 U [3 U]	3 U	3 U	3 U [3 U*]	1 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U
Isopropylbenzene (Cumene)	450	ug/L	1 U	2 U [2 U]	2 U	2 U	2 U [2 U*]	1 U	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U
Naphthalene	1.7	ug/L	3 U	2 U* [2 U*]	2 U	2 U	4 U [4 U]	3 U	2 U*	2 U	2 U	4 U	3 U	2 U*	2 U	2 U	4 U	3 U	2 U*	2 U	2 U	4 U
n-Butylbenzene	1,000	ug/L	2 U	3 U [3 U]	3 U	3 U	3 U [3 U*]	2 U	3 U	3 U	3 U	3 U	2 U	3 U	3 U	3 U	3 U	2 U	3 U	3 U	3 U	3 U
n-Propylbenzene	660	ug/L	1 U	3 U [3 U]	3 U	3 U	3 U [3 U*]	1 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U
tert-Butylbenzene	690	ug/L	1 U	3 U [3 U]	3 U	3 U	3 U [3 U]	1 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U
Tetrachloroethene (PCE)	41	ug/L	1 U	3 U [3 U]	3 U	3 U	3 U [3 U]	1 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U
Toluene	1,100	ug/L	1 U	2 U [2 U]	2 U	2 U	2 U [2 U*]	1 U	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U
Trichloroethene (TCE)	2.8	ug/L	1 U	3 U [3 U]	3 U	3 U	3 U [3 U*]	1 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U	1 U	3 U	3 U	3 U	3 U
Vinyl chloride	0.19	ug/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	1 U	1 U	1 U	1 U
Xylenes (o)	--	ug/L	1 U	2 U [2 U]	2 U	2 U	2 U [2 U*]	1 U	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U	1 U	2 U	2 U	2 U	2 U
Xylenes (total)	190	ug/L	2 U	3 U [3 U]	3 U	3 U	3 U [3 U*]	2 U	3 U	3 U	3 U	3 U	2 U	3 U	3 U	3 U	3 U	2 U	3 U	3 U	3 U	3 U
<b>Detected Miscellaneous</b>																						
Ferrous Iron	--	mg/L	0.4	0.2	0.2	NA	NA	0.4	0	0	NA	NA	0.4	0.2	0	NA	NA	0.4	0.1	0	NA	NA
Heterotrophic Plate Count	--	CFU/mL	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
<b>Detected Gasoline Range Organics</b>																						
Gasoline Range Organics (GRO)-C6-C10	2.2	mg/L	0.05 U	0.05 U [0.05]	0.05 U	0.05 U	1 U [1 U]	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	1 U	0.05 U	0.05 U	0.05 U	1 U
<b>Detected Diesel Range Organics</b>																						
DRO (nC10-<nC25)	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*]	0.39 U	0.21 U	0.11 U	0.11 U	0.12 U*	0.4 U	0.21 U	0.11 U	0.12 U	0.11 U*	0.38 U	0.2 U	0.11 U	0.13	0.12 U*
<b>Detected Field Parameters</b>																						
Dissolved oxygen	--	mg/L	6.55	6.91	5.03	5.21	6.29	4.27	4.23	2.08	4.1	3.02	4.35	3.92	3.19	5.44	3.14	1.39	4.31	1.19	3.1	1.52
ORP	--	mV	212.1	110.4	67.1	77.8	202	290	138.7	-69.7	87.5	195.9	236.1	149.7	-9.8	101.6	201.2	272.1	155.9	-57.2	93.2	195.8
pH	--	SU	5.44	5.62	5.69	NA	5.88	3.22	5.46	7.52	NA	5.78	4.79	5.34	7.12	NA	5.65	4.59	5.35	5.88	NA	5.48
Specific conductivity	--	mS/cm	0.062	0.067	0.071	0.121	0.061	0.108	0.093	0.079	0.128	0.056	0.107	0.071	0.078	0.127	0.048	0.162	0.113	0.149	0.192	0.092
Temperature	--	°C	6.29	5.2	9.9	3.41	2.12	4.84	4.48	7.67	3.31	0.88	5.05	4.42	7.12	3.13	1.71	4.81	4.48	7.94	0.28	0.40
Turbidity	--	NTU	22.2	49	39.5	0.11	10.89	4.21	0	9.8	0	14.16	60.1	39.2	33.8	0	71.22	74.9	208.3	34.3	0	176.9

**Notes:**  
1. Groundwater cleanup levels are the Alaska Department of Environmental Conservation's Groundwater Cleanup Levels (Article 3 - 18 AAC 75.345).  
Duplicate sample concentrations are presented in brackets.  
**Exceedances are bolded and shaded.**  
-- = No cleanup level available  
B = Compound was found in the blank and the sample.  
F1 - MS and/or MSD Recovery exceeds the control limits.  
H = sample was prepped or analyzed beyond the specified hold time  
J = estimated value  
U = not detected  
Y = The chromatographic response resembles a typical fuel pattern.  
NA = not analyzed  
Hcn = Sample was prepped or analyzed beyond the specified holding time. Due to the very short holding time of 8 hours, samples could not be analyzed within the hold time.  
\* = LCS or LCSD exceeds the control limits  
µg/L = micrograms per liter  
mg/L = milligrams per liter  
CFU/mL = colony forming units per milliliter  
mV = Millivolts  
S.U. = Standard unit  
mS/cm = Millisiemen per centimeter  
°C = Degree Celsius  
NTU = Nephelometric turbidity units





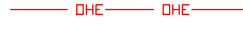

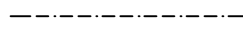
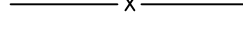


Figure

LOT 11, BERNICE LAKE, ALASKA INDUSTRIAL SUBDIVISION

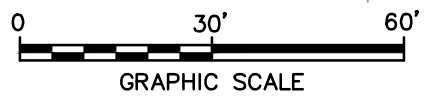



**LEGEND:**

-  EXISTING GROUNDWATER MONITORING WELL
-  TREATMENT WELL
-  EXISTING POWER POLE
-  SERVICE POWER POLE
-  OVERHEAD ELECTRIC
-  UNDERGROUND ELECTRIC
-  SVE AND AIR SPARGE PIPING
-  CHAIN LINK FENCE

**NOTE:**

1. BASE MAP SURVEY PROVIDED BY McLANE CONSULTING INC., AT A SCALE OF 1"=40'. COORDINATES ARE ALASKA STATE PLANE ZONE 4 NAD83. ELEVATIONS ARE NAVD88 IN FEET COMPUTED FROM AN OPUS SOLUTION USING GEOD09. BASIS OF HORIZONTAL CONTROL NAD83 POSITION (EPOCH 2003) AND VERTICAL CONTROL (NAVD88) WAS AN OPUS SOLUTION FROM CORS STATIONS ANC2 ANC AIRPORT 2 CORS ARP, TSEA ANCHORAGE CORS ARP AND UAAG U ALASKA COOP CORS ARP TO ESTABLISH THE POSITION AND ELEVATION OF CP-4.



GENERAL ELECTRIC COMPANY FORMER MACHINE SHOP NIKISKI, ALASKA	
<b>SITE MAP</b>	
	FIGURE <b>1</b>

CITY: SYRACUSE, NY DIV/GROUP: EBC-INDV DB/ID: L POSENAUER PM: M PELTON LVR:(Op)ONE\*OFF\*REF\*  
 V:\ENVCAD\SYRACUSE\ACT\01\003\125511502\000002\DWGS\SITE\31255801.dwg ACADVER: 19.1S (LMS TECH) PAGESETUP: 19.1S (LMS TECH) PAGESSETUP: 19.1S (LMS TECH) PAGESSETUP: 19.1S (LMS TECH) PAGESSETUP: 19.1S (LMS TECH)  
 XREFS: 31255801 31255800



**Attachment 1**

Laboratory Reports

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Seattle  
5755 8th Street East  
Tacoma, WA 98424  
Tel: (253)922-2310

TestAmerica Job ID: 580-62650-1  
Client Project/Site: GE-Nikiski

For:  
ARCADIS U.S. Inc  
4915 Prospectus Drive  
Suite F  
Durham, North Carolina 27713

Attn: Mr. Matthew Pelton



Authorized for release by:  
9/29/2016 4:02:39 PM

Kristine Allen, Manager of Project Management  
(253)248-4970  
[kristine.allen@testamericainc.com](mailto:kristine.allen@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

1

2

3

4

5

6

7

8

9

10

11



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Definitions . . . . .	4
Client Sample Results . . . . .	5
QC Sample Results . . . . .	21
Chronicle . . . . .	32
Certification Summary . . . . .	34
Sample Summary . . . . .	35
Chain of Custody . . . . .	36
Receipt Checklists . . . . .	37

# Case Narrative

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Job ID: 580-62650-1**

**Laboratory: TestAmerica Seattle**

## Narrative

### Job Narrative 580-62650-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 9/15/2016 8:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.1° C.

#### Receipt Exceptions

The Field Sampler was not listed on the Chain of Custody.

#### GC/MS VOA

Method(s) 8260C: The laboratory control sample duplicate (LCSD) for analytical batch 580-228044 recovered outside control limits for the following analytes: cis-1,2-Dichloroethene, Methylene Chloride and trans-1,2-Dichloroethene. These analytes were in control in the LCS, biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported. Samples with detections for these compounds were re-analyzed.

Method(s) 8260C: Due to the high concentration of o-Xylene, m-Xylene & p-Xylene, cis-1,2-Dichloroethene and Ethylbenzene in the sample, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 580-228044 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method(s) 8260C: The following samples was diluted to bring the concentration of target analytes within the calibration range: MW-1-W-091316 (580-62650-1) and MW-5-W-091316 (580-62650-4). Elevated reporting limits (RLs) are provided.

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

#### GC Semi VOA

Method(s) AK102 & 103: The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was earlier than the typical diesel fuel pattern used by the laboratory for quantitative purposes: MW-5-W-091316 (580-62650-4).

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.

# Definitions/Glossary

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

## 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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
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)

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: MW-1-W-091316**

**Lab Sample ID: 580-62650-1**

**Date Collected: 09/13/16 12:20**

**Matrix: Water**

**Date Received: 09/15/16 08:00**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/22/16 16:56	1
Bromobenzene	ND		2.0		ug/L			09/22/16 16:56	1
Bromoform	ND		1.0		ug/L			09/22/16 16:56	1
Bromomethane	ND		5.0		ug/L			09/22/16 16:56	1
Carbon tetrachloride	ND		3.0		ug/L			09/22/16 16:56	1
Chlorobenzene	ND		2.0		ug/L			09/22/16 16:56	1
Chlorobromomethane	ND		2.0		ug/L			09/22/16 16:56	1
Chlorodibromomethane	ND		1.0		ug/L			09/22/16 16:56	1
Chloroethane	ND		5.0		ug/L			09/22/16 16:56	1
Chloroform	ND		5.0		ug/L			09/22/16 16:56	1
Chloromethane	ND		5.0		ug/L			09/22/16 16:56	1
2-Chlorotoluene	ND		3.0		ug/L			09/22/16 16:56	1
4-Chlorotoluene	ND		2.0		ug/L			09/22/16 16:56	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 16:56	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/22/16 16:56	1
Dibromomethane	ND		1.0		ug/L			09/22/16 16:56	1
<b>1,2-Dichlorobenzene</b>	<b>2.1</b>		2.0		ug/L			09/22/16 16:56	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/22/16 16:56	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/22/16 16:56	1
Dichlorobromomethane	ND		2.0		ug/L			09/22/16 16:56	1
Dichlorodifluoromethane	ND		2.0		ug/L			09/22/16 16:56	1
<b>1,1-Dichloroethane</b>	<b>7.8</b>		2.0		ug/L			09/22/16 16:56	1
1,2-Dichloroethane	ND		1.0		ug/L			09/22/16 16:56	1
1,1-Dichloroethene	ND		2.0		ug/L			09/22/16 16:56	1
1,2-Dichloropropane	ND		1.0		ug/L			09/22/16 16:56	1
1,3-Dichloropropane	ND		1.0		ug/L			09/22/16 16:56	1
2,2-Dichloropropane	ND		3.0		ug/L			09/22/16 16:56	1
1,1-Dichloropropene	ND		3.0		ug/L			09/22/16 16:56	1
Ethylene Dibromide	ND		1.0		ug/L			09/22/16 16:56	1
Hexachlorobutadiene	ND		2.0		ug/L			09/22/16 16:56	1
<b>Isopropylbenzene</b>	<b>6.4</b>		2.0		ug/L			09/22/16 16:56	1
<b>4-Isopropyltoluene</b>	<b>3.4</b>		3.0		ug/L			09/22/16 16:56	1
Methylene Chloride	ND *		5.0		ug/L			09/22/16 16:56	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/22/16 16:56	1
<b>Naphthalene</b>	<b>3.8</b>		2.0		ug/L			09/22/16 16:56	1
<b>n-Butylbenzene</b>	<b>8.0</b>		3.0		ug/L			09/22/16 16:56	1
<b>N-Propylbenzene</b>	<b>6.4</b>		3.0		ug/L			09/22/16 16:56	1
<b>sec-Butylbenzene</b>	<b>3.3</b>		3.0		ug/L			09/22/16 16:56	1
Styrene	ND		5.0		ug/L			09/22/16 16:56	1
tert-Butylbenzene	ND		3.0		ug/L			09/22/16 16:56	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/22/16 16:56	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/22/16 16:56	1
<b>Tetrachloroethene</b>	<b>58</b>		3.0		ug/L			09/22/16 16:56	1
<b>Toluene</b>	<b>25</b>		2.0		ug/L			09/22/16 16:56	1
trans-1,2-Dichloroethene	ND *		3.0		ug/L			09/22/16 16:56	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 16:56	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/22/16 16:56	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/22/16 16:56	1
<b>1,1,1-Trichloroethane</b>	<b>3.5</b>		3.0		ug/L			09/22/16 16:56	1

TestAmerica Seattle



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: MW-1-W-091316**

**Lab Sample ID: 580-62650-1**

**Date Collected: 09/13/16 12:20**

**Matrix: Water**

**Date Received: 09/15/16 08:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0		ug/L			09/22/16 16:56	1
<b>Trichloroethene</b>	<b>32</b>		3.0		ug/L			09/22/16 16:56	1
Trichlorofluoromethane	ND		3.0		ug/L			09/22/16 16:56	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/22/16 16:56	1
<b>1,2,4-Trimethylbenzene</b>	<b>57</b>		3.0		ug/L			09/22/16 16:56	1
<b>1,3,5-Trimethylbenzene</b>	<b>21</b>		3.0		ug/L			09/22/16 16:56	1
Vinyl chloride	ND		1.0		ug/L			09/22/16 16:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 125		09/22/16 16:56	1
Dibromofluoromethane (Surr)	92		77 - 118		09/22/16 16:56	1
1,2-Dichloroethane-d4 (Surr)	91		65 - 143		09/22/16 16:56	1
Toluene-d8 (Surr)	102		82 - 122		09/22/16 16:56	1
Trifluorotoluene (Surr)	102		80 - 141		09/22/16 16:56	1

**Method: 8260C - Volatile Organic Compounds by GC/MS - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>130</b>		10		ug/L			09/25/16 16:00	10
<b>Ethylbenzene</b>	<b>360</b>		30		ug/L			09/25/16 16:00	10
<b>m-Xylene &amp; p-Xylene</b>	<b>530</b>		30		ug/L			09/25/16 16:00	10
<b>o-Xylene</b>	<b>170</b>		20		ug/L			09/25/16 16:00	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 125		09/25/16 16:00	10
Dibromofluoromethane (Surr)	94		77 - 118		09/25/16 16:00	10
1,2-Dichloroethane-d4 (Surr)	92		65 - 143		09/25/16 16:00	10
Toluene-d8 (Surr)	100		82 - 122		09/25/16 16:00	10
Trifluorotoluene (Surr)	103		80 - 141		09/25/16 16:00	10

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: MW-2-W-091316**

**Lab Sample ID: 580-62650-2**

**Date Collected: 09/13/16 11:35**

**Matrix: Water**

**Date Received: 09/15/16 08:00**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/22/16 15:31	1
Bromobenzene	ND		2.0		ug/L			09/22/16 15:31	1
Bromoform	ND		1.0		ug/L			09/22/16 15:31	1
Bromomethane	ND		5.0		ug/L			09/22/16 15:31	1
Carbon tetrachloride	ND		3.0		ug/L			09/22/16 15:31	1
Chlorobenzene	ND		2.0		ug/L			09/22/16 15:31	1
Chlorobromomethane	ND		2.0		ug/L			09/22/16 15:31	1
Chlorodibromomethane	ND		1.0		ug/L			09/22/16 15:31	1
Chloroethane	ND		5.0		ug/L			09/22/16 15:31	1
Chloroform	ND		5.0		ug/L			09/22/16 15:31	1
Chloromethane	ND		5.0		ug/L			09/22/16 15:31	1
2-Chlorotoluene	ND		3.0		ug/L			09/22/16 15:31	1
4-Chlorotoluene	ND		2.0		ug/L			09/22/16 15:31	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 15:31	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/22/16 15:31	1
Dibromomethane	ND		1.0		ug/L			09/22/16 15:31	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/22/16 15:31	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/22/16 15:31	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/22/16 15:31	1
Dichlorobromomethane	ND		2.0		ug/L			09/22/16 15:31	1
Dichlorodifluoromethane	ND		2.0		ug/L			09/22/16 15:31	1
<b>1,1-Dichloroethane</b>	<b>4.8</b>		2.0		ug/L			09/22/16 15:31	1
1,2-Dichloroethane	ND		1.0		ug/L			09/22/16 15:31	1
1,1-Dichloroethene	ND		2.0		ug/L			09/22/16 15:31	1
1,2-Dichloropropane	ND		1.0		ug/L			09/22/16 15:31	1
1,3-Dichloropropane	ND		1.0		ug/L			09/22/16 15:31	1
2,2-Dichloropropane	ND		3.0		ug/L			09/22/16 15:31	1
1,1-Dichloropropene	ND		3.0		ug/L			09/22/16 15:31	1
<b>Ethylbenzene</b>	<b>8.6</b>		3.0		ug/L			09/22/16 15:31	1
Ethylene Dibromide	ND		1.0		ug/L			09/22/16 15:31	1
Hexachlorobutadiene	ND		2.0		ug/L			09/22/16 15:31	1
Isopropylbenzene	ND		2.0		ug/L			09/22/16 15:31	1
4-Isopropyltoluene	ND		3.0		ug/L			09/22/16 15:31	1
Methylene Chloride	ND *		5.0		ug/L			09/22/16 15:31	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/22/16 15:31	1
<b>m-Xylene &amp; p-Xylene</b>	<b>7.2</b>		3.0		ug/L			09/22/16 15:31	1
Naphthalene	ND		2.0		ug/L			09/22/16 15:31	1
n-Butylbenzene	ND		3.0		ug/L			09/22/16 15:31	1
N-Propylbenzene	ND		3.0		ug/L			09/22/16 15:31	1
<b>o-Xylene</b>	<b>5.6</b>		2.0		ug/L			09/22/16 15:31	1
sec-Butylbenzene	ND		3.0		ug/L			09/22/16 15:31	1
Styrene	ND		5.0		ug/L			09/22/16 15:31	1
tert-Butylbenzene	ND		3.0		ug/L			09/22/16 15:31	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/22/16 15:31	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/22/16 15:31	1
Tetrachloroethene	ND		3.0		ug/L			09/22/16 15:31	1
Toluene	ND		2.0		ug/L			09/22/16 15:31	1
trans-1,2-Dichloroethene	ND *		3.0		ug/L			09/22/16 15:31	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 15:31	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: MW-2-W-091316**

**Lab Sample ID: 580-62650-2**

Date Collected: 09/13/16 11:35

Matrix: Water

Date Received: 09/15/16 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/22/16 15:31	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/22/16 15:31	1
1,1,1-Trichloroethane	ND		3.0		ug/L			09/22/16 15:31	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/22/16 15:31	1
Trichloroethene	ND		3.0		ug/L			09/22/16 15:31	1
Trichlorofluoromethane	ND		3.0		ug/L			09/22/16 15:31	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/22/16 15:31	1
<b>1,2,4-Trimethylbenzene</b>	<b>3.0</b>		3.0		ug/L			09/22/16 15:31	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/22/16 15:31	1
Vinyl chloride	ND		1.0		ug/L			09/22/16 15:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 125		09/22/16 15:31	1
Dibromofluoromethane (Surr)	94		77 - 118		09/22/16 15:31	1
1,2-Dichloroethane-d4 (Surr)	93		65 - 143		09/22/16 15:31	1
Toluene-d8 (Surr)	100		82 - 122		09/22/16 15:31	1
Trifluorotoluene (Surr)	100		80 - 141		09/22/16 15:31	1

**Method: 8260C - Volatile Organic Compounds by GC/MS - RA**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>61</b>		1.0		ug/L			09/25/16 14:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 125		09/25/16 14:34	1
Dibromofluoromethane (Surr)	93		77 - 118		09/25/16 14:34	1
1,2-Dichloroethane-d4 (Surr)	93		65 - 143		09/25/16 14:34	1
Toluene-d8 (Surr)	98		82 - 122		09/25/16 14:34	1
Trifluorotoluene (Surr)	103		80 - 141		09/25/16 14:34	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: MW-4-W-091316**

**Lab Sample ID: 580-62650-3**

**Date Collected: 09/13/16 13:15**

**Matrix: Water**

**Date Received: 09/15/16 08:00**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/22/16 17:25	1
Bromobenzene	ND		2.0		ug/L			09/22/16 17:25	1
Bromoform	ND		1.0		ug/L			09/22/16 17:25	1
Bromomethane	ND		5.0		ug/L			09/22/16 17:25	1
Carbon tetrachloride	ND		3.0		ug/L			09/22/16 17:25	1
Chlorobenzene	ND		2.0		ug/L			09/22/16 17:25	1
Chlorobromomethane	ND		2.0		ug/L			09/22/16 17:25	1
Chlorodibromomethane	ND		1.0		ug/L			09/22/16 17:25	1
Chloroethane	ND		5.0		ug/L			09/22/16 17:25	1
Chloroform	ND		5.0		ug/L			09/22/16 17:25	1
Chloromethane	ND		5.0		ug/L			09/22/16 17:25	1
2-Chlorotoluene	ND		3.0		ug/L			09/22/16 17:25	1
4-Chlorotoluene	ND		2.0		ug/L			09/22/16 17:25	1
cis-1,2-Dichloroethene	ND	*	1.0		ug/L			09/22/16 17:25	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 17:25	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/22/16 17:25	1
Dibromomethane	ND		1.0		ug/L			09/22/16 17:25	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/22/16 17:25	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/22/16 17:25	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/22/16 17:25	1
Dichlorobromomethane	ND		2.0		ug/L			09/22/16 17:25	1
Dichlorodifluoromethane	ND		2.0		ug/L			09/22/16 17:25	1
1,1-Dichloroethane	ND		2.0		ug/L			09/22/16 17:25	1
1,2-Dichloroethane	ND		1.0		ug/L			09/22/16 17:25	1
1,1-Dichloroethene	ND		2.0		ug/L			09/22/16 17:25	1
1,2-Dichloropropane	ND		1.0		ug/L			09/22/16 17:25	1
1,3-Dichloropropane	ND		1.0		ug/L			09/22/16 17:25	1
2,2-Dichloropropane	ND		3.0		ug/L			09/22/16 17:25	1
1,1-Dichloropropene	ND		3.0		ug/L			09/22/16 17:25	1
Ethylbenzene	ND		3.0		ug/L			09/22/16 17:25	1
Ethylene Dibromide	ND		1.0		ug/L			09/22/16 17:25	1
Hexachlorobutadiene	ND		2.0		ug/L			09/22/16 17:25	1
Isopropylbenzene	ND		2.0		ug/L			09/22/16 17:25	1
4-Isopropyltoluene	ND		3.0		ug/L			09/22/16 17:25	1
Methylene Chloride	ND	*	5.0		ug/L			09/22/16 17:25	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/22/16 17:25	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/22/16 17:25	1
Naphthalene	ND		2.0		ug/L			09/22/16 17:25	1
n-Butylbenzene	ND		3.0		ug/L			09/22/16 17:25	1
N-Propylbenzene	ND		3.0		ug/L			09/22/16 17:25	1
o-Xylene	ND		2.0		ug/L			09/22/16 17:25	1
sec-Butylbenzene	ND		3.0		ug/L			09/22/16 17:25	1
Styrene	ND		5.0		ug/L			09/22/16 17:25	1
tert-Butylbenzene	ND		3.0		ug/L			09/22/16 17:25	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/22/16 17:25	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/22/16 17:25	1
<b>Tetrachloroethene</b>	<b>13</b>		3.0		ug/L			09/22/16 17:25	1
Toluene	ND		2.0		ug/L			09/22/16 17:25	1
trans-1,2-Dichloroethene	ND	*	3.0		ug/L			09/22/16 17:25	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: MW-4-W-091316**

**Lab Sample ID: 580-62650-3**

**Date Collected: 09/13/16 13:15**

**Matrix: Water**

**Date Received: 09/15/16 08:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 17:25	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/22/16 17:25	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/22/16 17:25	1
<b>1,1,1-Trichloroethane</b>	<b>3.0</b>		3.0		ug/L			09/22/16 17:25	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/22/16 17:25	1
<b>Trichloroethene</b>	<b>4.2</b>		3.0		ug/L			09/22/16 17:25	1
Trichlorofluoromethane	ND		3.0		ug/L			09/22/16 17:25	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/22/16 17:25	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/22/16 17:25	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/22/16 17:25	1
Vinyl chloride	ND		1.0		ug/L			09/22/16 17:25	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	96		75 - 125					09/22/16 17:25	1
Dibromofluoromethane (Surr)	90		77 - 118					09/22/16 17:25	1
1,2-Dichloroethane-d4 (Surr)	92		65 - 143					09/22/16 17:25	1
Toluene-d8 (Surr)	100		82 - 122					09/22/16 17:25	1
Trifluorotoluene (Surr)	103		80 - 141					09/22/16 17:25	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: MW-5-W-091316**

**Lab Sample ID: 580-62650-4**

**Date Collected: 09/13/16 10:10**

**Matrix: Water**

**Date Received: 09/15/16 08:00**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	F1	2.0		ug/L			09/22/16 18:22	1
Bromobenzene	ND		2.0		ug/L			09/22/16 18:22	1
Bromoform	ND		1.0		ug/L			09/22/16 18:22	1
Bromomethane	ND		5.0		ug/L			09/22/16 18:22	1
Carbon tetrachloride	ND		3.0		ug/L			09/22/16 18:22	1
Chlorobenzene	ND		2.0		ug/L			09/22/16 18:22	1
Chlorobromomethane	ND		2.0		ug/L			09/22/16 18:22	1
Chlorodibromomethane	ND		1.0		ug/L			09/22/16 18:22	1
Chloroethane	ND		5.0		ug/L			09/22/16 18:22	1
Chloroform	ND		5.0		ug/L			09/22/16 18:22	1
Chloromethane	ND		5.0		ug/L			09/22/16 18:22	1
2-Chlorotoluene	ND		3.0		ug/L			09/22/16 18:22	1
4-Chlorotoluene	ND		2.0		ug/L			09/22/16 18:22	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 18:22	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/22/16 18:22	1
Dibromomethane	ND		1.0		ug/L			09/22/16 18:22	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/22/16 18:22	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/22/16 18:22	1
<b>1,4-Dichlorobenzene</b>	<b>4.2</b>		4.0		ug/L			09/22/16 18:22	1
Dichlorobromomethane	ND		2.0		ug/L			09/22/16 18:22	1
Dichlorodifluoromethane	ND		2.0		ug/L			09/22/16 18:22	1
1,1-Dichloroethane	ND		2.0		ug/L			09/22/16 18:22	1
1,2-Dichloroethane	ND		1.0		ug/L			09/22/16 18:22	1
1,1-Dichloroethene	ND	F1	2.0		ug/L			09/22/16 18:22	1
1,2-Dichloropropane	ND		1.0		ug/L			09/22/16 18:22	1
1,3-Dichloropropane	ND		1.0		ug/L			09/22/16 18:22	1
2,2-Dichloropropane	ND		3.0		ug/L			09/22/16 18:22	1
1,1-Dichloropropene	ND		3.0		ug/L			09/22/16 18:22	1
Ethylene Dibromide	ND		1.0		ug/L			09/22/16 18:22	1
Hexachlorobutadiene	ND		2.0		ug/L			09/22/16 18:22	1
Isopropylbenzene	ND		2.0		ug/L			09/22/16 18:22	1
4-Isopropyltoluene	ND		3.0		ug/L			09/22/16 18:22	1
Methylene Chloride	ND	* F1	5.0		ug/L			09/22/16 18:22	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/22/16 18:22	1
<b>Naphthalene</b>	<b>3.2</b>		2.0		ug/L			09/22/16 18:22	1
<b>n-Butylbenzene</b>	<b>10</b>		3.0		ug/L			09/22/16 18:22	1
N-Propylbenzene	ND		3.0		ug/L			09/22/16 18:22	1
sec-Butylbenzene	ND		3.0		ug/L			09/22/16 18:22	1
Styrene	ND		5.0		ug/L			09/22/16 18:22	1
tert-Butylbenzene	ND		3.0		ug/L			09/22/16 18:22	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/22/16 18:22	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/22/16 18:22	1
Tetrachloroethene	ND		3.0		ug/L			09/22/16 18:22	1
<b>Toluene</b>	<b>3.1</b>		2.0		ug/L			09/22/16 18:22	1
trans-1,2-Dichloroethene	ND	* F1	3.0		ug/L			09/22/16 18:22	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 18:22	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/22/16 18:22	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/22/16 18:22	1
1,1,1-Trichloroethane	ND		3.0		ug/L			09/22/16 18:22	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: MW-5-W-091316**

**Lab Sample ID: 580-62650-4**

Date Collected: 09/13/16 10:10

Matrix: Water

Date Received: 09/15/16 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0		ug/L			09/22/16 18:22	1
Trichloroethene	ND		3.0		ug/L			09/22/16 18:22	1
Trichlorofluoromethane	ND		3.0		ug/L			09/22/16 18:22	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/22/16 18:22	1
<b>1,2,4-Trimethylbenzene</b>	<b>20</b>	<b>F1</b>	3.0		ug/L			09/22/16 18:22	1
<b>1,3,5-Trimethylbenzene</b>	<b>14</b>	<b>F1</b>	3.0		ug/L			09/22/16 18:22	1
Vinyl chloride	ND		1.0		ug/L			09/22/16 18:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 125		09/22/16 18:22	1
Dibromofluoromethane (Surr)	93		77 - 118		09/22/16 18:22	1
1,2-Dichloroethane-d4 (Surr)	90		65 - 143		09/22/16 18:22	1
Toluene-d8 (Surr)	102		82 - 122		09/22/16 18:22	1
Trifluorotoluene (Surr)	102		80 - 141		09/22/16 18:22	1

**Method: 8260C - Volatile Organic Compounds by GC/MS - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>500</b>		50		ug/L			09/25/16 15:31	50
<b>Ethylbenzene</b>	<b>240</b>		150		ug/L			09/25/16 15:31	50
<b>m-Xylene &amp; p-Xylene</b>	<b>330</b>		150		ug/L			09/25/16 15:31	50
<b>o-Xylene</b>	<b>160</b>		100		ug/L			09/25/16 15:31	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 125		09/25/16 15:31	50
Dibromofluoromethane (Surr)	91		77 - 118		09/25/16 15:31	50
1,2-Dichloroethane-d4 (Surr)	91		65 - 143		09/25/16 15:31	50
Toluene-d8 (Surr)	99		82 - 122		09/25/16 15:31	50
Trifluorotoluene (Surr)	102		80 - 141		09/25/16 15:31	50

**Method: AK101 - Alaska - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Gasoline Range Organics (GRO) -C6-C10</b>	<b>1.7</b>		0.050		mg/L			09/22/16 16:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	102		50 - 150		09/22/16 16:14	1
4-Bromofluorobenzene (Surr)	131		50 - 150		09/22/16 16:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>1.3</b>		0.10		mg/L		09/22/16 16:36	09/24/16 19:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
o-Terphenyl	64		50 - 150		09/22/16 16:36	09/24/16 19:40	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: MW-7-W-091316**

**Lab Sample ID: 580-62650-5**

**Date Collected: 09/13/16 09:15**

**Matrix: Water**

**Date Received: 09/15/16 08:00**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/22/16 16:28	1
Bromobenzene	ND		2.0		ug/L			09/22/16 16:28	1
Bromoform	ND		1.0		ug/L			09/22/16 16:28	1
Bromomethane	ND		5.0		ug/L			09/22/16 16:28	1
Carbon tetrachloride	ND		3.0		ug/L			09/22/16 16:28	1
Chlorobenzene	ND		2.0		ug/L			09/22/16 16:28	1
Chlorobromomethane	ND		2.0		ug/L			09/22/16 16:28	1
Chlorodibromomethane	ND		1.0		ug/L			09/22/16 16:28	1
Chloroethane	ND		5.0		ug/L			09/22/16 16:28	1
Chloroform	ND		5.0		ug/L			09/22/16 16:28	1
Chloromethane	ND		5.0		ug/L			09/22/16 16:28	1
2-Chlorotoluene	ND		3.0		ug/L			09/22/16 16:28	1
4-Chlorotoluene	ND		2.0		ug/L			09/22/16 16:28	1
cis-1,2-Dichloroethene	ND	*	1.0		ug/L			09/22/16 16:28	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 16:28	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/22/16 16:28	1
Dibromomethane	ND		1.0		ug/L			09/22/16 16:28	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/22/16 16:28	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/22/16 16:28	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/22/16 16:28	1
Dichlorobromomethane	ND		2.0		ug/L			09/22/16 16:28	1
Dichlorodifluoromethane	ND		2.0		ug/L			09/22/16 16:28	1
1,1-Dichloroethane	ND		2.0		ug/L			09/22/16 16:28	1
1,2-Dichloroethane	ND		1.0		ug/L			09/22/16 16:28	1
1,1-Dichloroethene	ND		2.0		ug/L			09/22/16 16:28	1
1,2-Dichloropropane	ND		1.0		ug/L			09/22/16 16:28	1
1,3-Dichloropropane	ND		1.0		ug/L			09/22/16 16:28	1
2,2-Dichloropropane	ND		3.0		ug/L			09/22/16 16:28	1
1,1-Dichloropropene	ND		3.0		ug/L			09/22/16 16:28	1
Ethylbenzene	ND		3.0		ug/L			09/22/16 16:28	1
Ethylene Dibromide	ND		1.0		ug/L			09/22/16 16:28	1
Hexachlorobutadiene	ND		2.0		ug/L			09/22/16 16:28	1
Isopropylbenzene	ND		2.0		ug/L			09/22/16 16:28	1
4-Isopropyltoluene	ND		3.0		ug/L			09/22/16 16:28	1
Methylene Chloride	ND	*	5.0		ug/L			09/22/16 16:28	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/22/16 16:28	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/22/16 16:28	1
Naphthalene	ND		2.0		ug/L			09/22/16 16:28	1
n-Butylbenzene	ND		3.0		ug/L			09/22/16 16:28	1
N-Propylbenzene	ND		3.0		ug/L			09/22/16 16:28	1
o-Xylene	ND		2.0		ug/L			09/22/16 16:28	1
sec-Butylbenzene	ND		3.0		ug/L			09/22/16 16:28	1
Styrene	ND		5.0		ug/L			09/22/16 16:28	1
tert-Butylbenzene	ND		3.0		ug/L			09/22/16 16:28	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/22/16 16:28	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/22/16 16:28	1
<b>Tetrachloroethene</b>	<b>13</b>		3.0		ug/L			09/22/16 16:28	1
Toluene	ND		2.0		ug/L			09/22/16 16:28	1
trans-1,2-Dichloroethene	ND	*	3.0		ug/L			09/22/16 16:28	1

TestAmerica Seattle



# Client Sample Results

Client: ARCADIS U.S. Inc  
 Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: MW-7-W-091316**

**Lab Sample ID: 580-62650-5**

**Date Collected: 09/13/16 09:15**

**Matrix: Water**

**Date Received: 09/15/16 08:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 16:28	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/22/16 16:28	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/22/16 16:28	1
1,1,1-Trichloroethane	ND		3.0		ug/L			09/22/16 16:28	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/22/16 16:28	1
Trichloroethene	ND		3.0		ug/L			09/22/16 16:28	1
Trichlorofluoromethane	ND		3.0		ug/L			09/22/16 16:28	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/22/16 16:28	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/22/16 16:28	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/22/16 16:28	1
Vinyl chloride	ND		1.0		ug/L			09/22/16 16:28	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	96		75 - 125					09/22/16 16:28	1
Dibromofluoromethane (Surr)	91		77 - 118					09/22/16 16:28	1
1,2-Dichloroethane-d4 (Surr)	91		65 - 143					09/22/16 16:28	1
Toluene-d8 (Surr)	100		82 - 122					09/22/16 16:28	1
Trifluorotoluene (Surr)	102		80 - 141					09/22/16 16:28	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: BD-1-W-091316**

**Lab Sample ID: 580-62650-6**

**Date Collected: 09/13/16 00:01**

**Matrix: Water**

**Date Received: 09/15/16 08:00**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/22/16 15:59	1
Bromobenzene	ND		2.0		ug/L			09/22/16 15:59	1
Bromoform	ND		1.0		ug/L			09/22/16 15:59	1
Bromomethane	ND		5.0		ug/L			09/22/16 15:59	1
Carbon tetrachloride	ND		3.0		ug/L			09/22/16 15:59	1
Chlorobenzene	ND		2.0		ug/L			09/22/16 15:59	1
Chlorobromomethane	ND		2.0		ug/L			09/22/16 15:59	1
Chlorodibromomethane	ND		1.0		ug/L			09/22/16 15:59	1
Chloroethane	ND		5.0		ug/L			09/22/16 15:59	1
Chloroform	ND		5.0		ug/L			09/22/16 15:59	1
Chloromethane	ND		5.0		ug/L			09/22/16 15:59	1
2-Chlorotoluene	ND		3.0		ug/L			09/22/16 15:59	1
4-Chlorotoluene	ND		2.0		ug/L			09/22/16 15:59	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 15:59	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/22/16 15:59	1
Dibromomethane	ND		1.0		ug/L			09/22/16 15:59	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/22/16 15:59	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/22/16 15:59	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/22/16 15:59	1
Dichlorobromomethane	ND		2.0		ug/L			09/22/16 15:59	1
Dichlorodifluoromethane	ND		2.0		ug/L			09/22/16 15:59	1
<b>1,1-Dichloroethane</b>	<b>4.8</b>		2.0		ug/L			09/22/16 15:59	1
1,2-Dichloroethane	ND		1.0		ug/L			09/22/16 15:59	1
1,1-Dichloroethene	ND		2.0		ug/L			09/22/16 15:59	1
1,2-Dichloropropane	ND		1.0		ug/L			09/22/16 15:59	1
1,3-Dichloropropane	ND		1.0		ug/L			09/22/16 15:59	1
2,2-Dichloropropane	ND		3.0		ug/L			09/22/16 15:59	1
1,1-Dichloropropene	ND		3.0		ug/L			09/22/16 15:59	1
<b>Ethylbenzene</b>	<b>9.1</b>		3.0		ug/L			09/22/16 15:59	1
Ethylene Dibromide	ND		1.0		ug/L			09/22/16 15:59	1
Hexachlorobutadiene	ND		2.0		ug/L			09/22/16 15:59	1
Isopropylbenzene	ND		2.0		ug/L			09/22/16 15:59	1
4-Isopropyltoluene	ND		3.0		ug/L			09/22/16 15:59	1
Methylene Chloride	ND *		5.0		ug/L			09/22/16 15:59	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/22/16 15:59	1
<b>m-Xylene &amp; p-Xylene</b>	<b>7.6</b>		3.0		ug/L			09/22/16 15:59	1
Naphthalene	ND		2.0		ug/L			09/22/16 15:59	1
n-Butylbenzene	ND		3.0		ug/L			09/22/16 15:59	1
N-Propylbenzene	ND		3.0		ug/L			09/22/16 15:59	1
<b>o-Xylene</b>	<b>5.8</b>		2.0		ug/L			09/22/16 15:59	1
sec-Butylbenzene	ND		3.0		ug/L			09/22/16 15:59	1
Styrene	ND		5.0		ug/L			09/22/16 15:59	1
tert-Butylbenzene	ND		3.0		ug/L			09/22/16 15:59	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/22/16 15:59	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/22/16 15:59	1
Tetrachloroethene	ND		3.0		ug/L			09/22/16 15:59	1
Toluene	ND		2.0		ug/L			09/22/16 15:59	1
trans-1,2-Dichloroethene	ND *		3.0		ug/L			09/22/16 15:59	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 15:59	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: BD-1-W-091316**

**Lab Sample ID: 580-62650-6**

**Date Collected: 09/13/16 00:01**

**Matrix: Water**

**Date Received: 09/15/16 08:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/22/16 15:59	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/22/16 15:59	1
1,1,1-Trichloroethane	ND		3.0		ug/L			09/22/16 15:59	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/22/16 15:59	1
Trichloroethene	ND		3.0		ug/L			09/22/16 15:59	1
Trichlorofluoromethane	ND		3.0		ug/L			09/22/16 15:59	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/22/16 15:59	1
<b>1,2,4-Trimethylbenzene</b>	<b>3.0</b>		3.0		ug/L			09/22/16 15:59	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/22/16 15:59	1
Vinyl chloride	ND		1.0		ug/L			09/22/16 15:59	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	97		75 - 125					09/22/16 15:59	1
Dibromofluoromethane (Surr)	91		77 - 118					09/22/16 15:59	1
1,2-Dichloroethane-d4 (Surr)	91		65 - 143					09/22/16 15:59	1
Toluene-d8 (Surr)	102		82 - 122					09/22/16 15:59	1
Trifluorotoluene (Surr)	102		80 - 141					09/22/16 15:59	1

**Method: 8260C - Volatile Organic Compounds by GC/MS - RA**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>62</b>		1.0		ug/L			09/25/16 15:02	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	97		75 - 125					09/25/16 15:02	1
Dibromofluoromethane (Surr)	94		77 - 118					09/25/16 15:02	1
1,2-Dichloroethane-d4 (Surr)	90		65 - 143					09/25/16 15:02	1
Toluene-d8 (Surr)	100		82 - 122					09/25/16 15:02	1
Trifluorotoluene (Surr)	105		80 - 141					09/25/16 15:02	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: EB-1-W-091316**

**Lab Sample ID: 580-62650-7**

**Date Collected: 09/13/16 13:30**

**Matrix: Water**

**Date Received: 09/15/16 08:00**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/22/16 15:02	1
Bromobenzene	ND		2.0		ug/L			09/22/16 15:02	1
Bromoform	ND		1.0		ug/L			09/22/16 15:02	1
Bromomethane	ND		5.0		ug/L			09/22/16 15:02	1
Carbon tetrachloride	ND		3.0		ug/L			09/22/16 15:02	1
Chlorobenzene	ND		2.0		ug/L			09/22/16 15:02	1
Chlorobromomethane	ND		2.0		ug/L			09/22/16 15:02	1
Chlorodibromomethane	ND		1.0		ug/L			09/22/16 15:02	1
Chloroethane	ND		5.0		ug/L			09/22/16 15:02	1
Chloroform	ND		5.0		ug/L			09/22/16 15:02	1
Chloromethane	ND		5.0		ug/L			09/22/16 15:02	1
2-Chlorotoluene	ND		3.0		ug/L			09/22/16 15:02	1
4-Chlorotoluene	ND		2.0		ug/L			09/22/16 15:02	1
cis-1,2-Dichloroethene	ND	*	1.0		ug/L			09/22/16 15:02	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 15:02	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/22/16 15:02	1
Dibromomethane	ND		1.0		ug/L			09/22/16 15:02	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/22/16 15:02	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/22/16 15:02	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/22/16 15:02	1
Dichlorobromomethane	ND		2.0		ug/L			09/22/16 15:02	1
Dichlorodifluoromethane	ND		2.0		ug/L			09/22/16 15:02	1
1,1-Dichloroethane	ND		2.0		ug/L			09/22/16 15:02	1
1,2-Dichloroethane	ND		1.0		ug/L			09/22/16 15:02	1
1,1-Dichloroethene	ND		2.0		ug/L			09/22/16 15:02	1
1,2-Dichloropropane	ND		1.0		ug/L			09/22/16 15:02	1
1,3-Dichloropropane	ND		1.0		ug/L			09/22/16 15:02	1
2,2-Dichloropropane	ND		3.0		ug/L			09/22/16 15:02	1
1,1-Dichloropropene	ND		3.0		ug/L			09/22/16 15:02	1
Ethylbenzene	ND		3.0		ug/L			09/22/16 15:02	1
Ethylene Dibromide	ND		1.0		ug/L			09/22/16 15:02	1
Hexachlorobutadiene	ND		2.0		ug/L			09/22/16 15:02	1
Isopropylbenzene	ND		2.0		ug/L			09/22/16 15:02	1
4-Isopropyltoluene	ND		3.0		ug/L			09/22/16 15:02	1
Methylene Chloride	ND	*	5.0		ug/L			09/22/16 15:02	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/22/16 15:02	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/22/16 15:02	1
Naphthalene	ND		2.0		ug/L			09/22/16 15:02	1
n-Butylbenzene	ND		3.0		ug/L			09/22/16 15:02	1
N-Propylbenzene	ND		3.0		ug/L			09/22/16 15:02	1
o-Xylene	ND		2.0		ug/L			09/22/16 15:02	1
sec-Butylbenzene	ND		3.0		ug/L			09/22/16 15:02	1
Styrene	ND		5.0		ug/L			09/22/16 15:02	1
tert-Butylbenzene	ND		3.0		ug/L			09/22/16 15:02	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/22/16 15:02	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/22/16 15:02	1
Tetrachloroethene	ND		3.0		ug/L			09/22/16 15:02	1
Toluene	ND		2.0		ug/L			09/22/16 15:02	1
trans-1,2-Dichloroethene	ND	*	3.0		ug/L			09/22/16 15:02	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: EB-1-W-091316**

**Lab Sample ID: 580-62650-7**

Date Collected: 09/13/16 13:30

Matrix: Water

Date Received: 09/15/16 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 15:02	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/22/16 15:02	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/22/16 15:02	1
1,1,1-Trichloroethane	ND		3.0		ug/L			09/22/16 15:02	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/22/16 15:02	1
Trichloroethene	ND		3.0		ug/L			09/22/16 15:02	1
Trichlorofluoromethane	ND		3.0		ug/L			09/22/16 15:02	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/22/16 15:02	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/22/16 15:02	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/22/16 15:02	1
Vinyl chloride	ND		1.0		ug/L			09/22/16 15:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 125		09/22/16 15:02	1
Dibromofluoromethane (Surr)	96		77 - 118		09/22/16 15:02	1
1,2-Dichloroethane-d4 (Surr)	93		65 - 143		09/22/16 15:02	1
Toluene-d8 (Surr)	100		82 - 122		09/22/16 15:02	1
Trifluorotoluene (Surr)	103		80 - 141		09/22/16 15:02	1

**Method: AK101 - Alaska - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			09/22/16 15:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	104		50 - 150		09/22/16 15:42	1
4-Bromofluorobenzene (Surr)	94		50 - 150		09/22/16 15:42	1

**Method: 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		0.11		mg/L		09/22/16 16:36	09/24/16 20:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	73		50 - 150		09/22/16 16:36	09/24/16 20:43

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 580-62650-8**

Date Collected: 09/13/16 00:01

Matrix: Water

Date Received: 09/15/16 08:00

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/22/16 11:41	1
Bromobenzene	ND		2.0		ug/L			09/22/16 11:41	1
Bromoform	ND		1.0		ug/L			09/22/16 11:41	1
Bromomethane	ND		5.0		ug/L			09/22/16 11:41	1
Carbon tetrachloride	ND		3.0		ug/L			09/22/16 11:41	1
Chlorobenzene	ND		2.0		ug/L			09/22/16 11:41	1
Chlorobromomethane	ND		2.0		ug/L			09/22/16 11:41	1
Chlorodibromomethane	ND		1.0		ug/L			09/22/16 11:41	1
Chloroethane	ND		5.0		ug/L			09/22/16 11:41	1
Chloroform	ND		5.0		ug/L			09/22/16 11:41	1
Chloromethane	ND		5.0		ug/L			09/22/16 11:41	1
2-Chlorotoluene	ND		3.0		ug/L			09/22/16 11:41	1
4-Chlorotoluene	ND		2.0		ug/L			09/22/16 11:41	1
cis-1,2-Dichloroethene	ND	*	1.0		ug/L			09/22/16 11:41	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 11:41	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/22/16 11:41	1
Dibromomethane	ND		1.0		ug/L			09/22/16 11:41	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/22/16 11:41	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/22/16 11:41	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/22/16 11:41	1
Dichlorobromomethane	ND		2.0		ug/L			09/22/16 11:41	1
Dichlorodifluoromethane	ND		2.0		ug/L			09/22/16 11:41	1
1,1-Dichloroethane	ND		2.0		ug/L			09/22/16 11:41	1
1,2-Dichloroethane	ND		1.0		ug/L			09/22/16 11:41	1
1,1-Dichloroethene	ND		2.0		ug/L			09/22/16 11:41	1
1,2-Dichloropropane	ND		1.0		ug/L			09/22/16 11:41	1
1,3-Dichloropropane	ND		1.0		ug/L			09/22/16 11:41	1
2,2-Dichloropropane	ND		3.0		ug/L			09/22/16 11:41	1
1,1-Dichloropropene	ND		3.0		ug/L			09/22/16 11:41	1
Ethylbenzene	ND		3.0		ug/L			09/22/16 11:41	1
Ethylene Dibromide	ND		1.0		ug/L			09/22/16 11:41	1
Hexachlorobutadiene	ND		2.0		ug/L			09/22/16 11:41	1
Isopropylbenzene	ND		2.0		ug/L			09/22/16 11:41	1
4-Isopropyltoluene	ND		3.0		ug/L			09/22/16 11:41	1
Methylene Chloride	ND	*	5.0		ug/L			09/22/16 11:41	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/22/16 11:41	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/22/16 11:41	1
Naphthalene	ND		2.0		ug/L			09/22/16 11:41	1
n-Butylbenzene	ND		3.0		ug/L			09/22/16 11:41	1
N-Propylbenzene	ND		3.0		ug/L			09/22/16 11:41	1
o-Xylene	ND		2.0		ug/L			09/22/16 11:41	1
sec-Butylbenzene	ND		3.0		ug/L			09/22/16 11:41	1
Styrene	ND		5.0		ug/L			09/22/16 11:41	1
tert-Butylbenzene	ND		3.0		ug/L			09/22/16 11:41	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/22/16 11:41	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/22/16 11:41	1
Tetrachloroethene	ND		3.0		ug/L			09/22/16 11:41	1
Toluene	ND		2.0		ug/L			09/22/16 11:41	1
trans-1,2-Dichloroethene	ND	*	3.0		ug/L			09/22/16 11:41	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 580-62650-8**

Date Collected: 09/13/16 00:01

Matrix: Water

Date Received: 09/15/16 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 11:41	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/22/16 11:41	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/22/16 11:41	1
1,1,1-Trichloroethane	ND		3.0		ug/L			09/22/16 11:41	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/22/16 11:41	1
Trichloroethene	ND		3.0		ug/L			09/22/16 11:41	1
Trichlorofluoromethane	ND		3.0		ug/L			09/22/16 11:41	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/22/16 11:41	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/22/16 11:41	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/22/16 11:41	1
Vinyl chloride	ND		1.0		ug/L			09/22/16 11:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 125		09/22/16 11:41	1
Dibromofluoromethane (Surr)	91		77 - 118		09/22/16 11:41	1
1,2-Dichloroethane-d4 (Surr)	91		65 - 143		09/22/16 11:41	1
Toluene-d8 (Surr)	99		82 - 122		09/22/16 11:41	1
Trifluorotoluene (Surr)	102		80 - 141		09/22/16 11:41	1

**Method: AK101 - Alaska - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			09/22/16 13:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	105		50 - 150		09/22/16 13:32	1
4-Bromofluorobenzene (Surr)	95		50 - 150		09/22/16 13:32	1

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 580-228044/4**

**Matrix: Water**

**Analysis Batch: 228044**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/22/16 09:47	1
Bromobenzene	ND		2.0		ug/L			09/22/16 09:47	1
Bromoform	ND		1.0		ug/L			09/22/16 09:47	1
Bromomethane	ND		5.0		ug/L			09/22/16 09:47	1
Carbon tetrachloride	ND		3.0		ug/L			09/22/16 09:47	1
Chlorobenzene	ND		2.0		ug/L			09/22/16 09:47	1
Chlorobromomethane	ND		2.0		ug/L			09/22/16 09:47	1
Chlorodibromomethane	ND		1.0		ug/L			09/22/16 09:47	1
Chloroethane	ND		5.0		ug/L			09/22/16 09:47	1
Chloroform	ND		5.0		ug/L			09/22/16 09:47	1
Chloromethane	ND		5.0		ug/L			09/22/16 09:47	1
2-Chlorotoluene	ND		3.0		ug/L			09/22/16 09:47	1
4-Chlorotoluene	ND		2.0		ug/L			09/22/16 09:47	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/22/16 09:47	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 09:47	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/22/16 09:47	1
Dibromomethane	ND		1.0		ug/L			09/22/16 09:47	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/22/16 09:47	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/22/16 09:47	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/22/16 09:47	1
Dichlorobromomethane	ND		2.0		ug/L			09/22/16 09:47	1
Dichlorodifluoromethane	ND		2.0		ug/L			09/22/16 09:47	1
1,1-Dichloroethane	ND		2.0		ug/L			09/22/16 09:47	1
1,2-Dichloroethane	ND		1.0		ug/L			09/22/16 09:47	1
1,1-Dichloroethene	ND		2.0		ug/L			09/22/16 09:47	1
1,2-Dichloropropane	ND		1.0		ug/L			09/22/16 09:47	1
1,3-Dichloropropane	ND		1.0		ug/L			09/22/16 09:47	1
2,2-Dichloropropane	ND		3.0		ug/L			09/22/16 09:47	1
1,1-Dichloropropene	ND		3.0		ug/L			09/22/16 09:47	1
Ethylbenzene	ND		3.0		ug/L			09/22/16 09:47	1
Ethylene Dibromide	ND		1.0		ug/L			09/22/16 09:47	1
Hexachlorobutadiene	ND		2.0		ug/L			09/22/16 09:47	1
Isopropylbenzene	ND		2.0		ug/L			09/22/16 09:47	1
4-Isopropyltoluene	ND		3.0		ug/L			09/22/16 09:47	1
Methylene Chloride	ND		5.0		ug/L			09/22/16 09:47	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/22/16 09:47	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/22/16 09:47	1
Naphthalene	ND		2.0		ug/L			09/22/16 09:47	1
n-Butylbenzene	ND		3.0		ug/L			09/22/16 09:47	1
N-Propylbenzene	ND		3.0		ug/L			09/22/16 09:47	1
o-Xylene	ND		2.0		ug/L			09/22/16 09:47	1
sec-Butylbenzene	ND		3.0		ug/L			09/22/16 09:47	1
Styrene	ND		5.0		ug/L			09/22/16 09:47	1
tert-Butylbenzene	ND		3.0		ug/L			09/22/16 09:47	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/22/16 09:47	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/22/16 09:47	1
Tetrachloroethene	ND		3.0		ug/L			09/22/16 09:47	1
Toluene	ND		2.0		ug/L			09/22/16 09:47	1

TestAmerica Seattle



# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

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

Lab Sample ID: MB 580-228044/4

Matrix: Water

Analysis Batch: 228044

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		3.0		ug/L			09/22/16 09:47	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 09:47	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/22/16 09:47	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/22/16 09:47	1
1,1,1-Trichloroethane	ND		3.0		ug/L			09/22/16 09:47	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/22/16 09:47	1
Trichloroethene	ND		3.0		ug/L			09/22/16 09:47	1
Trichlorofluoromethane	ND		3.0		ug/L			09/22/16 09:47	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/22/16 09:47	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/22/16 09:47	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/22/16 09:47	1
Vinyl chloride	ND		1.0		ug/L			09/22/16 09:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		75 - 125		09/22/16 09:47	1
Dibromofluoromethane (Surr)	90		77 - 118		09/22/16 09:47	1
1,2-Dichloroethane-d4 (Surr)	89		65 - 143		09/22/16 09:47	1
Toluene-d8 (Surr)	101		82 - 122		09/22/16 09:47	1
Trifluorotoluene (Surr)	103		80 - 141		09/22/16 09:47	1

Lab Sample ID: LCS 580-228044/5

Matrix: Water

Analysis Batch: 228044

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	10.0	11.4		ug/L		113	80 - 120
Bromobenzene	10.0	10.5		ug/L		105	75 - 115
Bromoform	10.0	8.85		ug/L		88	55 - 130
Bromomethane	10.0	8.94		ug/L		89	55 - 125
Carbon tetrachloride	10.0	9.17		ug/L		92	65 - 124
Chlorobenzene	10.0	10.5		ug/L		104	80 - 120
Chlorobromomethane	10.0	10.4		ug/L		104	65 - 120
Chlorodibromomethane	10.0	9.08		ug/L		91	71 - 118
Chloroethane	10.0	8.98		ug/L		90	60 - 126
Chloroform	10.0	10.2		ug/L		102	80 - 119
Chloromethane	10.0	9.86		ug/L		99	40 - 149
2-Chlorotoluene	10.0	11.0		ug/L		110	69 - 125
4-Chlorotoluene	10.0	10.8		ug/L		107	68 - 121
cis-1,2-Dichloroethene	10.0	10.8		ug/L		108	70 - 111
cis-1,3-Dichloropropene	10.0	11.0		ug/L		109	77 - 117
1,2-Dibromo-3-Chloropropane	10.0	11.6		ug/L		116	58 - 141
Dibromomethane	10.0	9.98		ug/L		100	61 - 142
1,2-Dichlorobenzene	10.0	10.4		ug/L		104	70 - 120
1,3-Dichlorobenzene	10.0	10.2		ug/L		102	72 - 116
1,4-Dichlorobenzene	10.0	10.2		ug/L		101	75 - 117
Dichlorobromomethane	10.0	9.87		ug/L		98	75 - 120
Dichlorodifluoromethane	10.0	10.7		ug/L		107	20 - 141
1,1-Dichloroethane	10.0	10.8		ug/L		108	70 - 135

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

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

Lab Sample ID: LCS 580-228044/5

Matrix: Water

Analysis Batch: 228044

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	10.0	9.67		ug/L		97	58 - 143
1,1-Dichloroethene	10.1	10.6		ug/L		105	70 - 117
1,2-Dichloropropane	10.0	11.3		ug/L		113	58 - 150
1,3-Dichloropropane	10.0	10.4		ug/L		104	69 - 134
2,2-Dichloropropane	10.0	8.96		ug/L		90	50 - 140
1,1-Dichloropropene	10.0	11.0		ug/L		110	75 - 120
Ethylbenzene	10.0	10.8		ug/L		108	75 - 119
Ethylene Dibromide	10.0	9.99		ug/L		100	66 - 133
Hexachlorobutadiene	10.0	9.38		ug/L		94	56 - 125
Isopropylbenzene	10.0	10.8		ug/L		108	75 - 125
4-Isopropyltoluene	10.0	10.8		ug/L		108	66 - 120
Methylene Chloride	10.0	11.3		ug/L		113	70 - 115
Methyl tert-butyl ether	10.0	11.0		ug/L		110	65 - 125
m-Xylene & p-Xylene	10.0	10.3		ug/L		103	75 - 119
Naphthalene	10.0	11.7		ug/L		116	55 - 134
n-Butylbenzene	10.0	10.8		ug/L		108	70 - 120
N-Propylbenzene	10.0	11.6		ug/L		116	70 - 124
o-Xylene	10.0	10.3		ug/L		102	74 - 120
sec-Butylbenzene	10.0	11.1		ug/L		110	70 - 125
Styrene	10.0	10.6		ug/L		105	76 - 116
tert-Butylbenzene	10.0	10.9		ug/L		109	70 - 121
1,1,1,2-Tetrachloroethane	10.0	9.36		ug/L		93	64 - 130
1,1,2,2-Tetrachloroethane	10.0	12.0		ug/L		119	65 - 130
Tetrachloroethene	10.0	9.78		ug/L		97	70 - 124
Toluene	10.0	10.3		ug/L		103	75 - 120
trans-1,2-Dichloroethene	10.0	11.0		ug/L		110	72 - 113
trans-1,3-Dichloropropene	10.0	11.0		ug/L		110	73 - 122
1,2,3-Trichlorobenzene	10.0	9.79		ug/L		98	55 - 133
1,2,4-Trichlorobenzene	10.0	10.5		ug/L		105	56 - 129
1,1,1-Trichloroethane	10.0	9.14		ug/L		91	65 - 130
1,1,2-Trichloroethane	10.0	10.2		ug/L		102	69 - 135
Trichloroethene	10.0	10.7		ug/L		107	70 - 125
Trichlorofluoromethane	10.0	9.42		ug/L		94	49 - 130
1,2,3-Trichloropropane	10.0	10.7		ug/L		107	65 - 135
1,2,4-Trimethylbenzene	10.0	10.8		ug/L		108	75 - 121
1,3,5-Trimethylbenzene	10.0	10.8		ug/L		108	75 - 122
Vinyl chloride	10.0	9.27		ug/L		93	56 - 114

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	96		75 - 125
Dibromofluoromethane (Surr)	92		77 - 118
1,2-Dichloroethane-d4 (Surr)	90		65 - 143
Toluene-d8 (Surr)	99		82 - 122
Trifluorotoluene (Surr)	103		80 - 141

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

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

Lab Sample ID: LCSD 580-228044/6

Matrix: Water

Analysis Batch: 228044

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
Benzene	10.0	11.4		ug/L		114	80 - 120	0	14
Bromobenzene	10.0	10.2		ug/L		102	75 - 115	3	13
Bromoform	10.0	9.13		ug/L		91	55 - 130	3	20
Bromomethane	10.0	9.04		ug/L		90	55 - 125	1	30
Carbon tetrachloride	10.0	9.42		ug/L		94	65 - 124	3	19
Chlorobenzene	10.0	10.7		ug/L		106	80 - 120	2	15
Chlorobromomethane	10.0	10.5		ug/L		105	65 - 120	1	17
Chlorodibromomethane	10.0	9.12		ug/L		91	71 - 118	0	21
Chloroethane	10.0	9.18		ug/L		92	60 - 126	2	30
Chloroform	10.0	10.5		ug/L		105	80 - 119	3	15
Chloromethane	10.0	10.4		ug/L		104	40 - 149	6	22
2-Chlorotoluene	10.0	11.1		ug/L		111	69 - 125	1	15
4-Chlorotoluene	10.0	10.9		ug/L		109	68 - 121	1	15
cis-1,2-Dichloroethene	10.0	11.2	*	ug/L		112	70 - 111	4	15
cis-1,3-Dichloropropene	10.0	11.1		ug/L		111	77 - 117	1	24
1,2-Dibromo-3-Chloropropane	10.0	10.8		ug/L		107	58 - 141	7	30
Dibromomethane	10.0	10.2		ug/L		102	61 - 142	2	15
1,2-Dichlorobenzene	10.0	10.4		ug/L		103	70 - 120	0	15
1,3-Dichlorobenzene	10.0	10.4		ug/L		104	72 - 116	2	14
1,4-Dichlorobenzene	10.0	10.3		ug/L		103	75 - 117	1	17
Dichlorobromomethane	10.0	10.4		ug/L		103	75 - 120	5	14
Dichlorodifluoromethane	10.0	11.3		ug/L		113	20 - 141	6	35
1,1-Dichloroethane	10.0	11.2		ug/L		113	70 - 135	4	20
1,2-Dichloroethane	10.0	9.72		ug/L		97	58 - 143	0	17
1,1-Dichloroethene	10.1	11.8		ug/L		117	70 - 117	10	21
1,2-Dichloropropane	10.0	11.2		ug/L		112	58 - 150	1	15
1,3-Dichloropropane	10.0	10.4		ug/L		104	69 - 134	0	23
2,2-Dichloropropane	10.0	10.3		ug/L		103	50 - 140	13	20
1,1-Dichloropropene	10.0	11.1		ug/L		111	75 - 120	1	20
Ethylbenzene	10.0	10.9		ug/L		109	75 - 119	1	14
Ethylene Dibromide	10.0	10.4		ug/L		104	66 - 133	4	17
Hexachlorobutadiene	10.0	9.60		ug/L		96	56 - 125	2	19
Isopropylbenzene	10.0	10.9		ug/L		108	75 - 125	0	20
4-Isopropyltoluene	10.0	10.8		ug/L		108	66 - 120	0	13
Methylene Chloride	10.0	11.9	*	ug/L		119	70 - 115	5	19
Methyl tert-butyl ether	10.0	11.7		ug/L		117	65 - 125	7	18
m-Xylene & p-Xylene	10.0	10.4		ug/L		104	75 - 119	1	14
Naphthalene	10.0	11.9		ug/L		119	55 - 134	2	30
n-Butylbenzene	10.0	10.7		ug/L		107	70 - 120	2	20
N-Propylbenzene	10.0	11.5		ug/L		115	70 - 124	1	13
o-Xylene	10.0	10.6		ug/L		106	74 - 120	3	16
sec-Butylbenzene	10.0	11.0		ug/L		110	70 - 125	1	15
Styrene	10.0	10.8		ug/L		107	76 - 116	2	16
tert-Butylbenzene	10.0	10.9		ug/L		109	70 - 121	0	14
1,1,1,2-Tetrachloroethane	10.0	9.84		ug/L		98	64 - 130	5	20
1,1,1,2,2-Tetrachloroethane	10.0	11.9		ug/L		119	65 - 130	1	18
Tetrachloroethene	10.0	10.2		ug/L		102	70 - 124	4	20
Toluene	10.0	10.4		ug/L		104	75 - 120	1	19

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

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

**Lab Sample ID: LCSD 580-228044/6**

**Matrix: Water**

**Analysis Batch: 228044**

**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
trans-1,2-Dichloroethene	10.0	11.6	*	ug/L		116	72 - 113	5	21
trans-1,3-Dichloropropene	10.0	11.0		ug/L		110	73 - 122	0	30
1,2,3-Trichlorobenzene	10.0	10.3		ug/L		103	55 - 133	5	35
1,2,4-Trichlorobenzene	10.0	10.5		ug/L		105	56 - 129	1	22
1,1,1-Trichloroethane	10.0	9.40		ug/L		94	65 - 130	3	18
1,1,2-Trichloroethane	10.0	10.3		ug/L		103	69 - 135	1	24
Trichloroethene	10.0	11.0		ug/L		110	70 - 125	3	23
Trichlorofluoromethane	10.0	8.53		ug/L		85	49 - 130	10	35
1,2,3-Trichloropropane	10.0	11.1		ug/L		110	65 - 135	3	22
1,2,4-Trimethylbenzene	10.0	11.0		ug/L		110	75 - 121	2	16
1,3,5-Trimethylbenzene	10.0	10.7		ug/L		107	75 - 122	0	14
Vinyl chloride	10.0	9.62		ug/L		96	56 - 114	4	23

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	96		75 - 125
Dibromofluoromethane (Surr)	94		77 - 118
1,2-Dichloroethane-d4 (Surr)	92		65 - 143
Toluene-d8 (Surr)	98		82 - 122
Trifluorotoluene (Surr)	103		80 - 141

**Lab Sample ID: 580-62650-4 MS**

**Matrix: Water**

**Analysis Batch: 228044**

**Client Sample ID: MW-5-W-091316**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND	F1	10.0	12.2	F1	ug/L		122	80 - 120
Bromobenzene	ND		10.0	10.7		ug/L		107	75 - 115
Bromoform	ND		10.0	9.73		ug/L		97	55 - 130
Bromomethane	ND		10.0	8.85		ug/L		89	55 - 125
Carbon tetrachloride	ND		10.0	9.90		ug/L		99	65 - 124
Chlorobenzene	ND		10.0	11.0		ug/L		110	80 - 120
Chlorobromomethane	ND		10.0	10.7		ug/L		107	65 - 120
Chlorodibromomethane	ND		10.0	9.46		ug/L		95	71 - 118
Chloroethane	ND		10.0	10.0		ug/L		100	60 - 126
Chloroform	ND		10.0	10.8		ug/L		108	80 - 119
Chloromethane	ND		10.0	10.9		ug/L		109	40 - 149
2-Chlorotoluene	ND		10.0	11.0		ug/L		110	69 - 125
4-Chlorotoluene	ND		10.0	11.4		ug/L		114	68 - 121
cis-1,2-Dichloroethene	430	* E	10.0	459	E 4	ug/L		277	70 - 111
cis-1,3-Dichloropropene	ND		10.0	11.3		ug/L		113	77 - 117
1,2-Dibromo-3-Chloropropane	ND		10.0	12.5		ug/L		125	58 - 141
Dibromomethane	ND		10.0	10.6		ug/L		105	61 - 142
1,2-Dichlorobenzene	ND		10.0	12.9		ug/L		111	70 - 120
1,3-Dichlorobenzene	ND		10.0	11.3		ug/L		112	72 - 116
1,4-Dichlorobenzene	4.2		10.0	15.0		ug/L		108	75 - 117
Dichlorobromomethane	ND		10.0	10.5		ug/L		105	75 - 120
Dichlorodifluoromethane	ND		10.0	11.9		ug/L		119	20 - 141
1,1-Dichloroethane	ND		10.0	13.1		ug/L		113	70 - 135

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
 Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

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

Lab Sample ID: 580-62650-4 MS

Client Sample ID: MW-5-W-091316

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 228044

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	ND		10.0	9.89		ug/L		99	58 - 143
1,1-Dichloroethene	ND	F1	10.1	14.1	F1	ug/L		125	70 - 117
1,2-Dichloropropane	ND		10.0	12.0		ug/L		120	58 - 150
1,3-Dichloropropane	ND		10.0	10.8		ug/L		107	69 - 134
2,2-Dichloropropane	ND		10.0	8.93		ug/L		89	50 - 140
1,1-Dichloropropene	ND		10.0	11.9		ug/L		119	75 - 120
Ethylbenzene	150	E	10.0	156	E 4	ug/L		9	75 - 119
Ethylene Dibromide	ND		10.0	10.9		ug/L		109	66 - 133
Hexachlorobutadiene	ND		10.0	9.38		ug/L		94	56 - 125
Isopropylbenzene	ND		10.0	12.3		ug/L		114	75 - 125
4-Isopropyltoluene	ND		10.0	13.6		ug/L		111	66 - 120
Methylene Chloride	ND	* F1	10.0	11.9	F1	ug/L		118	70 - 115
Methyl tert-butyl ether	ND		10.0	11.9		ug/L		119	65 - 125
m-Xylene & p-Xylene	210	E	10.0	211	E 4	ug/L		13	75 - 119
Naphthalene	3.2		10.0	16.0		ug/L		128	55 - 134
n-Butylbenzene	10		10.0	21.1		ug/L		106	70 - 120
N-Propylbenzene	ND		10.0	13.0		ug/L		119	70 - 124
o-Xylene	120	E	10.0	127	E 4	ug/L		48	74 - 120
sec-Butylbenzene	ND		10.0	11.6		ug/L		116	70 - 125
Styrene	ND		10.0	10.9		ug/L		109	76 - 116
tert-Butylbenzene	ND		10.0	12.1		ug/L		112	70 - 121
1,1,1,2-Tetrachloroethane	ND		10.0	9.80		ug/L		98	64 - 130
1,1,2,2-Tetrachloroethane	ND		10.0	12.9		ug/L		128	65 - 130
Tetrachloroethene	ND		10.0	11.1		ug/L		111	70 - 124
Toluene	3.1		10.0	14.2		ug/L		112	75 - 120
trans-1,2-Dichloroethene	ND	* F1	10.0	13.2	F1	ug/L		131	72 - 113
trans-1,3-Dichloropropene	ND		10.0	11.0		ug/L		109	73 - 122
1,2,3-Trichlorobenzene	ND		10.0	10.5		ug/L		105	55 - 133
1,2,4-Trichlorobenzene	ND		10.0	10.9		ug/L		109	56 - 129
1,1,1-Trichloroethane	ND		10.0	10.3		ug/L		99	65 - 130
1,1,2-Trichloroethane	ND		10.0	10.9		ug/L		109	69 - 135
Trichloroethene	ND		10.0	11.6		ug/L		116	70 - 125
Trichlorofluoromethane	ND		10.0	9.65		ug/L		97	49 - 130
1,2,3-Trichloropropane	ND		10.0	12.3		ug/L		123	65 - 135
1,2,4-Trimethylbenzene	20	F1	10.0	31.6		ug/L		115	75 - 121
1,3,5-Trimethylbenzene	14	F1	10.0	26.1		ug/L		117	75 - 122
Vinyl chloride	ND		10.0	10.6		ug/L		101	56 - 114

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	97		75 - 125
Dibromofluoromethane (Surr)	94		77 - 118
1,2-Dichloroethane-d4 (Surr)	90		65 - 143
Toluene-d8 (Surr)	99		82 - 122
Trifluorotoluene (Surr)	103		80 - 141

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

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

**Lab Sample ID: 580-62650-4 MSD**

**Matrix: Water**

**Analysis Batch: 228044**

**Client Sample ID: MW-5-W-091316**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	RPD	Limit
	Result	Qualifier		Result	Qualifier							
Benzene	ND	F1	10.0	12.1	F1	ug/L		121	80 - 120	1		35
Bromobenzene	ND		10.0	10.3		ug/L		103	75 - 115	4		35
Bromoform	ND		10.0	9.29		ug/L		93	55 - 130	5		35
Bromomethane	ND		10.0	8.51		ug/L		85	55 - 125	4		35
Carbon tetrachloride	ND		10.0	9.32		ug/L		93	65 - 124	6		35
Chlorobenzene	ND		10.0	11.1		ug/L		111	80 - 120	1		35
Chlorobromomethane	ND		10.0	10.7		ug/L		107	65 - 120	0		35
Chlorodibromomethane	ND		10.0	9.38		ug/L		94	71 - 118	1		35
Chloroethane	ND		10.0	10.2		ug/L		102	60 - 126	2		35
Chloroform	ND		10.0	10.8		ug/L		108	80 - 119	0		35
Chloromethane	ND		10.0	10.5		ug/L		105	40 - 149	5		35
2-Chlorotoluene	ND		10.0	11.3		ug/L		113	69 - 125	2		35
4-Chlorotoluene	ND		10.0	11.0		ug/L		109	68 - 121	4		35
cis-1,2-Dichloroethene	430	* E	10.0	447	E 4	ug/L		156	70 - 111	3		35
cis-1,3-Dichloropropene	ND		10.0	11.2		ug/L		111	77 - 117	2		35
1,2-Dibromo-3-Chloropropane	ND		10.0	11.4		ug/L		114	58 - 141	9		35
Dibromomethane	ND		10.0	10.1		ug/L		101	61 - 142	4		35
1,2-Dichlorobenzene	ND		10.0	12.8		ug/L		110	70 - 120	1		35
1,3-Dichlorobenzene	ND		10.0	11.4		ug/L		114	72 - 116	1		35
1,4-Dichlorobenzene	4.2		10.0	15.0		ug/L		108	75 - 117	0		35
Dichlorobromomethane	ND		10.0	10.1		ug/L		101	75 - 120	4		35
Dichlorodifluoromethane	ND		10.0	11.6		ug/L		116	20 - 141	2		35
1,1-Dichloroethane	ND		10.0	13.4		ug/L		116	70 - 135	2		35
1,2-Dichloroethane	ND		10.0	9.66		ug/L		97	58 - 143	2		35
1,1-Dichloroethene	ND	F1	10.1	13.3		ug/L		117	70 - 117	6		35
1,2-Dichloropropane	ND		10.0	11.8		ug/L		118	58 - 150	1		35
1,3-Dichloropropane	ND		10.0	10.5		ug/L		104	69 - 134	3		35
2,2-Dichloropropane	ND		10.0	8.04		ug/L		80	50 - 140	11		35
1,1-Dichloropropene	ND		10.0	11.7		ug/L		117	75 - 120	2		35
Ethylbenzene	150	E	10.0	152	E 4	ug/L		-29	75 - 119	2		35
Ethylene Dibromide	ND		10.0	10.5		ug/L		104	66 - 133	4		35
Hexachlorobutadiene	ND		10.0	9.88		ug/L		99	56 - 125	5		35
Isopropylbenzene	ND		10.0	12.5		ug/L		115	75 - 125	1		35
4-Isopropyltoluene	ND		10.0	14.1		ug/L		116	66 - 120	3		35
Methylene Chloride	ND	* F1	10.0	11.4		ug/L		113	70 - 115	4		35
Methyl tert-butyl ether	ND		10.0	11.1		ug/L		110	65 - 125	7		35
m-Xylene & p-Xylene	210	E	10.0	205	E 4	ug/L		-41	75 - 119	3		35
Naphthalene	3.2		10.0	15.9		ug/L		126	55 - 134	1		35
n-Butylbenzene	10		10.0	21.7		ug/L		113	70 - 120	3		35
N-Propylbenzene	ND		10.0	13.4		ug/L		122	70 - 124	2		35
o-Xylene	120	E	10.0	125	E 4	ug/L		27	74 - 120	2		35
sec-Butylbenzene	ND		10.0	11.7		ug/L		117	70 - 125	1		35
Styrene	ND		10.0	11.4		ug/L		113	76 - 116	4		35
tert-Butylbenzene	ND		10.0	12.1		ug/L		112	70 - 121	0		35
1,1,1,2-Tetrachloroethane	ND		10.0	9.77		ug/L		97	64 - 130	0		35
1,1,1,2,2-Tetrachloroethane	ND		10.0	12.1		ug/L		121	65 - 130	6		35
Tetrachloroethene	ND		10.0	10.9		ug/L		109	70 - 124	2		35
Toluene	3.1		10.0	14.2		ug/L		111	75 - 120	0		35

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

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

**Lab Sample ID: 580-62650-4 MSD**

**Client Sample ID: MW-5-W-091316**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 228044**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
trans-1,2-Dichloroethene	ND	* F1	10.0	12.7	F1	ug/L		127	72 - 113	3	35
trans-1,3-Dichloropropene	ND		10.0	10.8		ug/L		108	73 - 122	2	35
1,2,3-Trichlorobenzene	ND		10.0	11.1		ug/L		111	55 - 133	6	35
1,2,4-Trichlorobenzene	ND		10.0	11.5		ug/L		115	56 - 129	6	35
1,1,1-Trichloroethane	ND		10.0	10.2		ug/L		98	65 - 130	1	35
1,1,2-Trichloroethane	ND		10.0	11.0		ug/L		110	69 - 135	1	35
Trichloroethene	ND		10.0	11.5		ug/L		115	70 - 125	1	35
Trichlorofluoromethane	ND		10.0	8.89		ug/L		89	49 - 130	8	35
1,2,3-Trichloropropane	ND		10.0	11.7		ug/L		117	65 - 135	5	35
1,2,4-Trimethylbenzene	20	F1	10.0	32.5	F1	ug/L		124	75 - 121	3	35
1,3,5-Trimethylbenzene	14	F1	10.0	26.8	F1	ug/L		124	75 - 122	2	35
Vinyl chloride	ND		10.0	9.79		ug/L		93	56 - 114	8	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		75 - 125
Dibromofluoromethane (Surr)	92		77 - 118
1,2-Dichloroethane-d4 (Surr)	87		65 - 143
Toluene-d8 (Surr)	101		82 - 122
Trifluorotoluene (Surr)	102		80 - 141

**Lab Sample ID: MB 580-228264/4**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 228264**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
cis-1,2-Dichloroethene	ND		1.0		ug/L		09/25/16 12:39	1	
Ethylbenzene	ND		3.0		ug/L		09/25/16 12:39	1	
m-Xylene & p-Xylene	ND		3.0		ug/L		09/25/16 12:39	1	
o-Xylene	ND		2.0		ug/L		09/25/16 12:39	1	

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 125		09/25/16 12:39	1
Dibromofluoromethane (Surr)	91		77 - 118		09/25/16 12:39	1
1,2-Dichloroethane-d4 (Surr)	91		65 - 143		09/25/16 12:39	1
Toluene-d8 (Surr)	100		82 - 122		09/25/16 12:39	1
Trifluorotoluene (Surr)	102		80 - 141		09/25/16 12:39	1

**Lab Sample ID: LCS 580-228264/5**

**Client Sample ID: Lab Control Sample**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 228264**

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec.
		Result	Qualifier				Limits
cis-1,2-Dichloroethene	10.0	10.4		ug/L		104	70 - 111
Ethylbenzene	10.0	10.5		ug/L		105	75 - 119
m-Xylene & p-Xylene	10.0	9.96		ug/L		99	75 - 119
o-Xylene	10.0	10.0		ug/L		100	74 - 120

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

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

**Lab Sample ID: LCS 580-228264/5**

**Matrix: Water**

**Analysis Batch: 228264**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Surrogate	LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		75 - 125
Dibromofluoromethane (Surr)	94		77 - 118
1,2-Dichloroethane-d4 (Surr)	90		65 - 143
Toluene-d8 (Surr)	100		82 - 122
Trifluorotoluene (Surr)	104		80 - 141

**Lab Sample ID: LCSD 580-228264/6**

**Matrix: Water**

**Analysis Batch: 228264**

**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-1,2-Dichloroethene	10.0	10.7		ug/L		107	70 - 111	3	15	
Ethylbenzene	10.0	10.4		ug/L		104	75 - 119	1	14	
m-Xylene & p-Xylene	10.0	9.92		ug/L		99	75 - 119	0	14	
o-Xylene	10.0	10.0		ug/L		100	74 - 120	0	16	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	96		75 - 125
Dibromofluoromethane (Surr)	92		77 - 118
1,2-Dichloroethane-d4 (Surr)	90		65 - 143
Toluene-d8 (Surr)	99		82 - 122
Trifluorotoluene (Surr)	105		80 - 141

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

**Lab Sample ID: MB 580-228050/8**

**Matrix: Water**

**Analysis Batch: 228050**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			09/22/16 11:55	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Trifluorotoluene (Surr)	105		50 - 150		09/22/16 11:55	1
4-Bromofluorobenzene (Surr)	95		50 - 150		09/22/16 11:55	1

**Lab Sample ID: LCS 580-228050/9**

**Matrix: Water**

**Analysis Batch: 228050**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	
							RPD	Limit
Gasoline Range Organics (GRO) -C6-C10	1.16	1.32		mg/L		113	60 - 120	

Surrogate	LCS		Limits
	%Recovery	Qualifier	
Trifluorotoluene (Surr)	108		50 - 150

TestAmerica Seattle



# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

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

**Lab Sample ID: LCS 580-228050/9**

**Matrix: Water**

**Analysis Batch: 228050**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		50 - 150

**Lab Sample ID: LCSD 580-228050/10**

**Matrix: Water**

**Analysis Batch: 228050**

**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
Gasoline Range Organics (GRO) -C6-C10	1.16	1.32		mg/L		113	60 - 120	0	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
Trifluorotoluene (Surr)	108		50 - 150
4-Bromofluorobenzene (Surr)	101		50 - 150

**Lab Sample ID: 580-62650-4 MS**

**Matrix: Water**

**Analysis Batch: 228050**

**Client Sample ID: MW-5-W-091316**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	1.7		1.16	3.08		mg/L		115	60 - 120		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
Trifluorotoluene (Surr)	104		50 - 150
4-Bromofluorobenzene (Surr)	136		50 - 150

**Lab Sample ID: 580-62650-4 MSD**

**Matrix: Water**

**Analysis Batch: 228050**

**Client Sample ID: MW-5-W-091316**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	1.7		1.16	3.08		mg/L		115	60 - 120	0	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
Trifluorotoluene (Surr)	104		50 - 150
4-Bromofluorobenzene (Surr)	138		50 - 150

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

**Lab Sample ID: MB 580-228146/1-A**

**Matrix: Water**

**Analysis Batch: 228252**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 228146**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	ND		0.10		mg/L		09/22/16 16:36	09/24/16 18:38	1

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

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

(Continued)

Lab Sample ID: MB 580-228146/1-A

Matrix: Water

Analysis Batch: 228252

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 228146

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
<i>o</i> -Terphenyl	100		50 - 150	09/22/16 16:36	09/24/16 18:38	1

Lab Sample ID: LCS 580-228146/2-A

Matrix: Water

Analysis Batch: 228252

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 228146

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	86		50 - 150

Lab Sample ID: LCSD 580-228146/3-A

Matrix: Water

Analysis Batch: 228252

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 228146

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	88		50 - 150

Lab Sample ID: 580-62650-4 MS

Matrix: Water

Analysis Batch: 228252

Client Sample ID: MW-5-W-091316

Prep Type: Total/NA

Prep Batch: 228146

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	67		50 - 150

Lab Sample ID: 580-62650-4 MSD

Matrix: Water

Analysis Batch: 228252

Client Sample ID: MW-5-W-091316

Prep Type: Total/NA

Prep Batch: 228146

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	65		50 - 150

TestAmerica Seattle

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

## Client Sample ID: MW-1-W-091316

Lab Sample ID: 580-62650-1

Date Collected: 09/13/16 12:20

Matrix: Water

Date Received: 09/15/16 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	228044	09/22/16 16:56	TL1	TAL SEA
Total/NA	Analysis	8260C	DL	10	228264	09/25/16 16:00	CJ	TAL SEA

## Client Sample ID: MW-2-W-091316

Lab Sample ID: 580-62650-2

Date Collected: 09/13/16 11:35

Matrix: Water

Date Received: 09/15/16 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	228044	09/22/16 15:31	TL1	TAL SEA
Total/NA	Analysis	8260C	RA	1	228264	09/25/16 14:34	CJ	TAL SEA

## Client Sample ID: MW-4-W-091316

Lab Sample ID: 580-62650-3

Date Collected: 09/13/16 13:15

Matrix: Water

Date Received: 09/15/16 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	228044	09/22/16 17:25	TL1	TAL SEA

## Client Sample ID: MW-5-W-091316

Lab Sample ID: 580-62650-4

Date Collected: 09/13/16 10:10

Matrix: Water

Date Received: 09/15/16 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	228044	09/22/16 18:22	TL1	TAL SEA
Total/NA	Analysis	8260C	DL	50	228264	09/25/16 15:31	CJ	TAL SEA
Total/NA	Analysis	AK101		1	228050	09/22/16 16:14	J1J	TAL SEA
Total/NA	Prep	3510C			228146	09/22/16 16:36	JCV	TAL SEA
Total/NA	Analysis	AK102 & 103		1	228252	09/24/16 19:40	KZ1	TAL SEA

## Client Sample ID: MW-7-W-091316

Lab Sample ID: 580-62650-5

Date Collected: 09/13/16 09:15

Matrix: Water

Date Received: 09/15/16 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	228044	09/22/16 16:28	TL1	TAL SEA

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: BD-1-W-091316**

**Lab Sample ID: 580-62650-6**

Date Collected: 09/13/16 00:01

Matrix: Water

Date Received: 09/15/16 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	228044	09/22/16 15:59	TL1	TAL SEA
Total/NA	Analysis	8260C	RA	1	228264	09/25/16 15:02	CJ	TAL SEA

**Client Sample ID: EB-1-W-091316**

**Lab Sample ID: 580-62650-7**

Date Collected: 09/13/16 13:30

Matrix: Water

Date Received: 09/15/16 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	228044	09/22/16 15:02	TL1	TAL SEA
Total/NA	Analysis	AK101		1	228050	09/22/16 15:42	J1J	TAL SEA
Total/NA	Prep	3510C			228146	09/22/16 16:36	JCV	TAL SEA
Total/NA	Analysis	AK102 & 103		1	228252	09/24/16 20:43	KZ1	TAL SEA

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 580-62650-8**

Date Collected: 09/13/16 00:01

Matrix: Water

Date Received: 09/15/16 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	228044	09/22/16 11:41	TL1	TAL SEA
Total/NA	Analysis	AK101		1	228050	09/22/16 13:32	J1J	TAL SEA

**Laboratory References:**

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

# Certification Summary

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

## Laboratory: TestAmerica Seattle

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-02-17

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

# Sample Summary

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-62650-1	MW-1-W-091316	Water	09/13/16 12:20	09/15/16 08:00
580-62650-2	MW-2-W-091316	Water	09/13/16 11:35	09/15/16 08:00
580-62650-3	MW-4-W-091316	Water	09/13/16 13:15	09/15/16 08:00
580-62650-4	MW-5-W-091316	Water	09/13/16 10:10	09/15/16 08:00
580-62650-5	MW-7-W-091316	Water	09/13/16 09:15	09/15/16 08:00
580-62650-6	BD-1-W-091316	Water	09/13/16 00:01	09/15/16 08:00
580-62650-7	EB-1-W-091316	Water	09/13/16 13:30	09/15/16 08:00
580-62650-8	TRIP BLANK	Water	09/13/16 00:01	09/15/16 08:00



Tacoma, WA 98424-1317  
phone 253.922.2310 fax 253.922.5047

Regulatory Program:  DW  NPDES  KORA  Other:

TestAmerica Laboratories, Inc.



Client Contact: ARCADIS-US, Inc.  
880 H Street STE 101  
Anchorage, AK 99501  
907.726.8095  
FAX: (xxx) xxx-xxxx  
Project Name: GE-N.K.I.K.  
Site: BOSSINS, 1404 SPOA  
PO # B0046260

Project Manager: Greg Montgomery  
Tel/Fax: Greg Montgomery  
Analysis Turnaround Time  
 CALENDAR DAYS  WORKING DAYS  
TAT if different from Below  
 2 weeks  
 1 week  
 2 days  
 1 day

Site Contact: \_\_\_\_\_  
Lab Contact: \_\_\_\_\_  
Date: \_\_\_\_\_  
Carrier: \_\_\_\_\_  
COC No.: \_\_\_\_\_ of \_\_\_\_\_ COCs

Sampler: \_\_\_\_\_  
For Lab Use Only:  
Walk-in Client: \_\_\_\_\_  
Lab Sampling: \_\_\_\_\_  
Job / SDG No.: \_\_\_\_\_

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grn)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	BTEX	GRO	DRO	Lead	Other
MW-1-W-091316	9/13/16	1220	G	W	6	N						
MW-2-W-091316	9/13/16	1135	G	W	6	N						
MW-4-W-091316	9/13/16	1315	G	W	6	N						
MW-5-W-091316	9/13/16	1010	G	W	6	N						
MW-7-W-091316	9/13/16	0915	G	W	6	N						
BD-1-W-091316	9/13/16	-	G	W	6	N						
EB-1-W-091316	9/13/16	1330	G	W	8	N						
Trip Blank	-/-	-	-	W	6							

Preservation Used: 1=Ice 2=HCl 3=H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification:  
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Special Instructions/QC Requirements & Comments:  
 Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown

Return to Client:  Disposal by Lab:  Archive for \_\_\_\_\_ Months

Custody Seal Intact:  Yes  No  
Custody Seal No.: \_\_\_\_\_  
Cooler Temp. (°C): Obs'd: \_\_\_\_\_ Cor'd: 4°C Therm ID No.: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Company: \_\_\_\_\_ Date/Time: 9/13/16 11:00  
Received by: \_\_\_\_\_ Company: T.A. AIC Date/Time: 9/13/16 12:30

Relinquished by: \_\_\_\_\_ Company: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
Received by: \_\_\_\_\_ Company: WSEH Date/Time: 9/15/16 0500

Relinquished by: \_\_\_\_\_ Company: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
Received in Laboratory by: \_\_\_\_\_ Company: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

580-62650 Chain of Custody

TB A2 Cooler Cor 5.1 Unc 3.3  
Cooler Disc 2.5, Blue/White @ Lab  
Wet/Packs Packing B, bbls  
WLS

Form No. CA-C-WI-002, Rev. 4.7, dated 11/02/2015

## Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 580-62650-1

SDG Number:

**Login Number: 62650**

**List Number: 1**

**Creator: Svabik-Seror, Philip M**

**List Source: TestAmerica Seattle**

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.	N/A	
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?	False	No name.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Seattle  
5755 8th Street East  
Tacoma, WA 98424  
Tel: (253)922-2310

TestAmerica Job ID: 580-66540-1  
Client Project/Site: GE-Nikiski

For:  
ARCADIS U.S. Inc  
4915 Prospectus Drive  
Suite F  
Durham, North Carolina 27713

Attn: Mr. Matthew Pelton



Authorized for release by:  
3/21/2017 9:48:45 AM

Kristine Allen, Manager of Project Management  
(253)248-4970  
[kristine.allen@testamericainc.com](mailto:kristine.allen@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

1

2

3

4

5

6

7

8

9

10

11



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Definitions . . . . .	5
Client Sample Results . . . . .	6
QC Sample Results . . . . .	34
Chronicle . . . . .	55
Certification Summary . . . . .	59
Sample Summary . . . . .	60
Chain of Custody . . . . .	61
Receipt Checklists . . . . .	64

# Case Narrative

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Job ID: 580-66540-1**

**Laboratory: TestAmerica Seattle**

## Narrative

### Job Narrative 580-66540-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 3/7/2017 10:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.1° C and 5.1° C.

#### Receipt Exceptions

One container for the following samples was received broken and leaking: MW-1-W-030217 (580-66540-1), MW-7-W-030117 (580-66540-7[MS]), MW-7-W-030117 (580-66540-7[MSD]), MW-8-W-030117 (580-66540-8), MW-9-W-030217 (580-66540-9) and BD-2-W-030117 (580-66540-13).

Sample MW-1-W-030217 (580-66540-1) had 1 broken 40mL HCL VOA

Sample MW-7-W-030117 (580-66540-7[MS]) had 1 broken 250mL HCL Amber Glass Bottle

Sample MW-7-W-030117 (580-66540-7[MSD]) had 1 broken 250mL HCL Amber Glass Bottle

Sample MW-8-W-030117 (580-66540-8) had 1 broken 250mL HCL Amber Glass Bottle

Sample MW-9-W-030217 (580-66540-9) had 1 broken 250mL HCL Amber Glass Bottle

Sample BD-2-W-030117 (580-66540-13) had 1 broken 40mL HCL VOA

The container labels for the samples did not match the Chain of Custody (COC). The container labels list just list the first 3 characters of the ID (for example MW-1), while the COC lists the entire ID (for example MW-1-W-030217). Samples were logged in per the containers labels at client request.

#### GC/MS VOA

Method(s) 8260C: The following samples was diluted to bring the concentration of target analytes within the calibration range: MW-1 (580-66540-1), MW-2 (580-66540-2) and MW-5 (580-66540-5). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample was reanalyzed for suspected carryover of Cis-1,2-Dichloroethene in previous batch. MW-3 (580-66540-3)

Method(s) 8260C: The lab control sample (LCS) and/or lab control sample duplicate (LCSD) recovered outside of control limits, high biased, for several compounds. The associated samples were non-detect for these compounds; therefore the data has been reported. The RPD was high for several compounds.

Method(s) AK101: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 240593 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10. The LCS/LCSD both recovered within the %R limits, so the results have been reported.

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

#### GC Semi VOA

Method(s) AK102 & 103: The following sample contained a hydrocarbon pattern in the diesel range; however, the elution pattern was earlier than the typical diesel fuel pattern used by the laboratory for quantitative purposes: MW-2 (580-66540-2) and MW-5 (580-66540-5).

Method(s) AK102 & 103: The following sample contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: MW-4 (580-66540-4) and MW-6 (580-66540-6).

Method(s) AK102 & 103: The matrix spike duplicate (MSD) recoveries for preparation batch 580-240600 and analytical batch 580-240570 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) AK102 & 103: The following sample contained a hydrocarbon pattern in the diesel range; however, the elution pattern was

# Case Narrative

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

---

## Job ID: 580-66540-1 (Continued)

---

### Laboratory: TestAmerica Seattle (Continued)

earlier than the typical diesel fuel pattern used by the laboratory for quantitative purposes: MW-1 (580-66540-1).

Method(s) AK102 & 103: The following sample contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: BD-1 (580-66540-12).

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

1

2

3

4

5

6

7

8

9

10

11

# Definitions/Glossary

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits

### GC VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits

### GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
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)

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-1**  
**Date Collected: 03/02/17 11:40**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-1**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/10/17 13:37	1
Bromobenzene	ND		2.0		ug/L			03/10/17 13:37	1
Bromoform	ND		1.0		ug/L			03/10/17 13:37	1
Bromomethane	ND		5.0		ug/L			03/10/17 13:37	1
Carbon tetrachloride	ND		3.0		ug/L			03/10/17 13:37	1
Chlorobenzene	ND		2.0		ug/L			03/10/17 13:37	1
Chlorobromomethane	ND		2.0		ug/L			03/10/17 13:37	1
Chlorodibromomethane	ND		1.0		ug/L			03/10/17 13:37	1
Chloroethane	ND		5.0		ug/L			03/10/17 13:37	1
Chloroform	ND		5.0		ug/L			03/10/17 13:37	1
Chloromethane	ND		5.0		ug/L			03/10/17 13:37	1
2-Chlorotoluene	ND		3.0		ug/L			03/10/17 13:37	1
4-Chlorotoluene	ND		2.0		ug/L			03/10/17 13:37	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 13:37	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/10/17 13:37	1
Dibromomethane	ND		1.0		ug/L			03/10/17 13:37	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/10/17 13:37	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/10/17 13:37	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/10/17 13:37	1
Dichlorobromomethane	ND		2.0		ug/L			03/10/17 13:37	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/10/17 13:37	1
<b>1,1-Dichloroethane</b>	<b>7.4</b>		2.0		ug/L			03/10/17 13:37	1
1,2-Dichloroethane	ND		1.0		ug/L			03/10/17 13:37	1
1,1-Dichloroethene	ND		2.0		ug/L			03/10/17 13:37	1
1,2-Dichloropropane	ND		1.0		ug/L			03/10/17 13:37	1
1,3-Dichloropropane	ND		1.0		ug/L			03/10/17 13:37	1
2,2-Dichloropropane	ND		3.0		ug/L			03/10/17 13:37	1
1,1-Dichloropropene	ND		3.0		ug/L			03/10/17 13:37	1
Ethylene Dibromide	ND		1.0		ug/L			03/10/17 13:37	1
Hexachlorobutadiene	ND		2.0		ug/L			03/10/17 13:37	1
<b>Isopropylbenzene</b>	<b>3.7</b>		2.0		ug/L			03/10/17 13:37	1
4-Isopropyltoluene	ND		3.0		ug/L			03/10/17 13:37	1
Methylene Chloride	ND		5.0		ug/L			03/10/17 13:37	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/10/17 13:37	1
Naphthalene	ND		2.0		ug/L			03/10/17 13:37	1
n-Butylbenzene	ND		3.0		ug/L			03/10/17 13:37	1
<b>N-Propylbenzene</b>	<b>3.4</b>		3.0		ug/L			03/10/17 13:37	1
sec-Butylbenzene	ND		3.0		ug/L			03/10/17 13:37	1
Styrene	ND		5.0		ug/L			03/10/17 13:37	1
tert-Butylbenzene	ND		3.0		ug/L			03/10/17 13:37	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/10/17 13:37	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/10/17 13:37	1
<b>Tetrachloroethene</b>	<b>50</b>		3.0		ug/L			03/10/17 13:37	1
<b>Toluene</b>	<b>9.7</b>		2.0		ug/L			03/10/17 13:37	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/10/17 13:37	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 13:37	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/10/17 13:37	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/10/17 13:37	1
<b>1,1,1-Trichloroethane</b>	<b>3.1</b>		3.0		ug/L			03/10/17 13:37	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-1**

**Lab Sample ID: 580-66540-1**

**Date Collected: 03/02/17 11:40**

**Matrix: Water**

**Date Received: 03/07/17 10:50**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0		ug/L			03/10/17 13:37	1
<b>Trichloroethene</b>	<b>22</b>		3.0		ug/L			03/10/17 13:37	1
Trichlorofluoromethane	ND		3.0		ug/L			03/10/17 13:37	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/10/17 13:37	1
<b>1,2,4-Trimethylbenzene</b>	<b>38</b>		3.0		ug/L			03/10/17 13:37	1
<b>1,3,5-Trimethylbenzene</b>	<b>11</b>		3.0		ug/L			03/10/17 13:37	1
Vinyl chloride	ND		1.0		ug/L			03/10/17 13:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		75 - 125		03/10/17 13:37	1
Dibromofluoromethane (Surr)	103		77 - 118		03/10/17 13:37	1
1,2-Dichloroethane-d4 (Surr)	103		65 - 143		03/10/17 13:37	1
Toluene-d8 (Surr)	102		82 - 122		03/10/17 13:37	1
Trifluorotoluene (Surr)	99		80 - 141		03/10/17 13:37	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>140</b>		10		ug/L			03/15/17 20:26	10
<b>Ethylbenzene</b>	<b>230</b>		30		ug/L			03/15/17 20:26	10
<b>m-Xylene &amp; p-Xylene</b>	<b>270</b>		30		ug/L			03/15/17 20:26	10
<b>o-Xylene</b>	<b>120</b>		20		ug/L			03/15/17 20:26	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		75 - 125		03/15/17 20:26	10
Dibromofluoromethane (Surr)	98		77 - 118		03/15/17 20:26	10
1,2-Dichloroethane-d4 (Surr)	102		65 - 143		03/15/17 20:26	10
Toluene-d8 (Surr)	101		82 - 122		03/15/17 20:26	10
Trifluorotoluene (Surr)	99		80 - 141		03/15/17 20:26	10

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Gasoline Range Organics (GRO) -C6-C10</b>	<b>1.2</b>		0.050		mg/L			03/15/17 00:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	102		50 - 150		03/15/17 00:02	1
4-Bromofluorobenzene (Surr)	112		50 - 150		03/15/17 00:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>1.2</b>		0.10		mg/L		03/15/17 13:59	03/15/17 20:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	57		50 - 150		03/15/17 13:59	03/15/17 20:44

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-2**  
**Date Collected: 03/01/17 17:40**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-2**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/10/17 14:03	1
Bromobenzene	ND		2.0		ug/L			03/10/17 14:03	1
Bromoform	ND		1.0		ug/L			03/10/17 14:03	1
Bromomethane	ND		5.0		ug/L			03/10/17 14:03	1
Carbon tetrachloride	ND		3.0		ug/L			03/10/17 14:03	1
Chlorobenzene	ND		2.0		ug/L			03/10/17 14:03	1
Chlorobromomethane	ND		2.0		ug/L			03/10/17 14:03	1
Chlorodibromomethane	ND		1.0		ug/L			03/10/17 14:03	1
Chloroethane	ND		5.0		ug/L			03/10/17 14:03	1
Chloroform	ND		5.0		ug/L			03/10/17 14:03	1
Chloromethane	ND		5.0		ug/L			03/10/17 14:03	1
2-Chlorotoluene	ND		3.0		ug/L			03/10/17 14:03	1
4-Chlorotoluene	ND		2.0		ug/L			03/10/17 14:03	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 14:03	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/10/17 14:03	1
Dibromomethane	ND		1.0		ug/L			03/10/17 14:03	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/10/17 14:03	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/10/17 14:03	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/10/17 14:03	1
Dichlorobromomethane	ND		2.0		ug/L			03/10/17 14:03	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/10/17 14:03	1
<b>1,1-Dichloroethane</b>	<b>5.5</b>		2.0		ug/L			03/10/17 14:03	1
1,2-Dichloroethane	ND		1.0		ug/L			03/10/17 14:03	1
1,1-Dichloroethene	ND		2.0		ug/L			03/10/17 14:03	1
1,2-Dichloropropane	ND		1.0		ug/L			03/10/17 14:03	1
1,3-Dichloropropane	ND		1.0		ug/L			03/10/17 14:03	1
2,2-Dichloropropane	ND		3.0		ug/L			03/10/17 14:03	1
1,1-Dichloropropene	ND		3.0		ug/L			03/10/17 14:03	1
Ethylene Dibromide	ND		1.0		ug/L			03/10/17 14:03	1
Hexachlorobutadiene	ND		2.0		ug/L			03/10/17 14:03	1
<b>Isopropylbenzene</b>	<b>2.3</b>		2.0		ug/L			03/10/17 14:03	1
4-Isopropyltoluene	ND		3.0		ug/L			03/10/17 14:03	1
Methylene Chloride	ND		5.0		ug/L			03/10/17 14:03	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/10/17 14:03	1
Naphthalene	ND		2.0		ug/L			03/10/17 14:03	1
n-Butylbenzene	ND		3.0		ug/L			03/10/17 14:03	1
N-Propylbenzene	ND		3.0		ug/L			03/10/17 14:03	1
<b>o-Xylene</b>	<b>65</b>		2.0		ug/L			03/10/17 14:03	1
sec-Butylbenzene	ND		3.0		ug/L			03/10/17 14:03	1
Styrene	ND		5.0		ug/L			03/10/17 14:03	1
tert-Butylbenzene	ND		3.0		ug/L			03/10/17 14:03	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/10/17 14:03	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/10/17 14:03	1
Tetrachloroethene	ND		3.0		ug/L			03/10/17 14:03	1
<b>Toluene</b>	<b>2.3</b>		2.0		ug/L			03/10/17 14:03	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/10/17 14:03	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 14:03	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/10/17 14:03	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/10/17 14:03	1

TestAmerica Seattle



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-2**  
**Date Collected: 03/01/17 17:40**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-2**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.0		ug/L			03/10/17 14:03	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/10/17 14:03	1
Trichloroethene	ND		3.0		ug/L			03/10/17 14:03	1
Trichlorofluoromethane	ND		3.0		ug/L			03/10/17 14:03	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/10/17 14:03	1
<b>1,2,4-Trimethylbenzene</b>	<b>22</b>		3.0		ug/L			03/10/17 14:03	1
<b>1,3,5-Trimethylbenzene</b>	<b>6.7</b>		3.0		ug/L			03/10/17 14:03	1
Vinyl chloride	ND		1.0		ug/L			03/10/17 14:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		75 - 125		03/10/17 14:03	1
Dibromofluoromethane (Surr)	102		77 - 118		03/10/17 14:03	1
1,2-Dichloroethane-d4 (Surr)	107		65 - 143		03/10/17 14:03	1
Toluene-d8 (Surr)	100		82 - 122		03/10/17 14:03	1
Trifluorotoluene (Surr)	99		80 - 141		03/10/17 14:03	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>110</b>		10		ug/L			03/15/17 20:53	10
<b>Ethylbenzene</b>	<b>91</b>		30		ug/L			03/15/17 20:53	10
<b>m-Xylene &amp; p-Xylene</b>	<b>110</b>		30		ug/L			03/15/17 20:53	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		75 - 125		03/15/17 20:53	10
Dibromofluoromethane (Surr)	98		77 - 118		03/15/17 20:53	10
1,2-Dichloroethane-d4 (Surr)	101		65 - 143		03/15/17 20:53	10
Toluene-d8 (Surr)	101		82 - 122		03/15/17 20:53	10
Trifluorotoluene (Surr)	98		80 - 141		03/15/17 20:53	10

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Gasoline Range Organics (GRO)</b>	<b>0.65</b>		0.050		mg/L			03/15/17 00:35	1
<b>-C6-C10</b>									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	105		50 - 150		03/15/17 00:35	1
4-Bromofluorobenzene (Surr)	110		50 - 150		03/15/17 00:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>0.47</b>		0.10		mg/L		03/13/17 10:56	03/13/17 20:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	71		50 - 150		03/13/17 10:56	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-3**  
**Date Collected: 03/02/17 10:40**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-3**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/10/17 14:30	1
Bromobenzene	ND		2.0		ug/L			03/10/17 14:30	1
Bromoform	ND		1.0		ug/L			03/10/17 14:30	1
Bromomethane	ND		5.0		ug/L			03/10/17 14:30	1
Carbon tetrachloride	ND		3.0		ug/L			03/10/17 14:30	1
Chlorobenzene	ND		2.0		ug/L			03/10/17 14:30	1
Chlorobromomethane	ND		2.0		ug/L			03/10/17 14:30	1
Chlorodibromomethane	ND		1.0		ug/L			03/10/17 14:30	1
Chloroethane	ND		5.0		ug/L			03/10/17 14:30	1
Chloroform	ND		5.0		ug/L			03/10/17 14:30	1
Chloromethane	ND		5.0		ug/L			03/10/17 14:30	1
2-Chlorotoluene	ND		3.0		ug/L			03/10/17 14:30	1
4-Chlorotoluene	ND		2.0		ug/L			03/10/17 14:30	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 14:30	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/10/17 14:30	1
Dibromomethane	ND		1.0		ug/L			03/10/17 14:30	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/10/17 14:30	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/10/17 14:30	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/10/17 14:30	1
Dichlorobromomethane	ND		2.0		ug/L			03/10/17 14:30	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/10/17 14:30	1
<b>1,1-Dichloroethane</b>	<b>5.4</b>		2.0		ug/L			03/10/17 14:30	1
1,2-Dichloroethane	ND		1.0		ug/L			03/10/17 14:30	1
1,1-Dichloroethene	ND		2.0		ug/L			03/10/17 14:30	1
1,2-Dichloropropane	ND		1.0		ug/L			03/10/17 14:30	1
1,3-Dichloropropane	ND		1.0		ug/L			03/10/17 14:30	1
2,2-Dichloropropane	ND		3.0		ug/L			03/10/17 14:30	1
1,1-Dichloropropene	ND		3.0		ug/L			03/10/17 14:30	1
Ethylbenzene	ND		3.0		ug/L			03/10/17 14:30	1
Ethylene Dibromide	ND		1.0		ug/L			03/10/17 14:30	1
Hexachlorobutadiene	ND		2.0		ug/L			03/10/17 14:30	1
Isopropylbenzene	ND		2.0		ug/L			03/10/17 14:30	1
4-Isopropyltoluene	ND		3.0		ug/L			03/10/17 14:30	1
Methylene Chloride	ND		5.0		ug/L			03/10/17 14:30	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/10/17 14:30	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/10/17 14:30	1
Naphthalene	ND		2.0		ug/L			03/10/17 14:30	1
n-Butylbenzene	ND		3.0		ug/L			03/10/17 14:30	1
N-Propylbenzene	ND		3.0		ug/L			03/10/17 14:30	1
o-Xylene	ND		2.0		ug/L			03/10/17 14:30	1
sec-Butylbenzene	ND		3.0		ug/L			03/10/17 14:30	1
Styrene	ND		5.0		ug/L			03/10/17 14:30	1
tert-Butylbenzene	ND		3.0		ug/L			03/10/17 14:30	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/10/17 14:30	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/10/17 14:30	1
Tetrachloroethene	ND		3.0		ug/L			03/10/17 14:30	1
Toluene	ND		2.0		ug/L			03/10/17 14:30	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/10/17 14:30	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 14:30	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-3**  
**Date Collected: 03/02/17 10:40**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-3**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/10/17 14:30	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/10/17 14:30	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/10/17 14:30	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/10/17 14:30	1
Trichloroethene	ND		3.0		ug/L			03/10/17 14:30	1
Trichlorofluoromethane	ND		3.0		ug/L			03/10/17 14:30	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/10/17 14:30	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/10/17 14:30	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/10/17 14:30	1
Vinyl chloride	ND		1.0		ug/L			03/10/17 14:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 125					03/10/17 14:30	1
Dibromofluoromethane (Surr)	98		77 - 118					03/10/17 14:30	1
1,2-Dichloroethane-d4 (Surr)	102		65 - 143					03/10/17 14:30	1
Toluene-d8 (Surr)	100		82 - 122					03/10/17 14:30	1
Trifluorotoluene (Surr)	99		80 - 141					03/10/17 14:30	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>4.9</b>		1.0		ug/L			03/15/17 19:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		75 - 125					03/15/17 19:59	1
Dibromofluoromethane (Surr)	99		77 - 118					03/15/17 19:59	1
1,2-Dichloroethane-d4 (Surr)	102		65 - 143					03/15/17 19:59	1
Toluene-d8 (Surr)	101		82 - 122					03/15/17 19:59	1
Trifluorotoluene (Surr)	98		80 - 141					03/15/17 19:59	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/15/17 19:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	103		50 - 150					03/15/17 19:41	1
4-Bromofluorobenzene (Surr)	101		50 - 150					03/15/17 19:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>0.30</b>		0.12		mg/L		03/15/17 13:59	03/15/17 21:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	73		50 - 150				03/15/17 13:59	03/15/17 21:28	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-4**  
**Date Collected: 03/01/17 13:05**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-4**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/10/17 14:56	1
Bromobenzene	ND		2.0		ug/L			03/10/17 14:56	1
Bromoform	ND		1.0		ug/L			03/10/17 14:56	1
Bromomethane	ND		5.0		ug/L			03/10/17 14:56	1
Carbon tetrachloride	ND		3.0		ug/L			03/10/17 14:56	1
Chlorobenzene	ND		2.0		ug/L			03/10/17 14:56	1
Chlorobromomethane	ND		2.0		ug/L			03/10/17 14:56	1
Chlorodibromomethane	ND		1.0		ug/L			03/10/17 14:56	1
Chloroethane	ND		5.0		ug/L			03/10/17 14:56	1
Chloroform	ND		5.0		ug/L			03/10/17 14:56	1
Chloromethane	ND		5.0		ug/L			03/10/17 14:56	1
2-Chlorotoluene	ND		3.0		ug/L			03/10/17 14:56	1
4-Chlorotoluene	ND		2.0		ug/L			03/10/17 14:56	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			03/10/17 14:56	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 14:56	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/10/17 14:56	1
Dibromomethane	ND		1.0		ug/L			03/10/17 14:56	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/10/17 14:56	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/10/17 14:56	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/10/17 14:56	1
Dichlorobromomethane	ND		2.0		ug/L			03/10/17 14:56	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/10/17 14:56	1
1,1-Dichloroethane	ND		2.0		ug/L			03/10/17 14:56	1
1,2-Dichloroethane	ND		1.0		ug/L			03/10/17 14:56	1
1,1-Dichloroethene	ND		2.0		ug/L			03/10/17 14:56	1
1,2-Dichloropropane	ND		1.0		ug/L			03/10/17 14:56	1
1,3-Dichloropropane	ND		1.0		ug/L			03/10/17 14:56	1
2,2-Dichloropropane	ND		3.0		ug/L			03/10/17 14:56	1
1,1-Dichloropropene	ND		3.0		ug/L			03/10/17 14:56	1
Ethylbenzene	ND		3.0		ug/L			03/10/17 14:56	1
Ethylene Dibromide	ND		1.0		ug/L			03/10/17 14:56	1
Hexachlorobutadiene	ND		2.0		ug/L			03/10/17 14:56	1
Isopropylbenzene	ND		2.0		ug/L			03/10/17 14:56	1
4-Isopropyltoluene	ND		3.0		ug/L			03/10/17 14:56	1
Methylene Chloride	ND		5.0		ug/L			03/10/17 14:56	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/10/17 14:56	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/10/17 14:56	1
Naphthalene	ND		2.0		ug/L			03/10/17 14:56	1
n-Butylbenzene	ND		3.0		ug/L			03/10/17 14:56	1
N-Propylbenzene	ND		3.0		ug/L			03/10/17 14:56	1
o-Xylene	ND		2.0		ug/L			03/10/17 14:56	1
sec-Butylbenzene	ND		3.0		ug/L			03/10/17 14:56	1
Styrene	ND		5.0		ug/L			03/10/17 14:56	1
tert-Butylbenzene	ND		3.0		ug/L			03/10/17 14:56	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/10/17 14:56	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/10/17 14:56	1
<b>Tetrachloroethene</b>	<b>12</b>		3.0		ug/L			03/10/17 14:56	1
Toluene	ND		2.0		ug/L			03/10/17 14:56	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/10/17 14:56	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-4**  
**Date Collected: 03/01/17 13:05**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-4**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 14:56	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/10/17 14:56	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/10/17 14:56	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/10/17 14:56	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/10/17 14:56	1
<b>Trichloroethene</b>	<b>3.5</b>		3.0		ug/L			03/10/17 14:56	1
Trichlorofluoromethane	ND		3.0		ug/L			03/10/17 14:56	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/10/17 14:56	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/10/17 14:56	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/10/17 14:56	1
Vinyl chloride	ND		1.0		ug/L			03/10/17 14:56	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	98		75 - 125					03/10/17 14:56	1
Dibromofluoromethane (Surr)	100		77 - 118					03/10/17 14:56	1
1,2-Dichloroethane-d4 (Surr)	103		65 - 143					03/10/17 14:56	1
Toluene-d8 (Surr)	100		82 - 122					03/10/17 14:56	1
Trifluorotoluene (Surr)	97		80 - 141					03/10/17 14:56	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/14/17 23:30	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Trifluorotoluene (Surr)	104		50 - 150					03/14/17 23:30	1
4-Bromofluorobenzene (Surr)	100		50 - 150					03/14/17 23:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>0.44</b>		0.10		mg/L		03/13/17 10:56	03/13/17 21:17	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl	73		50 - 150				03/13/17 10:56	03/13/17 21:17	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-5**

**Date Collected: 03/01/17 15:35**

**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-5**

**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/10/17 15:23	1
Bromobenzene	ND		2.0		ug/L			03/10/17 15:23	1
Bromoform	ND		1.0		ug/L			03/10/17 15:23	1
Bromomethane	ND		5.0		ug/L			03/10/17 15:23	1
Carbon tetrachloride	ND		3.0		ug/L			03/10/17 15:23	1
Chlorobenzene	ND		2.0		ug/L			03/10/17 15:23	1
Chlorobromomethane	ND		2.0		ug/L			03/10/17 15:23	1
Chlorodibromomethane	ND		1.0		ug/L			03/10/17 15:23	1
Chloroethane	ND		5.0		ug/L			03/10/17 15:23	1
Chloroform	ND		5.0		ug/L			03/10/17 15:23	1
Chloromethane	ND		5.0		ug/L			03/10/17 15:23	1
2-Chlorotoluene	ND		3.0		ug/L			03/10/17 15:23	1
4-Chlorotoluene	ND		2.0		ug/L			03/10/17 15:23	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 15:23	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/10/17 15:23	1
Dibromomethane	ND		1.0		ug/L			03/10/17 15:23	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/10/17 15:23	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/10/17 15:23	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/10/17 15:23	1
Dichlorobromomethane	ND		2.0		ug/L			03/10/17 15:23	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/10/17 15:23	1
1,1-Dichloroethane	ND		2.0		ug/L			03/10/17 15:23	1
1,2-Dichloroethane	ND		1.0		ug/L			03/10/17 15:23	1
1,1-Dichloroethene	ND		2.0		ug/L			03/10/17 15:23	1
1,2-Dichloropropane	ND		1.0		ug/L			03/10/17 15:23	1
1,3-Dichloropropane	ND		1.0		ug/L			03/10/17 15:23	1
2,2-Dichloropropane	ND		3.0		ug/L			03/10/17 15:23	1
1,1-Dichloropropene	ND		3.0		ug/L			03/10/17 15:23	1
Ethylene Dibromide	ND		1.0		ug/L			03/10/17 15:23	1
Hexachlorobutadiene	ND		2.0		ug/L			03/10/17 15:23	1
Isopropylbenzene	ND		2.0		ug/L			03/10/17 15:23	1
4-Isopropyltoluene	ND		3.0		ug/L			03/10/17 15:23	1
Methylene Chloride	ND		5.0		ug/L			03/10/17 15:23	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/10/17 15:23	1
Naphthalene	ND		2.0		ug/L			03/10/17 15:23	1
n-Butylbenzene	ND		3.0		ug/L			03/10/17 15:23	1
N-Propylbenzene	ND		3.0		ug/L			03/10/17 15:23	1
sec-Butylbenzene	ND		3.0		ug/L			03/10/17 15:23	1
Styrene	ND		5.0		ug/L			03/10/17 15:23	1
tert-Butylbenzene	ND		3.0		ug/L			03/10/17 15:23	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/10/17 15:23	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/10/17 15:23	1
Tetrachloroethene	ND		3.0		ug/L			03/10/17 15:23	1
Toluene	ND		2.0		ug/L			03/10/17 15:23	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/10/17 15:23	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 15:23	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/10/17 15:23	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/10/17 15:23	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/10/17 15:23	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-5**  
**Date Collected: 03/01/17 15:35**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-5**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0		ug/L			03/10/17 15:23	1
Trichloroethene	ND		3.0		ug/L			03/10/17 15:23	1
Trichlorofluoromethane	ND		3.0		ug/L			03/10/17 15:23	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/10/17 15:23	1
<b>1,2,4-Trimethylbenzene</b>	<b>15</b>		3.0		ug/L			03/10/17 15:23	1
<b>1,3,5-Trimethylbenzene</b>	<b>12</b>		3.0		ug/L			03/10/17 15:23	1
Vinyl chloride	ND		1.0		ug/L			03/10/17 15:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		75 - 125		03/10/17 15:23	1
Dibromofluoromethane (Surr)	100		77 - 118		03/10/17 15:23	1
1,2-Dichloroethane-d4 (Surr)	104		65 - 143		03/10/17 15:23	1
Toluene-d8 (Surr)	99		82 - 122		03/10/17 15:23	1
Trifluorotoluene (Surr)	99		80 - 141		03/10/17 15:23	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>290</b>		10		ug/L			03/15/17 21:20	10
<b>Ethylbenzene</b>	<b>180</b>		30		ug/L			03/15/17 21:20	10
<b>m-Xylene &amp; p-Xylene</b>	<b>240</b>		30		ug/L			03/15/17 21:20	10
<b>o-Xylene</b>	<b>100</b>		20		ug/L			03/15/17 21:20	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		75 - 125		03/15/17 21:20	10
Dibromofluoromethane (Surr)	96		77 - 118		03/15/17 21:20	10
1,2-Dichloroethane-d4 (Surr)	101		65 - 143		03/15/17 21:20	10
Toluene-d8 (Surr)	100		82 - 122		03/15/17 21:20	10
Trifluorotoluene (Surr)	98		80 - 141		03/15/17 21:20	10

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Gasoline Range Organics (GRO)</b>	<b>1.4</b>		0.050		mg/L			03/15/17 01:08	1
<b>-C6-C10</b>									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	102		50 - 150		03/15/17 01:08	1
4-Bromofluorobenzene (Surr)	148		50 - 150		03/15/17 01:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>0.96</b>		0.10		mg/L		03/13/17 10:56	03/13/17 21:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	69		50 - 150		03/13/17 10:56	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-6**  
**Date Collected: 03/01/17 14:30**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-6**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/10/17 15:50	1
Bromobenzene	ND		2.0		ug/L			03/10/17 15:50	1
Bromoform	ND		1.0		ug/L			03/10/17 15:50	1
Bromomethane	ND		5.0		ug/L			03/10/17 15:50	1
Carbon tetrachloride	ND		3.0		ug/L			03/10/17 15:50	1
Chlorobenzene	ND		2.0		ug/L			03/10/17 15:50	1
Chlorobromomethane	ND		2.0		ug/L			03/10/17 15:50	1
Chlorodibromomethane	ND		1.0		ug/L			03/10/17 15:50	1
Chloroethane	ND		5.0		ug/L			03/10/17 15:50	1
Chloroform	ND		5.0		ug/L			03/10/17 15:50	1
Chloromethane	ND		5.0		ug/L			03/10/17 15:50	1
2-Chlorotoluene	ND		3.0		ug/L			03/10/17 15:50	1
4-Chlorotoluene	ND		2.0		ug/L			03/10/17 15:50	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			03/10/17 15:50	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 15:50	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/10/17 15:50	1
Dibromomethane	ND		1.0		ug/L			03/10/17 15:50	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/10/17 15:50	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/10/17 15:50	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/10/17 15:50	1
Dichlorobromomethane	ND		2.0		ug/L			03/10/17 15:50	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/10/17 15:50	1
1,1-Dichloroethane	ND		2.0		ug/L			03/10/17 15:50	1
1,2-Dichloroethane	ND		1.0		ug/L			03/10/17 15:50	1
1,1-Dichloroethene	ND		2.0		ug/L			03/10/17 15:50	1
1,2-Dichloropropane	ND		1.0		ug/L			03/10/17 15:50	1
1,3-Dichloropropane	ND		1.0		ug/L			03/10/17 15:50	1
2,2-Dichloropropane	ND		3.0		ug/L			03/10/17 15:50	1
1,1-Dichloropropene	ND		3.0		ug/L			03/10/17 15:50	1
Ethylbenzene	ND		3.0		ug/L			03/10/17 15:50	1
Ethylene Dibromide	ND		1.0		ug/L			03/10/17 15:50	1
Hexachlorobutadiene	ND		2.0		ug/L			03/10/17 15:50	1
Isopropylbenzene	ND		2.0		ug/L			03/10/17 15:50	1
4-Isopropyltoluene	ND		3.0		ug/L			03/10/17 15:50	1
Methylene Chloride	ND		5.0		ug/L			03/10/17 15:50	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/10/17 15:50	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/10/17 15:50	1
Naphthalene	ND		2.0		ug/L			03/10/17 15:50	1
n-Butylbenzene	ND		3.0		ug/L			03/10/17 15:50	1
N-Propylbenzene	ND		3.0		ug/L			03/10/17 15:50	1
o-Xylene	ND		2.0		ug/L			03/10/17 15:50	1
sec-Butylbenzene	ND		3.0		ug/L			03/10/17 15:50	1
Styrene	ND		5.0		ug/L			03/10/17 15:50	1
tert-Butylbenzene	ND		3.0		ug/L			03/10/17 15:50	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/10/17 15:50	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/10/17 15:50	1
Tetrachloroethene	ND		3.0		ug/L			03/10/17 15:50	1
Toluene	ND		2.0		ug/L			03/10/17 15:50	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/10/17 15:50	1

