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October 25, 2021

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Via: erin.gleason@alaska.gov

RE: Delta Western Station, 900 Main Street, Haines, Alaska; ADEC File No. 1508.38.20

Subj: Monitoring and Groundwater Treatment System Maintenance Report

Environmental Management, Inc. (EMI) is pleased to provide this report on groundwater and surface water monitoring and groundwater treatment system maintenance at the Delta Western Haines Station, 900 Main Street, Haines, Alaska. The site is an active Alaska Department of Environmental Conservation (ADEC) Contaminated Site, file number 1508.38.20.

FIELD ACTIVITIES

The 2021 field activities included surface water sampling, groundwater monitoring, remediation system sampling and maintenance, improvements to the groundwater treatment system, repairing the bioswale cleanout, and surface soil sampling. Field activities were conducted by Andy Coulson (EMI), a Qualified Environmental Professional (QEP) and system maintenance and improvements was performed by Dale Erickson; all samples were collected by Mr. Coulson. Field activities took place on June 15 and 16, 2021. Work was performed in accordance with EMI's January 25, 2021 *Work Plan Addendum for Monitoring and Groundwater Treatment System Maintenance*, approved by the ADEC on March 2, 2021.

Surface Water Sampling from Sawmill Creek

EMI collected grab samples of surface water from Sawmill Creek. A single sample (18113-SW1-061621) was collected from location SW1 (Photo 1) shown on Figure A1, and a sample (18113-SW3-061621) and duplicate (18113-SW4-061621) were collected from location SW3 (Photo 2), also shown on Figure A1. SW1 is upstream of the site at the outlet of the culvert below Main Street, while SW3 is immediately downstream of the site at the outlet of the culvert below Spruce Grove Road.

Groundwater Monitoring

Groundwater samples were collected from wells MW16 (18113-MW16-061621, Photo 3), MW17 (18113-MW17-061621 and its duplicate 18113-MW77-061621, Photo 4), and MW19 (18113-MW19-061621, Photo 5). Depth to groundwater was measured in each well prior to purging. EMI attempted

to purge the wells using low-flow sampling methods, however in all three wells three well volumes were purged before enough water quality parameters stabilized to the standards in the ADEC *Field Sampling Guidance*. This is likely due to the somewhat small total well volumes for wells at this site due to their shallow depth.

GAC System Sampling and Maintenance

EMI removed the old granular activated carbon (GAC) and surrounding filter bags; total removed material filled approximately one and one quarter 55-gallon drums. These were replaced with new filter bags and GAC. After the GAC and filter bags were replaced, a sample of the untreated groundwater influent (18113-2021pretreatment) was collected from the pre-treatment sampling valve, and a sample of the post-treatment effluent water was collected from the outlet of the filter system (18113-2021posttreatment). A sample was also collected of the used GAC (18113-GAC21). EMI encountered two small leaks (drops) in the tubing, one at the inlet to the first filter drum and one at the inlet to one of the final filter drums; these were repaired using hose clamps and patches of excess tube material that was removed from elsewhere in the system.

Improve throughput of the groundwater treatment system

EMI observed that the throughput of the treatment system was noticeably greater after the GAC and filter bags were replaced. No fouling or reduction in inside diameter was observed inside the tubes between filter drums. EMI removed a stub of host that formed a dead end off of a T-junction in the tube between the first and second filter drums; EMI also removed the T-fitting so that there was a direct connection between the two drums. EMI could not adjust the height on the inlet pipe because it was embedded in the concrete manhole wall.

Repair bioswale upright cleanout

EMI repaired the broken upright cleanout to the bioswale (Photo 6). Uprights were previously supported by being attached the nearby utility pole. The broken upright was reattached to it subsurface pipe and to the utility pole; screws holding the intact upright had begun to work themselves out and these were tightened.

Surface Soil Sampling

Hand tools were used to advance test pits and collect soil samples at approximately one foot below ground surface at locations CL04 (sample 18113-CL04 and it duplicate 18113-CL77, Photo 7) and CL12 (sample 18113-CL12, Photo 8). Removed soils were placed immediately adjacent to the test pits and were used as backfill following field screening and analytical sample collection. Analytical samples were collected from the freshly exposed test pit using new, clean nitrile gloves and placed directly into clean laboratory-provided containers. Containers for volatile analyses were collected first and immediately preserved with laboratory-provided methanol. After the analytical samples were collected, a headspace sample was collected by filling a re-sealable quart size Ziplock bag approximately 1/3 to 1/2 full with soil. The bag was then agitated for 15 seconds before and after being



allowed to develop for at least 10 minutes, but not longer than an hour. Once the headspace sample was allowed to develop, the probe of a photoionization detector (PID) was inserted into the bag and the displayed value was recorded in the field notebook. A MiniRAE 3000 PID was the primary field screening instrument used. After reading headspace sample soils were returned to their test pit.

INVESTIGATION DERIVED WASTE

Liquid investigation derived waste (IDW) included purge water and decontamination water. Liquid IDW was disposed of by disconnecting the flexible pipe between the groundwater treatment system intake and its surface overflow vent and pouring the IDW into the pipe leading to the treatment system (Photo 11).

Solid IDW consisted of used tubing, PPE, and similar disposable items. These were disposed of as solid waste in the dumpster on site.

Soils removed while advancing test pits, and soils used for headspace screening samples, were used to backfill the test pit they originated from.

Used GAC, used filter bags, and other material removed from the groundwater treatment system were stored on site in two drums pending the results of the benzene toxicity characteristic leaching procedure (TCLP) analysis. The waste was determined to be non-hazardous; once a disposal option has been determined, ADEC approval will be sought prior to transport.

Work Plan Variances

The work plan addendum had specified that liquid IDW would be added directly to first drum filter. However, this was not feasible as the water level in the drum did not drop enough to add the liquid IDW. Liquid IDW was added to the treatment system via the overflow pipe instead (Photo 11).

RESULTS

Surface Observations

A new aboveground storage tank (AST), not yet in service, had been added to the site since the 2020 field activities, and it appeared that the RV dump station was no longer in service (Photo 9). The asphalt cap at the site appears intact. All monitoring wells were intact. No other significant changes to the site since previous sampling were observed.

Surface Water Sample Results

Surface water samples were analyzed for gasoline range organics (GRO) by method AK 101, diesel range organics and residual range organics (DRO/RRO) by method AK 102/103, total aromatic hydrocarbons (TAH) by method EPA 624, and total aqueous hydrocarbons (TAqH) by method EPA 625.



Detectable concentrations of DRO, RRO, and phenanthrene were reported in one or more of the samples. Estimated (J-flagged) concentrations of RRO were reported in each of the samples, and estimated (J-flagged) DRO concentration was reported in the duplicate sample only. There is no action level for DRO or RRO in surface water in 18 AAC 70, but for comparison these estimated detections are well below the groundwater cleanup levels for these analytes in 18 AAC 75, and they did not show any meaningful increase between upstream and downstream sample locations. Phenanthrene had estimated detections at similar concentrations in all samples and in the method blank for method EPA 625; these detections do not raise the TAqH concentration above the action level 18 AAC 70 and there is not a meaningful difference between the concentrations detected upstream and downstream of the site. Due to the estimated detection in the method blank, the data is flagged in Table 2.

Surface water sample results are presented in Table 2, and in the attached SGS laboratory reports 1213466 and 1213490.

Groundwater Observations

Groundwater elevations for each monitoring well are shown below in Table 1. The calculated direction of the groundwater gradient is shown by an arrow on Figure A1, and did not differ from 2020. No petroleum sheen was observed on purge water from any well, but MW17 water did have a petroleum odor.

Well	Top of Casing Elevation Feet above sea level, surveyed in 2020	Depth to Groundwater (2021) Feet below top of casing	Groundwater Elevation (2021) Feet above sea level	Groundwater Elevation (2020) Feet above sea level
MW16	31.48	2.47	29.01	28.32
MW17	29.85	2.71	27.14	27.07
MW19	28.55	1.96	26.59	26.19

Table 1 Groundwater elevation in monitoring wells at Haines Station

Groundwater Sample Results

Groundwater samples were analyzed for GRO by method AK 101, DRO/RRO by method AK 102/103, DRO/RRO with silica gel cleanup by AK 102/103, volatile organic compounds (VOC) by method 8260, and polynuclear aromatic hydrocarbons (PAH) by methods 8270 SIMS.

Samples from all wells exceeded groundwater cleanup levels for naphthalene, benzene, ethylbenzene, and 1,2,4-trimethylbenzene; some wells exceeded cleanup levels for other analytes as well. Concentrations of detected analytes in wells MW16 and MW19 decreased compared to results in 2020, while those in well MW17 increased. The only exceptions were 1- and 2-methylnaphthalene, where



the concentrations in MW17 stayed approximately the same as those in 2020 (though still above cleanup levels).

In all wells in both years, silica gel cleanup appeared to reduce DRO and RRO concentrations by about half. In samples from well MW17, DRO and RRO increased from 2020 to 2021; DRO in 2021 was above cleanup levels even after silica gel cleanup. DRO and RRO decreased in wells MW16 and MW19 compared to 2020 concentrations, such that neither analyte was above cleanup levels in either well even before silica gel cleanup.

Groundwater sample results are presented in Table 3, and in the attached SGS laboratory reports 1213460 and 1213486.

Groundwater Treatment System Observations

When EMI arrived on site, one of the final two filter barrels was on its side intact and closed (Photo 10), and a piece of tubing had jammed the sump pump float and prevented it from functioning correctly by taking too long to start pumping, and pumping too long after the water level had lowered. It is possible that late 2020 flooding in Haines caused these damages. Both the filter drum and the pump were intact and put back into operation once properly arranged. (Photo 11)

It was observed during maintenance that most of the iron-oxide sludge in the treatment system formed outside of the filter bag in the first filter drum.

After all of EMI's maintenance and modification activities, the left outfall pipe filled a one-liter sample bottle in 26 seconds, and the right outfall pipe filled a one-liter sample bottle in 46 seconds.

Groundwater Treatment System Sample Results

The water samples collected from the groundwater treatment system were analyzed for GRO by methods AK 101, and benzene, toluene, ethylbenzene, and xylenes (BTEX) by method 8260, and DRO/RRO by methods AK 102/103. The sample of used GAC was analyzed for benzene TCLP.

Benzene, DRO, and RRO were detected at concentrations below groundwater cleanup levels in the pretreatment water sample but not detected in the post-treatment water sample. Benzene was not detected in the TCLP extract of the used GAC.

Groundwater treatment system sample results are presented in Table 4, and in the attached SGS laboratory reports 1213463, 1213470, and 1213489.

Soil Sample Results

Soil analytical samples were analyzed for GRO by method AK 101, DRO/RRO by method AK 102/103, VOC by method 8260, and PAH by method 8270 SIMS. Field screening samples were also collected and analyzed in the field using headspace photoionization detector (PID) methods.



Headspace screening data did not suggest contamination. GRO, DRO, and RRO were detected at low levels in both locations, but well below cleanup levels. No VOC or PAH were detected.

Soil sample results are presented in Table 5, and in the attached SGS laboratory report 1213486.

QUALITY CONTROL/QUALITY ASSURANCE

Analytical results were checked using the ADEC Laboratory Data Review Checklist. Phenanthrene had estimated detections at similar concentrations in all three surface water samples and in the associated method blank for method EPA 625; the results in Table 2 have been flagged with a "B" as a result. No other failures that would impact the conclusions of this report were identified. Laboratory Data Review Checklists are enclosed with their corresponding laboratory report.

The PID used to collect headspace screening data for the soil samples was not checked against calibration gas prior to use, as the Tedlar bag of calibration gas had leaked during transport. The PID was checked against a Sharpie marker cap for responsiveness, and was found to be responsive. Headspace screening data was collected for reference only was not used for determining sample locations.

DISCUSSION

Based on the data collected in 2021, estimated (J-flagged) concentrations of DRO, RRO, and one PAH were reported in the samples collected from Sawmill Creek. These results were well below the regulatory limits and indicate that contamination is not migrating from groundwater at this site into the surface water of Sawmill Creek.

Sample results from 2021 monitoring show that groundwater at the site contains contaminant concentrations above applicable cleanup levels. All three wells contained VOC analytes above cleanup levels; only MW17 contained GRO, DRO, and PAH (besides naphthalene) above cleanup levels. Concentrations of all analytes decreased compared to 2020 samples in MW16 and MW19, while almost all increased in MW17.

The groundwater treatment system is effectively removing contamination from the water that it treats. Replacing filter bags and removing unnecessary branches in the pipe system adequately improved system throughput. Manipulating filter canisters during GAC replacement caused two small leaks to occur in tubing between canisters; these leaks were immediately repaired. However, it is likely that the embrittlement will worsen with time and replacing tubing, either as-needed or entirely, should be considered during the next maintenance event. If feasible, treatment system outfall water should be sampled prior to GAC replacement to determine if annual replacement is necessary or if less frequent replacement is adequate.

Based on the 2021 surface soil sample results, surface soil contamination is no longer present at locations CL04 and CL12. Since these locations were last sampled in 2009, the bioswale system was



constructed on the north side of the Haines Station site, including at these two locations. The bioswale would have involved excavating and replacing original soil from the site, and contaminated soil would have been removed and replaced at these two locations during that process.

Surface water and surface soil at this site do not appear to be contaminated. EMI recommends that annual groundwater monitoring continue until all wells show a stable or decreasing trend in analyte concentrations. EMI also recommends that prior to the next GAC replacement, samples of treatment system water be collected to determine if GAC replacement on an annual basis is necessary, and that replacing the tubing in the treatment system should be considered for the next maintenance event.

If you have any questions or wish to discuss this project, please do not hesitate to contact Shayla Marshall or the undersigned at (907) 272-9336.

Respectfully, **Environmental Management, Inc.**

Andy Coulson

Andy Coulson Qualified Environmental Professional

Encl:

Table 2 - Surface Water Sample Results
Table 3 - Groundwater Sample Results
Table 4 - Groundwater Treatment System Sample Results
Table 5 - Soil Sample Results
Figure 1
Attachment 1 - Photo Log
Attachment 2 - Field Notes
Attachment 3 - SGS Laboratory Reports and Data Review Checklists





	Sample					18113-SW3- 061621		18113-SW4- 061621		Trip Blank	
			Location	Upstrean Site	n of	Downstre of Site	eam e	Duplicate 18113-SV 06162	e of W3- 1	-	
			Date	6/16/2021		6/16/2021		6/16/2021		6/16/20	21
A malurata	A u a luta		TI	8:42 A	M	9:15 A	M	9:25 A	М	8:42 A	M
	Analyte	Action Level	Unit	0.0500	TT	0.0500	TT	0.0500	TT	0.0500	TT
AK101	Gasoline Range Organics	-	mg/L	0.0500		0.0500		0.0500	U	0.0500	U
AK102/103	Diesel Range Organics	-	mg/L	0.308	0	0.316	0	0.226	J		
AK102/103	Residual Range Organics	-	mg/L	0.219	J	0.222	J	0.227	J		
-	Total Aromatic Hydrocarbons ¹	10	ug/L	ND		ND		ND		-	
EPA 602/624	Benzene	-	ug/L	0.200	U	0.200	U	0.200	U	0.200	U
EPA 602/624	Ethylbenzene	-	ug/L	0.500	U	0.500	U	0.500	U	0.500	U
EPA 602/624	P & M -Xylene	-	ug/L	1.00	U	1.00	U	1.00	U	1.00	U
EPA 602/624	Toluene	-	ug/L	0.500	U	0.500	U	0.500	U	0.500	U
EPA 602/624	o-Xylene	-	ug/L	0.500	U	0.500	U	0.500	U	0.500	U
-	Total Aqueous Hydrocarbons ²	15	ug/L	0.0209	J	0.0178	J	0.0360	J	-	
EPA 625M SIM (PAH) LV	Acenaphthene	-	ug/L	0.0250	U	0.0245	U	0.0250	U	-	
EPA 625M SIM (PAH) LV	Acenaphthylene	-	ug/L	0.0250	U	0.0245	U	0.0250	U	-	
EPA 625M SIM (PAH) LV	Anthracene	-	ug/L	0.0250	U	0.0245	U	0.0250	U	-	
EPA 625M SIM (PAH) LV	Benzo(a)Anthracene	-	ug/L	0.0250	U	0.0245	U	0.0250	U	-	
EPA 625M SIM (PAH) LV	Benzo[a]pyrene	-	ug/L	0.0100	U	0.00980	U	0.0100	U	-	
EPA 625M SIM (PAH) LV	Benzo[b]Fluoranthene	-	ug/L	0.0250	U	0.0245	U	0.0250	U	-	
EPA 625M SIM (PAH) LV	Benzo[g,h,i]perylene	-	ug/L	0.0250	U	0.0245	U	0.0250	U	-	
EPA 625M SIM (PAH) LV	Benzo[k]fluoranthene	-	ug/L	0.0250	U	0.0245	U	0.0250	U	-	
EPA 625M SIM (PAH) LV	Chrysene	-	ug/L	0.0250	U	0.0245	U	0.0250	U	-	
EPA 625M SIM (PAH) LV	Dibenzo[a,h]anthracene	-	ug/L	0.0100	U	0.00980	U	0.0100	U	-	
EPA 625M SIM (PAH) LV	Fluoranthene	-	ug/L	0.0250	U	0.0245	U	0.0250	U		
EPA 625M SIM (PAH) LV	Fluorene	-	ug/L	0.0250	U	0.0245	U	0.0250	U	-	
EPA 625M SIM (PAH) LV	Indeno[1,2,3-c,d] pyrene	-	ug/L	0.0250	U	0.0245	U	0.0250	U	_	
EPA 625M SIM (PAH) LV	Naphthalene	-	ug/L	0.0500	U	0.0490	U	0.0500	U	_	
EPA 625M SIM (PAH) LV	Phenanthrene	-	ug/L	0.0209	JB	0.0178	JB	0.0360	JB		
EPA 625M SIM (PAH) LV	Pyrene	-	ug/L	0.0250	U	0.0245	U	0.0250	U	-	

Key

Total Aromatic Hydrocarbons (TAH) is calculated as the sum of all analytes detected by EPA Method 624 Total Aqueous Hydrocarbons (TAqH) is calculated as the sum of all analytes detected by EPA Methods 625 and 624

1 2

Milligrams per liter mg/L

ug/L Micrograms per liter

Analyte was not detected above the reporting limit of 0.0500 mg/L 0.05000 U

- Analyte was detected at an estimated concentration 0.219 mg/L 0.219 J
- 0.0209 JB Phenanthrene was detected at an estimated concentration 0.0209 ug/L, but was also detected in the method blank at an estimated concentration of 0.0227 ug/L

			Sample	18113- MW19- 061621	181 MW 061	13- /16- 621	18113- MW17- 061621	18113- MW77- 061621	Trip Blank
			Location	MW19	MV	V16	MW17	MW17 (Duplicate)	-
			Date	6/16/2021 11:10 AM	6/16/	2021 8 PM	6/16/2021 3:17 PM	6/16/2021 3:27 PM	6/16/2021 11:10 AM
Analysis	Analyte	GW Cleanup	Unit		12.1	51111	5117110	0.27110	
AK101	Gasoline Range Organics	2.2	mg/L	0.881	1.91	l	42.6	42.9	0.0500 U
AK102/103 AK102/103 Silica Gel	Diesel Range Organics	1.5	mg/L mg/I	1.33 0.614 I	0.82	4 J 0 I	4.08	4.97	-
AK102/103 Shiea Ger	Residual Range Organics	1.1	mg/L mg/L	0.874 J	0.33	6 J	0.915	J 1.37	-
AK102/103 Silica Gel	RRO Silica Gel	1.1	mg/L	0.540 U	0.54	0 U	0.550	U 0.550 U	_
SW8260D	1,1,1,2-Tetrachloroethane	5.7	ug/L	0.250 U	0.25	0 U	0.250	U 0.250 U	0.250 U
SW8260D	1,1,1-Trichloroethane	8000	ug/L	0.500 U	0.50	$\frac{0}{0}$ U	0.500	U 0.500 U	0.500 U
SW8260D	1,1,2,2-Tetracmoroethane	0.76	ug/L ug/L	0.230 U 0.200 U	0.23	0 U	0.230	U 0.230 U	0.230 U
SW8260D	1,1-Dichloroethane	28	ug/L	0.500 U	0.50	0 U	0.500	U 0.500 U	0.500 U
SW8260D	1,1-Dichloroethene	280	ug/L	0.500 U	0.50	0 U	0.500	U 0.500 U	0.500 U
SW8260D	1,1-Dichloropropene	-	ug/L	0.500 U	0.50	0 U	0.500	U 0.500 U	0.500 U
SW8260D	1,2,3-Trichlorobenzene	7	ug/L	0.500 U	0.50	$\frac{0}{0}$ U	0.500	U 0.500 U	0.500 U
SW8260D	1,2,3-1richloropropane	0.0075	ug/L	0.500 U	0.50		0.500	U 0.500 U	0.500 U
SW8260D	1.2.4-Trimethylbenzene	56	ug/L ug/L	116	174		1.640	1.820	0.500 U
SW8260D	1,2-Dibromo-3-chloropropane	-	ug/L	5.00 U	5.00) U	5.00	U 5.00 U	5.00 U
SW8260D	1,2-Dibromoethane	0.075	ug/L	0.0375 U	0.037	75 U	0.0375	U 0.0375 U	0.0375 U
SW8260D	1,2-Dichlorobenzene	300	ug/L	0.500 U	0.50	0 U	0.500	U 0.500 U	0.500 U
SW8260D	1,2-Dichloroethane	1.7	ug/L	0.250 U	0.25	$\frac{0}{0}$ U	0.250	U 0.250 U	0.250 U
SW8260D SW8260D	1,2-Dichloropropane	8.2 30	ug/L	0.500 U 5.48	35.8	8	0.500 474	533	0.500 U
SW8260D	1,3-Dichlorobenzene	300	ug/L ug/L	0.500 U	0.50	, 0 U	0.500	U 0.500 U	0.500 U
SW8260D	1,3-Dichloropropane	-	ug/L	0.250 U	0.25	0 U	0.250	U 0.250 U	0.250 U
SW8260D	1,4-Dichlorobenzene	4.8	ug/L	0.250 U	0.25	0 U	0.250	U 0.250 U	0.250 U
SW8260D	2,2-Dichloropropane	-	ug/L	0.500 U	0.50	0 U	0.500	U 0.500 U	0.500 U
SW8260D	2-Butanone (MEK)	5600	ug/L	5.00 U	5.00) U 0 U	5.00	U 5.00 U	5.00 U
SW8260D	2-Chlorototuene 2-Hexanone	38	ug/L ug/L	5.00 U	5.00	000 0U	5.00	U 5.00 U	5.00 U
SW8260D	4-Chlorotoluene	-	ug/L	0.500 U	0.50	0 U	0.500	U 0.500 U	0.500 U
SW8260D	4-Isopropyltoluene	-	ug/L	3.15	0.50	0 U	0.500	U 0.500 U	0.500 U
SW8260D	4-Methyl-2-pentanone (MIBK)	6300	ug/L	5.00 U	5.00) U	5.00	U 5.00 U	5.00 U
SW8260D	Benzene	4.6	ug/L	69.5	82.2		5,250	5,270	0.200 U
SW8260D SW8260D	Bromobenzene	62	ug/L	0.500 U	0.50		0.500	U 0.500 U	0.500 U
SW8260D	Bromodichloromethane	1.3	ug/L ug/L	0.300 U 0.250 U	0.25	0 U	0.250	U 0.250 U	0.250 U
SW8260D	Bromoform	33	ug/L	0.500 U	0.50	0 U	0.500	U 0.500 U	0.500 U
SW8260D	Bromomethane	7.5	ug/L	2.50 U	2.50) U	2.50	U 2.50 U	2.50 U
SW8260D	Carbon disulfide	810	ug/L	5.00 U	5.00) U	5.00	U 5.00 U	5.00 U
SW8260D	Carbon tetrachloride	4.6	ug/L	0.500 U	0.50	$\frac{0}{0}$ U	0.500	U 0.500 U	0.500 U
SW8260D	Chloroethane	21000	ug/L	0.230 U	0.23	0 U	0.230	U 0.230 U	0.230 U
SW8260D	Chloroform	2.2	ug/L	0.500 U	0.50	0 U	0.500	U 0.500 U	0.500 U
SW8260D	Chloromethane	190	ug/L	0.500 U	0.50	0 U	0.500	U 0.500 U	0.500 U
SW8260D	Dibromochloromethane	8.7	ug/L	0.250 U	0.25	0 U	0.250	U 0.250 U	0.250 U
SW8260D	Dibromomethane	8.3	ug/L	0.500 U	0.50	$\frac{0}{0}$ U	0.500	U 0.500 U	0.500 U
SW8260D SW8260D	Ethylbenzene	200	ug/L	21.9	82.6	<u>0 0</u>	0.300 1.680	1.840	0.500 U
SW8260D	Freon-113	10000	ug/L ug/L	5.00 U	5.00	,) U	5.00	U 5.00 U	5.00 U
SW8260D	Hexachlorobutadiene	1.4	ug/L	0.500 U	0.50	0 U	0.500	U 0.500 U	0.500 U
SW8260D	Isopropylbenzene (Cumene)	450	ug/L	5.49	9.31	l	68.0	70.2	0.500 U
SW8260D	Methyl-t-butyl ether	140	ug/L	5.00 U	5.00) U	5.00	U 5.00 U	5.00 U
SW8260D	Methylene chloride	110	ug/L	5.00 U	5.00) ()	5.00 307	<u> </u>	5.00 U
SW8260D	P & M -Xvlene	-	ug/L ug/L	14.3	278	: :	7,470	8,130	1.00 U
SW8260D	Styrene	1200	ug/L	0.500 U	0.50	0_ U	0.500	U 0.500 U	0.500 U
SW8260D	Tetrachloroethene	41	ug/L	0.500 U	0.50	0 U	0.500	U 0.500 U	0.500 U
SW8260D	Toluene	1100	ug/L	0.450 J	6.59)	1,450	1,540	0.500 U
SW8260D	Trichloroethene	2.8	ug/L	0.500 U	0.50	$\frac{0}{0}$ U	0.500	U 0.500 U	0.500 U
SW8260D	Vinvl acetate	410	ug/L 110/L	5.00 U	5.00	0 U) II	5.00	U 5.00 U	5.00 U
SW8260D	Vinyl chloride	0.19	ug/L	0.0750 U	0.075	50 U	0.0750	U 0.0750 U	0.0750 U
SW8260D	Xylenes (total)	190	ug/L	15.1	284		8,710	9,470	1.50 U
SW8260D	cis-1,2-Dichloroethene	36	ug/L	0.500 U	0.50	0 <u>U</u>	0.500	U 0.500 U	0.500 U
SW8260D	cis-1,3-Dichloropropene	-	ug/L	0.250 U	0.25	$\frac{0}{0}$ U	0.250	U 0.250 U	0.250 U
5 W 8200D SW8260D	n-Butylbenzene	660	ug/L 110/I	0.300 U 20 7	0.50 31 (0.500 207	0 0.500 U 233	0.300 U
SW8260D	o-Xylene	-	ug/L	0.850 J	6.31		1,240	1,350	0.500 U
SW8260D	sec-Butylbenzene	2000	ug/L	2.76	1.80	<u>,</u>	13.1	0.500 U	0.500 U

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Sample					-)- 1	18113 MW16 06162	- - 1	18113 MW17 06162	- 7_ 1	18113 MW77 06162	- - [Trip Bla	ınk
	Location			MW19	9	MW10	5	MW1′	7	MW17 (Duplica	7 te)	-	
			Date	6/16/20 11:10 A	21 .M	6/16/20 12:48 P	21 M	6/16/20 3:17 PI	21 M	6/16/202 3:27 PM	21 Л	6/16/20 11:10 A	21 M
SW8260D	tert-Butylbenzene	690	ug/L	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
SW8260D	trans-1,2-Dichloroethene	360	ug/L	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
SW8260D	trans-1,3-Dichloropropene	-	ug/L	0.500	U	0.500	U	0.500	U	0.500	U	0.500	U
8270D SIM LV (PAH)	1-Methylnaphthalene	11	ug/L	4.10		2.81		29.1		29.7		-	
8270D SIM LV (PAH)	2-Methylnaphthalene	36	ug/L	3.83		3.65		47.6		49.3		-	
8270D SIM LV (PAH)	Acenaphthene	530	ug/L	0.0893		0.0156	J	0.108		0.111		-	
8270D SIM LV (PAH)	Acenaphthylene	260	ug/L	0.0240	U	0.0250	U	0.0250	U	0.0240	U	-	
8270D SIM LV (PAH)	Anthracene	43	ug/L	0.0240	U	0.0250	U	0.0250	U	0.0240	U	-	
8270D SIM LV (PAH)	Benzo(a)Anthracene	0.3	ug/L	0.0240	U	0.0250	U	0.0250	U	0.0240	U	-	
8270D SIM LV (PAH)	Benzo[a]pyrene	0.25	ug/L	0.00960	U	0.0100	U	0.0100	U	0.00960	U	-	
8270D SIM LV (PAH)	Benzo[b]Fluoranthene	2.5	ug/L	0.0240	U	0.0250	U	0.0250	U	0.0240	U	-	
8270D SIM LV (PAH)	Benzo[g,h,i]perylene	0.26	ug/L	0.0240	U	0.0250	U	0.0250	U	0.0240	U	-	
8270D SIM LV (PAH)	Benzo[k]fluoranthene	0.8	ug/L	0.0240	U	0.0250	U	0.0250	U	0.0240	U	-	
8270D SIM LV (PAH)	Chrysene	2	ug/L	0.0240	U	0.0250	U	0.0250	U	0.0240	U	-	
8270D SIM LV (PAH)	Dibenzo[a,h]anthracene	0.25	ug/L	0.00960	U	0.0100	U	0.0100	U	0.00960	U	-	
8270D SIM LV (PAH)	Fluoranthene	260	ug/L	0.0240	U	0.0250	U	0.0250	U	0.0240	U	-	
8270D SIM LV (PAH)	Fluorene	290	ug/L	0.0240	U	0.0330	J	0.102		0.113		-	
8270D SIM LV (PAH)	Indeno[1,2,3-c,d] pyrene	0.19	ug/L	0.0240	U	0.0250	U	0.0250	U	0.0240	U	-	
8270D SIM LV (PAH)	Naphthalene	1.7	ug/L	9.44		12.6		279		225		-	
8270D SIM LV (PAH)	Phenanthrene	170	ug/L	0.125		0.0375	J	0.104		0.105		-	
8270D SIM LV (PAH)	Pyrene	120	ug/L	0.0240	U	0.0250	U	0.0250	U	0.0240	U	-	

Key	
mg/L	Milligrams per liter
ug/L	Micrograms per liter
0.881	Analyte was detected at a concentration of 0.881
	milligrams per liter
0.874 J	Analyte was detected at an estimated concentration of
	0.874 milligrams per liter
0.540 U	Analyte was not detected above the reporting limit of
	0.540 milligrams per liter
0.500 U	Analyte was not detected above the reporting limit of
	0.500 micrograms per liter, and this limit is greater than
	the analytes groundwater cleanup level
116	Analyte was detected at a concentration of 116
	micrograms per liter, and this concentration is greater
	than the analyte's groundwater cleanup level

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			Sample	18113- 2021pretreat ment	18113- 2021posttreat ment	18113- GAC21	Trip Blank
			Location	Pre-treatment sampling valve	Treatment system outfall	Used GAC	-
			Date	6/16/2021 1:46 PM	6/16/2021 1:35 PM	6/15/2021 4:42 PM	6/16/2021 1:35 PM
Analysis	Analyte	Action Level ¹	Unit				
AK101	Gasoline Range Organics	2.2	mg/L	0.0500 U	0.0500 U	-	0.0500 U
AK102/103	Diesel Range Organics	1.5	mg/L	0.277 J	0.366 U	-	-
AK102/103	Residual Range Organics	1.1	mg/L	0.265 J	0.305 U	-	-
SW8260D	Benzene	4.6	ug/L	0.840	0.200 U	-	0.200 U
SW8260D	Ethylbenzene	15	ug/L	0.500 U	0.500 U	-	0.500 U
SW8260D	P & M -Xylene	15	ug/L	1.00 U	1.00 U	-	1.00 U
SW8260D	Toluene	1100	ug/L	0.500 U	0.500 U	-	0.500 U
SW8260D	Xylenes (total)	190	ug/L	1.50 U	1.50 U	-	1.50 U
SW8260D	o-Xylene	190	ug/L	0.500 U	0.500 U	-	0.500 U
SW8260D TCLP	Benzene	0.5	mg/L	-	-	0.01 U	-

Key

1	Action levels are 18 AAC 75 Groundwater cleanup levels, except for Method 8260 TCLP Benzene, where the action level is
	taken from 40 CFR 261.24
mg/L	Milligrams per liter
ug/L	Micrograms per liter
0.0500 U	Analyte was not detected above the reporting limit of 0.0500
	milligrams per liter
0.277 J	Analyte was detected at an estimated concentration of 0.277
	milligrams per liter
0.840	Analyte was detected at a concenntration of 0.840 micrograms
	per liter

Sample 1811				18113-CL04	18113-CL77	18113-CL12	Trip Blank
			Location	CL04	CL04 (Duplicate)	CL12	-
			Date	6/16/2021	6/16/2021	6/16/2021	6/16/2021
	4 1 4		TT •4	3:43 PM	3:53 PM	3:52 PM	3:43 PM
Analysis	Analyte	MTG Cleanup Level	Unit	0.2		0.0	
A K 101	Gasolino Rongo Organico	-	ppillv mg/kg	0.3	- 		- 154 T
AK101 AV102/102	Discol Pango Organics	200	mg/kg	1.01 U	2.11 J	1.00 J	1.54 J
AK102/103	Residual Range Organics	9700	mg/kg	21.2 J 91.9 J	22.0 110 I	20.8 J	-
8270D SIM (PAH)	1-Methylnanhthalene	410	ug/kg	1/1 3 U	14 1 I	87.3 J	
8270D SIM (PAH)	2-Methylnaphthalene	1300	ug/kg	14.3 U	14.1 U	14.7 U	
8270D SIM (PAH)	Acenanhthene	37000	ug/kg	14.3 U	14.1 U	14.7 U	
8270D SIM (PAH)	Acenaphthylene	18000	ug/kg	14.3 U	14.1 U	14.7 U	_
8270D SIM (PAH)	Anthracene	390000	ug/kg	14.3 U	14.1 U	14.7 U	
8270D SIM (PAH)	Benzo(a)Anthracene	700	110/kg	14.3 U	14.1 U	14.7 U	_
8270D SIM (PAH)	Benzo(a)/ mundeene	1900	ug/kg	14.3 U	14.1 U	14.7 U	
8270D SIM (PAH)	Benzo[b]Fluoranthene	20000	110/kg	14.3 U	14.1 U	14.7 U	_
8270D SIM (PAH)	Benzo[g h i]pervlene	1500000	110/kg	14.3 U	14.1 U	147 U	_
8270D SIM (PAH)	Benzo[k]fluoranthene	190000	ug/kg	14.3 U	14.1 U	14.7 U	-
8270D SIM (PAH)	Chrysene	60000	ug/kg	14.3 U	14.1 U	14.7 U	_
8270D SIM (PAH)	Dibenzo[a.h]anthracene	6300	ug/kg	14.3 U	14.1 U	14.7 U	-
8270D SIM (PAH)	Fluoranthene	590000	ug/kg	14.3 U	14.1 U	14.7 U	-
8270D SIM (PAH)	Fluorene	36000	ug/kg	14.3 U	14.1 U	14.7 U	-
8270D SIM (PAH)	Indeno[1.2.3-c.d] pyrene	65000	ug/kg	14.3 U	14.1 U	14.7 U	-
8270D SIM (PAH)	Naphthalene	38	ug/kg	11.4 U	11.3 U	11.8 U	-
8270D SIM (PAH)	Phenanthrene	39000	ug/kg	14.3 U	14.1 U	14.7 U	-
8270D SIM (PAH)	Pyrene	87000	ug/kg	14.3 U	14.1 U	14.7 U	-
SW8260D	1,1,1,2-Tetrachloroethane	22	ug/kg	12.9 U	10.4 U	11.8 U	10.1 U
SW8260D	1,1,1-Trichloroethane	32000	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U
SW8260D	1,1,2,2-Tetrachloroethane	3	ug/kg	1.28 U	1.04 U	1.18 U	1.00 U
SW8260D	1,1,2-Trichloroethane	1.4	ug/kg	0.515 U	0.417 U	0.470 U	0.403 U
SW8260D	1,1-Dichloroethane	92	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U
SW8260D	1,1-Dichloroethene	1200	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U
SW8260D	1,1-Dichloropropene	-	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U
SW8260D	1,2,3-Trichlorobenzene	150	ug/kg	32.1 U	26.1 U	29.4 U	25.1 U
SW8260D	1,2,3-Trichloropropane	0.031	ug/kg	1.28 U	1.04 U	1.18 U	1.00 U
SW8260D	1,2,4-Trichlorobenzene	82	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U
SW8260D	1,2,4-Trimethylbenzene	610	ug/kg	32.1 U	26.1 U	29.4 U	25.1 U
SW8260D	1,2-Dibromo-3-chloropropane	-	ug/kg	64.5 U	52.0 U	59.0 U	50.5 U
SW8260D	1,2-Dibromoethane	0.24	ug/kg	0.645 U	0.520 U	0.590 U	0.505 U
SW8260D	1,2-Dichlorobenzene	2400	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U
SW8260D	1,2-Dichloroethane	5.5	ug/kg	1.28 U	1.04 U	1.18 U	1.00 U
SW8260D	1,2-Dichloropropane	30	ug/kg	6.45 U	5.20 U	5.90 U	5.05 U
SW8260D	1,3,5-Trimethylbenzene	660	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U
SW8260D	1,3-Dichlorobenzene	2300	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U
SW8260D	1,3-Dichloropropane	-	ug/kg	6.45 U	5.20 U	5.90 U	5.05 U

			Sample	18113-CL04	18113-CL77	18113-CL12	Trip Blank
			Location	CL04	CL04 (Duplicate)	CL12	-
			Date	6/16/2021	6/16/2021	6/16/2021	6/16/2021
				3:43 PM	3:53 PM	3:52 PM	3:43 PM
Analysis	Analyte	MTG Cleanup Level	Unit	464			10 (11
SW8260D	1,4-Dichlorobenzene	37	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U
SW8260D	2,2-Dichloropropane	-	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U
SW8260D	2-Butanone (MEK)	15000	ug/kg	161 U	131 U	147 U	126 U
SW8260D	2-Chlorotoluene	-	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U
SW8260D	2-Hexanone	110	ug/kg	64.5 U	52.0 U	59.0 U	50.5 U
SW8260D	4-Chlorotoluene	-	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U
SW8260D	4-Isopropyltoluene	-	ug/kg	64.5 U	52.0 U	59.0 U	50.5 U
SW8260D	4-Methyl-2-pentanone (MIBK)	18000	ug/kg	161 U	131 U	147 U	126 U
SW8260D	Acetone	38000	ug/kg	101 U	131 U	147 U	120 U
SW8260D	Benzene	22	ug/kg	8.05 U	6.50 U	7.35 U	0.30 U
SW8260D	Bromobenzene	300	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U
SW8260D	Bromodichloromethane	-	ug/kg	10.1 U	13.1 U	14.7 U	12.0 U
SW8260D	Bromoform	4.5	ug/kg	1.20 U	1.04 U	1.18 U	1.00 U
SW8260D	Bromomothana	24	ug/kg	10.1 U	10.4 U	14.7 U	12.0 U
SW8260D	Carbon disulfide	24	ug/Kg	64.5 U	52.0 U	59.0 U	50.5 U
SW8260D	Carbon tetrachloride	2300	ug/Kg	8 05 U	52.0 U	7 35 U	630 U
SW8260D	Chlorobenzene	460	11g/Kg	16.1 U	13.1 U	14.7 U	12.6 U
SW8260D	Chloroethane	72000	110/kg	10.1 U	105 U	14.7 U	101 U
SW8260D	Chloroform	7.1	ug/kg	2.57 U	2.09 U	2.35 U	2.02 U
SW8260D	Chloromethane	610	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U
SW8260D	Dibromochloromethane	2.7	ug/kg	3.21 U	2.61 U	2.94 U	2.52 U
SW8260D	Dibromomethane	25	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U
SW8260D	Dichlorodifluoromethane	3900	ug/kg	32.1 U	26.1 U	29.4 U	25.1 U
SW8260D	Ethylbenzene	130	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U
SW8260D	Freon-113	310000	ug/kg	64.5 U	52.0 U	59.0 U	50.5 U
SW8260D	Hexachlorobutadiene	20	ug/kg	12.9 U	10.4 U	11.8 U	10.1 U
SW8260D	Isopropylbenzene (Cumene)	5600	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U
SW8260D	Methyl-t-butyl ether	400	ug/kg	64.5 U	52.0 U	59.0 U	50.5 U
SW8260D	Methylene chloride	330	ug/kg	64.5 U	52.0 U	59.0 U	50.5 U
SW8260D	Naphthalene	38	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U
SW8260D	P & M -Xylene	-	ug/kg	32.1 U	26.1 U	29.4 U	25.1 U
SW8260D	Styrene	10000	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U
SW8260D	Tetrachloroethene	190	ug/kg	8.05 U	6.50 U	7.35 U	6.30 U
SW8260D	Toluene	6700	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U
SW8260D	Trichloroethene	11	ug/kg	3.21 U	2.61 U	2.94 U	2.52 U
SW8260D	Trichlorofluoromethane	41000	ug/kg	32.1 U	26.1 U	29.4 U	25.1 U
SW8260D	Vinyl acetate	1100	ug/kg	64.5 U	52.0 U	59.0 U	50.5 U
SW8260D	Vinyl chloride	0.8	ug/kg	0.515 U	0.417 U	0.470 U	0.403 U
SW8260D	Xylenes (total)	1500	ug/kg	48.3 U	39.1 U	44.0 U	37.8 U
SW8260D	cis-1,2-Dichloroethene	120	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U

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			Sample	18113-CL04	18113-CL77	18113-CL12	Trip Blank	
				CL04	CL04 (Duplicate)	CL04 (Duplicate) CL12		
Data			6/16/2021		6/16/2021	6/16/2021		
			Date	3:43 PM	3:53 PM	3:52 PM	3:43 PM	
Analysis	Analyte	MTG Cleanup Level	Unit					
SW8260D	cis-1,3-Dichloropropene	-	ug/kg	8.05 U	6.50 U	7.35 U	6.30 U	
SW8260D	n-Butylbenzene	23000	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U	
SW8260D	n-Propylbenzene	9100	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U	
SW8260D	o-Xylene	-	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U	
SW8260D	sec-Butylbenzene	42000	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U	
SW8260D	tert-Butylbenzene	11000	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U	
SW8260D	trans-1,2-Dichloroethene	1300	ug/kg	16.1 U	13.1 U	14.7 U	12.6 U	
SW8260D	trans-1,3-Dichloropropene	-	ug/kg	8.05 U	6.50 U	7.35 U	6.30 U	
SM21 2540G	Total Solids	-	%	86.8	87.9	83.6	-	

Key	
MTG	Migration to groundwater
ppmv	Parts per million by volume
mg/kg	Milligrams per kilogram
ug/kg	Micrograms per kilogram
1.61 U	Analyte was not detected above the reporting limit of 1.28 micrograms per kilog
1.28 U	Analyte was not detected above the reporting limit of 1.61 milligrams per kilog
	cleanup level
21.2 J	Analyte was detected at an estimated concentration of 21.2 milligrams per kilog
22.8	Analyte was detected at a concentration 22.8 milligrams per kilogram

ogram gram, but this is greater than its MTG

gram

Attachment 1

Photo Log



Photo 1: Surface water sampling location SW1. 15 June 2021, facing northwest.



Photo 2: Surface water sampling location SW3. 16 June 2021, facing west.



Photo 3: Monitoring well MW16. 16 June 2021, facing east.



Photo 4: Monitoring well MW17. 16 June 2021, facing north.



Photo 5: Monitoring well MW19. 16 June 2021, facing west.



Photo 6: Upright cleanouts after repairs; closer, taller cleanout had been knocked over. 16 June 2021, facing south.



Photo 7: Soil sample location CL04. 16 June 2021, facing southwest.



Photo 8: Soil sample location CL12. 16 June 2021, facing southwest.



Photo 9: AST to the left is new since 2020 field work. 17 June 2021, facing northwest.



Photo 10: Groundwater treatment system when EMI arrived, prior to maintenance. 15 June 2021.



Photo 11: Groundwater treatment system after maintenance. Blue pipe in upper right corner was disconnected for liquid IDW disposal. 16 June 2021.

Attachment 2

Field Notes

36 (5 June 2021 Velta Western Huines Station On site 09:00 Ardy Coulser - EMI, REP Pale Elichson - TCC Mile Denher - DW weither - light pin, ~60%. - Replaced GiAC and filter fabric bays in greaduater treatment marbole 1048. - modifiel system to value firition and Opportunities for blockage - permake in filter comitsur 2 and 3 Aisconnetal slotfel surren ripe, and Fach outlet elbour away STA from leng. Disconnert (1) O of canster to support by. In 2 al 4, sanded off 16:15 off site end caps of slottel pipe. 1.0

AC 6/15/21 - Remard and had and T- junction and connected consisters I and I with a single length of hose. - repaired lealls in hose before inlets to caniters I and 3 - iron exite fouling yorst in canister 2. not observed on insite of pipes, fitting or - hours betaen canadan 1 & noh interner dremter. - Used GAC Filled up (ad longs) I drun completely and 1.14 of the second drum 16:42 collected sample 18/13-GAC21 of the used Gotc. 1 confirmer, GAC.

6/16/21 AC 16 June 2021 38 39 10:08 MW19 in good condition Polta mustary Haines Stating MW19 water at 1.96 ft base at 7.50ft weather clarky, culm, ~600 FAC 590 F 5.54 ft of nell volum On 5.12 06:05 | wv = 0.6864 gallen 3 wv = 2.66 gallers Andy Carlon - EMI DEP Dule Erickson - Tec 10:49 begin grizing mill asymet del Pump @ 5 ft bys WL OC MELLA MC/Cm PH OPP 09:92 78/13 -SW1 -061621 sample me 10.7 7.00 496.2 6.50 -108.1 469 Collected. from Orten's of 0:52 3.72 11.7 1.64 506 6.57 +09=3 3.79 11.6 1.18 507 6.49 -110.5 Eulvert below Main Street. 19.57 102 6 × 40 ml w/ HCl 2 × 250 ml vo precivitav 79 gallers gurged. 2×11 w/HCL collected sample 12 113-MWD-1110 09:15 Colluft Sumple 18/13-SW3-06/621 and is deplicate 18113 - Sw 9 - 1961621 061621. Agion outlet of cubet below Mislion 60AC 6× 40 ml w/Hel 2×250ml. by p. isturter street. Each: 2×12 w/P/cl 6x 40ml w/HCl 2×250 ml no preservative 2x1 L W/HCL AU Rite in the Rain.

AC 6/16/21 40 12:07 MW16 WL 2.47 Ft well box 7.36 f 4.69 ft of unfor 1 WV= 0.782 f guillors 7WV=2.35 gallon Started pup at MW16 at 12:19 Pump at 4:86 At less ORP OC TON MEN bH Time WL 14.6 0.86 449.6 6.53 -85-5 12:12 3.33 14.1 0.12 433.8 6.50 12:17 -101.7 3.91 3.87 14.4 0.32 4379 12:32 6.48 -107.1 4.10 138 0.32 416.7 6.42 11:37 -106.7 12-39 7 12-5 gallons pursed. 12:48 Collected Sample [8113 - MW16 - 06162! greunduster, 6x 40 al. W/HU 2×250 ml 496 prosenta Lx IL wither AU

AC 6/16121 41 collected surge 13.35 18113-2021 post treatment from the treatment System Dutterll. 6× 90 ml w/ HCl 2x16 W/HCI Left outfull 26 scorts to fill 1 lifer Right outfull 46 seconds to fill 1 liter. Collected Sample 18113 - Jost me-13.96 freetmant toom the surging value. 60×40ml wHel 2x11 -1Hcl. - could not all purge inter to first filder conster water fit not have down after allifia Added purge inter to overfill pipes Rite in the Rain

6/16/21 Ac 42 - sheen not observe on proje buckets diving sumpling. However light sheen my plant on buckets impediately prior to disposal. MW17 - fiel over when opening cap 4:23 MW17 WL 2.71 well base 12.99 FF 10.26 ft of water 1.6498 = 1WV = 3 WV 4.93 fran pumping Min17 Frel oder from purpe unter fromp at 7.99 ft bys 4:30 gy an.

6/16/21 Ae °C MOn Km ORP WL PH Ime 5.45 125 318 23 6.57-62.7 1 19 6.15 10.6 0.33 565 6.27 -69.7 1 14 6.86 98 023 583 6.29 -76.7 -69.7 1+ 25 133 9.4 0.16 584 6.31 -85.7 14 49 - shen observed and gaze bucket, but appeared bis yin 1 - broke into Chandles or stirred 75 galling pured 73 W. 15:17 collected simple 18113 - MW17-061621 al its duplicke 18/13 - MW77-06/62(ench gronduster: 6× 40 ml w/HCl 2× 250 ml ro presents 2×12 w/HCl Rite in the Rain

AC 6/16/21 44 15-43: Collecto simple 18113-CL09 ad its dephate 18/13-0277. Cach 2 containers, soil, 1 where off 15:52 collected Sample (BU3-C(12, 1 w/ no OH. 2 containing 501, ID Start End PPMV CL04 15:43 16:10 0.3 CE12 15:52 16:11 0.0 16:06 = PJI (Minihar 2000) realy 0.0 on aubient air and El nor toppon isobright 567 ppm on sharpite cap off site 6:30 AL

Attachment 3

SGS Laboratory Reports and Data Review Checklists



Laboratory Report of Analysis

To: Delta Western-Anchorage 206 E Fireweed Ln #201 Anchorage, AK 99503 907-275-4159

Report Number: 1213460

Client Project: Haines Station Groundwater

Dear Shayla Marshall,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Alexandra at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely, SGS North America Inc.

Alexandra Daniel Project Manager Alexandra.Daniel@sgs.com

Alexandra Daniel 2021.07.13 17:10:27 -08'00'

Date

Print Date: 07/13/2021 4:49:08PM

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Case Narrative

SGS Client: Delta Western-Anchorage SGS Project: 1213460 Project Name/Site: Haines Station Groundwater Project Contact: Shayla Marshall

Refer to sample receipt form for information on sample condition.

18113-MW16-061621 (1213460002) PS

AK101 - Surrogate recovery for 4-bromofluorobenzene does not meet QC criteria due to matrix interference.

LCSD for HBN 1821107 [XXX/4500 (1617546) LCSD

8270D SIM - PAH LCSD recovery for benzo[a]anthracene does not meet QC criteria.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

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	Report of Manual Integrations								
Laboratory ID	<u>Client Sample ID</u>	Analytical Batch	<u>Analyte</u>	Reason					
8270D SIM LV (PA	AH)								
1213460001	18113-MW19-061621	XMS12708	Phenanthrene	BLC					
Manua	al Integration Reason Code Descriptions								
Code O M SS BLG RP PIR IT SP RSP FPS BLC PNF	Description Original Chromatogram Modified Chromatogram Skimmed surrogate Closed baseline gap Reassign peak name Pattern integration required Included tail Split peak Removed split peak Forced peak start/stop Baseline correction Peak not found by software								

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Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <<u>http://www.sgs.com/en/Terms-and-Conditions.aspx></u>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 DW Chemistry (Provisionally Certified as of 05/27/2021 for Mercury by EPA200.8, Nitrate as N by SM 4500NO3-F and VOCs by EPA 524.2) & Microbiology & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the

The following descriptors or qualifiers may be found in your report:

*	The analyte has exceeded allowable regulatory or control limits.				
!	Surrogate out of control limits.				
В	Indicates the analyte is found in a blank associated with the sample.				
CCV/CVA/CVB	Continuing Calibration Verification				
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification				
CL	Control Limit				
DF	Analytical Dilution Factor				
DL	Detection Limit (i.e., maximum method detection limit)				
E	The analyte result is above the calibrated range.				
GT	Greater Than				
IB	Instrument Blank				
ICV	Initial Calibration Verification				
J	The quantitation is an estimation.				
LCS(D)	Laboratory Control Spike (Duplicate)				
LLQC/LLIQC	Low Level Quantitation Check				
LOD	Limit of Detection (i.e., 1/2 of the LOQ)				
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)				
LT	Less Than				
MB	Method Blank				
MS(D)	Matrix Spike (Duplicate)				
ND	Indicates the analyte is not detected.				
RPD	Relative Percent Difference				
TNTC	Too Numerous To Count				
U	Indicates the analyte was analyzed for but not detected.				
Sample summaries which i	nclude a result for "Total Solids" have already been adjusted for moisture content				
All DRO/DRO analyses are integrated per SOR					
	integrated per OOF.				