TestAmerica Seattle



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-6**

**Lab Sample ID: 580-66540-6**

**Date Collected: 03/01/17 14:30**

**Matrix: Water**

**Date Received: 03/07/17 10:50**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 15:50	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/10/17 15:50	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/10/17 15:50	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/10/17 15:50	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/10/17 15:50	1
Trichloroethene	ND		3.0		ug/L			03/10/17 15:50	1
Trichlorofluoromethane	ND		3.0		ug/L			03/10/17 15:50	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/10/17 15:50	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/10/17 15:50	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/10/17 15:50	1
Vinyl chloride	ND		1.0		ug/L			03/10/17 15:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		75 - 125		03/10/17 15:50	1
Dibromofluoromethane (Surr)	99		77 - 118		03/10/17 15:50	1
1,2-Dichloroethane-d4 (Surr)	102		65 - 143		03/10/17 15:50	1
Toluene-d8 (Surr)	98		82 - 122		03/10/17 15:50	1
Trifluorotoluene (Surr)	100		80 - 141		03/10/17 15:50	1

### Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/15/17 20:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	101		50 - 150		03/15/17 20:14	1
4-Bromofluorobenzene (Surr)	99		50 - 150		03/15/17 20:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>0.20</b>		0.12		mg/L		03/13/17 10:56	03/13/17 22:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	74		50 - 150		03/13/17 10:56	03/13/17 22:01

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-7**  
**Date Collected: 03/01/17 11:40**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-7**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/10/17 16:16	1
Bromobenzene	ND		2.0		ug/L			03/10/17 16:16	1
Bromoform	ND		1.0		ug/L			03/10/17 16:16	1
Bromomethane	ND		5.0		ug/L			03/10/17 16:16	1
Carbon tetrachloride	ND		3.0		ug/L			03/10/17 16:16	1
Chlorobenzene	ND		2.0		ug/L			03/10/17 16:16	1
Chlorobromomethane	ND		2.0		ug/L			03/10/17 16:16	1
Chlorodibromomethane	ND		1.0		ug/L			03/10/17 16:16	1
Chloroethane	ND		5.0		ug/L			03/10/17 16:16	1
Chloroform	ND		5.0		ug/L			03/10/17 16:16	1
Chloromethane	ND		5.0		ug/L			03/10/17 16:16	1
2-Chlorotoluene	ND		3.0		ug/L			03/10/17 16:16	1
4-Chlorotoluene	ND		2.0		ug/L			03/10/17 16:16	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			03/10/17 16:16	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 16:16	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/10/17 16:16	1
Dibromomethane	ND		1.0		ug/L			03/10/17 16:16	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/10/17 16:16	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/10/17 16:16	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/10/17 16:16	1
Dichlorobromomethane	ND		2.0		ug/L			03/10/17 16:16	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/10/17 16:16	1
1,1-Dichloroethane	ND		2.0		ug/L			03/10/17 16:16	1
1,2-Dichloroethane	ND		1.0		ug/L			03/10/17 16:16	1
1,1-Dichloroethene	ND		2.0		ug/L			03/10/17 16:16	1
1,2-Dichloropropane	ND		1.0		ug/L			03/10/17 16:16	1
1,3-Dichloropropane	ND		1.0		ug/L			03/10/17 16:16	1
2,2-Dichloropropane	ND		3.0		ug/L			03/10/17 16:16	1
1,1-Dichloropropene	ND		3.0		ug/L			03/10/17 16:16	1
Ethylbenzene	ND		3.0		ug/L			03/10/17 16:16	1
Ethylene Dibromide	ND		1.0		ug/L			03/10/17 16:16	1
Hexachlorobutadiene	ND		2.0		ug/L			03/10/17 16:16	1
Isopropylbenzene	ND		2.0		ug/L			03/10/17 16:16	1
4-Isopropyltoluene	ND		3.0		ug/L			03/10/17 16:16	1
Methylene Chloride	ND		5.0		ug/L			03/10/17 16:16	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/10/17 16:16	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/10/17 16:16	1
Naphthalene	ND		2.0		ug/L			03/10/17 16:16	1
n-Butylbenzene	ND		3.0		ug/L			03/10/17 16:16	1
N-Propylbenzene	ND		3.0		ug/L			03/10/17 16:16	1
o-Xylene	ND		2.0		ug/L			03/10/17 16:16	1
sec-Butylbenzene	ND		3.0		ug/L			03/10/17 16:16	1
Styrene	ND		5.0		ug/L			03/10/17 16:16	1
tert-Butylbenzene	ND		3.0		ug/L			03/10/17 16:16	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/10/17 16:16	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/10/17 16:16	1
<b>Tetrachloroethene</b>	<b>14</b>		3.0		ug/L			03/10/17 16:16	1
Toluene	ND		2.0		ug/L			03/10/17 16:16	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/10/17 16:16	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-7**  
**Date Collected: 03/01/17 11:40**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-7**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 16:16	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/10/17 16:16	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/10/17 16:16	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/10/17 16:16	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/10/17 16:16	1
Trichloroethene	ND		3.0		ug/L			03/10/17 16:16	1
Trichlorofluoromethane	ND		3.0		ug/L			03/10/17 16:16	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/10/17 16:16	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/10/17 16:16	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/10/17 16:16	1
Vinyl chloride	ND		1.0		ug/L			03/10/17 16:16	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	97		75 - 125					03/10/17 16:16	1
Dibromofluoromethane (Surr)	99		77 - 118					03/10/17 16:16	1
1,2-Dichloroethane-d4 (Surr)	102		65 - 143					03/10/17 16:16	1
Toluene-d8 (Surr)	99		82 - 122					03/10/17 16:16	1
Trifluorotoluene (Surr)	98		80 - 141					03/10/17 16:16	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/15/17 02:13	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Trifluorotoluene (Surr)	102		50 - 150					03/15/17 02:13	1
4-Bromofluorobenzene (Surr)	101		50 - 150					03/15/17 02:13	1

## Method: 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	F1	0.10		mg/L		03/15/17 13:59	03/15/17 18:30	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl	79		50 - 150				03/15/17 13:59	03/15/17 18:30	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-8**  
**Date Collected: 03/01/17 16:50**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-8**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/10/17 17:36	1
Bromobenzene	ND		2.0		ug/L			03/10/17 17:36	1
Bromoform	ND		1.0		ug/L			03/10/17 17:36	1
Bromomethane	ND		5.0		ug/L			03/10/17 17:36	1
Carbon tetrachloride	ND		3.0		ug/L			03/10/17 17:36	1
Chlorobenzene	ND		2.0		ug/L			03/10/17 17:36	1
Chlorobromomethane	ND		2.0		ug/L			03/10/17 17:36	1
Chlorodibromomethane	ND		1.0		ug/L			03/10/17 17:36	1
Chloroethane	ND		5.0		ug/L			03/10/17 17:36	1
Chloroform	ND		5.0		ug/L			03/10/17 17:36	1
Chloromethane	ND		5.0		ug/L			03/10/17 17:36	1
2-Chlorotoluene	ND		3.0		ug/L			03/10/17 17:36	1
4-Chlorotoluene	ND		2.0		ug/L			03/10/17 17:36	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			03/10/17 17:36	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 17:36	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/10/17 17:36	1
Dibromomethane	ND		1.0		ug/L			03/10/17 17:36	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/10/17 17:36	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/10/17 17:36	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/10/17 17:36	1
Dichlorobromomethane	ND		2.0		ug/L			03/10/17 17:36	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/10/17 17:36	1
1,1-Dichloroethane	ND		2.0		ug/L			03/10/17 17:36	1
1,2-Dichloroethane	ND		1.0		ug/L			03/10/17 17:36	1
1,1-Dichloroethene	ND		2.0		ug/L			03/10/17 17:36	1
1,2-Dichloropropane	ND		1.0		ug/L			03/10/17 17:36	1
1,3-Dichloropropane	ND		1.0		ug/L			03/10/17 17:36	1
2,2-Dichloropropane	ND		3.0		ug/L			03/10/17 17:36	1
1,1-Dichloropropene	ND		3.0		ug/L			03/10/17 17:36	1
Ethylbenzene	ND		3.0		ug/L			03/10/17 17:36	1
Ethylene Dibromide	ND		1.0		ug/L			03/10/17 17:36	1
Hexachlorobutadiene	ND		2.0		ug/L			03/10/17 17:36	1
Isopropylbenzene	ND		2.0		ug/L			03/10/17 17:36	1
4-Isopropyltoluene	ND		3.0		ug/L			03/10/17 17:36	1
Methylene Chloride	ND		5.0		ug/L			03/10/17 17:36	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/10/17 17:36	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/10/17 17:36	1
Naphthalene	ND		2.0		ug/L			03/10/17 17:36	1
n-Butylbenzene	ND		3.0		ug/L			03/10/17 17:36	1
N-Propylbenzene	ND		3.0		ug/L			03/10/17 17:36	1
o-Xylene	ND		2.0		ug/L			03/10/17 17:36	1
sec-Butylbenzene	ND		3.0		ug/L			03/10/17 17:36	1
Styrene	ND		5.0		ug/L			03/10/17 17:36	1
tert-Butylbenzene	ND		3.0		ug/L			03/10/17 17:36	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/10/17 17:36	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/10/17 17:36	1
Tetrachloroethene	ND		3.0		ug/L			03/10/17 17:36	1
Toluene	ND		2.0		ug/L			03/10/17 17:36	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/10/17 17:36	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-8**  
**Date Collected: 03/01/17 16:50**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-8**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 17:36	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/10/17 17:36	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/10/17 17:36	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/10/17 17:36	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/10/17 17:36	1
Trichloroethene	ND		3.0		ug/L			03/10/17 17:36	1
Trichlorofluoromethane	ND		3.0		ug/L			03/10/17 17:36	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/10/17 17:36	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/10/17 17:36	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/10/17 17:36	1
Vinyl chloride	ND		1.0		ug/L			03/10/17 17:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		75 - 125		03/10/17 17:36	1
Dibromofluoromethane (Surr)	96		77 - 118		03/10/17 17:36	1
1,2-Dichloroethane-d4 (Surr)	101		65 - 143		03/10/17 17:36	1
Toluene-d8 (Surr)	99		82 - 122		03/10/17 17:36	1
Trifluorotoluene (Surr)	98		80 - 141		03/10/17 17:36	1

### Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/15/17 19:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	102		50 - 150		03/15/17 19:09	1
4-Bromofluorobenzene (Surr)	101		50 - 150		03/15/17 19:09	1

### Method: 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		0.10		mg/L		03/13/17 10:56	03/13/17 22:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	70		50 - 150		03/13/17 10:56	03/13/17 22:23

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-9**  
**Date Collected: 03/02/17 15:35**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-9**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/10/17 18:03	1
Bromobenzene	ND		2.0		ug/L			03/10/17 18:03	1
Bromoform	ND		1.0		ug/L			03/10/17 18:03	1
Bromomethane	ND		5.0		ug/L			03/10/17 18:03	1
Carbon tetrachloride	ND		3.0		ug/L			03/10/17 18:03	1
Chlorobenzene	ND		2.0		ug/L			03/10/17 18:03	1
Chlorobromomethane	ND		2.0		ug/L			03/10/17 18:03	1
Chlorodibromomethane	ND		1.0		ug/L			03/10/17 18:03	1
Chloroethane	ND		5.0		ug/L			03/10/17 18:03	1
Chloroform	ND		5.0		ug/L			03/10/17 18:03	1
Chloromethane	ND		5.0		ug/L			03/10/17 18:03	1
2-Chlorotoluene	ND		3.0		ug/L			03/10/17 18:03	1
4-Chlorotoluene	ND		2.0		ug/L			03/10/17 18:03	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			03/10/17 18:03	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 18:03	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/10/17 18:03	1
Dibromomethane	ND		1.0		ug/L			03/10/17 18:03	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/10/17 18:03	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/10/17 18:03	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/10/17 18:03	1
Dichlorobromomethane	ND		2.0		ug/L			03/10/17 18:03	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/10/17 18:03	1
1,1-Dichloroethane	ND		2.0		ug/L			03/10/17 18:03	1
1,2-Dichloroethane	ND		1.0		ug/L			03/10/17 18:03	1
1,1-Dichloroethene	ND		2.0		ug/L			03/10/17 18:03	1
1,2-Dichloropropane	ND		1.0		ug/L			03/10/17 18:03	1
1,3-Dichloropropane	ND		1.0		ug/L			03/10/17 18:03	1
2,2-Dichloropropane	ND		3.0		ug/L			03/10/17 18:03	1
1,1-Dichloropropene	ND		3.0		ug/L			03/10/17 18:03	1
Ethylbenzene	ND		3.0		ug/L			03/10/17 18:03	1
Ethylene Dibromide	ND		1.0		ug/L			03/10/17 18:03	1
Hexachlorobutadiene	ND		2.0		ug/L			03/10/17 18:03	1
Isopropylbenzene	ND		2.0		ug/L			03/10/17 18:03	1
4-Isopropyltoluene	ND		3.0		ug/L			03/10/17 18:03	1
Methylene Chloride	ND		5.0		ug/L			03/10/17 18:03	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/10/17 18:03	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/10/17 18:03	1
Naphthalene	ND		2.0		ug/L			03/10/17 18:03	1
n-Butylbenzene	ND		3.0		ug/L			03/10/17 18:03	1
N-Propylbenzene	ND		3.0		ug/L			03/10/17 18:03	1
o-Xylene	ND		2.0		ug/L			03/10/17 18:03	1
sec-Butylbenzene	ND		3.0		ug/L			03/10/17 18:03	1
Styrene	ND		5.0		ug/L			03/10/17 18:03	1
tert-Butylbenzene	ND		3.0		ug/L			03/10/17 18:03	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/10/17 18:03	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/10/17 18:03	1
Tetrachloroethene	ND		3.0		ug/L			03/10/17 18:03	1
Toluene	ND		2.0		ug/L			03/10/17 18:03	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/10/17 18:03	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-9**

**Lab Sample ID: 580-66540-9**

**Date Collected: 03/02/17 15:35**

**Matrix: Water**

**Date Received: 03/07/17 10:50**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 18:03	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/10/17 18:03	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/10/17 18:03	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/10/17 18:03	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/10/17 18:03	1
Trichloroethene	ND		3.0		ug/L			03/10/17 18:03	1
Trichlorofluoromethane	ND		3.0		ug/L			03/10/17 18:03	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/10/17 18:03	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/10/17 18:03	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/10/17 18:03	1
Vinyl chloride	ND		1.0		ug/L			03/10/17 18:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 125		03/10/17 18:03	1
Dibromofluoromethane (Surr)	110		77 - 118		03/10/17 18:03	1
1,2-Dichloroethane-d4 (Surr)	105		65 - 143		03/10/17 18:03	1
Toluene-d8 (Surr)	98		82 - 122		03/10/17 18:03	1
Trifluorotoluene (Surr)	100		80 - 141		03/10/17 18:03	1

### Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/15/17 17:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	103		50 - 150		03/15/17 17:31	1
4-Bromofluorobenzene (Surr)	100		50 - 150		03/15/17 17:31	1

### Method: 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		0.11		mg/L		03/15/17 13:59	03/15/17 21:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	80		50 - 150		03/15/17 13:59	03/15/17 21:50

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-10**

**Date Collected: 03/02/17 14:10**

**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-10**

**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/10/17 18:29	1
Bromobenzene	ND		2.0		ug/L			03/10/17 18:29	1
Bromoform	ND		1.0		ug/L			03/10/17 18:29	1
Bromomethane	ND		5.0		ug/L			03/10/17 18:29	1
Carbon tetrachloride	ND		3.0		ug/L			03/10/17 18:29	1
Chlorobenzene	ND		2.0		ug/L			03/10/17 18:29	1
Chlorobromomethane	ND		2.0		ug/L			03/10/17 18:29	1
Chlorodibromomethane	ND		1.0		ug/L			03/10/17 18:29	1
Chloroethane	ND		5.0		ug/L			03/10/17 18:29	1
Chloroform	ND		5.0		ug/L			03/10/17 18:29	1
Chloromethane	ND		5.0		ug/L			03/10/17 18:29	1
2-Chlorotoluene	ND		3.0		ug/L			03/10/17 18:29	1
4-Chlorotoluene	ND		2.0		ug/L			03/10/17 18:29	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			03/10/17 18:29	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 18:29	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/10/17 18:29	1
Dibromomethane	ND		1.0		ug/L			03/10/17 18:29	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/10/17 18:29	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/10/17 18:29	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/10/17 18:29	1
Dichlorobromomethane	ND		2.0		ug/L			03/10/17 18:29	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/10/17 18:29	1
1,1-Dichloroethane	ND		2.0		ug/L			03/10/17 18:29	1
1,2-Dichloroethane	ND		1.0		ug/L			03/10/17 18:29	1
1,1-Dichloroethene	ND		2.0		ug/L			03/10/17 18:29	1
1,2-Dichloropropane	ND		1.0		ug/L			03/10/17 18:29	1
1,3-Dichloropropane	ND		1.0		ug/L			03/10/17 18:29	1
2,2-Dichloropropane	ND		3.0		ug/L			03/10/17 18:29	1
1,1-Dichloropropene	ND		3.0		ug/L			03/10/17 18:29	1
Ethylbenzene	ND		3.0		ug/L			03/10/17 18:29	1
Ethylene Dibromide	ND		1.0		ug/L			03/10/17 18:29	1
Hexachlorobutadiene	ND		2.0		ug/L			03/10/17 18:29	1
Isopropylbenzene	ND		2.0		ug/L			03/10/17 18:29	1
4-Isopropyltoluene	ND		3.0		ug/L			03/10/17 18:29	1
Methylene Chloride	ND		5.0		ug/L			03/10/17 18:29	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/10/17 18:29	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/10/17 18:29	1
Naphthalene	ND		2.0		ug/L			03/10/17 18:29	1
n-Butylbenzene	ND		3.0		ug/L			03/10/17 18:29	1
N-Propylbenzene	ND		3.0		ug/L			03/10/17 18:29	1
o-Xylene	ND		2.0		ug/L			03/10/17 18:29	1
sec-Butylbenzene	ND		3.0		ug/L			03/10/17 18:29	1
Styrene	ND		5.0		ug/L			03/10/17 18:29	1
tert-Butylbenzene	ND		3.0		ug/L			03/10/17 18:29	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/10/17 18:29	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/10/17 18:29	1
Tetrachloroethene	ND		3.0		ug/L			03/10/17 18:29	1
Toluene	ND		2.0		ug/L			03/10/17 18:29	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/10/17 18:29	1

TestAmerica Seattle



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-10**  
**Date Collected: 03/02/17 14:10**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-10**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 18:29	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/10/17 18:29	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/10/17 18:29	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/10/17 18:29	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/10/17 18:29	1
Trichloroethene	ND		3.0		ug/L			03/10/17 18:29	1
Trichlorofluoromethane	ND		3.0		ug/L			03/10/17 18:29	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/10/17 18:29	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/10/17 18:29	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/10/17 18:29	1
Vinyl chloride	ND		1.0		ug/L			03/10/17 18:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 125		03/10/17 18:29	1
Dibromofluoromethane (Surr)	98		77 - 118		03/10/17 18:29	1
1,2-Dichloroethane-d4 (Surr)	104		65 - 143		03/10/17 18:29	1
Toluene-d8 (Surr)	97		82 - 122		03/10/17 18:29	1
Trifluorotoluene (Surr)	100		80 - 141		03/10/17 18:29	1

### Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/15/17 18:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	103		50 - 150		03/15/17 18:04	1
4-Bromofluorobenzene (Surr)	99		50 - 150		03/15/17 18:04	1

### Method: 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		0.12		mg/L		03/15/17 13:59	03/15/17 22:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	84		50 - 150		03/15/17 13:59	03/15/17 22:12

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-11**

**Date Collected: 03/02/17 14:45**

**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-11**

**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/13/17 17:32	1
Bromobenzene	ND		2.0		ug/L			03/13/17 17:32	1
Bromoform	ND		1.0		ug/L			03/13/17 17:32	1
Bromomethane	ND		5.0		ug/L			03/13/17 17:32	1
Carbon tetrachloride	ND		3.0		ug/L			03/13/17 17:32	1
Chlorobenzene	ND		2.0		ug/L			03/13/17 17:32	1
Chlorobromomethane	ND		2.0		ug/L			03/13/17 17:32	1
Chlorodibromomethane	ND		1.0		ug/L			03/13/17 17:32	1
Chloroethane	ND		5.0		ug/L			03/13/17 17:32	1
Chloroform	ND		5.0		ug/L			03/13/17 17:32	1
Chloromethane	ND		5.0		ug/L			03/13/17 17:32	1
2-Chlorotoluene	ND		3.0		ug/L			03/13/17 17:32	1
4-Chlorotoluene	ND		2.0		ug/L			03/13/17 17:32	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			03/13/17 17:32	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/13/17 17:32	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/13/17 17:32	1
Dibromomethane	ND		1.0		ug/L			03/13/17 17:32	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/13/17 17:32	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/13/17 17:32	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/13/17 17:32	1
Dichlorobromomethane	ND		2.0		ug/L			03/13/17 17:32	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/13/17 17:32	1
1,1-Dichloroethane	ND		2.0		ug/L			03/13/17 17:32	1
1,2-Dichloroethane	ND		1.0		ug/L			03/13/17 17:32	1
1,1-Dichloroethene	ND		2.0		ug/L			03/13/17 17:32	1
1,2-Dichloropropane	ND		1.0		ug/L			03/13/17 17:32	1
1,3-Dichloropropane	ND		1.0		ug/L			03/13/17 17:32	1
2,2-Dichloropropane	ND		3.0		ug/L			03/13/17 17:32	1
1,1-Dichloropropene	ND		3.0		ug/L			03/13/17 17:32	1
Ethylbenzene	ND		3.0		ug/L			03/13/17 17:32	1
Ethylene Dibromide	ND		1.0		ug/L			03/13/17 17:32	1
Hexachlorobutadiene	ND		2.0		ug/L			03/13/17 17:32	1
Isopropylbenzene	ND		2.0		ug/L			03/13/17 17:32	1
4-Isopropyltoluene	ND		3.0		ug/L			03/13/17 17:32	1
Methylene Chloride	ND		5.0		ug/L			03/13/17 17:32	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/13/17 17:32	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/13/17 17:32	1
Naphthalene	ND		2.0		ug/L			03/13/17 17:32	1
n-Butylbenzene	ND		3.0		ug/L			03/13/17 17:32	1
N-Propylbenzene	ND		3.0		ug/L			03/13/17 17:32	1
o-Xylene	ND		2.0		ug/L			03/13/17 17:32	1
sec-Butylbenzene	ND		3.0		ug/L			03/13/17 17:32	1
Styrene	ND		5.0		ug/L			03/13/17 17:32	1
tert-Butylbenzene	ND		3.0		ug/L			03/13/17 17:32	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/13/17 17:32	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/13/17 17:32	1
Tetrachloroethene	ND		3.0		ug/L			03/13/17 17:32	1
Toluene	ND		2.0		ug/L			03/13/17 17:32	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/13/17 17:32	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-11**

**Lab Sample ID: 580-66540-11**

**Date Collected: 03/02/17 14:45**

**Matrix: Water**

**Date Received: 03/07/17 10:50**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/13/17 17:32	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/13/17 17:32	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/13/17 17:32	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/13/17 17:32	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/13/17 17:32	1
Trichloroethene	ND		3.0		ug/L			03/13/17 17:32	1
Trichlorofluoromethane	ND		3.0		ug/L			03/13/17 17:32	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/13/17 17:32	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/13/17 17:32	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/13/17 17:32	1
Vinyl chloride	ND		1.0		ug/L			03/13/17 17:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 125		03/13/17 17:32	1
Dibromofluoromethane (Surr)	98		77 - 118		03/13/17 17:32	1
1,2-Dichloroethane-d4 (Surr)	100		65 - 143		03/13/17 17:32	1
Toluene-d8 (Surr)	101		82 - 122		03/13/17 17:32	1
Trifluorotoluene (Surr)	100		80 - 141		03/13/17 17:32	1

**Method: AK101 - Alaska - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/16/17 01:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	96		50 - 150		03/16/17 01:40	1
4-Bromofluorobenzene (Surr)	98		50 - 150		03/16/17 01:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>0.13</b>		0.11		mg/L		03/15/17 13:59	03/15/17 22:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	91		50 - 150		03/15/17 13:59	03/15/17 22:34

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: BD-1**

**Date Collected: 03/02/17 11:40**

**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-12**

**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/13/17 17:59	1
Bromobenzene	ND		2.0		ug/L			03/13/17 17:59	1
Bromoform	ND		1.0		ug/L			03/13/17 17:59	1
Bromomethane	ND		5.0		ug/L			03/13/17 17:59	1
Carbon tetrachloride	ND		3.0		ug/L			03/13/17 17:59	1
Chlorobenzene	ND		2.0		ug/L			03/13/17 17:59	1
Chlorobromomethane	ND		2.0		ug/L			03/13/17 17:59	1
Chlorodibromomethane	ND		1.0		ug/L			03/13/17 17:59	1
Chloroethane	ND		5.0		ug/L			03/13/17 17:59	1
Chloroform	ND		5.0		ug/L			03/13/17 17:59	1
Chloromethane	ND		5.0		ug/L			03/13/17 17:59	1
2-Chlorotoluene	ND		3.0		ug/L			03/13/17 17:59	1
4-Chlorotoluene	ND		2.0		ug/L			03/13/17 17:59	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			03/13/17 17:59	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/13/17 17:59	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/13/17 17:59	1
Dibromomethane	ND		1.0		ug/L			03/13/17 17:59	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/13/17 17:59	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/13/17 17:59	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/13/17 17:59	1
Dichlorobromomethane	ND		2.0		ug/L			03/13/17 17:59	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/13/17 17:59	1
1,1-Dichloroethane	ND		2.0		ug/L			03/13/17 17:59	1
1,2-Dichloroethane	ND		1.0		ug/L			03/13/17 17:59	1
1,1-Dichloroethene	ND		2.0		ug/L			03/13/17 17:59	1
1,2-Dichloropropane	ND		1.0		ug/L			03/13/17 17:59	1
1,3-Dichloropropane	ND		1.0		ug/L			03/13/17 17:59	1
2,2-Dichloropropane	ND		3.0		ug/L			03/13/17 17:59	1
1,1-Dichloropropene	ND		3.0		ug/L			03/13/17 17:59	1
Ethylbenzene	ND		3.0		ug/L			03/13/17 17:59	1
Ethylene Dibromide	ND		1.0		ug/L			03/13/17 17:59	1
Hexachlorobutadiene	ND		2.0		ug/L			03/13/17 17:59	1
Isopropylbenzene	ND		2.0		ug/L			03/13/17 17:59	1
4-Isopropyltoluene	ND		3.0		ug/L			03/13/17 17:59	1
Methylene Chloride	ND		5.0		ug/L			03/13/17 17:59	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/13/17 17:59	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/13/17 17:59	1
Naphthalene	ND		2.0		ug/L			03/13/17 17:59	1
n-Butylbenzene	ND		3.0		ug/L			03/13/17 17:59	1
N-Propylbenzene	ND		3.0		ug/L			03/13/17 17:59	1
o-Xylene	ND		2.0		ug/L			03/13/17 17:59	1
sec-Butylbenzene	ND		3.0		ug/L			03/13/17 17:59	1
Styrene	ND		5.0		ug/L			03/13/17 17:59	1
tert-Butylbenzene	ND		3.0		ug/L			03/13/17 17:59	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/13/17 17:59	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/13/17 17:59	1
<b>Tetrachloroethene</b>	<b>12</b>		3.0		ug/L			03/13/17 17:59	1
Toluene	ND		2.0		ug/L			03/13/17 17:59	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/13/17 17:59	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: BD-1**

**Lab Sample ID: 580-66540-12**

**Date Collected: 03/02/17 11:40**

**Matrix: Water**

**Date Received: 03/07/17 10:50**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/13/17 17:59	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/13/17 17:59	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/13/17 17:59	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/13/17 17:59	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/13/17 17:59	1
<b>Trichloroethene</b>	<b>3.6</b>		3.0		ug/L			03/13/17 17:59	1
Trichlorofluoromethane	ND		3.0		ug/L			03/13/17 17:59	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/13/17 17:59	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/13/17 17:59	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/13/17 17:59	1
Vinyl chloride	ND		1.0		ug/L			03/13/17 17:59	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	98		75 - 125					03/13/17 17:59	1
Dibromofluoromethane (Surr)	99		77 - 118					03/13/17 17:59	1
1,2-Dichloroethane-d4 (Surr)	100		65 - 143					03/13/17 17:59	1
Toluene-d8 (Surr)	100		82 - 122					03/13/17 17:59	1
Trifluorotoluene (Surr)	99		80 - 141					03/13/17 17:59	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/16/17 00:35	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Trifluorotoluene (Surr)	101		50 - 150					03/16/17 00:35	1
4-Bromofluorobenzene (Surr)	100		50 - 150					03/16/17 00:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>0.50</b>		0.12		mg/L		03/15/17 13:59	03/15/17 22:56	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl	95		50 - 150				03/15/17 13:59	03/15/17 22:56	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: BD-2**  
**Date Collected: 03/01/17 17:40**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-13**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/13/17 18:27	1
Bromobenzene	ND		2.0		ug/L			03/13/17 18:27	1
Bromoform	ND		1.0		ug/L			03/13/17 18:27	1
Bromomethane	ND		5.0		ug/L			03/13/17 18:27	1
Carbon tetrachloride	ND		3.0		ug/L			03/13/17 18:27	1
Chlorobenzene	ND		2.0		ug/L			03/13/17 18:27	1
Chlorobromomethane	ND		2.0		ug/L			03/13/17 18:27	1
Chlorodibromomethane	ND		1.0		ug/L			03/13/17 18:27	1
Chloroethane	ND		5.0		ug/L			03/13/17 18:27	1
Chloroform	ND		5.0		ug/L			03/13/17 18:27	1
Chloromethane	ND		5.0		ug/L			03/13/17 18:27	1
2-Chlorotoluene	ND		3.0		ug/L			03/13/17 18:27	1
4-Chlorotoluene	ND		2.0		ug/L			03/13/17 18:27	1
<b>cis-1,2-Dichloroethene</b>	<b>4.5</b>		1.0		ug/L			03/13/17 18:27	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/13/17 18:27	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/13/17 18:27	1
Dibromomethane	ND		1.0		ug/L			03/13/17 18:27	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/13/17 18:27	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/13/17 18:27	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/13/17 18:27	1
Dichlorobromomethane	ND		2.0		ug/L			03/13/17 18:27	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/13/17 18:27	1
<b>1,1-Dichloroethane</b>	<b>5.6</b>		2.0		ug/L			03/13/17 18:27	1
1,2-Dichloroethane	ND		1.0		ug/L			03/13/17 18:27	1
1,1-Dichloroethene	ND		2.0		ug/L			03/13/17 18:27	1
1,2-Dichloropropane	ND		1.0		ug/L			03/13/17 18:27	1
1,3-Dichloropropane	ND		1.0		ug/L			03/13/17 18:27	1
2,2-Dichloropropane	ND		3.0		ug/L			03/13/17 18:27	1
1,1-Dichloropropene	ND		3.0		ug/L			03/13/17 18:27	1
Ethylbenzene	ND		3.0		ug/L			03/13/17 18:27	1
Ethylene Dibromide	ND		1.0		ug/L			03/13/17 18:27	1
Hexachlorobutadiene	ND		2.0		ug/L			03/13/17 18:27	1
Isopropylbenzene	ND		2.0		ug/L			03/13/17 18:27	1
4-Isopropyltoluene	ND		3.0		ug/L			03/13/17 18:27	1
Methylene Chloride	ND		5.0		ug/L			03/13/17 18:27	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/13/17 18:27	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/13/17 18:27	1
Naphthalene	ND		2.0		ug/L			03/13/17 18:27	1
n-Butylbenzene	ND		3.0		ug/L			03/13/17 18:27	1
N-Propylbenzene	ND		3.0		ug/L			03/13/17 18:27	1
o-Xylene	ND		2.0		ug/L			03/13/17 18:27	1
sec-Butylbenzene	ND		3.0		ug/L			03/13/17 18:27	1
Styrene	ND		5.0		ug/L			03/13/17 18:27	1
tert-Butylbenzene	ND		3.0		ug/L			03/13/17 18:27	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/13/17 18:27	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/13/17 18:27	1
Tetrachloroethene	ND		3.0		ug/L			03/13/17 18:27	1
Toluene	ND		2.0		ug/L			03/13/17 18:27	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/13/17 18:27	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: BD-2**  
**Date Collected: 03/01/17 17:40**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-13**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/13/17 18:27	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/13/17 18:27	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/13/17 18:27	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/13/17 18:27	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/13/17 18:27	1
Trichloroethene	ND		3.0		ug/L			03/13/17 18:27	1
Trichlorofluoromethane	ND		3.0		ug/L			03/13/17 18:27	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/13/17 18:27	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/13/17 18:27	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/13/17 18:27	1
Vinyl chloride	ND		1.0		ug/L			03/13/17 18:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 125		03/13/17 18:27	1
Dibromofluoromethane (Surr)	98		77 - 118		03/13/17 18:27	1
1,2-Dichloroethane-d4 (Surr)	100		65 - 143		03/13/17 18:27	1
Toluene-d8 (Surr)	102		82 - 122		03/13/17 18:27	1
Trifluorotoluene (Surr)	99		80 - 141		03/13/17 18:27	1

### Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/14/17 22:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	103		50 - 150		03/14/17 22:58	1
4-Bromofluorobenzene (Surr)	100		50 - 150		03/14/17 22:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>0.28</b>		0.10		mg/L		03/13/17 10:56	03/13/17 22:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	69		50 - 150	03/13/17 10:56	03/13/17 22:45	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 580-66540-14**

**Date Collected: 03/02/17 10:40**

**Matrix: Water**

**Date Received: 03/07/17 10:50**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/13/17 14:50	1
Bromobenzene	ND		2.0		ug/L			03/13/17 14:50	1
Bromoform	ND		1.0		ug/L			03/13/17 14:50	1
Bromomethane	ND		5.0		ug/L			03/13/17 14:50	1
Carbon tetrachloride	ND		3.0		ug/L			03/13/17 14:50	1
Chlorobenzene	ND		2.0		ug/L			03/13/17 14:50	1
Chlorobromomethane	ND		2.0		ug/L			03/13/17 14:50	1
Chlorodibromomethane	ND		1.0		ug/L			03/13/17 14:50	1
Chloroethane	ND		5.0		ug/L			03/13/17 14:50	1
Chloroform	ND		5.0		ug/L			03/13/17 14:50	1
Chloromethane	ND		5.0		ug/L			03/13/17 14:50	1
2-Chlorotoluene	ND		3.0		ug/L			03/13/17 14:50	1
4-Chlorotoluene	ND		2.0		ug/L			03/13/17 14:50	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			03/13/17 14:50	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/13/17 14:50	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/13/17 14:50	1
Dibromomethane	ND		1.0		ug/L			03/13/17 14:50	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/13/17 14:50	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/13/17 14:50	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/13/17 14:50	1
Dichlorobromomethane	ND		2.0		ug/L			03/13/17 14:50	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/13/17 14:50	1
1,1-Dichloroethane	ND		2.0		ug/L			03/13/17 14:50	1
1,2-Dichloroethane	ND		1.0		ug/L			03/13/17 14:50	1
1,1-Dichloroethene	ND		2.0		ug/L			03/13/17 14:50	1
1,2-Dichloropropane	ND		1.0		ug/L			03/13/17 14:50	1
1,3-Dichloropropane	ND		1.0		ug/L			03/13/17 14:50	1
2,2-Dichloropropane	ND		3.0		ug/L			03/13/17 14:50	1
1,1-Dichloropropene	ND		3.0		ug/L			03/13/17 14:50	1
Ethylbenzene	ND		3.0		ug/L			03/13/17 14:50	1
Ethylene Dibromide	ND		1.0		ug/L			03/13/17 14:50	1
Hexachlorobutadiene	ND		2.0		ug/L			03/13/17 14:50	1
Isopropylbenzene	ND		2.0		ug/L			03/13/17 14:50	1
4-Isopropyltoluene	ND		3.0		ug/L			03/13/17 14:50	1
Methylene Chloride	ND		5.0		ug/L			03/13/17 14:50	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/13/17 14:50	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/13/17 14:50	1
Naphthalene	ND		2.0		ug/L			03/13/17 14:50	1
n-Butylbenzene	ND		3.0		ug/L			03/13/17 14:50	1
N-Propylbenzene	ND		3.0		ug/L			03/13/17 14:50	1
o-Xylene	ND		2.0		ug/L			03/13/17 14:50	1
sec-Butylbenzene	ND		3.0		ug/L			03/13/17 14:50	1
Styrene	ND		5.0		ug/L			03/13/17 14:50	1
tert-Butylbenzene	ND		3.0		ug/L			03/13/17 14:50	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/13/17 14:50	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/13/17 14:50	1
Tetrachloroethene	ND		3.0		ug/L			03/13/17 14:50	1
Toluene	ND		2.0		ug/L			03/13/17 14:50	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/13/17 14:50	1

TestAmerica Seattle



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 580-66540-14**

**Date Collected: 03/02/17 10:40**

**Matrix: Water**

**Date Received: 03/07/17 10:50**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/13/17 14:50	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/13/17 14:50	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/13/17 14:50	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/13/17 14:50	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/13/17 14:50	1
Trichloroethene	ND		3.0		ug/L			03/13/17 14:50	1
Trichlorofluoromethane	ND		3.0		ug/L			03/13/17 14:50	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/13/17 14:50	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/13/17 14:50	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/13/17 14:50	1
Vinyl chloride	ND		1.0		ug/L			03/13/17 14:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		75 - 125		03/13/17 14:50	1
Dibromofluoromethane (Surr)	96		77 - 118		03/13/17 14:50	1
1,2-Dichloroethane-d4 (Surr)	100		65 - 143		03/13/17 14:50	1
Toluene-d8 (Surr)	102		82 - 122		03/13/17 14:50	1
Trifluorotoluene (Surr)	97		80 - 141		03/13/17 14:50	1

**Method: AK101 - Alaska - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND	*	0.050		mg/L			03/15/17 13:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	107		50 - 150		03/15/17 13:05	1
4-Bromofluorobenzene (Surr)	91		50 - 150		03/15/17 13:05	1

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 580-240198/5**

**Matrix: Water**

**Analysis Batch: 240198**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/10/17 11:50	1
Bromobenzene	ND		2.0		ug/L			03/10/17 11:50	1
Bromoform	ND		1.0		ug/L			03/10/17 11:50	1
Bromomethane	ND		5.0		ug/L			03/10/17 11:50	1
Carbon tetrachloride	ND		3.0		ug/L			03/10/17 11:50	1
Chlorobenzene	ND		2.0		ug/L			03/10/17 11:50	1
Chlorobromomethane	ND		2.0		ug/L			03/10/17 11:50	1
Chlorodibromomethane	ND		1.0		ug/L			03/10/17 11:50	1
Chloroethane	ND		5.0		ug/L			03/10/17 11:50	1
Chloroform	ND		5.0		ug/L			03/10/17 11:50	1
Chloromethane	ND		5.0		ug/L			03/10/17 11:50	1
2-Chlorotoluene	ND		3.0		ug/L			03/10/17 11:50	1
4-Chlorotoluene	ND		2.0		ug/L			03/10/17 11:50	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			03/10/17 11:50	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 11:50	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/10/17 11:50	1
Dibromomethane	ND		1.0		ug/L			03/10/17 11:50	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/10/17 11:50	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/10/17 11:50	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/10/17 11:50	1
Dichlorobromomethane	ND		2.0		ug/L			03/10/17 11:50	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/10/17 11:50	1
1,1-Dichloroethane	ND		2.0		ug/L			03/10/17 11:50	1
1,2-Dichloroethane	ND		1.0		ug/L			03/10/17 11:50	1
1,1-Dichloroethene	ND		2.0		ug/L			03/10/17 11:50	1
1,2-Dichloropropane	ND		1.0		ug/L			03/10/17 11:50	1
1,3-Dichloropropane	ND		1.0		ug/L			03/10/17 11:50	1
2,2-Dichloropropane	ND		3.0		ug/L			03/10/17 11:50	1
1,1-Dichloropropene	ND		3.0		ug/L			03/10/17 11:50	1
Ethylbenzene	ND		3.0		ug/L			03/10/17 11:50	1
Ethylene Dibromide	ND		1.0		ug/L			03/10/17 11:50	1
Hexachlorobutadiene	ND		2.0		ug/L			03/10/17 11:50	1
Isopropylbenzene	ND		2.0		ug/L			03/10/17 11:50	1
4-Isopropyltoluene	ND		3.0		ug/L			03/10/17 11:50	1
Methylene Chloride	ND		5.0		ug/L			03/10/17 11:50	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/10/17 11:50	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/10/17 11:50	1
Naphthalene	ND		2.0		ug/L			03/10/17 11:50	1
n-Butylbenzene	ND		3.0		ug/L			03/10/17 11:50	1
N-Propylbenzene	ND		3.0		ug/L			03/10/17 11:50	1
o-Xylene	ND		2.0		ug/L			03/10/17 11:50	1
sec-Butylbenzene	ND		3.0		ug/L			03/10/17 11:50	1
Styrene	ND		5.0		ug/L			03/10/17 11:50	1
tert-Butylbenzene	ND		3.0		ug/L			03/10/17 11:50	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/10/17 11:50	1
1,1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/10/17 11:50	1
Tetrachloroethene	ND		3.0		ug/L			03/10/17 11:50	1
Toluene	ND		2.0		ug/L			03/10/17 11:50	1

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: MB 580-240198/5**  
**Matrix: Water**  
**Analysis Batch: 240198**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/10/17 11:50	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 11:50	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/10/17 11:50	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/10/17 11:50	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/10/17 11:50	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/10/17 11:50	1
Trichloroethene	ND		3.0		ug/L			03/10/17 11:50	1
Trichlorofluoromethane	ND		3.0		ug/L			03/10/17 11:50	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/10/17 11:50	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/10/17 11:50	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/10/17 11:50	1
Vinyl chloride	ND		1.0		ug/L			03/10/17 11:50	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 125		03/10/17 11:50	1
Dibromofluoromethane (Surr)	78		77 - 118		03/10/17 11:50	1
1,2-Dichloroethane-d4 (Surr)	102		65 - 143		03/10/17 11:50	1
Toluene-d8 (Surr)	98		82 - 122		03/10/17 11:50	1
Trifluorotoluene (Surr)	100		80 - 141		03/10/17 11:50	1

**Lab Sample ID: LCS 580-240198/6**  
**Matrix: Water**  
**Analysis Batch: 240198**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	10.0	10.3		ug/L		103	80 - 120
Bromobenzene	10.0	9.34		ug/L		93	75 - 115
Bromoform	10.0	8.80		ug/L		88	55 - 130
Bromomethane	10.0	9.71		ug/L		97	55 - 125
Carbon tetrachloride	10.0	9.66		ug/L		97	65 - 124
Chlorobenzene	10.0	9.46		ug/L		95	80 - 120
Chlorobromomethane	10.0	9.52		ug/L		95	65 - 120
Chlorodibromomethane	10.0	8.94		ug/L		89	71 - 118
Chloroethane	10.0	10.3		ug/L		103	60 - 126
Chloroform	10.0	9.27		ug/L		93	80 - 119
Chloromethane	10.0	10.7		ug/L		107	40 - 149
2-Chlorotoluene	10.0	9.57		ug/L		96	69 - 125
4-Chlorotoluene	10.0	9.82		ug/L		98	68 - 121
cis-1,2-Dichloroethene	10.0	10.3		ug/L		103	70 - 111
cis-1,3-Dichloropropene	10.0	9.95		ug/L		99	77 - 117
1,2-Dibromo-3-Chloropropane	10.0	8.98	J	ug/L		90	58 - 141
Dibromomethane	10.0	9.67		ug/L		97	61 - 142
1,2-Dichlorobenzene	10.0	9.48		ug/L		95	70 - 120
1,3-Dichlorobenzene	10.0	9.76		ug/L		98	72 - 116
1,4-Dichlorobenzene	10.0	9.59		ug/L		96	75 - 117
Dichlorobromomethane	10.0	9.44		ug/L		94	75 - 120
Dichlorodifluoromethane	10.0	9.15		ug/L		92	20 - 141
1,1-Dichloroethane	10.0	9.40		ug/L		94	70 - 135

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

Lab Sample ID: LCS 580-240198/6

Matrix: Water

Analysis Batch: 240198

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	10.0	10.6		ug/L		106	58 - 143
1,1-Dichloroethene	10.0	9.33		ug/L		93	70 - 117
1,2-Dichloropropane	10.0	9.90		ug/L		99	58 - 150
1,3-Dichloropropane	10.0	9.31		ug/L		93	69 - 134
2,2-Dichloropropane	10.0	11.5		ug/L		115	50 - 140
1,1-Dichloropropene	10.0	10.2		ug/L		102	75 - 120
Ethylbenzene	10.0	9.72		ug/L		97	75 - 119
Ethylene Dibromide	10.0	9.05		ug/L		90	66 - 133
Hexachlorobutadiene	10.0	9.45		ug/L		94	56 - 125
Isopropylbenzene	10.0	9.60		ug/L		96	75 - 125
4-Isopropyltoluene	10.0	9.81		ug/L		98	66 - 120
Methylene Chloride	10.0	9.76		ug/L		98	70 - 115
Methyl tert-butyl ether	10.0	9.40		ug/L		94	65 - 125
m-Xylene & p-Xylene	10.0	9.47		ug/L		95	75 - 119
Naphthalene	10.0	9.64		ug/L		96	55 - 134
n-Butylbenzene	10.0	10.2		ug/L		102	70 - 120
N-Propylbenzene	10.0	9.37		ug/L		94	70 - 124
o-Xylene	10.0	9.48		ug/L		95	74 - 120
sec-Butylbenzene	10.0	10.1		ug/L		101	70 - 125
Styrene	10.0	9.41		ug/L		94	76 - 116
tert-Butylbenzene	10.0	9.78		ug/L		98	70 - 121
1,1,1,2-Tetrachloroethane	10.0	9.12		ug/L		91	64 - 130
1,1,1,2,2-Tetrachloroethane	10.0	9.65		ug/L		96	65 - 130
Tetrachloroethene	10.0	9.44		ug/L		94	70 - 124
Toluene	10.0	9.94		ug/L		99	75 - 120
trans-1,2-Dichloroethene	10.0	10.0		ug/L		100	72 - 113
trans-1,3-Dichloropropene	10.0	9.55		ug/L		96	73 - 122
1,2,3-Trichlorobenzene	10.0	9.55		ug/L		96	55 - 133
1,2,4-Trichlorobenzene	10.0	9.36		ug/L		94	56 - 129
1,1,1-Trichloroethane	10.0	9.75		ug/L		97	65 - 130
1,1,2-Trichloroethane	10.0	9.15		ug/L		92	69 - 135
Trichloroethene	10.0	9.25		ug/L		93	70 - 125
Trichlorofluoromethane	10.0	9.16		ug/L		92	49 - 130
1,2,3-Trichloropropane	10.0	9.21		ug/L		92	65 - 135
1,2,4-Trimethylbenzene	10.0	10.3		ug/L		103	75 - 121
1,3,5-Trimethylbenzene	10.0	9.91		ug/L		99	75 - 122
Vinyl chloride	10.0	9.52		ug/L		95	56 - 114

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	98		75 - 125
Dibromofluoromethane (Surr)	99		77 - 118
1,2-Dichloroethane-d4 (Surr)	101		65 - 143
Toluene-d8 (Surr)	98		82 - 122
Trifluorotoluene (Surr)	99		80 - 141

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

Lab Sample ID: LCSD 580-240198/7

Matrix: Water

Analysis Batch: 240198

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
Benzene	10.0	9.46		ug/L		95	80 - 120	9	14
Bromobenzene	10.0	8.97		ug/L		90	75 - 115	4	13
Bromoform	10.0	8.82		ug/L		88	55 - 130	0	20
Bromomethane	10.0	9.31		ug/L		93	55 - 125	4	30
Carbon tetrachloride	10.0	8.87		ug/L		89	65 - 124	8	19
Chlorobenzene	10.0	8.93		ug/L		89	80 - 120	6	15
Chlorobromomethane	10.0	9.01		ug/L		90	65 - 120	6	17
Chlorodibromomethane	10.0	8.81		ug/L		88	71 - 118	2	21
Chloroethane	10.0	9.47		ug/L		95	60 - 126	8	30
Chloroform	10.0	8.80		ug/L		88	80 - 119	5	15
Chloromethane	10.0	9.38		ug/L		94	40 - 149	13	22
2-Chlorotoluene	10.0	8.95		ug/L		89	69 - 125	7	15
4-Chlorotoluene	10.0	9.51		ug/L		95	68 - 121	3	15
cis-1,2-Dichloroethene	10.0	9.46		ug/L		95	70 - 111	9	15
cis-1,3-Dichloropropene	10.0	9.31		ug/L		93	77 - 117	7	24
1,2-Dibromo-3-Chloropropane	10.0	8.95	J	ug/L		89	58 - 141	0	30
Dibromomethane	10.0	9.35		ug/L		93	61 - 142	3	15
1,2-Dichlorobenzene	10.0	9.13		ug/L		91	70 - 120	4	15
1,3-Dichlorobenzene	10.0	9.16		ug/L		92	72 - 116	6	14
1,4-Dichlorobenzene	10.0	9.09		ug/L		91	75 - 117	5	17
Dichlorobromomethane	10.0	8.97		ug/L		90	75 - 120	5	14
Dichlorodifluoromethane	10.0	8.90		ug/L		89	20 - 141	3	35
1,1-Dichloroethane	10.0	8.85		ug/L		88	70 - 135	6	20
1,2-Dichloroethane	10.0	10.5		ug/L		105	58 - 143	1	17
1,1-Dichloroethene	10.0	8.90		ug/L		89	70 - 117	5	21
1,2-Dichloropropane	10.0	9.24		ug/L		92	58 - 150	7	15
1,3-Dichloropropane	10.0	9.03		ug/L		90	69 - 134	3	23
2,2-Dichloropropane	10.0	9.74		ug/L		97	50 - 140	16	20
1,1-Dichloropropene	10.0	9.37		ug/L		94	75 - 120	8	20
Ethylbenzene	10.0	9.20		ug/L		92	75 - 119	5	14
Ethylene Dibromide	10.0	8.97		ug/L		90	66 - 133	1	17
Hexachlorobutadiene	10.0	9.55		ug/L		96	56 - 125	1	19
Isopropylbenzene	10.0	8.90		ug/L		89	75 - 125	8	20
4-Isopropyltoluene	10.0	9.04		ug/L		90	66 - 120	8	13
Methylene Chloride	10.0	9.44		ug/L		94	70 - 115	3	19
Methyl tert-butyl ether	10.0	9.04		ug/L		90	65 - 125	4	18
m-Xylene & p-Xylene	10.0	8.93		ug/L		89	75 - 119	6	14
Naphthalene	10.0	9.48		ug/L		95	55 - 134	2	30
n-Butylbenzene	10.0	9.48		ug/L		95	70 - 120	8	20
N-Propylbenzene	10.0	8.84		ug/L		88	70 - 124	6	13
o-Xylene	10.0	8.90		ug/L		89	74 - 120	6	16
sec-Butylbenzene	10.0	9.44		ug/L		94	70 - 125	7	15
Styrene	10.0	9.02		ug/L		90	76 - 116	4	16
tert-Butylbenzene	10.0	9.23		ug/L		92	70 - 121	6	14
1,1,1,2-Tetrachloroethane	10.0	8.60		ug/L		86	64 - 130	6	20
1,1,1,2,2-Tetrachloroethane	10.0	9.42		ug/L		94	65 - 130	2	18
Tetrachloroethene	10.0	9.12		ug/L		91	70 - 124	3	20
Toluene	10.0	9.31		ug/L		93	75 - 120	7	19

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: LCSD 580-240198/7**

**Matrix: Water**

**Analysis Batch: 240198**

**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
trans-1,2-Dichloroethene	10.0	8.98		ug/L		90	72 - 113	11	21
trans-1,3-Dichloropropene	10.0	9.35		ug/L		94	73 - 122	2	30
1,2,3-Trichlorobenzene	10.0	9.27		ug/L		93	55 - 133	3	35
1,2,4-Trichlorobenzene	10.0	8.99		ug/L		90	56 - 129	4	22
1,1,1-Trichloroethane	10.0	8.96		ug/L		90	65 - 130	8	18
1,1,2-Trichloroethane	10.0	8.84		ug/L		88	69 - 135	3	24
Trichloroethene	10.0	8.37		ug/L		84	70 - 125	10	23
Trichlorofluoromethane	10.0	8.27		ug/L		83	49 - 130	10	35
1,2,3-Trichloropropane	10.0	8.98		ug/L		90	65 - 135	3	22
1,2,4-Trimethylbenzene	10.0	9.61		ug/L		96	75 - 121	7	16
1,3,5-Trimethylbenzene	10.0	9.22		ug/L		92	75 - 122	7	14
Vinyl chloride	10.0	8.67		ug/L		87	56 - 114	9	23

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	99		75 - 125
Dibromofluoromethane (Surr)	98		77 - 118
1,2-Dichloroethane-d4 (Surr)	101		65 - 143
Toluene-d8 (Surr)	98		82 - 122
Trifluorotoluene (Surr)	97		80 - 141

**Lab Sample ID: 580-66540-7 MS**

**Matrix: Water**

**Analysis Batch: 240198**

**Client Sample ID: MW-7**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		10.0	9.86		ug/L		99	80 - 120
Bromobenzene	ND		10.0	9.10		ug/L		91	75 - 115
Bromoform	ND		10.0	8.76		ug/L		88	55 - 130
Bromomethane	ND		10.0	9.46		ug/L		95	55 - 125
Carbon tetrachloride	ND		10.0	9.39		ug/L		94	65 - 124
Chlorobenzene	ND		10.0	9.23		ug/L		92	80 - 120
Chlorobromomethane	ND		10.0	9.08		ug/L		91	65 - 120
Chlorodibromomethane	ND		10.0	8.85		ug/L		88	71 - 118
Chloroethane	ND		10.0	10.1		ug/L		101	60 - 126
Chloroform	ND		10.0	9.05		ug/L		91	80 - 119
Chloromethane	ND		10.0	11.0		ug/L		110	40 - 149
2-Chlorotoluene	ND		10.0	9.13		ug/L		91	69 - 125
4-Chlorotoluene	ND		10.0	9.49		ug/L		95	68 - 121
cis-1,2-Dichloroethene	ND		10.0	9.75		ug/L		98	70 - 111
cis-1,3-Dichloropropene	ND		10.0	9.35		ug/L		93	77 - 117
1,2-Dibromo-3-Chloropropane	ND		10.0	ND		ug/L		90	58 - 141
Dibromomethane	ND		10.0	9.32		ug/L		93	61 - 142
1,2-Dichlorobenzene	ND		10.0	9.27		ug/L		93	70 - 120
1,3-Dichlorobenzene	ND		10.0	9.46		ug/L		95	72 - 116
1,4-Dichlorobenzene	ND		10.0	9.02		ug/L		90	75 - 117
Dichlorobromomethane	ND		10.0	9.02		ug/L		90	75 - 120
Dichlorodifluoromethane	ND		10.0	9.38		ug/L		94	20 - 141
1,1-Dichloroethane	ND		10.0	9.20		ug/L		92	70 - 135

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

Lab Sample ID: 580-66540-7 MS

Matrix: Water

Analysis Batch: 240198

Client Sample ID: MW-7

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	ND		10.0	10.5		ug/L		105	58 - 143
1,1-Dichloroethene	ND		10.0	9.00		ug/L		90	70 - 117
1,2-Dichloropropane	ND		10.0	9.17		ug/L		92	58 - 150
1,3-Dichloropropane	ND		10.0	9.28		ug/L		93	69 - 134
2,2-Dichloropropane	ND		10.0	10.1		ug/L		101	50 - 140
1,1-Dichloropropene	ND		10.0	9.61		ug/L		96	75 - 120
Ethylbenzene	ND		10.0	9.69		ug/L		97	75 - 119
Ethylene Dibromide	ND		10.0	8.84		ug/L		88	66 - 133
Hexachlorobutadiene	ND		10.0	8.70		ug/L		87	56 - 125
Isopropylbenzene	ND		10.0	9.33		ug/L		93	75 - 125
4-Isopropyltoluene	ND		10.0	9.29		ug/L		93	66 - 120
Methylene Chloride	ND		10.0	9.72		ug/L		97	70 - 115
Methyl tert-butyl ether	ND		10.0	9.03		ug/L		90	65 - 125
m-Xylene & p-Xylene	ND		10.0	9.62		ug/L		93	75 - 119
Naphthalene	ND		10.0	9.44		ug/L		94	55 - 134
n-Butylbenzene	ND		10.0	9.38		ug/L		94	70 - 120
N-Propylbenzene	ND		10.0	8.92		ug/L		89	70 - 124
o-Xylene	ND		10.0	9.32		ug/L		93	74 - 120
sec-Butylbenzene	ND		10.0	9.74		ug/L		97	70 - 125
Styrene	ND		10.0	9.29		ug/L		93	76 - 116
tert-Butylbenzene	ND		10.0	9.51		ug/L		95	70 - 121
1,1,1,2-Tetrachloroethane	ND		10.0	8.66		ug/L		87	64 - 130
1,1,1,2,2-Tetrachloroethane	ND		10.0	9.64		ug/L		96	65 - 130
Tetrachloroethene	14		10.0	21.4		ug/L		72	70 - 124
Toluene	ND		10.0	9.81		ug/L		98	75 - 120
trans-1,2-Dichloroethene	ND		10.0	10.1		ug/L		101	72 - 113
trans-1,3-Dichloropropene	ND		10.0	9.20		ug/L		92	73 - 122
1,2,3-Trichlorobenzene	ND		10.0	9.10		ug/L		91	55 - 133
1,2,4-Trichlorobenzene	ND		10.0	8.80		ug/L		88	56 - 129
1,1,1-Trichloroethane	ND		10.0	10.4		ug/L		96	65 - 130
1,1,2-Trichloroethane	ND		10.0	8.99		ug/L		90	69 - 135
Trichloroethene	ND		10.0	10.2		ug/L		102	70 - 125
Trichlorofluoromethane	ND		10.0	8.81		ug/L		88	49 - 130
1,2,3-Trichloropropane	ND		10.0	9.16		ug/L		92	65 - 135
1,2,4-Trimethylbenzene	ND		10.0	9.84		ug/L		98	75 - 121
1,3,5-Trimethylbenzene	ND		10.0	9.51		ug/L		95	75 - 122
Vinyl chloride	ND		10.0	9.25		ug/L		93	56 - 114

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	99		75 - 125
Dibromofluoromethane (Surr)	100		77 - 118
1,2-Dichloroethane-d4 (Surr)	102		65 - 143
Toluene-d8 (Surr)	98		82 - 122
Trifluorotoluene (Surr)	99		80 - 141

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: 580-66540-7 MSD**

**Matrix: Water**

**Analysis Batch: 240198**

**Client Sample ID: MW-7**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		10.0	9.97		ug/L		100	80 - 120	1	35
Bromobenzene	ND		10.0	8.90		ug/L		89	75 - 115	2	35
Bromoform	ND		10.0	8.51		ug/L		85	55 - 130	3	35
Bromomethane	ND		10.0	9.82		ug/L		98	55 - 125	4	35
Carbon tetrachloride	ND		10.0	9.30		ug/L		93	65 - 124	1	35
Chlorobenzene	ND		10.0	9.11		ug/L		91	80 - 120	1	35
Chlorobromomethane	ND		10.0	9.12		ug/L		91	65 - 120	0	35
Chlorodibromomethane	ND		10.0	8.76		ug/L		88	71 - 118	1	35
Chloroethane	ND		10.0	10.0		ug/L		100	60 - 126	1	35
Chloroform	ND		10.0	9.38		ug/L		94	80 - 119	4	35
Chloromethane	ND		10.0	10.7		ug/L		107	40 - 149	3	35
2-Chlorotoluene	ND		10.0	9.11		ug/L		91	69 - 125	0	35
4-Chlorotoluene	ND		10.0	9.23		ug/L		92	68 - 121	3	35
cis-1,2-Dichloroethene	ND		10.0	10.2		ug/L		102	70 - 111	5	35
cis-1,3-Dichloropropene	ND		10.0	8.99		ug/L		90	77 - 117	4	35
1,2-Dibromo-3-Chloropropane	ND		10.0	ND		ug/L		89	58 - 141	1	35
Dibromomethane	ND		10.0	9.38		ug/L		94	61 - 142	1	35
1,2-Dichlorobenzene	ND		10.0	9.20		ug/L		92	70 - 120	1	35
1,3-Dichlorobenzene	ND		10.0	8.97		ug/L		90	72 - 116	5	35
1,4-Dichlorobenzene	ND		10.0	8.85		ug/L		89	75 - 117	2	35
Dichlorobromomethane	ND		10.0	8.87		ug/L		89	75 - 120	2	35
Dichlorodifluoromethane	ND		10.0	10.2		ug/L		102	20 - 141	8	35
1,1-Dichloroethane	ND		10.0	9.62		ug/L		96	70 - 135	4	35
1,2-Dichloroethane	ND		10.0	10.2		ug/L		102	58 - 143	3	35
1,1-Dichloroethene	ND		10.0	9.15		ug/L		91	70 - 117	2	35
1,2-Dichloropropane	ND		10.0	9.12		ug/L		91	58 - 150	1	35
1,3-Dichloropropane	ND		10.0	8.98		ug/L		90	69 - 134	3	35
2,2-Dichloropropane	ND		10.0	10.6		ug/L		106	50 - 140	5	35
1,1-Dichloropropene	ND		10.0	10.0		ug/L		100	75 - 120	4	35
Ethylbenzene	ND		10.0	9.53		ug/L		95	75 - 119	2	35
Ethylene Dibromide	ND		10.0	8.72		ug/L		87	66 - 133	1	35
Hexachlorobutadiene	ND		10.0	9.44		ug/L		94	56 - 125	8	35
Isopropylbenzene	ND		10.0	9.33		ug/L		93	75 - 125	0	35
4-Isopropyltoluene	ND		10.0	9.12		ug/L		91	66 - 120	2	35
Methylene Chloride	ND		10.0	9.55		ug/L		96	70 - 115	2	35
Methyl tert-butyl ether	ND		10.0	9.33		ug/L		93	65 - 125	3	35
m-Xylene & p-Xylene	ND		10.0	9.47		ug/L		92	75 - 119	2	35
Naphthalene	ND		10.0	9.57		ug/L		96	55 - 134	1	35
n-Butylbenzene	ND		10.0	9.26		ug/L		93	70 - 120	1	35
N-Propylbenzene	ND		10.0	8.97		ug/L		90	70 - 124	1	35
o-Xylene	ND		10.0	9.31		ug/L		93	74 - 120	0	35
sec-Butylbenzene	ND		10.0	9.71		ug/L		97	70 - 125	0	35
Styrene	ND		10.0	8.95		ug/L		90	76 - 116	4	35
tert-Butylbenzene	ND		10.0	9.56		ug/L		96	70 - 121	1	35
1,1,1,2-Tetrachloroethane	ND		10.0	8.96		ug/L		90	64 - 130	3	35
1,1,1,2,2-Tetrachloroethane	ND		10.0	9.48		ug/L		95	65 - 130	2	35
Tetrachloroethene	14		10.0	22.8		ug/L		85	70 - 124	6	35
Toluene	ND		10.0	9.77		ug/L		98	75 - 120	0	35

TestAmerica Seattle



# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: 580-66540-7 MSD**  
**Matrix: Water**  
**Analysis Batch: 240198**

**Client Sample ID: MW-7**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,2-Dichloroethene	ND		10.0	10.1		ug/L		101	72 - 113	0	35
trans-1,3-Dichloropropene	ND		10.0	8.75		ug/L		88	73 - 122	5	35
1,2,3-Trichlorobenzene	ND		10.0	9.29		ug/L		93	55 - 133	2	35
1,2,4-Trichlorobenzene	ND		10.0	9.15		ug/L		92	56 - 129	4	35
1,1,1-Trichloroethane	ND		10.0	10.7		ug/L		99	65 - 130	2	35
1,1,2-Trichloroethane	ND		10.0	8.91		ug/L		89	69 - 135	1	35
Trichloroethene	ND		10.0	10.2		ug/L		102	70 - 125	0	35
Trichlorofluoromethane	ND		10.0	9.41		ug/L		94	49 - 130	7	35
1,2,3-Trichloropropane	ND		10.0	8.84		ug/L		88	65 - 135	4	35
1,2,4-Trimethylbenzene	ND		10.0	9.66		ug/L		97	75 - 121	2	35
1,3,5-Trimethylbenzene	ND		10.0	9.43		ug/L		94	75 - 122	1	35
Vinyl chloride	ND		10.0	9.99		ug/L		100	56 - 114	8	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	99		75 - 125
Dibromofluoromethane (Surr)	102		77 - 118
1,2-Dichloroethane-d4 (Surr)	102		65 - 143
Toluene-d8 (Surr)	98		82 - 122
Trifluorotoluene (Surr)	99		80 - 141

**Lab Sample ID: MB 580-240388/5**  
**Matrix: Water**  
**Analysis Batch: 240388**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/13/17 11:13	1
Bromobenzene	ND		2.0		ug/L			03/13/17 11:13	1
Bromoform	ND		1.0		ug/L			03/13/17 11:13	1
Bromomethane	ND		5.0		ug/L			03/13/17 11:13	1
Carbon tetrachloride	ND		3.0		ug/L			03/13/17 11:13	1
Chlorobenzene	ND		2.0		ug/L			03/13/17 11:13	1
Chlorobromomethane	ND		2.0		ug/L			03/13/17 11:13	1
Chlorodibromomethane	ND		1.0		ug/L			03/13/17 11:13	1
Chloroethane	ND		5.0		ug/L			03/13/17 11:13	1
Chloroform	ND		5.0		ug/L			03/13/17 11:13	1
Chloromethane	ND		5.0		ug/L			03/13/17 11:13	1
2-Chlorotoluene	ND		3.0		ug/L			03/13/17 11:13	1
4-Chlorotoluene	ND		2.0		ug/L			03/13/17 11:13	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			03/13/17 11:13	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/13/17 11:13	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/13/17 11:13	1
Dibromomethane	ND		1.0		ug/L			03/13/17 11:13	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/13/17 11:13	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/13/17 11:13	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/13/17 11:13	1
Dichlorobromomethane	ND		2.0		ug/L			03/13/17 11:13	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/13/17 11:13	1
1,1-Dichloroethane	ND		2.0		ug/L			03/13/17 11:13	1

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: MB 580-240388/5**

**Matrix: Water**

**Analysis Batch: 240388**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		1.0		ug/L			03/13/17 11:13	1
1,1-Dichloroethene	ND		2.0		ug/L			03/13/17 11:13	1
1,2-Dichloropropane	ND		1.0		ug/L			03/13/17 11:13	1
1,3-Dichloropropane	ND		1.0		ug/L			03/13/17 11:13	1
2,2-Dichloropropane	ND		3.0		ug/L			03/13/17 11:13	1
1,1-Dichloropropene	ND		3.0		ug/L			03/13/17 11:13	1
Ethylbenzene	ND		3.0		ug/L			03/13/17 11:13	1
Ethylene Dibromide	ND		1.0		ug/L			03/13/17 11:13	1
Hexachlorobutadiene	ND		2.0		ug/L			03/13/17 11:13	1
Isopropylbenzene	ND		2.0		ug/L			03/13/17 11:13	1
4-Isopropyltoluene	ND		3.0		ug/L			03/13/17 11:13	1
Methylene Chloride	ND		5.0		ug/L			03/13/17 11:13	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/13/17 11:13	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/13/17 11:13	1
Naphthalene	ND		2.0		ug/L			03/13/17 11:13	1
n-Butylbenzene	ND		3.0		ug/L			03/13/17 11:13	1
N-Propylbenzene	ND		3.0		ug/L			03/13/17 11:13	1
o-Xylene	ND		2.0		ug/L			03/13/17 11:13	1
sec-Butylbenzene	ND		3.0		ug/L			03/13/17 11:13	1
Styrene	ND		5.0		ug/L			03/13/17 11:13	1
tert-Butylbenzene	ND		3.0		ug/L			03/13/17 11:13	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/13/17 11:13	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/13/17 11:13	1
Tetrachloroethene	ND		3.0		ug/L			03/13/17 11:13	1
Toluene	ND		2.0		ug/L			03/13/17 11:13	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/13/17 11:13	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/13/17 11:13	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/13/17 11:13	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/13/17 11:13	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/13/17 11:13	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/13/17 11:13	1
Trichloroethene	ND		3.0		ug/L			03/13/17 11:13	1
Trichlorofluoromethane	ND		3.0		ug/L			03/13/17 11:13	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/13/17 11:13	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/13/17 11:13	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/13/17 11:13	1
Vinyl chloride	ND		1.0		ug/L			03/13/17 11:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 125		03/13/17 11:13	1
Dibromofluoromethane (Surr)	95		77 - 118		03/13/17 11:13	1
1,2-Dichloroethane-d4 (Surr)	101		65 - 143		03/13/17 11:13	1
Toluene-d8 (Surr)	102		82 - 122		03/13/17 11:13	1
Trifluorotoluene (Surr)	98		80 - 141		03/13/17 11:13	1

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: LCS 580-240388/6**

**Matrix: Water**

**Analysis Batch: 240388**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	10.0	10.1		ug/L		101	80 - 120
Bromobenzene	10.0	9.15		ug/L		91	75 - 115
Bromoform	10.0	8.67		ug/L		87	55 - 130
Bromomethane	10.0	9.50		ug/L		95	55 - 125
Carbon tetrachloride	10.0	9.48		ug/L		95	65 - 124
Chlorobenzene	10.0	9.96		ug/L		100	80 - 120
Chlorobromomethane	10.0	9.57		ug/L		96	65 - 120
Chlorodibromomethane	10.0	9.28		ug/L		93	71 - 118
Chloroethane	10.0	9.41		ug/L		94	60 - 126
Chloroform	10.0	9.99		ug/L		100	80 - 119
Chloromethane	10.0	9.15		ug/L		91	40 - 149
2-Chlorotoluene	10.0	9.78		ug/L		98	69 - 125
4-Chlorotoluene	10.0	9.49		ug/L		95	68 - 121
cis-1,2-Dichloroethene	10.0	9.57		ug/L		96	70 - 111
cis-1,3-Dichloropropene	10.0	9.66		ug/L		97	77 - 117
1,2-Dibromo-3-Chloropropane	10.0	9.07	J	ug/L		91	58 - 141
Dibromomethane	10.0	9.29		ug/L		93	61 - 142
1,2-Dichlorobenzene	10.0	9.80		ug/L		98	70 - 120
1,3-Dichlorobenzene	10.0	9.73		ug/L		97	72 - 116
1,4-Dichlorobenzene	10.0	9.89		ug/L		99	75 - 117
Dichlorobromomethane	10.0	9.49		ug/L		95	75 - 120
Dichlorodifluoromethane	10.0	8.42		ug/L		84	20 - 141
1,1-Dichloroethane	10.0	9.96		ug/L		100	70 - 135
1,2-Dichloroethane	10.0	9.38		ug/L		94	58 - 143
1,1-Dichloroethene	10.0	9.37		ug/L		94	70 - 117
1,2-Dichloropropane	10.0	9.65		ug/L		96	58 - 150
1,3-Dichloropropane	10.0	9.74		ug/L		97	69 - 134
2,2-Dichloropropane	10.0	10.0		ug/L		100	50 - 140
1,1-Dichloropropene	10.0	9.86		ug/L		99	75 - 120
Ethylbenzene	10.0	10.3		ug/L		103	75 - 119
Ethylene Dibromide	10.0	9.44		ug/L		94	66 - 133
Hexachlorobutadiene	10.0	9.30		ug/L		93	56 - 125
Isopropylbenzene	10.0	10.2		ug/L		102	75 - 125
4-Isopropyltoluene	10.0	10.3		ug/L		103	66 - 120
Methylene Chloride	10.0	9.57		ug/L		96	70 - 115
Methyl tert-butyl ether	10.0	9.65		ug/L		97	65 - 125
m-Xylene & p-Xylene	10.0	9.59		ug/L		96	75 - 119
Naphthalene	10.0	9.48		ug/L		95	55 - 134
n-Butylbenzene	10.0	9.75		ug/L		98	70 - 120
N-Propylbenzene	10.0	10.3		ug/L		103	70 - 124
o-Xylene	10.0	10.5		ug/L		105	74 - 120
sec-Butylbenzene	10.0	10.4		ug/L		104	70 - 125
Styrene	10.0	9.85		ug/L		98	76 - 116
tert-Butylbenzene	10.0	9.79		ug/L		98	70 - 121
1,1,1,2-Tetrachloroethane	10.0	9.62		ug/L		96	64 - 130
1,1,1,2,2-Tetrachloroethane	10.0	10.5		ug/L		105	65 - 130
Tetrachloroethene	10.0	9.15		ug/L		92	70 - 124
Toluene	10.0	9.34		ug/L		93	75 - 120

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: LCS 580-240388/6**  
**Matrix: Water**  
**Analysis Batch: 240388**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	10.0	9.29		ug/L		93	72 - 113
trans-1,3-Dichloropropene	10.0	9.47		ug/L		95	73 - 122
1,2,3-Trichlorobenzene	10.0	9.92		ug/L		99	55 - 133
1,2,4-Trichlorobenzene	10.0	9.27		ug/L		93	56 - 129
1,1,1-Trichloroethane	10.0	9.52		ug/L		95	65 - 130
1,1,2-Trichloroethane	10.0	9.61		ug/L		96	69 - 135
Trichloroethene	10.0	9.61		ug/L		96	70 - 125
Trichlorofluoromethane	10.0	8.69		ug/L		87	49 - 130
1,2,3-Trichloropropane	10.0	10.1		ug/L		101	65 - 135
1,2,4-Trimethylbenzene	10.0	9.96		ug/L		100	75 - 121
1,3,5-Trimethylbenzene	10.0	9.96		ug/L		100	75 - 122
Vinyl chloride	10.0	10.2		ug/L		102	56 - 114

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		75 - 125
Dibromofluoromethane (Surr)	99		77 - 118
1,2-Dichloroethane-d4 (Surr)	100		65 - 143
Toluene-d8 (Surr)	102		82 - 122
Trifluorotoluene (Surr)	94		80 - 141

**Lab Sample ID: LCSD 580-240388/7**  
**Matrix: Water**  
**Analysis Batch: 240388**

**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
Benzene	10.0	9.75		ug/L		97	80 - 120	3	14
Bromobenzene	10.0	9.52		ug/L		95	75 - 115	4	13
Bromoform	10.0	8.13		ug/L		81	55 - 130	7	20
Bromomethane	10.0	9.28		ug/L		93	55 - 125	2	30
Carbon tetrachloride	10.0	9.61		ug/L		96	65 - 124	1	19
Chlorobenzene	10.0	10.1		ug/L		101	80 - 120	1	15
Chlorobromomethane	10.0	9.49		ug/L		95	65 - 120	1	17
Chlorodibromomethane	10.0	8.87		ug/L		89	71 - 118	5	21
Chloroethane	10.0	8.11		ug/L		81	60 - 126	15	30
Chloroform	10.0	9.92		ug/L		99	80 - 119	1	15
Chloromethane	10.0	9.20		ug/L		92	40 - 149	1	22
2-Chlorotoluene	10.0	9.46		ug/L		95	69 - 125	3	15
4-Chlorotoluene	10.0	9.67		ug/L		97	68 - 121	2	15
cis-1,2-Dichloroethene	10.0	9.31		ug/L		93	70 - 111	3	15
cis-1,3-Dichloropropene	10.0	9.44		ug/L		94	77 - 117	2	24
1,2-Dibromo-3-Chloropropane	10.0	8.07	J	ug/L		81	58 - 141	12	30
Dibromomethane	10.0	8.69		ug/L		87	61 - 142	7	15
1,2-Dichlorobenzene	10.0	9.78		ug/L		98	70 - 120	0	15
1,3-Dichlorobenzene	10.0	9.96		ug/L		100	72 - 116	2	14
1,4-Dichlorobenzene	10.0	9.59		ug/L		96	75 - 117	3	17
Dichlorobromomethane	10.0	9.57		ug/L		96	75 - 120	1	14
Dichlorodifluoromethane	10.0	9.21		ug/L		92	20 - 141	9	35
1,1-Dichloroethane	10.0	9.72		ug/L		97	70 - 135	2	20

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

Lab Sample ID: LCSD 580-240388/7

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 240388

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloroethane	10.0	9.26		ug/L		93	58 - 143	1	17
1,1-Dichloroethene	10.0	9.25		ug/L		92	70 - 117	1	21
1,2-Dichloropropane	10.0	9.55		ug/L		95	58 - 150	1	15
1,3-Dichloropropane	10.0	9.49		ug/L		95	69 - 134	3	23
2,2-Dichloropropane	10.0	9.83		ug/L		98	50 - 140	2	20
1,1-Dichloropropene	10.0	9.81		ug/L		98	75 - 120	1	20
Ethylbenzene	10.0	10.1		ug/L		101	75 - 119	2	14
Ethylene Dibromide	10.0	9.07		ug/L		91	66 - 133	4	17
Hexachlorobutadiene	10.0	9.46		ug/L		95	56 - 125	2	19
Isopropylbenzene	10.0	9.87		ug/L		99	75 - 125	3	20
4-Isopropyltoluene	10.0	10.2		ug/L		102	66 - 120	1	13
Methylene Chloride	10.0	9.27		ug/L		93	70 - 115	3	19
Methyl tert-butyl ether	10.0	9.14		ug/L		91	65 - 125	5	18
m-Xylene & p-Xylene	10.0	9.59		ug/L		96	75 - 119	0	14
Naphthalene	10.0	8.95		ug/L		90	55 - 134	6	30
n-Butylbenzene	10.0	9.71		ug/L		97	70 - 120	0	20
N-Propylbenzene	10.0	10.3		ug/L		103	70 - 124	0	13
o-Xylene	10.0	10.2		ug/L		102	74 - 120	3	16
sec-Butylbenzene	10.0	10.3		ug/L		103	70 - 125	2	15
Styrene	10.0	9.70		ug/L		97	76 - 116	1	16
tert-Butylbenzene	10.0	9.88		ug/L		99	70 - 121	1	14
1,1,1,2-Tetrachloroethane	10.0	9.30		ug/L		93	64 - 130	3	20
1,1,1,2,2-Tetrachloroethane	10.0	10.1		ug/L		101	65 - 130	5	18
Tetrachloroethene	10.0	9.19		ug/L		92	70 - 124	0	20
Toluene	10.0	9.42		ug/L		94	75 - 120	1	19
trans-1,2-Dichloroethene	10.0	9.25		ug/L		93	72 - 113	0	21
trans-1,3-Dichloropropene	10.0	9.29		ug/L		93	73 - 122	2	30
1,2,3-Trichlorobenzene	10.0	9.76		ug/L		98	55 - 133	2	35
1,2,4-Trichlorobenzene	10.0	9.24		ug/L		92	56 - 129	0	22
1,1,1-Trichloroethane	10.0	9.36		ug/L		94	65 - 130	2	18
1,1,2-Trichloroethane	10.0	9.18		ug/L		92	69 - 135	5	24
Trichloroethene	10.0	9.25		ug/L		92	70 - 125	4	23
Trichlorofluoromethane	10.0	8.97		ug/L		90	49 - 130	3	35
1,2,3-Trichloropropane	10.0	8.43		ug/L		84	65 - 135	18	22
1,2,4-Trimethylbenzene	10.0	9.92		ug/L		99	75 - 121	0	16
1,3,5-Trimethylbenzene	10.0	9.96		ug/L		100	75 - 122	0	14
Vinyl chloride	10.0	10.1		ug/L		101	56 - 114	0	23

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		75 - 125
Dibromofluoromethane (Surr)	99		77 - 118
1,2-Dichloroethane-d4 (Surr)	98		65 - 143
Toluene-d8 (Surr)	102		82 - 122
Trifluorotoluene (Surr)	96		80 - 141

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: MB 580-240562/5**

**Matrix: Water**

**Analysis Batch: 240562**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/15/17 13:12	1
Bromobenzene	ND		2.0		ug/L			03/15/17 13:12	1
Bromoform	ND		1.0		ug/L			03/15/17 13:12	1
Bromomethane	ND		5.0		ug/L			03/15/17 13:12	1
Carbon tetrachloride	ND		3.0		ug/L			03/15/17 13:12	1
Chlorobenzene	ND		2.0		ug/L			03/15/17 13:12	1
Chlorobromomethane	ND		2.0		ug/L			03/15/17 13:12	1
Chlorodibromomethane	ND		1.0		ug/L			03/15/17 13:12	1
Chloroethane	ND		5.0		ug/L			03/15/17 13:12	1
Chloroform	ND		5.0		ug/L			03/15/17 13:12	1
Chloromethane	ND		5.0		ug/L			03/15/17 13:12	1
2-Chlorotoluene	ND		3.0		ug/L			03/15/17 13:12	1
4-Chlorotoluene	ND		2.0		ug/L			03/15/17 13:12	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			03/15/17 13:12	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/15/17 13:12	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/15/17 13:12	1
Dibromomethane	ND		1.0		ug/L			03/15/17 13:12	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/15/17 13:12	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/15/17 13:12	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/15/17 13:12	1
Dichlorobromomethane	ND		2.0		ug/L			03/15/17 13:12	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/15/17 13:12	1
1,1-Dichloroethane	ND		2.0		ug/L			03/15/17 13:12	1
1,2-Dichloroethane	ND		1.0		ug/L			03/15/17 13:12	1
1,1-Dichloroethene	ND		2.0		ug/L			03/15/17 13:12	1
1,2-Dichloropropane	ND		1.0		ug/L			03/15/17 13:12	1
1,3-Dichloropropane	ND		1.0		ug/L			03/15/17 13:12	1
2,2-Dichloropropane	ND		3.0		ug/L			03/15/17 13:12	1
1,1-Dichloropropene	ND		3.0		ug/L			03/15/17 13:12	1
Ethylbenzene	ND		3.0		ug/L			03/15/17 13:12	1
Ethylene Dibromide	ND		1.0		ug/L			03/15/17 13:12	1
Hexachlorobutadiene	ND		2.0		ug/L			03/15/17 13:12	1
Isopropylbenzene	ND		2.0		ug/L			03/15/17 13:12	1
4-Isopropyltoluene	ND		3.0		ug/L			03/15/17 13:12	1
Methylene Chloride	ND		5.0		ug/L			03/15/17 13:12	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/15/17 13:12	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/15/17 13:12	1
Naphthalene	ND		2.0		ug/L			03/15/17 13:12	1
n-Butylbenzene	ND		3.0		ug/L			03/15/17 13:12	1
N-Propylbenzene	ND		3.0		ug/L			03/15/17 13:12	1
o-Xylene	ND		2.0		ug/L			03/15/17 13:12	1
sec-Butylbenzene	ND		3.0		ug/L			03/15/17 13:12	1
Styrene	ND		5.0		ug/L			03/15/17 13:12	1
tert-Butylbenzene	ND		3.0		ug/L			03/15/17 13:12	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/15/17 13:12	1
1,1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/15/17 13:12	1
Tetrachloroethene	ND		3.0		ug/L			03/15/17 13:12	1
Toluene	ND		2.0		ug/L			03/15/17 13:12	1

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: MB 580-240562/5**  
**Matrix: Water**  
**Analysis Batch: 240562**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/15/17 13:12	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/15/17 13:12	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/15/17 13:12	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/15/17 13:12	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/15/17 13:12	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/15/17 13:12	1
Trichloroethene	ND		3.0		ug/L			03/15/17 13:12	1
Trichlorofluoromethane	ND		3.0		ug/L			03/15/17 13:12	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/15/17 13:12	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/15/17 13:12	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/15/17 13:12	1
Vinyl chloride	ND		1.0		ug/L			03/15/17 13:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		75 - 125		03/15/17 13:12	1
Dibromofluoromethane (Surr)	97		77 - 118		03/15/17 13:12	1
1,2-Dichloroethane-d4 (Surr)	103		65 - 143		03/15/17 13:12	1
Toluene-d8 (Surr)	103		82 - 122		03/15/17 13:12	1
Trifluorotoluene (Surr)	97		80 - 141		03/15/17 13:12	1

**Lab Sample ID: LCS 580-240562/6**  
**Matrix: Water**  
**Analysis Batch: 240562**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	10.0	12.4	*	ug/L		124	80 - 120
Bromobenzene	10.0	11.1		ug/L		111	75 - 115
Bromoform	10.0	9.18		ug/L		92	55 - 130
Bromomethane	10.0	11.4		ug/L		114	55 - 125
Carbon tetrachloride	10.0	11.3		ug/L		113	65 - 124
Chlorobenzene	10.0	11.7		ug/L		117	80 - 120
Chlorobromomethane	10.0	10.9		ug/L		109	65 - 120
Chlorodibromomethane	10.0	10.5		ug/L		105	71 - 118
Chloroethane	10.0	11.0		ug/L		110	60 - 126
Chloroform	10.0	12.3	*	ug/L		123	80 - 119
Chloromethane	10.0	10.5		ug/L		105	40 - 149
2-Chlorotoluene	10.0	11.1		ug/L		111	69 - 125
4-Chlorotoluene	10.0	11.3		ug/L		113	68 - 121
cis-1,2-Dichloroethene	10.0	11.1		ug/L		111	70 - 111
cis-1,3-Dichloropropene	10.0	11.4		ug/L		114	77 - 117
1,2-Dibromo-3-Chloropropane	10.0	10.1		ug/L		101	58 - 141
Dibromomethane	10.0	10.4		ug/L		104	61 - 142
1,2-Dichlorobenzene	10.0	11.3		ug/L		113	70 - 120
1,3-Dichlorobenzene	10.0	11.3		ug/L		113	72 - 116
1,4-Dichlorobenzene	10.0	11.2		ug/L		112	75 - 117
Dichlorobromomethane	10.0	11.4		ug/L		114	75 - 120
Dichlorodifluoromethane	10.0	9.86		ug/L		99	20 - 141
1,1-Dichloroethane	10.0	11.9		ug/L		119	70 - 135

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

Lab Sample ID: LCS 580-240562/6

Matrix: Water

Analysis Batch: 240562

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	10.0	11.7		ug/L		117	58 - 143
1,1-Dichloroethene	10.0	11.5		ug/L		115	70 - 117
1,2-Dichloropropane	10.0	12.1		ug/L		121	58 - 150
1,3-Dichloropropane	10.0	11.4		ug/L		114	69 - 134
2,2-Dichloropropane	10.0	11.8		ug/L		118	50 - 140
1,1-Dichloropropene	10.0	12.1	*	ug/L		121	75 - 120
Ethylbenzene	10.0	11.5		ug/L		115	75 - 119
Ethylene Dibromide	10.0	11.1		ug/L		111	66 - 133
Hexachlorobutadiene	10.0	9.86		ug/L		99	56 - 125
Isopropylbenzene	10.0	12.0		ug/L		120	75 - 125
4-Isopropyltoluene	10.0	12.0		ug/L		120	66 - 120
Methylene Chloride	10.0	11.9	*	ug/L		119	70 - 115
Methyl tert-butyl ether	10.0	11.5		ug/L		115	65 - 125
m-Xylene & p-Xylene	10.0	11.5		ug/L		115	75 - 119
Naphthalene	10.0	10.7		ug/L		107	55 - 134
n-Butylbenzene	10.0	11.4		ug/L		114	70 - 120
N-Propylbenzene	10.0	12.3		ug/L		123	70 - 124
o-Xylene	10.0	12.0		ug/L		120	74 - 120
sec-Butylbenzene	10.0	12.1		ug/L		121	70 - 125
Styrene	10.0	11.5		ug/L		115	76 - 116
tert-Butylbenzene	10.0	11.3		ug/L		113	70 - 121
1,1,1,2-Tetrachloroethane	10.0	10.9		ug/L		109	64 - 130
1,1,1,2,2-Tetrachloroethane	10.0	11.8		ug/L		118	65 - 130
Tetrachloroethene	10.0	10.6		ug/L		106	70 - 124
Toluene	10.0	11.2		ug/L		112	75 - 120
trans-1,2-Dichloroethene	10.0	11.8	*	ug/L		118	72 - 113
trans-1,3-Dichloropropene	10.0	10.9		ug/L		109	73 - 122
1,2,3-Trichlorobenzene	10.0	11.2		ug/L		112	55 - 133
1,2,4-Trichlorobenzene	10.0	10.2		ug/L		102	56 - 129
1,1,1-Trichloroethane	10.0	11.5		ug/L		115	65 - 130
1,1,2-Trichloroethane	10.0	11.8		ug/L		118	69 - 135
Trichloroethene	10.0	11.3		ug/L		113	70 - 125
Trichlorofluoromethane	10.0	10.1		ug/L		101	49 - 130
1,2,3-Trichloropropane	10.0	11.2		ug/L		112	65 - 135
1,2,4-Trimethylbenzene	10.0	11.7		ug/L		117	75 - 121
1,3,5-Trimethylbenzene	10.0	11.7		ug/L		117	75 - 122
Vinyl chloride	10.0	11.7	*	ug/L		117	56 - 114

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	93		75 - 125
Dibromofluoromethane (Surr)	100		77 - 118
1,2-Dichloroethane-d4 (Surr)	101		65 - 143
Toluene-d8 (Surr)	100		82 - 122
Trifluorotoluene (Surr)	94		80 - 141

TestAmerica Seattle



# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

Lab Sample ID: LCSD 580-240562/7

Matrix: Water

Analysis Batch: 240562

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
Benzene	10.0	11.1		ug/L		111	80 - 120	11	14
Bromobenzene	10.0	10.1		ug/L		101	75 - 115	9	13
Bromoform	10.0	7.83		ug/L		78	55 - 130	16	20
Bromomethane	10.0	10.0		ug/L		100	55 - 125	13	30
Carbon tetrachloride	10.0	9.95		ug/L		100	65 - 124	13	19
Chlorobenzene	10.0	10.6		ug/L		106	80 - 120	10	15
Chlorobromomethane	10.0	10.0		ug/L		100	65 - 120	9	17
Chlorodibromomethane	10.0	9.57		ug/L		96	71 - 118	9	21
Chloroethane	10.0	10.2		ug/L		102	60 - 126	8	30
Chloroform	10.0	11.0		ug/L		110	80 - 119	11	15
Chloromethane	10.0	8.91		ug/L		89	40 - 149	16	22
2-Chlorotoluene	10.0	10.5		ug/L		105	69 - 125	5	15
4-Chlorotoluene	10.0	10.2		ug/L		102	68 - 121	10	15
cis-1,2-Dichloroethene	10.0	10.9		ug/L		109	70 - 111	3	15
cis-1,3-Dichloropropene	10.0	10.1		ug/L		101	77 - 117	12	24
1,2-Dibromo-3-Chloropropane	10.0	8.20	J	ug/L		82	58 - 141	21	30
Dibromomethane	10.0	9.15		ug/L		91	61 - 142	13	15
1,2-Dichlorobenzene	10.0	10.2		ug/L		102	70 - 120	10	15
1,3-Dichlorobenzene	10.0	10.3		ug/L		103	72 - 116	9	14
1,4-Dichlorobenzene	10.0	10.3		ug/L		103	75 - 117	9	17
Dichlorobromomethane	10.0	10.3		ug/L		103	75 - 120	10	14
Dichlorodifluoromethane	10.0	8.67		ug/L		87	20 - 141	13	35
1,1-Dichloroethane	10.0	10.9		ug/L		109	70 - 135	9	20
1,2-Dichloroethane	10.0	10.3		ug/L		103	58 - 143	12	17
1,1-Dichloroethene	10.0	9.77		ug/L		98	70 - 117	17	21
1,2-Dichloropropane	10.0	11.1		ug/L		111	58 - 150	9	15
1,3-Dichloropropane	10.0	10.4		ug/L		104	69 - 134	9	23
2,2-Dichloropropane	10.0	9.98		ug/L		100	50 - 140	17	20
1,1-Dichloropropene	10.0	10.8		ug/L		108	75 - 120	11	20
Ethylbenzene	10.0	10.7		ug/L		107	75 - 119	7	14
Ethylene Dibromide	10.0	10.1		ug/L		101	66 - 133	10	17
Hexachlorobutadiene	10.0	8.44		ug/L		84	56 - 125	16	19
Isopropylbenzene	10.0	10.4		ug/L		104	75 - 125	14	20
4-Isopropyltoluene	10.0	10.4	*	ug/L		104	66 - 120	14	13
Methylene Chloride	10.0	10.4		ug/L		104	70 - 115	13	19
Methyl tert-butyl ether	10.0	10.2		ug/L		102	65 - 125	12	18
m-Xylene & p-Xylene	10.0	10.1		ug/L		101	75 - 119	13	14
Naphthalene	10.0	9.22		ug/L		92	55 - 134	14	30
n-Butylbenzene	10.0	10.2		ug/L		102	70 - 120	11	20
N-Propylbenzene	10.0	10.7	*	ug/L		107	70 - 124	14	13
o-Xylene	10.0	10.7		ug/L		107	74 - 120	11	16
sec-Butylbenzene	10.0	10.8		ug/L		108	70 - 125	12	15
Styrene	10.0	10.4		ug/L		104	76 - 116	10	16
tert-Butylbenzene	10.0	10.2		ug/L		102	70 - 121	11	14
1,1,1,2-Tetrachloroethane	10.0	9.36		ug/L		94	64 - 130	15	20
1,1,1,2,2-Tetrachloroethane	10.0	10.8		ug/L		108	65 - 130	9	18
Tetrachloroethene	10.0	5.00	*	ug/L		50	70 - 124	71	20
Toluene	10.0	9.96		ug/L		100	75 - 120	11	19

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: LCSD 580-240562/7**

**Matrix: Water**

**Analysis Batch: 240562**

**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
trans-1,2-Dichloroethene	10.0	10.3		ug/L		103	72 - 113	14	21
trans-1,3-Dichloropropene	10.0	9.67		ug/L		97	73 - 122	12	30
1,2,3-Trichlorobenzene	10.0	9.82		ug/L		98	55 - 133	13	35
1,2,4-Trichlorobenzene	10.0	9.31		ug/L		93	56 - 129	9	22
1,1,1-Trichloroethane	10.0	10.3		ug/L		103	65 - 130	11	18
1,1,2-Trichloroethane	10.0	10.4		ug/L		104	69 - 135	12	24
Trichloroethene	10.0	9.89		ug/L		99	70 - 125	14	23
Trichlorofluoromethane	10.0	8.74		ug/L		87	49 - 130	14	35
1,2,3-Trichloropropane	10.0	10.4		ug/L		104	65 - 135	8	22
1,2,4-Trimethylbenzene	10.0	10.3		ug/L		103	75 - 121	13	16
1,3,5-Trimethylbenzene	10.0	10.1		ug/L		101	75 - 122	14	14
Vinyl chloride	10.0	10.2		ug/L		102	56 - 114	14	23

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	96		75 - 125
Dibromofluoromethane (Surr)	99		77 - 118
1,2-Dichloroethane-d4 (Surr)	100		65 - 143
Toluene-d8 (Surr)	100		82 - 122
Trifluorotoluene (Surr)	95		80 - 141

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

**Lab Sample ID: MB 580-240442/6**

**Matrix: Water**

**Analysis Batch: 240442**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/14/17 11:35	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	106		50 - 150		03/14/17 11:35	1
4-Bromofluorobenzene (Surr)	100		50 - 150		03/14/17 11:35	1

**Lab Sample ID: LCS 580-240442/7**

**Matrix: Water**

**Analysis Batch: 240442**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	1.08		mg/L		108	60 - 120

Surrogate	LCS %Recovery	LCS Qualifier	LCS Limits
Trifluorotoluene (Surr)	107		50 - 150
4-Bromofluorobenzene (Surr)	106		50 - 150

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: LCSD 580-240442/8**

**Matrix: Water**

**Analysis Batch: 240442**

**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
Gasoline Range Organics (GRO) -C6-C10	1.00	1.08		mg/L		108	60 - 120	0	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>						
Trifluorotoluene (Surr)	108		50 - 150						
4-Bromofluorobenzene (Surr)	106		50 - 150						

**Lab Sample ID: 580-66540-7 MS**

**Matrix: Water**

**Analysis Batch: 240442**

**Client Sample ID: MW-7**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	ND		1.00	0.952		mg/L		95	60 - 120		
<b>Surrogate</b>	<b>%Recovery</b>	<b>MS Qualifier</b>	<b>Limits</b>								
Trifluorotoluene (Surr)	102		50 - 150								
4-Bromofluorobenzene (Surr)	105		50 - 150								

**Lab Sample ID: 580-66540-7 MSD**

**Matrix: Water**

**Analysis Batch: 240442**

**Client Sample ID: MW-7**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	ND		1.00	0.989		mg/L		99	60 - 120	4	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>MSD Qualifier</b>	<b>Limits</b>								
Trifluorotoluene (Surr)	104		50 - 150								
4-Bromofluorobenzene (Surr)	105		50 - 150								

**Lab Sample ID: MB 580-240574/6**

**Matrix: Water**

**Analysis Batch: 240574**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/15/17 12:37	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>MB Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Trifluorotoluene (Surr)	103		50 - 150					03/15/17 12:37	1
4-Bromofluorobenzene (Surr)	100		50 - 150					03/15/17 12:37	1

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: LCS 580-240574/7**

**Matrix: Water**

**Analysis Batch: 240574**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	1.05		mg/L		105	60 - 120
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
Trifluorotoluene (Surr)	106		50 - 150				
4-Bromofluorobenzene (Surr)	105		50 - 150				

**Lab Sample ID: LCSD 580-240574/8**

**Matrix: Water**

**Analysis Batch: 240574**

**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
Gasoline Range Organics (GRO) -C6-C10	1.00	1.08		mg/L		108	60 - 120	2	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>						
Trifluorotoluene (Surr)	107		50 - 150						
4-Bromofluorobenzene (Surr)	106		50 - 150						

**Lab Sample ID: MB 580-240593/4**

**Matrix: Water**

**Analysis Batch: 240593**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/15/17 11:33	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>MB Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Trifluorotoluene (Surr)	93		50 - 150					03/15/17 11:33	1
4-Bromofluorobenzene (Surr)	92		50 - 150					03/15/17 11:33	1

**Lab Sample ID: LCS 580-240593/5**

**Matrix: Water**

**Analysis Batch: 240593**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	0.822		mg/L		82	60 - 120
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
Trifluorotoluene (Surr)	91		50 - 150				
4-Bromofluorobenzene (Surr)	93		50 - 150				

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: LCSD 580-240593/6**

**Matrix: Water**

**Analysis Batch: 240593**

**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
Gasoline Range Organics (GRO) -C6-C10	1.00	1.05	*	mg/L		105	60 - 120	25	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Trifluorotoluene (Surr)	101		50 - 150
4-Bromofluorobenzene (Surr)	93		50 - 150

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

**Lab Sample ID: MB 580-240322/1-A**

**Matrix: Water**

**Analysis Batch: 240402**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 240322**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	ND		0.10		mg/L		03/13/17 10:56	03/13/17 19:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	74		50 - 150	03/13/17 10:56	03/13/17 19:48	1

**Lab Sample ID: LCS 580-240322/2-A**

**Matrix: Water**

**Analysis Batch: 240402**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 240322**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
DRO (nC10-<nC25)	2.01	1.73		mg/L		86	75 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	82		50 - 150

**Lab Sample ID: LCSD 580-240322/3-A**

**Matrix: Water**

**Analysis Batch: 240402**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 240322**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
DRO (nC10-<nC25)	2.01	1.52		mg/L		75	75 - 125	13	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl	64		50 - 150

**Lab Sample ID: MB 580-240600/1-A**

**Matrix: Water**

**Analysis Batch: 240570**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 240600**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	ND		0.10		mg/L		03/15/17 13:59	03/15/17 17:24	1

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: MB 580-240600/1-A**  
**Matrix: Water**  
**Analysis Batch: 240570**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 240600**

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
<i>o</i> -Terphenyl	83		50 - 150	03/15/17 13:59	03/15/17 17:24	1

**Lab Sample ID: LCS 580-240600/2-A**  
**Matrix: Water**  
**Analysis Batch: 240570**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 240600**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	RPD	Limit
DRO (nC10-<nC25)	2.01	1.73		mg/L		86	75 - 125		

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	84		50 - 150

**Lab Sample ID: LCSD 580-240600/3-A**  
**Matrix: Water**  
**Analysis Batch: 240570**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 240600**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
DRO (nC10-<nC25)	2.01	1.67		mg/L		83	75 - 125	3	20

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	81		50 - 150

**Lab Sample ID: 580-66540-7 MS**  
**Matrix: Water**  
**Analysis Batch: 240570**

**Client Sample ID: MW-7**  
**Prep Type: Total/NA**  
**Prep Batch: 240600**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits	RPD	Limit
DRO (nC10-<nC25)	ND	F1	2.01	1.66		mg/L		81	75 - 125		

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	78		50 - 150

**Lab Sample ID: 580-66540-7 MSD**  
**Matrix: Water**  
**Analysis Batch: 240570**

**Client Sample ID: MW-7**  
**Prep Type: Total/NA**  
**Prep Batch: 240600**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
DRO (nC10-<nC25)	ND	F1	2.14	1.62	F1	mg/L		74	75 - 125	2	20

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	73		50 - 150

TestAmerica Seattle

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

## Client Sample ID: MW-1

Date Collected: 03/02/17 11:40

Date Received: 03/07/17 10:50

## Lab Sample ID: 580-66540-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240198	03/10/17 13:37	D1R	TAL SEA
Total/NA	Analysis	8260C	DL	10	240562	03/15/17 20:26	W1T	TAL SEA
Total/NA	Analysis	AK101		1	240442	03/15/17 00:02	J1J	TAL SEA
Total/NA	Prep	3510C			240600	03/15/17 13:59	Y1W	TAL SEA
Total/NA	Analysis	AK102 & 103		1	240570	03/15/17 20:44	KZ1	TAL SEA

## Client Sample ID: MW-2

Date Collected: 03/01/17 17:40

Date Received: 03/07/17 10:50

## Lab Sample ID: 580-66540-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240198	03/10/17 14:03	D1R	TAL SEA
Total/NA	Analysis	8260C	DL	10	240562	03/15/17 20:53	W1T	TAL SEA
Total/NA	Analysis	AK101		1	240442	03/15/17 00:35	J1J	TAL SEA
Total/NA	Prep	3510C			240322	03/13/17 10:56	JCV	TAL SEA
Total/NA	Analysis	AK102 & 103		1	240402	03/13/17 20:54	CJ	TAL SEA

## Client Sample ID: MW-3

Date Collected: 03/02/17 10:40

Date Received: 03/07/17 10:50

## Lab Sample ID: 580-66540-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240198	03/10/17 14:30	D1R	TAL SEA
Total/NA	Analysis	8260C	RA	1	240562	03/15/17 19:59	W1T	TAL SEA
Total/NA	Analysis	AK101		1	240574	03/15/17 19:41	TL1	TAL SEA
Total/NA	Prep	3510C			240600	03/15/17 13:59	Y1W	TAL SEA
Total/NA	Analysis	AK102 & 103		1	240570	03/15/17 21:28	KZ1	TAL SEA

## Client Sample ID: MW-4

Date Collected: 03/01/17 13:05

Date Received: 03/07/17 10:50

## Lab Sample ID: 580-66540-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240198	03/10/17 14:56	D1R	TAL SEA
Total/NA	Analysis	AK101		1	240442	03/14/17 23:30	J1J	TAL SEA
Total/NA	Prep	3510C			240322	03/13/17 10:56	JCV	TAL SEA
Total/NA	Analysis	AK102 & 103		1	240402	03/13/17 21:17	CJ	TAL SEA

TestAmerica Seattle

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-5**

**Date Collected: 03/01/17 15:35**

**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-5**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240198	03/10/17 15:23	D1R	TAL SEA
Total/NA	Analysis	8260C	DL	10	240562	03/15/17 21:20	W1T	TAL SEA
Total/NA	Analysis	AK101		1	240442	03/15/17 01:08	J1J	TAL SEA
Total/NA	Prep	3510C			240322	03/13/17 10:56	JCV	TAL SEA
Total/NA	Analysis	AK102 & 103		1	240402	03/13/17 21:39	CJ	TAL SEA

**Client Sample ID: MW-6**

**Date Collected: 03/01/17 14:30**

**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-6**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240198	03/10/17 15:50	D1R	TAL SEA
Total/NA	Analysis	AK101		1	240574	03/15/17 20:14	TL1	TAL SEA
Total/NA	Prep	3510C			240322	03/13/17 10:56	JCV	TAL SEA
Total/NA	Analysis	AK102 & 103		1	240402	03/13/17 22:01	CJ	TAL SEA

**Client Sample ID: MW-7**

**Date Collected: 03/01/17 11:40**

**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-7**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240198	03/10/17 16:16	D1R	TAL SEA
Total/NA	Analysis	AK101		1	240442	03/15/17 02:13	J1J	TAL SEA
Total/NA	Prep	3510C			240600	03/15/17 13:59	Y1W	TAL SEA
Total/NA	Analysis	AK102 & 103		1	240570	03/15/17 18:30	KZ1	TAL SEA

**Client Sample ID: MW-8**

**Date Collected: 03/01/17 16:50**

**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-8**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240198	03/10/17 17:36	D1R	TAL SEA
Total/NA	Analysis	AK101		1	240574	03/15/17 19:09	TL1	TAL SEA
Total/NA	Prep	3510C			240322	03/13/17 10:56	JCV	TAL SEA
Total/NA	Analysis	AK102 & 103		1	240402	03/13/17 22:23	CJ	TAL SEA

**Client Sample ID: MW-9**

**Date Collected: 03/02/17 15:35**

**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-9**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240198	03/10/17 18:03	D1R	TAL SEA

TestAmerica Seattle



# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

## Client Sample ID: MW-9

Date Collected: 03/02/17 15:35

Date Received: 03/07/17 10:50

## Lab Sample ID: 580-66540-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	AK101		1	240574	03/15/17 17:31	TL1	TAL SEA
Total/NA	Prep	3510C			240600	03/15/17 13:59	Y1W	TAL SEA
Total/NA	Analysis	AK102 & 103		1	240570	03/15/17 21:50	KZ1	TAL SEA

## Client Sample ID: MW-10

Date Collected: 03/02/17 14:10

Date Received: 03/07/17 10:50

## Lab Sample ID: 580-66540-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240198	03/10/17 18:29	D1R	TAL SEA
Total/NA	Analysis	AK101		1	240574	03/15/17 18:04	TL1	TAL SEA
Total/NA	Prep	3510C			240600	03/15/17 13:59	Y1W	TAL SEA
Total/NA	Analysis	AK102 & 103		1	240570	03/15/17 22:12	KZ1	TAL SEA

## Client Sample ID: MW-11

Date Collected: 03/02/17 14:45

Date Received: 03/07/17 10:50

## Lab Sample ID: 580-66540-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240388	03/13/17 17:32	TL1	TAL SEA
Total/NA	Analysis	AK101		1	240574	03/16/17 01:40	TL1	TAL SEA
Total/NA	Prep	3510C			240600	03/15/17 13:59	Y1W	TAL SEA
Total/NA	Analysis	AK102 & 103		1	240570	03/15/17 22:34	KZ1	TAL SEA

## Client Sample ID: BD-1

Date Collected: 03/02/17 11:40

Date Received: 03/07/17 10:50

## Lab Sample ID: 580-66540-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240388	03/13/17 17:59	TL1	TAL SEA
Total/NA	Analysis	AK101		1	240574	03/16/17 00:35	TL1	TAL SEA
Total/NA	Prep	3510C			240600	03/15/17 13:59	Y1W	TAL SEA
Total/NA	Analysis	AK102 & 103		1	240570	03/15/17 22:56	KZ1	TAL SEA

## Client Sample ID: BD-2

Date Collected: 03/01/17 17:40

Date Received: 03/07/17 10:50

## Lab Sample ID: 580-66540-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240388	03/13/17 18:27	TL1	TAL SEA
Total/NA	Analysis	AK101		1	240442	03/14/17 22:58	J1J	TAL SEA
Total/NA	Prep	3510C			240322	03/13/17 10:56	JCV	TAL SEA

TestAmerica Seattle

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: BD-2**

**Date Collected: 03/01/17 17:40**

**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-13**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	AK102 & 103		1	240402	03/13/17 22:45	CJ	TAL SEA

**Client Sample ID: Trip Blank**

**Date Collected: 03/02/17 10:40**

**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-14**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240388	03/13/17 14:50	TL1	TAL SEA
Total/NA	Analysis	AK101		1	240593	03/15/17 13:05	CJ	TAL SEA

## Laboratory References:

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

# Certification Summary

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

## Laboratory: TestAmerica Seattle

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-02-18

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

# Sample Summary

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

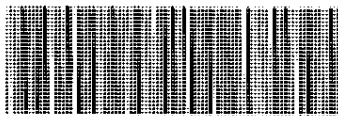
TestAmerica Job ID: 580-66540-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-66540-1	MW-1	Water	03/02/17 11:40	03/07/17 10:50
580-66540-2	MW-2	Water	03/01/17 17:40	03/07/17 10:50
580-66540-3	MW-3	Water	03/02/17 10:40	03/07/17 10:50
580-66540-4	MW-4	Water	03/01/17 13:05	03/07/17 10:50
580-66540-5	MW-5	Water	03/01/17 15:35	03/07/17 10:50
580-66540-6	MW-6	Water	03/01/17 14:30	03/07/17 10:50
580-66540-7	MW-7	Water	03/01/17 11:40	03/07/17 10:50
580-66540-8	MW-8	Water	03/01/17 16:50	03/07/17 10:50
580-66540-9	MW-9	Water	03/02/17 15:35	03/07/17 10:50
580-66540-10	MW-10	Water	03/02/17 14:10	03/07/17 10:50
580-66540-11	MW-11	Water	03/02/17 14:45	03/07/17 10:50
580-66540-12	BD-1	Water	03/02/17 11:40	03/07/17 10:50
580-66540-13	BD-2	Water	03/01/17 17:40	03/07/17 10:50
580-66540-14	Trip Blank	Water	03/02/17 10:40	03/07/17 10:50

# Chain of Custody Record

#N/A  
 #N/A  
 #N/A  
 #N/A

Regulatory Program:  DW  NPDES  RCRA  Other:

<b>Client Contact</b>		<b>Project Manager: Matthew Pelton</b>		<b>Site Contact: Michael MacDaniel</b>		<b>Date: 3/3/17</b>		<b>COC No:</b>	
ARCADIS		Tel/Fax:		Lab Contact:		Carrier:		_____ of _____ COCs	
880 H Street STE 101		<b>Analysis Turnaround Time</b> <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____ <input checked="" type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Filtered Sample (Y/N) Perform MS / MSD (Y/N) VOCs by EPA Method 8260B GRO by AK Method 101 DRO by AK method 102		 580-66540 Chain of Custody		Sampler: For Lab Use Only: Walk-in Client: Lab Sampling: Job / SDG No.:	
Anchorage, AK 99501									
206-465-3161									
(xxx) xxx-xxxx FAX									
Project Name: GE - Nikiski									
Site: Former TBE machine shop									
P O # B0031255									

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOCs by EPA Method 8260B	GRO by AK Method 101	DRO by AK method 102	Sample Specific Notes:
MW-1-W-030217	3/2/2017	1140	G	W	8	N	X	X	X		
MW-2-W-030117	3/1/2017	1740	G	W	8	N	X	X	X		
MW-3-W-030217	3/2/2017	1040	G	W	8	N	X	X	X		
MW-4-W-030117	3/1/2017	1305	G	W	8	N	X	X	X		
MW-5-W-030117	3/1/2017	1535	G	W	8	N	X	X	X		TBA2 Cooler Cor 0.1 Uncl.0
MW-6-W-030117	3/1/2017	1430	G	W	8	N	X	X	X		Cooler Dsc lg. blue with Lab
MW-7-W-030117	3/1/2017	1140	G	W	8	N	Y	X	X	X	Wet Packs Packing bubble
MW-8-W-030117	3/1/2017	1650	G	W	8	N	X	X	X		Fed P.O. w/cs
MW-9-W-030217	3/2/2017	1535	G	W	8	N	X	X	X		TB Cooler IR4 Cor 5.1 Uncl.7
MW-10-W-030217	3/2/2017	1410	G	W	8	N	X	X	X		Cooler Dsc lg. blue with Lab
MW-11-W-030217	3/2/2017	1445	G	W	8	N	X	X	X		Wet Packs Packing bubble
											Fed P.O. w/cs

**Preservation Used:** 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

**Possible Hazard Identification:**  
 Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown

**Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)**  
 Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months

**Special Instructions/QC Requirements & Comments:**

Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____		Cor'd: 34, 39		Therm ID No.:	
Relinquished by: <i>[Signature]</i>		Company: ARCADIS		Date/Time: 3/3/17 16:45		Received by: <i>[Signature]</i>		Company: TA-AK	
Relinquished by: <i>[Signature]</i>		Company: TA-AK		Date/Time: 3/6/17 10:00		Received by: <i>[Signature]</i>		Company: TA-Sea	
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Company:	

>>> Select a Laboratory <<<

# Chain of Custody Record



#N/A  
#N/A  
#N/A  
#N/A

Regulatory Program:  DW  NPDES  RCRA  Other:

TestAmerica Laboratories, Inc.

<b>Client Contact</b> ARCADIS 880 H Street STE 101 Anchorage, AK 99501 206-465-3161 (xxx) xxx-xxxx FAX Project Name: GE - Nikiski Site: Former TBE machine shop P O # B0031255		<b>Project Manager: Matthew Pelton</b> Tel/Fax:		<b>Site Contact: Michael MacDaniel</b> Date: 3/3/17		<b>COC No:</b> 2 of 2 COCs					
<b>Analysis Turnaround Time</b> <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below _____ <input checked="" type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		<b>Lab Contact:</b>		<b>Carrier:</b>		<b>Sampler:</b> <b>For Lab Use Only:</b> Walk-in Client: Lab Sampling:  Job / SDG No.:					
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	VOCs by EPA Method 8260B	GRO by AK Method 101	DRO by AK Method 102	Sample Specific Notes:
BD-1-W-030117	3/2/2017	1140	G	W	8	N	X	X	X		All labels on sample containers do not include the -W-MMDDYY nomenclature. This appears on the COC for reporting purposes
BD-2-W-030217	3/1/2017	1740	G	W	8	N	X	X	X		
Trip Blank	3/2/2017	1040	G	W	12	N	X	X			
<b>Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other</b>						<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b>					
<b>Possible Hazard Identification:</b> Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample. <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown						<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months					
<b>Special Instructions/QC Requirements &amp; Comments:</b>											
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____		Corr'd: 3.459		Therm ID No.:			
Relinquished by: <i>[Signature]</i>		Company: ARCADIS		Date/Time: 3/3/17 1645		Received by: <i>[Signature]</i>		Company: T.A.K		Date/Time: 3/3/17 1645	
Relinquished by: <i>[Signature]</i>		Company: T.A.K		Date/Time: 3/6/17 10:00		Received by: <i>[Signature]</i>		Company: T.A.K		Date/Time: 3/7/17 1050	
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Company:		Date/Time:	



CLIENT: Arcticis PROJECT: GE-Niskisk  
Date/Time Cooler Arrived 3 / 3 / 17 16:45 Cooler signed for by: Andrew Pilch  
(Print name)

### Preliminary Examination Phase:

Date cooler opened:  same as date received or \_\_\_/\_\_\_/\_\_\_  Cooler not opened

Cooler opened by (print) Andrew Pilch (sign) [Signature]

1. Delivered by  ALASKA AIRLINES  Fed-Ex  UPS  NAC  LYNDEN  CLIENT  Other: \_\_\_\_\_

Shipment Tracking # if applicable \_\_\_\_\_ (include copy of shipping papers in file)

2. Number of Custody Seals 0 Signed by \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_

Were custody seals unbroken and intact on arrival?  Yes  No

3. Were custody papers sealed in a plastic bag?  Yes  No  Not checked

4. Were custody papers filled out properly (ink, signed, etc.)?  Yes  No  Not checked

5. Did you sign the custody papers in the appropriate place?  Yes  No  Not checked

6. Was ice used?  Yes  No Type of ice:  blue ice  gel ice  real ice  dry ice Condition of ice: mostly hand

Temperature by Digi-Thermo Probe 3.4 °C Thermometer # Rec # 5  
Acceptance Criteria: 0 - 6°C 3.9

7. Was ice changed or added?  Yes  No  Not checked

8. Packing in Cooler:  bubble wrap  styrofoam  cardboard  Other: \_\_\_\_\_

9. Did samples arrive in plastic bags?  Yes  No  Not checked

10. Did all bottles arrive unbroken, and with labels in good condition?  Yes  No  Not checked

Comments  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



# Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 580-66540-1

**Login Number: 66540**  
**List Number: 1**  
**Creator: Gonzales, Steve**

**List Source: TestAmerica Seattle**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
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?	False	No name
There are no discrepancies between the containers received and the COC.	False	IDs on containers do not match the COC. Logged in per COC.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	Containers recd broken. Sufficient sample in remaining containers for analysis.
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
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 acppt. headspace
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	





# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Seattle  
5755 8th Street East  
Tacoma, WA 98424  
Tel: (253)922-2310

TestAmerica Job ID: 580-71203-1  
Client Project/Site: GE Kenai

For:  
ARCADIS U.S. Inc  
4915 Prospectus Drive  
Suite F  
Durham, North Carolina 27713

Attn: Mr. Matthew Pelton



Authorized for release by:  
9/22/2017 5:20:57 PM

Kristine Allen, Manager of Project Management  
(253)248-4970  
[kristine.allen@testamericainc.com](mailto:kristine.allen@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Definitions . . . . .	5
Client Sample Results . . . . .	6
QC Sample Results . . . . .	24
Chronicle . . . . .	37
Certification Summary . . . . .	40
Sample Summary . . . . .	41
Chain of Custody . . . . .	42
Receipt Checklists . . . . .	43

# Case Narrative

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Job ID: 580-71203-1**

**Laboratory: TestAmerica Seattle**

## Narrative

### Job Narrative 580-71203-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 9/8/2017 12:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was -0.2° C.

#### Receipt Exceptions

The information listed on the Chain-of-Custody (COC) was not correct: MW-2-W-090617 (580-71203-2[MS]) and MW-2-W-090617 (580-71203-2[MSD]). The MS and MSD were written on the COC as separate samples. In addition the containers were labeled to reflect this separateness. However the MS and MSD were actually from the parent (sample 2). The containers were logged in to reflect that they are QC for sample 2.

The following samples were received at the laboratory without a sample collection time documented on the chain of custody and the container labels: BD-1-W-090517 (580-71203-6) and BD-2-W-090617 (580-71203-7). The samples were logged in using a collection time of 0000.

#### GC/MS VOA

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 580-256318 recovered outside control limits for multiple analytes. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

The following samples were re-analyzed due to quality control deficiencies in the initial analysis: MW-1-W-090517 (580-71203-1), MW-2-W-090617 (580-71203-2), MW-2-W-090617 (580-71203-2[MS]), MW-2-W-090617 (580-71203-2[MSD]), MW-4-W-090517 (580-71203-3), MW-5-W-090617 (580-71203-4), MW-7-W-090517 (580-71203-5), BD-1-W-090517 (580-71203-6) and BD-2-W-090617 (580-71203-7)

Method(s) 8260C: The surrogate recovery for the LCS, LCSD and blank associated with analytical batch 580-256318 was outside the upper control limits. The associated samples were ND for the reported analytes.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 580-256318 recovered above the upper control limit for multiple analytes. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: (CCVIS 580-256318/3).

Method(s) 8260C: The minimum response factor (RF) criteria for the continuing calibration verification (CCV) analyzed in batch 580-256318 was outside criteria for the following analyte(s): Chloroethane. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered estimated.

Method(s) 8260C: Surrogate recovery for the following samples was outside the upper control limit: MW-2-W-090617 (580-71203-2), MW-2-W-090617 MS (580-71203-2 MS), MW-2-W-090617 MSD (580-71203-2 MSD), MW-5-W-090617 (580-71203-4), MW-7-W-090517 (580-71203-5), BD-1-W-090517 (580-71203-6), BD-2-W-090617 (580-71203-7), Trip Blank (580-71203-8) and EB-1-W-090617 (580-71203-9). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260C: The following samples was diluted to bring the concentration of target analytes within the calibration range: MW-1-W-090517 (580-71203-1), MW-5-W-090617 (580-71203-4) and BD-2-W-090617 (580-71203-7). Elevated reporting limits (RLs) are provided.

Method(s) AK101: Surrogate recovery for the following samples was outside control limits: MW-5-W-090617 (580-71203-4) and BD-2-W-090617 (580-71203-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

# Case Narrative

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

---

## Job ID: 580-71203-1 (Continued)

---

### Laboratory: TestAmerica Seattle (Continued)

#### GC Semi VOA

Method(s) AK102 & 103: Surrogate recovery for the following samples was outside control limits: MW-1-W-090517 (580-71203-1) and MW-2-W-090617 (580-71203-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) AK102 & 103: The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was earlier than the typical diesel fuel pattern used by the laboratory for quantitative purposes: MW-1-W-090517 (580-71203-1), MW-2-W-090617 (580-71203-2), MW-5-W-090617 (580-71203-4) and BD-2-W-090617 (580-71203-7).

Method(s) AK102 & 103: The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: MW-1-W-090517 (580-71203-1), MW-2-W-090617 (580-71203-2), MW-4-W-090517 (580-71203-3) and BD-1-W-090517 (580-71203-6).

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.



# Definitions/Glossary

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### GC VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

### GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
F1	MS and/or MSD Recovery is outside acceptance limits.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: MW-1-W-090517**

**Lab Sample ID: 580-71203-1**

**Date Collected: 09/05/17 15:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/15/17 17:37	1
Bromobenzene	ND		2.0		ug/L			09/15/17 17:37	1
Bromoform	ND		3.0		ug/L			09/15/17 17:37	1
Bromomethane	ND		6.0		ug/L			09/15/17 17:37	1
Carbon tetrachloride	ND *		3.0		ug/L			09/15/17 17:37	1
Chlorobenzene	ND		2.0		ug/L			09/15/17 17:37	1
Chlorobromomethane	ND		2.0		ug/L			09/15/17 17:37	1
Chlorodibromomethane	ND		1.0		ug/L			09/15/17 17:37	1
Chloroethane	ND		5.0		ug/L			09/15/17 17:37	1
Chloroform	ND *		5.0		ug/L			09/15/17 17:37	1
Chloromethane	ND		20		ug/L			09/15/17 17:37	1
2-Chlorotoluene	ND		3.0		ug/L			09/15/17 17:37	1
4-Chlorotoluene	ND		2.0		ug/L			09/15/17 17:37	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 17:37	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/15/17 17:37	1
Dibromomethane	ND		2.0		ug/L			09/15/17 17:37	1
<b>1,2-Dichlorobenzene</b>	<b>2.7</b>		2.0		ug/L			09/15/17 17:37	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/15/17 17:37	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/15/17 17:37	1
Dichlorobromomethane	ND *		2.0		ug/L			09/15/17 17:37	1
Dichlorodifluoromethane	ND		5.0		ug/L			09/15/17 17:37	1
<b>1,1-Dichloroethane</b>	<b>13</b>		2.0		ug/L			09/15/17 17:37	1
1,2-Dichloroethane	ND *		2.0		ug/L			09/15/17 17:37	1
1,1-Dichloroethene	ND		4.0		ug/L			09/15/17 17:37	1
1,2-Dichloropropane	ND		1.0		ug/L			09/15/17 17:37	1
1,3-Dichloropropane	ND		2.0		ug/L			09/15/17 17:37	1
2,2-Dichloropropane	ND *		3.0		ug/L			09/15/17 17:37	1
1,1-Dichloropropene	ND		3.0		ug/L			09/15/17 17:37	1
Ethylene Dibromide	ND		2.0		ug/L			09/15/17 17:37	1
Hexachlorobutadiene	ND		6.0		ug/L			09/15/17 17:37	1
<b>Isopropylbenzene</b>	<b>7.5</b>		2.0		ug/L			09/15/17 17:37	1
<b>4-Isopropyltoluene</b>	<b>4.9</b>		3.0		ug/L			09/15/17 17:37	1
Methylene Chloride	ND		5.0		ug/L			09/15/17 17:37	1
Methyl tert-butyl ether	ND *		2.0		ug/L			09/15/17 17:37	1
<b>Naphthalene</b>	<b>4.8</b>		4.0		ug/L			09/15/17 17:37	1
<b>n-Butylbenzene</b>	<b>11</b>		3.0		ug/L			09/15/17 17:37	1
<b>N-Propylbenzene</b>	<b>8.7</b>		3.0		ug/L			09/15/17 17:37	1
sec-Butylbenzene	ND		3.0		ug/L			09/15/17 17:37	1
Styrene	ND		5.0		ug/L			09/15/17 17:37	1
tert-Butylbenzene	ND		3.0		ug/L			09/15/17 17:37	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/15/17 17:37	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			09/15/17 17:37	1
<b>Tetrachloroethene</b>	<b>51</b>		3.0		ug/L			09/15/17 17:37	1
<b>Toluene</b>	<b>34</b>		2.0		ug/L			09/15/17 17:37	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			09/15/17 17:37	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 17:37	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			09/15/17 17:37	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/15/17 17:37	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/15/17 17:37	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: MW-1-W-090517**

**Lab Sample ID: 580-71203-1**

**Date Collected: 09/05/17 15:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Trichloroethene</b>	<b>33</b>		3.0		ug/L			09/15/17 17:37	1
Trichlorofluoromethane	ND		3.0		ug/L			09/15/17 17:37	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/15/17 17:37	1
<b>1,2,4-Trimethylbenzene</b>	<b>90</b>		3.0		ug/L			09/15/17 17:37	1
<b>1,3,5-Trimethylbenzene</b>	<b>31</b>		3.0		ug/L			09/15/17 17:37	1
Vinyl chloride	ND		1.0		ug/L			09/15/17 17:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		75 - 125		09/15/17 17:37	1
Dibromofluoromethane (Surr)	112		77 - 120		09/15/17 17:37	1
1,2-Dichloroethane-d4 (Surr)	125		80 - 126		09/15/17 17:37	1
Toluene-d8 (Surr)	93		80 - 122		09/15/17 17:37	1
Trifluorotoluene (Surr)	113		80 - 120		09/15/17 17:37	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>420</b>		100		ug/L			09/19/17 22:39	100
<b>Ethylbenzene</b>	<b>540</b>		300		ug/L			09/19/17 22:39	100
<b>m-Xylene &amp; p-Xylene</b>	<b>810</b>		300		ug/L			09/19/17 22:39	100
<b>o-Xylene</b>	<b>260</b>		200		ug/L			09/19/17 22:39	100
1,1,1-Trichloroethane	ND		300		ug/L			09/19/17 22:39	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		75 - 125		09/19/17 22:39	100
Dibromofluoromethane (Surr)	105		77 - 120		09/19/17 22:39	100
1,2-Dichloroethane-d4 (Surr)	91		80 - 126		09/19/17 22:39	100
Toluene-d8 (Surr)	92		80 - 122		09/19/17 22:39	100
Trifluorotoluene (Surr)	113		80 - 120		09/19/17 22:39	100

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Gasoline Range Organics (GRO) -C6-C10</b>	<b>3.6</b>		1.0		mg/L			09/13/17 23:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	104		75 - 120		09/13/17 23:16	1
4-Bromofluorobenzene (Surr)	111		68 - 119		09/13/17 23:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>3.5</b>		0.11		mg/L		09/13/17 08:46	09/16/17 04:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	162	X	50 - 150		09/13/17 08:46	09/16/17 04:20

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: MW-2-W-090617**

**Lab Sample ID: 580-71203-2**

**Date Collected: 09/06/17 08:40**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/15/17 21:09	1
Bromobenzene	ND		2.0		ug/L			09/15/17 21:09	1
Bromoform	ND		3.0		ug/L			09/15/17 21:09	1
Bromomethane	ND		6.0		ug/L			09/15/17 21:09	1
Carbon tetrachloride	ND	* F1	3.0		ug/L			09/15/17 21:09	1
Chlorobenzene	ND		2.0		ug/L			09/15/17 21:09	1
Chlorobromomethane	ND	F1	2.0		ug/L			09/15/17 21:09	1
Chlorodibromomethane	ND		1.0		ug/L			09/15/17 21:09	1
Chloroethane	ND		5.0		ug/L			09/15/17 21:09	1
Chloroform	ND	* F1	5.0		ug/L			09/15/17 21:09	1
Chloromethane	ND		20		ug/L			09/15/17 21:09	1
2-Chlorotoluene	ND		3.0		ug/L			09/15/17 21:09	1
4-Chlorotoluene	ND		2.0		ug/L			09/15/17 21:09	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 21:09	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/15/17 21:09	1
Dibromomethane	ND		2.0		ug/L			09/15/17 21:09	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/15/17 21:09	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/15/17 21:09	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/15/17 21:09	1
Dichlorobromomethane	ND	* F1	2.0		ug/L			09/15/17 21:09	1
Dichlorodifluoromethane	ND		5.0		ug/L			09/15/17 21:09	1
1,2-Dichloroethane	ND	* F1	2.0		ug/L			09/15/17 21:09	1
1,1-Dichloroethene	ND		4.0		ug/L			09/15/17 21:09	1
1,2-Dichloropropane	ND		1.0		ug/L			09/15/17 21:09	1
1,3-Dichloropropane	ND		2.0		ug/L			09/15/17 21:09	1
2,2-Dichloropropane	ND	F1 *	3.0		ug/L			09/15/17 21:09	1
1,1-Dichloropropene	ND	F1	3.0		ug/L			09/15/17 21:09	1
Ethylbenzene	ND		3.0		ug/L			09/15/17 21:09	1
Ethylene Dibromide	ND		2.0		ug/L			09/15/17 21:09	1
Hexachlorobutadiene	ND		6.0		ug/L			09/15/17 21:09	1
Isopropylbenzene	ND		2.0		ug/L			09/15/17 21:09	1
4-Isopropyltoluene	ND		3.0		ug/L			09/15/17 21:09	1
Methylene Chloride	ND		5.0		ug/L			09/15/17 21:09	1
Methyl tert-butyl ether	ND	F1 *	2.0		ug/L			09/15/17 21:09	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/15/17 21:09	1
Naphthalene	ND		4.0		ug/L			09/15/17 21:09	1
n-Butylbenzene	ND		3.0		ug/L			09/15/17 21:09	1
N-Propylbenzene	ND		3.0		ug/L			09/15/17 21:09	1
o-Xylene	ND		2.0		ug/L			09/15/17 21:09	1
sec-Butylbenzene	ND		3.0		ug/L			09/15/17 21:09	1
Styrene	ND		5.0		ug/L			09/15/17 21:09	1
tert-Butylbenzene	ND		3.0		ug/L			09/15/17 21:09	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/15/17 21:09	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			09/15/17 21:09	1
Tetrachloroethene	ND		3.0		ug/L			09/15/17 21:09	1
Toluene	ND		2.0		ug/L			09/15/17 21:09	1
trans-1,2-Dichloroethene	ND	F1	3.0		ug/L			09/15/17 21:09	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 21:09	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			09/15/17 21:09	1

TestAmerica Seattle



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: MW-2-W-090617**

**Lab Sample ID: 580-71203-2**

**Date Collected: 09/06/17 08:40**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/15/17 21:09	1
1,1,1-Trichloroethane	ND	F1 *	3.0		ug/L			09/15/17 21:09	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/15/17 21:09	1
Trichloroethene	ND		3.0		ug/L			09/15/17 21:09	1
Trichlorofluoromethane	ND		3.0		ug/L			09/15/17 21:09	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/15/17 21:09	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/15/17 21:09	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/15/17 21:09	1
Vinyl chloride	ND		1.0		ug/L			09/15/17 21:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		75 - 125		09/15/17 21:09	1
Dibromofluoromethane (Surr)	111		77 - 120		09/15/17 21:09	1
1,2-Dichloroethane-d4 (Surr)	135	X	80 - 126		09/15/17 21:09	1
Toluene-d8 (Surr)	94		80 - 122		09/15/17 21:09	1
Trifluorotoluene (Surr)	115		80 - 120		09/15/17 21:09	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	30		1.0		ug/L			09/20/17 00:19	1
1,1-Dichloroethane	3.9		2.0		ug/L			09/20/17 00:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		75 - 125		09/20/17 00:19	1
Dibromofluoromethane (Surr)	106		77 - 120		09/20/17 00:19	1
1,2-Dichloroethane-d4 (Surr)	93		80 - 126		09/20/17 00:19	1
Toluene-d8 (Surr)	92		80 - 122		09/20/17 00:19	1
Trifluorotoluene (Surr)	112		80 - 120		09/20/17 00:19	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			09/13/17 23:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	105		75 - 120		09/13/17 23:48	1
4-Bromofluorobenzene (Surr)	91		68 - 119		09/13/17 23:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	0.89	F1	0.10		mg/L		09/13/17 08:46	09/16/17 05:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
o-Terphenyl	217	X	50 - 150		09/13/17 08:46	09/16/17 05:04	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: MW-4-W-090517**

**Lab Sample ID: 580-71203-3**

**Date Collected: 09/05/17 12:15**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/15/17 18:03	1
Bromobenzene	ND		2.0		ug/L			09/15/17 18:03	1
Bromoform	ND		3.0		ug/L			09/15/17 18:03	1
Bromomethane	ND		6.0		ug/L			09/15/17 18:03	1
Carbon tetrachloride	ND *		3.0		ug/L			09/15/17 18:03	1
Chlorobenzene	ND		2.0		ug/L			09/15/17 18:03	1
Chlorobromomethane	ND		2.0		ug/L			09/15/17 18:03	1
Chlorodibromomethane	ND		1.0		ug/L			09/15/17 18:03	1
Chloroethane	ND		5.0		ug/L			09/15/17 18:03	1
Chloroform	ND *		5.0		ug/L			09/15/17 18:03	1
Chloromethane	ND		20		ug/L			09/15/17 18:03	1
2-Chlorotoluene	ND		3.0		ug/L			09/15/17 18:03	1
4-Chlorotoluene	ND		2.0		ug/L			09/15/17 18:03	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/15/17 18:03	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 18:03	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/15/17 18:03	1
Dibromomethane	ND		2.0		ug/L			09/15/17 18:03	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/15/17 18:03	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/15/17 18:03	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/15/17 18:03	1
Dichlorobromomethane	ND *		2.0		ug/L			09/15/17 18:03	1
Dichlorodifluoromethane	ND		5.0		ug/L			09/15/17 18:03	1
1,1-Dichloroethane	ND		2.0		ug/L			09/15/17 18:03	1
1,2-Dichloroethane	ND *		2.0		ug/L			09/15/17 18:03	1
1,1-Dichloroethene	ND		4.0		ug/L			09/15/17 18:03	1
1,2-Dichloropropane	ND		1.0		ug/L			09/15/17 18:03	1
1,3-Dichloropropane	ND		2.0		ug/L			09/15/17 18:03	1
2,2-Dichloropropane	ND *		3.0		ug/L			09/15/17 18:03	1
1,1-Dichloropropene	ND		3.0		ug/L			09/15/17 18:03	1
Ethylbenzene	ND		3.0		ug/L			09/15/17 18:03	1
Ethylene Dibromide	ND		2.0		ug/L			09/15/17 18:03	1
Hexachlorobutadiene	ND		6.0		ug/L			09/15/17 18:03	1
Isopropylbenzene	ND		2.0		ug/L			09/15/17 18:03	1
4-Isopropyltoluene	ND		3.0		ug/L			09/15/17 18:03	1
Methylene Chloride	ND		5.0		ug/L			09/15/17 18:03	1
Methyl tert-butyl ether	ND *		2.0		ug/L			09/15/17 18:03	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/15/17 18:03	1
Naphthalene	ND		4.0		ug/L			09/15/17 18:03	1
n-Butylbenzene	ND		3.0		ug/L			09/15/17 18:03	1
N-Propylbenzene	ND		3.0		ug/L			09/15/17 18:03	1
o-Xylene	ND		2.0		ug/L			09/15/17 18:03	1
sec-Butylbenzene	ND		3.0		ug/L			09/15/17 18:03	1
Styrene	ND		5.0		ug/L			09/15/17 18:03	1
tert-Butylbenzene	ND		3.0		ug/L			09/15/17 18:03	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/15/17 18:03	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			09/15/17 18:03	1
<b>Tetrachloroethene</b>	<b>14</b>		3.0		ug/L			09/15/17 18:03	1
Toluene	ND		2.0		ug/L			09/15/17 18:03	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			09/15/17 18:03	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: MW-4-W-090517**

**Lab Sample ID: 580-71203-3**

**Date Collected: 09/05/17 12:15**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 18:03	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			09/15/17 18:03	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/15/17 18:03	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/15/17 18:03	1
<b>Trichloroethene</b>	<b>4.9</b>		3.0		ug/L			09/15/17 18:03	1
Trichlorofluoromethane	ND		3.0		ug/L			09/15/17 18:03	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/15/17 18:03	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/15/17 18:03	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/15/17 18:03	1
Vinyl chloride	ND		1.0		ug/L			09/15/17 18:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		75 - 125		09/15/17 18:03	1
Dibromofluoromethane (Surr)	108		77 - 120		09/15/17 18:03	1
1,2-Dichloroethane-d4 (Surr)	123		80 - 126		09/15/17 18:03	1
Toluene-d8 (Surr)	90		80 - 122		09/15/17 18:03	1
Trifluorotoluene (Surr)	114		80 - 120		09/15/17 18:03	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,1,1-Trichloroethane</b>	<b>3.3</b>		3.0		ug/L			09/19/17 21:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		75 - 125		09/19/17 21:23	1
Dibromofluoromethane (Surr)	106		77 - 120		09/19/17 21:23	1
1,2-Dichloroethane-d4 (Surr)	92		80 - 126		09/19/17 21:23	1
Toluene-d8 (Surr)	91		80 - 122		09/19/17 21:23	1
Trifluorotoluene (Surr)	111		80 - 120		09/19/17 21:23	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			09/14/17 01:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	104		75 - 120		09/14/17 01:25	1
4-Bromofluorobenzene (Surr)	88		68 - 119		09/14/17 01:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>0.33</b>		0.10		mg/L		09/13/17 08:46	09/16/17 06:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	81		50 - 150		09/13/17 08:46	09/16/17 06:10

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: MW-5-W-090617**

**Lab Sample ID: 580-71203-4**

**Date Collected: 09/06/17 07:50**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/15/17 18:29	1
Bromobenzene	ND		2.0		ug/L			09/15/17 18:29	1
Bromoform	ND		3.0		ug/L			09/15/17 18:29	1
Bromomethane	ND		6.0		ug/L			09/15/17 18:29	1
Carbon tetrachloride	ND	*	3.0		ug/L			09/15/17 18:29	1
Chlorobenzene	ND		2.0		ug/L			09/15/17 18:29	1
Chlorobromomethane	ND		2.0		ug/L			09/15/17 18:29	1
Chlorodibromomethane	ND		1.0		ug/L			09/15/17 18:29	1
Chloroethane	ND		5.0		ug/L			09/15/17 18:29	1
Chloroform	ND	*	5.0		ug/L			09/15/17 18:29	1
Chloromethane	ND		20		ug/L			09/15/17 18:29	1
2-Chlorotoluene	ND		3.0		ug/L			09/15/17 18:29	1
4-Chlorotoluene	ND		2.0		ug/L			09/15/17 18:29	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 18:29	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/15/17 18:29	1
Dibromomethane	ND		2.0		ug/L			09/15/17 18:29	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/15/17 18:29	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/15/17 18:29	1
Dichlorobromomethane	ND	*	2.0		ug/L			09/15/17 18:29	1
Dichlorodifluoromethane	ND		5.0		ug/L			09/15/17 18:29	1
1,2-Dichloroethane	ND	*	2.0		ug/L			09/15/17 18:29	1
1,1-Dichloroethene	ND		4.0		ug/L			09/15/17 18:29	1
1,2-Dichloropropane	ND		1.0		ug/L			09/15/17 18:29	1
1,3-Dichloropropane	ND		2.0		ug/L			09/15/17 18:29	1
2,2-Dichloropropane	ND	*	3.0		ug/L			09/15/17 18:29	1
1,1-Dichloropropene	ND		3.0		ug/L			09/15/17 18:29	1
Ethylene Dibromide	ND		2.0		ug/L			09/15/17 18:29	1
Hexachlorobutadiene	ND		6.0		ug/L			09/15/17 18:29	1
Isopropylbenzene	ND		2.0		ug/L			09/15/17 18:29	1
4-Isopropyltoluene	ND		3.0		ug/L			09/15/17 18:29	1
Methylene Chloride	ND		5.0		ug/L			09/15/17 18:29	1
Methyl tert-butyl ether	ND	*	2.0		ug/L			09/15/17 18:29	1
Naphthalene	ND		4.0		ug/L			09/15/17 18:29	1
N-Propylbenzene	ND		3.0		ug/L			09/15/17 18:29	1
sec-Butylbenzene	ND		3.0		ug/L			09/15/17 18:29	1
Styrene	ND		5.0		ug/L			09/15/17 18:29	1
tert-Butylbenzene	ND		3.0		ug/L			09/15/17 18:29	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/15/17 18:29	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			09/15/17 18:29	1
Tetrachloroethene	ND		3.0		ug/L			09/15/17 18:29	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			09/15/17 18:29	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 18:29	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			09/15/17 18:29	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/15/17 18:29	1
1,1,1-Trichloroethane	ND	*	3.0		ug/L			09/15/17 18:29	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/15/17 18:29	1
Trichloroethene	ND		3.0		ug/L			09/15/17 18:29	1
Trichlorofluoromethane	ND		3.0		ug/L			09/15/17 18:29	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/15/17 18:29	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: MW-5-W-090617**

**Lab Sample ID: 580-71203-4**

**Date Collected: 09/06/17 07:50**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0		ug/L			09/15/17 18:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		75 - 125		09/15/17 18:29	1
Dibromofluoromethane (Surr)	112		77 - 120		09/15/17 18:29	1
1,2-Dichloroethane-d4 (Surr)	131	X	80 - 126		09/15/17 18:29	1
Toluene-d8 (Surr)	92		80 - 122		09/15/17 18:29	1
Trifluorotoluene (Surr)	119		80 - 120		09/15/17 18:29	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>220</b>		100		ug/L			09/19/17 23:28	100
1,4-Dichlorobenzene	ND		400		ug/L			09/19/17 23:28	100
1,1-Dichloroethane	ND		200		ug/L			09/19/17 23:28	100
Ethylbenzene	ND		300		ug/L			09/19/17 23:28	100
<b>m-Xylene &amp; p-Xylene</b>	<b>310</b>		300		ug/L			09/19/17 23:28	100
n-Butylbenzene	ND		300		ug/L			09/19/17 23:28	100
o-Xylene	ND		200		ug/L			09/19/17 23:28	100
Toluene	ND		200		ug/L			09/19/17 23:28	100
1,2,4-Trimethylbenzene	ND		300		ug/L			09/19/17 23:28	100
1,3,5-Trimethylbenzene	ND		300		ug/L			09/19/17 23:28	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		75 - 125		09/19/17 23:28	100
Dibromofluoromethane (Surr)	104		77 - 120		09/19/17 23:28	100
1,2-Dichloroethane-d4 (Surr)	90		80 - 126		09/19/17 23:28	100
Toluene-d8 (Surr)	93		80 - 122		09/19/17 23:28	100
Trifluorotoluene (Surr)	112		80 - 120		09/19/17 23:28	100

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Gasoline Range Organics (GRO)</b>	<b>1.7</b>		1.0		mg/L			09/14/17 01:57	1
<b>-C6-C10</b>									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	104		75 - 120		09/14/17 01:57	1
4-Bromofluorobenzene (Surr)	135	X	68 - 119		09/14/17 01:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>1.4</b>		0.10		mg/L		09/13/17 08:46	09/16/17 06:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	92		50 - 150		09/13/17 08:46	09/16/17 06:32

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: MW-7-W-090517**

**Lab Sample ID: 580-71203-5**

**Date Collected: 09/05/17 13:45**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/15/17 18:57	1
Bromobenzene	ND		2.0		ug/L			09/15/17 18:57	1
Bromoform	ND		3.0		ug/L			09/15/17 18:57	1
Bromomethane	ND		6.0		ug/L			09/15/17 18:57	1
Carbon tetrachloride	ND *		3.0		ug/L			09/15/17 18:57	1
Chlorobenzene	ND		2.0		ug/L			09/15/17 18:57	1
Chlorobromomethane	ND		2.0		ug/L			09/15/17 18:57	1
Chlorodibromomethane	ND		1.0		ug/L			09/15/17 18:57	1
Chloroethane	ND		5.0		ug/L			09/15/17 18:57	1
Chloroform	ND *		5.0		ug/L			09/15/17 18:57	1
Chloromethane	ND		20		ug/L			09/15/17 18:57	1
2-Chlorotoluene	ND		3.0		ug/L			09/15/17 18:57	1
4-Chlorotoluene	ND		2.0		ug/L			09/15/17 18:57	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/15/17 18:57	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 18:57	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/15/17 18:57	1
Dibromomethane	ND		2.0		ug/L			09/15/17 18:57	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/15/17 18:57	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/15/17 18:57	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/15/17 18:57	1
Dichlorobromomethane	ND *		2.0		ug/L			09/15/17 18:57	1
Dichlorodifluoromethane	ND		5.0		ug/L			09/15/17 18:57	1
1,1-Dichloroethane	ND		2.0		ug/L			09/15/17 18:57	1
1,2-Dichloroethane	ND *		2.0		ug/L			09/15/17 18:57	1
1,1-Dichloroethene	ND		4.0		ug/L			09/15/17 18:57	1
1,2-Dichloropropane	ND		1.0		ug/L			09/15/17 18:57	1
1,3-Dichloropropane	ND		2.0		ug/L			09/15/17 18:57	1
2,2-Dichloropropane	ND *		3.0		ug/L			09/15/17 18:57	1
1,1-Dichloropropene	ND		3.0		ug/L			09/15/17 18:57	1
Ethylbenzene	ND		3.0		ug/L			09/15/17 18:57	1
Ethylene Dibromide	ND		2.0		ug/L			09/15/17 18:57	1
Hexachlorobutadiene	ND		6.0		ug/L			09/15/17 18:57	1
Isopropylbenzene	ND		2.0		ug/L			09/15/17 18:57	1
4-Isopropyltoluene	ND		3.0		ug/L			09/15/17 18:57	1
Methylene Chloride	ND		5.0		ug/L			09/15/17 18:57	1
Methyl tert-butyl ether	ND *		2.0		ug/L			09/15/17 18:57	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/15/17 18:57	1
Naphthalene	ND		4.0		ug/L			09/15/17 18:57	1
n-Butylbenzene	ND		3.0		ug/L			09/15/17 18:57	1
N-Propylbenzene	ND		3.0		ug/L			09/15/17 18:57	1
o-Xylene	ND		2.0		ug/L			09/15/17 18:57	1
sec-Butylbenzene	ND		3.0		ug/L			09/15/17 18:57	1
Styrene	ND		5.0		ug/L			09/15/17 18:57	1
tert-Butylbenzene	ND		3.0		ug/L			09/15/17 18:57	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/15/17 18:57	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			09/15/17 18:57	1
Toluene	ND		2.0		ug/L			09/15/17 18:57	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			09/15/17 18:57	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 18:57	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: MW-7-W-090517**

**Lab Sample ID: 580-71203-5**

**Date Collected: 09/05/17 13:45**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		5.0		ug/L			09/15/17 18:57	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/15/17 18:57	1
1,1,1-Trichloroethane	ND	*	3.0		ug/L			09/15/17 18:57	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/15/17 18:57	1
Trichloroethene	ND		3.0		ug/L			09/15/17 18:57	1
Trichlorofluoromethane	ND		3.0		ug/L			09/15/17 18:57	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/15/17 18:57	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/15/17 18:57	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/15/17 18:57	1
Vinyl chloride	ND		1.0		ug/L			09/15/17 18:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		75 - 125		09/15/17 18:57	1
Dibromofluoromethane (Surr)	112		77 - 120		09/15/17 18:57	1
1,2-Dichloroethane-d4 (Surr)	135	X	80 - 126		09/15/17 18:57	1
Toluene-d8 (Surr)	93		80 - 122		09/15/17 18:57	1
Trifluorotoluene (Surr)	118		80 - 120		09/15/17 18:57	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	17		3.0		ug/L			09/19/17 21:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		75 - 125		09/19/17 21:48	1
Dibromofluoromethane (Surr)	105		77 - 120		09/19/17 21:48	1
1,2-Dichloroethane-d4 (Surr)	91		80 - 126		09/19/17 21:48	1
Toluene-d8 (Surr)	92		80 - 122		09/19/17 21:48	1
Trifluorotoluene (Surr)	114		80 - 120		09/19/17 21:48	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			09/14/17 03:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	104		75 - 120		09/14/17 03:01	1
4-Bromofluorobenzene (Surr)	88		68 - 119		09/14/17 03:01	1

## Method: 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		0.11		mg/L		09/13/17 08:46	09/16/17 06:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
o-Terphenyl	80		50 - 150		09/13/17 08:46	09/16/17 06:54	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: BD-1-W-090517**

**Lab Sample ID: 580-71203-6**

**Date Collected: 09/05/17 00:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/15/17 19:23	1
Bromobenzene	ND		2.0		ug/L			09/15/17 19:23	1
Bromoform	ND		3.0		ug/L			09/15/17 19:23	1
Bromomethane	ND		6.0		ug/L			09/15/17 19:23	1
Carbon tetrachloride	ND	*	3.0		ug/L			09/15/17 19:23	1
Chlorobenzene	ND		2.0		ug/L			09/15/17 19:23	1
Chlorobromomethane	ND		2.0		ug/L			09/15/17 19:23	1
Chlorodibromomethane	ND		1.0		ug/L			09/15/17 19:23	1
Chloroethane	ND		5.0		ug/L			09/15/17 19:23	1
Chloroform	ND	*	5.0		ug/L			09/15/17 19:23	1
Chloromethane	ND		20		ug/L			09/15/17 19:23	1
2-Chlorotoluene	ND		3.0		ug/L			09/15/17 19:23	1
4-Chlorotoluene	ND		2.0		ug/L			09/15/17 19:23	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/15/17 19:23	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 19:23	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/15/17 19:23	1
Dibromomethane	ND		2.0		ug/L			09/15/17 19:23	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/15/17 19:23	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/15/17 19:23	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/15/17 19:23	1
Dichlorobromomethane	ND	*	2.0		ug/L			09/15/17 19:23	1
Dichlorodifluoromethane	ND		5.0		ug/L			09/15/17 19:23	1
1,1-Dichloroethane	ND		2.0		ug/L			09/15/17 19:23	1
1,2-Dichloroethane	ND	*	2.0		ug/L			09/15/17 19:23	1
1,1-Dichloroethene	ND		4.0		ug/L			09/15/17 19:23	1
1,2-Dichloropropane	ND		1.0		ug/L			09/15/17 19:23	1
1,3-Dichloropropane	ND		2.0		ug/L			09/15/17 19:23	1
2,2-Dichloropropane	ND	*	3.0		ug/L			09/15/17 19:23	1
1,1-Dichloropropene	ND		3.0		ug/L			09/15/17 19:23	1
Ethylbenzene	ND		3.0		ug/L			09/15/17 19:23	1
Ethylene Dibromide	ND		2.0		ug/L			09/15/17 19:23	1
Hexachlorobutadiene	ND		6.0		ug/L			09/15/17 19:23	1
Isopropylbenzene	ND		2.0		ug/L			09/15/17 19:23	1
4-Isopropyltoluene	ND		3.0		ug/L			09/15/17 19:23	1
Methylene Chloride	ND		5.0		ug/L			09/15/17 19:23	1
Methyl tert-butyl ether	ND	*	2.0		ug/L			09/15/17 19:23	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/15/17 19:23	1
Naphthalene	ND		4.0		ug/L			09/15/17 19:23	1
n-Butylbenzene	ND		3.0		ug/L			09/15/17 19:23	1
N-Propylbenzene	ND		3.0		ug/L			09/15/17 19:23	1
o-Xylene	ND		2.0		ug/L			09/15/17 19:23	1
sec-Butylbenzene	ND		3.0		ug/L			09/15/17 19:23	1
Styrene	ND		5.0		ug/L			09/15/17 19:23	1
tert-Butylbenzene	ND		3.0		ug/L			09/15/17 19:23	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/15/17 19:23	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			09/15/17 19:23	1
Toluene	ND		2.0		ug/L			09/15/17 19:23	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			09/15/17 19:23	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 19:23	1

TestAmerica Seattle



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: BD-1-W-090517**

**Lab Sample ID: 580-71203-6**

**Date Collected: 09/05/17 00:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		5.0		ug/L			09/15/17 19:23	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/15/17 19:23	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/15/17 19:23	1
Trichlorofluoromethane	ND		3.0		ug/L			09/15/17 19:23	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/15/17 19:23	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/15/17 19:23	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/15/17 19:23	1
Vinyl chloride	ND		1.0		ug/L			09/15/17 19:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		75 - 125		09/15/17 19:23	1
Dibromofluoromethane (Surr)	111		77 - 120		09/15/17 19:23	1
1,2-Dichloroethane-d4 (Surr)	131	X	80 - 126		09/15/17 19:23	1
Toluene-d8 (Surr)	93		80 - 122		09/15/17 19:23	1
Trifluorotoluene (Surr)	114		80 - 120		09/15/17 19:23	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Tetrachloroethene</b>	<b>12</b>		3.0		ug/L			09/19/17 22:14	1
<b>1,1,1-Trichloroethane</b>	<b>3.4</b>		3.0		ug/L			09/19/17 22:14	1
<b>Trichloroethene</b>	<b>4.5</b>		3.0		ug/L			09/19/17 22:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		75 - 125		09/19/17 22:14	1
Dibromofluoromethane (Surr)	106		77 - 120		09/19/17 22:14	1
1,2-Dichloroethane-d4 (Surr)	92		80 - 126		09/19/17 22:14	1
Toluene-d8 (Surr)	93		80 - 122		09/19/17 22:14	1
Trifluorotoluene (Surr)	114		80 - 120		09/19/17 22:14	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			09/14/17 03:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	101		75 - 120		09/14/17 03:33	1
4-Bromofluorobenzene (Surr)	86		68 - 119		09/14/17 03:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>0.34</b>		0.10		mg/L		09/13/17 08:46	09/16/17 07:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
<i>o</i> -Terphenyl	90		50 - 150		09/13/17 08:46	09/16/17 07:16	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: BD-2-W-090617**

**Lab Sample ID: 580-71203-7**

**Date Collected: 09/06/17 00:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/15/17 19:50	1
Bromobenzene	ND		2.0		ug/L			09/15/17 19:50	1
Bromoform	ND		3.0		ug/L			09/15/17 19:50	1
Bromomethane	ND		6.0		ug/L			09/15/17 19:50	1
Carbon tetrachloride	ND	*	3.0		ug/L			09/15/17 19:50	1
Chlorobenzene	ND		2.0		ug/L			09/15/17 19:50	1
Chlorobromomethane	ND		2.0		ug/L			09/15/17 19:50	1
Chlorodibromomethane	ND		1.0		ug/L			09/15/17 19:50	1
Chloroethane	ND		5.0		ug/L			09/15/17 19:50	1
Chloroform	ND	*	5.0		ug/L			09/15/17 19:50	1
Chloromethane	ND		20		ug/L			09/15/17 19:50	1
2-Chlorotoluene	ND		3.0		ug/L			09/15/17 19:50	1
4-Chlorotoluene	ND		2.0		ug/L			09/15/17 19:50	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 19:50	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/15/17 19:50	1
Dibromomethane	ND		2.0		ug/L			09/15/17 19:50	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/15/17 19:50	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/15/17 19:50	1
Dichlorobromomethane	ND	*	2.0		ug/L			09/15/17 19:50	1
Dichlorodifluoromethane	ND		5.0		ug/L			09/15/17 19:50	1
1,2-Dichloroethane	ND	*	2.0		ug/L			09/15/17 19:50	1
1,1-Dichloroethene	ND		4.0		ug/L			09/15/17 19:50	1
1,2-Dichloropropane	ND		1.0		ug/L			09/15/17 19:50	1
1,3-Dichloropropane	ND		2.0		ug/L			09/15/17 19:50	1
2,2-Dichloropropane	ND	*	3.0		ug/L			09/15/17 19:50	1
1,1-Dichloropropene	ND		3.0		ug/L			09/15/17 19:50	1
Ethylene Dibromide	ND		2.0		ug/L			09/15/17 19:50	1
Hexachlorobutadiene	ND		6.0		ug/L			09/15/17 19:50	1
Isopropylbenzene	ND		2.0		ug/L			09/15/17 19:50	1
4-Isopropyltoluene	ND		3.0		ug/L			09/15/17 19:50	1
Methylene Chloride	ND		5.0		ug/L			09/15/17 19:50	1
Methyl tert-butyl ether	ND	*	2.0		ug/L			09/15/17 19:50	1
Naphthalene	ND		4.0		ug/L			09/15/17 19:50	1
N-Propylbenzene	ND		3.0		ug/L			09/15/17 19:50	1
sec-Butylbenzene	ND		3.0		ug/L			09/15/17 19:50	1
Styrene	ND		5.0		ug/L			09/15/17 19:50	1
tert-Butylbenzene	ND		3.0		ug/L			09/15/17 19:50	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/15/17 19:50	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			09/15/17 19:50	1
Tetrachloroethene	ND		3.0		ug/L			09/15/17 19:50	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			09/15/17 19:50	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 19:50	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			09/15/17 19:50	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/15/17 19:50	1
1,1,1-Trichloroethane	ND	*	3.0		ug/L			09/15/17 19:50	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/15/17 19:50	1
Trichloroethene	ND		3.0		ug/L			09/15/17 19:50	1
Trichlorofluoromethane	ND		3.0		ug/L			09/15/17 19:50	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/15/17 19:50	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: BD-2-W-090617**

**Lab Sample ID: 580-71203-7**

**Date Collected: 09/06/17 00:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0		ug/L			09/15/17 19:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		75 - 125		09/15/17 19:50	1
Dibromofluoromethane (Surr)	105		77 - 120		09/15/17 19:50	1
1,2-Dichloroethane-d4 (Surr)	127	X	80 - 126		09/15/17 19:50	1
Toluene-d8 (Surr)	94		80 - 122		09/15/17 19:50	1
Trifluorotoluene (Surr)	113		80 - 120		09/15/17 19:50	1

### Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>210</b>		100		ug/L			09/19/17 23:54	100
1,4-Dichlorobenzene	ND		400		ug/L			09/19/17 23:54	100
1,1-Dichloroethane	ND		200		ug/L			09/19/17 23:54	100
Ethylbenzene	ND		300		ug/L			09/19/17 23:54	100
<b>m-Xylene &amp; p-Xylene</b>	<b>310</b>		300		ug/L			09/19/17 23:54	100
n-Butylbenzene	ND		300		ug/L			09/19/17 23:54	100
o-Xylene	ND		200		ug/L			09/19/17 23:54	100
Toluene	ND		200		ug/L			09/19/17 23:54	100
1,2,4-Trimethylbenzene	ND		300		ug/L			09/19/17 23:54	100
1,3,5-Trimethylbenzene	ND		300		ug/L			09/19/17 23:54	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		75 - 125		09/19/17 23:54	100
Dibromofluoromethane (Surr)	106		77 - 120		09/19/17 23:54	100
1,2-Dichloroethane-d4 (Surr)	91		80 - 126		09/19/17 23:54	100
Toluene-d8 (Surr)	91		80 - 122		09/19/17 23:54	100
Trifluorotoluene (Surr)	111		80 - 120		09/19/17 23:54	100

### Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Gasoline Range Organics (GRO)</b>	<b>1.7</b>		1.0		mg/L			09/14/17 04:05	1
<b>-C6-C10</b>									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	104		75 - 120		09/14/17 04:05	1
4-Bromofluorobenzene (Surr)	136	X	68 - 119		09/14/17 04:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>1.4</b>		0.10		mg/L		09/13/17 08:46	09/16/17 07:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	89		50 - 150		09/13/17 08:46	09/16/17 07:38

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 580-71203-8**

**Date Collected: 09/05/17 00:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/15/17 20:16	1
Bromobenzene	ND		2.0		ug/L			09/15/17 20:16	1
Bromoform	ND		3.0		ug/L			09/15/17 20:16	1
Bromomethane	ND		6.0		ug/L			09/15/17 20:16	1
Carbon tetrachloride	ND *		3.0		ug/L			09/15/17 20:16	1
Chlorobenzene	ND		2.0		ug/L			09/15/17 20:16	1
Chlorobromomethane	ND		2.0		ug/L			09/15/17 20:16	1
Chlorodibromomethane	ND		1.0		ug/L			09/15/17 20:16	1
Chloroethane	ND		5.0		ug/L			09/15/17 20:16	1
Chloroform	ND *		5.0		ug/L			09/15/17 20:16	1
Chloromethane	ND		20		ug/L			09/15/17 20:16	1
2-Chlorotoluene	ND		3.0		ug/L			09/15/17 20:16	1
4-Chlorotoluene	ND		2.0		ug/L			09/15/17 20:16	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/15/17 20:16	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 20:16	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/15/17 20:16	1
Dibromomethane	ND		2.0		ug/L			09/15/17 20:16	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/15/17 20:16	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/15/17 20:16	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/15/17 20:16	1
Dichlorobromomethane	ND *		2.0		ug/L			09/15/17 20:16	1
Dichlorodifluoromethane	ND		5.0		ug/L			09/15/17 20:16	1
1,1-Dichloroethane	ND		2.0		ug/L			09/15/17 20:16	1
1,2-Dichloroethane	ND *		2.0		ug/L			09/15/17 20:16	1
1,1-Dichloroethene	ND		4.0		ug/L			09/15/17 20:16	1
1,2-Dichloropropane	ND		1.0		ug/L			09/15/17 20:16	1
1,3-Dichloropropane	ND		2.0		ug/L			09/15/17 20:16	1
2,2-Dichloropropane	ND *		3.0		ug/L			09/15/17 20:16	1
1,1-Dichloropropene	ND		3.0		ug/L			09/15/17 20:16	1
Ethylbenzene	ND		3.0		ug/L			09/15/17 20:16	1
Ethylene Dibromide	ND		2.0		ug/L			09/15/17 20:16	1
Hexachlorobutadiene	ND		6.0		ug/L			09/15/17 20:16	1
Isopropylbenzene	ND		2.0		ug/L			09/15/17 20:16	1
4-Isopropyltoluene	ND		3.0		ug/L			09/15/17 20:16	1
Methylene Chloride	ND		5.0		ug/L			09/15/17 20:16	1
Methyl tert-butyl ether	ND *		2.0		ug/L			09/15/17 20:16	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/15/17 20:16	1
Naphthalene	ND		4.0		ug/L			09/15/17 20:16	1
n-Butylbenzene	ND		3.0		ug/L			09/15/17 20:16	1
N-Propylbenzene	ND		3.0		ug/L			09/15/17 20:16	1
o-Xylene	ND		2.0		ug/L			09/15/17 20:16	1
sec-Butylbenzene	ND		3.0		ug/L			09/15/17 20:16	1
Styrene	ND		5.0		ug/L			09/15/17 20:16	1
tert-Butylbenzene	ND		3.0		ug/L			09/15/17 20:16	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/15/17 20:16	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			09/15/17 20:16	1
Tetrachloroethene	ND		3.0		ug/L			09/15/17 20:16	1
Toluene	ND		2.0		ug/L			09/15/17 20:16	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			09/15/17 20:16	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 580-71203-8**

**Date Collected: 09/05/17 00:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 20:16	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			09/15/17 20:16	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/15/17 20:16	1
1,1,1-Trichloroethane	ND	*	3.0		ug/L			09/15/17 20:16	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/15/17 20:16	1
Trichloroethene	ND		3.0		ug/L			09/15/17 20:16	1
Trichlorofluoromethane	ND		3.0		ug/L			09/15/17 20:16	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/15/17 20:16	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/15/17 20:16	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/15/17 20:16	1
Vinyl chloride	ND		1.0		ug/L			09/15/17 20:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		75 - 125		09/15/17 20:16	1
Dibromofluoromethane (Surr)	108		77 - 120		09/15/17 20:16	1
1,2-Dichloroethane-d4 (Surr)	124		80 - 126		09/15/17 20:16	1
Toluene-d8 (Surr)	91		80 - 122		09/15/17 20:16	1
Trifluorotoluene (Surr)	112		80 - 120		09/15/17 20:16	1

**Method: AK101 - Alaska - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			09/13/17 17:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	107		75 - 120		09/13/17 17:54	1
4-Bromofluorobenzene (Surr)	87		68 - 119		09/13/17 17:54	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: EB-1-W-090617**

**Lab Sample ID: 580-71203-9**

**Date Collected: 09/06/17 09:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/15/17 20:43	1
Bromobenzene	ND		2.0		ug/L			09/15/17 20:43	1
Bromoform	ND		3.0		ug/L			09/15/17 20:43	1
Bromomethane	ND		6.0		ug/L			09/15/17 20:43	1
Carbon tetrachloride	ND *		3.0		ug/L			09/15/17 20:43	1
Chlorobenzene	ND		2.0		ug/L			09/15/17 20:43	1
Chlorobromomethane	ND		2.0		ug/L			09/15/17 20:43	1
Chlorodibromomethane	ND		1.0		ug/L			09/15/17 20:43	1
Chloroethane	ND		5.0		ug/L			09/15/17 20:43	1
Chloroform	ND *		5.0		ug/L			09/15/17 20:43	1
Chloromethane	ND		20		ug/L			09/15/17 20:43	1
2-Chlorotoluene	ND		3.0		ug/L			09/15/17 20:43	1
4-Chlorotoluene	ND		2.0		ug/L			09/15/17 20:43	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/15/17 20:43	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 20:43	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/15/17 20:43	1
Dibromomethane	ND		2.0		ug/L			09/15/17 20:43	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/15/17 20:43	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/15/17 20:43	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/15/17 20:43	1
Dichlorobromomethane	ND *		2.0		ug/L			09/15/17 20:43	1
Dichlorodifluoromethane	ND		5.0		ug/L			09/15/17 20:43	1
1,1-Dichloroethane	ND		2.0		ug/L			09/15/17 20:43	1
1,2-Dichloroethane	ND *		2.0		ug/L			09/15/17 20:43	1
1,1-Dichloroethene	ND		4.0		ug/L			09/15/17 20:43	1
1,2-Dichloropropane	ND		1.0		ug/L			09/15/17 20:43	1
1,3-Dichloropropane	ND		2.0		ug/L			09/15/17 20:43	1
2,2-Dichloropropane	ND *		3.0		ug/L			09/15/17 20:43	1
1,1-Dichloropropene	ND		3.0		ug/L			09/15/17 20:43	1
Ethylbenzene	ND		3.0		ug/L			09/15/17 20:43	1
Ethylene Dibromide	ND		2.0		ug/L			09/15/17 20:43	1
Hexachlorobutadiene	ND		6.0		ug/L			09/15/17 20:43	1
Isopropylbenzene	ND		2.0		ug/L			09/15/17 20:43	1
4-Isopropyltoluene	ND		3.0		ug/L			09/15/17 20:43	1
Methylene Chloride	ND		5.0		ug/L			09/15/17 20:43	1
Methyl tert-butyl ether	ND *		2.0		ug/L			09/15/17 20:43	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/15/17 20:43	1
Naphthalene	ND		4.0		ug/L			09/15/17 20:43	1
n-Butylbenzene	ND		3.0		ug/L			09/15/17 20:43	1
N-Propylbenzene	ND		3.0		ug/L			09/15/17 20:43	1
o-Xylene	ND		2.0		ug/L			09/15/17 20:43	1
sec-Butylbenzene	ND		3.0		ug/L			09/15/17 20:43	1
Styrene	ND		5.0		ug/L			09/15/17 20:43	1
tert-Butylbenzene	ND		3.0		ug/L			09/15/17 20:43	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/15/17 20:43	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			09/15/17 20:43	1
Tetrachloroethene	ND		3.0		ug/L			09/15/17 20:43	1
Toluene	ND		2.0		ug/L			09/15/17 20:43	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			09/15/17 20:43	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: EB-1-W-090617**

**Lab Sample ID: 580-71203-9**

**Date Collected: 09/06/17 09:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 20:43	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			09/15/17 20:43	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/15/17 20:43	1
1,1,1-Trichloroethane	ND	*	3.0		ug/L			09/15/17 20:43	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/15/17 20:43	1
Trichloroethene	ND		3.0		ug/L			09/15/17 20:43	1
Trichlorofluoromethane	ND		3.0		ug/L			09/15/17 20:43	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/15/17 20:43	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/15/17 20:43	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/15/17 20:43	1
Vinyl chloride	ND		1.0		ug/L			09/15/17 20:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		75 - 125		09/15/17 20:43	1
Dibromofluoromethane (Surr)	115		77 - 120		09/15/17 20:43	1
1,2-Dichloroethane-d4 (Surr)	126		80 - 126		09/15/17 20:43	1
Toluene-d8 (Surr)	93		80 - 122		09/15/17 20:43	1
Trifluorotoluene (Surr)	114		80 - 120		09/15/17 20:43	1

### Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			09/14/17 04:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	100		75 - 120		09/14/17 04:38	1
4-Bromofluorobenzene (Surr)	87		68 - 119		09/14/17 04:38	1

### Method: 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		0.11		mg/L		09/13/17 08:46	09/16/17 08:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
o-Terphenyl	86		50 - 150		09/13/17 08:46	09/16/17 08:00	1

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 580-256318/5**

**Matrix: Water**

**Analysis Batch: 256318**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/15/17 13:13	1
Bromobenzene	ND		2.0		ug/L			09/15/17 13:13	1
Bromoform	ND		3.0		ug/L			09/15/17 13:13	1
Bromomethane	ND		6.0		ug/L			09/15/17 13:13	1
Carbon tetrachloride	ND		3.0		ug/L			09/15/17 13:13	1
Chlorobenzene	ND		2.0		ug/L			09/15/17 13:13	1
Chlorobromomethane	ND		2.0		ug/L			09/15/17 13:13	1
Chlorodibromomethane	ND		1.0		ug/L			09/15/17 13:13	1
Chloroethane	ND		5.0		ug/L			09/15/17 13:13	1
Chloroform	ND		5.0		ug/L			09/15/17 13:13	1
Chloromethane	ND		20		ug/L			09/15/17 13:13	1
2-Chlorotoluene	ND		3.0		ug/L			09/15/17 13:13	1
4-Chlorotoluene	ND		2.0		ug/L			09/15/17 13:13	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/15/17 13:13	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 13:13	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/15/17 13:13	1
Dibromomethane	ND		2.0		ug/L			09/15/17 13:13	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/15/17 13:13	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/15/17 13:13	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/15/17 13:13	1
Dichlorobromomethane	ND		2.0		ug/L			09/15/17 13:13	1
Dichlorodifluoromethane	ND		5.0		ug/L			09/15/17 13:13	1
1,1-Dichloroethane	ND		2.0		ug/L			09/15/17 13:13	1
1,2-Dichloroethane	ND		2.0		ug/L			09/15/17 13:13	1
1,1-Dichloroethene	ND		4.0		ug/L			09/15/17 13:13	1
1,2-Dichloropropane	ND		1.0		ug/L			09/15/17 13:13	1
1,3-Dichloropropane	ND		2.0		ug/L			09/15/17 13:13	1
2,2-Dichloropropane	ND		3.0		ug/L			09/15/17 13:13	1
1,1-Dichloropropene	ND		3.0		ug/L			09/15/17 13:13	1
Ethylbenzene	ND		3.0		ug/L			09/15/17 13:13	1
Ethylene Dibromide	ND		2.0		ug/L			09/15/17 13:13	1
Hexachlorobutadiene	ND		6.0		ug/L			09/15/17 13:13	1
Isopropylbenzene	ND		2.0		ug/L			09/15/17 13:13	1
4-Isopropyltoluene	ND		3.0		ug/L			09/15/17 13:13	1
Methylene Chloride	ND		5.0		ug/L			09/15/17 13:13	1
Methyl tert-butyl ether	ND		2.0		ug/L			09/15/17 13:13	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/15/17 13:13	1
Naphthalene	ND		4.0		ug/L			09/15/17 13:13	1
n-Butylbenzene	ND		3.0		ug/L			09/15/17 13:13	1
N-Propylbenzene	ND		3.0		ug/L			09/15/17 13:13	1
o-Xylene	ND		2.0		ug/L			09/15/17 13:13	1
sec-Butylbenzene	ND		3.0		ug/L			09/15/17 13:13	1
Styrene	ND		5.0		ug/L			09/15/17 13:13	1
tert-Butylbenzene	ND		3.0		ug/L			09/15/17 13:13	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/15/17 13:13	1
1,1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			09/15/17 13:13	1
Tetrachloroethene	ND		3.0		ug/L			09/15/17 13:13	1
Toluene	ND		2.0		ug/L			09/15/17 13:13	1

TestAmerica Seattle



# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

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

**Lab Sample ID: MB 580-256318/5**  
**Matrix: Water**  
**Analysis Batch: 256318**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		3.0		ug/L			09/15/17 13:13	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 13:13	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			09/15/17 13:13	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/15/17 13:13	1
1,1,1-Trichloroethane	ND		3.0		ug/L			09/15/17 13:13	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/15/17 13:13	1
Trichloroethene	ND		3.0		ug/L			09/15/17 13:13	1
Trichlorofluoromethane	ND		3.0		ug/L			09/15/17 13:13	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/15/17 13:13	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/15/17 13:13	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/15/17 13:13	1
Vinyl chloride	ND		1.0		ug/L			09/15/17 13:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		75 - 125		09/15/17 13:13	1
Dibromofluoromethane (Surr)	113		77 - 120		09/15/17 13:13	1
1,2-Dichloroethane-d4 (Surr)	130	X	80 - 126		09/15/17 13:13	1
Toluene-d8 (Surr)	93		80 - 122		09/15/17 13:13	1
Trifluorotoluene (Surr)	119		80 - 120		09/15/17 13:13	1

**Lab Sample ID: LCS 580-256318/6**  
**Matrix: Water**  
**Analysis Batch: 256318**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	10.0	10.9		ug/L		109	75 - 120
Bromobenzene	10.0	9.07		ug/L		91	75 - 120
Bromoform	10.0	10.6		ug/L		106	71 - 120
Bromomethane	10.0	9.53		ug/L		95	55 - 125
Carbon tetrachloride	10.0	13.8	*	ug/L		138	72 - 124
Chlorobenzene	10.0	9.79		ug/L		98	80 - 120
Chlorobromomethane	10.0	11.6		ug/L		116	78 - 120
Chlorodibromomethane	10.0	10.6		ug/L		106	71 - 120
Chloroethane	10.0	9.24		ug/L		92	65 - 126
Chloroform	10.0	12.1	*	ug/L		121	80 - 119
Chloromethane	10.0	10.8	J	ug/L		108	25 - 149
2-Chlorotoluene	10.0	9.35		ug/L		94	80 - 120
4-Chlorotoluene	10.0	9.33		ug/L		93	80 - 121
cis-1,2-Dichloroethene	10.0	11.6		ug/L		116	76 - 120
cis-1,3-Dichloropropene	10.0	9.56		ug/L		96	77 - 120
1,2-Dibromo-3-Chloropropane	10.0	10.5		ug/L		105	58 - 133
Dibromomethane	10.0	12.3		ug/L		123	75 - 123
1,2-Dichlorobenzene	10.0	9.42		ug/L		94	80 - 120
1,3-Dichlorobenzene	10.0	9.42		ug/L		94	80 - 121
1,4-Dichlorobenzene	10.0	9.42		ug/L		94	80 - 120
Dichlorobromomethane	10.0	13.5	*	ug/L		135	75 - 120
Dichlorodifluoromethane	10.0	9.89		ug/L		99	20 - 150
1,1-Dichloroethane	10.0	11.5		ug/L		115	70 - 120

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

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

**Lab Sample ID: LCS 580-256318/6**  
**Matrix: Water**  
**Analysis Batch: 256318**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	10.0	15.0	*	ug/L		150	76 - 131
1,1-Dichloroethene	10.0	10.9		ug/L		109	70 - 129
1,2-Dichloropropane	10.0	10.8		ug/L		108	72 - 120
1,3-Dichloropropane	10.0	9.83		ug/L		98	79 - 123
2,2-Dichloropropane	10.0	14.7	*	ug/L		147	43 - 140
1,1-Dichloropropene	10.0	11.8		ug/L		118	75 - 120
Ethylbenzene	10.0	9.98		ug/L		100	75 - 120
Ethylene Dibromide	10.0	9.57		ug/L		96	79 - 120
Hexachlorobutadiene	10.0	10.1		ug/L		101	65 - 125
Isopropylbenzene	10.0	10.1		ug/L		101	75 - 125
4-Isopropyltoluene	10.0	9.39		ug/L		94	77 - 120
Methylene Chloride	10.0	10.4		ug/L		104	70 - 125
Methyl tert-butyl ether	10.0	12.4	*	ug/L		124	79 - 120
m-Xylene & p-Xylene	10.0	10.1		ug/L		101	75 - 120
Naphthalene	10.0	9.56		ug/L		96	71 - 126
n-Butylbenzene	10.0	9.36		ug/L		94	78 - 120
N-Propylbenzene	10.0	9.08		ug/L		91	80 - 124
o-Xylene	10.0	10.1		ug/L		101	74 - 120
sec-Butylbenzene	10.0	9.05		ug/L		90	78 - 125
Styrene	10.0	9.75		ug/L		98	76 - 121
tert-Butylbenzene	10.0	9.53		ug/L		95	80 - 121
1,1,1,2-Tetrachloroethane	10.0	10.5		ug/L		105	79 - 120
1,1,1,2,2-Tetrachloroethane	10.0	9.52		ug/L		95	65 - 130
Tetrachloroethene	10.0	10.5		ug/L		105	76 - 124
Toluene	10.0	9.53		ug/L		95	75 - 120
trans-1,2-Dichloroethene	10.0	11.5		ug/L		115	72 - 124
trans-1,3-Dichloropropene	10.0	10.5		ug/L		105	73 - 122
1,2,3-Trichlorobenzene	10.0	10.6		ug/L		106	74 - 123
1,2,4-Trichlorobenzene	10.0	9.76		ug/L		98	76 - 120
1,1,1-Trichloroethane	10.0	13.3	*	ug/L		133	74 - 130
1,1,2-Trichloroethane	10.0	9.62		ug/L		96	78 - 121
Trichloroethene	10.0	11.4		ug/L		114	70 - 125
Trichlorofluoromethane	10.0	12.5		ug/L		125	49 - 144
1,2,3-Trichloropropane	10.0	9.70		ug/L		97	76 - 124
1,2,4-Trimethylbenzene	10.0	9.17		ug/L		92	75 - 121
1,3,5-Trimethylbenzene	10.0	9.18		ug/L		92	75 - 122
Vinyl chloride	10.0	10.3		ug/L		103	20 - 150

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	107		75 - 125
Dibromofluoromethane (Surr)	114		77 - 120
1,2-Dichloroethane-d4 (Surr)	133	X	80 - 126
Toluene-d8 (Surr)	90		80 - 122
Trifluorotoluene (Surr)	117		80 - 120

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

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

Lab Sample ID: LCSD 580-256318/25

Matrix: Water

Analysis Batch: 256318

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
Benzene	10.0	10.8		ug/L		108	75 - 120	1	14
Bromobenzene	10.0	9.35		ug/L		94	75 - 120	3	13
Bromoform	10.0	9.35		ug/L		93	71 - 120	13	20
Bromomethane	10.0	9.26		ug/L		93	55 - 125	3	35
Carbon tetrachloride	10.0	13.4	*	ug/L		134	72 - 124	3	19
Chlorobenzene	10.0	9.42		ug/L		94	80 - 120	4	15
Chlorobromomethane	10.0	10.9		ug/L		109	78 - 120	6	35
Chlorodibromomethane	10.0	10.1		ug/L		101	71 - 120	5	35
Chloroethane	10.0	8.45		ug/L		84	65 - 126	9	35
Chloroform	10.0	12.0	*	ug/L		120	80 - 119	0	15
Chloromethane	10.0	10.5	J	ug/L		105	25 - 149	2	35
2-Chlorotoluene	10.0	9.29		ug/L		93	80 - 120	1	15
4-Chlorotoluene	10.0	9.64		ug/L		96	80 - 121	3	34
cis-1,2-Dichloroethene	10.0	11.6		ug/L		116	76 - 120	0	15
cis-1,3-Dichloropropene	10.0	9.59		ug/L		96	77 - 120	0	12
1,2-Dibromo-3-Chloropropane	10.0	8.34	J	ug/L		83	58 - 133	23	35
Dibromomethane	10.0	12.0		ug/L		120	75 - 123	2	22
1,2-Dichlorobenzene	10.0	9.53		ug/L		95	80 - 120	1	15
1,3-Dichlorobenzene	10.0	9.65		ug/L		96	80 - 121	2	14
1,4-Dichlorobenzene	10.0	9.67		ug/L		97	80 - 120	3	17
Dichlorobromomethane	10.0	12.7	*	ug/L		127	75 - 120	6	14
Dichlorodifluoromethane	10.0	10.5		ug/L		105	20 - 150	6	35
1,1-Dichloroethane	10.0	11.5		ug/L		115	70 - 120	0	20
1,2-Dichloroethane	10.0	14.1	*	ug/L		141	76 - 131	6	11
1,1-Dichloroethene	10.0	11.2		ug/L		112	70 - 129	2	27
1,2-Dichloropropane	10.0	10.9		ug/L		109	72 - 120	1	26
1,3-Dichloropropane	10.0	9.28		ug/L		93	79 - 123	6	35
2,2-Dichloropropane	10.0	14.0		ug/L		140	43 - 140	5	35
1,1-Dichloropropene	10.0	11.7		ug/L		117	75 - 120	1	20
Ethylbenzene	10.0	9.42		ug/L		94	75 - 120	6	14
Ethylene Dibromide	10.0	9.72		ug/L		97	79 - 120	2	26
Hexachlorobutadiene	10.0	10.9		ug/L		109	65 - 125	8	29
Isopropylbenzene	10.0	9.64		ug/L		96	75 - 125	5	20
4-Isopropyltoluene	10.0	9.62		ug/L		96	77 - 120	2	13
Methylene Chloride	10.0	10.6		ug/L		106	70 - 125	1	29
Methyl tert-butyl ether	10.0	11.6		ug/L		116	79 - 120	7	18
m-Xylene & p-Xylene	10.0	10.0		ug/L		100	75 - 120	1	14
Naphthalene	10.0	8.96		ug/L		90	71 - 126	7	16
n-Butylbenzene	10.0	9.36		ug/L		94	78 - 120	0	14
N-Propylbenzene	10.0	9.08		ug/L		91	80 - 124	0	13
o-Xylene	10.0	9.84		ug/L		98	74 - 120	3	16
sec-Butylbenzene	10.0	9.37		ug/L		94	78 - 125	4	15
Styrene	10.0	9.64		ug/L		96	76 - 121	1	16
tert-Butylbenzene	10.0	9.37		ug/L		94	80 - 121	2	14
1,1,1,2-Tetrachloroethane	10.0	10.1		ug/L		101	79 - 120	4	20
1,1,1,2,2-Tetrachloroethane	10.0	8.97		ug/L		90	65 - 130	6	18
Tetrachloroethene	10.0	10.3		ug/L		103	76 - 124	2	20
Toluene	10.0	9.06		ug/L		91	75 - 120	5	13

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

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

**Lab Sample ID: LCSD 580-256318/25**

**Matrix: Water**

**Analysis Batch: 256318**

**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
trans-1,2-Dichloroethene	10.0	10.7		ug/L		107	72 - 124	7	21
trans-1,3-Dichloropropene	10.0	10.3		ug/L		103	73 - 122	1	13
1,2,3-Trichlorobenzene	10.0	10.5		ug/L		105	74 - 123	1	17
1,2,4-Trichlorobenzene	10.0	9.45		ug/L		95	76 - 120	3	22
1,1,1-Trichloroethane	10.0	12.9		ug/L		129	74 - 130	3	18
1,1,2-Trichloroethane	10.0	9.40		ug/L		94	78 - 121	2	14
Trichloroethene	10.0	11.0		ug/L		110	70 - 125	4	15
Trichlorofluoromethane	10.0	12.3		ug/L		123	49 - 144	2	35
1,2,3-Trichloropropane	10.0	9.34		ug/L		93	76 - 124	4	30
1,2,4-Trimethylbenzene	10.0	9.22		ug/L		92	75 - 121	1	16
1,3,5-Trimethylbenzene	10.0	9.43		ug/L		94	75 - 122	3	14
Vinyl chloride	10.0	10.0		ug/L		100	20 - 150	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	106		75 - 125
Dibromofluoromethane (Surr)	109		77 - 120
1,2-Dichloroethane-d4 (Surr)	125		80 - 126
Toluene-d8 (Surr)	89		80 - 122
Trifluorotoluene (Surr)	116		80 - 120

**Lab Sample ID: 580-71203-2 MS**

**Matrix: Water**

**Analysis Batch: 256318**

**Client Sample ID: MW-2-W-090617**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		10.0	11.3		ug/L		113	80 - 120
Bromobenzene	ND		10.0	10.1		ug/L		101	75 - 115
Bromoform	ND		10.0	11.0		ug/L		110	55 - 130
Bromomethane	ND		10.0	8.49		ug/L		85	55 - 125
Carbon tetrachloride	ND	* F1	10.0	14.5	F1	ug/L		145	65 - 124
Chlorobenzene	ND		10.0	10.1		ug/L		101	80 - 120
Chlorobromomethane	ND	F1	10.0	12.4	F1	ug/L		124	65 - 120
Chlorodibromomethane	ND		10.0	11.6		ug/L		116	71 - 118
Chloroethane	ND		10.0	10.4		ug/L		104	60 - 126
Chloroform	ND	* F1	10.0	12.6	F1	ug/L		126	80 - 119
Chloromethane	ND		10.0	ND		ug/L		105	40 - 149
2-Chlorotoluene	ND		10.0	9.88		ug/L		99	69 - 125
4-Chlorotoluene	ND		10.0	9.65		ug/L		97	68 - 121
cis-1,3-Dichloropropene	ND		10.0	9.87		ug/L		99	77 - 117
1,2-Dibromo-3-Chloropropane	ND		10.0	10.5		ug/L		105	58 - 141
Dibromomethane	ND		10.0	12.8		ug/L		128	61 - 142
1,2-Dichlorobenzene	ND		10.0	10.2		ug/L		98	70 - 120
1,3-Dichlorobenzene	ND		10.0	9.93		ug/L		99	72 - 116
1,4-Dichlorobenzene	ND		10.0	10.2		ug/L		102	75 - 117
Dichlorobromomethane	ND	* F1	10.0	13.5	F1	ug/L		135	75 - 120
Dichlorodifluoromethane	ND		10.0	9.22		ug/L		92	20 - 141
1,2-Dichloroethane	ND	* F1	10.0	15.4	F1	ug/L		154	58 - 143
1,1-Dichloroethene	ND		10.0	11.3		ug/L		113	70 - 117

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

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

Lab Sample ID: 580-71203-2 MS

Matrix: Water

Analysis Batch: 256318

Client Sample ID: MW-2-W-090617

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	ND		10.0	12.1		ug/L		121	58 - 150
1,3-Dichloropropane	ND		10.0	10.3		ug/L		103	69 - 134
2,2-Dichloropropane	ND	F1 *	10.0	13.7		ug/L		137	50 - 140
1,1-Dichloropropene	ND	F1	10.0	11.9		ug/L		119	75 - 120
Ethylbenzene	ND		10.0	12.2		ug/L		103	75 - 119
Ethylene Dibromide	ND		10.0	10.1		ug/L		101	66 - 133
Hexachlorobutadiene	ND		10.0	9.74		ug/L		97	56 - 125
Isopropylbenzene	ND		10.0	11.2		ug/L		106	75 - 125
4-Isopropyltoluene	ND		10.0	9.81		ug/L		98	66 - 120
Methylene Chloride	ND		10.0	10.5		ug/L		105	70 - 115
Methyl tert-butyl ether	ND	F1 *	10.0	12.8	F1	ug/L		128	65 - 125
m-Xylene & p-Xylene	ND		10.0	11.5		ug/L		103	75 - 119
Naphthalene	ND		10.0	10.6		ug/L		106	55 - 134
n-Butylbenzene	ND		10.0	10.1		ug/L		101	70 - 120
N-Propylbenzene	ND		10.0	9.45		ug/L		94	70 - 124
o-Xylene	ND		10.0	10.5		ug/L		102	74 - 120
sec-Butylbenzene	ND		10.0	10.0		ug/L		94	70 - 125
Styrene	ND		10.0	10.0		ug/L		100	76 - 116
tert-Butylbenzene	ND		10.0	10.1		ug/L		101	70 - 121
1,1,1,2-Tetrachloroethane	ND		10.0	11.4		ug/L		114	64 - 130
1,1,2,2-Tetrachloroethane	ND		10.0	10.6		ug/L		106	65 - 130
Tetrachloroethene	ND		10.0	10.9		ug/L		109	70 - 124
Toluene	ND		10.0	9.89		ug/L		99	75 - 120
trans-1,2-Dichloroethene	ND	F1	10.0	10.9		ug/L		109	72 - 113
trans-1,3-Dichloropropene	ND		10.0	10.5		ug/L		105	73 - 122
1,2,3-Trichlorobenzene	ND		10.0	10.6		ug/L		106	55 - 133
1,2,4-Trichlorobenzene	ND		10.0	10.0		ug/L		100	56 - 129
1,1,1-Trichloroethane	ND	F1 *	10.0	13.8	F1	ug/L		138	65 - 130
1,1,2-Trichloroethane	ND		10.0	10.3		ug/L		103	69 - 135
Trichloroethene	ND		10.0	11.0		ug/L		106	70 - 125
Trichlorofluoromethane	ND		10.0	12.0		ug/L		120	49 - 130
1,2,3-Trichloropropane	ND		10.0	11.0		ug/L		110	65 - 135
1,2,4-Trimethylbenzene	ND		10.0	10.6		ug/L		98	75 - 121
1,3,5-Trimethylbenzene	ND		10.0	10.0		ug/L		100	75 - 122
Vinyl chloride	ND		10.0	9.51		ug/L		95	56 - 114

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		75 - 125
Dibromofluoromethane (Surr)	110		77 - 120
1,2-Dichloroethane-d4 (Surr)	129	X	80 - 126
Toluene-d8 (Surr)	90		80 - 122
Trifluorotoluene (Surr)	114		80 - 120

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

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

**Lab Sample ID: 580-71203-2 MSD**

**Matrix: Water**

**Analysis Batch: 256318**

**Client Sample ID: MW-2-W-090617**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		10.0	11.3		ug/L		113	80 - 120	0	35
Bromobenzene	ND		10.0	10.1		ug/L		101	75 - 115	0	35
Bromoform	ND		10.0	10.6		ug/L		106	55 - 130	4	35
Bromomethane	ND		10.0	8.64		ug/L		86	55 - 125	2	35
Carbon tetrachloride	ND	* F1	10.0	14.3	F1	ug/L		143	65 - 124	1	35
Chlorobenzene	ND		10.0	9.87		ug/L		99	80 - 120	3	35
Chlorobromomethane	ND	F1	10.0	11.5		ug/L		115	65 - 120	7	35
Chlorodibromomethane	ND		10.0	10.8		ug/L		108	71 - 118	7	35
Chloroethane	ND		10.0	9.63		ug/L		96	60 - 126	8	35
Chloroform	ND	* F1	10.0	13.4	F1	ug/L		134	80 - 119	6	35
Chloromethane	ND		10.0	ND		ug/L		103	40 - 149	2	35
2-Chlorotoluene	ND		10.0	9.41		ug/L		94	69 - 125	5	35
4-Chlorotoluene	ND		10.0	9.96		ug/L		100	68 - 121	3	35
cis-1,3-Dichloropropene	ND		10.0	10.1		ug/L		101	77 - 117	3	35
1,2-Dibromo-3-Chloropropane	ND		10.0	10.2		ug/L		102	58 - 141	3	35
Dibromomethane	ND		10.0	13.1		ug/L		131	61 - 142	3	35
1,2-Dichlorobenzene	ND		10.0	10.0		ug/L		96	70 - 120	2	35
1,3-Dichlorobenzene	ND		10.0	9.83		ug/L		98	72 - 116	1	35
1,4-Dichlorobenzene	ND		10.0	10.2		ug/L		102	75 - 117	1	35
Dichlorobromomethane	ND	* F1	10.0	13.4	F1	ug/L		134	75 - 120	0	35
Dichlorodifluoromethane	ND		10.0	9.33		ug/L		93	20 - 141	1	35
1,2-Dichloroethane	ND	* F1	10.0	15.6	F1	ug/L		156	58 - 143	2	35
1,1-Dichloroethene	ND		10.0	11.2		ug/L		112	70 - 117	0	35
1,2-Dichloropropane	ND		10.0	11.7		ug/L		117	58 - 150	3	35
1,3-Dichloropropane	ND		10.0	9.73		ug/L		97	69 - 134	5	35
2,2-Dichloropropane	ND	F1 *	10.0	14.3	F1	ug/L		143	50 - 140	4	35
1,1-Dichloropropene	ND	F1	10.0	12.8	F1	ug/L		128	75 - 120	7	35
Ethylbenzene	ND		10.0	11.9		ug/L		101	75 - 119	2	35
Ethylene Dibromide	ND		10.0	9.72		ug/L		97	66 - 133	4	35
Hexachlorobutadiene	ND		10.0	10.2		ug/L		102	56 - 125	5	35
Isopropylbenzene	ND		10.0	10.8		ug/L		102	75 - 125	4	35
4-Isopropyltoluene	ND		10.0	9.72		ug/L		97	66 - 120	1	35
Methylene Chloride	ND		10.0	10.5		ug/L		105	70 - 115	1	35
Methyl tert-butyl ether	ND	F1 *	10.0	12.1		ug/L		121	65 - 125	6	35
m-Xylene & p-Xylene	ND		10.0	11.3		ug/L		101	75 - 119	2	35
Naphthalene	ND		10.0	9.76		ug/L		98	55 - 134	8	35
n-Butylbenzene	ND		10.0	10.1		ug/L		101	70 - 120	0	35
N-Propylbenzene	ND		10.0	9.60		ug/L		96	70 - 124	2	35
o-Xylene	ND		10.0	10.5		ug/L		102	74 - 120	0	35
sec-Butylbenzene	ND		10.0	10.3		ug/L		97	70 - 125	3	35
Styrene	ND		10.0	10.1		ug/L		101	76 - 116	1	35
tert-Butylbenzene	ND		10.0	9.93		ug/L		99	70 - 121	2	35
1,1,1,2-Tetrachloroethane	ND		10.0	10.6		ug/L		106	64 - 130	6	35
1,1,1,2,2-Tetrachloroethane	ND		10.0	9.67		ug/L		97	65 - 130	10	35
Tetrachloroethene	ND		10.0	10.6		ug/L		106	70 - 124	3	35
Toluene	ND		10.0	9.65		ug/L		96	75 - 120	2	35
trans-1,2-Dichloroethene	ND	F1	10.0	12.1	F1	ug/L		121	72 - 113	11	35
trans-1,3-Dichloropropene	ND		10.0	10.5		ug/L		105	73 - 122	0	35

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

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

**Lab Sample ID: 580-71203-2 MSD**

**Matrix: Water**

**Analysis Batch: 256318**

**Client Sample ID: MW-2-W-090617**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichlorobenzene	ND		10.0	10.2		ug/L		102	55 - 133	4	35
1,2,4-Trichlorobenzene	ND		10.0	9.91		ug/L		99	56 - 129	1	35
1,1,1-Trichloroethane	ND	F1 *	10.0	13.8	F1	ug/L		138	65 - 130	0	35
1,1,2-Trichloroethane	ND		10.0	9.84		ug/L		98	69 - 135	5	35
Trichloroethene	ND		10.0	11.6		ug/L		112	70 - 125	5	35
Trichlorofluoromethane	ND		10.0	12.2		ug/L		122	49 - 130	2	35
1,2,3-Trichloropropane	ND		10.0	10.0		ug/L		100	65 - 135	9	35
1,2,4-Trimethylbenzene	ND		10.0	10.5		ug/L		97	75 - 121	1	35
1,3,5-Trimethylbenzene	ND		10.0	10.2		ug/L		102	75 - 122	2	35
Vinyl chloride	ND		10.0	9.60		ug/L		96	56 - 114	1	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		75 - 125
Dibromofluoromethane (Surr)	111		77 - 120
1,2-Dichloroethane-d4 (Surr)	130	X	80 - 126
Toluene-d8 (Surr)	88		80 - 122
Trifluorotoluene (Surr)	116		80 - 120

**Lab Sample ID: MB 580-256639/5**

**Matrix: Water**

**Analysis Batch: 256639**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/19/17 17:17	1
Bromobenzene	ND		2.0		ug/L			09/19/17 17:17	1
Bromoform	ND		3.0		ug/L			09/19/17 17:17	1
Bromomethane	ND		6.0		ug/L			09/19/17 17:17	1
Carbon tetrachloride	ND		3.0		ug/L			09/19/17 17:17	1
Chlorobenzene	ND		2.0		ug/L			09/19/17 17:17	1
Chlorobromomethane	ND		2.0		ug/L			09/19/17 17:17	1
Chlorodibromomethane	ND		1.0		ug/L			09/19/17 17:17	1
Chloroethane	ND		5.0		ug/L			09/19/17 17:17	1
Chloroform	ND		5.0		ug/L			09/19/17 17:17	1
Chloromethane	ND		20		ug/L			09/19/17 17:17	1
2-Chlorotoluene	ND		3.0		ug/L			09/19/17 17:17	1
4-Chlorotoluene	ND		2.0		ug/L			09/19/17 17:17	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/19/17 17:17	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/19/17 17:17	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/19/17 17:17	1
Dibromomethane	ND		2.0		ug/L			09/19/17 17:17	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/19/17 17:17	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/19/17 17:17	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/19/17 17:17	1
Dichlorobromomethane	ND		2.0		ug/L			09/19/17 17:17	1
Dichlorodifluoromethane	ND		5.0		ug/L			09/19/17 17:17	1
1,1-Dichloroethane	ND		2.0		ug/L			09/19/17 17:17	1
1,2-Dichloroethane	ND		2.0		ug/L			09/19/17 17:17	1
1,1-Dichloroethene	ND		4.0		ug/L			09/19/17 17:17	1

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

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

**Lab Sample ID: MB 580-256639/5**

**Matrix: Water**

**Analysis Batch: 256639**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2-Dichloropropane	ND		1.0		ug/L			09/19/17 17:17	1
1,3-Dichloropropane	ND		2.0		ug/L			09/19/17 17:17	1
2,2-Dichloropropane	ND		3.0		ug/L			09/19/17 17:17	1
1,1-Dichloropropene	ND		3.0		ug/L			09/19/17 17:17	1
Ethylbenzene	ND		3.0		ug/L			09/19/17 17:17	1
Ethylene Dibromide	ND		2.0		ug/L			09/19/17 17:17	1
Hexachlorobutadiene	ND		6.0		ug/L			09/19/17 17:17	1
Isopropylbenzene	ND		2.0		ug/L			09/19/17 17:17	1
4-Isopropyltoluene	ND		3.0		ug/L			09/19/17 17:17	1
Methylene Chloride	ND		5.0		ug/L			09/19/17 17:17	1
Methyl tert-butyl ether	ND		2.0		ug/L			09/19/17 17:17	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/19/17 17:17	1
Naphthalene	ND		4.0		ug/L			09/19/17 17:17	1
n-Butylbenzene	ND		3.0		ug/L			09/19/17 17:17	1
N-Propylbenzene	ND		3.0		ug/L			09/19/17 17:17	1
o-Xylene	ND		2.0		ug/L			09/19/17 17:17	1
sec-Butylbenzene	ND		3.0		ug/L			09/19/17 17:17	1
Styrene	ND		5.0		ug/L			09/19/17 17:17	1
tert-Butylbenzene	ND		3.0		ug/L			09/19/17 17:17	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/19/17 17:17	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			09/19/17 17:17	1
Tetrachloroethene	ND		3.0		ug/L			09/19/17 17:17	1
Toluene	ND		2.0		ug/L			09/19/17 17:17	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			09/19/17 17:17	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/19/17 17:17	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			09/19/17 17:17	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/19/17 17:17	1
1,1,1-Trichloroethane	ND		3.0		ug/L			09/19/17 17:17	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/19/17 17:17	1
Trichloroethene	ND		3.0		ug/L			09/19/17 17:17	1
Trichlorofluoromethane	ND		3.0		ug/L			09/19/17 17:17	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/19/17 17:17	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/19/17 17:17	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/19/17 17:17	1
Vinyl chloride	ND		1.0		ug/L			09/19/17 17:17	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	106		75 - 125		09/19/17 17:17	1
Dibromofluoromethane (Surr)	107		77 - 120		09/19/17 17:17	1
1,2-Dichloroethane-d4 (Surr)	92		80 - 126		09/19/17 17:17	1
Toluene-d8 (Surr)	92		80 - 122		09/19/17 17:17	1
Trifluorotoluene (Surr)	111		80 - 120		09/19/17 17:17	1

TestAmerica Seattle



# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

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

**Lab Sample ID: LCS 580-256639/6**

**Matrix: Water**

**Analysis Batch: 256639**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	10.0	10.6		ug/L		106	76 - 120
1,4-Dichlorobenzene	10.0	10.3		ug/L		103	80 - 120
1,1-Dichloroethane	10.0	9.60		ug/L		96	70 - 120
Ethylbenzene	10.0	9.63		ug/L		96	75 - 120
m-Xylene & p-Xylene	10.0	9.52		ug/L		95	75 - 120
n-Butylbenzene	10.0	10.2		ug/L		102	78 - 120
o-Xylene	10.0	9.49		ug/L		95	74 - 120
Tetrachloroethene	10.0	10.7		ug/L		107	76 - 124
Toluene	10.0	9.54		ug/L		95	75 - 120
1,1,1-Trichloroethane	10.0	10.3		ug/L		103	74 - 130
Trichloroethene	10.0	11.5		ug/L		115	70 - 125
1,2,4-Trimethylbenzene	10.0	9.77		ug/L		98	75 - 121
1,3,5-Trimethylbenzene	10.0	9.51		ug/L		95	75 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		75 - 125
Dibromofluoromethane (Surr)	105		77 - 120
1,2-Dichloroethane-d4 (Surr)	91		80 - 126
Toluene-d8 (Surr)	91		80 - 122
Trifluorotoluene (Surr)	111		80 - 120

**Lab Sample ID: LCSD 580-256639/7**

**Matrix: Water**

**Analysis Batch: 256639**

**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-1,2-Dichloroethene	10.0	10.8		ug/L		108	76 - 120	2	15
1,4-Dichlorobenzene	10.0	10.4		ug/L		104	80 - 120	2	17
1,1-Dichloroethane	10.0	9.69		ug/L		97	70 - 120	1	20
Ethylbenzene	10.0	9.62		ug/L		96	75 - 120	0	14
m-Xylene & p-Xylene	10.0	9.69		ug/L		97	75 - 120	2	14
n-Butylbenzene	10.0	10.2		ug/L		102	78 - 120	0	14
o-Xylene	10.0	9.67		ug/L		97	74 - 120	2	16
Tetrachloroethene	10.0	11.0		ug/L		110	76 - 124	3	20
Toluene	10.0	9.87		ug/L		99	75 - 120	3	13
1,1,1-Trichloroethane	10.0	10.4		ug/L		104	74 - 130	1	18
Trichloroethene	10.0	11.2		ug/L		112	70 - 125	2	15
1,2,4-Trimethylbenzene	10.0	9.72		ug/L		97	75 - 121	1	16
1,3,5-Trimethylbenzene	10.0	9.74		ug/L		97	75 - 122	2	14

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		75 - 125
Dibromofluoromethane (Surr)	104		77 - 120
1,2-Dichloroethane-d4 (Surr)	92		80 - 126
Toluene-d8 (Surr)	92		80 - 122
Trifluorotoluene (Surr)	112		80 - 120

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

## Method: 8260C - Volatile Organic Compounds by GC/MS - RA

**Lab Sample ID: 580-71203-2 MS**

**Matrix: Water**

**Analysis Batch: 256639**

**Client Sample ID: MW-2-W-090617**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS MS		Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
cis-1,2-Dichloroethene - RA	30		10.0	40.0		ug/L		105	70 - 111	
1,1-Dichloroethane - RA	3.9		10.0	13.5		ug/L		96	70 - 135	
<b>Surrogate</b>	<b>MS MS</b>		<b>Limits</b>							
	<b>%Recovery</b>	<b>Qualifier</b>								
4-Bromofluorobenzene (Surr) - RA	103		75 - 125							
Dibromofluoromethane (Surr) - RA	106		77 - 120							
1,2-Dichloroethane-d4 (Surr) - RA	91		80 - 126							
Toluene-d8 (Surr) - RA	90		80 - 122							
Trifluorotoluene (Surr) - RA	110		80 - 120							

**Lab Sample ID: 580-71203-2 MSD**

**Matrix: Water**

**Analysis Batch: 256639**

**Client Sample ID: MW-2-W-090617**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD MSD		Unit	D	%Rec	%Rec.	Limits	RPD	RPD	Limit
	Result	Qualifier		Result	Qualifier								
cis-1,2-Dichloroethene - RA	30		10.0	39.9		ug/L		104	70 - 111	0	35		
1,1-Dichloroethane - RA	3.9		10.0	13.3		ug/L		93	70 - 135	2	35		
<b>Surrogate</b>	<b>MSD MSD</b>		<b>Limits</b>										
	<b>%Recovery</b>	<b>Qualifier</b>											
4-Bromofluorobenzene (Surr) - RA	105		75 - 125										
Dibromofluoromethane (Surr) - RA	106		77 - 120										
1,2-Dichloroethane-d4 (Surr) - RA	91		80 - 126										
Toluene-d8 (Surr) - RA	92		80 - 122										
Trifluorotoluene (Surr) - RA	111		80 - 120										

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

**Lab Sample ID: MB 580-256072/6**

**Matrix: Water**

**Analysis Batch: 256072**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			09/13/17 15:14	1
<b>Surrogate</b>	<b>MB MB</b>		<b>Limits</b>						
	<b>%Recovery</b>	<b>Qualifier</b>							
Trifluorotoluene (Surr)	105		75 - 120						
4-Bromofluorobenzene (Surr)	87		68 - 119						

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

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

**Lab Sample ID: LCS 580-256072/7**

**Matrix: Water**

**Analysis Batch: 256072**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	1.04		mg/L		104	77 - 123
<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
Trifluorotoluene (Surr)	100		75 - 120				
4-Bromofluorobenzene (Surr)	92		68 - 119				

**Lab Sample ID: 580-71203-2 MS**

**Matrix: Water**

**Analysis Batch: 256072**

**Client Sample ID: MW-2-W-090617**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	ND		1.00	ND		mg/L		96	77 - 123
<b>Surrogate</b>	<b>MS %Recovery</b>	<b>MS Qualifier</b>	<b>Limits</b>						
Trifluorotoluene (Surr)	103		75 - 120						
4-Bromofluorobenzene (Surr)	93		68 - 119						

**Lab Sample ID: 580-71203-2 MSD**

**Matrix: Water**

**Analysis Batch: 256072**

**Client Sample ID: MW-2-W-090617**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Gasoline Range Organics (GRO) -C6-C10	ND		1.00	1.01		mg/L		101	77 - 123	6	20
<b>Surrogate</b>	<b>MSD %Recovery</b>	<b>MSD Qualifier</b>	<b>Limits</b>								
Trifluorotoluene (Surr)	102		75 - 120								
4-Bromofluorobenzene (Surr)	96		68 - 119								

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

**Lab Sample ID: MB 580-256013/1-A**

**Matrix: Water**

**Analysis Batch: 256323**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 256013**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	ND		0.10		mg/L		09/13/17 08:46	09/16/17 01:02	1
<b>Surrogate</b>	<b>MB %Recovery</b>	<b>MB Qualifier</b>	<b>Limits</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>			
o-Terphenyl	96		50 - 150	09/13/17 08:46	09/16/17 01:02	1			

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

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

**Lab Sample ID: LCS 580-256013/2-A**

**Matrix: Water**

**Analysis Batch: 256323**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 256013**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
DRO (nC10-<nC25)	2.00	1.90		mg/L		95	75 - 125
<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
<i>o</i> -Terphenyl	104		50 - 150				

**Lab Sample ID: LCSD 580-256013/3-A**

**Matrix: Water**

**Analysis Batch: 256323**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 256013**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
DRO (nC10-<nC25)	2.00	2.10		mg/L		105	75 - 125	10	16
<b>Surrogate</b>	<b>LCSD %Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>						
<i>o</i> -Terphenyl	111		50 - 150						

**Lab Sample ID: 580-71203-2 MS**

**Matrix: Water**

**Analysis Batch: 256323**

**Client Sample ID: MW-2-W-090617**

**Prep Type: Total/NA**

**Prep Batch: 256013**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
DRO (nC10-<nC25)	0.89	F1	2.07	2.15	F1	mg/L		61	75 - 125
<b>Surrogate</b>	<b>MS %Recovery</b>	<b>MS Qualifier</b>	<b>Limits</b>						
<i>o</i> -Terphenyl	102		50 - 150						

**Lab Sample ID: 580-71203-2 MSD**

**Matrix: Water**

**Analysis Batch: 256323**

**Client Sample ID: MW-2-W-090617**

**Prep Type: Total/NA**

**Prep Batch: 256013**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
DRO (nC10-<nC25)	0.89	F1	2.31	2.49	F1	mg/L		69	75 - 125	15	16
<b>Surrogate</b>	<b>MSD %Recovery</b>	<b>MSD Qualifier</b>	<b>Limits</b>								
<i>o</i> -Terphenyl	99		50 - 150								

TestAmerica Seattle

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: MW-1-W-090517**

**Lab Sample ID: 580-71203-1**

**Date Collected: 09/05/17 15:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	DL	100	256639	09/19/17 22:39	CJ	TAL SEA
Total/NA	Analysis	8260C		1	256318	09/15/17 17:37	IWH	TAL SEA
Total/NA	Analysis	AK101		1	256072	09/13/17 23:16	RSB	TAL SEA
Total/NA	Prep	3510C			256013	09/13/17 08:46	NDB	TAL SEA
Total/NA	Analysis	AK102 & 103		1	256323	09/16/17 04:20	T1W	TAL SEA

**Client Sample ID: MW-2-W-090617**

**Lab Sample ID: 580-71203-2**

**Date Collected: 09/06/17 08:40**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	RA	1	256639	09/20/17 00:19	CJ	TAL SEA
Total/NA	Analysis	8260C		1	256318	09/15/17 21:09	IWH	TAL SEA
Total/NA	Analysis	AK101		1	256072	09/13/17 23:48	RSB	TAL SEA
Total/NA	Prep	3510C			256013	09/13/17 08:46	NDB	TAL SEA
Total/NA	Analysis	AK102 & 103		1	256323	09/16/17 05:04	T1W	TAL SEA

**Client Sample ID: MW-4-W-090517**

**Lab Sample ID: 580-71203-3**

**Date Collected: 09/05/17 12:15**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	RA	1	256639	09/19/17 21:23	CJ	TAL SEA
Total/NA	Analysis	8260C		1	256318	09/15/17 18:03	IWH	TAL SEA
Total/NA	Analysis	AK101		1	256072	09/14/17 01:25	RSB	TAL SEA
Total/NA	Prep	3510C			256013	09/13/17 08:46	NDB	TAL SEA
Total/NA	Analysis	AK102 & 103		1	256323	09/16/17 06:10	T1W	TAL SEA

**Client Sample ID: MW-5-W-090617**

**Lab Sample ID: 580-71203-4**

**Date Collected: 09/06/17 07:50**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	DL	100	256639	09/19/17 23:28	CJ	TAL SEA
Total/NA	Analysis	8260C		1	256318	09/15/17 18:29	IWH	TAL SEA
Total/NA	Analysis	AK101		1	256072	09/14/17 01:57	RSB	TAL SEA
Total/NA	Prep	3510C			256013	09/13/17 08:46	NDB	TAL SEA
Total/NA	Analysis	AK102 & 103		1	256323	09/16/17 06:32	T1W	TAL SEA

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: MW-7-W-090517**

**Lab Sample ID: 580-71203-5**

**Date Collected: 09/05/17 13:45**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	RA	1	256639	09/19/17 21:48	CJ	TAL SEA
Total/NA	Analysis	8260C		1	256318	09/15/17 18:57	IWH	TAL SEA
Total/NA	Analysis	AK101		1	256072	09/14/17 03:01	RSB	TAL SEA
Total/NA	Prep	3510C			256013	09/13/17 08:46	NDB	TAL SEA
Total/NA	Analysis	AK102 & 103		1	256323	09/16/17 06:54	T1W	TAL SEA

**Client Sample ID: BD-1-W-090517**

**Lab Sample ID: 580-71203-6**

**Date Collected: 09/05/17 00:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	RA	1	256639	09/19/17 22:14	CJ	TAL SEA
Total/NA	Analysis	8260C		1	256318	09/15/17 19:23	IWH	TAL SEA
Total/NA	Analysis	AK101		1	256072	09/14/17 03:33	RSB	TAL SEA
Total/NA	Prep	3510C			256013	09/13/17 08:46	NDB	TAL SEA
Total/NA	Analysis	AK102 & 103		1	256323	09/16/17 07:16	T1W	TAL SEA

**Client Sample ID: BD-2-W-090617**

**Lab Sample ID: 580-71203-7**

**Date Collected: 09/06/17 00:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	DL	100	256639	09/19/17 23:54	CJ	TAL SEA
Total/NA	Analysis	8260C		1	256318	09/15/17 19:50	IWH	TAL SEA
Total/NA	Analysis	AK101		1	256072	09/14/17 04:05	RSB	TAL SEA
Total/NA	Prep	3510C			256013	09/13/17 08:46	NDB	TAL SEA
Total/NA	Analysis	AK102 & 103		1	256323	09/16/17 07:38	T1W	TAL SEA

**Client Sample ID: Trip Blank**

**Lab Sample ID: 580-71203-8**

**Date Collected: 09/05/17 00:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	256318	09/15/17 20:16	IWH	TAL SEA
Total/NA	Analysis	AK101		1	256072	09/13/17 17:54	RSB	TAL SEA

**Client Sample ID: EB-1-W-090617**

**Lab Sample ID: 580-71203-9**

**Date Collected: 09/06/17 09:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	256318	09/15/17 20:43	IWH	TAL SEA

TestAmerica Seattle

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	AK101		1	256072	09/14/17 04:38	RSB	TAL SEA
Total/NA	Prep	3510C			256013	09/13/17 08:46	NDB	TAL SEA
Total/NA	Analysis	AK102 & 103		1	256323	09/16/17 08:00	T1W	TAL SEA

### Laboratory References:

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



# Accreditation/Certification Summary

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

## Laboratory: TestAmerica Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-02-18

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11



# Sample Summary

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

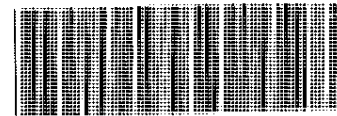
Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-71203-1	MW-1-W-090517	Water	09/05/17 15:00	09/08/17 12:30
580-71203-2	MW-2-W-090617	Water	09/06/17 08:40	09/08/17 12:30
580-71203-3	MW-4-W-090517	Water	09/05/17 12:15	09/08/17 12:30
580-71203-4	MW-5-W-090617	Water	09/06/17 07:50	09/08/17 12:30
580-71203-5	MW-7-W-090517	Water	09/05/17 13:45	09/08/17 12:30
580-71203-6	BD-1-W-090517	Water	09/05/17 00:00	09/08/17 12:30
580-71203-7	BD-2-W-090617	Water	09/06/17 00:00	09/08/17 12:30
580-71203-8	Trip Blank	Water	09/05/17 00:00	09/08/17 12:30
580-71203-9	EB-1-W-090617	Water	09/06/17 09:00	09/08/17 12:30

Loc: 580  
71203

TestAmerica Seattle

5755 8th Street East  
Tacoma, WA 98424  
Phone (253) 922-2310 Fax (253) 922-5047

Chain of Custody Record



580-71203 Chain of Custody

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

<b>Client Information</b>		Sampler: <u>M. MacDaniel</u>		Lab PM: Allen, Kristine D		Carrier Tracking No(s):		COC No: 580-25483-8411.1																																																																																									
Client Contact: Anna Hagemeister		Phone: <u>206-465-3161</u>		E-Mail: kristine.allen@testamericainc.com				Page: Page 1 of 2																																																																																									
Company: ARCADIS U.S., Inc.				<b>Analysis Requested</b>						Job #																																																																																							
Address: 630 Plaza Drive Suite 100				Due Date Requested:		<table border="1"> <tr> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>8260C - VOCs</th> <th>AK102_103 - AK102 (PRO)</th> <th>AK101 - AK101</th> <th>8260C, AK101</th> <th>Total Number of containers</th> </tr> <tr> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>5</td> </tr> <tr> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>6</td> </tr> <tr> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>6</td> </tr> <tr> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>6</td> </tr> <tr> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>6</td> </tr> <tr> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>6</td> </tr> <tr> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>6</td> </tr> <tr> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>6</td> </tr> <tr> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>6</td> </tr> <tr> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>4</td> </tr> <tr> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>6</td> </tr> </table>						Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - VOCs	AK102_103 - AK102 (PRO)	AK101 - AK101	8260C, AK101	Total Number of containers	X	X	X	X	X	X	5	X	X	X	X	X	X	6	X	X	X	X	X	X	6	X	X	X	X	X	X	6	X	X	X	X	X	X	6	X	X	X	X	X	X	6	X	X	X	X	X	X	6	X	X	X	X	X	X	6	X	X	X	X	X	X	6	X	X	X	X	X	X	4	X	X	X	X	X	X	6	Preservation Codes: A - HCL      M - Hexane B - NaOH      N - None C - Zn Acetate      O - AsNaO2 D - Nitric Acid      P - Na2O4S E - NaHSO4      Q - Na2SO3 F - MeOH      R - Na2S2O3 G - Amcnlor      S - H2SO4 H - Ascorbic Acid      T - TSP Dodecahydrate I - Ice      U - Acetone J - DI Water      V - MCAA K - EDTA      W - pH 4-5 L - EDA      Z - other (specify)	
Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - VOCs	AK102_103 - AK102 (PRO)	AK101 - AK101	8260C, AK101							Total Number of containers																																																																																					
X	X	X	X	X	X							5																																																																																					
X	X	X	X	X	X							6																																																																																					
X	X	X	X	X	X	6																																																																																											
X	X	X	X	X	X	6																																																																																											
X	X	X	X	X	X	6																																																																																											
X	X	X	X	X	X	6																																																																																											
X	X	X	X	X	X	6																																																																																											
X	X	X	X	X	X	6																																																																																											
X	X	X	X	X	X	6																																																																																											
X	X	X	X	X	X	4																																																																																											
X	X	X	X	X	X	6																																																																																											
Address: 630 Plaza Drive Suite 100				TAT Requested (days): <u>Standard 10 day</u>								Other:																																																																																					
City: Highlands Ranch				PO #								Special Instructions/Note:																																																																																					
State, Zip: CO, 80129-2377				B0031255.1403.00005																																																																																													
Phone: 919-415-2308(Tel)				WO #																																																																																													
Email: anna.hagemeister@arcadis-us.com				Project #																																																																																													
Project Name: GE Kenai				SSOW#																																																																																													
Site: <u>W.K.K., AK</u>																																																																																																	
<b>Sample Identification</b>		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=wast/wal, BT=Tissue, A=Air)		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		8260C - VOCs		AK102_103 - AK102 (PRO)		AK101 - AK101		8260C, AK101		Total Number of containers		Special Instructions/Note:																																																																									
MW-1-W-090517		9/5/17		1500		G		Water		X		X		X		X		X		X		X		TB AZ Cooler Cor 0.2 Unc 0.6 Cooler Desc by DLR un@Lab Wet Packs Packing Double Custody Seal: (Yes) No Good																																																																									
MW-2-W-090617		9/6/17		840		G		Water		X		X		X		X		X		X		X																																																																											
MW-4-W-090517		9/5/17		1215		G		Water		X		X		X		X		X		X		X																																																																											
MW-5-W-090617		9/6/17		750		G		Water		X		X		X		X		X		X		X																																																																											
MW-7-W-090517		9/5/17		1345		G		Water		X		X		X		X		X		X		X																																																																											
BD-1-W-090517		9/5/17		-		G		Water		X		X		X		X		X		X		X																																																																											
BD-2-W-090617		9/6/17		-		G		Water		X		X		X		X		X		X		X																																																																											
MS-W-090617		9/6/17		840		G		Water		X		X		X		X		X		X		X																																																																											
MSD-W-090617		9/6/17		840		G		Water		X		X		X		X		X		X		X																																																																											
Trip Blank		-		-		-		Water		X		X		X		X		X		X		X																																																																											
EB-1-W-090617		9/6/17		900		G		Water		X		X		X		X		X		X		X																																																																											
<b>Possible Hazard Identification</b>				<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological				<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b>																																																																																									
Deliverable Requested: I, II(III) IV, Other (specify)								<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months																																																																																									
Special Instructions/QC Requirements:																																																																																																	
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:																																																																																											
Relinquished by: <u>[Signature]</u>		Date/Time: 9/7/17 @ 940		Company: ARCADIS		Received by: <u>[Signature]</u>		Date/Time: 9/7/17 10:07		Company: TA- AK																																																																																							
Relinquished by: <u>[Signature]</u>		Date/Time: 9/7/17 15:30		Company: TA- AK		Received by: <u>[Signature]</u>		Date/Time: 9/8/17 12:30		Company: TA- Sea																																																																																							
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:		Company:																																																																																							
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 43A ac - 2.7 °C		Page 42 of 43																																																																																											

# Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 580-71203-1

**Login Number: 71203**

**List Source: TestAmerica Seattle**

**List Number: 1**

**Creator: Ponce-McDermott, Monica**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
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	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	False	No time on COC or sample containers
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	False	Headspace larger than 1/4".
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

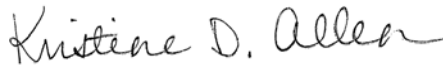
## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Seattle  
5755 8th Street East  
Tacoma, WA 98424  
Tel: (253)922-2310

TestAmerica Job ID: 580-76037-1  
Client Project/Site: GE Nikiski  
Revision: 1

For:  
ARCADIS U.S. Inc  
4915 Prospectus Drive  
Suite G  
Durham, North Carolina 27713

Attn: Mr. Matthew Pelton



Authorized for release by:  
4/11/2018 11:56:01 AM

Kristine Allen, Manager of Project Management  
(253)248-4970  
[kristine.allen@testamericainc.com](mailto:kristine.allen@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

1

2

3

4

5

6

7

8

9

10

11



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Definitions . . . . .	5
Client Sample Results . . . . .	6
QC Sample Results . . . . .	36
Chronicle . . . . .	48
Certification Summary . . . . .	52
Sample Summary . . . . .	53
Chain of Custody . . . . .	54
Receipt Checklists . . . . .	56

# Case Narrative

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

## Job ID: 580-76037-1

### Laboratory: TestAmerica Seattle

#### Narrative

**Report was revised 4-11-18 to remove results for the MS and MSD samples that were not spiked due to a log in error.**

#### Receipt

The samples were received on 3/23/2018 9:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were -0.2° C and 1.2° C.

#### Receipt Exceptions

One container for the following samples were received broken: MS (580-76037-14) and Trip Blank (580-76037-17).  
1 HCL VOA Vial for each samples were received broken.

Do to a log in error, the samples designated as 'MS' and 'MSD' were not logged in to be spiked by the lab. They were logged in as discrete samples and not spiked.

#### GC/MS VOA

Method(s) 8260C: The laboratory control sample duplicate (LCSD) for analytical batch 580-270476 recovered outside control limits for Bromoform. This analyte was biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch analytical batch 580-270547 recovered outside control limits for multiple analytes. With the exception of Bromoform, the individual recoveries of both the LCS and LCSD met the acceptance criteria.

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-1 (580-76037-1), MW-2 (580-76037-2), MW-5 (580-76037-5) and BD-2 (580-76037-13). Elevated reporting limits (RLs) are provided.

Method(s) AK101: The surrogate recovery for the blank associated with analytical batch 580-270332 was outside the upper control limits. The surrogate recovery for the LCS and LCSD met the acceptance criteria.

Method(s) AK101: Surrogate recovery for the following samples were outside control limits: MW-5 (580-76037-5) and BD-2 (580-76037-13). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

#### GC Semi VOA

Method(s) AK102 & 103: The following samples were re-extracted due to low LCS recovery for DRO (nC10-<nC25). The re-extraction event contained an LCSD with low DRO (nC10-<nC25) recovery. There is no sample volume remaining for further extractions; both sets of data have been reported. MW-1 (580-76037-1), MW-2 (580-76037-2), MW-3 (580-76037-3), MW-4 (580-76037-4), MW-5 (580-76037-5), MW-6 (580-76037-6), MW-7 (580-76037-7), MW-8 (580-76037-8), MW-9 (580-76037-9), MW-10 (580-76037-10), MW-11 (580-76037-11), BD-1 (580-76037-12), BD-2 (580-76037-13), EB (580-76037-16) and (LCS 580-270270/2-A)

Method(s) AK102 & 103: The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was earlier than the typical diesel fuel pattern used by the laboratory for quantitative purposes: MW-1 (580-76037-1) and MW-5 (580-76037-5).

Method(s) AK102 & 103: The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: MW-3 (580-76037-3) and MW-4 (580-76037-4).

Method(s) AK102 & 103: Surrogate recovery for the following samples were outside control limits: MW-7 (580-76037-7), MW-8 (580-76037-8), MW-9 (580-76037-9), BD-1 (580-76037-12) and BD-2 (580-76037-13). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) AK102 & 103: The following sample contained a hydrocarbon pattern in the diesel range; however, the elution pattern was earlier than the typical diesel fuel pattern used by the laboratory for quantitative purposes: BD-2 (580-76037-13).

Method(s) AK102 & 103: The following sample contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: EB (580-76037-16).

# Case Narrative

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

---

## Job ID: 580-76037-1 (Continued)

---

### Laboratory: TestAmerica 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.

1

2

3

4

5

6

7

8

9

10

11

# Definitions/Glossary

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### GC VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

### GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
X	Surrogate is outside control limits
*	RPD of the LCS and LCSD exceeds the control limits

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-1**  
**Date Collected: 03/21/18 14:20**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-1**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/02/18 20:33	1
Bromobenzene	ND		2.0		ug/L			04/02/18 20:33	1
Bromoform	ND		3.0		ug/L			04/02/18 20:33	1
Bromomethane	ND		6.0		ug/L			04/02/18 20:33	1
Carbon tetrachloride	ND		3.0		ug/L			04/02/18 20:33	1
Chlorobenzene	ND		2.0		ug/L			04/02/18 20:33	1
Chlorobromomethane	ND		2.0		ug/L			04/02/18 20:33	1
Chlorodibromomethane	ND		1.0		ug/L			04/02/18 20:33	1
Chloroethane	ND		5.0		ug/L			04/02/18 20:33	1
Chloroform	ND		5.0		ug/L			04/02/18 20:33	1
Chloromethane	ND		20		ug/L			04/02/18 20:33	1
2-Chlorotoluene	ND		3.0		ug/L			04/02/18 20:33	1
4-Chlorotoluene	ND		2.0		ug/L			04/02/18 20:33	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 20:33	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/02/18 20:33	1
Dibromomethane	ND		2.0		ug/L			04/02/18 20:33	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/02/18 20:33	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/02/18 20:33	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/02/18 20:33	1
Dichlorobromomethane	ND		2.0		ug/L			04/02/18 20:33	1
Dichlorodifluoromethane	ND		10		ug/L			04/02/18 20:33	1
<b>1,1-Dichloroethane</b>	<b>6.9</b>		2.0		ug/L			04/02/18 20:33	1
1,2-Dichloroethane	ND		2.0		ug/L			04/02/18 20:33	1
1,1-Dichloroethene	ND		4.0		ug/L			04/02/18 20:33	1
1,2-Dichloropropane	ND		1.0		ug/L			04/02/18 20:33	1
1,3-Dichloropropane	ND		2.0		ug/L			04/02/18 20:33	1
2,2-Dichloropropane	ND		3.0		ug/L			04/02/18 20:33	1
1,1-Dichloropropene	ND		3.0		ug/L			04/02/18 20:33	1
<b>Ethylbenzene</b>	<b>15</b>		3.0		ug/L			04/02/18 20:33	1
Ethylene Dibromide	ND		2.0		ug/L			04/02/18 20:33	1
Hexachlorobutadiene	ND		6.0		ug/L			04/02/18 20:33	1
Isopropylbenzene	ND		2.0		ug/L			04/02/18 20:33	1
4-Isopropyltoluene	ND		3.0		ug/L			04/02/18 20:33	1
Methylene Chloride	ND		5.0		ug/L			04/02/18 20:33	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/02/18 20:33	1
<b>m-Xylene &amp; p-Xylene</b>	<b>20</b>		3.0		ug/L			04/02/18 20:33	1
Naphthalene	ND		4.0		ug/L			04/02/18 20:33	1
n-Butylbenzene	ND		3.0		ug/L			04/02/18 20:33	1
N-Propylbenzene	ND		3.0		ug/L			04/02/18 20:33	1
<b>o-Xylene</b>	<b>9.8</b>		2.0		ug/L			04/02/18 20:33	1
sec-Butylbenzene	ND		3.0		ug/L			04/02/18 20:33	1
Styrene	ND		5.0		ug/L			04/02/18 20:33	1
tert-Butylbenzene	ND		3.0		ug/L			04/02/18 20:33	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/02/18 20:33	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/02/18 20:33	1
<b>Tetrachloroethene</b>	<b>40</b>		3.0		ug/L			04/02/18 20:33	1
Toluene	ND		2.0		ug/L			04/02/18 20:33	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 20:33	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 20:33	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-1**  
**Date Collected: 03/21/18 14:20**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-1**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/02/18 20:33	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/02/18 20:33	1
<b>1,1,1-Trichloroethane</b>	<b>3.9</b>		3.0		ug/L			04/02/18 20:33	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/02/18 20:33	1
<b>Trichloroethene</b>	<b>19</b>		3.0		ug/L			04/02/18 20:33	1
Trichlorofluoromethane	ND		3.0		ug/L			04/02/18 20:33	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/02/18 20:33	1
<b>1,2,4-Trimethylbenzene</b>	<b>3.7</b>		3.0		ug/L			04/02/18 20:33	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			04/02/18 20:33	1
Vinyl chloride	ND		1.0		ug/L			04/02/18 20:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 125					04/02/18 20:33	1
Dibromofluoromethane (Surr)	101		77 - 120					04/02/18 20:33	1
1,2-Dichloroethane-d4 (Surr)	103		80 - 126					04/02/18 20:33	1
Toluene-d8 (Surr)	101		80 - 122					04/02/18 20:33	1
Trifluorotoluene (Surr)	100		80 - 120					04/02/18 20:33	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>180</b>		30		ug/L			04/04/18 15:16	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		75 - 125					04/04/18 15:16	10
Dibromofluoromethane (Surr)	104		77 - 120					04/04/18 15:16	10
1,2-Dichloroethane-d4 (Surr)	105		80 - 126					04/04/18 15:16	10
Toluene-d8 (Surr)	97		80 - 122					04/04/18 15:16	10
Trifluorotoluene (Surr)	106		80 - 120					04/04/18 15:16	10

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			03/31/18 18:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	116		75 - 120					03/31/18 18:13	1
4-Bromofluorobenzene (Surr)	92		68 - 119					03/31/18 18:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>0.92</b>	*	0.11		mg/L		03/30/18 13:35	04/02/18 19:22	1
<b>DRO (nC10-&lt;nC25)</b>	<b>0.74</b>	*	0.11		mg/L		04/03/18 13:07	04/04/18 23:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	59		50 - 150				03/30/18 13:35	04/02/18 19:22	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-2**  
**Date Collected: 03/21/18 12:45**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-2**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/02/18 21:02	1
Bromobenzene	ND		2.0		ug/L			04/02/18 21:02	1
Bromoform	ND		3.0		ug/L			04/02/18 21:02	1
Bromomethane	ND		6.0		ug/L			04/02/18 21:02	1
Carbon tetrachloride	ND		3.0		ug/L			04/02/18 21:02	1
Chlorobenzene	ND		2.0		ug/L			04/02/18 21:02	1
Chlorobromomethane	ND		2.0		ug/L			04/02/18 21:02	1
Chlorodibromomethane	ND		1.0		ug/L			04/02/18 21:02	1
Chloroethane	ND		5.0		ug/L			04/02/18 21:02	1
Chloroform	ND		5.0		ug/L			04/02/18 21:02	1
Chloromethane	ND		20		ug/L			04/02/18 21:02	1
2-Chlorotoluene	ND		3.0		ug/L			04/02/18 21:02	1
4-Chlorotoluene	ND		2.0		ug/L			04/02/18 21:02	1
<b>cis-1,2-Dichloroethene</b>	<b>72</b>		3.0		ug/L			04/02/18 21:02	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 21:02	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/02/18 21:02	1
Dibromomethane	ND		2.0		ug/L			04/02/18 21:02	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/02/18 21:02	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/02/18 21:02	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/02/18 21:02	1
Dichlorobromomethane	ND		2.0		ug/L			04/02/18 21:02	1
Dichlorodifluoromethane	ND		10		ug/L			04/02/18 21:02	1
<b>1,1-Dichloroethane</b>	<b>7.0</b>		2.0		ug/L			04/02/18 21:02	1
1,2-Dichloroethane	ND		2.0		ug/L			04/02/18 21:02	1
1,1-Dichloroethene	ND		4.0		ug/L			04/02/18 21:02	1
1,2-Dichloropropane	ND		1.0		ug/L			04/02/18 21:02	1
1,3-Dichloropropane	ND		2.0		ug/L			04/02/18 21:02	1
2,2-Dichloropropane	ND		3.0		ug/L			04/02/18 21:02	1
1,1-Dichloropropene	ND		3.0		ug/L			04/02/18 21:02	1
<b>Ethylbenzene</b>	<b>83</b>		3.0		ug/L			04/02/18 21:02	1
Ethylene Dibromide	ND		2.0		ug/L			04/02/18 21:02	1
Hexachlorobutadiene	ND		6.0		ug/L			04/02/18 21:02	1
Isopropylbenzene	ND		2.0		ug/L			04/02/18 21:02	1
4-Isopropyltoluene	ND		3.0		ug/L			04/02/18 21:02	1
Methylene Chloride	ND		5.0		ug/L			04/02/18 21:02	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/02/18 21:02	1
Naphthalene	ND		4.0		ug/L			04/02/18 21:02	1
n-Butylbenzene	ND		3.0		ug/L			04/02/18 21:02	1
N-Propylbenzene	ND		3.0		ug/L			04/02/18 21:02	1
<b>o-Xylene</b>	<b>30</b>		2.0		ug/L			04/02/18 21:02	1
sec-Butylbenzene	ND		3.0		ug/L			04/02/18 21:02	1
Styrene	ND		5.0		ug/L			04/02/18 21:02	1
tert-Butylbenzene	ND		3.0		ug/L			04/02/18 21:02	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/02/18 21:02	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/02/18 21:02	1
Tetrachloroethene	ND		3.0		ug/L			04/02/18 21:02	1
Toluene	ND		2.0		ug/L			04/02/18 21:02	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 21:02	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 21:02	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-2**  
**Date Collected: 03/21/18 12:45**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-2**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/02/18 21:02	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/02/18 21:02	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/02/18 21:02	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/02/18 21:02	1
Trichloroethene	ND		3.0		ug/L			04/02/18 21:02	1
Trichlorofluoromethane	ND		3.0		ug/L			04/02/18 21:02	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/02/18 21:02	1
<b>1,2,4-Trimethylbenzene</b>	<b>17</b>		3.0		ug/L			04/02/18 21:02	1
<b>1,3,5-Trimethylbenzene</b>	<b>5.6</b>		3.0		ug/L			04/02/18 21:02	1
Vinyl chloride	ND		1.0		ug/L			04/02/18 21:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		75 - 125		04/02/18 21:02	1
Dibromofluoromethane (Surr)	98		77 - 120		04/02/18 21:02	1
1,2-Dichloroethane-d4 (Surr)	101		80 - 126		04/02/18 21:02	1
Toluene-d8 (Surr)	100		80 - 122		04/02/18 21:02	1
Trifluorotoluene (Surr)	98		80 - 120		04/02/18 21:02	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>m-Xylene &amp; p-Xylene</b>	<b>96</b>		30		ug/L			04/04/18 15:44	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		75 - 125		04/04/18 15:44	10
Dibromofluoromethane (Surr)	105		77 - 120		04/04/18 15:44	10
1,2-Dichloroethane-d4 (Surr)	103		80 - 126		04/04/18 15:44	10
Toluene-d8 (Surr)	101		80 - 122		04/04/18 15:44	10
Trifluorotoluene (Surr)	105		80 - 120		04/04/18 15:44	10

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			03/31/18 18:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	118		75 - 120		03/31/18 18:45	1
4-Bromofluorobenzene (Surr)	95		68 - 119		03/31/18 18:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>0.33</b>	*	0.11		mg/L		03/30/18 13:35	04/02/18 19:50	1
<b>DRO (nC10-&lt;nC25)</b>	<b>0.29</b>	*	0.12		mg/L		04/03/18 13:07	04/05/18 00:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
o-Terphenyl	56		50 - 150		03/30/18 13:35	04/02/18 19:50	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-3**  
**Date Collected: 03/21/18 13:40**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-3**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/02/18 21:30	1
Bromobenzene	ND		2.0		ug/L			04/02/18 21:30	1
Bromoform	ND		3.0		ug/L			04/02/18 21:30	1
Bromomethane	ND		6.0		ug/L			04/02/18 21:30	1
Carbon tetrachloride	ND		3.0		ug/L			04/02/18 21:30	1
Chlorobenzene	ND		2.0		ug/L			04/02/18 21:30	1
Chlorobromomethane	ND		2.0		ug/L			04/02/18 21:30	1
Chlorodibromomethane	ND		1.0		ug/L			04/02/18 21:30	1
Chloroethane	ND		5.0		ug/L			04/02/18 21:30	1
Chloroform	ND		5.0		ug/L			04/02/18 21:30	1
Chloromethane	ND		20		ug/L			04/02/18 21:30	1
2-Chlorotoluene	ND		3.0		ug/L			04/02/18 21:30	1
4-Chlorotoluene	ND		2.0		ug/L			04/02/18 21:30	1
<b>cis-1,2-Dichloroethene</b>	<b>5.3</b>		3.0		ug/L			04/02/18 21:30	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 21:30	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/02/18 21:30	1
Dibromomethane	ND		2.0		ug/L			04/02/18 21:30	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/02/18 21:30	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/02/18 21:30	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/02/18 21:30	1
Dichlorobromomethane	ND		2.0		ug/L			04/02/18 21:30	1
Dichlorodifluoromethane	ND		10		ug/L			04/02/18 21:30	1
<b>1,1-Dichloroethane</b>	<b>5.2</b>		2.0		ug/L			04/02/18 21:30	1
1,2-Dichloroethane	ND		2.0		ug/L			04/02/18 21:30	1
1,1-Dichloroethene	ND		4.0		ug/L			04/02/18 21:30	1
1,2-Dichloropropane	ND		1.0		ug/L			04/02/18 21:30	1
1,3-Dichloropropane	ND		2.0		ug/L			04/02/18 21:30	1
2,2-Dichloropropane	ND		3.0		ug/L			04/02/18 21:30	1
1,1-Dichloropropene	ND		3.0		ug/L			04/02/18 21:30	1
Ethylbenzene	ND		3.0		ug/L			04/02/18 21:30	1
Ethylene Dibromide	ND		2.0		ug/L			04/02/18 21:30	1
Hexachlorobutadiene	ND		6.0		ug/L			04/02/18 21:30	1
Isopropylbenzene	ND		2.0		ug/L			04/02/18 21:30	1
4-Isopropyltoluene	ND		3.0		ug/L			04/02/18 21:30	1
Methylene Chloride	ND		5.0		ug/L			04/02/18 21:30	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/02/18 21:30	1
m-Xylene & p-Xylene	ND		3.0		ug/L			04/02/18 21:30	1
Naphthalene	ND		4.0		ug/L			04/02/18 21:30	1
n-Butylbenzene	ND		3.0		ug/L			04/02/18 21:30	1
N-Propylbenzene	ND		3.0		ug/L			04/02/18 21:30	1
o-Xylene	ND		2.0		ug/L			04/02/18 21:30	1
sec-Butylbenzene	ND		3.0		ug/L			04/02/18 21:30	1
Styrene	ND		5.0		ug/L			04/02/18 21:30	1
tert-Butylbenzene	ND		3.0		ug/L			04/02/18 21:30	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/02/18 21:30	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/02/18 21:30	1
Tetrachloroethene	ND		3.0		ug/L			04/02/18 21:30	1
Toluene	ND		2.0		ug/L			04/02/18 21:30	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 21:30	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-3**  
**Date Collected: 03/21/18 13:40**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-3**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 21:30	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/02/18 21:30	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/02/18 21:30	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/02/18 21:30	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/02/18 21:30	1
Trichloroethene	ND		3.0		ug/L			04/02/18 21:30	1
Trichlorofluoromethane	ND		3.0		ug/L			04/02/18 21:30	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/02/18 21:30	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			04/02/18 21:30	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			04/02/18 21:30	1
Vinyl chloride	ND		1.0		ug/L			04/02/18 21:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		75 - 125		04/02/18 21:30	1
Dibromofluoromethane (Surr)	102		77 - 120		04/02/18 21:30	1
1,2-Dichloroethane-d4 (Surr)	103		80 - 126		04/02/18 21:30	1
Toluene-d8 (Surr)	103		80 - 122		04/02/18 21:30	1
Trifluorotoluene (Surr)	101		80 - 120		04/02/18 21:30	1

### Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			03/31/18 19:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	117		75 - 120		03/31/18 19:17	1
4-Bromofluorobenzene (Surr)	88		68 - 119		03/31/18 19:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	0.19	*	0.12		mg/L		03/30/18 13:35	04/02/18 20:17	1
DRO (nC10-<nC25)	0.17	*	0.12		mg/L		04/03/18 13:07	04/05/18 00:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	60		50 - 150	03/30/18 13:35	04/02/18 20:17	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-4**  
**Date Collected: 03/20/18 11:55**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-4**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/02/18 21:59	1
Bromobenzene	ND		2.0		ug/L			04/02/18 21:59	1
Bromoform	ND		3.0		ug/L			04/02/18 21:59	1
Bromomethane	ND		6.0		ug/L			04/02/18 21:59	1
Carbon tetrachloride	ND		3.0		ug/L			04/02/18 21:59	1
Chlorobenzene	ND		2.0		ug/L			04/02/18 21:59	1
Chlorobromomethane	ND		2.0		ug/L			04/02/18 21:59	1
Chlorodibromomethane	ND		1.0		ug/L			04/02/18 21:59	1
Chloroethane	ND		5.0		ug/L			04/02/18 21:59	1
Chloroform	ND		5.0		ug/L			04/02/18 21:59	1
Chloromethane	ND		20		ug/L			04/02/18 21:59	1
2-Chlorotoluene	ND		3.0		ug/L			04/02/18 21:59	1
4-Chlorotoluene	ND		2.0		ug/L			04/02/18 21:59	1
cis-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 21:59	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 21:59	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/02/18 21:59	1
Dibromomethane	ND		2.0		ug/L			04/02/18 21:59	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/02/18 21:59	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/02/18 21:59	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/02/18 21:59	1
Dichlorobromomethane	ND		2.0		ug/L			04/02/18 21:59	1
Dichlorodifluoromethane	ND		10		ug/L			04/02/18 21:59	1
1,1-Dichloroethane	ND		2.0		ug/L			04/02/18 21:59	1
1,2-Dichloroethane	ND		2.0		ug/L			04/02/18 21:59	1
1,1-Dichloroethene	ND		4.0		ug/L			04/02/18 21:59	1
1,2-Dichloropropane	ND		1.0		ug/L			04/02/18 21:59	1
1,3-Dichloropropane	ND		2.0		ug/L			04/02/18 21:59	1
2,2-Dichloropropane	ND		3.0		ug/L			04/02/18 21:59	1
1,1-Dichloropropene	ND		3.0		ug/L			04/02/18 21:59	1
Ethylbenzene	ND		3.0		ug/L			04/02/18 21:59	1
Ethylene Dibromide	ND		2.0		ug/L			04/02/18 21:59	1
Hexachlorobutadiene	ND		6.0		ug/L			04/02/18 21:59	1
Isopropylbenzene	ND		2.0		ug/L			04/02/18 21:59	1
4-Isopropyltoluene	ND		3.0		ug/L			04/02/18 21:59	1
Methylene Chloride	ND		5.0		ug/L			04/02/18 21:59	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/02/18 21:59	1
m-Xylene & p-Xylene	ND		3.0		ug/L			04/02/18 21:59	1
Naphthalene	ND		4.0		ug/L			04/02/18 21:59	1
n-Butylbenzene	ND		3.0		ug/L			04/02/18 21:59	1
N-Propylbenzene	ND		3.0		ug/L			04/02/18 21:59	1
o-Xylene	ND		2.0		ug/L			04/02/18 21:59	1
sec-Butylbenzene	ND		3.0		ug/L			04/02/18 21:59	1
Styrene	ND		5.0		ug/L			04/02/18 21:59	1
tert-Butylbenzene	ND		3.0		ug/L			04/02/18 21:59	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/02/18 21:59	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/02/18 21:59	1
<b>Tetrachloroethene</b>	<b>14</b>		3.0		ug/L			04/02/18 21:59	1
Toluene	ND		2.0		ug/L			04/02/18 21:59	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 21:59	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-4**

**Lab Sample ID: 580-76037-4**

**Date Collected: 03/20/18 11:55**

**Matrix: Water**

**Date Received: 03/23/18 09:25**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 21:59	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/02/18 21:59	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/02/18 21:59	1
<b>1,1,1-Trichloroethane</b>	<b>3.3</b>		3.0		ug/L			04/02/18 21:59	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/02/18 21:59	1
<b>Trichloroethene</b>	<b>4.6</b>		3.0		ug/L			04/02/18 21:59	1
Trichlorofluoromethane	ND		3.0		ug/L			04/02/18 21:59	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/02/18 21:59	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			04/02/18 21:59	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			04/02/18 21:59	1
Vinyl chloride	ND		1.0		ug/L			04/02/18 21:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 125		04/02/18 21:59	1
Dibromofluoromethane (Surr)	101		77 - 120		04/02/18 21:59	1
1,2-Dichloroethane-d4 (Surr)	102		80 - 126		04/02/18 21:59	1
Toluene-d8 (Surr)	104		80 - 122		04/02/18 21:59	1
Trifluorotoluene (Surr)	101		80 - 120		04/02/18 21:59	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			03/31/18 19:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	118		75 - 120		03/31/18 19:49	1
4-Bromofluorobenzene (Surr)	88		68 - 119		03/31/18 19:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>0.27</b>	*	0.13		mg/L		03/30/18 13:35	04/02/18 20:45	1
<b>DRO (nC10-&lt;nC25)</b>	<b>0.19</b>	*	0.11		mg/L		04/03/18 13:07	04/05/18 01:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	59		50 - 150		03/30/18 13:35	04/02/18 20:45

TestAmerica Seattle



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-5**  
**Date Collected: 03/21/18 11:45**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-5**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/02/18 22:27	1
Bromobenzene	ND		2.0		ug/L			04/02/18 22:27	1
Bromoform	ND		3.0		ug/L			04/02/18 22:27	1
Bromomethane	ND		6.0		ug/L			04/02/18 22:27	1
Carbon tetrachloride	ND		3.0		ug/L			04/02/18 22:27	1
Chlorobenzene	ND		2.0		ug/L			04/02/18 22:27	1
Chlorobromomethane	ND		2.0		ug/L			04/02/18 22:27	1
Chlorodibromomethane	ND		1.0		ug/L			04/02/18 22:27	1
Chloroethane	ND		5.0		ug/L			04/02/18 22:27	1
Chloroform	ND		5.0		ug/L			04/02/18 22:27	1
Chloromethane	ND		20		ug/L			04/02/18 22:27	1
2-Chlorotoluene	ND		3.0		ug/L			04/02/18 22:27	1
4-Chlorotoluene	ND		2.0		ug/L			04/02/18 22:27	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 22:27	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/02/18 22:27	1
Dibromomethane	ND		2.0		ug/L			04/02/18 22:27	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/02/18 22:27	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/02/18 22:27	1
<b>1,4-Dichlorobenzene</b>	<b>4.4</b>		4.0		ug/L			04/02/18 22:27	1
Dichlorobromomethane	ND		2.0		ug/L			04/02/18 22:27	1
Dichlorodifluoromethane	ND		10		ug/L			04/02/18 22:27	1
1,1-Dichloroethane	ND		2.0		ug/L			04/02/18 22:27	1
1,2-Dichloroethane	ND		2.0		ug/L			04/02/18 22:27	1
1,1-Dichloroethene	ND		4.0		ug/L			04/02/18 22:27	1
1,2-Dichloropropane	ND		1.0		ug/L			04/02/18 22:27	1
1,3-Dichloropropane	ND		2.0		ug/L			04/02/18 22:27	1
2,2-Dichloropropane	ND		3.0		ug/L			04/02/18 22:27	1
1,1-Dichloropropene	ND		3.0		ug/L			04/02/18 22:27	1
Ethylene Dibromide	ND		2.0		ug/L			04/02/18 22:27	1
Hexachlorobutadiene	ND		6.0		ug/L			04/02/18 22:27	1
Isopropylbenzene	ND		2.0		ug/L			04/02/18 22:27	1
<b>4-Isopropyltoluene</b>	<b>3.4</b>		3.0		ug/L			04/02/18 22:27	1
Methylene Chloride	ND		5.0		ug/L			04/02/18 22:27	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/02/18 22:27	1
Naphthalene	ND		4.0		ug/L			04/02/18 22:27	1
n-Butylbenzene	ND		3.0		ug/L			04/02/18 22:27	1
N-Propylbenzene	ND		3.0		ug/L			04/02/18 22:27	1
<b>o-Xylene</b>	<b>84</b>		2.0		ug/L			04/02/18 22:27	1
sec-Butylbenzene	ND		3.0		ug/L			04/02/18 22:27	1
Styrene	ND		5.0		ug/L			04/02/18 22:27	1
tert-Butylbenzene	ND		3.0		ug/L			04/02/18 22:27	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/02/18 22:27	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/02/18 22:27	1
Tetrachloroethene	ND		3.0		ug/L			04/02/18 22:27	1
Toluene	ND		2.0		ug/L			04/02/18 22:27	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 22:27	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 22:27	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/02/18 22:27	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/02/18 22:27	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-5**  
**Date Collected: 03/21/18 11:45**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-5**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.0		ug/L			04/02/18 22:27	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/02/18 22:27	1
Trichloroethene	ND		3.0		ug/L			04/02/18 22:27	1
Trichlorofluoromethane	ND		3.0		ug/L			04/02/18 22:27	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/02/18 22:27	1
<b>1,2,4-Trimethylbenzene</b>	<b>32</b>		3.0		ug/L			04/02/18 22:27	1
<b>1,3,5-Trimethylbenzene</b>	<b>17</b>		3.0		ug/L			04/02/18 22:27	1
Vinyl chloride	ND		1.0		ug/L			04/02/18 22:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		75 - 125		04/02/18 22:27	1
Dibromofluoromethane (Surr)	102		77 - 120		04/02/18 22:27	1
1,2-Dichloroethane-d4 (Surr)	103		80 - 126		04/02/18 22:27	1
Toluene-d8 (Surr)	99		80 - 122		04/02/18 22:27	1
Trifluorotoluene (Surr)	100		80 - 120		04/02/18 22:27	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>150</b>		30		ug/L			04/04/18 16:13	10
<b>Ethylbenzene</b>	<b>240</b>		30		ug/L			04/04/18 16:13	10
<b>m-Xylene &amp; p-Xylene</b>	<b>350</b>		30		ug/L			04/04/18 16:13	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		75 - 125		04/04/18 16:13	10
Dibromofluoromethane (Surr)	103		77 - 120		04/04/18 16:13	10
1,2-Dichloroethane-d4 (Surr)	104		80 - 126		04/04/18 16:13	10
Toluene-d8 (Surr)	97		80 - 122		04/04/18 16:13	10
Trifluorotoluene (Surr)	106		80 - 120		04/04/18 16:13	10