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Note:



AK101

SW8260D

Sample Summary Client Sample ID Lab Sample ID Collected Matrix **Received** Water (Surface, Eff., Ground) 18113-MW19-061621 1213460001 06/16/2021 06/18/2021 18113-MW16-061621 1213460002 06/16/2021 06/18/2021 Water (Surface, Eff., Ground) Water (Surface, Eff., Ground) 18113-MW17-061621 1213460003 06/16/2021 06/18/2021 18113-MW77-061621 1213460004 06/16/2021 06/18/2021 Water (Surface, Eff., Ground) Trip Blank 1213460005 06/16/2021 06/18/2021 Water (Surface, Eff., Ground) Method Method Description 8270 PAH SIM GC/MS LV 8270D SIM LV (PAH)

Gasoline Range Organics (W)

Volatile Organic Compounds (W) FULL

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Detectable Results Summary

Client Sample ID: 18113-MW19-061621			
Lab Sample ID: 1213460001	Parameter	Result	Units
Polynuclear Aromatics GC/MS	1-Methylnaphthalene	4.10	ug/L
•	2-Methylnaphthalene	3.83	ug/L
	Acenaphthene	0.0893	ug/L
	Naphthalene	9.44	ug/L
	Phenanthrene	0.125	ug/L
Volatile Fuels	Gasoline Range Organics	0.881	mg/L
Volatile GC/MS	1,2,4-Trimethylbenzene	116	ug/L
	1,3,5-Trimethylbenzene	5.48	ug/L
	4-Isopropyltoluene	3.15	ug/L
	Benzene	69.5	ug/L
	Ethylbenzene	21.9	ug/L
	lsopropylbenzene (Cumene)	5.49	ug/L
	Naphthalene	17.3	ug/L
	n-Propylbenzene	20.7	ug/L
	o-Xylene	0.850J	ug/L
	P & M -Xylene	14.3	ug/L
	sec-Butylbenzene	2.76	ug/L
	Toluene	0.450J	ug/L
	Xylenes (total)	15.1	ug/L
Client Sample ID: 18113-MW16-061621			
Lab Sample ID: 1213460002	Parameter	Result	Units
Polynuclear Aromatics GC/MS	1-Methylnaphthalene	2.81	ua/L
r olyndolodi Aromatico oomio	2-Methylnaphthalene	3.65	ua/L
	Acenaphthene	0.0156J	ua/L
	Fluorene	0.0330J	ug/L
	Naphthalene	12.6	ua/L
	Phenanthrene	0.0375J	ua/L
Volatile Fuels	Gasoline Range Organics	1.91	mg/L
Volatile GC/MS	1,2,4-Trimethylbenzene	174	ug/L
	1,3,5-Trimethylbenzene	35.8	ug/L
	Benzene	82.2	ug/L
	Ethylbenzene	82.6	ug/L
	Isopropylbenzene (Cumene)	9.31	ug/L
	Naphthalene	20.4	ug/L
	n-Propylbenzene	31.9	ug/L
	o-Xylene	6.31	ug/L
	P & M -Xylene	278	ug/L
	sec-Butylbenzene	1.86	ug/L
	Toluene	6.59	ug/L
	Xylenes (total)	284	ug/L

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Detectable Results Summary

Client Sample ID: 18113-MW17-061621			
Lab Sample ID: 1213460003	Parameter	Result	Units
Polynuclear Aromatics GC/MS	1-Methylnaphthalene	29.1	ug/L
-	2-Methylnaphthalene	47.6	ug/L
	Acenaphthene	0.108	ug/L
	Fluorene	0.102	ug/L
	Naphthalene	279	ug/L
	Phenanthrene	0.104	ug/L
Volatile Fuels	Gasoline Range Organics	42.6	mg/L
Volatile GC/MS	1,2,4-Trimethylbenzene	1640	ug/L
	1,3,5-Trimethylbenzene	474	ug/L
	Benzene	5250	ug/L
	Ethylbenzene	1680	ug/L
	Isopropylbenzene (Cumene)	68.0	ug/L
	Naphthalene	307	ug/L
	n-Propylbenzene	207	ug/L
	o-Xylene	1240	ug/L
	P & M -Xylene	7470	ug/L
	sec-Butylbenzene	13.1	ug/L
	Toluene	1450	ug/L
	Xylenes (total)	8710	ug/L
Client Sample ID: 18113-MW77-061621			
Lab Sample ID: 1213460004	Parameter	Result	l Inite
Polynuclear Aromatics GC/MS	1-Methylnaphthalene	29.7	ua/l
r orynacical Aromatics Comio	2-Methylnaphthalene	49.3	ua/L
	Acenaphthene	0.111	ua/L
	Fluorene	0.113	ua/L
	Naphthalene	225	ua/L
	Phenanthrene	0.105	ua/L
Volatile Fuels	Gasoline Range Organics	42.9	mg/L
Volatile GC/MS	1,2,4-Trimethylbenzene	1820	ug/L
	1,3,5-Trimethylbenzene	533	ug/L
	Benzene	5270	ug/L
	Ethylbenzene	1840	ug/L
	Isopropylbenzene (Cumene)	70.2	ug/L
	Naphthalene	345	ug/L
	n-Propylbenzene	233	ug/L
	o-Xylene	1350	ug/L
	P & M -Xylene	8130	ug/L
		1510	//
	loluene	1540	ug/L
	l oluene Xylenes (total)	9470	ug/L ug/L

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Client Sample ID: **18113-MW19-061621** Client Project ID: **Haines Station Groundwater** Lab Sample ID: 1213460001 Lab Project ID: 1213460 Collection Date: 06/16/21 11:10 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Polynuclear Aromatics GC/MS

						Allowable	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	DF	<u>Limits</u>	Date Analyzed
1-Methylnaphthalene	4.10	0.0481	0.0144	ug/L	1		07/01/21 23:51
2-Methylnaphthalene	3.83	0.0481	0.0144	ug/L	1		07/01/21 23:51
Acenaphthene	0.0893	0.0481	0.0144	ug/L	1		07/01/21 23:51
Acenaphthylene	0.0240 U	0.0481	0.0144	ug/L	1		07/01/21 23:51
Anthracene	0.0240 U	0.0481	0.0144	ug/L	1		07/01/21 23:51
Benzo(a)Anthracene	0.0240 U	0.0481	0.0144	ug/L	1		07/01/21 23:51
Benzo[a]pyrene	0.00960 U	0.0192	0.00596	ug/L	1		07/01/21 23:51
Benzo[b]Fluoranthene	0.0240 U	0.0481	0.0144	ug/L	1		07/01/21 23:51
Benzo[g,h,i]perylene	0.0240 U	0.0481	0.0144	ug/L	1		07/01/21 23:51
Benzo[k]fluoranthene	0.0240 U	0.0481	0.0144	ug/L	1		07/01/21 23:51
Chrysene	0.0240 U	0.0481	0.0144	ug/L	1		07/01/21 23:51
Dibenzo[a,h]anthracene	0.00960 U	0.0192	0.00596	ug/L	1		07/01/21 23:51
Fluoranthene	0.0240 U	0.0481	0.0144	ug/L	1		07/01/21 23:51
Fluorene	0.0240 U	0.0481	0.0144	ug/L	1		07/01/21 23:51
Indeno[1,2,3-c,d] pyrene	0.0240 U	0.0481	0.0144	ug/L	1		07/01/21 23:51
Naphthalene	9.44	0.0962	0.0298	ug/L	1		07/01/21 23:51
Phenanthrene	0.125	0.0481	0.0144	ug/L	1		07/01/21 23:51
Pyrene	0.0240 U	0.0481	0.0144	ug/L	1		07/01/21 23:51
Surrogates							
2-Methylnaphthalene-d10 (surr)	76.6	42-86		%	1		07/01/21 23:51
Fluoranthene-d10 (surr)	74.5	50-97		%	1		07/01/21 23:51

Batch Information

Analytical Batch: XMS12708 Analytical Method: 8270D SIM LV (PAH) Analyst: LAW Analytical Date/Time: 07/01/21 23:51 Container ID: 1213460001-A Prep Batch: XXX45004 Prep Method: SW3535A Prep Date/Time: 06/21/21 12:37 Prep Initial Wt./Vol.: 260 mL Prep Extract Vol: 1 mL

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Results of 18113-MW19-061621							
Client Sample ID: 18113-MW19-061 Client Project ID: Haines Station Gr Lab Sample ID: 1213460001 Lab Project ID: 1213460	621 roundwater	C R M S L	ollection Da eceived Dat atrix: Water olids (%): ocation:	te: 06/16/ te: 06/18/2 (Surface,	21 11:10 21 14:51 Eff., Gro	und)	
Results by Volatile Fuels							
Parameter Gasoline Range Organics	<u>Result Qual</u> 0.881	<u>LOQ/CL</u> 0.100	<u>DL</u> 0.0310	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/28/21 01:12
Surrogates							
4-Bromofluorobenzene (surr)	132	50-150		%	1		06/28/21 01:12
Batch Information							
Analytical Batch: VFC15681 Analytical Method: AK101 Analyst: IJV Analytical Date/Time: 06/28/21 01:12 Container ID: 1213460001-C		F F F	Prep Batch: Prep Method: Prep Date/Tir Prep Initial W Prep Extract	VXX37316 SW5030E ne: 06/27/2 't./Vol.: 5 m Vol: 5 mL	21 06:00 L		

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Client Sample ID: **18113-MW19-061621** Client Project ID: **Haines Station Groundwater** Lab Sample ID: 1213460001 Lab Project ID: 1213460 Collection Date: 06/16/21 11:10 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Volatile GC/MS

						Allowable	
Parameter	<u>Result Qual</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	DF	<u>Limits</u>	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250 U	0.500	0.150	ug/L	1		06/24/21 19:41
1,1,1-Trichloroethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
1,1,2,2-Tetrachloroethane	0.250 U	0.500	0.150	ug/L	1		06/24/21 19:41
1,1,2-Trichloroethane	0.200 U	0.400	0.120	ug/L	1		06/24/21 19:41
1,1-Dichloroethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
1,1-Dichloroethene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
1,1-Dichloropropene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
1,2,3-Trichlorobenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
1,2,3-Trichloropropane	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
1,2,4-Trichlorobenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
1,2,4-Trimethylbenzene	116	1.00	0.310	ug/L	1		06/24/21 19:41
1,2-Dibromo-3-chloropropane	5.00 U	10.0	3.10	ug/L	1		06/24/21 19:41
1,2-Dibromoethane	0.0375 U	0.0750	0.0180	ug/L	1		06/24/21 19:41
1,2-Dichlorobenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
1,2-Dichloroethane	0.250 U	0.500	0.150	ug/L	1		06/24/21 19:41
1,2-Dichloropropane	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
1,3,5-Trimethylbenzene	5.48	1.00	0.310	ug/L	1		06/24/21 19:41
1,3-Dichlorobenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
1,3-Dichloropropane	0.250 U	0.500	0.150	ug/L	1		06/24/21 19:41
1,4-Dichlorobenzene	0.250 U	0.500	0.150	ug/L	1		06/24/21 19:41
2,2-Dichloropropane	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
2-Butanone (MEK)	5.00 U	10.0	3.10	ug/L	1		06/24/21 19:41
2-Chlorotoluene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
2-Hexanone	5.00 U	10.0	3.10	ug/L	1		06/24/21 19:41
4-Chlorotoluene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
4-Isopropyltoluene	3.15	1.00	0.310	ug/L	1		06/24/21 19:41
4-Methyl-2-pentanone (MIBK)	5.00 U	10.0	3.10	ug/L	1		06/24/21 19:41
Benzene	69.5	0.400	0.120	ug/L	1		06/24/21 19:41
Bromobenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
Bromochloromethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
Bromodichloromethane	0.250 U	0.500	0.150	ug/L	1		06/24/21 19:41
Bromoform	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
Bromomethane	2.50 U	5.00	2.00	ug/L	1		06/24/21 19:41
Carbon disulfide	5.00 U	10.0	3.10	ug/L	1		06/24/21 19:41
Carbon tetrachloride	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
Chlorobenzene	0.250 U	0.500	0.150	ug/L	1		06/24/21 19:41
Chloroethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41

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Client Sample ID: **18113-MW19-061621** Client Project ID: **Haines Station Groundwater** Lab Sample ID: 1213460001 Lab Project ID: 1213460 Collection Date: 06/16/21 11:10 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Volatile GC/MS

						Allowable	
<u>Parameter</u>	<u>Result Qual</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Chloroform	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
Chloromethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
cis-1,2-Dichloroethene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
cis-1,3-Dichloropropene	0.250 U	0.500	0.150	ug/L	1		06/24/21 19:41
Dibromochloromethane	0.250 U	0.500	0.150	ug/L	1		06/24/21 19:41
Dibromomethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
Dichlorodifluoromethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
Ethylbenzene	21.9	1.00	0.310	ug/L	1		06/24/21 19:41
Freon-113	5.00 U	10.0	3.10	ug/L	1		06/24/21 19:41
Hexachlorobutadiene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
Isopropylbenzene (Cumene)	5.49	1.00	0.310	ug/L	1		06/24/21 19:41
Methylene chloride	5.00 U	10.0	3.10	ug/L	1		06/24/21 19:41
Methyl-t-butyl ether	5.00 U	10.0	3.10	ug/L	1		06/24/21 19:41
Naphthalene	17.3	1.00	0.310	ug/L	1		06/24/21 19:41
n-Butylbenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
n-Propylbenzene	20.7	1.00	0.310	ug/L	1		06/24/21 19:41
o-Xylene	0.850 J	1.00	0.310	ug/L	1		06/24/21 19:41
P & M -Xylene	14.3	2.00	0.620	ug/L	1		06/24/21 19:41
sec-Butylbenzene	2.76	1.00	0.310	ug/L	1		06/24/21 19:41
Styrene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
tert-Butylbenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
Tetrachloroethene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
Toluene	0.450 J	1.00	0.310	ug/L	1		06/24/21 19:41
trans-1,2-Dichloroethene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
trans-1,3-Dichloropropene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
Trichloroethene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
Trichlorofluoromethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:41
Vinyl acetate	5.00 U	10.0	3.10	ug/L	1		06/24/21 19:41
Vinyl chloride	0.0750 U	0.150	0.0500	ug/L	1		06/24/21 19:41
Xylenes (total)	15.1	3.00	1.00	ug/L	1		06/24/21 19:41
Surrogates							
1,2-Dichloroethane-D4 (surr)	99.8	81-118		%	1		06/24/21 19:41
4-Bromofluorobenzene (surr)	103	85-114		%	1		06/24/21 19:41
Toluene-d8 (surr)	98.2	89-112		%	1		06/24/21 19:41

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Client Sample ID: **18113-MW19-061621** Client Project ID: **Haines Station Groundwater** Lab Sample ID: 1213460001 Lab Project ID: 1213460 Collection Date: 06/16/21 11:10 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS20861 Analytical Method: SW8260D Analyst: MDT Analytical Date/Time: 06/24/21 19:41 Container ID: 1213460001-F Prep Batch: VXX37326 Prep Method: SW5030B Prep Date/Time: 06/24/21 06:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

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Client Sample ID: **18113-MW16-061621** Client Project ID: **Haines Station Groundwater** Lab Sample ID: 1213460002 Lab Project ID: 1213460 Collection Date: 06/16/21 12:48 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Polynuclear Aromatics GC/MS

						Allowable	
Parameter	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	DF	<u>Limits</u>	Date Analyzed
1-Methylnaphthalene	2.81	0.0500	0.0150	ug/L	1		07/01/21 02:17
2-Methylnaphthalene	3.65	0.0500	0.0150	ug/L	1		07/01/21 02:17
Acenaphthene	0.0156 J	0.0500	0.0150	ug/L	1		07/01/21 02:17
Acenaphthylene	0.0250 U	0.0500	0.0150	ug/L	1		07/01/21 02:17
Anthracene	0.0250 U	0.0500	0.0150	ug/L	1		07/01/21 02:17
Benzo(a)Anthracene	0.0250 U	0.0500	0.0150	ug/L	1		07/01/21 02:17
Benzo[a]pyrene	0.0100 U	0.0200	0.00620	ug/L	1		07/01/21 02:17
Benzo[b]Fluoranthene	0.0250 U	0.0500	0.0150	ug/L	1		07/01/21 02:17
Benzo[g,h,i]perylene	0.0250 U	0.0500	0.0150	ug/L	1		07/01/21 02:17
Benzo[k]fluoranthene	0.0250 U	0.0500	0.0150	ug/L	1		07/01/21 02:17
Chrysene	0.0250 U	0.0500	0.0150	ug/L	1		07/01/21 02:17
Dibenzo[a,h]anthracene	0.0100 U	0.0200	0.00620	ug/L	1		07/01/21 02:17
Fluoranthene	0.0250 U	0.0500	0.0150	ug/L	1		07/01/21 02:17
Fluorene	0.0330 J	0.0500	0.0150	ug/L	1		07/01/21 02:17
Indeno[1,2,3-c,d] pyrene	0.0250 U	0.0500	0.0150	ug/L	1		07/01/21 02:17
Naphthalene	12.6	0.500	0.155	ug/L	5		07/01/21 02:38
Phenanthrene	0.0375 J	0.0500	0.0150	ug/L	1		07/01/21 02:17
Pyrene	0.0250 U	0.0500	0.0150	ug/L	1		07/01/21 02:17
Surrogates							
2-Methylnaphthalene-d10 (surr)	71.5	42-86		%	1		07/01/21 02:17
Fluoranthene-d10 (surr)	68.2	50-97		%	1		07/01/21 02:17

Batch Information

Analytical Batch: XMS12709 Analytical Method: 8270D SIM LV (PAH) Analyst: LAW Analytical Date/Time: 07/01/21 02:17 Container ID: 1213460002-A

Analytical Batch: XMS12709 Analytical Method: 8270D SIM LV (PAH) Analyst: LAW Analytical Date/Time: 07/01/21 02:38 Container ID: 1213460002-A Prep Batch: XXX45004 Prep Method: SW3535A Prep Date/Time: 06/21/21 12:37 Prep Initial Wt./Vol.: 250 mL Prep Extract Vol: 1 mL

Prep Batch: XXX45004 Prep Method: SW3535A Prep Date/Time: 06/21/21 12:37 Prep Initial Wt./Vol.: 250 mL Prep Extract Vol: 1 mL

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- Results of 18113-MW16-061621								
Client Sample ID: 18113-MW16-061621 Client Project ID: Haines Station Groundwater Lab Sample ID: 1213460002 Lab Project ID: 1213460			C R M S					
Results by Volatile Fuels								
<u>Parameter</u> Gasoline Range Organics	<u>Result C</u> 1.91	<u>)ual</u>	<u>LOQ/CL</u> 0.100	<u>DL</u> 0.0310	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/28/21 01:30
Surrogates								
4-Bromofluorobenzene (surr)	158	*	50-150		%	1		06/28/21 01:30
Batch Information								
Analytical Batch: VFC15681 Analytical Method: AK101 Analyst: IJV Analytical Date/Time: 06/28/21 01:30 Container ID: 1213460002-D				Prep Batch: Prep Method Prep Date/Tir Prep Initial W Prep Extract	VXX37316 : SW5030E me: 06/27/2 't./Vol.: 5 m Vol: 5 mL	3 21 06:00 IL		

Print Date: 07/13/2021 4:49:17PM

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Client Sample ID: **18113-MW16-061621** Client Project ID: **Haines Station Groundwater** Lab Sample ID: 1213460002 Lab Project ID: 1213460 Collection Date: 06/16/21 12:48 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Volatile GC/MS

						Allowable	
Parameter	<u>Result Qual</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	DF	<u>Limits</u>	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250 U	0.500	0.150	ug/L	1		06/24/21 19:56
1,1,1-Trichloroethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
1,1,2,2-Tetrachloroethane	0.250 U	0.500	0.150	ug/L	1		06/24/21 19:56
1,1,2-Trichloroethane	0.200 U	0.400	0.120	ug/L	1		06/24/21 19:56
1,1-Dichloroethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
1,1-Dichloroethene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
1,1-Dichloropropene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
1,2,3-Trichlorobenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
1,2,3-Trichloropropane	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
1,2,4-Trichlorobenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
1,2,4-Trimethylbenzene	174	1.00	0.310	ug/L	1		06/24/21 19:56
1,2-Dibromo-3-chloropropane	5.00 U	10.0	3.10	ug/L	1		06/24/21 19:56
1,2-Dibromoethane	0.0375 U	0.0750	0.0180	ug/L	1		06/24/21 19:56
1,2-Dichlorobenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
1,2-Dichloroethane	0.250 U	0.500	0.150	ug/L	1		06/24/21 19:56
1,2-Dichloropropane	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
1,3,5-Trimethylbenzene	35.8	1.00	0.310	ug/L	1		06/24/21 19:56
1,3-Dichlorobenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
1,3-Dichloropropane	0.250 U	0.500	0.150	ug/L	1		06/24/21 19:56
1,4-Dichlorobenzene	0.250 U	0.500	0.150	ug/L	1		06/24/21 19:56
2,2-Dichloropropane	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
2-Butanone (MEK)	5.00 U	10.0	3.10	ug/L	1		06/24/21 19:56
2-Chlorotoluene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
2-Hexanone	5.00 U	10.0	3.10	ug/L	1		06/24/21 19:56
4-Chlorotoluene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
4-Isopropyltoluene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
4-Methyl-2-pentanone (MIBK)	5.00 U	10.0	3.10	ug/L	1		06/24/21 19:56
Benzene	82.2	0.400	0.120	ug/L	1		06/24/21 19:56
Bromobenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
Bromochloromethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
Bromodichloromethane	0.250 U	0.500	0.150	ug/L	1		06/24/21 19:56
Bromoform	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
Bromomethane	2.50 U	5.00	2.00	ug/L	1		06/24/21 19:56
Carbon disulfide	5.00 U	10.0	3.10	ug/L	1		06/24/21 19:56
Carbon tetrachloride	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
Chlorobenzene	0.250 U	0.500	0.150	ug/L	1		06/24/21 19:56
Chloroethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56

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Client Sample ID: **18113-MW16-061621** Client Project ID: **Haines Station Groundwater** Lab Sample ID: 1213460002 Lab Project ID: 1213460 Collection Date: 06/16/21 12:48 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Volatile GC/MS

						Allowable	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Chloroform	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
Chloromethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
cis-1,2-Dichloroethene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
cis-1,3-Dichloropropene	0.250 U	0.500	0.150	ug/L	1		06/24/21 19:56
Dibromochloromethane	0.250 U	0.500	0.150	ug/L	1		06/24/21 19:56
Dibromomethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
Dichlorodifluoromethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
Ethylbenzene	82.6	1.00	0.310	ug/L	1		06/24/21 19:56
Freon-113	5.00 U	10.0	3.10	ug/L	1		06/24/21 19:56
Hexachlorobutadiene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
Isopropylbenzene (Cumene)	9.31	1.00	0.310	ug/L	1		06/24/21 19:56
Methylene chloride	5.00 U	10.0	3.10	ug/L	1		06/24/21 19:56
Methyl-t-butyl ether	5.00 U	10.0	3.10	ug/L	1		06/24/21 19:56
Naphthalene	20.4	1.00	0.310	ug/L	1		06/24/21 19:56
n-Butylbenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
n-Propylbenzene	31.9	1.00	0.310	ug/L	1		06/24/21 19:56
o-Xylene	6.31	1.00	0.310	ug/L	1		06/24/21 19:56
P & M -Xylene	278	2.00	0.620	ug/L	1		06/24/21 19:56
sec-Butylbenzene	1.86	1.00	0.310	ug/L	1		06/24/21 19:56
Styrene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
tert-Butylbenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
Tetrachloroethene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
Toluene	6.59	1.00	0.310	ug/L	1		06/24/21 19:56
trans-1,2-Dichloroethene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
trans-1,3-Dichloropropene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
Trichloroethene	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
Trichlorofluoromethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 19:56
Vinyl acetate	5.00 U	10.0	3.10	ug/L	1		06/24/21 19:56
Vinyl chloride	0.0750 U	0.150	0.0500	ug/L	1		06/24/21 19:56
Xylenes (total)	284	3.00	1.00	ug/L	1		06/24/21 19:56
Surrogates							
1,2-Dichloroethane-D4 (surr)	94	81-118		%	1		06/24/21 19:56
4-Bromofluorobenzene (surr)	104	85-114		%	1		06/24/21 19:56
Toluene-d8 (surr)	99.7	89-112		%	1		06/24/21 19:56

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Client Sample ID: **18113-MW16-061621** Client Project ID: **Haines Station Groundwater** Lab Sample ID: 1213460002 Lab Project ID: 1213460 Collection Date: 06/16/21 12:48 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS20861 Analytical Method: SW8260D Analyst: MDT Analytical Date/Time: 06/24/21 19:56 Container ID: 1213460002-F Prep Batch: VXX37326 Prep Method: SW5030B Prep Date/Time: 06/24/21 06:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

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Client Sample ID: **18113-MW17-061621** Client Project ID: **Haines Station Groundwater** Lab Sample ID: 1213460003 Lab Project ID: 1213460 Collection Date: 06/16/21 15:17 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Polynuclear Aromatics GC/MS

						Allowable	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	DF	<u>Limits</u>	Date Analyzed
1-Methylnaphthalene	29.1	1.00	0.300	ug/L	20		07/01/21 03:19
2-Methylnaphthalene	47.6	1.00	0.300	ug/L	20		07/01/21 03:19
Acenaphthene	0.108	0.0500	0.0150	ug/L	1		07/01/21 02:58
Acenaphthylene	0.0250 U	0.0500	0.0150	ug/L	1		07/01/21 02:58
Anthracene	0.0250 U	0.0500	0.0150	ug/L	1		07/01/21 02:58
Benzo(a)Anthracene	0.0250 U	0.0500	0.0150	ug/L	1		07/01/21 02:58
Benzo[a]pyrene	0.0100 U	0.0200	0.00620	ug/L	1		07/01/21 02:58
Benzo[b]Fluoranthene	0.0250 U	0.0500	0.0150	ug/L	1		07/01/21 02:58
Benzo[g,h,i]perylene	0.0250 U	0.0500	0.0150	ug/L	1		07/01/21 02:58
Benzo[k]fluoranthene	0.0250 U	0.0500	0.0150	ug/L	1		07/01/21 02:58
Chrysene	0.0250 U	0.0500	0.0150	ug/L	1		07/01/21 02:58
Dibenzo[a,h]anthracene	0.0100 U	0.0200	0.00620	ug/L	1		07/01/21 02:58
Fluoranthene	0.0250 U	0.0500	0.0150	ug/L	1		07/01/21 02:58
Fluorene	0.102	0.0500	0.0150	ug/L	1		07/01/21 02:58
Indeno[1,2,3-c,d] pyrene	0.0250 U	0.0500	0.0150	ug/L	1		07/01/21 02:58
Naphthalene	279	4.00	1.24	ug/L	40		07/04/21 15:19
Phenanthrene	0.104	0.0500	0.0150	ug/L	1		07/01/21 02:58
Pyrene	0.0250 U	0.0500	0.0150	ug/L	1		07/01/21 02:58
Surrogates							
2-Methylnaphthalene-d10 (surr)	68.5	42-86		%	1		07/01/21 02:58
Fluoranthene-d10 (surr)	64.2	50-97		%	1		07/01/21 02:58

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Client Sample ID: **18113-MW17-061621** Client Project ID: **Haines Station Groundwater** Lab Sample ID: 1213460003 Lab Project ID: 1213460

Results by Polynuclear Aromatics GC/MS

Batch Information

Analytical Batch: XMS12709 Analytical Method: 8270D SIM LV (PAH) Analyst: LAW Analytical Date/Time: 07/01/21 02:58 Container ID: 1213460003-A

Analytical Batch: XMS12709 Analytical Method: 8270D SIM LV (PAH) Analyst: LAW Analytical Date/Time: 07/01/21 03:19 Container ID: 1213460003-A

Analytical Batch: XMS12713 Analytical Method: 8270D SIM LV (PAH) Analyst: LAW Analytical Date/Time: 07/04/21 15:19 Container ID: 1213460003-A Collection Date: 06/16/21 15:17 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Prep Batch: XXX45004 Prep Method: SW3535A Prep Date/Time: 06/21/21 12:37 Prep Initial Wt./Vol.: 250 mL Prep Extract Vol: 1 mL

Prep Batch: XXX45004 Prep Method: SW3535A Prep Date/Time: 06/21/21 12:37 Prep Initial Wt./Vol.: 250 mL Prep Extract Vol: 1 mL

Prep Batch: XXX45004 Prep Method: SW3535A Prep Date/Time: 06/21/21 12:37 Prep Initial Wt./Vol.: 250 mL Prep Extract Vol: 1 mL

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Results of 18113-MW17-061621							
Client Sample ID: 18113-MW17-06162 Client Project ID: Haines Station Grou Lab Sample ID: 1213460003 Lab Project ID: 1213460	C R M S L	ollection Da eceived Da atrix: Wate olids (%): ocation:	ate: 06/16/2 ate: 06/18/2 rr (Surface,	21 15:17 21 14:51 Eff., Gro	und)		
Results by Volatile Fuels							
<u>Parameter</u> Gasoline Range Organics	<u>Result Qual</u> 42.6	<u>LOQ/CL</u> 10.0	<u>DL</u> 3.10	<u>Units</u> mg/L	<u>DF</u> 100	<u>Allowable</u> <u>Limits</u>	Date Analyzed 06/28/21 22:56
Surrogates							
4-Bromofluorobenzene (surr)	71.6	50-150		%	100		06/28/21 22:56
Batch Information Analytical Batch: VFC15683 Analytical Method: AK101 Analyst: IJV Analytical Date/Time: 06/28/21 22:56 Container ID: 1213460003-C		T T T	Prep Batch: Prep Methoo Prep Date/Ti Prep Initial V Prep Extract	VXX37324 I: SW5030B ime: 06/28/2 Vt./Vol.: 5 m Vol: 5 mL	1 06:00 L		

Print Date: 07/13/2021 4:49:17PM

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Client Sample ID: **18113-MW17-061621** Client Project ID: **Haines Station Groundwater** Lab Sample ID: 1213460003 Lab Project ID: 1213460 Collection Date: 06/16/21 15:17 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Volatile GC/MS

						<u>Allowable</u>	
Parameter	<u>Result Qual</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	DF	<u>Limits</u>	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250 U	0.500	0.150	ug/L	1		06/24/21 20:11
1,1,1-Trichloroethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
1,1,2,2-Tetrachloroethane	0.250 U	0.500	0.150	ug/L	1		06/24/21 20:11
1,1,2-Trichloroethane	0.200 U	0.400	0.120	ug/L	1		06/24/21 20:11
1,1-Dichloroethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
1,1-Dichloroethene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
1,1-Dichloropropene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
1,2,3-Trichlorobenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
1,2,3-Trichloropropane	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
1,2,4-Trichlorobenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
1,2,4-Trimethylbenzene	1640	50.0	15.5	ug/L	50		06/30/21 16:12
1,2-Dibromo-3-chloropropane	5.00 U	10.0	3.10	ug/L	1		06/24/21 20:11
1,2-Dibromoethane	0.0375 U	0.0750	0.0180	ug/L	1		06/24/21 20:11
1,2-Dichlorobenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
1,2-Dichloroethane	0.250 U	0.500	0.150	ug/L	1		06/24/21 20:11
1,2-Dichloropropane	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
1,3,5-Trimethylbenzene	474	50.0	15.5	ug/L	50		06/30/21 16:12
1,3-Dichlorobenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
1,3-Dichloropropane	0.250 U	0.500	0.150	ug/L	1		06/24/21 20:11
1,4-Dichlorobenzene	0.250 U	0.500	0.150	ug/L	1		06/24/21 20:11
2,2-Dichloropropane	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
2-Butanone (MEK)	5.00 U	10.0	3.10	ug/L	1		06/24/21 20:11
2-Chlorotoluene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
2-Hexanone	5.00 U	10.0	3.10	ug/L	1		06/24/21 20:11
4-Chlorotoluene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
4-Isopropyltoluene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
4-Methyl-2-pentanone (MIBK)	5.00 U	10.0	3.10	ug/L	1		06/24/21 20:11
Benzene	5250	20.0	6.00	ug/L	50		06/30/21 16:12
Bromobenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
Bromochloromethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
Bromodichloromethane	0.250 U	0.500	0.150	ug/L	1		06/24/21 20:11
Bromoform	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
Bromomethane	2.50 U	5.00	2.00	ug/L	1		06/24/21 20:11
Carbon disulfide	5.00 U	10.0	3.10	ug/L	1		06/24/21 20:11
Carbon tetrachloride	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
Chlorobenzene	0.250 U	0.500	0.150	ug/L	1		06/24/21 20:11
Chloroethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11

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Client Sample ID: **18113-MW17-061621** Client Project ID: **Haines Station Groundwater** Lab Sample ID: 1213460003 Lab Project ID: 1213460 Collection Date: 06/16/21 15:17 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Volatile GC/MS

						Allowable	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Limits	Date Analyzed
Chloroform	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
Chloromethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
cis-1,2-Dichloroethene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
cis-1,3-Dichloropropene	0.250 U	0.500	0.150	ug/L	1		06/24/21 20:11
Dibromochloromethane	0.250 U	0.500	0.150	ug/L	1		06/24/21 20:11
Dibromomethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
Dichlorodifluoromethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
Ethylbenzene	1680	50.0	15.5	ug/L	50		06/30/21 16:12
Freon-113	5.00 U	10.0	3.10	ug/L	1		06/24/21 20:11
Hexachlorobutadiene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
Isopropylbenzene (Cumene)	68.0	1.00	0.310	ug/L	1		06/24/21 20:11
Methylene chloride	5.00 U	10.0	3.10	ug/L	1		06/24/21 20:11
Methyl-t-butyl ether	5.00 U	10.0	3.10	ug/L	1		06/24/21 20:11
Naphthalene	307	50.0	15.5	ug/L	50		06/30/21 16:12
n-Butylbenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
n-Propylbenzene	207	50.0	15.5	ug/L	50		06/30/21 16:12
o-Xylene	1240	50.0	15.5	ug/L	50		06/30/21 16:12
P & M -Xylene	7470	100	31.0	ug/L	50		06/30/21 16:12
sec-Butylbenzene	13.1	1.00	0.310	ug/L	1		06/24/21 20:11
Styrene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
tert-Butylbenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
Tetrachloroethene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
Toluene	1450	50.0	15.5	ug/L	50		06/30/21 16:12
trans-1,2-Dichloroethene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
trans-1,3-Dichloropropene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
Trichloroethene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
Trichlorofluoromethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:11
Vinyl acetate	5.00 U	10.0	3.10	ug/L	1		06/24/21 20:11
Vinyl chloride	0.0750 U	0.150	0.0500	ug/L	1		06/24/21 20:11
Xylenes (total)	8710	150	50.0	ug/L	50		06/30/21 16:12
Surrogates							
1,2-Dichloroethane-D4 (surr)	91.8	81-118		%	1		06/24/21 20:11
4-Bromofluorobenzene (surr)	98.4	85-114		%	1		06/24/21 20:11
Toluene-d8 (surr)	101	89-112		%	1		06/24/21 20:11

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Client Sample ID: **18113-MW17-061621** Client Project ID: **Haines Station Groundwater** Lab Sample ID: 1213460003 Lab Project ID: 1213460

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS20873 Analytical Method: SW8260D Analyst: MDT Analytical Date/Time: 06/30/21 16:12 Container ID: 1213460003-F

Analytical Batch: VMS20861 Analytical Method: SW8260D Analyst: MDT Analytical Date/Time: 06/24/21 20:11 Container ID: 1213460003-F Collection Date: 06/16/21 15:17 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Prep Batch: VXX37342 Prep Method: SW5030B Prep Date/Time: 06/30/21 06:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Prep Batch: VXX37326 Prep Method: SW5030B Prep Date/Time: 06/24/21 06:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

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Client Sample ID: **18113-MW77-061621** Client Project ID: **Haines Station Groundwater** Lab Sample ID: 1213460004 Lab Project ID: 1213460 Collection Date: 06/16/21 15:27 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Polynuclear Aromatics GC/MS

						Allowable	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	DF	<u>Limits</u>	Date Analyzed
1-Methylnaphthalene	29.7	0.962	0.288	ug/L	20		07/01/21 04:00
2-Methylnaphthalene	49.3	0.962	0.288	ug/L	20		07/01/21 04:00
Acenaphthene	0.111	0.0481	0.0144	ug/L	1		07/01/21 03:39
Acenaphthylene	0.0240 U	0.0481	0.0144	ug/L	1		07/01/21 03:39
Anthracene	0.0240 U	0.0481	0.0144	ug/L	1		07/01/21 03:39
Benzo(a)Anthracene	0.0240 U	0.0481	0.0144	ug/L	1		07/01/21 03:39
Benzo[a]pyrene	0.00960 U	0.0192	0.00596	ug/L	1		07/01/21 03:39
Benzo[b]Fluoranthene	0.0240 U	0.0481	0.0144	ug/L	1		07/01/21 03:39
Benzo[g,h,i]perylene	0.0240 U	0.0481	0.0144	ug/L	1		07/01/21 03:39
Benzo[k]fluoranthene	0.0240 U	0.0481	0.0144	ug/L	1		07/01/21 03:39
Chrysene	0.0240 U	0.0481	0.0144	ug/L	1		07/01/21 03:39
Dibenzo[a,h]anthracene	0.00960 U	0.0192	0.00596	ug/L	1		07/01/21 03:39
Fluoranthene	0.0240 U	0.0481	0.0144	ug/L	1		07/01/21 03:39
Fluorene	0.113	0.0481	0.0144	ug/L	1		07/01/21 03:39
Indeno[1,2,3-c,d] pyrene	0.0240 U	0.0481	0.0144	ug/L	1		07/01/21 03:39
Naphthalene	225	3.85	1.19	ug/L	40		07/04/21 15:40
Phenanthrene	0.105	0.0481	0.0144	ug/L	1		07/01/21 03:39
Pyrene	0.0240 U	0.0481	0.0144	ug/L	1		07/01/21 03:39
Surrogates							
2-Methylnaphthalene-d10 (surr)	64.6	42-86		%	1		07/01/21 03:39
Fluoranthene-d10 (surr)	70.8	50-97		%	1		07/01/21 03:39

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Client Sample ID: **18113-MW77-061621** Client Project ID: **Haines Station Groundwater** Lab Sample ID: 1213460004 Lab Project ID: 1213460

Results by Polynuclear Aromatics GC/MS

Batch Information

Analytical Batch: XMS12709 Analytical Method: 8270D SIM LV (PAH) Analyst: LAW Analytical Date/Time: 07/01/21 03:39 Container ID: 1213460004-A

Analytical Batch: XMS12709 Analytical Method: 8270D SIM LV (PAH) Analyst: LAW Analytical Date/Time: 07/01/21 04:00 Container ID: 1213460004-A

Analytical Batch: XMS12713 Analytical Method: 8270D SIM LV (PAH) Analyst: LAW Analytical Date/Time: 07/04/21 15:40 Container ID: 1213460004-A Collection Date: 06/16/21 15:27 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Prep Batch: XXX45004 Prep Method: SW3535A Prep Date/Time: 06/21/21 12:37 Prep Initial Wt./Vol.: 260 mL Prep Extract Vol: 1 mL

Prep Batch: XXX45004 Prep Method: SW3535A Prep Date/Time: 06/21/21 12:37 Prep Initial Wt./Vol.: 260 mL Prep Extract Vol: 1 mL

Prep Batch: XXX45004 Prep Method: SW3535A Prep Date/Time: 06/21/21 12:37 Prep Initial Wt./Vol.: 260 mL Prep Extract Vol: 1 mL

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Results of 18113-MW77-061621								
Client Sample ID: 18113-MW77-06162 Client Project ID: Haines Station Grou Lab Sample ID: 1213460004 Lab Project ID: 1213460	1 Indwater	C R M Sa La	Collection Date: 06/16/21 15:27 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:					
Results by Volatile Fuels			_					
<u>Parameter</u> Gasoline Range Organics	<u>Result</u> Qual 42.9	<u>LOQ/CL</u> 10.0	<u>DL</u> 3.10	<u>Units</u> mg/L	<u>DF</u> 100	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/28/21 23:14	
Surrogates								
4-Bromofluorobenzene (surr)	74.7	50-150		%	100		06/28/21 23:14	
Batch Information Analytical Batch: VFC15683 Analytical Method: AK101 Analyst: IJV Analytical Date/Time: 06/28/21 23:14 Container ID: 1213460004-C		F F F F	Prep Batch: Prep Method Prep Date/Ti Prep Initial V Prep Extract	VXX37324 I: SW5030B ime: 06/28/2 Vt./Vol.: 5 m Vol: 5 mL	1 06:00 L			

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Client Sample ID: **18113-MW77-061621** Client Project ID: **Haines Station Groundwater** Lab Sample ID: 1213460004 Lab Project ID: 1213460 Collection Date: 06/16/21 15:27 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Volatile GC/MS

						Allowable	
<u>Parameter</u>	<u>Result Qual</u>	LOQ/CL	DL	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250 U	0.500	0.150	ug/L	1		06/24/21 20:27
1,1,1-Trichloroethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
1,1,2,2-Tetrachloroethane	0.250 U	0.500	0.150	ug/L	1		06/24/21 20:27
1,1,2-Trichloroethane	0.200 U	0.400	0.120	ug/L	1		06/24/21 20:27
1,1-Dichloroethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
1,1-Dichloroethene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
1,1-Dichloropropene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
1,2,3-Trichlorobenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
1,2,3-Trichloropropane	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
1,2,4-Trichlorobenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
1,2,4-Trimethylbenzene	1820	50.0	15.5	ug/L	50		06/30/21 16:27
1,2-Dibromo-3-chloropropane	5.00 U	10.0	3.10	ug/L	1		06/24/21 20:27
1,2-Dibromoethane	0.0375 U	0.0750	0.0180	ug/L	1		06/24/21 20:27
1,2-Dichlorobenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
1,2-Dichloroethane	0.250 U	0.500	0.150	ug/L	1		06/24/21 20:27
1,2-Dichloropropane	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
1,3,5-Trimethylbenzene	533	50.0	15.5	ug/L	50		06/30/21 16:27
1,3-Dichlorobenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
1,3-Dichloropropane	0.250 U	0.500	0.150	ug/L	1		06/24/21 20:27
1,4-Dichlorobenzene	0.250 U	0.500	0.150	ug/L	1		06/24/21 20:27
2,2-Dichloropropane	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
2-Butanone (MEK)	5.00 U	10.0	3.10	ug/L	1		06/24/21 20:27
2-Chlorotoluene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
2-Hexanone	5.00 U	10.0	3.10	ug/L	1		06/24/21 20:27
4-Chlorotoluene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
4-Isopropyltoluene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
4-Methyl-2-pentanone (MIBK)	5.00 U	10.0	3.10	ug/L	1		06/24/21 20:27
Benzene	5270	20.0	6.00	ug/L	50		06/30/21 16:27
Bromobenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
Bromochloromethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
Bromodichloromethane	0.250 U	0.500	0.150	ug/L	1		06/24/21 20:27
Bromoform	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
Bromomethane	2.50 U	5.00	2.00	ug/L	1		06/24/21 20:27
Carbon disulfide	5.00 U	10.0	3.10	ug/L	1		06/24/21 20:27
Carbon tetrachloride	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
Chlorobenzene	0.250 U	0.500	0.150	ug/L	1		06/24/21 20:27
Chloroethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27

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Client Sample ID: **18113-MW77-061621** Client Project ID: **Haines Station Groundwater** Lab Sample ID: 1213460004 Lab Project ID: 1213460 Collection Date: 06/16/21 15:27 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Volatile GC/MS

						Allowable	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	DF	<u>Limits</u>	Date Analyzed
Chloroform	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
Chloromethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
cis-1,2-Dichloroethene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
cis-1,3-Dichloropropene	0.250 U	0.500	0.150	ug/L	1		06/24/21 20:27
Dibromochloromethane	0.250 U	0.500	0.150	ug/L	1		06/24/21 20:27
Dibromomethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
Dichlorodifluoromethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
Ethylbenzene	1840	50.0	15.5	ug/L	50		06/30/21 16:27
Freon-113	5.00 U	10.0	3.10	ug/L	1		06/24/21 20:27
Hexachlorobutadiene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
Isopropylbenzene (Cumene)	70.2	1.00	0.310	ug/L	1		06/24/21 20:27
Methylene chloride	5.00 U	10.0	3.10	ug/L	1		06/24/21 20:27
Methyl-t-butyl ether	5.00 U	10.0	3.10	ug/L	1		06/24/21 20:27
Naphthalene	345	50.0	15.5	ug/L	50		06/30/21 16:27
n-Butylbenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
n-Propylbenzene	233	50.0	15.5	ug/L	50		06/30/21 16:27
o-Xylene	1350	50.0	15.5	ug/L	50		06/30/21 16:27
P & M -Xylene	8130	100	31.0	ug/L	50		06/30/21 16:27
sec-Butylbenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
Styrene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
tert-Butylbenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
Tetrachloroethene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
Toluene	1540	50.0	15.5	ug/L	50		06/30/21 16:27
trans-1,2-Dichloroethene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
trans-1,3-Dichloropropene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
Trichloroethene	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
Trichlorofluoromethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 20:27
Vinyl acetate	5.00 U	10.0	3.10	ug/L	1		06/24/21 20:27
Vinyl chloride	0.0750 U	0.150	0.0500	ug/L	1		06/24/21 20:27
Xylenes (total)	9470	150	50.0	ug/L	50		06/30/21 16:27
Surrogates							
1,2-Dichloroethane-D4 (surr)	90.6	81-118		%	1		06/24/21 20:27
4-Bromofluorobenzene (surr)	98.2	85-114		%	1		06/24/21 20:27
Toluene-d8 (surr)	101	89-112		%	1		06/24/21 20:27

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Client Sample ID: **18113-MW77-061621** Client Project ID: **Haines Station Groundwater** Lab Sample ID: 1213460004 Lab Project ID: 1213460

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS20873 Analytical Method: SW8260D Analyst: MDT Analytical Date/Time: 06/30/21 16:27 Container ID: 1213460004-F

Analytical Batch: VMS20861 Analytical Method: SW8260D Analyst: MDT Analytical Date/Time: 06/24/21 20:27 Container ID: 1213460004-F Collection Date: 06/16/21 15:27 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Prep Batch: VXX37342 Prep Method: SW5030B Prep Date/Time: 06/30/21 06:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Prep Batch: VXX37326 Prep Method: SW5030B Prep Date/Time: 06/24/21 06:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

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Results of Trip Blank							
Client Sample ID: Trip Blank Client Project ID: Haines Station (Lab Sample ID: 1213460005 Lab Project ID: 1213460	Collection Date: 06/16/21 11:10 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:						
Results by Volatile Fuels							
<u>Parameter</u> Gasoline Range Organics	<u>Result Qual</u> 0.0500 U	<u>LOQ/CL</u> 0.100	<u>DL</u> 0.0310	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	Date Analyzed
urrogates							
4-Bromofluorobenzene (surr)	75.2	50-150		%	1		06/25/21 00:56
Batch Information							
Analytical Batch: VFC15674 Analytical Method: AK101 Analyst: IJV Analytical Date/Time: 06/25/21 00:5 Container ID: 1213460005-A	56		Prep Batch: ` Prep Method: Prep Date/Tir Prep Initial W Prep Extract `	VXX37303 : SW5030B me: 06/24/2 t./Vol.: 5 m Vol: 5 mL	21 06:00 L		

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Results of Trip Blank

SG

Client Sample ID: **Trip Blank** Client Project ID: **Haines Station Groundwater** Lab Sample ID: 1213460005 Lab Project ID: 1213460 Collection Date: 06/16/21 11:10 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Volatile GC/MS

						Allowable	
Parameter	<u>Result Qual</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
1,1,1,2-Tetrachloroethane	0.250 U	0.500	0.150	ug/L	1		06/24/21 17:39
1,1,1-Trichloroethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
1,1,2,2-Tetrachloroethane	0.250 U	0.500	0.150	ug/L	1		06/24/21 17:39
1,1,2-Trichloroethane	0.200 U	0.400	0.120	ug/L	1		06/24/21 17:39
1,1-Dichloroethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
1,1-Dichloroethene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
1,1-Dichloropropene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
1,2,3-Trichlorobenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
1,2,3-Trichloropropane	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
1,2,4-Trichlorobenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
1,2,4-Trimethylbenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
1,2-Dibromo-3-chloropropane	5.00 U	10.0	3.10	ug/L	1		06/24/21 17:39
1,2-Dibromoethane	0.0375 U	0.0750	0.0180	ug/L	1		06/24/21 17:39
1,2-Dichlorobenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
1,2-Dichloroethane	0.250 U	0.500	0.150	ug/L	1		06/24/21 17:39
1,2-Dichloropropane	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
1,3,5-Trimethylbenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
1,3-Dichlorobenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
1,3-Dichloropropane	0.250 U	0.500	0.150	ug/L	1		06/24/21 17:39
1,4-Dichlorobenzene	0.250 U	0.500	0.150	ug/L	1		06/24/21 17:39
2,2-Dichloropropane	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
2-Butanone (MEK)	5.00 U	10.0	3.10	ug/L	1		06/24/21 17:39
2-Chlorotoluene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
2-Hexanone	5.00 U	10.0	3.10	ug/L	1		06/24/21 17:39
4-Chlorotoluene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
4-Isopropyltoluene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
4-Methyl-2-pentanone (MIBK)	5.00 U	10.0	3.10	ug/L	1		06/24/21 17:39
Benzene	0.200 U	0.400	0.120	ug/L	1		06/24/21 17:39
Bromobenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
Bromochloromethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
Bromodichloromethane	0.250 U	0.500	0.150	ug/L	1		06/24/21 17:39
Bromoform	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
Bromomethane	2.50 U	5.00	2.00	ug/L	1		06/24/21 17:39
Carbon disulfide	5.00 U	10.0	3.10	ug/L	1		06/24/21 17:39
Carbon tetrachloride	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
Chlorobenzene	0.250 U	0.500	0.150	ug/L	1		06/24/21 17:39
Chloroethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39

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Results of Trip Blank

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Client Sample ID: **Trip Blank** Client Project ID: **Haines Station Groundwater** Lab Sample ID: 1213460005 Lab Project ID: 1213460 Collection Date: 06/16/21 11:10 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Volatile GC/MS

			5		55	Allowable	
<u>Parameter</u>	Result Quai	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>		Limits	Date Analyzed
Chloromethana	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
cis-1,2-Dichloroethene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
cis-1,3-Dichloropropene	0.250 U	0.500	0.150	ug/L	1		06/24/21 17:39
	0.250 U	0.500	0.150	ug/L	1		06/24/21 17:39
Dibromomethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
Dichlorodifluoromethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
Ethylbenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
Freon-113	5.00 U	10.0	3.10	ug/L	1		06/24/21 17:39
Hexachlorobutadiene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
Isopropylbenzene (Cumene)	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
Methylene chloride	5.00 U	10.0	3.10	ug/L	1		06/24/21 17:39
Methyl-t-butyl ether	5.00 U	10.0	3.10	ug/L	1		06/24/21 17:39
Naphthalene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
n-Butylbenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
n-Propylbenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
o-Xylene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
P & M -Xylene	1.00 U	2.00	0.620	ug/L	1		06/24/21 17:39
sec-Butylbenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
Styrene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
tert-Butylbenzene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
Tetrachloroethene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
Toluene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
trans-1,2-Dichloroethene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
trans-1,3-Dichloropropene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
Trichloroethene	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
Trichlorofluoromethane	0.500 U	1.00	0.310	ug/L	1		06/24/21 17:39
Vinyl acetate	5.00 U	10.0	3.10	ug/L	1		06/24/21 17:39
Vinyl chloride	0.0750 U	0.150	0.0500	ug/L	1		06/24/21 17:39
Xylenes (total)	1.50 U	3.00	1.00	ug/L	1		06/24/21 17:39
Surrogates							
1,2-Dichloroethane-D4 (surr)	106	81-118		%	1		06/24/21 17:39
4-Bromofluorobenzene (surr)	101	85-114		%	1		06/24/21 17:39
Toluene-d8 (surr)	99.3	89-112		%	1		06/24/21 17:39

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Results of Trip Blank

Client Sample ID: **Trip Blank** Client Project ID: **Haines Station Groundwater** Lab Sample ID: 1213460005 Lab Project ID: 1213460 Collection Date: 06/16/21 11:10 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS20861 Analytical Method: SW8260D Analyst: MDT Analytical Date/Time: 06/24/21 17:39 Container ID: 1213460005-A Prep Batch: VXX37326 Prep Method: SW5030B Prep Date/Time: 06/24/21 06:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

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Slank I ah ID: 1618768	264 11/22/272021	Matrix	· Water (Surfac	e Eff Ground)
	504 [VAA/37303]	IMALIX	. Water (Sunac	e, Ell., Ground)
QC for Samples: I213460005				
Results by AK101				
<u>Parameter</u> Basoline Range Organics	<u>Results</u> 0.0500U	<u>LOQ/CL</u> 0.100	<u>DL</u> 0.0310	<u>Units</u> mg/L
urrogates I-Bromofluorobenzene (surr)	76	50-150		%
atch Information				
Analytical Batch: VFC1567 Analytical Method: AK101 Instrument: Agilent 7890 Pl Analyst: IJV Analytical Date/Time: 6/24/	4 D/FID 2021 11:07:00AM	Prep Bat Prep Me Prep Dat Prep Initi Prep Ext	ch: VXX37303 thod: SW5030B te/Time: 6/24/20 al Wt./Vol.: 5 mL ract Vol: 5 mL	21 6:00:00AM -



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213460 [VXX37303] Blank Spike Lab ID: 1618771 Date Analyzed: 06/24/2021 12:01 Spike Duplicate ID: LCSD for HBN 1213460 [VXX37303] Spike Duplicate Lab ID: 1618772 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213460005

Results by AK101									
	E	Blank Spike	e (mg/L)	S	pike Duplic	cate (mg/L)			
Parameter	Spike	Result	<u>Rec (%)</u>	Spike	Result	<u>Rec (%)</u>	CL	<u>RPD (%)</u>	RPD CL
Gasoline Range Organics	1.00	1.08	108	1.00	1.05	105	(60-120)	2.90	(< 20)
Surrogates									
4-Bromofluorobenzene (surr)	0.0500		94	0.0500		91	(50-150)	3.90	
Batch Information									
Analytical Batch: VFC15674 Analytical Method: AK101				Prep Prep	Batch: V Method:	XX37303 SW5030B			
Instrument: Agilent 7890 PID/	/FID			Prep	Date/Tim	e: 06/24/202	1 06:00		
Analyst: IJV				Spik Dup	e Init Wt./\ e Init Wt./\	/ol.: 1.00 mg /ol.: 1.00 mg	g/L Extract \ g/L Extract V	/ol: 5 mL ol: 5 mL	