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Gasoline Range Organics (GRO)</b>	<b>1.7</b>		1.0		mg/L			03/31/18 20:52	1
<b>-C6-C10</b>									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	118		75 - 120		03/31/18 20:52	1
4-Bromofluorobenzene (Surr)	129	X	68 - 119		03/31/18 20:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>0.65</b>	*	0.14		mg/L		03/30/18 13:35	04/02/18 21:40	1
<b>DRO (nC10-&lt;nC25)</b>	<b>0.50</b>	*	0.11		mg/L		04/03/18 13:07	04/05/18 01:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	64		50 - 150		03/30/18 13:35	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-6**  
**Date Collected: 03/21/18 11:00**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-6**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/02/18 22:56	1
Bromobenzene	ND		2.0		ug/L			04/02/18 22:56	1
Bromoform	ND		3.0		ug/L			04/02/18 22:56	1
Bromomethane	ND		6.0		ug/L			04/02/18 22:56	1
Carbon tetrachloride	ND		3.0		ug/L			04/02/18 22:56	1
Chlorobenzene	ND		2.0		ug/L			04/02/18 22:56	1
Chlorobromomethane	ND		2.0		ug/L			04/02/18 22:56	1
Chlorodibromomethane	ND		1.0		ug/L			04/02/18 22:56	1
Chloroethane	ND		5.0		ug/L			04/02/18 22:56	1
Chloroform	ND		5.0		ug/L			04/02/18 22:56	1
Chloromethane	ND		20		ug/L			04/02/18 22:56	1
2-Chlorotoluene	ND		3.0		ug/L			04/02/18 22:56	1
4-Chlorotoluene	ND		2.0		ug/L			04/02/18 22:56	1
cis-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 22:56	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 22:56	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/02/18 22:56	1
Dibromomethane	ND		2.0		ug/L			04/02/18 22:56	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/02/18 22:56	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/02/18 22:56	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/02/18 22:56	1
Dichlorobromomethane	ND		2.0		ug/L			04/02/18 22:56	1
Dichlorodifluoromethane	ND		10		ug/L			04/02/18 22:56	1
1,1-Dichloroethane	ND		2.0		ug/L			04/02/18 22:56	1
1,2-Dichloroethane	ND		2.0		ug/L			04/02/18 22:56	1
1,1-Dichloroethene	ND		4.0		ug/L			04/02/18 22:56	1
1,2-Dichloropropane	ND		1.0		ug/L			04/02/18 22:56	1
1,3-Dichloropropane	ND		2.0		ug/L			04/02/18 22:56	1
2,2-Dichloropropane	ND		3.0		ug/L			04/02/18 22:56	1
1,1-Dichloropropene	ND		3.0		ug/L			04/02/18 22:56	1
Ethylbenzene	ND		3.0		ug/L			04/02/18 22:56	1
Ethylene Dibromide	ND		2.0		ug/L			04/02/18 22:56	1
Hexachlorobutadiene	ND		6.0		ug/L			04/02/18 22:56	1
Isopropylbenzene	ND		2.0		ug/L			04/02/18 22:56	1
4-Isopropyltoluene	ND		3.0		ug/L			04/02/18 22:56	1
Methylene Chloride	ND		5.0		ug/L			04/02/18 22:56	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/02/18 22:56	1
m-Xylene & p-Xylene	ND		3.0		ug/L			04/02/18 22:56	1
Naphthalene	ND		4.0		ug/L			04/02/18 22:56	1
n-Butylbenzene	ND		3.0		ug/L			04/02/18 22:56	1
N-Propylbenzene	ND		3.0		ug/L			04/02/18 22:56	1
o-Xylene	ND		2.0		ug/L			04/02/18 22:56	1
sec-Butylbenzene	ND		3.0		ug/L			04/02/18 22:56	1
Styrene	ND		5.0		ug/L			04/02/18 22:56	1
tert-Butylbenzene	ND		3.0		ug/L			04/02/18 22:56	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/02/18 22:56	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/02/18 22:56	1
Tetrachloroethene	ND		3.0		ug/L			04/02/18 22:56	1
Toluene	ND		2.0		ug/L			04/02/18 22:56	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 22:56	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-6**  
**Date Collected: 03/21/18 11:00**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-6**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 22:56	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/02/18 22:56	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/02/18 22:56	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/02/18 22:56	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/02/18 22:56	1
Trichloroethene	ND		3.0		ug/L			04/02/18 22:56	1
Trichlorofluoromethane	ND		3.0		ug/L			04/02/18 22:56	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/02/18 22:56	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			04/02/18 22:56	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			04/02/18 22:56	1
Vinyl chloride	ND		1.0		ug/L			04/02/18 22:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		75 - 125		04/02/18 22:56	1
Dibromofluoromethane (Surr)	101		77 - 120		04/02/18 22:56	1
1,2-Dichloroethane-d4 (Surr)	103		80 - 126		04/02/18 22:56	1
Toluene-d8 (Surr)	100		80 - 122		04/02/18 22:56	1
Trifluorotoluene (Surr)	101		80 - 120		04/02/18 22:56	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			03/31/18 21:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	117		75 - 120		03/31/18 21:24	1
4-Bromofluorobenzene (Surr)	89		68 - 119		03/31/18 21:24	1

## Method: 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		03/30/18 13:35	04/02/18 22:07	1
DRO (nC10-<nC25)	ND	*	0.11		mg/L		04/04/18 09:36	04/05/18 23:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	58		50 - 150	03/30/18 13:35	04/02/18 22:07	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-7**  
**Date Collected: 03/20/18 15:45**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-7**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/02/18 23:25	1
Bromobenzene	ND		2.0		ug/L			04/02/18 23:25	1
Bromoform	ND		3.0		ug/L			04/02/18 23:25	1
Bromomethane	ND		6.0		ug/L			04/02/18 23:25	1
Carbon tetrachloride	ND		3.0		ug/L			04/02/18 23:25	1
Chlorobenzene	ND		2.0		ug/L			04/02/18 23:25	1
Chlorobromomethane	ND		2.0		ug/L			04/02/18 23:25	1
Chlorodibromomethane	ND		1.0		ug/L			04/02/18 23:25	1
Chloroethane	ND		5.0		ug/L			04/02/18 23:25	1
Chloroform	ND		5.0		ug/L			04/02/18 23:25	1
Chloromethane	ND		20		ug/L			04/02/18 23:25	1
2-Chlorotoluene	ND		3.0		ug/L			04/02/18 23:25	1
4-Chlorotoluene	ND		2.0		ug/L			04/02/18 23:25	1
cis-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 23:25	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 23:25	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/02/18 23:25	1
Dibromomethane	ND		2.0		ug/L			04/02/18 23:25	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/02/18 23:25	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/02/18 23:25	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/02/18 23:25	1
Dichlorobromomethane	ND		2.0		ug/L			04/02/18 23:25	1
Dichlorodifluoromethane	ND		10		ug/L			04/02/18 23:25	1
1,1-Dichloroethane	ND		2.0		ug/L			04/02/18 23:25	1
1,2-Dichloroethane	ND		2.0		ug/L			04/02/18 23:25	1
1,1-Dichloroethene	ND		4.0		ug/L			04/02/18 23:25	1
1,2-Dichloropropane	ND		1.0		ug/L			04/02/18 23:25	1
1,3-Dichloropropane	ND		2.0		ug/L			04/02/18 23:25	1
2,2-Dichloropropane	ND		3.0		ug/L			04/02/18 23:25	1
1,1-Dichloropropene	ND		3.0		ug/L			04/02/18 23:25	1
Ethylbenzene	ND		3.0		ug/L			04/02/18 23:25	1
Ethylene Dibromide	ND		2.0		ug/L			04/02/18 23:25	1
Hexachlorobutadiene	ND		6.0		ug/L			04/02/18 23:25	1
Isopropylbenzene	ND		2.0		ug/L			04/02/18 23:25	1
4-Isopropyltoluene	ND		3.0		ug/L			04/02/18 23:25	1
Methylene Chloride	ND		5.0		ug/L			04/02/18 23:25	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/02/18 23:25	1
m-Xylene & p-Xylene	ND		3.0		ug/L			04/02/18 23:25	1
Naphthalene	ND		4.0		ug/L			04/02/18 23:25	1
n-Butylbenzene	ND		3.0		ug/L			04/02/18 23:25	1
N-Propylbenzene	ND		3.0		ug/L			04/02/18 23:25	1
o-Xylene	ND		2.0		ug/L			04/02/18 23:25	1
sec-Butylbenzene	ND		3.0		ug/L			04/02/18 23:25	1
Styrene	ND		5.0		ug/L			04/02/18 23:25	1
tert-Butylbenzene	ND		3.0		ug/L			04/02/18 23:25	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/02/18 23:25	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/02/18 23:25	1
<b>Tetrachloroethene</b>	<b>12</b>		3.0		ug/L			04/02/18 23:25	1
Toluene	ND		2.0		ug/L			04/02/18 23:25	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 23:25	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-7**  
**Date Collected: 03/20/18 15:45**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-7**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 23:25	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/02/18 23:25	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/02/18 23:25	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/02/18 23:25	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/02/18 23:25	1
Trichloroethene	ND		3.0		ug/L			04/02/18 23:25	1
Trichlorofluoromethane	ND		3.0		ug/L			04/02/18 23:25	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/02/18 23:25	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			04/02/18 23:25	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			04/02/18 23:25	1
Vinyl chloride	ND		1.0		ug/L			04/02/18 23:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 125		04/02/18 23:25	1
Dibromofluoromethane (Surr)	101		77 - 120		04/02/18 23:25	1
1,2-Dichloroethane-d4 (Surr)	101		80 - 126		04/02/18 23:25	1
Toluene-d8 (Surr)	100		80 - 122		04/02/18 23:25	1
Trifluorotoluene (Surr)	101		80 - 120		04/02/18 23:25	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			03/31/18 21:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	118		75 - 120		03/31/18 21:55	1
4-Bromofluorobenzene (Surr)	90		68 - 119		03/31/18 21:55	1

## Method: 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	*	0.12		mg/L		03/30/18 13:35	04/02/18 22:35	1
DRO (nC10-<nC25)	ND	*	0.12		mg/L		04/03/18 13:07	04/05/18 01:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	43	X	50 - 150	03/30/18 13:35	04/02/18 22:35	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-8**  
**Date Collected: 03/20/18 15:05**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-8**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/02/18 23:53	1
Bromobenzene	ND		2.0		ug/L			04/02/18 23:53	1
Bromoform	ND		3.0		ug/L			04/02/18 23:53	1
Bromomethane	ND		6.0		ug/L			04/02/18 23:53	1
Carbon tetrachloride	ND		3.0		ug/L			04/02/18 23:53	1
Chlorobenzene	ND		2.0		ug/L			04/02/18 23:53	1
Chlorobromomethane	ND		2.0		ug/L			04/02/18 23:53	1
Chlorodibromomethane	ND		1.0		ug/L			04/02/18 23:53	1
Chloroethane	ND		5.0		ug/L			04/02/18 23:53	1
Chloroform	ND		5.0		ug/L			04/02/18 23:53	1
Chloromethane	ND		20		ug/L			04/02/18 23:53	1
2-Chlorotoluene	ND		3.0		ug/L			04/02/18 23:53	1
4-Chlorotoluene	ND		2.0		ug/L			04/02/18 23:53	1
cis-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 23:53	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 23:53	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/02/18 23:53	1
Dibromomethane	ND		2.0		ug/L			04/02/18 23:53	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/02/18 23:53	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/02/18 23:53	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/02/18 23:53	1
Dichlorobromomethane	ND		2.0		ug/L			04/02/18 23:53	1
Dichlorodifluoromethane	ND		10		ug/L			04/02/18 23:53	1
1,1-Dichloroethane	ND		2.0		ug/L			04/02/18 23:53	1
1,2-Dichloroethane	ND		2.0		ug/L			04/02/18 23:53	1
1,1-Dichloroethene	ND		4.0		ug/L			04/02/18 23:53	1
1,2-Dichloropropane	ND		1.0		ug/L			04/02/18 23:53	1
1,3-Dichloropropane	ND		2.0		ug/L			04/02/18 23:53	1
2,2-Dichloropropane	ND		3.0		ug/L			04/02/18 23:53	1
1,1-Dichloropropene	ND		3.0		ug/L			04/02/18 23:53	1
Ethylbenzene	ND		3.0		ug/L			04/02/18 23:53	1
Ethylene Dibromide	ND		2.0		ug/L			04/02/18 23:53	1
Hexachlorobutadiene	ND		6.0		ug/L			04/02/18 23:53	1
Isopropylbenzene	ND		2.0		ug/L			04/02/18 23:53	1
4-Isopropyltoluene	ND		3.0		ug/L			04/02/18 23:53	1
Methylene Chloride	ND		5.0		ug/L			04/02/18 23:53	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/02/18 23:53	1
m-Xylene & p-Xylene	ND		3.0		ug/L			04/02/18 23:53	1
Naphthalene	ND		4.0		ug/L			04/02/18 23:53	1
n-Butylbenzene	ND		3.0		ug/L			04/02/18 23:53	1
N-Propylbenzene	ND		3.0		ug/L			04/02/18 23:53	1
o-Xylene	ND		2.0		ug/L			04/02/18 23:53	1
sec-Butylbenzene	ND		3.0		ug/L			04/02/18 23:53	1
Styrene	ND		5.0		ug/L			04/02/18 23:53	1
tert-Butylbenzene	ND		3.0		ug/L			04/02/18 23:53	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/02/18 23:53	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/02/18 23:53	1
Tetrachloroethene	ND		3.0		ug/L			04/02/18 23:53	1
Toluene	ND		2.0		ug/L			04/02/18 23:53	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 23:53	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-8**

**Lab Sample ID: 580-76037-8**

**Date Collected: 03/20/18 15:05**

**Matrix: Water**

**Date Received: 03/23/18 09:25**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 23:53	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/02/18 23:53	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/02/18 23:53	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/02/18 23:53	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/02/18 23:53	1
Trichloroethene	ND		3.0		ug/L			04/02/18 23:53	1
Trichlorofluoromethane	ND		3.0		ug/L			04/02/18 23:53	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/02/18 23:53	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			04/02/18 23:53	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			04/02/18 23:53	1
Vinyl chloride	ND		1.0		ug/L			04/02/18 23:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		75 - 125		04/02/18 23:53	1
Dibromofluoromethane (Surr)	101		77 - 120		04/02/18 23:53	1
1,2-Dichloroethane-d4 (Surr)	104		80 - 126		04/02/18 23:53	1
Toluene-d8 (Surr)	100		80 - 122		04/02/18 23:53	1
Trifluorotoluene (Surr)	101		80 - 120		04/02/18 23:53	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			03/31/18 22:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	118		75 - 120		03/31/18 22:27	1
4-Bromofluorobenzene (Surr)	87		68 - 119		03/31/18 22:27	1

## Method: 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	*	0.11		mg/L		03/30/18 13:35	04/02/18 23:02	1
DRO (nC10-<nC25)	ND	*	0.11		mg/L		04/03/18 13:07	04/05/18 02:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	49	X	50 - 150	03/30/18 13:35	04/02/18 23:02	1

TestAmerica Seattle



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-9**  
**Date Collected: 03/20/18 14:10**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-9**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/03/18 00:22	1
Bromobenzene	ND		2.0		ug/L			04/03/18 00:22	1
Bromoform	ND		3.0		ug/L			04/03/18 00:22	1
Bromomethane	ND		6.0		ug/L			04/03/18 00:22	1
Carbon tetrachloride	ND		3.0		ug/L			04/03/18 00:22	1
Chlorobenzene	ND		2.0		ug/L			04/03/18 00:22	1
Chlorobromomethane	ND		2.0		ug/L			04/03/18 00:22	1
Chlorodibromomethane	ND		1.0		ug/L			04/03/18 00:22	1
Chloroethane	ND		5.0		ug/L			04/03/18 00:22	1
Chloroform	ND		5.0		ug/L			04/03/18 00:22	1
Chloromethane	ND		20		ug/L			04/03/18 00:22	1
2-Chlorotoluene	ND		3.0		ug/L			04/03/18 00:22	1
4-Chlorotoluene	ND		2.0		ug/L			04/03/18 00:22	1
cis-1,2-Dichloroethene	ND		3.0		ug/L			04/03/18 00:22	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/03/18 00:22	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/03/18 00:22	1
Dibromomethane	ND		2.0		ug/L			04/03/18 00:22	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/03/18 00:22	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/03/18 00:22	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/03/18 00:22	1
Dichlorobromomethane	ND		2.0		ug/L			04/03/18 00:22	1
Dichlorodifluoromethane	ND		10		ug/L			04/03/18 00:22	1
1,1-Dichloroethane	ND		2.0		ug/L			04/03/18 00:22	1
1,2-Dichloroethane	ND		2.0		ug/L			04/03/18 00:22	1
1,1-Dichloroethene	ND		4.0		ug/L			04/03/18 00:22	1
1,2-Dichloropropane	ND		1.0		ug/L			04/03/18 00:22	1
1,3-Dichloropropane	ND		2.0		ug/L			04/03/18 00:22	1
2,2-Dichloropropane	ND		3.0		ug/L			04/03/18 00:22	1
1,1-Dichloropropene	ND		3.0		ug/L			04/03/18 00:22	1
Ethylbenzene	ND		3.0		ug/L			04/03/18 00:22	1
Ethylene Dibromide	ND		2.0		ug/L			04/03/18 00:22	1
Hexachlorobutadiene	ND		6.0		ug/L			04/03/18 00:22	1
Isopropylbenzene	ND		2.0		ug/L			04/03/18 00:22	1
4-Isopropyltoluene	ND		3.0		ug/L			04/03/18 00:22	1
Methylene Chloride	ND		5.0		ug/L			04/03/18 00:22	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/03/18 00:22	1
m-Xylene & p-Xylene	ND		3.0		ug/L			04/03/18 00:22	1
Naphthalene	ND		4.0		ug/L			04/03/18 00:22	1
n-Butylbenzene	ND		3.0		ug/L			04/03/18 00:22	1
N-Propylbenzene	ND		3.0		ug/L			04/03/18 00:22	1
o-Xylene	ND		2.0		ug/L			04/03/18 00:22	1
sec-Butylbenzene	ND		3.0		ug/L			04/03/18 00:22	1
Styrene	ND		5.0		ug/L			04/03/18 00:22	1
tert-Butylbenzene	ND		3.0		ug/L			04/03/18 00:22	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/03/18 00:22	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/03/18 00:22	1
Tetrachloroethene	ND		3.0		ug/L			04/03/18 00:22	1
Toluene	ND		2.0		ug/L			04/03/18 00:22	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/03/18 00:22	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-9**

**Lab Sample ID: 580-76037-9**

**Date Collected: 03/20/18 14:10**

**Matrix: Water**

**Date Received: 03/23/18 09:25**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/03/18 00:22	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/03/18 00:22	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/03/18 00:22	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/03/18 00:22	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/03/18 00:22	1
Trichloroethene	ND		3.0		ug/L			04/03/18 00:22	1
Trichlorofluoromethane	ND		3.0		ug/L			04/03/18 00:22	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/03/18 00:22	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			04/03/18 00:22	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			04/03/18 00:22	1
Vinyl chloride	ND		1.0		ug/L			04/03/18 00:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 125		04/03/18 00:22	1
Dibromofluoromethane (Surr)	100		77 - 120		04/03/18 00:22	1
1,2-Dichloroethane-d4 (Surr)	105		80 - 126		04/03/18 00:22	1
Toluene-d8 (Surr)	101		80 - 122		04/03/18 00:22	1
Trifluorotoluene (Surr)	101		80 - 120		04/03/18 00:22	1

**Method: AK101 - Alaska - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			03/31/18 22:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	115		75 - 120		03/31/18 22:59	1
4-Bromofluorobenzene (Surr)	85		68 - 119		03/31/18 22:59	1

**Method: 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	*	0.12		mg/L		03/30/18 13:35	04/02/18 23:29	1
DRO (nC10-<nC25)	ND	*	0.11		mg/L		04/03/18 13:07	04/05/18 02:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	49	X	50 - 150	03/30/18 13:35	04/02/18 23:29	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-10**

**Date Collected: 03/20/18 13:30**

**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-10**

**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/03/18 00:50	1
Bromobenzene	ND		2.0		ug/L			04/03/18 00:50	1
Bromoform	ND		3.0		ug/L			04/03/18 00:50	1
Bromomethane	ND		6.0		ug/L			04/03/18 00:50	1
Carbon tetrachloride	ND		3.0		ug/L			04/03/18 00:50	1
Chlorobenzene	ND		2.0		ug/L			04/03/18 00:50	1
Chlorobromomethane	ND		2.0		ug/L			04/03/18 00:50	1
Chlorodibromomethane	ND		1.0		ug/L			04/03/18 00:50	1
Chloroethane	ND		5.0		ug/L			04/03/18 00:50	1
Chloroform	ND		5.0		ug/L			04/03/18 00:50	1
Chloromethane	ND		20		ug/L			04/03/18 00:50	1
2-Chlorotoluene	ND		3.0		ug/L			04/03/18 00:50	1
4-Chlorotoluene	ND		2.0		ug/L			04/03/18 00:50	1
cis-1,2-Dichloroethene	ND		3.0		ug/L			04/03/18 00:50	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/03/18 00:50	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/03/18 00:50	1
Dibromomethane	ND		2.0		ug/L			04/03/18 00:50	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/03/18 00:50	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/03/18 00:50	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/03/18 00:50	1
Dichlorobromomethane	ND		2.0		ug/L			04/03/18 00:50	1
Dichlorodifluoromethane	ND		10		ug/L			04/03/18 00:50	1
1,1-Dichloroethane	ND		2.0		ug/L			04/03/18 00:50	1
1,2-Dichloroethane	ND		2.0		ug/L			04/03/18 00:50	1
1,1-Dichloroethene	ND		4.0		ug/L			04/03/18 00:50	1
1,2-Dichloropropane	ND		1.0		ug/L			04/03/18 00:50	1
1,3-Dichloropropane	ND		2.0		ug/L			04/03/18 00:50	1
2,2-Dichloropropane	ND		3.0		ug/L			04/03/18 00:50	1
1,1-Dichloropropene	ND		3.0		ug/L			04/03/18 00:50	1
Ethylbenzene	ND		3.0		ug/L			04/03/18 00:50	1
Ethylene Dibromide	ND		2.0		ug/L			04/03/18 00:50	1
Hexachlorobutadiene	ND		6.0		ug/L			04/03/18 00:50	1
Isopropylbenzene	ND		2.0		ug/L			04/03/18 00:50	1
4-Isopropyltoluene	ND		3.0		ug/L			04/03/18 00:50	1
Methylene Chloride	ND		5.0		ug/L			04/03/18 00:50	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/03/18 00:50	1
m-Xylene & p-Xylene	ND		3.0		ug/L			04/03/18 00:50	1
Naphthalene	ND		4.0		ug/L			04/03/18 00:50	1
n-Butylbenzene	ND		3.0		ug/L			04/03/18 00:50	1
N-Propylbenzene	ND		3.0		ug/L			04/03/18 00:50	1
o-Xylene	ND		2.0		ug/L			04/03/18 00:50	1
sec-Butylbenzene	ND		3.0		ug/L			04/03/18 00:50	1
Styrene	ND		5.0		ug/L			04/03/18 00:50	1
tert-Butylbenzene	ND		3.0		ug/L			04/03/18 00:50	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/03/18 00:50	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/03/18 00:50	1
Tetrachloroethene	ND		3.0		ug/L			04/03/18 00:50	1
Toluene	ND		2.0		ug/L			04/03/18 00:50	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/03/18 00:50	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-10**  
**Date Collected: 03/20/18 13:30**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-10**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/03/18 00:50	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/03/18 00:50	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/03/18 00:50	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/03/18 00:50	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/03/18 00:50	1
Trichloroethene	ND		3.0		ug/L			04/03/18 00:50	1
Trichlorofluoromethane	ND		3.0		ug/L			04/03/18 00:50	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/03/18 00:50	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			04/03/18 00:50	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			04/03/18 00:50	1
Vinyl chloride	ND		1.0		ug/L			04/03/18 00:50	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	99		75 - 125					04/03/18 00:50	1
Dibromofluoromethane (Surr)	101		77 - 120					04/03/18 00:50	1
1,2-Dichloroethane-d4 (Surr)	104		80 - 126					04/03/18 00:50	1
Toluene-d8 (Surr)	101		80 - 122					04/03/18 00:50	1
Trifluorotoluene (Surr)	101		80 - 120					04/03/18 00:50	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			03/31/18 23:30	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Trifluorotoluene (Surr)	115		75 - 120					03/31/18 23:30	1
4-Bromofluorobenzene (Surr)	89		68 - 119					03/31/18 23:30	1

## Method: 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	*	0.11		mg/L		03/30/18 13:35	04/02/18 23:56	1
DRO (nC10-<nC25)	ND	*	0.11		mg/L		04/03/18 13:07	04/05/18 03:45	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl	54		50 - 150				03/30/18 13:35	04/02/18 23:56	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-11**

**Date Collected: 03/20/18 12:50**

**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-11**

**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/03/18 01:19	1
Bromobenzene	ND		2.0		ug/L			04/03/18 01:19	1
Bromoform	ND		3.0		ug/L			04/03/18 01:19	1
Bromomethane	ND		6.0		ug/L			04/03/18 01:19	1
Carbon tetrachloride	ND		3.0		ug/L			04/03/18 01:19	1
Chlorobenzene	ND		2.0		ug/L			04/03/18 01:19	1
Chlorobromomethane	ND		2.0		ug/L			04/03/18 01:19	1
Chlorodibromomethane	ND		1.0		ug/L			04/03/18 01:19	1
Chloroethane	ND		5.0		ug/L			04/03/18 01:19	1
Chloroform	ND		5.0		ug/L			04/03/18 01:19	1
Chloromethane	ND		20		ug/L			04/03/18 01:19	1
2-Chlorotoluene	ND		3.0		ug/L			04/03/18 01:19	1
4-Chlorotoluene	ND		2.0		ug/L			04/03/18 01:19	1
cis-1,2-Dichloroethene	ND		3.0		ug/L			04/03/18 01:19	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/03/18 01:19	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/03/18 01:19	1
Dibromomethane	ND		2.0		ug/L			04/03/18 01:19	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/03/18 01:19	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/03/18 01:19	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/03/18 01:19	1
Dichlorobromomethane	ND		2.0		ug/L			04/03/18 01:19	1
Dichlorodifluoromethane	ND		10		ug/L			04/03/18 01:19	1
1,1-Dichloroethane	ND		2.0		ug/L			04/03/18 01:19	1
1,2-Dichloroethane	ND		2.0		ug/L			04/03/18 01:19	1
1,1-Dichloroethene	ND		4.0		ug/L			04/03/18 01:19	1
1,2-Dichloropropane	ND		1.0		ug/L			04/03/18 01:19	1
1,3-Dichloropropane	ND		2.0		ug/L			04/03/18 01:19	1
2,2-Dichloropropane	ND		3.0		ug/L			04/03/18 01:19	1
1,1-Dichloropropene	ND		3.0		ug/L			04/03/18 01:19	1
Ethylbenzene	ND		3.0		ug/L			04/03/18 01:19	1
Ethylene Dibromide	ND		2.0		ug/L			04/03/18 01:19	1
Hexachlorobutadiene	ND		6.0		ug/L			04/03/18 01:19	1
Isopropylbenzene	ND		2.0		ug/L			04/03/18 01:19	1
4-Isopropyltoluene	ND		3.0		ug/L			04/03/18 01:19	1
Methylene Chloride	ND		5.0		ug/L			04/03/18 01:19	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/03/18 01:19	1
m-Xylene & p-Xylene	ND		3.0		ug/L			04/03/18 01:19	1
Naphthalene	ND		4.0		ug/L			04/03/18 01:19	1
n-Butylbenzene	ND		3.0		ug/L			04/03/18 01:19	1
N-Propylbenzene	ND		3.0		ug/L			04/03/18 01:19	1
o-Xylene	ND		2.0		ug/L			04/03/18 01:19	1
sec-Butylbenzene	ND		3.0		ug/L			04/03/18 01:19	1
Styrene	ND		5.0		ug/L			04/03/18 01:19	1
tert-Butylbenzene	ND		3.0		ug/L			04/03/18 01:19	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/03/18 01:19	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/03/18 01:19	1
Tetrachloroethene	ND		3.0		ug/L			04/03/18 01:19	1
Toluene	ND		2.0		ug/L			04/03/18 01:19	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/03/18 01:19	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-11**

**Lab Sample ID: 580-76037-11**

**Date Collected: 03/20/18 12:50**

**Matrix: Water**

**Date Received: 03/23/18 09:25**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/03/18 01:19	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/03/18 01:19	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/03/18 01:19	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/03/18 01:19	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/03/18 01:19	1
Trichloroethene	ND		3.0		ug/L			04/03/18 01:19	1
Trichlorofluoromethane	ND		3.0		ug/L			04/03/18 01:19	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/03/18 01:19	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			04/03/18 01:19	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			04/03/18 01:19	1
Vinyl chloride	ND		1.0		ug/L			04/03/18 01:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		75 - 125		04/03/18 01:19	1
Dibromofluoromethane (Surr)	102		77 - 120		04/03/18 01:19	1
1,2-Dichloroethane-d4 (Surr)	102		80 - 126		04/03/18 01:19	1
Toluene-d8 (Surr)	102		80 - 122		04/03/18 01:19	1
Trifluorotoluene (Surr)	102		80 - 120		04/03/18 01:19	1

**Method: AK101 - Alaska - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			04/01/18 00:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	118		75 - 120		04/01/18 00:02	1
4-Bromofluorobenzene (Surr)	88		68 - 119		04/01/18 00:02	1

**Method: 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	*	0.12		mg/L		03/30/18 13:35	04/03/18 00:23	1
DRO (nC10-<nC25)	ND	*	0.12		mg/L		04/03/18 13:07	04/05/18 04:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	51		50 - 150	03/30/18 13:35	04/03/18 00:23	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: BD-1**  
**Date Collected: 03/20/18 00:01**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-12**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	*	3.0		ug/L			04/03/18 14:57	1
Bromobenzene	ND	*	2.0		ug/L			04/03/18 14:57	1
Bromoform	ND	*	3.0		ug/L			04/03/18 14:57	1
Bromomethane	ND		6.0		ug/L			04/03/18 14:57	1
Carbon tetrachloride	ND	*	3.0		ug/L			04/03/18 14:57	1
Chlorobenzene	ND	*	2.0		ug/L			04/03/18 14:57	1
Chlorobromomethane	ND		2.0		ug/L			04/03/18 14:57	1
Chlorodibromomethane	ND		1.0		ug/L			04/03/18 14:57	1
Chloroethane	ND		5.0		ug/L			04/03/18 14:57	1
Chloroform	ND	*	5.0		ug/L			04/03/18 14:57	1
Chloromethane	ND		20		ug/L			04/03/18 14:57	1
2-Chlorotoluene	ND	*	3.0		ug/L			04/03/18 14:57	1
4-Chlorotoluene	ND		2.0		ug/L			04/03/18 14:57	1
cis-1,2-Dichloroethene	ND	*	3.0		ug/L			04/03/18 14:57	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/03/18 14:57	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/03/18 14:57	1
Dibromomethane	ND		2.0		ug/L			04/03/18 14:57	1
1,2-Dichlorobenzene	ND	*	2.0		ug/L			04/03/18 14:57	1
1,3-Dichlorobenzene	ND	*	2.0		ug/L			04/03/18 14:57	1
1,4-Dichlorobenzene	ND	*	4.0		ug/L			04/03/18 14:57	1
Dichlorobromomethane	ND		2.0		ug/L			04/03/18 14:57	1
Dichlorodifluoromethane	ND		10		ug/L			04/03/18 14:57	1
1,1-Dichloroethane	ND		2.0		ug/L			04/03/18 14:57	1
1,2-Dichloroethane	ND	*	2.0		ug/L			04/03/18 14:57	1
1,1-Dichloroethene	ND		4.0		ug/L			04/03/18 14:57	1
1,2-Dichloropropane	ND		1.0		ug/L			04/03/18 14:57	1
1,3-Dichloropropane	ND		2.0		ug/L			04/03/18 14:57	1
2,2-Dichloropropane	ND		3.0		ug/L			04/03/18 14:57	1
1,1-Dichloropropene	ND		3.0		ug/L			04/03/18 14:57	1
Ethylbenzene	ND	*	3.0		ug/L			04/03/18 14:57	1
Ethylene Dibromide	ND		2.0		ug/L			04/03/18 14:57	1
Hexachlorobutadiene	ND		6.0		ug/L			04/03/18 14:57	1
Isopropylbenzene	ND	*	2.0		ug/L			04/03/18 14:57	1
4-Isopropyltoluene	ND	*	3.0		ug/L			04/03/18 14:57	1
Methylene Chloride	ND		5.0		ug/L			04/03/18 14:57	1
Methyl tert-butyl ether	ND	*	2.0		ug/L			04/03/18 14:57	1
m-Xylene & p-Xylene	ND	*	3.0		ug/L			04/03/18 14:57	1
Naphthalene	ND		4.0		ug/L			04/03/18 14:57	1
n-Butylbenzene	ND	*	3.0		ug/L			04/03/18 14:57	1
N-Propylbenzene	ND	*	3.0		ug/L			04/03/18 14:57	1
o-Xylene	ND	*	2.0		ug/L			04/03/18 14:57	1
sec-Butylbenzene	ND	*	3.0		ug/L			04/03/18 14:57	1
Styrene	ND	*	5.0		ug/L			04/03/18 14:57	1
tert-Butylbenzene	ND		3.0		ug/L			04/03/18 14:57	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/03/18 14:57	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/03/18 14:57	1
Tetrachloroethene	ND		3.0		ug/L			04/03/18 14:57	1
Toluene	ND	*	2.0		ug/L			04/03/18 14:57	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/03/18 14:57	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: BD-1**

**Lab Sample ID: 580-76037-12**

**Date Collected: 03/20/18 00:01**

**Matrix: Water**

**Date Received: 03/23/18 09:25**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND	*	1.0		ug/L			04/03/18 14:57	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/03/18 14:57	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/03/18 14:57	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/03/18 14:57	1
1,1,2-Trichloroethane	ND	*	1.0		ug/L			04/03/18 14:57	1
Trichloroethene	ND	*	3.0		ug/L			04/03/18 14:57	1
Trichlorofluoromethane	ND		3.0		ug/L			04/03/18 14:57	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/03/18 14:57	1
1,2,4-Trimethylbenzene	ND	*	3.0		ug/L			04/03/18 14:57	1
1,3,5-Trimethylbenzene	ND	*	3.0		ug/L			04/03/18 14:57	1
Vinyl chloride	ND		1.0		ug/L			04/03/18 14:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		75 - 125		04/03/18 14:57	1
Dibromofluoromethane (Surr)	103		77 - 120		04/03/18 14:57	1
1,2-Dichloroethane-d4 (Surr)	104		80 - 126		04/03/18 14:57	1
Toluene-d8 (Surr)	100		80 - 122		04/03/18 14:57	1
Trifluorotoluene (Surr)	103		80 - 120		04/03/18 14:57	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			04/01/18 00:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	117		75 - 120		04/01/18 00:34	1
4-Bromofluorobenzene (Surr)	89		68 - 119		04/01/18 00:34	1

## Method: 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	*	0.12		mg/L		03/30/18 13:35	04/03/18 00:50	1
DRO (nC10-<nC25)	ND	*	0.12		mg/L		04/03/18 13:07	04/05/18 04:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	49	X	50 - 150	03/30/18 13:35	04/03/18 00:50	1

TestAmerica Seattle



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: BD-2**  
**Date Collected: 03/21/18 00:01**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-13**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/04/18 17:10	1
Bromobenzene	ND		2.0		ug/L			04/04/18 17:10	1
Bromoform	ND		3.0		ug/L			04/04/18 17:10	1
Bromomethane	ND		6.0		ug/L			04/04/18 17:10	1
Carbon tetrachloride	ND		3.0		ug/L			04/04/18 17:10	1
Chlorobenzene	ND		2.0		ug/L			04/04/18 17:10	1
Chlorobromomethane	ND		2.0		ug/L			04/04/18 17:10	1
Chlorodibromomethane	ND		1.0		ug/L			04/04/18 17:10	1
Chloroethane	ND		5.0		ug/L			04/04/18 17:10	1
Chloroform	ND		5.0		ug/L			04/04/18 17:10	1
Chloromethane	ND		20		ug/L			04/04/18 17:10	1
2-Chlorotoluene	ND		3.0		ug/L			04/04/18 17:10	1
4-Chlorotoluene	ND		2.0		ug/L			04/04/18 17:10	1
cis-1,3-Dichloropropene	ND	*	1.0		ug/L			04/04/18 17:10	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/04/18 17:10	1
Dibromomethane	ND		2.0		ug/L			04/04/18 17:10	1
1,2-Dichlorobenzene	ND	*	2.0		ug/L			04/04/18 17:10	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/04/18 17:10	1
<b>1,4-Dichlorobenzene</b>	<b>4.5</b>		4.0		ug/L			04/04/18 17:10	1
Dichlorobromomethane	ND	*	2.0		ug/L			04/04/18 17:10	1
Dichlorodifluoromethane	ND		10		ug/L			04/04/18 17:10	1
1,1-Dichloroethane	ND		2.0		ug/L			04/04/18 17:10	1
1,2-Dichloroethane	ND	*	2.0		ug/L			04/04/18 17:10	1
1,1-Dichloroethene	ND		4.0		ug/L			04/04/18 17:10	1
1,2-Dichloropropane	ND		1.0		ug/L			04/04/18 17:10	1
1,3-Dichloropropane	ND		2.0		ug/L			04/04/18 17:10	1
2,2-Dichloropropane	ND		3.0		ug/L			04/04/18 17:10	1
1,1-Dichloropropene	ND		3.0		ug/L			04/04/18 17:10	1
Ethylene Dibromide	ND		2.0		ug/L			04/04/18 17:10	1
Hexachlorobutadiene	ND		6.0		ug/L			04/04/18 17:10	1
Isopropylbenzene	ND		2.0		ug/L			04/04/18 17:10	1
<b>4-Isopropyltoluene</b>	<b>3.2</b>	*	3.0		ug/L			04/04/18 17:10	1
Methylene Chloride	ND		5.0		ug/L			04/04/18 17:10	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/04/18 17:10	1
Naphthalene	ND	*	4.0		ug/L			04/04/18 17:10	1
n-Butylbenzene	ND		3.0		ug/L			04/04/18 17:10	1
N-Propylbenzene	ND	*	3.0		ug/L			04/04/18 17:10	1
<b>o-Xylene</b>	<b>88</b>		2.0		ug/L			04/04/18 17:10	1
sec-Butylbenzene	ND		3.0		ug/L			04/04/18 17:10	1
Styrene	ND		5.0		ug/L			04/04/18 17:10	1
tert-Butylbenzene	ND	*	3.0		ug/L			04/04/18 17:10	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/04/18 17:10	1
1,1,1,2,2-Tetrachloroethane	ND	*	3.0		ug/L			04/04/18 17:10	1
Tetrachloroethene	ND		3.0		ug/L			04/04/18 17:10	1
Toluene	ND	*	2.0		ug/L			04/04/18 17:10	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/04/18 17:10	1
trans-1,3-Dichloropropene	ND	*	1.0		ug/L			04/04/18 17:10	1
1,2,3-Trichlorobenzene	ND	*	5.0		ug/L			04/04/18 17:10	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/04/18 17:10	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: BD-2**  
**Date Collected: 03/21/18 00:01**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-13**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.0		ug/L			04/04/18 17:10	1
1,1,2-Trichloroethane	ND	*	1.0		ug/L			04/04/18 17:10	1
Trichloroethene	ND		3.0		ug/L			04/04/18 17:10	1
Trichlorofluoromethane	ND		3.0		ug/L			04/04/18 17:10	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/04/18 17:10	1
<b>1,2,4-Trimethylbenzene</b>	<b>29</b>		3.0		ug/L			04/04/18 17:10	1
<b>1,3,5-Trimethylbenzene</b>	<b>17</b>	*	3.0		ug/L			04/04/18 17:10	1
Vinyl chloride	ND		1.0		ug/L			04/04/18 17:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		75 - 125		04/04/18 17:10	1
Dibromofluoromethane (Surr)	103		77 - 120		04/04/18 17:10	1
1,2-Dichloroethane-d4 (Surr)	101		80 - 126		04/04/18 17:10	1
Toluene-d8 (Surr)	98		80 - 122		04/04/18 17:10	1
Trifluorotoluene (Surr)	107		80 - 120		04/04/18 17:10	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>170</b>		30		ug/L			04/04/18 16:42	10
<b>Ethylbenzene</b>	<b>270</b>		30		ug/L			04/04/18 16:42	10
<b>m-Xylene &amp; p-Xylene</b>	<b>390</b>		30		ug/L			04/04/18 16:42	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		75 - 125		04/04/18 16:42	10
Dibromofluoromethane (Surr)	105		77 - 120		04/04/18 16:42	10
1,2-Dichloroethane-d4 (Surr)	104		80 - 126		04/04/18 16:42	10
Toluene-d8 (Surr)	98		80 - 122		04/04/18 16:42	10
Trifluorotoluene (Surr)	107		80 - 120		04/04/18 16:42	10

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Gasoline Range Organics (GRO)</b>	<b>1.7</b>		1.0		mg/L			04/01/18 01:37	1
<b>-C6-C10</b>									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	117		75 - 120		04/01/18 01:37	1
4-Bromofluorobenzene (Surr)	126	X	68 - 119		04/01/18 01:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>0.35</b>	*	0.11		mg/L		03/30/18 13:35	04/03/18 01:17	1
<b>DRO (nC10-&lt;nC25)</b>	<b>0.48</b>	*	0.11		mg/L		04/04/18 09:36	04/06/18 00:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	32	X	50 - 150	03/30/18 13:35	04/03/18 01:17	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: EB**  
**Date Collected: 03/21/18 14:40**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-16**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/04/18 18:36	1
Bromobenzene	ND		2.0		ug/L			04/04/18 18:36	1
Bromoform	ND		3.0		ug/L			04/04/18 18:36	1
Bromomethane	ND		6.0		ug/L			04/04/18 18:36	1
Carbon tetrachloride	ND		3.0		ug/L			04/04/18 18:36	1
Chlorobenzene	ND		2.0		ug/L			04/04/18 18:36	1
Chlorobromomethane	ND		2.0		ug/L			04/04/18 18:36	1
Chlorodibromomethane	ND		1.0		ug/L			04/04/18 18:36	1
Chloroethane	ND		5.0		ug/L			04/04/18 18:36	1
Chloroform	ND		5.0		ug/L			04/04/18 18:36	1
Chloromethane	ND		20		ug/L			04/04/18 18:36	1
2-Chlorotoluene	ND		3.0		ug/L			04/04/18 18:36	1
4-Chlorotoluene	ND		2.0		ug/L			04/04/18 18:36	1
cis-1,2-Dichloroethene	ND		3.0		ug/L			04/04/18 18:36	1
cis-1,3-Dichloropropene	ND	*	1.0		ug/L			04/04/18 18:36	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/04/18 18:36	1
Dibromomethane	ND		2.0		ug/L			04/04/18 18:36	1
1,2-Dichlorobenzene	ND	*	2.0		ug/L			04/04/18 18:36	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/04/18 18:36	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/04/18 18:36	1
Dichlorobromomethane	ND	*	2.0		ug/L			04/04/18 18:36	1
Dichlorodifluoromethane	ND		10		ug/L			04/04/18 18:36	1
1,1-Dichloroethane	ND		2.0		ug/L			04/04/18 18:36	1
1,2-Dichloroethane	ND	*	2.0		ug/L			04/04/18 18:36	1
1,1-Dichloroethene	ND		4.0		ug/L			04/04/18 18:36	1
1,2-Dichloropropane	ND		1.0		ug/L			04/04/18 18:36	1
1,3-Dichloropropane	ND		2.0		ug/L			04/04/18 18:36	1
2,2-Dichloropropane	ND		3.0		ug/L			04/04/18 18:36	1
1,1-Dichloropropene	ND		3.0		ug/L			04/04/18 18:36	1
Ethylbenzene	ND		3.0		ug/L			04/04/18 18:36	1
Ethylene Dibromide	ND		2.0		ug/L			04/04/18 18:36	1
Hexachlorobutadiene	ND		6.0		ug/L			04/04/18 18:36	1
Isopropylbenzene	ND		2.0		ug/L			04/04/18 18:36	1
4-Isopropyltoluene	ND	*	3.0		ug/L			04/04/18 18:36	1
Methylene Chloride	ND		5.0		ug/L			04/04/18 18:36	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/04/18 18:36	1
m-Xylene & p-Xylene	ND		3.0		ug/L			04/04/18 18:36	1
Naphthalene	ND	*	4.0		ug/L			04/04/18 18:36	1
n-Butylbenzene	ND		3.0		ug/L			04/04/18 18:36	1
N-Propylbenzene	ND	*	3.0		ug/L			04/04/18 18:36	1
o-Xylene	ND		2.0		ug/L			04/04/18 18:36	1
sec-Butylbenzene	ND		3.0		ug/L			04/04/18 18:36	1
Styrene	ND		5.0		ug/L			04/04/18 18:36	1
tert-Butylbenzene	ND	*	3.0		ug/L			04/04/18 18:36	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/04/18 18:36	1
1,1,2,2-Tetrachloroethane	ND	*	3.0		ug/L			04/04/18 18:36	1
Tetrachloroethene	ND		3.0		ug/L			04/04/18 18:36	1
Toluene	ND	*	2.0		ug/L			04/04/18 18:36	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/04/18 18:36	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: EB**  
**Date Collected: 03/21/18 14:40**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-16**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND	*	1.0		ug/L			04/04/18 18:36	1
1,2,3-Trichlorobenzene	ND	*	5.0		ug/L			04/04/18 18:36	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/04/18 18:36	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/04/18 18:36	1
1,1,2-Trichloroethane	ND	*	1.0		ug/L			04/04/18 18:36	1
Trichloroethene	ND		3.0		ug/L			04/04/18 18:36	1
Trichlorofluoromethane	ND		3.0		ug/L			04/04/18 18:36	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/04/18 18:36	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			04/04/18 18:36	1
1,3,5-Trimethylbenzene	ND	*	3.0		ug/L			04/04/18 18:36	1
Vinyl chloride	ND		1.0		ug/L			04/04/18 18:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		75 - 125		04/04/18 18:36	1
Dibromofluoromethane (Surr)	106		77 - 120		04/04/18 18:36	1
1,2-Dichloroethane-d4 (Surr)	105		80 - 126		04/04/18 18:36	1
Toluene-d8 (Surr)	102		80 - 122		04/04/18 18:36	1
Trifluorotoluene (Surr)	107		80 - 120		04/04/18 18:36	1

### Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			04/01/18 03:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	115		75 - 120		04/01/18 03:12	1
4-Bromofluorobenzene (Surr)	87		68 - 119		04/01/18 03:12	1

### Method: 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	*	0.12		mg/L		03/30/18 13:35	04/03/18 03:05	1
<b>DRO (nC10-&lt;nC25)</b>	<b>0.46</b>	*	0.12		mg/L		04/04/18 09:36	04/06/18 00:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	51		50 - 150	03/30/18 13:35	04/03/18 03:05	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 580-76037-17**

**Date Collected: 03/20/18 00:01**

**Matrix: Water**

**Date Received: 03/23/18 09:25**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/02/18 20:05	1
Bromobenzene	ND		2.0		ug/L			04/02/18 20:05	1
Bromoform	ND		3.0		ug/L			04/02/18 20:05	1
Bromomethane	ND		6.0		ug/L			04/02/18 20:05	1
Carbon tetrachloride	ND		3.0		ug/L			04/02/18 20:05	1
Chlorobenzene	ND		2.0		ug/L			04/02/18 20:05	1
Chlorobromomethane	ND		2.0		ug/L			04/02/18 20:05	1
Chlorodibromomethane	ND		1.0		ug/L			04/02/18 20:05	1
Chloroethane	ND		5.0		ug/L			04/02/18 20:05	1
Chloroform	ND		5.0		ug/L			04/02/18 20:05	1
Chloromethane	ND		20		ug/L			04/02/18 20:05	1
2-Chlorotoluene	ND		3.0		ug/L			04/02/18 20:05	1
4-Chlorotoluene	ND		2.0		ug/L			04/02/18 20:05	1
cis-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 20:05	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 20:05	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/02/18 20:05	1
Dibromomethane	ND		2.0		ug/L			04/02/18 20:05	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/02/18 20:05	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/02/18 20:05	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/02/18 20:05	1
Dichlorobromomethane	ND		2.0		ug/L			04/02/18 20:05	1
Dichlorodifluoromethane	ND		10		ug/L			04/02/18 20:05	1
1,1-Dichloroethane	ND		2.0		ug/L			04/02/18 20:05	1
1,2-Dichloroethane	ND		2.0		ug/L			04/02/18 20:05	1
1,1-Dichloroethene	ND		4.0		ug/L			04/02/18 20:05	1
1,2-Dichloropropane	ND		1.0		ug/L			04/02/18 20:05	1
1,3-Dichloropropane	ND		2.0		ug/L			04/02/18 20:05	1
2,2-Dichloropropane	ND		3.0		ug/L			04/02/18 20:05	1
1,1-Dichloropropene	ND		3.0		ug/L			04/02/18 20:05	1
Ethylbenzene	ND		3.0		ug/L			04/02/18 20:05	1
Ethylene Dibromide	ND		2.0		ug/L			04/02/18 20:05	1
Hexachlorobutadiene	ND		6.0		ug/L			04/02/18 20:05	1
Isopropylbenzene	ND		2.0		ug/L			04/02/18 20:05	1
4-Isopropyltoluene	ND		3.0		ug/L			04/02/18 20:05	1
Methylene Chloride	ND		5.0		ug/L			04/02/18 20:05	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/02/18 20:05	1
m-Xylene & p-Xylene	ND		3.0		ug/L			04/02/18 20:05	1
Naphthalene	ND		4.0		ug/L			04/02/18 20:05	1
n-Butylbenzene	ND		3.0		ug/L			04/02/18 20:05	1
N-Propylbenzene	ND		3.0		ug/L			04/02/18 20:05	1
o-Xylene	ND		2.0		ug/L			04/02/18 20:05	1
sec-Butylbenzene	ND		3.0		ug/L			04/02/18 20:05	1
Styrene	ND		5.0		ug/L			04/02/18 20:05	1
tert-Butylbenzene	ND		3.0		ug/L			04/02/18 20:05	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/02/18 20:05	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/02/18 20:05	1
Tetrachloroethene	ND		3.0		ug/L			04/02/18 20:05	1
Toluene	ND		2.0		ug/L			04/02/18 20:05	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 20:05	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 580-76037-17**

**Date Collected: 03/20/18 00:01**

**Matrix: Water**

**Date Received: 03/23/18 09:25**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 20:05	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/02/18 20:05	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/02/18 20:05	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/02/18 20:05	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/02/18 20:05	1
Trichloroethene	ND		3.0		ug/L			04/02/18 20:05	1
Trichlorofluoromethane	ND		3.0		ug/L			04/02/18 20:05	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/02/18 20:05	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			04/02/18 20:05	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			04/02/18 20:05	1
Vinyl chloride	ND		1.0		ug/L			04/02/18 20:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		75 - 125		04/02/18 20:05	1
Dibromofluoromethane (Surr)	100		77 - 120		04/02/18 20:05	1
1,2-Dichloroethane-d4 (Surr)	102		80 - 126		04/02/18 20:05	1
Toluene-d8 (Surr)	101		80 - 122		04/02/18 20:05	1
Trifluorotoluene (Surr)	101		80 - 120		04/02/18 20:05	1

**Method: AK101 - Alaska - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			03/31/18 17:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	105		75 - 120		03/31/18 17:41	1
4-Bromofluorobenzene (Surr)	90		68 - 119		03/31/18 17:41	1

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 580-270387/13

Matrix: Water

Analysis Batch: 270387

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/02/18 18:39	1
Bromobenzene	ND		2.0		ug/L			04/02/18 18:39	1
Bromoform	ND		3.0		ug/L			04/02/18 18:39	1
Bromomethane	ND		6.0		ug/L			04/02/18 18:39	1
Carbon tetrachloride	ND		3.0		ug/L			04/02/18 18:39	1
Chlorobenzene	ND		2.0		ug/L			04/02/18 18:39	1
Chlorobromomethane	ND		2.0		ug/L			04/02/18 18:39	1
Chlorodibromomethane	ND		1.0		ug/L			04/02/18 18:39	1
Chloroethane	ND		5.0		ug/L			04/02/18 18:39	1
Chloroform	ND		5.0		ug/L			04/02/18 18:39	1
Chloromethane	ND		20		ug/L			04/02/18 18:39	1
2-Chlorotoluene	ND		3.0		ug/L			04/02/18 18:39	1
4-Chlorotoluene	ND		2.0		ug/L			04/02/18 18:39	1
cis-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 18:39	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 18:39	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/02/18 18:39	1
Dibromomethane	ND		2.0		ug/L			04/02/18 18:39	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/02/18 18:39	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/02/18 18:39	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/02/18 18:39	1
Dichlorobromomethane	ND		2.0		ug/L			04/02/18 18:39	1
Dichlorodifluoromethane	ND		10		ug/L			04/02/18 18:39	1
1,1-Dichloroethane	ND		2.0		ug/L			04/02/18 18:39	1
1,2-Dichloroethane	ND		2.0		ug/L			04/02/18 18:39	1
1,1-Dichloroethene	ND		4.0		ug/L			04/02/18 18:39	1
1,2-Dichloropropane	ND		1.0		ug/L			04/02/18 18:39	1
1,3-Dichloropropane	ND		2.0		ug/L			04/02/18 18:39	1
2,2-Dichloropropane	ND		3.0		ug/L			04/02/18 18:39	1
1,1-Dichloropropene	ND		3.0		ug/L			04/02/18 18:39	1
Ethylbenzene	ND		3.0		ug/L			04/02/18 18:39	1
Ethylene Dibromide	ND		2.0		ug/L			04/02/18 18:39	1
Hexachlorobutadiene	ND		6.0		ug/L			04/02/18 18:39	1
Isopropylbenzene	ND		2.0		ug/L			04/02/18 18:39	1
4-Isopropyltoluene	ND		3.0		ug/L			04/02/18 18:39	1
Methylene Chloride	ND		5.0		ug/L			04/02/18 18:39	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/02/18 18:39	1
m-Xylene & p-Xylene	ND		3.0		ug/L			04/02/18 18:39	1
Naphthalene	ND		4.0		ug/L			04/02/18 18:39	1
n-Butylbenzene	ND		3.0		ug/L			04/02/18 18:39	1
N-Propylbenzene	ND		3.0		ug/L			04/02/18 18:39	1
o-Xylene	ND		2.0		ug/L			04/02/18 18:39	1
sec-Butylbenzene	ND		3.0		ug/L			04/02/18 18:39	1
Styrene	ND		5.0		ug/L			04/02/18 18:39	1
tert-Butylbenzene	ND		3.0		ug/L			04/02/18 18:39	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/02/18 18:39	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/02/18 18:39	1
Tetrachloroethene	ND		3.0		ug/L			04/02/18 18:39	1
Toluene	ND		2.0		ug/L			04/02/18 18:39	1

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

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

**Lab Sample ID: MB 580-270387/13**  
**Matrix: Water**  
**Analysis Batch: 270387**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 18:39	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 18:39	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/02/18 18:39	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/02/18 18:39	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/02/18 18:39	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/02/18 18:39	1
Trichloroethene	ND		3.0		ug/L			04/02/18 18:39	1
Trichlorofluoromethane	ND		3.0		ug/L			04/02/18 18:39	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/02/18 18:39	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			04/02/18 18:39	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			04/02/18 18:39	1
Vinyl chloride	ND		1.0		ug/L			04/02/18 18:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		75 - 125		04/02/18 18:39	1
Dibromofluoromethane (Surr)	101		77 - 120		04/02/18 18:39	1
1,2-Dichloroethane-d4 (Surr)	102		80 - 126		04/02/18 18:39	1
Toluene-d8 (Surr)	101		80 - 122		04/02/18 18:39	1
Trifluorotoluene (Surr)	100		80 - 120		04/02/18 18:39	1

**Lab Sample ID: LCS 580-270387/14**  
**Matrix: Water**  
**Analysis Batch: 270387**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	10.0	9.66		ug/L		97	75 - 120
Bromobenzene	10.0	9.60		ug/L		96	75 - 120
Bromoform	10.0	9.65		ug/L		97	71 - 120
Bromomethane	10.0	8.85		ug/L		89	55 - 125
Carbon tetrachloride	10.0	9.76		ug/L		98	72 - 124
Chlorobenzene	10.0	9.71		ug/L		97	80 - 120
Chlorobromomethane	10.0	9.65		ug/L		97	78 - 120
Chlorodibromomethane	10.0	9.69		ug/L		97	71 - 120
Chloroethane	10.0	9.96		ug/L		100	65 - 126
Chloroform	10.0	9.50		ug/L		95	80 - 119
Chloromethane	10.0	9.25	J	ug/L		92	25 - 149
2-Chlorotoluene	10.0	9.59		ug/L		96	80 - 120
4-Chlorotoluene	10.0	9.87		ug/L		99	80 - 121
cis-1,2-Dichloroethene	10.0	9.51		ug/L		95	76 - 120
cis-1,3-Dichloropropene	10.0	9.54		ug/L		95	77 - 120
1,2-Dibromo-3-Chloropropane	10.0	8.79	J	ug/L		88	58 - 133
Dibromomethane	10.0	9.58		ug/L		96	75 - 123
1,2-Dichlorobenzene	10.0	9.69		ug/L		97	80 - 120
1,3-Dichlorobenzene	10.0	9.58		ug/L		96	80 - 121
1,4-Dichlorobenzene	10.0	9.62		ug/L		96	80 - 120
Dichlorobromomethane	10.0	9.40		ug/L		94	75 - 120
Dichlorodifluoromethane	10.0	10.5		ug/L		105	20 - 150
1,1-Dichloroethane	10.0	9.63		ug/L		96	70 - 120

TestAmerica Seattle



# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

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

Lab Sample ID: LCS 580-270387/14

Matrix: Water

Analysis Batch: 270387

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	10.0	9.70		ug/L		97	76 - 131
1,1-Dichloroethene	10.0	9.77		ug/L		98	70 - 129
1,2-Dichloropropane	10.0	9.56		ug/L		96	72 - 120
1,3-Dichloropropane	10.0	9.73		ug/L		97	79 - 123
2,2-Dichloropropane	10.0	9.08		ug/L		91	43 - 140
1,1-Dichloropropene	10.0	9.80		ug/L		98	75 - 120
Ethylbenzene	10.0	9.62		ug/L		96	75 - 120
Ethylene Dibromide	10.0	9.46		ug/L		95	79 - 120
Hexachlorobutadiene	10.0	10.2		ug/L		102	65 - 125
Isopropylbenzene	10.0	9.87		ug/L		99	75 - 125
4-Isopropyltoluene	10.0	9.72		ug/L		97	77 - 120
Methylene Chloride	10.0	9.35		ug/L		93	70 - 125
Methyl tert-butyl ether	10.0	9.60		ug/L		96	79 - 120
m-Xylene & p-Xylene	10.0	9.80		ug/L		98	75 - 120
Naphthalene	10.0	9.58		ug/L		96	71 - 126
n-Butylbenzene	10.0	9.68		ug/L		97	78 - 120
N-Propylbenzene	10.0	9.93		ug/L		99	80 - 124
o-Xylene	10.0	9.63		ug/L		96	74 - 120
sec-Butylbenzene	10.0	9.92		ug/L		99	78 - 125
Styrene	10.0	9.35		ug/L		94	76 - 121
tert-Butylbenzene	10.0	9.84		ug/L		98	80 - 121
1,1,1,2-Tetrachloroethane	10.0	9.69		ug/L		97	79 - 120
1,1,1,2,2-Tetrachloroethane	10.0	9.68		ug/L		97	65 - 130
Tetrachloroethene	10.0	9.92		ug/L		99	76 - 124
Toluene	10.0	9.76		ug/L		98	75 - 120
trans-1,2-Dichloroethene	10.0	9.75		ug/L		97	72 - 124
trans-1,3-Dichloropropene	10.0	9.66		ug/L		97	73 - 122
1,2,3-Trichlorobenzene	10.0	9.60		ug/L		96	74 - 123
1,2,4-Trichlorobenzene	10.0	9.44		ug/L		94	76 - 120
1,1,1-Trichloroethane	10.0	9.79		ug/L		98	74 - 130
1,1,2-Trichloroethane	10.0	9.85		ug/L		99	78 - 121
Trichloroethene	10.0	9.56		ug/L		96	70 - 125
Trichlorofluoromethane	10.0	10.5		ug/L		105	49 - 144
1,2,3-Trichloropropane	10.0	9.68		ug/L		97	76 - 124
1,2,4-Trimethylbenzene	10.0	9.70		ug/L		97	75 - 121
1,3,5-Trimethylbenzene	10.0	9.77		ug/L		98	75 - 122
Vinyl chloride	10.0	10.2		ug/L		102	20 - 150

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	100		75 - 125
Dibromofluoromethane (Surr)	100		77 - 120
1,2-Dichloroethane-d4 (Surr)	101		80 - 126
Toluene-d8 (Surr)	100		80 - 122
Trifluorotoluene (Surr)	100		80 - 120

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

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

**Lab Sample ID: LCSD 580-270387/15**

**Matrix: Water**

**Analysis Batch: 270387**

**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
Benzene	10.0	10.1		ug/L		101	75 - 120	4	14
Bromobenzene	10.0	9.86		ug/L		99	75 - 120	3	13
Bromoform	10.0	9.58		ug/L		96	71 - 120	1	20
Bromomethane	10.0	9.87		ug/L		99	55 - 125	11	35
Carbon tetrachloride	10.0	10.1		ug/L		101	72 - 124	3	19
Chlorobenzene	10.0	10.1		ug/L		101	80 - 120	4	15
Chlorobromomethane	10.0	9.65		ug/L		97	78 - 120	0	35
Chlorodibromomethane	10.0	9.70		ug/L		97	71 - 120	0	35
Chloroethane	10.0	9.87		ug/L		99	65 - 126	1	35
Chloroform	10.0	10.1		ug/L		101	80 - 119	6	15
Chloromethane	10.0	9.66	J	ug/L		97	25 - 149	4	35
2-Chlorotoluene	10.0	9.82		ug/L		98	80 - 120	2	15
4-Chlorotoluene	10.0	9.93		ug/L		99	80 - 121	1	34
cis-1,2-Dichloroethene	10.0	10.4		ug/L		104	76 - 120	9	15
cis-1,3-Dichloropropene	10.0	9.55		ug/L		95	77 - 120	0	12
1,2-Dibromo-3-Chloropropane	10.0	8.88	J	ug/L		89	58 - 133	1	35
Dibromomethane	10.0	9.59		ug/L		96	75 - 123	0	22
1,2-Dichlorobenzene	10.0	9.79		ug/L		98	80 - 120	1	15
1,3-Dichlorobenzene	10.0	9.43		ug/L		94	80 - 121	2	14
1,4-Dichlorobenzene	10.0	9.69		ug/L		97	80 - 120	1	17
Dichlorobromomethane	10.0	9.71		ug/L		97	75 - 120	3	14
Dichlorodifluoromethane	10.0	11.4		ug/L		114	20 - 150	9	35
1,1-Dichloroethane	10.0	10.2		ug/L		102	70 - 120	6	20
1,2-Dichloroethane	10.0	9.56		ug/L		96	76 - 131	1	11
1,1-Dichloroethene	10.0	10.6		ug/L		106	70 - 129	8	27
1,2-Dichloropropane	10.0	9.82		ug/L		98	72 - 120	3	26
1,3-Dichloropropane	10.0	9.66		ug/L		97	79 - 123	1	35
2,2-Dichloropropane	10.0	8.90		ug/L		89	43 - 140	2	35
1,1-Dichloropropene	10.0	10.1		ug/L		101	75 - 120	3	20
Ethylbenzene	10.0	10.3		ug/L		103	75 - 120	7	14
Ethylene Dibromide	10.0	9.74		ug/L		97	79 - 120	3	26
Hexachlorobutadiene	10.0	9.91		ug/L		99	65 - 125	3	29
Isopropylbenzene	10.0	10.4		ug/L		104	75 - 125	5	20
4-Isopropyltoluene	10.0	9.97		ug/L		100	77 - 120	3	13
Methylene Chloride	10.0	9.13		ug/L		91	70 - 125	2	29
Methyl tert-butyl ether	10.0	9.42		ug/L		94	79 - 120	2	18
m-Xylene & p-Xylene	10.0	10.1		ug/L		101	75 - 120	3	14
Naphthalene	10.0	9.34		ug/L		93	71 - 126	2	16
n-Butylbenzene	10.0	9.96		ug/L		100	78 - 120	3	14
N-Propylbenzene	10.0	10.2		ug/L		102	80 - 124	3	13
o-Xylene	10.0	10.1		ug/L		101	74 - 120	5	16
sec-Butylbenzene	10.0	10.2		ug/L		102	78 - 125	3	15
Styrene	10.0	9.83		ug/L		98	76 - 121	5	16
tert-Butylbenzene	10.0	9.94		ug/L		99	80 - 121	1	14
1,1,1,2-Tetrachloroethane	10.0	9.96		ug/L		100	79 - 120	3	20
1,1,1,2,2-Tetrachloroethane	10.0	9.06		ug/L		91	65 - 130	7	18
Tetrachloroethene	10.0	10.0		ug/L		100	76 - 124	1	20
Toluene	10.0	10.1		ug/L		101	75 - 120	3	13

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

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

**Lab Sample ID: LCSD 580-270387/15**  
**Matrix: Water**  
**Analysis Batch: 270387**

**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
trans-1,2-Dichloroethene	10.0	9.95		ug/L		100	72 - 124	2	21
trans-1,3-Dichloropropene	10.0	9.59		ug/L		96	73 - 122	1	13
1,2,3-Trichlorobenzene	10.0	9.40		ug/L		94	74 - 123	2	17
1,2,4-Trichlorobenzene	10.0	9.40		ug/L		94	76 - 120	0	22
1,1,1-Trichloroethane	10.0	10.1		ug/L		101	74 - 130	3	18
1,1,2-Trichloroethane	10.0	9.89		ug/L		99	78 - 121	0	14
Trichloroethene	10.0	10.4		ug/L		104	70 - 125	9	15
Trichlorofluoromethane	10.0	11.1		ug/L		111	49 - 144	5	35
1,2,3-Trichloropropane	10.0	9.78		ug/L		98	76 - 124	1	30
1,2,4-Trimethylbenzene	10.0	10.0		ug/L		100	75 - 121	3	16
1,3,5-Trimethylbenzene	10.0	10.0		ug/L		100	75 - 122	2	14
Vinyl chloride	10.0	10.6		ug/L		106	20 - 150	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	101		75 - 125
Dibromofluoromethane (Surr)	99		77 - 120
1,2-Dichloroethane-d4 (Surr)	99		80 - 126
Toluene-d8 (Surr)	101		80 - 122
Trifluorotoluene (Surr)	99		80 - 120

**Lab Sample ID: MB 580-270476/5**  
**Matrix: Water**  
**Analysis Batch: 270476**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/03/18 12:04	1
Bromobenzene	ND		2.0		ug/L			04/03/18 12:04	1
Bromoform	ND		3.0		ug/L			04/03/18 12:04	1
Bromomethane	ND		6.0		ug/L			04/03/18 12:04	1
Carbon tetrachloride	ND		3.0		ug/L			04/03/18 12:04	1
Chlorobenzene	ND		2.0		ug/L			04/03/18 12:04	1
Chlorobromomethane	ND		2.0		ug/L			04/03/18 12:04	1
Chlorodibromomethane	ND		1.0		ug/L			04/03/18 12:04	1
Chloroethane	ND		5.0		ug/L			04/03/18 12:04	1
Chloroform	ND		5.0		ug/L			04/03/18 12:04	1
Chloromethane	ND		20		ug/L			04/03/18 12:04	1
2-Chlorotoluene	ND		3.0		ug/L			04/03/18 12:04	1
4-Chlorotoluene	ND		2.0		ug/L			04/03/18 12:04	1
cis-1,2-Dichloroethene	ND		3.0		ug/L			04/03/18 12:04	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/03/18 12:04	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/03/18 12:04	1
Dibromomethane	ND		2.0		ug/L			04/03/18 12:04	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/03/18 12:04	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/03/18 12:04	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/03/18 12:04	1
Dichlorobromomethane	ND		2.0		ug/L			04/03/18 12:04	1
Dichlorodifluoromethane	ND		10		ug/L			04/03/18 12:04	1
1,1-Dichloroethane	ND		2.0		ug/L			04/03/18 12:04	1

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

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

**Lab Sample ID: MB 580-270476/5**  
**Matrix: Water**  
**Analysis Batch: 270476**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		2.0		ug/L			04/03/18 12:04	1
1,1-Dichloroethene	ND		4.0		ug/L			04/03/18 12:04	1
1,2-Dichloropropane	ND		1.0		ug/L			04/03/18 12:04	1
1,3-Dichloropropane	ND		2.0		ug/L			04/03/18 12:04	1
2,2-Dichloropropane	ND		3.0		ug/L			04/03/18 12:04	1
1,1-Dichloropropene	ND		3.0		ug/L			04/03/18 12:04	1
Ethylbenzene	ND		3.0		ug/L			04/03/18 12:04	1
Ethylene Dibromide	ND		2.0		ug/L			04/03/18 12:04	1
Hexachlorobutadiene	ND		6.0		ug/L			04/03/18 12:04	1
Isopropylbenzene	ND		2.0		ug/L			04/03/18 12:04	1
4-Isopropyltoluene	ND		3.0		ug/L			04/03/18 12:04	1
Methylene Chloride	ND		5.0		ug/L			04/03/18 12:04	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/03/18 12:04	1
m-Xylene & p-Xylene	ND		3.0		ug/L			04/03/18 12:04	1
Naphthalene	ND		4.0		ug/L			04/03/18 12:04	1
n-Butylbenzene	ND		3.0		ug/L			04/03/18 12:04	1
N-Propylbenzene	ND		3.0		ug/L			04/03/18 12:04	1
o-Xylene	ND		2.0		ug/L			04/03/18 12:04	1
sec-Butylbenzene	ND		3.0		ug/L			04/03/18 12:04	1
Styrene	ND		5.0		ug/L			04/03/18 12:04	1
tert-Butylbenzene	ND		3.0		ug/L			04/03/18 12:04	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/03/18 12:04	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/03/18 12:04	1
Tetrachloroethene	ND		3.0		ug/L			04/03/18 12:04	1
Toluene	ND		2.0		ug/L			04/03/18 12:04	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/03/18 12:04	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/03/18 12:04	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/03/18 12:04	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/03/18 12:04	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/03/18 12:04	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/03/18 12:04	1
Trichloroethene	ND		3.0		ug/L			04/03/18 12:04	1
Trichlorofluoromethane	ND		3.0		ug/L			04/03/18 12:04	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/03/18 12:04	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			04/03/18 12:04	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			04/03/18 12:04	1
Vinyl chloride	ND		1.0		ug/L			04/03/18 12:04	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		75 - 125		04/03/18 12:04	1
Dibromofluoromethane (Surr)	102		77 - 120		04/03/18 12:04	1
1,2-Dichloroethane-d4 (Surr)	103		80 - 126		04/03/18 12:04	1
Toluene-d8 (Surr)	100		80 - 122		04/03/18 12:04	1
Trifluorotoluene (Surr)	103		80 - 120		04/03/18 12:04	1

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

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

**Lab Sample ID: LCS 580-270476/6**

**Matrix: Water**

**Analysis Batch: 270476**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	10.0	9.78		ug/L		98	75 - 120
Bromobenzene	10.0	9.10		ug/L		91	75 - 120
Bromoform	10.0	9.65		ug/L		97	71 - 120
Bromomethane	10.0	8.77		ug/L		88	55 - 125
Carbon tetrachloride	10.0	9.86		ug/L		99	72 - 124
Chlorobenzene	10.0	9.50		ug/L		95	80 - 120
Chlorobromomethane	10.0	9.57		ug/L		96	78 - 120
Chlorodibromomethane	10.0	9.82		ug/L		98	71 - 120
Chloroethane	10.0	9.67		ug/L		97	65 - 126
Chloroform	10.0	9.65		ug/L		96	80 - 119
Chloromethane	10.0	9.60	J	ug/L		96	25 - 149
2-Chlorotoluene	10.0	9.32		ug/L		93	80 - 120
4-Chlorotoluene	10.0	9.31		ug/L		93	80 - 121
cis-1,2-Dichloroethene	10.0	9.23		ug/L		92	76 - 120
cis-1,3-Dichloropropene	10.0	10.0		ug/L		100	77 - 120
1,2-Dibromo-3-Chloropropane	10.0	9.20	J	ug/L		92	58 - 133
Dibromomethane	10.0	9.63		ug/L		96	75 - 123
1,2-Dichlorobenzene	10.0	9.42		ug/L		94	80 - 120
1,3-Dichlorobenzene	10.0	9.23		ug/L		92	80 - 121
1,4-Dichlorobenzene	10.0	9.31		ug/L		93	80 - 120
Dichlorobromomethane	10.0	10.1		ug/L		101	75 - 120
Dichlorodifluoromethane	10.0	9.53	J	ug/L		95	20 - 150
1,1-Dichloroethane	10.0	9.83		ug/L		98	70 - 120
1,2-Dichloroethane	10.0	9.45		ug/L		94	76 - 131
1,1-Dichloroethene	10.0	9.98		ug/L		100	70 - 129
1,2-Dichloropropane	10.0	9.57		ug/L		96	72 - 120
1,3-Dichloropropane	10.0	9.27		ug/L		93	79 - 123
2,2-Dichloropropane	10.0	9.51		ug/L		95	43 - 140
1,1-Dichloropropene	10.0	9.82		ug/L		98	75 - 120
Ethylbenzene	10.0	9.38		ug/L		94	75 - 120
Ethylene Dibromide	10.0	9.38		ug/L		94	79 - 120
Hexachlorobutadiene	10.0	9.61		ug/L		96	65 - 125
Isopropylbenzene	10.0	9.81		ug/L		98	75 - 125
4-Isopropyltoluene	10.0	9.47		ug/L		95	77 - 120
Methylene Chloride	10.0	9.25		ug/L		93	70 - 125
Methyl tert-butyl ether	10.0	9.26		ug/L		93	79 - 120
m-Xylene & p-Xylene	10.0	9.29		ug/L		93	75 - 120
Naphthalene	10.0	9.48		ug/L		95	71 - 126
n-Butylbenzene	10.0	9.22		ug/L		92	78 - 120
N-Propylbenzene	10.0	9.64		ug/L		96	80 - 124
o-Xylene	10.0	9.47		ug/L		95	74 - 120
sec-Butylbenzene	10.0	9.79		ug/L		98	78 - 125
Styrene	10.0	8.81		ug/L		88	76 - 121
tert-Butylbenzene	10.0	9.78		ug/L		98	80 - 121
1,1,1,2-Tetrachloroethane	10.0	9.87		ug/L		99	79 - 120
1,1,1,2,2-Tetrachloroethane	10.0	9.17		ug/L		92	65 - 130
Tetrachloroethene	10.0	9.76		ug/L		98	76 - 124
Toluene	10.0	9.58		ug/L		96	75 - 120

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

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

**Lab Sample ID: LCS 580-270476/6**  
**Matrix: Water**  
**Analysis Batch: 270476**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	10.0	9.46		ug/L		95	72 - 124
trans-1,3-Dichloropropene	10.0	9.48		ug/L		95	73 - 122
1,2,3-Trichlorobenzene	10.0	9.43		ug/L		94	74 - 123
1,2,4-Trichlorobenzene	10.0	9.28		ug/L		93	76 - 120
1,1,1-Trichloroethane	10.0	9.85		ug/L		99	74 - 130
1,1,2-Trichloroethane	10.0	9.67		ug/L		97	78 - 121
Trichloroethene	10.0	10.0		ug/L		100	70 - 125
Trichlorofluoromethane	10.0	9.87		ug/L		99	49 - 144
1,2,3-Trichloropropane	10.0	9.33		ug/L		93	76 - 124
1,2,4-Trimethylbenzene	10.0	9.46		ug/L		95	75 - 121
1,3,5-Trimethylbenzene	10.0	9.69		ug/L		97	75 - 122
Vinyl chloride	10.0	10.1		ug/L		101	20 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		75 - 125
Dibromofluoromethane (Surr)	102		77 - 120
1,2-Dichloroethane-d4 (Surr)	103		80 - 126
Toluene-d8 (Surr)	102		80 - 122
Trifluorotoluene (Surr)	101		80 - 120

**Lab Sample ID: LCSD 580-270476/7**  
**Matrix: Water**  
**Analysis Batch: 270476**

**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
Benzene	10.0	11.6	*	ug/L		116	75 - 120	17	14
Bromobenzene	10.0	11.0	*	ug/L		110	75 - 120	19	13
Bromoform	10.0	12.4	*	ug/L		124	71 - 120	25	20
Bromomethane	10.0	11.2		ug/L		112	55 - 125	24	35
Carbon tetrachloride	10.0	12.2	*	ug/L		122	72 - 124	21	19
Chlorobenzene	10.0	11.6	*	ug/L		116	80 - 120	20	15
Chlorobromomethane	10.0	11.6		ug/L		116	78 - 120	19	35
Chlorodibromomethane	10.0	11.8		ug/L		118	71 - 120	19	35
Chloroethane	10.0	11.4		ug/L		114	65 - 126	17	35
Chloroform	10.0	11.8	*	ug/L		118	80 - 119	20	15
Chloromethane	10.0	10.8	J	ug/L		108	25 - 149	11	35
2-Chlorotoluene	10.0	11.2	*	ug/L		112	80 - 120	19	15
4-Chlorotoluene	10.0	11.3		ug/L		113	80 - 121	20	34
cis-1,2-Dichloroethene	10.0	11.8	*	ug/L		118	76 - 120	25	15
cis-1,3-Dichloropropene	10.0	11.0		ug/L		110	77 - 120	9	12
1,2-Dibromo-3-Chloropropane	10.0	10.6		ug/L		106	58 - 133	14	35
Dibromomethane	10.0	11.4		ug/L		114	75 - 123	17	22
1,2-Dichlorobenzene	10.0	11.1	*	ug/L		111	80 - 120	17	15
1,3-Dichlorobenzene	10.0	11.8	*	ug/L		118	80 - 121	25	14
1,4-Dichlorobenzene	10.0	11.3	*	ug/L		113	80 - 120	19	17
Dichlorobromomethane	10.0	11.5		ug/L		115	75 - 120	14	14
Dichlorodifluoromethane	10.0	11.9		ug/L		119	20 - 150	22	35
1,1-Dichloroethane	10.0	11.8		ug/L		118	70 - 120	18	20

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

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

Lab Sample ID: LCSD 580-270476/7

Matrix: Water

Analysis Batch: 270476

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
1,2-Dichloroethane	10.0	11.2	*	ug/L		112	76 - 131	17	11
1,1-Dichloroethene	10.0	11.8		ug/L		118	70 - 129	17	27
1,2-Dichloropropane	10.0	11.4		ug/L		114	72 - 120	17	26
1,3-Dichloropropane	10.0	11.4		ug/L		114	79 - 123	20	35
2,2-Dichloropropane	10.0	11.7		ug/L		117	43 - 140	21	35
1,1-Dichloropropene	10.0	12.0		ug/L		120	75 - 120	20	20
Ethylbenzene	10.0	11.6	*	ug/L		116	75 - 120	21	14
Ethylene Dibromide	10.0	11.2		ug/L		112	79 - 120	18	26
Hexachlorobutadiene	10.0	11.7		ug/L		117	65 - 125	19	29
Isopropylbenzene	10.0	12.1	*	ug/L		121	75 - 125	21	20
4-Isopropyltoluene	10.0	11.3	*	ug/L		113	77 - 120	18	13
Methylene Chloride	10.0	10.7		ug/L		107	70 - 125	15	29
Methyl tert-butyl ether	10.0	11.5	*	ug/L		115	79 - 120	21	18
m-Xylene & p-Xylene	10.0	11.6	*	ug/L		116	75 - 120	22	14
Naphthalene	10.0	11.0		ug/L		110	71 - 126	15	16
n-Butylbenzene	10.0	11.3	*	ug/L		113	78 - 120	21	14
N-Propylbenzene	10.0	11.6	*	ug/L		116	80 - 124	18	13
o-Xylene	10.0	11.8	*	ug/L		118	74 - 120	22	16
sec-Butylbenzene	10.0	11.5	*	ug/L		115	78 - 125	16	15
Styrene	10.0	11.4	*	ug/L		114	76 - 121	26	16
tert-Butylbenzene	10.0	11.3		ug/L		113	80 - 121	14	14
1,1,1,2-Tetrachloroethane	10.0	11.7		ug/L		117	79 - 120	17	20
1,1,1,2,2-Tetrachloroethane	10.0	10.7		ug/L		107	65 - 130	16	18
Tetrachloroethene	10.0	11.6		ug/L		116	76 - 124	18	20
Toluene	10.0	11.5	*	ug/L		115	75 - 120	18	13
trans-1,2-Dichloroethene	10.0	11.7		ug/L		117	72 - 124	21	21
trans-1,3-Dichloropropene	10.0	11.3	*	ug/L		113	73 - 122	17	13
1,2,3-Trichlorobenzene	10.0	11.0		ug/L		110	74 - 123	15	17
1,2,4-Trichlorobenzene	10.0	11.4		ug/L		114	76 - 120	20	22
1,1,1-Trichloroethane	10.0	11.7		ug/L		117	74 - 130	17	18
1,1,2-Trichloroethane	10.0	11.6	*	ug/L		116	78 - 121	18	14
Trichloroethene	10.0	12.2	*	ug/L		122	70 - 125	20	15
Trichlorofluoromethane	10.0	12.4		ug/L		124	49 - 144	23	35
1,2,3-Trichloropropane	10.0	11.5		ug/L		115	76 - 124	21	30
1,2,4-Trimethylbenzene	10.0	11.3	*	ug/L		113	75 - 121	18	16
1,3,5-Trimethylbenzene	10.0	11.3	*	ug/L		113	75 - 122	15	14
Vinyl chloride	10.0	11.4		ug/L		114	20 - 150	12	35

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	102		75 - 125
Dibromofluoromethane (Surr)	102		77 - 120
1,2-Dichloroethane-d4 (Surr)	103		80 - 126
Toluene-d8 (Surr)	100		80 - 122
Trifluorotoluene (Surr)	100		80 - 120

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

**Lab Sample ID: MB 580-270332/5**

**Matrix: Water**

**Analysis Batch: 270332**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			03/31/18 16:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	126	X	75 - 120		03/31/18 16:06	1
4-Bromofluorobenzene (Surr)	88		68 - 119		03/31/18 16:06	1

**Lab Sample ID: LCS 580-270332/6**

**Matrix: Water**

**Analysis Batch: 270332**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	1.13		mg/L		113	77 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Trifluorotoluene (Surr)	119		75 - 120
4-Bromofluorobenzene (Surr)	95		68 - 119

**Lab Sample ID: LCSD 580-270332/7**

**Matrix: Water**

**Analysis Batch: 270332**

**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
Gasoline Range Organics (GRO) -C6-C10	1.00	1.11		mg/L		111	77 - 123	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Trifluorotoluene (Surr)	116		75 - 120
4-Bromofluorobenzene (Surr)	93		68 - 119

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

**Lab Sample ID: MB 580-270270/1-A**

**Matrix: Water**

**Analysis Batch: 270409**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 270270**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	ND		0.11		mg/L		03/30/18 13:35	04/02/18 16:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	66		50 - 150	03/30/18 13:35	04/02/18 16:34	1

TestAmerica Seattle



# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

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

**Lab Sample ID: LCS 580-270270/2-A**  
**Matrix: Water**  
**Analysis Batch: 270409**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 270270**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
DRO (nC10-<nC25)	2.00	1.39	*	mg/L		70	75 - 125
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
<i>o-Terphenyl</i>	75		50 - 150				

**Lab Sample ID: LCSD 580-270270/3-A**  
**Matrix: Water**  
**Analysis Batch: 270409**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 270270**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
DRO (nC10-<nC25)	2.00	1.49		mg/L		75	75 - 125	7	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>						
<i>o-Terphenyl</i>	76		50 - 150						

**Lab Sample ID: MB 580-270489/1-A**  
**Matrix: Water**  
**Analysis Batch: 270640**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 270489**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	ND		0.11		mg/L		04/03/18 13:07	04/04/18 17:34	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>MB Qualifier</b>	<b>Limits</b>						
<i>o-Terphenyl</i>	64		50 - 150						
							<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
							04/03/18 13:07	04/04/18 17:34	1

**Lab Sample ID: LCS 580-270489/2-A**  
**Matrix: Water**  
**Analysis Batch: 270640**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 270489**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
DRO (nC10-<nC25)	2.00	1.53		mg/L		77	75 - 125
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
<i>o-Terphenyl</i>	63		50 - 150				

**Lab Sample ID: LCSD 580-270489/3-A**  
**Matrix: Water**  
**Analysis Batch: 270640**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 270489**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
DRO (nC10-<nC25)	2.00	1.30	*	mg/L		65	75 - 125	17	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>						
<i>o-Terphenyl</i>	65		50 - 150						

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

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

**Lab Sample ID: MB 580-270554/1-A**  
**Matrix: Water**  
**Analysis Batch: 270747**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 270554**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	ND		0.11		mg/L		04/04/18 09:36	04/05/18 21:16	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	73		50 - 150				04/04/18 09:36	04/05/18 21:16	1

**Lab Sample ID: LCS 580-270554/2-A**  
**Matrix: Water**  
**Analysis Batch: 270747**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 270554**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
DRO (nC10-<nC25)	2.00	1.56		mg/L		78	75 - 125
Surrogate	%Recovery	LCS Qualifier	Limits				
<i>o</i> -Terphenyl	78		50 - 150				

**Lab Sample ID: LCSD 580-270554/3-A**  
**Matrix: Water**  
**Analysis Batch: 270747**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 270554**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
DRO (nC10-<nC25)	2.00	1.27	*	mg/L		63	75 - 125	21	20
Surrogate	%Recovery	LCSD Qualifier	Limits						
<i>o</i> -Terphenyl	65		50 - 150						

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-1**  
**Date Collected: 03/21/18 14:20**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-1**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270387	04/02/18 20:33	RSB	TAL SEA
Total/NA	Analysis	8260C	DL	10	270547	04/04/18 15:16	JSM	TAL SEA
Total/NA	Analysis	AK101		1	270332	03/31/18 18:13	JSM	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/02/18 19:22	T1W	TAL SEA
Total/NA	Prep	3510C			270489	04/03/18 13:07	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270640	04/04/18 23:37	ADB	TAL SEA

**Client Sample ID: MW-2**  
**Date Collected: 03/21/18 12:45**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-2**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270387	04/02/18 21:02	RSB	TAL SEA
Total/NA	Analysis	8260C	DL	10	270547	04/04/18 15:44	JSM	TAL SEA
Total/NA	Analysis	AK101		1	270332	03/31/18 18:45	JSM	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/02/18 19:50	T1W	TAL SEA
Total/NA	Prep	3510C			270489	04/03/18 13:07	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270640	04/05/18 00:05	ADB	TAL SEA

**Client Sample ID: MW-3**  
**Date Collected: 03/21/18 13:40**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-3**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270387	04/02/18 21:30	RSB	TAL SEA
Total/NA	Analysis	AK101		1	270332	03/31/18 19:17	JSM	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/02/18 20:17	T1W	TAL SEA
Total/NA	Prep	3510C			270489	04/03/18 13:07	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270640	04/05/18 00:33	ADB	TAL SEA

**Client Sample ID: MW-4**  
**Date Collected: 03/20/18 11:55**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-4**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270387	04/02/18 21:59	RSB	TAL SEA
Total/NA	Analysis	AK101		1	270332	03/31/18 19:49	JSM	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/02/18 20:45	T1W	TAL SEA

TestAmerica Seattle

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

## Client Sample ID: MW-4

Date Collected: 03/20/18 11:55

Date Received: 03/23/18 09:25

## Lab Sample ID: 580-76037-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			270489	04/03/18 13:07	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270640	04/05/18 01:00	ADB	TAL SEA

## Client Sample ID: MW-5

Date Collected: 03/21/18 11:45

Date Received: 03/23/18 09:25

## Lab Sample ID: 580-76037-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270387	04/02/18 22:27	RSB	TAL SEA
Total/NA	Analysis	8260C	DL	10	270547	04/04/18 16:13	JSM	TAL SEA
Total/NA	Analysis	AK101		1	270332	03/31/18 20:52	JSM	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/02/18 21:40	T1W	TAL SEA
Total/NA	Prep	3510C			270489	04/03/18 13:07	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270640	04/05/18 01:28	ADB	TAL SEA

## Client Sample ID: MW-6

Date Collected: 03/21/18 11:00

Date Received: 03/23/18 09:25

## Lab Sample ID: 580-76037-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270387	04/02/18 22:56	RSB	TAL SEA
Total/NA	Analysis	AK101		1	270332	03/31/18 21:24	JSM	TAL SEA
Total/NA	Prep	3510C			270554	04/04/18 09:36	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270747	04/05/18 23:51	ADB	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/02/18 22:07	T1W	TAL SEA

## Client Sample ID: MW-7

Date Collected: 03/20/18 15:45

Date Received: 03/23/18 09:25

## Lab Sample ID: 580-76037-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270387	04/02/18 23:25	RSB	TAL SEA
Total/NA	Analysis	AK101		1	270332	03/31/18 21:55	JSM	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/02/18 22:35	T1W	TAL SEA
Total/NA	Prep	3510C			270489	04/03/18 13:07	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270640	04/05/18 01:55	ADB	TAL SEA

TestAmerica Seattle

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-8**

**Date Collected: 03/20/18 15:05**

**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-8**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270387	04/02/18 23:53	RSB	TAL SEA
Total/NA	Analysis	AK101		1	270332	03/31/18 22:27	JSM	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/02/18 23:02	T1W	TAL SEA
Total/NA	Prep	3510C			270489	04/03/18 13:07	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270640	04/05/18 02:23	ADB	TAL SEA

**Client Sample ID: MW-9**

**Date Collected: 03/20/18 14:10**

**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-9**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270387	04/03/18 00:22	RSB	TAL SEA
Total/NA	Analysis	AK101		1	270332	03/31/18 22:59	JSM	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/02/18 23:29	T1W	TAL SEA
Total/NA	Prep	3510C			270489	04/03/18 13:07	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270640	04/05/18 02:50	ADB	TAL SEA

**Client Sample ID: MW-10**

**Date Collected: 03/20/18 13:30**

**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-10**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270387	04/03/18 00:50	RSB	TAL SEA
Total/NA	Analysis	AK101		1	270332	03/31/18 23:30	JSM	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/02/18 23:56	T1W	TAL SEA
Total/NA	Prep	3510C			270489	04/03/18 13:07	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270640	04/05/18 03:45	ADB	TAL SEA

**Client Sample ID: MW-11**

**Date Collected: 03/20/18 12:50**

**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-11**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270387	04/03/18 01:19	RSB	TAL SEA
Total/NA	Analysis	AK101		1	270332	04/01/18 00:02	JSM	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/03/18 00:23	T1W	TAL SEA
Total/NA	Prep	3510C			270489	04/03/18 13:07	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270640	04/05/18 04:16	ADB	TAL SEA

TestAmerica Seattle

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

## Client Sample ID: BD-1

Date Collected: 03/20/18 00:01

Date Received: 03/23/18 09:25

## Lab Sample ID: 580-76037-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270476	04/03/18 14:57	P1P	TAL SEA
Total/NA	Analysis	AK101		1	270332	04/01/18 00:34	JSM	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/03/18 00:50	T1W	TAL SEA
Total/NA	Prep	3510C			270489	04/03/18 13:07	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270640	04/05/18 04:44	ADB	TAL SEA

## Client Sample ID: BD-2

Date Collected: 03/21/18 00:01

Date Received: 03/23/18 09:25

## Lab Sample ID: 580-76037-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	DL	10	270547	04/04/18 16:42	JSM	TAL SEA
Total/NA	Analysis	8260C		1	270547	04/04/18 17:10	JSM	TAL SEA
Total/NA	Analysis	AK101		1	270332	04/01/18 01:37	JSM	TAL SEA
Total/NA	Prep	3510C			270554	04/04/18 09:36	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270747	04/06/18 00:13	ADB	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/03/18 01:17	T1W	TAL SEA

## Client Sample ID: EB

Date Collected: 03/21/18 14:40

Date Received: 03/23/18 09:25

## Lab Sample ID: 580-76037-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270547	04/04/18 18:36	JSM	TAL SEA
Total/NA	Analysis	AK101		1	270332	04/01/18 03:12	JSM	TAL SEA
Total/NA	Prep	3510C			270554	04/04/18 09:36	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270747	04/06/18 00:57	ADB	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/03/18 03:05	T1W	TAL SEA

## Client Sample ID: Trip Blank

Date Collected: 03/20/18 00:01

Date Received: 03/23/18 09:25

## Lab Sample ID: 580-76037-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270387	04/02/18 20:05	RSB	TAL SEA
Total/NA	Analysis	AK101		1	270332	03/31/18 17:41	JSM	TAL SEA

### Laboratory References:

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

TestAmerica Seattle

# Accreditation/Certification Summary

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

## Laboratory: TestAmerica Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-024	01-19-19

The following analytes are included in this report, but are not accredited/certified under this accreditation/certification:

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	1,1-Dichloropropene
8260C		Water	1,2-Dibromo-3-Chloropropane
8260C		Water	1,3-Dichloropropane
8260C		Water	2,2-Dichloropropane
8260C		Water	2-Chlorotoluene
8260C		Water	4-Chlorotoluene
8260C		Water	4-Isopropyltoluene
8260C		Water	Chlorobromomethane
8260C		Water	cis-1,3-Dichloropropene
8260C		Water	trans-1,3-Dichloropropene

# Sample Summary

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-76037-1	MW-1	Water	03/21/18 14:20	03/23/18 09:25
580-76037-2	MW-2	Water	03/21/18 12:45	03/23/18 09:25
580-76037-3	MW-3	Water	03/21/18 13:40	03/23/18 09:25
580-76037-4	MW-4	Water	03/20/18 11:55	03/23/18 09:25
580-76037-5	MW-5	Water	03/21/18 11:45	03/23/18 09:25
580-76037-6	MW-6	Water	03/21/18 11:00	03/23/18 09:25
580-76037-7	MW-7	Water	03/20/18 15:45	03/23/18 09:25
580-76037-8	MW-8	Water	03/20/18 15:05	03/23/18 09:25
580-76037-9	MW-9	Water	03/20/18 14:10	03/23/18 09:25
580-76037-10	MW-10	Water	03/20/18 13:30	03/23/18 09:25
580-76037-11	MW-11	Water	03/20/18 12:50	03/23/18 09:25
580-76037-12	BD-1	Water	03/20/18 00:01	03/23/18 09:25
580-76037-13	BD-2	Water	03/21/18 00:01	03/23/18 09:25
580-76037-16	EB	Water	03/21/18 14:40	03/23/18 09:25
580-76037-17	Trip Blank	Water	03/20/18 00:01	03/23/18 09:25



**TestAmerica Seattle**

5755 8th Street East

Loc: 580  
**76037**

**Chain of Custody Record**



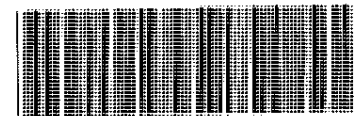
Tacoma, WA 98424-1317  
phone 253.922.2310 fax 253.922.5047

Regulatory Program:  DW  NPDES  RCRA  Other:

TestAmerica Laboratories, Inc.

<b>Client Contact</b>	<b>Project Manager:</b> <u>Greg Montgomery</u>	<b>Site Contact:</b> <u>Michael MacDaniel</u>	<b>Date:</b> <u>6/23/17</u> <u>3/22/18</u>	<b>COC No:</b> 1 of 2 COCs
ARCADIS	<b>Tel/Fax:</b> <u>Matt Pelton</u>	<b>Lab Contact:</b> <u>Kristine Allen</u>	<b>Carrier:</b> <u>FedEx</u>	<b>Sampler:</b>
880 H St STE 101	<b>Analysis Turnaround Time</b>			<b>For Lab Use Only:</b>
Anchorage, AK 99501	<input type="checkbox"/> CALENDAR DAYS	<input checked="" type="checkbox"/> WORKING DAYS		Walk-in Client:
(206) 465-3161 Phone	TAT if different from Below <u>Standard</u>			Lab Sampling:
(xxx) xxx-xxxx FAX	<input type="checkbox"/> 2 weeks			Job / SDG No.:
Project Name: <u>Clear AFS</u>	<input type="checkbox"/> 1 week			
Site: <u>Former TBE Machine Shop</u>	<input type="checkbox"/> 2 days			
P O # <u>B0031255.1404</u>	<input type="checkbox"/> 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)			Sample Specific Notes:	
							8260C	AK102 - AK102 (DRO)	AK101 - AK101 (GRO)		
MW-1	3/21/2018	1420	G	W	8	N	N	X	X	X	Therm. ID <u>A2</u> Cor <u>0.26</u> Unc <u>0.0</u> Cooler Dsc: <u>1rg Blue</u> <del>Wet</del> Packs Packing: <u>Sub</u> Fed P.O. Custody Seal: Yes <u>No</u>
MW-2	3/21/2018	1245	G	W	8	N	N	X	X	X	
MW-3	3/21/2018	1340	G	W	8	N	N	X	X	X	
MW-4	3/20/2018	1155	G	W	8	N	N	X	X	X	
MW-5	3/21/2018	1145	G	W	8	N	N	X	X	X	
MW-6	3/21/2018	1100	G	W	8	N	N	X	X	X	
MW-7	3/20/2018	1545	G	W	8	N	N	X	X	X	
MW-8	3/20/2018	1505	G	W	8	N	N	X	X	X	
MW-9	3/20/2018	1410	G	W	8	N	Y	X	X	X	
MW-10	3/20/2018	1330	G	W	8	N	N	X	X	X	
MW-11	3/20/2018	1250	G	W	8	N	N	X	X	X	Therm. ID <u>A2</u> Cor <u>0.20</u> Unc <u>1.4</u> Cooler Dsc: <u>1rg Blue</u> <del>Wet</del> Packs Packing: <u>Sub</u> Fed P.O. Custody Seal: Yes <u>No</u>
BD-1	3/20/2018	-	G	W	8	N	N	X	X	X	
<b>Preservation Used:</b> 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other							2	2	2		



580-76037 Chain of Custody

<b>Possible Hazard Identification:</b> Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample. <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown	<b>Sample Disposal ( A fee may be assessed if )</b> <input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months
--	--

**Special Instructions/QC Requirements & Comments:**

Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Custody Seal No.:	Cooler Temp. (°C): Obs'd:	Therm ID No.:
Relinquished by: <u>Michael MacDaniel</u>	Company: <u>ARCADIS</u>	Date/Time: <u>6/2/17</u> <u>3/22/18 12:20</u>	Received by:
Relinquished by:	Company:	Date/Time:	Received by:
Relinquished by:	Company:	Date/Time:	Received in Laboratory: <u>SKA P</u> Date/Time: <u>3.23.18</u> <u>0925</u>

Tacoma, WA 98424-1317  
phone 253.922.2310 fax 253.922.5047

Regulatory Program:  DW  NPDES  RCRA  Other:

**TestAmerica Laboratories, Inc.**

<b>Client Contact</b>		<b>Project Manager:</b> <u>Greg Montgomery</u>		<b>Site Contact:</b> <u>Michael MacDaniel</u>		<b>Date:</b> <del>6/21/17</del> <u>3/22/18</u>		<b>COC No:</b>				
ARCADIS 880 H St STE 101 Anchorage, AK 99501 (206) 465-3161 Phone (xxx) xxx-xxxx FAX Project Name: <u>Clear AFS GE NIKK</u> Site: Former TBE Machine Shop P O # B0031255.1404		<b>Tel/Fax:</b> <u>Matt Felton</u>		<b>Lab Contact:</b> <u>Kristine Allen</u>		<b>Carrier:</b> <u>FedEx</u>		<u>2</u> of <u>2</u> COCs				
		<b>Analysis Turnaround Time</b>						<b>Sampler:</b>				
		<input type="checkbox"/> CALENDAR DAYS <input checked="" type="checkbox"/> WORKING DAYS						<b>For Lab Use Only:</b>				
		TAT if different from Below <u>Standard</u>						Walk-in Client: _____				
		<input type="checkbox"/> 2 weeks						Lab Sampling: _____				
		<input type="checkbox"/> 1 week						Job / SDG No.: _____				
		<input type="checkbox"/> 2 days										
		<input type="checkbox"/> 1 day										
<b>Sample Identification</b>		<b>Sample Date</b>	<b>Sample Time</b>	<b>Sample Type</b> (C=Comp, G=Grab)	<b>Matrix</b>	<b># of Cont.</b>	<b>Filtered Sample (Y/N)</b>	<b>Perform MS / MSD (Y/N)</b>	<b>8260C</b>	<b>AK102 - AK102 (DRO)</b>	<b>AK101 - AK101 (GRO)</b>	<b>Sample Specific Notes:</b>
BD-2	3/21/2018	--	G	W	8	N	N	X	X	X		
MS	3/20/2018	1410	G	W	8	N	N	X	X	X		
MSD	3/21/2018	1410	G	W	8	N	N	X	X	X		
EB	3/21/2018	1440	G	W	8	N	N	X	X	X		
Trip Blank	--	--	G	W	12	N	N	X		X		
<b>Preservation Used:</b> 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____							2 2 2					
<b>Possible Hazard Identification:</b> Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.							<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b>					
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown							<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months					
<b>Special Instructions/QC Requirements &amp; Comments:</b>												
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:				Cooler Temp. (°C): Obs'd: _____ Corr'd: _____				Therm ID No.:		
Relinquished by: <u>Michael MacDaniel</u>		Company: <u>ARCADIS</u>		Date/Time: <u>3/21/17</u>		Received by:		Company:		Date/Time:		
Relinquished by:		Company:		Date/Time:		Received by:		Company:		Date/Time:		
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Company: <u>SEATA</u>		Date/Time: <u>3.23.18 0925</u>		

## Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 580-76037-1

**Login Number: 76037**

**List Number: 1**

**Creator: Gall, Brandon A**

**List Source: TestAmerica Seattle**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	Containers recd broken. Sufficient sample in remaining containers for analysis.
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



**Attachment 2**

Laboratory Data Review  
Checklists

## Laboratory Data Review Checklist

Completed by:	Kylie Kegerreis		
Title:	Environmental Engineer	Date:	4/11/2018
CS Report Name:	GE - Nikiski	Report Date:	9/29/2016
Consultant Firm:	Arcadis U.S., Inc.		
Laboratory Name:	TestAmerica, Inc.	Laboratory Report Number:	580-62650-1
ADEC File Number:		ADEC RecKey Number:	

### 1. Laboratory

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

Yes     No     NA (Please explain.)    Comments:

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     NA (Please explain)    Comments:

Samples were not transferred or sub-contracted to an alternate laboratory

### 2. Chain of Custody (COC)

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

Yes     No     NA (Please explain)    Comments:

Field sampler was not listed on COC, but signatures and dates are provided.

b. Correct analyses requested?

Yes     No     NA (Please explain)    Comments:

VOCs by Method 8260C  
GRO by Method AK101 (MW-5-W-091316, EB-1-W-091316, and trip blank only)  
DRO by Methods AK102 & 103 (MW-5-W-091316 and EB-1-W-091316 only)

3. Laboratory Sample Receipt Documentation

a. Sample/cooler temperature documented and within range at receipt ( $4^{\circ} \pm 2^{\circ} \text{C}$ )?

Yes     No     NA (Please explain)    Comments:

Temperature = 4.5 °C

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

Yes     No     NA (Please explain)    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     NA (Please explain)    Comments:

Containers were not broken or leaking. VOC vials have no headspace.

d. If there were any discrepancies, were they documented? - For example, incorrect sample containers/preservation, sample temperature outside of acceptance range, insufficient or missing samples, etc.?

Yes     No     NA (Please explain)    Comments:

No discrepancies noted.

e. Data quality or usability affected? (Please explain)

Comments:

Data quality or usability not affected.

4. Case Narrative

a. Present and understandable?

Yes     No     NA (Please explain)    Comments:

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

Yes     No     NA (Please explain)    Comments:

See Attachment 1

c. Were all corrective actions documented?

Yes     No     NA (Please explain)    Comments:

See Attachment 1

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

Comments:

No effect on data quality/usability.

## 5. Samples Results

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

Yes     No     NA (Please explain)

Comments:

b. All applicable holding times met?

Yes     No     NA (Please explain)

Comments:

Hold times: Methods 8260C and AK101 - Analysis w/in 14 days; Methods AK102 & 103 - Extraction w/in 14 days, Analysis w/in 40 days of extraction  
Collection Date: 9/13/16  
Prepped: 9/22/16 (AK102 & 103 only)  
Analyzed: 9/22/16 (8260C and AK101); Some 8260C samples re-analyzed on 9/25/16; 9/24/16 (AK102 & 103)

c. All soils reported on a dry weight basis?

Yes     No     NA (Please explain)

Comments:

Samples are aqueous

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

Yes     No     NA (Please explain)

Comments:

The PQLs are less than the Cleanup Levels

e. Data quality or usability affected? (Please explain)

Comments:

Data quality or usability not affected.

## 6. QC Samples

a. Method Blank

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

Yes     No     NA (Please explain)

Comments:

ii. All method blank results less than PQL?

Yes     No     NA (Please explain)

Comments:

iii. If above PQL, what samples are affected?

Comments:

N/A

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

Yes     No     NA (Please explain)

Comments:

Method blank results all below PQL

v. Data quality or usability affected? (Please explain)

Comments:

Data quality or usability not affected due to method blank.

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     NA (Please explain)

Comments:

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

Yes     No     NA (Please explain)

Comments:

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     NA (Please explain)

Comments:

Method 8260C (Batch = 228044) LCSD: cis-1,2-dichloroethene %R = 112 (Limits = 70 - 111); methylene chloride %R = 119 (Limits = 70 - 115); trans-1,2-dichloroethene %R = 116 (Limits = 72 - 113)



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/DMSD, and or sample/sample duplicate. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)

Yes     No     NA (Please explain)    Comments:

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

Comments:

No samples are affected because the LCS and RPD are within acceptable limits and the analytes were not detected in the samples associated with batch 228044.

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

Yes     No     NA (Please explain)    Comments:

Affected samples are noted with an asterisk in the laboratory report.

vii. Data quality or usability affected? (Please explain)

Comments:

Data quality or usability was not affected due to LCS/LCSD recoveries

c. Surrogates - Organics Only

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

Yes     No     NA (Please explain)    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     NA (Please explain)    Comments:

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

Yes     No     NA (Please explain)    Comments:

No failed surrogate recoveries

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

Comments:

Data quality or usability not affected due to surrogate recoveries

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       NA (Please explain.)      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       NA (Please explain.)      Comments:

iii. All results less than PQL?

Yes       No       NA (Please explain.)      Comments:

iv. If above PQL, what samples are affected?

Comments:

N/A - all results less than PQL

v. Data quality or usability affected? (Please explain.)

Comments:

Data quality or usability not affected due to trip blank

e. Field Duplicate

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

Yes       No       NA (Please explain.)      Comments:

Field duplicate: BD-1-W-091316 (Parent sample: MW-2-W-091316)

ii. Submitted blind to lab?

Yes       No       NA (Please explain.)      Comments:

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

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

Where  $R_1$  = Sample Concentration  
 $R_2$  = Field Duplicate Concentration

Yes     No     NA (Please explain)    Comments:

See Table 1

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

Yes     No     NA (Please explain)    Comments:

Data quality or usability not affected due to field duplicates

f. Decontamination or Equipment Blank (if applicable)

Yes     No     NA (Please explain)    Comments:

EB-1-W-091316

i. All results less than PQL?

Yes     No     NA (Please explain)    Comments:

ii. If above PQL, what samples are affected?

Comments:

N/A - no sample results above PQL

iii. Data quality or usability affected? (Please explain.)

Comments:

Data quality or usability not affected due to equipment blanks.

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

a. Defined and appropriate?

Yes     No     NA (Please explain)    Comments:

MS/MSD analysis performed on MW-5-W-091316. Some percent recoveries outside of limits, biased high (identified by laboratory qualifier F1). Qualify detects as estimated for MW-5-W-091316 only: 1,2,4-trimethylbenzene = 20 J ug/L; 1,3,5-trimethylbenzene = 14 J ug/L

Reset Form

**Table 1**  
**Relative Percent Difference for Parent and Field Duplicate Samples**  
**Report Number: 580-62650-1**  
**Former TBE Machine Shop, Nikiski, AK**

Sample Identification	MW-2-W-091316	BD-1-W-091316	RPD <sup>a</sup>
Analyte	Result (µg/L)	Result (µg/L)	
1,1-dichloroethane	4.8	4.8	0%
ethylbenzene	8.6	9.1	6%
m & p-xylene	7.2	7.6	5%
o-xylene	5.6	5.8	4%
1,2,4-trimethylbenzene	3	3	0%
cis-1,2-dichloroethene	61	62	2%

Notes:

<sup>a</sup> Relative percent difference (RPD) calculated for detected results only.

µg/L = micrograms per liter

**Attachment 1**  
**Additional Information for Job 580-62650-1**  
**Former TBE Machine Shop**  
**Nikiski, AK**

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

Method 8260C:

1. LCSD for analytical batch 580-228044 recovered outside control limits for cis-1,2-dichloroethene, methylene chloride, and trans-1,2-dichloroethene.
2. MS/MSD for analytical batch 580-228044 could not be evaluated due to high concentration of o-xylene, m-xylene and p-xylene.
3. Samples MW-1-W-091316 and MW-5-W-091316 were diluted to bring the concentration of target analytes within the calibrated range.

Methods AK102 & 103:

4. Samples MW-1-W-091316 and MW-5-W-091316 were diluted to bring the concentration of target analytes within the calibrated range, which resulted in elevated reporting limits.
- c. Were all corrective actions documented?
1. Analytes were in control in the LCS and were not detected in the associated sample; therefore, the data have been reported. Samples with detections for these compounds were re-analyzed.
  2. The associated LCS met acceptance criteria
  3. Elevated reporting limits are provided.
  4. Not applicable

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING


## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Seattle  
5755 8th Street East  
Tacoma, WA 98424  
Tel: (253)922-2310

TestAmerica Job ID: 580-62650-1  
Client Project/Site: GE-Nikiski

For:  
ARCADIS U.S. Inc  
4915 Prospectus Drive  
Suite F  
Durham, North Carolina 27713

Attn: Mr. Matthew Pelton



Authorized for release by:  
9/29/2016 4:02:39 PM

Kristine Allen, Manager of Project Management  
(253)248-4970  
[kristine.allen@testamericainc.com](mailto:kristine.allen@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Definitions . . . . .	4
Client Sample Results . . . . .	5
QC Sample Results . . . . .	21
Chronicle . . . . .	32
Certification Summary . . . . .	34
Sample Summary . . . . .	35
Chain of Custody . . . . .	36
Receipt Checklists . . . . .	37

# Case Narrative

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Job ID: 580-62650-1**

**Laboratory: TestAmerica Seattle**

## Narrative

### Job Narrative 580-62650-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 9/15/2016 8:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.1° C.

#### Receipt Exceptions

The Field Sampler was not listed on the Chain of Custody.

#### GC/MS VOA

Method(s) 8260C: The laboratory control sample duplicate (LCSD) for analytical batch 580-228044 recovered outside control limits for the following analytes: cis-1,2-Dichloroethene, Methylene Chloride and trans-1,2-Dichloroethene. These analytes were in control in the LCS, biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported. Samples with detections for these compounds were re-analyzed.

Method(s) 8260C: Due to the high concentration of o-Xylene, m-Xylene & p-Xylene, cis-1,2-Dichloroethene and Ethylbenzene in the sample, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 580-228044 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.

Method(s) 8260C: The following samples was diluted to bring the concentration of target analytes within the calibration range: MW-1-W-091316 (580-62650-1) and MW-5-W-091316 (580-62650-4). Elevated reporting limits (RLs) are provided.

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

#### GC Semi VOA

Method(s) AK102 & 103: The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was earlier than the typical diesel fuel pattern used by the laboratory for quantitative purposes: MW-5-W-091316 (580-62650-4).

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.



# Definitions/Glossary

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

## 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
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
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)

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: MW-1-W-091316**

**Lab Sample ID: 580-62650-1**

**Date Collected: 09/13/16 12:20**

**Matrix: Water**

**Date Received: 09/15/16 08:00**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/22/16 16:56	1
Bromobenzene	ND		2.0		ug/L			09/22/16 16:56	1
Bromoform	ND		1.0		ug/L			09/22/16 16:56	1
Bromomethane	ND		5.0		ug/L			09/22/16 16:56	1
Carbon tetrachloride	ND		3.0		ug/L			09/22/16 16:56	1
Chlorobenzene	ND		2.0		ug/L			09/22/16 16:56	1
Chlorobromomethane	ND		2.0		ug/L			09/22/16 16:56	1
Chlorodibromomethane	ND		1.0		ug/L			09/22/16 16:56	1
Chloroethane	ND		5.0		ug/L			09/22/16 16:56	1
Chloroform	ND		5.0		ug/L			09/22/16 16:56	1
Chloromethane	ND		5.0		ug/L			09/22/16 16:56	1
2-Chlorotoluene	ND		3.0		ug/L			09/22/16 16:56	1
4-Chlorotoluene	ND		2.0		ug/L			09/22/16 16:56	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 16:56	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/22/16 16:56	1
Dibromomethane	ND		1.0		ug/L			09/22/16 16:56	1
<b>1,2-Dichlorobenzene</b>	<b>2.1</b>		2.0		ug/L			09/22/16 16:56	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/22/16 16:56	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/22/16 16:56	1
Dichlorobromomethane	ND		2.0		ug/L			09/22/16 16:56	1
Dichlorodifluoromethane	ND		2.0		ug/L			09/22/16 16:56	1
<b>1,1-Dichloroethane</b>	<b>7.8</b>		2.0		ug/L			09/22/16 16:56	1
1,2-Dichloroethane	ND		1.0		ug/L			09/22/16 16:56	1
1,1-Dichloroethene	ND		2.0		ug/L			09/22/16 16:56	1
1,2-Dichloropropane	ND		1.0		ug/L			09/22/16 16:56	1
1,3-Dichloropropane	ND		1.0		ug/L			09/22/16 16:56	1
2,2-Dichloropropane	ND		3.0		ug/L			09/22/16 16:56	1
1,1-Dichloropropene	ND		3.0		ug/L			09/22/16 16:56	1
Ethylene Dibromide	ND		1.0		ug/L			09/22/16 16:56	1
Hexachlorobutadiene	ND		2.0		ug/L			09/22/16 16:56	1
<b>Isopropylbenzene</b>	<b>6.4</b>		2.0		ug/L			09/22/16 16:56	1
<b>4-Isopropyltoluene</b>	<b>3.4</b>		3.0		ug/L			09/22/16 16:56	1
Methylene Chloride	ND *		5.0		ug/L			09/22/16 16:56	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/22/16 16:56	1
<b>Naphthalene</b>	<b>3.8</b>		2.0		ug/L			09/22/16 16:56	1
<b>n-Butylbenzene</b>	<b>8.0</b>		3.0		ug/L			09/22/16 16:56	1
<b>N-Propylbenzene</b>	<b>6.4</b>		3.0		ug/L			09/22/16 16:56	1
<b>sec-Butylbenzene</b>	<b>3.3</b>		3.0		ug/L			09/22/16 16:56	1
Styrene	ND		5.0		ug/L			09/22/16 16:56	1
tert-Butylbenzene	ND		3.0		ug/L			09/22/16 16:56	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/22/16 16:56	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/22/16 16:56	1
<b>Tetrachloroethene</b>	<b>58</b>		3.0		ug/L			09/22/16 16:56	1
<b>Toluene</b>	<b>25</b>		2.0		ug/L			09/22/16 16:56	1
trans-1,2-Dichloroethene	ND *		3.0		ug/L			09/22/16 16:56	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 16:56	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/22/16 16:56	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/22/16 16:56	1
<b>1,1,1-Trichloroethane</b>	<b>3.5</b>		3.0		ug/L			09/22/16 16:56	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: MW-1-W-091316**

**Lab Sample ID: 580-62650-1**

**Date Collected: 09/13/16 12:20**

**Matrix: Water**

**Date Received: 09/15/16 08:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0		ug/L			09/22/16 16:56	1
<b>Trichloroethene</b>	<b>32</b>		3.0		ug/L			09/22/16 16:56	1
Trichlorofluoromethane	ND		3.0		ug/L			09/22/16 16:56	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/22/16 16:56	1
<b>1,2,4-Trimethylbenzene</b>	<b>57</b>		3.0		ug/L			09/22/16 16:56	1
<b>1,3,5-Trimethylbenzene</b>	<b>21</b>		3.0		ug/L			09/22/16 16:56	1
Vinyl chloride	ND		1.0		ug/L			09/22/16 16:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 125		09/22/16 16:56	1
Dibromofluoromethane (Surr)	92		77 - 118		09/22/16 16:56	1
1,2-Dichloroethane-d4 (Surr)	91		65 - 143		09/22/16 16:56	1
Toluene-d8 (Surr)	102		82 - 122		09/22/16 16:56	1
Trifluorotoluene (Surr)	102		80 - 141		09/22/16 16:56	1

**Method: 8260C - Volatile Organic Compounds by GC/MS - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>130</b>		10		ug/L			09/25/16 16:00	10
<b>Ethylbenzene</b>	<b>360</b>		30		ug/L			09/25/16 16:00	10
<b>m-Xylene &amp; p-Xylene</b>	<b>530</b>		30		ug/L			09/25/16 16:00	10
<b>o-Xylene</b>	<b>170</b>		20		ug/L			09/25/16 16:00	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 125		09/25/16 16:00	10
Dibromofluoromethane (Surr)	94		77 - 118		09/25/16 16:00	10
1,2-Dichloroethane-d4 (Surr)	92		65 - 143		09/25/16 16:00	10
Toluene-d8 (Surr)	100		82 - 122		09/25/16 16:00	10
Trifluorotoluene (Surr)	103		80 - 141		09/25/16 16:00	10

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: MW-2-W-091316**

**Lab Sample ID: 580-62650-2**

**Date Collected: 09/13/16 11:35**

**Matrix: Water**

**Date Received: 09/15/16 08:00**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/22/16 15:31	1
Bromobenzene	ND		2.0		ug/L			09/22/16 15:31	1
Bromoform	ND		1.0		ug/L			09/22/16 15:31	1
Bromomethane	ND		5.0		ug/L			09/22/16 15:31	1
Carbon tetrachloride	ND		3.0		ug/L			09/22/16 15:31	1
Chlorobenzene	ND		2.0		ug/L			09/22/16 15:31	1
Chlorobromomethane	ND		2.0		ug/L			09/22/16 15:31	1
Chlorodibromomethane	ND		1.0		ug/L			09/22/16 15:31	1
Chloroethane	ND		5.0		ug/L			09/22/16 15:31	1
Chloroform	ND		5.0		ug/L			09/22/16 15:31	1
Chloromethane	ND		5.0		ug/L			09/22/16 15:31	1
2-Chlorotoluene	ND		3.0		ug/L			09/22/16 15:31	1
4-Chlorotoluene	ND		2.0		ug/L			09/22/16 15:31	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 15:31	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/22/16 15:31	1
Dibromomethane	ND		1.0		ug/L			09/22/16 15:31	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/22/16 15:31	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/22/16 15:31	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/22/16 15:31	1
Dichlorobromomethane	ND		2.0		ug/L			09/22/16 15:31	1
Dichlorodifluoromethane	ND		2.0		ug/L			09/22/16 15:31	1
<b>1,1-Dichloroethane</b>	<b>4.8</b>		2.0		ug/L			09/22/16 15:31	1
1,2-Dichloroethane	ND		1.0		ug/L			09/22/16 15:31	1
1,1-Dichloroethene	ND		2.0		ug/L			09/22/16 15:31	1
1,2-Dichloropropane	ND		1.0		ug/L			09/22/16 15:31	1
1,3-Dichloropropane	ND		1.0		ug/L			09/22/16 15:31	1
2,2-Dichloropropane	ND		3.0		ug/L			09/22/16 15:31	1
1,1-Dichloropropene	ND		3.0		ug/L			09/22/16 15:31	1
<b>Ethylbenzene</b>	<b>8.6</b>		3.0		ug/L			09/22/16 15:31	1
Ethylene Dibromide	ND		1.0		ug/L			09/22/16 15:31	1
Hexachlorobutadiene	ND		2.0		ug/L			09/22/16 15:31	1
Isopropylbenzene	ND		2.0		ug/L			09/22/16 15:31	1
4-Isopropyltoluene	ND		3.0		ug/L			09/22/16 15:31	1
Methylene Chloride	ND *		5.0		ug/L			09/22/16 15:31	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/22/16 15:31	1
<b>m-Xylene &amp; p-Xylene</b>	<b>7.2</b>		3.0		ug/L			09/22/16 15:31	1
Naphthalene	ND		2.0		ug/L			09/22/16 15:31	1
n-Butylbenzene	ND		3.0		ug/L			09/22/16 15:31	1
N-Propylbenzene	ND		3.0		ug/L			09/22/16 15:31	1
<b>o-Xylene</b>	<b>5.6</b>		2.0		ug/L			09/22/16 15:31	1
sec-Butylbenzene	ND		3.0		ug/L			09/22/16 15:31	1
Styrene	ND		5.0		ug/L			09/22/16 15:31	1
tert-Butylbenzene	ND		3.0		ug/L			09/22/16 15:31	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/22/16 15:31	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/22/16 15:31	1
Tetrachloroethene	ND		3.0		ug/L			09/22/16 15:31	1
Toluene	ND		2.0		ug/L			09/22/16 15:31	1
trans-1,2-Dichloroethene	ND *		3.0		ug/L			09/22/16 15:31	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 15:31	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: MW-2-W-091316**

**Lab Sample ID: 580-62650-2**

Date Collected: 09/13/16 11:35

Matrix: Water

Date Received: 09/15/16 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/22/16 15:31	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/22/16 15:31	1
1,1,1-Trichloroethane	ND		3.0		ug/L			09/22/16 15:31	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/22/16 15:31	1
Trichloroethene	ND		3.0		ug/L			09/22/16 15:31	1
Trichlorofluoromethane	ND		3.0		ug/L			09/22/16 15:31	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/22/16 15:31	1
<b>1,2,4-Trimethylbenzene</b>	<b>3.0</b>		3.0		ug/L			09/22/16 15:31	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/22/16 15:31	1
Vinyl chloride	ND		1.0		ug/L			09/22/16 15:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 125		09/22/16 15:31	1
Dibromofluoromethane (Surr)	94		77 - 118		09/22/16 15:31	1
1,2-Dichloroethane-d4 (Surr)	93		65 - 143		09/22/16 15:31	1
Toluene-d8 (Surr)	100		82 - 122		09/22/16 15:31	1
Trifluorotoluene (Surr)	100		80 - 141		09/22/16 15:31	1

**Method: 8260C - Volatile Organic Compounds by GC/MS - RA**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>61</b>		1.0		ug/L			09/25/16 14:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 125		09/25/16 14:34	1
Dibromofluoromethane (Surr)	93		77 - 118		09/25/16 14:34	1
1,2-Dichloroethane-d4 (Surr)	93		65 - 143		09/25/16 14:34	1
Toluene-d8 (Surr)	98		82 - 122		09/25/16 14:34	1
Trifluorotoluene (Surr)	103		80 - 141		09/25/16 14:34	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: MW-4-W-091316**

**Lab Sample ID: 580-62650-3**

**Date Collected: 09/13/16 13:15**

**Matrix: Water**

**Date Received: 09/15/16 08:00**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/22/16 17:25	1
Bromobenzene	ND		2.0		ug/L			09/22/16 17:25	1
Bromoform	ND		1.0		ug/L			09/22/16 17:25	1
Bromomethane	ND		5.0		ug/L			09/22/16 17:25	1
Carbon tetrachloride	ND		3.0		ug/L			09/22/16 17:25	1
Chlorobenzene	ND		2.0		ug/L			09/22/16 17:25	1
Chlorobromomethane	ND		2.0		ug/L			09/22/16 17:25	1
Chlorodibromomethane	ND		1.0		ug/L			09/22/16 17:25	1
Chloroethane	ND		5.0		ug/L			09/22/16 17:25	1
Chloroform	ND		5.0		ug/L			09/22/16 17:25	1
Chloromethane	ND		5.0		ug/L			09/22/16 17:25	1
2-Chlorotoluene	ND		3.0		ug/L			09/22/16 17:25	1
4-Chlorotoluene	ND		2.0		ug/L			09/22/16 17:25	1
cis-1,2-Dichloroethene	ND	*	1.0		ug/L			09/22/16 17:25	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 17:25	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/22/16 17:25	1
Dibromomethane	ND		1.0		ug/L			09/22/16 17:25	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/22/16 17:25	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/22/16 17:25	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/22/16 17:25	1
Dichlorobromomethane	ND		2.0		ug/L			09/22/16 17:25	1
Dichlorodifluoromethane	ND		2.0		ug/L			09/22/16 17:25	1
1,1-Dichloroethane	ND		2.0		ug/L			09/22/16 17:25	1
1,2-Dichloroethane	ND		1.0		ug/L			09/22/16 17:25	1
1,1-Dichloroethene	ND		2.0		ug/L			09/22/16 17:25	1
1,2-Dichloropropane	ND		1.0		ug/L			09/22/16 17:25	1
1,3-Dichloropropane	ND		1.0		ug/L			09/22/16 17:25	1
2,2-Dichloropropane	ND		3.0		ug/L			09/22/16 17:25	1
1,1-Dichloropropene	ND		3.0		ug/L			09/22/16 17:25	1
Ethylbenzene	ND		3.0		ug/L			09/22/16 17:25	1
Ethylene Dibromide	ND		1.0		ug/L			09/22/16 17:25	1
Hexachlorobutadiene	ND		2.0		ug/L			09/22/16 17:25	1
Isopropylbenzene	ND		2.0		ug/L			09/22/16 17:25	1
4-Isopropyltoluene	ND		3.0		ug/L			09/22/16 17:25	1
Methylene Chloride	ND	*	5.0		ug/L			09/22/16 17:25	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/22/16 17:25	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/22/16 17:25	1
Naphthalene	ND		2.0		ug/L			09/22/16 17:25	1
n-Butylbenzene	ND		3.0		ug/L			09/22/16 17:25	1
N-Propylbenzene	ND		3.0		ug/L			09/22/16 17:25	1
o-Xylene	ND		2.0		ug/L			09/22/16 17:25	1
sec-Butylbenzene	ND		3.0		ug/L			09/22/16 17:25	1
Styrene	ND		5.0		ug/L			09/22/16 17:25	1
tert-Butylbenzene	ND		3.0		ug/L			09/22/16 17:25	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/22/16 17:25	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/22/16 17:25	1
<b>Tetrachloroethene</b>	<b>13</b>		3.0		ug/L			09/22/16 17:25	1
Toluene	ND		2.0		ug/L			09/22/16 17:25	1
trans-1,2-Dichloroethene	ND	*	3.0		ug/L			09/22/16 17:25	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: MW-4-W-091316**

**Lab Sample ID: 580-62650-3**

**Date Collected: 09/13/16 13:15**

**Matrix: Water**

**Date Received: 09/15/16 08:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 17:25	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/22/16 17:25	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/22/16 17:25	1
<b>1,1,1-Trichloroethane</b>	<b>3.0</b>		3.0		ug/L			09/22/16 17:25	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/22/16 17:25	1
<b>Trichloroethene</b>	<b>4.2</b>		3.0		ug/L			09/22/16 17:25	1
Trichlorofluoromethane	ND		3.0		ug/L			09/22/16 17:25	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/22/16 17:25	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/22/16 17:25	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/22/16 17:25	1
Vinyl chloride	ND		1.0		ug/L			09/22/16 17:25	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	96		75 - 125					09/22/16 17:25	1
Dibromofluoromethane (Surr)	90		77 - 118					09/22/16 17:25	1
1,2-Dichloroethane-d4 (Surr)	92		65 - 143					09/22/16 17:25	1
Toluene-d8 (Surr)	100		82 - 122					09/22/16 17:25	1
Trifluorotoluene (Surr)	103		80 - 141					09/22/16 17:25	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: MW-5-W-091316**

**Lab Sample ID: 580-62650-4**

**Date Collected: 09/13/16 10:10**

**Matrix: Water**

**Date Received: 09/15/16 08:00**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	F1	2.0		ug/L			09/22/16 18:22	1
Bromobenzene	ND		2.0		ug/L			09/22/16 18:22	1
Bromoform	ND		1.0		ug/L			09/22/16 18:22	1
Bromomethane	ND		5.0		ug/L			09/22/16 18:22	1
Carbon tetrachloride	ND		3.0		ug/L			09/22/16 18:22	1
Chlorobenzene	ND		2.0		ug/L			09/22/16 18:22	1
Chlorobromomethane	ND		2.0		ug/L			09/22/16 18:22	1
Chlorodibromomethane	ND		1.0		ug/L			09/22/16 18:22	1
Chloroethane	ND		5.0		ug/L			09/22/16 18:22	1
Chloroform	ND		5.0		ug/L			09/22/16 18:22	1
Chloromethane	ND		5.0		ug/L			09/22/16 18:22	1
2-Chlorotoluene	ND		3.0		ug/L			09/22/16 18:22	1
4-Chlorotoluene	ND		2.0		ug/L			09/22/16 18:22	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 18:22	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/22/16 18:22	1
Dibromomethane	ND		1.0		ug/L			09/22/16 18:22	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/22/16 18:22	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/22/16 18:22	1
<b>1,4-Dichlorobenzene</b>	<b>4.2</b>		4.0		ug/L			09/22/16 18:22	1
Dichlorobromomethane	ND		2.0		ug/L			09/22/16 18:22	1
Dichlorodifluoromethane	ND		2.0		ug/L			09/22/16 18:22	1
1,1-Dichloroethane	ND		2.0		ug/L			09/22/16 18:22	1
1,2-Dichloroethane	ND		1.0		ug/L			09/22/16 18:22	1
1,1-Dichloroethene	ND	F1	2.0		ug/L			09/22/16 18:22	1
1,2-Dichloropropane	ND		1.0		ug/L			09/22/16 18:22	1
1,3-Dichloropropane	ND		1.0		ug/L			09/22/16 18:22	1
2,2-Dichloropropane	ND		3.0		ug/L			09/22/16 18:22	1
1,1-Dichloropropene	ND		3.0		ug/L			09/22/16 18:22	1
Ethylene Dibromide	ND		1.0		ug/L			09/22/16 18:22	1
Hexachlorobutadiene	ND		2.0		ug/L			09/22/16 18:22	1
Isopropylbenzene	ND		2.0		ug/L			09/22/16 18:22	1
4-Isopropyltoluene	ND		3.0		ug/L			09/22/16 18:22	1
Methylene Chloride	ND	* F1	5.0		ug/L			09/22/16 18:22	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/22/16 18:22	1
<b>Naphthalene</b>	<b>3.2</b>		2.0		ug/L			09/22/16 18:22	1
<b>n-Butylbenzene</b>	<b>10</b>		3.0		ug/L			09/22/16 18:22	1
N-Propylbenzene	ND		3.0		ug/L			09/22/16 18:22	1
sec-Butylbenzene	ND		3.0		ug/L			09/22/16 18:22	1
Styrene	ND		5.0		ug/L			09/22/16 18:22	1
tert-Butylbenzene	ND		3.0		ug/L			09/22/16 18:22	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/22/16 18:22	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/22/16 18:22	1
Tetrachloroethene	ND		3.0		ug/L			09/22/16 18:22	1
<b>Toluene</b>	<b>3.1</b>		2.0		ug/L			09/22/16 18:22	1
trans-1,2-Dichloroethene	ND	* F1	3.0		ug/L			09/22/16 18:22	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 18:22	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/22/16 18:22	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/22/16 18:22	1
1,1,1-Trichloroethane	ND		3.0		ug/L			09/22/16 18:22	1

TestAmerica Seattle



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: MW-5-W-091316**

**Lab Sample ID: 580-62650-4**

Date Collected: 09/13/16 10:10

Matrix: Water

Date Received: 09/15/16 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0		ug/L			09/22/16 18:22	1
Trichloroethene	ND		3.0		ug/L			09/22/16 18:22	1
Trichlorofluoromethane	ND		3.0		ug/L			09/22/16 18:22	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/22/16 18:22	1
<b>1,2,4-Trimethylbenzene</b>	<b>20</b>	<b>FF J</b>	3.0		ug/L			09/22/16 18:22	1
<b>1,3,5-Trimethylbenzene</b>	<b>14</b>	<b>FF J</b>	3.0		ug/L			09/22/16 18:22	1
Vinyl chloride	ND		1.0		ug/L			09/22/16 18:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 125		09/22/16 18:22	1
Dibromofluoromethane (Surr)	93		77 - 118		09/22/16 18:22	1
1,2-Dichloroethane-d4 (Surr)	90		65 - 143		09/22/16 18:22	1
Toluene-d8 (Surr)	102		82 - 122		09/22/16 18:22	1
Trifluorotoluene (Surr)	102		80 - 141		09/22/16 18:22	1

**Method: 8260C - Volatile Organic Compounds by GC/MS - DL**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>500</b>		50		ug/L			09/25/16 15:31	50
<b>Ethylbenzene</b>	<b>240</b>		150		ug/L			09/25/16 15:31	50
<b>m-Xylene &amp; p-Xylene</b>	<b>330</b>		150		ug/L			09/25/16 15:31	50
<b>o-Xylene</b>	<b>160</b>		100		ug/L			09/25/16 15:31	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 125		09/25/16 15:31	50
Dibromofluoromethane (Surr)	91		77 - 118		09/25/16 15:31	50
1,2-Dichloroethane-d4 (Surr)	91		65 - 143		09/25/16 15:31	50
Toluene-d8 (Surr)	99		82 - 122		09/25/16 15:31	50
Trifluorotoluene (Surr)	102		80 - 141		09/25/16 15:31	50

**Method: AK101 - Alaska - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Gasoline Range Organics (GRO)</b>	<b>1.7</b>		0.050		mg/L			09/22/16 16:14	1
<b>-C6-C10</b>									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	102		50 - 150		09/22/16 16:14	1
4-Bromofluorobenzene (Surr)	131		50 - 150		09/22/16 16:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>1.3</b>		0.10		mg/L		09/22/16 16:36	09/24/16 19:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
<i>o</i> -Terphenyl	64		50 - 150		09/22/16 16:36	09/24/16 19:40	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: MW-7-W-091316**

**Lab Sample ID: 580-62650-5**

**Date Collected: 09/13/16 09:15**

**Matrix: Water**

**Date Received: 09/15/16 08:00**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/22/16 16:28	1
Bromobenzene	ND		2.0		ug/L			09/22/16 16:28	1
Bromoform	ND		1.0		ug/L			09/22/16 16:28	1
Bromomethane	ND		5.0		ug/L			09/22/16 16:28	1
Carbon tetrachloride	ND		3.0		ug/L			09/22/16 16:28	1
Chlorobenzene	ND		2.0		ug/L			09/22/16 16:28	1
Chlorobromomethane	ND		2.0		ug/L			09/22/16 16:28	1
Chlorodibromomethane	ND		1.0		ug/L			09/22/16 16:28	1
Chloroethane	ND		5.0		ug/L			09/22/16 16:28	1
Chloroform	ND		5.0		ug/L			09/22/16 16:28	1
Chloromethane	ND		5.0		ug/L			09/22/16 16:28	1
2-Chlorotoluene	ND		3.0		ug/L			09/22/16 16:28	1
4-Chlorotoluene	ND		2.0		ug/L			09/22/16 16:28	1
cis-1,2-Dichloroethene	ND	*	1.0		ug/L			09/22/16 16:28	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 16:28	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/22/16 16:28	1
Dibromomethane	ND		1.0		ug/L			09/22/16 16:28	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/22/16 16:28	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/22/16 16:28	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/22/16 16:28	1
Dichlorobromomethane	ND		2.0		ug/L			09/22/16 16:28	1
Dichlorodifluoromethane	ND		2.0		ug/L			09/22/16 16:28	1
1,1-Dichloroethane	ND		2.0		ug/L			09/22/16 16:28	1
1,2-Dichloroethane	ND		1.0		ug/L			09/22/16 16:28	1
1,1-Dichloroethene	ND		2.0		ug/L			09/22/16 16:28	1
1,2-Dichloropropane	ND		1.0		ug/L			09/22/16 16:28	1
1,3-Dichloropropane	ND		1.0		ug/L			09/22/16 16:28	1
2,2-Dichloropropane	ND		3.0		ug/L			09/22/16 16:28	1
1,1-Dichloropropene	ND		3.0		ug/L			09/22/16 16:28	1
Ethylbenzene	ND		3.0		ug/L			09/22/16 16:28	1
Ethylene Dibromide	ND		1.0		ug/L			09/22/16 16:28	1
Hexachlorobutadiene	ND		2.0		ug/L			09/22/16 16:28	1
Isopropylbenzene	ND		2.0		ug/L			09/22/16 16:28	1
4-Isopropyltoluene	ND		3.0		ug/L			09/22/16 16:28	1
Methylene Chloride	ND	*	5.0		ug/L			09/22/16 16:28	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/22/16 16:28	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/22/16 16:28	1
Naphthalene	ND		2.0		ug/L			09/22/16 16:28	1
n-Butylbenzene	ND		3.0		ug/L			09/22/16 16:28	1
N-Propylbenzene	ND		3.0		ug/L			09/22/16 16:28	1
o-Xylene	ND		2.0		ug/L			09/22/16 16:28	1
sec-Butylbenzene	ND		3.0		ug/L			09/22/16 16:28	1
Styrene	ND		5.0		ug/L			09/22/16 16:28	1
tert-Butylbenzene	ND		3.0		ug/L			09/22/16 16:28	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/22/16 16:28	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/22/16 16:28	1
<b>Tetrachloroethene</b>	<b>13</b>		3.0		ug/L			09/22/16 16:28	1
Toluene	ND		2.0		ug/L			09/22/16 16:28	1
trans-1,2-Dichloroethene	ND	*	3.0		ug/L			09/22/16 16:28	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: MW-7-W-091316**

**Lab Sample ID: 580-62650-5**

**Date Collected: 09/13/16 09:15**

**Matrix: Water**

**Date Received: 09/15/16 08:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 16:28	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/22/16 16:28	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/22/16 16:28	1
1,1,1-Trichloroethane	ND		3.0		ug/L			09/22/16 16:28	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/22/16 16:28	1
Trichloroethene	ND		3.0		ug/L			09/22/16 16:28	1
Trichlorofluoromethane	ND		3.0		ug/L			09/22/16 16:28	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/22/16 16:28	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/22/16 16:28	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/22/16 16:28	1
Vinyl chloride	ND		1.0		ug/L			09/22/16 16:28	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	96		75 - 125					09/22/16 16:28	1
Dibromofluoromethane (Surr)	91		77 - 118					09/22/16 16:28	1
1,2-Dichloroethane-d4 (Surr)	91		65 - 143					09/22/16 16:28	1
Toluene-d8 (Surr)	100		82 - 122					09/22/16 16:28	1
Trifluorotoluene (Surr)	102		80 - 141					09/22/16 16:28	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: BD-1-W-091316**

**Lab Sample ID: 580-62650-6**

**Date Collected: 09/13/16 00:01**

**Matrix: Water**

**Date Received: 09/15/16 08:00**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/22/16 15:59	1
Bromobenzene	ND		2.0		ug/L			09/22/16 15:59	1
Bromoform	ND		1.0		ug/L			09/22/16 15:59	1
Bromomethane	ND		5.0		ug/L			09/22/16 15:59	1
Carbon tetrachloride	ND		3.0		ug/L			09/22/16 15:59	1
Chlorobenzene	ND		2.0		ug/L			09/22/16 15:59	1
Chlorobromomethane	ND		2.0		ug/L			09/22/16 15:59	1
Chlorodibromomethane	ND		1.0		ug/L			09/22/16 15:59	1
Chloroethane	ND		5.0		ug/L			09/22/16 15:59	1
Chloroform	ND		5.0		ug/L			09/22/16 15:59	1
Chloromethane	ND		5.0		ug/L			09/22/16 15:59	1
2-Chlorotoluene	ND		3.0		ug/L			09/22/16 15:59	1
4-Chlorotoluene	ND		2.0		ug/L			09/22/16 15:59	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 15:59	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/22/16 15:59	1
Dibromomethane	ND		1.0		ug/L			09/22/16 15:59	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/22/16 15:59	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/22/16 15:59	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/22/16 15:59	1
Dichlorobromomethane	ND		2.0		ug/L			09/22/16 15:59	1
Dichlorodifluoromethane	ND		2.0		ug/L			09/22/16 15:59	1
<b>1,1-Dichloroethane</b>	<b>4.8</b>		2.0		ug/L			09/22/16 15:59	1
1,2-Dichloroethane	ND		1.0		ug/L			09/22/16 15:59	1
1,1-Dichloroethene	ND		2.0		ug/L			09/22/16 15:59	1
1,2-Dichloropropane	ND		1.0		ug/L			09/22/16 15:59	1
1,3-Dichloropropane	ND		1.0		ug/L			09/22/16 15:59	1
2,2-Dichloropropane	ND		3.0		ug/L			09/22/16 15:59	1
1,1-Dichloropropene	ND		3.0		ug/L			09/22/16 15:59	1
<b>Ethylbenzene</b>	<b>9.1</b>		3.0		ug/L			09/22/16 15:59	1
Ethylene Dibromide	ND		1.0		ug/L			09/22/16 15:59	1
Hexachlorobutadiene	ND		2.0		ug/L			09/22/16 15:59	1
Isopropylbenzene	ND		2.0		ug/L			09/22/16 15:59	1
4-Isopropyltoluene	ND		3.0		ug/L			09/22/16 15:59	1
Methylene Chloride	ND *		5.0		ug/L			09/22/16 15:59	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/22/16 15:59	1
<b>m-Xylene &amp; p-Xylene</b>	<b>7.6</b>		3.0		ug/L			09/22/16 15:59	1
Naphthalene	ND		2.0		ug/L			09/22/16 15:59	1
n-Butylbenzene	ND		3.0		ug/L			09/22/16 15:59	1
N-Propylbenzene	ND		3.0		ug/L			09/22/16 15:59	1
<b>o-Xylene</b>	<b>5.8</b>		2.0		ug/L			09/22/16 15:59	1
sec-Butylbenzene	ND		3.0		ug/L			09/22/16 15:59	1
Styrene	ND		5.0		ug/L			09/22/16 15:59	1
tert-Butylbenzene	ND		3.0		ug/L			09/22/16 15:59	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/22/16 15:59	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/22/16 15:59	1
Tetrachloroethene	ND		3.0		ug/L			09/22/16 15:59	1
Toluene	ND		2.0		ug/L			09/22/16 15:59	1
trans-1,2-Dichloroethene	ND *		3.0		ug/L			09/22/16 15:59	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 15:59	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: BD-1-W-091316**

**Lab Sample ID: 580-62650-6**

**Date Collected: 09/13/16 00:01**

**Matrix: Water**

**Date Received: 09/15/16 08:00**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/22/16 15:59	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/22/16 15:59	1
1,1,1-Trichloroethane	ND		3.0		ug/L			09/22/16 15:59	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/22/16 15:59	1
Trichloroethene	ND		3.0		ug/L			09/22/16 15:59	1
Trichlorofluoromethane	ND		3.0		ug/L			09/22/16 15:59	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/22/16 15:59	1
<b>1,2,4-Trimethylbenzene</b>	<b>3.0</b>		3.0		ug/L			09/22/16 15:59	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/22/16 15:59	1
Vinyl chloride	ND		1.0		ug/L			09/22/16 15:59	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	97		75 - 125					09/22/16 15:59	1
Dibromofluoromethane (Surr)	91		77 - 118					09/22/16 15:59	1
1,2-Dichloroethane-d4 (Surr)	91		65 - 143					09/22/16 15:59	1
Toluene-d8 (Surr)	102		82 - 122					09/22/16 15:59	1
Trifluorotoluene (Surr)	102		80 - 141					09/22/16 15:59	1

**Method: 8260C - Volatile Organic Compounds by GC/MS - RA**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>62</b>		1.0		ug/L			09/25/16 15:02	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	97		75 - 125					09/25/16 15:02	1
Dibromofluoromethane (Surr)	94		77 - 118					09/25/16 15:02	1
1,2-Dichloroethane-d4 (Surr)	90		65 - 143					09/25/16 15:02	1
Toluene-d8 (Surr)	100		82 - 122					09/25/16 15:02	1
Trifluorotoluene (Surr)	105		80 - 141					09/25/16 15:02	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: EB-1-W-091316**

**Lab Sample ID: 580-62650-7**

**Date Collected: 09/13/16 13:30**

**Matrix: Water**

**Date Received: 09/15/16 08:00**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/22/16 15:02	1
Bromobenzene	ND		2.0		ug/L			09/22/16 15:02	1
Bromoform	ND		1.0		ug/L			09/22/16 15:02	1
Bromomethane	ND		5.0		ug/L			09/22/16 15:02	1
Carbon tetrachloride	ND		3.0		ug/L			09/22/16 15:02	1
Chlorobenzene	ND		2.0		ug/L			09/22/16 15:02	1
Chlorobromomethane	ND		2.0		ug/L			09/22/16 15:02	1
Chlorodibromomethane	ND		1.0		ug/L			09/22/16 15:02	1
Chloroethane	ND		5.0		ug/L			09/22/16 15:02	1
Chloroform	ND		5.0		ug/L			09/22/16 15:02	1
Chloromethane	ND		5.0		ug/L			09/22/16 15:02	1
2-Chlorotoluene	ND		3.0		ug/L			09/22/16 15:02	1
4-Chlorotoluene	ND		2.0		ug/L			09/22/16 15:02	1
cis-1,2-Dichloroethene	ND	*	1.0		ug/L			09/22/16 15:02	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 15:02	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/22/16 15:02	1
Dibromomethane	ND		1.0		ug/L			09/22/16 15:02	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/22/16 15:02	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/22/16 15:02	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/22/16 15:02	1
Dichlorobromomethane	ND		2.0		ug/L			09/22/16 15:02	1
Dichlorodifluoromethane	ND		2.0		ug/L			09/22/16 15:02	1
1,1-Dichloroethane	ND		2.0		ug/L			09/22/16 15:02	1
1,2-Dichloroethane	ND		1.0		ug/L			09/22/16 15:02	1
1,1-Dichloroethene	ND		2.0		ug/L			09/22/16 15:02	1
1,2-Dichloropropane	ND		1.0		ug/L			09/22/16 15:02	1
1,3-Dichloropropane	ND		1.0		ug/L			09/22/16 15:02	1
2,2-Dichloropropane	ND		3.0		ug/L			09/22/16 15:02	1
1,1-Dichloropropene	ND		3.0		ug/L			09/22/16 15:02	1
Ethylbenzene	ND		3.0		ug/L			09/22/16 15:02	1
Ethylene Dibromide	ND		1.0		ug/L			09/22/16 15:02	1
Hexachlorobutadiene	ND		2.0		ug/L			09/22/16 15:02	1
Isopropylbenzene	ND		2.0		ug/L			09/22/16 15:02	1
4-Isopropyltoluene	ND		3.0		ug/L			09/22/16 15:02	1
Methylene Chloride	ND	*	5.0		ug/L			09/22/16 15:02	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/22/16 15:02	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/22/16 15:02	1
Naphthalene	ND		2.0		ug/L			09/22/16 15:02	1
n-Butylbenzene	ND		3.0		ug/L			09/22/16 15:02	1
N-Propylbenzene	ND		3.0		ug/L			09/22/16 15:02	1
o-Xylene	ND		2.0		ug/L			09/22/16 15:02	1
sec-Butylbenzene	ND		3.0		ug/L			09/22/16 15:02	1
Styrene	ND		5.0		ug/L			09/22/16 15:02	1
tert-Butylbenzene	ND		3.0		ug/L			09/22/16 15:02	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/22/16 15:02	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/22/16 15:02	1
Tetrachloroethene	ND		3.0		ug/L			09/22/16 15:02	1
Toluene	ND		2.0		ug/L			09/22/16 15:02	1
trans-1,2-Dichloroethene	ND	*	3.0		ug/L			09/22/16 15:02	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: EB-1-W-091316**

**Lab Sample ID: 580-62650-7**

Date Collected: 09/13/16 13:30

Matrix: Water

Date Received: 09/15/16 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 15:02	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/22/16 15:02	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/22/16 15:02	1
1,1,1-Trichloroethane	ND		3.0		ug/L			09/22/16 15:02	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/22/16 15:02	1
Trichloroethene	ND		3.0		ug/L			09/22/16 15:02	1
Trichlorofluoromethane	ND		3.0		ug/L			09/22/16 15:02	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/22/16 15:02	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/22/16 15:02	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/22/16 15:02	1
Vinyl chloride	ND		1.0		ug/L			09/22/16 15:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 125		09/22/16 15:02	1
Dibromofluoromethane (Surr)	96		77 - 118		09/22/16 15:02	1
1,2-Dichloroethane-d4 (Surr)	93		65 - 143		09/22/16 15:02	1
Toluene-d8 (Surr)	100		82 - 122		09/22/16 15:02	1
Trifluorotoluene (Surr)	103		80 - 141		09/22/16 15:02	1

**Method: AK101 - Alaska - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			09/22/16 15:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	104		50 - 150		09/22/16 15:42	1
4-Bromofluorobenzene (Surr)	94		50 - 150		09/22/16 15:42	1

**Method: 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		0.11		mg/L		09/22/16 16:36	09/24/16 20:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	73		50 - 150		09/22/16 16:36	09/24/16 20:43

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 580-62650-8**

Date Collected: 09/13/16 00:01

Matrix: Water

Date Received: 09/15/16 08:00

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/22/16 11:41	1
Bromobenzene	ND		2.0		ug/L			09/22/16 11:41	1
Bromoform	ND		1.0		ug/L			09/22/16 11:41	1
Bromomethane	ND		5.0		ug/L			09/22/16 11:41	1
Carbon tetrachloride	ND		3.0		ug/L			09/22/16 11:41	1
Chlorobenzene	ND		2.0		ug/L			09/22/16 11:41	1
Chlorobromomethane	ND		2.0		ug/L			09/22/16 11:41	1
Chlorodibromomethane	ND		1.0		ug/L			09/22/16 11:41	1
Chloroethane	ND		5.0		ug/L			09/22/16 11:41	1
Chloroform	ND		5.0		ug/L			09/22/16 11:41	1
Chloromethane	ND		5.0		ug/L			09/22/16 11:41	1
2-Chlorotoluene	ND		3.0		ug/L			09/22/16 11:41	1
4-Chlorotoluene	ND		2.0		ug/L			09/22/16 11:41	1
cis-1,2-Dichloroethene	ND	*	1.0		ug/L			09/22/16 11:41	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 11:41	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/22/16 11:41	1
Dibromomethane	ND		1.0		ug/L			09/22/16 11:41	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/22/16 11:41	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/22/16 11:41	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/22/16 11:41	1
Dichlorobromomethane	ND		2.0		ug/L			09/22/16 11:41	1
Dichlorodifluoromethane	ND		2.0		ug/L			09/22/16 11:41	1
1,1-Dichloroethane	ND		2.0		ug/L			09/22/16 11:41	1
1,2-Dichloroethane	ND		1.0		ug/L			09/22/16 11:41	1
1,1-Dichloroethene	ND		2.0		ug/L			09/22/16 11:41	1
1,2-Dichloropropane	ND		1.0		ug/L			09/22/16 11:41	1
1,3-Dichloropropane	ND		1.0		ug/L			09/22/16 11:41	1
2,2-Dichloropropane	ND		3.0		ug/L			09/22/16 11:41	1
1,1-Dichloropropene	ND		3.0		ug/L			09/22/16 11:41	1
Ethylbenzene	ND		3.0		ug/L			09/22/16 11:41	1
Ethylene Dibromide	ND		1.0		ug/L			09/22/16 11:41	1
Hexachlorobutadiene	ND		2.0		ug/L			09/22/16 11:41	1
Isopropylbenzene	ND		2.0		ug/L			09/22/16 11:41	1
4-Isopropyltoluene	ND		3.0		ug/L			09/22/16 11:41	1
Methylene Chloride	ND	*	5.0		ug/L			09/22/16 11:41	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/22/16 11:41	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/22/16 11:41	1
Naphthalene	ND		2.0		ug/L			09/22/16 11:41	1
n-Butylbenzene	ND		3.0		ug/L			09/22/16 11:41	1
N-Propylbenzene	ND		3.0		ug/L			09/22/16 11:41	1
o-Xylene	ND		2.0		ug/L			09/22/16 11:41	1
sec-Butylbenzene	ND		3.0		ug/L			09/22/16 11:41	1
Styrene	ND		5.0		ug/L			09/22/16 11:41	1
tert-Butylbenzene	ND		3.0		ug/L			09/22/16 11:41	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/22/16 11:41	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/22/16 11:41	1
Tetrachloroethene	ND		3.0		ug/L			09/22/16 11:41	1
Toluene	ND		2.0		ug/L			09/22/16 11:41	1
trans-1,2-Dichloroethene	ND	*	3.0		ug/L			09/22/16 11:41	1

TestAmerica Seattle



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 580-62650-8**

Date Collected: 09/13/16 00:01

Matrix: Water

Date Received: 09/15/16 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 11:41	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/22/16 11:41	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/22/16 11:41	1
1,1,1-Trichloroethane	ND		3.0		ug/L			09/22/16 11:41	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/22/16 11:41	1
Trichloroethene	ND		3.0		ug/L			09/22/16 11:41	1
Trichlorofluoromethane	ND		3.0		ug/L			09/22/16 11:41	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/22/16 11:41	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/22/16 11:41	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/22/16 11:41	1
Vinyl chloride	ND		1.0		ug/L			09/22/16 11:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 125		09/22/16 11:41	1
Dibromofluoromethane (Surr)	91		77 - 118		09/22/16 11:41	1
1,2-Dichloroethane-d4 (Surr)	91		65 - 143		09/22/16 11:41	1
Toluene-d8 (Surr)	99		82 - 122		09/22/16 11:41	1
Trifluorotoluene (Surr)	102		80 - 141		09/22/16 11:41	1

**Method: AK101 - Alaska - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			09/22/16 13:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	105		50 - 150		09/22/16 13:32	1
4-Bromofluorobenzene (Surr)	95		50 - 150		09/22/16 13:32	1

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 580-228044/4**

**Matrix: Water**

**Analysis Batch: 228044**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/22/16 09:47	1
Bromobenzene	ND		2.0		ug/L			09/22/16 09:47	1
Bromoform	ND		1.0		ug/L			09/22/16 09:47	1
Bromomethane	ND		5.0		ug/L			09/22/16 09:47	1
Carbon tetrachloride	ND		3.0		ug/L			09/22/16 09:47	1
Chlorobenzene	ND		2.0		ug/L			09/22/16 09:47	1
Chlorobromomethane	ND		2.0		ug/L			09/22/16 09:47	1
Chlorodibromomethane	ND		1.0		ug/L			09/22/16 09:47	1
Chloroethane	ND		5.0		ug/L			09/22/16 09:47	1
Chloroform	ND		5.0		ug/L			09/22/16 09:47	1
Chloromethane	ND		5.0		ug/L			09/22/16 09:47	1
2-Chlorotoluene	ND		3.0		ug/L			09/22/16 09:47	1
4-Chlorotoluene	ND		2.0		ug/L			09/22/16 09:47	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/22/16 09:47	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 09:47	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/22/16 09:47	1
Dibromomethane	ND		1.0		ug/L			09/22/16 09:47	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/22/16 09:47	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/22/16 09:47	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/22/16 09:47	1
Dichlorobromomethane	ND		2.0		ug/L			09/22/16 09:47	1
Dichlorodifluoromethane	ND		2.0		ug/L			09/22/16 09:47	1
1,1-Dichloroethane	ND		2.0		ug/L			09/22/16 09:47	1
1,2-Dichloroethane	ND		1.0		ug/L			09/22/16 09:47	1
1,1-Dichloroethene	ND		2.0		ug/L			09/22/16 09:47	1
1,2-Dichloropropane	ND		1.0		ug/L			09/22/16 09:47	1
1,3-Dichloropropane	ND		1.0		ug/L			09/22/16 09:47	1
2,2-Dichloropropane	ND		3.0		ug/L			09/22/16 09:47	1
1,1-Dichloropropene	ND		3.0		ug/L			09/22/16 09:47	1
Ethylbenzene	ND		3.0		ug/L			09/22/16 09:47	1
Ethylene Dibromide	ND		1.0		ug/L			09/22/16 09:47	1
Hexachlorobutadiene	ND		2.0		ug/L			09/22/16 09:47	1
Isopropylbenzene	ND		2.0		ug/L			09/22/16 09:47	1
4-Isopropyltoluene	ND		3.0		ug/L			09/22/16 09:47	1
Methylene Chloride	ND		5.0		ug/L			09/22/16 09:47	1
Methyl tert-butyl ether	ND		1.0		ug/L			09/22/16 09:47	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/22/16 09:47	1
Naphthalene	ND		2.0		ug/L			09/22/16 09:47	1
n-Butylbenzene	ND		3.0		ug/L			09/22/16 09:47	1
N-Propylbenzene	ND		3.0		ug/L			09/22/16 09:47	1
o-Xylene	ND		2.0		ug/L			09/22/16 09:47	1
sec-Butylbenzene	ND		3.0		ug/L			09/22/16 09:47	1
Styrene	ND		5.0		ug/L			09/22/16 09:47	1
tert-Butylbenzene	ND		3.0		ug/L			09/22/16 09:47	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/22/16 09:47	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			09/22/16 09:47	1
Tetrachloroethene	ND		3.0		ug/L			09/22/16 09:47	1
Toluene	ND		2.0		ug/L			09/22/16 09:47	1

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

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

**Lab Sample ID: MB 580-228044/4**

**Matrix: Water**

**Analysis Batch: 228044**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		3.0		ug/L			09/22/16 09:47	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/22/16 09:47	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			09/22/16 09:47	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			09/22/16 09:47	1
1,1,1-Trichloroethane	ND		3.0		ug/L			09/22/16 09:47	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/22/16 09:47	1
Trichloroethene	ND		3.0		ug/L			09/22/16 09:47	1
Trichlorofluoromethane	ND		3.0		ug/L			09/22/16 09:47	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/22/16 09:47	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/22/16 09:47	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/22/16 09:47	1
Vinyl chloride	ND		1.0		ug/L			09/22/16 09:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		75 - 125		09/22/16 09:47	1
Dibromofluoromethane (Surr)	90		77 - 118		09/22/16 09:47	1
1,2-Dichloroethane-d4 (Surr)	89		65 - 143		09/22/16 09:47	1
Toluene-d8 (Surr)	101		82 - 122		09/22/16 09:47	1
Trifluorotoluene (Surr)	103		80 - 141		09/22/16 09:47	1

**Lab Sample ID: LCS 580-228044/5**

**Matrix: Water**

**Analysis Batch: 228044**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	10.0	11.4		ug/L		113	80 - 120
Bromobenzene	10.0	10.5		ug/L		105	75 - 115
Bromoform	10.0	8.85		ug/L		88	55 - 130
Bromomethane	10.0	8.94		ug/L		89	55 - 125
Carbon tetrachloride	10.0	9.17		ug/L		92	65 - 124
Chlorobenzene	10.0	10.5		ug/L		104	80 - 120
Chlorobromomethane	10.0	10.4		ug/L		104	65 - 120
Chlorodibromomethane	10.0	9.08		ug/L		91	71 - 118
Chloroethane	10.0	8.98		ug/L		90	60 - 126
Chloroform	10.0	10.2		ug/L		102	80 - 119
Chloromethane	10.0	9.86		ug/L		99	40 - 149
2-Chlorotoluene	10.0	11.0		ug/L		110	69 - 125
4-Chlorotoluene	10.0	10.8		ug/L		107	68 - 121
cis-1,2-Dichloroethene	10.0	10.8		ug/L		108	70 - 111
cis-1,3-Dichloropropene	10.0	11.0		ug/L		109	77 - 117
1,2-Dibromo-3-Chloropropane	10.0	11.6		ug/L		116	58 - 141
Dibromomethane	10.0	9.98		ug/L		100	61 - 142
1,2-Dichlorobenzene	10.0	10.4		ug/L		104	70 - 120
1,3-Dichlorobenzene	10.0	10.2		ug/L		102	72 - 116
1,4-Dichlorobenzene	10.0	10.2		ug/L		101	75 - 117
Dichlorobromomethane	10.0	9.87		ug/L		98	75 - 120
Dichlorodifluoromethane	10.0	10.7		ug/L		107	20 - 141
1,1-Dichloroethane	10.0	10.8		ug/L		108	70 - 135

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

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

**Lab Sample ID: LCS 580-228044/5**

**Matrix: Water**

**Analysis Batch: 228044**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	10.0	9.67		ug/L		97	58 - 143
1,1-Dichloroethene	10.1	10.6		ug/L		105	70 - 117
1,2-Dichloropropane	10.0	11.3		ug/L		113	58 - 150
1,3-Dichloropropane	10.0	10.4		ug/L		104	69 - 134
2,2-Dichloropropane	10.0	8.96		ug/L		90	50 - 140
1,1-Dichloropropene	10.0	11.0		ug/L		110	75 - 120
Ethylbenzene	10.0	10.8		ug/L		108	75 - 119
Ethylene Dibromide	10.0	9.99		ug/L		100	66 - 133
Hexachlorobutadiene	10.0	9.38		ug/L		94	56 - 125
Isopropylbenzene	10.0	10.8		ug/L		108	75 - 125
4-Isopropyltoluene	10.0	10.8		ug/L		108	66 - 120
Methylene Chloride	10.0	11.3		ug/L		113	70 - 115
Methyl tert-butyl ether	10.0	11.0		ug/L		110	65 - 125
m-Xylene & p-Xylene	10.0	10.3		ug/L		103	75 - 119
Naphthalene	10.0	11.7		ug/L		116	55 - 134
n-Butylbenzene	10.0	10.8		ug/L		108	70 - 120
N-Propylbenzene	10.0	11.6		ug/L		116	70 - 124
o-Xylene	10.0	10.3		ug/L		102	74 - 120
sec-Butylbenzene	10.0	11.1		ug/L		110	70 - 125
Styrene	10.0	10.6		ug/L		105	76 - 116
tert-Butylbenzene	10.0	10.9		ug/L		109	70 - 121
1,1,1,2-Tetrachloroethane	10.0	9.36		ug/L		93	64 - 130
1,1,2,2-Tetrachloroethane	10.0	12.0		ug/L		119	65 - 130
Tetrachloroethene	10.0	9.78		ug/L		97	70 - 124
Toluene	10.0	10.3		ug/L		103	75 - 120
trans-1,2-Dichloroethene	10.0	11.0		ug/L		110	72 - 113
trans-1,3-Dichloropropene	10.0	11.0		ug/L		110	73 - 122
1,2,3-Trichlorobenzene	10.0	9.79		ug/L		98	55 - 133
1,2,4-Trichlorobenzene	10.0	10.5		ug/L		105	56 - 129
1,1,1-Trichloroethane	10.0	9.14		ug/L		91	65 - 130
1,1,2-Trichloroethane	10.0	10.2		ug/L		102	69 - 135
Trichloroethene	10.0	10.7		ug/L		107	70 - 125
Trichlorofluoromethane	10.0	9.42		ug/L		94	49 - 130
1,2,3-Trichloropropane	10.0	10.7		ug/L		107	65 - 135
1,2,4-Trimethylbenzene	10.0	10.8		ug/L		108	75 - 121
1,3,5-Trimethylbenzene	10.0	10.8		ug/L		108	75 - 122
Vinyl chloride	10.0	9.27		ug/L		93	56 - 114

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	96		75 - 125
Dibromofluoromethane (Surr)	92		77 - 118
1,2-Dichloroethane-d4 (Surr)	90		65 - 143
Toluene-d8 (Surr)	99		82 - 122
Trifluorotoluene (Surr)	103		80 - 141

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

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

Lab Sample ID: LCSD 580-228044/6

Matrix: Water

Analysis Batch: 228044

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
Benzene	10.0	11.4		ug/L		114	80 - 120	0	14
Bromobenzene	10.0	10.2		ug/L		102	75 - 115	3	13
Bromoform	10.0	9.13		ug/L		91	55 - 130	3	20
Bromomethane	10.0	9.04		ug/L		90	55 - 125	1	30
Carbon tetrachloride	10.0	9.42		ug/L		94	65 - 124	3	19
Chlorobenzene	10.0	10.7		ug/L		106	80 - 120	2	15
Chlorobromomethane	10.0	10.5		ug/L		105	65 - 120	1	17
Chlorodibromomethane	10.0	9.12		ug/L		91	71 - 118	0	21
Chloroethane	10.0	9.18		ug/L		92	60 - 126	2	30
Chloroform	10.0	10.5		ug/L		105	80 - 119	3	15
Chloromethane	10.0	10.4		ug/L		104	40 - 149	6	22
2-Chlorotoluene	10.0	11.1		ug/L		111	69 - 125	1	15
4-Chlorotoluene	10.0	10.9		ug/L		109	68 - 121	1	15
cis-1,2-Dichloroethene	10.0	11.2	*	ug/L		112	70 - 111	4	15
cis-1,3-Dichloropropene	10.0	11.1		ug/L		111	77 - 117	1	24
1,2-Dibromo-3-Chloropropane	10.0	10.8		ug/L		107	58 - 141	7	30
Dibromomethane	10.0	10.2		ug/L		102	61 - 142	2	15
1,2-Dichlorobenzene	10.0	10.4		ug/L		103	70 - 120	0	15
1,3-Dichlorobenzene	10.0	10.4		ug/L		104	72 - 116	2	14
1,4-Dichlorobenzene	10.0	10.3		ug/L		103	75 - 117	1	17
Dichlorobromomethane	10.0	10.4		ug/L		103	75 - 120	5	14
Dichlorodifluoromethane	10.0	11.3		ug/L		113	20 - 141	6	35
1,1-Dichloroethane	10.0	11.2		ug/L		113	70 - 135	4	20
1,2-Dichloroethane	10.0	9.72		ug/L		97	58 - 143	0	17
1,1-Dichloroethene	10.1	11.8		ug/L		117	70 - 117	10	21
1,2-Dichloropropane	10.0	11.2		ug/L		112	58 - 150	1	15
1,3-Dichloropropane	10.0	10.4		ug/L		104	69 - 134	0	23
2,2-Dichloropropane	10.0	10.3		ug/L		103	50 - 140	13	20
1,1-Dichloropropene	10.0	11.1		ug/L		111	75 - 120	1	20
Ethylbenzene	10.0	10.9		ug/L		109	75 - 119	1	14
Ethylene Dibromide	10.0	10.4		ug/L		104	66 - 133	4	17
Hexachlorobutadiene	10.0	9.60		ug/L		96	56 - 125	2	19
Isopropylbenzene	10.0	10.9		ug/L		108	75 - 125	0	20
4-Isopropyltoluene	10.0	10.8		ug/L		108	66 - 120	0	13
Methylene Chloride	10.0	11.9	*	ug/L		119	70 - 115	5	19
Methyl tert-butyl ether	10.0	11.7		ug/L		117	65 - 125	7	18
m-Xylene & p-Xylene	10.0	10.4		ug/L		104	75 - 119	1	14
Naphthalene	10.0	11.9		ug/L		119	55 - 134	2	30
n-Butylbenzene	10.0	10.7		ug/L		107	70 - 120	2	20
N-Propylbenzene	10.0	11.5		ug/L		115	70 - 124	1	13
o-Xylene	10.0	10.6		ug/L		106	74 - 120	3	16
sec-Butylbenzene	10.0	11.0		ug/L		110	70 - 125	1	15
Styrene	10.0	10.8		ug/L		107	76 - 116	2	16
tert-Butylbenzene	10.0	10.9		ug/L		109	70 - 121	0	14
1,1,1,2-Tetrachloroethane	10.0	9.84		ug/L		98	64 - 130	5	20
1,1,1,2,2-Tetrachloroethane	10.0	11.9		ug/L		119	65 - 130	1	18
Tetrachloroethene	10.0	10.2		ug/L		102	70 - 124	4	20
Toluene	10.0	10.4		ug/L		104	75 - 120	1	19

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

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

Lab Sample ID: LCSD 580-228044/6

Matrix: Water

Analysis Batch: 228044

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
trans-1,2-Dichloroethene	10.0	11.6	*	ug/L		116	72 - 113	5	21
trans-1,3-Dichloropropene	10.0	11.0		ug/L		110	73 - 122	0	30
1,2,3-Trichlorobenzene	10.0	10.3		ug/L		103	55 - 133	5	35
1,2,4-Trichlorobenzene	10.0	10.5		ug/L		105	56 - 129	1	22
1,1,1-Trichloroethane	10.0	9.40		ug/L		94	65 - 130	3	18
1,1,2-Trichloroethane	10.0	10.3		ug/L		103	69 - 135	1	24
Trichloroethene	10.0	11.0		ug/L		110	70 - 125	3	23
Trichlorofluoromethane	10.0	8.53		ug/L		85	49 - 130	10	35
1,2,3-Trichloropropane	10.0	11.1		ug/L		110	65 - 135	3	22
1,2,4-Trimethylbenzene	10.0	11.0		ug/L		110	75 - 121	2	16
1,3,5-Trimethylbenzene	10.0	10.7		ug/L		107	75 - 122	0	14
Vinyl chloride	10.0	9.62		ug/L		96	56 - 114	4	23

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	96		75 - 125
Dibromofluoromethane (Surr)	94		77 - 118
1,2-Dichloroethane-d4 (Surr)	92		65 - 143
Toluene-d8 (Surr)	98		82 - 122
Trifluorotoluene (Surr)	103		80 - 141

Lab Sample ID: 580-62650-4 MS

Matrix: Water

Analysis Batch: 228044

Client Sample ID: MW-5-W-091316

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND	F1	10.0	12.2	F1	ug/L		122	80 - 120
Bromobenzene	ND		10.0	10.7		ug/L		107	75 - 115
Bromoform	ND		10.0	9.73		ug/L		97	55 - 130
Bromomethane	ND		10.0	8.85		ug/L		89	55 - 125
Carbon tetrachloride	ND		10.0	9.90		ug/L		99	65 - 124
Chlorobenzene	ND		10.0	11.0		ug/L		110	80 - 120
Chlorobromomethane	ND		10.0	10.7		ug/L		107	65 - 120
Chlorodibromomethane	ND		10.0	9.46		ug/L		95	71 - 118
Chloroethane	ND		10.0	10.0		ug/L		100	60 - 126
Chloroform	ND		10.0	10.8		ug/L		108	80 - 119
Chloromethane	ND		10.0	10.9		ug/L		109	40 - 149
2-Chlorotoluene	ND		10.0	11.0		ug/L		110	69 - 125
4-Chlorotoluene	ND		10.0	11.4		ug/L		114	68 - 121
cis-1,2-Dichloroethene	430	* E	10.0	459	E 4	ug/L		277	70 - 111
cis-1,3-Dichloropropene	ND		10.0	11.3		ug/L		113	77 - 117
1,2-Dibromo-3-Chloropropane	ND		10.0	12.5		ug/L		125	58 - 141
Dibromomethane	ND		10.0	10.6		ug/L		105	61 - 142
1,2-Dichlorobenzene	ND		10.0	12.9		ug/L		111	70 - 120
1,3-Dichlorobenzene	ND		10.0	11.3		ug/L		112	72 - 116
1,4-Dichlorobenzene	4.2		10.0	15.0		ug/L		108	75 - 117
Dichlorobromomethane	ND		10.0	10.5		ug/L		105	75 - 120
Dichlorodifluoromethane	ND		10.0	11.9		ug/L		119	20 - 141
1,1-Dichloroethane	ND		10.0	13.1		ug/L		113	70 - 135

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

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

Lab Sample ID: 580-62650-4 MS

Client Sample ID: MW-5-W-091316

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 228044

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
1,2-Dichloroethane	ND		10.0	9.89		ug/L		99	58 - 143
1,1-Dichloroethene	ND	F1	10.1	14.1	F1	ug/L		125	70 - 117
1,2-Dichloropropane	ND		10.0	12.0		ug/L		120	58 - 150
1,3-Dichloropropane	ND		10.0	10.8		ug/L		107	69 - 134
2,2-Dichloropropane	ND		10.0	8.93		ug/L		89	50 - 140
1,1-Dichloropropene	ND		10.0	11.9		ug/L		119	75 - 120
Ethylbenzene	150	E	10.0	156	E 4	ug/L		9	75 - 119
Ethylene Dibromide	ND		10.0	10.9		ug/L		109	66 - 133
Hexachlorobutadiene	ND		10.0	9.38		ug/L		94	56 - 125
Isopropylbenzene	ND		10.0	12.3		ug/L		114	75 - 125
4-Isopropyltoluene	ND		10.0	13.6		ug/L		111	66 - 120
Methylene Chloride	ND	* F1	10.0	11.9	F1	ug/L		118	70 - 115
Methyl tert-butyl ether	ND		10.0	11.9		ug/L		119	65 - 125
m-Xylene & p-Xylene	210	E	10.0	211	E 4	ug/L		13	75 - 119
Naphthalene	3.2		10.0	16.0		ug/L		128	55 - 134
n-Butylbenzene	10		10.0	21.1		ug/L		106	70 - 120
N-Propylbenzene	ND		10.0	13.0		ug/L		119	70 - 124
o-Xylene	120	E	10.0	127	E 4	ug/L		48	74 - 120
sec-Butylbenzene	ND		10.0	11.6		ug/L		116	70 - 125
Styrene	ND		10.0	10.9		ug/L		109	76 - 116
tert-Butylbenzene	ND		10.0	12.1		ug/L		112	70 - 121
1,1,1,2-Tetrachloroethane	ND		10.0	9.80		ug/L		98	64 - 130
1,1,2,2-Tetrachloroethane	ND		10.0	12.9		ug/L		128	65 - 130
Tetrachloroethene	ND		10.0	11.1		ug/L		111	70 - 124
Toluene	3.1		10.0	14.2		ug/L		112	75 - 120
trans-1,2-Dichloroethene	ND	* F1	10.0	13.2	F1	ug/L		131	72 - 113
trans-1,3-Dichloropropene	ND		10.0	11.0		ug/L		109	73 - 122
1,2,3-Trichlorobenzene	ND		10.0	10.5		ug/L		105	55 - 133
1,2,4-Trichlorobenzene	ND		10.0	10.9		ug/L		109	56 - 129
1,1,1-Trichloroethane	ND		10.0	10.3		ug/L		99	65 - 130
1,1,2-Trichloroethane	ND		10.0	10.9		ug/L		109	69 - 135
Trichloroethene	ND		10.0	11.6		ug/L		116	70 - 125
Trichlorofluoromethane	ND		10.0	9.65		ug/L		97	49 - 130
1,2,3-Trichloropropane	ND		10.0	12.3		ug/L		123	65 - 135
1,2,4-Trimethylbenzene	20	F1	10.0	31.6		ug/L		115	75 - 121
1,3,5-Trimethylbenzene	14	F1	10.0	26.1		ug/L		117	75 - 122
Vinyl chloride	ND		10.0	10.6		ug/L		101	56 - 114

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		75 - 125
Dibromofluoromethane (Surr)	94		77 - 118
1,2-Dichloroethane-d4 (Surr)	90		65 - 143
Toluene-d8 (Surr)	99		82 - 122
Trifluorotoluene (Surr)	103		80 - 141

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

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

**Lab Sample ID: 580-62650-4 MSD**

**Matrix: Water**

**Analysis Batch: 228044**

**Client Sample ID: MW-5-W-091316**

**Prep Type: Total/NA**

Analyte	Sample		Spike Added	MSD		Unit	D	%Rec	%Rec.		RPD	
	Result	Qualifier		Result	Qualifier				Limits	RPD	Limit	
Benzene	ND	F1	10.0	12.1	F1	ug/L		121	80 - 120	1	35	
Bromobenzene	ND		10.0	10.3		ug/L		103	75 - 115	4	35	
Bromoform	ND		10.0	9.29		ug/L		93	55 - 130	5	35	
Bromomethane	ND		10.0	8.51		ug/L		85	55 - 125	4	35	
Carbon tetrachloride	ND		10.0	9.32		ug/L		93	65 - 124	6	35	
Chlorobenzene	ND		10.0	11.1		ug/L		111	80 - 120	1	35	
Chlorobromomethane	ND		10.0	10.7		ug/L		107	65 - 120	0	35	
Chlorodibromomethane	ND		10.0	9.38		ug/L		94	71 - 118	1	35	
Chloroethane	ND		10.0	10.2		ug/L		102	60 - 126	2	35	
Chloroform	ND		10.0	10.8		ug/L		108	80 - 119	0	35	
Chloromethane	ND		10.0	10.5		ug/L		105	40 - 149	5	35	
2-Chlorotoluene	ND		10.0	11.3		ug/L		113	69 - 125	2	35	
4-Chlorotoluene	ND		10.0	11.0		ug/L		109	68 - 121	4	35	
cis-1,2-Dichloroethene	430	* E	10.0	447	E 4	ug/L		156	70 - 111	3	35	
cis-1,3-Dichloropropene	ND		10.0	11.2		ug/L		111	77 - 117	2	35	
1,2-Dibromo-3-Chloropropane	ND		10.0	11.4		ug/L		114	58 - 141	9	35	
Dibromomethane	ND		10.0	10.1		ug/L		101	61 - 142	4	35	
1,2-Dichlorobenzene	ND		10.0	12.8		ug/L		110	70 - 120	1	35	
1,3-Dichlorobenzene	ND		10.0	11.4		ug/L		114	72 - 116	1	35	
1,4-Dichlorobenzene	4.2		10.0	15.0		ug/L		108	75 - 117	0	35	
Dichlorobromomethane	ND		10.0	10.1		ug/L		101	75 - 120	4	35	
Dichlorodifluoromethane	ND		10.0	11.6		ug/L		116	20 - 141	2	35	
1,1-Dichloroethane	ND		10.0	13.4		ug/L		116	70 - 135	2	35	
1,2-Dichloroethane	ND		10.0	9.66		ug/L		97	58 - 143	2	35	
1,1-Dichloroethene	ND	F1	10.1	13.3		ug/L		117	70 - 117	6	35	
1,2-Dichloropropane	ND		10.0	11.8		ug/L		118	58 - 150	1	35	
1,3-Dichloropropane	ND		10.0	10.5		ug/L		104	69 - 134	3	35	
2,2-Dichloropropane	ND		10.0	8.04		ug/L		80	50 - 140	11	35	
1,1-Dichloropropene	ND		10.0	11.7		ug/L		117	75 - 120	2	35	
Ethylbenzene	150	E	10.0	152	E 4	ug/L		-29	75 - 119	2	35	
Ethylene Dibromide	ND		10.0	10.5		ug/L		104	66 - 133	4	35	
Hexachlorobutadiene	ND		10.0	9.88		ug/L		99	56 - 125	5	35	
Isopropylbenzene	ND		10.0	12.5		ug/L		115	75 - 125	1	35	
4-Isopropyltoluene	ND		10.0	14.1		ug/L		116	66 - 120	3	35	
Methylene Chloride	ND	* F1	10.0	11.4		ug/L		113	70 - 115	4	35	
Methyl tert-butyl ether	ND		10.0	11.1		ug/L		110	65 - 125	7	35	
m-Xylene & p-Xylene	210	E	10.0	205	E 4	ug/L		-41	75 - 119	3	35	
Naphthalene	3.2		10.0	15.9		ug/L		126	55 - 134	1	35	
n-Butylbenzene	10		10.0	21.7		ug/L		113	70 - 120	3	35	
N-Propylbenzene	ND		10.0	13.4		ug/L		122	70 - 124	2	35	
o-Xylene	120	E	10.0	125	E 4	ug/L		27	74 - 120	2	35	
sec-Butylbenzene	ND		10.0	11.7		ug/L		117	70 - 125	1	35	
Styrene	ND		10.0	11.4		ug/L		113	76 - 116	4	35	
tert-Butylbenzene	ND		10.0	12.1		ug/L		112	70 - 121	0	35	
1,1,1,2-Tetrachloroethane	ND		10.0	9.77		ug/L		97	64 - 130	0	35	
1,1,1,2,2-Tetrachloroethane	ND		10.0	12.1		ug/L		121	65 - 130	6	35	
Tetrachloroethene	ND		10.0	10.9		ug/L		109	70 - 124	2	35	
Toluene	3.1		10.0	14.2		ug/L		111	75 - 120	0	35	

TestAmerica Seattle



# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

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

Lab Sample ID: 580-62650-4 MSD

Client Sample ID: MW-5-W-091316

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 228044

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
trans-1,2-Dichloroethene	ND	* F1	10.0	12.7	F1	ug/L		127	72 - 113	3	35
trans-1,3-Dichloropropene	ND		10.0	10.8		ug/L		108	73 - 122	2	35
1,2,3-Trichlorobenzene	ND		10.0	11.1		ug/L		111	55 - 133	6	35
1,2,4-Trichlorobenzene	ND		10.0	11.5		ug/L		115	56 - 129	6	35
1,1,1-Trichloroethane	ND		10.0	10.2		ug/L		98	65 - 130	1	35
1,1,2-Trichloroethane	ND		10.0	11.0		ug/L		110	69 - 135	1	35
Trichloroethene	ND		10.0	11.5		ug/L		115	70 - 125	1	35
Trichlorofluoromethane	ND		10.0	8.89		ug/L		89	49 - 130	8	35
1,2,3-Trichloropropane	ND		10.0	11.7		ug/L		117	65 - 135	5	35
1,2,4-Trimethylbenzene	20	F1	10.0	32.5	F1	ug/L		124	75 - 121	3	35
1,3,5-Trimethylbenzene	14	F1	10.0	26.8	F1	ug/L		124	75 - 122	2	35
Vinyl chloride	ND		10.0	9.79		ug/L		93	56 - 114	8	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		75 - 125
Dibromofluoromethane (Surr)	92		77 - 118
1,2-Dichloroethane-d4 (Surr)	87		65 - 143
Toluene-d8 (Surr)	101		82 - 122
Trifluorotoluene (Surr)	102		80 - 141

Lab Sample ID: MB 580-228264/4

Client Sample ID: Method Blank

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 228264

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
cis-1,2-Dichloroethene	ND		1.0		ug/L		09/25/16 12:39	1	
Ethylbenzene	ND		3.0		ug/L		09/25/16 12:39	1	
m-Xylene & p-Xylene	ND		3.0		ug/L		09/25/16 12:39	1	
o-Xylene	ND		2.0		ug/L		09/25/16 12:39	1	

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 125		09/25/16 12:39	1
Dibromofluoromethane (Surr)	91		77 - 118		09/25/16 12:39	1
1,2-Dichloroethane-d4 (Surr)	91		65 - 143		09/25/16 12:39	1
Toluene-d8 (Surr)	100		82 - 122		09/25/16 12:39	1
Trifluorotoluene (Surr)	102		80 - 141		09/25/16 12:39	1

Lab Sample ID: LCS 580-228264/5

Client Sample ID: Lab Control Sample

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 228264

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec.
		Result	Qualifier				Limits
cis-1,2-Dichloroethene	10.0	10.4		ug/L		104	70 - 111
Ethylbenzene	10.0	10.5		ug/L		105	75 - 119
m-Xylene & p-Xylene	10.0	9.96		ug/L		99	75 - 119
o-Xylene	10.0	10.0		ug/L		100	74 - 120

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

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

Lab Sample ID: LCS 580-228264/5

Matrix: Water

Analysis Batch: 228264

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		75 - 125
Dibromofluoromethane (Surr)	94		77 - 118
1,2-Dichloroethane-d4 (Surr)	90		65 - 143
Toluene-d8 (Surr)	100		82 - 122
Trifluorotoluene (Surr)	104		80 - 141

Lab Sample ID: LCSD 580-228264/6

Matrix: Water

Analysis Batch: 228264

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-1,2-Dichloroethene	10.0	10.7		ug/L		107	70 - 111	3	15
Ethylbenzene	10.0	10.4		ug/L		104	75 - 119	1	14
m-Xylene & p-Xylene	10.0	9.92		ug/L		99	75 - 119	0	14
o-Xylene	10.0	10.0		ug/L		100	74 - 120	0	16

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		75 - 125
Dibromofluoromethane (Surr)	92		77 - 118
1,2-Dichloroethane-d4 (Surr)	90		65 - 143
Toluene-d8 (Surr)	99		82 - 122
Trifluorotoluene (Surr)	105		80 - 141

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Lab Sample ID: MB 580-228050/8

Matrix: Water

Analysis Batch: 228050

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			09/22/16 11:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	105		50 - 150		09/22/16 11:55	1
4-Bromofluorobenzene (Surr)	95		50 - 150		09/22/16 11:55	1

Lab Sample ID: LCS 580-228050/9

Matrix: Water

Analysis Batch: 228050

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.16	1.32		mg/L		113	60 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Trifluorotoluene (Surr)	108		50 - 150

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

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

**Lab Sample ID: LCS 580-228050/9**

**Matrix: Water**

**Analysis Batch: 228050**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		50 - 150

**Lab Sample ID: LCSD 580-228050/10**

**Matrix: Water**

**Analysis Batch: 228050**

**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
Gasoline Range Organics (GRO) -C6-C10	1.16	1.32		mg/L		113	60 - 120	0	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
Trifluorotoluene (Surr)	108		50 - 150
4-Bromofluorobenzene (Surr)	101		50 - 150

**Lab Sample ID: 580-62650-4 MS**

**Matrix: Water**

**Analysis Batch: 228050**

**Client Sample ID: MW-5-W-091316**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	1.7		1.16	3.08		mg/L		115	60 - 120		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
Trifluorotoluene (Surr)	104		50 - 150
4-Bromofluorobenzene (Surr)	136		50 - 150

**Lab Sample ID: 580-62650-4 MSD**

**Matrix: Water**

**Analysis Batch: 228050**

**Client Sample ID: MW-5-W-091316**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	1.7		1.16	3.08		mg/L		115	60 - 120	0	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
Trifluorotoluene (Surr)	104		50 - 150
4-Bromofluorobenzene (Surr)	138		50 - 150

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

**Lab Sample ID: MB 580-228146/1-A**

**Matrix: Water**

**Analysis Batch: 228252**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 228146**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	ND		0.10		mg/L		09/22/16 16:36	09/24/16 18:38	1

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

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

(Continued)

Lab Sample ID: MB 580-228146/1-A

Matrix: Water

Analysis Batch: 228252

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 228146

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
<i>o</i> -Terphenyl	100		50 - 150	09/22/16 16:36	09/24/16 18:38	1

Lab Sample ID: LCS 580-228146/2-A

Matrix: Water

Analysis Batch: 228252

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 228146

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	86		50 - 150

Lab Sample ID: LCSD 580-228146/3-A

Matrix: Water

Analysis Batch: 228252

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 228146

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	88		50 - 150

Lab Sample ID: 580-62650-4 MS

Matrix: Water

Analysis Batch: 228252

Client Sample ID: MW-5-W-091316

Prep Type: Total/NA

Prep Batch: 228146

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	67		50 - 150

Lab Sample ID: 580-62650-4 MSD

Matrix: Water

Analysis Batch: 228252

Client Sample ID: MW-5-W-091316

Prep Type: Total/NA

Prep Batch: 228146

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	65		50 - 150

TestAmerica Seattle

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

## Client Sample ID: MW-1-W-091316

Lab Sample ID: 580-62650-1

Date Collected: 09/13/16 12:20

Matrix: Water

Date Received: 09/15/16 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	228044	09/22/16 16:56	TL1	TAL SEA
Total/NA	Analysis	8260C	DL	10	228264	09/25/16 16:00	CJ	TAL SEA

## Client Sample ID: MW-2-W-091316

Lab Sample ID: 580-62650-2

Date Collected: 09/13/16 11:35

Matrix: Water

Date Received: 09/15/16 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	228044	09/22/16 15:31	TL1	TAL SEA
Total/NA	Analysis	8260C	RA	1	228264	09/25/16 14:34	CJ	TAL SEA

## Client Sample ID: MW-4-W-091316

Lab Sample ID: 580-62650-3

Date Collected: 09/13/16 13:15

Matrix: Water

Date Received: 09/15/16 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	228044	09/22/16 17:25	TL1	TAL SEA

## Client Sample ID: MW-5-W-091316

Lab Sample ID: 580-62650-4

Date Collected: 09/13/16 10:10

Matrix: Water

Date Received: 09/15/16 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	228044	09/22/16 18:22	TL1	TAL SEA
Total/NA	Analysis	8260C	DL	50	228264	09/25/16 15:31	CJ	TAL SEA
Total/NA	Analysis	AK101		1	228050	09/22/16 16:14	J1J	TAL SEA
Total/NA	Prep	3510C			228146	09/22/16 16:36	JCV	TAL SEA
Total/NA	Analysis	AK102 & 103		1	228252	09/24/16 19:40	KZ1	TAL SEA

## Client Sample ID: MW-7-W-091316

Lab Sample ID: 580-62650-5

Date Collected: 09/13/16 09:15

Matrix: Water

Date Received: 09/15/16 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	228044	09/22/16 16:28	TL1	TAL SEA

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

**Client Sample ID: BD-1-W-091316**

**Lab Sample ID: 580-62650-6**

Date Collected: 09/13/16 00:01

Matrix: Water

Date Received: 09/15/16 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	228044	09/22/16 15:59	TL1	TAL SEA
Total/NA	Analysis	8260C	RA	1	228264	09/25/16 15:02	CJ	TAL SEA

**Client Sample ID: EB-1-W-091316**

**Lab Sample ID: 580-62650-7**

Date Collected: 09/13/16 13:30

Matrix: Water

Date Received: 09/15/16 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	228044	09/22/16 15:02	TL1	TAL SEA
Total/NA	Analysis	AK101		1	228050	09/22/16 15:42	J1J	TAL SEA
Total/NA	Prep	3510C			228146	09/22/16 16:36	JCV	TAL SEA
Total/NA	Analysis	AK102 & 103		1	228252	09/24/16 20:43	KZ1	TAL SEA

**Client Sample ID: TRIP BLANK**

**Lab Sample ID: 580-62650-8**

Date Collected: 09/13/16 00:01

Matrix: Water

Date Received: 09/15/16 08:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	228044	09/22/16 11:41	TL1	TAL SEA
Total/NA	Analysis	AK101		1	228050	09/22/16 13:32	J1J	TAL SEA

**Laboratory References:**

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

# Certification Summary

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

## Laboratory: TestAmerica Seattle

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-02-17

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11

# Sample Summary

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-62650-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-62650-1	MW-1-W-091316	Water	09/13/16 12:20	09/15/16 08:00
580-62650-2	MW-2-W-091316	Water	09/13/16 11:35	09/15/16 08:00
580-62650-3	MW-4-W-091316	Water	09/13/16 13:15	09/15/16 08:00
580-62650-4	MW-5-W-091316	Water	09/13/16 10:10	09/15/16 08:00
580-62650-5	MW-7-W-091316	Water	09/13/16 09:15	09/15/16 08:00
580-62650-6	BD-1-W-091316	Water	09/13/16 00:01	09/15/16 08:00
580-62650-7	EB-1-W-091316	Water	09/13/16 13:30	09/15/16 08:00
580-62650-8	TRIP BLANK	Water	09/13/16 00:01	09/15/16 08:00





Tacoma, WA 98424-1317  
phone 253.922.2310 fax 253.922.5047

Regulatory Program:  DW  NPDES  KORA  Other:

TestAmerica Laboratories, Inc.

THE LEADER IN ENVIRONMENTAL TESTING



Client Contact: ARCADIS-US, Inc.  
880 H Street STE 101  
Anchorage, AK 99501  
907.726.9095  
FAX: (xxx) xxx-xxxx  
Project Name: GE-N.K.I.K.  
Site: BOSSINS, 1404 SPOA  
PO # B0046260

Project Manager: Greg Montgomery  
Tel/Fax: Greg Montgomery  
Analysis Turnaround Time  
 CALENDAR DAYS  WORKING DAYS  
TAT if different from Below  
 2 weeks  
 1 week  
 2 days  
 1 day

Site Contact: \_\_\_\_\_  
Lab Contact: \_\_\_\_\_  
Date: \_\_\_\_\_  
Carrier: \_\_\_\_\_  
COC No.: \_\_\_\_\_ of \_\_\_\_\_ COCs

Sampler: \_\_\_\_\_  
For Lab Use Only:  
Walk-in Client: \_\_\_\_\_  
Lab Sampling: \_\_\_\_\_  
Job / SDG No.: \_\_\_\_\_

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grn)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	BTEX	GRO	DRO	Lead	Other
MW-1-W-091316	9/13/16	1220	G	W	6	N						
MW-2-W-091316	9/13/16	1135	G	W	6	N						
MW-4-W-091316	9/13/16	1315	G	W	6	N						
MW-5-W-091316	9/13/16	1010	G	W	6	N						
MW-7-W-091316	9/13/16	0915	G	W	6	N						
BD-1-W-091316	9/13/16	-	G	W	6	N						
EB-1-W-091316	9/13/16	1330	G	W	8	N						
Trip Blank	-/-	-	-	W	6							

Preservation Used: 1=Ice 2=HCl 3=H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification:  
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Special Instructions/QC Requirements & Comments:  
 Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown  Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months

Custody Seal Intact:  Yes  No  
Custody Seal No.: \_\_\_\_\_  
Cooler Temp. (°C): Obs'd: \_\_\_\_\_  
Therm ID No.: \_\_\_\_\_

Relinquished by: \_\_\_\_\_  
Company: \_\_\_\_\_  
Date/Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_  
Company: \_\_\_\_\_  
Date/Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_  
Company: \_\_\_\_\_  
Date/Time: \_\_\_\_\_

Received by: \_\_\_\_\_  
Received in Laboratory by: \_\_\_\_\_

Company: \_\_\_\_\_  
Date/Time: \_\_\_\_\_

Company: \_\_\_\_\_  
Date/Time: \_\_\_\_\_

Company: \_\_\_\_\_  
Date/Time: \_\_\_\_\_



TB #2 Cooler Cor 5.1 Unc 3.3  
Cooler Disc 2.5, Blue/White @ Lab  
Wet/Packs Packing B, bblc  
VLS

## Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 580-62650-1

SDG Number:

**Login Number: 62650**

**List Number: 1**

**Creator: Svabik-Seror, Philip M**

**List Source: TestAmerica Seattle**

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.	N/A	
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?	False	No name.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

## Laboratory Data Review Checklist

Completed by:	Kylie Kegerreis		
Title:	Environmental Engineer	Date:	5/1/2018
CS Report Name:	GE - Nikiski	Report Date:	3/21/2017
Consultant Firm:	Arcadis U.S., Inc.		
Laboratory Name:	TestAmerica, Inc.	Laboratory Report Number:	580-66540-1
ADEC File Number:		ADEC RecKey Number:	

### 1. Laboratory

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

Yes     No     NA (Please explain.)    Comments:

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     NA (Please explain)    Comments:

Samples were not transferred or sub-contracted to an alternate laboratory

### 2. Chain of Custody (COC)

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

Yes     No     NA (Please explain)    Comments:

Field sampler was not listed on COC, but signatures and dates are provided.

b. Correct analyses requested?

Yes     No     NA (Please explain)    Comments:

VOCs by Method 8260C  
GRO by Method AK101  
DRO by Methods AK102 & 103

3. Laboratory Sample Receipt Documentation

a. Sample/cooler temperature documented and within range at receipt ( $4^{\circ} \pm 2^{\circ} \text{C}$ )?

Yes     No     NA (Please explain)    Comments:

Temperatures = 3.4 and 3.9 °C

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

Yes     No     NA (Please explain)    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     NA (Please explain)    Comments:

One container for the samples listed in part d was received broken and leaking. Headspace larger than 1/4" in one or more vials.

d. If there were any discrepancies, were they documented? - For example, incorrect sample containers/preservation, sample temperature outside of acceptance range, insufficient or missing samples, etc.?

Yes     No     NA (Please explain)    Comments:

Broken/leaking samples were documented (MW-1-W-030214, MW-7-W-030117, MW-7-W-030117, MW-8-W-030117, MW-9-W-030217, and BD-2-W-030117). Headspace discrepancies noted in at least one vial. Sample IDs on containers did not match COC.

e. Data quality or usability affected? (Please explain)

Comments:

Data quality or usability was not affected because sufficient sample volume remained for all samples and the sample IDs on the COC were used per client request.

4. Case Narrative

a. Present and understandable?

Yes     No     NA (Please explain)    Comments:

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

Yes     No     NA (Please explain)    Comments:

See Attachment 1

c. Were all corrective actions documented?

Yes     No     NA (Please explain)

Comments:

See Attachment 1

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

Comments:

No effect on data quality/usability.

## 5. Samples Results

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

Yes     No     NA (Please explain)

Comments:

DRO analyzed for Trip Blank even though it was not requested on COC

b. All applicable holding times met?

Yes     No     NA (Please explain)

Comments:

Hold times: Methods 8260C and AK101 - Analysis w/in 14 days; Methods AK102 & 103 - Extraction w/ in 14 days, Analysis w/in 40 days of extraction  
Collection Dates 3/1 - 3/2/17  
Prepped: 3/13/17 and 3/15/17 (AK102 & 103 Only)  
Analyzed: 3/10 & 3/13/17 (8260C, some re-analyzed 3/15); 3/14 - 3/16/17 (AK101); 3/13 & 3/15/17 (AK102 & 103)

c. All soils reported on a dry weight basis?

Yes     No     NA (Please explain)

Comments:

Samples are aqueous

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

Yes     No     NA (Please explain)

Comments:

The PQLs are less than the Cleanup Levels

e. Data quality or usability affected? (Please explain)

Comments:

Data quality or usability not affected.

6. QC Samples

a. Method Blank

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

Yes     No     NA (Please explain)

Comments:

ii. All method blank results less than PQL?

Yes     No     NA (Please explain)

Comments:

iii. If above PQL, what samples are affected?

Comments:

N/A

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

Yes     No     NA (Please explain)

Comments:

Method blank results all below PQL

v. Data quality or usability affected? (Please explain)

Comments:

Data quality or usability not affected due to method blank.

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     NA (Please explain)

Comments:

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

Yes     No     NA (Please explain)

Comments:

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     NA (Please explain)    Comments:

Method 8260C (Batch = 240562) LCS: benzene = 124 (Limits = 80 - 120); chloroform = 123 (Limits = 80 - 119); 1,1-dichloropropene = 121 (Limits = 75 - 120); methylene chloride = 119 (Limits = 70 - 115); trans-1,2-dichloroethene = 118 (Limits = 72 - 113); vinyl chloride = 117 (Limits = 56 - 114)

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/DMSD, and or sample/sample duplicate. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)

Yes     No     NA (Please explain)    Comments:

Method 8260C (Batch = 240562) RPD: isopropyltoluene = 14 (Limit = 13); n-propylbenzene = 14 (Limit = 13); tetrachloroethene = 71 (Limit = 20). Method AK101 (Batch = 240593): GRO = 25 (Limit = 20)

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

Comments:

No samples are affected because the analytes were not detected in the associated samples.

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

Yes     No     NA (Please explain)    Comments:

Affected samples/analytes are noted with an asterisk in the laboratory report (trip blank only). All other analytes are not included in the report, because they were not re-run for re-analysis or dilution.

vii. Data quality or usability affected? (Please explain)

Comments:

Data quality or usability not affected due to LCS/LCSD recoveries.

### c. Surrogates - Organics Only

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

Yes     No     NA (Please explain)    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     NA (Please explain)    Comments:

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

- Yes     No     NA (Please explain)

Comments:

No failed surrogate recoveries

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

Comments:

Data quality or usability not affected due to surrogate recoveries

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     NA (Please explain.)

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     NA (Please explain.)

Comments:

iii. All results less than PQL?

- Yes     No     NA (Please explain.)

Comments:

iv. If above PQL, what samples are affected?

Comments:

N/A - all results less than PQL

v. Data quality or usability affected? (Please explain.)

Comments:

Data quality or usability not affected due to trip blank.

e. Field Duplicate

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

- Yes     No     NA (Please explain)

Comments:

Field Duplicate: BD-1 (Parent Sample: MW-4)  
Field Duplicate: BD-2 (Parent Sample: MW-3)



ii. Submitted blind to lab?

Yes     No     NA (Please explain.)

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     NA (Please explain)

Comments:

See Table 1

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

Yes     No     NA (Please explain)

Comments:

Data quality or usability not affected due to field duplicates.

f. Decontamination or Equipment Blank (if applicable)

Yes     No     NA (Please explain)

Comments:

A decontamination or equipment blank was not collected.

i. All results less than PQL?

Yes     No     NA (Please explain)

Comments:

A decontamination or equipment blank was not collected.

ii. If above PQL, what samples are affected?

Comments:

N/A

iii. Data quality or usability affected? (Please explain.)

Comments:

N/A

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

a. Defined and appropriate?

Yes       No       NA (Please explain)

Comments:

MS/MSD analysis performed on MW-7. The MSD %R for DRO was outside of the limits, biased low (identified by an F1 qualifier). Qualify the non-detect as estimated for MW-7 only: < 0.10 UJ ug/L

Reset Form

**Table 1**  
**Relative Percent Difference for Parent and Field Duplicate Samples**  
**Report Number: 580-66540-1**  
**Former TBE Machine Shop, Nikiski, AK**

Sample Identification	MW-4	BD-1	RPD <sup>a</sup>	MW-3	BD-2	RPD <sup>a</sup>
Analyte	Result (µg/L)	Result (µg/L)		Result (µg/L)	Result (µg/L)	
cis-1,2-dichloroethene	ND	ND	--	4.9	4.5	9%
1,1-dichloroethane	ND	ND	--	5.4	5.6	4%
tetrachloroethene	12	12	0%	ND	ND	--
trichloroethene	3.5	3.6	3%	ND	ND	--
diesel range organics	0.44	0.50	13%	0.3	0.28	7%

Notes:

<sup>a</sup> Relative percent difference (RPD) calculated for detected results only.

µg/L = micrograms per liter

ND = not detected

-- = not calculated

**Attachment 1**  
**Additional Information for Job 580-66540-1**  
**Former TBE Machine Shop**  
**Nikiski, AK**

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

Method 8260C:

1. The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-1, MW-2, and MW-5. Elevated reporting limits are provided.
2. The following sample had suspected carryover of cis-1,2-dichloroethene in previous batch: MW-3.
3. The lab control sample (LCS) and/or lab control sample duplicate (LCSD) recovered outside of control limits, biased high, for several compounds. The RPD was high for several compounds.

Method AK101:

4. The %RPD of the LCS and LCSD for preparation batch 24053 recovered outside control limits for Gasoline Range Organics (GRO)-C6-C10.

Methods AK102 & 103:

5. The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was earlier than the typical diesel fuel pattern used by the laboratory for quantitative purposes: MW-2 and MW-5.
6. The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel pattern used by the laboratory for quantitative purposes: MW-4 and MW-6.
7. The matrix spike duplicate (MSD) recoveries for preparation batch 580-240600 and analytical batch 580-240570 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated LCS recover was within acceptable limits.
8. The following sample contained a hydrocarbon pattern in the diesel range; however, the elution pattern was earlier than the typical diesel fuel pattern used by the laboratory for quantitative purposes: MW-1.
9. The following sample contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel pattern used by the laboratory for quantitative purposes: BD-1.

- c. Were all corrective actions documented?

1. Elevated reporting limits are provided.
2. The sample was reanalyzed.
3. Associated samples were non-detect; no corrective action required.
4. The LCS/LCSD were recovered within the %R limits; no corrective action required.
5. Not applicable
6. Not applicable
7. Not applicable
8. Not applicable
9. Not applicable

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Seattle  
5755 8th Street East  
Tacoma, WA 98424  
Tel: (253)922-2310

TestAmerica Job ID: 580-66540-1  
Client Project/Site: GE-Nikiski

For:  
ARCADIS U.S. Inc  
4915 Prospectus Drive  
Suite F  
Durham, North Carolina 27713

Attn: Mr. Matthew Pelton



Authorized for release by:  
3/21/2017 9:48:45 AM

Kristine Allen, Manager of Project Management  
(253)248-4970  
[kristine.allen@testamericainc.com](mailto:kristine.allen@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Definitions . . . . .	5
Client Sample Results . . . . .	6
QC Sample Results . . . . .	34
Chronicle . . . . .	55
Certification Summary . . . . .	59
Sample Summary . . . . .	60
Chain of Custody . . . . .	61
Receipt Checklists . . . . .	64

# Case Narrative

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Job ID: 580-66540-1**

**Laboratory: TestAmerica Seattle**

## Narrative

### Job Narrative 580-66540-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 3/7/2017 10:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.1° C and 5.1° C.

#### Receipt Exceptions

One container for the following samples was received broken and leaking: MW-1-W-030217 (580-66540-1), MW-7-W-030117 (580-66540-7[MS]), MW-7-W-030117 (580-66540-7[MSD]), MW-8-W-030117 (580-66540-8), MW-9-W-030217 (580-66540-9) and BD-2-W-030117 (580-66540-13).

Sample MW-1-W-030217 (580-66540-1) had 1 broken 40mL HCL VOA

Sample MW-7-W-030117 (580-66540-7[MS]) had 1 broken 250mL HCL Amber Glass Bottle

Sample MW-7-W-030117 (580-66540-7[MSD]) had 1 broken 250mL HCL Amber Glass Bottle

Sample MW-8-W-030117 (580-66540-8) had 1 broken 250mL HCL Amber Glass Bottle

Sample MW-9-W-030217 (580-66540-9) had 1 broken 250mL HCL Amber Glass Bottle

Sample BD-2-W-030117 (580-66540-13) had 1 broken 40mL HCL VOA

The container labels for the samples did not match the Chain of Custody (COC). The container labels list just list the first 3 characters of the ID (for example MW-1), while the COC lists the entire ID (for example MW-1-W-030217). Samples were logged in per the containers labels at client request.

#### GC/MS VOA

Method(s) 8260C: The following samples was diluted to bring the concentration of target analytes within the calibration range: MW-1 (580-66540-1), MW-2 (580-66540-2) and MW-5 (580-66540-5). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample was reanalyzed for suspected carryover of Cis-1,2-Dichloroethene in previous batch. MW-3 (580-66540-3)

Method(s) 8260C: The lab control sample (LCS) and/or lab control sample duplicate (LCSD) recovered outside of control limits, high biased, for several compounds. The associated samples were non-detect for these compounds; therefore the data has been reported. The RPD was high for several compounds.

Method(s) AK101: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 240593 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10. The LCS/LCSD both recovered within the %R limits, so the results have been reported.

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

#### GC Semi VOA

Method(s) AK102 & 103: The following sample contained a hydrocarbon pattern in the diesel range; however, the elution pattern was earlier than the typical diesel fuel pattern used by the laboratory for quantitative purposes: MW-2 (580-66540-2) and MW-5 (580-66540-5).

Method(s) AK102 & 103: The following sample contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: MW-4 (580-66540-4) and MW-6 (580-66540-6).

Method(s) AK102 & 103: The matrix spike duplicate (MSD) recoveries for preparation batch 580-240600 and analytical batch 580-240570 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) AK102 & 103: The following sample contained a hydrocarbon pattern in the diesel range; however, the elution pattern was

# Case Narrative

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

---

## Job ID: 580-66540-1 (Continued)

---

### Laboratory: TestAmerica Seattle (Continued)

earlier than the typical diesel fuel pattern used by the laboratory for quantitative purposes: MW-1 (580-66540-1).

Method(s) AK102 & 103: The following sample contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: BD-1 (580-66540-12).

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

1

2

3

4

5

6

7

8

9

10

11



# Definitions/Glossary

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits

### GC VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits

### GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
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)

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-1**  
**Date Collected: 03/02/17 11:40**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-1**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/10/17 13:37	1
Bromobenzene	ND		2.0		ug/L			03/10/17 13:37	1
Bromoform	ND		1.0		ug/L			03/10/17 13:37	1
Bromomethane	ND		5.0		ug/L			03/10/17 13:37	1
Carbon tetrachloride	ND		3.0		ug/L			03/10/17 13:37	1
Chlorobenzene	ND		2.0		ug/L			03/10/17 13:37	1
Chlorobromomethane	ND		2.0		ug/L			03/10/17 13:37	1
Chlorodibromomethane	ND		1.0		ug/L			03/10/17 13:37	1
Chloroethane	ND		5.0		ug/L			03/10/17 13:37	1
Chloroform	ND		5.0		ug/L			03/10/17 13:37	1
Chloromethane	ND		5.0		ug/L			03/10/17 13:37	1
2-Chlorotoluene	ND		3.0		ug/L			03/10/17 13:37	1
4-Chlorotoluene	ND		2.0		ug/L			03/10/17 13:37	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 13:37	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/10/17 13:37	1
Dibromomethane	ND		1.0		ug/L			03/10/17 13:37	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/10/17 13:37	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/10/17 13:37	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/10/17 13:37	1
Dichlorobromomethane	ND		2.0		ug/L			03/10/17 13:37	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/10/17 13:37	1
<b>1,1-Dichloroethane</b>	<b>7.4</b>		2.0		ug/L			03/10/17 13:37	1
1,2-Dichloroethane	ND		1.0		ug/L			03/10/17 13:37	1
1,1-Dichloroethene	ND		2.0		ug/L			03/10/17 13:37	1
1,2-Dichloropropane	ND		1.0		ug/L			03/10/17 13:37	1
1,3-Dichloropropane	ND		1.0		ug/L			03/10/17 13:37	1
2,2-Dichloropropane	ND		3.0		ug/L			03/10/17 13:37	1
1,1-Dichloropropene	ND		3.0		ug/L			03/10/17 13:37	1
Ethylene Dibromide	ND		1.0		ug/L			03/10/17 13:37	1
Hexachlorobutadiene	ND		2.0		ug/L			03/10/17 13:37	1
<b>Isopropylbenzene</b>	<b>3.7</b>		2.0		ug/L			03/10/17 13:37	1
4-Isopropyltoluene	ND		3.0		ug/L			03/10/17 13:37	1
Methylene Chloride	ND		5.0		ug/L			03/10/17 13:37	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/10/17 13:37	1
Naphthalene	ND		2.0		ug/L			03/10/17 13:37	1
n-Butylbenzene	ND		3.0		ug/L			03/10/17 13:37	1
<b>N-Propylbenzene</b>	<b>3.4</b>		3.0		ug/L			03/10/17 13:37	1
sec-Butylbenzene	ND		3.0		ug/L			03/10/17 13:37	1
Styrene	ND		5.0		ug/L			03/10/17 13:37	1
tert-Butylbenzene	ND		3.0		ug/L			03/10/17 13:37	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/10/17 13:37	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/10/17 13:37	1
<b>Tetrachloroethene</b>	<b>50</b>		3.0		ug/L			03/10/17 13:37	1
<b>Toluene</b>	<b>9.7</b>		2.0		ug/L			03/10/17 13:37	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/10/17 13:37	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 13:37	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/10/17 13:37	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/10/17 13:37	1
<b>1,1,1-Trichloroethane</b>	<b>3.1</b>		3.0		ug/L			03/10/17 13:37	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-1**

**Lab Sample ID: 580-66540-1**

**Date Collected: 03/02/17 11:40**

**Matrix: Water**

**Date Received: 03/07/17 10:50**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0		ug/L			03/10/17 13:37	1
<b>Trichloroethene</b>	<b>22</b>		3.0		ug/L			03/10/17 13:37	1
Trichlorofluoromethane	ND		3.0		ug/L			03/10/17 13:37	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/10/17 13:37	1
<b>1,2,4-Trimethylbenzene</b>	<b>38</b>		3.0		ug/L			03/10/17 13:37	1
<b>1,3,5-Trimethylbenzene</b>	<b>11</b>		3.0		ug/L			03/10/17 13:37	1
Vinyl chloride	ND		1.0		ug/L			03/10/17 13:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		75 - 125		03/10/17 13:37	1
Dibromofluoromethane (Surr)	103		77 - 118		03/10/17 13:37	1
1,2-Dichloroethane-d4 (Surr)	103		65 - 143		03/10/17 13:37	1
Toluene-d8 (Surr)	102		82 - 122		03/10/17 13:37	1
Trifluorotoluene (Surr)	99		80 - 141		03/10/17 13:37	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>140</b>		10		ug/L			03/15/17 20:26	10
<b>Ethylbenzene</b>	<b>230</b>		30		ug/L			03/15/17 20:26	10
<b>m-Xylene &amp; p-Xylene</b>	<b>270</b>		30		ug/L			03/15/17 20:26	10
<b>o-Xylene</b>	<b>120</b>		20		ug/L			03/15/17 20:26	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		75 - 125		03/15/17 20:26	10
Dibromofluoromethane (Surr)	98		77 - 118		03/15/17 20:26	10
1,2-Dichloroethane-d4 (Surr)	102		65 - 143		03/15/17 20:26	10
Toluene-d8 (Surr)	101		82 - 122		03/15/17 20:26	10
Trifluorotoluene (Surr)	99		80 - 141		03/15/17 20:26	10

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Gasoline Range Organics (GRO) -C6-C10</b>	<b>1.2</b>		0.050		mg/L			03/15/17 00:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	102		50 - 150		03/15/17 00:02	1
4-Bromofluorobenzene (Surr)	112		50 - 150		03/15/17 00:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>1.2</b>		0.10		mg/L		03/15/17 13:59	03/15/17 20:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	57		50 - 150		03/15/17 13:59	03/15/17 20:44

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-2**  
**Date Collected: 03/01/17 17:40**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-2**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/10/17 14:03	1
Bromobenzene	ND		2.0		ug/L			03/10/17 14:03	1
Bromoform	ND		1.0		ug/L			03/10/17 14:03	1
Bromomethane	ND		5.0		ug/L			03/10/17 14:03	1
Carbon tetrachloride	ND		3.0		ug/L			03/10/17 14:03	1
Chlorobenzene	ND		2.0		ug/L			03/10/17 14:03	1
Chlorobromomethane	ND		2.0		ug/L			03/10/17 14:03	1
Chlorodibromomethane	ND		1.0		ug/L			03/10/17 14:03	1
Chloroethane	ND		5.0		ug/L			03/10/17 14:03	1
Chloroform	ND		5.0		ug/L			03/10/17 14:03	1
Chloromethane	ND		5.0		ug/L			03/10/17 14:03	1
2-Chlorotoluene	ND		3.0		ug/L			03/10/17 14:03	1
4-Chlorotoluene	ND		2.0		ug/L			03/10/17 14:03	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 14:03	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/10/17 14:03	1
Dibromomethane	ND		1.0		ug/L			03/10/17 14:03	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/10/17 14:03	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/10/17 14:03	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/10/17 14:03	1
Dichlorobromomethane	ND		2.0		ug/L			03/10/17 14:03	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/10/17 14:03	1
<b>1,1-Dichloroethane</b>	<b>5.5</b>		2.0		ug/L			03/10/17 14:03	1
1,2-Dichloroethane	ND		1.0		ug/L			03/10/17 14:03	1
1,1-Dichloroethene	ND		2.0		ug/L			03/10/17 14:03	1
1,2-Dichloropropane	ND		1.0		ug/L			03/10/17 14:03	1
1,3-Dichloropropane	ND		1.0		ug/L			03/10/17 14:03	1
2,2-Dichloropropane	ND		3.0		ug/L			03/10/17 14:03	1
1,1-Dichloropropene	ND		3.0		ug/L			03/10/17 14:03	1
Ethylene Dibromide	ND		1.0		ug/L			03/10/17 14:03	1
Hexachlorobutadiene	ND		2.0		ug/L			03/10/17 14:03	1
<b>Isopropylbenzene</b>	<b>2.3</b>		2.0		ug/L			03/10/17 14:03	1
4-Isopropyltoluene	ND		3.0		ug/L			03/10/17 14:03	1
Methylene Chloride	ND		5.0		ug/L			03/10/17 14:03	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/10/17 14:03	1
Naphthalene	ND		2.0		ug/L			03/10/17 14:03	1
n-Butylbenzene	ND		3.0		ug/L			03/10/17 14:03	1
N-Propylbenzene	ND		3.0		ug/L			03/10/17 14:03	1
<b>o-Xylene</b>	<b>65</b>		2.0		ug/L			03/10/17 14:03	1
sec-Butylbenzene	ND		3.0		ug/L			03/10/17 14:03	1
Styrene	ND		5.0		ug/L			03/10/17 14:03	1
tert-Butylbenzene	ND		3.0		ug/L			03/10/17 14:03	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/10/17 14:03	1
1,1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/10/17 14:03	1
Tetrachloroethene	ND		3.0		ug/L			03/10/17 14:03	1
<b>Toluene</b>	<b>2.3</b>		2.0		ug/L			03/10/17 14:03	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/10/17 14:03	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 14:03	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/10/17 14:03	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/10/17 14:03	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-2**  
**Date Collected: 03/01/17 17:40**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-2**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.0		ug/L			03/10/17 14:03	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/10/17 14:03	1
Trichloroethene	ND		3.0		ug/L			03/10/17 14:03	1
Trichlorofluoromethane	ND		3.0		ug/L			03/10/17 14:03	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/10/17 14:03	1
<b>1,2,4-Trimethylbenzene</b>	<b>22</b>		3.0		ug/L			03/10/17 14:03	1
<b>1,3,5-Trimethylbenzene</b>	<b>6.7</b>		3.0		ug/L			03/10/17 14:03	1
Vinyl chloride	ND		1.0		ug/L			03/10/17 14:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		75 - 125		03/10/17 14:03	1
Dibromofluoromethane (Surr)	102		77 - 118		03/10/17 14:03	1
1,2-Dichloroethane-d4 (Surr)	107		65 - 143		03/10/17 14:03	1
Toluene-d8 (Surr)	100		82 - 122		03/10/17 14:03	1
Trifluorotoluene (Surr)	99		80 - 141		03/10/17 14:03	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>110</b>		10		ug/L			03/15/17 20:53	10
<b>Ethylbenzene</b>	<b>91</b>		30		ug/L			03/15/17 20:53	10
<b>m-Xylene &amp; p-Xylene</b>	<b>110</b>		30		ug/L			03/15/17 20:53	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		75 - 125		03/15/17 20:53	10
Dibromofluoromethane (Surr)	98		77 - 118		03/15/17 20:53	10
1,2-Dichloroethane-d4 (Surr)	101		65 - 143		03/15/17 20:53	10
Toluene-d8 (Surr)	101		82 - 122		03/15/17 20:53	10
Trifluorotoluene (Surr)	98		80 - 141		03/15/17 20:53	10

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Gasoline Range Organics (GRO)</b>	<b>0.65</b>		0.050		mg/L			03/15/17 00:35	1
<b>-C6-C10</b>									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	105		50 - 150		03/15/17 00:35	1
4-Bromofluorobenzene (Surr)	110		50 - 150		03/15/17 00:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>0.47</b>		0.10		mg/L		03/13/17 10:56	03/13/17 20:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	71		50 - 150		03/13/17 10:56	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-3**  
**Date Collected: 03/02/17 10:40**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-3**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/10/17 14:30	1
Bromobenzene	ND		2.0		ug/L			03/10/17 14:30	1
Bromoform	ND		1.0		ug/L			03/10/17 14:30	1
Bromomethane	ND		5.0		ug/L			03/10/17 14:30	1
Carbon tetrachloride	ND		3.0		ug/L			03/10/17 14:30	1
Chlorobenzene	ND		2.0		ug/L			03/10/17 14:30	1
Chlorobromomethane	ND		2.0		ug/L			03/10/17 14:30	1
Chlorodibromomethane	ND		1.0		ug/L			03/10/17 14:30	1
Chloroethane	ND		5.0		ug/L			03/10/17 14:30	1
Chloroform	ND		5.0		ug/L			03/10/17 14:30	1
Chloromethane	ND		5.0		ug/L			03/10/17 14:30	1
2-Chlorotoluene	ND		3.0		ug/L			03/10/17 14:30	1
4-Chlorotoluene	ND		2.0		ug/L			03/10/17 14:30	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 14:30	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/10/17 14:30	1
Dibromomethane	ND		1.0		ug/L			03/10/17 14:30	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/10/17 14:30	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/10/17 14:30	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/10/17 14:30	1
Dichlorobromomethane	ND		2.0		ug/L			03/10/17 14:30	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/10/17 14:30	1
<b>1,1-Dichloroethane</b>	<b>5.4</b>		2.0		ug/L			03/10/17 14:30	1
1,2-Dichloroethane	ND		1.0		ug/L			03/10/17 14:30	1
1,1-Dichloroethene	ND		2.0		ug/L			03/10/17 14:30	1
1,2-Dichloropropane	ND		1.0		ug/L			03/10/17 14:30	1
1,3-Dichloropropane	ND		1.0		ug/L			03/10/17 14:30	1
2,2-Dichloropropane	ND		3.0		ug/L			03/10/17 14:30	1
1,1-Dichloropropene	ND		3.0		ug/L			03/10/17 14:30	1
Ethylbenzene	ND		3.0		ug/L			03/10/17 14:30	1
Ethylene Dibromide	ND		1.0		ug/L			03/10/17 14:30	1
Hexachlorobutadiene	ND		2.0		ug/L			03/10/17 14:30	1
Isopropylbenzene	ND		2.0		ug/L			03/10/17 14:30	1
4-Isopropyltoluene	ND		3.0		ug/L			03/10/17 14:30	1
Methylene Chloride	ND		5.0		ug/L			03/10/17 14:30	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/10/17 14:30	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/10/17 14:30	1
Naphthalene	ND		2.0		ug/L			03/10/17 14:30	1
n-Butylbenzene	ND		3.0		ug/L			03/10/17 14:30	1
N-Propylbenzene	ND		3.0		ug/L			03/10/17 14:30	1
o-Xylene	ND		2.0		ug/L			03/10/17 14:30	1
sec-Butylbenzene	ND		3.0		ug/L			03/10/17 14:30	1
Styrene	ND		5.0		ug/L			03/10/17 14:30	1
tert-Butylbenzene	ND		3.0		ug/L			03/10/17 14:30	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/10/17 14:30	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/10/17 14:30	1
Tetrachloroethene	ND		3.0		ug/L			03/10/17 14:30	1
Toluene	ND		2.0		ug/L			03/10/17 14:30	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/10/17 14:30	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 14:30	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-3**  
**Date Collected: 03/02/17 10:40**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-3**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/10/17 14:30	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/10/17 14:30	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/10/17 14:30	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/10/17 14:30	1
Trichloroethene	ND		3.0		ug/L			03/10/17 14:30	1
Trichlorofluoromethane	ND		3.0		ug/L			03/10/17 14:30	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/10/17 14:30	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/10/17 14:30	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/10/17 14:30	1
Vinyl chloride	ND		1.0		ug/L			03/10/17 14:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 125					03/10/17 14:30	1
Dibromofluoromethane (Surr)	98		77 - 118					03/10/17 14:30	1
1,2-Dichloroethane-d4 (Surr)	102		65 - 143					03/10/17 14:30	1
Toluene-d8 (Surr)	100		82 - 122					03/10/17 14:30	1
Trifluorotoluene (Surr)	99		80 - 141					03/10/17 14:30	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>4.9</b>		1.0		ug/L			03/15/17 19:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		75 - 125					03/15/17 19:59	1
Dibromofluoromethane (Surr)	99		77 - 118					03/15/17 19:59	1
1,2-Dichloroethane-d4 (Surr)	102		65 - 143					03/15/17 19:59	1
Toluene-d8 (Surr)	101		82 - 122					03/15/17 19:59	1
Trifluorotoluene (Surr)	98		80 - 141					03/15/17 19:59	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/15/17 19:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	103		50 - 150					03/15/17 19:41	1
4-Bromofluorobenzene (Surr)	101		50 - 150					03/15/17 19:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>0.30</b>		0.12		mg/L		03/15/17 13:59	03/15/17 21:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	73		50 - 150				03/15/17 13:59	03/15/17 21:28	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-4**  
**Date Collected: 03/01/17 13:05**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-4**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/10/17 14:56	1
Bromobenzene	ND		2.0		ug/L			03/10/17 14:56	1
Bromoform	ND		1.0		ug/L			03/10/17 14:56	1
Bromomethane	ND		5.0		ug/L			03/10/17 14:56	1
Carbon tetrachloride	ND		3.0		ug/L			03/10/17 14:56	1
Chlorobenzene	ND		2.0		ug/L			03/10/17 14:56	1
Chlorobromomethane	ND		2.0		ug/L			03/10/17 14:56	1
Chlorodibromomethane	ND		1.0		ug/L			03/10/17 14:56	1
Chloroethane	ND		5.0		ug/L			03/10/17 14:56	1
Chloroform	ND		5.0		ug/L			03/10/17 14:56	1
Chloromethane	ND		5.0		ug/L			03/10/17 14:56	1
2-Chlorotoluene	ND		3.0		ug/L			03/10/17 14:56	1
4-Chlorotoluene	ND		2.0		ug/L			03/10/17 14:56	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			03/10/17 14:56	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 14:56	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/10/17 14:56	1
Dibromomethane	ND		1.0		ug/L			03/10/17 14:56	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/10/17 14:56	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/10/17 14:56	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/10/17 14:56	1
Dichlorobromomethane	ND		2.0		ug/L			03/10/17 14:56	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/10/17 14:56	1
1,1-Dichloroethane	ND		2.0		ug/L			03/10/17 14:56	1
1,2-Dichloroethane	ND		1.0		ug/L			03/10/17 14:56	1
1,1-Dichloroethene	ND		2.0		ug/L			03/10/17 14:56	1
1,2-Dichloropropane	ND		1.0		ug/L			03/10/17 14:56	1
1,3-Dichloropropane	ND		1.0		ug/L			03/10/17 14:56	1
2,2-Dichloropropane	ND		3.0		ug/L			03/10/17 14:56	1
1,1-Dichloropropene	ND		3.0		ug/L			03/10/17 14:56	1
Ethylbenzene	ND		3.0		ug/L			03/10/17 14:56	1
Ethylene Dibromide	ND		1.0		ug/L			03/10/17 14:56	1
Hexachlorobutadiene	ND		2.0		ug/L			03/10/17 14:56	1
Isopropylbenzene	ND		2.0		ug/L			03/10/17 14:56	1
4-Isopropyltoluene	ND		3.0		ug/L			03/10/17 14:56	1
Methylene Chloride	ND		5.0		ug/L			03/10/17 14:56	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/10/17 14:56	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/10/17 14:56	1
Naphthalene	ND		2.0		ug/L			03/10/17 14:56	1
n-Butylbenzene	ND		3.0		ug/L			03/10/17 14:56	1
N-Propylbenzene	ND		3.0		ug/L			03/10/17 14:56	1
o-Xylene	ND		2.0		ug/L			03/10/17 14:56	1
sec-Butylbenzene	ND		3.0		ug/L			03/10/17 14:56	1
Styrene	ND		5.0		ug/L			03/10/17 14:56	1
tert-Butylbenzene	ND		3.0		ug/L			03/10/17 14:56	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/10/17 14:56	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/10/17 14:56	1
<b>Tetrachloroethene</b>	<b>12</b>		3.0		ug/L			03/10/17 14:56	1
Toluene	ND		2.0		ug/L			03/10/17 14:56	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/10/17 14:56	1

TestAmerica Seattle



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-4**  
**Date Collected: 03/01/17 13:05**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-4**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 14:56	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/10/17 14:56	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/10/17 14:56	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/10/17 14:56	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/10/17 14:56	1
<b>Trichloroethene</b>	<b>3.5</b>		3.0		ug/L			03/10/17 14:56	1
Trichlorofluoromethane	ND		3.0		ug/L			03/10/17 14:56	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/10/17 14:56	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/10/17 14:56	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/10/17 14:56	1
Vinyl chloride	ND		1.0		ug/L			03/10/17 14:56	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	98		75 - 125					03/10/17 14:56	1
Dibromofluoromethane (Surr)	100		77 - 118					03/10/17 14:56	1
1,2-Dichloroethane-d4 (Surr)	103		65 - 143					03/10/17 14:56	1
Toluene-d8 (Surr)	100		82 - 122					03/10/17 14:56	1
Trifluorotoluene (Surr)	97		80 - 141					03/10/17 14:56	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/14/17 23:30	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Trifluorotoluene (Surr)	104		50 - 150					03/14/17 23:30	1
4-Bromofluorobenzene (Surr)	100		50 - 150					03/14/17 23:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>0.44</b>		0.10		mg/L		03/13/17 10:56	03/13/17 21:17	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl	73		50 - 150				03/13/17 10:56	03/13/17 21:17	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-5**  
**Date Collected: 03/01/17 15:35**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-5**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/10/17 15:23	1
Bromobenzene	ND		2.0		ug/L			03/10/17 15:23	1
Bromoform	ND		1.0		ug/L			03/10/17 15:23	1
Bromomethane	ND		5.0		ug/L			03/10/17 15:23	1
Carbon tetrachloride	ND		3.0		ug/L			03/10/17 15:23	1
Chlorobenzene	ND		2.0		ug/L			03/10/17 15:23	1
Chlorobromomethane	ND		2.0		ug/L			03/10/17 15:23	1
Chlorodibromomethane	ND		1.0		ug/L			03/10/17 15:23	1
Chloroethane	ND		5.0		ug/L			03/10/17 15:23	1
Chloroform	ND		5.0		ug/L			03/10/17 15:23	1
Chloromethane	ND		5.0		ug/L			03/10/17 15:23	1
2-Chlorotoluene	ND		3.0		ug/L			03/10/17 15:23	1
4-Chlorotoluene	ND		2.0		ug/L			03/10/17 15:23	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 15:23	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/10/17 15:23	1
Dibromomethane	ND		1.0		ug/L			03/10/17 15:23	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/10/17 15:23	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/10/17 15:23	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/10/17 15:23	1
Dichlorobromomethane	ND		2.0		ug/L			03/10/17 15:23	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/10/17 15:23	1
1,1-Dichloroethane	ND		2.0		ug/L			03/10/17 15:23	1
1,2-Dichloroethane	ND		1.0		ug/L			03/10/17 15:23	1
1,1-Dichloroethene	ND		2.0		ug/L			03/10/17 15:23	1
1,2-Dichloropropane	ND		1.0		ug/L			03/10/17 15:23	1
1,3-Dichloropropane	ND		1.0		ug/L			03/10/17 15:23	1
2,2-Dichloropropane	ND		3.0		ug/L			03/10/17 15:23	1
1,1-Dichloropropene	ND		3.0		ug/L			03/10/17 15:23	1
Ethylene Dibromide	ND		1.0		ug/L			03/10/17 15:23	1
Hexachlorobutadiene	ND		2.0		ug/L			03/10/17 15:23	1
Isopropylbenzene	ND		2.0		ug/L			03/10/17 15:23	1
4-Isopropyltoluene	ND		3.0		ug/L			03/10/17 15:23	1
Methylene Chloride	ND		5.0		ug/L			03/10/17 15:23	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/10/17 15:23	1
Naphthalene	ND		2.0		ug/L			03/10/17 15:23	1
n-Butylbenzene	ND		3.0		ug/L			03/10/17 15:23	1
N-Propylbenzene	ND		3.0		ug/L			03/10/17 15:23	1
sec-Butylbenzene	ND		3.0		ug/L			03/10/17 15:23	1
Styrene	ND		5.0		ug/L			03/10/17 15:23	1
tert-Butylbenzene	ND		3.0		ug/L			03/10/17 15:23	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/10/17 15:23	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/10/17 15:23	1
Tetrachloroethene	ND		3.0		ug/L			03/10/17 15:23	1
Toluene	ND		2.0		ug/L			03/10/17 15:23	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/10/17 15:23	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 15:23	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/10/17 15:23	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/10/17 15:23	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/10/17 15:23	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-5**  
**Date Collected: 03/01/17 15:35**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-5**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		1.0		ug/L			03/10/17 15:23	1
Trichloroethene	ND		3.0		ug/L			03/10/17 15:23	1
Trichlorofluoromethane	ND		3.0		ug/L			03/10/17 15:23	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/10/17 15:23	1
<b>1,2,4-Trimethylbenzene</b>	<b>15</b>		3.0		ug/L			03/10/17 15:23	1
<b>1,3,5-Trimethylbenzene</b>	<b>12</b>		3.0		ug/L			03/10/17 15:23	1
Vinyl chloride	ND		1.0		ug/L			03/10/17 15:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		75 - 125		03/10/17 15:23	1
Dibromofluoromethane (Surr)	100		77 - 118		03/10/17 15:23	1
1,2-Dichloroethane-d4 (Surr)	104		65 - 143		03/10/17 15:23	1
Toluene-d8 (Surr)	99		82 - 122		03/10/17 15:23	1
Trifluorotoluene (Surr)	99		80 - 141		03/10/17 15:23	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>290</b>		10		ug/L			03/15/17 21:20	10
<b>Ethylbenzene</b>	<b>180</b>		30		ug/L			03/15/17 21:20	10
<b>m-Xylene &amp; p-Xylene</b>	<b>240</b>		30		ug/L			03/15/17 21:20	10
<b>o-Xylene</b>	<b>100</b>		20		ug/L			03/15/17 21:20	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		75 - 125		03/15/17 21:20	10
Dibromofluoromethane (Surr)	96		77 - 118		03/15/17 21:20	10
1,2-Dichloroethane-d4 (Surr)	101		65 - 143		03/15/17 21:20	10
Toluene-d8 (Surr)	100		82 - 122		03/15/17 21:20	10
Trifluorotoluene (Surr)	98		80 - 141		03/15/17 21:20	10

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Gasoline Range Organics (GRO)</b>	<b>1.4</b>		0.050		mg/L			03/15/17 01:08	1
<b>-C6-C10</b>									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	102		50 - 150		03/15/17 01:08	1
4-Bromofluorobenzene (Surr)	148		50 - 150		03/15/17 01:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>0.96</b>		0.10		mg/L		03/13/17 10:56	03/13/17 21:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	69		50 - 150		03/13/17 10:56	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-6**  
**Date Collected: 03/01/17 14:30**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-6**  
**Matrix: Water**

## Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/10/17 15:50	1
Bromobenzene	ND		2.0		ug/L			03/10/17 15:50	1
Bromoform	ND		1.0		ug/L			03/10/17 15:50	1
Bromomethane	ND		5.0		ug/L			03/10/17 15:50	1
Carbon tetrachloride	ND		3.0		ug/L			03/10/17 15:50	1
Chlorobenzene	ND		2.0		ug/L			03/10/17 15:50	1
Chlorobromomethane	ND		2.0		ug/L			03/10/17 15:50	1
Chlorodibromomethane	ND		1.0		ug/L			03/10/17 15:50	1
Chloroethane	ND		5.0		ug/L			03/10/17 15:50	1
Chloroform	ND		5.0		ug/L			03/10/17 15:50	1
Chloromethane	ND		5.0		ug/L			03/10/17 15:50	1
2-Chlorotoluene	ND		3.0		ug/L			03/10/17 15:50	1
4-Chlorotoluene	ND		2.0		ug/L			03/10/17 15:50	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			03/10/17 15:50	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 15:50	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/10/17 15:50	1
Dibromomethane	ND		1.0		ug/L			03/10/17 15:50	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/10/17 15:50	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/10/17 15:50	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/10/17 15:50	1
Dichlorobromomethane	ND		2.0		ug/L			03/10/17 15:50	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/10/17 15:50	1
1,1-Dichloroethane	ND		2.0		ug/L			03/10/17 15:50	1
1,2-Dichloroethane	ND		1.0		ug/L			03/10/17 15:50	1
1,1-Dichloroethene	ND		2.0		ug/L			03/10/17 15:50	1
1,2-Dichloropropane	ND		1.0		ug/L			03/10/17 15:50	1
1,3-Dichloropropane	ND		1.0		ug/L			03/10/17 15:50	1
2,2-Dichloropropane	ND		3.0		ug/L			03/10/17 15:50	1
1,1-Dichloropropene	ND		3.0		ug/L			03/10/17 15:50	1
Ethylbenzene	ND		3.0		ug/L			03/10/17 15:50	1
Ethylene Dibromide	ND		1.0		ug/L			03/10/17 15:50	1
Hexachlorobutadiene	ND		2.0		ug/L			03/10/17 15:50	1
Isopropylbenzene	ND		2.0		ug/L			03/10/17 15:50	1
4-Isopropyltoluene	ND		3.0		ug/L			03/10/17 15:50	1
Methylene Chloride	ND		5.0		ug/L			03/10/17 15:50	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/10/17 15:50	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/10/17 15:50	1
Naphthalene	ND		2.0		ug/L			03/10/17 15:50	1
n-Butylbenzene	ND		3.0		ug/L			03/10/17 15:50	1
N-Propylbenzene	ND		3.0		ug/L			03/10/17 15:50	1
o-Xylene	ND		2.0		ug/L			03/10/17 15:50	1
sec-Butylbenzene	ND		3.0		ug/L			03/10/17 15:50	1
Styrene	ND		5.0		ug/L			03/10/17 15:50	1
tert-Butylbenzene	ND		3.0		ug/L			03/10/17 15:50	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/10/17 15:50	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/10/17 15:50	1
Tetrachloroethene	ND		3.0		ug/L			03/10/17 15:50	1
Toluene	ND		2.0		ug/L			03/10/17 15:50	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/10/17 15:50	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-6**

**Lab Sample ID: 580-66540-6**

**Date Collected: 03/01/17 14:30**

**Matrix: Water**

**Date Received: 03/07/17 10:50**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 15:50	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/10/17 15:50	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/10/17 15:50	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/10/17 15:50	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/10/17 15:50	1
Trichloroethene	ND		3.0		ug/L			03/10/17 15:50	1
Trichlorofluoromethane	ND		3.0		ug/L			03/10/17 15:50	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/10/17 15:50	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/10/17 15:50	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/10/17 15:50	1
Vinyl chloride	ND		1.0		ug/L			03/10/17 15:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		75 - 125		03/10/17 15:50	1
Dibromofluoromethane (Surr)	99		77 - 118		03/10/17 15:50	1
1,2-Dichloroethane-d4 (Surr)	102		65 - 143		03/10/17 15:50	1
Toluene-d8 (Surr)	98		82 - 122		03/10/17 15:50	1
Trifluorotoluene (Surr)	100		80 - 141		03/10/17 15:50	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/15/17 20:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	101		50 - 150		03/15/17 20:14	1
4-Bromofluorobenzene (Surr)	99		50 - 150		03/15/17 20:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>0.20</b>		0.12		mg/L		03/13/17 10:56	03/13/17 22:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	74		50 - 150		03/13/17 10:56	03/13/17 22:01

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-7**  
**Date Collected: 03/01/17 11:40**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-7**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/10/17 16:16	1
Bromobenzene	ND		2.0		ug/L			03/10/17 16:16	1
Bromoform	ND		1.0		ug/L			03/10/17 16:16	1
Bromomethane	ND		5.0		ug/L			03/10/17 16:16	1
Carbon tetrachloride	ND		3.0		ug/L			03/10/17 16:16	1
Chlorobenzene	ND		2.0		ug/L			03/10/17 16:16	1
Chlorobromomethane	ND		2.0		ug/L			03/10/17 16:16	1
Chlorodibromomethane	ND		1.0		ug/L			03/10/17 16:16	1
Chloroethane	ND		5.0		ug/L			03/10/17 16:16	1
Chloroform	ND		5.0		ug/L			03/10/17 16:16	1
Chloromethane	ND		5.0		ug/L			03/10/17 16:16	1
2-Chlorotoluene	ND		3.0		ug/L			03/10/17 16:16	1
4-Chlorotoluene	ND		2.0		ug/L			03/10/17 16:16	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			03/10/17 16:16	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 16:16	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/10/17 16:16	1
Dibromomethane	ND		1.0		ug/L			03/10/17 16:16	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/10/17 16:16	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/10/17 16:16	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/10/17 16:16	1
Dichlorobromomethane	ND		2.0		ug/L			03/10/17 16:16	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/10/17 16:16	1
1,1-Dichloroethane	ND		2.0		ug/L			03/10/17 16:16	1
1,2-Dichloroethane	ND		1.0		ug/L			03/10/17 16:16	1
1,1-Dichloroethene	ND		2.0		ug/L			03/10/17 16:16	1
1,2-Dichloropropane	ND		1.0		ug/L			03/10/17 16:16	1
1,3-Dichloropropane	ND		1.0		ug/L			03/10/17 16:16	1
2,2-Dichloropropane	ND		3.0		ug/L			03/10/17 16:16	1
1,1-Dichloropropene	ND		3.0		ug/L			03/10/17 16:16	1
Ethylbenzene	ND		3.0		ug/L			03/10/17 16:16	1
Ethylene Dibromide	ND		1.0		ug/L			03/10/17 16:16	1
Hexachlorobutadiene	ND		2.0		ug/L			03/10/17 16:16	1
Isopropylbenzene	ND		2.0		ug/L			03/10/17 16:16	1
4-Isopropyltoluene	ND		3.0		ug/L			03/10/17 16:16	1
Methylene Chloride	ND		5.0		ug/L			03/10/17 16:16	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/10/17 16:16	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/10/17 16:16	1
Naphthalene	ND		2.0		ug/L			03/10/17 16:16	1
n-Butylbenzene	ND		3.0		ug/L			03/10/17 16:16	1
N-Propylbenzene	ND		3.0		ug/L			03/10/17 16:16	1
o-Xylene	ND		2.0		ug/L			03/10/17 16:16	1
sec-Butylbenzene	ND		3.0		ug/L			03/10/17 16:16	1
Styrene	ND		5.0		ug/L			03/10/17 16:16	1
tert-Butylbenzene	ND		3.0		ug/L			03/10/17 16:16	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/10/17 16:16	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/10/17 16:16	1
<b>Tetrachloroethene</b>	<b>14</b>		3.0		ug/L			03/10/17 16:16	1
Toluene	ND		2.0		ug/L			03/10/17 16:16	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/10/17 16:16	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-7**  
**Date Collected: 03/01/17 11:40**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-7**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 16:16	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/10/17 16:16	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/10/17 16:16	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/10/17 16:16	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/10/17 16:16	1
Trichloroethene	ND		3.0		ug/L			03/10/17 16:16	1
Trichlorofluoromethane	ND		3.0		ug/L			03/10/17 16:16	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/10/17 16:16	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/10/17 16:16	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/10/17 16:16	1
Vinyl chloride	ND		1.0		ug/L			03/10/17 16:16	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	97		75 - 125					03/10/17 16:16	1
Dibromofluoromethane (Surr)	99		77 - 118					03/10/17 16:16	1
1,2-Dichloroethane-d4 (Surr)	102		65 - 143					03/10/17 16:16	1
Toluene-d8 (Surr)	99		82 - 122					03/10/17 16:16	1
Trifluorotoluene (Surr)	98		80 - 141					03/10/17 16:16	1

### Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/15/17 02:13	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Trifluorotoluene (Surr)	102		50 - 150					03/15/17 02:13	1
4-Bromofluorobenzene (Surr)	101		50 - 150					03/15/17 02:13	1

### Method: 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	F1 UJ	0.10		mg/L		03/15/17 13:59	03/15/17 18:30	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl	79		50 - 150				03/15/17 13:59	03/15/17 18:30	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-8**  
**Date Collected: 03/01/17 16:50**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-8**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/10/17 17:36	1
Bromobenzene	ND		2.0		ug/L			03/10/17 17:36	1
Bromoform	ND		1.0		ug/L			03/10/17 17:36	1
Bromomethane	ND		5.0		ug/L			03/10/17 17:36	1
Carbon tetrachloride	ND		3.0		ug/L			03/10/17 17:36	1
Chlorobenzene	ND		2.0		ug/L			03/10/17 17:36	1
Chlorobromomethane	ND		2.0		ug/L			03/10/17 17:36	1
Chlorodibromomethane	ND		1.0		ug/L			03/10/17 17:36	1
Chloroethane	ND		5.0		ug/L			03/10/17 17:36	1
Chloroform	ND		5.0		ug/L			03/10/17 17:36	1
Chloromethane	ND		5.0		ug/L			03/10/17 17:36	1
2-Chlorotoluene	ND		3.0		ug/L			03/10/17 17:36	1
4-Chlorotoluene	ND		2.0		ug/L			03/10/17 17:36	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			03/10/17 17:36	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 17:36	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/10/17 17:36	1
Dibromomethane	ND		1.0		ug/L			03/10/17 17:36	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/10/17 17:36	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/10/17 17:36	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/10/17 17:36	1
Dichlorobromomethane	ND		2.0		ug/L			03/10/17 17:36	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/10/17 17:36	1
1,1-Dichloroethane	ND		2.0		ug/L			03/10/17 17:36	1
1,2-Dichloroethane	ND		1.0		ug/L			03/10/17 17:36	1
1,1-Dichloroethene	ND		2.0		ug/L			03/10/17 17:36	1
1,2-Dichloropropane	ND		1.0		ug/L			03/10/17 17:36	1
1,3-Dichloropropane	ND		1.0		ug/L			03/10/17 17:36	1
2,2-Dichloropropane	ND		3.0		ug/L			03/10/17 17:36	1
1,1-Dichloropropene	ND		3.0		ug/L			03/10/17 17:36	1
Ethylbenzene	ND		3.0		ug/L			03/10/17 17:36	1
Ethylene Dibromide	ND		1.0		ug/L			03/10/17 17:36	1
Hexachlorobutadiene	ND		2.0		ug/L			03/10/17 17:36	1
Isopropylbenzene	ND		2.0		ug/L			03/10/17 17:36	1
4-Isopropyltoluene	ND		3.0		ug/L			03/10/17 17:36	1
Methylene Chloride	ND		5.0		ug/L			03/10/17 17:36	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/10/17 17:36	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/10/17 17:36	1
Naphthalene	ND		2.0		ug/L			03/10/17 17:36	1
n-Butylbenzene	ND		3.0		ug/L			03/10/17 17:36	1
N-Propylbenzene	ND		3.0		ug/L			03/10/17 17:36	1
o-Xylene	ND		2.0		ug/L			03/10/17 17:36	1
sec-Butylbenzene	ND		3.0		ug/L			03/10/17 17:36	1
Styrene	ND		5.0		ug/L			03/10/17 17:36	1
tert-Butylbenzene	ND		3.0		ug/L			03/10/17 17:36	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/10/17 17:36	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/10/17 17:36	1
Tetrachloroethene	ND		3.0		ug/L			03/10/17 17:36	1
Toluene	ND		2.0		ug/L			03/10/17 17:36	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/10/17 17:36	1

TestAmerica Seattle



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-8**

**Lab Sample ID: 580-66540-8**

**Date Collected: 03/01/17 16:50**

**Matrix: Water**

**Date Received: 03/07/17 10:50**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 17:36	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/10/17 17:36	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/10/17 17:36	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/10/17 17:36	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/10/17 17:36	1
Trichloroethene	ND		3.0		ug/L			03/10/17 17:36	1
Trichlorofluoromethane	ND		3.0		ug/L			03/10/17 17:36	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/10/17 17:36	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/10/17 17:36	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/10/17 17:36	1
Vinyl chloride	ND		1.0		ug/L			03/10/17 17:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		75 - 125		03/10/17 17:36	1
Dibromofluoromethane (Surr)	96		77 - 118		03/10/17 17:36	1
1,2-Dichloroethane-d4 (Surr)	101		65 - 143		03/10/17 17:36	1
Toluene-d8 (Surr)	99		82 - 122		03/10/17 17:36	1
Trifluorotoluene (Surr)	98		80 - 141		03/10/17 17:36	1

**Method: AK101 - Alaska - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/15/17 19:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	102		50 - 150		03/15/17 19:09	1
4-Bromofluorobenzene (Surr)	101		50 - 150		03/15/17 19:09	1

**Method: 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		0.10		mg/L		03/13/17 10:56	03/13/17 22:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	70		50 - 150		03/13/17 10:56	03/13/17 22:23