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Method Blank										
Blank ID: MB for HBN 18214 Blank Lab ID: 1619367	475 [VXX/37316]	Matrix: Water (Surface, Eff., Ground)								
QC for Samples: 1213460001, 1213460002										
Results by AK101										
Parameter	<u>Results</u>	LOQ/CL	<u>DL</u>	<u>Units</u>						
Gasoline Range Organics	0.0500U	0.100	0.0310	mg/L						
Surrogates										
4-Bromofluorobenzene (surr)	88.4	50-150		%						
Batch Information										
Analytical Batch: VFC1568	1	Prep Bat	ch: VXX37316							
Analytical Method: AK101		Prep Me	thod: SW5030E	3						
Instrument: Agilent 7890A	PID/FID	Prep Dat	te/Time: 6/27/20	021 6:00:00AM						
Analyst: IJV	2021 2.40.00DM	Prep Initial Wt./Vol.: 5 mL								
Analytical Date/Time. 0/27/	2021 3.40.00FW	гтер сл	TACE VOI. STIL							



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213460 [VXX37316] Blank Spike Lab ID: 1619370 Date Analyzed: 06/27/2021 16:43 Spike Duplicate ID: LCSD for HBN 1213460 [VXX37316] Spike Duplicate Lab ID: 1619371 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213460001, 1213460002

Results by AK101			_						
	I	Blank Spike	e (mg/L)	S	pike Dupli	cate (mg/L)			
Parameter	<u>Spike</u>	Result	<u>Rec (%)</u>	Spike	Result	<u>Rec (%)</u>	CL	<u>RPD (%)</u>	RPD CL
Gasoline Range Organics	1.00	1.02	102	1.00	1.07	107	(60-120)	4.60	(< 20)
Surrogates									
4-Bromofluorobenzene (surr)	0.0500		108	0.0500		105	(50-150)	3.10	
Batch Information									
Analytical Batch: VFC15681				Prep	Batch: V	XX37316			
Analytical Method: AK101				Prep	Method:	SW5030B			
Instrument: Agilent 7890A Pl	D/FID			Prep	Date/Tim	e: 06/27/202	1 06:00		
Analyst: IJV				Spik	e Init Wt./\	/ol.: 1.00 mg	g/L Extract \	/ol: 5 mL	
				Dup	e Init Wt./\	/ol.: 1.00 mg	J/L Extract V	ol: 5 mL	

Print Date: 07/13/2021 4:49:27PM

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Method Blank	45 N/XX/272241	Motriv: Wete	r (Surface Eff. Cround)
Blank Lab ID: 1619527	015 [VXX/3/324]		r (Sunace, En., Ground)
QC for Samples: 1213460003, 1213460004			
Results by AK101)	
Parameter Gasoline Range Organics	<u>Results</u> 0.0500U		<u>Units</u> 310 mg/L
G urrogates 4-Bromofluorobenzene (surr)	70	50-150	%
atch Information			
Analytical Batch: VFC15683 Analytical Method: AK101 Instrument: Agilent 7890 PI Analyst: IJV Analytical Date/Time: 6/28/2	3 D/FID 2021 10:26:00AM	Prep Batch: VX Prep Method: S Prep Date/Time: Prep Initial Wt./N Prep Extract Vol	XX37324 GW5030B : 6/28/2021 6:00:00AM Vol.: 5 mL I: 5 mL



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213460 [VXX37324] Blank Spike Lab ID: 1619528 Date Analyzed: 06/28/2021 11:20 Spike Duplicate ID: LCSD for HBN 1213460 [VXX37324] Spike Duplicate Lab ID: 1619529 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213460003, 1213460004

Results by AK101			_						
	E	Blank Spike	e (mg/L)	s	pike Duplic	cate (mg/L)			
<u>Parameter</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	CL	<u>RPD (%)</u>	RPD CL
Gasoline Range Organics	1.00	1.01	101	1.00	1.00	100	(60-120)	0.73	(< 20)
Surrogates									
4-Bromofluorobenzene (surr)	0.0500		80	0.0500		82	(50-150)	2.30	
Batch Information									
Analytical Batch: VFC15683 Analytical Method: AK101				Prep Prep	Batch: V Method:	XX37324 SW5030B			
Instrument: Agilent 7890 PID / Analyst: IJV	FID			Prep Spik Dup	Date/Time e Init Wt./\ e Init Wt./\	e: 06/28/202 /ol.: 1.00 mg /ol.: 1.00 mg	1 06:00 g/L Extract \ g/L Extract V	/ol: 5 mL ol: 5 mL	

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Method Blank

Blank ID: MB for HBN 1821522 [VXX/37326] Blank Lab ID: 1619556 Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1213460001, 1213460002, 1213460003, 1213460004, 1213460005

Results by SW8260D				
Parameter	Results	LOQ/CL	DL	Units
1,1,1,2-Tetrachloroethane	0.250U	0.500	0.150	ug/L
1,1,1-Trichloroethane	0.500U	1.00	0.310	ug/L
1,1,2,2-Tetrachloroethane	0.250U	0.500	0.150	ug/L
1,1,2-Trichloroethane	0.200U	0.400	0.120	ug/L
1,1-Dichloroethane	0.500U	1.00	0.310	ug/L
1,1-Dichloroethene	0.500U	1.00	0.310	ug/L
1,1-Dichloropropene	0.500U	1.00	0.310	ug/L
1,2,3-Trichlorobenzene	0.500U	1.00	0.310	ug/L
1,2,3-Trichloropropane	0.500U	1.00	0.310	ug/L
1,2,4-Trichlorobenzene	0.500U	1.00	0.310	ug/L
1,2,4-Trimethylbenzene	0.500U	1.00	0.310	ug/L
1,2-Dibromo-3-chloropropane	5.00U	10.0	3.10	ug/L
1,2-Dibromoethane	0.0375U	0.0750	0.0180	ug/L
1,2-Dichlorobenzene	0.500U	1.00	0.310	ug/L
1,2-Dichloroethane	0.250U	0.500	0.150	ug/L
1,2-Dichloropropane	0.500U	1.00	0.310	ug/L
1,3,5-Trimethylbenzene	0.500U	1.00	0.310	ug/L
1,3-Dichlorobenzene	0.500U	1.00	0.310	ug/L
1,3-Dichloropropane	0.250U	0.500	0.150	ug/L
1,4-Dichlorobenzene	0.250U	0.500	0.150	ug/L
2,2-Dichloropropane	0.500U	1.00	0.310	ug/L
2-Butanone (MEK)	5.00U	10.0	3.10	ug/L
2-Chlorotoluene	0.500U	1.00	0.310	ug/L
2-Hexanone	5.00U	10.0	3.10	ug/L
4-Chlorotoluene	0.500U	1.00	0.310	ug/L
4-Isopropyltoluene	0.500U	1.00	0.310	ug/L
4-Methyl-2-pentanone (MIBK)	5.00U	10.0	3.10	ug/L
Benzene	0.200U	0.400	0.120	ug/L
Bromobenzene	0.500U	1.00	0.310	ug/L
Bromochloromethane	0.500U	1.00	0.310	ug/L
Bromodichloromethane	0.250U	0.500	0.150	ug/L
Bromoform	0.500U	1.00	0.310	ug/L
Bromomethane	2.50U	5.00	2.00	ug/L
Carbon disulfide	5.00U	10.0	3.10	ug/L
Carbon tetrachloride	0.500U	1.00	0.310	ug/L
Chlorobenzene	0.250U	0.500	0.150	ug/L
Chloroethane	0.500U	1.00	0.310	ug/L
Chloroform	0.500U	1.00	0.310	ug/L

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Method Blank

Blank ID: MB for HBN 1821522 [VXX/37326] Blank Lab ID: 1619556 Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1213460001, 1213460002, 1213460003, 1213460004, 1213460005

Results by SW8260D					
Parameter	Results	100/01	וח	l Inite	
Chloromethane	0.500U	1.00	0.310	ug/l	
cis-1.2-Dichloroethene	0.500U	1.00	0.310	ua/L	
cis-1.3-Dichloropropene	0.250U	0.500	0.150	ua/L	
Dibromochloromethane	0.250U	0.500	0.150	ug/L	
Dibromomethane	0.500U	1.00	0.310	ug/L	
Dichlorodifluoromethane	0.500U	1.00	0.310	ug/L	
Ethylbenzene	0.500U	1.00	0.310	ug/L	
Freon-113	5.00U	10.0	3.10	ug/L	
Hexachlorobutadiene	0.500U	1.00	0.310	ug/L	
Isopropylbenzene (Cumene)	0.500U	1.00	0.310	ug/L	
Methylene chloride	5.00U	10.0	3.10	ug/L	
Methyl-t-butyl ether	5.00U	10.0	3.10	ug/L	
Naphthalene	0.500U	1.00	0.310	ug/L	
n-Butylbenzene	0.500U	1.00	0.310	ug/L	
n-Propylbenzene	0.500U	1.00	0.310	ug/L	
o-Xylene	0.500U	1.00	0.310	ug/L	
P & M -Xylene	1.00U	2.00	0.620	ug/L	
sec-Butylbenzene	0.500U	1.00	0.310	ug/L	
Styrene	0.500U	1.00	0.310	ug/L	
tert-Butylbenzene	0.500U	1.00	0.310	ug/L	
Tetrachloroethene	0.500U	1.00	0.310	ug/L	
Toluene	0.500U	1.00	0.310	ug/L	
trans-1,2-Dichloroethene	0.500U	1.00	0.310	ug/L	
trans-1,3-Dichloropropene	0.500U	1.00	0.310	ug/L	
Trichloroethene	0.500U	1.00	0.310	ug/L	
Trichlorofluoromethane	0.500U	1.00	0.310	ug/L	
Vinyl acetate	5.00U	10.0	3.10	ug/L	
Vinyl chloride	0.0750U	0.150	0.0500	ug/L	
Xylenes (total)	1.50U	3.00	1.00	ug/L	
Surrogates					
1,2-Dichloroethane-D4 (surr)	103	81-118		%	
4-Bromofluorobenzene (surr)	101	85-114		%	
Toluene-d8 (surr)	98.9	89-112		%	

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Method Blank					
Blank ID: MB for HBN Blank Lab ID: 161955	I 1821522 [VXX/37326] 6	Matri	x: Water (Su	rface, Eff., Ground)	
QC for Samples: 1213460001, 12134600	02, 1213460003, 1213460004, 12	13460005			
		1			
Results by SW8260D					
Parameter	Results	LOQ/CL	<u>DL</u>	<u>Units</u>	
Results by SW8260D Parameter Batch Information	Results	LOQ/CL	DL	<u>Units</u>	
Parameter Batch Information Analytical Batch: VM	<u>Results</u> //S20861	LOQ/CL Prep Ba	<u>DL</u> itch: VXX373	<u>Units</u> 26	
Parameter Batch Information Analytical Batch: VM Analytical Method: S	<u>Results</u> AS20861 SW8260D	LOQ/CL Prep Ba Prep D	<u>DL</u> tch: VXX373 ethod: SW503	<u>Units</u> 26 30B	
Results by SW8260D Parameter Batch Information Analytical Batch: VM Analytical Method: S Instrument: VPA 780 Analyst: MDT	Results //S20861 SW8260D 0/5975 GC/MS	LOQ/CL Prep Ba Prep Ma Prep Da Prep In	DL tch: VXX373 ethod: SW503 tte/Time: 6/24	<u>Units</u> 26 30B \$/2021 6:00:00AM	

Print Date: 07/13/2021 4:49:34PM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213460 [VXX37326] Blank Spike Lab ID: 1619557 Date Analyzed: 06/24/2021 15:21 Spike Duplicate ID: LCSD for HBN 1213460 [VXX37326] Spike Duplicate Lab ID: 1619558 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213460001, 1213460002, 1213460003, 1213460004, 1213460005

Results by SW8260D Blank Spike (ug/L) Spike Duplicate (ug/L) <u>Rec (%)</u> Parameter <u>Spike</u> Rec (%) <u>Spike</u> CL RPD (%) RPD CL Result Result 1,1,1,2-Tetrachloroethane 30 29.8 30 29.7 99 99 (78-124) 0.47 (< 20) 30 30.0 100 30 30.2 1,1,1-Trichloroethane 101 (74-131) 0.63 (< 20) 1,1,2,2-Tetrachloroethane 30 30.4 101 30 30.6 102 (71 - 121)0.79 (< 20) 1,1,2-Trichloroethane 30 30.8 103 30 30.5 102 (80-119) 1.10 (< 20) 103 30.8 0.52 1.1-Dichloroethane 30 30.9 30 103 (77-125) (< 20) 1,1-Dichloroethene 30 31.4 105 30 31.2 104 (71-131) 0.35 (< 20) 1,1-Dichloropropene 30 30.7 102 30 30.7 102 (79-125)0.20 (< 20) 30 29.4 98 30 29.7 99 (69-129) 0.98 1,2,3-Trichlorobenzene (< 20) 1,2,3-Trichloropropane 30 30.4 101 30 30.8 103 (73-122) 1.20 (< 20) 30 0.60 1,2,4-Trichlorobenzene 30 29.8 99 30.0 100 (69-130) (< 20) 1,2,4-Trimethylbenzene 30 30.2 101 30 30.0 100 0.86 (79-124)(< 20) 1,2-Dibromo-3-chloropropane 30 28.8 96 30 28.6 96 (62-128) 0.45 (< 20) 1,2-Dibromoethane 30 103 30 30.6 1.40 31.0 102 (77-121)(< 20) 1.2-Dichlorobenzene 30 29.6 99 30 29.9 100 (80-119) 0.97 (< 20) 1,2-Dichloroethane 30 30.3 101 30 29.8 99 (73-128) 1.60 (< 20) 1,2-Dichloropropane 30 106 30 31.5 31.8 105 (78-122) 1.10 (< 20) 1,3,5-Trimethylbenzene 30 30.2 101 30 30.6 102 (75-124) 1.30 (< 20) 1,3-Dichlorobenzene 30 29.8 99 30 29.9 100 (80-119) 0.54 (< 20) 1,3-Dichloropropane 30 30.8 103 30 30.5 102 (80-119) 0.95 (< 20) 30 100 30 30.1 100 0.20 1,4-Dichlorobenzene 30.1 (79-118) (< 20) 2,2-Dichloropropane 30 30.2 101 30 30.2 101 (60-139)0.00 (< 20) 2-Butanone (MEK) 90 93.4 104 90 89.7 100 (56-143) 4.00 (< 20) 2-Chlorotoluene 30 30.2 101 30 30.3 101 (79-122) 0.36 (< 20) 106 2.90 2-Hexanone 90 95.4 90 92.6 103 (57-139) (< 20) 30.1 100 30 30.3 101 4-Chlorotoluene 30 (78-122) 0.79 (< 20) 4-Isopropyltoluene 30 30.2 101 30 30.6 102 (77-127) 1.40 (< 20) 4-Methyl-2-pentanone (MIBK) 90 95.2 106 90 93.1 103 (67-130) 2.20 (< 20)Benzene 30 30.3 101 30 30.1 100 (79-120) 0.50 (< 20) 30 29.6 99 30 29.9 1.00 Bromobenzene 100 (80-120) (< 20) Bromochloromethane 30 30.7 102 30 30.3 101 (78-123) 1.10 (< 20) Bromodichloromethane 30 30.6 102 30 30.3 101 (79-125) 1.00 (< 20) Bromoform 30 28.9 96 30 28.7 96 (66-130) 0.66 (< 20) Bromomethane 30 26.4 88 30 26.2 87 (53-141) 0.87 (< 20) Carbon disulfide 103 45 46.4 45 46.0 102 (64-133) 0.95 (< 20)

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1213460 [VXX37326] Blank Spike Lab ID: 1619557 Date Analyzed: 06/24/2021 15:21 Spike Duplicate ID: LCSD for HBN 1213460 [VXX37326] Spike Duplicate Lab ID: 1619558 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213460001, 1213460002, 1213460003, 1213460004, 1213460005

Results by SW8260D Blank Spike (ug/L) Spike Duplicate (ug/L) Parameter <u>Spike</u> Rec (%) <u>Spike</u> Result Rec (%) CL RPD (%) RPD CL Result 30.1 Carbon tetrachloride 30 100 30 30.6 102 (72-136) 1.70 (< 20) 30 29.8 99 30 29.6 0.47 Chlorobenzene 99 (82-118) (< 20) Chloroethane 30 34.1 114 30 33.4 111 (60-138) 2.20 (< 20) Chloroform 30 30.5 102 30 30.2 101 (79-124) 0.82 (< 20) 93 30 27.3 1.60 (< 20) Chloromethane 30 27.8 91 (50-139) cis-1,2-Dichloroethene 30 29.7 99 30 30.1 100 (78-123) 1.30 (< 20) cis-1,3-Dichloropropene 30 31.0 103 30 30.8 103 (75-124)0.45 (< 20) Dibromochloromethane 30 29.6 99 30 29.5 98 (74-126) 0.24 (< 20) Dibromomethane 30 31.0 103 30 30.5 102 (79-123) 1.60 (< 20) Dichlorodifluoromethane 30 25.3 1.60 30 257 86 84 (32-152) (< 20) Ethylbenzene 30 29.5 98 30 29.2 97 0.95 (79-121)(< 20) Freon-113 45 47.6 106 45 47.6 106 (70-136) 0.08 (< 20) Hexachlorobutadiene 30 29.1 97 30 28.5 95 (66-134) 2.00 (< 20) Isopropylbenzene (Cumene) 30 30.2 101 30 29.9 100 (72-131) 1.00 (< 20) Methylene chloride 30 32.6 109 30 32.3 108 (74-124) 1.00 (< 20) Methyl-t-butyl ether 45 46.3 103 45 46.0 (71-124) 0.65 102 (< 20) Naphthalene 30 30.9 103 30 31.1 104 (61-128) 0.71 (< 20) n-Butylbenzene 30 30.2 101 30 30.4 101 (75-128) 0.53 (< 20) n-Propylbenzene 30 30.2 101 30 30.4 101 (76-126) 0.53 (< 20) 30 29.0 97 30 28.6 95 1.30 o-Xylene (78-122) (< 20) P & M -Xylene 60 58.3 97 60 57.9 96 (80-121) 0.76 (< 20) sec-Butylbenzene 30 29.7 99 30 30.0 100 (77-126) 0.97 (< 20) Styrene 30 30.2 101 30 29.8 100 (78-123) 1.00 (< 20) tert-Butylbenzene 30 100 30 29.7 99 30.1 (78-124) 1.20 (< 20) Tetrachloroethene 29.2 97 30 29.2 97 (74-129) 0.10 30 (< 20) 30 Toluene 30 28.7 96 28.6 95 (80-121) 0.38 (< 20) trans-1,2-Dichloroethene 30 30.8 103 30 30.6 102 (75-124) 0.75 (< 20)trans-1,3-Dichloropropene 30 31.1 104 30 30.8 103 (73-127) 0.90 (< 20) Trichloroethene 30 30.3 101 30 30.4 101 0.33 (79-123) (< 20) Trichlorofluoromethane 30 29.5 98 30 29.3 98 (65-141) 0.51 (< 20) Vinyl acetate 30 32.7 109 30 32.5 108 (54-146)0.52 (< 20) Vinyl chloride 30 29.0 97 30 28.7 96 (58-137) 0.87 (< 20) Xylenes (total) 90 87.3 97 90 86.5 96 (79-121) 0.94 (< 20)

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1213460 [VXX37326] Blank Spike Lab ID: 1619557 Date Analyzed: 06/24/2021 15:21 Spike Duplicate ID: LCSD for HBN 1213460 [VXX37326] Spike Duplicate Lab ID: 1619558 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213460001, 1213460002, 1213460003, 1213460004, 1213460005

Results by SW8260D Blank Spike (%) Spike Duplicate (%) Parameter <u>Spike</u> Result <u>Rec (%)</u> <u>Spike</u> Result Rec (%) <u>CL</u> <u>RPD (%)</u> RPD CL Surrogates 1,2-Dichloroethane-D4 (surr) 99 30 97 30 (81-118) 2.30 4-Bromofluorobenzene (surr) 30 102 30 101 (85-114) 0.59 100 Toluene-d8 (surr) 30 30 100 (89-112) 0.13

Batch Information

Analytical Batch: VMS20861 Analytical Method: SW8260D Instrument: VPA 780/5975 GC/MS Analyst: MDT Prep Batch: VXX37326 Prep Method: SW5030B Prep Date/Time: 06/24/2021 06:00 Spike Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL Dupe Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL

Print Date: 07/13/2021 4:49:36PM

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Method Blank

Blank ID: MB for HBN 1821672 [VXX/37342] Blank Lab ID: 1620254 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213460003, 1213460004

Results by SW8260D

<u>Parameter</u>	<u>Results</u>	LOQ/CL	DL	<u>Units</u>
1,2,4-Trimethylbenzene	0.500U	1.00	0.310	ug/L
1,3,5-Trimethylbenzene	0.500U	1.00	0.310	ug/L
Benzene	0.200U	0.400	0.120	ug/L
Ethylbenzene	0.500U	1.00	0.310	ug/L
Naphthalene	0.500U	1.00	0.310	ug/L
n-Propylbenzene	0.500U	1.00	0.310	ug/L
o-Xylene	0.500U	1.00	0.310	ug/L
P & M -Xylene	1.00U	2.00	0.620	ug/L
Toluene	0.500U	1.00	0.310	ug/L
Xylenes (total)	1.50U	3.00	1.00	ug/L
Surrogates				
1,2-Dichloroethane-D4 (surr)	100	81-118		%
4-Bromofluorobenzene (surr)	102	85-114		%
Toluene-d8 (surr)	100	89-112		%

Batch Information

Analytical Batch: VMS20873 Analytical Method: SW8260D Instrument: Agilent 7890-75MS Analyst: MDT Analytical Date/Time: 6/30/2021 10:44:00AM Prep Batch: VXX37342 Prep Method: SW5030B Prep Date/Time: 6/30/2021 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Print Date: 07/13/2021 4:49:39PM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213460 [VXX37342] Blank Spike Lab ID: 1620255 Date Analyzed: 06/30/2021 12:08 Spike Duplicate ID: LCSD for HBN 1213460 [VXX37342] Spike Duplicate Lab ID: 1620256 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213460003, 1213460004

Results by SW8260D

	Blank Spike (ug/L)				Spike Dupli	cate (ug/L)			
<u>Parameter</u>	Spike	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	CL	<u>RPD (%)</u>	RPD CL
1,2,4-Trimethylbenzene	30	31.1	104	30	31.0	103	(79-124)	0.48	(< 20)
1,3,5-Trimethylbenzene	30	31.2	104	30	31.0	103	(75-124)	0.61	(< 20)
Benzene	30	30.1	100	30	30.0	100	(79-120)	0.30	(< 20)
Ethylbenzene	30	30.2	101	30	29.6	99	(79-121)	2.00	(< 20)
Naphthalene	30	28.9	96	30	31.7	106	(61-128)	9.20	(< 20)
n-Propylbenzene	30	31.4	105	30	31.0	103	(76-126)	1.30	(< 20)
o-Xylene	30	30.2	101	30	29.9	100	(78-122)	1.00	(< 20)
P & M -Xylene	60	59.9	100	60	59.5	99	(80-121)	0.57	(< 20)
Toluene	30	29.6	99	30	29.1	97	(80-121)	1.70	(< 20)
Xylenes (total)	90	90.1	100	90	89.4	99	(79-121)	0.72	(< 20)
Surrogates									
1,2-Dichloroethane-D4 (surr)	30		97	30		98	(81-118)	0.65	
4-Bromofluorobenzene (surr)	30		101	30		100	(85-114)	0.83	
Toluene-d8 (surr)	30		100	30		100	(89-112)	0.30	

Batch Information

Analytical Batch: VMS20873 Analytical Method: SW8260D Instrument: Agilent 7890-75MS Analyst: MDT Prep Batch: VXX37342 Prep Method: SW5030B Prep Date/Time: 06/30/2021 06:00 Spike Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL Dupe Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL

Print Date: 07/13/2021 4:49:41PM



Method Blank

Blank ID: MB for HBN 1821107 [XXX/45004] Blank Lab ID: 1617544 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213460001, 1213460002, 1213460003, 1213460004

Results by 8270D SIM LV (PAH)

Parameter	Results	LOQ/CL	<u>DL</u>	<u>Units</u>
1-Methylnaphthalene	0.0250U	0.0500	0.0150	ug/L
2-Methylnaphthalene	0.0250U	0.0500	0.0150	ug/L
Acenaphthene	0.0250U	0.0500	0.0150	ug/L
Acenaphthylene	0.0250U	0.0500	0.0150	ug/L
Anthracene	0.0250U	0.0500	0.0150	ug/L
Benzo(a)Anthracene	0.0250U	0.0500	0.0150	ug/L
Benzo[a]pyrene	0.0100U	0.0200	0.00620	ug/L
Benzo[b]Fluoranthene	0.0250U	0.0500	0.0150	ug/L
Benzo[g,h,i]perylene	0.0250U	0.0500	0.0150	ug/L
Benzo[k]fluoranthene	0.0250U	0.0500	0.0150	ug/L
Chrysene	0.0250U	0.0500	0.0150	ug/L
Dibenzo[a,h]anthracene	0.0100U	0.0200	0.00620	ug/L
Fluoranthene	0.0250U	0.0500	0.0150	ug/L
Fluorene	0.0250U	0.0500	0.0150	ug/L
Indeno[1,2,3-c,d] pyrene	0.0250U	0.0500	0.0150	ug/L
Naphthalene	0.0500U	0.100	0.0310	ug/L
Phenanthrene	0.0227J	0.0500	0.0150	ug/L
Pyrene	0.0250U	0.0500	0.0150	ug/L
Surrogates				
2-Methylnaphthalene-d10 (surr)	57.4	42-86		%
Fluoranthene-d10 (surr)	74.5	50-97		%

Batch Information

Analytical Batch: XMS12689 Analytical Method: 8270D SIM LV (PAH) Instrument: SVA Agilent 780/5975 GC/MS Analyst: LAW Analytical Date/Time: 6/23/2021 6:53:00PM Prep Batch: XXX45004 Prep Method: SW3535A Prep Date/Time: 6/21/2021 12:37:50PM Prep Initial Wt./Vol.: 250 mL Prep Extract Vol: 1 mL

Print Date: 07/13/2021 4:49:43PM

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1213460 [XXX45004] Blank Spike Lab ID: 1617545 Date Analyzed: 06/23/2021 19:14 Spike Duplicate ID: LCSD for HBN 1213460 [XXX45004] Spike Duplicate Lab ID: 1617546 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213460001, 1213460002, 1213460003, 1213460004

Results by 8270D SIM LV (PAH)

	I	Blank Spike	e (ug/L)		Spike Duplie	cate (ug/L)			
<u>Parameter</u>	Spike	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	CL	<u>RPD (%)</u>	RPD CL
1-Methylnaphthalene	2	1.47	73	2	1.27	64	(41-115)	14.30	(< 20)
2-Methylnaphthalene	2	1.44	72	2	1.23	62	(39-114)	15.60	(< 20)
Acenaphthene	2	1.67	84	2	1.48	74	(48-114)	12.10	(< 20)
Acenaphthylene	2	1.71	86	2	1.50	75	(35-121)	13.40	(< 20)
Anthracene	2	1.58	79	2	1.41	71	(53-119)	11.40	(< 20)
Benzo(a)Anthracene	2	1.32	66	2	1.13	57	* (59-120)	15.30	(< 20)
Benzo[a]pyrene	2	1.44	72	2	1.25	63	(53-120)	14.00	(< 20)
Benzo[b]Fluoranthene	2	1.31	65	2	1.12	56	(53-126)	15.50	(< 20)
Benzo[g,h,i]perylene	2	1.70	85	2	1.49	74	(44-128)	13.50	(< 20)
Benzo[k]fluoranthene	2	1.63	81	2	1.40	70	(54-125)	14.90	(< 20)
Chrysene	2	1.56	78	2	1.35	67	(57-120)	14.60	(< 20)
Dibenzo[a,h]anthracene	2	1.61	81	2	1.41	71	(44-131)	13.20	(< 20)
Fluoranthene	2	1.49	74	2	1.32	66	(58-120)	12.10	(< 20)
Fluorene	2	1.68	84	2	1.48	74	(50-118)	12.40	(< 20)
Indeno[1,2,3-c,d] pyrene	2	1.59	79	2	1.39	70	(48-130)	13.30	(< 20)
Naphthalene	2	1.42	71	2	1.22	61	(43-114)	15.10	(< 20)
Phenanthrene	2	1.63	81	2	1.46	73	(53-115)	11.00	(< 20)
Pyrene	2	1.50	75	2	1.34	67	(53-121)	11.60	(< 20)
Surrogates									
2-Methylnaphthalene-d10 (surr)	2		66	2		60	(42-86)	9.70	
Fluoranthene-d10 (surr)	2		71	2		67	(50-97)	5.90	

Batch Information

Analytical Batch: XMS12689 Analytical Method: 8270D SIM LV (PAH) Instrument: SVA Agilent 780/5975 GC/MS Analyst: LAW Prep Batch: XXX45004 Prep Method: SW3535A Prep Date/Time: 06/21/2021 12:37 Spike Init Wt./Vol.: 2 ug/L Extract Vol: 1 mL Dupe Init Wt./Vol.: 2 ug/L Extract Vol: 1 mL

Print Date: 07/13/2021 4:49:46PM

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http://www.sgs.com/terms-and abluitions

e-Sample Receipt Form

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SGS Workorder #:

1213460

1213460

Review Criteria	No, N/A Exceptions Noted below					
Chain of Custody / Temperature Requ	uirements	Y	Exemption permitte	d if sampler hand carries/del	ivers.	
Were Custody Seals intact? Note #	& location N/A	absent				
COC accompanied	samples? Yes					
DOD: Were samples received in COC corresponding	g coolers? N/A					
N/A **Exemption permitted	if chilled & colle	cted <8 hou	rs ago, or for samples v	where chilling is not required		
Temperature blank compliant* (i.e., 0-6 °C a	fter CF)? Yes	Cooler ID:	1	@ 5.4 °C Therm. ID): D60	
		Cooler ID:		@ °C Therm. ID):	
If samples received without a temperature blank, the "cooler temperature" of documented instead & "COOLER TEMP" will be noted to the right. "ambient" or "	will be "chilled" will	Cooler ID:		@ °C Therm. ID):	
be noted if neither is available.		Cooler ID:		@ °C Therm. ID):	
	0	Cooler ID:		@ °C Therm. ID):	
*It >6°C, were samples collected <8 hou	irs ago? N/A					
If 20°C were comple containers i	an france laure					
II <0°C, were sample containers i	ce free? N/A					
Note: Identify containers received at non-compliant temp	oraturo					
Use form FS-0029 if more space is	needed.					
Holding Time / Documentation / Sample Condition	Requirements	Note: Refer to	o form F-083 "Sample Guid	de" for specific holding times.		
Were samples received within holdi	ing time? Yes					
Do samples match COC ** (i.e.,sample IDs,dates/times co	ollected)? Yes					
**Note: If times differ <1hr, record details & login per	COC.					
***Note: If sample information on containers differs from COC, SGS will default t	o COC information					
Were analytical requests clear? (i.e., method is specified for	analyses Yes					
		N		ttad for motols (o a 200 8/60	204)	
Were proper containers (type/mass/volume/preservative*					<u>20AJ.</u>	
)4004.					
Volatile / LL-Hg Re	equirements					
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with s	amples? Yes					
Were all water VOA vials free of headspace (i.e., bubbles	<mark>≤ 6mm)?</mark> Yes					
Were all soil VOAs field extracted with MeO	H+BFB? N/A					
Note to Client: Any "No", answer above indicates a	non-compliance	with standa	d procedures and may	impact data quality.		
A ddition	nal notes (if a	nnlicable				
Addition		pplicable)	•			



Sample Containers and Preservatives

Container Id	Preservative	<u>Container</u> Condition	Container Id	<u>Preservative</u>	<u>Container</u> Condition
1213460001-A	No Preservative Required	ОК			
1213460001-B	No Preservative Required	ОК			
1213460001-C	HCL to $pH < 2$	ОК			
1213460001-D	HCL to $pH < 2$	ОК			
1213460001-E	HCL to $pH < 2$	ОК			
1213460001-F	HCL to $pH < 2$	ОК			
1213460001-G	HCL to $pH < 2$	ОК			
1213460001-H	HCL to $pH < 2$	ОК			
1213460002-A	No Preservative Required	ОК			
1213460002-B	No Preservative Required	ОК			
1213460002-C	HCL to $pH < 2$	ОК			
1213460002-D	HCL to $pH < 2$	ОК			
1213460002-E	HCL to $pH < 2$	ОК			
1213460002-F	HCL to $pH < 2$	ОК			
1213460002-G	HCL to $pH < 2$	ОК			
1213460002-H	HCL to $pH < 2$	ОК			
1213460003-A	No Preservative Required	ОК			
1213460003-B	No Preservative Required	ОК			
1213460003-C	HCL to $pH < 2$	ОК			
1213460003-D	HCL to $pH < 2$	ОК			
1213460003-E	HCL to $pH < 2$	ОК			
1213460003-F	HCL to $pH < 2$	ОК			
1213460003-G	HCL to $pH < 2$	ОК			
1213460003-H	HCL to $pH < 2$	ОК			
1213460004-A	No Preservative Required	ОК			
1213460004-B	No Preservative Required	ОК			
1213460004-C	HCL to $pH < 2$	ОК			
1213460004-D	HCL to $pH < 2$	ОК			
1213460004-E	HCL to $pH < 2$	ОК			
1213460004-F	HCL to $pH < 2$	ОК			
1213460004-G	HCL to $pH < 2$	ОК			
1213460004-H	HCL to $pH < 2$	ОК			
1213460005-A	HCL to pH < 2	ОК			
1213460005-B	HCL to $pH < 2$	ОК			
1213460005-C	HCL to $pH < 2$	ОК			

Container Id

<u>Preservative</u>

<u>Container</u> <u>Condition</u> Container Id

<u>Preservative</u>

Container Condition

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

OK - The container was received at an acceptable pH for the analysis requested.

 $\operatorname{\mathsf{BU}}$ - The container was received with headspace greater than 6mm.

 $\mathsf{D}\mathsf{M}$ - The container was received damaged.

 $\ensuremath{\mathsf{FR}}\xspace$ - The container was received frozen and not usable for Bacteria or BOD analyses.

IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.

NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.

PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis

requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added. QN - Insufficient sample quantity provided.

Laboratory Data Review Checklist

Completed By:

Andy Coulson

Title:

Environmental Scientist

Date:

3 August 2021

Consultant Firm:

EMI

Laboratory Name:

SGS Anchorage

Laboratory Report Number:

1213460

Laboratory Report Date:

07/13/21

CS Site Name:

Delta Western Station Haines

ADEC File Number:

1508.38.020

Hazard Identification Number:

25489

Laboratory Report Date:

07/13/21

CS Site Name:

Delta Western Station Haines

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

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

	$Yes \boxtimes No \square N/A \square Comments:$
	 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?
	$Yes \square No \square N/A \boxtimes Comments:$
	All samples analyzed at SGS Anchorage
<u>C</u>	hain of Custody (CoC)
	a. CoC information completed, signed, and dated (including released/received by)?
	Yes No N/A Comments:
	b. Correct analyses requested?
	Yes \boxtimes No \square N/A \square Comments:
. <u>L</u>	aboratory Sample Receipt Documentation
	a. Sample/cooler temperature documented and within range at receipt (0° to 6° C)?
	$\mathbf{V}_{\alpha\alpha} \boxtimes \mathbf{N}_{\alpha} \boxtimes \mathbf{N}_{\alpha} \boxtimes \mathbf{N}_{\alpha} \boxtimes \mathbf{N}_{\alpha} $

Volatile Chlorinated Solvents, etc.)?

 $Yes \boxtimes No \square N/A \square Comments:$

Laboratory Report Date:

07/13/21

CS Site Name:

Delta Western Station Haines

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

Yes \boxtimes No \square N/A \square Comments:

All samples in good condition

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, etc.?

No discrepancies noted

e. Data quality or usability affected?

Comments:

No effect on data quality or usability

- 4. Case Narrative
 - a. Present and understandable?

Yes \boxtimes No \square N/A \square Comments:

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

Yes \boxtimes No \square N/A \square Comments:

In sample 18113-MW16-061621, surrogate recovery for 4-bromofluorobenzene does not meet QC criteria due to matrix interference when analyzing for AK 101.

In the 8270 LCSD, recovery for benzo[a]anthracene did not meet QC criteria..

c. Were all corrective actions documented?

Yes \square No \boxtimes N/A \square Comments:

No corrective actions taken

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

Comments:

No effect on data quality or usability

Laboratory Report Date:

07/13/21

CS Site Name:

Delta Western Station Haines

5. <u>Samples Results</u>

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

Yes \boxtimes No \square N/A \square Comments:

b. All applicable holding times met?

Yes \boxtimes No \square N/A \square Comments:

c. All soils reported on a dry weight basis?

Yes \square No \square N/A \boxtimes Comments:

Only groundwater samples in this report

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

Yes \boxtimes No \square N/A \square Comments:

e. Data quality or usability affected?

No effect on data quality or usability

6. QC Samples

- a. Method Blank
 - i. One method blank reported per matrix, analysis and 20 samples?

Yes \boxtimes No \square N/A \square Comments:

ii. All method blank results less than limit of quantitation (LOQ) or project specified objectives?Yes⊠ No□ N/A□ Comments:

Laboratory Report Date:

07/13/21

CS Site Name:

Delta Western Station Haines

iii. If above LOQ or project specified objectives, what samples are affected? Comments:

No samples affected

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

Yes \square No \square N/A \boxtimes Comments:

No samples affected

v. Data quality or usability affected?

Comments:

No effect on data quality or usability

- 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 \boxtimes No \square N/A \square Comments:

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

Yes \square No \square N/A \boxtimes Comments:

Only organic analyses requested.

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

Yes \square No \boxtimes N/A \square Comments:

For benzo[a]anthracene, the LCSD recovery was below control limits.

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

Yes \boxtimes No \square N/A \square Comments:

Laboratory Report Date:

07/13/21

CS Site Name:

Delta Western Station Haines

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

All samples affected.

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

Yes \square No \boxtimes N/A \square Comments:

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

Comments:

No affect on data usability; benzo[a]anthracene was not detected in this report or any other report for samples collected in this project.

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

Note: Leave blank if not required for project

i. Organics - One MS/MSD reported per matrix, analysis and 20 samples?

Yes \square No \square N/A \square Comments:

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

Yes \square No \square N/A \square Comments:

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

Yes \square No \square N/A \square Comments:

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

Yes \square No \square N/A \square Comments:

Laboratory Report Date:

07/13/21

CS Site Name:

Delta Western Station Haines

- v. If %R or RPD is outside of acceptable limits, what samples are affected? Comments:
- vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes□	No□	$N/A\square$	Comments:
------	-----	--------------	-----------

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

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

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

Yes \boxtimes No \square N/A \square Comments:

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

Yes \square No \boxtimes N/A \square Comments:

Surrogate recovery for GRO for sample 18113-MW16-061621 was above control limits.

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

Yes \boxtimes No \square N/A \square Comments:

iv. Data quality or usability affected?

Comments:

No effect on data quality or usability. Surrogate failure suggests GRO results are biased high, however the result is still below groundwater cleanup levels.

Laboratory Report Date:

07/13/21

CS Site Name:

Delta Western Station Haines

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

Yes \boxtimes No \square N/A \square 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 \square No \boxtimes N/A \square Comments:

Only one cooler used to transport containers for volatile analysis used on this project.

iii. All results less than LOQ and project specified objectives?

Yes \boxtimes No \square N/A \square Comments:

iv. If above LOQ or project specified objectives, what samples are affected?

Comments:

No samples affected

v. Data quality or usability affected?

Comments:

No effect on data quality or usability.

- f. Field Duplicate
 - i. One field duplicate submitted per matrix, analysis and 10 project samples?

Yes \boxtimes No \square N/A \square Comments:

Sample 18113-MW77-061621 is a duplicate of sample 18113-MW17-061621

ii. Submitted blind to lab?

Yes \boxtimes No \square N/A \square Comments:

Laboratory Report Date:

07/13/21

CS Site Name:

Delta Western Station Haines

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

RPD (%) = Absolute value of: $(R_1-R_2)/((R_1+R_2)/2)$ x 100

Where $R_1 =$ Sample Concentration $R_2 =$ Field Duplicate Concentration

Yes \square No \boxtimes N/A \square Comments:

Sec-butylbenzene was detected at a concentration of 13.1 ug/L in sample 18113-M17-061621, but not detected above the reporting limit of 0.5 ug/L in its duplicate. All other RPDs were less than 30%.

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

No effect on data quality or usability. Both sec-butylbenzene results are well below its groundwater cleanup level of 2,000 ug/L.

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

Yes \square No \square N/A \boxtimes Comments:

Equipment blank not required by work plan.

i. All results less than LOQ and project specified objectives?

Yes \square No \square N/A \square Comments:

ii. If above LOQ or project specified objectives, what samples are affected? Comments:

iii. Data quality or usability affected?

Comments:

Laboratory Report Date:

07/13/21

CS Site Name:

Delta Western Station Haines

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

a. Defined and appropriate?

Yes \boxtimes No \square N/A \square Comments:



Laboratory Report of Analysis

To: Delta Western-Anchorage 206 E Fireweed Ln #201 Anchorage, AK 99503 907-275-4159

Report Number: 1213463

Client Project: Haines Station GW Treatment

Dear Shayla Marshall,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Alexandra at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely, SGS North America Inc.

Alexandra Daniel Project Manager Alexandra.Daniel@sgs.com

Alexandra Daniel 2021.07.09 16:12:00 -08'00'

Date

Print Date: 07/09/2021 4:00:27PM

SGS North America Inc.

200 West Potter Drive, Anchorage, AK 99518 t 907.562.2343 f 907.561.5301 www.us.sgs.com Results via Engage



Case Narrative

SGS Client: Delta Western-Anchorage SGS Project: 1213463 Project Name/Site: Haines Station GW Treatment Project Contact: Shayla Marshall

Refer to sample receipt form for information on sample condition.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

Print Date: 07/09/2021 4:00:28PM

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Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <<u>http://www.sgs.com/en/Terms-and-Conditions.aspx></u>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 DW Chemistry (Provisionally Certified as of 05/27/2021 for Mercury by EPA200.8, Nitrate as N by SM 4500NO3-F and VOCs by EPA 524.2) & Microbiology & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the

The following descriptors or qualifiers may be found in your report:

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
В	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
TNTC	Too Numerous To Count
U	Indicates the analyte was analyzed for but not detected.
Sample summaries which in All DRO/RRO analyses are	nclude a result for "Total Solids" have already been adjusted for moisture content.

Print Date: 07/09/2021 4:00:31PM

Note:



Sample Summary

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Collected</u>	<u>Received</u>	<u>Matrix</u>
18113-2021posttreatment	1213463001	06/16/2021	06/18/2021	Water (Surface, Eff., Ground)
18113-2021pretreatment	1213463002	06/16/2021	06/18/2021	Water (Surface, Eff., Ground)
Trip Blank	1213463003	06/16/2021	06/18/2021	Water (Surface, Eff., Ground)

Method AK101 SW8260D <u>Method Description</u> Gasoline Range Organics (W) Volatile Organic Compounds (W)

Print Date: 07/09/2021 4:00:32PM



Detectable Results Summary

Client Sample ID: 18113-2021pretreatment Lab Sample ID: 1213463002 Volatile GC/MS

Parameter Benzene <u>Result</u> 0.840 Units

ug/L

Print Date: 07/09/2021 4:00:34PM

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Results of 18113-2021posttreatment							
Client Sample ID: 18113-2021posttre Client Project ID: Haines Station GW Lab Sample ID: 1213463001 Lab Project ID: 1213463	C R M S	ollection Da eceived Dat atrix: Water olids (%): ocation:	llection Date: 06/16/21 13:35 ceived Date: 06/18/21 14:51 trix: Water (Surface, Eff., Grou lids (%): cation:				
Results by Volatile Fuels			_				
Parameter Gasoline Range Organics	<u>Result Qual</u> 0.0500 U	<u>LOQ/CL</u> 0.100	<u>DL</u> 0.0310	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/28/21 00:36
Surrogates							
4-Bromofluorobenzene (surr)	82.4	50-150		%	1		06/28/21 00:36
Batch Information							
Analytical Batch: VFC15681 Analytical Method: AK101 Analyst: IJV Analytical Date/Time: 06/28/21 00:36 Container ID: 1213463001-D		i i i i i i i i i i i i i i i i i i i	Prep Batch: ` Prep Method: Prep Date/Tir Prep Initial W Prep Extract `	VXX37316 SW5030B ne: 06/27/2 t./Vol.: 5 m Vol: 5 mL	21 06:00 L		

Print Date: 07/09/2021 4:00:35PM

J flagging is activated

Member of SGS Group

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Results of 18113-2021posttreatment

Client Sample ID: **18113-2021posttreatment** Client Project ID: **Haines Station GW Treatment** Lab Sample ID: 1213463001 Lab Project ID: 1213463 Collection Date: 06/16/21 13:35 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Volatile GC/MS

						Allowable	
Parameter	Result Qual	LOQ/CL	DL	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Benzene	0.200 U	0.400	0.120	ug/L	1		06/30/21 15:12
Ethylbenzene	0.500 U	1.00	0.310	ug/L	1		06/30/21 15:12
o-Xylene	0.500 U	1.00	0.310	ug/L	1		06/30/21 15:12
P & M -Xylene	1.00 U	2.00	0.620	ug/L	1		06/30/21 15:12
Toluene	0.500 U	1.00	0.310	ug/L	1		06/30/21 15:12
Xylenes (total)	1.50 U	3.00	1.00	ug/L	1		06/30/21 15:12
Surrogates							
1,2-Dichloroethane-D4 (surr)	100	81-118		%	1		06/30/21 15:12
4-Bromofluorobenzene (surr)	104	85-114		%	1		06/30/21 15:12
Toluene-d8 (surr)	98.9	89-112		%	1		06/30/21 15:12

Batch Information

Analytical Batch: VMS20873 Analytical Method: SW8260D Analyst: MDT Analytical Date/Time: 06/30/21 15:12 Container ID: 1213463001-A Prep Batch: VXX37342 Prep Method: SW5030B Prep Date/Time: 06/30/21 06:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Print Date: 07/09/2021 4:00:35PM

J flagging is activated



Results of 18113-2021pretreatment							
Client Sample ID: 18113-2021pretrea Client Project ID: Haines Station GW Lab Sample ID: 1213463002 Lab Project ID: 1213463	C R M S	ound)					
Results by Volatile Fuels			_				
Parameter Gasoline Range Organics	<u>Result Qual</u> 0.0500 U	<u>LOQ/CL</u> 0.100	<u>DL</u> 0.0310	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/28/21 00:54
Surrogates							
4-Bromofluorobenzene (surr)	87.7	50-150		%	1		06/28/21 00:54
Batch Information							
Analytical Batch: VFC15681 Analytical Method: AK101 Analyst: IJV Analytical Date/Time: 06/28/21 00:54 Container ID: 1213463002-D			Prep Batch: Prep Method: Prep Date/Tir Prep Initial W Prep Extract	VXX37316 : SW5030E ne: 06/27/2 't./Vol.: 5 m Vol: 5 mL	3 21 06:00 hL		

Print Date: 07/09/2021 4:00:35PM

J flagging is activated

Member of SGS Group

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Results of 18113-2021 pretreatment

Client Sample ID: **18113-2021pretreatment** Client Project ID: **Haines Station GW Treatment** Lab Sample ID: 1213463002 Lab Project ID: 1213463 Collection Date: 06/16/21 13:46 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Volatile GC/MS

						Allowable	
Parameter	<u>Result Qual</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Benzene	0.840	0.400	0.120	ug/L	1		06/30/21 15:27
Ethylbenzene	0.500 U	1.00	0.310	ug/L	1		06/30/21 15:27
o-Xylene	0.500 U	1.00	0.310	ug/L	1		06/30/21 15:27
P & M -Xylene	1.00 U	2.00	0.620	ug/L	1		06/30/21 15:27
Toluene	0.500 U	1.00	0.310	ug/L	1		06/30/21 15:27
Xylenes (total)	1.50 U	3.00	1.00	ug/L	1		06/30/21 15:27
Surrogates							
1,2-Dichloroethane-D4 (surr)	101	81-118		%	1		06/30/21 15:27
4-Bromofluorobenzene (surr)	102	85-114		%	1		06/30/21 15:27
Toluene-d8 (surr)	99.6	89-112		%	1		06/30/21 15:27

Batch Information

Analytical Batch: VMS20873 Analytical Method: SW8260D Analyst: MDT Analytical Date/Time: 06/30/21 15:27 Container ID: 1213463002-A Prep Batch: VXX37342 Prep Method: SW5030B Prep Date/Time: 06/30/21 06:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Print Date: 07/09/2021 4:00:35PM

J flagging is activated

Results of Trip Blank Client Sample ID: Trip Blank Client Project ID: Haines Station ab Sample ID: 1213463003 ab Project ID: 1213463	C R M S La	ollection Da eceived Dat atrix: Water olids (%): ocation:	tte: 06/16/ te: 06/18/2 ⁻(Surface,	21 13:35 21 14:51 Eff., Gro	und)		
Results by Volatile Fuels Parameter Basoline Range Organics	<u>Result Qual</u> 0.0500 U	<u>LOQ/CL</u> 0.100	<u>DL</u> 0.0310	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> Limits	<u>Date Analyzed</u> 06/25/21 01:1
rrogates -Bromofluorobenzene (surr)	74.6	50-150		%	1		06/25/21 01:1
Batch Information							
Analytical Batch: VFC15674 Analytical Method: AK101 Analyst: IJV Analytical Date/Time: 06/25/21 01: Container ID: 1213463003-A	14	F F F	Prep Batch: ` Prep Method: Prep Date/Tir Prep Initial W Prep Extract `	VXX37303 SW5030B ne: 06/24/2 t./Vol.: 5 m Vol: 5 mL	21 06:00 L		

Print Date: 07/09/2021 4:00:35PM

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200 West Potter Drive Anchorage, AK 95518 t 907.562.2343 f 907.561.5301 www.us.sgs.com J flagging is activated

Results of Trip Blank							
Client Sample ID: Trip Blank Client Project ID: Haines Station G Lab Sample ID: 1213463003 Lab Project ID: 1213463	C R M S L	ollection Da eceived Da atrix: Wate blids (%): pocation:	ate: 06/16/ te: 06/18/2 r (Surface,	21 13:35 21 14:51 Eff., Gro	5 bund)		
Results by Volatile GC/MS							
						Allowable	
<u>Parameter</u>	<u>Result</u> Qual	LOQ/CL	DL	<u>Units</u>	DF	<u>Limits</u>	Date Analyzed
Benzene	0.200 U	0.400	0.120	ug/L	1		06/30/21 14:27
Ethylbenzene	0.500 U	1.00	0.310	ug/L	1		06/30/21 14:27
o-Xylene	0.500 U	1.00	0.310	ug/L	1		06/30/21 14:27
P & M -Xylene	1.00 U	2.00	0.620	ug/L	1		06/30/21 14:27
Toluene	0.500 U	1.00	0.310	ug/L	1		06/30/21 14:27
Xylenes (total)	1.50 U	3.00	1.00	ug/L	1		06/30/21 14:27
Surrogates							
1,2-Dichloroethane-D4 (surr)	101	81-118		%	1		06/30/21 14:27
4-Bromofluorobenzene (surr)	103	85-114		%	1		06/30/21 14:27
Toluene-d8 (surr)	100	89-112		%	1		06/30/21 14:27
Batch Information Analytical Batch: VMS20873 Analytical Mathed: SW8260D			Prep Batch:	VXX37342			

Analytical Method: SW8260D Analyst: MDT Analytical Date/Time: 06/30/21 14:27 Container ID: 1213463003-A

SGS

Prep Batch: VXX37342 Prep Method: SW5030B Prep Date/Time: 06/30/21 06:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Print Date: 07/09/2021 4:00:35PM

J flagging is activated

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Method Blank					
Blank ID: MB for HBN 1821364 [VXX/37303] Blank Lab ID: 1618768		Matrix	k: Water (Surfac	ce, Eff., Ground)	
QC for Samples: 1213463003					
Results by AK101)			
Parameter	Results	LOQ/CL	<u>DL</u>	Units	
Gasoline Range Organics	0.0500U	0.100	0.0310	mg/L	
4-Bromofluorobenzene (surr)	76	50-150		%	
Analytical Batch: VFC15674 Analytical Method: AK101 Instrument: Agilent 7890 PI	1 D/FID	Prep Ba Prep Me Prep Da	tch: VXX37303 ethod: SW5030B te/Time: 6/24/20) 21 6:00:00AM	
Analyst: IJV Analytical Date/Time: 6/24/	2021 11:07:00AM	Prep Init Prep Ex	tial Wt./Vol.: 5 m tract Vol: 5 mL	L	

Print Date: 07/09/2021 4:00:37PM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213463 [VXX37303] Blank Spike Lab ID: 1618771 Date Analyzed: 06/24/2021 12:01 Spike Duplicate ID: LCSD for HBN 1213463 [VXX37303] Spike Duplicate Lab ID: 1618772 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213463003