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-9**  
**Date Collected: 03/02/17 15:35**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-9**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/10/17 18:03	1
Bromobenzene	ND		2.0		ug/L			03/10/17 18:03	1
Bromoform	ND		1.0		ug/L			03/10/17 18:03	1
Bromomethane	ND		5.0		ug/L			03/10/17 18:03	1
Carbon tetrachloride	ND		3.0		ug/L			03/10/17 18:03	1
Chlorobenzene	ND		2.0		ug/L			03/10/17 18:03	1
Chlorobromomethane	ND		2.0		ug/L			03/10/17 18:03	1
Chlorodibromomethane	ND		1.0		ug/L			03/10/17 18:03	1
Chloroethane	ND		5.0		ug/L			03/10/17 18:03	1
Chloroform	ND		5.0		ug/L			03/10/17 18:03	1
Chloromethane	ND		5.0		ug/L			03/10/17 18:03	1
2-Chlorotoluene	ND		3.0		ug/L			03/10/17 18:03	1
4-Chlorotoluene	ND		2.0		ug/L			03/10/17 18:03	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			03/10/17 18:03	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 18:03	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/10/17 18:03	1
Dibromomethane	ND		1.0		ug/L			03/10/17 18:03	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/10/17 18:03	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/10/17 18:03	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/10/17 18:03	1
Dichlorobromomethane	ND		2.0		ug/L			03/10/17 18:03	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/10/17 18:03	1
1,1-Dichloroethane	ND		2.0		ug/L			03/10/17 18:03	1
1,2-Dichloroethane	ND		1.0		ug/L			03/10/17 18:03	1
1,1-Dichloroethene	ND		2.0		ug/L			03/10/17 18:03	1
1,2-Dichloropropane	ND		1.0		ug/L			03/10/17 18:03	1
1,3-Dichloropropane	ND		1.0		ug/L			03/10/17 18:03	1
2,2-Dichloropropane	ND		3.0		ug/L			03/10/17 18:03	1
1,1-Dichloropropene	ND		3.0		ug/L			03/10/17 18:03	1
Ethylbenzene	ND		3.0		ug/L			03/10/17 18:03	1
Ethylene Dibromide	ND		1.0		ug/L			03/10/17 18:03	1
Hexachlorobutadiene	ND		2.0		ug/L			03/10/17 18:03	1
Isopropylbenzene	ND		2.0		ug/L			03/10/17 18:03	1
4-Isopropyltoluene	ND		3.0		ug/L			03/10/17 18:03	1
Methylene Chloride	ND		5.0		ug/L			03/10/17 18:03	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/10/17 18:03	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/10/17 18:03	1
Naphthalene	ND		2.0		ug/L			03/10/17 18:03	1
n-Butylbenzene	ND		3.0		ug/L			03/10/17 18:03	1
N-Propylbenzene	ND		3.0		ug/L			03/10/17 18:03	1
o-Xylene	ND		2.0		ug/L			03/10/17 18:03	1
sec-Butylbenzene	ND		3.0		ug/L			03/10/17 18:03	1
Styrene	ND		5.0		ug/L			03/10/17 18:03	1
tert-Butylbenzene	ND		3.0		ug/L			03/10/17 18:03	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/10/17 18:03	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/10/17 18:03	1
Tetrachloroethene	ND		3.0		ug/L			03/10/17 18:03	1
Toluene	ND		2.0		ug/L			03/10/17 18:03	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/10/17 18:03	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-9**

**Lab Sample ID: 580-66540-9**

**Date Collected: 03/02/17 15:35**

**Matrix: Water**

**Date Received: 03/07/17 10:50**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 18:03	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/10/17 18:03	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/10/17 18:03	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/10/17 18:03	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/10/17 18:03	1
Trichloroethene	ND		3.0		ug/L			03/10/17 18:03	1
Trichlorofluoromethane	ND		3.0		ug/L			03/10/17 18:03	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/10/17 18:03	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/10/17 18:03	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/10/17 18:03	1
Vinyl chloride	ND		1.0		ug/L			03/10/17 18:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 125		03/10/17 18:03	1
Dibromofluoromethane (Surr)	110		77 - 118		03/10/17 18:03	1
1,2-Dichloroethane-d4 (Surr)	105		65 - 143		03/10/17 18:03	1
Toluene-d8 (Surr)	98		82 - 122		03/10/17 18:03	1
Trifluorotoluene (Surr)	100		80 - 141		03/10/17 18:03	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/15/17 17:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	103		50 - 150		03/15/17 17:31	1
4-Bromofluorobenzene (Surr)	100		50 - 150		03/15/17 17:31	1

## Method: 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		0.11		mg/L		03/15/17 13:59	03/15/17 21:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	80		50 - 150		03/15/17 13:59	03/15/17 21:50

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-10**

**Date Collected: 03/02/17 14:10**

**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-10**

**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/10/17 18:29	1
Bromobenzene	ND		2.0		ug/L			03/10/17 18:29	1
Bromoform	ND		1.0		ug/L			03/10/17 18:29	1
Bromomethane	ND		5.0		ug/L			03/10/17 18:29	1
Carbon tetrachloride	ND		3.0		ug/L			03/10/17 18:29	1
Chlorobenzene	ND		2.0		ug/L			03/10/17 18:29	1
Chlorobromomethane	ND		2.0		ug/L			03/10/17 18:29	1
Chlorodibromomethane	ND		1.0		ug/L			03/10/17 18:29	1
Chloroethane	ND		5.0		ug/L			03/10/17 18:29	1
Chloroform	ND		5.0		ug/L			03/10/17 18:29	1
Chloromethane	ND		5.0		ug/L			03/10/17 18:29	1
2-Chlorotoluene	ND		3.0		ug/L			03/10/17 18:29	1
4-Chlorotoluene	ND		2.0		ug/L			03/10/17 18:29	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			03/10/17 18:29	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 18:29	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/10/17 18:29	1
Dibromomethane	ND		1.0		ug/L			03/10/17 18:29	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/10/17 18:29	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/10/17 18:29	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/10/17 18:29	1
Dichlorobromomethane	ND		2.0		ug/L			03/10/17 18:29	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/10/17 18:29	1
1,1-Dichloroethane	ND		2.0		ug/L			03/10/17 18:29	1
1,2-Dichloroethane	ND		1.0		ug/L			03/10/17 18:29	1
1,1-Dichloroethene	ND		2.0		ug/L			03/10/17 18:29	1
1,2-Dichloropropane	ND		1.0		ug/L			03/10/17 18:29	1
1,3-Dichloropropane	ND		1.0		ug/L			03/10/17 18:29	1
2,2-Dichloropropane	ND		3.0		ug/L			03/10/17 18:29	1
1,1-Dichloropropene	ND		3.0		ug/L			03/10/17 18:29	1
Ethylbenzene	ND		3.0		ug/L			03/10/17 18:29	1
Ethylene Dibromide	ND		1.0		ug/L			03/10/17 18:29	1
Hexachlorobutadiene	ND		2.0		ug/L			03/10/17 18:29	1
Isopropylbenzene	ND		2.0		ug/L			03/10/17 18:29	1
4-Isopropyltoluene	ND		3.0		ug/L			03/10/17 18:29	1
Methylene Chloride	ND		5.0		ug/L			03/10/17 18:29	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/10/17 18:29	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/10/17 18:29	1
Naphthalene	ND		2.0		ug/L			03/10/17 18:29	1
n-Butylbenzene	ND		3.0		ug/L			03/10/17 18:29	1
N-Propylbenzene	ND		3.0		ug/L			03/10/17 18:29	1
o-Xylene	ND		2.0		ug/L			03/10/17 18:29	1
sec-Butylbenzene	ND		3.0		ug/L			03/10/17 18:29	1
Styrene	ND		5.0		ug/L			03/10/17 18:29	1
tert-Butylbenzene	ND		3.0		ug/L			03/10/17 18:29	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/10/17 18:29	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/10/17 18:29	1
Tetrachloroethene	ND		3.0		ug/L			03/10/17 18:29	1
Toluene	ND		2.0		ug/L			03/10/17 18:29	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/10/17 18:29	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-10**  
**Date Collected: 03/02/17 14:10**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-10**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 18:29	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/10/17 18:29	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/10/17 18:29	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/10/17 18:29	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/10/17 18:29	1
Trichloroethene	ND		3.0		ug/L			03/10/17 18:29	1
Trichlorofluoromethane	ND		3.0		ug/L			03/10/17 18:29	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/10/17 18:29	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/10/17 18:29	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/10/17 18:29	1
Vinyl chloride	ND		1.0		ug/L			03/10/17 18:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 125		03/10/17 18:29	1
Dibromofluoromethane (Surr)	98		77 - 118		03/10/17 18:29	1
1,2-Dichloroethane-d4 (Surr)	104		65 - 143		03/10/17 18:29	1
Toluene-d8 (Surr)	97		82 - 122		03/10/17 18:29	1
Trifluorotoluene (Surr)	100		80 - 141		03/10/17 18:29	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/15/17 18:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	103		50 - 150		03/15/17 18:04	1
4-Bromofluorobenzene (Surr)	99		50 - 150		03/15/17 18:04	1

## Method: 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		0.12		mg/L		03/15/17 13:59	03/15/17 22:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	84		50 - 150		03/15/17 13:59	03/15/17 22:12

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-11**

**Date Collected: 03/02/17 14:45**

**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-11**

**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/13/17 17:32	1
Bromobenzene	ND		2.0		ug/L			03/13/17 17:32	1
Bromoform	ND		1.0		ug/L			03/13/17 17:32	1
Bromomethane	ND		5.0		ug/L			03/13/17 17:32	1
Carbon tetrachloride	ND		3.0		ug/L			03/13/17 17:32	1
Chlorobenzene	ND		2.0		ug/L			03/13/17 17:32	1
Chlorobromomethane	ND		2.0		ug/L			03/13/17 17:32	1
Chlorodibromomethane	ND		1.0		ug/L			03/13/17 17:32	1
Chloroethane	ND		5.0		ug/L			03/13/17 17:32	1
Chloroform	ND		5.0		ug/L			03/13/17 17:32	1
Chloromethane	ND		5.0		ug/L			03/13/17 17:32	1
2-Chlorotoluene	ND		3.0		ug/L			03/13/17 17:32	1
4-Chlorotoluene	ND		2.0		ug/L			03/13/17 17:32	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			03/13/17 17:32	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/13/17 17:32	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/13/17 17:32	1
Dibromomethane	ND		1.0		ug/L			03/13/17 17:32	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/13/17 17:32	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/13/17 17:32	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/13/17 17:32	1
Dichlorobromomethane	ND		2.0		ug/L			03/13/17 17:32	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/13/17 17:32	1
1,1-Dichloroethane	ND		2.0		ug/L			03/13/17 17:32	1
1,2-Dichloroethane	ND		1.0		ug/L			03/13/17 17:32	1
1,1-Dichloroethene	ND		2.0		ug/L			03/13/17 17:32	1
1,2-Dichloropropane	ND		1.0		ug/L			03/13/17 17:32	1
1,3-Dichloropropane	ND		1.0		ug/L			03/13/17 17:32	1
2,2-Dichloropropane	ND		3.0		ug/L			03/13/17 17:32	1
1,1-Dichloropropene	ND		3.0		ug/L			03/13/17 17:32	1
Ethylbenzene	ND		3.0		ug/L			03/13/17 17:32	1
Ethylene Dibromide	ND		1.0		ug/L			03/13/17 17:32	1
Hexachlorobutadiene	ND		2.0		ug/L			03/13/17 17:32	1
Isopropylbenzene	ND		2.0		ug/L			03/13/17 17:32	1
4-Isopropyltoluene	ND		3.0		ug/L			03/13/17 17:32	1
Methylene Chloride	ND		5.0		ug/L			03/13/17 17:32	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/13/17 17:32	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/13/17 17:32	1
Naphthalene	ND		2.0		ug/L			03/13/17 17:32	1
n-Butylbenzene	ND		3.0		ug/L			03/13/17 17:32	1
N-Propylbenzene	ND		3.0		ug/L			03/13/17 17:32	1
o-Xylene	ND		2.0		ug/L			03/13/17 17:32	1
sec-Butylbenzene	ND		3.0		ug/L			03/13/17 17:32	1
Styrene	ND		5.0		ug/L			03/13/17 17:32	1
tert-Butylbenzene	ND		3.0		ug/L			03/13/17 17:32	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/13/17 17:32	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/13/17 17:32	1
Tetrachloroethene	ND		3.0		ug/L			03/13/17 17:32	1
Toluene	ND		2.0		ug/L			03/13/17 17:32	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/13/17 17:32	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-11**

**Lab Sample ID: 580-66540-11**

**Date Collected: 03/02/17 14:45**

**Matrix: Water**

**Date Received: 03/07/17 10:50**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/13/17 17:32	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/13/17 17:32	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/13/17 17:32	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/13/17 17:32	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/13/17 17:32	1
Trichloroethene	ND		3.0		ug/L			03/13/17 17:32	1
Trichlorofluoromethane	ND		3.0		ug/L			03/13/17 17:32	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/13/17 17:32	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/13/17 17:32	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/13/17 17:32	1
Vinyl chloride	ND		1.0		ug/L			03/13/17 17:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 125		03/13/17 17:32	1
Dibromofluoromethane (Surr)	98		77 - 118		03/13/17 17:32	1
1,2-Dichloroethane-d4 (Surr)	100		65 - 143		03/13/17 17:32	1
Toluene-d8 (Surr)	101		82 - 122		03/13/17 17:32	1
Trifluorotoluene (Surr)	100		80 - 141		03/13/17 17:32	1

**Method: AK101 - Alaska - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/16/17 01:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	96		50 - 150		03/16/17 01:40	1
4-Bromofluorobenzene (Surr)	98		50 - 150		03/16/17 01:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>0.13</b>		0.11		mg/L		03/15/17 13:59	03/15/17 22:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	91		50 - 150		03/15/17 13:59	03/15/17 22:34

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: BD-1**  
**Date Collected: 03/02/17 11:40**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-12**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/13/17 17:59	1
Bromobenzene	ND		2.0		ug/L			03/13/17 17:59	1
Bromoform	ND		1.0		ug/L			03/13/17 17:59	1
Bromomethane	ND		5.0		ug/L			03/13/17 17:59	1
Carbon tetrachloride	ND		3.0		ug/L			03/13/17 17:59	1
Chlorobenzene	ND		2.0		ug/L			03/13/17 17:59	1
Chlorobromomethane	ND		2.0		ug/L			03/13/17 17:59	1
Chlorodibromomethane	ND		1.0		ug/L			03/13/17 17:59	1
Chloroethane	ND		5.0		ug/L			03/13/17 17:59	1
Chloroform	ND		5.0		ug/L			03/13/17 17:59	1
Chloromethane	ND		5.0		ug/L			03/13/17 17:59	1
2-Chlorotoluene	ND		3.0		ug/L			03/13/17 17:59	1
4-Chlorotoluene	ND		2.0		ug/L			03/13/17 17:59	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			03/13/17 17:59	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/13/17 17:59	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/13/17 17:59	1
Dibromomethane	ND		1.0		ug/L			03/13/17 17:59	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/13/17 17:59	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/13/17 17:59	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/13/17 17:59	1
Dichlorobromomethane	ND		2.0		ug/L			03/13/17 17:59	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/13/17 17:59	1
1,1-Dichloroethane	ND		2.0		ug/L			03/13/17 17:59	1
1,2-Dichloroethane	ND		1.0		ug/L			03/13/17 17:59	1
1,1-Dichloroethene	ND		2.0		ug/L			03/13/17 17:59	1
1,2-Dichloropropane	ND		1.0		ug/L			03/13/17 17:59	1
1,3-Dichloropropane	ND		1.0		ug/L			03/13/17 17:59	1
2,2-Dichloropropane	ND		3.0		ug/L			03/13/17 17:59	1
1,1-Dichloropropene	ND		3.0		ug/L			03/13/17 17:59	1
Ethylbenzene	ND		3.0		ug/L			03/13/17 17:59	1
Ethylene Dibromide	ND		1.0		ug/L			03/13/17 17:59	1
Hexachlorobutadiene	ND		2.0		ug/L			03/13/17 17:59	1
Isopropylbenzene	ND		2.0		ug/L			03/13/17 17:59	1
4-Isopropyltoluene	ND		3.0		ug/L			03/13/17 17:59	1
Methylene Chloride	ND		5.0		ug/L			03/13/17 17:59	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/13/17 17:59	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/13/17 17:59	1
Naphthalene	ND		2.0		ug/L			03/13/17 17:59	1
n-Butylbenzene	ND		3.0		ug/L			03/13/17 17:59	1
N-Propylbenzene	ND		3.0		ug/L			03/13/17 17:59	1
o-Xylene	ND		2.0		ug/L			03/13/17 17:59	1
sec-Butylbenzene	ND		3.0		ug/L			03/13/17 17:59	1
Styrene	ND		5.0		ug/L			03/13/17 17:59	1
tert-Butylbenzene	ND		3.0		ug/L			03/13/17 17:59	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/13/17 17:59	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/13/17 17:59	1
<b>Tetrachloroethene</b>	<b>12</b>		3.0		ug/L			03/13/17 17:59	1
Toluene	ND		2.0		ug/L			03/13/17 17:59	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/13/17 17:59	1

TestAmerica Seattle



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: BD-1**

**Lab Sample ID: 580-66540-12**

**Date Collected: 03/02/17 11:40**

**Matrix: Water**

**Date Received: 03/07/17 10:50**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/13/17 17:59	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/13/17 17:59	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/13/17 17:59	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/13/17 17:59	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/13/17 17:59	1
<b>Trichloroethene</b>	<b>3.6</b>		3.0		ug/L			03/13/17 17:59	1
Trichlorofluoromethane	ND		3.0		ug/L			03/13/17 17:59	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/13/17 17:59	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/13/17 17:59	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/13/17 17:59	1
Vinyl chloride	ND		1.0		ug/L			03/13/17 17:59	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	98		75 - 125					03/13/17 17:59	1
Dibromofluoromethane (Surr)	99		77 - 118					03/13/17 17:59	1
1,2-Dichloroethane-d4 (Surr)	100		65 - 143					03/13/17 17:59	1
Toluene-d8 (Surr)	100		82 - 122					03/13/17 17:59	1
Trifluorotoluene (Surr)	99		80 - 141					03/13/17 17:59	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/16/17 00:35	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Trifluorotoluene (Surr)	101		50 - 150					03/16/17 00:35	1
4-Bromofluorobenzene (Surr)	100		50 - 150					03/16/17 00:35	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>0.50</b>		0.12		mg/L		03/15/17 13:59	03/15/17 22:56	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl	95		50 - 150				03/15/17 13:59	03/15/17 22:56	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: BD-2**  
**Date Collected: 03/01/17 17:40**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-13**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/13/17 18:27	1
Bromobenzene	ND		2.0		ug/L			03/13/17 18:27	1
Bromoform	ND		1.0		ug/L			03/13/17 18:27	1
Bromomethane	ND		5.0		ug/L			03/13/17 18:27	1
Carbon tetrachloride	ND		3.0		ug/L			03/13/17 18:27	1
Chlorobenzene	ND		2.0		ug/L			03/13/17 18:27	1
Chlorobromomethane	ND		2.0		ug/L			03/13/17 18:27	1
Chlorodibromomethane	ND		1.0		ug/L			03/13/17 18:27	1
Chloroethane	ND		5.0		ug/L			03/13/17 18:27	1
Chloroform	ND		5.0		ug/L			03/13/17 18:27	1
Chloromethane	ND		5.0		ug/L			03/13/17 18:27	1
2-Chlorotoluene	ND		3.0		ug/L			03/13/17 18:27	1
4-Chlorotoluene	ND		2.0		ug/L			03/13/17 18:27	1
<b>cis-1,2-Dichloroethene</b>	<b>4.5</b>		1.0		ug/L			03/13/17 18:27	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/13/17 18:27	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/13/17 18:27	1
Dibromomethane	ND		1.0		ug/L			03/13/17 18:27	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/13/17 18:27	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/13/17 18:27	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/13/17 18:27	1
Dichlorobromomethane	ND		2.0		ug/L			03/13/17 18:27	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/13/17 18:27	1
<b>1,1-Dichloroethane</b>	<b>5.6</b>		2.0		ug/L			03/13/17 18:27	1
1,2-Dichloroethane	ND		1.0		ug/L			03/13/17 18:27	1
1,1-Dichloroethene	ND		2.0		ug/L			03/13/17 18:27	1
1,2-Dichloropropane	ND		1.0		ug/L			03/13/17 18:27	1
1,3-Dichloropropane	ND		1.0		ug/L			03/13/17 18:27	1
2,2-Dichloropropane	ND		3.0		ug/L			03/13/17 18:27	1
1,1-Dichloropropene	ND		3.0		ug/L			03/13/17 18:27	1
Ethylbenzene	ND		3.0		ug/L			03/13/17 18:27	1
Ethylene Dibromide	ND		1.0		ug/L			03/13/17 18:27	1
Hexachlorobutadiene	ND		2.0		ug/L			03/13/17 18:27	1
Isopropylbenzene	ND		2.0		ug/L			03/13/17 18:27	1
4-Isopropyltoluene	ND		3.0		ug/L			03/13/17 18:27	1
Methylene Chloride	ND		5.0		ug/L			03/13/17 18:27	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/13/17 18:27	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/13/17 18:27	1
Naphthalene	ND		2.0		ug/L			03/13/17 18:27	1
n-Butylbenzene	ND		3.0		ug/L			03/13/17 18:27	1
N-Propylbenzene	ND		3.0		ug/L			03/13/17 18:27	1
o-Xylene	ND		2.0		ug/L			03/13/17 18:27	1
sec-Butylbenzene	ND		3.0		ug/L			03/13/17 18:27	1
Styrene	ND		5.0		ug/L			03/13/17 18:27	1
tert-Butylbenzene	ND		3.0		ug/L			03/13/17 18:27	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/13/17 18:27	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/13/17 18:27	1
Tetrachloroethene	ND		3.0		ug/L			03/13/17 18:27	1
Toluene	ND		2.0		ug/L			03/13/17 18:27	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/13/17 18:27	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: BD-2**  
**Date Collected: 03/01/17 17:40**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-13**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/13/17 18:27	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/13/17 18:27	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/13/17 18:27	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/13/17 18:27	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/13/17 18:27	1
Trichloroethene	ND		3.0		ug/L			03/13/17 18:27	1
Trichlorofluoromethane	ND		3.0		ug/L			03/13/17 18:27	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/13/17 18:27	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/13/17 18:27	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/13/17 18:27	1
Vinyl chloride	ND		1.0		ug/L			03/13/17 18:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 125		03/13/17 18:27	1
Dibromofluoromethane (Surr)	98		77 - 118		03/13/17 18:27	1
1,2-Dichloroethane-d4 (Surr)	100		65 - 143		03/13/17 18:27	1
Toluene-d8 (Surr)	102		82 - 122		03/13/17 18:27	1
Trifluorotoluene (Surr)	99		80 - 141		03/13/17 18:27	1

### Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/14/17 22:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	103		50 - 150		03/14/17 22:58	1
4-Bromofluorobenzene (Surr)	100		50 - 150		03/14/17 22:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>0.28</b>		0.10		mg/L		03/13/17 10:56	03/13/17 22:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	69		50 - 150	03/13/17 10:56	03/13/17 22:45	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 580-66540-14**

**Date Collected: 03/02/17 10:40**

**Matrix: Water**

**Date Received: 03/07/17 10:50**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/13/17 14:50	1
Bromobenzene	ND		2.0		ug/L			03/13/17 14:50	1
Bromoform	ND		1.0		ug/L			03/13/17 14:50	1
Bromomethane	ND		5.0		ug/L			03/13/17 14:50	1
Carbon tetrachloride	ND		3.0		ug/L			03/13/17 14:50	1
Chlorobenzene	ND		2.0		ug/L			03/13/17 14:50	1
Chlorobromomethane	ND		2.0		ug/L			03/13/17 14:50	1
Chlorodibromomethane	ND		1.0		ug/L			03/13/17 14:50	1
Chloroethane	ND		5.0		ug/L			03/13/17 14:50	1
Chloroform	ND		5.0		ug/L			03/13/17 14:50	1
Chloromethane	ND		5.0		ug/L			03/13/17 14:50	1
2-Chlorotoluene	ND		3.0		ug/L			03/13/17 14:50	1
4-Chlorotoluene	ND		2.0		ug/L			03/13/17 14:50	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			03/13/17 14:50	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/13/17 14:50	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/13/17 14:50	1
Dibromomethane	ND		1.0		ug/L			03/13/17 14:50	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/13/17 14:50	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/13/17 14:50	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/13/17 14:50	1
Dichlorobromomethane	ND		2.0		ug/L			03/13/17 14:50	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/13/17 14:50	1
1,1-Dichloroethane	ND		2.0		ug/L			03/13/17 14:50	1
1,2-Dichloroethane	ND		1.0		ug/L			03/13/17 14:50	1
1,1-Dichloroethene	ND		2.0		ug/L			03/13/17 14:50	1
1,2-Dichloropropane	ND		1.0		ug/L			03/13/17 14:50	1
1,3-Dichloropropane	ND		1.0		ug/L			03/13/17 14:50	1
2,2-Dichloropropane	ND		3.0		ug/L			03/13/17 14:50	1
1,1-Dichloropropene	ND		3.0		ug/L			03/13/17 14:50	1
Ethylbenzene	ND		3.0		ug/L			03/13/17 14:50	1
Ethylene Dibromide	ND		1.0		ug/L			03/13/17 14:50	1
Hexachlorobutadiene	ND		2.0		ug/L			03/13/17 14:50	1
Isopropylbenzene	ND		2.0		ug/L			03/13/17 14:50	1
4-Isopropyltoluene	ND		3.0		ug/L			03/13/17 14:50	1
Methylene Chloride	ND		5.0		ug/L			03/13/17 14:50	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/13/17 14:50	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/13/17 14:50	1
Naphthalene	ND		2.0		ug/L			03/13/17 14:50	1
n-Butylbenzene	ND		3.0		ug/L			03/13/17 14:50	1
N-Propylbenzene	ND		3.0		ug/L			03/13/17 14:50	1
o-Xylene	ND		2.0		ug/L			03/13/17 14:50	1
sec-Butylbenzene	ND		3.0		ug/L			03/13/17 14:50	1
Styrene	ND		5.0		ug/L			03/13/17 14:50	1
tert-Butylbenzene	ND		3.0		ug/L			03/13/17 14:50	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/13/17 14:50	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/13/17 14:50	1
Tetrachloroethene	ND		3.0		ug/L			03/13/17 14:50	1
Toluene	ND		2.0		ug/L			03/13/17 14:50	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/13/17 14:50	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 580-66540-14**

**Date Collected: 03/02/17 10:40**

**Matrix: Water**

**Date Received: 03/07/17 10:50**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/13/17 14:50	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/13/17 14:50	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/13/17 14:50	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/13/17 14:50	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/13/17 14:50	1
Trichloroethene	ND		3.0		ug/L			03/13/17 14:50	1
Trichlorofluoromethane	ND		3.0		ug/L			03/13/17 14:50	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/13/17 14:50	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/13/17 14:50	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/13/17 14:50	1
Vinyl chloride	ND		1.0		ug/L			03/13/17 14:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		75 - 125		03/13/17 14:50	1
Dibromofluoromethane (Surr)	96		77 - 118		03/13/17 14:50	1
1,2-Dichloroethane-d4 (Surr)	100		65 - 143		03/13/17 14:50	1
Toluene-d8 (Surr)	102		82 - 122		03/13/17 14:50	1
Trifluorotoluene (Surr)	97		80 - 141		03/13/17 14:50	1

**Method: AK101 - Alaska - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND	*	0.050		mg/L			03/15/17 13:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	107		50 - 150		03/15/17 13:05	1
4-Bromofluorobenzene (Surr)	91		50 - 150		03/15/17 13:05	1

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 580-240198/5**

**Matrix: Water**

**Analysis Batch: 240198**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/10/17 11:50	1
Bromobenzene	ND		2.0		ug/L			03/10/17 11:50	1
Bromoform	ND		1.0		ug/L			03/10/17 11:50	1
Bromomethane	ND		5.0		ug/L			03/10/17 11:50	1
Carbon tetrachloride	ND		3.0		ug/L			03/10/17 11:50	1
Chlorobenzene	ND		2.0		ug/L			03/10/17 11:50	1
Chlorobromomethane	ND		2.0		ug/L			03/10/17 11:50	1
Chlorodibromomethane	ND		1.0		ug/L			03/10/17 11:50	1
Chloroethane	ND		5.0		ug/L			03/10/17 11:50	1
Chloroform	ND		5.0		ug/L			03/10/17 11:50	1
Chloromethane	ND		5.0		ug/L			03/10/17 11:50	1
2-Chlorotoluene	ND		3.0		ug/L			03/10/17 11:50	1
4-Chlorotoluene	ND		2.0		ug/L			03/10/17 11:50	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			03/10/17 11:50	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 11:50	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/10/17 11:50	1
Dibromomethane	ND		1.0		ug/L			03/10/17 11:50	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/10/17 11:50	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/10/17 11:50	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/10/17 11:50	1
Dichlorobromomethane	ND		2.0		ug/L			03/10/17 11:50	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/10/17 11:50	1
1,1-Dichloroethane	ND		2.0		ug/L			03/10/17 11:50	1
1,2-Dichloroethane	ND		1.0		ug/L			03/10/17 11:50	1
1,1-Dichloroethene	ND		2.0		ug/L			03/10/17 11:50	1
1,2-Dichloropropane	ND		1.0		ug/L			03/10/17 11:50	1
1,3-Dichloropropane	ND		1.0		ug/L			03/10/17 11:50	1
2,2-Dichloropropane	ND		3.0		ug/L			03/10/17 11:50	1
1,1-Dichloropropene	ND		3.0		ug/L			03/10/17 11:50	1
Ethylbenzene	ND		3.0		ug/L			03/10/17 11:50	1
Ethylene Dibromide	ND		1.0		ug/L			03/10/17 11:50	1
Hexachlorobutadiene	ND		2.0		ug/L			03/10/17 11:50	1
Isopropylbenzene	ND		2.0		ug/L			03/10/17 11:50	1
4-Isopropyltoluene	ND		3.0		ug/L			03/10/17 11:50	1
Methylene Chloride	ND		5.0		ug/L			03/10/17 11:50	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/10/17 11:50	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/10/17 11:50	1
Naphthalene	ND		2.0		ug/L			03/10/17 11:50	1
n-Butylbenzene	ND		3.0		ug/L			03/10/17 11:50	1
N-Propylbenzene	ND		3.0		ug/L			03/10/17 11:50	1
o-Xylene	ND		2.0		ug/L			03/10/17 11:50	1
sec-Butylbenzene	ND		3.0		ug/L			03/10/17 11:50	1
Styrene	ND		5.0		ug/L			03/10/17 11:50	1
tert-Butylbenzene	ND		3.0		ug/L			03/10/17 11:50	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/10/17 11:50	1
1,1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/10/17 11:50	1
Tetrachloroethene	ND		3.0		ug/L			03/10/17 11:50	1
Toluene	ND		2.0		ug/L			03/10/17 11:50	1

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: MB 580-240198/5**  
**Matrix: Water**  
**Analysis Batch: 240198**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/10/17 11:50	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/10/17 11:50	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/10/17 11:50	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/10/17 11:50	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/10/17 11:50	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/10/17 11:50	1
Trichloroethene	ND		3.0		ug/L			03/10/17 11:50	1
Trichlorofluoromethane	ND		3.0		ug/L			03/10/17 11:50	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/10/17 11:50	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/10/17 11:50	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/10/17 11:50	1
Vinyl chloride	ND		1.0		ug/L			03/10/17 11:50	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 125		03/10/17 11:50	1
Dibromofluoromethane (Surr)	78		77 - 118		03/10/17 11:50	1
1,2-Dichloroethane-d4 (Surr)	102		65 - 143		03/10/17 11:50	1
Toluene-d8 (Surr)	98		82 - 122		03/10/17 11:50	1
Trifluorotoluene (Surr)	100		80 - 141		03/10/17 11:50	1

**Lab Sample ID: LCS 580-240198/6**  
**Matrix: Water**  
**Analysis Batch: 240198**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	10.0	10.3		ug/L		103	80 - 120
Bromobenzene	10.0	9.34		ug/L		93	75 - 115
Bromoform	10.0	8.80		ug/L		88	55 - 130
Bromomethane	10.0	9.71		ug/L		97	55 - 125
Carbon tetrachloride	10.0	9.66		ug/L		97	65 - 124
Chlorobenzene	10.0	9.46		ug/L		95	80 - 120
Chlorobromomethane	10.0	9.52		ug/L		95	65 - 120
Chlorodibromomethane	10.0	8.94		ug/L		89	71 - 118
Chloroethane	10.0	10.3		ug/L		103	60 - 126
Chloroform	10.0	9.27		ug/L		93	80 - 119
Chloromethane	10.0	10.7		ug/L		107	40 - 149
2-Chlorotoluene	10.0	9.57		ug/L		96	69 - 125
4-Chlorotoluene	10.0	9.82		ug/L		98	68 - 121
cis-1,2-Dichloroethene	10.0	10.3		ug/L		103	70 - 111
cis-1,3-Dichloropropene	10.0	9.95		ug/L		99	77 - 117
1,2-Dibromo-3-Chloropropane	10.0	8.98	J	ug/L		90	58 - 141
Dibromomethane	10.0	9.67		ug/L		97	61 - 142
1,2-Dichlorobenzene	10.0	9.48		ug/L		95	70 - 120
1,3-Dichlorobenzene	10.0	9.76		ug/L		98	72 - 116
1,4-Dichlorobenzene	10.0	9.59		ug/L		96	75 - 117
Dichlorobromomethane	10.0	9.44		ug/L		94	75 - 120
Dichlorodifluoromethane	10.0	9.15		ug/L		92	20 - 141
1,1-Dichloroethane	10.0	9.40		ug/L		94	70 - 135

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

Lab Sample ID: LCS 580-240198/6

Matrix: Water

Analysis Batch: 240198

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	10.0	10.6		ug/L		106	58 - 143
1,1-Dichloroethene	10.0	9.33		ug/L		93	70 - 117
1,2-Dichloropropane	10.0	9.90		ug/L		99	58 - 150
1,3-Dichloropropane	10.0	9.31		ug/L		93	69 - 134
2,2-Dichloropropane	10.0	11.5		ug/L		115	50 - 140
1,1-Dichloropropene	10.0	10.2		ug/L		102	75 - 120
Ethylbenzene	10.0	9.72		ug/L		97	75 - 119
Ethylene Dibromide	10.0	9.05		ug/L		90	66 - 133
Hexachlorobutadiene	10.0	9.45		ug/L		94	56 - 125
Isopropylbenzene	10.0	9.60		ug/L		96	75 - 125
4-Isopropyltoluene	10.0	9.81		ug/L		98	66 - 120
Methylene Chloride	10.0	9.76		ug/L		98	70 - 115
Methyl tert-butyl ether	10.0	9.40		ug/L		94	65 - 125
m-Xylene & p-Xylene	10.0	9.47		ug/L		95	75 - 119
Naphthalene	10.0	9.64		ug/L		96	55 - 134
n-Butylbenzene	10.0	10.2		ug/L		102	70 - 120
N-Propylbenzene	10.0	9.37		ug/L		94	70 - 124
o-Xylene	10.0	9.48		ug/L		95	74 - 120
sec-Butylbenzene	10.0	10.1		ug/L		101	70 - 125
Styrene	10.0	9.41		ug/L		94	76 - 116
tert-Butylbenzene	10.0	9.78		ug/L		98	70 - 121
1,1,1,2-Tetrachloroethane	10.0	9.12		ug/L		91	64 - 130
1,1,1,2,2-Tetrachloroethane	10.0	9.65		ug/L		96	65 - 130
Tetrachloroethene	10.0	9.44		ug/L		94	70 - 124
Toluene	10.0	9.94		ug/L		99	75 - 120
trans-1,2-Dichloroethene	10.0	10.0		ug/L		100	72 - 113
trans-1,3-Dichloropropene	10.0	9.55		ug/L		96	73 - 122
1,2,3-Trichlorobenzene	10.0	9.55		ug/L		96	55 - 133
1,2,4-Trichlorobenzene	10.0	9.36		ug/L		94	56 - 129
1,1,1-Trichloroethane	10.0	9.75		ug/L		97	65 - 130
1,1,2-Trichloroethane	10.0	9.15		ug/L		92	69 - 135
Trichloroethene	10.0	9.25		ug/L		93	70 - 125
Trichlorofluoromethane	10.0	9.16		ug/L		92	49 - 130
1,2,3-Trichloropropane	10.0	9.21		ug/L		92	65 - 135
1,2,4-Trimethylbenzene	10.0	10.3		ug/L		103	75 - 121
1,3,5-Trimethylbenzene	10.0	9.91		ug/L		99	75 - 122
Vinyl chloride	10.0	9.52		ug/L		95	56 - 114

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	98		75 - 125
Dibromofluoromethane (Surr)	99		77 - 118
1,2-Dichloroethane-d4 (Surr)	101		65 - 143
Toluene-d8 (Surr)	98		82 - 122
Trifluorotoluene (Surr)	99		80 - 141

TestAmerica Seattle



# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

Lab Sample ID: LCSD 580-240198/7

Matrix: Water

Analysis Batch: 240198

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
Benzene	10.0	9.46		ug/L		95	80 - 120	9	14
Bromobenzene	10.0	8.97		ug/L		90	75 - 115	4	13
Bromoform	10.0	8.82		ug/L		88	55 - 130	0	20
Bromomethane	10.0	9.31		ug/L		93	55 - 125	4	30
Carbon tetrachloride	10.0	8.87		ug/L		89	65 - 124	8	19
Chlorobenzene	10.0	8.93		ug/L		89	80 - 120	6	15
Chlorobromomethane	10.0	9.01		ug/L		90	65 - 120	6	17
Chlorodibromomethane	10.0	8.81		ug/L		88	71 - 118	2	21
Chloroethane	10.0	9.47		ug/L		95	60 - 126	8	30
Chloroform	10.0	8.80		ug/L		88	80 - 119	5	15
Chloromethane	10.0	9.38		ug/L		94	40 - 149	13	22
2-Chlorotoluene	10.0	8.95		ug/L		89	69 - 125	7	15
4-Chlorotoluene	10.0	9.51		ug/L		95	68 - 121	3	15
cis-1,2-Dichloroethene	10.0	9.46		ug/L		95	70 - 111	9	15
cis-1,3-Dichloropropene	10.0	9.31		ug/L		93	77 - 117	7	24
1,2-Dibromo-3-Chloropropane	10.0	8.95	J	ug/L		89	58 - 141	0	30
Dibromomethane	10.0	9.35		ug/L		93	61 - 142	3	15
1,2-Dichlorobenzene	10.0	9.13		ug/L		91	70 - 120	4	15
1,3-Dichlorobenzene	10.0	9.16		ug/L		92	72 - 116	6	14
1,4-Dichlorobenzene	10.0	9.09		ug/L		91	75 - 117	5	17
Dichlorobromomethane	10.0	8.97		ug/L		90	75 - 120	5	14
Dichlorodifluoromethane	10.0	8.90		ug/L		89	20 - 141	3	35
1,1-Dichloroethane	10.0	8.85		ug/L		88	70 - 135	6	20
1,2-Dichloroethane	10.0	10.5		ug/L		105	58 - 143	1	17
1,1-Dichloroethene	10.0	8.90		ug/L		89	70 - 117	5	21
1,2-Dichloropropane	10.0	9.24		ug/L		92	58 - 150	7	15
1,3-Dichloropropane	10.0	9.03		ug/L		90	69 - 134	3	23
2,2-Dichloropropane	10.0	9.74		ug/L		97	50 - 140	16	20
1,1-Dichloropropene	10.0	9.37		ug/L		94	75 - 120	8	20
Ethylbenzene	10.0	9.20		ug/L		92	75 - 119	5	14
Ethylene Dibromide	10.0	8.97		ug/L		90	66 - 133	1	17
Hexachlorobutadiene	10.0	9.55		ug/L		96	56 - 125	1	19
Isopropylbenzene	10.0	8.90		ug/L		89	75 - 125	8	20
4-Isopropyltoluene	10.0	9.04		ug/L		90	66 - 120	8	13
Methylene Chloride	10.0	9.44		ug/L		94	70 - 115	3	19
Methyl tert-butyl ether	10.0	9.04		ug/L		90	65 - 125	4	18
m-Xylene & p-Xylene	10.0	8.93		ug/L		89	75 - 119	6	14
Naphthalene	10.0	9.48		ug/L		95	55 - 134	2	30
n-Butylbenzene	10.0	9.48		ug/L		95	70 - 120	8	20
N-Propylbenzene	10.0	8.84		ug/L		88	70 - 124	6	13
o-Xylene	10.0	8.90		ug/L		89	74 - 120	6	16
sec-Butylbenzene	10.0	9.44		ug/L		94	70 - 125	7	15
Styrene	10.0	9.02		ug/L		90	76 - 116	4	16
tert-Butylbenzene	10.0	9.23		ug/L		92	70 - 121	6	14
1,1,1,2-Tetrachloroethane	10.0	8.60		ug/L		86	64 - 130	6	20
1,1,1,2,2-Tetrachloroethane	10.0	9.42		ug/L		94	65 - 130	2	18
Tetrachloroethene	10.0	9.12		ug/L		91	70 - 124	3	20
Toluene	10.0	9.31		ug/L		93	75 - 120	7	19

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

Lab Sample ID: LCSD 580-240198/7

Matrix: Water

Analysis Batch: 240198

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
trans-1,2-Dichloroethene	10.0	8.98		ug/L		90	72 - 113	11	21
trans-1,3-Dichloropropene	10.0	9.35		ug/L		94	73 - 122	2	30
1,2,3-Trichlorobenzene	10.0	9.27		ug/L		93	55 - 133	3	35
1,2,4-Trichlorobenzene	10.0	8.99		ug/L		90	56 - 129	4	22
1,1,1-Trichloroethane	10.0	8.96		ug/L		90	65 - 130	8	18
1,1,2-Trichloroethane	10.0	8.84		ug/L		88	69 - 135	3	24
Trichloroethene	10.0	8.37		ug/L		84	70 - 125	10	23
Trichlorofluoromethane	10.0	8.27		ug/L		83	49 - 130	10	35
1,2,3-Trichloropropane	10.0	8.98		ug/L		90	65 - 135	3	22
1,2,4-Trimethylbenzene	10.0	9.61		ug/L		96	75 - 121	7	16
1,3,5-Trimethylbenzene	10.0	9.22		ug/L		92	75 - 122	7	14
Vinyl chloride	10.0	8.67		ug/L		87	56 - 114	9	23

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	99		75 - 125
Dibromofluoromethane (Surr)	98		77 - 118
1,2-Dichloroethane-d4 (Surr)	101		65 - 143
Toluene-d8 (Surr)	98		82 - 122
Trifluorotoluene (Surr)	97		80 - 141

Lab Sample ID: 580-66540-7 MS

Matrix: Water

Analysis Batch: 240198

Client Sample ID: MW-7

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		10.0	9.86		ug/L		99	80 - 120
Bromobenzene	ND		10.0	9.10		ug/L		91	75 - 115
Bromoform	ND		10.0	8.76		ug/L		88	55 - 130
Bromomethane	ND		10.0	9.46		ug/L		95	55 - 125
Carbon tetrachloride	ND		10.0	9.39		ug/L		94	65 - 124
Chlorobenzene	ND		10.0	9.23		ug/L		92	80 - 120
Chlorobromomethane	ND		10.0	9.08		ug/L		91	65 - 120
Chlorodibromomethane	ND		10.0	8.85		ug/L		88	71 - 118
Chloroethane	ND		10.0	10.1		ug/L		101	60 - 126
Chloroform	ND		10.0	9.05		ug/L		91	80 - 119
Chloromethane	ND		10.0	11.0		ug/L		110	40 - 149
2-Chlorotoluene	ND		10.0	9.13		ug/L		91	69 - 125
4-Chlorotoluene	ND		10.0	9.49		ug/L		95	68 - 121
cis-1,2-Dichloroethene	ND		10.0	9.75		ug/L		98	70 - 111
cis-1,3-Dichloropropene	ND		10.0	9.35		ug/L		93	77 - 117
1,2-Dibromo-3-Chloropropane	ND		10.0	ND		ug/L		90	58 - 141
Dibromomethane	ND		10.0	9.32		ug/L		93	61 - 142
1,2-Dichlorobenzene	ND		10.0	9.27		ug/L		93	70 - 120
1,3-Dichlorobenzene	ND		10.0	9.46		ug/L		95	72 - 116
1,4-Dichlorobenzene	ND		10.0	9.02		ug/L		90	75 - 117
Dichlorobromomethane	ND		10.0	9.02		ug/L		90	75 - 120
Dichlorodifluoromethane	ND		10.0	9.38		ug/L		94	20 - 141
1,1-Dichloroethane	ND		10.0	9.20		ug/L		92	70 - 135

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: 580-66540-7 MS**

**Matrix: Water**

**Analysis Batch: 240198**

**Client Sample ID: MW-7**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	ND		10.0	10.5		ug/L		105	58 - 143
1,1-Dichloroethene	ND		10.0	9.00		ug/L		90	70 - 117
1,2-Dichloropropane	ND		10.0	9.17		ug/L		92	58 - 150
1,3-Dichloropropane	ND		10.0	9.28		ug/L		93	69 - 134
2,2-Dichloropropane	ND		10.0	10.1		ug/L		101	50 - 140
1,1-Dichloropropene	ND		10.0	9.61		ug/L		96	75 - 120
Ethylbenzene	ND		10.0	9.69		ug/L		97	75 - 119
Ethylene Dibromide	ND		10.0	8.84		ug/L		88	66 - 133
Hexachlorobutadiene	ND		10.0	8.70		ug/L		87	56 - 125
Isopropylbenzene	ND		10.0	9.33		ug/L		93	75 - 125
4-Isopropyltoluene	ND		10.0	9.29		ug/L		93	66 - 120
Methylene Chloride	ND		10.0	9.72		ug/L		97	70 - 115
Methyl tert-butyl ether	ND		10.0	9.03		ug/L		90	65 - 125
m-Xylene & p-Xylene	ND		10.0	9.62		ug/L		93	75 - 119
Naphthalene	ND		10.0	9.44		ug/L		94	55 - 134
n-Butylbenzene	ND		10.0	9.38		ug/L		94	70 - 120
N-Propylbenzene	ND		10.0	8.92		ug/L		89	70 - 124
o-Xylene	ND		10.0	9.32		ug/L		93	74 - 120
sec-Butylbenzene	ND		10.0	9.74		ug/L		97	70 - 125
Styrene	ND		10.0	9.29		ug/L		93	76 - 116
tert-Butylbenzene	ND		10.0	9.51		ug/L		95	70 - 121
1,1,1,2-Tetrachloroethane	ND		10.0	8.66		ug/L		87	64 - 130
1,1,1,2,2-Tetrachloroethane	ND		10.0	9.64		ug/L		96	65 - 130
Tetrachloroethene	14		10.0	21.4		ug/L		72	70 - 124
Toluene	ND		10.0	9.81		ug/L		98	75 - 120
trans-1,2-Dichloroethene	ND		10.0	10.1		ug/L		101	72 - 113
trans-1,3-Dichloropropene	ND		10.0	9.20		ug/L		92	73 - 122
1,2,3-Trichlorobenzene	ND		10.0	9.10		ug/L		91	55 - 133
1,2,4-Trichlorobenzene	ND		10.0	8.80		ug/L		88	56 - 129
1,1,1-Trichloroethane	ND		10.0	10.4		ug/L		96	65 - 130
1,1,2-Trichloroethane	ND		10.0	8.99		ug/L		90	69 - 135
Trichloroethene	ND		10.0	10.2		ug/L		102	70 - 125
Trichlorofluoromethane	ND		10.0	8.81		ug/L		88	49 - 130
1,2,3-Trichloropropane	ND		10.0	9.16		ug/L		92	65 - 135
1,2,4-Trimethylbenzene	ND		10.0	9.84		ug/L		98	75 - 121
1,3,5-Trimethylbenzene	ND		10.0	9.51		ug/L		95	75 - 122
Vinyl chloride	ND		10.0	9.25		ug/L		93	56 - 114

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		75 - 125
Dibromofluoromethane (Surr)	100		77 - 118
1,2-Dichloroethane-d4 (Surr)	102		65 - 143
Toluene-d8 (Surr)	98		82 - 122
Trifluorotoluene (Surr)	99		80 - 141

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: 580-66540-7 MSD**

**Matrix: Water**

**Analysis Batch: 240198**

**Client Sample ID: MW-7**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		10.0	9.97		ug/L		100	80 - 120	1	35
Bromobenzene	ND		10.0	8.90		ug/L		89	75 - 115	2	35
Bromoform	ND		10.0	8.51		ug/L		85	55 - 130	3	35
Bromomethane	ND		10.0	9.82		ug/L		98	55 - 125	4	35
Carbon tetrachloride	ND		10.0	9.30		ug/L		93	65 - 124	1	35
Chlorobenzene	ND		10.0	9.11		ug/L		91	80 - 120	1	35
Chlorobromomethane	ND		10.0	9.12		ug/L		91	65 - 120	0	35
Chlorodibromomethane	ND		10.0	8.76		ug/L		88	71 - 118	1	35
Chloroethane	ND		10.0	10.0		ug/L		100	60 - 126	1	35
Chloroform	ND		10.0	9.38		ug/L		94	80 - 119	4	35
Chloromethane	ND		10.0	10.7		ug/L		107	40 - 149	3	35
2-Chlorotoluene	ND		10.0	9.11		ug/L		91	69 - 125	0	35
4-Chlorotoluene	ND		10.0	9.23		ug/L		92	68 - 121	3	35
cis-1,2-Dichloroethene	ND		10.0	10.2		ug/L		102	70 - 111	5	35
cis-1,3-Dichloropropene	ND		10.0	8.99		ug/L		90	77 - 117	4	35
1,2-Dibromo-3-Chloropropane	ND		10.0	ND		ug/L		89	58 - 141	1	35
Dibromomethane	ND		10.0	9.38		ug/L		94	61 - 142	1	35
1,2-Dichlorobenzene	ND		10.0	9.20		ug/L		92	70 - 120	1	35
1,3-Dichlorobenzene	ND		10.0	8.97		ug/L		90	72 - 116	5	35
1,4-Dichlorobenzene	ND		10.0	8.85		ug/L		89	75 - 117	2	35
Dichlorobromomethane	ND		10.0	8.87		ug/L		89	75 - 120	2	35
Dichlorodifluoromethane	ND		10.0	10.2		ug/L		102	20 - 141	8	35
1,1-Dichloroethane	ND		10.0	9.62		ug/L		96	70 - 135	4	35
1,2-Dichloroethane	ND		10.0	10.2		ug/L		102	58 - 143	3	35
1,1-Dichloroethene	ND		10.0	9.15		ug/L		91	70 - 117	2	35
1,2-Dichloropropane	ND		10.0	9.12		ug/L		91	58 - 150	1	35
1,3-Dichloropropane	ND		10.0	8.98		ug/L		90	69 - 134	3	35
2,2-Dichloropropane	ND		10.0	10.6		ug/L		106	50 - 140	5	35
1,1-Dichloropropene	ND		10.0	10.0		ug/L		100	75 - 120	4	35
Ethylbenzene	ND		10.0	9.53		ug/L		95	75 - 119	2	35
Ethylene Dibromide	ND		10.0	8.72		ug/L		87	66 - 133	1	35
Hexachlorobutadiene	ND		10.0	9.44		ug/L		94	56 - 125	8	35
Isopropylbenzene	ND		10.0	9.33		ug/L		93	75 - 125	0	35
4-Isopropyltoluene	ND		10.0	9.12		ug/L		91	66 - 120	2	35
Methylene Chloride	ND		10.0	9.55		ug/L		96	70 - 115	2	35
Methyl tert-butyl ether	ND		10.0	9.33		ug/L		93	65 - 125	3	35
m-Xylene & p-Xylene	ND		10.0	9.47		ug/L		92	75 - 119	2	35
Naphthalene	ND		10.0	9.57		ug/L		96	55 - 134	1	35
n-Butylbenzene	ND		10.0	9.26		ug/L		93	70 - 120	1	35
N-Propylbenzene	ND		10.0	8.97		ug/L		90	70 - 124	1	35
o-Xylene	ND		10.0	9.31		ug/L		93	74 - 120	0	35
sec-Butylbenzene	ND		10.0	9.71		ug/L		97	70 - 125	0	35
Styrene	ND		10.0	8.95		ug/L		90	76 - 116	4	35
tert-Butylbenzene	ND		10.0	9.56		ug/L		96	70 - 121	1	35
1,1,1,2-Tetrachloroethane	ND		10.0	8.96		ug/L		90	64 - 130	3	35
1,1,1,2,2-Tetrachloroethane	ND		10.0	9.48		ug/L		95	65 - 130	2	35
Tetrachloroethene	14		10.0	22.8		ug/L		85	70 - 124	6	35
Toluene	ND		10.0	9.77		ug/L		98	75 - 120	0	35

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: 580-66540-7 MSD**  
**Matrix: Water**  
**Analysis Batch: 240198**

**Client Sample ID: MW-7**  
**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
trans-1,2-Dichloroethene	ND		10.0	10.1		ug/L		101	72 - 113	0	35
trans-1,3-Dichloropropene	ND		10.0	8.75		ug/L		88	73 - 122	5	35
1,2,3-Trichlorobenzene	ND		10.0	9.29		ug/L		93	55 - 133	2	35
1,2,4-Trichlorobenzene	ND		10.0	9.15		ug/L		92	56 - 129	4	35
1,1,1-Trichloroethane	ND		10.0	10.7		ug/L		99	65 - 130	2	35
1,1,2-Trichloroethane	ND		10.0	8.91		ug/L		89	69 - 135	1	35
Trichloroethene	ND		10.0	10.2		ug/L		102	70 - 125	0	35
Trichlorofluoromethane	ND		10.0	9.41		ug/L		94	49 - 130	7	35
1,2,3-Trichloropropane	ND		10.0	8.84		ug/L		88	65 - 135	4	35
1,2,4-Trimethylbenzene	ND		10.0	9.66		ug/L		97	75 - 121	2	35
1,3,5-Trimethylbenzene	ND		10.0	9.43		ug/L		94	75 - 122	1	35
Vinyl chloride	ND		10.0	9.99		ug/L		100	56 - 114	8	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	99		75 - 125
Dibromofluoromethane (Surr)	102		77 - 118
1,2-Dichloroethane-d4 (Surr)	102		65 - 143
Toluene-d8 (Surr)	98		82 - 122
Trifluorotoluene (Surr)	99		80 - 141

**Lab Sample ID: MB 580-240388/5**  
**Matrix: Water**  
**Analysis Batch: 240388**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/13/17 11:13	1
Bromobenzene	ND		2.0		ug/L			03/13/17 11:13	1
Bromoform	ND		1.0		ug/L			03/13/17 11:13	1
Bromomethane	ND		5.0		ug/L			03/13/17 11:13	1
Carbon tetrachloride	ND		3.0		ug/L			03/13/17 11:13	1
Chlorobenzene	ND		2.0		ug/L			03/13/17 11:13	1
Chlorobromomethane	ND		2.0		ug/L			03/13/17 11:13	1
Chlorodibromomethane	ND		1.0		ug/L			03/13/17 11:13	1
Chloroethane	ND		5.0		ug/L			03/13/17 11:13	1
Chloroform	ND		5.0		ug/L			03/13/17 11:13	1
Chloromethane	ND		5.0		ug/L			03/13/17 11:13	1
2-Chlorotoluene	ND		3.0		ug/L			03/13/17 11:13	1
4-Chlorotoluene	ND		2.0		ug/L			03/13/17 11:13	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			03/13/17 11:13	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/13/17 11:13	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/13/17 11:13	1
Dibromomethane	ND		1.0		ug/L			03/13/17 11:13	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/13/17 11:13	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/13/17 11:13	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/13/17 11:13	1
Dichlorobromomethane	ND		2.0		ug/L			03/13/17 11:13	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/13/17 11:13	1
1,1-Dichloroethane	ND		2.0		ug/L			03/13/17 11:13	1

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

Lab Sample ID: MB 580-240388/5

Matrix: Water

Analysis Batch: 240388

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		1.0		ug/L			03/13/17 11:13	1
1,1-Dichloroethene	ND		2.0		ug/L			03/13/17 11:13	1
1,2-Dichloropropane	ND		1.0		ug/L			03/13/17 11:13	1
1,3-Dichloropropane	ND		1.0		ug/L			03/13/17 11:13	1
2,2-Dichloropropane	ND		3.0		ug/L			03/13/17 11:13	1
1,1-Dichloropropene	ND		3.0		ug/L			03/13/17 11:13	1
Ethylbenzene	ND		3.0		ug/L			03/13/17 11:13	1
Ethylene Dibromide	ND		1.0		ug/L			03/13/17 11:13	1
Hexachlorobutadiene	ND		2.0		ug/L			03/13/17 11:13	1
Isopropylbenzene	ND		2.0		ug/L			03/13/17 11:13	1
4-Isopropyltoluene	ND		3.0		ug/L			03/13/17 11:13	1
Methylene Chloride	ND		5.0		ug/L			03/13/17 11:13	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/13/17 11:13	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/13/17 11:13	1
Naphthalene	ND		2.0		ug/L			03/13/17 11:13	1
n-Butylbenzene	ND		3.0		ug/L			03/13/17 11:13	1
N-Propylbenzene	ND		3.0		ug/L			03/13/17 11:13	1
o-Xylene	ND		2.0		ug/L			03/13/17 11:13	1
sec-Butylbenzene	ND		3.0		ug/L			03/13/17 11:13	1
Styrene	ND		5.0		ug/L			03/13/17 11:13	1
tert-Butylbenzene	ND		3.0		ug/L			03/13/17 11:13	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/13/17 11:13	1
1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/13/17 11:13	1
Tetrachloroethene	ND		3.0		ug/L			03/13/17 11:13	1
Toluene	ND		2.0		ug/L			03/13/17 11:13	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/13/17 11:13	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/13/17 11:13	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/13/17 11:13	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/13/17 11:13	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/13/17 11:13	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/13/17 11:13	1
Trichloroethene	ND		3.0		ug/L			03/13/17 11:13	1
Trichlorofluoromethane	ND		3.0		ug/L			03/13/17 11:13	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/13/17 11:13	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/13/17 11:13	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/13/17 11:13	1
Vinyl chloride	ND		1.0		ug/L			03/13/17 11:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 125		03/13/17 11:13	1
Dibromofluoromethane (Surr)	95		77 - 118		03/13/17 11:13	1
1,2-Dichloroethane-d4 (Surr)	101		65 - 143		03/13/17 11:13	1
Toluene-d8 (Surr)	102		82 - 122		03/13/17 11:13	1
Trifluorotoluene (Surr)	98		80 - 141		03/13/17 11:13	1

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: LCS 580-240388/6**

**Matrix: Water**

**Analysis Batch: 240388**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	10.0	10.1		ug/L		101	80 - 120
Bromobenzene	10.0	9.15		ug/L		91	75 - 115
Bromoform	10.0	8.67		ug/L		87	55 - 130
Bromomethane	10.0	9.50		ug/L		95	55 - 125
Carbon tetrachloride	10.0	9.48		ug/L		95	65 - 124
Chlorobenzene	10.0	9.96		ug/L		100	80 - 120
Chlorobromomethane	10.0	9.57		ug/L		96	65 - 120
Chlorodibromomethane	10.0	9.28		ug/L		93	71 - 118
Chloroethane	10.0	9.41		ug/L		94	60 - 126
Chloroform	10.0	9.99		ug/L		100	80 - 119
Chloromethane	10.0	9.15		ug/L		91	40 - 149
2-Chlorotoluene	10.0	9.78		ug/L		98	69 - 125
4-Chlorotoluene	10.0	9.49		ug/L		95	68 - 121
cis-1,2-Dichloroethene	10.0	9.57		ug/L		96	70 - 111
cis-1,3-Dichloropropene	10.0	9.66		ug/L		97	77 - 117
1,2-Dibromo-3-Chloropropane	10.0	9.07	J	ug/L		91	58 - 141
Dibromomethane	10.0	9.29		ug/L		93	61 - 142
1,2-Dichlorobenzene	10.0	9.80		ug/L		98	70 - 120
1,3-Dichlorobenzene	10.0	9.73		ug/L		97	72 - 116
1,4-Dichlorobenzene	10.0	9.89		ug/L		99	75 - 117
Dichlorobromomethane	10.0	9.49		ug/L		95	75 - 120
Dichlorodifluoromethane	10.0	8.42		ug/L		84	20 - 141
1,1-Dichloroethane	10.0	9.96		ug/L		100	70 - 135
1,2-Dichloroethane	10.0	9.38		ug/L		94	58 - 143
1,1-Dichloroethene	10.0	9.37		ug/L		94	70 - 117
1,2-Dichloropropane	10.0	9.65		ug/L		96	58 - 150
1,3-Dichloropropane	10.0	9.74		ug/L		97	69 - 134
2,2-Dichloropropane	10.0	10.0		ug/L		100	50 - 140
1,1-Dichloropropene	10.0	9.86		ug/L		99	75 - 120
Ethylbenzene	10.0	10.3		ug/L		103	75 - 119
Ethylene Dibromide	10.0	9.44		ug/L		94	66 - 133
Hexachlorobutadiene	10.0	9.30		ug/L		93	56 - 125
Isopropylbenzene	10.0	10.2		ug/L		102	75 - 125
4-Isopropyltoluene	10.0	10.3		ug/L		103	66 - 120
Methylene Chloride	10.0	9.57		ug/L		96	70 - 115
Methyl tert-butyl ether	10.0	9.65		ug/L		97	65 - 125
m-Xylene & p-Xylene	10.0	9.59		ug/L		96	75 - 119
Naphthalene	10.0	9.48		ug/L		95	55 - 134
n-Butylbenzene	10.0	9.75		ug/L		98	70 - 120
N-Propylbenzene	10.0	10.3		ug/L		103	70 - 124
o-Xylene	10.0	10.5		ug/L		105	74 - 120
sec-Butylbenzene	10.0	10.4		ug/L		104	70 - 125
Styrene	10.0	9.85		ug/L		98	76 - 116
tert-Butylbenzene	10.0	9.79		ug/L		98	70 - 121
1,1,1,2-Tetrachloroethane	10.0	9.62		ug/L		96	64 - 130
1,1,1,2,2-Tetrachloroethane	10.0	10.5		ug/L		105	65 - 130
Tetrachloroethene	10.0	9.15		ug/L		92	70 - 124
Toluene	10.0	9.34		ug/L		93	75 - 120

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: LCS 580-240388/6**  
**Matrix: Water**  
**Analysis Batch: 240388**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	10.0	9.29		ug/L		93	72 - 113
trans-1,3-Dichloropropene	10.0	9.47		ug/L		95	73 - 122
1,2,3-Trichlorobenzene	10.0	9.92		ug/L		99	55 - 133
1,2,4-Trichlorobenzene	10.0	9.27		ug/L		93	56 - 129
1,1,1-Trichloroethane	10.0	9.52		ug/L		95	65 - 130
1,1,2-Trichloroethane	10.0	9.61		ug/L		96	69 - 135
Trichloroethene	10.0	9.61		ug/L		96	70 - 125
Trichlorofluoromethane	10.0	8.69		ug/L		87	49 - 130
1,2,3-Trichloropropane	10.0	10.1		ug/L		101	65 - 135
1,2,4-Trimethylbenzene	10.0	9.96		ug/L		100	75 - 121
1,3,5-Trimethylbenzene	10.0	9.96		ug/L		100	75 - 122
Vinyl chloride	10.0	10.2		ug/L		102	56 - 114

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		75 - 125
Dibromofluoromethane (Surr)	99		77 - 118
1,2-Dichloroethane-d4 (Surr)	100		65 - 143
Toluene-d8 (Surr)	102		82 - 122
Trifluorotoluene (Surr)	94		80 - 141

**Lab Sample ID: LCSD 580-240388/7**  
**Matrix: Water**  
**Analysis Batch: 240388**

**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
Benzene	10.0	9.75		ug/L		97	80 - 120	3	14
Bromobenzene	10.0	9.52		ug/L		95	75 - 115	4	13
Bromoform	10.0	8.13		ug/L		81	55 - 130	7	20
Bromomethane	10.0	9.28		ug/L		93	55 - 125	2	30
Carbon tetrachloride	10.0	9.61		ug/L		96	65 - 124	1	19
Chlorobenzene	10.0	10.1		ug/L		101	80 - 120	1	15
Chlorobromomethane	10.0	9.49		ug/L		95	65 - 120	1	17
Chlorodibromomethane	10.0	8.87		ug/L		89	71 - 118	5	21
Chloroethane	10.0	8.11		ug/L		81	60 - 126	15	30
Chloroform	10.0	9.92		ug/L		99	80 - 119	1	15
Chloromethane	10.0	9.20		ug/L		92	40 - 149	1	22
2-Chlorotoluene	10.0	9.46		ug/L		95	69 - 125	3	15
4-Chlorotoluene	10.0	9.67		ug/L		97	68 - 121	2	15
cis-1,2-Dichloroethene	10.0	9.31		ug/L		93	70 - 111	3	15
cis-1,3-Dichloropropene	10.0	9.44		ug/L		94	77 - 117	2	24
1,2-Dibromo-3-Chloropropane	10.0	8.07	J	ug/L		81	58 - 141	12	30
Dibromomethane	10.0	8.69		ug/L		87	61 - 142	7	15
1,2-Dichlorobenzene	10.0	9.78		ug/L		98	70 - 120	0	15
1,3-Dichlorobenzene	10.0	9.96		ug/L		100	72 - 116	2	14
1,4-Dichlorobenzene	10.0	9.59		ug/L		96	75 - 117	3	17
Dichlorobromomethane	10.0	9.57		ug/L		96	75 - 120	1	14
Dichlorodifluoromethane	10.0	9.21		ug/L		92	20 - 141	9	35
1,1-Dichloroethane	10.0	9.72		ug/L		97	70 - 135	2	20

TestAmerica Seattle



# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

Lab Sample ID: LCSD 580-240388/7

Client Sample ID: Lab Control Sample Dup

Matrix: Water

Prep Type: Total/NA

Analysis Batch: 240388

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2-Dichloroethane	10.0	9.26		ug/L		93	58 - 143	1	17
1,1-Dichloroethene	10.0	9.25		ug/L		92	70 - 117	1	21
1,2-Dichloropropane	10.0	9.55		ug/L		95	58 - 150	1	15
1,3-Dichloropropane	10.0	9.49		ug/L		95	69 - 134	3	23
2,2-Dichloropropane	10.0	9.83		ug/L		98	50 - 140	2	20
1,1-Dichloropropene	10.0	9.81		ug/L		98	75 - 120	1	20
Ethylbenzene	10.0	10.1		ug/L		101	75 - 119	2	14
Ethylene Dibromide	10.0	9.07		ug/L		91	66 - 133	4	17
Hexachlorobutadiene	10.0	9.46		ug/L		95	56 - 125	2	19
Isopropylbenzene	10.0	9.87		ug/L		99	75 - 125	3	20
4-Isopropyltoluene	10.0	10.2		ug/L		102	66 - 120	1	13
Methylene Chloride	10.0	9.27		ug/L		93	70 - 115	3	19
Methyl tert-butyl ether	10.0	9.14		ug/L		91	65 - 125	5	18
m-Xylene & p-Xylene	10.0	9.59		ug/L		96	75 - 119	0	14
Naphthalene	10.0	8.95		ug/L		90	55 - 134	6	30
n-Butylbenzene	10.0	9.71		ug/L		97	70 - 120	0	20
N-Propylbenzene	10.0	10.3		ug/L		103	70 - 124	0	13
o-Xylene	10.0	10.2		ug/L		102	74 - 120	3	16
sec-Butylbenzene	10.0	10.3		ug/L		103	70 - 125	2	15
Styrene	10.0	9.70		ug/L		97	76 - 116	1	16
tert-Butylbenzene	10.0	9.88		ug/L		99	70 - 121	1	14
1,1,1,2-Tetrachloroethane	10.0	9.30		ug/L		93	64 - 130	3	20
1,1,1,2,2-Tetrachloroethane	10.0	10.1		ug/L		101	65 - 130	5	18
Tetrachloroethene	10.0	9.19		ug/L		92	70 - 124	0	20
Toluene	10.0	9.42		ug/L		94	75 - 120	1	19
trans-1,2-Dichloroethene	10.0	9.25		ug/L		93	72 - 113	0	21
trans-1,3-Dichloropropene	10.0	9.29		ug/L		93	73 - 122	2	30
1,2,3-Trichlorobenzene	10.0	9.76		ug/L		98	55 - 133	2	35
1,2,4-Trichlorobenzene	10.0	9.24		ug/L		92	56 - 129	0	22
1,1,1-Trichloroethane	10.0	9.36		ug/L		94	65 - 130	2	18
1,1,2-Trichloroethane	10.0	9.18		ug/L		92	69 - 135	5	24
Trichloroethene	10.0	9.25		ug/L		92	70 - 125	4	23
Trichlorofluoromethane	10.0	8.97		ug/L		90	49 - 130	3	35
1,2,3-Trichloropropane	10.0	8.43		ug/L		84	65 - 135	18	22
1,2,4-Trimethylbenzene	10.0	9.92		ug/L		99	75 - 121	0	16
1,3,5-Trimethylbenzene	10.0	9.96		ug/L		100	75 - 122	0	14
Vinyl chloride	10.0	10.1		ug/L		101	56 - 114	0	23

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	97		75 - 125
Dibromofluoromethane (Surr)	99		77 - 118
1,2-Dichloroethane-d4 (Surr)	98		65 - 143
Toluene-d8 (Surr)	102		82 - 122
Trifluorotoluene (Surr)	96		80 - 141

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: MB 580-240562/5**

**Matrix: Water**

**Analysis Batch: 240562**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			03/15/17 13:12	1
Bromobenzene	ND		2.0		ug/L			03/15/17 13:12	1
Bromoform	ND		1.0		ug/L			03/15/17 13:12	1
Bromomethane	ND		5.0		ug/L			03/15/17 13:12	1
Carbon tetrachloride	ND		3.0		ug/L			03/15/17 13:12	1
Chlorobenzene	ND		2.0		ug/L			03/15/17 13:12	1
Chlorobromomethane	ND		2.0		ug/L			03/15/17 13:12	1
Chlorodibromomethane	ND		1.0		ug/L			03/15/17 13:12	1
Chloroethane	ND		5.0		ug/L			03/15/17 13:12	1
Chloroform	ND		5.0		ug/L			03/15/17 13:12	1
Chloromethane	ND		5.0		ug/L			03/15/17 13:12	1
2-Chlorotoluene	ND		3.0		ug/L			03/15/17 13:12	1
4-Chlorotoluene	ND		2.0		ug/L			03/15/17 13:12	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			03/15/17 13:12	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			03/15/17 13:12	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			03/15/17 13:12	1
Dibromomethane	ND		1.0		ug/L			03/15/17 13:12	1
1,2-Dichlorobenzene	ND		2.0		ug/L			03/15/17 13:12	1
1,3-Dichlorobenzene	ND		2.0		ug/L			03/15/17 13:12	1
1,4-Dichlorobenzene	ND		4.0		ug/L			03/15/17 13:12	1
Dichlorobromomethane	ND		2.0		ug/L			03/15/17 13:12	1
Dichlorodifluoromethane	ND		2.0		ug/L			03/15/17 13:12	1
1,1-Dichloroethane	ND		2.0		ug/L			03/15/17 13:12	1
1,2-Dichloroethane	ND		1.0		ug/L			03/15/17 13:12	1
1,1-Dichloroethene	ND		2.0		ug/L			03/15/17 13:12	1
1,2-Dichloropropane	ND		1.0		ug/L			03/15/17 13:12	1
1,3-Dichloropropane	ND		1.0		ug/L			03/15/17 13:12	1
2,2-Dichloropropane	ND		3.0		ug/L			03/15/17 13:12	1
1,1-Dichloropropene	ND		3.0		ug/L			03/15/17 13:12	1
Ethylbenzene	ND		3.0		ug/L			03/15/17 13:12	1
Ethylene Dibromide	ND		1.0		ug/L			03/15/17 13:12	1
Hexachlorobutadiene	ND		2.0		ug/L			03/15/17 13:12	1
Isopropylbenzene	ND		2.0		ug/L			03/15/17 13:12	1
4-Isopropyltoluene	ND		3.0		ug/L			03/15/17 13:12	1
Methylene Chloride	ND		5.0		ug/L			03/15/17 13:12	1
Methyl tert-butyl ether	ND		1.0		ug/L			03/15/17 13:12	1
m-Xylene & p-Xylene	ND		3.0		ug/L			03/15/17 13:12	1
Naphthalene	ND		2.0		ug/L			03/15/17 13:12	1
n-Butylbenzene	ND		3.0		ug/L			03/15/17 13:12	1
N-Propylbenzene	ND		3.0		ug/L			03/15/17 13:12	1
o-Xylene	ND		2.0		ug/L			03/15/17 13:12	1
sec-Butylbenzene	ND		3.0		ug/L			03/15/17 13:12	1
Styrene	ND		5.0		ug/L			03/15/17 13:12	1
tert-Butylbenzene	ND		3.0		ug/L			03/15/17 13:12	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			03/15/17 13:12	1
1,1,1,2,2-Tetrachloroethane	ND		1.0		ug/L			03/15/17 13:12	1
Tetrachloroethene	ND		3.0		ug/L			03/15/17 13:12	1
Toluene	ND		2.0		ug/L			03/15/17 13:12	1

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: MB 580-240562/5**  
**Matrix: Water**  
**Analysis Batch: 240562**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		3.0		ug/L			03/15/17 13:12	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			03/15/17 13:12	1
1,2,3-Trichlorobenzene	ND		2.0		ug/L			03/15/17 13:12	1
1,2,4-Trichlorobenzene	ND		1.0		ug/L			03/15/17 13:12	1
1,1,1-Trichloroethane	ND		3.0		ug/L			03/15/17 13:12	1
1,1,2-Trichloroethane	ND		1.0		ug/L			03/15/17 13:12	1
Trichloroethene	ND		3.0		ug/L			03/15/17 13:12	1
Trichlorofluoromethane	ND		3.0		ug/L			03/15/17 13:12	1
1,2,3-Trichloropropane	ND		2.0		ug/L			03/15/17 13:12	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			03/15/17 13:12	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			03/15/17 13:12	1
Vinyl chloride	ND		1.0		ug/L			03/15/17 13:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		75 - 125		03/15/17 13:12	1
Dibromofluoromethane (Surr)	97		77 - 118		03/15/17 13:12	1
1,2-Dichloroethane-d4 (Surr)	103		65 - 143		03/15/17 13:12	1
Toluene-d8 (Surr)	103		82 - 122		03/15/17 13:12	1
Trifluorotoluene (Surr)	97		80 - 141		03/15/17 13:12	1

**Lab Sample ID: LCS 580-240562/6**  
**Matrix: Water**  
**Analysis Batch: 240562**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	10.0	12.4	*	ug/L		124	80 - 120
Bromobenzene	10.0	11.1		ug/L		111	75 - 115
Bromoform	10.0	9.18		ug/L		92	55 - 130
Bromomethane	10.0	11.4		ug/L		114	55 - 125
Carbon tetrachloride	10.0	11.3		ug/L		113	65 - 124
Chlorobenzene	10.0	11.7		ug/L		117	80 - 120
Chlorobromomethane	10.0	10.9		ug/L		109	65 - 120
Chlorodibromomethane	10.0	10.5		ug/L		105	71 - 118
Chloroethane	10.0	11.0		ug/L		110	60 - 126
Chloroform	10.0	12.3	*	ug/L		123	80 - 119
Chloromethane	10.0	10.5		ug/L		105	40 - 149
2-Chlorotoluene	10.0	11.1		ug/L		111	69 - 125
4-Chlorotoluene	10.0	11.3		ug/L		113	68 - 121
cis-1,2-Dichloroethene	10.0	11.1		ug/L		111	70 - 111
cis-1,3-Dichloropropene	10.0	11.4		ug/L		114	77 - 117
1,2-Dibromo-3-Chloropropane	10.0	10.1		ug/L		101	58 - 141
Dibromomethane	10.0	10.4		ug/L		104	61 - 142
1,2-Dichlorobenzene	10.0	11.3		ug/L		113	70 - 120
1,3-Dichlorobenzene	10.0	11.3		ug/L		113	72 - 116
1,4-Dichlorobenzene	10.0	11.2		ug/L		112	75 - 117
Dichlorobromomethane	10.0	11.4		ug/L		114	75 - 120
Dichlorodifluoromethane	10.0	9.86		ug/L		99	20 - 141
1,1-Dichloroethane	10.0	11.9		ug/L		119	70 - 135

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

Lab Sample ID: LCS 580-240562/6

Matrix: Water

Analysis Batch: 240562

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	10.0	11.7		ug/L		117	58 - 143
1,1-Dichloroethene	10.0	11.5		ug/L		115	70 - 117
1,2-Dichloropropane	10.0	12.1		ug/L		121	58 - 150
1,3-Dichloropropane	10.0	11.4		ug/L		114	69 - 134
2,2-Dichloropropane	10.0	11.8		ug/L		118	50 - 140
1,1-Dichloropropene	10.0	12.1	*	ug/L		121	75 - 120
Ethylbenzene	10.0	11.5		ug/L		115	75 - 119
Ethylene Dibromide	10.0	11.1		ug/L		111	66 - 133
Hexachlorobutadiene	10.0	9.86		ug/L		99	56 - 125
Isopropylbenzene	10.0	12.0		ug/L		120	75 - 125
4-Isopropyltoluene	10.0	12.0		ug/L		120	66 - 120
Methylene Chloride	10.0	11.9	*	ug/L		119	70 - 115
Methyl tert-butyl ether	10.0	11.5		ug/L		115	65 - 125
m-Xylene & p-Xylene	10.0	11.5		ug/L		115	75 - 119
Naphthalene	10.0	10.7		ug/L		107	55 - 134
n-Butylbenzene	10.0	11.4		ug/L		114	70 - 120
N-Propylbenzene	10.0	12.3		ug/L		123	70 - 124
o-Xylene	10.0	12.0		ug/L		120	74 - 120
sec-Butylbenzene	10.0	12.1		ug/L		121	70 - 125
Styrene	10.0	11.5		ug/L		115	76 - 116
tert-Butylbenzene	10.0	11.3		ug/L		113	70 - 121
1,1,1,2-Tetrachloroethane	10.0	10.9		ug/L		109	64 - 130
1,1,1,2,2-Tetrachloroethane	10.0	11.8		ug/L		118	65 - 130
Tetrachloroethene	10.0	10.6		ug/L		106	70 - 124
Toluene	10.0	11.2		ug/L		112	75 - 120
trans-1,2-Dichloroethene	10.0	11.8	*	ug/L		118	72 - 113
trans-1,3-Dichloropropene	10.0	10.9		ug/L		109	73 - 122
1,2,3-Trichlorobenzene	10.0	11.2		ug/L		112	55 - 133
1,2,4-Trichlorobenzene	10.0	10.2		ug/L		102	56 - 129
1,1,1-Trichloroethane	10.0	11.5		ug/L		115	65 - 130
1,1,2-Trichloroethane	10.0	11.8		ug/L		118	69 - 135
Trichloroethene	10.0	11.3		ug/L		113	70 - 125
Trichlorofluoromethane	10.0	10.1		ug/L		101	49 - 130
1,2,3-Trichloropropane	10.0	11.2		ug/L		112	65 - 135
1,2,4-Trimethylbenzene	10.0	11.7		ug/L		117	75 - 121
1,3,5-Trimethylbenzene	10.0	11.7		ug/L		117	75 - 122
Vinyl chloride	10.0	11.7	*	ug/L		117	56 - 114

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	93		75 - 125
Dibromofluoromethane (Surr)	100		77 - 118
1,2-Dichloroethane-d4 (Surr)	101		65 - 143
Toluene-d8 (Surr)	100		82 - 122
Trifluorotoluene (Surr)	94		80 - 141

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

Lab Sample ID: LCSD 580-240562/7

Matrix: Water

Analysis Batch: 240562

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
Benzene	10.0	11.1		ug/L		111	80 - 120	11	14
Bromobenzene	10.0	10.1		ug/L		101	75 - 115	9	13
Bromoform	10.0	7.83		ug/L		78	55 - 130	16	20
Bromomethane	10.0	10.0		ug/L		100	55 - 125	13	30
Carbon tetrachloride	10.0	9.95		ug/L		100	65 - 124	13	19
Chlorobenzene	10.0	10.6		ug/L		106	80 - 120	10	15
Chlorobromomethane	10.0	10.0		ug/L		100	65 - 120	9	17
Chlorodibromomethane	10.0	9.57		ug/L		96	71 - 118	9	21
Chloroethane	10.0	10.2		ug/L		102	60 - 126	8	30
Chloroform	10.0	11.0		ug/L		110	80 - 119	11	15
Chloromethane	10.0	8.91		ug/L		89	40 - 149	16	22
2-Chlorotoluene	10.0	10.5		ug/L		105	69 - 125	5	15
4-Chlorotoluene	10.0	10.2		ug/L		102	68 - 121	10	15
cis-1,2-Dichloroethene	10.0	10.9		ug/L		109	70 - 111	3	15
cis-1,3-Dichloropropene	10.0	10.1		ug/L		101	77 - 117	12	24
1,2-Dibromo-3-Chloropropane	10.0	8.20	J	ug/L		82	58 - 141	21	30
Dibromomethane	10.0	9.15		ug/L		91	61 - 142	13	15
1,2-Dichlorobenzene	10.0	10.2		ug/L		102	70 - 120	10	15
1,3-Dichlorobenzene	10.0	10.3		ug/L		103	72 - 116	9	14
1,4-Dichlorobenzene	10.0	10.3		ug/L		103	75 - 117	9	17
Dichlorobromomethane	10.0	10.3		ug/L		103	75 - 120	10	14
Dichlorodifluoromethane	10.0	8.67		ug/L		87	20 - 141	13	35
1,1-Dichloroethane	10.0	10.9		ug/L		109	70 - 135	9	20
1,2-Dichloroethane	10.0	10.3		ug/L		103	58 - 143	12	17
1,1-Dichloroethene	10.0	9.77		ug/L		98	70 - 117	17	21
1,2-Dichloropropane	10.0	11.1		ug/L		111	58 - 150	9	15
1,3-Dichloropropane	10.0	10.4		ug/L		104	69 - 134	9	23
2,2-Dichloropropane	10.0	9.98		ug/L		100	50 - 140	17	20
1,1-Dichloropropene	10.0	10.8		ug/L		108	75 - 120	11	20
Ethylbenzene	10.0	10.7		ug/L		107	75 - 119	7	14
Ethylene Dibromide	10.0	10.1		ug/L		101	66 - 133	10	17
Hexachlorobutadiene	10.0	8.44		ug/L		84	56 - 125	16	19
Isopropylbenzene	10.0	10.4		ug/L		104	75 - 125	14	20
4-Isopropyltoluene	10.0	10.4	*	ug/L		104	66 - 120	14	13
Methylene Chloride	10.0	10.4		ug/L		104	70 - 115	13	19
Methyl tert-butyl ether	10.0	10.2		ug/L		102	65 - 125	12	18
m-Xylene & p-Xylene	10.0	10.1		ug/L		101	75 - 119	13	14
Naphthalene	10.0	9.22		ug/L		92	55 - 134	14	30
n-Butylbenzene	10.0	10.2		ug/L		102	70 - 120	11	20
N-Propylbenzene	10.0	10.7	*	ug/L		107	70 - 124	14	13
o-Xylene	10.0	10.7		ug/L		107	74 - 120	11	16
sec-Butylbenzene	10.0	10.8		ug/L		108	70 - 125	12	15
Styrene	10.0	10.4		ug/L		104	76 - 116	10	16
tert-Butylbenzene	10.0	10.2		ug/L		102	70 - 121	11	14
1,1,1,2-Tetrachloroethane	10.0	9.36		ug/L		94	64 - 130	15	20
1,1,1,2-Tetrachloroethane	10.0	10.8		ug/L		108	65 - 130	9	18
Tetrachloroethene	10.0	5.00	*	ug/L		50	70 - 124	71	20
Toluene	10.0	9.96		ug/L		100	75 - 120	11	19

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: LCSD 580-240562/7**

**Matrix: Water**

**Analysis Batch: 240562**

**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
trans-1,2-Dichloroethene	10.0	10.3		ug/L		103	72 - 113	14	21
trans-1,3-Dichloropropene	10.0	9.67		ug/L		97	73 - 122	12	30
1,2,3-Trichlorobenzene	10.0	9.82		ug/L		98	55 - 133	13	35
1,2,4-Trichlorobenzene	10.0	9.31		ug/L		93	56 - 129	9	22
1,1,1-Trichloroethane	10.0	10.3		ug/L		103	65 - 130	11	18
1,1,2-Trichloroethane	10.0	10.4		ug/L		104	69 - 135	12	24
Trichloroethene	10.0	9.89		ug/L		99	70 - 125	14	23
Trichlorofluoromethane	10.0	8.74		ug/L		87	49 - 130	14	35
1,2,3-Trichloropropane	10.0	10.4		ug/L		104	65 - 135	8	22
1,2,4-Trimethylbenzene	10.0	10.3		ug/L		103	75 - 121	13	16
1,3,5-Trimethylbenzene	10.0	10.1		ug/L		101	75 - 122	14	14
Vinyl chloride	10.0	10.2		ug/L		102	56 - 114	14	23

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	96		75 - 125
Dibromofluoromethane (Surr)	99		77 - 118
1,2-Dichloroethane-d4 (Surr)	100		65 - 143
Toluene-d8 (Surr)	100		82 - 122
Trifluorotoluene (Surr)	95		80 - 141

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

**Lab Sample ID: MB 580-240442/6**

**Matrix: Water**

**Analysis Batch: 240442**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/14/17 11:35	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	106		50 - 150		03/14/17 11:35	1
4-Bromofluorobenzene (Surr)	100		50 - 150		03/14/17 11:35	1

**Lab Sample ID: LCS 580-240442/7**

**Matrix: Water**

**Analysis Batch: 240442**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	1.08		mg/L		108	60 - 120

Surrogate	LCS %Recovery	LCS Qualifier	LCS Limits
Trifluorotoluene (Surr)	107		50 - 150
4-Bromofluorobenzene (Surr)	106		50 - 150

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: LCSD 580-240442/8**

**Matrix: Water**

**Analysis Batch: 240442**

**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
Gasoline Range Organics (GRO) -C6-C10	1.00	1.08		mg/L		108	60 - 120	0	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>						
Trifluorotoluene (Surr)	108		50 - 150						
4-Bromofluorobenzene (Surr)	106		50 - 150						

**Lab Sample ID: 580-66540-7 MS**

**Matrix: Water**

**Analysis Batch: 240442**

**Client Sample ID: MW-7**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	ND		1.00	0.952		mg/L		95	60 - 120		
<b>Surrogate</b>	<b>%Recovery</b>	<b>MS Qualifier</b>	<b>Limits</b>								
Trifluorotoluene (Surr)	102		50 - 150								
4-Bromofluorobenzene (Surr)	105		50 - 150								

**Lab Sample ID: 580-66540-7 MSD**

**Matrix: Water**

**Analysis Batch: 240442**

**Client Sample ID: MW-7**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C6-C10	ND		1.00	0.989		mg/L		99	60 - 120	4	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>MSD Qualifier</b>	<b>Limits</b>								
Trifluorotoluene (Surr)	104		50 - 150								
4-Bromofluorobenzene (Surr)	105		50 - 150								

**Lab Sample ID: MB 580-240574/6**

**Matrix: Water**

**Analysis Batch: 240574**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/15/17 12:37	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>MB Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Trifluorotoluene (Surr)	103		50 - 150					03/15/17 12:37	1
4-Bromofluorobenzene (Surr)	100		50 - 150					03/15/17 12:37	1

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: LCS 580-240574/7**

**Matrix: Water**

**Analysis Batch: 240574**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	1.05		mg/L		105	60 - 120
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
Trifluorotoluene (Surr)	106		50 - 150				
4-Bromofluorobenzene (Surr)	105		50 - 150				

**Lab Sample ID: LCSD 580-240574/8**

**Matrix: Water**

**Analysis Batch: 240574**

**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
Gasoline Range Organics (GRO) -C6-C10	1.00	1.08		mg/L		108	60 - 120	2	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>						
Trifluorotoluene (Surr)	107		50 - 150						
4-Bromofluorobenzene (Surr)	106		50 - 150						

**Lab Sample ID: MB 580-240593/4**

**Matrix: Water**

**Analysis Batch: 240593**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		0.050		mg/L			03/15/17 11:33	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>MB Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Trifluorotoluene (Surr)	93		50 - 150					03/15/17 11:33	1
4-Bromofluorobenzene (Surr)	92		50 - 150					03/15/17 11:33	1

**Lab Sample ID: LCS 580-240593/5**

**Matrix: Water**

**Analysis Batch: 240593**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	0.822		mg/L		82	60 - 120
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
Trifluorotoluene (Surr)	91		50 - 150				
4-Bromofluorobenzene (Surr)	93		50 - 150				

TestAmerica Seattle



# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: LCSD 580-240593/6**

**Matrix: Water**

**Analysis Batch: 240593**

**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
Gasoline Range Organics (GRO) -C6-C10	1.00	1.05	*	mg/L		105	60 - 120	25	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Trifluorotoluene (Surr)	101		50 - 150
4-Bromofluorobenzene (Surr)	93		50 - 150

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

**Lab Sample ID: MB 580-240322/1-A**

**Matrix: Water**

**Analysis Batch: 240402**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 240322**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	ND		0.10		mg/L		03/13/17 10:56	03/13/17 19:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	74		50 - 150	03/13/17 10:56	03/13/17 19:48	1

**Lab Sample ID: LCS 580-240322/2-A**

**Matrix: Water**

**Analysis Batch: 240402**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 240322**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
DRO (nC10-<nC25)	2.01	1.73		mg/L		86	75 - 125

Surrogate	LCS %Recovery	LCS Qualifier	Limits
o-Terphenyl	82		50 - 150

**Lab Sample ID: LCSD 580-240322/3-A**

**Matrix: Water**

**Analysis Batch: 240402**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 240322**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
DRO (nC10-<nC25)	2.01	1.52		mg/L		75	75 - 125	13	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
o-Terphenyl	64		50 - 150

**Lab Sample ID: MB 580-240600/1-A**

**Matrix: Water**

**Analysis Batch: 240570**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 240600**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	ND		0.10		mg/L		03/15/17 13:59	03/15/17 17:24	1

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

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

**Lab Sample ID: MB 580-240600/1-A**  
**Matrix: Water**  
**Analysis Batch: 240570**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 240600**

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
<i>o</i> -Terphenyl	83		50 - 150	03/15/17 13:59	03/15/17 17:24	1

**Lab Sample ID: LCS 580-240600/2-A**  
**Matrix: Water**  
**Analysis Batch: 240570**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 240600**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	RPD	Limit
DRO (nC10-<nC25)	2.01	1.73		mg/L		86	75 - 125		

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	84		50 - 150

**Lab Sample ID: LCSD 580-240600/3-A**  
**Matrix: Water**  
**Analysis Batch: 240570**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 240600**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
DRO (nC10-<nC25)	2.01	1.67		mg/L		83	75 - 125	3	20

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	81		50 - 150

**Lab Sample ID: 580-66540-7 MS**  
**Matrix: Water**  
**Analysis Batch: 240570**

**Client Sample ID: MW-7**  
**Prep Type: Total/NA**  
**Prep Batch: 240600**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits	RPD	Limit
DRO (nC10-<nC25)	ND	F1	2.01	1.66		mg/L		81	75 - 125		

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	78		50 - 150

**Lab Sample ID: 580-66540-7 MSD**  
**Matrix: Water**  
**Analysis Batch: 240570**

**Client Sample ID: MW-7**  
**Prep Type: Total/NA**  
**Prep Batch: 240600**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
DRO (nC10-<nC25)	ND	F1	2.14	1.62	F1	mg/L		74	75 - 125	2	20

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
<i>o</i> -Terphenyl	73		50 - 150

TestAmerica Seattle

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

## Client Sample ID: MW-1

Date Collected: 03/02/17 11:40

Date Received: 03/07/17 10:50

## Lab Sample ID: 580-66540-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240198	03/10/17 13:37	D1R	TAL SEA
Total/NA	Analysis	8260C	DL	10	240562	03/15/17 20:26	W1T	TAL SEA
Total/NA	Analysis	AK101		1	240442	03/15/17 00:02	J1J	TAL SEA
Total/NA	Prep	3510C			240600	03/15/17 13:59	Y1W	TAL SEA
Total/NA	Analysis	AK102 & 103		1	240570	03/15/17 20:44	KZ1	TAL SEA

## Client Sample ID: MW-2

Date Collected: 03/01/17 17:40

Date Received: 03/07/17 10:50

## Lab Sample ID: 580-66540-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240198	03/10/17 14:03	D1R	TAL SEA
Total/NA	Analysis	8260C	DL	10	240562	03/15/17 20:53	W1T	TAL SEA
Total/NA	Analysis	AK101		1	240442	03/15/17 00:35	J1J	TAL SEA
Total/NA	Prep	3510C			240322	03/13/17 10:56	JCV	TAL SEA
Total/NA	Analysis	AK102 & 103		1	240402	03/13/17 20:54	CJ	TAL SEA

## Client Sample ID: MW-3

Date Collected: 03/02/17 10:40

Date Received: 03/07/17 10:50

## Lab Sample ID: 580-66540-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240198	03/10/17 14:30	D1R	TAL SEA
Total/NA	Analysis	8260C	RA	1	240562	03/15/17 19:59	W1T	TAL SEA
Total/NA	Analysis	AK101		1	240574	03/15/17 19:41	TL1	TAL SEA
Total/NA	Prep	3510C			240600	03/15/17 13:59	Y1W	TAL SEA
Total/NA	Analysis	AK102 & 103		1	240570	03/15/17 21:28	KZ1	TAL SEA

## Client Sample ID: MW-4

Date Collected: 03/01/17 13:05

Date Received: 03/07/17 10:50

## Lab Sample ID: 580-66540-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240198	03/10/17 14:56	D1R	TAL SEA
Total/NA	Analysis	AK101		1	240442	03/14/17 23:30	J1J	TAL SEA
Total/NA	Prep	3510C			240322	03/13/17 10:56	JCV	TAL SEA
Total/NA	Analysis	AK102 & 103		1	240402	03/13/17 21:17	CJ	TAL SEA

TestAmerica Seattle

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: MW-5**  
**Date Collected: 03/01/17 15:35**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-5**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240198	03/10/17 15:23	D1R	TAL SEA
Total/NA	Analysis	8260C	DL	10	240562	03/15/17 21:20	W1T	TAL SEA
Total/NA	Analysis	AK101		1	240442	03/15/17 01:08	J1J	TAL SEA
Total/NA	Prep	3510C			240322	03/13/17 10:56	JCV	TAL SEA
Total/NA	Analysis	AK102 & 103		1	240402	03/13/17 21:39	CJ	TAL SEA

**Client Sample ID: MW-6**  
**Date Collected: 03/01/17 14:30**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-6**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240198	03/10/17 15:50	D1R	TAL SEA
Total/NA	Analysis	AK101		1	240574	03/15/17 20:14	TL1	TAL SEA
Total/NA	Prep	3510C			240322	03/13/17 10:56	JCV	TAL SEA
Total/NA	Analysis	AK102 & 103		1	240402	03/13/17 22:01	CJ	TAL SEA

**Client Sample ID: MW-7**  
**Date Collected: 03/01/17 11:40**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-7**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240198	03/10/17 16:16	D1R	TAL SEA
Total/NA	Analysis	AK101		1	240442	03/15/17 02:13	J1J	TAL SEA
Total/NA	Prep	3510C			240600	03/15/17 13:59	Y1W	TAL SEA
Total/NA	Analysis	AK102 & 103		1	240570	03/15/17 18:30	KZ1	TAL SEA

**Client Sample ID: MW-8**  
**Date Collected: 03/01/17 16:50**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-8**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240198	03/10/17 17:36	D1R	TAL SEA
Total/NA	Analysis	AK101		1	240574	03/15/17 19:09	TL1	TAL SEA
Total/NA	Prep	3510C			240322	03/13/17 10:56	JCV	TAL SEA
Total/NA	Analysis	AK102 & 103		1	240402	03/13/17 22:23	CJ	TAL SEA

**Client Sample ID: MW-9**  
**Date Collected: 03/02/17 15:35**  
**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-9**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240198	03/10/17 18:03	D1R	TAL SEA

TestAmerica Seattle

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

## Client Sample ID: MW-9

Date Collected: 03/02/17 15:35

Date Received: 03/07/17 10:50

## Lab Sample ID: 580-66540-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	AK101		1	240574	03/15/17 17:31	TL1	TAL SEA
Total/NA	Prep	3510C			240600	03/15/17 13:59	Y1W	TAL SEA
Total/NA	Analysis	AK102 & 103		1	240570	03/15/17 21:50	KZ1	TAL SEA

## Client Sample ID: MW-10

Date Collected: 03/02/17 14:10

Date Received: 03/07/17 10:50

## Lab Sample ID: 580-66540-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240198	03/10/17 18:29	D1R	TAL SEA
Total/NA	Analysis	AK101		1	240574	03/15/17 18:04	TL1	TAL SEA
Total/NA	Prep	3510C			240600	03/15/17 13:59	Y1W	TAL SEA
Total/NA	Analysis	AK102 & 103		1	240570	03/15/17 22:12	KZ1	TAL SEA

## Client Sample ID: MW-11

Date Collected: 03/02/17 14:45

Date Received: 03/07/17 10:50

## Lab Sample ID: 580-66540-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240388	03/13/17 17:32	TL1	TAL SEA
Total/NA	Analysis	AK101		1	240574	03/16/17 01:40	TL1	TAL SEA
Total/NA	Prep	3510C			240600	03/15/17 13:59	Y1W	TAL SEA
Total/NA	Analysis	AK102 & 103		1	240570	03/15/17 22:34	KZ1	TAL SEA

## Client Sample ID: BD-1

Date Collected: 03/02/17 11:40

Date Received: 03/07/17 10:50

## Lab Sample ID: 580-66540-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240388	03/13/17 17:59	TL1	TAL SEA
Total/NA	Analysis	AK101		1	240574	03/16/17 00:35	TL1	TAL SEA
Total/NA	Prep	3510C			240600	03/15/17 13:59	Y1W	TAL SEA
Total/NA	Analysis	AK102 & 103		1	240570	03/15/17 22:56	KZ1	TAL SEA

## Client Sample ID: BD-2

Date Collected: 03/01/17 17:40

Date Received: 03/07/17 10:50

## Lab Sample ID: 580-66540-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240388	03/13/17 18:27	TL1	TAL SEA
Total/NA	Analysis	AK101		1	240442	03/14/17 22:58	J1J	TAL SEA
Total/NA	Prep	3510C			240322	03/13/17 10:56	JCV	TAL SEA

TestAmerica Seattle

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

**Client Sample ID: BD-2**

**Date Collected: 03/01/17 17:40**

**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-13**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	AK102 & 103		1	240402	03/13/17 22:45	CJ	TAL SEA

**Client Sample ID: Trip Blank**

**Date Collected: 03/02/17 10:40**

**Date Received: 03/07/17 10:50**

**Lab Sample ID: 580-66540-14**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	240388	03/13/17 14:50	TL1	TAL SEA
Total/NA	Analysis	AK101		1	240593	03/15/17 13:05	CJ	TAL SEA

**Laboratory References:**

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

# Certification Summary

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

## Laboratory: TestAmerica Seattle

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-02-18

1

2

3

4

5

6

7

8

9

10

11

# Sample Summary

Client: ARCADIS U.S. Inc  
Project/Site: GE-Nikiski

TestAmerica Job ID: 580-66540-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-66540-1	MW-1	Water	03/02/17 11:40	03/07/17 10:50
580-66540-2	MW-2	Water	03/01/17 17:40	03/07/17 10:50
580-66540-3	MW-3	Water	03/02/17 10:40	03/07/17 10:50
580-66540-4	MW-4	Water	03/01/17 13:05	03/07/17 10:50
580-66540-5	MW-5	Water	03/01/17 15:35	03/07/17 10:50
580-66540-6	MW-6	Water	03/01/17 14:30	03/07/17 10:50
580-66540-7	MW-7	Water	03/01/17 11:40	03/07/17 10:50
580-66540-8	MW-8	Water	03/01/17 16:50	03/07/17 10:50
580-66540-9	MW-9	Water	03/02/17 15:35	03/07/17 10:50
580-66540-10	MW-10	Water	03/02/17 14:10	03/07/17 10:50
580-66540-11	MW-11	Water	03/02/17 14:45	03/07/17 10:50
580-66540-12	BD-1	Water	03/02/17 11:40	03/07/17 10:50
580-66540-13	BD-2	Water	03/01/17 17:40	03/07/17 10:50
580-66540-14	Trip Blank	Water	03/02/17 10:40	03/07/17 10:50



>>> Select a Laboratory <<< Loc: 580  
**66540**

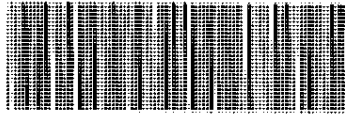
# Chain of Custody Record

**TestAmerica**  
 THE LEADER IN ENVIRONMENTAL TESTING

#N/A  
 #N/A  
 #N/A  
 #N/A

Regulatory Program:  DW  NPDES  RCRA  Other:

TestAmerica Laboratories, Inc.

<b>Client Contact</b>		<b>Project Manager: Matthew Pelton</b>		<b>Site Contact: Michael MacDaniel</b>		<b>Date: 3/3/17</b>		<b>COC No:</b>	
ARCADIS		Tel/Fax:		Lab Contact:		Carrier:		_____ of _____ COCs	
880 H Street STE 101		<b>Analysis Turnaround Time</b>		Filtered Sample (Y/N) Perform MS / MSD (Y/N) VOCs by EPA Method 8260B GRO by AK Method 101 DRO by AK method 102		 580-66540 Chain of Custody		Sampler:	
Anchorage, AK 99501		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS						For Lab Use Only:	
206-465-3161		TAT if different from Below _____						Walk-in Client:	
(xxx) xxx-xxxx FAX		<input checked="" type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day						Lab Sampling:	
Project Name: GE - Nikiski								Job / SDG No.:	
Site: Former TBE machine shop									
P O # B0031255									
<b>Sample Identification</b>		<b>Sample Date</b>	<b>Sample Time</b>	<b>Sample Type (C=Comp, G=Grab)</b>	<b>Matrix</b>	<b># of Cont.</b>			<b>Sample Specific Notes:</b>
MW-1-W-030217	3/2/2017	1140	G	W	8	N	X	X	
MW-2-W-030117	3/1/2017	1740	G	W	8	N	X	X	
MW-3-W-030217	3/2/2017	1040	G	W	8	N	X	X	
MW-4-W-030117	3/1/2017	1305	G	W	8	N	X	X	
MW-5-W-030117	3/1/2017	1535	G	W	8	N	X	X	TBA2 Cooler Cor 0.1 Uncl.0
MW-6-W-030117	3/1/2017	1430	G	W	8	N	X	X	Cooler Dsc lg. blue with Lab
MW-7-W-030117	3/1/2017	1140	G	W	8	N	Y	X	Wet Packs Packing bubble
MW-8-W-030117	3/1/2017	1650	G	W	8	N	X	X	Fed P.O. w/cs
MW-9-W-030217	3/2/2017	1535	G	W	8	N	X	X	
MW-10-W-030217	3/2/2017	1410	G	W	8	N	X	X	TB Cooler IR4 Cor 5.1 Uncl.7
MW-11-W-030217	3/2/2017	1445	G	W	8	N	X	X	Cooler Dsc lg. blue with Lab
									Wet Packs Packing bubble
									Fed P.O. w/cs
<b>Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other</b>									
<b>Possible Hazard Identification:</b>							<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b>		
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.									
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown							<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months		
<b>Special Instructions/QC Requirements &amp; Comments:</b>									
Custody Seals Intact: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd:		Corr'd: 3.4, 3.9		Therm ID No.:	
Relinquished by: <i>[Signature]</i>		Company: ARCADIS		Date/Time: 3/3/17 16:45		Received by: <i>[Signature]</i>		Company: TA-AK	
Relinquished by: <i>[Signature]</i>		Company: TA-AK		Date/Time: 3/6/17 10:00		Received by: <i>[Signature]</i>		Company: TA-Sea	
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Company:	

Form No. CA-C-WI-002, Rev. 4.11, dated 1/24/2017



CLIENT: Arcticis PROJECT: GE-Niskisk  
Date/Time Cooler Arrived 3 / 3 / 17 16:45 Cooler signed for by: Andrew Pilch  
(Print name)

### Preliminary Examination Phase:

Date cooler opened:  same as date received or \_\_\_/\_\_\_/\_\_\_  Cooler not opened  
Cooler opened by (print) Andrew Pilch (sign) [Signature]

1. Delivered by  ALASKA AIRLINES  Fed-Ex  UPS  NAC  LYNDEN  CLIENT  Other: \_\_\_\_\_

Shipment Tracking # if applicable \_\_\_\_\_ (include copy of shipping papers in file)

2. Number of Custody Seals 0 Signed by \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_

- Were custody seals unbroken and intact on arrival?  Yes  No
- 3. Were custody papers sealed in a plastic bag?  Yes  No  Not checked
- 4. Were custody papers filled out properly (ink, signed, etc.)?  Yes  No  Not checked
- 5. Did you sign the custody papers in the appropriate place?  Yes  No  Not checked

6. Was ice used?  Yes  No Type of ice:  blue ice  gel ice  real ice  dry ice Condition of ice: mostly hand

Temperature by Digi-Thermo Probe 3.4 °C Thermometer # Rec # 5  
Acceptance Criteria: 0 - 6°C 3.9

- 7. Was ice changed or added?  Yes  No  Not checked
- 8. Packing in Cooler:  bubble wrap  styrofoam  cardboard  Other: \_\_\_\_\_
- 9. Did samples arrive in plastic bags?  Yes  No  Not checked
- 10. Did all bottles arrive unbroken, and with labels in good condition?  Yes  No  Not checked

Comments  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



# Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 580-66540-1

**Login Number: 66540**  
**List Number: 1**  
**Creator: Gonzales, Steve**

**List Source: TestAmerica Seattle**

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
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?	False	No name
There are no discrepancies between the containers received and the COC.	False	IDs on containers do not match the COC. Logged in per COC.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	Containers recd broken. Sufficient sample in remaining containers for analysis.
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
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 acppt. headspace
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



## Laboratory Data Review Checklist

Completed by:	Kylie Kegerreis		
Title:	Environmental Engineer	Date:	5/1/2018
CS Report Name:	GE Kenai	Report Date:	9/22/2017
Consultant Firm:	Arcadis U.S., Inc.		
Laboratory Name:	TestAmerica, Inc.	Laboratory Report Number:	580-71203-1
ADEC File Number:		ADEC RecKey Number:	

### 1. Laboratory

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

Yes     No     NA (Please explain.)    Comments:

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     NA (Please explain)    Comments:

Samples were not transferred or sub-contracted to an alternate laboratory

### 2. Chain of Custody (COC)

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

Yes     No     NA (Please explain)    Comments:

Missing sample time for 2 samples (BD-1-W-090517 and BD-2-W-090617)

b. Correct analyses requested?

Yes     No     NA (Please explain)    Comments:

VOCs by Method 8260C  
GRO by Method AK101  
DRO by Methods AK102 & 103 (not analyzed for trip blank sample)

3. Laboratory Sample Receipt Documentation

a. Sample/cooler temperature documented and within range at receipt ( $4^{\circ} \pm 2^{\circ} \text{C}$ )?

Yes     No     NA (Please explain)    Comments:

Temperature =  $-0.2^{\circ}\text{C}$ ; although this is outside the temperature range, no issues because the temperature is cold enough to prevent volatilization of VOCs or GRO

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

Yes     No     NA (Please explain)    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     NA (Please explain)    Comments:

No broken/leaking containers. Some samples had headspace larger than 1/4"

d. If there were any discrepancies, were they documented? - For example, incorrect sample containers/preservation, sample temperature outside of acceptance range, insufficient or missing samples, etc.?

Yes     No     NA (Please explain)    Comments:

MS/MSD accidentally written on COC as separate samples instead of as a note for the parent sample (MW-2). The samples were logged correctly. Two samples (BD-1-W-090517 and BD-2-W-090617) did not contain a collection time on the COC or sample containers.

e. Data quality or usability affected? (Please explain)

Comments:

Data quality or usability not affected.

4. Case Narrative

a. Present and understandable?

Yes     No     NA (Please explain)    Comments:

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

Yes     No     NA (Please explain)    Comments:

See Attachment 1

c. Were all corrective actions documented?

Yes       No       NA (Please explain)

Comments:

See Attachment 1

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

Comments:

No effect on data quality/usability.

## 5. Samples Results

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

Yes       No       NA (Please explain)

Comments:

b. All applicable holding times met?

Yes       No       NA (Please explain)

Comments:

Hold times: Methods 8260C and AK101 - Analysis w/in 14 days; Methods AK102 & 103 - Extraction w/ in 14 days, Analysis w/in 40 days of extraction  
Collection Dates: 9/5 - 9/6/17  
Prepped: 9/13/17 (AK102 & 103 Only)  
Analyzed: 9/15/17 (8260C some re-analyzed on 9/19 and 9/20); 9/13 - 9/14/17 (AK101); 9/16/17 (AK 102 & 103)

c. All soils reported on a dry weight basis?

Yes       No       NA (Please explain)

Comments:

Samples are aqueous

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

Yes       No       NA (Please explain)

Comments:

Yes, with the exceptions provided in Attachment 1

e. Data quality or usability affected? (Please explain)

Comments:

Data quality or usability is not affected, because historically the analytes have been either below the Cleanup Level or non-detect for the wells listed in part d.

6. QC Samples

a. Method Blank

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

Yes     No     NA (Please explain)

Comments:

ii. All method blank results less than PQL?

Yes     No     NA (Please explain)

Comments:

iii. If above PQL, what samples are affected?

Comments:

N/A

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

Yes     No     NA (Please explain)

Comments:

Method blanks all below PQL

v. Data quality or usability affected? (Please explain)

Comments:

Data quality or usability not affected due to method blank

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     NA (Please explain)

Comments:

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

Yes     No     NA (Please explain)

Comments:

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     NA (Please explain)    Comments:

Method 8260C (Batch = 256318) LCS: carbon tetrachloride = 138 (Limits = 72 - 124); chloroform = 121 (Limits = 80 - 119); dichlorobromomethane = 135 (Limits = 75 - 120); 1,2-dichloroethane = 150 (Limits = 76 - 131); 2,2-dichloropropane = 147 (Limits = 43 - 140); methyl tert-butyl ether = 124 (Limits = 79 - 120); 1,1,1-trichloroethane = 133 (Limits = 74 - 130). LCSD: carbon tetrachloride = 134 (Limits = 74 - 124); chloroform = 120 (Limits = 80 - 119); dichlorobromomethane = 127 (Limits = 75 - 120); 1,2-dichloroethane = 141 (Limits = 76 - 131)

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/DMSD, and or sample/sample duplicate. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)

Yes     No     NA (Please explain)    Comments:

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

Comments:

No samples are affected because the analytes were not detected in the associated samples.

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

Yes     No     NA (Please explain)    Comments:

Affected samples/analytes are noted with an asterisk in the laboratory report.

vii. Data quality or usability affected? (Please explain)

Comments:

Data quality or usability not affected due to LCS/LCSD recoveries.

c. Surrogates - Organics Only

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

Yes     No     NA (Please explain)    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     NA (Please explain)    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       NA (Please explain)

Comments:

The failed surrogate recoveries are identified with an "X" next to the surrogate recovery.

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

Comments:

Data quality or usability is not affected for all affected samples. See attached sheet

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       NA (Please explain.)

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       NA (Please explain.)

Comments:

iii. All results less than PQL?

- Yes       No       NA (Please explain.)

Comments:

iv. If above PQL, what samples are affected?

Comments:

N/A - all results less than PQL

v. Data quality or usability affected? (Please explain.)

Comments:

Data quality or usability not affected due to trip blank.

e. Field Duplicate

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

- Yes       No       NA (Please explain)

Comments:

Field Duplicate: BD-1-W-090517 (Parent Sample: MW-4-W-090517)  
Field Duplicate: BD-2-W-090617 (Parent Sample: MW-5-W-090617)

ii. Submitted blind to lab?

Yes     No     NA (Please explain.)

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     NA (Please explain)

Comments:

See Table 1

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

Yes     No     NA (Please explain)

Comments:

Data quality or usability not affected due to field duplicates.

f. Decontamination or Equipment Blank (if applicable)

Yes     No     NA (Please explain)

Comments:

EB-1-W-090617

i. All results less than PQL?

Yes     No     NA (Please explain)

Comments:

ii. If above PQL, what samples are affected?

Comments:

N/A - no sample results above PQL

iii. Data quality or usability affected? (Please explain.)

Comments:

Data quality or usability not affected due to equipment blanks

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

a. Defined and appropriate?

Yes       No       NA (Please explain)

Comments:

MS/MSD analysis performed on MW-2-W-090617. For Method 8260C, multiple MS and MSD %R were outside of the limits, biased high. For Method AK102 & 103, MS and MSD for DRO was outside of the limits, biased low. For Method 8260C, results were non-detect; therefore, qualification is not necessary. For Method AK102 & 103, the result was detect and should be qualified as estimated (0.89 J ug/L) for MW-2-W-090617 only.  
The %R outside of the limits was identified by an F1 qualifier in the laboratory report.

Reset Form

**Table 1**  
**Relative Percent Difference for Parent and Field Duplicate Samples**  
**Report Number: 580-71203-1**  
**Former TBE Machine Shop, Nikiski, AK**

Sample Identification	MW-4-W-090517	BD-1-W-090517	RPD <sup>a</sup>	MW-5-W-090617	BD-2-W-090617	RPD <sup>a</sup>
Analyte	Result (µg/L)	Result (µg/L)		Result (µg/L)	Result (µg/L)	
cis-1,2-dichloroethene	ND	ND	--	220	210	5%
tetrachloroethene	14	12	15%	ND	ND	--
1,1,1-trichloroethane	3.3	3.4	3%	ND	ND	--
trichloroethene	4.9	4.5	9%	ND	ND	--
m & p-xylene	ND	ND	--	310	310	0%
gasoline range organics	ND	ND	--	1.7	1.7	0%
diesel range organics	0.33	0.34	3%	1.4	1.4	0%

Notes:

<sup>a</sup> Relative percent difference (RPD) calculated for detected results only.

µg/L = micrograms per liter

ND = not detected

-- = not calculated

**Attachment 1**  
**Additional Information for Job 580-71203-1**  
**Former TBE Machine Shop**  
**Nikiski, AK**

4. Case Narrative
- d. Discrepancies, errors or QC failures identified by the lab?

Method 8260C:

1. The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 580-256318 recovered outside control limits for multiple analytes.
2. Quality control deficiencies in the initial analysis: MW-1-W-090517, MW-2-W-090617 (and MS/MSD), MW-4-W-090517, MW-5-W-090617, MW-7-W-090517, BD-1-W-090517, and BD-2-W-090617
3. The surrogate recovery for the LCS, LCSD, and blank associated with analytical batch 580-256318 was outside the upper control limits.
4. The continuing calibration verification (CCV) associated with batch 580-256318 recovered above the upper control limit for multiple analytes.
5. The minimum response factor (RF) criteria for the CCV analyzed in batch 580-256318 was outside criteria for the following analyte: chloroethane.
6. Surrogate recovery for the following samples was outside the upper control limit: MW-2-W-090617 (and MS/MSD), MW-5-W-090617, MW-7-W-090517, BD-1-W-090517, BD-2-W-090617, Trip Blank, and EB-1-W-090617.
7. The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-1-W-090517, MW-5-W-090617, and BD-2-W-090617.

Method AK101:

8. Surrogate recovery for the following samples was outside control limits: MW-5-W-090617 and BD-2-W-090617.

Methods AK102 & 103:

9. Surrogate recovery for the following samples was outside control limits: MW-1-W-090517 and MW-2-W-090617.
10. The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was earlier than the typical diesel pattern used by the laboratory for quantitative purposes: MW-1-W-090517, MW-2-W-090617, MW-5-W-090617, and BD-2-W-090617.
11. The following sample contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel pattern used by the laboratory for quantitative purposes: MW-1-W-090517, MW-2-W-090617, MW-4-W-090517, and BD-1-W-090517.

- c. Were all corrective actions documented?

1. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.
2. The samples were reanalyzed.
3. The associated samples were ND for the reported analytes; therefore, data have been reported.
4. The associated samples were ND for the reported analytes; therefore, data have been reported.
5. Sample analysis may proceed; however, any detection or non-detection for the affected analyte is considered estimated.

6. The samples did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.
  7. Elevated reporting limits are provided.
  8. Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.
  9. Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.
  10. Not applicable.
  11. Not applicable.
5. Samples Results
- d. Are the reported PQLs less than the Cleanup Level or the minimum required detection level for the project?

Yes, with the following exceptions<sup>1</sup>:

- MW-1-W-090517: analyte with elevated PQLs due to re-analysis with dilution
  1. 1,1,1-trichloroethane: PQL = 300 µg/L; Cleanup Level = 200 µg/L
- MW-5-W-090617: analyte with elevated PQLs due to re-analysis with dilution
  1. 1,4-dichlorobenzene: PQL = 400 µg/L; Cleanup Level = 75 µg/L
- BD-2-W-090617: analyte with elevated PQLs due to re-analysis with dilution
  1. 1,4-dichlorobenzene: PQL = 400 µg/L; Cleanup Level = 75 µg/L

6. QC Samples
- 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)

Percent recoveries were not within method or laboratory limits for the following samples:

- MW-1-W-090517
  - Method AK102 & 103. Surrogate %R = 162 (Limits = 50 – 150)
- MW-2-W-090617
  - Method 8260C. 1,2-dichloroethane-d4 %R = 135 (Limits = 80 – 126). All other surrogates (4 others) within limits
  - Method AK102 & 103: Surrogate %R = 217 (Limits = 50 – 150)
- MW-5-W-090617
  - Method 8260C. 1,2-dichloroethane-d4 %R = 131 (Limits = 80 – 126). All other surrogates (4 others) within limits
  - Method AK101. 4-bromofluorobenzene %R = 135 (Laboratory Limits = 68 – 119). Other surrogate within limits. Also, within the 50 – 150 %R limit.
- MW-7-W-090517
  - Method 8260C. 1,2-dichloroethane-d4 %R = 135 (Limits = 80 – 126). All other surrogates (4 others) within limits
- BD-1-W-090517
  - Method 8260C. 1,2-dichloroethane-d4 %R = 131 (Limits = 80 – 126). All other surrogates (4 others) within limits
- BD-2-W-090617

---

<sup>1</sup> Only non-detect results with PQLs above the corresponding Cleanup Level are provided

- Method 8260C. 1,2-dichloroethane-d4 %R = 131 (Limits = 80 – 126). All other surrogates (4 others) within limits
- Method AK101. 4-bromofluorobenzene %R = 136 (Laboratory Limits = 68 – 119). Other surrogate within limits. Also, within the 50 – 150 %R limit.
- Method 8260C Analysis Batch 256318
  - Method Blank: 1,2-dichloroethane-d-4 %R = 130 (Limits = 80 – 126). All other surrogates (4 others) within limits
  - LCS: 1,2-dichloroethane-d4 %R = 133 (Limits = 80 – 126). All other surrogates (4 others) within limits
  - MS: 1,2-dichloroethane-d4 %R = 129 (Limits = 80 – 126). All other surrogates (4 others) within limits
  - MSD: 1,2-dichloroethane-d4 %R = 130 (Limits = 80 – 126). All other surrogates (4 others) within limits

iv. Data quality or usability affected?

Data quality or usability affected for the following samples:

MW-1-W-090517: Add a J for estimated next to the DRO result (3.5 J µg/L)

MW-2-W-090617: Add a J for estimated next to the DRO result (0.89 J µg/L)

MW-5-W-090617: Add a J for estimated next to the GRO result (1.7 J µg/L)

BD-2-W-090617: Add a J for estimated next to the GRO result (1.7 J µg/L)

All other samples/analytes do not require qualification because there is more than 1 other surrogate for the sample within the control limits.



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Seattle  
5755 8th Street East  
Tacoma, WA 98424  
Tel: (253)922-2310

TestAmerica Job ID: 580-71203-1  
Client Project/Site: GE Kenai

For:  
ARCADIS U.S. Inc  
4915 Prospectus Drive  
Suite F  
Durham, North Carolina 27713

Attn: Mr. Matthew Pelton



Authorized for release by:  
9/22/2017 5:20:57 PM

Kristine Allen, Manager of Project Management  
(253)248-4970  
[kristine.allen@testamericainc.com](mailto:kristine.allen@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

1

2

3

4

5

6

7

8

9

10

11



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Definitions . . . . .	5
Client Sample Results . . . . .	6
QC Sample Results . . . . .	24
Chronicle . . . . .	37
Certification Summary . . . . .	40
Sample Summary . . . . .	41
Chain of Custody . . . . .	42
Receipt Checklists . . . . .	43

# Case Narrative

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Job ID: 580-71203-1**

**Laboratory: TestAmerica Seattle**

## Narrative

### Job Narrative 580-71203-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 9/8/2017 12:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was -0.2° C.

#### Receipt Exceptions

The information listed on the Chain-of-Custody (COC) was not correct: MW-2-W-090617 (580-71203-2[MS]) and MW-2-W-090617 (580-71203-2[MSD]). The MS and MSD were written on the COC as separate samples. In addition the containers were labeled to reflect this separateness. However the MS and MSD were actually from the parent (sample 2). The containers were logged in to reflect that they are QC for sample 2.

The following samples were received at the laboratory without a sample collection time documented on the chain of custody and the container labels: BD-1-W-090517 (580-71203-6) and BD-2-W-090617 (580-71203-7). The samples were logged in using a collection time of 0000.

#### GC/MS VOA

Method(s) 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 580-256318 recovered outside control limits for multiple analytes. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

The following samples were re-analyzed due to quality control deficiencies in the initial analysis: MW-1-W-090517 (580-71203-1), MW-2-W-090617 (580-71203-2), MW-2-W-090617 (580-71203-2[MS]), MW-2-W-090617 (580-71203-2[MSD]), MW-4-W-090517 (580-71203-3), MW-5-W-090617 (580-71203-4), MW-7-W-090517 (580-71203-5), BD-1-W-090517 (580-71203-6) and BD-2-W-090617 (580-71203-7)

Method(s) 8260C: The surrogate recovery for the LCS, LCSD and blank associated with analytical batch 580-256318 was outside the upper control limits. The associated samples were ND for the reported analytes.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 580-256318 recovered above the upper control limit for multiple analytes. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: (CCVIS 580-256318/3).

Method(s) 8260C: The minimum response factor (RF) criteria for the continuing calibration verification (CCV) analyzed in batch 580-256318 was outside criteria for the following analyte(s): Chloroethane. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered estimated.

Method(s) 8260C: Surrogate recovery for the following samples was outside the upper control limit: MW-2-W-090617 (580-71203-2), MW-2-W-090617 MS (580-71203-2 MS), MW-2-W-090617 MSD (580-71203-2 MSD), MW-5-W-090617 (580-71203-4), MW-7-W-090517 (580-71203-5), BD-1-W-090517 (580-71203-6), BD-2-W-090617 (580-71203-7), Trip Blank (580-71203-8) and EB-1-W-090617 (580-71203-9). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8260C: The following samples was diluted to bring the concentration of target analytes within the calibration range: MW-1-W-090517 (580-71203-1), MW-5-W-090617 (580-71203-4) and BD-2-W-090617 (580-71203-7). Elevated reporting limits (RLs) are provided.

Method(s) AK101: Surrogate recovery for the following samples was outside control limits: MW-5-W-090617 (580-71203-4) and BD-2-W-090617 (580-71203-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

# Case Narrative

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

---

## Job ID: 580-71203-1 (Continued)

---

### Laboratory: TestAmerica Seattle (Continued)

#### GC Semi VOA

Method(s) AK102 & 103: Surrogate recovery for the following samples was outside control limits: MW-1-W-090517 (580-71203-1) and MW-2-W-090617 (580-71203-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) AK102 & 103: The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was earlier than the typical diesel fuel pattern used by the laboratory for quantitative purposes: MW-1-W-090517 (580-71203-1), MW-2-W-090617 (580-71203-2), MW-5-W-090617 (580-71203-4) and BD-2-W-090617 (580-71203-7).

Method(s) AK102 & 103: The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: MW-1-W-090517 (580-71203-1), MW-2-W-090617 (580-71203-2), MW-4-W-090517 (580-71203-3) and BD-1-W-090517 (580-71203-6).

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.

# Definitions/Glossary

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### GC VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

### GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
F1	MS and/or MSD Recovery is outside acceptance limits.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: MW-1-W-090517**

**Lab Sample ID: 580-71203-1**

**Date Collected: 09/05/17 15:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/15/17 17:37	1
Bromobenzene	ND		2.0		ug/L			09/15/17 17:37	1
Bromoform	ND		3.0		ug/L			09/15/17 17:37	1
Bromomethane	ND		6.0		ug/L			09/15/17 17:37	1
Carbon tetrachloride	ND *		3.0		ug/L			09/15/17 17:37	1
Chlorobenzene	ND		2.0		ug/L			09/15/17 17:37	1
Chlorobromomethane	ND		2.0		ug/L			09/15/17 17:37	1
Chlorodibromomethane	ND		1.0		ug/L			09/15/17 17:37	1
Chloroethane	ND		5.0		ug/L			09/15/17 17:37	1
Chloroform	ND *		5.0		ug/L			09/15/17 17:37	1
Chloromethane	ND		20		ug/L			09/15/17 17:37	1
2-Chlorotoluene	ND		3.0		ug/L			09/15/17 17:37	1
4-Chlorotoluene	ND		2.0		ug/L			09/15/17 17:37	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 17:37	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/15/17 17:37	1
Dibromomethane	ND		2.0		ug/L			09/15/17 17:37	1
<b>1,2-Dichlorobenzene</b>	<b>2.7</b>		2.0		ug/L			09/15/17 17:37	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/15/17 17:37	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/15/17 17:37	1
Dichlorobromomethane	ND *		2.0		ug/L			09/15/17 17:37	1
Dichlorodifluoromethane	ND		5.0		ug/L			09/15/17 17:37	1
<b>1,1-Dichloroethane</b>	<b>13</b>		2.0		ug/L			09/15/17 17:37	1
1,2-Dichloroethane	ND *		2.0		ug/L			09/15/17 17:37	1
1,1-Dichloroethene	ND		4.0		ug/L			09/15/17 17:37	1
1,2-Dichloropropane	ND		1.0		ug/L			09/15/17 17:37	1
1,3-Dichloropropane	ND		2.0		ug/L			09/15/17 17:37	1
2,2-Dichloropropane	ND *		3.0		ug/L			09/15/17 17:37	1
1,1-Dichloropropene	ND		3.0		ug/L			09/15/17 17:37	1
Ethylene Dibromide	ND		2.0		ug/L			09/15/17 17:37	1
Hexachlorobutadiene	ND		6.0		ug/L			09/15/17 17:37	1
<b>Isopropylbenzene</b>	<b>7.5</b>		2.0		ug/L			09/15/17 17:37	1
<b>4-Isopropyltoluene</b>	<b>4.9</b>		3.0		ug/L			09/15/17 17:37	1
Methylene Chloride	ND		5.0		ug/L			09/15/17 17:37	1
Methyl tert-butyl ether	ND *		2.0		ug/L			09/15/17 17:37	1
<b>Naphthalene</b>	<b>4.8</b>		4.0		ug/L			09/15/17 17:37	1
<b>n-Butylbenzene</b>	<b>11</b>		3.0		ug/L			09/15/17 17:37	1
<b>N-Propylbenzene</b>	<b>8.7</b>		3.0		ug/L			09/15/17 17:37	1
sec-Butylbenzene	ND		3.0		ug/L			09/15/17 17:37	1
Styrene	ND		5.0		ug/L			09/15/17 17:37	1
tert-Butylbenzene	ND		3.0		ug/L			09/15/17 17:37	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/15/17 17:37	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			09/15/17 17:37	1
<b>Tetrachloroethene</b>	<b>51</b>		3.0		ug/L			09/15/17 17:37	1
<b>Toluene</b>	<b>34</b>		2.0		ug/L			09/15/17 17:37	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			09/15/17 17:37	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 17:37	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			09/15/17 17:37	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/15/17 17:37	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/15/17 17:37	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: MW-1-W-090517**

**Lab Sample ID: 580-71203-1**

**Date Collected: 09/05/17 15:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Trichloroethene</b>	<b>33</b>		3.0		ug/L			09/15/17 17:37	1
Trichlorofluoromethane	ND		3.0		ug/L			09/15/17 17:37	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/15/17 17:37	1
<b>1,2,4-Trimethylbenzene</b>	<b>90</b>		3.0		ug/L			09/15/17 17:37	1
<b>1,3,5-Trimethylbenzene</b>	<b>31</b>		3.0		ug/L			09/15/17 17:37	1
Vinyl chloride	ND		1.0		ug/L			09/15/17 17:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		75 - 125		09/15/17 17:37	1
Dibromofluoromethane (Surr)	112		77 - 120		09/15/17 17:37	1
1,2-Dichloroethane-d4 (Surr)	125		80 - 126		09/15/17 17:37	1
Toluene-d8 (Surr)	93		80 - 122		09/15/17 17:37	1
Trifluorotoluene (Surr)	113		80 - 120		09/15/17 17:37	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>420</b>		100		ug/L			09/19/17 22:39	100
<b>Ethylbenzene</b>	<b>540</b>		300		ug/L			09/19/17 22:39	100
<b>m-Xylene &amp; p-Xylene</b>	<b>810</b>		300		ug/L			09/19/17 22:39	100
<b>o-Xylene</b>	<b>260</b>		200		ug/L			09/19/17 22:39	100
1,1,1-Trichloroethane	ND		300		ug/L			09/19/17 22:39	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		75 - 125		09/19/17 22:39	100
Dibromofluoromethane (Surr)	105		77 - 120		09/19/17 22:39	100
1,2-Dichloroethane-d4 (Surr)	91		80 - 126		09/19/17 22:39	100
Toluene-d8 (Surr)	92		80 - 122		09/19/17 22:39	100
Trifluorotoluene (Surr)	113		80 - 120		09/19/17 22:39	100

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Gasoline Range Organics (GRO) -C6-C10</b>	<b>3.6</b>		1.0		mg/L			09/13/17 23:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	104		75 - 120		09/13/17 23:16	1
4-Bromofluorobenzene (Surr)	111		68 - 119		09/13/17 23:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>3.5</b>	<b>J</b>	0.11		mg/L		09/13/17 08:46	09/16/17 04:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	162	X	50 - 150		09/13/17 08:46	09/16/17 04:20

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: MW-2-W-090617**

**Lab Sample ID: 580-71203-2**

**Date Collected: 09/06/17 08:40**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/15/17 21:09	1
Bromobenzene	ND		2.0		ug/L			09/15/17 21:09	1
Bromoform	ND		3.0		ug/L			09/15/17 21:09	1
Bromomethane	ND		6.0		ug/L			09/15/17 21:09	1
Carbon tetrachloride	ND	* F1	3.0		ug/L			09/15/17 21:09	1
Chlorobenzene	ND		2.0		ug/L			09/15/17 21:09	1
Chlorobromomethane	ND	F1	2.0		ug/L			09/15/17 21:09	1
Chlorodibromomethane	ND		1.0		ug/L			09/15/17 21:09	1
Chloroethane	ND		5.0		ug/L			09/15/17 21:09	1
Chloroform	ND	* F1	5.0		ug/L			09/15/17 21:09	1
Chloromethane	ND		20		ug/L			09/15/17 21:09	1
2-Chlorotoluene	ND		3.0		ug/L			09/15/17 21:09	1
4-Chlorotoluene	ND		2.0		ug/L			09/15/17 21:09	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 21:09	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/15/17 21:09	1
Dibromomethane	ND		2.0		ug/L			09/15/17 21:09	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/15/17 21:09	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/15/17 21:09	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/15/17 21:09	1
Dichlorobromomethane	ND	* F1	2.0		ug/L			09/15/17 21:09	1
Dichlorodifluoromethane	ND		5.0		ug/L			09/15/17 21:09	1
1,2-Dichloroethane	ND	* F1	2.0		ug/L			09/15/17 21:09	1
1,1-Dichloroethene	ND		4.0		ug/L			09/15/17 21:09	1
1,2-Dichloropropane	ND		1.0		ug/L			09/15/17 21:09	1
1,3-Dichloropropane	ND		2.0		ug/L			09/15/17 21:09	1
2,2-Dichloropropane	ND	F1 *	3.0		ug/L			09/15/17 21:09	1
1,1-Dichloropropene	ND	F1	3.0		ug/L			09/15/17 21:09	1
Ethylbenzene	ND		3.0		ug/L			09/15/17 21:09	1
Ethylene Dibromide	ND		2.0		ug/L			09/15/17 21:09	1
Hexachlorobutadiene	ND		6.0		ug/L			09/15/17 21:09	1
Isopropylbenzene	ND		2.0		ug/L			09/15/17 21:09	1
4-Isopropyltoluene	ND		3.0		ug/L			09/15/17 21:09	1
Methylene Chloride	ND		5.0		ug/L			09/15/17 21:09	1
Methyl tert-butyl ether	ND	F1 *	2.0		ug/L			09/15/17 21:09	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/15/17 21:09	1
Naphthalene	ND		4.0		ug/L			09/15/17 21:09	1
n-Butylbenzene	ND		3.0		ug/L			09/15/17 21:09	1
N-Propylbenzene	ND		3.0		ug/L			09/15/17 21:09	1
o-Xylene	ND		2.0		ug/L			09/15/17 21:09	1
sec-Butylbenzene	ND		3.0		ug/L			09/15/17 21:09	1
Styrene	ND		5.0		ug/L			09/15/17 21:09	1
tert-Butylbenzene	ND		3.0		ug/L			09/15/17 21:09	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/15/17 21:09	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			09/15/17 21:09	1
Tetrachloroethene	ND		3.0		ug/L			09/15/17 21:09	1
Toluene	ND		2.0		ug/L			09/15/17 21:09	1
trans-1,2-Dichloroethene	ND	F1	3.0		ug/L			09/15/17 21:09	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 21:09	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			09/15/17 21:09	1

TestAmerica Seattle



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: MW-2-W-090617**

**Lab Sample ID: 580-71203-2**

**Date Collected: 09/06/17 08:40**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/15/17 21:09	1
1,1,1-Trichloroethane	ND	F1 *	3.0		ug/L			09/15/17 21:09	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/15/17 21:09	1
Trichloroethene	ND		3.0		ug/L			09/15/17 21:09	1
Trichlorofluoromethane	ND		3.0		ug/L			09/15/17 21:09	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/15/17 21:09	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/15/17 21:09	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/15/17 21:09	1
Vinyl chloride	ND		1.0		ug/L			09/15/17 21:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		75 - 125		09/15/17 21:09	1
Dibromofluoromethane (Surr)	111		77 - 120		09/15/17 21:09	1
1,2-Dichloroethane-d4 (Surr)	135	X	80 - 126		09/15/17 21:09	1
Toluene-d8 (Surr)	94		80 - 122		09/15/17 21:09	1
Trifluorotoluene (Surr)	115		80 - 120		09/15/17 21:09	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	30		1.0		ug/L			09/20/17 00:19	1
1,1-Dichloroethane	3.9		2.0		ug/L			09/20/17 00:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		75 - 125		09/20/17 00:19	1
Dibromofluoromethane (Surr)	106		77 - 120		09/20/17 00:19	1
1,2-Dichloroethane-d4 (Surr)	93		80 - 126		09/20/17 00:19	1
Toluene-d8 (Surr)	92		80 - 122		09/20/17 00:19	1
Trifluorotoluene (Surr)	112		80 - 120		09/20/17 00:19	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			09/13/17 23:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	105		75 - 120		09/13/17 23:48	1
4-Bromofluorobenzene (Surr)	91		68 - 119		09/13/17 23:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	0.89	F1 J	0.10		mg/L		09/13/17 08:46	09/16/17 05:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
o-Terphenyl	217	X	50 - 150		09/13/17 08:46	09/16/17 05:04	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: MW-4-W-090517**

**Lab Sample ID: 580-71203-3**

**Date Collected: 09/05/17 12:15**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/15/17 18:03	1
Bromobenzene	ND		2.0		ug/L			09/15/17 18:03	1
Bromoform	ND		3.0		ug/L			09/15/17 18:03	1
Bromomethane	ND		6.0		ug/L			09/15/17 18:03	1
Carbon tetrachloride	ND *		3.0		ug/L			09/15/17 18:03	1
Chlorobenzene	ND		2.0		ug/L			09/15/17 18:03	1
Chlorobromomethane	ND		2.0		ug/L			09/15/17 18:03	1
Chlorodibromomethane	ND		1.0		ug/L			09/15/17 18:03	1
Chloroethane	ND		5.0		ug/L			09/15/17 18:03	1
Chloroform	ND *		5.0		ug/L			09/15/17 18:03	1
Chloromethane	ND		20		ug/L			09/15/17 18:03	1
2-Chlorotoluene	ND		3.0		ug/L			09/15/17 18:03	1
4-Chlorotoluene	ND		2.0		ug/L			09/15/17 18:03	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/15/17 18:03	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 18:03	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/15/17 18:03	1
Dibromomethane	ND		2.0		ug/L			09/15/17 18:03	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/15/17 18:03	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/15/17 18:03	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/15/17 18:03	1
Dichlorobromomethane	ND *		2.0		ug/L			09/15/17 18:03	1
Dichlorodifluoromethane	ND		5.0		ug/L			09/15/17 18:03	1
1,1-Dichloroethane	ND		2.0		ug/L			09/15/17 18:03	1
1,2-Dichloroethane	ND *		2.0		ug/L			09/15/17 18:03	1
1,1-Dichloroethene	ND		4.0		ug/L			09/15/17 18:03	1
1,2-Dichloropropane	ND		1.0		ug/L			09/15/17 18:03	1
1,3-Dichloropropane	ND		2.0		ug/L			09/15/17 18:03	1
2,2-Dichloropropane	ND *		3.0		ug/L			09/15/17 18:03	1
1,1-Dichloropropene	ND		3.0		ug/L			09/15/17 18:03	1
Ethylbenzene	ND		3.0		ug/L			09/15/17 18:03	1
Ethylene Dibromide	ND		2.0		ug/L			09/15/17 18:03	1
Hexachlorobutadiene	ND		6.0		ug/L			09/15/17 18:03	1
Isopropylbenzene	ND		2.0		ug/L			09/15/17 18:03	1
4-Isopropyltoluene	ND		3.0		ug/L			09/15/17 18:03	1
Methylene Chloride	ND		5.0		ug/L			09/15/17 18:03	1
Methyl tert-butyl ether	ND *		2.0		ug/L			09/15/17 18:03	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/15/17 18:03	1
Naphthalene	ND		4.0		ug/L			09/15/17 18:03	1
n-Butylbenzene	ND		3.0		ug/L			09/15/17 18:03	1
N-Propylbenzene	ND		3.0		ug/L			09/15/17 18:03	1
o-Xylene	ND		2.0		ug/L			09/15/17 18:03	1
sec-Butylbenzene	ND		3.0		ug/L			09/15/17 18:03	1
Styrene	ND		5.0		ug/L			09/15/17 18:03	1
tert-Butylbenzene	ND		3.0		ug/L			09/15/17 18:03	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/15/17 18:03	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			09/15/17 18:03	1
<b>Tetrachloroethene</b>	<b>14</b>		3.0		ug/L			09/15/17 18:03	1
Toluene	ND		2.0		ug/L			09/15/17 18:03	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			09/15/17 18:03	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: MW-4-W-090517**

**Lab Sample ID: 580-71203-3**

**Date Collected: 09/05/17 12:15**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 18:03	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			09/15/17 18:03	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/15/17 18:03	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/15/17 18:03	1
<b>Trichloroethene</b>	<b>4.9</b>		3.0		ug/L			09/15/17 18:03	1
Trichlorofluoromethane	ND		3.0		ug/L			09/15/17 18:03	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/15/17 18:03	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/15/17 18:03	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/15/17 18:03	1
Vinyl chloride	ND		1.0		ug/L			09/15/17 18:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		75 - 125		09/15/17 18:03	1
Dibromofluoromethane (Surr)	108		77 - 120		09/15/17 18:03	1
1,2-Dichloroethane-d4 (Surr)	123		80 - 126		09/15/17 18:03	1
Toluene-d8 (Surr)	90		80 - 122		09/15/17 18:03	1
Trifluorotoluene (Surr)	114		80 - 120		09/15/17 18:03	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>1,1,1-Trichloroethane</b>	<b>3.3</b>		3.0		ug/L			09/19/17 21:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		75 - 125		09/19/17 21:23	1
Dibromofluoromethane (Surr)	106		77 - 120		09/19/17 21:23	1
1,2-Dichloroethane-d4 (Surr)	92		80 - 126		09/19/17 21:23	1
Toluene-d8 (Surr)	91		80 - 122		09/19/17 21:23	1
Trifluorotoluene (Surr)	111		80 - 120		09/19/17 21:23	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			09/14/17 01:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	104		75 - 120		09/14/17 01:25	1
4-Bromofluorobenzene (Surr)	88		68 - 119		09/14/17 01:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>0.33</b>		0.10		mg/L		09/13/17 08:46	09/16/17 06:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	81		50 - 150		09/13/17 08:46	09/16/17 06:10

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: MW-5-W-090617**

**Lab Sample ID: 580-71203-4**

**Date Collected: 09/06/17 07:50**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/15/17 18:29	1
Bromobenzene	ND		2.0		ug/L			09/15/17 18:29	1
Bromoform	ND		3.0		ug/L			09/15/17 18:29	1
Bromomethane	ND		6.0		ug/L			09/15/17 18:29	1
Carbon tetrachloride	ND	*	3.0		ug/L			09/15/17 18:29	1
Chlorobenzene	ND		2.0		ug/L			09/15/17 18:29	1
Chlorobromomethane	ND		2.0		ug/L			09/15/17 18:29	1
Chlorodibromomethane	ND		1.0		ug/L			09/15/17 18:29	1
Chloroethane	ND		5.0		ug/L			09/15/17 18:29	1
Chloroform	ND	*	5.0		ug/L			09/15/17 18:29	1
Chloromethane	ND		20		ug/L			09/15/17 18:29	1
2-Chlorotoluene	ND		3.0		ug/L			09/15/17 18:29	1
4-Chlorotoluene	ND		2.0		ug/L			09/15/17 18:29	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 18:29	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/15/17 18:29	1
Dibromomethane	ND		2.0		ug/L			09/15/17 18:29	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/15/17 18:29	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/15/17 18:29	1
Dichlorobromomethane	ND	*	2.0		ug/L			09/15/17 18:29	1
Dichlorodifluoromethane	ND		5.0		ug/L			09/15/17 18:29	1
1,2-Dichloroethane	ND	*	2.0		ug/L			09/15/17 18:29	1
1,1-Dichloroethene	ND		4.0		ug/L			09/15/17 18:29	1
1,2-Dichloropropane	ND		1.0		ug/L			09/15/17 18:29	1
1,3-Dichloropropane	ND		2.0		ug/L			09/15/17 18:29	1
2,2-Dichloropropane	ND	*	3.0		ug/L			09/15/17 18:29	1
1,1-Dichloropropene	ND		3.0		ug/L			09/15/17 18:29	1
Ethylene Dibromide	ND		2.0		ug/L			09/15/17 18:29	1
Hexachlorobutadiene	ND		6.0		ug/L			09/15/17 18:29	1
Isopropylbenzene	ND		2.0		ug/L			09/15/17 18:29	1
4-Isopropyltoluene	ND		3.0		ug/L			09/15/17 18:29	1
Methylene Chloride	ND		5.0		ug/L			09/15/17 18:29	1
Methyl tert-butyl ether	ND	*	2.0		ug/L			09/15/17 18:29	1
Naphthalene	ND		4.0		ug/L			09/15/17 18:29	1
N-Propylbenzene	ND		3.0		ug/L			09/15/17 18:29	1
sec-Butylbenzene	ND		3.0		ug/L			09/15/17 18:29	1
Styrene	ND		5.0		ug/L			09/15/17 18:29	1
tert-Butylbenzene	ND		3.0		ug/L			09/15/17 18:29	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/15/17 18:29	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			09/15/17 18:29	1
Tetrachloroethene	ND		3.0		ug/L			09/15/17 18:29	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			09/15/17 18:29	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 18:29	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			09/15/17 18:29	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/15/17 18:29	1
1,1,1-Trichloroethane	ND	*	3.0		ug/L			09/15/17 18:29	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/15/17 18:29	1
Trichloroethene	ND		3.0		ug/L			09/15/17 18:29	1
Trichlorofluoromethane	ND		3.0		ug/L			09/15/17 18:29	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/15/17 18:29	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: MW-5-W-090617**

**Lab Sample ID: 580-71203-4**

**Date Collected: 09/06/17 07:50**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0		ug/L			09/15/17 18:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		75 - 125		09/15/17 18:29	1
Dibromofluoromethane (Surr)	112		77 - 120		09/15/17 18:29	1
1,2-Dichloroethane-d4 (Surr)	131	X	80 - 126		09/15/17 18:29	1
Toluene-d8 (Surr)	92		80 - 122		09/15/17 18:29	1
Trifluorotoluene (Surr)	119		80 - 120		09/15/17 18:29	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>220</b>		100		ug/L			09/19/17 23:28	100
1,4-Dichlorobenzene	ND		400		ug/L			09/19/17 23:28	100
1,1-Dichloroethane	ND		200		ug/L			09/19/17 23:28	100
Ethylbenzene	ND		300		ug/L			09/19/17 23:28	100
<b>m-Xylene &amp; p-Xylene</b>	<b>310</b>		300		ug/L			09/19/17 23:28	100
n-Butylbenzene	ND		300		ug/L			09/19/17 23:28	100
o-Xylene	ND		200		ug/L			09/19/17 23:28	100
Toluene	ND		200		ug/L			09/19/17 23:28	100
1,2,4-Trimethylbenzene	ND		300		ug/L			09/19/17 23:28	100
1,3,5-Trimethylbenzene	ND		300		ug/L			09/19/17 23:28	100

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		75 - 125		09/19/17 23:28	100
Dibromofluoromethane (Surr)	104		77 - 120		09/19/17 23:28	100
1,2-Dichloroethane-d4 (Surr)	90		80 - 126		09/19/17 23:28	100
Toluene-d8 (Surr)	93		80 - 122		09/19/17 23:28	100
Trifluorotoluene (Surr)	112		80 - 120		09/19/17 23:28	100

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Gasoline Range Organics (GRO)</b>	<b>1.7</b>	<b>J</b>	1.0		mg/L			09/14/17 01:57	1

**-C6-C10**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	104		75 - 120		09/14/17 01:57	1
4-Bromofluorobenzene (Surr)	135	X	68 - 119		09/14/17 01:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>1.4</b>		0.10		mg/L		09/13/17 08:46	09/16/17 06:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	92		50 - 150		09/13/17 08:46	09/16/17 06:32

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: MW-7-W-090517**

**Lab Sample ID: 580-71203-5**

**Date Collected: 09/05/17 13:45**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/15/17 18:57	1
Bromobenzene	ND		2.0		ug/L			09/15/17 18:57	1
Bromoform	ND		3.0		ug/L			09/15/17 18:57	1
Bromomethane	ND		6.0		ug/L			09/15/17 18:57	1
Carbon tetrachloride	ND *		3.0		ug/L			09/15/17 18:57	1
Chlorobenzene	ND		2.0		ug/L			09/15/17 18:57	1
Chlorobromomethane	ND		2.0		ug/L			09/15/17 18:57	1
Chlorodibromomethane	ND		1.0		ug/L			09/15/17 18:57	1
Chloroethane	ND		5.0		ug/L			09/15/17 18:57	1
Chloroform	ND *		5.0		ug/L			09/15/17 18:57	1
Chloromethane	ND		20		ug/L			09/15/17 18:57	1
2-Chlorotoluene	ND		3.0		ug/L			09/15/17 18:57	1
4-Chlorotoluene	ND		2.0		ug/L			09/15/17 18:57	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/15/17 18:57	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 18:57	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/15/17 18:57	1
Dibromomethane	ND		2.0		ug/L			09/15/17 18:57	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/15/17 18:57	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/15/17 18:57	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/15/17 18:57	1
Dichlorobromomethane	ND *		2.0		ug/L			09/15/17 18:57	1
Dichlorodifluoromethane	ND		5.0		ug/L			09/15/17 18:57	1
1,1-Dichloroethane	ND		2.0		ug/L			09/15/17 18:57	1
1,2-Dichloroethane	ND *		2.0		ug/L			09/15/17 18:57	1
1,1-Dichloroethene	ND		4.0		ug/L			09/15/17 18:57	1
1,2-Dichloropropane	ND		1.0		ug/L			09/15/17 18:57	1
1,3-Dichloropropane	ND		2.0		ug/L			09/15/17 18:57	1
2,2-Dichloropropane	ND *		3.0		ug/L			09/15/17 18:57	1
1,1-Dichloropropene	ND		3.0		ug/L			09/15/17 18:57	1
Ethylbenzene	ND		3.0		ug/L			09/15/17 18:57	1
Ethylene Dibromide	ND		2.0		ug/L			09/15/17 18:57	1
Hexachlorobutadiene	ND		6.0		ug/L			09/15/17 18:57	1
Isopropylbenzene	ND		2.0		ug/L			09/15/17 18:57	1
4-Isopropyltoluene	ND		3.0		ug/L			09/15/17 18:57	1
Methylene Chloride	ND		5.0		ug/L			09/15/17 18:57	1
Methyl tert-butyl ether	ND *		2.0		ug/L			09/15/17 18:57	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/15/17 18:57	1
Naphthalene	ND		4.0		ug/L			09/15/17 18:57	1
n-Butylbenzene	ND		3.0		ug/L			09/15/17 18:57	1
N-Propylbenzene	ND		3.0		ug/L			09/15/17 18:57	1
o-Xylene	ND		2.0		ug/L			09/15/17 18:57	1
sec-Butylbenzene	ND		3.0		ug/L			09/15/17 18:57	1
Styrene	ND		5.0		ug/L			09/15/17 18:57	1
tert-Butylbenzene	ND		3.0		ug/L			09/15/17 18:57	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/15/17 18:57	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			09/15/17 18:57	1
Toluene	ND		2.0		ug/L			09/15/17 18:57	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			09/15/17 18:57	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 18:57	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: MW-7-W-090517**

**Lab Sample ID: 580-71203-5**

**Date Collected: 09/05/17 13:45**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		5.0		ug/L			09/15/17 18:57	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/15/17 18:57	1
1,1,1-Trichloroethane	ND	*	3.0		ug/L			09/15/17 18:57	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/15/17 18:57	1
Trichloroethene	ND		3.0		ug/L			09/15/17 18:57	1
Trichlorofluoromethane	ND		3.0		ug/L			09/15/17 18:57	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/15/17 18:57	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/15/17 18:57	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/15/17 18:57	1
Vinyl chloride	ND		1.0		ug/L			09/15/17 18:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		75 - 125		09/15/17 18:57	1
Dibromofluoromethane (Surr)	112		77 - 120		09/15/17 18:57	1
1,2-Dichloroethane-d4 (Surr)	135	X	80 - 126		09/15/17 18:57	1
Toluene-d8 (Surr)	93		80 - 122		09/15/17 18:57	1
Trifluorotoluene (Surr)	118		80 - 120		09/15/17 18:57	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	17		3.0		ug/L			09/19/17 21:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		75 - 125		09/19/17 21:48	1
Dibromofluoromethane (Surr)	105		77 - 120		09/19/17 21:48	1
1,2-Dichloroethane-d4 (Surr)	91		80 - 126		09/19/17 21:48	1
Toluene-d8 (Surr)	92		80 - 122		09/19/17 21:48	1
Trifluorotoluene (Surr)	114		80 - 120		09/19/17 21:48	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			09/14/17 03:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	104		75 - 120		09/14/17 03:01	1
4-Bromofluorobenzene (Surr)	88		68 - 119		09/14/17 03:01	1

## Method: 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		0.11		mg/L		09/13/17 08:46	09/16/17 06:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
o-Terphenyl	80		50 - 150		09/13/17 08:46	09/16/17 06:54	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: BD-1-W-090517**

**Lab Sample ID: 580-71203-6**

**Date Collected: 09/05/17 00:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/15/17 19:23	1
Bromobenzene	ND		2.0		ug/L			09/15/17 19:23	1
Bromoform	ND		3.0		ug/L			09/15/17 19:23	1
Bromomethane	ND		6.0		ug/L			09/15/17 19:23	1
Carbon tetrachloride	ND *		3.0		ug/L			09/15/17 19:23	1
Chlorobenzene	ND		2.0		ug/L			09/15/17 19:23	1
Chlorobromomethane	ND		2.0		ug/L			09/15/17 19:23	1
Chlorodibromomethane	ND		1.0		ug/L			09/15/17 19:23	1
Chloroethane	ND		5.0		ug/L			09/15/17 19:23	1
Chloroform	ND *		5.0		ug/L			09/15/17 19:23	1
Chloromethane	ND		20		ug/L			09/15/17 19:23	1
2-Chlorotoluene	ND		3.0		ug/L			09/15/17 19:23	1
4-Chlorotoluene	ND		2.0		ug/L			09/15/17 19:23	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/15/17 19:23	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 19:23	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/15/17 19:23	1
Dibromomethane	ND		2.0		ug/L			09/15/17 19:23	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/15/17 19:23	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/15/17 19:23	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/15/17 19:23	1
Dichlorobromomethane	ND *		2.0		ug/L			09/15/17 19:23	1
Dichlorodifluoromethane	ND		5.0		ug/L			09/15/17 19:23	1
1,1-Dichloroethane	ND		2.0		ug/L			09/15/17 19:23	1
1,2-Dichloroethane	ND *		2.0		ug/L			09/15/17 19:23	1
1,1-Dichloroethene	ND		4.0		ug/L			09/15/17 19:23	1
1,2-Dichloropropane	ND		1.0		ug/L			09/15/17 19:23	1
1,3-Dichloropropane	ND		2.0		ug/L			09/15/17 19:23	1
2,2-Dichloropropane	ND *		3.0		ug/L			09/15/17 19:23	1
1,1-Dichloropropene	ND		3.0		ug/L			09/15/17 19:23	1
Ethylbenzene	ND		3.0		ug/L			09/15/17 19:23	1
Ethylene Dibromide	ND		2.0		ug/L			09/15/17 19:23	1
Hexachlorobutadiene	ND		6.0		ug/L			09/15/17 19:23	1
Isopropylbenzene	ND		2.0		ug/L			09/15/17 19:23	1
4-Isopropyltoluene	ND		3.0		ug/L			09/15/17 19:23	1
Methylene Chloride	ND		5.0		ug/L			09/15/17 19:23	1
Methyl tert-butyl ether	ND *		2.0		ug/L			09/15/17 19:23	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/15/17 19:23	1
Naphthalene	ND		4.0		ug/L			09/15/17 19:23	1
n-Butylbenzene	ND		3.0		ug/L			09/15/17 19:23	1
N-Propylbenzene	ND		3.0		ug/L			09/15/17 19:23	1
o-Xylene	ND		2.0		ug/L			09/15/17 19:23	1
sec-Butylbenzene	ND		3.0		ug/L			09/15/17 19:23	1
Styrene	ND		5.0		ug/L			09/15/17 19:23	1
tert-Butylbenzene	ND		3.0		ug/L			09/15/17 19:23	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/15/17 19:23	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			09/15/17 19:23	1
Toluene	ND		2.0		ug/L			09/15/17 19:23	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			09/15/17 19:23	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 19:23	1

TestAmerica Seattle



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: BD-1-W-090517**

**Lab Sample ID: 580-71203-6**

**Date Collected: 09/05/17 00:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		5.0		ug/L			09/15/17 19:23	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/15/17 19:23	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/15/17 19:23	1
Trichlorofluoromethane	ND		3.0		ug/L			09/15/17 19:23	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/15/17 19:23	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/15/17 19:23	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/15/17 19:23	1
Vinyl chloride	ND		1.0		ug/L			09/15/17 19:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		75 - 125		09/15/17 19:23	1
Dibromofluoromethane (Surr)	111		77 - 120		09/15/17 19:23	1
1,2-Dichloroethane-d4 (Surr)	131	X	80 - 126		09/15/17 19:23	1
Toluene-d8 (Surr)	93		80 - 122		09/15/17 19:23	1
Trifluorotoluene (Surr)	114		80 - 120		09/15/17 19:23	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Tetrachloroethene</b>	<b>12</b>		3.0		ug/L			09/19/17 22:14	1
<b>1,1,1-Trichloroethane</b>	<b>3.4</b>		3.0		ug/L			09/19/17 22:14	1
<b>Trichloroethene</b>	<b>4.5</b>		3.0		ug/L			09/19/17 22:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		75 - 125		09/19/17 22:14	1
Dibromofluoromethane (Surr)	106		77 - 120		09/19/17 22:14	1
1,2-Dichloroethane-d4 (Surr)	92		80 - 126		09/19/17 22:14	1
Toluene-d8 (Surr)	93		80 - 122		09/19/17 22:14	1
Trifluorotoluene (Surr)	114		80 - 120		09/19/17 22:14	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			09/14/17 03:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	101		75 - 120		09/14/17 03:33	1
4-Bromofluorobenzene (Surr)	86		68 - 119		09/14/17 03:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>0.34</b>		0.10		mg/L		09/13/17 08:46	09/16/17 07:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	90		50 - 150		09/13/17 08:46	09/16/17 07:16

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: BD-2-W-090617**

**Lab Sample ID: 580-71203-7**

**Date Collected: 09/06/17 00:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/15/17 19:50	1
Bromobenzene	ND		2.0		ug/L			09/15/17 19:50	1
Bromoform	ND		3.0		ug/L			09/15/17 19:50	1
Bromomethane	ND		6.0		ug/L			09/15/17 19:50	1
Carbon tetrachloride	ND *		3.0		ug/L			09/15/17 19:50	1
Chlorobenzene	ND		2.0		ug/L			09/15/17 19:50	1
Chlorobromomethane	ND		2.0		ug/L			09/15/17 19:50	1
Chlorodibromomethane	ND		1.0		ug/L			09/15/17 19:50	1
Chloroethane	ND		5.0		ug/L			09/15/17 19:50	1
Chloroform	ND *		5.0		ug/L			09/15/17 19:50	1
Chloromethane	ND		20		ug/L			09/15/17 19:50	1
2-Chlorotoluene	ND		3.0		ug/L			09/15/17 19:50	1
4-Chlorotoluene	ND		2.0		ug/L			09/15/17 19:50	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 19:50	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/15/17 19:50	1
Dibromomethane	ND		2.0		ug/L			09/15/17 19:50	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/15/17 19:50	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/15/17 19:50	1
Dichlorobromomethane	ND *		2.0		ug/L			09/15/17 19:50	1
Dichlorodifluoromethane	ND		5.0		ug/L			09/15/17 19:50	1
1,2-Dichloroethane	ND *		2.0		ug/L			09/15/17 19:50	1
1,1-Dichloroethene	ND		4.0		ug/L			09/15/17 19:50	1
1,2-Dichloropropane	ND		1.0		ug/L			09/15/17 19:50	1
1,3-Dichloropropane	ND		2.0		ug/L			09/15/17 19:50	1
2,2-Dichloropropane	ND *		3.0		ug/L			09/15/17 19:50	1
1,1-Dichloropropene	ND		3.0		ug/L			09/15/17 19:50	1
Ethylene Dibromide	ND		2.0		ug/L			09/15/17 19:50	1
Hexachlorobutadiene	ND		6.0		ug/L			09/15/17 19:50	1
Isopropylbenzene	ND		2.0		ug/L			09/15/17 19:50	1
4-Isopropyltoluene	ND		3.0		ug/L			09/15/17 19:50	1
Methylene Chloride	ND		5.0		ug/L			09/15/17 19:50	1
Methyl tert-butyl ether	ND *		2.0		ug/L			09/15/17 19:50	1
Naphthalene	ND		4.0		ug/L			09/15/17 19:50	1
N-Propylbenzene	ND		3.0		ug/L			09/15/17 19:50	1
sec-Butylbenzene	ND		3.0		ug/L			09/15/17 19:50	1
Styrene	ND		5.0		ug/L			09/15/17 19:50	1
tert-Butylbenzene	ND		3.0		ug/L			09/15/17 19:50	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/15/17 19:50	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			09/15/17 19:50	1
Tetrachloroethene	ND		3.0		ug/L			09/15/17 19:50	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			09/15/17 19:50	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 19:50	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			09/15/17 19:50	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/15/17 19:50	1
1,1,1-Trichloroethane	ND *		3.0		ug/L			09/15/17 19:50	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/15/17 19:50	1
Trichloroethene	ND		3.0		ug/L			09/15/17 19:50	1
Trichlorofluoromethane	ND		3.0		ug/L			09/15/17 19:50	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/15/17 19:50	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: BD-2-W-090617**

**Lab Sample ID: 580-71203-7**

**Date Collected: 09/06/17 00:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0		ug/L			09/15/17 19:50	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	113		75 - 125					09/15/17 19:50	1
Dibromofluoromethane (Surr)	105		77 - 120					09/15/17 19:50	1
1,2-Dichloroethane-d4 (Surr)	127	X	80 - 126					09/15/17 19:50	1
Toluene-d8 (Surr)	94		80 - 122					09/15/17 19:50	1
Trifluorotoluene (Surr)	113		80 - 120					09/15/17 19:50	1

### Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>210</b>		100		ug/L			09/19/17 23:54	100
1,4-Dichlorobenzene	ND		400		ug/L			09/19/17 23:54	100
1,1-Dichloroethane	ND		200		ug/L			09/19/17 23:54	100
Ethylbenzene	ND		300		ug/L			09/19/17 23:54	100
<b>m-Xylene &amp; p-Xylene</b>	<b>310</b>		300		ug/L			09/19/17 23:54	100
n-Butylbenzene	ND		300		ug/L			09/19/17 23:54	100
o-Xylene	ND		200		ug/L			09/19/17 23:54	100
Toluene	ND		200		ug/L			09/19/17 23:54	100
1,2,4-Trimethylbenzene	ND		300		ug/L			09/19/17 23:54	100
1,3,5-Trimethylbenzene	ND		300		ug/L			09/19/17 23:54	100
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	104		75 - 125					09/19/17 23:54	100
Dibromofluoromethane (Surr)	106		77 - 120					09/19/17 23:54	100
1,2-Dichloroethane-d4 (Surr)	91		80 - 126					09/19/17 23:54	100
Toluene-d8 (Surr)	91		80 - 122					09/19/17 23:54	100
Trifluorotoluene (Surr)	111		80 - 120					09/19/17 23:54	100

### Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Gasoline Range Organics (GRO)</b>	<b>1.7</b>	<b>J</b>	1.0		mg/L			09/14/17 04:05	1
<b>-C6-C10</b>									
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Trifluorotoluene (Surr)	104		75 - 120					09/14/17 04:05	1
4-Bromofluorobenzene (Surr)	136	X	68 - 119					09/14/17 04:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>DRO (nC10-&lt;nC25)</b>	<b>1.4</b>		0.10		mg/L		09/13/17 08:46	09/16/17 07:38	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl	89		50 - 150				09/13/17 08:46	09/16/17 07:38	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 580-71203-8**

**Date Collected: 09/05/17 00:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/15/17 20:16	1
Bromobenzene	ND		2.0		ug/L			09/15/17 20:16	1
Bromoform	ND		3.0		ug/L			09/15/17 20:16	1
Bromomethane	ND		6.0		ug/L			09/15/17 20:16	1
Carbon tetrachloride	ND *		3.0		ug/L			09/15/17 20:16	1
Chlorobenzene	ND		2.0		ug/L			09/15/17 20:16	1
Chlorobromomethane	ND		2.0		ug/L			09/15/17 20:16	1
Chlorodibromomethane	ND		1.0		ug/L			09/15/17 20:16	1
Chloroethane	ND		5.0		ug/L			09/15/17 20:16	1
Chloroform	ND *		5.0		ug/L			09/15/17 20:16	1
Chloromethane	ND		20		ug/L			09/15/17 20:16	1
2-Chlorotoluene	ND		3.0		ug/L			09/15/17 20:16	1
4-Chlorotoluene	ND		2.0		ug/L			09/15/17 20:16	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/15/17 20:16	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 20:16	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/15/17 20:16	1
Dibromomethane	ND		2.0		ug/L			09/15/17 20:16	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/15/17 20:16	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/15/17 20:16	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/15/17 20:16	1
Dichlorobromomethane	ND *		2.0		ug/L			09/15/17 20:16	1
Dichlorodifluoromethane	ND		5.0		ug/L			09/15/17 20:16	1
1,1-Dichloroethane	ND		2.0		ug/L			09/15/17 20:16	1
1,2-Dichloroethane	ND *		2.0		ug/L			09/15/17 20:16	1
1,1-Dichloroethene	ND		4.0		ug/L			09/15/17 20:16	1
1,2-Dichloropropane	ND		1.0		ug/L			09/15/17 20:16	1
1,3-Dichloropropane	ND		2.0		ug/L			09/15/17 20:16	1
2,2-Dichloropropane	ND *		3.0		ug/L			09/15/17 20:16	1
1,1-Dichloropropene	ND		3.0		ug/L			09/15/17 20:16	1
Ethylbenzene	ND		3.0		ug/L			09/15/17 20:16	1
Ethylene Dibromide	ND		2.0		ug/L			09/15/17 20:16	1
Hexachlorobutadiene	ND		6.0		ug/L			09/15/17 20:16	1
Isopropylbenzene	ND		2.0		ug/L			09/15/17 20:16	1
4-Isopropyltoluene	ND		3.0		ug/L			09/15/17 20:16	1
Methylene Chloride	ND		5.0		ug/L			09/15/17 20:16	1
Methyl tert-butyl ether	ND *		2.0		ug/L			09/15/17 20:16	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/15/17 20:16	1
Naphthalene	ND		4.0		ug/L			09/15/17 20:16	1
n-Butylbenzene	ND		3.0		ug/L			09/15/17 20:16	1
N-Propylbenzene	ND		3.0		ug/L			09/15/17 20:16	1
o-Xylene	ND		2.0		ug/L			09/15/17 20:16	1
sec-Butylbenzene	ND		3.0		ug/L			09/15/17 20:16	1
Styrene	ND		5.0		ug/L			09/15/17 20:16	1
tert-Butylbenzene	ND		3.0		ug/L			09/15/17 20:16	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/15/17 20:16	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			09/15/17 20:16	1
Tetrachloroethene	ND		3.0		ug/L			09/15/17 20:16	1
Toluene	ND		2.0		ug/L			09/15/17 20:16	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			09/15/17 20:16	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 580-71203-8**

**Date Collected: 09/05/17 00:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 20:16	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			09/15/17 20:16	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/15/17 20:16	1
1,1,1-Trichloroethane	ND	*	3.0		ug/L			09/15/17 20:16	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/15/17 20:16	1
Trichloroethene	ND		3.0		ug/L			09/15/17 20:16	1
Trichlorofluoromethane	ND		3.0		ug/L			09/15/17 20:16	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/15/17 20:16	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/15/17 20:16	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/15/17 20:16	1
Vinyl chloride	ND		1.0		ug/L			09/15/17 20:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		75 - 125		09/15/17 20:16	1
Dibromofluoromethane (Surr)	108		77 - 120		09/15/17 20:16	1
1,2-Dichloroethane-d4 (Surr)	124		80 - 126		09/15/17 20:16	1
Toluene-d8 (Surr)	91		80 - 122		09/15/17 20:16	1
Trifluorotoluene (Surr)	112		80 - 120		09/15/17 20:16	1

**Method: AK101 - Alaska - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			09/13/17 17:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	107		75 - 120		09/13/17 17:54	1
4-Bromofluorobenzene (Surr)	87		68 - 119		09/13/17 17:54	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: EB-1-W-090617**

**Lab Sample ID: 580-71203-9**

**Date Collected: 09/06/17 09:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/15/17 20:43	1
Bromobenzene	ND		2.0		ug/L			09/15/17 20:43	1
Bromoform	ND		3.0		ug/L			09/15/17 20:43	1
Bromomethane	ND		6.0		ug/L			09/15/17 20:43	1
Carbon tetrachloride	ND *		3.0		ug/L			09/15/17 20:43	1
Chlorobenzene	ND		2.0		ug/L			09/15/17 20:43	1
Chlorobromomethane	ND		2.0		ug/L			09/15/17 20:43	1
Chlorodibromomethane	ND		1.0		ug/L			09/15/17 20:43	1
Chloroethane	ND		5.0		ug/L			09/15/17 20:43	1
Chloroform	ND *		5.0		ug/L			09/15/17 20:43	1
Chloromethane	ND		20		ug/L			09/15/17 20:43	1
2-Chlorotoluene	ND		3.0		ug/L			09/15/17 20:43	1
4-Chlorotoluene	ND		2.0		ug/L			09/15/17 20:43	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/15/17 20:43	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 20:43	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/15/17 20:43	1
Dibromomethane	ND		2.0		ug/L			09/15/17 20:43	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/15/17 20:43	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/15/17 20:43	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/15/17 20:43	1
Dichlorobromomethane	ND *		2.0		ug/L			09/15/17 20:43	1
Dichlorodifluoromethane	ND		5.0		ug/L			09/15/17 20:43	1
1,1-Dichloroethane	ND		2.0		ug/L			09/15/17 20:43	1
1,2-Dichloroethane	ND *		2.0		ug/L			09/15/17 20:43	1
1,1-Dichloroethene	ND		4.0		ug/L			09/15/17 20:43	1
1,2-Dichloropropane	ND		1.0		ug/L			09/15/17 20:43	1
1,3-Dichloropropane	ND		2.0		ug/L			09/15/17 20:43	1
2,2-Dichloropropane	ND *		3.0		ug/L			09/15/17 20:43	1
1,1-Dichloropropene	ND		3.0		ug/L			09/15/17 20:43	1
Ethylbenzene	ND		3.0		ug/L			09/15/17 20:43	1
Ethylene Dibromide	ND		2.0		ug/L			09/15/17 20:43	1
Hexachlorobutadiene	ND		6.0		ug/L			09/15/17 20:43	1
Isopropylbenzene	ND		2.0		ug/L			09/15/17 20:43	1
4-Isopropyltoluene	ND		3.0		ug/L			09/15/17 20:43	1
Methylene Chloride	ND		5.0		ug/L			09/15/17 20:43	1
Methyl tert-butyl ether	ND *		2.0		ug/L			09/15/17 20:43	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/15/17 20:43	1
Naphthalene	ND		4.0		ug/L			09/15/17 20:43	1
n-Butylbenzene	ND		3.0		ug/L			09/15/17 20:43	1
N-Propylbenzene	ND		3.0		ug/L			09/15/17 20:43	1
o-Xylene	ND		2.0		ug/L			09/15/17 20:43	1
sec-Butylbenzene	ND		3.0		ug/L			09/15/17 20:43	1
Styrene	ND		5.0		ug/L			09/15/17 20:43	1
tert-Butylbenzene	ND		3.0		ug/L			09/15/17 20:43	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/15/17 20:43	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			09/15/17 20:43	1
Tetrachloroethene	ND		3.0		ug/L			09/15/17 20:43	1
Toluene	ND		2.0		ug/L			09/15/17 20:43	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			09/15/17 20:43	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: EB-1-W-090617**

**Lab Sample ID: 580-71203-9**

**Date Collected: 09/06/17 09:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 20:43	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			09/15/17 20:43	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/15/17 20:43	1
1,1,1-Trichloroethane	ND	*	3.0		ug/L			09/15/17 20:43	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/15/17 20:43	1
Trichloroethene	ND		3.0		ug/L			09/15/17 20:43	1
Trichlorofluoromethane	ND		3.0		ug/L			09/15/17 20:43	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/15/17 20:43	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/15/17 20:43	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/15/17 20:43	1
Vinyl chloride	ND		1.0		ug/L			09/15/17 20:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		75 - 125		09/15/17 20:43	1
Dibromofluoromethane (Surr)	115		77 - 120		09/15/17 20:43	1
1,2-Dichloroethane-d4 (Surr)	126		80 - 126		09/15/17 20:43	1
Toluene-d8 (Surr)	93		80 - 122		09/15/17 20:43	1
Trifluorotoluene (Surr)	114		80 - 120		09/15/17 20:43	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			09/14/17 04:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	100		75 - 120		09/14/17 04:38	1
4-Bromofluorobenzene (Surr)	87		68 - 119		09/14/17 04:38	1

## Method: 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		0.11		mg/L		09/13/17 08:46	09/16/17 08:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
o-Terphenyl	86		50 - 150		09/13/17 08:46	09/16/17 08:00	1

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 580-256318/5

Matrix: Water

Analysis Batch: 256318

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/15/17 13:13	1
Bromobenzene	ND		2.0		ug/L			09/15/17 13:13	1
Bromoform	ND		3.0		ug/L			09/15/17 13:13	1
Bromomethane	ND		6.0		ug/L			09/15/17 13:13	1
Carbon tetrachloride	ND		3.0		ug/L			09/15/17 13:13	1
Chlorobenzene	ND		2.0		ug/L			09/15/17 13:13	1
Chlorobromomethane	ND		2.0		ug/L			09/15/17 13:13	1
Chlorodibromomethane	ND		1.0		ug/L			09/15/17 13:13	1
Chloroethane	ND		5.0		ug/L			09/15/17 13:13	1
Chloroform	ND		5.0		ug/L			09/15/17 13:13	1
Chloromethane	ND		20		ug/L			09/15/17 13:13	1
2-Chlorotoluene	ND		3.0		ug/L			09/15/17 13:13	1
4-Chlorotoluene	ND		2.0		ug/L			09/15/17 13:13	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/15/17 13:13	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 13:13	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/15/17 13:13	1
Dibromomethane	ND		2.0		ug/L			09/15/17 13:13	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/15/17 13:13	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/15/17 13:13	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/15/17 13:13	1
Dichlorobromomethane	ND		2.0		ug/L			09/15/17 13:13	1
Dichlorodifluoromethane	ND		5.0		ug/L			09/15/17 13:13	1
1,1-Dichloroethane	ND		2.0		ug/L			09/15/17 13:13	1
1,2-Dichloroethane	ND		2.0		ug/L			09/15/17 13:13	1
1,1-Dichloroethene	ND		4.0		ug/L			09/15/17 13:13	1
1,2-Dichloropropane	ND		1.0		ug/L			09/15/17 13:13	1
1,3-Dichloropropane	ND		2.0		ug/L			09/15/17 13:13	1
2,2-Dichloropropane	ND		3.0		ug/L			09/15/17 13:13	1
1,1-Dichloropropene	ND		3.0		ug/L			09/15/17 13:13	1
Ethylbenzene	ND		3.0		ug/L			09/15/17 13:13	1
Ethylene Dibromide	ND		2.0		ug/L			09/15/17 13:13	1
Hexachlorobutadiene	ND		6.0		ug/L			09/15/17 13:13	1
Isopropylbenzene	ND		2.0		ug/L			09/15/17 13:13	1
4-Isopropyltoluene	ND		3.0		ug/L			09/15/17 13:13	1
Methylene Chloride	ND		5.0		ug/L			09/15/17 13:13	1
Methyl tert-butyl ether	ND		2.0		ug/L			09/15/17 13:13	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/15/17 13:13	1
Naphthalene	ND		4.0		ug/L			09/15/17 13:13	1
n-Butylbenzene	ND		3.0		ug/L			09/15/17 13:13	1
N-Propylbenzene	ND		3.0		ug/L			09/15/17 13:13	1
o-Xylene	ND		2.0		ug/L			09/15/17 13:13	1
sec-Butylbenzene	ND		3.0		ug/L			09/15/17 13:13	1
Styrene	ND		5.0		ug/L			09/15/17 13:13	1
tert-Butylbenzene	ND		3.0		ug/L			09/15/17 13:13	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/15/17 13:13	1
1,1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			09/15/17 13:13	1
Tetrachloroethene	ND		3.0		ug/L			09/15/17 13:13	1
Toluene	ND		2.0		ug/L			09/15/17 13:13	1

TestAmerica Seattle



# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

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

**Lab Sample ID: MB 580-256318/5**  
**Matrix: Water**  
**Analysis Batch: 256318**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		3.0		ug/L			09/15/17 13:13	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/15/17 13:13	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			09/15/17 13:13	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/15/17 13:13	1
1,1,1-Trichloroethane	ND		3.0		ug/L			09/15/17 13:13	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/15/17 13:13	1
Trichloroethene	ND		3.0		ug/L			09/15/17 13:13	1
Trichlorofluoromethane	ND		3.0		ug/L			09/15/17 13:13	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/15/17 13:13	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/15/17 13:13	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/15/17 13:13	1
Vinyl chloride	ND		1.0		ug/L			09/15/17 13:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		75 - 125		09/15/17 13:13	1
Dibromofluoromethane (Surr)	113		77 - 120		09/15/17 13:13	1
1,2-Dichloroethane-d4 (Surr)	130	X	80 - 126		09/15/17 13:13	1
Toluene-d8 (Surr)	93		80 - 122		09/15/17 13:13	1
Trifluorotoluene (Surr)	119		80 - 120		09/15/17 13:13	1

**Lab Sample ID: LCS 580-256318/6**  
**Matrix: Water**  
**Analysis Batch: 256318**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	10.0	10.9		ug/L		109	75 - 120
Bromobenzene	10.0	9.07		ug/L		91	75 - 120
Bromoform	10.0	10.6		ug/L		106	71 - 120
Bromomethane	10.0	9.53		ug/L		95	55 - 125
Carbon tetrachloride	10.0	13.8	*	ug/L		138	72 - 124
Chlorobenzene	10.0	9.79		ug/L		98	80 - 120
Chlorobromomethane	10.0	11.6		ug/L		116	78 - 120
Chlorodibromomethane	10.0	10.6		ug/L		106	71 - 120
Chloroethane	10.0	9.24		ug/L		92	65 - 126
Chloroform	10.0	12.1	*	ug/L		121	80 - 119
Chloromethane	10.0	10.8	J	ug/L		108	25 - 149
2-Chlorotoluene	10.0	9.35		ug/L		94	80 - 120
4-Chlorotoluene	10.0	9.33		ug/L		93	80 - 121
cis-1,2-Dichloroethene	10.0	11.6		ug/L		116	76 - 120
cis-1,3-Dichloropropene	10.0	9.56		ug/L		96	77 - 120
1,2-Dibromo-3-Chloropropane	10.0	10.5		ug/L		105	58 - 133
Dibromomethane	10.0	12.3		ug/L		123	75 - 123
1,2-Dichlorobenzene	10.0	9.42		ug/L		94	80 - 120
1,3-Dichlorobenzene	10.0	9.42		ug/L		94	80 - 121
1,4-Dichlorobenzene	10.0	9.42		ug/L		94	80 - 120
Dichlorobromomethane	10.0	13.5	*	ug/L		135	75 - 120
Dichlorodifluoromethane	10.0	9.89		ug/L		99	20 - 150
1,1-Dichloroethane	10.0	11.5		ug/L		115	70 - 120

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

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

Lab Sample ID: LCS 580-256318/6

Matrix: Water

Analysis Batch: 256318

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	10.0	15.0	*	ug/L		150	76 - 131
1,1-Dichloroethene	10.0	10.9		ug/L		109	70 - 129
1,2-Dichloropropane	10.0	10.8		ug/L		108	72 - 120
1,3-Dichloropropane	10.0	9.83		ug/L		98	79 - 123
2,2-Dichloropropane	10.0	14.7	*	ug/L		147	43 - 140
1,1-Dichloropropene	10.0	11.8		ug/L		118	75 - 120
Ethylbenzene	10.0	9.98		ug/L		100	75 - 120
Ethylene Dibromide	10.0	9.57		ug/L		96	79 - 120
Hexachlorobutadiene	10.0	10.1		ug/L		101	65 - 125
Isopropylbenzene	10.0	10.1		ug/L		101	75 - 125
4-Isopropyltoluene	10.0	9.39		ug/L		94	77 - 120
Methylene Chloride	10.0	10.4		ug/L		104	70 - 125
Methyl tert-butyl ether	10.0	12.4	*	ug/L		124	79 - 120
m-Xylene & p-Xylene	10.0	10.1		ug/L		101	75 - 120
Naphthalene	10.0	9.56		ug/L		96	71 - 126
n-Butylbenzene	10.0	9.36		ug/L		94	78 - 120
N-Propylbenzene	10.0	9.08		ug/L		91	80 - 124
o-Xylene	10.0	10.1		ug/L		101	74 - 120
sec-Butylbenzene	10.0	9.05		ug/L		90	78 - 125
Styrene	10.0	9.75		ug/L		98	76 - 121
tert-Butylbenzene	10.0	9.53		ug/L		95	80 - 121
1,1,1,2-Tetrachloroethane	10.0	10.5		ug/L		105	79 - 120
1,1,1,2,2-Tetrachloroethane	10.0	9.52		ug/L		95	65 - 130
Tetrachloroethene	10.0	10.5		ug/L		105	76 - 124
Toluene	10.0	9.53		ug/L		95	75 - 120
trans-1,2-Dichloroethene	10.0	11.5		ug/L		115	72 - 124
trans-1,3-Dichloropropene	10.0	10.5		ug/L		105	73 - 122
1,2,3-Trichlorobenzene	10.0	10.6		ug/L		106	74 - 123
1,2,4-Trichlorobenzene	10.0	9.76		ug/L		98	76 - 120
1,1,1-Trichloroethane	10.0	13.3	*	ug/L		133	74 - 130
1,1,2-Trichloroethane	10.0	9.62		ug/L		96	78 - 121
Trichloroethene	10.0	11.4		ug/L		114	70 - 125
Trichlorofluoromethane	10.0	12.5		ug/L		125	49 - 144
1,2,3-Trichloropropane	10.0	9.70		ug/L		97	76 - 124
1,2,4-Trimethylbenzene	10.0	9.17		ug/L		92	75 - 121
1,3,5-Trimethylbenzene	10.0	9.18		ug/L		92	75 - 122
Vinyl chloride	10.0	10.3		ug/L		103	20 - 150

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	107		75 - 125
Dibromofluoromethane (Surr)	114		77 - 120
1,2-Dichloroethane-d4 (Surr)	133	X	80 - 126
Toluene-d8 (Surr)	90		80 - 122
Trifluorotoluene (Surr)	117		80 - 120

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

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

**Lab Sample ID: LCSD 580-256318/25**

**Matrix: Water**

**Analysis Batch: 256318**

**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
Benzene	10.0	10.8		ug/L		108	75 - 120	1	14
Bromobenzene	10.0	9.35		ug/L		94	75 - 120	3	13
Bromoform	10.0	9.35		ug/L		93	71 - 120	13	20
Bromomethane	10.0	9.26		ug/L		93	55 - 125	3	35
Carbon tetrachloride	10.0	13.4	*	ug/L		134	72 - 124	3	19
Chlorobenzene	10.0	9.42		ug/L		94	80 - 120	4	15
Chlorobromomethane	10.0	10.9		ug/L		109	78 - 120	6	35
Chlorodibromomethane	10.0	10.1		ug/L		101	71 - 120	5	35
Chloroethane	10.0	8.45		ug/L		84	65 - 126	9	35
Chloroform	10.0	12.0	*	ug/L		120	80 - 119	0	15
Chloromethane	10.0	10.5	J	ug/L		105	25 - 149	2	35
2-Chlorotoluene	10.0	9.29		ug/L		93	80 - 120	1	15
4-Chlorotoluene	10.0	9.64		ug/L		96	80 - 121	3	34
cis-1,2-Dichloroethene	10.0	11.6		ug/L		116	76 - 120	0	15
cis-1,3-Dichloropropene	10.0	9.59		ug/L		96	77 - 120	0	12
1,2-Dibromo-3-Chloropropane	10.0	8.34	J	ug/L		83	58 - 133	23	35
Dibromomethane	10.0	12.0		ug/L		120	75 - 123	2	22
1,2-Dichlorobenzene	10.0	9.53		ug/L		95	80 - 120	1	15
1,3-Dichlorobenzene	10.0	9.65		ug/L		96	80 - 121	2	14
1,4-Dichlorobenzene	10.0	9.67		ug/L		97	80 - 120	3	17
Dichlorobromomethane	10.0	12.7	*	ug/L		127	75 - 120	6	14
Dichlorodifluoromethane	10.0	10.5		ug/L		105	20 - 150	6	35
1,1-Dichloroethane	10.0	11.5		ug/L		115	70 - 120	0	20
1,2-Dichloroethane	10.0	14.1	*	ug/L		141	76 - 131	6	11
1,1-Dichloroethene	10.0	11.2		ug/L		112	70 - 129	2	27
1,2-Dichloropropane	10.0	10.9		ug/L		109	72 - 120	1	26
1,3-Dichloropropane	10.0	9.28		ug/L		93	79 - 123	6	35
2,2-Dichloropropane	10.0	14.0		ug/L		140	43 - 140	5	35
1,1-Dichloropropene	10.0	11.7		ug/L		117	75 - 120	1	20
Ethylbenzene	10.0	9.42		ug/L		94	75 - 120	6	14
Ethylene Dibromide	10.0	9.72		ug/L		97	79 - 120	2	26
Hexachlorobutadiene	10.0	10.9		ug/L		109	65 - 125	8	29
Isopropylbenzene	10.0	9.64		ug/L		96	75 - 125	5	20
4-Isopropyltoluene	10.0	9.62		ug/L		96	77 - 120	2	13
Methylene Chloride	10.0	10.6		ug/L		106	70 - 125	1	29
Methyl tert-butyl ether	10.0	11.6		ug/L		116	79 - 120	7	18
m-Xylene & p-Xylene	10.0	10.0		ug/L		100	75 - 120	1	14
Naphthalene	10.0	8.96		ug/L		90	71 - 126	7	16
n-Butylbenzene	10.0	9.36		ug/L		94	78 - 120	0	14
N-Propylbenzene	10.0	9.08		ug/L		91	80 - 124	0	13
o-Xylene	10.0	9.84		ug/L		98	74 - 120	3	16
sec-Butylbenzene	10.0	9.37		ug/L		94	78 - 125	4	15
Styrene	10.0	9.64		ug/L		96	76 - 121	1	16
tert-Butylbenzene	10.0	9.37		ug/L		94	80 - 121	2	14
1,1,1,2-Tetrachloroethane	10.0	10.1		ug/L		101	79 - 120	4	20
1,1,1,2,2-Tetrachloroethane	10.0	8.97		ug/L		90	65 - 130	6	18
Tetrachloroethene	10.0	10.3		ug/L		103	76 - 124	2	20
Toluene	10.0	9.06		ug/L		91	75 - 120	5	13

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

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

Lab Sample ID: LCSD 580-256318/25

Matrix: Water

Analysis Batch: 256318

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
trans-1,2-Dichloroethene	10.0	10.7		ug/L		107	72 - 124	7	21
trans-1,3-Dichloropropene	10.0	10.3		ug/L		103	73 - 122	1	13
1,2,3-Trichlorobenzene	10.0	10.5		ug/L		105	74 - 123	1	17
1,2,4-Trichlorobenzene	10.0	9.45		ug/L		95	76 - 120	3	22
1,1,1-Trichloroethane	10.0	12.9		ug/L		129	74 - 130	3	18
1,1,2-Trichloroethane	10.0	9.40		ug/L		94	78 - 121	2	14
Trichloroethene	10.0	11.0		ug/L		110	70 - 125	4	15
Trichlorofluoromethane	10.0	12.3		ug/L		123	49 - 144	2	35
1,2,3-Trichloropropane	10.0	9.34		ug/L		93	76 - 124	4	30
1,2,4-Trimethylbenzene	10.0	9.22		ug/L		92	75 - 121	1	16
1,3,5-Trimethylbenzene	10.0	9.43		ug/L		94	75 - 122	3	14
Vinyl chloride	10.0	10.0		ug/L		100	20 - 150	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	106		75 - 125
Dibromofluoromethane (Surr)	109		77 - 120
1,2-Dichloroethane-d4 (Surr)	125		80 - 126
Toluene-d8 (Surr)	89		80 - 122
Trifluorotoluene (Surr)	116		80 - 120

Lab Sample ID: 580-71203-2 MS

Matrix: Water

Analysis Batch: 256318

Client Sample ID: MW-2-W-090617

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	ND		10.0	11.3		ug/L		113	80 - 120
Bromobenzene	ND		10.0	10.1		ug/L		101	75 - 115
Bromoform	ND		10.0	11.0		ug/L		110	55 - 130
Bromomethane	ND		10.0	8.49		ug/L		85	55 - 125
Carbon tetrachloride	ND	* F1	10.0	14.5	F1	ug/L		145	65 - 124
Chlorobenzene	ND		10.0	10.1		ug/L		101	80 - 120
Chlorobromomethane	ND	F1	10.0	12.4	F1	ug/L		124	65 - 120
Chlorodibromomethane	ND		10.0	11.6		ug/L		116	71 - 118
Chloroethane	ND		10.0	10.4		ug/L		104	60 - 126
Chloroform	ND	* F1	10.0	12.6	F1	ug/L		126	80 - 119
Chloromethane	ND		10.0	ND		ug/L		105	40 - 149
2-Chlorotoluene	ND		10.0	9.88		ug/L		99	69 - 125
4-Chlorotoluene	ND		10.0	9.65		ug/L		97	68 - 121
cis-1,3-Dichloropropene	ND		10.0	9.87		ug/L		99	77 - 117
1,2-Dibromo-3-Chloropropane	ND		10.0	10.5		ug/L		105	58 - 141
Dibromomethane	ND		10.0	12.8		ug/L		128	61 - 142
1,2-Dichlorobenzene	ND		10.0	10.2		ug/L		98	70 - 120
1,3-Dichlorobenzene	ND		10.0	9.93		ug/L		99	72 - 116
1,4-Dichlorobenzene	ND		10.0	10.2		ug/L		102	75 - 117
Dichlorobromomethane	ND	* F1	10.0	13.5	F1	ug/L		135	75 - 120
Dichlorodifluoromethane	ND		10.0	9.22		ug/L		92	20 - 141
1,2-Dichloroethane	ND	* F1	10.0	15.4	F1	ug/L		154	58 - 143
1,1-Dichloroethene	ND		10.0	11.3		ug/L		113	70 - 117

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

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

Lab Sample ID: 580-71203-2 MS

Matrix: Water

Analysis Batch: 256318

Client Sample ID: MW-2-W-090617

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	ND		10.0	12.1		ug/L		121	58 - 150
1,3-Dichloropropane	ND		10.0	10.3		ug/L		103	69 - 134
2,2-Dichloropropane	ND	F1 *	10.0	13.7		ug/L		137	50 - 140
1,1-Dichloropropene	ND	F1	10.0	11.9		ug/L		119	75 - 120
Ethylbenzene	ND		10.0	12.2		ug/L		103	75 - 119
Ethylene Dibromide	ND		10.0	10.1		ug/L		101	66 - 133
Hexachlorobutadiene	ND		10.0	9.74		ug/L		97	56 - 125
Isopropylbenzene	ND		10.0	11.2		ug/L		106	75 - 125
4-Isopropyltoluene	ND		10.0	9.81		ug/L		98	66 - 120
Methylene Chloride	ND		10.0	10.5		ug/L		105	70 - 115
Methyl tert-butyl ether	ND	F1 *	10.0	12.8	F1	ug/L		128	65 - 125
m-Xylene & p-Xylene	ND		10.0	11.5		ug/L		103	75 - 119
Naphthalene	ND		10.0	10.6		ug/L		106	55 - 134
n-Butylbenzene	ND		10.0	10.1		ug/L		101	70 - 120
N-Propylbenzene	ND		10.0	9.45		ug/L		94	70 - 124
o-Xylene	ND		10.0	10.5		ug/L		102	74 - 120
sec-Butylbenzene	ND		10.0	10.0		ug/L		94	70 - 125
Styrene	ND		10.0	10.0		ug/L		100	76 - 116
tert-Butylbenzene	ND		10.0	10.1		ug/L		101	70 - 121
1,1,1,2-Tetrachloroethane	ND		10.0	11.4		ug/L		114	64 - 130
1,1,2,2-Tetrachloroethane	ND		10.0	10.6		ug/L		106	65 - 130
Tetrachloroethene	ND		10.0	10.9		ug/L		109	70 - 124
Toluene	ND		10.0	9.89		ug/L		99	75 - 120
trans-1,2-Dichloroethene	ND	F1	10.0	10.9		ug/L		109	72 - 113
trans-1,3-Dichloropropene	ND		10.0	10.5		ug/L		105	73 - 122
1,2,3-Trichlorobenzene	ND		10.0	10.6		ug/L		106	55 - 133
1,2,4-Trichlorobenzene	ND		10.0	10.0		ug/L		100	56 - 129
1,1,1-Trichloroethane	ND	F1 *	10.0	13.8	F1	ug/L		138	65 - 130
1,1,2-Trichloroethane	ND		10.0	10.3		ug/L		103	69 - 135
Trichloroethene	ND		10.0	11.0		ug/L		106	70 - 125
Trichlorofluoromethane	ND		10.0	12.0		ug/L		120	49 - 130
1,2,3-Trichloropropane	ND		10.0	11.0		ug/L		110	65 - 135
1,2,4-Trimethylbenzene	ND		10.0	10.6		ug/L		98	75 - 121
1,3,5-Trimethylbenzene	ND		10.0	10.0		ug/L		100	75 - 122
Vinyl chloride	ND		10.0	9.51		ug/L		95	56 - 114

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		75 - 125
Dibromofluoromethane (Surr)	110		77 - 120
1,2-Dichloroethane-d4 (Surr)	129	X	80 - 126
Toluene-d8 (Surr)	90		80 - 122
Trifluorotoluene (Surr)	114		80 - 120

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

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

**Lab Sample ID: 580-71203-2 MSD**

**Matrix: Water**

**Analysis Batch: 256318**

**Client Sample ID: MW-2-W-090617**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	ND		10.0	11.3		ug/L		113	80 - 120	0	35
Bromobenzene	ND		10.0	10.1		ug/L		101	75 - 115	0	35
Bromoform	ND		10.0	10.6		ug/L		106	55 - 130	4	35
Bromomethane	ND		10.0	8.64		ug/L		86	55 - 125	2	35
Carbon tetrachloride	ND	* F1	10.0	14.3	F1	ug/L		143	65 - 124	1	35
Chlorobenzene	ND		10.0	9.87		ug/L		99	80 - 120	3	35
Chlorobromomethane	ND	F1	10.0	11.5		ug/L		115	65 - 120	7	35
Chlorodibromomethane	ND		10.0	10.8		ug/L		108	71 - 118	7	35
Chloroethane	ND		10.0	9.63		ug/L		96	60 - 126	8	35
Chloroform	ND	* F1	10.0	13.4	F1	ug/L		134	80 - 119	6	35
Chloromethane	ND		10.0	ND		ug/L		103	40 - 149	2	35
2-Chlorotoluene	ND		10.0	9.41		ug/L		94	69 - 125	5	35
4-Chlorotoluene	ND		10.0	9.96		ug/L		100	68 - 121	3	35
cis-1,3-Dichloropropene	ND		10.0	10.1		ug/L		101	77 - 117	3	35
1,2-Dibromo-3-Chloropropane	ND		10.0	10.2		ug/L		102	58 - 141	3	35
Dibromomethane	ND		10.0	13.1		ug/L		131	61 - 142	3	35
1,2-Dichlorobenzene	ND		10.0	10.0		ug/L		96	70 - 120	2	35
1,3-Dichlorobenzene	ND		10.0	9.83		ug/L		98	72 - 116	1	35
1,4-Dichlorobenzene	ND		10.0	10.2		ug/L		102	75 - 117	1	35
Dichlorobromomethane	ND	* F1	10.0	13.4	F1	ug/L		134	75 - 120	0	35
Dichlorodifluoromethane	ND		10.0	9.33		ug/L		93	20 - 141	1	35
1,2-Dichloroethane	ND	* F1	10.0	15.6	F1	ug/L		156	58 - 143	2	35
1,1-Dichloroethene	ND		10.0	11.2		ug/L		112	70 - 117	0	35
1,2-Dichloropropane	ND		10.0	11.7		ug/L		117	58 - 150	3	35
1,3-Dichloropropane	ND		10.0	9.73		ug/L		97	69 - 134	5	35
2,2-Dichloropropane	ND	F1 *	10.0	14.3	F1	ug/L		143	50 - 140	4	35
1,1-Dichloropropene	ND	F1	10.0	12.8	F1	ug/L		128	75 - 120	7	35
Ethylbenzene	ND		10.0	11.9		ug/L		101	75 - 119	2	35
Ethylene Dibromide	ND		10.0	9.72		ug/L		97	66 - 133	4	35
Hexachlorobutadiene	ND		10.0	10.2		ug/L		102	56 - 125	5	35
Isopropylbenzene	ND		10.0	10.8		ug/L		102	75 - 125	4	35
4-Isopropyltoluene	ND		10.0	9.72		ug/L		97	66 - 120	1	35
Methylene Chloride	ND		10.0	10.5		ug/L		105	70 - 115	1	35
Methyl tert-butyl ether	ND	F1 *	10.0	12.1		ug/L		121	65 - 125	6	35
m-Xylene & p-Xylene	ND		10.0	11.3		ug/L		101	75 - 119	2	35
Naphthalene	ND		10.0	9.76		ug/L		98	55 - 134	8	35
n-Butylbenzene	ND		10.0	10.1		ug/L		101	70 - 120	0	35
N-Propylbenzene	ND		10.0	9.60		ug/L		96	70 - 124	2	35
o-Xylene	ND		10.0	10.5		ug/L		102	74 - 120	0	35
sec-Butylbenzene	ND		10.0	10.3		ug/L		97	70 - 125	3	35
Styrene	ND		10.0	10.1		ug/L		101	76 - 116	1	35
tert-Butylbenzene	ND		10.0	9.93		ug/L		99	70 - 121	2	35
1,1,1,2-Tetrachloroethane	ND		10.0	10.6		ug/L		106	64 - 130	6	35
1,1,1,2,2-Tetrachloroethane	ND		10.0	9.67		ug/L		97	65 - 130	10	35
Tetrachloroethene	ND		10.0	10.6		ug/L		106	70 - 124	3	35
Toluene	ND		10.0	9.65		ug/L		96	75 - 120	2	35
trans-1,2-Dichloroethene	ND	F1	10.0	12.1	F1	ug/L		121	72 - 113	11	35
trans-1,3-Dichloropropene	ND		10.0	10.5		ug/L		105	73 - 122	0	35

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

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

**Lab Sample ID: 580-71203-2 MSD**

**Matrix: Water**

**Analysis Batch: 256318**

**Client Sample ID: MW-2-W-090617**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichlorobenzene	ND		10.0	10.2		ug/L		102	55 - 133	4	35
1,2,4-Trichlorobenzene	ND		10.0	9.91		ug/L		99	56 - 129	1	35
1,1,1-Trichloroethane	ND	F1 *	10.0	13.8	F1	ug/L		138	65 - 130	0	35
1,1,2-Trichloroethane	ND		10.0	9.84		ug/L		98	69 - 135	5	35
Trichloroethene	ND		10.0	11.6		ug/L		112	70 - 125	5	35
Trichlorofluoromethane	ND		10.0	12.2		ug/L		122	49 - 130	2	35
1,2,3-Trichloropropane	ND		10.0	10.0		ug/L		100	65 - 135	9	35
1,2,4-Trimethylbenzene	ND		10.0	10.5		ug/L		97	75 - 121	1	35
1,3,5-Trimethylbenzene	ND		10.0	10.2		ug/L		102	75 - 122	2	35
Vinyl chloride	ND		10.0	9.60		ug/L		96	56 - 114	1	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	109		75 - 125
Dibromofluoromethane (Surr)	111		77 - 120
1,2-Dichloroethane-d4 (Surr)	130	X	80 - 126
Toluene-d8 (Surr)	88		80 - 122
Trifluorotoluene (Surr)	116		80 - 120

**Lab Sample ID: MB 580-256639/5**

**Matrix: Water**

**Analysis Batch: 256639**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0		ug/L			09/19/17 17:17	1
Bromobenzene	ND		2.0		ug/L			09/19/17 17:17	1
Bromoform	ND		3.0		ug/L			09/19/17 17:17	1
Bromomethane	ND		6.0		ug/L			09/19/17 17:17	1
Carbon tetrachloride	ND		3.0		ug/L			09/19/17 17:17	1
Chlorobenzene	ND		2.0		ug/L			09/19/17 17:17	1
Chlorobromomethane	ND		2.0		ug/L			09/19/17 17:17	1
Chlorodibromomethane	ND		1.0		ug/L			09/19/17 17:17	1
Chloroethane	ND		5.0		ug/L			09/19/17 17:17	1
Chloroform	ND		5.0		ug/L			09/19/17 17:17	1
Chloromethane	ND		20		ug/L			09/19/17 17:17	1
2-Chlorotoluene	ND		3.0		ug/L			09/19/17 17:17	1
4-Chlorotoluene	ND		2.0		ug/L			09/19/17 17:17	1
cis-1,2-Dichloroethene	ND		1.0		ug/L			09/19/17 17:17	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			09/19/17 17:17	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			09/19/17 17:17	1
Dibromomethane	ND		2.0		ug/L			09/19/17 17:17	1
1,2-Dichlorobenzene	ND		2.0		ug/L			09/19/17 17:17	1
1,3-Dichlorobenzene	ND		2.0		ug/L			09/19/17 17:17	1
1,4-Dichlorobenzene	ND		4.0		ug/L			09/19/17 17:17	1
Dichlorobromomethane	ND		2.0		ug/L			09/19/17 17:17	1
Dichlorodifluoromethane	ND		5.0		ug/L			09/19/17 17:17	1
1,1-Dichloroethane	ND		2.0		ug/L			09/19/17 17:17	1
1,2-Dichloroethane	ND		2.0		ug/L			09/19/17 17:17	1
1,1-Dichloroethene	ND		4.0		ug/L			09/19/17 17:17	1

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

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

**Lab Sample ID: MB 580-256639/5**

**Matrix: Water**

**Analysis Batch: 256639**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2-Dichloropropane	ND		1.0		ug/L			09/19/17 17:17	1
1,3-Dichloropropane	ND		2.0		ug/L			09/19/17 17:17	1
2,2-Dichloropropane	ND		3.0		ug/L			09/19/17 17:17	1
1,1-Dichloropropene	ND		3.0		ug/L			09/19/17 17:17	1
Ethylbenzene	ND		3.0		ug/L			09/19/17 17:17	1
Ethylene Dibromide	ND		2.0		ug/L			09/19/17 17:17	1
Hexachlorobutadiene	ND		6.0		ug/L			09/19/17 17:17	1
Isopropylbenzene	ND		2.0		ug/L			09/19/17 17:17	1
4-Isopropyltoluene	ND		3.0		ug/L			09/19/17 17:17	1
Methylene Chloride	ND		5.0		ug/L			09/19/17 17:17	1
Methyl tert-butyl ether	ND		2.0		ug/L			09/19/17 17:17	1
m-Xylene & p-Xylene	ND		3.0		ug/L			09/19/17 17:17	1
Naphthalene	ND		4.0		ug/L			09/19/17 17:17	1
n-Butylbenzene	ND		3.0		ug/L			09/19/17 17:17	1
N-Propylbenzene	ND		3.0		ug/L			09/19/17 17:17	1
o-Xylene	ND		2.0		ug/L			09/19/17 17:17	1
sec-Butylbenzene	ND		3.0		ug/L			09/19/17 17:17	1
Styrene	ND		5.0		ug/L			09/19/17 17:17	1
tert-Butylbenzene	ND		3.0		ug/L			09/19/17 17:17	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			09/19/17 17:17	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			09/19/17 17:17	1
Tetrachloroethene	ND		3.0		ug/L			09/19/17 17:17	1
Toluene	ND		2.0		ug/L			09/19/17 17:17	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			09/19/17 17:17	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			09/19/17 17:17	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			09/19/17 17:17	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			09/19/17 17:17	1
1,1,1-Trichloroethane	ND		3.0		ug/L			09/19/17 17:17	1
1,1,2-Trichloroethane	ND		1.0		ug/L			09/19/17 17:17	1
Trichloroethene	ND		3.0		ug/L			09/19/17 17:17	1
Trichlorofluoromethane	ND		3.0		ug/L			09/19/17 17:17	1
1,2,3-Trichloropropane	ND		2.0		ug/L			09/19/17 17:17	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			09/19/17 17:17	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			09/19/17 17:17	1
Vinyl chloride	ND		1.0		ug/L			09/19/17 17:17	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	106		75 - 125		09/19/17 17:17	1
Dibromofluoromethane (Surr)	107		77 - 120		09/19/17 17:17	1
1,2-Dichloroethane-d4 (Surr)	92		80 - 126		09/19/17 17:17	1
Toluene-d8 (Surr)	92		80 - 122		09/19/17 17:17	1
Trifluorotoluene (Surr)	111		80 - 120		09/19/17 17:17	1

TestAmerica Seattle



# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

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

**Lab Sample ID: LCS 580-256639/6**

**Matrix: Water**

**Analysis Batch: 256639**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	10.0	10.6		ug/L		106	76 - 120
1,4-Dichlorobenzene	10.0	10.3		ug/L		103	80 - 120
1,1-Dichloroethane	10.0	9.60		ug/L		96	70 - 120
Ethylbenzene	10.0	9.63		ug/L		96	75 - 120
m-Xylene & p-Xylene	10.0	9.52		ug/L		95	75 - 120
n-Butylbenzene	10.0	10.2		ug/L		102	78 - 120
o-Xylene	10.0	9.49		ug/L		95	74 - 120
Tetrachloroethene	10.0	10.7		ug/L		107	76 - 124
Toluene	10.0	9.54		ug/L		95	75 - 120
1,1,1-Trichloroethane	10.0	10.3		ug/L		103	74 - 130
Trichloroethene	10.0	11.5		ug/L		115	70 - 125
1,2,4-Trimethylbenzene	10.0	9.77		ug/L		98	75 - 121
1,3,5-Trimethylbenzene	10.0	9.51		ug/L		95	75 - 122

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		75 - 125
Dibromofluoromethane (Surr)	105		77 - 120
1,2-Dichloroethane-d4 (Surr)	91		80 - 126
Toluene-d8 (Surr)	91		80 - 122
Trifluorotoluene (Surr)	111		80 - 120

**Lab Sample ID: LCSD 580-256639/7**

**Matrix: Water**

**Analysis Batch: 256639**

**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-1,2-Dichloroethene	10.0	10.8		ug/L		108	76 - 120	2	15
1,4-Dichlorobenzene	10.0	10.4		ug/L		104	80 - 120	2	17
1,1-Dichloroethane	10.0	9.69		ug/L		97	70 - 120	1	20
Ethylbenzene	10.0	9.62		ug/L		96	75 - 120	0	14
m-Xylene & p-Xylene	10.0	9.69		ug/L		97	75 - 120	2	14
n-Butylbenzene	10.0	10.2		ug/L		102	78 - 120	0	14
o-Xylene	10.0	9.67		ug/L		97	74 - 120	2	16
Tetrachloroethene	10.0	11.0		ug/L		110	76 - 124	3	20
Toluene	10.0	9.87		ug/L		99	75 - 120	3	13
1,1,1-Trichloroethane	10.0	10.4		ug/L		104	74 - 130	1	18
Trichloroethene	10.0	11.2		ug/L		112	70 - 125	2	15
1,2,4-Trimethylbenzene	10.0	9.72		ug/L		97	75 - 121	1	16
1,3,5-Trimethylbenzene	10.0	9.74		ug/L		97	75 - 122	2	14

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		75 - 125
Dibromofluoromethane (Surr)	104		77 - 120
1,2-Dichloroethane-d4 (Surr)	92		80 - 126
Toluene-d8 (Surr)	92		80 - 122
Trifluorotoluene (Surr)	112		80 - 120

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

## Method: 8260C - Volatile Organic Compounds by GC/MS - RA

**Lab Sample ID: 580-71203-2 MS**

**Matrix: Water**

**Analysis Batch: 256639**

**Client Sample ID: MW-2-W-090617**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS MS		Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier		Result	Qualifier					
cis-1,2-Dichloroethene - RA	30		10.0	40.0		ug/L		105	70 - 111	
1,1-Dichloroethane - RA	3.9		10.0	13.5		ug/L		96	70 - 135	
<b>Surrogate</b>	<b>MS MS</b>		<b>Limits</b>							
	<b>%Recovery</b>	<b>Qualifier</b>								
4-Bromofluorobenzene (Surr) - RA	103		75 - 125							
Dibromofluoromethane (Surr) - RA	106		77 - 120							
1,2-Dichloroethane-d4 (Surr) - RA	91		80 - 126							
Toluene-d8 (Surr) - RA	90		80 - 122							
Trifluorotoluene (Surr) - RA	110		80 - 120							

**Lab Sample ID: 580-71203-2 MSD**

**Matrix: Water**

**Analysis Batch: 256639**

**Client Sample ID: MW-2-W-090617**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD MSD		Unit	D	%Rec	%Rec.	Limits	RPD	RPD	Limit
	Result	Qualifier		Result	Qualifier								
cis-1,2-Dichloroethene - RA	30		10.0	39.9		ug/L		104	70 - 111	0	35		
1,1-Dichloroethane - RA	3.9		10.0	13.3		ug/L		93	70 - 135	2	35		
<b>Surrogate</b>	<b>MSD MSD</b>		<b>Limits</b>										
	<b>%Recovery</b>	<b>Qualifier</b>											
4-Bromofluorobenzene (Surr) - RA	105		75 - 125										
Dibromofluoromethane (Surr) - RA	106		77 - 120										
1,2-Dichloroethane-d4 (Surr) - RA	91		80 - 126										
Toluene-d8 (Surr) - RA	92		80 - 122										
Trifluorotoluene (Surr) - RA	111		80 - 120										

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

**Lab Sample ID: MB 580-256072/6**

**Matrix: Water**

**Analysis Batch: 256072**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			09/13/17 15:14	1
<b>Surrogate</b>	<b>MB MB</b>		<b>Limits</b>						
	<b>%Recovery</b>	<b>Qualifier</b>							
Trifluorotoluene (Surr)	105		75 - 120						
4-Bromofluorobenzene (Surr)	87		68 - 119						

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

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

**Lab Sample ID: LCS 580-256072/7**

**Matrix: Water**

**Analysis Batch: 256072**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	1.04		mg/L		104	77 - 123
<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
Trifluorotoluene (Surr)	100		75 - 120				
4-Bromofluorobenzene (Surr)	92		68 - 119				

**Lab Sample ID: 580-71203-2 MS**

**Matrix: Water**

**Analysis Batch: 256072**

**Client Sample ID: MW-2-W-090617**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	ND		1.00	ND		mg/L		96	77 - 123
<b>Surrogate</b>	<b>MS %Recovery</b>	<b>MS Qualifier</b>	<b>Limits</b>						
Trifluorotoluene (Surr)	103		75 - 120						
4-Bromofluorobenzene (Surr)	93		68 - 119						

**Lab Sample ID: 580-71203-2 MSD**

**Matrix: Water**

**Analysis Batch: 256072**

**Client Sample ID: MW-2-W-090617**

**Prep Type: Total/NA**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Gasoline Range Organics (GRO) -C6-C10	ND		1.00	1.01		mg/L		101	77 - 123	6	20
<b>Surrogate</b>	<b>MSD %Recovery</b>	<b>MSD Qualifier</b>	<b>Limits</b>								
Trifluorotoluene (Surr)	102		75 - 120								
4-Bromofluorobenzene (Surr)	96		68 - 119								

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

**Lab Sample ID: MB 580-256013/1-A**

**Matrix: Water**

**Analysis Batch: 256323**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 256013**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	ND		0.10		mg/L		09/13/17 08:46	09/16/17 01:02	1
<b>Surrogate</b>	<b>MB %Recovery</b>	<b>MB Qualifier</b>	<b>Limits</b>	<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>			
o-Terphenyl	96		50 - 150	09/13/17 08:46	09/16/17 01:02	1			

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

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

**Lab Sample ID: LCS 580-256013/2-A**

**Matrix: Water**

**Analysis Batch: 256323**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 256013**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
DRO (nC10-<nC25)	2.00	1.90		mg/L		95	75 - 125
<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
<i>o</i> -Terphenyl	104		50 - 150				

**Lab Sample ID: LCSD 580-256013/3-A**

**Matrix: Water**

**Analysis Batch: 256323**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 256013**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
DRO (nC10-<nC25)	2.00	2.10		mg/L		105	75 - 125	10	16
<b>Surrogate</b>	<b>LCSD %Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>						
<i>o</i> -Terphenyl	111		50 - 150						

**Lab Sample ID: 580-71203-2 MS**

**Matrix: Water**

**Analysis Batch: 256323**

**Client Sample ID: MW-2-W-090617**

**Prep Type: Total/NA**

**Prep Batch: 256013**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
DRO (nC10-<nC25)	0.89	F1	2.07	2.15	F1	mg/L		61	75 - 125
<b>Surrogate</b>	<b>MS %Recovery</b>	<b>MS Qualifier</b>	<b>Limits</b>						
<i>o</i> -Terphenyl	102		50 - 150						

**Lab Sample ID: 580-71203-2 MSD**

**Matrix: Water**

**Analysis Batch: 256323**

**Client Sample ID: MW-2-W-090617**

**Prep Type: Total/NA**

**Prep Batch: 256013**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
DRO (nC10-<nC25)	0.89	F1	2.31	2.49	F1	mg/L		69	75 - 125	15	16
<b>Surrogate</b>	<b>MSD %Recovery</b>	<b>MSD Qualifier</b>	<b>Limits</b>								
<i>o</i> -Terphenyl	99		50 - 150								

TestAmerica Seattle

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: MW-1-W-090517**

**Date Collected: 09/05/17 15:00**

**Date Received: 09/08/17 12:30**

**Lab Sample ID: 580-71203-1**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	DL	100	256639	09/19/17 22:39	CJ	TAL SEA
Total/NA	Analysis	8260C		1	256318	09/15/17 17:37	IWH	TAL SEA
Total/NA	Analysis	AK101		1	256072	09/13/17 23:16	RSB	TAL SEA
Total/NA	Prep	3510C			256013	09/13/17 08:46	NDB	TAL SEA
Total/NA	Analysis	AK102 & 103		1	256323	09/16/17 04:20	T1W	TAL SEA

**Client Sample ID: MW-2-W-090617**

**Date Collected: 09/06/17 08:40**

**Date Received: 09/08/17 12:30**

**Lab Sample ID: 580-71203-2**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	RA	1	256639	09/20/17 00:19	CJ	TAL SEA
Total/NA	Analysis	8260C		1	256318	09/15/17 21:09	IWH	TAL SEA
Total/NA	Analysis	AK101		1	256072	09/13/17 23:48	RSB	TAL SEA
Total/NA	Prep	3510C			256013	09/13/17 08:46	NDB	TAL SEA
Total/NA	Analysis	AK102 & 103		1	256323	09/16/17 05:04	T1W	TAL SEA

**Client Sample ID: MW-4-W-090517**

**Date Collected: 09/05/17 12:15**

**Date Received: 09/08/17 12:30**

**Lab Sample ID: 580-71203-3**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	RA	1	256639	09/19/17 21:23	CJ	TAL SEA
Total/NA	Analysis	8260C		1	256318	09/15/17 18:03	IWH	TAL SEA
Total/NA	Analysis	AK101		1	256072	09/14/17 01:25	RSB	TAL SEA
Total/NA	Prep	3510C			256013	09/13/17 08:46	NDB	TAL SEA
Total/NA	Analysis	AK102 & 103		1	256323	09/16/17 06:10	T1W	TAL SEA

**Client Sample ID: MW-5-W-090617**

**Date Collected: 09/06/17 07:50**

**Date Received: 09/08/17 12:30**

**Lab Sample ID: 580-71203-4**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	DL	100	256639	09/19/17 23:28	CJ	TAL SEA
Total/NA	Analysis	8260C		1	256318	09/15/17 18:29	IWH	TAL SEA
Total/NA	Analysis	AK101		1	256072	09/14/17 01:57	RSB	TAL SEA
Total/NA	Prep	3510C			256013	09/13/17 08:46	NDB	TAL SEA
Total/NA	Analysis	AK102 & 103		1	256323	09/16/17 06:32	T1W	TAL SEA

TestAmerica Seattle

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

**Client Sample ID: MW-7-W-090517**

**Lab Sample ID: 580-71203-5**

**Date Collected: 09/05/17 13:45**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	RA	1	256639	09/19/17 21:48	CJ	TAL SEA
Total/NA	Analysis	8260C		1	256318	09/15/17 18:57	IWH	TAL SEA
Total/NA	Analysis	AK101		1	256072	09/14/17 03:01	RSB	TAL SEA
Total/NA	Prep	3510C			256013	09/13/17 08:46	NDB	TAL SEA
Total/NA	Analysis	AK102 & 103		1	256323	09/16/17 06:54	T1W	TAL SEA

**Client Sample ID: BD-1-W-090517**

**Lab Sample ID: 580-71203-6**

**Date Collected: 09/05/17 00:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	RA	1	256639	09/19/17 22:14	CJ	TAL SEA
Total/NA	Analysis	8260C		1	256318	09/15/17 19:23	IWH	TAL SEA
Total/NA	Analysis	AK101		1	256072	09/14/17 03:33	RSB	TAL SEA
Total/NA	Prep	3510C			256013	09/13/17 08:46	NDB	TAL SEA
Total/NA	Analysis	AK102 & 103		1	256323	09/16/17 07:16	T1W	TAL SEA

**Client Sample ID: BD-2-W-090617**

**Lab Sample ID: 580-71203-7**

**Date Collected: 09/06/17 00:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	DL	100	256639	09/19/17 23:54	CJ	TAL SEA
Total/NA	Analysis	8260C		1	256318	09/15/17 19:50	IWH	TAL SEA
Total/NA	Analysis	AK101		1	256072	09/14/17 04:05	RSB	TAL SEA
Total/NA	Prep	3510C			256013	09/13/17 08:46	NDB	TAL SEA
Total/NA	Analysis	AK102 & 103		1	256323	09/16/17 07:38	T1W	TAL SEA

**Client Sample ID: Trip Blank**

**Lab Sample ID: 580-71203-8**

**Date Collected: 09/05/17 00:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	256318	09/15/17 20:16	IWH	TAL SEA
Total/NA	Analysis	AK101		1	256072	09/13/17 17:54	RSB	TAL SEA

**Client Sample ID: EB-1-W-090617**

**Lab Sample ID: 580-71203-9**

**Date Collected: 09/06/17 09:00**

**Matrix: Water**

**Date Received: 09/08/17 12:30**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	256318	09/15/17 20:43	IWH	TAL SEA

TestAmerica Seattle

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	AK101		1	256072	09/14/17 04:38	RSB	TAL SEA
Total/NA	Prep	3510C			256013	09/13/17 08:46	NDB	TAL SEA
Total/NA	Analysis	AK102 & 103		1	256323	09/16/17 08:00	T1W	TAL SEA

## Laboratory References:

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



# Accreditation/Certification Summary

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

## Laboratory: TestAmerica Seattle

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	UST-022	03-02-18

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11



# Sample Summary

Client: ARCADIS U.S. Inc  
Project/Site: GE Kenai

TestAmerica Job ID: 580-71203-1

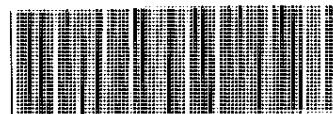
Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-71203-1	MW-1-W-090517	Water	09/05/17 15:00	09/08/17 12:30
580-71203-2	MW-2-W-090617	Water	09/06/17 08:40	09/08/17 12:30
580-71203-3	MW-4-W-090517	Water	09/05/17 12:15	09/08/17 12:30
580-71203-4	MW-5-W-090617	Water	09/06/17 07:50	09/08/17 12:30
580-71203-5	MW-7-W-090517	Water	09/05/17 13:45	09/08/17 12:30
580-71203-6	BD-1-W-090517	Water	09/05/17 00:00	09/08/17 12:30
580-71203-7	BD-2-W-090617	Water	09/06/17 00:00	09/08/17 12:30
580-71203-8	Trip Blank	Water	09/05/17 00:00	09/08/17 12:30
580-71203-9	EB-1-W-090617	Water	09/06/17 09:00	09/08/17 12:30

Loc: 580  
71203

TestAmerica Seattle

5755 8th Street East  
Tacoma, WA 98424  
Phone (253) 922-2310 Fax (253) 922-5047

Chain of Custody Record



580-71203 Chain of Custody

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

<b>Client Information</b>		Sampler: <u>M. MacDaniel</u>		Lab PM: Allen, Kristine D		Carrier Tracking No(s):		COC No: 580-25483-8411.1	
Client Contact: Anna Hagemeister		Phone: <u>206-465-3161</u>		E-Mail: kristine.allen@testamericainc.com				Page: Page 1 of 2	
Company: ARCADIS U.S., Inc.		Due Date Requested:		<b>Analysis Requested</b>		Total Number of containers		<b>Preservation Codes:</b> A - HCL      M - Hexane B - NaOH      N - None C - Zn Acetate      O - AsNaO2 D - Nitric Acid      P - Na2O4S E - NaHSO4      Q - Na2SO3 F - MeOH      R - Na2S2O3 G - Amcnlor      S - H2SO4 H - Ascorbic Acid      T - TSP Dodecahydrate I - Ice      U - Acetone J - DI Water      V - MCAA K - EDTA      W - pH 4-5 L - EDA      Z - other (specify)	
Address: 630 Plaza Drive Suite 100		TAT Requested (days): <u>Standard 10 day</u>							
City: Highlands Ranch		PO # B0031255.1403.00005							
State, Zip: CO, 80129-2377		WO #							
Phone: 919-415-2308(Tel)		Project # 58007486		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		<b>Other:</b>	
Email: anna.hagemeister@arcadis-us.com		SSOW#		8260C - VOCs		AK102_103 - AK102 (PRO)			
Project Name: GE Kenai		Site: <u>W.K.K., AK</u>		AK101 - AK101		8260C, AK101			
<b>Sample Identification</b>		<b>Sample Date</b>		<b>Sample Time</b>		<b>Sample Type (C=Comp, G=grab)</b>		<b>Matrix (W=water, S=solid, O=wast/wal, BT=Tissue, A=Air)</b>	
								<b>Field Filtered Sample (Yes or No)</b>	
								<b>Perform MS/MSD (Yes or No)</b>	
								<b>8260C - VOCs</b>	
								<b>AK102_103 - AK102 (PRO)</b>	
								<b>AK101 - AK101</b>	
								<b>8260C, AK101</b>	
								<b>Special Instructions/Note:</b>	
MW-1-W-090517		9/5/17		1500		G		Water	
MW-2-W-090617		9/6/17		840		G		Water	
MW-4-W-090517		9/5/17		1215		G		Water	
MW-5-W-090617		9/6/17		750		G		Water	
MW-7-W-090517		9/5/17		1345		G		Water	
BD-1-W-090517		9/5/17		-		G		Water	
BD-2-W-090617		9/6/17		-		G		Water	
MS-W-090617		9/6/17		840		G		Water	
MSD-W-090617		9/6/17		840		G		Water	
Trip Blank		-		-		-		Water	
EB-1-W-090617		9/6/17		900		G		Water	
<b>Possible Hazard Identification</b>		<input checked="" type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable		<input type="checkbox"/> Skin Irritant		<input type="checkbox"/> Poison B	
		<input type="checkbox"/> Unknown		<input type="checkbox"/> Radiological					
Deliverable Requested: I, II(III) IV, Other (specify)									
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:			
Relinquished by: <u>[Signature]</u>		Date/Time: 9/7/17 @ 940		Company: ARCADIS		Received by: <u>[Signature]</u>		Date/Time: 9/7/17 10:07	
Relinquished by: <u>[Signature]</u>		Date/Time: 9/7/17 1530		Company: T.A.A.K		Received by: <u>[Signature]</u>		Date/Time: 9/8/17 1230	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 43A - 2.7°C				9/22/2017	

TB AZ Cooler Cor 0.2 Unc 0.6  
Cooler Desc by DLR un@Lab  
Wet Packs Packing Double  
Custody Seal: (Yes) No

1  
2  
3  
5  
6  
7  
8  
9  
10

## Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 580-71203-1

**Login Number: 71203**

**List Source: TestAmerica Seattle**

**List Number: 1**

**Creator: Ponce-McDermott, Monica**

Question	Answer	Comment
Radioactivity wasn't checked or is <math>\leq</math> background as measured by a survey meter.	True	
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	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	False	No time on COC or sample containers
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	False	Headspace larger than 1/4".
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

## Laboratory Data Review Checklist

Completed by:	Kylie Kegerreis		
Title:	Environmental Engineer	Date:	5/2/2018
CS Report Name:	GE Nikiski	Report Date:	4/11/2018
Consultant Firm:	Arcadis U.S., Inc.		
Laboratory Name:	TestAmerica, Inc.	Laboratory Report Number:	580-76037-1
ADEC File Number:		ADEC RecKey Number:	

### 1. Laboratory

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

Yes       No       NA (Please explain.)      Comments:

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       NA (Please explain)      Comments:

Samples were not transferred or sub-contracted to an alternate laboratory

### 2. Chain of Custody (COC)

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

Yes       No       NA (Please explain)      Comments:

Missing sample time for 2 samples (BD-1 and BD-2)

b. Correct analyses requested?

Yes       No       NA (Please explain)      Comments:

VOCs by Method 8260C  
GRO by Method AK101  
DRO by Methods AK102 & 103 (not analyzed for trip blank sample)

3. Laboratory Sample Receipt Documentation

a. Sample/cooler temperature documented and within range at receipt ( $4^{\circ} \pm 2^{\circ} \text{C}$ )?

Yes     No     NA (Please explain)    Comments:

Temperatures = -0.2 and 1.2 °C; although these are outside the temperature range, no issues because the temperatures are cold enough to prevent volatilization of VOCs or GRO

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

Yes     No     NA (Please explain)    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     NA (Please explain)    Comments:

One container for the samples listed in part d was received broken and leaking.

d. If there were any discrepancies, were they documented? - For example, incorrect sample containers/preservation, sample temperature outside of acceptance range, insufficient or missing samples, etc.?

Yes     No     NA (Please explain)    Comments:

Broken/leaking samples were documented (MS and Trip Blank). The samples designated as MS and MSD were inadvertently logged in as discrete samples instead of spiked samples.

e. Data quality or usability affected? (Please explain)

Comments:

Data quality or usability was not affected for broken samples because sufficient sample volume remained for all samples. Data quality or usability potentially affected as MS/MSD analysis could not be performed.

4. Case Narrative

a. Present and understandable?

Yes     No     NA (Please explain)    Comments:

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

Yes     No     NA (Please explain)    Comments:

See attached sheet

c. Were all corrective actions documented?

Yes     No     NA (Please explain)    Comments:

See attached sheet

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

Comments:

No effect on data quality/usability

## 5. Samples Results

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

Yes     No     NA (Please explain)

Comments:

Analysis not performed on MS or MSD sample (see 3b)

b. All applicable holding times met?

Yes     No     NA (Please explain)

Comments:

Hold times: Methods 8260C and AK101 - Analysis w/in 14 days; Methods AK102 & 103 - Extraction w/in 14 days, Analysis w/in 40 days of extraction  
Collection Dates: 3/20 - 3/21/18  
Prepped: 3/30/18; re-extracted 4/4 - 4/5/18 (AK102 & 103 Only)  
Analyzed: 4/2 - 4/4/18 (8260C some re-analyzed on 4/4/18); 3/31 - 4/1/18 (AK101); 4/2 - 4/3/18 (AK 102 & 103, some re-analyzed 4/5 - 4/6/18)

c. All soils reported on a dry weight basis?

Yes     No     NA (Please explain)

Comments:

Samples are aqueous

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

Yes     No     NA (Please explain)

Comments:

e. Data quality or usability affected? (Please explain)

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     NA (Please explain)

Comments:

ii. All method blank results less than PQL?

Yes     No     NA (Please explain)

Comments:

iii. If above PQL, what samples are affected?

Comments:

N/A

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

Yes     No     NA (Please explain)

Comments:

Method blanks all below PQL

v. Data quality or usability affected? (Please explain)

Comments:

Data quality or usability not affected due to method blank

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     NA (Please explain)

Comments:

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

Yes     No     NA (Please explain)

Comments:

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     NA (Please explain)

Comments:

Method 8260C (Batch = 270476) LCSD: bromoform = 124 (Limits = 71 - 120)  
Method AK102 & 103 (Batch = 270409) LCS: DRO = 70 (Limits = 75 - 125)  
(Batch 270640) LCSD: DRO = 65 (Limits = 75 - 125)

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/DMSD, and or sample/sample duplicate. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)

Yes     No     NA (Please explain)    Comments:

See attached sheet

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

See attached sheet

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

Yes     No     NA (Please explain)    Comments:

Affected samples/analytes are noted with an asterisk in the laboratory report.

vii. Data quality or usability affected? (Please explain)    Comments:

Data quality or usability is not affected with the following exception:  
For DRO, data should be qualified as estimated with a J (detects) or UJ (non-detects).

c. Surrogates - Organics Only

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

Yes     No     NA (Please explain)    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     NA (Please explain)    Comments:

See attached sheet

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

Yes     No     NA (Please explain)    Comments:

The failed surrogate recoveries are identified with an "X" next to the surrogate recovery.

iv. Data quality or usability affected? (Use the comment box to explain.).  
Comments:

Data quality or usability is not affected for all affected samples. See attached sheet.



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       NA (Please explain.)      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       NA (Please explain.)      Comments:

iii. All results less than PQL?

Yes       No       NA (Please explain.)      Comments:

iv. If above PQL, what samples are affected?

Comments:

N/A - all results less than PQL

v. Data quality or usability affected? (Please explain.)

Comments:

Data quality or usability not affected due to trip blank.

e. Field Duplicate

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

Yes       No       NA (Please explain.)      Comments:

Field Duplicate: BD-1 (Parent Sample: MW-8)  
Field Duplicate: BD-2 (Parent Sample: MW-5)

ii. Submitted blind to lab?

Yes       No       NA (Please explain.)      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     NA (Please explain)    Comments:

See attached table

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

Yes     No     NA (Please explain)    Comments:

Data quality or usability is not affected due to field duplicates.

f. Decontamination or Equipment Blank (if applicable)

Yes     No     NA (Please explain)    Comments:

EB

i. All results less than PQL?

Yes     No     NA (Please explain)    Comments:

Re-analyzed DRO result = 0.46 ug/L

ii. If above PQL, what samples are affected?

Comments:

MW-1, MW-2, MW-3, MW-5, MW-6, and BD-2

iii. Data quality or usability affected? (Please explain.)

Comments:

Data quality or usability is affected. See attached sheet.

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

a. Defined and appropriate?

Yes     No     NA (Please explain)    Comments:

Reset Form

**Table 1**  
**Relative Percent Difference for Parent and Field Duplicate Samples**  
**Report Number: 580-76037-1**  
**Former TBE Machine Shop, Nikiski, AK**

Sample Identification	MW-8	BD-1	RPD <sup>a</sup>	MW-5	BD-2	RPD <sup>a</sup>
Analyte	Result (µg/L)	Result (µg/L)		Result (µg/L)	Result (µg/L)	
1,4-dichlorobenzene	ND	ND	--	4.4	4.5	2%
cis-1,2-dichloroethene	ND	ND	--	150	170	13%
ethylbenzene	ND	ND	--	240	270	12%
4-isopropyltoluene	ND	ND	--	3.4	3.2	6%
m & p-xylene	ND	ND	--	350	390	11%
o-xylene	ND	ND	--	84	88	5%
1,2,4-trimethylbenzene	ND	ND	--	32	29	10%
1,3,5-trimethylbenzene	ND	ND	--	17	17	0%
gasoline range organics	ND	ND	--	1.7	1.7	0%
diesel range organics	ND	ND	--	0.50	0.48	4%

Notes:

<sup>a</sup> Relative percent difference (RPD) calculated for detected results only.

µg/L = micrograms per liter

ND = not detected

-- = not calculated

**Attachment 1**  
**Additional Information for Job 580-76037-1**  
**Former TBE Machine Shop**  
**Nikiski, AK**

4. Case Narrative
- d. Discrepancies, errors or QC failures identified by the lab?

Method 8260C:

1. The laboratory control sample duplicate (LCSD) for analytical batch 580-270476 recovered outside control limits for bromoform.
2. The RPD of the laboratory control sample (LCS) and LCSD for analytical batch 580-270547 recovered outside control limits for multiple analytes.
3. The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-1, MW-2, MW-5, and BD-2.

Method AK101:

4. Surrogate recovery for the blank associated with analytical batch 580-270332 was outside the upper control limits.
5. Surrogate recovery for the following samples were outside control limits: MW-5 and BD-2.

Methods AK102 & 103:

6. The following samples had low LCS recovery: MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, BD-1, BD-2, and EB.
7. The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was earlier than the typical diesel pattern used by the laboratory for quantitative purposes: MW-1 and MW-5.
8. The following sample contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel pattern used by the laboratory for quantitative purposes: MW-3 and MW-4.
9. Surrogate recovery for the following samples were outside control limits: MW-7, MW-8, MW-9, BD-1, and BD-2.
10. The following sample contained a hydrocarbon pattern in the diesel range; however, the elution pattern was earlier than the typical diesel fuel pattern used by the laboratory for quantitative purposes: BD-2.
11. The following sample contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel pattern used by the laboratory for quantitative purposes: EB.

- c. Were all corrective actions documented?

1. This analyte was biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.
2. Except for bromoform, the individual recoveries of both the LCS and LCSD met the acceptance criteria.
3. Elevated reporting limits are provided.
4. The surrogate recovery for the LCS and LCSD met the acceptance criteria.
5. Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.
6. The samples were re-extracted. The re-extraction event contained an LCSD with low DRO recovery. There is no sample volume remaining for further extractions; therefore, both sets of data have been reported.

7. Not applicable
8. Not applicable
9. Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.
10. Not applicable.
11. Not applicable.

5. QC Samples

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

- 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)

RPDs were not within method or laboratory limits for the following methods and analytes [analyte = RPD (Limit)]:

Method 8260C (Batch = 270476): benzene = 17 (14); bromobenzene = 19 (13); bromoform = 25 (20); carbon tetrachloride = 21 (19); chlorobenzene = 20 (15); chloroform = 20 (15); 2-chlorotoluene = 19 (5); cis-1,2-dichloroethene = 25 (15); 1,2-dichlorobenzene = 17 (15); 1,3-dichlorobenzene = 25 (14); 1,4-dichlorobenzene = 19 (17); 1,2-dichloroethane = 17 (11); ethylbenzene = 21 (14); isopropylbenzene = 21 (20); 4-isopropyltoluene = 18 (13); methyl tert-butyl ether = 21 (18); m & p-xylene = 22 (14); n-butylbenzene = 21 (14); n-propylbenzene = 18 (13); o-xylene = 22 (16); sec-butylbenzene = 16 (15); styrene = 26 (16); toluene = 18 (13); trans-1,3-dichloropropene = 17 (13); 1,1,2-trichloroethane = 18 (14); trichloroethene = 20 (15); 1,2,4-trimethylbenzene = 18 (16); 1,3,5-trimethylbenzene = 15 (14)

- v. If %R or RPD is outside of acceptable limits, what samples are affected?
  - For %R for bromoform and for the RPDs for Method 8260C – no samples are affected because the results are non-detects
  - For %R for DRO – the following samples are affected: MW-1, MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, BD-1, BD-2, and EB

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)

Percent recoveries were not within method or laboratory limits for the following samples:

- MW-5
  - Method AK101. 4-bromofluorobenzene %R = 129 (Limits = 68 – 119). Other surrogate within limit. Also, within the 50 – 150 %R limit.
- MW-7
  - Method AK102 & 103. Surrogate %R = 43 (Limits = 50 - 150).
- MW-8
  - Method AK102 & 103. Surrogate %R = 49 (Limits = 50 - 150).
- MW-9
  - Method AK102 & 103. Surrogate %R = 49 (Limits = 50 - 150).
- BD-1
  - Method AK102 & 103. Surrogate %R = 49 (Limits = 50 - 150).
- BD-2

- Method AK101. 4-bromofluorobenzene %R = 126 (Limits = 68 – 119). Other surrogate within limit. Also, within the 50 – 150 %R limit.
- Method AK102 & 103. Surrogate %R = 32 (Limits = 50 - 150).
- Method AK101 Analysis Batch 270332
  - Method Blank: trifluorotoluene %R = 126 (Limits = 80 – 126). Other surrogate within limits. Also, within the 50 – 150 %R limit.

iv. Data quality or usability affected?

Data quality or usability affected for the following samples:

- MW-5: Add a J for estimated next to the GRO result (1.5 J µg/L)
- BD-2: Add a J for estimated next to the GRO result (1.7 J µg/L)

All other samples/analytes do not require qualification because the samples were re-analyzed and there were no surrogate recovery failures for the reanalysis.

f. Decontamination or Equipment Blank (if applicable)

iii. Data quality or usability affected? (Please Explain)

Data quality or usability affected for the following samples:

- MW-1: The detected result (0.74 µg/L) was < 5 x the field blank concentration (0.46 µg/L). The result is changed to < 0.74 UB µg/L
- MW-2: The detected result (0.29 µg/L) was < 5 x the field blank concentration (0.46 µg/L). The result is changed to < 0.29 UB µg/L
- MW-3: The detected result (0.17 µg/L) was < 5 x the field blank concentration (0.46 µg/L). The result is changed to < 0.17 UB µg/L
- MW-5: The detected result (0.50 µg/L) was < 5 x the field blank concentration (0.46 µg/L). The result is changed to < 0.50 UB µg/L
- BD-2: The detected result (0.48 µg/L) was < 5 x the field blank concentration (0.46 µg/L). The result is changed to < 0.48 UB µg/L

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

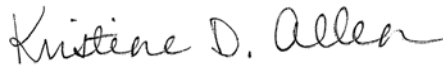
## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Seattle  
5755 8th Street East  
Tacoma, WA 98424  
Tel: (253)922-2310

TestAmerica Job ID: 580-76037-1  
Client Project/Site: GE Nikiski  
Revision: 1

For:  
ARCADIS U.S. Inc  
4915 Prospectus Drive  
Suite G  
Durham, North Carolina 27713

Attn: Mr. Matthew Pelton



Authorized for release by:  
4/11/2018 11:56:01 AM

Kristine Allen, Manager of Project Management  
(253)248-4970  
[kristine.allen@testamericainc.com](mailto:kristine.allen@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

*Results relate only to the items tested and the sample(s) as received by the laboratory.*

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Case Narrative . . . . .	3
Definitions . . . . .	5
Client Sample Results . . . . .	6
QC Sample Results . . . . .	36
Chronicle . . . . .	48
Certification Summary . . . . .	52
Sample Summary . . . . .	53
Chain of Custody . . . . .	54
Receipt Checklists . . . . .	56



# Case Narrative

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

## Job ID: 580-76037-1

### Laboratory: TestAmerica Seattle

#### Narrative

**Report was revised 4-11-18 to remove results for the MS and MSD samples that were not spiked due to a log in error.**

#### Receipt

The samples were received on 3/23/2018 9:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were -0.2° C and 1.2° C.

#### Receipt Exceptions

One container for the following samples were received broken: MS (580-76037-14) and Trip Blank (580-76037-17).  
1 HCL VOA Vial for each samples were received broken.

Do to a log in error, the samples designated as 'MS' and 'MSD' were not logged in to be spiked by the lab. They were logged in as discrete samples and not spiked.

#### GC/MS VOA

Method(s) 8260C: The laboratory control sample duplicate (LCSD) for analytical batch 580-270476 recovered outside control limits for Bromoform. This analyte was biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch analytical batch 580-270547 recovered outside control limits for multiple analytes. With the exception of Bromoform, the individual recoveries of both the LCS and LCSD met the acceptance criteria.

Method(s) 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-1 (580-76037-1), MW-2 (580-76037-2), MW-5 (580-76037-5) and BD-2 (580-76037-13). Elevated reporting limits (RLs) are provided.

Method(s) AK101: The surrogate recovery for the blank associated with analytical batch 580-270332 was outside the upper control limits. The surrogate recovery for the LCS and LCSD met the acceptance criteria.

Method(s) AK101: Surrogate recovery for the following samples were outside control limits: MW-5 (580-76037-5) and BD-2 (580-76037-13). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

#### GC Semi VOA

Method(s) AK102 & 103: The following samples were re-extracted due to low LCS recovery for DRO (nC10-<nC25). The re-extraction event contained an LCSD with low DRO (nC10-<nC25) recovery. There is no sample volume remaining for further extractions; both sets of data have been reported. MW-1 (580-76037-1), MW-2 (580-76037-2), MW-3 (580-76037-3), MW-4 (580-76037-4), MW-5 (580-76037-5), MW-6 (580-76037-6), MW-7 (580-76037-7), MW-8 (580-76037-8), MW-9 (580-76037-9), MW-10 (580-76037-10), MW-11 (580-76037-11), BD-1 (580-76037-12), BD-2 (580-76037-13), EB (580-76037-16) and (LCS 580-270270/2-A)

Method(s) AK102 & 103: The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was earlier than the typical diesel fuel pattern used by the laboratory for quantitative purposes: MW-1 (580-76037-1) and MW-5 (580-76037-5).

Method(s) AK102 & 103: The following samples contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: MW-3 (580-76037-3) and MW-4 (580-76037-4).

Method(s) AK102 & 103: Surrogate recovery for the following samples were outside control limits: MW-7 (580-76037-7), MW-8 (580-76037-8), MW-9 (580-76037-9), BD-1 (580-76037-12) and BD-2 (580-76037-13). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) AK102 & 103: The following sample contained a hydrocarbon pattern in the diesel range; however, the elution pattern was earlier than the typical diesel fuel pattern used by the laboratory for quantitative purposes: BD-2 (580-76037-13).

Method(s) AK102 & 103: The following sample contained a hydrocarbon pattern in the diesel range; however, the elution pattern was later than the typical diesel fuel pattern used by the laboratory for quantitative purposes: EB (580-76037-16).