Results by AK101									
Blank Spike			e (mg/L)	S	pike Dupli	cate (mg/L)			
<u>Parameter</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Gasoline Range Organics	1.00	1.08	108	1.00	1.05	105	(60-120)	2.90	(< 20)
Surrogates									
4-Bromofluorobenzene (surr)	0.0500		94	0.0500		91	(50-150)	3.90	
Batch Information									
Analytical Batch: VFC15674 Analytical Method: AK101				Prep Prep	Batch: V Method:	XX37303 SW5030B			
Instrument: Agilent 7890 PID Analyst: IJV	/FID			Prep Spik Dup	Date/Tim e Init Wt./\ e Init Wt./\	e: 06/24/202 /ol.: 1.00 mg /ol.: 1.00 mg	2 1 06:00 g/L Extract V g/L Extract V	Vol: 5 mL ′ol: 5 mL	

Print Date: 07/09/2021 4:00:39PM

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Method Blank Blank ID: MB for HBN 1821475 [VXX/37316] Blank Lab ID: 1619367							
		Matrix: Water (Surface, Eff., Ground)					
QC for Samples: 1213463001, 1213463002							
Results by AK101							
Parameter	Results	LOQ/CL	<u>DL</u>	<u>Units</u>			
Gasoline Range Organics	0.0500U	0.100	0.0310	mg/L			
Surrogates							
4-Bromofluorobenzene (surr)	88.4	50-150		%			
3atch Information							
Analytical Batch: VFC1568	1	Prep Ba	tch: VXX37316				
Analytical Method: AK101		Prep Me	ethod: SW5030	В			
Instrument: Agilent 7890A PID/FID Analyst: IJV Analytical Date/Time: 6/27/2021 3:48:00PM		Prep Date/Time: 6/27/2021 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 ml					

Print Date: 07/09/2021 4:00:42PM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213463 [VXX37316] Blank Spike Lab ID: 1619370 Date Analyzed: 06/27/2021 16:43 Spike Duplicate ID: LCSD for HBN 1213463 [VXX37316] Spike Duplicate Lab ID: 1619371 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213463001, 1213463002

Results by AK101			_						
	Blank Spike (r		e (mg/L)	Spike Duplicate (mg/L)					
Parameter	<u>Spike</u>	Result	<u>Rec (%)</u>	Spike	Result	<u>Rec (%)</u>	CL	<u>RPD (%)</u>	RPD CL
Gasoline Range Organics	1.00	1.02	102	1.00	1.07	107	(60-120)	4.60	(< 20)
Surrogates									
4-Bromofluorobenzene (surr)	0.0500		108	0.0500		105	(50-150)	3.10	
Batch Information									
Analytical Batch: VFC15681				Prep	Batch: V	XX37316			
Analytical Method: AK101	1 Prep Method: SW5030B								
Instrument: Agilent 7890A Pl	PID/FID Prep Date/Time: 06/27/2021 06:00								
Analyst: IJV				Spik	e Init Wt./\	/ol.: 1.00 mg	g/L Extract \	/ol: 5 mL	
				Dup	e Init Wt./V	/ol.: 1.00 mg	J/L Extract V	ol: 5 mL	

Print Date: 07/09/2021 4:00:44PM



Method Blank

Blank ID: MB for HBN 1821672 [VXX/37342] Blank Lab ID: 1620254 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213463001, 1213463003

Results by SW8260D

<u>Parameter</u>	Results	LOQ/CL	<u>DL</u>	<u>Units</u>
Benzene	0.200U	0.400	0.120	ug/L
Ethylbenzene	0.500U	1.00	0.310	ug/L
o-Xylene	0.500U	1.00	0.310	ug/L
P & M -Xylene	1.00U	2.00	0.620	ug/L
Toluene	0.500U	1.00	0.310	ug/L
Xylenes (total)	1.50U	3.00	1.00	ug/L
Surrogates				
1,2-Dichloroethane-D4 (surr)	100	81-118		%
4-Bromofluorobenzene (surr)	102	85-114		%
Toluene-d8 (surr)	100	89-112		%

Batch Information

Analytical Batch: VMS20873 Analytical Method: SW8260D Instrument: Agilent 7890-75MS Analyst: MDT Analytical Date/Time: 6/30/2021 10:44:00AM Prep Batch: VXX37342 Prep Method: SW5030B Prep Date/Time: 6/30/2021 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Print Date: 07/09/2021 4:00:46PM


Blank Spike Summary

Blank Spike ID: LCS for HBN 1213463 [VXX37342] Blank Spike Lab ID: 1620255 Date Analyzed: 06/30/2021 12:08 Spike Duplicate ID: LCSD for HBN 1213463 [VXX37342] Spike Duplicate Lab ID: 1620256 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213463001, 1213463002, 1213463003

Results by SW8260D

		Blank Spike	e (ug/L)	:	Spike Dupli	cate (ug/L)			
<u>Parameter</u>	Spike	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	CL	<u>RPD (%)</u>	RPD CL
Benzene	30	30.1	100	30	30.0	100	(79-120)	0.30	(< 20)
Ethylbenzene	30	30.2	101	30	29.6	99	(79-121)	2.00	(< 20)
o-Xylene	30	30.2	101	30	29.9	100	(78-122)	1.00	(< 20)
P & M -Xylene	60	59.9	100	60	59.5	99	(80-121)	0.57	(< 20)
Toluene	30	29.6	99	30	29.1	97	(80-121)	1.70	(< 20)
Xylenes (total)	90	90.1	100	90	89.4	99	(79-121)	0.72	(< 20)
Surrogates									
1,2-Dichloroethane-D4 (surr)	30		97	30		98	(81-118)	0.65	
4-Bromofluorobenzene (surr)	30		101	30		100	(85-114)	0.83	
Toluene-d8 (surr)	30		100	30		100	(89-112)	0.30	

Batch Information

Analytical Batch: VMS20873 Analytical Method: SW8260D Instrument: Agilent 7890-75MS Analyst: MDT Prep Batch: VXX37342 Prep Method: SW5030B Prep Date/Time: 06/30/2021 06:00 Spike Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL Dupe Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL

Print Date: 07/09/2021 4:00:48PM





SGS Environmental Services 200 West Potter Road Anchorage, AK 99518 (907) 562-2343 www.sgs.com/alaska

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	-	Andy Coulson	ONE #: 907-	-272-933	6	SEC	TION 3				F	RESE	RVATIV	E				
		PROJECT Haines Station GW PRO NAME: Treatment PER	DJECT/ SID/ :MIT #:			# C	SAMPLE TYPE:	HCI	HCI	HCI								
ľ	<u>ה</u>	REPORTS TO: Andy Coulson E-₩	AIL: acouls	on@emi-a	laska.com	O N T	Comp Grab	101)		60)								
		INVOICE TO: Delta Western P.O	OTE #: . #:			A I N	Mi (Multi- incre-	(AK	(AK	K (82								
t SA		RESERVED FOR LAB SAMPLE IDENTIFICATION	DATE MM/DD/YY	TIME HH:MM	MATRIX/ MATRIX CODE	E R S	mental)	GRO	DRO/RF 102/103	BTE)								REMARKS/ LOC ID
gemen		(AF) 18113-2021posttreatment	06/16/21	13:35	w	6	G	1		\checkmark								
Mana		2AF) 18113-2021pretreatment	06/16/21	13:46	W	6	G	1		1								
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© SGS			6/8/21	14 <u>5</u> 1	The	, (allo	R]€		See atta	ched Sai	nple Rec	elpt For	m)	(Se	ee attache	ed Sample Receipt Form)

http://www.sgs.com/terms-and ponditions

e-Sample Receipt Form

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SGS Workorder #:

1213463

1213463

Review Criteria Condition (Yes			, No, N/A Exceptions Noted below					
Chain of Custody / Temperature Require	ments	Y	es Exemption permitte	ed if sampler h	and carries/deliv	vers.		
Were Custody Seals intact? Note # & loc	ation N/A	absent						
COC accompanied same	oles? Yes							
DOD: Were samples received in COC corresponding coo	lers? N/A							
N/A **Exemption permitted if chi	illed & coll	ected <8 hou	rs ago, or for samples	where chilling	is not required			
Temperature blank compliant* (i.e., 0-6 °C after 0	CF)? Yes	Cooler ID:	1	@ 5.	4 °C Therm. ID:	D60		
		Cooler ID:		@	°C Therm. ID:			
If samples received without a temperature blank, the "cooler temperature" will be		Cooler ID:		@	°C Therm. ID:			
documented instead & "COOLER TEMP" will be noted to the right. "ambient" or "chilled" will be noted if neither is available.		Cooler ID:		@	°C Therm. ID:			
		Cooler ID:		@	°C Therm. ID:			
*If >6°C, were samples collected <8 hours ag	go? N/A				•			
If <0°C, were sample containers ice fr	ee? N/A							
		<u> </u>						
Note: Identify containers received at non-compliant temperat	ure.							
Use form FS-0029 if more space is nee	aea.							
Holding Time / Documentation / Sample Condition Regu	uirements	Note: Refer t	o form F-083 "Sample Gui	de" for specific h	olding times.			
Were samples received within holding ti	me? Yes							
Do samples match COC** (i.e., sample IDs, dates/times collected	ed)? Yes							
**Note: If times differ <1hr, record details & login per COC). 							
***Note: If sample information on containers differs from COC, SGS will default to COC	C information							
Were analytical requests clear? (i.e., method is specified for analytical	yses Yes	l						
with multiple option for analysis (Ex: BTEX, Me	tals)							
					(000.0/000	0.4.)		
Mara proper containers (ture/mara) (clume/orecom/otive***)			A <u>***Exemption perm</u>	litted for metal	s (e.g,200.8/602	<u>0A).</u>		
were proper containers (type/mass/volume/preservative a)us	sed?	l						
Volatile / LL-Hg Requi	rements	1						
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samp	les? Yes							
Were all water VOA vials free of headspace (i.e., bubbles ≤ 6m	nm)? Yes	1						
Were all soil VOAs field extracted with MeOH+B	FB? N/A							
Note to Client: Any "No", answer above indicates non-c	ompliance	with standa	d procedures and may	impact data o	quality.			
	otes /:t	n n li n n li n h						
Additional r	IUTES (IF a							



Sample Containers and Preservatives

Container Id	<u>Preservative</u>	<u>Container</u> <u>Condition</u>	Container Id	<u>Preservative</u>	<u>Container</u> <u>Condition</u>
1213463001-A	HCL to pH < 2	ОК			
1213463001-B	HCL to $pH < 2$	ОК			
1213463001-C	HCL to $pH < 2$	ОК			
1213463001-D	HCL to $pH < 2$	ОК			
1213463001-E	HCL to $pH < 2$	ОК			
1213463001-F	HCL to $pH < 2$	ОК			
1213463002-A	HCL to $pH < 2$	ОК			
1213463002-B	HCL to $pH < 2$	ОК			
1213463002-C	HCL to $pH < 2$	ОК			
1213463002-D	HCL to $pH < 2$	ОК			
1213463002-E	HCL to $pH < 2$	OK			
1213463002-F	HCL to $pH < 2$	ОК			
1213463003-A	HCL to $pH < 2$	ОК			
1213463003-B	HCL to $pH < 2$	ОК			
1213463003-C	HCL to $pH < 2$	ОК			

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

OK - The container was received at an acceptable pH for the analysis requested.

- BU The container was received with headspace greater than 6mm.
- DM The container was received damaged.
- FR The container was received frozen and not usable for Bacteria or BOD analyses.
- IC The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.
- NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.
- PA The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.
- PH The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis

requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added. QN - Insufficient sample quantity provided.

Laboratory Data Review Checklist

Completed By:

Andy Coulson

Title:

Environmental Scientist

Date:

3 August 2021

Consultant Firm:

EMI

Laboratory Name:

SGS Anchorage

Laboratory Report Number:

1213463

Laboratory Report Date:

07/09/21

CS Site Name:

Delta Western Station Haines

ADEC File Number:

1508.38.020

Hazard Identification Number:

25489

Laboratory Report Date:

07/09/21

CS Site Name:

Delta Western Station Haines

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

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

	Yes \boxtimes No \square N/A \square 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 \square No \square N/A \boxtimes Comments:
	All samples analyzed at SGS Anchorage
<u>C</u>	hain of Custody (CoC)
	a. CoC information completed, signed, and dated (including released/received by)?
	Yes \boxtimes No \square N/A \square Comments:
	b. Correct analyses requested?
	Yes \boxtimes No \square N/A \square Comments:
. <u>L</u>	aboratory Sample Receipt Documentation
	a. Sample/cooler temperature documented and within range at receipt (0° to 6° C)?

Volatile Chlorinated Solvents, etc.)?

Yes \boxtimes No \square N/A \square Comments:

Laboratory Report Date:

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v	1/	\mathbf{v}	/ 4	T

CS Site Name:

Delta Western Station Haines

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

Yes \boxtimes No \square N/A \square Comments:

All samples in good condition

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, etc.?

Yes $ NOX N/A $	Comments:	

No discrepancies noted

e. Data quality or usability affected?

Comments:

No effect on data quality or usability

4. Case Narrative

a. Present and understandable?

Yes \boxtimes No \square N/A \square Comments:

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

Yes \square No \boxtimes N/A \square Comments:

No discrepancies noted

c. Were all corrective actions documented?

Yes \square No \boxtimes N/A \square Comments:

No corrective actions taken

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

Comments:

No effect on data quality or usability

Laboratory Report Date:

07/09/21

CS Site Name:

Delta Western Station Haines

5. <u>Samples Results</u>

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

Yes \boxtimes No \square N/A \square Comments:

b. All applicable holding times met?

c. All soils reported on a dry weight basis?

Yes \square No \square N/A \boxtimes Comments:

Only groundwater samples

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

Yes \boxtimes No \square N/A \square Comments:

e. Data quality or usability affected?

No effect on data quality or usability

6. QC Samples

- a. Method Blank
 - i. One method blank reported per matrix, analysis and 20 samples?

Yes \boxtimes No \square N/A \square Comments:

ii. All method blank results less than limit of quantitation (LOQ) or project specified objectives?Yes⊠ No□ N/A□ Comments:

Laboratory Report Date:

07/09/21

CS Site Name:

Delta Western Station Haines

iii. If above LOQ or project specified objectives, what samples are affected? Comments:

No samples affected

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

Yes \square No \square N/A \boxtimes Comments:

No samples affected

v. Data quality or usability affected?

Comments:

No effect on data quality or usability

- 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 \boxtimes No \square N/A \square Comments:

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

Yes \square No \square N/A \boxtimes Comments:

Only organic analyses requested

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

Yes \boxtimes No \square N/A \square Comments:

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

Yes \boxtimes No \square N/A \square Comments:

Laboratory Report Date:

07/09/21

CS Site Name:

Delta Western Station Haines

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

No samples affected

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

Yes \square No \square N/A \boxtimes Comments:

No samples affected

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

Comments:

No effect on data quality or usability

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Note: Leave blank if not required for project

i. Organics - One MS/MSD reported per matrix, analysis and 20 samples?

Yes \square No \square N/A \square Comments:

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

Yes \square No \square N/A \square Comments:

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

Yes \square No \square N/A \square Comments:

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

Yes \square No \square N/A \square Comments:

Laboratory Report Date:

07/09/21

CS Site Name:

Delta Western Station Haines

- v. If %R or RPD is outside of acceptable limits, what samples are affected? Comments:
- vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes \square No \square N/A \square Comment
--

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

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

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

Yes \boxtimes No \square N/A \square Comments:

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

Yes \boxtimes No \square N/A \square Comments:

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

Yes \square No \square N/A \boxtimes Comments:

No samples had failed recoveries

iv. Data quality or usability affected?

Comments:

No effect on data quality or usability

Laboratory Report Date:

07/09/21

CS Site Name:

Delta Western Station Haines

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

Yes \boxtimes No \square N/A \square 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 \square No \boxtimes N/A \square Comments:

Only one cooler used to transport samples for this project

iii. All results less than LOQ and project specified objectives?

Yes \boxtimes No \square N/A \square Comments:

iv. If above LOQ or project specified objectives, what samples are affected?

Comments:

No samples affected

v. Data quality or usability affected?

Comments:

No effect on data quality or usability.

- f. Field Duplicate
 - i. One field duplicate submitted per matrix, analysis and 10 project samples?

Yes \square No \boxtimes N/A \square Comments:

These samples only intended to test effectiveness of treatment system, not to characterize site conditions

ii. Submitted blind to lab?

Yes \square No \square N/A \boxtimes Comments:

Laboratory Report Date:

07/09/21

CS Site Name:

Delta Western Station Haines

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

RPD (%) = Absolute value of: $(R_1-R_2)/((R_1+R_2)/2)$ x 100

Where $R_1 =$ Sample Concentration $R_2 =$ Field Duplicate Concentration

Yes \square No \square N/A \boxtimes Comments:

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

No effect on data quality or usability

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

Yes \square No \square N/A \boxtimes Comments:

Water was collected directly from treatment system into laboratory-provided preserved containers.

i. All results less than LOQ and project specified objectives?

Yes \square No \square N/A \boxtimes Comments:

ii. If above LOQ or project specified objectives, what samples are affected? Comments:

iii. Data quality or usability affected?

Comments:

Laboratory Report Date:

07/09/21

CS Site Name:

Delta Western Station Haines

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

a. Defined and appropriate?

Yes \boxtimes No \square N/A \square Comments:



Laboratory Report of Analysis

To: Delta Western-Anchorage 206 E Fireweed Ln #201 Anchorage, AK 99503 907-275-4159

Report Number: 1213466

Client Project: Haines Station Surface Water

Dear Shayla Marshall,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Alexandra at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely, SGS North America Inc.

Alexandra Daniel Project Manager Alexandra.Daniel@sgs.com

Alexandra Daniel 2021.07.09 16:17:02 -08'00'

Date

Print Date: 07/09/2021 4:02:44PM

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Case Narrative

SGS Client: Delta Western-Anchorage SGS Project: 1213466 Project Name/Site: Haines Station Surface Water Project Contact: Shayla Marshall

Refer to sample receipt form for information on sample condition.

LCSD for HBN 1821107 [XXX/4500 (1617546) LCSD

8270D SIM - PAH LCSD recovery for benzo[a]anthracene does not meet QC criteria.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

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Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <<u>http://www.sgs.com/en/Terms-and-Conditions.aspx></u>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 DW Chemistry (Provisionally Certified as of 05/27/2021 for Mercury by EPA200.8, Nitrate as N by SM 4500NO3-F and VOCs by EPA 524.2) & Microbiology & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the

The following descriptors or qualifiers may be found in your report:

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
В	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
TNTC	Too Numerous To Count
U	Indicates the analyte was analyzed for but not detected.
Sample summaries which i All DRO/RRO analyses are	nclude a result for "Total Solids" have already been adjusted for moisture content. • integrated per SOP.

Print Date: 07/09/2021 4:02:47PM

Note:



<u>Client Sample ID</u> 18113-SW1-061621 18113-SW3-061621 18113-SW4-061621	Lab Sample ID 1213466001 1213466002 1213466003 1213466004	Collected 06/16/2021 06/16/2021 06/16/2021	Received 06/18/2021 06/18/2021 06/18/2021	<u>Matrix</u> Water (Surface, Eff., Ground) Water (Surface, Eff., Ground) Water (Surface, Eff., Ground)
Trip Blank	1213466004	06/16/2021	06/18/2021	Water (Surface, Eff., Ground)

<u>Method</u>

EPA 602/624 EPA 625M SIM (PAH) LV AK101

Method Description

602 Aromatics by 624 (W) 625 PAH SIM GC/MS Low Volume Gasoline Range Organics (W)

Print Date: 07/09/2021 4:02:49PM



	Detectable Results Summary		
Client Sample ID: 18113-SW1-061621 Lab Sample ID: 1213466001 Polynuclear Aromatics GC/MS	<u>Parameter</u> Phenanthrene	<u>Result</u> 0.0209J	<u>Units</u> ug/L
Client Sample ID: 18113-SW3-061621 Lab Sample ID: 1213466002 Polynuclear Aromatics GC/MS	<u>Parameter</u> Phenanthrene	<u>Result</u> 0.0178J	<u>Units</u> ug/L
Client Sample ID: 18113-SW4-061621 Lab Sample ID: 1213466003 Polynuclear Aromatics GC/MS	<u>Parameter</u> Phenanthrene	<u>Result</u> 0.0360J	<u>Units</u> ug/L

Print Date: 07/09/2021 4:02:51PM

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Results of 18113-SW1-061621

Client Sample ID: **18113-SW1-061621** Client Project ID: **Haines Station Surface Water** Lab Sample ID: 1213466001 Lab Project ID: 1213466 Collection Date: 06/16/21 08:42 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Polynuclear Aromatics GC/MS

						Allowable	
Parameter	<u>Result Qual</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Limits	Date Analyzed
Acenaphthene	0.0250 U	0.0500	0.0150	ug/L	1		07/02/21 00:11
Acenaphthylene	0.0250 U	0.0500	0.0150	ug/L	1		07/02/21 00:11
Anthracene	0.0250 U	0.0500	0.0150	ug/L	1		07/02/21 00:11
Benzo(a)Anthracene	0.0250 U	0.0500	0.0150	ug/L	1		07/02/21 00:11
Benzo[a]pyrene	0.0100 U	0.0200	0.00620	ug/L	1		07/02/21 00:11
Benzo[b]Fluoranthene	0.0250 U	0.0500	0.0150	ug/L	1		07/02/21 00:11
Benzo[g,h,i]perylene	0.0250 U	0.0500	0.0150	ug/L	1		07/02/21 00:11
Benzo[k]fluoranthene	0.0250 U	0.0500	0.0150	ug/L	1		07/02/21 00:11
Chrysene	0.0250 U	0.0500	0.0150	ug/L	1		07/02/21 00:11
Dibenzo[a,h]anthracene	0.0100 U	0.0200	0.00620	ug/L	1		07/02/21 00:11
Fluoranthene	0.0250 U	0.0500	0.0150	ug/L	1		07/02/21 00:11
Fluorene	0.0250 U	0.0500	0.0150	ug/L	1		07/02/21 00:11
Indeno[1,2,3-c,d] pyrene	0.0250 U	0.0500	0.0150	ug/L	1		07/02/21 00:11
Naphthalene	0.0500 U	0.100	0.0310	ug/L	1		07/02/21 00:11
Phenanthrene	0.0209 J	0.0500	0.0150	ug/L	1		07/02/21 00:11
Pyrene	0.0250 U	0.0500	0.0150	ug/L	1		07/02/21 00:11
Surrogates							
2-Methylnaphthalene-d10 (surr)	65.9	42-86		%	1		07/02/21 00:11
Fluoranthene-d10 (surr)	76.3	50-97		%	1		07/02/21 00:11

Batch Information

Analytical Batch: XMS12708 Analytical Method: EPA 625M SIM (PAH) LV Analyst: LAW Analytical Date/Time: 07/02/21 00:11 Container ID: 1213466001-A Prep Batch: XXX45004 Prep Method: SW3535A Prep Date/Time: 06/21/21 12:37 Prep Initial Wt./Vol.: 250 mL Prep Extract Vol: 1 mL

Print Date: 07/09/2021 4:02:52PM

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SGS							
Results of 18113-SW1-061621							
Client Sample ID: 18113-SW1-061621 Client Project ID: Haines Station Sur Lab Sample ID: 1213466001 Lab Project ID: 1213466	C F M S L	collection Da Received Da Matrix: Water colids (%): ocation:	nte: 06/16/ te: 06/18/2 r (Surface,	/21 08:42 21 14:51 Eff., Grc	2 ound)		
Results by Volatile Fuels							
<u>Parameter</u> Gasoline Range Organics	<u>Result Qual</u> 0.0500 U	<u>LOQ/CL</u> 0.100	<u>DL</u> 0.0310	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/25/21 12:55
Surrogates							
4-Bromofluorobenzene (surr)	97	50-150		%	1		06/25/21 12:55
Batch Information							
Analytical Batch: VFC15672 Analytical Method: AK101 Analyst: IJV Analytical Date/Time: 06/25/21 12:55 Container ID: 1213466001-C			Prep Batch: Prep Method Prep Date/Tir Prep Initial W Prep Extract	VXX37301 : SW5030E me: 06/24/2 /t./Vol.: 5 m Vol: 5 mL	3 21 06:00 1L		

Print Date: 07/09/2021 4:02:52PM

J flagging is activated



Results of 18113-SW1-061621

Client Sample ID: **18113-SW1-061621** Client Project ID: **Haines Station Surface Water** Lab Sample ID: 1213466001 Lab Project ID: 1213466 Collection Date: 06/16/21 08:42 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Volatile GC/MS

						Allowable	
Parameter	<u>Result Qual</u>	LOQ/CL	DL	Units	DF	Limits	Date Analyzed
Benzene	0.200 U	0.400	0.120	ug/L	1		06/23/21 22:15
Ethylbenzene	0.500 U	1.00	0.310	ug/L	1		06/23/21 22:15
o-Xylene	0.500 U	1.00	0.310	ug/L	1		06/23/21 22:15
P & M -Xylene	1.00 U	2.00	0.620	ug/L	1		06/23/21 22:15
Toluene	0.500 U	1.00	0.310	ug/L	1		06/23/21 22:15
Surrogates							
1,2-Dichloroethane-D4 (surr)	105	81-118		%	1		06/23/21 22:15
4-Bromofluorobenzene (surr)	101	85-114		%	1		06/23/21 22:15
Toluene-d8 (surr)	99.6	89-112		%	1		06/23/21 22:15

Batch Information

Analytical Batch: VMS20849 Analytical Method: EPA 602/624 Analyst: JMG Analytical Date/Time: 06/23/21 22:15 Container ID: 1213466001-F Prep Batch: VXX37295 Prep Method: SW5030B Prep Date/Time: 06/23/21 06:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Print Date: 07/09/2021 4:02:52PM

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Results of 18113-SW3-061621

Client Sample ID: **18113-SW3-061621** Client Project ID: **Haines Station Surface Water** Lab Sample ID: 1213466002 Lab Project ID: 1213466 Collection Date: 06/16/21 09:15 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Polynuclear Aromatics GC/MS

						Allowable	
<u>Parameter</u>	<u>Result Qual</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Limits Date Analyzed	
Acenaphthene	0.0245 U	0.0490	0.0147	ug/L	1	07/02/21 00:32	
Acenaphthylene	0.0245 U	0.0490	0.0147	ug/L	1	07/02/21 00:32	
Anthracene	0.0245 U	0.0490	0.0147	ug/L	1	07/02/21 00:32	
Benzo(a)Anthracene	0.0245 U	0.0490	0.0147	ug/L	1	07/02/21 00:32	
Benzo[a]pyrene	0.00980 U	0.0196	0.00608	ug/L	1	07/02/21 00:32	
Benzo[b]Fluoranthene	0.0245 U	0.0490	0.0147	ug/L	1	07/02/21 00:32	
Benzo[g,h,i]perylene	0.0245 U	0.0490	0.0147	ug/L	1	07/02/21 00:32	
Benzo[k]fluoranthene	0.0245 U	0.0490	0.0147	ug/L	1	07/02/21 00:32	
Chrysene	0.0245 U	0.0490	0.0147	ug/L	1	07/02/21 00:32	
Dibenzo[a,h]anthracene	0.00980 U	0.0196	0.00608	ug/L	1	07/02/21 00:32	
Fluoranthene	0.0245 U	0.0490	0.0147	ug/L	1	07/02/21 00:32	
Fluorene	0.0245 U	0.0490	0.0147	ug/L	1	07/02/21 00:32	
Indeno[1,2,3-c,d] pyrene	0.0245 U	0.0490	0.0147	ug/L	1	07/02/21 00:32	
Naphthalene	0.0490 U	0.0980	0.0304	ug/L	1	07/02/21 00:32	
Phenanthrene	0.0178 J	0.0490	0.0147	ug/L	1	07/02/21 00:32	
Pyrene	0.0245 U	0.0490	0.0147	ug/L	1	07/02/21 00:32	
Surrogates							
2-Methylnaphthalene-d10 (surr)	67.6	42-86		%	1	07/02/21 00:32	
Fluoranthene-d10 (surr)	75.6	50-97		%	1	07/02/21 00:32	

Batch Information

Analytical Batch: XMS12708 Analytical Method: EPA 625M SIM (PAH) LV Analyst: LAW Analytical Date/Time: 07/02/21 00:32 Container ID: 1213466002-A Prep Batch: XXX45004 Prep Method: SW3535A Prep Date/Time: 06/21/21 12:37 Prep Initial Wt./Vol.: 255 mL Prep Extract Vol: 1 mL

Print Date: 07/09/2021 4:02:52PM

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SGGS Results of 18113-SW3-061621							
Client Sample ID: 18113-SW3-061621 Client Project ID: Haines Station Sur Lab Sample ID: 1213466002 Lab Project ID: 1213466	C R M S L	ollection Da eceived Da latrix: Water olids (%): ocation:	und)				
						Allowable	
Parameter Gasoline Range Organics	<u>Result Qual</u> 0.0500 U	<u>LOQ/CL</u> 0.100	<u>DL</u> 0.0310	<u>Units</u> mg/L	<u>DF</u> 1	<u>Limits</u>	Date Analyzed
Surrogates							
4-Bromofluorobenzene (surr)	89.4	50-150		%	1		06/28/21 00:00
Batch Information Analytical Batch: VFC15681 Analytical Method: AK101 Analyst: IJV			Prep Batch: Prep Method: Prep Date/Tir	VXX37316 SW5030E ne: 06/27/2	3 21 06:00		

Print Date: 07/09/2021 4:02:52PM

J flagging is activated



Results of 18113-SW3-061621

Client Sample ID: **18113-SW3-061621** Client Project ID: **Haines Station Surface Water** Lab Sample ID: 1213466002 Lab Project ID: 1213466 Collection Date: 06/16/21 09:15 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Volatile GC/MS

						Allowable	
Parameter	<u>Result Qual</u>	LOQ/CL	DL	<u>Units</u>	DF	<u>Limits</u>	Date Analyzed
Benzene	0.200 U	0.400	0.120	ug/L	1		06/23/21 22:31
Ethylbenzene	0.500 U	1.00	0.310	ug/L	1		06/23/21 22:31
o-Xylene	0.500 U	1.00	0.310	ug/L	1		06/23/21 22:31
P & M -Xylene	1.00 U	2.00	0.620	ug/L	1		06/23/21 22:31
Toluene	0.500 U	1.00	0.310	ug/L	1		06/23/21 22:31
Surrogates							
1,2-Dichloroethane-D4 (surr)	104	81-118		%	1		06/23/21 22:31
4-Bromofluorobenzene (surr)	101	85-114		%	1		06/23/21 22:31
Toluene-d8 (surr)	99.5	89-112		%	1		06/23/21 22:31

Batch Information

Analytical Batch: VMS20849 Analytical Method: EPA 602/624 Analyst: JMG Analytical Date/Time: 06/23/21 22:31 Container ID: 1213466002-F Prep Batch: VXX37295 Prep Method: SW5030B Prep Date/Time: 06/23/21 06:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Print Date: 07/09/2021 4:02:52PM

J flagging is activated



Results of 18113-SW4-061621

Client Sample ID: **18113-SW4-061621** Client Project ID: **Haines Station Surface Water** Lab Sample ID: 1213466003 Lab Project ID: 1213466 Collection Date: 06/16/21 09:25 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Polynuclear Aromatics GC/MS

						Allowable	
<u>Parameter</u>	<u>Result Qual</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Limits [<u> Date Analyzed</u>
Acenaphthene	0.0250 U	0.0500	0.0150	ug/L	1	()7/02/21 00:52
Acenaphthylene	0.0250 U	0.0500	0.0150	ug/L	1	()7/02/21 00:52
Anthracene	0.0250 U	0.0500	0.0150	ug/L	1	()7/02/21 00:52
Benzo(a)Anthracene	0.0250 U	0.0500	0.0150	ug/L	1	()7/02/21 00:52
Benzo[a]pyrene	0.0100 U	0.0200	0.00620	ug/L	1	()7/02/21 00:52
Benzo[b]Fluoranthene	0.0250 U	0.0500	0.0150	ug/L	1	()7/02/21 00:52
Benzo[g,h,i]perylene	0.0250 U	0.0500	0.0150	ug/L	1	()7/02/21 00:52
Benzo[k]fluoranthene	0.0250 U	0.0500	0.0150	ug/L	1	()7/02/21 00:52
Chrysene	0.0250 U	0.0500	0.0150	ug/L	1	()7/02/21 00:52
Dibenzo[a,h]anthracene	0.0100 U	0.0200	0.00620	ug/L	1	()7/02/21 00:52
Fluoranthene	0.0250 U	0.0500	0.0150	ug/L	1	()7/02/21 00:52
Fluorene	0.0250 U	0.0500	0.0150	ug/L	1	()7/02/21 00:52
Indeno[1,2,3-c,d] pyrene	0.0250 U	0.0500	0.0150	ug/L	1	()7/02/21 00:52
Naphthalene	0.0500 U	0.100	0.0310	ug/L	1	()7/02/21 00:52
Phenanthrene	0.0360 J	0.0500	0.0150	ug/L	1	()7/02/21 00:52
Pyrene	0.0250 U	0.0500	0.0150	ug/L	1	()7/02/21 00:52
Surrogates							
2-Methylnaphthalene-d10 (surr)	69.4	42-86		%	1	()7/02/21 00:52
Fluoranthene-d10 (surr)	79.6	50-97		%	1	()7/02/21 00:52

Batch Information

Analytical Batch: XMS12708 Analytical Method: EPA 625M SIM (PAH) LV Analyst: LAW Analytical Date/Time: 07/02/21 00:52 Container ID: 1213466003-A Prep Batch: XXX45004 Prep Method: SW3535A Prep Date/Time: 06/21/21 12:37 Prep Initial Wt./Vol.: 250 mL Prep Extract Vol: 1 mL

Print Date: 07/09/2021 4:02:52PM

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SGS Pecults of 18113 SW4 061621							
Client Sample ID: 18113-SW4-061621 Client Project ID: Haines Station Surf Lab Sample ID: 1213466003 Lab Project ID: 1213466	C R M S L	Collection Da Received Da Iatrix: Water Iolids (%): ocation:	te: 06/16/ te: 06/18/2 (Surface,	21 09:25 21 14:51 Eff., Gro	und)		
Results by Volatile Fuels						Allowable	
Parameter	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	Limits	Date Analyzed
Gasoline Range Organics	0.0500 U	0.100	0.0310	mg/L	1		06/28/21 00:18
Surrogates							
4-Bromofluorobenzene (surr)	91	50-150		%	1		06/28/21 00:18
Batch Information Analytical Batch: VFC15681 Analytical Method: AK101 Analyst: IJV Analytical Date/Time: 06/28/21 00:18 Container ID: 1213466003-C			Prep Batch: Prep Method: Prep Date/Tir Prep Initial W Prep Extract	VXX37316 SW5030B ne: 06/27/2 't./Vol.: 5 m Vol: 5 mL	21 06:00 L		

Print Date: 07/09/2021 4:02:52PM

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Results of 18113-SW4-061621

Client Sample ID: **18113-SW4-061621** Client Project ID: **Haines Station Surface Water** Lab Sample ID: 1213466003 Lab Project ID: 1213466 Collection Date: 06/16/21 09:25 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Volatile GC/MS

						Allowable	
Parameter	<u>Result Qual</u>	LOQ/CL	DL	<u>Units</u>	DF	<u>Limits</u>	Date Analyzed
Benzene	0.200 U	0.400	0.120	ug/L	1		06/23/21 22:46
Ethylbenzene	0.500 U	1.00	0.310	ug/L	1		06/23/21 22:46
o-Xylene	0.500 U	1.00	0.310	ug/L	1		06/23/21 22:46
P & M -Xylene	1.00 U	2.00	0.620	ug/L	1		06/23/21 22:46
Toluene	0.500 U	1.00	0.310	ug/L	1		06/23/21 22:46
Surrogates							
1,2-Dichloroethane-D4 (surr)	104	81-118		%	1		06/23/21 22:46
4-Bromofluorobenzene (surr)	100	85-114		%	1		06/23/21 22:46
Toluene-d8 (surr)	99.5	89-112		%	1		06/23/21 22:46

Batch Information

Analytical Batch: VMS20849 Analytical Method: EPA 602/624 Analyst: JMG Analytical Date/Time: 06/23/21 22:46 Container ID: 1213466003-F Prep Batch: VXX37295 Prep Method: SW5030B Prep Date/Time: 06/23/21 06:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Print Date: 07/09/2021 4:02:52PM

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Results of Trip Blank							
Client Sample ID: Trip Blank Client Project ID: Haines Station Surf Lab Sample ID: 1213466004 Lab Project ID: 1213466	ace Water	C R M S L	Collection Da Received Dat Matrix: Water Colids (%): Ocation:	te: 06/16/ te: 06/18/ź (Surface,	21 08:42 21 14:51 Eff., Gro	und)	
Results by Volatile Fuels							
<u>Parameter</u> Gasoline Range Organics	<u>Result Qual</u> 0.0500 U	<u>LOQ/CL</u> 0.100	<u>DL</u> 0.0310	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyze</u> 06/25/21 00:0
urrogates							
4-Bromofluorobenzene (surr)	73.5	50-150		%	1		06/25/21 00:0
Batch Information							
Analytical Batch: VFC15674 Analytical Method: AK101 Analyst: IJV Analytical Date/Time: 06/25/21 00:02 Container ID: 1213466004-A			Prep Batch: ` Prep Method: Prep Date/Tir Prep Initial W Prep Extract `	VXX37303 : SW5030E me: 06/24/2 /t./Vol.: 5 m Vol: 5 mL	3 21 06:00 IL		

Print Date: 07/09/2021 4:02:52PM

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Results of Trip Blank

SG

Client Sample ID: Trip Blank
Client Project ID: Haines Station Surface Water
Lab Sample ID: 1213466004
Lab Project ID: 1213466

Collection Date: 06/16/21 08:42 Received Date: 06/18/21 14:51 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:

Results by Volatile GC/MS

						Allowable	
<u>Parameter</u>	Result Qual	LOQ/CL	DL	<u>Units</u>	DF	<u>Limits</u>	Date Analyzed
Benzene	0.200 U	0.400	0.120	ug/L	1		06/23/21 18:12
Ethylbenzene	0.500 U	1.00	0.310	ug/L	1		06/23/21 18:12
o-Xylene	0.500 U	1.00	0.310	ug/L	1		06/23/21 18:12
P & M -Xylene	1.00 U	2.00	0.620	ug/L	1		06/23/21 18:12
Toluene	0.500 U	1.00	0.310	ug/L	1		06/23/21 18:12
Surrogates							
1,2-Dichloroethane-D4 (surr)	101	81-118		%	1		06/23/21 18:12
4-Bromofluorobenzene (surr)	101	85-114		%	1		06/23/21 18:12
Toluene-d8 (surr)	99.9	89-112		%	1		06/23/21 18:12

Batch Information

Analytical Batch: VMS20849 Analytical Method: EPA 602/624 Analyst: JMG Analytical Date/Time: 06/23/21 18:12 Container ID: 1213466004-A Prep Batch: VXX37295 Prep Method: SW5030B Prep Date/Time: 06/23/21 06:00 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Print Date: 07/09/2021 4:02:52PM

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Method Blank

Blank ID: MB for HBN 1821335 [VXX/37295] Blank Lab ID: 1618658 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213466001, 1213466002, 1213466003, 1213466004

Results by EPA 602/624

<u>Parameter</u>	Results	LOQ/CL	<u>DL</u>	<u>Units</u>
Benzene	0.200U	0.400	0.120	ug/L
Ethylbenzene	0.500U	1.00	0.310	ug/L
o-Xylene	0.500U	1.00	0.310	ug/L
P & M -Xylene	1.00U	2.00	0.620	ug/L
Toluene	0.500U	1.00	0.310	ug/L
Surrogates				
1,2-Dichloroethane-D4 (surr)	106	81-118		%
4-Bromofluorobenzene (surr)	102	85-114		%
Toluene-d8 (surr)	99.8	89-112		%

Batch Information

Analytical Batch: VMS20849 Analytical Method: EPA 602/624 Instrument: VPA 780/5975 GC/MS Analyst: JMG Analytical Date/Time: 6/23/2021 1:35:00PM Prep Batch: VXX37295 Prep Method: SW5030B Prep Date/Time: 6/23/2021 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Print Date: 07/09/2021 4:02:55PM

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Anti-Foam Blank

Blank ID: AFB for HBN 1821335 [VXX/37295 Blank Lab ID: 1618660 Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1213466001, 1213466002, 1213466003, 1213466004

Results by EPA 602/624

<u>Parameter</u>	<u>Results</u>	LOQ/CL	<u>DL</u>
Benzene	0.200U	0.400	0.120
Ethylbenzene	0.500U	1.00	0.310
o-Xylene	0.500U	1.00	0.310
P & M -Xylene	1.00U	2.00	0.620
Toluene	0.500U	1.00	0.310

Batch Information

Analytical Batch: VMS20849 Analytical Method: EPA 602/624 Instrument: VPA 780/5975 GC/MS Analyst: JMG Analytical Date/Time: 6/23/2021 6:27:00PM Prep Batch: VXX37295 Prep Method: SW5030B Prep Date/Time: 6/23/2021 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Print Date: 07/09/2021 4:02:55PM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213466 [VXX37295] Blank Spike Lab ID: 1618659 Date Analyzed: 06/23/2021 13:51 Spike Duplicate ID: LCSD for HBN 1213466 [VXX37295] Spike Duplicate Lab ID: 1618661 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213466001, 1213466002, 1213466003, 1213466004

Results by EPA 602/624

		Blank Spike	e (ug/L)	;	Spike Dupli	cate (ug/L)			
<u>Parameter</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	CL	<u>RPD (%)</u>	RPD CL
Benzene	30	29.8	99	30	29.8	99	(79-120)	0.04	(< 20)
Ethylbenzene	30	28.9	96	30	28.9	96	(79-121)	0.01	(< 20)
o-Xylene	30	28.7	96	30	28.5	95	(78-122)	0.83	(< 20)
P & M -Xylene	60	57.1	95	60	57.0	95	(80-121)	0.08	(< 20)
Toluene	30	28.3	94	30	28.3	94	(80-121)	0.09	(< 20)
Surrogates									
1,2-Dichloroethane-D4 (surr)	30		102	30		98	(81-118)	3.80	
4-Bromofluorobenzene (surr)	30		101	30		100	(85-114)	1.10	
Toluene-d8 (surr)	30		100	30		100	(89-112)	0.12	

Batch Information

Analytical Batch: VMS20849 Analytical Method: EPA 602/624 Instrument: VPA 780/5975 GC/MS Analyst: JMG Prep Batch: VXX37295 Prep Method: SW5030B Prep Date/Time: 06/23/2021 06:00 Spike Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL Dupe Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL

Print Date: 07/09/2021 4:02:57PM

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<u>Units</u> mg/L %
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Blank Spike Summary

Blank Spike ID: LCS for HBN 1213466 [VXX37301] Blank Spike Lab ID: 1618748 Date Analyzed: 06/24/2021 14:53 Spike Duplicate ID: LCSD for HBN 1213466 [VXX37301] Spike Duplicate Lab ID: 1618749 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213466001

Results by AK101									
		Blank Spike	e (mg/L)	S	pike Dupli	cate (mg/L)			
Parameter	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	CL	<u>RPD (%)</u>	RPD CL
Gasoline Range Organics	1.00	1.05	105	1.00	0.993	99	(60-120)	5.80	(< 20)
Surrogates									
4-Bromofluorobenzene (surr)	0.0500		119	0.0500		113	(50-150)	5.50	
Batch Information									
Analytical Batch: VFC15672				Pre	Batch: V	XX37301			
Analytical Method: AK101				Pre	Method:	SW5030B			
Instrument: Agilent 7890A PI	D/FID			Pre	Date/Tim	e: 06/24/202	1 06:00		
Analyst: IJV				Spik	e Init Wt./\	/ol.: 1.00 m	g/L Extract \	Vol: 5 mL	
				Dup	e Init Wt./\	/ol.: 1.00 mg	g/L Extract V	ol: 5 mL	

Print Date: 07/09/2021 4:03:02PM

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ethod Blank					
lank ID: MB for HBN 182136 lank Lab ID: 1618768	64 [VXX/37303]	Matrix	k: Water (Surfac	e, Eff., Ground)	
IC for Samples: 213466004					
esults by AK101					
P <u>arameter</u> Gasoline Range Organics	<u>Results</u> 0.0500U	<u>LOQ/CL</u> 0.100	<u>DL</u> 0.0310	<u>Units</u> mg/L	
urrogates l-Bromofluorobenzene (surr)	76	50-150		%	
atch Information					
Analytical Batch: VFC15674 Analytical Method: AK101 Instrument: Agilent 7890 PID Analyst: IJV Analytical Date/Time: 6/24/20	/FID 021 11:07:00AM	Prep Ba Prep Me Prep Da Prep Ini Prep Ex	tch: VXX37303 ethod: SW5030B te/Time: 6/24/20 tial Wt./Vol.: 5 mL tract Vol: 5 mL	21 6:00:00AM -	


Blank Spike Summary

Blank Spike ID: LCS for HBN 1213466 [VXX37303] Blank Spike Lab ID: 1618771 Date Analyzed: 06/24/2021 12:01 Spike Duplicate ID: LCSD for HBN 1213466 [VXX37303] Spike Duplicate Lab ID: 1618772 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213466004

Results by AK101									
	I	Blank Spike	e (mg/L)	S	pike Dupli	cate (mg/L)			
<u>Parameter</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Gasoline Range Organics	1.00	1.08	108	1.00	1.05	105	(60-120)	2.90	(< 20)
Surrogates									
4-Bromofluorobenzene (surr)	0.0500		94	0.0500		91	(50-150)	3.90	
Batch Information									
Analytical Batch: VFC15674				Prep	Batch: V	XX37303			
Analytical Method: AK101				Prep	Method:	SW5030B			
Instrument: Agilent 7890 PID	/FID			Prep	Date/Tim	e: 06/24/202	21 06:00		
Analyst: IJV				Spik	e Init Wt./\	/ol.: 1.00 m	g/L Extract \	Vol: 5 mL	
				Dup	e Init Wt./\	/ol.: 1.00 mg	g/L Extract V	ol: 5 mL	

Print Date: 07/09/2021 4:03:07PM

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Method Blank					
Blank ID: MB for HBN 1821 Blank Lab ID: 1619367	475 [VXX/37316]	Mati	rix: Water (Surfa	ace, Eff., Ground)	
QC for Samples: 1213466002, 1213466003					
Results by AK101					
Parameter	<u>Results</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	
Gasoline Range Organics	0.0500U	0.100	0.0310	mg/L	
Surrogates					
4-Bromofluorobenzene (surr)	88.4	50-150		%	
Batch Information					
Analytical Batch: VFC1568	1	Prep B	atch: VXX37316	6	
Analytical Method: AK101		Prep N	lethod: SW5030	В	
Instrument: Agilent 7890A	PID/FID	Prep D)ate/Time: 6/27/2	2021 6:00:00AM	
Analyst: IJV	2021 3.48.00PM	Prep Ir Prep F	ntial Wt./Vol.: 5 r	nL	
, and y total Dato, finno. 0,21,	2021 0.10.001 11	1100 -			

Print Date: 07/09/2021 4:03:10PM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213466 [VXX37316] Blank Spike Lab ID: 1619370 Date Analyzed: 06/27/2021 16:43 Spike Duplicate ID: LCSD for HBN 1213466 [VXX37316] Spike Duplicate Lab ID: 1619371 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213466002, 1213466003

Results by AK101			_						
	I	Blank Spike	e (mg/L)	S	pike Dupli	cate (mg/L)			
Parameter	<u>Spike</u>	Result	<u>Rec (%)</u>	Spike	Result	<u>Rec (%)</u>	CL	<u>RPD (%)</u>	RPD CL
Gasoline Range Organics	1.00	1.02	102	1.00	1.07	107	(60-120)	4.60	(< 20)
Surrogates									
4-Bromofluorobenzene (surr)	0.0500		108	0.0500		105	(50-150)	3.10	
Batch Information									
Analytical Batch: VFC15681				Prep	Batch: V	XX37316			
Analytical Method: AK101				Prep	Method:	SW5030B			
Instrument: Agilent 7890A PI	D/FID			Prep	Date/Tim	e: 06/27/202	1 06:00		
Analyst: IJV				Spik	e Init Wt./\	/ol.: 1.00 mg	g/L Extract \	/ol: 5 mL	
				Dup	e Init Wt./V	/ol.: 1.00 mg	J/L Extract V	ol: 5 mL	

Print Date: 07/09/2021 4:03:12PM



Method Blank

Blank ID: MB for HBN 1821107 [XXX/45004] Blank Lab ID: 1617544 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213466001, 1213466003

Results by EPA 625M SIM (PAH) LV

Parameter	Results	LOQ/CL	<u>DL</u>	<u>Units</u>
Acenaphthene	0.0250U	0.0500	0.0150	ug/L
Acenaphthylene	0.0250U	0.0500	0.0150	ug/L
Anthracene	0.0250U	0.0500	0.0150	ug/L
Benzo(a)Anthracene	0.0250U	0.0500	0.0150	ug/L
Benzo[a]pyrene	0.0100U	0.0200	0.00620	ug/L
Benzo[b]Fluoranthene	0.0250U	0.0500	0.0150	ug/L
Benzo[g,h,i]perylene	0.0250U	0.0500	0.0150	ug/L
Benzo[k]fluoranthene	0.0250U	0.0500	0.0150	ug/L
Chrysene	0.0250U	0.0500	0.0150	ug/L
Dibenzo[a,h]anthracene	0.0100U	0.0200	0.00620	ug/L
Fluoranthene	0.0250U	0.0500	0.0150	ug/L
Fluorene	0.0250U	0.0500	0.0150	ug/L
Indeno[1,2,3-c,d] pyrene	0.0250U	0.0500	0.0150	ug/L
Naphthalene	0.0500U	0.100	0.0310	ug/L
Phenanthrene	0.0227J	0.0500	0.0150	ug/L
Pyrene	0.0250U	0.0500	0.0150	ug/L
Surrogates				
2-Methylnaphthalene-d10 (surr)	57.4	42-86		%
Fluoranthene-d10 (surr)	74.5	50-97		%

Batch Information

Analytical Batch: XMS12689 Analytical Method: EPA 625M SIM (PAH) LV Instrument: SVA Agilent 780/5975 GC/MS Analyst: LAW Analytical Date/Time: 6/23/2021 6:53:00PM Prep Batch: XXX45004 Prep Method: SW3535A Prep Date/Time: 6/21/2021 12:37:50PM Prep Initial Wt./Vol.: 250 mL Prep Extract Vol: 1 mL

Print Date: 07/09/2021 4:03:14PM

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1213466 [XXX45004] Blank Spike Lab ID: 1617545 Date Analyzed: 06/23/2021 19:14 Spike Duplicate ID: LCSD for HBN 1213466 [XXX45004] Spike Duplicate Lab ID: 1617546 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213466001, 1213466002, 1213466003

Results by EPA 625M SIM (PAH) LV

		Blank Spike	e (ug/L)		Spike Dupli	cate (ug/L)			
<u>Parameter</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	Spike	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Acenaphthene	2	1.67	84	2	1.48	74	(48-114)	12.10	(< 20)
Acenaphthylene	2	1.71	86	2	1.50	75	(35-121)	13.40	(< 20)
Anthracene	2	1.58	79	2	1.41	71	(53-119)	11.40	(< 20)
Benzo(a)Anthracene	2	1.32	66	2	1.13	57	* (59-120)	15.30	(< 20)
Benzo[a]pyrene	2	1.44	72	2	1.25	63	(53-120)	14.00	(< 20)
Benzo[b]Fluoranthene	2	1.31	65	2	1.12	56	(53-126)	15.50	(< 20)
Benzo[g,h,i]perylene	2	1.70	85	2	1.49	74	(44-128)	13.50	(< 20)
Benzo[k]fluoranthene	2	1.63	81	2	1.40	70	(54-125)	14.90	(< 20)
Chrysene	2	1.56	78	2	1.35	67	(57-120)	14.60	(< 20)
Dibenzo[a,h]anthracene	2	1.61	81	2	1.41	71	(44-131)	13.20	(< 20)
Fluoranthene	2	1.49	74	2	1.32	66	(58-120)	12.10	(< 20)
Fluorene	2	1.68	84	2	1.48	74	(50-118)	12.40	(< 20)
Indeno[1,2,3-c,d] pyrene	2	1.59	79	2	1.39	70	(48-130)	13.30	(< 20)
Naphthalene	2	1.42	71	2	1.22	61	(43-114)	15.10	(< 20)
Phenanthrene	2	1.63	81	2	1.46	73	(53-115)	11.00	(< 20)
Pyrene	2	1.50	75	2	1.34	67	(53-121)	11.60	(< 20)
Surrogates									
2-Methylnaphthalene-d10 (surr)	2		66	2		60	(42-86)	9.70	
Fluoranthene-d10 (surr)	2		71	2		67	(50-97)	5.90	

Batch Information

Analytical Batch: XMS12689 Analytical Method: EPA 625M SIM (PAH) LV Instrument: SVA Agilent 780/5975 GC/MS Analyst: LAW Prep Batch: XXX45004 Prep Method: SW3535A Prep Date/Time: 06/21/2021 12:37 Spike Init Wt./Vol.: 2 ug/L Extract Vol: 1 mL Dupe Init Wt./Vol.: 2 ug/L Extract Vol: 1 mL

Print Date: 07/09/2021 4:03:16PM

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	-	CONTACT:	Andy Coulson	ONE #: 907	-272-933	6	SEC	TION 3				F	RESE	RVATIV	Έ.				- Page of
	CTION	PROJECT H NAME: V	laines Station Surface PRC PWS Vater PER	DJECT/ SID/ :MIT #:			# C	SAMPLE TYPE:	HCI	HCI	HCI	None							
	SE	REPORTS T	^{•O:} Andy Coulson	AIL: acouls	on@emi-a	alaska.com	O N T	Comp Grab	101)			()							
		INVOICE TO	^{9:} Delta Western P.o	OTE #: . #:			A I N	MI (Multi-	(AK	to (AK	(624)	H (625							
t SA		RESERVED	SAMPLE IDENTIFICATION	DATE MM/DD/YY	TIME HH:MM	MATRIX/ MATRIX CODE	E R S	mental)	GRO	DRO/RF 102/103	ТАН	TAqF							REMARKS/ LOC ID
Jemen		(LAH)	18113-SW1-061621	06/16/21	08:42	w	8	G	\checkmark		\checkmark	\checkmark							
Manag		(2AU)	18113-SW3-061621	06/16/21	09:15	W	8	G	✓		\checkmark	\checkmark							
sroup	4 2	(JARE)	18113-SW4-061621	06/16/21	09:25	w	8	G	\checkmark		\checkmark	\checkmark							
SGS G	õ	(HAC)	Trip Blank			w			✓		\checkmark								
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North		RELINQUIS	HED BY:(4)	DATE	TIME	RECEIVED	ORLA	BORATO	RY BY:			Ó	R AMB]		INT	ACT	BROKEN ABSEND
222				6/18/21	14.5)	Jac	a	ests.	Re	Γc.	(\$	See attac	hed Sam	ple Rec	elpt Forn	n) ((Se	e attache	ed Sample Receipt Form)

http://www.sgs.com/terms-and-conditions

e-Sample Receipt Form

CCC	
363	3

SGS Workorder #:

1213466

1213466

Review Criteria	Condition (Yes,	No, N/A	Exception	s Noted below	
Chain of Custody / Temperature	Requirements	Ye	Exemption permitted in	f sampler hand carries/deliv	vers.
Were Custody Seals intact? I	Note # & location N/A	absent			
COC accom	panied samples? Yes				
DOD: Were samples received in COC correspondence	ponding coolers? N/A				
N/A **Exemption pe	rmitted if chilled & colled	cted <8 hou	rs ago, or for samples wh	ere chilling is not required	
Temperature blank compliant* (i.e., 0-	6 °C after CF)? Yes	Cooler ID:	1 @	5.4 °C Therm. ID:	D60
		Cooler ID:	@	C Therm. ID:	
If samples received without a temperature blank, the "cooler tempe	rature" will be	Cooler ID:	@	C Therm. ID:	
be noted if neither is available.	ient of chilled will	Cooler ID:	@	C Therm. ID:	
		Cooler ID:	@	C Therm. ID:	
*If >6°C, were samples collected <	<8 hours ago? N/A				
If <0°C, were sample conta	iners ice free? N/A				
Note: Identify containers received at non-complian	t temperature .				
Use form FS-0029 if more sp	ace is needed.				
Holding Time / Documentation / Sample Cond Were samples received within	altion Requirements	Note: Refer to	o form F-083 "Sample Guide"	for specific holding times.	
were samples received within					
Do samples match COC** (i.e., sample IDs.dates/tin	nes collected)? Yes				
**Note: If times differ <1hr, record details & log	in per COC.				
***Note: If sample information on containers differs from COC, SGS will	default to COC information				
Were analytical requests clear? (i.e., method is specific	ed for analyses Yes				
with multiple option for analysis (Ex:	BTEX, Metals)				
		N/	A ***Exemption permitte	ed for metals (e.g,200.8/602	0A <u>).</u>
Were proper containers (type/mass/volume/preserv	/ative***)used? Yes		"		
Volatile / LL-I	Hg Requirements				
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler	with samples? Yes				
Were all water VOA vials free of headspace (i.e., bu	bbles ≤ 6mm)? <mark>Yes</mark>				
Were all soil VOAs field extracted with	h MeOH+BFB? N/A				
Note to Client: Any "No", answer above ind	icates non-compliance	with standar	d procedures and may im	pact data quality.	
A	dditional notes (if a	pplicable)	:		



Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	Container Condition	<u>Container Id</u>	<u>Preservative</u>	<u>Container</u> <u>Condition</u>
1213466001-A	No Preservative Required	ОК			
1213466001-B	No Preservative Required	OK			
1213466001-C	HCL to pH < 2	OK			
1213466001-D	HCL to $pH < 2$	OK			
1213466001-E	HCL to $pH < 2$	OK			
1213466001-F	HCL to $pH < 2$	OK			
1213466001-G	HCL to pH < 2	OK			
1213466001-H	HCL to $pH < 2$	OK			
1213466002-A	No Preservative Required	OK			
1213466002-B	No Preservative Required	OK			
1213466002-C	HCL to pH < 2	OK			
1213466002-D	HCL to $pH < 2$	OK			
1213466002-E	HCL to $pH < 2$	OK			
1213466002-F	HCL to $pH < 2$	OK			
1213466002-G	HCL to pH < 2	OK			
1213466002-H	HCL to $pH < 2$	OK			
1213466003-A	No Preservative Required	OK			
1213466003-B	No Preservative Required	OK			
1213466003-C	HCL to $pH < 2$	OK			
1213466003-D	HCL to $pH < 2$	OK			
1213466003-E	HCL to $pH < 2$	OK			
1213466003-F	HCL to $pH < 2$	OK			
1213466003-G	HCL to $pH < 2$	OK			
1213466003-H	HCL to $pH < 2$	ОК			
1213466004-A	HCL to $pH < 2$	OK			
1213466004-B	HCL to pH < 2	ОК			

Container Condition Glossary

1213466004-C

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

OK

OK - The container was received at an acceptable pH for the analysis requested.

- BU The container was received with headspace greater than 6mm.
- DM The container was received damaged.

HCL to pH < 2

FR - The container was received frozen and not usable for Bacteria or BOD analyses.

IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.

NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.

PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis

requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added. QN - Insufficient sample quantity provided.

Laboratory Data Review Checklist

Completed By:

Andy Coulson

Title:

Environmental Scientist

Date:

3 August 2021

Consultant Firm:

EMI

Laboratory Name:

SGS Anchorage

Laboratory Report Number:

1213466

Laboratory Report Date:

07/09/2021

CS Site Name:

Delta Western Station Haines

ADEC File Number:

1508.38.020

Hazard Identification Number:

25489

Laboratory Report Date:

07/09/2021

CS Site Name:

Delta Western Station Haines

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

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

	Yes \boxtimes No \square N/A \square 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 \square No \square N/A \boxtimes Comments:
	All samples analyzed at SGS Anchorage
<u>C</u>	hain of Custody (CoC)
	a. CoC information completed, signed, and dated (including released/received by)?
	Yes \boxtimes No \square N/A \square Comments:
	b. Correct analyses requested?
	Yes \boxtimes No \square N/A \square Comments:
. <u>L</u>	aboratory Sample Receipt Documentation
	a. Sample/cooler temperature documented and within range at receipt (0° to 6° C)?
	Yes \boxtimes No \square N/A \square Comments:

Volatile Chlorinated Solvents, etc.)?

Yes \boxtimes No \square N/A \square Comments:

Laboratory Report Date:

 07/09/2021

 CS Site Name:

 Delta Western Station Haines

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

 Yes⊠ No□ N/A□ Comments:

 All samples in good condition

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, etc.?

Yes \square No \square N/A \boxtimes Com
--

No discrepancies noted.

e. Data quality or usability affected?

Comments:

No effect on data quality or usability

- 4. Case Narrative
 - a. Present and understandable?

Yes \boxtimes No \square N/A \square Comments:

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

Yes \boxtimes No \square N/A \square Comments:

8270D SIM - PAH LCSD recovery for benzo[a]anthracene does not meet QC criteria.

c. Were all corrective actions documented?

Yes \square No \square N/A \boxtimes Comments:

No corrective actions taken

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

Comments:

No effect on data quality or usability. LCS recovery and LCS/LCSD RPD were within limits.

Laboratory Report Date:

07/09/2021

CS Site Name:

Delta Western Station Haines

5. <u>Samples Results</u>

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

Yes \boxtimes No \square N/A \square Comments:

b. All applicable holding times met?

c. All soils reported on a dry weight basis?

Yes \square No \square N/A \boxtimes Comments:

Only water samples in this report

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

Yes \boxtimes No \square N/A \square Comments:

e. Data quality or usability affected?

No effect on data quality or usability

6. QC Samples

a. Method Blank

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

Yes \boxtimes No \square N/A \square Comments:

ii. All method blank results less than limit of quantitation (LOQ) or project specified objectives?

Yes \boxtimes No \square N/A \square Comments:

Phenanthrene had an estimated detection below the LOQ in the method blank.

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Delta Western Station Haines

iii. If above LOQ or project specified objectives, what samples are affected? Comments:

All samples affected

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

Yes \square No \boxtimes N/A \square Comments:

v. Data quality or usability affected?

Comments:

No effect on data quality or usability

- 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 \boxtimes No \square N/A \square Comments:

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

Yes \square No \square N/A \boxtimes Comments:

No inorganic analyses requested

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

Yes \square No \boxtimes N/A \square Comments:

8270D SIM - PAH LCSD recovery for benzo[a]anthracene was below control limits. LCS was within,

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

Yes \boxtimes No \square N/A \square Comments:

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

All samples affected

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

Yes \square No \boxtimes N/A \square Comments:

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

Comments:

No effect on data quality or usability. LCS recovery and LCS/CSD RPD were both within control limits.

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

Note: Leave blank if not required for project

i. Organics - One MS/MSD reported per matrix, analysis and 20 samples?

Yes \square No \square N/A \square Comments:

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

Yes \square No \square N/A \square Comments:

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

Yes \square No \square N/A \square Comments:

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

Yes \square No \square N/A \square Comments:

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- v. If %R or RPD is outside of acceptable limits, what samples are affected? Comments:
- vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes \square No \square N/A \square Comment
--

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

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

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

Yes \boxtimes No \square N/A \square Comments:

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

Yes \boxtimes No \square N/A \square Comments:

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

Yes \square No \square N/A \boxtimes Comments:

No samples had failed recoveries

iv. Data quality or usability affected?

Comments:

No effect on data quality or usability

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CS Site Name:

Delta Western Station Haines

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

Yes \boxtimes No \square N/A \square 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 \square No \square N/A \boxtimes Comments:

Only one cooler used to transport sample containers for volatile analyses for this project.

iii. All results less than LOQ and project specified objectives?

Yes \boxtimes No \square N/A \square Comments:

iv. If above LOQ or project specified objectives, what samples are affected?

Comments:

No samples affected

v. Data quality or usability affected?

Comments:

No effect on data quality or usability

- f. Field Duplicate
 - i. One field duplicate submitted per matrix, analysis and 10 project samples?

Yes \boxtimes No \square N/A \square Comments:

Samples 18113-SW3-061621 and 18113-SW4-061621 were duplicates

ii. Submitted blind to lab?

Yes \boxtimes No \square N/A \square Comments:

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Delta Western Station Haines

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

RPD (%) = Absolute value of: $(R_1-R_2)/((R_1+R_2)/2)$ x 100

Where $R_1 =$ Sample Concentration $R_2 =$ Field Duplicate Concentration

Yes \square No \boxtimes N/A \square Comments:

RPD for phenanthrene was 68%

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

No effect on data usability; water is still below 18 AAC 60 action levels for TAqH.

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

Yes \square No \square N/A \boxtimes Comments:

Equipment blank not required by work plan

i. All results less than LOQ and project specified objectives?

Yes \square No \square N/A \square Comments:

ii. If above LOQ or project specified objectives, what samples are affected? Comments:

iii. Data quality or usability affected?

Comments:

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CS Site Name:

Delta Western Station Haines

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

a. Defined and appropriate?

Yes \boxtimes No \square N/A \square Comments:



Laboratory Report of Analysis

To: Delta Western-Anchorage 206 E Fireweed Ln #201 Anchorage, AK 99503 907-275-4159

Report Number: 1213470

Client Project: Haines Station Used GAC

Dear Shayla Marshall,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Alexandra at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely, SGS North America Inc.

Alexandra Daniel Project Manager Alexandra.Daniel@sgs.com

Alexandra Daniel 2021.07.02 16:43:30 -08'00'

Date

Print Date: 07/02/2021 1:28:56PM

SGS North America Inc.

200 West Potter Drive, Anchorage, AK 99518 t 907.562.2343 f 907.561.5301 www.us.sgs.com Results via Engage

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Case Narrative

SGS Client: **Delta Western-Anchorage** SGS Project: **1213470** Project Name/Site: **Haines Station Used GAC** Project Contact: **Shayla Marshall**

Refer to sample receipt form for information on sample condition.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

Print Date: 07/02/2021 1:28:58PM

SGS North America Inc.

200 West Potter Drive, Anchorage, AK 99518 t 907.562.2343 f 907.561.5301 www.us.sgs.com

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Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <<u>http://www.sgs.com/en/Terms-and-Conditions.aspx></u>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 DW Chemistry (Provisionally Certified as of 05/27/2021 for Mercury by EPA200.8, Nitrate as N by SM 4500NO3-F and VOCs by EPA 524.2) & Microbiology & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the

The following descriptors or qualifiers may be found in your report:

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
В	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
TNTC	Too Numerous To Count
U	Indicates the analyte was analyzed for but not detected.
Sample summaries which i All DRO/RRO analyses are	nclude a result for "Total Solids" have already been adjusted for moisture content. • integrated per SOP.

Print Date: 07/02/2021 1:29:00PM

Note:



Sample Summary								
Client Sample ID 18113-GAC21	<u>Lab Sample ID</u> 1213470001	<u>Collected</u> 06/15/2021	<u>Received</u> 06/18/2021	<u>Matrix</u> Solid/Soil (Wet Weight)				
<u>Method</u> SW8260D TCLP	<u>Method Des</u> TCLP Volati	<u>cription</u> le Organic Compo	ounds 8260					

Print Date: 07/02/2021 1:29:01PM

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Results of 18113-GAC21

Client Sample ID: 18113-GAC21 Collection Date: 06/15/21 16:42 Received Date: 06/18/21 14:51 Client Project ID: Haines Station Used GAC Matrix: Solid/Soil (Wet Weight) Lab Sample ID: 1213470001 Lab Project ID: 1213470 Solids (%): Location: Results by TCLP Volatiles GC/MS Allowable Parameter Result Qual LOQ/CL DL Units DF Date Analyzed <u>Limits</u> 0.0100 U Benzene 0.0200 0.00600 mg/L 50 (<0.5) 07/01/21 22:28 Surrogates 1,2-Dichloroethane-D4 (surr) 108 81-118 % 50 07/01/21 22:28 4-Bromofluorobenzene (surr) 101 85-114 % 50 07/01/21 22:28 Toluene-d8 (surr) 104 89-112 50 07/01/21 22:28 % **Batch Information** Analytical Batch: VMS20872 Prep Batch: VXX37341 Analytical Method: SW8260D TCLP Prep Method: SW5030B Analyst: JMG Prep Date/Time: 07/01/21 06:00 Analytical Date/Time: 07/01/21 22:28 Prep Initial Wt./Vol.: 5 mL Container ID: 1213470001-A Prep Extract Vol: 5 mL

Print Date: 07/02/2021 1:29:04PM

J flagging is activated

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Method Blank

Blank ID: MB for HBN 1821666 [VXX/37341] Blank Lab ID: 1620234

QC for Samples: 1213470001

Results by SW8260D TCLP

	5.0002000	0.000400	0.000120	mg/L
Surrogates				
1,2-Dichloroethane-D4 (surr) 1	107	81-118		%
4-Bromofluorobenzene (surr) 1	101	85-114		%
Toluene-d8 (surr) 1	103	89-112		%

Batch Information

Analytical Batch: VMS20872 Analytical Method: SW8260D TCLP Instrument: VPA 780/5975 GC/MS Analyst: JMG Analytical Date/Time: 7/1/2021 3:48:00PM Prep Batch: VXX37341 Prep Method: SW5030B Prep Date/Time: 7/1/2021 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Matrix: Water (Surface, Eff., Ground)

Leaching Blank

SG

Blank ID: LB for HBN 1821510 [TCLP/11252 Blank Lab ID: 1619514

QC for Samples: 1213470001

Results by SW8260D TCLP

Parameter	Results	LOQ/CL	DL	Units
Benzene	0.0100U	0.0200	0.00600	mg/L
Surrogates				
1,2-Dichloroethane-D4 (surr)	108	81-118		%
4-Bromofluorobenzene (surr)	100	85-114		%
Toluene-d8 (surr)	103	89-112		%

Batch Information

Analytical Batch: VMS20872 Analytical Method: SW8260D TCLP Instrument: VPA 780/5975 GC/MS Analyst: JMG Analytical Date/Time: 7/1/2021 7:40:00PM Prep Batch: VXX37341 Prep Method: SW5030B Prep Date/Time: 7/1/2021 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Matrix: Water (Surface, Eff., Ground)

Leaching Blank

SG

Blank ID: LB for HBN 1821540 [TCLP/11254 Blank Lab ID: 1619619

QC for Samples: 1213470001

Results by SW8260D TCLP

<u>Parameter</u>	Results	LOQ/CL	<u>DL</u>	<u>Units</u>
Benzene	0.0100U	0.0200	0.00600	mg/L
Surrogates				
1,2-Dichloroethane-D4 (surr)	106	81-118		%
4-Bromofluorobenzene (surr)	101	85-114		%
Toluene-d8 (surr)	104	89-112		%

Batch Information

Analytical Batch: VMS20872 Analytical Method: SW8260D TCLP Instrument: VPA 780/5975 GC/MS Analyst: JMG Analytical Date/Time: 7/1/2021 7:55:00PM Prep Batch: VXX37341 Prep Method: SW5030B Prep Date/Time: 7/1/2021 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Matrix: Water (Surface, Eff., Ground)

Leaching Blank

SG

Blank ID: LB for HBN 1821629 [TCLP/11258 Blank Lab ID: 1620070

QC for Samples: 1213470001

Results by SW8260D TCLP

<u>Parameter</u>	Results	LOQ/CL	DL	<u>Units</u>
Benzene	0.0100U	0.0200	0.00600	mg/L
Surrogates				
1,2-Dichloroethane-D4 (surr)	106	81-118		%
4-Bromofluorobenzene (surr)	100	85-114		%
Toluene-d8 (surr)	103	89-112		%

Batch Information

Analytical Batch: VMS20872 Analytical Method: SW8260D TCLP Instrument: VPA 780/5975 GC/MS Analyst: JMG Analytical Date/Time: 7/1/2021 8:11:00PM Prep Batch: VXX37341 Prep Method: SW5030B Prep Date/Time: 7/1/2021 6:00:00AM Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 5 mL

Matrix: Water (Surface, Eff., Ground)



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213470 [VXX37341] Blank Spike Lab ID: 1620235 Date Analyzed: 07/01/2021 16:03 Spike Duplicate ID: LCSD for HBN 1213470 [VXX37341] Spike Duplicate Lab ID: 1620236 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213470001

Results by SW8260D TCLP

	i	Blank Spike	e (mg/L)	S	pike Duplic	cate (mg/L)			
Parameter	Spike	Result	Rec (%)	Spike	Result	<u>Rec (%)</u>	CL	<u>RPD (%)</u>	RPD CL
Benzene	0.0300	0.0286	96	0.0300	0.0281	94	(79-120)	1.90	(< 20)
Surrogates									
1,2-Dichloroethane-D4 (surr)	0.0300		100	0.0300		100	(81-118)	0.19	
4-Bromofluorobenzene (surr)	0.0300		100	0.0300		101	(85-114)	0.74	
Toluene-d8 (surr)	0.0300		104	0.0300		104	(89-112)	0.53	

Batch Information

Analytical Batch: VMS20872 Analytical Method: SW8260D TCLP Instrument: VPA 780/5975 GC/MS Analyst: JMG Prep Batch: VXX37341 Prep Method: SW5030B Prep Date/Time: 07/01/2021 06:00 Spike Init Wt./Vol.: 0.0300 mg/L Extract Vol: 5 mL Dupe Init Wt./Vol.: 0.0300 mg/L Extract Vol: 5 mL

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J	U	J)	

MERICA INC. CHAIN OF CUSTODY RECORD

SGS Environmental Services 200 West Potter Road Anchorage, AK 99518 (907) 562-2343 www.sgs.com/alaska

				ME	RICA ING 34	С. Сн ∍ 5 (ain C ₂9 5	DF CU: VE	STOD	Y REG	SOR	D	-			(907) 5 www.s	6 2-2343 gs.com/alaska
		CLIENT: EMI					INST OMI	RUCTIOI SSIONS	NS: SEC MAY DI	TIONS	1-5 N HE O	IUST E NSET	BE FIL OF AN	LED NALY:	OUT. SIS.		Page 1 of
		Andy Coulson 907-272-9336			SEC	FION 3				PRESE	RVATIN	/E				· ugo of	
0120-		PROJECT NAME: Haines Station Used GAC PW PEF	CT Haines Station Used GAC PROJECT/ PWSID/ PERMIT #:			# C	SAMPLE TYPE:	None									
Ċ	ที	REPORTS TO: Andy Coulson E-MAIL: acoulson@emi-alaska.com					Comp Grab MI (Multi- incre-	zene									
		INVOICE TO: Delta Western P.o. #:			o Ben												
tt SA		RESERVED FOR LAB SAMPLE IDENTIFICATION	DATE MM/DD/YY	TIME HH:MM	MATRIX/ MATRIX CODE	E R S	mental)	TCLF									REMARKS/ LOC ID
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S North A		RELINQUISHED BY:(4)	DATE	TIME	RECEIVED	ORLA	IORATO	RY BY:		0 <u>00</u>	DR AM	BIENT [<u></u>		INT	ACT	BROKEN ABSENT
© SG			6/18/21	14:51	The	14	W.	KJZ.		(See atta	ched Sa	mple Rec	elpt Forr	n)	(Se	e attache	d Sample Receipt Form)

http://www.sgs.com/terms-and-panditions



Date Characterized: 6/18/21

Characterization of TCLP Samples for LIMS Login

 Analyst: RJC

Sample Container ID:	Matrix	%	ls sufficient volume/mass available?	Notes:			
	Xylene miscible (Top layer * = matrix 3 **)			If multiple jars were received, were they consistent? Yes / No / NA If biphasic, was there only one layer with sufficient samp			
8 13-GAC21	Water miscible (Middle layer = matrix 6)		Yesy No	Yes / No / NA Sample description/other observations:			
	Solid (Bottom layer = matrix 7 or 2 if % solids required)	100		**Are samples Glycol or Solvent in appearance or odor? If yes schedule TCLP Metals matrix 6 acode.			
	Xylene miscible (Top layer * = matrix 3 **)			If multiple jars were received, were they consistent? Yes / No / NA If biphasic, was there only one layer with sufficient sample			
	Water miscible (Middle layer = matrix 6)		Yes / No	? Yes / No / NA Sample description/other observations: **Are samples Glycol or Solvent in appearance or odor? If yes schedule TCLP Metals matrix 6 acode.			
	Solid (Bottom layer = matrix 7 or 2 if % solids required)						
	Xylene miscible (Top layer * = matrix 3 **)			If multiple jars were received, were they consistent? Yes / No / NA If biphasic, was there only one layer with sufficient sample			
	Water miscible (Middle layer = matrix 6)		Yes / No	Yes / No / NA Sample description/other observations:			
	Solid (Bottom layer = matrix 7 or 2 if % solids required)			**Are samples Glycol or Solvent in appearance or odor? yes schedule TCLP Metals matrix 6 acode.			
	Xylene miscible (Top layer * = matrix 3 **)		_	If multiple jars were received, were they consistent? Yes / No / NA If biphasic, was there only one layer with sufficient samp			
	Water miscible (Middle layer = matrix 6)		Yes / No	Yes / No / NA Sample description/other observations:			
	Solid (Bottom layer = matrix 7 or 2 if % solids required)		-	**Are samples Glycol or Solvent in appearance or odor? If yes schedule TCLP Metals matrix 6 acode.			
	Xylene miscible (Top layer * = matrix 3 **)			If multiple jars were received, were they consistent? Yes / No / NA If biphasic, was there only one layer with sufficient sample			
	Water miscible (Middle layer = matrix 6)		Yes / No	Yes / No / NA Sample description/other observations:			
	Solid (Bottom layer = matrix 7 or 2 if % solids required)			**Are samples Glycol or Solvent in appearance or odor? If yes schedule TCLP Metals matrix 6 acode.			

Remember: *= Chlorinated oils will be heavier than water and present as the bottom later. ** = Oils must be filterable to be logged in as matrix 3. Nonfilterable oils must be logged in as matrix 7.

*** = Refer to F078 'Characterization of TCLP Samples for LIMS' to determine if there's sufficent volume/mass.

e-Sam<u>ple Receipt Form</u>

SGS

orkorder #:

1213470

1213470

Review Criteria	Condition (Yes,		No, N/A		Exceptions Noted below				
Chain of Custody / Temperature Requi	irement	s	١	/es	Exemption permitt	ed if sa	mpler hand carries/delive	ers.	
Were Custody Seals intact? Note # &	location	N/A	absent						
COC accompanied sa	amples?	Yes							
DOD: Were samples received in COC corresponding of	coolers?	N/A							
N/A **Exemption permitted if	f chilled &	colle	cted <8 ho	urs a	ago, or for samples	where	chilling is not required		
Temperature blank compliant* (i.e., 0-6 °C after	er CF)?	Yes	Cooler ID	:	1	@	5.4 °C Therm. ID:	D60	
			Cooler ID	:		@	°C Therm. ID:		
If samples received without a temperature blank, the "cooler temperature" will documented instead & "COOLER TEMP" will be noted to the right "ambient" or "ch	If samples received without a temperature blank, the "cooler temperature" will be		Cooler ID	:		@	°C Therm. ID:		
be noted if neither is available.			Cooler ID	:		@	°C Therm. ID:		
			Cooler ID			@	°C Therm. ID:		
*If >6°C, were samples collected <8 hours	s ago?	N/A							
If <0°C, were sample containers ice	e free?	N/A							
Note: Identify containers received at non-compliant temper	erature .								
Use form FS-0029 if more space is n	needed.								
Holding Time / Documentation / Sample Condition Re	eauirem	ents	Note: Refer	to for	m F-083 "Sample Gu	ide" for	specific holding times.		
Were samples received within holding	g time?	Yes			·····				
Do samples match COC** (i.e., sample IDs, dates/times colle	ected)?	Yes							
**Note: If times differ <1hr, record details & login per C	COC.								
***Note: If sample information on containers differs from COC, SGS will default to 0	COC inforr	nation							
Were analytical requests clear? (i.e., method is specified for an	nalyses	Yes							
with multiple option for analysis (Ex: BTEX, I	Metals)								
			1	N/A	***Exemption perm	nitted fo	or metals (e.g,200.8/6020	<u>)A).</u>	
Were proper containers (type/mass/volume/preservative***	*)used?	Yes							
		n to							
Were Trip Blacks (i.e.)(OAs LL Lds) is appler with as									
Were all water VOA vials from of boodspaces (i.e., bubbles	6mm)2	N/A							
Were all soil VOAs field extracted with MeOH	H+BFB?	N/A							
Note to Client: Any "No", answer above indicates no	on-compli	ance	with standa	ard p	rocedures and ma	y impa	ct data quality.		
Additions	al notae	(if a	onlicable	<u>ا</u> ر					
	arnotes	(II a	oplicable	.).					



Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container</u> Condition	<u>Container Id</u>	<u>Preservative</u>	<u>Container</u> Condition
1213470001-A	No Preservative Required	ОК			

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

OK - The container was received at an acceptable pH for the analysis requested.

BU - The container was received with headspace greater than 6mm.

DM - The container was received damaged.

FR - The container was received frozen and not usable for Bacteria or BOD analyses.

IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.

NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.

PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis

requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added. QN - Insufficient sample quantity provided.



Laboratory Report of Analysis

To: Delta Western-Anchorage 206 E Fireweed Ln #201 Anchorage, AK 99503 907-275-4159

Report Number: 1213486

Client Project: Haines Station Groundwater

Dear Shayla Marshall,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Alexandra at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely, SGS North America Inc.

Alexandra Daniel Project Manager Alexandra.Daniel@sgs.com

Alexandra Daniel 2021.06.30 16:35:57 -08'00'

Date

Print Date: 06/30/2021 8:06:38AM

SGS North America Inc.

200 West Potter Drive, Anchorage, AK 99518 t 907.562.2343 f 907.561.5301 www.us.sgs.com Results via Engage

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Case Narrative

SGS Client: Delta Western-Anchorage SGS Project: 1213486 Project Name/Site: Haines Station Groundwater Project Contact: Shayla Marshall

Refer to sample receipt form for information on sample condition.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

Print Date: 06/30/2021 8:06:40AM

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200 West Potter Drive, Anchorage, AK 99518 t 907.562.2343 f 907.561.5301 www.us.sgs.com

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Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <<u>http://www.sgs.com/en/Terms-and-Conditions.aspx></u>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 DW Chemistry (Provisionally Certified as of 05/27/2021 for Mercury by EPA200.8, Nitrate as N by SM 4500NO3-F and VOCs by EPA 524.2) & Microbiology & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the

The following descriptors or qualifiers may be found in your report:

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
В	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
TNTC	Too Numerous To Count
U	Indicates the analyte was analyzed for but not detected.
Sample summaries which i All DRO/RRO analyses are	nclude a result for "Total Solids" have already been adjusted for moisture content. integrated per SOP.

Print Date: 06/30/2021 8:06:41AM

Note:



Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	<u>Matrix</u>
18113-MW19-061621	1213486001	06/16/2021	06/19/2021	Water (Surface, Eff., Ground)
18113-MW16-061621	1213486002	06/16/2021	06/19/2021	Water (Surface, Eff., Ground)
18113-MW17-061621	1213486003	06/16/2021	06/19/2021	Water (Surface, Eff., Ground)
18113-MW77-061621	1213486004	06/16/2021	06/19/2021	Water (Surface, Eff., Ground)
<u>Method</u>	Method Des	scription		

AK102

AK103 AK102 AK103

Diesel/Residual Range Organics w/ Silica Diesel/Residual Range Organics w/ Silica Diesel/Residual Range Organics Water Diesel/Residual Range Organics Water

Print Date: 06/30/2021 8:06:43AM


Detectable Results Summary

Client Sample ID: 18113-MW19-061621			
Lab Sample ID: 1213486001	Parameter	Result	<u>Units</u>
Semivolatile Organic Fuels	Diesel Range Organics	1.33	mg/L
	Residual Range Organics	0.874J	mg/L
Semivolatile Organic Fuels Department, Silic	aDRO Silica Gel	0.614J	mg/L
Client Sample ID: 18113-MW16-061621			
Lab Sample ID: 1213486002	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Semivolatile Organic Fuels	Diesel Range Organics	0.824J	mg/L
	Residual Range Organics	0.416J	mg/L
Semivolatile Organic Fuels Department, Silic	aDRO Silica Gel	0.530J	mg/L
Client Sample ID: 18113-MW17-061621			
Lab Sample ID: 1213486003	Parameter	<u>Result</u>	<u>Units</u>
Semivolatile Organic Fuels	Diesel Range Organics	4.08	mg/L
	Residual Range Organics	0.915J	mg/L
Semivolatile Organic Fuels Department, Silic	aDRO Silica Gel	2.18	mg/L
Client Sample ID: 18113-MW77-061621			
Lab Sample ID: 1213486004	Parameter	<u>Result</u>	<u>Units</u>
Semivolatile Organic Fuels	Diesel Range Organics	4.97	mg/L
	Residual Range Organics	1.37	mg/L
Semivolatile Organic Fuels Department, Silic	aDRO Silica Gel	2.42	mg/L

Print Date: 06/30/2021 8:06:44AM

SGS North America Inc.



			L					
	- Results of 18113-MW19-061621							
	Client Sample ID: 18113-MW19-06162 Client Project ID: Haines Station Grou Lab Sample ID: 1213486001 Lab Project ID: 1213486	l ndwater	Collection Date: 06/16/21 11:10 Received Date: 06/19/21 13:11 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:					
L	Results by Semivolatile Organic Fuels							
	<u>Parameter</u> Diesel Range Organics	<u>Result Qual</u> 1.33	<u>LOQ/CL</u> 1.29	<u>DL</u> 0.387	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/25/21 17:07
1	Surrogates							
	5a Androstane (surr)	87.2	50-150		%	1		06/25/21 17:07
	Batch Information							
	Analytical Batch: XFC15970 Analytical Method: AK102 Analyst: IVM Analytical Date/Time: 06/25/21 17:07 Container ID: 1213486001-A			Prep Batch: Prep Method Prep Date/Tii Prep Initial W Prep Extract	XXX45028 : SW3520C me: 06/23/2 /t./Vol.: 930 Vol: 2 mL	21 17:13 mL		
	<u>Parameter</u> Residual Range Organics	<u>Result Qual</u> 0.874 J	<u>LOQ/CL</u> 1.08	<u>DL</u> 0.323	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/25/21 17:07
:	Surrogates n-Triacontane-d62 (surr)	87.3	50-150		%	1		06/25/21 17:07
	Batch Information Analytical Batch: XFC15970 Analytical Method: AK103 Analyst: IVM Analytical Date/Time: 06/25/21 17:07 Container ID: 1213486001-A			Prep Batch: Prep Method Prep Date/Tii Prep Initial W Prep Extract	XXX45028 : SW3520C me: 06/23/2 /t./Vol.: 930 Vol: 2 mL	1 17:13 mL		



Client Sample ID: 18113-MW19-061621 Client Project ID: Haines Station Grou Lab Sample ID: 1213486001 Lab Project ID: 1213486	1 Indwater		Collection Da Received Da Matrix: Wate Solids (%): Location:) bund)			
Results by Semivolatile Organic Fuels	Department,	Silica G					
<u>Parameter</u> DRO Silica Gel Surrogates	<u>Result Qual</u> 0.614 J	<u>LOQ/CL</u> 1.29	<u>DL</u> 0.387	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/25/21 14:00
5a Androstane (surr)	80.6	50-150		%	1		06/25/21 14:00
Batch Information Analytical Batch: XFC15972 Analytical Method: AK102- Analyst: IVM Analytical Date/Time: 06/25/21 14:00 Container ID: 1213486001-A			Prep Batch: Prep Method Prep Date/Ti Prep Initial W Prep Extract	XXX45029 : SW3520C me: 06/23/2 /t./Vol.: 930 Vol: 2 mL	C w/SG CI 21 17:13 1 mL	eanup-SG	
<u>Parameter</u> RRO Silica Gel Surrogates	<u>Result Qual</u> 0.540 U	<u>LOQ/CL</u> 1.08	<u>DL</u> 0.323	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/25/21 14:00
n-Triacontane-d62 (surr)	81.4	50-150		%	1		06/25/21 14:00
Batch Information Analytical Batch: XFC15972 Analytical Method: AK103- Analyst: IVM Analytical Date/Time: 06/25/21 14:00 Container ID: 1213486001-A			Prep Batch: Prep Method Prep Date/Ti Prep Initial W Prep Extract	XXX45029 : SW3520C me: 06/23/2 /t./Vol.: 930 Vol: 2 mL	C w/SG CI 21 17:13 1 mL	eanup-SG	



Results by Semivolatile Organic Fuels		N S L					
	i						
<u>arameter</u> biesel Range Organics	<u>Result Qual</u> 0.824 J	<u>LOQ/CL</u> 1.29	<u>DL</u> 0.387	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/25/21 17:17
rrogates							
a Androstane (surr)	84.3	50-150		%	1		06/25/21 17:17
atch Information							
Analytical Batch: XFC15970 Analytical Method: AK102 Analyst: IVM Analytical Date/Time: 06/25/21 17:17 Container ID: 1213486002-A			Prep Batch: Prep Method Prep Date/Tii Prep Initial W Prep Extract	XXX45028 : SW3520C me: 06/23/2 /t./Vol.: 930 Vol: 2 mL	: 1 17:13 mL		
<u>arameter</u> lesidual Range Organics	<u>Result Qual</u> 0.416 J	<u>LOQ/CL</u> 1.08	<u>DL</u> 0.323	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/25/21 17:17
rrogates							
-Triacontane-d62 (surr)	83.8	50-150		%	1		06/25/21 17:17
Batch Information							
Analytical Batch: XFC15970 Analytical Method: AK103 Analyst: IVM Analytical Date/Time: 06/25/21 17:17 Container ID: 1213486002-A			Prep Batch: Prep Method Prep Date/Tin Prep Initial W Prep Extract	XXX45028 : SW3520C me: 06/23/2 /t./Vol.: 930 Vol: 2 mL	1 17:13 mL		



Lab Sample ID: 1213486002 Lab Project ID: 1213486	bundwater	Matrix: Water (Surface, Eff., Ground) Solids (%): Location:					
Results by Semivolatile Organic Fue	Is Department, S	Silica G	_				
Parameter	Result Qual	LOQ/CL	DL	Units	DF	<u>Allowable</u> Limits	Date Analyzed
DRO Silica Gel	0.530 J	1.29	0.387	mg/L	1		06/25/21 14:10
urrogates							
5a Androstane (surr)	79.3	50-150		%	1		06/25/21 14:10
Batch Information							
Analytical Batch: XFC15972 Analytical Method: AK102- Analyst: IVM Analytical Date/Time: 06/25/21 14:10 Container ID: 1213486002-A			Prep Batch: Prep Method Prep Date/Tii Prep Initial W Prep Extract	XXX45029 : SW3520C me: 06/23/2 /t./Vol.: 930 Vol: 2 mL	0 w/SG Cl 21 17:13 mL	eanup-SG	
<u>Parameter</u> RRO Silica Gel	<u>Result Qual</u> 0.540 U	<u>LOQ/CL</u> 1.08	<u>DL</u> 0.323	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/25/21 14:10
urrogates							
n-Triacontane-d62 (surr)	79.3	50-150		%	1		06/25/21 14:10
Batch Information							
Analytical Batch: XFC15972 Analytical Method: AK103- Analyst: IVM Analytical Date/Time: 06/25/21 14:10 Container ID: 1213486002-A			Prep Batch: Prep Method Prep Date/Tii Prep Initial W Prep Extract	XXX45029 : SW3520C me: 06/23/2 /t./Vol.: 930 Vol: 2 mL	w/SG Cl 21 17:13 mL	eanup-SG	



Results of 18113-MW17-061621							
Client Sample ID: 18113-MW17-06162 Client Project ID: Haines Station Grou Lab Sample ID: 1213486003 Lab Project ID: 1213486	1 undwater	Collection Date: 06/16/21 15:17 Received Date: 06/19/21 13:11 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:					
Results by Semivolatile Organic Fuels	3						
						Allowable	
Parameter	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	DF	Limits	Date Analyzed
Diesel Range Organics	4.08	1.33	0.398	mg/L	1		06/25/21 17:27
Surrogates							
5a Androstane (surr)	82.2	50-150		%	1		06/25/21 17:27
Detek lafermetter							
Analytical Batch: XFC15970 Analytical Method: AK102 Analyst: IVM Analytical Date/Time: 06/25/21 17:27 Container ID: 1213486003-A			Prep Batch: Prep Method Prep Date/Tii Prep Initial W Prep Extract	XXX45028 : SW3520C me: 06/23/2 /t./Vol.: 905 Vol: 2 mL	; 21 17:13 mL		
<u>Parameter</u> Residual Range Organics	<u>Result Qual</u> 0.915 J	<u>LOQ/CL</u> 1.10	<u>DL</u> 0.331	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/25/21 17:27
Surrogates							
n-Triacontane-d62 (surr)	82.7	50-150		%	1		06/25/21 17:27
Batch Information							
Analytical Batch: XFC15970 Analytical Method: AK103 Analyst: IVM Analytical Date/Time: 06/25/21 17:27 Container ID: 1213486003-A			Prep Batch: Prep Method Prep Date/Tii Prep Initial W Prep Extract	XXX45028 : SW3520C me: 06/23/2 /t./Vol.: 905 Vol: 2 mL	; 21 17:13 5 mL		



Results of 18113-MW17-061621							
Client Sample ID: 18113-MW17-06162 Client Project ID: Haines Station Grou Lab Sample ID: 1213486003 Lab Project ID: 1213486	l ndwater		Collection Da Received Da Matrix: Wate Solids (%): Location:	ate: 06/16/ ite: 06/19/2 r (Surface,	21 15:17 21 13:11 Eff., Gro	und)	
Results by Semivolatile Organic Fuels	Department,	Silica G					
<u>Parameter</u> DRO Silica Gel	<u>Result Qual</u> 2.18	<u>LOQ/CL</u> 1.33	<u>DL</u> 0.398	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	Date Analyzed 06/25/21 14:20
Surrogates							
5a Androstane (surr)	77.6	50-150		%	1		06/25/21 14:20
Batch Information							
Analytical Batch: XFC15972 Analytical Method: AK102- Analyst: IVM Analytical Date/Time: 06/25/21 14:20 Container ID: 1213486003-A			Prep Batch: Prep Method Prep Date/Ti Prep Initial W Prep Extract	XXX45029 I: SW3520C me: 06/23/2 /t./Vol.: 905 Vol: 2 mL	w/SG Cl 1 17:13 mL	eanup-SG	
						Allowable	
Parameter	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
RRO Silica Gel	0.550 0	1.10	0.331	mg/L	1		06/25/21 14:20
Surrogates							
n-Triacontane-d62 (surr)	79.4	50-150		%	1		06/25/21 14:20
Batch Information							
Analytical Batch: XFC15972 Analytical Method: AK103- Analyst: IVM Analytical Date/Time: 06/25/21 14:20 Container ID: 1213486003-A			Prep Batch: Prep Method Prep Date/Tii Prep Initial W Prep Extract	XXX45029 I: SW3520C me: 06/23/2 /t./Vol.: 905 Vol: 2 mL	w/SG Cl 1 17:13 mL	eanup-SG	



Results by Semivolatile Organic Fuels Parameter R Diesel Range Organics urrogates ja Androstane (surr) Batch Information Analytical Batch: XFC15970	<u>esult Qual</u> 4.97 88.5	<u>LOQ/CL</u> 1.33 50-150	<u>DL</u> 0.398	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/25/21 17:37
Parameter R Diesel Range Organics Irrogates Ja Androstane (surr) Jatch Information Analytical Batch: XFC15970 XFC15970	<u>esult Qual</u> 4.97 88.5	LOQ/CL 1.33 50-150	<u>DL</u> 0.398	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/25/21 17:37
Diesel Range Organics urrogates 5a Androstane (surr) Batch Information Analytical Batch: XFC15970	4.97 88.5	1.33 50-150	0.398	mg/L	1		06/25/21 17:37
Jirrogates 5a Androstane (surr) 3atch Information Analytical Batch: XFC15970	88.5	50-150					
5a Androstane (surr) 3atch Information Analytical Batch: XFC15970	88.5	50-150					
Satch Information Analytical Batch: XFC15970				%	1		06/25/21 17:37
Analytical Batch: XFC15970							
Analytical Method: AK102 Analyst: IVM Analytical Date/Time: 06/25/21 17:37 Container ID: 1213486004-A			Prep Batch: 2 Prep Method: Prep Date/Tir Prep Initial W Prep Extract	XXX45028 : SW3520C ne: 06/23/2 't./Vol.: 905 Vol: 2 mL	1 17:13 mL		
Parameter Residual Range Organics	<u>esult Qual</u> 1.37	<u>LOQ/CL</u> 1.10	<u>DL</u> 0.331	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	Date Analyzed 06/25/21 17:37
ırrogates							
ı-Triacontane-d62 (surr)	88.3	50-150		%	1		06/25/21 17:37
Satch Information							
Analytical Batch: XFC15970 Analytical Method: AK103 Analyst: IVM Analytical Date/Time: 06/25/21 17:37 Container ID: 1213486004-A			Prep Batch: 2 Prep Method: Prep Date/Tir Prep Initial W Prep Extract	XXX45028 : SW3520C ne: 06/23/2 't./Vol.: 905 Vol: 2 mL	1 17:13 mL		



Results of 18113-MW77-061621							
Client Sample ID: 18113-MW77-06162 Client Project ID: Haines Station Grou Lab Sample ID: 1213486004 Lab Project ID: 1213486	1 ndwater		Collection Da Received Da Matrix: Water Solids (%): Location:	ate: 06/16/ te: 06/19/2 r (Surface,	21 15:27 21 13:11 Eff., Gro	, pund)	
Results by Semivolatile Organic Fuels	Department,	Silica G					
<u>Parameter</u> DRO Silica Gel	<u>Result Qual</u> 2.42	<u>LOQ/CL</u> 1.33	<u>DL</u> 0.398	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/25/21 14:30
Surrogates							
5a Androstane (surr)	75.6	50-150		%	1		06/25/21 14:30
Batch Information							
Analytical Batch: XFC15972 Analytical Method: AK102- Analyst: IVM Analytical Date/Time: 06/25/21 14:30 Container ID: 1213486004-A			Prep Batch: Prep Method Prep Date/Tin Prep Initial W Prep Extract	XXX45029 : SW3520C me: 06/23/2 /t./Vol.: 905 Vol: 2 mL	w/SG CI 21 17:13 mL	eanup-SG	
						Allowable	
<u>Parameter</u> RRO Silica Gel	<u>Result Qual</u> 0.550 U	<u>LOQ/CL</u> 1.10	<u>DL</u> 0.331	<u>Units</u> mg/L	<u>DF</u> 1	<u>Limits</u>	<u>Date Analyzed</u> 06/25/21 14:30
Surrogates							
n-Triacontane-d62 (surr)	76.4	50-150		%	1		06/25/21 14:30
Batch Information							
Analytical Batch: XFC15972 Analytical Method: AK103- Analyst: IVM Analytical Date/Time: 06/25/21 14:30 Container ID: 1213486004-A			Prep Batch: Prep Method Prep Date/Tin Prep Initial W Prep Extract	XXX45029 : SW3520C me: 06/23/2 /t./Vol.: 905 Vol: 2 mL	s w/SG CI 21 17:13 mL	eanup-SG	

SGS

Method Blank							
Blank ID: MB for HBN 182 Blank Lab ID: 1618207	21248 [XXX/45028]	Matrix: Water (Surface, Eff., Ground)					
QC for Samples: 1213486001, 1213486002, 7	1213486003, 1213486004						
Results by AK102							
Parameter	Results	LOQ/CL	<u>DL</u>	<u>Units</u>			
Diesel Range Organics	0.600U	1.20	0.360	mg/L			
Surrogates							
5a Androstane (surr)	92.4	60-120		%			
3atch Information							
Analytical Batch: XFC15	5970	Prep Ba	tch: XXX45028				
Analytical Method: AK10)2	Prep Me	ethod: SW3520	C			
Instrument: Agilent 7800)B F	Prep Da Prep Ini	te/Time: 6/23/2	021 5:13:00PM			
Analyst: IVM			uai vvi./voi 10	00 IIIL			

Print Date: 06/30/2021 8:06:49AM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213486 [XXX45028] Blank Spike Lab ID: 1618208 Date Analyzed: 06/25/2021 16:08 Spike Duplicate ID: LCSD for HBN 1213486 [XXX45028] Spike Duplicate Lab ID: 1618209 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213486001, 1213486002, 1213486003, 1213486004

Results by AK102			_						
		Blank Spike	e (mg/L)	S	Spike Duplic	cate (mg/L)			
<u>Parameter</u>	Spike	Result	<u>Rec (%)</u>	Spike	Result	<u>Rec (%)</u>	CL	<u>RPD (%)</u>	RPD CL
Diesel Range Organics	10	10.6	106	10	10.5	105	(75-125)	0.52	(< 20)
Surrogates									
5a Androstane (surr)	0.2		111	0.2		103	(60-120)	7.90	
Batch Information									
Analytical Batch: XFC15970 Analytical Method: AK102 Instrument: Agilent 7890B F				Pre Pre Pre	p Batch: X p Method: p Date/Time	XX45028 SW3520C e: 06/23/202	1 17:13	alt 2 ml	
Anaiyst. IVINI				Dup	e Init Wt./V	/ol.: 10 mg/L	Extract Vol	: 2 mL	

Print Date: 06/30/2021 8:06:51AM

SGS

Blank ID: MB for HBN 1821248 [XXX/45028] Blank Lab ID: 1618207 QC for Samples: 1213486001, 1213486002, 1213486003, 1213486004				
esults	LOQ/CL	<u>DL</u>	<u>Units</u>	
500U	1.00	0.300	mg/L	
	00.400		0 /	
ł	60-120		%	
	Prep Bat	ch: XXX45028		
	Prep Met	thod: SW3520C		
	Prep Dat	te/Time: 6/23/20	21 5:13:00PM	
3.28.00PM	Prep Initi Prep Ext	ial Wt./Vol.: 100 ract Vol: 2 ml	0 mL	
	<u>sults</u> 500U	soults LOQ/CL 500U 1.00 60-120 Prep Bat Prep Dat Prep Dat Prep Init 3:58:00PM	Soults LOQ/CL DL 500U 1.00 0.300 60-120 60-120 Prep Batch: XXX45028 Prep Method: SW3520C Prep Date/Time: 6/23/20 Prep Date/Time: 6/23/20 Prep Initial Wt./Vol.: 100 Prep Extract Vol: 2 mL	soults LOQ/CL DL Units 500U 1.00 0.300 mg/L 60-120 % Prep Batch: XXX45028 Prep Method: SW3520C Prep Date/Time: 6/23/2021 5:13:00PM Prep Initial Wt./vol.: 1000 mL Prep Extract Vol: 2 mL

Print Date: 06/30/2021 8:06:53AM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213486 [XXX45028] Blank Spike Lab ID: 1618208 Date Analyzed: 06/25/2021 16:08 Spike Duplicate ID: LCSD for HBN 1213486 [XXX45028] Spike Duplicate Lab ID: 1618209 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213486001, 1213486002, 1213486003, 1213486004

Results by AK103			_						
		Blank Spike	e (mg/L)	S	pike Dupli	cate (mg/L)			
Parameter	Spike	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Residual Range Organics	10	11.0	110	10	10.5	105	(60-120)	4.50	(< 20)
Surrogates									
n-Triacontane-d62 (surr)	0.2		107	0.2		97	(60-120)	9.70	
Batch Information									
Analytical Batch: XFC15970 Analytical Method: AK103				Pre Pre	o Batch: X o Method:	XX45028 SW3520C			
Instrument: Agilent 7890B F Analyst: IVM				Pre _l Spił Dup	o Date/Tim ke Init Wt./\ ve Init Wt./\	e: 06/23/202 /ol.: 10 mg/l /ol.: 10 mg/l	21 17:13 L Extract Vo L Extract Vol	ol: 2 mL : 2 mL	
						-			

Print Date: 06/30/2021 8:06:55AM

SGS

Blank ID: MB for HBN 18 Blank Lab ID: 1618210	21249 [XXX/45029]	Matri	x: Water (Surfa	ce, Eff., Ground)					
QC for Samples: 1213486001, 1213486002,	1213486003, 1213486004								
Results by AK102									
Parameter	Results	LOQ/CL	<u>DL</u>	<u>Units</u>					
DRO Silica Gel	0.600U	1.20	0.360	mg/L					
Surrogates									
5a Androstane (surr)	81.8	70-125		%					
Batch Information									
Analytical Batch: XFC15	972	Prep Ba	tch: XXX45029						
Analytical Method: AK10)2	Prep Me	ethod: SW35200	C w/SG Cleanup					
Instrument: Agilent 7890	IB F	Prep Da Prep Ini	ate/Time: 6/23/2 tial Wt //ol : 10(021 5:13:00PM					
	Analytical Date/Time: 6/25/2021 12:52:00PM			Prep Initial Wt./Vol.: 1000 mL Prep Extract Vol: 2 ml					

Print Date: 06/30/2021 8:06:57AM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213486 [XXX45029] Blank Spike Lab ID: 1618211 Date Analyzed: 06/25/2021 13:01 Spike Duplicate ID: LCSD for HBN 1213486 [XXX45029] Spike Duplicate Lab ID: 1618212 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 121348

 $1213486001,\,1213486002,\,1213486003,\,1213486004$

Results by AK102			_						
		Blank Spike	e (mg/L)	S	Spike Dupli				
<u>Parameter</u>	Spike	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
DRO Silica Gel	10	8.68	87	10	9.27	93	(70-125)	6.70	(< 20)
Surrogates									
5a Androstane (surr)	0.2		95	0.2		94	(70-125)	1.80	
Batch Information									
Analytical Batch: XFC15972 Analytical Method: AK102 Instrument: Agilent 7890B F Analyst: IVM				Pre Pre Pre Spil Dup	p Batch: X p Method: p Date/Tim ke Init Wt./\ pe Init Wt./\	XX45029 SW3520C w e: 06/23/202 /ol.: 10 mg/ /ol.: 10 mg/l	/ SG Cleanup 21 17:13 L Extract Vo _ Extract Vol	ol: 2 mL : 2 mL	

Print Date: 06/30/2021 8:07:00AM

SGS

Blank ID: MB for HBN 182 Blank Lab ID: 1618210	1249 [XXX/45029]	Matrix	k: Water (Surfa	ce, Eff., Ground)
QC for Samples: 1213486001, 1213486002, 1	213486003, 1213486004			
Results by AK103				
<u>Parameter</u> RRO Silica Gel	<u>Results</u> 0.500U	<u>LOQ/CL</u> 1.00	<u>DL</u> 0.300	<u>Units</u> mg/L
Surrogates				
n-Triacontane-d62 (surr)	84.8	70-125		%
Batch Information				
Analytical Batch: XFC159	972	Prep Ba	tch: XXX45029	
Analytical Method: AK103	3	Prep Me Brop Do	thod: SW35200	W/SG Cleanup
Instrument. Agrient 7690E		Prep Da Prep Init	ial Wt./Vol.: 100	10 mL
Analyst: IVM				