# Case Narrative

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

---

## Job ID: 580-76037-1 (Continued)

---

### Laboratory: TestAmerica 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.

1

2

3

4

5

6

7

8

9

10

11

# Definitions/Glossary

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	RPD of the LCS and LCSD exceeds the control limits
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### GC VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

### GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
X	Surrogate is outside control limits
*	RPD of the LCS and LCSD exceeds the control limits

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
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)

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-1**  
**Date Collected: 03/21/18 14:20**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-1**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/02/18 20:33	1
Bromobenzene	ND		2.0		ug/L			04/02/18 20:33	1
Bromoform	ND		3.0		ug/L			04/02/18 20:33	1
Bromomethane	ND		6.0		ug/L			04/02/18 20:33	1
Carbon tetrachloride	ND		3.0		ug/L			04/02/18 20:33	1
Chlorobenzene	ND		2.0		ug/L			04/02/18 20:33	1
Chlorobromomethane	ND		2.0		ug/L			04/02/18 20:33	1
Chlorodibromomethane	ND		1.0		ug/L			04/02/18 20:33	1
Chloroethane	ND		5.0		ug/L			04/02/18 20:33	1
Chloroform	ND		5.0		ug/L			04/02/18 20:33	1
Chloromethane	ND		20		ug/L			04/02/18 20:33	1
2-Chlorotoluene	ND		3.0		ug/L			04/02/18 20:33	1
4-Chlorotoluene	ND		2.0		ug/L			04/02/18 20:33	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 20:33	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/02/18 20:33	1
Dibromomethane	ND		2.0		ug/L			04/02/18 20:33	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/02/18 20:33	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/02/18 20:33	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/02/18 20:33	1
Dichlorobromomethane	ND		2.0		ug/L			04/02/18 20:33	1
Dichlorodifluoromethane	ND		10		ug/L			04/02/18 20:33	1
<b>1,1-Dichloroethane</b>	<b>6.9</b>		2.0		ug/L			04/02/18 20:33	1
1,2-Dichloroethane	ND		2.0		ug/L			04/02/18 20:33	1
1,1-Dichloroethene	ND		4.0		ug/L			04/02/18 20:33	1
1,2-Dichloropropane	ND		1.0		ug/L			04/02/18 20:33	1
1,3-Dichloropropane	ND		2.0		ug/L			04/02/18 20:33	1
2,2-Dichloropropane	ND		3.0		ug/L			04/02/18 20:33	1
1,1-Dichloropropene	ND		3.0		ug/L			04/02/18 20:33	1
<b>Ethylbenzene</b>	<b>15</b>		3.0		ug/L			04/02/18 20:33	1
Ethylene Dibromide	ND		2.0		ug/L			04/02/18 20:33	1
Hexachlorobutadiene	ND		6.0		ug/L			04/02/18 20:33	1
Isopropylbenzene	ND		2.0		ug/L			04/02/18 20:33	1
4-Isopropyltoluene	ND		3.0		ug/L			04/02/18 20:33	1
Methylene Chloride	ND		5.0		ug/L			04/02/18 20:33	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/02/18 20:33	1
<b>m-Xylene &amp; p-Xylene</b>	<b>20</b>		3.0		ug/L			04/02/18 20:33	1
Naphthalene	ND		4.0		ug/L			04/02/18 20:33	1
n-Butylbenzene	ND		3.0		ug/L			04/02/18 20:33	1
N-Propylbenzene	ND		3.0		ug/L			04/02/18 20:33	1
<b>o-Xylene</b>	<b>9.8</b>		2.0		ug/L			04/02/18 20:33	1
sec-Butylbenzene	ND		3.0		ug/L			04/02/18 20:33	1
Styrene	ND		5.0		ug/L			04/02/18 20:33	1
tert-Butylbenzene	ND		3.0		ug/L			04/02/18 20:33	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/02/18 20:33	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/02/18 20:33	1
<b>Tetrachloroethene</b>	<b>40</b>		3.0		ug/L			04/02/18 20:33	1
Toluene	ND		2.0		ug/L			04/02/18 20:33	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 20:33	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 20:33	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-1**  
**Date Collected: 03/21/18 14:20**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-1**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/02/18 20:33	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/02/18 20:33	1
<b>1,1,1-Trichloroethane</b>	<b>3.9</b>		3.0		ug/L			04/02/18 20:33	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/02/18 20:33	1
<b>Trichloroethene</b>	<b>19</b>		3.0		ug/L			04/02/18 20:33	1
Trichlorofluoromethane	ND		3.0		ug/L			04/02/18 20:33	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/02/18 20:33	1
<b>1,2,4-Trimethylbenzene</b>	<b>3.7</b>		3.0		ug/L			04/02/18 20:33	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			04/02/18 20:33	1
Vinyl chloride	ND		1.0		ug/L			04/02/18 20:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 125					04/02/18 20:33	1
Dibromofluoromethane (Surr)	101		77 - 120					04/02/18 20:33	1
1,2-Dichloroethane-d4 (Surr)	103		80 - 126					04/02/18 20:33	1
Toluene-d8 (Surr)	101		80 - 122					04/02/18 20:33	1
Trifluorotoluene (Surr)	100		80 - 120					04/02/18 20:33	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>180</b>		30		ug/L			04/04/18 15:16	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		75 - 125					04/04/18 15:16	10
Dibromofluoromethane (Surr)	104		77 - 120					04/04/18 15:16	10
1,2-Dichloroethane-d4 (Surr)	105		80 - 126					04/04/18 15:16	10
Toluene-d8 (Surr)	97		80 - 122					04/04/18 15:16	10
Trifluorotoluene (Surr)	106		80 - 120					04/04/18 15:16	10

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			03/31/18 18:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	116		75 - 120					03/31/18 18:13	1
4-Bromofluorobenzene (Surr)	92		68 - 119					03/31/18 18:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<del>DRO (nC10-&lt;nC25)</del>	<del>0.92</del>	<del>*</del>	<del>0.11</del>		<del>mg/L</del>		<del>03/30/18 13:35</del>	<del>04/02/18 19:22</del>	<del>1</del>
DRO (nC10-<nC25)	0.74	* UB	0.11	0.74	mg/L		04/03/18 13:07	04/04/18 23:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	59		50 - 150				03/30/18 13:35	04/02/18 19:22	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-2**  
**Date Collected: 03/21/18 12:45**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-2**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/02/18 21:02	1
Bromobenzene	ND		2.0		ug/L			04/02/18 21:02	1
Bromoform	ND		3.0		ug/L			04/02/18 21:02	1
Bromomethane	ND		6.0		ug/L			04/02/18 21:02	1
Carbon tetrachloride	ND		3.0		ug/L			04/02/18 21:02	1
Chlorobenzene	ND		2.0		ug/L			04/02/18 21:02	1
Chlorobromomethane	ND		2.0		ug/L			04/02/18 21:02	1
Chlorodibromomethane	ND		1.0		ug/L			04/02/18 21:02	1
Chloroethane	ND		5.0		ug/L			04/02/18 21:02	1
Chloroform	ND		5.0		ug/L			04/02/18 21:02	1
Chloromethane	ND		20		ug/L			04/02/18 21:02	1
2-Chlorotoluene	ND		3.0		ug/L			04/02/18 21:02	1
4-Chlorotoluene	ND		2.0		ug/L			04/02/18 21:02	1
<b>cis-1,2-Dichloroethene</b>	<b>72</b>		3.0		ug/L			04/02/18 21:02	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 21:02	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/02/18 21:02	1
Dibromomethane	ND		2.0		ug/L			04/02/18 21:02	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/02/18 21:02	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/02/18 21:02	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/02/18 21:02	1
Dichlorobromomethane	ND		2.0		ug/L			04/02/18 21:02	1
Dichlorodifluoromethane	ND		10		ug/L			04/02/18 21:02	1
<b>1,1-Dichloroethane</b>	<b>7.0</b>		2.0		ug/L			04/02/18 21:02	1
1,2-Dichloroethane	ND		2.0		ug/L			04/02/18 21:02	1
1,1-Dichloroethene	ND		4.0		ug/L			04/02/18 21:02	1
1,2-Dichloropropane	ND		1.0		ug/L			04/02/18 21:02	1
1,3-Dichloropropane	ND		2.0		ug/L			04/02/18 21:02	1
2,2-Dichloropropane	ND		3.0		ug/L			04/02/18 21:02	1
1,1-Dichloropropene	ND		3.0		ug/L			04/02/18 21:02	1
<b>Ethylbenzene</b>	<b>83</b>		3.0		ug/L			04/02/18 21:02	1
Ethylene Dibromide	ND		2.0		ug/L			04/02/18 21:02	1
Hexachlorobutadiene	ND		6.0		ug/L			04/02/18 21:02	1
Isopropylbenzene	ND		2.0		ug/L			04/02/18 21:02	1
4-Isopropyltoluene	ND		3.0		ug/L			04/02/18 21:02	1
Methylene Chloride	ND		5.0		ug/L			04/02/18 21:02	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/02/18 21:02	1
Naphthalene	ND		4.0		ug/L			04/02/18 21:02	1
n-Butylbenzene	ND		3.0		ug/L			04/02/18 21:02	1
N-Propylbenzene	ND		3.0		ug/L			04/02/18 21:02	1
<b>o-Xylene</b>	<b>30</b>		2.0		ug/L			04/02/18 21:02	1
sec-Butylbenzene	ND		3.0		ug/L			04/02/18 21:02	1
Styrene	ND		5.0		ug/L			04/02/18 21:02	1
tert-Butylbenzene	ND		3.0		ug/L			04/02/18 21:02	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/02/18 21:02	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/02/18 21:02	1
Tetrachloroethene	ND		3.0		ug/L			04/02/18 21:02	1
Toluene	ND		2.0		ug/L			04/02/18 21:02	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 21:02	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 21:02	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-2**  
**Date Collected: 03/21/18 12:45**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-2**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/02/18 21:02	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/02/18 21:02	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/02/18 21:02	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/02/18 21:02	1
Trichloroethene	ND		3.0		ug/L			04/02/18 21:02	1
Trichlorofluoromethane	ND		3.0		ug/L			04/02/18 21:02	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/02/18 21:02	1
<b>1,2,4-Trimethylbenzene</b>	<b>17</b>		3.0		ug/L			04/02/18 21:02	1
<b>1,3,5-Trimethylbenzene</b>	<b>5.6</b>		3.0		ug/L			04/02/18 21:02	1
Vinyl chloride	ND		1.0		ug/L			04/02/18 21:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		75 - 125					04/02/18 21:02	1
Dibromofluoromethane (Surr)	98		77 - 120					04/02/18 21:02	1
1,2-Dichloroethane-d4 (Surr)	101		80 - 126					04/02/18 21:02	1
Toluene-d8 (Surr)	100		80 - 122					04/02/18 21:02	1
Trifluorotoluene (Surr)	98		80 - 120					04/02/18 21:02	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>m-Xylene &amp; p-Xylene</b>	<b>96</b>		30		ug/L			04/04/18 15:44	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		75 - 125					04/04/18 15:44	10
Dibromofluoromethane (Surr)	105		77 - 120					04/04/18 15:44	10
1,2-Dichloroethane-d4 (Surr)	103		80 - 126					04/04/18 15:44	10
Toluene-d8 (Surr)	101		80 - 122					04/04/18 15:44	10
Trifluorotoluene (Surr)	105		80 - 120					04/04/18 15:44	10

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			03/31/18 18:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	118		75 - 120					03/31/18 18:45	1
4-Bromofluorobenzene (Surr)	95		68 - 119					03/31/18 18:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<del>DRO (nC10-&lt;nC25)</del>	<del>0.33</del>	<del>*</del>	<del>0.11</del>		mg/L		<del>03/30/18 13:35</del>	<del>04/02/18 19:50</del>	<del>1</del>
DRO (nC10-<nC25)	0.29	* UB	0.12	0.29	mg/L		04/03/18 13:07	04/05/18 00:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	56		50 - 150				03/30/18 13:35	04/02/18 19:50	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-3**  
**Date Collected: 03/21/18 13:40**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-3**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/02/18 21:30	1
Bromobenzene	ND		2.0		ug/L			04/02/18 21:30	1
Bromoform	ND		3.0		ug/L			04/02/18 21:30	1
Bromomethane	ND		6.0		ug/L			04/02/18 21:30	1
Carbon tetrachloride	ND		3.0		ug/L			04/02/18 21:30	1
Chlorobenzene	ND		2.0		ug/L			04/02/18 21:30	1
Chlorobromomethane	ND		2.0		ug/L			04/02/18 21:30	1
Chlorodibromomethane	ND		1.0		ug/L			04/02/18 21:30	1
Chloroethane	ND		5.0		ug/L			04/02/18 21:30	1
Chloroform	ND		5.0		ug/L			04/02/18 21:30	1
Chloromethane	ND		20		ug/L			04/02/18 21:30	1
2-Chlorotoluene	ND		3.0		ug/L			04/02/18 21:30	1
4-Chlorotoluene	ND		2.0		ug/L			04/02/18 21:30	1
<b>cis-1,2-Dichloroethene</b>	<b>5.3</b>		3.0		ug/L			04/02/18 21:30	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 21:30	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/02/18 21:30	1
Dibromomethane	ND		2.0		ug/L			04/02/18 21:30	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/02/18 21:30	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/02/18 21:30	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/02/18 21:30	1
Dichlorobromomethane	ND		2.0		ug/L			04/02/18 21:30	1
Dichlorodifluoromethane	ND		10		ug/L			04/02/18 21:30	1
<b>1,1-Dichloroethane</b>	<b>5.2</b>		2.0		ug/L			04/02/18 21:30	1
1,2-Dichloroethane	ND		2.0		ug/L			04/02/18 21:30	1
1,1-Dichloroethene	ND		4.0		ug/L			04/02/18 21:30	1
1,2-Dichloropropane	ND		1.0		ug/L			04/02/18 21:30	1
1,3-Dichloropropane	ND		2.0		ug/L			04/02/18 21:30	1
2,2-Dichloropropane	ND		3.0		ug/L			04/02/18 21:30	1
1,1-Dichloropropene	ND		3.0		ug/L			04/02/18 21:30	1
Ethylbenzene	ND		3.0		ug/L			04/02/18 21:30	1
Ethylene Dibromide	ND		2.0		ug/L			04/02/18 21:30	1
Hexachlorobutadiene	ND		6.0		ug/L			04/02/18 21:30	1
Isopropylbenzene	ND		2.0		ug/L			04/02/18 21:30	1
4-Isopropyltoluene	ND		3.0		ug/L			04/02/18 21:30	1
Methylene Chloride	ND		5.0		ug/L			04/02/18 21:30	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/02/18 21:30	1
m-Xylene & p-Xylene	ND		3.0		ug/L			04/02/18 21:30	1
Naphthalene	ND		4.0		ug/L			04/02/18 21:30	1
n-Butylbenzene	ND		3.0		ug/L			04/02/18 21:30	1
N-Propylbenzene	ND		3.0		ug/L			04/02/18 21:30	1
o-Xylene	ND		2.0		ug/L			04/02/18 21:30	1
sec-Butylbenzene	ND		3.0		ug/L			04/02/18 21:30	1
Styrene	ND		5.0		ug/L			04/02/18 21:30	1
tert-Butylbenzene	ND		3.0		ug/L			04/02/18 21:30	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/02/18 21:30	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/02/18 21:30	1
Tetrachloroethene	ND		3.0		ug/L			04/02/18 21:30	1
Toluene	ND		2.0		ug/L			04/02/18 21:30	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 21:30	1

TestAmerica Seattle



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-3**  
**Date Collected: 03/21/18 13:40**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-3**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 21:30	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/02/18 21:30	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/02/18 21:30	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/02/18 21:30	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/02/18 21:30	1
Trichloroethene	ND		3.0		ug/L			04/02/18 21:30	1
Trichlorofluoromethane	ND		3.0		ug/L			04/02/18 21:30	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/02/18 21:30	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			04/02/18 21:30	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			04/02/18 21:30	1
Vinyl chloride	ND		1.0		ug/L			04/02/18 21:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		75 - 125					04/02/18 21:30	1
Dibromofluoromethane (Surr)	102		77 - 120					04/02/18 21:30	1
1,2-Dichloroethane-d4 (Surr)	103		80 - 126					04/02/18 21:30	1
Toluene-d8 (Surr)	103		80 - 122					04/02/18 21:30	1
Trifluorotoluene (Surr)	101		80 - 120					04/02/18 21:30	1

### Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			03/31/18 19:17	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	117		75 - 120					03/31/18 19:17	1
4-Bromofluorobenzene (Surr)	88		68 - 119					03/31/18 19:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<del>DRO (nC10-&lt;nC25)</del>	<del>0.19</del>	<del>*</del>	<del>0.12</del>		mg/L		<del>03/30/18 13:35</del>	<del>04/02/18 20:17</del>	<del>1</del>
DRO (nC10-<nC25)	0.17	* UB	0.12	0.17	mg/L		04/03/18 13:07	04/05/18 00:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	60		50 - 150				03/30/18 13:35	04/02/18 20:17	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-4**  
**Date Collected: 03/20/18 11:55**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-4**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/02/18 21:59	1
Bromobenzene	ND		2.0		ug/L			04/02/18 21:59	1
Bromoform	ND		3.0		ug/L			04/02/18 21:59	1
Bromomethane	ND		6.0		ug/L			04/02/18 21:59	1
Carbon tetrachloride	ND		3.0		ug/L			04/02/18 21:59	1
Chlorobenzene	ND		2.0		ug/L			04/02/18 21:59	1
Chlorobromomethane	ND		2.0		ug/L			04/02/18 21:59	1
Chlorodibromomethane	ND		1.0		ug/L			04/02/18 21:59	1
Chloroethane	ND		5.0		ug/L			04/02/18 21:59	1
Chloroform	ND		5.0		ug/L			04/02/18 21:59	1
Chloromethane	ND		20		ug/L			04/02/18 21:59	1
2-Chlorotoluene	ND		3.0		ug/L			04/02/18 21:59	1
4-Chlorotoluene	ND		2.0		ug/L			04/02/18 21:59	1
cis-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 21:59	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 21:59	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/02/18 21:59	1
Dibromomethane	ND		2.0		ug/L			04/02/18 21:59	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/02/18 21:59	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/02/18 21:59	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/02/18 21:59	1
Dichlorobromomethane	ND		2.0		ug/L			04/02/18 21:59	1
Dichlorodifluoromethane	ND		10		ug/L			04/02/18 21:59	1
1,1-Dichloroethane	ND		2.0		ug/L			04/02/18 21:59	1
1,2-Dichloroethane	ND		2.0		ug/L			04/02/18 21:59	1
1,1-Dichloroethene	ND		4.0		ug/L			04/02/18 21:59	1
1,2-Dichloropropane	ND		1.0		ug/L			04/02/18 21:59	1
1,3-Dichloropropane	ND		2.0		ug/L			04/02/18 21:59	1
2,2-Dichloropropane	ND		3.0		ug/L			04/02/18 21:59	1
1,1-Dichloropropene	ND		3.0		ug/L			04/02/18 21:59	1
Ethylbenzene	ND		3.0		ug/L			04/02/18 21:59	1
Ethylene Dibromide	ND		2.0		ug/L			04/02/18 21:59	1
Hexachlorobutadiene	ND		6.0		ug/L			04/02/18 21:59	1
Isopropylbenzene	ND		2.0		ug/L			04/02/18 21:59	1
4-Isopropyltoluene	ND		3.0		ug/L			04/02/18 21:59	1
Methylene Chloride	ND		5.0		ug/L			04/02/18 21:59	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/02/18 21:59	1
m-Xylene & p-Xylene	ND		3.0		ug/L			04/02/18 21:59	1
Naphthalene	ND		4.0		ug/L			04/02/18 21:59	1
n-Butylbenzene	ND		3.0		ug/L			04/02/18 21:59	1
N-Propylbenzene	ND		3.0		ug/L			04/02/18 21:59	1
o-Xylene	ND		2.0		ug/L			04/02/18 21:59	1
sec-Butylbenzene	ND		3.0		ug/L			04/02/18 21:59	1
Styrene	ND		5.0		ug/L			04/02/18 21:59	1
tert-Butylbenzene	ND		3.0		ug/L			04/02/18 21:59	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/02/18 21:59	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/02/18 21:59	1
<b>Tetrachloroethene</b>	<b>14</b>		3.0		ug/L			04/02/18 21:59	1
Toluene	ND		2.0		ug/L			04/02/18 21:59	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 21:59	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-4**

**Lab Sample ID: 580-76037-4**

**Date Collected: 03/20/18 11:55**

**Matrix: Water**

**Date Received: 03/23/18 09:25**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 21:59	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/02/18 21:59	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/02/18 21:59	1
<b>1,1,1-Trichloroethane</b>	<b>3.3</b>		3.0		ug/L			04/02/18 21:59	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/02/18 21:59	1
<b>Trichloroethene</b>	<b>4.6</b>		3.0		ug/L			04/02/18 21:59	1
Trichlorofluoromethane	ND		3.0		ug/L			04/02/18 21:59	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/02/18 21:59	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			04/02/18 21:59	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			04/02/18 21:59	1
Vinyl chloride	ND		1.0		ug/L			04/02/18 21:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 125		04/02/18 21:59	1
Dibromofluoromethane (Surr)	101		77 - 120		04/02/18 21:59	1
1,2-Dichloroethane-d4 (Surr)	102		80 - 126		04/02/18 21:59	1
Toluene-d8 (Surr)	104		80 - 122		04/02/18 21:59	1
Trifluorotoluene (Surr)	101		80 - 120		04/02/18 21:59	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			03/31/18 19:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	118		75 - 120		03/31/18 19:49	1
4-Bromofluorobenzene (Surr)	88		68 - 119		03/31/18 19:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<del>DRO (nC10-&lt;nC25)</del>	<del>0.27</del>	<del>*</del>	<del>0.13</del>		<del>mg/L</del>		<del>03/30/18 13:35</del>	<del>04/02/18 20:45</del>	<del>1</del>
DRO (nC10-<nC25)	0.19	* J	0.11		mg/L		04/03/18 13:07	04/05/18 01:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	59		50 - 150	03/30/18 13:35	04/02/18 20:45	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-5**  
**Date Collected: 03/21/18 11:45**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-5**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/02/18 22:27	1
Bromobenzene	ND		2.0		ug/L			04/02/18 22:27	1
Bromoform	ND		3.0		ug/L			04/02/18 22:27	1
Bromomethane	ND		6.0		ug/L			04/02/18 22:27	1
Carbon tetrachloride	ND		3.0		ug/L			04/02/18 22:27	1
Chlorobenzene	ND		2.0		ug/L			04/02/18 22:27	1
Chlorobromomethane	ND		2.0		ug/L			04/02/18 22:27	1
Chlorodibromomethane	ND		1.0		ug/L			04/02/18 22:27	1
Chloroethane	ND		5.0		ug/L			04/02/18 22:27	1
Chloroform	ND		5.0		ug/L			04/02/18 22:27	1
Chloromethane	ND		20		ug/L			04/02/18 22:27	1
2-Chlorotoluene	ND		3.0		ug/L			04/02/18 22:27	1
4-Chlorotoluene	ND		2.0		ug/L			04/02/18 22:27	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 22:27	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/02/18 22:27	1
Dibromomethane	ND		2.0		ug/L			04/02/18 22:27	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/02/18 22:27	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/02/18 22:27	1
<b>1,4-Dichlorobenzene</b>	<b>4.4</b>		4.0		ug/L			04/02/18 22:27	1
Dichlorobromomethane	ND		2.0		ug/L			04/02/18 22:27	1
Dichlorodifluoromethane	ND		10		ug/L			04/02/18 22:27	1
1,1-Dichloroethane	ND		2.0		ug/L			04/02/18 22:27	1
1,2-Dichloroethane	ND		2.0		ug/L			04/02/18 22:27	1
1,1-Dichloroethene	ND		4.0		ug/L			04/02/18 22:27	1
1,2-Dichloropropane	ND		1.0		ug/L			04/02/18 22:27	1
1,3-Dichloropropane	ND		2.0		ug/L			04/02/18 22:27	1
2,2-Dichloropropane	ND		3.0		ug/L			04/02/18 22:27	1
1,1-Dichloropropene	ND		3.0		ug/L			04/02/18 22:27	1
Ethylene Dibromide	ND		2.0		ug/L			04/02/18 22:27	1
Hexachlorobutadiene	ND		6.0		ug/L			04/02/18 22:27	1
Isopropylbenzene	ND		2.0		ug/L			04/02/18 22:27	1
<b>4-Isopropyltoluene</b>	<b>3.4</b>		3.0		ug/L			04/02/18 22:27	1
Methylene Chloride	ND		5.0		ug/L			04/02/18 22:27	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/02/18 22:27	1
Naphthalene	ND		4.0		ug/L			04/02/18 22:27	1
n-Butylbenzene	ND		3.0		ug/L			04/02/18 22:27	1
N-Propylbenzene	ND		3.0		ug/L			04/02/18 22:27	1
<b>o-Xylene</b>	<b>84</b>		2.0		ug/L			04/02/18 22:27	1
sec-Butylbenzene	ND		3.0		ug/L			04/02/18 22:27	1
Styrene	ND		5.0		ug/L			04/02/18 22:27	1
tert-Butylbenzene	ND		3.0		ug/L			04/02/18 22:27	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/02/18 22:27	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/02/18 22:27	1
Tetrachloroethene	ND		3.0		ug/L			04/02/18 22:27	1
Toluene	ND		2.0		ug/L			04/02/18 22:27	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 22:27	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 22:27	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/02/18 22:27	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/02/18 22:27	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-5**  
**Date Collected: 03/21/18 11:45**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-5**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.0		ug/L			04/02/18 22:27	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/02/18 22:27	1
Trichloroethene	ND		3.0		ug/L			04/02/18 22:27	1
Trichlorofluoromethane	ND		3.0		ug/L			04/02/18 22:27	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/02/18 22:27	1
<b>1,2,4-Trimethylbenzene</b>	<b>32</b>		3.0		ug/L			04/02/18 22:27	1
<b>1,3,5-Trimethylbenzene</b>	<b>17</b>		3.0		ug/L			04/02/18 22:27	1
Vinyl chloride	ND		1.0		ug/L			04/02/18 22:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		75 - 125		04/02/18 22:27	1
Dibromofluoromethane (Surr)	102		77 - 120		04/02/18 22:27	1
1,2-Dichloroethane-d4 (Surr)	103		80 - 126		04/02/18 22:27	1
Toluene-d8 (Surr)	99		80 - 122		04/02/18 22:27	1
Trifluorotoluene (Surr)	100		80 - 120		04/02/18 22:27	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>150</b>		30		ug/L			04/04/18 16:13	10
<b>Ethylbenzene</b>	<b>240</b>		30		ug/L			04/04/18 16:13	10
<b>m-Xylene &amp; p-Xylene</b>	<b>350</b>		30		ug/L			04/04/18 16:13	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		75 - 125		04/04/18 16:13	10
Dibromofluoromethane (Surr)	103		77 - 120		04/04/18 16:13	10
1,2-Dichloroethane-d4 (Surr)	104		80 - 126		04/04/18 16:13	10
Toluene-d8 (Surr)	97		80 - 122		04/04/18 16:13	10
Trifluorotoluene (Surr)	106		80 - 120		04/04/18 16:13	10

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Gasoline Range Organics (GRO)</b>	<b>1.7</b>	<b>J</b>	1.0		mg/L			03/31/18 20:52	1
<b>-C6-C10</b>									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	118		75 - 120		03/31/18 20:52	1
4-Bromofluorobenzene (Surr)	129	X	68 - 119		03/31/18 20:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<del>DRO (nC10-&lt;nC25)</del>	<del>0.65</del>	<del>*</del>	<del>0.14</del>		mg/L		<del>03/30/18 13:35</del>	<del>04/02/18 21:40</del>	<del>1</del>
<b>DRO (nC10-&lt;nC25)</b>	<b>0.50</b>	<b>* UB</b>	<b>0.11</b>	<b>0.50</b>	mg/L		04/03/18 13:07	04/05/18 01:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	64		50 - 150		03/30/18 13:35	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-6**  
**Date Collected: 03/21/18 11:00**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-6**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/02/18 22:56	1
Bromobenzene	ND		2.0		ug/L			04/02/18 22:56	1
Bromoform	ND		3.0		ug/L			04/02/18 22:56	1
Bromomethane	ND		6.0		ug/L			04/02/18 22:56	1
Carbon tetrachloride	ND		3.0		ug/L			04/02/18 22:56	1
Chlorobenzene	ND		2.0		ug/L			04/02/18 22:56	1
Chlorobromomethane	ND		2.0		ug/L			04/02/18 22:56	1
Chlorodibromomethane	ND		1.0		ug/L			04/02/18 22:56	1
Chloroethane	ND		5.0		ug/L			04/02/18 22:56	1
Chloroform	ND		5.0		ug/L			04/02/18 22:56	1
Chloromethane	ND		20		ug/L			04/02/18 22:56	1
2-Chlorotoluene	ND		3.0		ug/L			04/02/18 22:56	1
4-Chlorotoluene	ND		2.0		ug/L			04/02/18 22:56	1
cis-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 22:56	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 22:56	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/02/18 22:56	1
Dibromomethane	ND		2.0		ug/L			04/02/18 22:56	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/02/18 22:56	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/02/18 22:56	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/02/18 22:56	1
Dichlorobromomethane	ND		2.0		ug/L			04/02/18 22:56	1
Dichlorodifluoromethane	ND		10		ug/L			04/02/18 22:56	1
1,1-Dichloroethane	ND		2.0		ug/L			04/02/18 22:56	1
1,2-Dichloroethane	ND		2.0		ug/L			04/02/18 22:56	1
1,1-Dichloroethene	ND		4.0		ug/L			04/02/18 22:56	1
1,2-Dichloropropane	ND		1.0		ug/L			04/02/18 22:56	1
1,3-Dichloropropane	ND		2.0		ug/L			04/02/18 22:56	1
2,2-Dichloropropane	ND		3.0		ug/L			04/02/18 22:56	1
1,1-Dichloropropene	ND		3.0		ug/L			04/02/18 22:56	1
Ethylbenzene	ND		3.0		ug/L			04/02/18 22:56	1
Ethylene Dibromide	ND		2.0		ug/L			04/02/18 22:56	1
Hexachlorobutadiene	ND		6.0		ug/L			04/02/18 22:56	1
Isopropylbenzene	ND		2.0		ug/L			04/02/18 22:56	1
4-Isopropyltoluene	ND		3.0		ug/L			04/02/18 22:56	1
Methylene Chloride	ND		5.0		ug/L			04/02/18 22:56	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/02/18 22:56	1
m-Xylene & p-Xylene	ND		3.0		ug/L			04/02/18 22:56	1
Naphthalene	ND		4.0		ug/L			04/02/18 22:56	1
n-Butylbenzene	ND		3.0		ug/L			04/02/18 22:56	1
N-Propylbenzene	ND		3.0		ug/L			04/02/18 22:56	1
o-Xylene	ND		2.0		ug/L			04/02/18 22:56	1
sec-Butylbenzene	ND		3.0		ug/L			04/02/18 22:56	1
Styrene	ND		5.0		ug/L			04/02/18 22:56	1
tert-Butylbenzene	ND		3.0		ug/L			04/02/18 22:56	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/02/18 22:56	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/02/18 22:56	1
Tetrachloroethene	ND		3.0		ug/L			04/02/18 22:56	1
Toluene	ND		2.0		ug/L			04/02/18 22:56	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 22:56	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-6**  
**Date Collected: 03/21/18 11:00**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-6**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 22:56	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/02/18 22:56	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/02/18 22:56	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/02/18 22:56	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/02/18 22:56	1
Trichloroethene	ND		3.0		ug/L			04/02/18 22:56	1
Trichlorofluoromethane	ND		3.0		ug/L			04/02/18 22:56	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/02/18 22:56	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			04/02/18 22:56	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			04/02/18 22:56	1
Vinyl chloride	ND		1.0		ug/L			04/02/18 22:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		75 - 125		04/02/18 22:56	1
Dibromofluoromethane (Surr)	101		77 - 120		04/02/18 22:56	1
1,2-Dichloroethane-d4 (Surr)	103		80 - 126		04/02/18 22:56	1
Toluene-d8 (Surr)	100		80 - 122		04/02/18 22:56	1
Trifluorotoluene (Surr)	101		80 - 120		04/02/18 22:56	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			03/31/18 21:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	117		75 - 120		03/31/18 21:24	1
4-Bromofluorobenzene (Surr)	89		68 - 119		03/31/18 21:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<del>DRO (nC10-&lt;nC25)</del>	<del>ND</del>	<del>*</del>	<del>0.13</del>	<del></del>	<del>mg/L</del>	<del></del>	<del>03/30/18 13:35</del>	<del>04/02/18 22:07</del>	<del>1</del>
DRO (nC10-<nC25)	ND	* UJ	0.11		mg/L		04/04/18 09:36	04/05/18 23:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	58		50 - 150	03/30/18 13:35	04/02/18 22:07	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-7**  
**Date Collected: 03/20/18 15:45**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-7**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/02/18 23:25	1
Bromobenzene	ND		2.0		ug/L			04/02/18 23:25	1
Bromoform	ND		3.0		ug/L			04/02/18 23:25	1
Bromomethane	ND		6.0		ug/L			04/02/18 23:25	1
Carbon tetrachloride	ND		3.0		ug/L			04/02/18 23:25	1
Chlorobenzene	ND		2.0		ug/L			04/02/18 23:25	1
Chlorobromomethane	ND		2.0		ug/L			04/02/18 23:25	1
Chlorodibromomethane	ND		1.0		ug/L			04/02/18 23:25	1
Chloroethane	ND		5.0		ug/L			04/02/18 23:25	1
Chloroform	ND		5.0		ug/L			04/02/18 23:25	1
Chloromethane	ND		20		ug/L			04/02/18 23:25	1
2-Chlorotoluene	ND		3.0		ug/L			04/02/18 23:25	1
4-Chlorotoluene	ND		2.0		ug/L			04/02/18 23:25	1
cis-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 23:25	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 23:25	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/02/18 23:25	1
Dibromomethane	ND		2.0		ug/L			04/02/18 23:25	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/02/18 23:25	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/02/18 23:25	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/02/18 23:25	1
Dichlorobromomethane	ND		2.0		ug/L			04/02/18 23:25	1
Dichlorodifluoromethane	ND		10		ug/L			04/02/18 23:25	1
1,1-Dichloroethane	ND		2.0		ug/L			04/02/18 23:25	1
1,2-Dichloroethane	ND		2.0		ug/L			04/02/18 23:25	1
1,1-Dichloroethene	ND		4.0		ug/L			04/02/18 23:25	1
1,2-Dichloropropane	ND		1.0		ug/L			04/02/18 23:25	1
1,3-Dichloropropane	ND		2.0		ug/L			04/02/18 23:25	1
2,2-Dichloropropane	ND		3.0		ug/L			04/02/18 23:25	1
1,1-Dichloropropene	ND		3.0		ug/L			04/02/18 23:25	1
Ethylbenzene	ND		3.0		ug/L			04/02/18 23:25	1
Ethylene Dibromide	ND		2.0		ug/L			04/02/18 23:25	1
Hexachlorobutadiene	ND		6.0		ug/L			04/02/18 23:25	1
Isopropylbenzene	ND		2.0		ug/L			04/02/18 23:25	1
4-Isopropyltoluene	ND		3.0		ug/L			04/02/18 23:25	1
Methylene Chloride	ND		5.0		ug/L			04/02/18 23:25	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/02/18 23:25	1
m-Xylene & p-Xylene	ND		3.0		ug/L			04/02/18 23:25	1
Naphthalene	ND		4.0		ug/L			04/02/18 23:25	1
n-Butylbenzene	ND		3.0		ug/L			04/02/18 23:25	1
N-Propylbenzene	ND		3.0		ug/L			04/02/18 23:25	1
o-Xylene	ND		2.0		ug/L			04/02/18 23:25	1
sec-Butylbenzene	ND		3.0		ug/L			04/02/18 23:25	1
Styrene	ND		5.0		ug/L			04/02/18 23:25	1
tert-Butylbenzene	ND		3.0		ug/L			04/02/18 23:25	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/02/18 23:25	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/02/18 23:25	1
<b>Tetrachloroethene</b>	<b>12</b>		3.0		ug/L			04/02/18 23:25	1
Toluene	ND		2.0		ug/L			04/02/18 23:25	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 23:25	1

TestAmerica Seattle



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-7**  
**Date Collected: 03/20/18 15:45**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-7**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 23:25	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/02/18 23:25	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/02/18 23:25	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/02/18 23:25	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/02/18 23:25	1
Trichloroethene	ND		3.0		ug/L			04/02/18 23:25	1
Trichlorofluoromethane	ND		3.0		ug/L			04/02/18 23:25	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/02/18 23:25	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			04/02/18 23:25	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			04/02/18 23:25	1
Vinyl chloride	ND		1.0		ug/L			04/02/18 23:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		75 - 125		04/02/18 23:25	1
Dibromofluoromethane (Surr)	101		77 - 120		04/02/18 23:25	1
1,2-Dichloroethane-d4 (Surr)	101		80 - 126		04/02/18 23:25	1
Toluene-d8 (Surr)	100		80 - 122		04/02/18 23:25	1
Trifluorotoluene (Surr)	101		80 - 120		04/02/18 23:25	1

### Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			03/31/18 21:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	118		75 - 120		03/31/18 21:55	1
4-Bromofluorobenzene (Surr)	90		68 - 119		03/31/18 21:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<del>DRO (nC10-&lt;nC25)</del>	<del>ND</del>	<del>*</del>	<del>0.12</del>	<del></del>	<del>mg/L</del>	<del></del>	<del>03/30/18 13:35</del>	<del>04/02/18 22:35</del>	<del>1</del>
DRO (nC10-<nC25)	ND	* UJ	0.12		mg/L		04/03/18 13:07	04/05/18 01:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	43	X	50 - 150	03/30/18 13:35	04/02/18 22:35	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-8**  
**Date Collected: 03/20/18 15:05**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-8**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/02/18 23:53	1
Bromobenzene	ND		2.0		ug/L			04/02/18 23:53	1
Bromoform	ND		3.0		ug/L			04/02/18 23:53	1
Bromomethane	ND		6.0		ug/L			04/02/18 23:53	1
Carbon tetrachloride	ND		3.0		ug/L			04/02/18 23:53	1
Chlorobenzene	ND		2.0		ug/L			04/02/18 23:53	1
Chlorobromomethane	ND		2.0		ug/L			04/02/18 23:53	1
Chlorodibromomethane	ND		1.0		ug/L			04/02/18 23:53	1
Chloroethane	ND		5.0		ug/L			04/02/18 23:53	1
Chloroform	ND		5.0		ug/L			04/02/18 23:53	1
Chloromethane	ND		20		ug/L			04/02/18 23:53	1
2-Chlorotoluene	ND		3.0		ug/L			04/02/18 23:53	1
4-Chlorotoluene	ND		2.0		ug/L			04/02/18 23:53	1
cis-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 23:53	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 23:53	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/02/18 23:53	1
Dibromomethane	ND		2.0		ug/L			04/02/18 23:53	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/02/18 23:53	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/02/18 23:53	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/02/18 23:53	1
Dichlorobromomethane	ND		2.0		ug/L			04/02/18 23:53	1
Dichlorodifluoromethane	ND		10		ug/L			04/02/18 23:53	1
1,1-Dichloroethane	ND		2.0		ug/L			04/02/18 23:53	1
1,2-Dichloroethane	ND		2.0		ug/L			04/02/18 23:53	1
1,1-Dichloroethene	ND		4.0		ug/L			04/02/18 23:53	1
1,2-Dichloropropane	ND		1.0		ug/L			04/02/18 23:53	1
1,3-Dichloropropane	ND		2.0		ug/L			04/02/18 23:53	1
2,2-Dichloropropane	ND		3.0		ug/L			04/02/18 23:53	1
1,1-Dichloropropene	ND		3.0		ug/L			04/02/18 23:53	1
Ethylbenzene	ND		3.0		ug/L			04/02/18 23:53	1
Ethylene Dibromide	ND		2.0		ug/L			04/02/18 23:53	1
Hexachlorobutadiene	ND		6.0		ug/L			04/02/18 23:53	1
Isopropylbenzene	ND		2.0		ug/L			04/02/18 23:53	1
4-Isopropyltoluene	ND		3.0		ug/L			04/02/18 23:53	1
Methylene Chloride	ND		5.0		ug/L			04/02/18 23:53	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/02/18 23:53	1
m-Xylene & p-Xylene	ND		3.0		ug/L			04/02/18 23:53	1
Naphthalene	ND		4.0		ug/L			04/02/18 23:53	1
n-Butylbenzene	ND		3.0		ug/L			04/02/18 23:53	1
N-Propylbenzene	ND		3.0		ug/L			04/02/18 23:53	1
o-Xylene	ND		2.0		ug/L			04/02/18 23:53	1
sec-Butylbenzene	ND		3.0		ug/L			04/02/18 23:53	1
Styrene	ND		5.0		ug/L			04/02/18 23:53	1
tert-Butylbenzene	ND		3.0		ug/L			04/02/18 23:53	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/02/18 23:53	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/02/18 23:53	1
Tetrachloroethene	ND		3.0		ug/L			04/02/18 23:53	1
Toluene	ND		2.0		ug/L			04/02/18 23:53	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 23:53	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-8**  
**Date Collected: 03/20/18 15:05**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-8**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 23:53	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/02/18 23:53	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/02/18 23:53	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/02/18 23:53	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/02/18 23:53	1
Trichloroethene	ND		3.0		ug/L			04/02/18 23:53	1
Trichlorofluoromethane	ND		3.0		ug/L			04/02/18 23:53	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/02/18 23:53	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			04/02/18 23:53	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			04/02/18 23:53	1
Vinyl chloride	ND		1.0		ug/L			04/02/18 23:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		75 - 125		04/02/18 23:53	1
Dibromofluoromethane (Surr)	101		77 - 120		04/02/18 23:53	1
1,2-Dichloroethane-d4 (Surr)	104		80 - 126		04/02/18 23:53	1
Toluene-d8 (Surr)	100		80 - 122		04/02/18 23:53	1
Trifluorotoluene (Surr)	101		80 - 120		04/02/18 23:53	1

### Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			03/31/18 22:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	118		75 - 120		03/31/18 22:27	1
4-Bromofluorobenzene (Surr)	87		68 - 119		03/31/18 22:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<del>DRO (nC10-&lt;nC25)</del>	<del>ND</del>	<del>*</del>	<del>0.11</del>	<del></del>	<del>mg/L</del>	<del></del>	<del>03/30/18 13:35</del>	<del>04/02/18 23:02</del>	<del>1</del>
DRO (nC10-<nC25)	ND	* UJ	0.11		mg/L		04/03/18 13:07	04/05/18 02:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	49	X	50 - 150	03/30/18 13:35	04/02/18 23:02	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-9**  
**Date Collected: 03/20/18 14:10**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-9**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/03/18 00:22	1
Bromobenzene	ND		2.0		ug/L			04/03/18 00:22	1
Bromoform	ND		3.0		ug/L			04/03/18 00:22	1
Bromomethane	ND		6.0		ug/L			04/03/18 00:22	1
Carbon tetrachloride	ND		3.0		ug/L			04/03/18 00:22	1
Chlorobenzene	ND		2.0		ug/L			04/03/18 00:22	1
Chlorobromomethane	ND		2.0		ug/L			04/03/18 00:22	1
Chlorodibromomethane	ND		1.0		ug/L			04/03/18 00:22	1
Chloroethane	ND		5.0		ug/L			04/03/18 00:22	1
Chloroform	ND		5.0		ug/L			04/03/18 00:22	1
Chloromethane	ND		20		ug/L			04/03/18 00:22	1
2-Chlorotoluene	ND		3.0		ug/L			04/03/18 00:22	1
4-Chlorotoluene	ND		2.0		ug/L			04/03/18 00:22	1
cis-1,2-Dichloroethene	ND		3.0		ug/L			04/03/18 00:22	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/03/18 00:22	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/03/18 00:22	1
Dibromomethane	ND		2.0		ug/L			04/03/18 00:22	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/03/18 00:22	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/03/18 00:22	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/03/18 00:22	1
Dichlorobromomethane	ND		2.0		ug/L			04/03/18 00:22	1
Dichlorodifluoromethane	ND		10		ug/L			04/03/18 00:22	1
1,1-Dichloroethane	ND		2.0		ug/L			04/03/18 00:22	1
1,2-Dichloroethane	ND		2.0		ug/L			04/03/18 00:22	1
1,1-Dichloroethene	ND		4.0		ug/L			04/03/18 00:22	1
1,2-Dichloropropane	ND		1.0		ug/L			04/03/18 00:22	1
1,3-Dichloropropane	ND		2.0		ug/L			04/03/18 00:22	1
2,2-Dichloropropane	ND		3.0		ug/L			04/03/18 00:22	1
1,1-Dichloropropene	ND		3.0		ug/L			04/03/18 00:22	1
Ethylbenzene	ND		3.0		ug/L			04/03/18 00:22	1
Ethylene Dibromide	ND		2.0		ug/L			04/03/18 00:22	1
Hexachlorobutadiene	ND		6.0		ug/L			04/03/18 00:22	1
Isopropylbenzene	ND		2.0		ug/L			04/03/18 00:22	1
4-Isopropyltoluene	ND		3.0		ug/L			04/03/18 00:22	1
Methylene Chloride	ND		5.0		ug/L			04/03/18 00:22	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/03/18 00:22	1
m-Xylene & p-Xylene	ND		3.0		ug/L			04/03/18 00:22	1
Naphthalene	ND		4.0		ug/L			04/03/18 00:22	1
n-Butylbenzene	ND		3.0		ug/L			04/03/18 00:22	1
N-Propylbenzene	ND		3.0		ug/L			04/03/18 00:22	1
o-Xylene	ND		2.0		ug/L			04/03/18 00:22	1
sec-Butylbenzene	ND		3.0		ug/L			04/03/18 00:22	1
Styrene	ND		5.0		ug/L			04/03/18 00:22	1
tert-Butylbenzene	ND		3.0		ug/L			04/03/18 00:22	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/03/18 00:22	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/03/18 00:22	1
Tetrachloroethene	ND		3.0		ug/L			04/03/18 00:22	1
Toluene	ND		2.0		ug/L			04/03/18 00:22	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/03/18 00:22	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-9**  
**Date Collected: 03/20/18 14:10**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-9**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/03/18 00:22	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/03/18 00:22	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/03/18 00:22	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/03/18 00:22	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/03/18 00:22	1
Trichloroethene	ND		3.0		ug/L			04/03/18 00:22	1
Trichlorofluoromethane	ND		3.0		ug/L			04/03/18 00:22	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/03/18 00:22	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			04/03/18 00:22	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			04/03/18 00:22	1
Vinyl chloride	ND		1.0		ug/L			04/03/18 00:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		75 - 125		04/03/18 00:22	1
Dibromofluoromethane (Surr)	100		77 - 120		04/03/18 00:22	1
1,2-Dichloroethane-d4 (Surr)	105		80 - 126		04/03/18 00:22	1
Toluene-d8 (Surr)	101		80 - 122		04/03/18 00:22	1
Trifluorotoluene (Surr)	101		80 - 120		04/03/18 00:22	1

### Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			03/31/18 22:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	115		75 - 120		03/31/18 22:59	1
4-Bromofluorobenzene (Surr)	85		68 - 119		03/31/18 22:59	1

### Method: 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	*	0.12		mg/L		03/30/18 13:35	04/02/18 23:29	1
DRO (nC10-<nC25)	ND	* UJ	0.11		mg/L		04/03/18 13:07	04/05/18 02:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	49	X	50 - 150	03/30/18 13:35	04/02/18 23:29	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-10**

**Date Collected: 03/20/18 13:30**

**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-10**

**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/03/18 00:50	1
Bromobenzene	ND		2.0		ug/L			04/03/18 00:50	1
Bromoform	ND		3.0		ug/L			04/03/18 00:50	1
Bromomethane	ND		6.0		ug/L			04/03/18 00:50	1
Carbon tetrachloride	ND		3.0		ug/L			04/03/18 00:50	1
Chlorobenzene	ND		2.0		ug/L			04/03/18 00:50	1
Chlorobromomethane	ND		2.0		ug/L			04/03/18 00:50	1
Chlorodibromomethane	ND		1.0		ug/L			04/03/18 00:50	1
Chloroethane	ND		5.0		ug/L			04/03/18 00:50	1
Chloroform	ND		5.0		ug/L			04/03/18 00:50	1
Chloromethane	ND		20		ug/L			04/03/18 00:50	1
2-Chlorotoluene	ND		3.0		ug/L			04/03/18 00:50	1
4-Chlorotoluene	ND		2.0		ug/L			04/03/18 00:50	1
cis-1,2-Dichloroethene	ND		3.0		ug/L			04/03/18 00:50	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/03/18 00:50	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/03/18 00:50	1
Dibromomethane	ND		2.0		ug/L			04/03/18 00:50	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/03/18 00:50	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/03/18 00:50	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/03/18 00:50	1
Dichlorobromomethane	ND		2.0		ug/L			04/03/18 00:50	1
Dichlorodifluoromethane	ND		10		ug/L			04/03/18 00:50	1
1,1-Dichloroethane	ND		2.0		ug/L			04/03/18 00:50	1
1,2-Dichloroethane	ND		2.0		ug/L			04/03/18 00:50	1
1,1-Dichloroethene	ND		4.0		ug/L			04/03/18 00:50	1
1,2-Dichloropropane	ND		1.0		ug/L			04/03/18 00:50	1
1,3-Dichloropropane	ND		2.0		ug/L			04/03/18 00:50	1
2,2-Dichloropropane	ND		3.0		ug/L			04/03/18 00:50	1
1,1-Dichloropropene	ND		3.0		ug/L			04/03/18 00:50	1
Ethylbenzene	ND		3.0		ug/L			04/03/18 00:50	1
Ethylene Dibromide	ND		2.0		ug/L			04/03/18 00:50	1
Hexachlorobutadiene	ND		6.0		ug/L			04/03/18 00:50	1
Isopropylbenzene	ND		2.0		ug/L			04/03/18 00:50	1
4-Isopropyltoluene	ND		3.0		ug/L			04/03/18 00:50	1
Methylene Chloride	ND		5.0		ug/L			04/03/18 00:50	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/03/18 00:50	1
m-Xylene & p-Xylene	ND		3.0		ug/L			04/03/18 00:50	1
Naphthalene	ND		4.0		ug/L			04/03/18 00:50	1
n-Butylbenzene	ND		3.0		ug/L			04/03/18 00:50	1
N-Propylbenzene	ND		3.0		ug/L			04/03/18 00:50	1
o-Xylene	ND		2.0		ug/L			04/03/18 00:50	1
sec-Butylbenzene	ND		3.0		ug/L			04/03/18 00:50	1
Styrene	ND		5.0		ug/L			04/03/18 00:50	1
tert-Butylbenzene	ND		3.0		ug/L			04/03/18 00:50	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/03/18 00:50	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/03/18 00:50	1
Tetrachloroethene	ND		3.0		ug/L			04/03/18 00:50	1
Toluene	ND		2.0		ug/L			04/03/18 00:50	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/03/18 00:50	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-10**  
**Date Collected: 03/20/18 13:30**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-10**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/03/18 00:50	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/03/18 00:50	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/03/18 00:50	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/03/18 00:50	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/03/18 00:50	1
Trichloroethene	ND		3.0		ug/L			04/03/18 00:50	1
Trichlorofluoromethane	ND		3.0		ug/L			04/03/18 00:50	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/03/18 00:50	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			04/03/18 00:50	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			04/03/18 00:50	1
Vinyl chloride	ND		1.0		ug/L			04/03/18 00:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		75 - 125					04/03/18 00:50	1
Dibromofluoromethane (Surr)	101		77 - 120					04/03/18 00:50	1
1,2-Dichloroethane-d4 (Surr)	104		80 - 126					04/03/18 00:50	1
Toluene-d8 (Surr)	101		80 - 122					04/03/18 00:50	1
Trifluorotoluene (Surr)	101		80 - 120					04/03/18 00:50	1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			03/31/18 23:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	115		75 - 120					03/31/18 23:30	1
4-Bromofluorobenzene (Surr)	89		68 - 119					03/31/18 23:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<del>DRO (nC10-&lt;nC25)</del>	<del>ND</del>	<del>*</del>	<del>0.11</del>	<del></del>	<del>mg/L</del>	<del></del>	<del>03/30/18 13:35</del>	<del>04/02/18 23:56</del>	<del>1</del>
DRO (nC10-<nC25)	ND	* UJ	0.11		mg/L		04/03/18 13:07	04/05/18 03:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	54		50 - 150				03/30/18 13:35	04/02/18 23:56	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-11**

**Date Collected: 03/20/18 12:50**

**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-11**

**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/03/18 01:19	1
Bromobenzene	ND		2.0		ug/L			04/03/18 01:19	1
Bromoform	ND		3.0		ug/L			04/03/18 01:19	1
Bromomethane	ND		6.0		ug/L			04/03/18 01:19	1
Carbon tetrachloride	ND		3.0		ug/L			04/03/18 01:19	1
Chlorobenzene	ND		2.0		ug/L			04/03/18 01:19	1
Chlorobromomethane	ND		2.0		ug/L			04/03/18 01:19	1
Chlorodibromomethane	ND		1.0		ug/L			04/03/18 01:19	1
Chloroethane	ND		5.0		ug/L			04/03/18 01:19	1
Chloroform	ND		5.0		ug/L			04/03/18 01:19	1
Chloromethane	ND		20		ug/L			04/03/18 01:19	1
2-Chlorotoluene	ND		3.0		ug/L			04/03/18 01:19	1
4-Chlorotoluene	ND		2.0		ug/L			04/03/18 01:19	1
cis-1,2-Dichloroethene	ND		3.0		ug/L			04/03/18 01:19	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/03/18 01:19	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/03/18 01:19	1
Dibromomethane	ND		2.0		ug/L			04/03/18 01:19	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/03/18 01:19	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/03/18 01:19	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/03/18 01:19	1
Dichlorobromomethane	ND		2.0		ug/L			04/03/18 01:19	1
Dichlorodifluoromethane	ND		10		ug/L			04/03/18 01:19	1
1,1-Dichloroethane	ND		2.0		ug/L			04/03/18 01:19	1
1,2-Dichloroethane	ND		2.0		ug/L			04/03/18 01:19	1
1,1-Dichloroethene	ND		4.0		ug/L			04/03/18 01:19	1
1,2-Dichloropropane	ND		1.0		ug/L			04/03/18 01:19	1
1,3-Dichloropropane	ND		2.0		ug/L			04/03/18 01:19	1
2,2-Dichloropropane	ND		3.0		ug/L			04/03/18 01:19	1
1,1-Dichloropropene	ND		3.0		ug/L			04/03/18 01:19	1
Ethylbenzene	ND		3.0		ug/L			04/03/18 01:19	1
Ethylene Dibromide	ND		2.0		ug/L			04/03/18 01:19	1
Hexachlorobutadiene	ND		6.0		ug/L			04/03/18 01:19	1
Isopropylbenzene	ND		2.0		ug/L			04/03/18 01:19	1
4-Isopropyltoluene	ND		3.0		ug/L			04/03/18 01:19	1
Methylene Chloride	ND		5.0		ug/L			04/03/18 01:19	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/03/18 01:19	1
m-Xylene & p-Xylene	ND		3.0		ug/L			04/03/18 01:19	1
Naphthalene	ND		4.0		ug/L			04/03/18 01:19	1
n-Butylbenzene	ND		3.0		ug/L			04/03/18 01:19	1
N-Propylbenzene	ND		3.0		ug/L			04/03/18 01:19	1
o-Xylene	ND		2.0		ug/L			04/03/18 01:19	1
sec-Butylbenzene	ND		3.0		ug/L			04/03/18 01:19	1
Styrene	ND		5.0		ug/L			04/03/18 01:19	1
tert-Butylbenzene	ND		3.0		ug/L			04/03/18 01:19	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/03/18 01:19	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/03/18 01:19	1
Tetrachloroethene	ND		3.0		ug/L			04/03/18 01:19	1
Toluene	ND		2.0		ug/L			04/03/18 01:19	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/03/18 01:19	1

TestAmerica Seattle



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-11**

**Lab Sample ID: 580-76037-11**

**Date Collected: 03/20/18 12:50**

**Matrix: Water**

**Date Received: 03/23/18 09:25**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/03/18 01:19	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/03/18 01:19	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/03/18 01:19	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/03/18 01:19	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/03/18 01:19	1
Trichloroethene	ND		3.0		ug/L			04/03/18 01:19	1
Trichlorofluoromethane	ND		3.0		ug/L			04/03/18 01:19	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/03/18 01:19	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			04/03/18 01:19	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			04/03/18 01:19	1
Vinyl chloride	ND		1.0		ug/L			04/03/18 01:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		75 - 125		04/03/18 01:19	1
Dibromofluoromethane (Surr)	102		77 - 120		04/03/18 01:19	1
1,2-Dichloroethane-d4 (Surr)	102		80 - 126		04/03/18 01:19	1
Toluene-d8 (Surr)	102		80 - 122		04/03/18 01:19	1
Trifluorotoluene (Surr)	102		80 - 120		04/03/18 01:19	1

**Method: AK101 - Alaska - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			04/01/18 00:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	118		75 - 120		04/01/18 00:02	1
4-Bromofluorobenzene (Surr)	88		68 - 119		04/01/18 00:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<del>DRO (nC10-&lt;nC25)</del>	<del>ND</del>	<del>*</del>	<del>0.12</del>	<del></del>	<del>mg/L</del>	<del></del>	<del>03/30/18 13:35</del>	<del>04/03/18 00:23</del>	<del>1</del>
DRO (nC10-<nC25)	ND	* UJ	0.12		mg/L		04/03/18 13:07	04/05/18 04:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	51		50 - 150	03/30/18 13:35	04/03/18 00:23	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: BD-1**  
**Date Collected: 03/20/18 00:01**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-12**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	*	3.0		ug/L			04/03/18 14:57	1
Bromobenzene	ND	*	2.0		ug/L			04/03/18 14:57	1
Bromoform	ND	*	3.0		ug/L			04/03/18 14:57	1
Bromomethane	ND		6.0		ug/L			04/03/18 14:57	1
Carbon tetrachloride	ND	*	3.0		ug/L			04/03/18 14:57	1
Chlorobenzene	ND	*	2.0		ug/L			04/03/18 14:57	1
Chlorobromomethane	ND		2.0		ug/L			04/03/18 14:57	1
Chlorodibromomethane	ND		1.0		ug/L			04/03/18 14:57	1
Chloroethane	ND		5.0		ug/L			04/03/18 14:57	1
Chloroform	ND	*	5.0		ug/L			04/03/18 14:57	1
Chloromethane	ND		20		ug/L			04/03/18 14:57	1
2-Chlorotoluene	ND	*	3.0		ug/L			04/03/18 14:57	1
4-Chlorotoluene	ND		2.0		ug/L			04/03/18 14:57	1
cis-1,2-Dichloroethene	ND	*	3.0		ug/L			04/03/18 14:57	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/03/18 14:57	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/03/18 14:57	1
Dibromomethane	ND		2.0		ug/L			04/03/18 14:57	1
1,2-Dichlorobenzene	ND	*	2.0		ug/L			04/03/18 14:57	1
1,3-Dichlorobenzene	ND	*	2.0		ug/L			04/03/18 14:57	1
1,4-Dichlorobenzene	ND	*	4.0		ug/L			04/03/18 14:57	1
Dichlorobromomethane	ND		2.0		ug/L			04/03/18 14:57	1
Dichlorodifluoromethane	ND		10		ug/L			04/03/18 14:57	1
1,1-Dichloroethane	ND		2.0		ug/L			04/03/18 14:57	1
1,2-Dichloroethane	ND	*	2.0		ug/L			04/03/18 14:57	1
1,1-Dichloroethene	ND		4.0		ug/L			04/03/18 14:57	1
1,2-Dichloropropane	ND		1.0		ug/L			04/03/18 14:57	1
1,3-Dichloropropane	ND		2.0		ug/L			04/03/18 14:57	1
2,2-Dichloropropane	ND		3.0		ug/L			04/03/18 14:57	1
1,1-Dichloropropene	ND		3.0		ug/L			04/03/18 14:57	1
Ethylbenzene	ND	*	3.0		ug/L			04/03/18 14:57	1
Ethylene Dibromide	ND		2.0		ug/L			04/03/18 14:57	1
Hexachlorobutadiene	ND		6.0		ug/L			04/03/18 14:57	1
Isopropylbenzene	ND	*	2.0		ug/L			04/03/18 14:57	1
4-Isopropyltoluene	ND	*	3.0		ug/L			04/03/18 14:57	1
Methylene Chloride	ND		5.0		ug/L			04/03/18 14:57	1
Methyl tert-butyl ether	ND	*	2.0		ug/L			04/03/18 14:57	1
m-Xylene & p-Xylene	ND	*	3.0		ug/L			04/03/18 14:57	1
Naphthalene	ND		4.0		ug/L			04/03/18 14:57	1
n-Butylbenzene	ND	*	3.0		ug/L			04/03/18 14:57	1
N-Propylbenzene	ND	*	3.0		ug/L			04/03/18 14:57	1
o-Xylene	ND	*	2.0		ug/L			04/03/18 14:57	1
sec-Butylbenzene	ND	*	3.0		ug/L			04/03/18 14:57	1
Styrene	ND	*	5.0		ug/L			04/03/18 14:57	1
tert-Butylbenzene	ND		3.0		ug/L			04/03/18 14:57	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/03/18 14:57	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/03/18 14:57	1
Tetrachloroethene	ND		3.0		ug/L			04/03/18 14:57	1
Toluene	ND	*	2.0		ug/L			04/03/18 14:57	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/03/18 14:57	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: BD-1**

**Lab Sample ID: 580-76037-12**

**Date Collected: 03/20/18 00:01**

**Matrix: Water**

**Date Received: 03/23/18 09:25**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND	*	1.0		ug/L			04/03/18 14:57	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/03/18 14:57	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/03/18 14:57	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/03/18 14:57	1
1,1,2-Trichloroethane	ND	*	1.0		ug/L			04/03/18 14:57	1
Trichloroethene	ND	*	3.0		ug/L			04/03/18 14:57	1
Trichlorofluoromethane	ND		3.0		ug/L			04/03/18 14:57	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/03/18 14:57	1
1,2,4-Trimethylbenzene	ND	*	3.0		ug/L			04/03/18 14:57	1
1,3,5-Trimethylbenzene	ND	*	3.0		ug/L			04/03/18 14:57	1
Vinyl chloride	ND		1.0		ug/L			04/03/18 14:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		75 - 125		04/03/18 14:57	1
Dibromofluoromethane (Surr)	103		77 - 120		04/03/18 14:57	1
1,2-Dichloroethane-d4 (Surr)	104		80 - 126		04/03/18 14:57	1
Toluene-d8 (Surr)	100		80 - 122		04/03/18 14:57	1
Trifluorotoluene (Surr)	103		80 - 120		04/03/18 14:57	1

**Method: AK101 - Alaska - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			04/01/18 00:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	117		75 - 120		04/01/18 00:34	1
4-Bromofluorobenzene (Surr)	89		68 - 119		04/01/18 00:34	1

**Method: 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	*	0.12		mg/L		03/30/18 13:35	04/03/18 00:50	1
DRO (nC10-<nC25)	ND	* UJ	0.12		mg/L		04/03/18 13:07	04/05/18 04:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	49	X	50 - 150	03/30/18 13:35	04/03/18 00:50	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: BD-2**  
**Date Collected: 03/21/18 00:01**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-13**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/04/18 17:10	1
Bromobenzene	ND		2.0		ug/L			04/04/18 17:10	1
Bromoform	ND		3.0		ug/L			04/04/18 17:10	1
Bromomethane	ND		6.0		ug/L			04/04/18 17:10	1
Carbon tetrachloride	ND		3.0		ug/L			04/04/18 17:10	1
Chlorobenzene	ND		2.0		ug/L			04/04/18 17:10	1
Chlorobromomethane	ND		2.0		ug/L			04/04/18 17:10	1
Chlorodibromomethane	ND		1.0		ug/L			04/04/18 17:10	1
Chloroethane	ND		5.0		ug/L			04/04/18 17:10	1
Chloroform	ND		5.0		ug/L			04/04/18 17:10	1
Chloromethane	ND		20		ug/L			04/04/18 17:10	1
2-Chlorotoluene	ND		3.0		ug/L			04/04/18 17:10	1
4-Chlorotoluene	ND		2.0		ug/L			04/04/18 17:10	1
cis-1,3-Dichloropropene	ND	*	1.0		ug/L			04/04/18 17:10	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/04/18 17:10	1
Dibromomethane	ND		2.0		ug/L			04/04/18 17:10	1
1,2-Dichlorobenzene	ND	*	2.0		ug/L			04/04/18 17:10	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/04/18 17:10	1
<b>1,4-Dichlorobenzene</b>	<b>4.5</b>		4.0		ug/L			04/04/18 17:10	1
Dichlorobromomethane	ND	*	2.0		ug/L			04/04/18 17:10	1
Dichlorodifluoromethane	ND		10		ug/L			04/04/18 17:10	1
1,1-Dichloroethane	ND		2.0		ug/L			04/04/18 17:10	1
1,2-Dichloroethane	ND	*	2.0		ug/L			04/04/18 17:10	1
1,1-Dichloroethene	ND		4.0		ug/L			04/04/18 17:10	1
1,2-Dichloropropane	ND		1.0		ug/L			04/04/18 17:10	1
1,3-Dichloropropane	ND		2.0		ug/L			04/04/18 17:10	1
2,2-Dichloropropane	ND		3.0		ug/L			04/04/18 17:10	1
1,1-Dichloropropene	ND		3.0		ug/L			04/04/18 17:10	1
Ethylene Dibromide	ND		2.0		ug/L			04/04/18 17:10	1
Hexachlorobutadiene	ND		6.0		ug/L			04/04/18 17:10	1
Isopropylbenzene	ND		2.0		ug/L			04/04/18 17:10	1
<b>4-Isopropyltoluene</b>	<b>3.2</b>	*	3.0		ug/L			04/04/18 17:10	1
Methylene Chloride	ND		5.0		ug/L			04/04/18 17:10	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/04/18 17:10	1
Naphthalene	ND	*	4.0		ug/L			04/04/18 17:10	1
n-Butylbenzene	ND		3.0		ug/L			04/04/18 17:10	1
N-Propylbenzene	ND	*	3.0		ug/L			04/04/18 17:10	1
<b>o-Xylene</b>	<b>88</b>		2.0		ug/L			04/04/18 17:10	1
sec-Butylbenzene	ND		3.0		ug/L			04/04/18 17:10	1
Styrene	ND		5.0		ug/L			04/04/18 17:10	1
tert-Butylbenzene	ND	*	3.0		ug/L			04/04/18 17:10	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/04/18 17:10	1
1,1,1,2,2-Tetrachloroethane	ND	*	3.0		ug/L			04/04/18 17:10	1
Tetrachloroethene	ND		3.0		ug/L			04/04/18 17:10	1
Toluene	ND	*	2.0		ug/L			04/04/18 17:10	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/04/18 17:10	1
trans-1,3-Dichloropropene	ND	*	1.0		ug/L			04/04/18 17:10	1
1,2,3-Trichlorobenzene	ND	*	5.0		ug/L			04/04/18 17:10	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/04/18 17:10	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: BD-2**  
**Date Collected: 03/21/18 00:01**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-13**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		3.0		ug/L			04/04/18 17:10	1
1,1,2-Trichloroethane	ND	*	1.0		ug/L			04/04/18 17:10	1
Trichloroethene	ND		3.0		ug/L			04/04/18 17:10	1
Trichlorofluoromethane	ND		3.0		ug/L			04/04/18 17:10	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/04/18 17:10	1
<b>1,2,4-Trimethylbenzene</b>	<b>29</b>		3.0		ug/L			04/04/18 17:10	1
<b>1,3,5-Trimethylbenzene</b>	<b>17</b>	*	3.0		ug/L			04/04/18 17:10	1
Vinyl chloride	ND		1.0		ug/L			04/04/18 17:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		75 - 125		04/04/18 17:10	1
Dibromofluoromethane (Surr)	103		77 - 120		04/04/18 17:10	1
1,2-Dichloroethane-d4 (Surr)	101		80 - 126		04/04/18 17:10	1
Toluene-d8 (Surr)	98		80 - 122		04/04/18 17:10	1
Trifluorotoluene (Surr)	107		80 - 120		04/04/18 17:10	1

## Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>cis-1,2-Dichloroethene</b>	<b>170</b>		30		ug/L			04/04/18 16:42	10
<b>Ethylbenzene</b>	<b>270</b>		30		ug/L			04/04/18 16:42	10
<b>m-Xylene &amp; p-Xylene</b>	<b>390</b>		30		ug/L			04/04/18 16:42	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		75 - 125		04/04/18 16:42	10
Dibromofluoromethane (Surr)	105		77 - 120		04/04/18 16:42	10
1,2-Dichloroethane-d4 (Surr)	104		80 - 126		04/04/18 16:42	10
Toluene-d8 (Surr)	98		80 - 122		04/04/18 16:42	10
Trifluorotoluene (Surr)	107		80 - 120		04/04/18 16:42	10

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Gasoline Range Organics (GRO)</b>	<b>1.7</b>	J	1.0		mg/L			04/01/18 01:37	1
<b>-C6-C10</b>									

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	117		75 - 120		04/01/18 01:37	1
4-Bromofluorobenzene (Surr)	126	X	68 - 119		04/01/18 01:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<del>DRO (nC10-&lt;nC25)</del>	<del>0.35</del>	<del>*</del>	<del>0.11</del>		mg/L		<del>03/30/18 13:35</del>	<del>04/03/18 01:17</del>	<del>1</del>
<b>DRO (nC10-&lt;nC25)</b>	<b>0.48</b>	<b>* UB</b>	<b>0.11</b>	<b>0.48</b>	mg/L		04/04/18 09:36	04/06/18 00:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	32	X	50 - 150	03/30/18 13:35	04/03/18 01:17	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: EB**  
**Date Collected: 03/21/18 14:40**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-16**  
**Matrix: Water**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/04/18 18:36	1
Bromobenzene	ND		2.0		ug/L			04/04/18 18:36	1
Bromoform	ND		3.0		ug/L			04/04/18 18:36	1
Bromomethane	ND		6.0		ug/L			04/04/18 18:36	1
Carbon tetrachloride	ND		3.0		ug/L			04/04/18 18:36	1
Chlorobenzene	ND		2.0		ug/L			04/04/18 18:36	1
Chlorobromomethane	ND		2.0		ug/L			04/04/18 18:36	1
Chlorodibromomethane	ND		1.0		ug/L			04/04/18 18:36	1
Chloroethane	ND		5.0		ug/L			04/04/18 18:36	1
Chloroform	ND		5.0		ug/L			04/04/18 18:36	1
Chloromethane	ND		20		ug/L			04/04/18 18:36	1
2-Chlorotoluene	ND		3.0		ug/L			04/04/18 18:36	1
4-Chlorotoluene	ND		2.0		ug/L			04/04/18 18:36	1
cis-1,2-Dichloroethene	ND		3.0		ug/L			04/04/18 18:36	1
cis-1,3-Dichloropropene	ND	*	1.0		ug/L			04/04/18 18:36	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/04/18 18:36	1
Dibromomethane	ND		2.0		ug/L			04/04/18 18:36	1
1,2-Dichlorobenzene	ND	*	2.0		ug/L			04/04/18 18:36	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/04/18 18:36	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/04/18 18:36	1
Dichlorobromomethane	ND	*	2.0		ug/L			04/04/18 18:36	1
Dichlorodifluoromethane	ND		10		ug/L			04/04/18 18:36	1
1,1-Dichloroethane	ND		2.0		ug/L			04/04/18 18:36	1
1,2-Dichloroethane	ND	*	2.0		ug/L			04/04/18 18:36	1
1,1-Dichloroethene	ND		4.0		ug/L			04/04/18 18:36	1
1,2-Dichloropropane	ND		1.0		ug/L			04/04/18 18:36	1
1,3-Dichloropropane	ND		2.0		ug/L			04/04/18 18:36	1
2,2-Dichloropropane	ND		3.0		ug/L			04/04/18 18:36	1
1,1-Dichloropropene	ND		3.0		ug/L			04/04/18 18:36	1
Ethylbenzene	ND		3.0		ug/L			04/04/18 18:36	1
Ethylene Dibromide	ND		2.0		ug/L			04/04/18 18:36	1
Hexachlorobutadiene	ND		6.0		ug/L			04/04/18 18:36	1
Isopropylbenzene	ND		2.0		ug/L			04/04/18 18:36	1
4-Isopropyltoluene	ND	*	3.0		ug/L			04/04/18 18:36	1
Methylene Chloride	ND		5.0		ug/L			04/04/18 18:36	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/04/18 18:36	1
m-Xylene & p-Xylene	ND		3.0		ug/L			04/04/18 18:36	1
Naphthalene	ND	*	4.0		ug/L			04/04/18 18:36	1
n-Butylbenzene	ND		3.0		ug/L			04/04/18 18:36	1
N-Propylbenzene	ND	*	3.0		ug/L			04/04/18 18:36	1
o-Xylene	ND		2.0		ug/L			04/04/18 18:36	1
sec-Butylbenzene	ND		3.0		ug/L			04/04/18 18:36	1
Styrene	ND		5.0		ug/L			04/04/18 18:36	1
tert-Butylbenzene	ND	*	3.0		ug/L			04/04/18 18:36	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/04/18 18:36	1
1,1,2,2-Tetrachloroethane	ND	*	3.0		ug/L			04/04/18 18:36	1
Tetrachloroethene	ND		3.0		ug/L			04/04/18 18:36	1
Toluene	ND	*	2.0		ug/L			04/04/18 18:36	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/04/18 18:36	1

TestAmerica Seattle

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: EB**  
**Date Collected: 03/21/18 14:40**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-16**  
**Matrix: Water**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND	*	1.0		ug/L			04/04/18 18:36	1
1,2,3-Trichlorobenzene	ND	*	5.0		ug/L			04/04/18 18:36	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/04/18 18:36	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/04/18 18:36	1
1,1,2-Trichloroethane	ND	*	1.0		ug/L			04/04/18 18:36	1
Trichloroethene	ND		3.0		ug/L			04/04/18 18:36	1
Trichlorofluoromethane	ND		3.0		ug/L			04/04/18 18:36	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/04/18 18:36	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			04/04/18 18:36	1
1,3,5-Trimethylbenzene	ND	*	3.0		ug/L			04/04/18 18:36	1
Vinyl chloride	ND		1.0		ug/L			04/04/18 18:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		75 - 125		04/04/18 18:36	1
Dibromofluoromethane (Surr)	106		77 - 120		04/04/18 18:36	1
1,2-Dichloroethane-d4 (Surr)	105		80 - 126		04/04/18 18:36	1
Toluene-d8 (Surr)	102		80 - 122		04/04/18 18:36	1
Trifluorotoluene (Surr)	107		80 - 120		04/04/18 18:36	1

### Method: AK101 - Alaska - Gasoline Range Organics (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			04/01/18 03:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	115		75 - 120		04/01/18 03:12	1
4-Bromofluorobenzene (Surr)	87		68 - 119		04/01/18 03:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<del>DRO (nC10-&lt;nC25)</del>	<del>ND</del>	<del>*</del>	<del>0.12</del>		<del>mg/L</del>		<del>03/30/18 13:35</del>	<del>04/03/18 03:05</del>	<del>1</del>
<b>DRO (nC10-&lt;nC25)</b>	<b>0.46</b>	<b>* J</b>	0.12		mg/L		04/04/18 09:36	04/06/18 00:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	51		50 - 150	03/30/18 13:35	04/03/18 03:05	1

# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 580-76037-17**

**Date Collected: 03/20/18 00:01**

**Matrix: Water**

**Date Received: 03/23/18 09:25**

**Method: 8260C - Volatile Organic Compounds by GC/MS**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/02/18 20:05	1
Bromobenzene	ND		2.0		ug/L			04/02/18 20:05	1
Bromoform	ND		3.0		ug/L			04/02/18 20:05	1
Bromomethane	ND		6.0		ug/L			04/02/18 20:05	1
Carbon tetrachloride	ND		3.0		ug/L			04/02/18 20:05	1
Chlorobenzene	ND		2.0		ug/L			04/02/18 20:05	1
Chlorobromomethane	ND		2.0		ug/L			04/02/18 20:05	1
Chlorodibromomethane	ND		1.0		ug/L			04/02/18 20:05	1
Chloroethane	ND		5.0		ug/L			04/02/18 20:05	1
Chloroform	ND		5.0		ug/L			04/02/18 20:05	1
Chloromethane	ND		20		ug/L			04/02/18 20:05	1
2-Chlorotoluene	ND		3.0		ug/L			04/02/18 20:05	1
4-Chlorotoluene	ND		2.0		ug/L			04/02/18 20:05	1
cis-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 20:05	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 20:05	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/02/18 20:05	1
Dibromomethane	ND		2.0		ug/L			04/02/18 20:05	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/02/18 20:05	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/02/18 20:05	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/02/18 20:05	1
Dichlorobromomethane	ND		2.0		ug/L			04/02/18 20:05	1
Dichlorodifluoromethane	ND		10		ug/L			04/02/18 20:05	1
1,1-Dichloroethane	ND		2.0		ug/L			04/02/18 20:05	1
1,2-Dichloroethane	ND		2.0		ug/L			04/02/18 20:05	1
1,1-Dichloroethene	ND		4.0		ug/L			04/02/18 20:05	1
1,2-Dichloropropane	ND		1.0		ug/L			04/02/18 20:05	1
1,3-Dichloropropane	ND		2.0		ug/L			04/02/18 20:05	1
2,2-Dichloropropane	ND		3.0		ug/L			04/02/18 20:05	1
1,1-Dichloropropene	ND		3.0		ug/L			04/02/18 20:05	1
Ethylbenzene	ND		3.0		ug/L			04/02/18 20:05	1
Ethylene Dibromide	ND		2.0		ug/L			04/02/18 20:05	1
Hexachlorobutadiene	ND		6.0		ug/L			04/02/18 20:05	1
Isopropylbenzene	ND		2.0		ug/L			04/02/18 20:05	1
4-Isopropyltoluene	ND		3.0		ug/L			04/02/18 20:05	1
Methylene Chloride	ND		5.0		ug/L			04/02/18 20:05	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/02/18 20:05	1
m-Xylene & p-Xylene	ND		3.0		ug/L			04/02/18 20:05	1
Naphthalene	ND		4.0		ug/L			04/02/18 20:05	1
n-Butylbenzene	ND		3.0		ug/L			04/02/18 20:05	1
N-Propylbenzene	ND		3.0		ug/L			04/02/18 20:05	1
o-Xylene	ND		2.0		ug/L			04/02/18 20:05	1
sec-Butylbenzene	ND		3.0		ug/L			04/02/18 20:05	1
Styrene	ND		5.0		ug/L			04/02/18 20:05	1
tert-Butylbenzene	ND		3.0		ug/L			04/02/18 20:05	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/02/18 20:05	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/02/18 20:05	1
Tetrachloroethene	ND		3.0		ug/L			04/02/18 20:05	1
Toluene	ND		2.0		ug/L			04/02/18 20:05	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 20:05	1

TestAmerica Seattle



# Client Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: Trip Blank**

**Lab Sample ID: 580-76037-17**

**Date Collected: 03/20/18 00:01**

**Matrix: Water**

**Date Received: 03/23/18 09:25**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 20:05	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/02/18 20:05	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/02/18 20:05	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/02/18 20:05	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/02/18 20:05	1
Trichloroethene	ND		3.0		ug/L			04/02/18 20:05	1
Trichlorofluoromethane	ND		3.0		ug/L			04/02/18 20:05	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/02/18 20:05	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			04/02/18 20:05	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			04/02/18 20:05	1
Vinyl chloride	ND		1.0		ug/L			04/02/18 20:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		75 - 125		04/02/18 20:05	1
Dibromofluoromethane (Surr)	100		77 - 120		04/02/18 20:05	1
1,2-Dichloroethane-d4 (Surr)	102		80 - 126		04/02/18 20:05	1
Toluene-d8 (Surr)	101		80 - 122		04/02/18 20:05	1
Trifluorotoluene (Surr)	101		80 - 120		04/02/18 20:05	1

**Method: AK101 - Alaska - Gasoline Range Organics (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			03/31/18 17:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	105		75 - 120		03/31/18 17:41	1
4-Bromofluorobenzene (Surr)	90		68 - 119		03/31/18 17:41	1

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

## Method: 8260C - Volatile Organic Compounds by GC/MS

**Lab Sample ID: MB 580-270387/13**

**Matrix: Water**

**Analysis Batch: 270387**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/02/18 18:39	1
Bromobenzene	ND		2.0		ug/L			04/02/18 18:39	1
Bromoform	ND		3.0		ug/L			04/02/18 18:39	1
Bromomethane	ND		6.0		ug/L			04/02/18 18:39	1
Carbon tetrachloride	ND		3.0		ug/L			04/02/18 18:39	1
Chlorobenzene	ND		2.0		ug/L			04/02/18 18:39	1
Chlorobromomethane	ND		2.0		ug/L			04/02/18 18:39	1
Chlorodibromomethane	ND		1.0		ug/L			04/02/18 18:39	1
Chloroethane	ND		5.0		ug/L			04/02/18 18:39	1
Chloroform	ND		5.0		ug/L			04/02/18 18:39	1
Chloromethane	ND		20		ug/L			04/02/18 18:39	1
2-Chlorotoluene	ND		3.0		ug/L			04/02/18 18:39	1
4-Chlorotoluene	ND		2.0		ug/L			04/02/18 18:39	1
cis-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 18:39	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 18:39	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/02/18 18:39	1
Dibromomethane	ND		2.0		ug/L			04/02/18 18:39	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/02/18 18:39	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/02/18 18:39	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/02/18 18:39	1
Dichlorobromomethane	ND		2.0		ug/L			04/02/18 18:39	1
Dichlorodifluoromethane	ND		10		ug/L			04/02/18 18:39	1
1,1-Dichloroethane	ND		2.0		ug/L			04/02/18 18:39	1
1,2-Dichloroethane	ND		2.0		ug/L			04/02/18 18:39	1
1,1-Dichloroethene	ND		4.0		ug/L			04/02/18 18:39	1
1,2-Dichloropropane	ND		1.0		ug/L			04/02/18 18:39	1
1,3-Dichloropropane	ND		2.0		ug/L			04/02/18 18:39	1
2,2-Dichloropropane	ND		3.0		ug/L			04/02/18 18:39	1
1,1-Dichloropropene	ND		3.0		ug/L			04/02/18 18:39	1
Ethylbenzene	ND		3.0		ug/L			04/02/18 18:39	1
Ethylene Dibromide	ND		2.0		ug/L			04/02/18 18:39	1
Hexachlorobutadiene	ND		6.0		ug/L			04/02/18 18:39	1
Isopropylbenzene	ND		2.0		ug/L			04/02/18 18:39	1
4-Isopropyltoluene	ND		3.0		ug/L			04/02/18 18:39	1
Methylene Chloride	ND		5.0		ug/L			04/02/18 18:39	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/02/18 18:39	1
m-Xylene & p-Xylene	ND		3.0		ug/L			04/02/18 18:39	1
Naphthalene	ND		4.0		ug/L			04/02/18 18:39	1
n-Butylbenzene	ND		3.0		ug/L			04/02/18 18:39	1
N-Propylbenzene	ND		3.0		ug/L			04/02/18 18:39	1
o-Xylene	ND		2.0		ug/L			04/02/18 18:39	1
sec-Butylbenzene	ND		3.0		ug/L			04/02/18 18:39	1
Styrene	ND		5.0		ug/L			04/02/18 18:39	1
tert-Butylbenzene	ND		3.0		ug/L			04/02/18 18:39	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/02/18 18:39	1
1,1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/02/18 18:39	1
Tetrachloroethene	ND		3.0		ug/L			04/02/18 18:39	1
Toluene	ND		2.0		ug/L			04/02/18 18:39	1

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

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

**Lab Sample ID: MB 580-270387/13**  
**Matrix: Water**  
**Analysis Batch: 270387**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/02/18 18:39	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/02/18 18:39	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/02/18 18:39	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/02/18 18:39	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/02/18 18:39	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/02/18 18:39	1
Trichloroethene	ND		3.0		ug/L			04/02/18 18:39	1
Trichlorofluoromethane	ND		3.0		ug/L			04/02/18 18:39	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/02/18 18:39	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			04/02/18 18:39	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			04/02/18 18:39	1
Vinyl chloride	ND		1.0		ug/L			04/02/18 18:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		75 - 125		04/02/18 18:39	1
Dibromofluoromethane (Surr)	101		77 - 120		04/02/18 18:39	1
1,2-Dichloroethane-d4 (Surr)	102		80 - 126		04/02/18 18:39	1
Toluene-d8 (Surr)	101		80 - 122		04/02/18 18:39	1
Trifluorotoluene (Surr)	100		80 - 120		04/02/18 18:39	1

**Lab Sample ID: LCS 580-270387/14**  
**Matrix: Water**  
**Analysis Batch: 270387**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	10.0	9.66		ug/L		97	75 - 120
Bromobenzene	10.0	9.60		ug/L		96	75 - 120
Bromoform	10.0	9.65		ug/L		97	71 - 120
Bromomethane	10.0	8.85		ug/L		89	55 - 125
Carbon tetrachloride	10.0	9.76		ug/L		98	72 - 124
Chlorobenzene	10.0	9.71		ug/L		97	80 - 120
Chlorobromomethane	10.0	9.65		ug/L		97	78 - 120
Chlorodibromomethane	10.0	9.69		ug/L		97	71 - 120
Chloroethane	10.0	9.96		ug/L		100	65 - 126
Chloroform	10.0	9.50		ug/L		95	80 - 119
Chloromethane	10.0	9.25	J	ug/L		92	25 - 149
2-Chlorotoluene	10.0	9.59		ug/L		96	80 - 120
4-Chlorotoluene	10.0	9.87		ug/L		99	80 - 121
cis-1,2-Dichloroethene	10.0	9.51		ug/L		95	76 - 120
cis-1,3-Dichloropropene	10.0	9.54		ug/L		95	77 - 120
1,2-Dibromo-3-Chloropropane	10.0	8.79	J	ug/L		88	58 - 133
Dibromomethane	10.0	9.58		ug/L		96	75 - 123
1,2-Dichlorobenzene	10.0	9.69		ug/L		97	80 - 120
1,3-Dichlorobenzene	10.0	9.58		ug/L		96	80 - 121
1,4-Dichlorobenzene	10.0	9.62		ug/L		96	80 - 120
Dichlorobromomethane	10.0	9.40		ug/L		94	75 - 120
Dichlorodifluoromethane	10.0	10.5		ug/L		105	20 - 150
1,1-Dichloroethane	10.0	9.63		ug/L		96	70 - 120

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

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

Lab Sample ID: LCS 580-270387/14

Matrix: Water

Analysis Batch: 270387

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	10.0	9.70		ug/L		97	76 - 131
1,1-Dichloroethene	10.0	9.77		ug/L		98	70 - 129
1,2-Dichloropropane	10.0	9.56		ug/L		96	72 - 120
1,3-Dichloropropane	10.0	9.73		ug/L		97	79 - 123
2,2-Dichloropropane	10.0	9.08		ug/L		91	43 - 140
1,1-Dichloropropene	10.0	9.80		ug/L		98	75 - 120
Ethylbenzene	10.0	9.62		ug/L		96	75 - 120
Ethylene Dibromide	10.0	9.46		ug/L		95	79 - 120
Hexachlorobutadiene	10.0	10.2		ug/L		102	65 - 125
Isopropylbenzene	10.0	9.87		ug/L		99	75 - 125
4-Isopropyltoluene	10.0	9.72		ug/L		97	77 - 120
Methylene Chloride	10.0	9.35		ug/L		93	70 - 125
Methyl tert-butyl ether	10.0	9.60		ug/L		96	79 - 120
m-Xylene & p-Xylene	10.0	9.80		ug/L		98	75 - 120
Naphthalene	10.0	9.58		ug/L		96	71 - 126
n-Butylbenzene	10.0	9.68		ug/L		97	78 - 120
N-Propylbenzene	10.0	9.93		ug/L		99	80 - 124
o-Xylene	10.0	9.63		ug/L		96	74 - 120
sec-Butylbenzene	10.0	9.92		ug/L		99	78 - 125
Styrene	10.0	9.35		ug/L		94	76 - 121
tert-Butylbenzene	10.0	9.84		ug/L		98	80 - 121
1,1,1,2-Tetrachloroethane	10.0	9.69		ug/L		97	79 - 120
1,1,1,2,2-Tetrachloroethane	10.0	9.68		ug/L		97	65 - 130
Tetrachloroethene	10.0	9.92		ug/L		99	76 - 124
Toluene	10.0	9.76		ug/L		98	75 - 120
trans-1,2-Dichloroethene	10.0	9.75		ug/L		97	72 - 124
trans-1,3-Dichloropropene	10.0	9.66		ug/L		97	73 - 122
1,2,3-Trichlorobenzene	10.0	9.60		ug/L		96	74 - 123
1,2,4-Trichlorobenzene	10.0	9.44		ug/L		94	76 - 120
1,1,1-Trichloroethane	10.0	9.79		ug/L		98	74 - 130
1,1,2-Trichloroethane	10.0	9.85		ug/L		99	78 - 121
Trichloroethene	10.0	9.56		ug/L		96	70 - 125
Trichlorofluoromethane	10.0	10.5		ug/L		105	49 - 144
1,2,3-Trichloropropane	10.0	9.68		ug/L		97	76 - 124
1,2,4-Trimethylbenzene	10.0	9.70		ug/L		97	75 - 121
1,3,5-Trimethylbenzene	10.0	9.77		ug/L		98	75 - 122
Vinyl chloride	10.0	10.2		ug/L		102	20 - 150

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	100		75 - 125
Dibromofluoromethane (Surr)	100		77 - 120
1,2-Dichloroethane-d4 (Surr)	101		80 - 126
Toluene-d8 (Surr)	100		80 - 122
Trifluorotoluene (Surr)	100		80 - 120

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

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

**Lab Sample ID: LCSD 580-270387/15**

**Matrix: Water**

**Analysis Batch: 270387**

**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
Benzene	10.0	10.1		ug/L		101	75 - 120	4	14
Bromobenzene	10.0	9.86		ug/L		99	75 - 120	3	13
Bromoform	10.0	9.58		ug/L		96	71 - 120	1	20
Bromomethane	10.0	9.87		ug/L		99	55 - 125	11	35
Carbon tetrachloride	10.0	10.1		ug/L		101	72 - 124	3	19
Chlorobenzene	10.0	10.1		ug/L		101	80 - 120	4	15
Chlorobromomethane	10.0	9.65		ug/L		97	78 - 120	0	35
Chlorodibromomethane	10.0	9.70		ug/L		97	71 - 120	0	35
Chloroethane	10.0	9.87		ug/L		99	65 - 126	1	35
Chloroform	10.0	10.1		ug/L		101	80 - 119	6	15
Chloromethane	10.0	9.66	J	ug/L		97	25 - 149	4	35
2-Chlorotoluene	10.0	9.82		ug/L		98	80 - 120	2	15
4-Chlorotoluene	10.0	9.93		ug/L		99	80 - 121	1	34
cis-1,2-Dichloroethene	10.0	10.4		ug/L		104	76 - 120	9	15
cis-1,3-Dichloropropene	10.0	9.55		ug/L		95	77 - 120	0	12
1,2-Dibromo-3-Chloropropane	10.0	8.88	J	ug/L		89	58 - 133	1	35
Dibromomethane	10.0	9.59		ug/L		96	75 - 123	0	22
1,2-Dichlorobenzene	10.0	9.79		ug/L		98	80 - 120	1	15
1,3-Dichlorobenzene	10.0	9.43		ug/L		94	80 - 121	2	14
1,4-Dichlorobenzene	10.0	9.69		ug/L		97	80 - 120	1	17
Dichlorobromomethane	10.0	9.71		ug/L		97	75 - 120	3	14
Dichlorodifluoromethane	10.0	11.4		ug/L		114	20 - 150	9	35
1,1-Dichloroethane	10.0	10.2		ug/L		102	70 - 120	6	20
1,2-Dichloroethane	10.0	9.56		ug/L		96	76 - 131	1	11
1,1-Dichloroethene	10.0	10.6		ug/L		106	70 - 129	8	27
1,2-Dichloropropane	10.0	9.82		ug/L		98	72 - 120	3	26
1,3-Dichloropropane	10.0	9.66		ug/L		97	79 - 123	1	35
2,2-Dichloropropane	10.0	8.90		ug/L		89	43 - 140	2	35
1,1-Dichloropropene	10.0	10.1		ug/L		101	75 - 120	3	20
Ethylbenzene	10.0	10.3		ug/L		103	75 - 120	7	14
Ethylene Dibromide	10.0	9.74		ug/L		97	79 - 120	3	26
Hexachlorobutadiene	10.0	9.91		ug/L		99	65 - 125	3	29
Isopropylbenzene	10.0	10.4		ug/L		104	75 - 125	5	20
4-Isopropyltoluene	10.0	9.97		ug/L		100	77 - 120	3	13
Methylene Chloride	10.0	9.13		ug/L		91	70 - 125	2	29
Methyl tert-butyl ether	10.0	9.42		ug/L		94	79 - 120	2	18
m-Xylene & p-Xylene	10.0	10.1		ug/L		101	75 - 120	3	14
Naphthalene	10.0	9.34		ug/L		93	71 - 126	2	16
n-Butylbenzene	10.0	9.96		ug/L		100	78 - 120	3	14
N-Propylbenzene	10.0	10.2		ug/L		102	80 - 124	3	13
o-Xylene	10.0	10.1		ug/L		101	74 - 120	5	16
sec-Butylbenzene	10.0	10.2		ug/L		102	78 - 125	3	15
Styrene	10.0	9.83		ug/L		98	76 - 121	5	16
tert-Butylbenzene	10.0	9.94		ug/L		99	80 - 121	1	14
1,1,1,2-Tetrachloroethane	10.0	9.96		ug/L		100	79 - 120	3	20
1,1,1,2,2-Tetrachloroethane	10.0	9.06		ug/L		91	65 - 130	7	18
Tetrachloroethene	10.0	10.0		ug/L		100	76 - 124	1	20
Toluene	10.0	10.1		ug/L		101	75 - 120	3	13

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

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

**Lab Sample ID: LCSD 580-270387/15**  
**Matrix: Water**  
**Analysis Batch: 270387**

**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
trans-1,2-Dichloroethene	10.0	9.95		ug/L		100	72 - 124	2	21
trans-1,3-Dichloropropene	10.0	9.59		ug/L		96	73 - 122	1	13
1,2,3-Trichlorobenzene	10.0	9.40		ug/L		94	74 - 123	2	17
1,2,4-Trichlorobenzene	10.0	9.40		ug/L		94	76 - 120	0	22
1,1,1-Trichloroethane	10.0	10.1		ug/L		101	74 - 130	3	18
1,1,2-Trichloroethane	10.0	9.89		ug/L		99	78 - 121	0	14
Trichloroethene	10.0	10.4		ug/L		104	70 - 125	9	15
Trichlorofluoromethane	10.0	11.1		ug/L		111	49 - 144	5	35
1,2,3-Trichloropropane	10.0	9.78		ug/L		98	76 - 124	1	30
1,2,4-Trimethylbenzene	10.0	10.0		ug/L		100	75 - 121	3	16
1,3,5-Trimethylbenzene	10.0	10.0		ug/L		100	75 - 122	2	14
Vinyl chloride	10.0	10.6		ug/L		106	20 - 150	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene (Surr)	101		75 - 125
Dibromofluoromethane (Surr)	99		77 - 120
1,2-Dichloroethane-d4 (Surr)	99		80 - 126
Toluene-d8 (Surr)	101		80 - 122
Trifluorotoluene (Surr)	99		80 - 120

**Lab Sample ID: MB 580-270476/5**  
**Matrix: Water**  
**Analysis Batch: 270476**

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		3.0		ug/L			04/03/18 12:04	1
Bromobenzene	ND		2.0		ug/L			04/03/18 12:04	1
Bromoform	ND		3.0		ug/L			04/03/18 12:04	1
Bromomethane	ND		6.0		ug/L			04/03/18 12:04	1
Carbon tetrachloride	ND		3.0		ug/L			04/03/18 12:04	1
Chlorobenzene	ND		2.0		ug/L			04/03/18 12:04	1
Chlorobromomethane	ND		2.0		ug/L			04/03/18 12:04	1
Chlorodibromomethane	ND		1.0		ug/L			04/03/18 12:04	1
Chloroethane	ND		5.0		ug/L			04/03/18 12:04	1
Chloroform	ND		5.0		ug/L			04/03/18 12:04	1
Chloromethane	ND		20		ug/L			04/03/18 12:04	1
2-Chlorotoluene	ND		3.0		ug/L			04/03/18 12:04	1
4-Chlorotoluene	ND		2.0		ug/L			04/03/18 12:04	1
cis-1,2-Dichloroethene	ND		3.0		ug/L			04/03/18 12:04	1
cis-1,3-Dichloropropene	ND		1.0		ug/L			04/03/18 12:04	1
1,2-Dibromo-3-Chloropropane	ND		10		ug/L			04/03/18 12:04	1
Dibromomethane	ND		2.0		ug/L			04/03/18 12:04	1
1,2-Dichlorobenzene	ND		2.0		ug/L			04/03/18 12:04	1
1,3-Dichlorobenzene	ND		2.0		ug/L			04/03/18 12:04	1
1,4-Dichlorobenzene	ND		4.0		ug/L			04/03/18 12:04	1
Dichlorobromomethane	ND		2.0		ug/L			04/03/18 12:04	1
Dichlorodifluoromethane	ND		10		ug/L			04/03/18 12:04	1
1,1-Dichloroethane	ND		2.0		ug/L			04/03/18 12:04	1

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

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

**Lab Sample ID: MB 580-270476/5**  
**Matrix: Water**  
**Analysis Batch: 270476**

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

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2-Dichloroethane	ND		2.0		ug/L			04/03/18 12:04	1
1,1-Dichloroethene	ND		4.0		ug/L			04/03/18 12:04	1
1,2-Dichloropropane	ND		1.0		ug/L			04/03/18 12:04	1
1,3-Dichloropropane	ND		2.0		ug/L			04/03/18 12:04	1
2,2-Dichloropropane	ND		3.0		ug/L			04/03/18 12:04	1
1,1-Dichloropropene	ND		3.0		ug/L			04/03/18 12:04	1
Ethylbenzene	ND		3.0		ug/L			04/03/18 12:04	1
Ethylene Dibromide	ND		2.0		ug/L			04/03/18 12:04	1
Hexachlorobutadiene	ND		6.0		ug/L			04/03/18 12:04	1
Isopropylbenzene	ND		2.0		ug/L			04/03/18 12:04	1
4-Isopropyltoluene	ND		3.0		ug/L			04/03/18 12:04	1
Methylene Chloride	ND		5.0		ug/L			04/03/18 12:04	1
Methyl tert-butyl ether	ND		2.0		ug/L			04/03/18 12:04	1
m-Xylene & p-Xylene	ND		3.0		ug/L			04/03/18 12:04	1
Naphthalene	ND		4.0		ug/L			04/03/18 12:04	1
n-Butylbenzene	ND		3.0		ug/L			04/03/18 12:04	1
N-Propylbenzene	ND		3.0		ug/L			04/03/18 12:04	1
o-Xylene	ND		2.0		ug/L			04/03/18 12:04	1
sec-Butylbenzene	ND		3.0		ug/L			04/03/18 12:04	1
Styrene	ND		5.0		ug/L			04/03/18 12:04	1
tert-Butylbenzene	ND		3.0		ug/L			04/03/18 12:04	1
1,1,1,2-Tetrachloroethane	ND		2.0		ug/L			04/03/18 12:04	1
1,1,2,2-Tetrachloroethane	ND		3.0		ug/L			04/03/18 12:04	1
Tetrachloroethene	ND		3.0		ug/L			04/03/18 12:04	1
Toluene	ND		2.0		ug/L			04/03/18 12:04	1
trans-1,2-Dichloroethene	ND		3.0		ug/L			04/03/18 12:04	1
trans-1,3-Dichloropropene	ND		1.0		ug/L			04/03/18 12:04	1
1,2,3-Trichlorobenzene	ND		5.0		ug/L			04/03/18 12:04	1
1,2,4-Trichlorobenzene	ND		2.0		ug/L			04/03/18 12:04	1
1,1,1-Trichloroethane	ND		3.0		ug/L			04/03/18 12:04	1
1,1,2-Trichloroethane	ND		1.0		ug/L			04/03/18 12:04	1
Trichloroethene	ND		3.0		ug/L			04/03/18 12:04	1
Trichlorofluoromethane	ND		3.0		ug/L			04/03/18 12:04	1
1,2,3-Trichloropropane	ND		2.0		ug/L			04/03/18 12:04	1
1,2,4-Trimethylbenzene	ND		3.0		ug/L			04/03/18 12:04	1
1,3,5-Trimethylbenzene	ND		3.0		ug/L			04/03/18 12:04	1
Vinyl chloride	ND		1.0		ug/L			04/03/18 12:04	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	100		75 - 125		04/03/18 12:04	1
Dibromofluoromethane (Surr)	102		77 - 120		04/03/18 12:04	1
1,2-Dichloroethane-d4 (Surr)	103		80 - 126		04/03/18 12:04	1
Toluene-d8 (Surr)	100		80 - 122		04/03/18 12:04	1
Trifluorotoluene (Surr)	103		80 - 120		04/03/18 12:04	1

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

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

**Lab Sample ID: LCS 580-270476/6**

**Matrix: Water**

**Analysis Batch: 270476**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	10.0	9.78		ug/L		98	75 - 120
Bromobenzene	10.0	9.10		ug/L		91	75 - 120
Bromoform	10.0	9.65		ug/L		97	71 - 120
Bromomethane	10.0	8.77		ug/L		88	55 - 125
Carbon tetrachloride	10.0	9.86		ug/L		99	72 - 124
Chlorobenzene	10.0	9.50		ug/L		95	80 - 120
Chlorobromomethane	10.0	9.57		ug/L		96	78 - 120
Chlorodibromomethane	10.0	9.82		ug/L		98	71 - 120
Chloroethane	10.0	9.67		ug/L		97	65 - 126
Chloroform	10.0	9.65		ug/L		96	80 - 119
Chloromethane	10.0	9.60	J	ug/L		96	25 - 149
2-Chlorotoluene	10.0	9.32		ug/L		93	80 - 120
4-Chlorotoluene	10.0	9.31		ug/L		93	80 - 121
cis-1,2-Dichloroethene	10.0	9.23		ug/L		92	76 - 120
cis-1,3-Dichloropropene	10.0	10.0		ug/L		100	77 - 120
1,2-Dibromo-3-Chloropropane	10.0	9.20	J	ug/L		92	58 - 133
Dibromomethane	10.0	9.63		ug/L		96	75 - 123
1,2-Dichlorobenzene	10.0	9.42		ug/L		94	80 - 120
1,3-Dichlorobenzene	10.0	9.23		ug/L		92	80 - 121
1,4-Dichlorobenzene	10.0	9.31		ug/L		93	80 - 120
Dichlorobromomethane	10.0	10.1		ug/L		101	75 - 120
Dichlorodifluoromethane	10.0	9.53	J	ug/L		95	20 - 150
1,1-Dichloroethane	10.0	9.83		ug/L		98	70 - 120
1,2-Dichloroethane	10.0	9.45		ug/L		94	76 - 131
1,1-Dichloroethene	10.0	9.98		ug/L		100	70 - 129
1,2-Dichloropropane	10.0	9.57		ug/L		96	72 - 120
1,3-Dichloropropane	10.0	9.27		ug/L		93	79 - 123
2,2-Dichloropropane	10.0	9.51		ug/L		95	43 - 140
1,1-Dichloropropene	10.0	9.82		ug/L		98	75 - 120
Ethylbenzene	10.0	9.38		ug/L		94	75 - 120
Ethylene Dibromide	10.0	9.38		ug/L		94	79 - 120
Hexachlorobutadiene	10.0	9.61		ug/L		96	65 - 125
Isopropylbenzene	10.0	9.81		ug/L		98	75 - 125
4-Isopropyltoluene	10.0	9.47		ug/L		95	77 - 120
Methylene Chloride	10.0	9.25		ug/L		93	70 - 125
Methyl tert-butyl ether	10.0	9.26		ug/L		93	79 - 120
m-Xylene & p-Xylene	10.0	9.29		ug/L		93	75 - 120
Naphthalene	10.0	9.48		ug/L		95	71 - 126
n-Butylbenzene	10.0	9.22		ug/L		92	78 - 120
N-Propylbenzene	10.0	9.64		ug/L		96	80 - 124
o-Xylene	10.0	9.47		ug/L		95	74 - 120
sec-Butylbenzene	10.0	9.79		ug/L		98	78 - 125
Styrene	10.0	8.81		ug/L		88	76 - 121
tert-Butylbenzene	10.0	9.78		ug/L		98	80 - 121
1,1,1,2-Tetrachloroethane	10.0	9.87		ug/L		99	79 - 120
1,1,2,2-Tetrachloroethane	10.0	9.17		ug/L		92	65 - 130
Tetrachloroethene	10.0	9.76		ug/L		98	76 - 124
Toluene	10.0	9.58		ug/L		96	75 - 120

TestAmerica Seattle



# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

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

**Lab Sample ID: LCS 580-270476/6**  
**Matrix: Water**  
**Analysis Batch: 270476**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	10.0	9.46		ug/L		95	72 - 124
trans-1,3-Dichloropropene	10.0	9.48		ug/L		95	73 - 122
1,2,3-Trichlorobenzene	10.0	9.43		ug/L		94	74 - 123
1,2,4-Trichlorobenzene	10.0	9.28		ug/L		93	76 - 120
1,1,1-Trichloroethane	10.0	9.85		ug/L		99	74 - 130
1,1,2-Trichloroethane	10.0	9.67		ug/L		97	78 - 121
Trichloroethene	10.0	10.0		ug/L		100	70 - 125
Trichlorofluoromethane	10.0	9.87		ug/L		99	49 - 144
1,2,3-Trichloropropane	10.0	9.33		ug/L		93	76 - 124
1,2,4-Trimethylbenzene	10.0	9.46		ug/L		95	75 - 121
1,3,5-Trimethylbenzene	10.0	9.69		ug/L		97	75 - 122
Vinyl chloride	10.0	10.1		ug/L		101	20 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		75 - 125
Dibromofluoromethane (Surr)	102		77 - 120
1,2-Dichloroethane-d4 (Surr)	103		80 - 126
Toluene-d8 (Surr)	102		80 - 122
Trifluorotoluene (Surr)	101		80 - 120

**Lab Sample ID: LCSD 580-270476/7**  
**Matrix: Water**  
**Analysis Batch: 270476**

**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
Benzene	10.0	11.6	*	ug/L		116	75 - 120	17	14
Bromobenzene	10.0	11.0	*	ug/L		110	75 - 120	19	13
Bromoform	10.0	12.4	*	ug/L		124	71 - 120	25	20
Bromomethane	10.0	11.2		ug/L		112	55 - 125	24	35
Carbon tetrachloride	10.0	12.2	*	ug/L		122	72 - 124	21	19
Chlorobenzene	10.0	11.6	*	ug/L		116	80 - 120	20	15
Chlorobromomethane	10.0	11.6		ug/L		116	78 - 120	19	35
Chlorodibromomethane	10.0	11.8		ug/L		118	71 - 120	19	35
Chloroethane	10.0	11.4		ug/L		114	65 - 126	17	35
Chloroform	10.0	11.8	*	ug/L		118	80 - 119	20	15
Chloromethane	10.0	10.8	J	ug/L		108	25 - 149	11	35
2-Chlorotoluene	10.0	11.2	*	ug/L		112	80 - 120	19	15
4-Chlorotoluene	10.0	11.3		ug/L		113	80 - 121	20	34
cis-1,2-Dichloroethene	10.0	11.8	*	ug/L		118	76 - 120	25	15
cis-1,3-Dichloropropene	10.0	11.0		ug/L		110	77 - 120	9	12
1,2-Dibromo-3-Chloropropane	10.0	10.6		ug/L		106	58 - 133	14	35
Dibromomethane	10.0	11.4		ug/L		114	75 - 123	17	22
1,2-Dichlorobenzene	10.0	11.1	*	ug/L		111	80 - 120	17	15
1,3-Dichlorobenzene	10.0	11.8	*	ug/L		118	80 - 121	25	14
1,4-Dichlorobenzene	10.0	11.3	*	ug/L		113	80 - 120	19	17
Dichlorobromomethane	10.0	11.5		ug/L		115	75 - 120	14	14
Dichlorodifluoromethane	10.0	11.9		ug/L		119	20 - 150	22	35
1,1-Dichloroethane	10.0	11.8		ug/L		118	70 - 120	18	20

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

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

Lab Sample ID: LCSD 580-270476/7

Matrix: Water

Analysis Batch: 270476

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
1,2-Dichloroethane	10.0	11.2	*	ug/L		112	76 - 131	17	11
1,1-Dichloroethene	10.0	11.8		ug/L		118	70 - 129	17	27
1,2-Dichloropropane	10.0	11.4		ug/L		114	72 - 120	17	26
1,3-Dichloropropane	10.0	11.4		ug/L		114	79 - 123	20	35
2,2-Dichloropropane	10.0	11.7		ug/L		117	43 - 140	21	35
1,1-Dichloropropene	10.0	12.0		ug/L		120	75 - 120	20	20
Ethylbenzene	10.0	11.6	*	ug/L		116	75 - 120	21	14
Ethylene Dibromide	10.0	11.2		ug/L		112	79 - 120	18	26
Hexachlorobutadiene	10.0	11.7		ug/L		117	65 - 125	19	29
Isopropylbenzene	10.0	12.1	*	ug/L		121	75 - 125	21	20
4-Isopropyltoluene	10.0	11.3	*	ug/L		113	77 - 120	18	13
Methylene Chloride	10.0	10.7		ug/L		107	70 - 125	15	29
Methyl tert-butyl ether	10.0	11.5	*	ug/L		115	79 - 120	21	18
m-Xylene & p-Xylene	10.0	11.6	*	ug/L		116	75 - 120	22	14
Naphthalene	10.0	11.0		ug/L		110	71 - 126	15	16
n-Butylbenzene	10.0	11.3	*	ug/L		113	78 - 120	21	14
N-Propylbenzene	10.0	11.6	*	ug/L		116	80 - 124	18	13
o-Xylene	10.0	11.8	*	ug/L		118	74 - 120	22	16
sec-Butylbenzene	10.0	11.5	*	ug/L		115	78 - 125	16	15
Styrene	10.0	11.4	*	ug/L		114	76 - 121	26	16
tert-Butylbenzene	10.0	11.3		ug/L		113	80 - 121	14	14
1,1,1,2-Tetrachloroethane	10.0	11.7		ug/L		117	79 - 120	17	20
1,1,1,2,2-Tetrachloroethane	10.0	10.7		ug/L		107	65 - 130	16	18
Tetrachloroethene	10.0	11.6		ug/L		116	76 - 124	18	20
Toluene	10.0	11.5	*	ug/L		115	75 - 120	18	13
trans-1,2-Dichloroethene	10.0	11.7		ug/L		117	72 - 124	21	21
trans-1,3-Dichloropropene	10.0	11.3	*	ug/L		113	73 - 122	17	13
1,2,3-Trichlorobenzene	10.0	11.0		ug/L		110	74 - 123	15	17
1,2,4-Trichlorobenzene	10.0	11.4		ug/L		114	76 - 120	20	22
1,1,1-Trichloroethane	10.0	11.7		ug/L		117	74 - 130	17	18
1,1,2-Trichloroethane	10.0	11.6	*	ug/L		116	78 - 121	18	14
Trichloroethene	10.0	12.2	*	ug/L		122	70 - 125	20	15
Trichlorofluoromethane	10.0	12.4		ug/L		124	49 - 144	23	35
1,2,3-Trichloropropane	10.0	11.5		ug/L		115	76 - 124	21	30
1,2,4-Trimethylbenzene	10.0	11.3	*	ug/L		113	75 - 121	18	16
1,3,5-Trimethylbenzene	10.0	11.3	*	ug/L		113	75 - 122	15	14
Vinyl chloride	10.0	11.4		ug/L		114	20 - 150	12	35

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	102		75 - 125
Dibromofluoromethane (Surr)	102		77 - 120
1,2-Dichloroethane-d4 (Surr)	103		80 - 126
Toluene-d8 (Surr)	100		80 - 122
Trifluorotoluene (Surr)	100		80 - 120

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

## Method: AK101 - Alaska - Gasoline Range Organics (GC)

**Lab Sample ID: MB 580-270332/5**

**Matrix: Water**

**Analysis Batch: 270332**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO) -C6-C10	ND		1.0		mg/L			03/31/18 16:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Trifluorotoluene (Surr)	126	X	75 - 120		03/31/18 16:06	1
4-Bromofluorobenzene (Surr)	88		68 - 119		03/31/18 16:06	1

**Lab Sample ID: LCS 580-270332/6**

**Matrix: Water**

**Analysis Batch: 270332**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C6-C10	1.00	1.13		mg/L		113	77 - 123

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Trifluorotoluene (Surr)	119		75 - 120
4-Bromofluorobenzene (Surr)	95		68 - 119

**Lab Sample ID: LCSD 580-270332/7**

**Matrix: Water**

**Analysis Batch: 270332**

**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
Gasoline Range Organics (GRO) -C6-C10	1.00	1.11		mg/L		111	77 - 123	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Trifluorotoluene (Surr)	116		75 - 120
4-Bromofluorobenzene (Surr)	93		68 - 119

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

**Lab Sample ID: MB 580-270270/1-A**

**Matrix: Water**

**Analysis Batch: 270409**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 270270**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	ND		0.11		mg/L		03/30/18 13:35	04/02/18 16:34	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	66		50 - 150	03/30/18 13:35	04/02/18 16:34	1

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

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

**Lab Sample ID: LCS 580-270270/2-A**  
**Matrix: Water**  
**Analysis Batch: 270409**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 270270**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
DRO (nC10-<nC25)	2.00	1.39	*	mg/L		70	75 - 125
<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
<i>o-Terphenyl</i>	75		50 - 150				

**Lab Sample ID: LCSD 580-270270/3-A**  
**Matrix: Water**  
**Analysis Batch: 270409**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 270270**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
DRO (nC10-<nC25)	2.00	1.49		mg/L		75	75 - 125	7	20
<b>Surrogate</b>	<b>LCSD %Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>						
<i>o-Terphenyl</i>	76		50 - 150						

**Lab Sample ID: MB 580-270489/1-A**  
**Matrix: Water**  
**Analysis Batch: 270640**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 270489**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	ND		0.11		mg/L		04/03/18 13:07	04/04/18 17:34	1
<b>Surrogate</b>	<b>MB %Recovery</b>	<b>MB Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o-Terphenyl</i>	64		50 - 150				04/03/18 13:07	04/04/18 17:34	1

**Lab Sample ID: LCS 580-270489/2-A**  
**Matrix: Water**  
**Analysis Batch: 270640**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 270489**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
DRO (nC10-<nC25)	2.00	1.53		mg/L		77	75 - 125
<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
<i>o-Terphenyl</i>	63		50 - 150				

**Lab Sample ID: LCSD 580-270489/3-A**  
**Matrix: Water**  
**Analysis Batch: 270640**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 270489**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
DRO (nC10-<nC25)	2.00	1.30	*	mg/L		65	75 - 125	17	20
<b>Surrogate</b>	<b>LCSD %Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>						
<i>o-Terphenyl</i>	65		50 - 150						

TestAmerica Seattle

# QC Sample Results

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

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

**Lab Sample ID: MB 580-270554/1-A**  
**Matrix: Water**  
**Analysis Batch: 270747**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 270554**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
DRO (nC10-<nC25)	ND		0.11		mg/L		04/04/18 09:36	04/05/18 21:16	1
Surrogate	%Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o</i> -Terphenyl	73		50 - 150				04/04/18 09:36	04/05/18 21:16	1

**Lab Sample ID: LCS 580-270554/2-A**  
**Matrix: Water**  
**Analysis Batch: 270747**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 270554**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
DRO (nC10-<nC25)	2.00	1.56		mg/L		78	75 - 125
Surrogate	%Recovery	LCS Qualifier	Limits				%Rec.
<i>o</i> -Terphenyl	78		50 - 150				

**Lab Sample ID: LCSD 580-270554/3-A**  
**Matrix: Water**  
**Analysis Batch: 270747**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 270554**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
DRO (nC10-<nC25)	2.00	1.27	*	mg/L		63	75 - 125	21	20
Surrogate	%Recovery	LCSD Qualifier	Limits						
<i>o</i> -Terphenyl	65		50 - 150						

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-1**  
**Date Collected: 03/21/18 14:20**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-1**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270387	04/02/18 20:33	RSB	TAL SEA
Total/NA	Analysis	8260C	DL	10	270547	04/04/18 15:16	JSM	TAL SEA
Total/NA	Analysis	AK101		1	270332	03/31/18 18:13	JSM	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/02/18 19:22	T1W	TAL SEA
Total/NA	Prep	3510C			270489	04/03/18 13:07	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270640	04/04/18 23:37	ADB	TAL SEA

**Client Sample ID: MW-2**  
**Date Collected: 03/21/18 12:45**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-2**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270387	04/02/18 21:02	RSB	TAL SEA
Total/NA	Analysis	8260C	DL	10	270547	04/04/18 15:44	JSM	TAL SEA
Total/NA	Analysis	AK101		1	270332	03/31/18 18:45	JSM	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/02/18 19:50	T1W	TAL SEA
Total/NA	Prep	3510C			270489	04/03/18 13:07	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270640	04/05/18 00:05	ADB	TAL SEA

**Client Sample ID: MW-3**  
**Date Collected: 03/21/18 13:40**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-3**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270387	04/02/18 21:30	RSB	TAL SEA
Total/NA	Analysis	AK101		1	270332	03/31/18 19:17	JSM	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/02/18 20:17	T1W	TAL SEA
Total/NA	Prep	3510C			270489	04/03/18 13:07	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270640	04/05/18 00:33	ADB	TAL SEA

**Client Sample ID: MW-4**  
**Date Collected: 03/20/18 11:55**  
**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-4**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270387	04/02/18 21:59	RSB	TAL SEA
Total/NA	Analysis	AK101		1	270332	03/31/18 19:49	JSM	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/02/18 20:45	T1W	TAL SEA

TestAmerica Seattle

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

## Client Sample ID: MW-4

Date Collected: 03/20/18 11:55

Date Received: 03/23/18 09:25

## Lab Sample ID: 580-76037-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			270489	04/03/18 13:07	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270640	04/05/18 01:00	ADB	TAL SEA

## Client Sample ID: MW-5

Date Collected: 03/21/18 11:45

Date Received: 03/23/18 09:25

## Lab Sample ID: 580-76037-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270387	04/02/18 22:27	RSB	TAL SEA
Total/NA	Analysis	8260C	DL	10	270547	04/04/18 16:13	JSM	TAL SEA
Total/NA	Analysis	AK101		1	270332	03/31/18 20:52	JSM	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/02/18 21:40	T1W	TAL SEA
Total/NA	Prep	3510C			270489	04/03/18 13:07	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270640	04/05/18 01:28	ADB	TAL SEA

## Client Sample ID: MW-6

Date Collected: 03/21/18 11:00

Date Received: 03/23/18 09:25

## Lab Sample ID: 580-76037-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270387	04/02/18 22:56	RSB	TAL SEA
Total/NA	Analysis	AK101		1	270332	03/31/18 21:24	JSM	TAL SEA
Total/NA	Prep	3510C			270554	04/04/18 09:36	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270747	04/05/18 23:51	ADB	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/02/18 22:07	T1W	TAL SEA

## Client Sample ID: MW-7

Date Collected: 03/20/18 15:45

Date Received: 03/23/18 09:25

## Lab Sample ID: 580-76037-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270387	04/02/18 23:25	RSB	TAL SEA
Total/NA	Analysis	AK101		1	270332	03/31/18 21:55	JSM	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/02/18 22:35	T1W	TAL SEA
Total/NA	Prep	3510C			270489	04/03/18 13:07	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270640	04/05/18 01:55	ADB	TAL SEA

TestAmerica Seattle

# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

**Client Sample ID: MW-8**

**Date Collected: 03/20/18 15:05**

**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-8**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270387	04/02/18 23:53	RSB	TAL SEA
Total/NA	Analysis	AK101		1	270332	03/31/18 22:27	JSM	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/02/18 23:02	T1W	TAL SEA
Total/NA	Prep	3510C			270489	04/03/18 13:07	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270640	04/05/18 02:23	ADB	TAL SEA

**Client Sample ID: MW-9**

**Date Collected: 03/20/18 14:10**

**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-9**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270387	04/03/18 00:22	RSB	TAL SEA
Total/NA	Analysis	AK101		1	270332	03/31/18 22:59	JSM	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/02/18 23:29	T1W	TAL SEA
Total/NA	Prep	3510C			270489	04/03/18 13:07	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270640	04/05/18 02:50	ADB	TAL SEA

**Client Sample ID: MW-10**

**Date Collected: 03/20/18 13:30**

**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-10**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270387	04/03/18 00:50	RSB	TAL SEA
Total/NA	Analysis	AK101		1	270332	03/31/18 23:30	JSM	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/02/18 23:56	T1W	TAL SEA
Total/NA	Prep	3510C			270489	04/03/18 13:07	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270640	04/05/18 03:45	ADB	TAL SEA

**Client Sample ID: MW-11**

**Date Collected: 03/20/18 12:50**

**Date Received: 03/23/18 09:25**

**Lab Sample ID: 580-76037-11**

**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270387	04/03/18 01:19	RSB	TAL SEA
Total/NA	Analysis	AK101		1	270332	04/01/18 00:02	JSM	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/03/18 00:23	T1W	TAL SEA
Total/NA	Prep	3510C			270489	04/03/18 13:07	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270640	04/05/18 04:16	ADB	TAL SEA

TestAmerica Seattle



# Lab Chronicle

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

## Client Sample ID: BD-1

Date Collected: 03/20/18 00:01

Date Received: 03/23/18 09:25

## Lab Sample ID: 580-76037-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270476	04/03/18 14:57	P1P	TAL SEA
Total/NA	Analysis	AK101		1	270332	04/01/18 00:34	JSM	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/03/18 00:50	T1W	TAL SEA
Total/NA	Prep	3510C			270489	04/03/18 13:07	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270640	04/05/18 04:44	ADB	TAL SEA

## Client Sample ID: BD-2

Date Collected: 03/21/18 00:01

Date Received: 03/23/18 09:25

## Lab Sample ID: 580-76037-13

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	DL	10	270547	04/04/18 16:42	JSM	TAL SEA
Total/NA	Analysis	8260C		1	270547	04/04/18 17:10	JSM	TAL SEA
Total/NA	Analysis	AK101		1	270332	04/01/18 01:37	JSM	TAL SEA
Total/NA	Prep	3510C			270554	04/04/18 09:36	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270747	04/06/18 00:13	ADB	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/03/18 01:17	T1W	TAL SEA

## Client Sample ID: EB

Date Collected: 03/21/18 14:40

Date Received: 03/23/18 09:25

## Lab Sample ID: 580-76037-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270547	04/04/18 18:36	JSM	TAL SEA
Total/NA	Analysis	AK101		1	270332	04/01/18 03:12	JSM	TAL SEA
Total/NA	Prep	3510C			270554	04/04/18 09:36	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270747	04/06/18 00:57	ADB	TAL SEA
Total/NA	Prep	3510C			270270	03/30/18 13:35	APR	TAL SEA
Total/NA	Analysis	AK102 & 103		1	270409	04/03/18 03:05	T1W	TAL SEA

## Client Sample ID: Trip Blank

Date Collected: 03/20/18 00:01

Date Received: 03/23/18 09:25

## Lab Sample ID: 580-76037-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	270387	04/02/18 20:05	RSB	TAL SEA
Total/NA	Analysis	AK101		1	270332	03/31/18 17:41	JSM	TAL SEA

### Laboratory References:

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

TestAmerica Seattle

# Accreditation/Certification Summary

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

## Laboratory: TestAmerica Seattle

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska (UST)	State Program	10	17-024	01-19-19

The following analytes are included in this report, but are not accredited/certified under this accreditation/certification:

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	1,1-Dichloropropene
8260C		Water	1,2-Dibromo-3-Chloropropane
8260C		Water	1,3-Dichloropropane
8260C		Water	2,2-Dichloropropane
8260C		Water	2-Chlorotoluene
8260C		Water	4-Chlorotoluene
8260C		Water	4-Isopropyltoluene
8260C		Water	Chlorobromomethane
8260C		Water	cis-1,3-Dichloropropene
8260C		Water	trans-1,3-Dichloropropene

# Sample Summary

Client: ARCADIS U.S. Inc  
Project/Site: GE Nikiski

TestAmerica Job ID: 580-76037-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-76037-1	MW-1	Water	03/21/18 14:20	03/23/18 09:25
580-76037-2	MW-2	Water	03/21/18 12:45	03/23/18 09:25
580-76037-3	MW-3	Water	03/21/18 13:40	03/23/18 09:25
580-76037-4	MW-4	Water	03/20/18 11:55	03/23/18 09:25
580-76037-5	MW-5	Water	03/21/18 11:45	03/23/18 09:25
580-76037-6	MW-6	Water	03/21/18 11:00	03/23/18 09:25
580-76037-7	MW-7	Water	03/20/18 15:45	03/23/18 09:25
580-76037-8	MW-8	Water	03/20/18 15:05	03/23/18 09:25
580-76037-9	MW-9	Water	03/20/18 14:10	03/23/18 09:25
580-76037-10	MW-10	Water	03/20/18 13:30	03/23/18 09:25
580-76037-11	MW-11	Water	03/20/18 12:50	03/23/18 09:25
580-76037-12	BD-1	Water	03/20/18 00:01	03/23/18 09:25
580-76037-13	BD-2	Water	03/21/18 00:01	03/23/18 09:25
580-76037-16	EB	Water	03/21/18 14:40	03/23/18 09:25
580-76037-17	Trip Blank	Water	03/20/18 00:01	03/23/18 09:25

**TestAmerica Seattle**

5755 8th Street East

Tacoma, WA 98424-1317  
phone 253.922.2310 fax 253.922.5047

Loc: 580  
**76037**

**Chain of Custody Record**



TestAmerica Laboratories, Inc.

Regulatory Program:  DW  NPDES  RCRA  Other:

<b>Client Contact</b>		<b>Project Manager:</b> <u>Greg Montgomery</u>		<b>Site Contact:</b> <u>Michael MacDaniel</u>		<b>Date:</b> <u>6/23/17</u> <u>3/22/18</u>		<b>COC No:</b>	
ARCADIS		<b>Tel/Fax:</b> <u>Matt Pelton</u>		<b>Lab Contact:</b> <u>Kristine Allen</u>		<b>Carrier:</b> <u>FedEx</u>		1 of 2 COCs	
880 H St STE 101		<b>Analysis Turnaround Time</b>							
Anchorage, AK 99501		<input type="checkbox"/> CALENDAR DAYS <input checked="" type="checkbox"/> WORKING DAYS							
(206) 465-3161 Phone		TAT if different from Below <u>Standard</u>							
(xxx) xxx-xxxx FAX		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day							
Project Name: <u>Clear AFS</u>		Filtered Sample (Y/N) Perform MS / MSD (Y/N) 8260C AK102 - AK102 (DRO) AK101 - AK101 (GRO)							
Site: <u>Former TBE Machine Shop</u>									
P O # <u>B0031255.1404</u>									

**Sampler:**

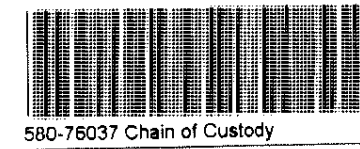
**For Lab Use Only:**

Walk-in Client: \_\_\_\_\_

Lab Sampling: \_\_\_\_\_

Job / SDG No.: \_\_\_\_\_

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	8260C	AK102 - AK102 (DRO)	AK101 - AK101 (GRO)	Sample Specific Notes:
MW-1	3/21/2018	1420	G	W	8	N	N	X	X	X	Therm. ID <u>A2</u> Cor <u>0.26</u> Unc <u>0.0</u> Cooler Dsc: <u>1rg Blue</u> <del>W/P</del> Packs Packing: <u>Sub</u> Fed P.O. Custody Seal: Yes <u>No</u>
MW-2	3/21/2018	1245	G	W	8	N	N	X	X	X	
MW-3	3/21/2018	1340	G	W	8	N	N	X	X	X	
MW-4	3/20/2018	1155	G	W	8	N	N	X	X	X	
MW-5	3/21/2018	1145	G	W	8	N	N	X	X	X	
MW-6	3/21/2018	1100	G	W	8	N	N	X	X	X	
MW-7	3/20/2018	1545	G	W	8	N	N	X	X	X	
MW-8	3/20/2018	1505	G	W	8	N	N	X	X	X	
MW-9	3/20/2018	1410	G	W	8	N	Y	X	X	X	
MW-10	3/20/2018	1330	G	W	8	N	N	X	X	X	
MW-11	3/20/2018	1250	G	W	8	N	N	X	X	X	Therm. ID <u>A2</u> Cor <u>0.20</u> Unc <u>1.4</u> Cooler Dsc: <u>1rg Blue</u> <del>W/P</del> Packs Packing: <u>Sub</u> Fed P.O. Custody Seal: Yes <u>No</u>
BD-1	3/20/2018	-	G	W	8	N	N	X	X	X	



**Preservation Used:** 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

**Possible Hazard Identification:**  
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown

**Sample Disposal ( A fee may be assessed if )**  
 Return to Client  Disposal by Lab  Archive for \_\_\_\_\_ Months

**Special Instructions/QC Requirements & Comments:**

Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____ Cor'd: _____		Therm ID No.:	
Relinquished by: <u>Michael MacDaniel</u>	Company: <u>ARCADIS</u>	Date/Time: <u>6/2/17</u> <u>3/22/18</u>	Received by:	Company:	Date/Time:		
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:		
Relinquished by:	Company:	Date/Time:	Received in Laboratory: <u>B. J. Hall</u>	Company: <u>SKA P</u>	Date/Time: <u>3.23.18</u> <u>0925</u>		

Tacoma, WA 98424-1317  
phone 253.922.2310 fax 253.922.5047

Regulatory Program:  DW  NPDES  RCRA  Other:

TestAmerica Laboratories, Inc.

<b>Client Contact</b>		<b>Project Manager:</b> Greg Montgomery		<b>Site Contact:</b> Michael MacDaniel		<b>Date:</b> <del>3/21/17</del> 3/22/18		<b>COC No:</b>		
ARCADIS		Tel/Fax: Matt Felton		Lab Contact: Kristine Allen		Carrier: FedEx		2 of 2 COCs		
880 H St STE 101		<b>Analysis Turnaround Time</b>		Filtered Sample (Y/N) Perform MS/MSD (Y/N) 8260C AK102 - AK102 (DRO) AK101 - AK101 (GRO)				Sampler:		
Anchorage, AK 99501		<input type="checkbox"/> CALENDAR DAYS <input checked="" type="checkbox"/> WORKING DAYS TAT if different from Below Standard						For Lab Use Only:		
(206) 465-3161 Phone		<input type="checkbox"/> 2 weeks <input type="checkbox"/> 1 week <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day						Walk-in Client:		
(xxx) xxx-xxxx FAX								Lab Sampling:		
Project Name: <del>Clear AFS</del> GE NIKK								Job / SDG No.:		
Site: Former TBE Machine Shop										
P O # B0031255.1404										
<b>Sample Identification</b>		<b>Sample Date</b>	<b>Sample Time</b>	<b>Sample Type</b> (C=Comp, G=Grab)	<b>Matrix</b>	<b># of Cont.</b>	<b>Sample Specific Notes:</b>			
BD-2	3/21/2018	--	G	W	8	N	N	X	X	X
MS	3/20/2018	1410	G	W	8	N	N	X	X	X
MSD	3/21/2018	1410	G	W	8	N	N	X	X	X
EB	3/21/2018	1440	G	W	8	N	N	X	X	X
Trip Blank	--	--	G	W	12	N	N	X		X
<b>Preservation Used:</b> 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other							2	2	2	
<b>Possible Hazard Identification:</b> Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.							<b>Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)</b>			
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown							<input type="checkbox"/> Return to Client <input checked="" type="checkbox"/> Disposal by Lab <input type="checkbox"/> Archive for _____ Months			
<b>Special Instructions/QC Requirements &amp; Comments:</b>										
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:			Cooler Temp. (°C): Obs'd: _____ Corr'd: _____			Therm ID No.:		
Relinquished by: Michael MacDaniel		Company: ARCADIS		Date/Time: 3/21/17		Received by:		Company:		
		1200		3/22/18						
Relinquished by:		Company:		Date/Time:		Received by:		Company:		
Relinquished by:		Company:		Date/Time:		Received in Laboratory by:		Company:		
						B. [Signature]		3/23/18 0925		

## Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 580-76037-1

**Login Number: 76037**

**List Number: 1**

**Creator: Gall, Brandon A**

**List Source: TestAmerica Seattle**

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	Containers recd broken. Sufficient sample in remaining containers for analysis.
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	