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213486 [XXX45029] Blank Spike Lab ID: 1618211 Date Analyzed: 06/25/2021 13:01 Spike Duplicate ID: LCSD for HBN 1213486 [XXX45029] Spike Duplicate Lab ID: 1618212 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213486001, 1213486002, 1213486003, 1213486004

Results by AK103									
		Blank Spike	e (mg/L)	mg/L) Spike Duplicate (mg/L)					
<u>Parameter</u>	Spike	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
RRO Silica Gel	10	9.33	93	10	9.64	96	(70-125)	3.30	(< 20)
Surrogates									
n-Triacontane-d62 (surr)	0.2		86	0.2		85	(70-125)	0.90	
Batch Information									
Analytical Batch: XFC15972 Analytical Method: AK103 Instrument: Agilent 7890B F Analyst: IVM				Pre Pre Pre Spil Dup	p Batch: X p Method: p Date/Tim ke Init Wt./\ pe Init Wt./\	XX45029 SW3520C w e: 06/23/202 /ol.: 10 mg/ /ol.: 10 mg/l	/ SG Cleanup 21 17:13 L Extract Vo _ Extract Vol	ol: 2 mL : 2 mL	

Print Date: 06/30/2021 8:07:05AM



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SGS NORTH AMERICA INC. CHAIN OF CUSTODY RECORD

SGS Environmental Services 200 West Potter Road Anchorage, AK 99518 (907) 562-2343 www.sgs.com/alaska

				1	36569	5							
Γ	CLIENT: EMI		INSTR OMI	RUCTI	ons: Is ma'	SECTI Y DEL	ONS 1 AY TH	-5 MU E ONS	ST BE F	ILLED ANALY:	OUT. SIS.		_ 1 _1
Ţ	CONTACT: Andy Coulson PHONE #: 907-272-9336	SEC	TION 3				PI	RESERV	ATIVE				Page of
	PROJECT Haines Station PROJECT/ NAME: Groundwater PERMIT #:	# C	SAMPLE TYPE:	HCI	HCI	HCI	НCI	Vone					
ŭ	REPORTS TO: Andy Coulson E-MAIL: acoulson@emi-alaska.com	N T	Comp Grab	101)	AK	v/ eanup	0	1213486					
	INVOICE TO: Delta Western QUOTE #: P.O. #:	A I N	MI (Multi- incre-	AK)	RRO (03)	RRO v gel cle	(826	(A770					
t SA	RESERVED SAMPLE IDENTIFICATION DATE TIME MATRIX/ USE SAMPLE IDENTIFICATION MM/DD/YY HH:MM CODE	E R S	mental)	GRC	DRO/ 102/1	DRO/ silica	700 V	SIN PAH					REMARKS/ LOC ID
anagement	(AB) 18117 - MW19-061621 06/16/24 11:10 W	2	6		X	<u>×</u> ×							
Group Ma	340 19117 - MW17-CU1621 06/16/21 15:17 W	2	6		X	××							
	C(AG) 10/17 - A(W/7-06105A 06/16/5A (3.F/	<i>v</i> -			~								
red tradem									· · · · · · · · · · · · · · · · · · ·				
is a registe													
ed - SGS						SECT	ION 4		piect? NC		DATA	DELIVEI	RABLE REQUIREMENTS:
ghts reserv	(Inter Contraction of the Contra	Ň	hr	$ \wedge $		COC ID Cooler): ID:			· .			
014 - Ali n		^{3Y:}	19	-		REQUES	STED TU	RNAROU	IND TIME A	ND/OR SP	ECIAL IN	STRUCT	IONS
ca inc 2	RELINDUISHED BY(3) DATE TIME RECEIVED E	BY:	\sim				TF	MP BL	VNK °C'				
lorth Amer	RELINQUISHED BY:(4)	OR LA	BORATO	RY BY:		4.0 D	,s <u>2</u>	34 R AMBII		-	ANK INT	ACT	BROKEN ABSENT
© SGS N	6/19/21 1311 Michaeler	.Al	nu	ми		(\$	See attact	ned Samp	le Receipt F	orm)	(Se	e attache	d Sample Receipt Form)

http://www.sqs.com/terms-and-conditions

F101_eCOC_Revised_2014-12-10



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e-Sample Receipt Form FBK

363	SGS Workorder #:		EMI G	W		EMI GW	
Review	/ Criteria	Condition (Yes	No, N/A	Excep	otions No	oted below	
<u>Chain of Cu</u>	<u>stody / Temperature Requi</u>	rements		Exemption pern	nitted if san	npler hand carries/delive	ers.
We	ere Custody Seals intact? Note # &	location Yes					
	COC accompanied sa	amples? Yes					
DOD: Were sample	es received in COC corresponding of	coolers? N/A					,
	**Exemption permitted if	chilled & colle	ected <8 hou	rs ago, or for samp	les where c	chilling is not required	
Temperature b	lank compliant* (i.e., 0-6 °C afte	er CF)? Yes	Cooler ID:	1	@	3.4 °C Therm. ID:	21
			Cooler ID:		@	°C Therm. ID:	
If samples received without a tempe documented instead & "COOLER TEMP"	rature blank, the "cooler temperature" will will be noted to the right. "ambient" or "ch	l be nilled" will	Cooler ID:		@	°C Therm. ID:	
be noted if	neither is available.		Cooler ID:		@	°C Therm. ID:	
*// >6°С, и	vere samples collected <8 hours	s ago?	<u> </u> T				
lf <	0°C, were sample containers ice	e free?				·	
Note: Identify Containers re Use f	orm FS-0029 if more space is n	needed.					
Holding Time / Docur	nentation / Sample Condition R	equirements	Note: Refe	to form F-083 "Sa	mple Guide	e" for specific holding tir	nes.
Do samples match COC** (i.e.,sample IDs,dates/times colle	ected)? N/C	ļ				
**Note: If times differ <	1hr, record details & login per C	:0C.					
***Note: It sample information on containe	ers differs from COC, SGS will default to (COC information					
Were analytical requests clear with multiple	? (i.e., method is specified for an option for analysis (Ex: BTEX,	nalyses Metals)]				
Were Trip Blanks (i.e.,	VOAs, LL-Hg) in cooler with sa	mples? N/A					
Were all water VOA vials fre	e of headspace (i.e., bubbles \leq	6mm)? N/A					
Were all soil V	VOAs field extracted with MeOH	I+BFB? N/A					
For Rush/Short Hold	Time, was RUSH/Short HT ema	il sent? N/A					
Note to Client: A	ny "No", answer above indicates no	on-compliance	with standa	rd procedures and	may impac	t data quality.	
	Additiona	al notes (if a	applicable)	*			
SGS Profile				(0		

e-Sample Receipt Form

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262	SGS Workorder #	# :	12	2134	486	12	213486	
Rev	iew Criteria	Conditior	n (Yes, No	N/A	Exc	eptions Not	ed below	
<u>Chain of</u>	Custody / Temperature Req	uirement	: <u>s</u>		N/A Exemption pe	ermitted if sampl	er hand carries/del	vers.
	Were Custody Seals intact? Note #	& location	Yes 1	⁻ ,1B				
	COC accompanied	l samples?	Yes					
DOD: Were sa	imples received in COC corresponding	g coolers?	N/A					
	N/A **Exemption permitted	d if chilled &	collecte	ed <8 ho	ours ago, or for san	nples where chil	ling is not required	
Temperatu	re blank compliant* (i.e., 0-6 °C a	after CF)?	Yes C	ooler ID): 1	@	3.4 °C Therm. ID	D52
			C	ooler ID	<mark>):</mark>	@	°C Therm. ID	:
If samples received without a to cumented instead & "COOLER TE	Imperature blank, the "cooler temperature" IMP" will be noted to the right. "ambient" or	will be "chilled" will	C	ooler ID	<mark>):</mark>	@	°C Therm. ID	:
be no	led if neither is available.		C	ooler ID	<mark>):</mark>	@	°C Therm. ID	:
			C	ooler ID	<mark>):</mark>	@	°C Therm. ID	:
*lf >6°	C, were samples collected <8 hou	urs ago?	N/A					
	K 000	· (0						
	If <0°C, were sample containers i	ice free?	N/A					
Nata: Identify contains								
Note: Identify containe	lse form FS-0029 if more space is	perature . s needed.						
		, noodou.						
Holding Time / Do	cumentation / Sample Condition	Requireme	ents No	te: Refer	r to form F-083 "Samp	ble Guide" for spec	ific holding times.	
N	ere samples received within hold	ling time?	Yes					
Do samples match COC	** (i.e.,sample IDs,dates/times co	ollected)?	Yes					
**Note: If times diff	er <1hr, record details & login per	COC.						
Note: If sample information on co	ntainers differs from COC, SGS will default t	to COC inform	nation					
Vere analytical requests cl	ear? (i.e., method is specified for	analyses	Yes					
with mul	tiple option for analysis (Ex: BTEX	K, Metals)						
					N/A ***Exemption	permitted for m	etals (e.g,200.8/60	<u>20B).</u>
Were proper containers	; (type/mass/volume/preservative*	***)used?	Yes					
	<u>Volatile / LL-Hg Re</u>	equireme	ents					
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with s	samples?	N/A					
Were all water VOA vials	free of headspace (i.e., bubbles	≤ 6mm)?	N/A					
Were all s	oil VOAs field extracted with MeC	OH+BFB?	N/A					
Note to Clier	it: Any "No", answer above indicates	non-complia	ance wit	h standa	ard procedures and	d may impact da	ata quality.	
	Additio	nal notes	(if apr	licable	<i></i>			
			1		- <u>,</u> -			



Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container</u> <u>Condition</u>	<u>Container Id</u>	<u>Preservative</u>	<u>Container</u> <u>Condition</u>
1213486001-A	HCL to pH < 2	ОК			
1213486001-B	HCL to $pH < 2$	ОК			
1213486002-A	HCL to $pH < 2$	ОК			
1213486002-B	HCL to $pH < 2$	ОК			
1213486003-A	HCL to $pH < 2$	ОК			
1213486003-B	HCL to $pH < 2$	ОК			
1213486004-A	HCL to pH < 2	ОК			
1213486004-B	HCL to $pH < 2$	ОК			

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

- OK The container was received at an acceptable pH for the analysis requested.
- BU The container was received with headspace greater than 6mm.
- DM The container was received damaged.
- FR The container was received frozen and not usable for Bacteria or BOD analyses.
- IC The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.
- NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.
- PA The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.
- PH The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added. QN Insufficient sample quantity provided.

Laboratory Data Review Checklist

Completed By:

Andy Coulson

Title:

Environmental Scientist

Date:

23 August 2021

Consultant Firm:

EMI

Laboratory Name:

SGS Anchorage

Laboratory Report Number:

1213486

Laboratory Report Date:

06/30/21

CS Site Name:

Delta Western Station Haines

ADEC File Number:

1508.38.020

Hazard Identification Number:

25489

Laboratory Report Date:

06/30/21

CS Site Name:

Delta Western Station Haines

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

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

	$Yes \boxtimes No \square N/A \square Comments:$
	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 N/A Comments:
	All samples analyzed at SGS Anchorage
<u>C</u>	hain of Custody (CoC)
	a. CoC information completed, signed, and dated (including released/received by)?
	Yes No N/A Comments:
	b. Correct analyses requested?
	Yes \boxtimes No \square N/A \square Comments:
. <u>L</u>	aboratory Sample Receipt Documentation
	a. Sample/cooler temperature documented and within range at receipt (0° to 6° C)?
	Yes \boxtimes No \square N/A \square Comments:

Volatile Chlorinated Solvents, etc.)?

Yes \boxtimes No \square N/A \square Comments:

Laboratory Report Date:

CS Site Name:

Delta Western Station Haines

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

Yes \boxtimes No \square N/A \square Comments:

All samples in good condition

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, etc.?

		/	~	
Yes∟	No⊠	N/AL	Comments:	

No discrepancies noted

e. Data quality or usability affected?

Comments:

No effect on data quality or usability

4. Case Narrative

a. Present and understandable?

Yes \boxtimes No \square N/A \square Comments:

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

Yes \square No \boxtimes N/A \square Comments:

c. Were all corrective actions documented?

Yes \square No \square N/A \boxtimes Comments:

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

Comments:

No effect on data quality or usability

Laboratory Report Date:

06/30/21

CS Site Name:

Delta Western Station Haines

5. <u>Samples Results</u>

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

Yes \boxtimes No \square N/A \square Comments:

b. All applicable holding times met?

Yes⊠	No□	$N/A\square$	Comments:
------	-----	--------------	-----------

c. All soils reported on a dry weight basis?

Yes \square No \square N/A \boxtimes Comments:

Only water samples in this report

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

Yes \boxtimes No \square N/A \square Comments:

e. Data quality or usability affected?

No effect on data quality or usability

6. QC Samples

- a. Method Blank
 - i. One method blank reported per matrix, analysis and 20 samples?

Yes \boxtimes No \square N/A \square Comments:

ii. All method blank results less than limit of quantitation (LOQ) or project specified objectives?Yes⊠ No□ N/A□ Comments:

Laboratory Report Date:

06/30/21

CS Site Name:

Delta Western Station Haines

iii. If above LOQ or project specified objectives, what samples are affected? Comments:

No samples affected

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

Yes \square No \square N/A \boxtimes Comments:

No samples affected

v. Data quality or usability affected?

Comments:

No effect on data quality or usability

- 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 \boxtimes No \square N/A \square Comments:

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

Yes \square No \square N/A \boxtimes Comments:

No inorganic analyses requested.

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

Yes \boxtimes No \square N/A \square Comments:

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

Yes \boxtimes No \square N/A \square Comments:

Laboratory Report Date:

06/30/21

CS Site Name:

Delta Western Station Haines

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

No samples affected

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

Yes \square No \square N/A \boxtimes Comments:

No samples affected

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

Comments:

No effect on data quality or usability

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Note: Leave blank if not required for project

i. Organics - One MS/MSD reported per matrix, analysis and 20 samples?

Yes \square No \square N/A \square Comments:

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

Yes \square No \square N/A \square Comments:

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

Yes \square No \square N/A \square Comments:

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

Yes \square No \square N/A \square Comments:

Laboratory Report Date:

06/30/21

CS Site Name:

Delta Western Station Haines

- v. If %R or RPD is outside of acceptable limits, what samples are affected? Comments:
- vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes \square No \square N/A \square Comment
--

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

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

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

Yes \boxtimes No \square N/A \square Comments:

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

Yes \boxtimes No \square N/A \square Comments:

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

Yes \square No \square N/A \boxtimes Comments:

No samples had failed recoveries

iv. Data quality or usability affected?

Comments:

No effect on data quality or usability

Laboratory Report Date:

06/30/21

CS Site Name:

Delta Western Station Haines

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

Yes \square No \square N/A \boxtimes Comments:

No volatile analyses requested in this report

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 \square No \square N/A \boxtimes Comments:

iii. All results less than LOQ and project specified objectives?

Yes \square No \square N/A \boxtimes Comments:

iv. If above LOQ or project specified objectives, what samples are affected? Comments:

v. Data quality or usability affected?

Comments:

No effect on data quality or usability

- f. Field Duplicate
 - i. One field duplicate submitted per matrix, analysis and 10 project samples?

Yes \boxtimes No \square N/A \square Comments:

Samples 18113-MW77-061621 is a duplicate of 18113-MW17-061621

ii. Submitted blind to lab?

Yes \boxtimes No \square N/A \square Comments:

Laboratory Report Date:

06/30/21

CS Site Name:

Delta Western Station Haines

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

RPD (%) = Absolute value of: $(R_1-R_2)/((R_1+R_2)/2)$ x 100

Where $R_1 =$ Sample Concentration $R_2 =$ Field Duplicate Concentration

Yes \boxtimes No \square N/A \square Comments:

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

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

Yes \square No \square N/A \boxtimes Comments:

Decontamination blank not required by workplan

i. All results less than LOQ and project specified objectives?

Yes \square No \square N/A \square Comments:

ii. If above LOQ or project specified objectives, what samples are affected? Comments:

iii. Data quality or usability affected?

Comments:

Laboratory Report Date:

06/30/21

CS Site Name:

Delta Western Station Haines

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

a. Defined and appropriate?

Yes \boxtimes No \square N/A \square Comments:



Laboratory Report of Analysis

To: Delta Western-Anchorage 206 E Fireweed Ln #201 Anchorage, AK 99503 907-275-4159

Report Number: **1213488**

Client Project: Haines Station Soil

Dear Shayla Marshall,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Alexandra at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely, SGS North America Inc.

Alexandra Daniel Project Manager Alexandra.Daniel@sgs.com

Alexandra Daniel 2021.07.07 16:06:56 -08'00'

Date

Print Date: 07/07/2021 11:24:36AM

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Case Narrative

SGS Client: Delta Western-Anchorage SGS Project: 1213488 Project Name/Site: Haines Station Soil Project Contact: Shayla Marshall

Refer to sample receipt form for information on sample condition.

LCS for HBN 1821332 [VXX/37294 (1618647) LCS

8260D- LCS recovery for trichlorofluoromethane does not meet QC criteria, however this analyte was not detected above the LOQ in the associated samples.

LCSD for HBN 1821355 [VXX/3730 (1618742) LCSD

AK101 - GRO recovery does not meet QC criteria. This analyte was not reported above the LOQ in the associated samples.

1213444005MS (1617989) MS

8270D SIM - PAH MS recoveries for multiple analytes do not meet QC criteria. Refer to the LCS for accuracy requirements.

1213488001(1618648MS) (1618649) MS

8260D- MS recovery for trichlorofluoromethane does not meet QC criteria, however this analyte was not detected above the LOQ in the parent sample.

1213444005MSD (1617990) MSD

8270D SIM - PAH MSD recoveries for multiple analytes do not meet QC criteria. Refer to the LCS for accuracy requirements.

8270D SIM - PAH MS/MSD RPD's for multiple analytes do not meet QC criteria due to matrix interference. The results for these analytes are considered estimated in the parent sample.

1213488001(1618648MSD) (1618650) MSD

8260D- MSD recovery for trichlorofluoromethane does not meet QC criteria, however this analyte was not detected above the LOQ in the parent sample.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

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Report of Manual Integrations						
Laboratory ID	Client Sample ID	Analytical Batch	<u>Analyte</u>	Reason		
8270D SIM (PAH)						
1213444005	LABREFQC	XMS12710	Benzo[k]fluoranthene	RP		
1617989	1213444005MS	XMS12710	Benzo[k]fluoranthene	RP		
1617990	1213444005MSD	XMS12710	Benzo[k]fluoranthene	RP		

Manual Integration Reason Code Descriptions

Code Description

- O Original Chromatogram
- M Modified Chromatogram
- SS Skimmed surrogate
- BLG Closed baseline gap
- RP Reassign peak name
- PIR Pattern integration required
- IT Included tail
- SP Split peak
- RSP Removed split peak
- FPS Forced peak start/stop
- BLC Baseline correction
- PNF Peak not found by software

All DRO/RRO analysis are integrated per SOP.

Print Date: 07/07/2021 11:24:40AM



Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <<u>http://www.sgs.com/en/Terms-and-Conditions.aspx></u>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 DW Chemistry (Provisionally Certified as of 05/27/2021 for Mercury by EPA200.8, Nitrate as N by SM 4500NO3-F and VOCs by EPA 524.2) & Microbiology & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the

The following descriptors or qualifiers may be found in your report:

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
В	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
TNTC	Too Numerous To Count
U	Indicates the analyte was analyzed for but not detected.
Sample summaries which in All DRO/RRO analyses are	nclude a result for "Total Solids" have already been adjusted for moisture content. integrated per SOP.

Print Date: 07/07/2021 11:24:41AM

Note:



Sample Summary						
Lab Sample ID	Collected	Received	Matrix			
1213488001	06/16/2021	06/19/2021	Soil/Solid (dry weight)			
1213488002	06/16/2021	06/19/2021	Soil/Solid (dry weight)			
1213488003	06/16/2021	06/19/2021	Soil/Solid (dry weight)			
1213488004	06/16/2021	06/19/2021	Soil/Solid (dry weight)			
<u>Method Description</u> 8270 PAH SIM Semi-Volatiles GC/MS Diesel/Residual Range Organics						
	Sa <u>Lab Sample ID</u> 1213488001 1213488002 1213488003 1213488004 <u>Method Descr</u> 8270 PAH SIN Diesel/Residua	Lab Sample ID Collected 1213488001 06/16/2021 1213488002 06/16/2021 1213488003 06/16/2021 1213488004 06/16/2021 1213488004 06/16/2021 1213488004 06/16/2021 Diesel/Residual Range Organica	Lab Sample ID Collected Received 1213488001 06/16/2021 06/19/2021 1213488002 06/16/2021 06/19/2021 1213488003 06/16/2021 06/19/2021 1213488004 06/16/2021 06/19/2021 1213488004 06/16/2021 06/19/2021 Method Description 8270 PAH SIM Semi-Volatiles GC/MS Diesel/Residual Range Organics Diesel/Residual Range Organics			

AK103 AK101 SM21 2540G SW8260D 8270 PAH SIM Semi-Volatiles GC/MS Diesel/Residual Range Organics Diesel/Residual Range Organics Gasoline Range Organics (S) Percent Solids SM2540G VOC 8260 (S) Field Extracted

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Volatile Fuels

Client Sample ID: 18113-CL04 Lab Sample ID: 1213488001	Parameter	Result	<u>Units</u>
Semivolatile Organic Fuels	Diesel Range Organics	21.2J	mg/kg
	Residual Range Organics	81.8J	mg/kg
Client Sample ID: 18113-CL12			
Lab Sample ID: 1213488002	<u>Parameter</u>	Result	<u>Units</u>
Semivolatile Organic Fuels	Diesel Range Organics	20.8J	mg/kg
	Residual Range Organics	87.9J	mg/kg
Volatile Fuels	Gasoline Range Organics	1.06J	mg/kg

Detectable Results Summary

Volatile Fuels	Gasoline Range Organics	1.06J	mg/kg
Client Sample ID: 18113-CL77			
Lab Sample ID: 1213488003	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Semivolatile Organic Fuels	Diesel Range Organics	22.8	mg/kg
	Residual Range Organics	110J	mg/kg
Volatile Fuels	Gasoline Range Organics	2.11J	mg/kg
Client Sample ID: Trip Blank			
Lab Sample ID: 1213488004	Parameter	Result	Units

Blank			
3004	<u>Parameter</u>	Result	<u>Units</u>
	Gasoline Range Organics	1.54J	mg/kg

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Client Sample ID: **18113-CL04** Client Project ID: **Haines Station Soil** Lab Sample ID: 1213488001 Lab Project ID: 1213488

Collection Date: 06/16/21 15:43 Received Date: 06/19/21 13:11 Matrix: Soil/Solid (dry weight) Solids (%):86.8 Location:

Results by Polynuclear Aromatics GC/MS

						Allowable	
Parameter	<u>Result Qual</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	DF	<u>Limits</u>	Date Analyzed
1-Methylnaphthalene	14.3 U	28.6	7.14	ug/kg	1		07/01/21 16:41
2-Methylnaphthalene	14.3 U	28.6	7.14	ug/kg	1		07/01/21 16:41
Acenaphthene	14.3 U	28.6	7.14	ug/kg	1		07/01/21 16:41
Acenaphthylene	14.3 U	28.6	7.14	ug/kg	1		07/01/21 16:41
Anthracene	14.3 U	28.6	7.14	ug/kg	1		07/01/21 16:41
Benzo(a)Anthracene	14.3 U	28.6	7.14	ug/kg	1		07/01/21 16:41
Benzo[a]pyrene	14.3 U	28.6	7.14	ug/kg	1		07/01/21 16:41
Benzo[b]Fluoranthene	14.3 U	28.6	7.14	ug/kg	1		07/01/21 16:41
Benzo[g,h,i]perylene	14.3 U	28.6	7.14	ug/kg	1		07/01/21 16:41
Benzo[k]fluoranthene	14.3 U	28.6	7.14	ug/kg	1		07/01/21 16:41
Chrysene	14.3 U	28.6	7.14	ug/kg	1		07/01/21 16:41
Dibenzo[a,h]anthracene	14.3 U	28.6	7.14	ug/kg	1		07/01/21 16:41
Fluoranthene	14.3 U	28.6	7.14	ug/kg	1		07/01/21 16:41
Fluorene	14.3 U	28.6	7.14	ug/kg	1		07/01/21 16:41
Indeno[1,2,3-c,d] pyrene	14.3 U	28.6	7.14	ug/kg	1		07/01/21 16:41
Naphthalene	11.4 U	22.8	5.71	ug/kg	1		07/01/21 16:41
Phenanthrene	14.3 U	28.6	7.14	ug/kg	1		07/01/21 16:41
Pyrene	14.3 U	28.6	7.14	ug/kg	1		07/01/21 16:41
Surrogates							
2-Methylnaphthalene-d10 (surr)	66.5	58-103		%	1		07/01/21 16:41
Fluoranthene-d10 (surr)	57.2	54-113		%	1		07/01/21 16:41

Batch Information

Analytical Batch: XMS12708 Analytical Method: 8270D SIM (PAH) Analyst: LAW Analytical Date/Time: 07/01/21 16:41 Container ID: 1213488001-A Prep Batch: XXX45021 Prep Method: SW3550C Prep Date/Time: 06/23/21 09:47 Prep Initial Wt./Vol.: 22.7 g Prep Extract Vol: 5 mL

Print Date: 07/07/2021 11:24:45AM

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Client Sample ID: 18113-CL04 Client Project ID: Haines Station Soi Lab Sample ID: 1213488001 Lab Project ID: 1213488	I		Collection Da Received Da Matrix: Soil/S Solids (%):8 Location:	ate: 06/16/ ate: 06/19/2 Solid (dry w 6.8	21 15:43 21 13:11 eight)		
Results by Semivolatile Organic Fue	S		_				
<u>Parameter</u> Diesel Range Organics	<u>Result Qual</u> 21.2 J	<u>LOQ/CL</u> 22.5	<u>DL</u> 6.96	<u>Units</u> mg/kg	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/25/21 17:37
urrogates 5a Androstane (surr)	84.6	50-150		%	1		06/25/21 17:37
Analytical Batch: XFC15973 Analytical Method: AK102 Analyst: IVM Analytical Date/Time: 06/25/21 17:37 Container ID: 1213488001-A		Prep Method: SW3550C Prep Date/Time: 06/24/21 16:53 Prep Initial Wt./Vol.: 30.787 g Prep Extract Vol: 5 mL					
<u>Parameter</u> Residual Range Organics	<u>Result Qual</u> 81.8 J	<u>LOQ/CL</u> 112	<u>DL</u> 48.3	<u>Units</u> mg/kg	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	Date Analyzed
urrogates							
n-Triacontane-d62 (surr)	83.1	50-150		%	1		06/25/21 17:37
Batch Information							
Analytical Batch: XFC15973 Analytical Method: AK103 Analyst: IVM Analyst: IVM			Prep Batch: Prep Method Prep Date/T Prep Initial V Prep Extract	XXX45039 d: SW3550C ime: 06/24/2 Vt./Vol.: 30.7 : Vol: 5 mL	: 21 16:53 787 g		

Print Date: 07/07/2021 11:24:45AM

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Results of 18113-CL04							
Client Sample ID: 18113-CL04 Client Project ID: Haines Station Soil Lab Sample ID: 1213488001 Lab Project ID: 1213488		C R M S L	collection Da acceived Da latrix: Soil/S olids (%):86 ocation:	ate: 06/16/ ate: 06/19/2 Solid (dry w 5.8	21 15:43 21 13:11 eight)		
Results by volatile Fuels			_			Allowable	
Parameter	Result Qual	<u>LOQ/CL</u>	<u>DL</u> 0.065	<u>Units</u>	DF 1	<u>Limits</u>	Date Analyzed
	1.01 0	5.22	0.905	iiig/kg	I		00/23/21 03.34
Surrogates 4-Bromofluorobenzene (surr)	108	50-150		%	1		06/25/21 03:54
Batch Information							
Analytical Batch: VFC15671 Analytical Method: AK101 Analyst: IJV Analytical Date/Time: 06/25/21 03:54 Container ID: 1213488001-B			Prep Batch: Prep Method Prep Date/Ti Prep Initial V Prep Extract	VXX37300 I: SW5035A me: 06/16/2 Vt./Vol.: 58.6 Vol: 32.758	21 15:43 697 g 66 mL		

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Results of 18113-CL04

Client Sample ID: **18113-CL04** Client Project ID: **Haines Station Soil** Lab Sample ID: 1213488001 Lab Project ID: 1213488 Collection Date: 06/16/21 15:43 Received Date: 06/19/21 13:11 Matrix: Soil/Solid (dry weight) Solids (%):86.8 Location:

Results by Volatile GC/MS

						<u>Allowable</u>	
<u>Parameter</u>	<u>Result Qual</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
1,1,1,2-Tetrachloroethane	12.9 U	25.7	7.97	ug/kg	1		06/24/21 14:12
1,1,1-Trichloroethane	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
1,1,2,2-Tetrachloroethane	1.28 U	2.57	0.797	ug/kg	1		06/24/21 14:12
1,1,2-Trichloroethane	0.515 U	1.03	0.322	ug/kg	1		06/24/21 14:12
1,1-Dichloroethane	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
1,1-Dichloroethene	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
1,1-Dichloropropene	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
1,2,3-Trichlorobenzene	32.1 U	64.3	19.3	ug/kg	1		06/24/21 14:12
1,2,3-Trichloropropane	1.28 U	2.57	0.797	ug/kg	1		06/24/21 14:12
1,2,4-Trichlorobenzene	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
1,2,4-Trimethylbenzene	32.1 U	64.3	19.3	ug/kg	1		06/24/21 14:12
1,2-Dibromo-3-chloropropane	64.5 U	129	39.9	ug/kg	1		06/24/21 14:12
1,2-Dibromoethane	0.645 U	1.29	0.514	ug/kg	1		06/24/21 14:12
1,2-Dichlorobenzene	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
1,2-Dichloroethane	1.28 U	2.57	0.900	ug/kg	1		06/24/21 14:12
1,2-Dichloropropane	6.45 U	12.9	3.99	ug/kg	1		06/24/21 14:12
1,3,5-Trimethylbenzene	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
1,3-Dichlorobenzene	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
1,3-Dichloropropane	6.45 U	12.9	3.99	ug/kg	1		06/24/21 14:12
1,4-Dichlorobenzene	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
2,2-Dichloropropane	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
2-Butanone (MEK)	161 U	322	100	ug/kg	1		06/24/21 14:12
2-Chlorotoluene	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
2-Hexanone	64.5 U	129	39.9	ug/kg	1		06/24/21 14:12
4-Chlorotoluene	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
4-Isopropyltoluene	64.5 U	129	32.2	ug/kg	1		06/24/21 14:12
4-Methyl-2-pentanone (MIBK)	161 U	322	100	ug/kg	1		06/24/21 14:12
Acetone	161 U	322	100	ug/kg	1		06/24/21 14:12
Benzene	8.05 U	16.1	5.02	ug/kg	1		06/24/21 14:12
Bromobenzene	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
Bromochloromethane	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
Bromodichloromethane	1.28 U	2.57	0.797	ug/kg	1		06/24/21 14:12
Bromoform	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
Bromomethane	12.9 U	25.7	7.97	ug/kg	1		06/24/21 14:12
Carbon disulfide	64.5 U	129	39.9	ug/kg	1		06/24/21 14:12
Carbon tetrachloride	8.05 U	16.1	5.02	ug/kg	1		06/24/21 14:12
Chlorobenzene	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12

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Results of 18113-CL04

Client Sample ID: **18113-CL04** Client Project ID: **Haines Station Soil** Lab Sample ID: 1213488001 Lab Project ID: 1213488 Collection Date: 06/16/21 15:43 Received Date: 06/19/21 13:11 Matrix: Soil/Solid (dry weight) Solids (%):86.8 Location:

Results by Volatile GC/MS

						Allowable	
Parameter	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Chloroethane	129 U	257	79.7	ug/kg	1		06/24/21 14:12
Chloroform	2.57 U	5.14	1.29	ug/kg	1		06/24/21 14:12
Chloromethane	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
cis-1,2-Dichloroethene	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
cis-1,3-Dichloropropene	8.05 U	16.1	5.02	ug/kg	1		06/24/21 14:12
Dibromochloromethane	3.21 U	6.43	1.93	ug/kg	1		06/24/21 14:12
Dibromomethane	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
Dichlorodifluoromethane	32.1 U	64.3	19.3	ug/kg	1		06/24/21 14:12
Ethylbenzene	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
Freon-113	64.5 U	129	39.9	ug/kg	1		06/24/21 14:12
Hexachlorobutadiene	12.9 U	25.7	7.97	ug/kg	1		06/24/21 14:12
Isopropylbenzene (Cumene)	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
Methylene chloride	64.5 U	129	39.9	ug/kg	1		06/24/21 14:12
Methyl-t-butyl ether	64.5 U	129	39.9	ug/kg	1		06/24/21 14:12
Naphthalene	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
n-Butylbenzene	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
n-Propylbenzene	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
o-Xylene	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
P & M -Xylene	32.1 U	64.3	19.3	ug/kg	1		06/24/21 14:12
sec-Butylbenzene	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
Styrene	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
tert-Butylbenzene	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
Tetrachloroethene	8.05 U	16.1	5.02	ug/kg	1		06/24/21 14:12
Toluene	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
trans-1,2-Dichloroethene	16.1 U	32.2	10.0	ug/kg	1		06/24/21 14:12
trans-1,3-Dichloropropene	8.05 U	16.1	5.02	ug/kg	1		06/24/21 14:12
Trichloroethene	3.21 U	6.43	1.93	ug/kg	1		06/24/21 14:12
Trichlorofluoromethane	32.1 U	64.3	19.3	ug/kg	1		06/24/21 14:12
Vinyl acetate	64.5 U	129	39.9	ug/kg	1		06/24/21 14:12
Vinyl chloride	0.515 U	1.03	0.322	ug/kg	1		06/24/21 14:12
Xylenes (total)	48.3 U	96.5	29.3	ug/kg	1		06/24/21 14:12
Surrogates							
1,2-Dichloroethane-D4 (surr)	103	71-136		%	1		06/24/21 14:12
4-Bromofluorobenzene (surr)	81.9	55-151		%	1		06/24/21 14:12
Toluene-d8 (surr)	101	85-116		%	1		06/24/21 14:12

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Client Sample ID: **18113-CL04** Client Project ID: **Haines Station Soil** Lab Sample ID: 1213488001 Lab Project ID: 1213488

Received Date: 06/19/21 13:11 Matrix: Soil/Solid (dry weight) Solids (%):86.8 Location:

Collection Date: 06/16/21 15:43

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS20848 Analytical Method: SW8260D Analyst: MDT Analytical Date/Time: 06/24/21 14:12 Container ID: 1213488001-B Prep Batch: VXX37294 Prep Method: SW5035A Prep Date/Time: 06/16/21 15:43 Prep Initial Wt./Vol.: 58.697 g Prep Extract Vol: 32.7586 mL

Print Date: 07/07/2021 11:24:45AM

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Client Sample ID: **18113-CL12** Client Project ID: **Haines Station Soil** Lab Sample ID: 1213488002 Lab Project ID: 1213488

Collection Date: 06/16/21 15:52 Received Date: 06/19/21 13:11 Matrix: Soil/Solid (dry weight) Solids (%):83.6 Location:

Results by Polynuclear Aromatics GC/MS

						Allowable	
Parameter	<u>Result Qual</u>	LOQ/CL	DL	<u>Units</u>	DF	<u>Limits</u>	Date Analyzed
1-Methylnaphthalene	14.7 U	29.4	7.35	ug/kg	1		07/01/21 17:02
2-Methylnaphthalene	14.7 U	29.4	7.35	ug/kg	1		07/01/21 17:02
Acenaphthene	14.7 U	29.4	7.35	ug/kg	1		07/01/21 17:02
Acenaphthylene	14.7 U	29.4	7.35	ug/kg	1		07/01/21 17:02
Anthracene	14.7 U	29.4	7.35	ug/kg	1		07/01/21 17:02
Benzo(a)Anthracene	14.7 U	29.4	7.35	ug/kg	1		07/01/21 17:02
Benzo[a]pyrene	14.7 U	29.4	7.35	ug/kg	1		07/01/21 17:02
Benzo[b]Fluoranthene	14.7 U	29.4	7.35	ug/kg	1		07/01/21 17:02
Benzo[g,h,i]perylene	14.7 U	29.4	7.35	ug/kg	1		07/01/21 17:02
Benzo[k]fluoranthene	14.7 U	29.4	7.35	ug/kg	1		07/01/21 17:02
Chrysene	14.7 U	29.4	7.35	ug/kg	1		07/01/21 17:02
Dibenzo[a,h]anthracene	14.7 U	29.4	7.35	ug/kg	1		07/01/21 17:02
Fluoranthene	14.7 U	29.4	7.35	ug/kg	1		07/01/21 17:02
Fluorene	14.7 U	29.4	7.35	ug/kg	1		07/01/21 17:02
Indeno[1,2,3-c,d] pyrene	14.7 U	29.4	7.35	ug/kg	1		07/01/21 17:02
Naphthalene	11.8 U	23.5	5.88	ug/kg	1		07/01/21 17:02
Phenanthrene	14.7 U	29.4	7.35	ug/kg	1		07/01/21 17:02
Pyrene	14.7 U	29.4	7.35	ug/kg	1		07/01/21 17:02
Surrogates							
2-Methylnaphthalene-d10 (surr)	81	58-103		%	1		07/01/21 17:02
Fluoranthene-d10 (surr)	78.6	54-113		%	1		07/01/21 17:02

Batch Information

Analytical Batch: XMS12708 Analytical Method: 8270D SIM (PAH) Analyst: LAW Analytical Date/Time: 07/01/21 17:02 Container ID: 1213488002-A Prep Batch: XXX45021 Prep Method: SW3550C Prep Date/Time: 06/23/21 09:47 Prep Initial Wt./Vol.: 22.873 g Prep Extract Vol: 5 mL

Print Date: 07/07/2021 11:24:45AM

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Client Sample ID: 18113-CL12 Collection Date: 06/19/21 13:21 Client Project ID: Haines Station Soil Received Date: 06/19/21 13:11 Lab Sample ID: 1213488 Matrix: Soil/Solid (dry weight) Lab Project ID: 1213488 Solids (%):83.6 Location: Results by Semivolatile Organic Fuels Parameter Result Qual LOQ/CL DL Units DE Limits E Diesel Range Organics 20.8 J 23.8 7.38 mg/kg 1 0 Surrogates 5a Androstane (surr) 87.3 50-150 % 1 0 Batch Information Analytical Batch: XFC15973 Prep Batch: XXX45039 Prep Method: SW3550C Prep Date/Time: 06/24/21 16:53 Prep Date/Time: 06/24/21 16:53 Prep Date/Time: 06/24/21 16:53 Prep Initial Wt./vol.: 30.126 g Prep Date/Time: 06/24/21 16:53 Prep Extract Vol: 5 mL Allowable Limits E Parameter Result Qual LOQ/CL DL Units DE Limits E Residual Range Organics 87.9 J 119 51.2 mg/kg 1 0 Surrogates n-Triacontane-d62 (surr) 84.1 50-150	Project ID: 18113-CL12				-+ 00/40/	14 45.50		
Results by Semivolatile Organic Fuels Parameter Result Qual LOQ/CL DL Units DE Limits E Diesel Range Organics 20.8 J 23.8 7.38 mg/kg 1 0 Surrogates Sa Androstane (surr) 87.3 50-150 % 1 0 Batch Information Analytical Batch: XFC15973 Analytical Method: AK102 Analyst: IVM Analytical Date/Time: 06/25/21 17:49 Container ID: 1213488002-A Prep Batch: XXX45039 Prep Date/Time: 06/24/21 16:53 Prep Date/Time: 06/24/21 16:53 Prep Date/Time: 06/24/21 16:53 Parameter Result Qual LOQ/CL Prep Date/Time: 06/24/21 16:53 Prep Extract Vol: 5 mL Parameter Result Qual LOQ/CL Prep Date/Time: 06/24/21 16:53 Prep Initial Wt./Vol.: 30.126 g Prep Extract Vol: 5 mL Prep Initial Wt./Vol.: 5 mL DE Limits E Surrogates 87.9 J 119 51.2 mg/kg 1 0 Surrogates n-Triacontane-d62 (surr) 84.1 50-150 % 1 0	ample ID: 1213488002 roject ID: 1213488		F M S L	Collection D Received Da Matrix: Soil/S Solids (%):8 Location:	ate: 06/19/2 ate: 06/19/2 Solid (dry w 3.6	21 15:52 21 13:11 eight)		
Parameter Diesel Range OrganicsResult Qual 20.8 JLOQ/CL 23.8DL T.38Units mg/kgDE LimitsLimits LimitsDE LimitsLimits LimitsDE LimitsAllowable LimitsDE LimitsLimits DE LimitsDE LimitsLimits DE 	s by Semivolatile Organic Fuels							
Surrogates 5a Androstane (surr) 87.3 50-150 % 1 0 Batch Information Analytical Batch: XFC15973 Prep Batch: XXX45039 Prep Method: SW3550C Analytical Method: AK102 Prep Method: SW3550C Prep Date/Time: 06/24/21 16:53 Prep Date/Time: 06/24/21 16:53 Analytical Date/Time: 06/25/21 17:49 Prep Initial Wt./Vol.: 30.126 g Prep Extract Vol: 5 mL Parameter Result Qual LOQ/CL DL Units DF Limits D Residual Range Organics 87.9 J 119 51.2 mg/kg 1 0 Surrogates n-Triacontane-d62 (surr) 84.1 50-150 % 1 0	<u>əter</u> Range Organics	<u>Result Qual</u> 20.8 J	<u>LOQ/CL</u> 23.8	<u>DL</u> 7.38	<u>Units</u> mg/kg	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/25/21 17:49
Batch Information Analytical Batch: XFC15973 Analytical Method: AK102 Analytical Method: AK102 Analytical Date/Time: 06/25/21 17:49 Container ID: 1213488002-A Parameter Result Qual LOQ/CL DL Units DF Limits E Residual Range Organics 87.9 J 119 51.2 mg/kg 1 0 Surrogates n-Triacontane-d62 (surr) 84.1 50-150 % 1 0	ites rostane (surr)	87.3	50-150		%	1		06/25/21 17:49
Analytical Batch: XFC15973 Prep Batch: XXX45039 Analytical Method: AK102 Prep Method: SW3550C Analytical Date/Time: 06/25/21 17:49 Prep Date/Time: 06/24/21 16:53 Prep Initial Wt./Vol.: 30.126 g Prep Extract Vol: 5 mL Parameter Result Qual LOQ/CL DL Units DF Limits E Residual Range Organics 87.9 J 119 51.2 mg/kg 1 0 Surrogates n-Triacontane-d62 (surr) 84.1 50-150 % 1 0	Information							
Parameter Result Qual LOQ/CL DL Units DF Limits E Residual Range Organics 87.9 J 119 51.2 mg/kg 1 0 Surrogates n-Triacontane-d62 (surr) 84.1 50-150 % 1 0	ytical Batch: XFC15973 ytical Method: AK102 yst: IVM ytical Date/Time: 06/25/21 17:49 ;ainer ID: 1213488002-A		Prep Batch: XXX45039 Prep Method: SW3550C Prep Date/Time: 06/24/21 16:53 Prep Initial Wt./Vol.: 30.126 g Prep Extract Vol: 5 mL					
Taranteer Tecon Gal Edit Gal	ator	Result Qual	1.00/01	וח	Linite	DE	<u>Allowable</u>	Date Analyzed
Surrogates n-Triacontane-d62 (surr) 84.1 50-150 % 1 0	al Range Organics	87.9 J	119	51.2	mg/kg	1		06/25/21 17:49
n-Triacontane-d62 (surr) 84.1 50-150 % 1 0	ates							
	ontane-d62 (surr)	84.1	50-150		%	1		06/25/21 17:49
Batch Information	Information							
Analytical Batch: XFC15973Prep Batch: XXX45039Analytical Method: AK103Prep Method: SW3550CAnalyst: IVMPrep Date/Time: 06/25/21 17:49Analytical Date/Time: 06/25/21 17:49Prep Initial Wt./Vol.: 30.126 gContainer ID: 1213488002-APrep Extract Vol: 5 mL	ytical Batch: XFC15973 ytical Method: AK103 yst: IVM ytical Date/Time: 06/25/21 17:49 ainer ID: 1213488002-A			Prep Batch: Prep Method Prep Date/T Prep Initial V Prep Extract	XXX45039 d: SW3550C ime: 06/24/2 Vt./Vol.: 30.1 : Vol: 5 mL	1 16:53 26 g		

Print Date: 07/07/2021 11:24:45AM

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SGS							
Results of 18113-CL12							
Client Sample ID: 18113-CL12 Client Project ID: Haines Station Soil Lab Sample ID: 1213488002 Lab Project ID: 1213488		C R M S L	ollection Da eceived Da atrix: Soil/S olids (%):83				
Results by Volatile Fuels							
<u>Parameter</u> Gasoline Range Organics	<u>Result</u> Qual 1.06 J	<u>LOQ/CL</u> 2.94	<u>DL</u> 0.881	<u>Units</u> mg/kg	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyze</u> 06/25/21 03:
Surrogates							
4-Bromofluorobenzene (surr)	125	50-150		%	1		06/25/21 03:
Batch Information							
Analytical Batch: VFC15671 Analytical Method: AK101		F	Prep Batch: Prep Method	VXX37300 : SW5035A			

Prep Date/Time: 06/16/21 15:52

Prep Initial Wt./Vol.: 76.338 g

Prep Extract Vol: 37.5088 mL

Print Date: 07/07/2021 11:24:45AM

Analyst: IJV

Analytical Date/Time: 06/25/21 03:18

Container ID: 1213488002-B

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Results of 18113-CL12

Client Sample ID: **18113-CL12** Client Project ID: **Haines Station Soil** Lab Sample ID: 1213488002 Lab Project ID: 1213488

Collection Date: 06/16/21 15:52 Received Date: 06/19/21 13:11 Matrix: Soil/Solid (dry weight) Solids (%):83.6 Location:

Results by Volatile GC/MS

						<u>Allowable</u>	
Parameter	<u>Result Qual</u>	LOQ/CL	DL	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
1,1,1,2-Tetrachloroethane	11.8 U	23.5	7.29	ug/kg	1		06/24/21 14:27
1,1,1-Trichloroethane	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
1,1,2,2-Tetrachloroethane	1.18 U	2.35	0.729	ug/kg	1		06/24/21 14:27
1,1,2-Trichloroethane	0.470 U	0.940	0.294	ug/kg	1		06/24/21 14:27
1,1-Dichloroethane	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
1,1-Dichloroethene	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
1,1-Dichloropropene	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
1,2,3-Trichlorobenzene	29.4 U	58.8	17.6	ug/kg	1		06/24/21 14:27
1,2,3-Trichloropropane	1.18 U	2.35	0.729	ug/kg	1		06/24/21 14:27
1,2,4-Trichlorobenzene	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
1,2,4-Trimethylbenzene	29.4 U	58.8	17.6	ug/kg	1		06/24/21 14:27
1,2-Dibromo-3-chloropropane	59.0 U	118	36.4	ug/kg	1		06/24/21 14:27
1,2-Dibromoethane	0.590 U	1.18	0.470	ug/kg	1		06/24/21 14:27
1,2-Dichlorobenzene	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
1,2-Dichloroethane	1.18 U	2.35	0.823	ug/kg	1		06/24/21 14:27
1,2-Dichloropropane	5.90 U	11.8	3.64	ug/kg	1		06/24/21 14:27
1,3,5-Trimethylbenzene	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
1,3-Dichlorobenzene	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
1,3-Dichloropropane	5.90 U	11.8	3.64	ug/kg	1		06/24/21 14:27
1,4-Dichlorobenzene	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
2,2-Dichloropropane	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
2-Butanone (MEK)	147 U	294	91.7	ug/kg	1		06/24/21 14:27
2-Chlorotoluene	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
2-Hexanone	59.0 U	118	36.4	ug/kg	1		06/24/21 14:27
4-Chlorotoluene	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
4-Isopropyltoluene	59.0 U	118	29.4	ug/kg	1		06/24/21 14:27
4-Methyl-2-pentanone (MIBK)	147 U	294	91.7	ug/kg	1		06/24/21 14:27
Acetone	147 U	294	91.7	ug/kg	1		06/24/21 14:27
Benzene	7.35 U	14.7	4.58	ug/kg	1		06/24/21 14:27
Bromobenzene	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
Bromochloromethane	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
Bromodichloromethane	1.18 U	2.35	0.729	ug/kg	1		06/24/21 14:27
Bromoform	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
Bromomethane	11.8 U	23.5	7.29	ug/kg	1		06/24/21 14:27
Carbon disulfide	59.0 U	118	36.4	ug/kg	1		06/24/21 14:27
Carbon tetrachloride	7.35 U	14.7	4.58	ug/kg	1		06/24/21 14:27
Chlorobenzene	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27

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Client Sample ID: **18113-CL12** Client Project ID: **Haines Station Soil** Lab Sample ID: 1213488002 Lab Project ID: 1213488

Collection Date: 06/16/21 15:52 Received Date: 06/19/21 13:11 Matrix: Soil/Solid (dry weight) Solids (%):83.6 Location:

Results by Volatile GC/MS

						Allowable	
<u>Parameter</u>	<u>Result Qual</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Chloroethane	118 U	235	72.9	ug/kg	1		06/24/21 14:27
Chloroform	2.35 U	4.70	1.18	ug/kg	1		06/24/21 14:27
Chloromethane	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
cis-1,2-Dichloroethene	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
cis-1,3-Dichloropropene	7.35 U	14.7	4.58	ug/kg	1		06/24/21 14:27
Dibromochloromethane	2.94 U	5.88	1.76	ug/kg	1		06/24/21 14:27
Dibromomethane	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
Dichlorodifluoromethane	29.4 U	58.8	17.6	ug/kg	1		06/24/21 14:27
Ethylbenzene	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
Freon-113	59.0 U	118	36.4	ug/kg	1		06/24/21 14:27
Hexachlorobutadiene	11.8 U	23.5	7.29	ug/kg	1		06/24/21 14:27
Isopropylbenzene (Cumene)	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
Methylene chloride	59.0 U	118	36.4	ug/kg	1		06/24/21 14:27
Methyl-t-butyl ether	59.0 U	118	36.4	ug/kg	1		06/24/21 14:27
Naphthalene	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
n-Butylbenzene	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
n-Propylbenzene	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
o-Xylene	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
P & M -Xylene	29.4 U	58.8	17.6	ug/kg	1		06/24/21 14:27
sec-Butylbenzene	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
Styrene	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
tert-Butylbenzene	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
Tetrachloroethene	7.35 U	14.7	4.58	ug/kg	1		06/24/21 14:27
Toluene	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
trans-1,2-Dichloroethene	14.7 U	29.4	9.17	ug/kg	1		06/24/21 14:27
trans-1,3-Dichloropropene	7.35 U	14.7	4.58	ug/kg	1		06/24/21 14:27
Trichloroethene	2.94 U	5.88	1.76	ug/kg	1		06/24/21 14:27
Trichlorofluoromethane	29.4 U	58.8	17.6	ug/kg	1		06/24/21 14:27
Vinyl acetate	59.0 U	118	36.4	ug/kg	1		06/24/21 14:27
Vinyl chloride	0.470 U	0.940	0.294	ug/kg	1		06/24/21 14:27
Xylenes (total)	44.0 U	88.1	26.8	ug/kg	1		06/24/21 14:27
Surrogates							
1,2-Dichloroethane-D4 (surr)	102	71-136		%	1		06/24/21 14:27
4-Bromofluorobenzene (surr)	94.6	55-151		%	1		06/24/21 14:27
Toluene-d8 (surr)	100	85-116		%	1		06/24/21 14:27

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Client Sample ID: **18113-CL12** Client Project ID: **Haines Station Soil** Lab Sample ID: 1213488002 Lab Project ID: 1213488

Collection Date: 06/16/21 15:52 Received Date: 06/19/21 13:11 Matrix: Soil/Solid (dry weight) Solids (%):83.6 Location:

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS20848 Analytical Method: SW8260D Analyst: MDT Analytical Date/Time: 06/24/21 14:27 Container ID: 1213488002-B Prep Batch: VXX37294 Prep Method: SW5035A Prep Date/Time: 06/16/21 15:52 Prep Initial Wt./Vol.: 76.338 g Prep Extract Vol: 37.5088 mL

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Client Sample ID: **18113-CL77** Client Project ID: **Haines Station Soil** Lab Sample ID: 1213488003 Lab Project ID: 1213488

Collection Date: 06/16/21 15:53 Received Date: 06/19/21 13:11 Matrix: Soil/Solid (dry weight) Solids (%):87.9 Location:

Results by Polynuclear Aromatics GC/MS

						Allowable	
Parameter	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	DF	<u>Limits</u>	Date Analyzed
1-Methylnaphthalene	14.1 U	28.1	7.03	ug/kg	1		07/01/21 17:22
2-Methylnaphthalene	14.1 U	28.1	7.03	ug/kg	1		07/01/21 17:22
Acenaphthene	14.1 U	28.1	7.03	ug/kg	1		07/01/21 17:22
Acenaphthylene	14.1 U	28.1	7.03	ug/kg	1		07/01/21 17:22
Anthracene	14.1 U	28.1	7.03	ug/kg	1		07/01/21 17:22
Benzo(a)Anthracene	14.1 U	28.1	7.03	ug/kg	1		07/01/21 17:22
Benzo[a]pyrene	14.1 U	28.1	7.03	ug/kg	1		07/01/21 17:22
Benzo[b]Fluoranthene	14.1 U	28.1	7.03	ug/kg	1		07/01/21 17:22
Benzo[g,h,i]perylene	14.1 U	28.1	7.03	ug/kg	1		07/01/21 17:22
Benzo[k]fluoranthene	14.1 U	28.1	7.03	ug/kg	1		07/01/21 17:22
Chrysene	14.1 U	28.1	7.03	ug/kg	1		07/01/21 17:22
Dibenzo[a,h]anthracene	14.1 U	28.1	7.03	ug/kg	1		07/01/21 17:22
Fluoranthene	14.1 U	28.1	7.03	ug/kg	1		07/01/21 17:22
Fluorene	14.1 U	28.1	7.03	ug/kg	1		07/01/21 17:22
Indeno[1,2,3-c,d] pyrene	14.1 U	28.1	7.03	ug/kg	1		07/01/21 17:22
Naphthalene	11.3 U	22.5	5.62	ug/kg	1		07/01/21 17:22
Phenanthrene	14.1 U	28.1	7.03	ug/kg	1		07/01/21 17:22
Pyrene	14.1 U	28.1	7.03	ug/kg	1		07/01/21 17:22
Surrogates							
2-Methylnaphthalene-d10 (surr)	66.2	58-103		%	1		07/01/21 17:22
Fluoranthene-d10 (surr)	58.9	54-113		%	1		07/01/21 17:22

Batch Information

Analytical Batch: XMS12708 Analytical Method: 8270D SIM (PAH) Analyst: LAW Analytical Date/Time: 07/01/21 17:22 Container ID: 1213488003-A Prep Batch: XXX45021 Prep Method: SW3550C Prep Date/Time: 06/23/21 09:47 Prep Initial Wt./Vol.: 22.768 g Prep Extract Vol: 5 mL

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Results of 18113-CL77							
Client Sample ID: 18113-CL77 Client Project ID: Haines Station Soil Lab Sample ID: 1213488003 Lab Project ID: 1213488		F F S L	Collection D Received Da Matrix: Soil/S Solids (%):8 Location:				
Results by Semivolatile Organic Fuel	S		_				
<u>Parameter</u> Diesel Range Organics	<u>Result Qual</u> 22.8	<u>LOQ/CL</u> 22.6	<u>DL</u> 6.99	<u>Units</u> mg/kg	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/25/21 17:58
urrogates 5a Androstane (surr)	99.5	50-150		%	1		06/25/21 17:58
Analytical Batch: AFC13973 Analytical Method: AK102 Analyst: IVM Analytical Date/Time: 06/25/21 17:58 Container ID: 1213488003-A			Prep Method Prep Date/T Prep Initial V Prep Extract	2: SW3550C ime: 06/24/2 Vt./Vol.: 30.2 : Vol: 5 mL	1 16:53 ?77 g		
<u>Parameter</u> Residual Range Organics	<u>Result Qual</u> 110 J	<u>LOQ/CL</u> 113	<u>DL</u> 48.5	<u>Units</u> mg/kg	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/25/21 17:58
u rrogates n-Triacontane-d62 (surr)	97	50-150		%	1		06/25/21 17:58
Batch Information							
Analytical Batch: XFC15973 Analytical Method: AK103 Analyst: IVM Analytical Date/Time: 06/25/21 17:58 Container ID: 1213488003-A			Prep Batch: Prep Method Prep Date/T Prep Initial V Prep Extract	XXX45039 d: SW3550C ime: 06/24/2 Vt./Vol.: 30.2 : Vol: 5 mL	1 16:53 ?77 g		

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Client Sample ID: 18113-CL77 Client Project ID: Haines Station Soil Lab Sample ID: 1213488003 Lab Project ID: 1213488		C R M S L	Collection Da Received Da Matrix: Soil/S Colids (%):8 Ocation:	ate: 06/16/ ate: 06/19/2 Solid (dry w 7.9	21 15:53 21 13:11 eight)		
Parameter Gasoline Range Organics	<u>Result Qual</u> 2.11 J	<u>LOQ/CL</u> 2.61	<u>DL</u> 0.782	<u>Units</u> mg/kg	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/25/21 03:36
Surrogates 4-Bromofluorobenzene (surr)	105	50-150		%	1		06/25/21 03:36
Analytical Batch: VFC15671 Analytical Method: AK101 Analyst: IJV Analytical Date/Time: 06/25/21 03:36 Container ID: 1213488003-B			Prep Batch: Prep Methoc Prep Date/T Prep Initial V Prep Extract	VXX37300 I: SW5035A ime: 06/16/2 Vt./Vol.: 74.1 Vol: 33.997	1 15:53 177 g 5 mL		

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Results of 18113-CL77

Client Sample ID: **18113-CL77** Client Project ID: **Haines Station Soil** Lab Sample ID: 1213488003 Lab Project ID: 1213488 Collection Date: 06/16/21 15:53 Received Date: 06/19/21 13:11 Matrix: Soil/Solid (dry weight) Solids (%):87.9 Location:

Results by Volatile GC/MS

						Allowable	
<u>Parameter</u>	<u>Result Qual</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
1,1,1,2-Tetrachloroethane	10.4 U	20.9	6.47	ug/kg	1		06/24/21 14:43
1,1,1-Trichloroethane	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
1,1,2,2-Tetrachloroethane	1.04 U	2.09	0.647	ug/kg	1		06/24/21 14:43
1,1,2-Trichloroethane	0.417 U	0.835	0.261	ug/kg	1		06/24/21 14:43
1,1-Dichloroethane	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
1,1-Dichloroethene	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
1,1-Dichloropropene	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
1,2,3-Trichlorobenzene	26.1 U	52.2	15.6	ug/kg	1		06/24/21 14:43
1,2,3-Trichloropropane	1.04 U	2.09	0.647	ug/kg	1		06/24/21 14:43
1,2,4-Trichlorobenzene	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
1,2,4-Trimethylbenzene	26.1 U	52.2	15.6	ug/kg	1		06/24/21 14:43
1,2-Dibromo-3-chloropropane	52.0 U	104	32.3	ug/kg	1		06/24/21 14:43
1,2-Dibromoethane	0.520 U	1.04	0.417	ug/kg	1		06/24/21 14:43
1,2-Dichlorobenzene	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
1,2-Dichloroethane	1.04 U	2.09	0.730	ug/kg	1		06/24/21 14:43
1,2-Dichloropropane	5.20 U	10.4	3.23	ug/kg	1		06/24/21 14:43
1,3,5-Trimethylbenzene	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
1,3-Dichlorobenzene	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
1,3-Dichloropropane	5.20 U	10.4	3.23	ug/kg	1		06/24/21 14:43
1,4-Dichlorobenzene	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
2,2-Dichloropropane	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
2-Butanone (MEK)	131 U	261	81.4	ug/kg	1		06/24/21 14:43
2-Chlorotoluene	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
2-Hexanone	52.0 U	104	32.3	ug/kg	1		06/24/21 14:43
4-Chlorotoluene	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
4-Isopropyltoluene	52.0 U	104	26.1	ug/kg	1		06/24/21 14:43
4-Methyl-2-pentanone (MIBK)	131 U	261	81.4	ug/kg	1		06/24/21 14:43
Acetone	131 U	261	81.4	ug/kg	1		06/24/21 14:43
Benzene	6.50 U	13.0	4.07	ug/kg	1		06/24/21 14:43
Bromobenzene	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
Bromochloromethane	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
Bromodichloromethane	1.04 U	2.09	0.647	ug/kg	1		06/24/21 14:43
Bromoform	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
Bromomethane	10.4 U	20.9	6.47	ug/kg	1		06/24/21 14:43
Carbon disulfide	52.0 U	104	32.3	ug/kg	1		06/24/21 14:43
Carbon tetrachloride	6.50 U	13.0	4.07	ug/kg	1		06/24/21 14:43
Chlorobenzene	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43

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Results of 18113-CL77

Client Sample ID: **18113-CL77** Client Project ID: **Haines Station Soil** Lab Sample ID: 1213488003 Lab Project ID: 1213488 Collection Date: 06/16/21 15:53 Received Date: 06/19/21 13:11 Matrix: Soil/Solid (dry weight) Solids (%):87.9 Location:

Results by Volatile GC/MS

						Allowable	
Parameter	<u>Result Qual</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Chloroethane	105 U	209	64.7	ug/kg	1		06/24/21 14:43
Chloroform	2.09 U	4.17	1.04	ug/kg	1		06/24/21 14:43
Chloromethane	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
cis-1,2-Dichloroethene	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
cis-1,3-Dichloropropene	6.50 U	13.0	4.07	ug/kg	1		06/24/21 14:43
Dibromochloromethane	2.61 U	5.22	1.56	ug/kg	1		06/24/21 14:43
Dibromomethane	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
Dichlorodifluoromethane	26.1 U	52.2	15.6	ug/kg	1		06/24/21 14:43
Ethylbenzene	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
Freon-113	52.0 U	104	32.3	ug/kg	1		06/24/21 14:43
Hexachlorobutadiene	10.4 U	20.9	6.47	ug/kg	1		06/24/21 14:43
Isopropylbenzene (Cumene)	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
Methylene chloride	52.0 U	104	32.3	ug/kg	1		06/24/21 14:43
Methyl-t-butyl ether	52.0 U	104	32.3	ug/kg	1		06/24/21 14:43
Naphthalene	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
n-Butylbenzene	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
n-Propylbenzene	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
o-Xylene	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
P & M -Xylene	26.1 U	52.2	15.6	ug/kg	1		06/24/21 14:43
sec-Butylbenzene	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
Styrene	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
tert-Butylbenzene	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
Tetrachloroethene	6.50 U	13.0	4.07	ug/kg	1		06/24/21 14:43
Toluene	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
trans-1,2-Dichloroethene	13.1 U	26.1	8.14	ug/kg	1		06/24/21 14:43
trans-1,3-Dichloropropene	6.50 U	13.0	4.07	ug/kg	1		06/24/21 14:43
Trichloroethene	2.61 U	5.22	1.56	ug/kg	1		06/24/21 14:43
Trichlorofluoromethane	26.1 U	52.2	15.6	ug/kg	1		06/24/21 14:43
Vinyl acetate	52.0 U	104	32.3	ug/kg	1		06/24/21 14:43
Vinyl chloride	0.417 U	0.835	0.261	ug/kg	1		06/24/21 14:43
Xylenes (total)	39.1 U	78.2	23.8	ug/kg	1		06/24/21 14:43
Surrogates							
1,2-Dichloroethane-D4 (surr)	103	71-136		%	1		06/24/21 14:43
4-Bromofluorobenzene (surr)	82	55-151		%	1		06/24/21 14:43
Toluene-d8 (surr)	102	85-116		%	1		06/24/21 14:43

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Client Sample ID: **18113-CL77** Client Project ID: **Haines Station Soil** Lab Sample ID: 1213488003 Lab Project ID: 1213488

Collection Date: 06/16/21 15:53 Received Date: 06/19/21 13:11 Matrix: Soil/Solid (dry weight) Solids (%):87.9 Location:

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS20848 Analytical Method: SW8260D Analyst: MDT Analytical Date/Time: 06/24/21 14:43 Container ID: 1213488003-B Prep Batch: VXX37294 Prep Method: SW5035A Prep Date/Time: 06/16/21 15:53 Prep Initial Wt./Vol.: 74.177 g Prep Extract Vol: 33.9975 mL

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Results of Irip Blank							
Client Sample ID: Trip Blank Client Project ID: Haines Station Soil Lab Sample ID: 1213488004 Lab Project ID: 1213488		C R M S	ollection Da eceived Da latrix: Soil/S olids (%): ocation:	ate: 06/16/ ate: 06/19/2 Solid (dry w	21 15:43 21 13:11 eight)		
Results by Volatile Fuels]				
Parameter Gasoline Range Organics	<u>Result Qual</u>	<u>LOQ/CL</u> 2.52	<u>DL</u> 0.755	<u>Units</u> ma/ka	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	Date Analyze
	1.04 0	2.52	0.755	mg/kg			00/20/21 02.
4-Bromofluorobenzene (surr)	123	50-150		%	1		06/25/21 02:
Batch Information							
Analytical Batch: VFC15671 Analytical Method: AK101 Analyst: IJV			Prep Batch: Prep Method Prep Date/Ti Prep Initial V	VXX37300 I: SW5035A me: 06/16/2 Vt./Vol.: 49.6	1 15:43 653 g		

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Results of Trip Blank

Client Sample ID: **Trip Blank** Client Project ID: **Haines Station Soil** Lab Sample ID: 1213488004 Lab Project ID: 1213488 Collection Date: 06/16/21 15:43 Received Date: 06/19/21 13:11 Matrix: Soil/Solid (dry weight) Solids (%): Location:

Results by Volatile GC/MS

						<u>Allowable</u>	
<u>Parameter</u>	<u>Result Qual</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
1,1,1,2-Tetrachloroethane	10.1 U	20.1	6.24	ug/kg	1		06/24/21 13:56
1,1,1-Trichloroethane	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
1,1,2,2-Tetrachloroethane	1.00 U	2.01	0.624	ug/kg	1		06/24/21 13:56
1,1,2-Trichloroethane	0.403 U	0.806	0.252	ug/kg	1		06/24/21 13:56
1,1-Dichloroethane	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
1,1-Dichloroethene	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
1,1-Dichloropropene	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
1,2,3-Trichlorobenzene	25.1 U	50.3	15.1	ug/kg	1		06/24/21 13:56
1,2,3-Trichloropropane	1.00 U	2.01	0.624	ug/kg	1		06/24/21 13:56
1,2,4-Trichlorobenzene	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
1,2,4-Trimethylbenzene	25.1 U	50.3	15.1	ug/kg	1		06/24/21 13:56
1,2-Dibromo-3-chloropropane	50.5 U	101	31.2	ug/kg	1		06/24/21 13:56
1,2-Dibromoethane	0.505 U	1.01	0.403	ug/kg	1		06/24/21 13:56
1,2-Dichlorobenzene	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
1,2-Dichloroethane	1.00 U	2.01	0.705	ug/kg	1		06/24/21 13:56
1,2-Dichloropropane	5.05 U	10.1	3.12	ug/kg	1		06/24/21 13:56
1,3,5-Trimethylbenzene	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
1,3-Dichlorobenzene	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
1,3-Dichloropropane	5.05 U	10.1	3.12	ug/kg	1		06/24/21 13:56
1,4-Dichlorobenzene	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
2,2-Dichloropropane	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
2-Butanone (MEK)	126 U	252	78.5	ug/kg	1		06/24/21 13:56
2-Chlorotoluene	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
2-Hexanone	50.5 U	101	31.2	ug/kg	1		06/24/21 13:56
4-Chlorotoluene	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
4-Isopropyltoluene	50.5 U	101	25.2	ug/kg	1		06/24/21 13:56
4-Methyl-2-pentanone (MIBK)	126 U	252	78.5	ug/kg	1		06/24/21 13:56
Acetone	126 U	252	78.5	ug/kg	1		06/24/21 13:56
Benzene	6.30 U	12.6	3.93	ug/kg	1		06/24/21 13:56
Bromobenzene	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
Bromochloromethane	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
Bromodichloromethane	1.00 U	2.01	0.624	ug/kg	1		06/24/21 13:56
Bromoform	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
Bromomethane	10.1 U	20.1	6.24	ug/kg	1		06/24/21 13:56
Carbon disulfide	50.5 U	101	31.2	ug/kg	1		06/24/21 13:56
Carbon tetrachloride	6.30 U	12.6	3.93	ug/kg	1		06/24/21 13:56
Chlorobenzene	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56

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Results of Trip Blank

Client Sample ID: **Trip Blank** Client Project ID: **Haines Station Soil** Lab Sample ID: 1213488004 Lab Project ID: 1213488 Collection Date: 06/16/21 15:43 Received Date: 06/19/21 13:11 Matrix: Soil/Solid (dry weight) Solids (%): Location:

Results by Volatile GC/MS

						Allowable	
<u>Parameter</u>	<u>Result Qual</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Chloroethane	101 U	201	62.4	ug/kg	1		06/24/21 13:56
Chloroform	2.02 U	4.03	1.01	ug/kg	1		06/24/21 13:56
Chloromethane	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
cis-1,2-Dichloroethene	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
cis-1,3-Dichloropropene	6.30 U	12.6	3.93	ug/kg	1		06/24/21 13:56
Dibromochloromethane	2.52 U	5.03	1.51	ug/kg	1		06/24/21 13:56
Dibromomethane	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
Dichlorodifluoromethane	25.1 U	50.3	15.1	ug/kg	1		06/24/21 13:56
Ethylbenzene	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
Freon-113	50.5 U	101	31.2	ug/kg	1		06/24/21 13:56
Hexachlorobutadiene	10.1 U	20.1	6.24	ug/kg	1		06/24/21 13:56
Isopropylbenzene (Cumene)	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
Methylene chloride	50.5 U	101	31.2	ug/kg	1		06/24/21 13:56
Methyl-t-butyl ether	50.5 U	101	31.2	ug/kg	1		06/24/21 13:56
Naphthalene	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
n-Butylbenzene	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
n-Propylbenzene	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
o-Xylene	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
P & M -Xylene	25.1 U	50.3	15.1	ug/kg	1		06/24/21 13:56
sec-Butylbenzene	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
Styrene	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
tert-Butylbenzene	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
Tetrachloroethene	6.30 U	12.6	3.93	ug/kg	1		06/24/21 13:56
Toluene	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
trans-1,2-Dichloroethene	12.6 U	25.2	7.85	ug/kg	1		06/24/21 13:56
trans-1,3-Dichloropropene	6.30 U	12.6	3.93	ug/kg	1		06/24/21 13:56
Trichloroethene	2.52 U	5.03	1.51	ug/kg	1		06/24/21 13:56
Trichlorofluoromethane	25.1 U	50.3	15.1	ug/kg	1		06/24/21 13:56
Vinyl acetate	50.5 U	101	31.2	ug/kg	1		06/24/21 13:56
Vinyl chloride	0.403 U	0.806	0.252	ug/kg	1		06/24/21 13:56
Xylenes (total)	37.8 U	75.5	23.0	ug/kg	1		06/24/21 13:56
Surrogates							
1,2-Dichloroethane-D4 (surr)	101	71-136		%	1		06/24/21 13:56
4-Bromofluorobenzene (surr)	96.8	55-151		%	1		06/24/21 13:56
Toluene-d8 (surr)	99.8	85-116		%	1		06/24/21 13:56

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Results of Trip Blank

Client Sample ID: **Trip Blank** Client Project ID: **Haines Station Soil** Lab Sample ID: 1213488004 Lab Project ID: 1213488

Collection Date: 06/16/21 15:43 Received Date: 06/19/21 13:11 Matrix: Soil/Solid (dry weight) Solids (%): Location:

Results by Volatile GC/MS

Batch Information

Analytical Batch: VMS20848 Analytical Method: SW8260D Analyst: MDT Analytical Date/Time: 06/24/21 13:56 Container ID: 1213488004-A Prep Batch: VXX37294 Prep Method: SW5035A Prep Date/Time: 06/16/21 15:43 Prep Initial Wt./Vol.: 49.653 g Prep Extract Vol: 25 mL

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Method Blank					
Blank ID: MB for HBI Blank Lab ID: 16176	N 1821129 [SPT/11303] 34	Matri	x: Soil/Solid	(dry weight)	
QC for Samples: 1213488001, 1213488	002, 1213488003				
Describe has ONION OF	····				
Results by SM21 25 4 <u>Parameter</u> Total Solids	40G <u>Results</u> 100	LOQ/CL	DL	<u>Units</u> %	

Print Date: 07/07/2021 11:24:48AM

Duplicate Sample Sum	mary							
Driginal Sample ID: 121 Duplicate Sample ID: 16 QC for Samples:	3444004 517637		Analysis Date: 06/21/2021 17:45 Matrix: Soil/Solid (dry weight)					
Results by SM21 2540G								
JAME	<u>Original</u>	Duplicate	<u>Units</u>	<u>RPD (%)</u>	RPD CL			
otal Solids	77.0	76.8	%	0.17	(< 15)			

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Duplicate Sample Summa	iry								
Original Sample ID: 12134 Duplicate Sample ID: 1617	144008 7638		Analysis Date: 06/21/2021 17:45 Matrix: Soil/Solid (dry weight)						
QC for Samples:									
1213488001, 1213488002,	, 1213488003								
Results by SM21 2540G									
NAME	<u>Original</u>	Duplicate	<u>Units</u>	<u>RPD (%)</u>	RPD CL				
Total Solids	79.5	80.4	%	1.20	(< 15)				
Batch Information									
Analytical Batch: SPT11303	3								
Analytical Method: SM21 2	540G								
Instrument: Analyst: TMM									

Print Date: 07/07/2021 11:24:49AM

Duplicate Sample Sum	mary						
Original Sample ID: 1213496011 Duplicate Sample ID: 1617639 QC for Samples:			Analysis Date: 06/21/2021 17:45 Matrix: Soil/Solid (dry weight)				
1213488001, 12134880	02, 1213488003						
Results by SM21 25400	3						
NAME	Original	Duplicate	<u>Units</u>	<u>RPD (%)</u>	RPD CL		
Total Solids	97.5	97.6	%	0.10	(< 15)		
Batch Information							
Analytical Method: SM2 Instrument: Analyst: TMM	1 2540G						

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Method Blank

Blank ID: MB for HBN 1821332 [VXX/37294] Blank Lab ID: 1618646 Matrix: Soil/Solid (dry weight)

QC for Samples: 1213488001, 1213488002, 1213488003, 1213488004

Results by SW8260D

<u>Parameter</u>	<u>Results</u>	LOQ/CL	<u>DL</u>	<u>Units</u>
1,1,1,2-Tetrachloroethane	10.0U	20.0	6.20	ug/kg
1,1,1-Trichloroethane	12.5U	25.0	7.80	ug/kg
1,1,2,2-Tetrachloroethane	1.00U	2.00	0.620	ug/kg
1,1,2-Trichloroethane	0.400U	0.800	0.250	ug/kg
1,1-Dichloroethane	12.5U	25.0	7.80	ug/kg
1,1-Dichloroethene	12.5U	25.0	7.80	ug/kg
1,1-Dichloropropene	12.5U	25.0	7.80	ug/kg
1,2,3-Trichlorobenzene	25.0U	50.0	15.0	ug/kg
1,2,3-Trichloropropane	1.00U	2.00	0.620	ug/kg
1,2,4-Trichlorobenzene	12.5U	25.0	7.80	ug/kg
1,2,4-Trimethylbenzene	25.0U	50.0	15.0	ug/kg
1,2-Dibromo-3-chloropropane	50.0U	100	31.0	ug/kg
1,2-Dibromoethane	0.500U	1.00	0.400	ug/kg
1,2-Dichlorobenzene	12.5U	25.0	7.80	ug/kg
1,2-Dichloroethane	1.00U	2.00	0.700	ug/kg
1,2-Dichloropropane	5.00U	10.0	3.10	ug/kg
1,3,5-Trimethylbenzene	12.5U	25.0	7.80	ug/kg
1,3-Dichlorobenzene	12.5U	25.0	7.80	ug/kg
1,3-Dichloropropane	5.00U	10.0	3.10	ug/kg
1,4-Dichlorobenzene	12.5U	25.0	7.80	ug/kg
2,2-Dichloropropane	12.5U	25.0	7.80	ug/kg
2-Butanone (MEK)	125U	250	78.0	ug/kg
2-Chlorotoluene	12.5U	25.0	7.80	ug/kg
2-Hexanone	50.0U	100	31.0	ug/kg
4-Chlorotoluene	12.5U	25.0	7.80	ug/kg
4-Isopropyltoluene	50.0U	100	25.0	ug/kg
4-Methyl-2-pentanone (MIBK)	125U	250	78.0	ug/kg
Acetone	125U	250	78.0	ug/kg
Benzene	6.25U	12.5	3.90	ug/kg
Bromobenzene	12.5U	25.0	7.80	ug/kg
Bromochloromethane	12.5U	25.0	7.80	ug/kg
Bromodichloromethane	1.00U	2.00	0.620	ug/kg
Bromoform	12.5U	25.0	7.80	ug/kg
Bromomethane	10.0U	20.0	6.20	ug/kg
Carbon disulfide	50.0U	100	31.0	ug/kg
Carbon tetrachloride	6.25U	12.5	3.90	ug/kg
Chlorobenzene	12.5U	25.0	7.80	ug/kg
Chloroethane	100U	200	62.0	ug/kg

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Method Blank

Blank ID: MB for HBN 1821332 [VXX/37294] Blank Lab ID: 1618646 Matrix: Soil/Solid (dry weight)

QC for Samples:

 $1213488001,\,1213488002,\,1213488003,\,1213488004$

Results by SW8260D				
Parameter	Results		DI	Units
Chloroform	2.00U	4.00	1.00	ug/kg
Chloromethane	12.5U	25.0	7.80	ug/kg
cis-1,2-Dichloroethene	12.5U	25.0	7.80	ug/kg
cis-1,3-Dichloropropene	6.25U	12.5	3.90	ug/kg
Dibromochloromethane	2.50U	5.00	1.50	ug/kg
Dibromomethane	12.5U	25.0	7.80	ug/kg
Dichlorodifluoromethane	25.0U	50.0	15.0	ug/kg
Ethylbenzene	12.5U	25.0	7.80	ug/kg
Freon-113	50.0U	100	31.0	ug/kg
Hexachlorobutadiene	10.0U	20.0	6.20	ug/kg
Isopropylbenzene (Cumene)	12.5U	25.0	7.80	ug/kg
Methylene chloride	50.0U	100	31.0	ug/kg
Methyl-t-butyl ether	50.0U	100	31.0	ug/kg
Naphthalene	12.5U	25.0	7.80	ug/kg
n-Butylbenzene	12.5U	25.0	7.80	ug/kg
n-Propylbenzene	12.5U	25.0	7.80	ug/kg
o-Xylene	12.5U	25.0	7.80	ug/kg
P & M -Xylene	25.0U	50.0	15.0	ug/kg
sec-Butylbenzene	12.5U	25.0	7.80	ug/kg
Styrene	12.5U	25.0	7.80	ug/kg
tert-Butylbenzene	12.5U	25.0	7.80	ug/kg
Tetrachloroethene	6.25U	12.5	3.90	ug/kg
Toluene	12.5U	25.0	7.80	ug/kg
trans-1,2-Dichloroethene	12.5U	25.0	7.80	ug/kg
trans-1,3-Dichloropropene	6.25U	12.5	3.90	ug/kg
Trichloroethene	2.50U	5.00	1.50	ug/kg
Trichlorofluoromethane	25.0U	50.0	15.0	ug/kg
Vinyl acetate	50.0U	100	31.0	ug/kg
Vinyl chloride	0.400U	0.800	0.250	ug/kg
Xylenes (total)	37.5U	75.0	22.8	ug/kg
Surrogates				
1,2-Dichloroethane-D4 (surr)	102	71-136		%
4-Bromofluorobenzene (surr)	93.2	55-151		%
Toluene-d8 (surr)	101	85-116		%

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Method Blank]			
Blank ID: MB for HBN Blank Lab ID: 161864	l 1821332 [VXX/37294] 6	Matri	x: Soil/Solid	l (dry weight)	
QC for Samples: 1213488001, 12134880	02, 1213488003, 1213488004				
Results by SW8260D					
Parameter	<u>Results</u>	LOQ/CL	DL	<u>Units</u>	
Batch Information					
Analytical Batch: VN Analytical Method: S Instrument: VRA Ag Analyst: MDT		Prep Ba Prep M Prep Da Prep In	atch: VXX372 ethod: SW50 ate/Time: 6/2 itial Wt./Vol.:	294 035A 24/2021 6:00:00AM 50 g	
Analytical Date/Time	: 6/24/2021 10:21:00AM	Prep Ex	tract Vol: 25	5 mL	

Print Date: 07/07/2021 11:24:53AM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213488 [VXX37294] Blank Spike Lab ID: 1618647 Date Analyzed: 06/24/2021 10:36

Matrix: Soil/Solid (dry weight)

QC for Samples: 1213488001, 1213488002, 1213488003, 1213488004

Results by SW8260D

	E	Blank Spike	(ug/kg)	
<u>Parameter</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>
1,1,1,2-Tetrachloroethane	750	831	111	(78-125)
1,1,1-Trichloroethane	750	816	109	(73-130)
1,1,2,2-Tetrachloroethane	750	813	108	(70-124)
1,1,2-Trichloroethane	750	772	103	(78-121)
1,1-Dichloroethane	750	765	102	(76-125)
1,1-Dichloroethene	750	795	106	(70-131)
1,1-Dichloropropene	750	775	103	(76-125)
1,2,3-Trichlorobenzene	750	833	111	(66-130)
1,2,3-Trichloropropane	750	772	103	(73-125)
1,2,4-Trichlorobenzene	750	853	114	(67-129)
1,2,4-Trimethylbenzene	750	791	106	(75-123)
1,2-Dibromo-3-chloropropane	750	779	104	(61-132)
1,2-Dibromoethane	750	827	110	(78-122)
1,2-Dichlorobenzene	750	831	111	(78-121)
1,2-Dichloroethane	750	749	100	(73-128)
1,2-Dichloropropane	750	781	104	(76-123)
1,3,5-Trimethylbenzene	750	772	103	(73-124)
1,3-Dichlorobenzene	750	753	100	(77-121)
1,3-Dichloropropane	750	780	104	(77-121)
1,4-Dichlorobenzene	750	802	107	(75-120)
2,2-Dichloropropane	750	870	116	(67-133)
2-Butanone (MEK)	2250	2400	107	(51-148)
2-Chlorotoluene	750	770	103	(75-122)
2-Hexanone	2250	2480	110	(53-145)
4-Chlorotoluene	750	809	108	(72-124)
4-Isopropyltoluene	750	780	104	(73-127)
4-Methyl-2-pentanone (MIBK)	2250	2390	106	(65-135)
Acetone	2250	2020	90	(36-164)
Benzene	750	770	103	(77-121)
Bromobenzene	750	775	103	(78-121)
Bromochloromethane	750	769	103	(78-125)
Bromodichloromethane	750	772	103	(75-127)
Bromoform	750	777	104	(67-132)
Bromomethane	750	745	99	(53-143)

Print Date: 07/07/2021 11:24:55AM

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1213488 [VXX37294] Blank Spike Lab ID: 1618647 Date Analyzed: 06/24/2021 10:36

Matrix: Soil/Solid (dry weight)

QC for Samples:

1213488001, 1213488002, 1213488003, 1213488004

Results by SW8260D

ParameterSpikeRec.WsCLCarbon disulfide1301340119(63-132)Carbon disulfide750760113(70-135)Chlorobenzene75074399(59-139)Chlorobethane750712103(78-123)Chlorobethane75071896(50-136)cish 12-Dichloropthene750712103(77-123)cish 12-Dichloropthene750720106(78-126)Dibromethane750721106(78-126)Dibromethane75072298(78-126)Dibromethane75073298(78-126)Dibromethane750734106(78-127)Preon-113120121(61-135)Isopropylbenzene (Cumene)750764122(71-128)Methyl-bethyl ether750764124(70-128)n-Burylbenzene750864101(70-128)n-Burylbenzene750864124(71-128)n-Burylbenzene750864102(71-128)n-Burylbenzene750816102(71-128)n-Burylbenzene750816102(71-128)n-Burylbenzene750816102(71-128)n-Burylbenzene750816103(71-128)n-Burylbenzene750164164(71-128)n-Burylbenzene750164164(71-128)n-B		I	Blank Spike	(ug/kg)	
Carbon disulfide11301340119(63-132)Carbon tetrachloride750749113(70-135)Chloroethane75074399(59-139)Chloroethane75074396(50-136)Chloroethane750772103(74-123)chloroethane750778102(74-126)Dibromochloropropene750778104(74-126)Dibromochloromethane750778104(74-126)Dibromochloromethane750784100(76-122)Ethylbenzene750784100(76-122)Freen-1131130120107(66-136)Hexachlorobutadiene750784102(70-128)Methylen-blord750784102(70-128)Naphthalene750784102(70-128)Naphthalene750784102(70-128)Naphthalene750883111(62-129)n-Proyblenzene750864109(73-125)o-Xylene750764102(77-124)sc-Eulylbenzene750764103(73-125)o-Xylene750764104(73-125)o-Xylene750764104(73-126)sc-Eulylbenzene750764104(73-126)tetrast-tylbenzene750764104(73-126)tetrast-tylbenzene750754104(73-126) <th><u>Parameter</u></th> <th><u>Spike</u></th> <th>Result</th> <th><u>Rec (%)</u></th> <th><u>CL</u></th>	<u>Parameter</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>
Carbon tetrachloride750849113(70-135)Chlorobenzene750758101(79-120)Chlorobenzene75074399(59-139)Chloroform750772103(78-123)Chloromethane75077896(50-136)cis-1.3-Dichloropropene750772103(74-126)Dibronochioromethane750772104(74-126)Dibronochioromethane75077298(29-149)Ethylbenzene750784104(74-126)Pieron-1131301200107(66-136)Hexachlorobutadiene750784105(78-125)Naphthalene750766102(76-128)Hethylbenzene750784105(70-128)Hethylbenzene750833111(62-129)Naphthalene750864102(77-128)Naphthalene750864102(77-128)P & M-Xylene750769102(77-128)P & M-Xylene750769103(73-126)Styrene750764103(73-126)Tetrachlorobethene750754104(73-126)Tetrachlorobethene750754102(77-123)P & M-Xylene750754103(73-126)Tetrachlorobethene750754103(73-126)Tetrachlorobethene750754104(73-126	Carbon disulfide	1130	1340	119	(63-132)
Chlorobenzene750758101(79-12)Chloroethane75074399(59-13)Chloroethane75071896(50-136)cis-1,2-Dichloroethene750760102(77-123)cis-1,3-Dichloropopene750772103(74-126)Dibromothlane750772103(74-126)Dibromothlane750772103(74-126)Dibromothlane750784104(74-126)Dibromothlane750784106(78-122)Ethylbenzene750784100(76-122)Freon-1131130120107(66-136)Hexachlorobutadiene750764102(70-128)Iborypenzene (Cumene)750764102(70-128)Methyl-butyl ether11301140101(73-125)Naphthalene750888120(70-128)n-Propylbenzene750764109(73-125)o-Xylene750764102(77-124)sec-Butylbenzene750764103(73-125)o-Xylene750764103(73-126)tert-Butylbenzene750764104(74-126)tert-Butylbenzene750764104(74-126)tert-Butylbenzene750764104(74-126)tert-Butylbenzene750764104(74-126)tert-Butylbenzene750764104 <t< th=""><th>Carbon tetrachloride</th><th>750</th><th>849</th><th>113</th><th>(70-135)</th></t<>	Carbon tetrachloride	750	849	113	(70-135)
Chloroethane75074399(59-139)Chloroform750772103(78-123)Chloromethane750766102(77-123)cis-1.2-Dichloropropene750772103(74-126)Dibromochloromethane750772103(74-126)Dibromochloromethane750772104(74-126)Dibromochloromethane750784104(74-126)Dibromochloromethane750743104(76-122)Freen-11311301200107(66-136)Hexachlorobutadiene750784105(68-134)Heyshene Clumene)750784105(70-128)Methylene chloride750784105(70-128)Naphthalene750883111(73-125)n-Butylbenzene750764109(73-125)n-Stylene750764109(73-125)n-Stylene750764103(73-126)n-Butylbenzene750764103(73-126)n-Stylene750764103(73-126)sec-Butylbenzene750764103(73-126)Styrene750764103(73-126)Styrene750764103(73-126)Styrene750764104(73-126)Styrene750764104(73-126)Styrene750764104(74-126)Tichlor	Chlorobenzene	750	758	101	(79-120)
Chlorofrm750772103(78-123)Chloromethane75071896(50-136)cis-1.2-Dichloroptopen750772103(77-123)cis-1.3-Dichloroptopen750778104(74-126)Dibromochlaromethane750778104(74-125)Dichlorodifluoromethane75078298(29-149)Ethylbenzene75078298(66-136)Freon-113110120(77-123)(66-136)Hexachlorobutadiene750784105(68-134)Methylene choride750764102(70-128)Naphthalene750764102(70-128)Naphthalene750838111(62-129)n-Butylbenzene750836120(70-128)n-Butylbenzene750816102(70-128)n-Butylbenzene750816102(70-128)n-Butylbenzene750816102(71-123)sec-Butylbenzene750764103(73-125)Styrene750770103(73-125)Tean-1/2-Dichlorophene750784106(73-128)Toluene750784106(71-130)Tean-1/2-Dichlorophene750784106(71-123)Tean-1/2-Dichlorophene750784106(71-130)Tichlorophene750784106(71-130)Tichlorophene750784	Chloroethane	750	743	99	(59-139)
Chloromethane75075076096(50-136)cis-1,2-Dichloroethene750760102(77-123)cis-1,3-Dichloropropene750772103(74-126)Dibromochloromethane750780106(78-125)Dichlorodifluoromethane75073298(29-149)Ethylbenzene750742100(76-122)Froen-11311301200107(66-136)Hexachlorobutadiene750784102(70-128)Isopropylbenzene (Cumene)750784102(70-128)Methyle-bulyl ether11301140101(73-125)Naphthalene750883111(62-129)n-Bulylbenzene750898120(70-128)n-Propylbenzene750898102(77-124)sec-Bulylbenzene750764102(77-124)sec-Bulylbenzene750764102(77-124)sec-Bulylbenzene750764104(73-125)P & M -Xylene1500170103(73-126)Styrene750764104(73-126)Toluene750764104(74-125)Itans-1,2-Dichloroethene750764104(74-125)Toluene750764104(74-125)Toluene750764104(74-125)Toluene750764105(77-123)Toluene750764<	Chloroform	750	772	103	(78-123)
cis-1,2-Dichloroptopene750766102(77-123)cis-1,3-Dichloroptopene750772103(74-126)Dibromochloromethane750778104(74-126)Dibromothloromethane750790106(29-149)Ethylbenzene750748100(76-122)Freon-11311301200107(66-136)Hexachlorobutadien750784105(68-134)Hexachlorobutadien750784102(70-128)Methylen-choirde750784102(70-128)Methylen-choirde750784102(70-128)Naphthalene750784101(73-125)Naphthalene750786102(70-128)Naphthalene750785102(70-128)Naphthalene750765102(77-123)P & M-Xylene750769103(73-126)Styrene750769103(73-126)Styrene750763104(73-126)Toluene750763102(74-125)Toluene750763102(74-126)Toluene750763103(73-126)Toluene750763104(74-126)Toluene750763104(74-126)Toluene750763104(74-126)Toluene750763104(74-126)Toluene75076	Chloromethane	750	718	96	(50-136)
cis-1,3-Dichloropropene 750 772 103 (74-126) Dibromochloromethane 750 778 104 (74-126) Dibromodhlaromethane 750 799 106 (78-125) Dichorodifluromethane 750 732 98 (29-149) Ethylbenzene 750 748 100 (76-122) Freon-113 1130 120 (68-136) Hexachlorobutadiene 750 764 102 (70-128) Methylene chloride 750 764 102 (70-128) Naphthalene 750 764 102 (70-128) Naphthalene 750 838 11 (62-129) n-Butylbenzene 750 838 12 (70-128) n-Propylbenzene 750 838 12 (70-128) n-Propylbenzene 750 816 109 (71-123) set-Butylbenzene 750 754 102 (71-124) set-Butylbenzene 750 758<	cis-1,2-Dichloroethene	750	766	102	(77-123)
Dibromochloromethane 750 778 104 (74-126) Dibromomethane 750 799 106 (78-125) Dichlorodifluoromethane 750 732 98 (29-149) Ethylbenzene 750 748 100 (76-122) Freon-113 1130 1200 107 (66-136) Hexachlorobutadiene 750 784 105 (68-134) Isopropylbenzene (Cumene) 750 784 105 (70-128) Methyl-t-butyl ether 1130 1140 101 (73-125) Naphthalene 750 838 120 (70-128) n-Propylbenzene 750 846 109 (73-125) o-Xylene 750 765 102 (77-124) sec-Butylbenzene 750 764 103 (73-126) Styrene 750 764 103 (73-126) Styrene 750 758 101 (71-121) trans-1,2-Dichloroethene 750	cis-1,3-Dichloropropene	750	772	103	(74-126)
Dibromomethane 750 799 106 (78-125) Dichlorodifluoromethane 750 732 98 (29-149) Ethylbenzene 750 748 100 (76-122) Freon-113 1130 1200 107 (66-136) Hexachlorobutadiene 750 784 105 (68-134) Methylene chloride 750 766 102 (70-128) Methylene chloride 750 766 102 (70-128) Naphthalene 750 833 111 (62-129) n-Butylbenzene 750 816 109 (73-125) o-Xylene 750 816 109 (77-128) o-Xylene 750 765 102 (77-128) sec-Butylbenzene 750 769 103 (73-126) Styrene 750 769 103 (73-126) Tetrachloroethene 750 763 102 (74-124) tert-Butylbenzene 750 763	Dibromochloromethane	750	778	104	(74-126)
Dichlorodifluoromethane75073298(29-149)Ethylbenzene750748100(76-122)Freon-11311301200107(66-136)Hexachlorobutadiene750838112(61-135)Isoproylbenzene (Cumene)750764105(70-128)Methylene chloride750766102(70-128)Methylene chloride750838111(73-125)Naphthalene750838120(70-128)n-Butylbenzene750816109(77-123)o-Xylene750765102(77-123)p & M -Xylene750769103(73-125)Sec-Butylbenzene750769103(73-126)Styrene750769103(73-125)Totlene750769103(73-125)Totlene750769103(73-126)Totlene750769103(73-125)Totlene750769103(73-126)Totlene750763102(74-125)Totlene750763102(74-125)Totlene750763102(74-125)Totlene750763102(74-125)Totlene750763102(74-125)Totlene750764106(74-125)Totlenorthene750791105(74-125)Trichlorothene750791105	Dibromomethane	750	799	106	(78-125)
Ethylbenzene 750 748 100 (76-12) Freon-113 1130 1200 107 (66-136) Hexachlorobutadiene 750 838 112 (61-135) Isoproylbenzene (Cumene) 750 764 105 (68-134) Methylene chloride 750 766 102 (70-128) Methyl-Lbutyl ether 1130 1140 101 (73-125) Naphthalene 750 838 111 (62-129) n-Butylbenzene 750 838 109 (70-128) n-Proylbenzene 750 816 109 (77-123) o-Xylene 750 765 102 (77-124) sec-Butylbenzene 750 764 103 (73-126) Styrene 750 764 103 (73-126) Styrene 750 763 103 (73-126) Tetrachloroethene 750 763 104 (74-125) Tetrachloroethene 750 784 </th <th>Dichlorodifluoromethane</th> <th>750</th> <th>732</th> <th>98</th> <th>(29-149)</th>	Dichlorodifluoromethane	750	732	98	(29-149)
Freon-113 1130 1200 107 (66-136) Hexachlorobutadiene 750 838 112 (61-135) Isopropylbenzene (Cumene) 750 784 105 (68-134) Methylene chloride 750 766 102 (70-128) Methyl-butyl ether 1130 1140 101 (73-125) Naphthalene 750 838 120 (70-128) n-Propylbenzene 750 818 109 (70-128) o-Xylene 750 816 109 (73-125) o-Xylene 750 816 109 (73-125) o-Xylene 750 816 102 (77-123) P & M -Xylene 750 764 103 (73-126) Styrene 750 794 106 (74-124) tert-Bulylbenzene 750 784 101 (74-125) Tetrachloroethene 750 784 102 (74-125) Tetrachloroethene 750 784 <th>Ethylbenzene</th> <th>750</th> <th>748</th> <th>100</th> <th>(76-122)</th>	Ethylbenzene	750	748	100	(76-122)
Hexachlorobutadiene 750 838 112 (61-135) Isopropylbenzene (Cumene) 750 784 105 (68-134) Methylene chloride 750 766 102 (70-128) Methyl-t-butyl ether 1130 1140 (73-125) Naphthalene 750 833 111 (62-129) n-Butylbenzene 750 838 120 (70-128) o-Xylene 750 816 109 (73-125) o-Xylene 750 765 102 (77-123) P & M -Xylene 1500 1470 98 (77-124) sec-Butylbenzene 750 769 103 (73-125) Styrene 750 769 103 (73-128) Tetrachloroethene 750 784 104 (74-125) Tetrachloroethene 750 789 102 (74-125) Tetrachloroethene 750 784 104 (74-125) Tetrachloroethene 750 791	Freon-113	1130	1200	107	(66-136)
Isopropylbenzene (Cumene) 750 784 105 (68-134) Methylene chloride 750 766 102 (70-128) Methyl-t-butyl ether 1130 1140 01 (73-125) Naphthalene 750 833 111 (62-129) n-Butylbenzene 750 898 120 (70-128) n-Propylbenzene 750 816 109 (73-125) o-Xylene 750 765 102 (77-123) P&M -Xylene 1500 1470 98 (77-124) sec-Butylbenzene 750 764 103 (73-126) Styrene 750 764 106 (73-126) Tetrachloroethene 750 764 103 (73-126) Tetrachloroethene 750 763 103 (73-126) Tetrachloroethene 750 758 104 (74-125) Trans-1,2-Dichloroethene 750 754 105 (77-123) Trichlorofthene 750<	Hexachlorobutadiene	750	838	112	(61-135)
Methylene chloride 750 766 102 (70-128) Methyl-t-butyl ether 1130 1140 101 (73-125) Naphthalene 750 833 111 (62-129) n-Butylbenzene 750 898 120 (70-128) n-Propylbenzene 750 816 109 (77-123) o-Xylene 750 765 102 (77-123) p& M -Xylene 1500 1470 98 (77-124) sec-Butylbenzene 750 769 103 (73-126) Styrene 750 769 103 (73-126) tert-Butylbenzene 750 740 106 (73-126) Tetrachloroethene 750 749 100 (73-128) Toluene 750 758 101 (77-121) trans-1,2-Dichloroethene 750 754 102 (77-123) Trichloroethene 750 791 106 (77-123) Trichloroethene 750 7	Isopropylbenzene (Cumene)	750	784	105	(68-134)
Methyl-t-butyl ether 1130 1140 101 (73-125) Naphthalene 750 833 111 (62-129) n-Butylbenzene 750 898 120 (70-128) n-Propylbenzene 750 816 109 (73-125) o-Xylene 750 765 102 (77-123) P & M -Xylene 1500 1470 98 (77-124) sec-Butylbenzene 750 769 103 (73-126) Styrene 750 794 106 (73-126) Tetrachloroethene 750 794 106 (73-128) Tetrachloroethene 750 749 100 (73-128) Toluene 750 749 100 (73-128) trans-1,2-Dichloroethene 750 763 102 (74-125) trans-1,3-Dichloropopene 750 791 106 (71-130) Trichlorofluoromethane 750 791 156 (62-140) Vinyl acetate 750	Methylene chloride	750	766	102	(70-128)
Naphthalene 750 833 111 (62-129) n-Butylbenzene 750 898 120 (70-128) n-Propylbenzene 750 816 109 (73-125) o-Xylene 750 765 102 (77-123) P & M - Xylene 1500 1470 98 (77-124) sec-Butylbenzene 750 769 103 (73-126) Styrene 750 769 103 (73-126) tert-Butylbenzene 750 770 103 (73-125) Tetrachloroethene 750 770 103 (73-125) Toluene 750 783 101 (73-125) trans-1,2-Dichloroethene 750 783 102 (74-125) trans-1,3-Dichloropropene 750 791 106 (71-130) Trichlorofluoromethane 750 791 105 (72-124) Vinyl acetate 750 1170 156 (62-140) Vinyl chloride 750	Methyl-t-butyl ether	1130	1140	101	(73-125)
n-Butylbenzene 750 898 120 (70-128) n-Propylbenzene 750 816 109 (73-125) o-Xylene 750 765 102 (77-123) P & M -Xylene 1500 1470 98 (77-124) sec-Butylbenzene 750 769 103 (73-126) Styrene 750 794 106 (76-124) tert-Butylbenzene 750 770 103 (73-125) Tetrachloroethene 750 749 106 (73-128) Toluene 750 749 100 (73-128) Trans-1,2-Dichloroethene 750 753 101 (77-121) trans-1,3-Dichloropropene 750 791 106 (74-125) trans-1,3-Dichloropropene 750 791 106 (74-125) Trichlorofluoromethane 750 791 105 (77-123) Trichlorofluoromethane 750 1170 156 * (62-140) Vinyl acetate 750 866 115 (50-151) (50-151) <t< th=""><th>Naphthalene</th><th>750</th><th>833</th><th>111</th><th>(62-129)</th></t<>	Naphthalene	750	833	111	(62-129)
n-Propylbenzene 750 816 109 (73-125) o-Xylene 750 765 102 (77-123) P & M -Xylene 1500 1470 98 (77-124) sec-Butylbenzene 750 769 103 (73-126) Styrene 750 769 103 (73-126) tert-Butylbenzene 750 769 103 (73-126) tert-Butylbenzene 750 701 103 (73-126) Tetrachloroethene 750 770 103 (73-128) Toluene 750 749 100 (73-128) Toluene 750 758 101 (77-121) trans-1,2-Dichloroethene 750 791 106 (74-125) trans-1,3-Dichloropropene 750 791 105 (77-123) Trichlorofluoromethane 750 1170 156 * (62-140) Vinyl acetate 750 866 115 (50-151) (50-151) Vinyl chloride 750 785 105 (78-124) (56-135) <	n-Butylbenzene	750	898	120	(70-128)
o-Xylene750765102(77-123)P & M -Xylene1500147098(77-124)sec-Butylbenzene750769103(73-126)Styrene750794106(76-124)tert-Butylbenzene750770103(73-125)Tetrachloroethene750749100(73-128)Toluene750758101(77-121)trans-1,2-Dichloroethene750763102(74-125)trans-1,3-Dichloropropene750791106(71-130)Trichloroethene750791105(77-123)Trichloroethene7501170156*(62-140)Vinyl acetate750785105(50-151)Vinyl chloride750785105(56-135)Xylenes (total)2250224099(78-124)	n-Propylbenzene	750	816	109	(73-125)
P & M -Xylene 1500 1470 98 (77-124) sec-Butylbenzene 750 769 103 (73-126) Styrene 750 794 106 (76-124) tert-Butylbenzene 750 794 103 (76-124) tert-Butylbenzene 750 794 103 (73-125) Tetrachloroethene 750 749 100 (73-128) Toluene 750 758 101 (77-121) trans-1,2-Dichloroethene 750 763 102 (74-125) trans-1,3-Dichloropropene 750 791 106 (77-123) Trichloroethene 750 791 105 (77-123) Trichloroethene 750 791 156 * (62-140) Vinyl acetate 750 866 115 (50-151) Vinyl chloride 750 785 105 (56-135) Vinyl chloride 250 2240 99 (78-124)	o-Xylene	750	765	102	(77-123)
sec-Butylbenzene 750 769 103 (73-126) Styrene 750 794 106 (76-124) tert-Butylbenzene 750 770 103 (73-125) Tetrachloroethene 750 749 100 (73-128) Toluene 750 758 101 (77-121) trans-1,2-Dichloroethene 750 763 102 (74-125) trans-1,3-Dichloropropene 750 791 106 (77-123) Trichloroethene 750 791 105 (77-123) Trichloroethene 750 791 156 * (62-140) Vinyl acetate 750 785 105 (50-151) Vinyl chloride 750 785 105 (56-135) Vinyl chloride 750 785 105 (56-135) Vinyl chloride 250 2240 99 (78-124)	P & M -Xylene	1500	1470	98	(77-124)
Styrene750794106(76-124)tert-Butylbenzene750770103(73-125)Tetrachloroethene750749100(73-128)Toluene750758101(77-121)trans-1,2-Dichloroethene750763102(74-125)trans-1,3-Dichloropropene750791106(71-130)Trichloroethene750791105(77-123)Trichlorofluoromethane7501170156*(62-140)Vinyl acetate750785105(50-151)Vinyl chloride750785105(56-135)Xylenes (total)2250224099(78-124)	sec-Butylbenzene	750	769	103	(73-126)
tert-Butylbenzene750770103(73-125)Tetrachloroethene750749100(73-128)Toluene750758101(77-121)trans-1,2-Dichloroethene750763102(74-125)trans-1,3-Dichloropropene750791106(71-130)Trichloroethene750791105(77-123)Trichlorofluoromethane7501170156*(62-140)Vinyl acetate750866115(50-151)Vinyl chloride750785105(78-124)Vinyl chloride2250224099(78-124)	Styrene	750	794	106	(76-124)
Tetrachloroethene 750 749 100 (73-128) Toluene 750 758 101 (77-121) trans-1,2-Dichloroethene 750 763 102 (74-125) trans-1,3-Dichloropropene 750 791 106 (71-130) Trichloroethene 750 791 105 (77-123) Trichlorofluoromethane 750 1170 156 * (62-140) Vinyl acetate 750 866 115 (50-151) Vinyl chloride 750 785 105 (56-135) Xylenes (total) 2250 2240 99 (78-124)	tert-Butylbenzene	750	770	103	(73-125)
Toluene 750 758 101 (77-121) trans-1,2-Dichloroethene 750 763 102 (74-125) trans-1,3-Dichloropropene 750 791 106 (71-130) Trichloroethene 750 791 105 (77-123) Trichlorofluoromethane 750 1170 156 * (62-140) Vinyl acetate 750 866 115 (50-151) Vinyl chloride 750 785 105 (56-135) Xylenes (total) 2250 2240 99 (78-124)	Tetrachloroethene	750	749	100	(73-128)
trans-1,2-Dichloroethene 750 763 102 (74-125) trans-1,3-Dichloropropene 750 791 106 (71-130) Trichloroethene 750 791 105 (77-123) Trichlorofluoromethane 750 1170 156 * (62-140) Vinyl acetate 750 866 115 (50-151) Vinyl chloride 750 785 105 (56-135) Xylenes (total) 2250 2240 99 (78-124)	Toluene	750	758	101	(77-121)
trans-1,3-Dichloropropene 750 791 106 (71-130) Trichloroethene 750 791 105 (77-123) Trichlorofluoromethane 750 1170 156 * (62-140) Vinyl acetate 750 866 115 (50-151) Vinyl chloride 750 785 105 (56-135) Xylenes (total) 2250 2240 99 (78-124)	trans-1,2-Dichloroethene	750	763	102	(74-125)
Trichloroethene 750 791 105 (77-123) Trichlorofluoromethane 750 1170 156 * (62-140) Vinyl acetate 750 866 115 (50-151) Vinyl chloride 750 785 105 (56-135) Xylenes (total) 2250 2240 99 (78-124)	trans-1,3-Dichloropropene	750	791	106	(71-130)
Trichlorofluoromethane 750 1170 156 * (62-140) Vinyl acetate 750 866 115 (50-151) Vinyl chloride 750 785 105 (56-135) Xylenes (total) 2250 2240 99 (78-124)	Trichloroethene	750	791	105	(77-123)
Vinyl acetate750866115(50-151)Vinyl chloride750785105(56-135)Xylenes (total)2250224099(78-124)	Trichlorofluoromethane	750	1170	156 *	(62-140)
Vinyl chloride 750 785 105 (56-135) Xylenes (total) 2250 2240 99 (78-124)	Vinyl acetate	750	866	115	(50-151)
Xylenes (total) 2250 2240 99 (78-124)	Vinyl chloride	750	785	105	(56-135)
	Xylenes (total)	2250	2240	99	(78-124)

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Siank Spike Summary		_	
Blank Spike ID: LCS for HBN Blank Spike Lab ID: 1618647 Date Analyzed: 06/24/2021	I 1213488 [VXX3729 7 10:36	4]	
Dato / 11aly200. 00/21/2021	10.00		Matrix: Soil/Solid (dry weight)
QC for Samples: 1213488	001, 1213488002, 1213	3488003, 1213	488004
Results by SW8260D			
	Blank Spike	e (ug/kg)	
<u>Parameter</u>	Spike Result	<u>Rec (%)</u>	<u>CL</u>
urrogates			
1,2-Dichloroethane-D4 (surr)	750	100	(71-136)
4-Bromofluorobenzene (surr)	750	90	(55-151)
Toluene-d8 (surr)	750	101	(85-116)
Batch Information			
Analytical Batch: VMS20848			Prep Batch: VXX37294
Analytical Method: SW8260D			Prep Method: SW5035A
Analyst: MDT	MS 7890B/5977A		Spike Init Wt./Vol.: 750 ug/kg Extract Vol: 25 mL

Print Date: 07/07/2021 11:24:55AM



Matrix Spike Summary

Original Sample ID: 1618648 MS Sample ID: 1618649 MS MSD Sample ID: 1618650 MSD Analysis Date: 06/24/2021 14:12 Analysis Date: 06/24/2021 12:24 Analysis Date: 06/24/2021 12:39 Matrix: Solid/Soil (Wet Weight)

QC for Samples: 1213488001, 1213488002, 1213488003, 1213488004

Results by SW8260D			_							
		Mat	rix Spike (ı	ug/kg)	Spike	Duplicate	e (ug/kg)			
<u>Parameter</u>	<u>Sample</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	Spike	Result	<u>Rec (%)</u>	CL	<u>RPD (%)</u>	RPD CL
1,1,1,2-Tetrachloroethane	8.50U	639	723	113	639	715	112	78-125	1.20	(< 20)
1,1,1-Trichloroethane	10.7U	639	673	105	639	670	105	73-130	0.32	(< 20)
1,1,2,2-Tetrachloroethane	0.850U	639	717	112	639	722	113	70-124	0.65	(< 20)
1,1,2-Trichloroethane	0.341U	639	672	105	639	667	104	78-121	0.86	(< 20)
1,1-Dichloroethane	10.7U	639	647	101	639	642	101	76-125	0.76	(< 20)
1,1-Dichloroethene	10.7U	639	643	101	639	634	99	70-131	1.50	(< 20)
1,1-Dichloropropene	10.7U	639	642	100	639	637	100	76-125	0.67	(< 20)
1,2,3-Trichlorobenzene	21.3U	639	774	121	639	819	128	66-130	5.60	(< 20)
1,2,3-Trichloropropane	0.850U	639	699	109	639	687	108	73-125	1.70	(< 20)
1,2,4-Trichlorobenzene	10.7U	639	769	120	639	791	124	67-129	2.80	(< 20)
1,2,4-Trimethylbenzene	21.3U	639	683	107	639	678	106	75-123	0.66	(< 20)
1,2-Dibromo-3-chloropropane	42.6U	639	716	112	639	719	113	61-132	0.45	(< 20)
1,2-Dibromoethane	0.426U	639	728	114	639	728	114	78-122	0.06	(< 20)
1,2-Dichlorobenzene	10.7U	639	697	109	639	686	107	78-121	1.50	(< 20)
1,2-Dichloroethane	0.850U	639	644	101	639	641	100	73-128	0.40	(< 20)
1,2-Dichloropropane	4.26U	639	668	105	639	664	104	76-123	0.61	(< 20)
1,3,5-Trimethylbenzene	10.7U	639	677	106	639	671	105	73-124	0.98	(< 20)
1,3-Dichlorobenzene	10.7U	639	674	106	639	670	105	77-121	0.67	(< 20)
1,3-Dichloropropane	4.26U	639	680	106	639	674	106	77-121	0.82	(< 20)
1,4-Dichlorobenzene	10.7U	639	683	107	639	675	106	75-120	1.20	(< 20)
2,2-Dichloropropane	10.7U	639	730	114	639	724	113	67-133	0.88	(< 20)
2-Butanone (MEK)	107U	1920	2110	110	1920	2080	109	51-148	1.30	(< 20)
2-Chlorotoluene	10.7U	639	683	107	639	673	105	75-122	1.50	(< 20)
2-Hexanone	42.6U	1920	2190	114	1920	2190	114	53-145	0.09	(< 20)
4-Chlorotoluene	10.7U	639	682	107	639	687	108	72-124	0.75	(< 20)
4-Isopropyltoluene	42.6U	639	688	108	639	677	106	73-127	1.60	(< 20)
4-Methyl-2-pentanone (MIBK)	107U	1920	2120	111	1920	2090	109	65-135	1.30	(< 20)
Acetone	107U	1920	1800	94	1920	1760	92	36-164	2.10	(< 20)
Benzene	5.30U	639	650	102	639	640	100	77-121	1.50	(< 20)
Bromobenzene	10.7U	639	684	107	639	690	108	78-121	0.87	(< 20)
Bromochloromethane	10.7U	639	664	104	639	662	104	78-125	0.26	(< 20)
Bromodichloromethane	0.850U	639	670	105	639	667	104	75-127	0.57	(< 20)
Bromoform	10.7U	639	705	110	639	696	109	67-132	1.20	(< 20)
Bromomethane	8.50U	639	584	91	639	586	92	53-143	0.33	(< 20)
Carbon disulfide	42.6U	958	1080	113	958	1070	111	63-132	1.40	(< 20)
Carbon tetrachloride	5.30U	639	698	109	639	692	108	70-135	0.86	(< 20)
Chlorobenzene	10.7U	639	652	102	639	653	102	79-120	0.13	(< 20)

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Matrix Spike Summary

Original Sample ID: 1618648 MS Sample ID: 1618649 MS MSD Sample ID: 1618650 MSD Analysis Date: 06/24/2021 14:12 Analysis Date: 06/24/2021 12:24 Analysis Date: 06/24/2021 12:39 Matrix: Solid/Soil (Wet Weight)

QC for Samples: 1213488001, 1213488002, 1213488003, 1213488004

Results by SW8260D										
		Mat	rix Spike (u	ıg/kg)	Spike	Duplicate	(ug/kg)			
<u>Parameter</u>	<u>Sample</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	Spike	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Chloroethane	85.0U	639	598	94	639	590	92	59-139	1.30	(< 20)
Chloroform	1.71U	639	661	104	639	657	103	78-123	0.71	(< 20)
Chloromethane	10.7U	639	520	81	639	495	78	50-136	4.90	(< 20)
cis-1,2-Dichloroethene	10.7U	639	658	103	639	657	103	77-123	0.23	(< 20)
cis-1,3-Dichloropropene	5.30U	639	675	106	639	671	105	74-126	0.70	(< 20)
Dibromochloromethane	2.13U	639	685	107	639	686	107	74-126	0.12	(< 20)
Dibromomethane	10.7U	639	699	109	639	695	109	78-125	0.67	(< 20)
Dichlorodifluoromethane	21.3U	639	373	58	639	331	52	29-149	12.00	(< 20)
Ethylbenzene	10.7U	639	635	99	639	631	99	76-122	0.57	(< 20)
Freon-113	42.6U	958	950	99	958	931	97	66-136	2.00	(< 20)
Hexachlorobutadiene	8.50U	639	818	128	639	813	127	61-135	0.63	(< 20)
Isopropylbenzene (Cumene)	10.7U	639	665	104	639	656	103	68-134	1.50	(< 20)
Methylene chloride	42.6U	639	655	103	639	653	102	70-128	0.36	(< 20)
Methyl-t-butyl ether	42.6U	958	977	102	958	981	102	73-125	0.41	(< 20)
Naphthalene	10.7U	639	747	117	639	780	122	62-129	4.30	(< 20)
n-Butylbenzene	10.7U	639	727	114	639	712	112	70-128	2.00	(< 20)
n-Propylbenzene	10.7U	639	693	108	639	689	108	73-125	0.49	(< 20)
o-Xylene	10.7U	639	652	102	639	648	101	77-123	0.52	(< 20)
P & M -Xylene	21.3U	1280	1250	98	1280	1250	98	77-124	0.61	(< 20)
sec-Butylbenzene	10.7U	639	673	105	639	664	104	73-126	1.40	(< 20)
Styrene	10.7U	639	687	108	639	684	107	76-124	0.56	(< 20)
tert-Butylbenzene	10.7U	639	676	106	639	662	104	73-125	2.10	(< 20)
Tetrachloroethene	5.30U	639	652	102	639	672	105	73-128	3.00	(< 20)
Toluene	10.7U	639	644	101	639	643	101	77-121	0.13	(< 20)
trans-1,2-Dichloroethene	10.7U	639	705	110	639	642	101	74-125	9.30	(< 20)
trans-1,3-Dichloropropene	5.30U	639	691	108	639	693	108	71-130	0.18	(< 20)
Trichloroethene	2.13U	639	668	105	639	663	104	77-123	0.74	(< 20)
Trichlorofluoromethane	21.3U	639	963	151 *	639	960	150 *	62-140	0.35	(< 20)
Vinyl acetate	42.6U	639	752	118	639	758	119	50-151	0.73	(< 20)
Vinyl chloride	0.341U	639	577	90	639	590	92	56-135	2.20	(< 20)
Xylenes (total)	31.9U	1920	1910	99	1920	1890	99	78-124	0.58	(< 20)
Surrogates										
1,2-Dichloroethane-D4 (surr)		639	653	102	639	645	101	71-136	1.20	
4-Bromofluorobenzene (surr)		1060	673	63	1060	667	63	55-151	0.99	
Toluene-d8 (surr)		639	644	101	639	643	101	85-116	0.17	

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				D (
MS Sample ID: 1618649 MS MSD Sample ID: 1618650 MSD				Analysis Date: Analysis Date: 06/24/2021 12:24 Analysis Date: 06/24/2021 12:39 Matrix: Solid/Soil (Wet Weight)						
QC for Samples: 1213	488001, 121348800	02, 121348	38003, 121	3488004						
Results by SW8260D		M	latrix Snike	. (%)	Spil	ke Dunlica	ate (%)			
<u>Parameter</u>	Sample	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Analyst: MDT Analytical Date/Time:	6/24/2021 12:24:00)PM		Prep) Initial Wt	./Vol.: 58 /ol: 25.00	.70g mL			

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355 [VXX/37300]	Matrix: Soil/Solid (dry weight)									
13488003, 1213488004										
<u>Results</u>	LOQ/CL	DL	<u>Units</u>							
1.10J	2.50	0.750	mg/kg							
104	50-150		%							
1	Prep Ba	tch: VXX37300								
	Prep Me	thod: SW5035	Ą							
PID/FID	Prep Da Drop Init	te/Time: 6/24/2	021 6:00:00AM							
2021 2:41:00AM	Prep Int Prep Ext	tract Vol: 25 ml	9							
	1									
	355 [VXX/37300] I3488003, 1213488004 <u>Results</u> 1.10J 104 1 PID/FID	355 [VXX/37300] Matrix 13488003, 1213488004 <u>Results</u> <u>LOQ/CL</u> 1.10J 2.50 104 50-150 1 Prep Ba Prep Me Prep Da Prep Init	355 [VXX/37300] Matrix: Soil/Solid (dr 13488003, 1213488004 Image: Solid Solid Solid (dr <u>Results</u> LOQ/CL DL 1.10J 2.50 0.750 104 50-150 104 1 Prep Batch: VXX37300 Prep Method: SW5035/ PID/FID Prep Date/Time: 6/24/2 Prep Initial Wt./vol.: 50 12021 2:41:000M Prep Satch: V/X37300	355 [VXX/37300] Matrix: Soil/Solid (dry weight) 13488003, 1213488004 Results LOQ/CL DL Units 1.10J 2.50 0.750 mg/kg 104 50-150 % 1 Prep Batch: VXX37300 Prep Method: SW5035A PID/FID Prep Initial Wt./Vol.: 50 mg 6:00:00AM Prep Initial Wt./Vol.: 55 mg Prep State Val: 25 mg						

Print Date: 07/07/2021 11:24:59AM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213488 [VXX37300] Blank Spike Lab ID: 1618741 Date Analyzed: 06/25/2021 02:05 Spike Duplicate ID: LCSD for HBN 1213488 [VXX37300] Spike Duplicate Lab ID: 1618742 Matrix: Soil/Solid (dry weight)

QC for Samples: 1213488001, 1213488002, 1213488003, 1213488004

Results by AK101									
		Blank Spike	(mg/kg)	S	pike Duplic	ate (mg/kg))		
Parameter	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Gasoline Range Organics	12.5	14.4	115	12.5	15.6	125	* (60-120)	8.40	(< 20)
Surrogates									
4-Bromofluorobenzene (surr)	1.25		113	1.25		114	(50-150)	1.40	
Batch Information									
Analytical Batch: VFC15671				Pre	p Batch: V	XX37300			
Analytical Method: AK101				Pre	p Method:	SW5035A	24 06:00		
Analyst: I.IV	DIFID			Spi	ke Init Wt /\	e. 06/24/20 /ol: 12.5 m	ng/Ka Extract	t Vol [.] 25 ml	
/ maryou lev				Dup	e Init Wt./\	/ol.: 12.5 m	ig/Kg Extract	Vol: 25 mL	

Print Date: 07/07/2021 11:25:01AM



Method Blank

Blank ID: MB for HBN 1821202 [XXX/45021] Blank Lab ID: 1617987 Matrix: Soil/Solid (dry weight)

QC for Samples:

1213488001, 1213488002, 1213488003

Results by 8270D SIM (PAH)					
Parameter	Results	LOQ/CL	DL	Units	
1-Methylnaphthalene	12.5U	25.0	6.25	ug/kg	
2-Methylnaphthalene	12.5U	25.0	6.25	ug/kg	
Acenaphthene	12.5U	25.0	6.25	ug/kg	
Acenaphthylene	12.5U	25.0	6.25	ug/kg	
Anthracene	12.5U	25.0	6.25	ug/kg	
Benzo(a)Anthracene	12.5U	25.0	6.25	ug/kg	
Benzo[a]pyrene	12.5U	25.0	6.25	ug/kg	
Benzo[b]Fluoranthene	12.5U	25.0	6.25	ug/kg	
Benzo[g,h,i]perylene	12.5U	25.0	6.25	ug/kg	
Benzo[k]fluoranthene	12.5U	25.0	6.25	ug/kg	
Chrysene	12.5U	25.0	6.25	ug/kg	
Dibenzo[a,h]anthracene	12.5U	25.0	6.25	ug/kg	
Fluoranthene	12.5U	25.0	6.25	ug/kg	
Fluorene	12.5U	25.0	6.25	ug/kg	
Indeno[1,2,3-c,d] pyrene	12.5U	25.0	6.25	ug/kg	
Naphthalene	10.0U	20.0	5.00	ug/kg	
Phenanthrene	12.5U	25.0	6.25	ug/kg	
Pyrene	12.5U	25.0	6.25	ug/kg	
Surrogates					
2-Methylnaphthalene-d10 (surr)	88.6	58-103		%	
Fluoranthene-d10 (surr)	86.8	54-113		%	

Batch Information

Analytical Batch: XMS12715 Analytical Method: 8270D SIM (PAH) Instrument: Agilent GC 7890B/5977A SWA Analyst: LAW Analytical Date/Time: 7/5/2021 8:53:00PM Prep Batch: XXX45021 Prep Method: SW3550C Prep Date/Time: 6/23/2021 9:47:51AM Prep Initial Wt./Vol.: 22.5 g Prep Extract Vol: 5 mL

Print Date: 07/07/2021 11:25:03AM

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1213488 [XXX45021] Blank Spike Lab ID: 1617988 Date Analyzed: 07/05/2021 21:13

Matrix: Soil/Solid (dry weight)

QC for Samples: 1213488001, 1213488002, 1213488003

Results by 8270D SIM (PAH)

	I	Blank Spike	(ug/kg)	
Parameter	<u>Spike</u>	Result	<u>Rec (%)</u>	
1-Methylnaphthalene	111	102	92	
2-Methylnaphthalene	111	99.3	89	
Acenaphthene	111	98.2	88	
Acenaphthylene	111	100	90	
Anthracene	111	100	90	
Benzo(a)Anthracene	111	100	90	
Benzo[a]pyrene	111	98.6	89	
Benzo[b]Fluoranthene	111	106	95	
Benzo[g,h,i]perylene	111	101	91	
Benzo[k]fluoranthene	111	103	93	
Chrysene	111	104	94	
Dibenzo[a,h]anthracene	111	101	91	
Fluoranthene	111	103	93	
Fluorene	111	103	93	
Indeno[1,2,3-c,d] pyrene	111	99.3	89	
Naphthalene	111	96.1	87	
Phenanthrene	111	101	91	
Pyrene	111	102	91	
Surrogates				
2-Methylnaphthalene-d10 (surr)	111		86	
Fluoranthene-d10 (surr)	111		86	

Batch Information

Analytical Batch: XMS12715 Analytical Method: 8270D SIM (PAH) Instrument: Agilent GC 7890B/5977A SWA Analyst: LAW Prep Batch: XXX45021 Prep Method: SW3550C Prep Date/Time: 06/23/2021 09:47 Spike Init Wt./Vol.: 111 ug/kg Extract Vol: 5 mL Dupe Init Wt./Vol.: Extract Vol:

Print Date: 07/07/2021 11:25:05AM

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Matrix Spike Summary

Original Sample ID: 1213444005 MS Sample ID: 1617989 MS MSD Sample ID: 1617990 MSD

QC for Samples: 1213488001, 1213488002, 1213488003

Analysis Date: 06/30/2021 3:17 Analysis Date: 06/30/2021 3:38 Analysis Date: 06/30/2021 3:58 Matrix: Soil/Solid (dry weight)

Results by 8270D SIM (PAH)

		Mat	rix Spike (u	ıg/kg)		Spike	Duplicate	(ug/kg)				
<u>Parameter</u>	Sample	Spike	Result	<u>Rec (%</u>	<u>)</u>	Spike	Result	<u>Rec (%</u>	<u>6)</u>	CL	<u>RPD (%)</u>	RPD CL
1-Methylnaphthalene	8.93J	134	115	79		137	115	77		43-111	0.71	(< 20)
2-Methylnaphthalene	14.5J	134	117	76		137	114	73		39-114	2.00	(< 20)
Acenaphthene	21.2J	134	147	93		137	159	101		44-111	8.60	(< 20)
Acenaphthylene	258	134	253	-4 *	ł	137	244	-10	*	39-116	3.20	(< 20)
Anthracene	512	134	408	-78 *	ł	137	382	-95	*	50-114	6.30	(< 20)
Benzo[g,h,i]perylene	330	134	369	29 *	۲	137	390	44	*	49-127	5.80	(< 20)
Dibenzo[a,h]anthracene	109	134	184	55		137	194	62		50-129	5.20	(< 20)
Fluorene	116	134	171	41 *	۲	137	190	54		47-114	10.10	(< 20)
Indeno[1,2,3-c,d] pyrene	346	134	355	6 *	ł	137	377	23	*	49-130	6.30	(< 20)
Naphthalene	13.4J	134	123	82		137	128	84		38-111	3.50	(< 20)
Benzo(a)Anthracene	1520	134	662	-639 *	ł	137	750	-565	*	54-122	12.40	(< 20)
Benzo[a]pyrene	872	134	692	-134 *	۲	137	704	-123	*	50-125	1.80	(< 20)
Benzo[b]Fluoranthene	2010	134	1203	-597 *	ł	137	1149	-627	*	53-128	4.60	(< 20)
Benzo[k]fluoranthene	580	134	466	-85 *	۲	137	470	-81	*	56-123	0.82	(< 20)
Chrysene	2680	134	986	-1260 *	ł	137	1010	-1220	*	57-118	2.30	(< 20)
Fluoranthene	7410	134	2552	-3610 *	ł	137	1726	-4150	*	55-119	38.40 *	(< 20)
Phenanthrene	683	134	720	27 *	ł	137	853	125	*	49-113	17.00	(< 20)
Pyrene	5240	134	1985	-2410 *	ł	137	1504	-2730	*	55-117	27.90 *	(< 20)
Surrogates												
2-Methylnaphthalene-d10 (surr)		134	101	75		137	102	75		58-103	1.30	
Fluoranthene-d10 (surr)		134	100	74		137	102	75		54-113	2.10	

Batch Information

Analytical Batch: XMS12706 Analytical Method: 8270D SIM (PAH) Instrument: Agilent GC 7890B/5977A SWA Analyst: LAW Analytical Date/Time: 6/30/2021 3:38:00AM

Analytical Batch: XMS12710 Analytical Method: 8270D SIM (PAH) Instrument: Agilent GC 7890B/5977A SWA Analyst: LAW Analytical Date/Time: 7/2/2021 12:41:00AM

Prep Batch: XXX45021 Prep Method: Sonication Extr Soil 8270 PAH SIM 5ml Prep Date/Time: 6/23/2021 9:47:51AM Prep Initial Wt./Vol.: 22.90g Prep Extract Vol: 5.00mL

Prep Batch: XXX45021 Prep Method: Sonication Extr Soil 8270 PAH SIM 5ml Prep Date/Time: 6/23/2021 9:47:51AM Prep Initial Wt./Vol.: 22.90g Prep Extract Vol: 5.00mL

Print Date: 07/07/2021 11:25:06AM

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Method Blank					
Blank ID: MB for HBN 182 Blank Lab ID: 1618483	21301 [XXX/45039]	Matrix	k: Soil/Solid (d	ry weight)	
QC for Samples: 1213488001, 1213488002, ²	1213488003				
Results by AK102					
Parameter	<u>Results</u>	LOQ/CL	<u>DL</u>	<u>Units</u>	
Diesel Range Organics	10.0U	20.0	6.20	mg/kg	
Surrogates					
5a Androstane (surr)	105	60-120		%	
3atch Information					
Analytical Batch: XFC15	973	Prep Ba	tch: XXX45039)	
Analytical Method: AK10)2	Prep Me	ethod: SW3550	C	
Instrument: Agilent 7890	IB R	Prep Da Prep Init	ite/Time: 6/24/2	2021 4:53:50PM	
7 thonyot. TVIVI	05/2021 1:01:00DM	Prop Ex	tract Vol: 5 ml	9	

Print Date: 07/07/2021 11:25:08AM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213488 [XXX45039] Blank Spike Lab ID: 1618484 Date Analyzed: 06/25/2021 13:11 Spike Duplicate ID: LCSD for HBN 1213488 [XXX45039] Spike Duplicate Lab ID: 1618485 Matrix: Soil/Solid (dry weight)

QC for Samples: 1213488001, 1213488002, 1213488003

Results by AK102			_						
	E	Blank Spike	(mg/kg)	S	pike Duplic	ate (mg/kg)			
<u>Parameter</u>	Spike	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Diesel Range Organics	667	712	107	667	740	111	(75-125)	3.90	(< 20)
Surrogates									
5a Androstane (surr)	16.7		107	16.7		112	(60-120)	3.70	
Batch Information									
Analytical Batch: XFC15973				Pre	p Batch: X	XX45039			
Analytical Method: AK102				Pre	p Method:	SW3550C			
Instrument: Agilent 7890B R				Pre	p Date/Tim	e: 06/24/202	1 16:53		
Analyst: IVM				Spi	ke Init Wt./\	/ol.: 667 mg	/kg Extract	Vol: 5 mL	
				Dup	be Init Wt./\	/ol.: 667 mg	/kg Extract \	/ol: 5 mL	

Print Date: 07/07/2021 11:25:10AM

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Method Blank]			
Blank ID: MB for HBN 1821 Blank Lab ID: 1618483	301 [XXX/45039]	Matrix	k: Soil/Solid (d	ry weight)	
QC for Samples: 1213488001, 1213488002, 12	213488003				
Results by AK103)			
Parameter	Results	LOQ/CL	<u>DL</u>	<u>Units</u>	
Residual Range Organics	50.0U	100	43.0	mg/kg	
Surrogates					
n-Triacontane-d62 (surr)	111	60-120		%	
Satch Information					
Analytical Batch: XFC159	73	Prep Ba	tch: XXX45039		
Analytical Method: AK103		Prep Me	thod: SW3550	C	
	R	Prep Da	te/Time: 6/24/2	021 4:53:50PM	
Instrument: Agilent /890B		Pren Inn			

Print Date: 07/07/2021 11:25:13AM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213488 [XXX45039] Blank Spike Lab ID: 1618484 Date Analyzed: 06/25/2021 13:11 Spike Duplicate ID: LCSD for HBN 1213488 [XXX45039] Spike Duplicate Lab ID: 1618485 Matrix: Soil/Solid (dry weight)

QC for Samples: 1213488001, 1213488002, 1213488003

Results by AK103			_						
	E	Blank Spike	(mg/kg)	S	pike Duplic	ate (mg/kg)			
<u>Parameter</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	Spike	Result	<u>Rec (%)</u>	CL	<u>RPD (%)</u>	RPD CL
Residual Range Organics	667	682	102	667	701	105	(60-120)	2.70	(< 20)
Surrogates									
n-Triacontane-d62 (surr)	16.7		110	16.7		109	(60-120)	0.92	
Batch Information									
Analytical Batch: XFC15973 Analytical Method: AK103				Pre Pre	p Batch: X p Method:	XX45039 SW3550C			
Instrument: Agilent 7890B R Analyst: IVM				Pre Spi Dup	p Date/Tim ke Init Wt./\ pe Init Wt./\	e: 06/24/202 /ol.: 667 mg /ol.: 667 mg	1 16:53 /kg Extract /kg Extract \	Vol: 5 mL /ol: 5 mL	

Print Date: 07/07/2021 11:25:15AM



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SGS NORTH AMERICA INC. CHAIN OF CUSTODY RECORD



								P# 36	55										
ſ		CLIENT: EN	11					INST	RUCTI	ONS:	SECT	IONS	1-5 M	UST B	E FILI	ED O	UT.		
					070.000	`		UMI	SSIO	NS MA	Y DEL	AT II		ISEL	JF AN	ALIS	13.		1 1 Page of
	_	een Aon A	Andy Coulson .	-1907-	272-9336	0	SEC	SECTION 3		PRESERVATIVE									
		^{project} H name:	aines Station	PROJECT/ PWSID/ PERMIT #-	###*******		# C	SAMPLE TYPE:	ЛеОН	AeOH	Vone	lone							
	л И	REPORTS TO	^{D:} Andy Coulson ^E	-MAIL: acouls	on@emi-al	aska.com	O N T	Comp Grab	01)		X L								
		INVOICE TO:	Delta Western	QUOTE #: P.O. #:			A	MI (Multi-	(AK 1	(8260	RO (A	3270							
		RESERVED FOR LAB USE	SAMPLE IDENTIFICATIO	DN DATE MM/DD/YY	TIME HH:MM	MATRIX/ MATRIX CODE	E R S	mental)	GRO	VOC	DRO/F 102/10	PAH (SIMS)							REMARKS/ LOC ID
		IN	18113-CL04	06/16/2i	15:93	S	2	G	~	~	~	~							
Malia		ZAB	18113-CL12	06/16/21	15:52	S	2	G	4	~	~	~							
21016	N	GAB	18113-CL77	06/16/2	15:53	S	2	G	~	~	~	~		ļ					
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s reser		Alac 1		CATOS	11:00	(1)	In 4	M	nL		cocı	D:	4						
nı rign		REANOLIS			TIME	RECEIVED		AIA			Coole	r ID:				OR SPE		STRUC	
- 2014 - 4	ION 5	Wal	5-ml	0/19/21	12:02	Value	·/	114					ORTA						
a Inc	L L	RELINQUISH	HED BY:(3	DATE /	TIME	RECEIVED	BY:	0			1						-		
n Americ	S	Will	Hut	6-18-21	1536			>			AWC	<u>, oz</u> ‡	EMB B	LANK.	<u>~</u> ;		CHAI	N OF C	USTODY SEAL: (CIRCLE)
TONS		RELINQUISH	HED BY:(4)	DATE		RECEIVED	FORLA	BORATC	RY BY	in	1.	(OR AM	BIENT	[]		(INT	ACT)	BROKEN ABSENT
500				6/19/21	1711	Inde	uta	Un	~			(See atta	iched Sa	mple Rec	wipt For	m)	(80	e attach	ed Sample Receipt Form)

http://www.sgs.com/terms-and-conditions

Page 51 of 54 F101_eCOC_Revised_2014-12-10 e-Sample Receipt Form FBK

D-ul 0-		am (M						
Review Cr Chain of Custo	dy / Temperature Requiremen	on (Yes, r		EXCE	mitted if sar		W arrias/daliwar	•
<u>Unam of Custo</u> Were C	ustody Seals intact? Note # & location	Yes			initied if sai		ames/deliver	э.
	COC accompanied samples?	Yes						
DOD: Were samples re	ceived in COC corresponding coolers?	N/A						-
	**Exemption permitted if chilled	k collec	cted <8 hou	urs ago, or for sam	ples where	chilling is not	required	
Temperature blank	compliant* (i.e., 0-6 °C after CF)?	Yes	Cooler ID:	1	@	3.4 °C1	Therm. ID:	5
			Cooler ID:	-	@		Therm. ID:	
If samples received without a temperature	e blank, the "cooler temperature" will be		Cooler ID:		@	°C	Therm. ID:	
be noted if neith	e noted to the right. "ambient" or "chilled" will er is available.		Cooler ID:		@	۲D°	Therm. ID:	
*If >6°C, were	samples collected <8 hours ago?							
If <0°C,	were sample containers ice free?							
Note: Identify containers receiv	ved at non-compliant temperature .							
	ou at non compliant tompolitical o	100.044						
Use form	FS-0029 if more space is needed.							
Use form	FS-0029 if more space is needed.			· · · ·				
Use form	FS-0029 if more space is needed.							
Use form	FS-0029 if more space is needed.							
Use form <u>Holding Time / Document</u>	FS-0029 if more space is needed.	nents	Note: Refe	r to form F-083 "S	ample Guide	e" for specific	: holding time	es.
Use form Holding Time / Document Do samples match COC** (i.e.,s	FS-0029 if more space is needed. ation / Sample Condition Requirem sample IDs,dates/times collected)?	nents N/C	Note: Refe	r to form F-083 "S	ample Guide	e" for specific	bolding time)SL
Use form Holding Time / Document Do samples match COC** (i.e.,s **Note: If times differ <1hr,	FS-0029 if more space is needed. ation / Sample Condition Requirent sample IDs, dates/times collected)? record details & login per COC.	nents N/C	Note: Refe	r to form F-083 "S	ample Guide	e" for specific	holding time)S .
Use form <u>Holding Time / Document</u> Do samples match COC ** (i.e.,s **Note: If times differ <1hr, **Note: If sample information on containers di	FS-0029 if more space is needed. ation / Sample Condition Requirem sample IDs,dates/times collected)? record details & login per COC. ffers from COC, SGS will default to COC info	nents N/C	Note: Refe	r to form F-083 "S	ample Guide	e" for specific	holding time)S.
Use form <u>Holding Time / Document</u> Do samples match COC ** (i.e.,s **Note: If times differ <1hr, **Note: If sample information on containers di Were samples in good con	FS-0029 if more space is needed. ation / Sample Condition Requirent sample IDs, dates/times collected)? record details & login per COC. Iffers from COC, SGS will default to COC inford dition (no leaks/cracks/breakage)?	nents N/C mation Yes	Note: Refe	r to form F-083 "S	ample Guide	e" for specific	holding time)S :
Use form <u>Holding Time / Document</u> Do samples match COC ** (i.e.,s **Note: If times differ <1hr, **Note: If sample information on containers di Were samples in good con Were analytical requests clear? (i.e	FS-0029 if more space is needed. ation / Sample Condition Requirem sample IDs,dates/times collected)? record details & login per COC. Ifers from COC, SGS will default to COC info dition (no leaks/cracks/breakage)? a method is specified for analyses	nents N/C mation Yes	Note: Refe	r to form F-083 "S	ample Guide	e" for specific	holding time)S .
Use form <u>Holding Time / Document</u> Do samples match COC ** (i.e.,s **Note: If times differ <1hr, **Note: If sample information on containers di Were samples in good con Were analytical requests clear? (i.e with multiple opt	FS-0029 if more space is needed. ation / Sample Condition Requirem sample IDs, dates/times collected)? record details & login per COC. Ifers from COC, SGS will default to COC info dition (no leaks/cracks/breakage)? e., method is specified for analyses ion for analysis (Ex: BTEX, Metals)	nents N/C mation Yes	Note: Refe	r to form F-083 "S	ample Guide	e" for specific	holding time	3 S .
Use form <u>Holding Time / Document</u> Do samples match COC** (i.e.,s **Note: If times differ <1hr, **Note: If sample information on containers di Were samples in good con Were analytical requests clear? (i.e with multiple opt	FS-0029 if more space is needed. ation / Sample Condition Requirents sample IDs, dates/times collected)? record details & login per COC. ffers from COC, SGS will default to COC infordition (no leaks/cracks/breakage)? e., method is specified for analyses ion for analysis (Ex: BTEX, Metals)	nents N/C Yes	Note: Refe	r to form F-083 "S	ample Guide	e" for specific	e holding time	es.
Use form <u>Holding Time / Document</u> Do samples match COC** (i.e.,s **Note: If times differ <1hr, ***Note: If sample information on containers di Were samples in good con Were analytical requests clear? (i.e with multiple opt Were Trip Blanks (i.e., VO	FS-0029 if more space is needed. <u>sation / Sample Condition Requiren</u> sample IDs,dates/times collected)? record details & login per COC. ffers from COC, SGS will default to COC info dition (no leaks/cracks/breakage)? e., method is specified for analyses ion for analysis (Ex: BTEX, Metals) As, LL-Hg) in cooler with samples?	ments N/C Tration Yes Yes	Note: Refe	r to form F-083 "S	ample Guide	e" for specific	holding time	35 .
Use form <u>Holding Time / Document</u> Do samples match COC** (i.e.,s **Note: If times differ <1hr, **Note: If sample information on containers di Were samples in good con Were analytical requests clear? (i.e. with multiple opt Were Trip Blanks (i.e., VO, Were all water VOA vials free of	FS-0029 if more space is needed. <u>sation / Sample Condition Requiren</u> sample IDs,dates/times collected)? record details & login per COC. ffers from COC, SGS will default to COC info dition (no leaks/cracks/breakage)? e., method is specified for analyses ion for analysis (Ex: BTEX, Metals) As, LL-Hg) in cooler with samples? headspace (i.e., bubbles ≤ 6mm)?	nents N/C Yes Yes N/A	Note: Refe	r to form F-083 "S	ample Guide	e" for specific	holding time)S
Use form <u>Holding Time / Document</u> Do samples match COC** (i.e.,s **Note: If times differ <1hr, **Note: If sample information on containers di Were samples in good con Were analytical requests clear? (i.e. with multiple opt Were Trip Blanks (i.e., VO, Were all water VOA vials free of Were all soil VOA	FS-0029 if more space is needed. <u>sation / Sample Condition Requiren</u> sample IDs,dates/times collected)? record details & login per COC. ffers from COC, SGS will default to COC info dition (no leaks/cracks/breakage)? e., method is specified for analyses ion for analysis (Ex: BTEX, Metals) As, LL-Hg) in cooler with samples? headspace (i.e., bubbles ≤ 6mm)? s field extracted with MeOH+BFB?	ments N/C Yes Yes N/A Yes	Note: Refe	r to form F-083 "S	ample Guide	e" for specific	e holding time	3 S.
Use form <u>Holding Time / Document</u> Do samples match COC ** (i.e.,s **Note: If times differ <1hr, **Note: If sample information on containers di Were samples in good con Were analytical requests clear? (i.e. with multiple opt Were Trip Blanks (i.e., VO, Were all water VOA vials free of Were all soil VOA For Rush/Short Hold Time	FS-0029 if more space is needed. Tation / Sample Condition Requirem sample IDs,dates/times collected)? record details & login per COC. Ifers from COC, SGS will default to COC info dition (no leaks/cracks/breakage)? e., method is specified for analyses ion for analysis (Ex: BTEX, Metals) As, LL-Hg) in cooler with samples? headspace (i.e., bubbles ≤ 6mm)? s field extracted with MeOH+BFB? e, was RUSH/Short HT email sent?	nents N/C Yes Yes N/A Yes N/A	Note: Refe	r to form F-083 "S	ample Guide	e" for specific	holding time	€ €
Use form <u>Holding Time / Document</u> Do samples match COC** (i.e.,s **Note: If times differ <1hr, **Note: If sample information on containers di Were samples in good con Were analytical requests clear? (i.e. with multiple opt Were Trip Blanks (i.e., VO, Were all water VOA vials free of Were all soil VOA For Rush/Short Hold Time Note to Client: Any "	FS-0029 if more space is needed. ation / Sample Condition Requirer sample IDs,dates/times collected)? record details & login per COC. ffers from COC, SGS will default to COC info dition (no leaks/cracks/breakage)? e., method is specified for analyses ion for analysis (Ex: BTEX, Metals) As, LL-Hg) in cooler with samples? headspace (i.e., bubbles ≤ 6mm)? s field extracted with MeOH+BFB? e, was RUSH/Short HT email sent? No", answer above indicates non-comp	nents N/C Yes Yes N/A Yes N/A iance	Note: Refe	r to form F-083 "S	ample Guide	e" for specific		əs .
Use form <u>Holding Time / Document</u> Do samples match COC** (i.e.,s **Note: If times differ <1hr, **Note: If sample information on containers di Were samples in good con Were analytical requests clear? (i.e. with multiple opt Were Trip Blanks (i.e., VO, Were all water VOA vials free of Were all soil VOA For Rush/Short Hold Time Note to Client: Any "f	FS-0029 if more space is needed. ation / Sample Condition Requirem sample IDs,dates/times collected)? record details & login per COC. Ifers from COC, SGS will default to COC info dition (no leaks/cracks/breakage)? e., method is specified for analyses ion for analysis (Ex: BTEX, Metals) As, LL-Hg) in cooler with samples? headspace (i.e., bubbles ≤ 6mm)? s field extracted with MeOH+BFB? e, was RUSH/Short HT email sent? No", answer above indicates non-comp Additional note:	Treation Yes Yes N/A Yes N/A S (if a	Note: Refe	r to form F-083 "S	ample Guide	e" for specific	• holding time	3 S .
Use form <u>Holding Time / Document</u> Do samples match COC** (i.e.,s **Note: If times differ <1hr, ***Note: If sample information on containers di Were samples in good con Were analytical requests clear? (i.e. with multiple opt Were Trip Blanks (i.e., VO, Were all water VOA vials free of Were all soil VOA For Rush/Short Hold Time Note to Client: Any "I	FS-0029 if more space is needed. Exation / Sample Condition Requirem sample IDs,dates/times collected)? record details & login per COC. Ifers from COC, SGS will default to COC info dition (no leaks/cracks/breakage)? e., method is specified for analyses ion for analysis (Ex: BTEX, Metals) As, LL-Hg) in cooler with samples? headspace (i.e., bubbles ≤ 6mm)? s field extracted with MeOH+BFB? e, was RUSH/Short HT email sent? No", answer above indicates non-comp Additional note:	Tration Yes Yes N/A Yes N/A S (if a	Note: Refe	r to form F-083 "S urd procedures and	ample Guide	e" for specific	holding time	
Use form Holding Time / Document Do samples match COC** (i.e.,s **Note: If times differ <1hr, ***Note: If sample information on containers di Were samples in good con Were analytical requests clear? (i.e. with multiple opt Were analytical requests clear? (i.e., VO, Were analyt	FS-0029 if more space is needed. Exation / Sample Condition Requirem sample IDs,dates/times collected)? record details & login per COC. Ifers from COC, SGS will default to COC infordition (no leaks/cracks/breakage)? e., method is specified for analyses ion for analysis (Ex: BTEX, Metals) As, LL-Hg) in cooler with samples? headspace (i.e., bubbles ≤ 6mm)? s field extracted with MeOH+BFB? e, was RUSH/Short HT email sent? No", answer above indicates non-comp Additional note:	rmation Yes Yes N/A Yes N/A iance v s (if a	Note: Refe	r to form F-083 "S	ample Guide	e" for specific	holding time	3S .

|--|

000	SGS Workorder #.		2134	00	1 2	1 3 4 8	8
Review	v Criteria	Condition (Yes,	No, N/A	Exc	eptions No	ted below	
Chain of Cu	ustody / Temperature Requir	rements	Ν	I/A Exemption pe	ermitted if sam	pler hand carries/delig	vers
W	ere Custody Seals intact? Note # & l	location Yes	1F,1B				
	COC accompanied sa	imples? Yes					
DOD: were samp	les received in COC corresponding co	obilled & colle	atad 28 bay	un and ar for an	nalas whore of	illing is not required	
Temperature	blank compliant* (i.e. 0-6 °C afte						D5
remperature			Cooler ID:	-	@	°C Therm ID:	
If samples received without a temp	erature blank, the "cooler temperature" will	be	Cooler ID:	·	@	°C Therm, ID:	
ocumented instead & "COOLER TEMP	" will be noted to the right. "ambient" or "chi	illed" will	Cooler ID:		@	°C Therm. ID:	:
benoted			Cooler ID:	:	@	°C Therm. ID:	:
*lf >6°C,	were samples collected <8 hours	ago? N/A		<u> </u>			
lf <	O°C, were sample containers ice	free? N/A					
Note: Identify containers r	eceived at non-compliant temper	ature.					
Use	Torm FS-0029 If more space is ne	eeded.					
Holding Time / Docu	mentation / Sample Condition Re	quirements	Note: Refer	to form F-083 "Samp	ole Guide" for spe	ecific holding times.	
Were	e samples received within holding	g time? Yes					
	<i></i>						
Do samples match COC**	(i.e., sample IDs, dates/times colle	ected)? Yes					
NOLE. II LIMES UMER <	and details a login per CC	OC information					
	2 (i.e. method is specified for an						
were analytical requests clear with multiple	e option for analysis (Ex: BTEX, N	Metals)					
			N	I/A ***Exemption	permitted for	metals (e.g,200.8/602	20B)
Were proper containers (ty	/pe/mass/volume/preservative***))used? Yes					
147	Volatile / LL-Hg Requ	uirements					
Were Trip Blanks (i.e.	, VOAs, LL-Hg) in cooler with san	nples? Yes					
were all water VOA vials fre	be of neadspace (i.e., bubbles ≤ 6						
vvere all soil		+BFB? Yes				1.4	
Note to Client: /	Any "No", answer above indicates nor	n-compliance	with standa	ra procedures and	a may impact o	bata quality.	
	Additiona	<mark>l notes (if a</mark>	pplicable):			



Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container</u> <u>Condition</u>	Container Id	<u>Preservative</u>	<u>Container</u> <u>Condition</u>
1213488001-A	No Preservative Required	ОК			
1213488001-B	Methanol field pres. 4 C	OK			
1213488002-A	No Preservative Required	OK			
1213488002-B	Methanol field pres. 4 C	OK			
1213488003-A	No Preservative Required	OK			
1213488003-B	Methanol field pres. 4 C	ОК			
1213488004-A	Methanol field pres. 4 C	ОК			

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

OK - The container was received at an acceptable pH for the analysis requested.

- BU The container was received with headspace greater than 6mm.
- DM The container was received damaged.

FR - The container was received frozen and not usable for Bacteria or BOD analyses.

IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.

NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.

PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added. QN - Insufficient sample quantity provided.

Laboratory Data Review Checklist

Completed By:

Andy Coulson

Title:

Environmental Scientist

Date:

24 August 2021

Consultant Firm:

EMI

Laboratory Name:

SGS Anchorage

Laboratory Report Number:

1213488

Laboratory Report Date:

07/07/2021

CS Site Name:

Delta Western Station Haines

ADEC File Number:

1508.38.020

Hazard Identification Number:

25489

Laboratory Report Date:

07/07/2021

CS Site Name:

Delta Western Station Haines

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

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

	$Yes \boxtimes No \square N/A \square Comments:$
	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 N/A Comments:
	All samples analyzed at SGS Anchorage
<u>C</u>	hain of Custody (CoC)
	a. CoC information completed, signed, and dated (including released/received by)?
	Yes No N/A Comments:
	b. Correct analyses requested?
	Yes \boxtimes No \square N/A \square Comments:
. <u>L</u>	aboratory Sample Receipt Documentation
	a. Sample/cooler temperature documented and within range at receipt (0° to 6° C)?
	Yes \square No \square N/A \square Comments:

Volatile Chlorinated Solvents, etc.)?

Yes \boxtimes No \square N/A \square Comments:

Laboratory Report Date:

07/07/2021 CS Site Name:

Delta Western Station Haines

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

Yes \boxtimes No \square N/A \square Comments:

All samples in good condition

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, etc.?

Yes□	No□	N/A 🖂	Comments:
100			commente.

All samples in good condition

e. Data quality or usability affected?

Comments:

No effect on data quality or usability

4. Case Narrative

a. Present and understandable?

Yes \boxtimes No \square N/A \square Comments:

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

Yes \boxtimes No \square N/A \square Comments:

c. Were all corrective actions documented?

Yes \boxtimes No \square N/A \square Comments:

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

Comments:

No effect on data usability

Laboratory Report Date:

07/07/2021

CS Site Name:

Delta Western Station Haines

5. <u>Samples Results</u>

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

Yes \boxtimes No \square N/A \square Comments:

b. All applicable holding times met?

Yes⊠	No	N/A	Comments:
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c. All soils reported on a dry weight basis?

Yes \boxtimes No \square N/A \square Comments:

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

Yes \Box No \boxtimes N/A \Box Comments:

LOQs for 1,2,3-trichloropropane, 1,2-dibromoethane, and dibromochloromethane were all greater than their MTG cleanup level in at least one sample.

e. Data quality or usability affected?

No effect on data quality or usability. The affected analytes are not suspected at this site.

6. QC Samples

- a. Method Blank
 - i. One method blank reported per matrix, analysis and 20 samples?

Yes \boxtimes No \square N/A \square Comments:

ii. All method blank results less than limit of quantitation (LOQ) or project specified objectives?

Yes \boxtimes No \square N/A \square Comments:

Method blank for GRO had an estimated detection that was less than the LOQ.

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CS Site Name:

Delta Western Station Haines

iii. If above LOQ or project specified objectives, what samples are affected? Comments:

No samples affected.

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

Yes \square No \square N/A \boxtimes Comments:

No samples affected

v. Data quality or usability affected?

Comments:

No effect on data quality or usability

- 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 \boxtimes No \square N/A \square Comments:

LCS for 8260 and 8270, LCS/LCSD for AK 101, 102, and 103.

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

Yes \square No \square N/A \boxtimes Comments:

No inorganic analyses requested

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

Yes \square No \square N/A \square Comments:

GRO LCSD recovery above limits; LCS within limits

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

Yes \boxtimes No \square N/A \square Comments:

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

All samples affected.

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

Yes \square No \boxtimes N/A \square Comments:

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

Comments:

No effect on data usability. GRO LCS was within limits, LCSD failure suggests GRO results may be biased high, but results are still less than 1% of the MTG cleanup level.

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

Note: Leave blank if not required for project

i. Organics - One MS/MSD reported per matrix, analysis and 20 samples?

Yes \boxtimes No \square N/A \square Comments:

For methods 8260 and 8270

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

Yes \square No \square N/A \boxtimes Comments:

No inorganic analyses requested

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

Yes \square No \boxtimes N/A \square Comments:

Most PAH analytes recovered below control limits in both the MS and MSD.

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

```
Yes \square No \boxtimes N/A \square Comments:
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Fluoranthene and Pyrene had RPD greater than the control limits

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Delta Western Station Haines

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

All samples affected

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

Yes \square No \boxtimes N/A \square Comments:

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

No effect on data quality or usability. Parent sample of the MS/MSD was not from the project, and suffered from matrix interference according to the case narrative. Accuracy for 8270 can be assessed using the LCS, where all results were within limits. Fluoranthene and Pyrene were not detected in any samples.

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

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

Yes \boxtimes No \square N/A \square Comments:

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

Yes \boxtimes No \square N/A \square Comments:

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

Yes \square No \square N/A \boxtimes Comments:

No samples had failed recoveries

iv. Data quality or usability affected?

Comments:

No effect on data quality or usability.

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

Yes \boxtimes No \square N/A \square 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 \square No \boxtimes N/A \square Comments:

Only one cooler used to transport samples for this report.

iii. All results less than LOQ and project specified objectives?

Yes \boxtimes No \square N/A \square Comments:

An estimated detection of GRO was recorded for the trip blank, less than the LOQ.

iv. If above LOQ or project specified objectives, what samples are affected?

Comments:

No samples affected.

v. Data quality or usability affected?

Comments:

No effect on data quality or usability.

- f. Field Duplicate
 - i. One field duplicate submitted per matrix, analysis and 10 project samples?

Yes \boxtimes No \square N/A \square Comments:

Sample 18113-CL77 is a duplicate of sample 18113-CL12.

ii. Submitted blind to lab?

Yes \boxtimes No \square N/A \square Comments:

Laboratory Report Date:

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

RPD (%) = Absolute value of: $(R_1-R_2)/((R_1+R_2)/2)$ x 100

Where $R_1 =$ Sample Concentration $R_2 =$ Field Duplicate Concentration

Yes \square No \boxtimes N/A \square Comments:

RPD for GRO was 66%

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

No effect on data usability. All GRO results were less than 1% of the MTG cleanup level.

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

Yes \square No \square N/A \boxtimes Comments:

Only disposable equipment (nitrile gloves) was used to collect soil samples.

i. All results less than LOQ and project specified objectives?

Yes \square No \square N/A \boxtimes Comments:

ii. If above LOQ or project specified objectives, what samples are affected? Comments:

iii. Data quality or usability affected?

Comments:

Laboratory Report Date:

07/07/2021

CS Site Name:

Delta Western Station Haines

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

a. Defined and appropriate?

Yes \boxtimes No \square N/A \square Comments:



Laboratory Report of Analysis

To: Delta Western-Anchorage 206 E Fireweed Ln #201 Anchorage, AK 99503 907-275-4159

Report Number: 1213489

Client Project: Haines Station GW Treatment

Dear Shayla Marshall,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Alexandra at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely, SGS North America Inc.		Stephen C. Ede
	Stophen C.	Ede 2021.06.29
		16:45:55 -08'00'

Alexandra Daniel Project Manager Alexandra.Daniel@sgs.com Date

Print Date: 06/29/2021 3:39:50PM

SGS North America Inc.

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Case Narrative

SGS Client: Delta Western-Anchorage SGS Project: 1213489 Project Name/Site: Haines Station GW Treatment Project Contact: Shayla Marshall

Refer to sample receipt form for information on sample condition.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

Print Date: 06/29/2021 3:39:52PM

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Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <<u>http://www.sgs.com/en/Terms-and-Conditions.aspx></u>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 DW Chemistry (Provisionally Certified as of 05/27/2021 for Mercury by EPA200.8, Nitrate as N by SM 4500NO3-F and VOCs by EPA 524.2) & Microbiology & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the

The following descriptors or qualifiers may be found in your report:

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
В	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
TNTC	Too Numerous To Count
U	Indicates the analyte was analyzed for but not detected.
Sample summaries which i All DRO/RRO analyses are	nclude a result for "Total Solids" have already been adjusted for moisture content. • integrated per SOP.

Print Date: 06/29/2021 3:39:54PM

Note:



Sample Summary

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Collected</u>	<u>Received</u>	<u>Matrix</u>
18113-2021PostTreatment	1213489001	06/16/2021	06/19/2021	Water (Surface, Eff., Ground)
18113-2021PreTreatment	1213489002	06/16/2021	06/19/2021	Water (Surface, Eff., Ground)
Method	Method Des	cription		

Method AK102 AK103

Diesel/Residual Range Organics Water
Diesel/Residual Range Organics Water

Print Date: 06/29/2021 3:39:56PM



Detectable Results Summary

Client Sample ID: 18113-2021PreTreatment			
Lab Sample ID: 1213489002	<u>Parameter</u>	Result	Units
Semivolatile Organic Fuels	Diesel Range Organics	0.277J	mg/L
	Residual Range Organics	0.265J	mg/L

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		L					
Results of 18113-2021PostTreatment							
Client Sample ID: 18113-2021PostTrea Client Project ID: Haines Station GW 1 Lab Sample ID: 1213489001 Lab Project ID: 1213489	atment Treatment	C F N S	Collection Da Received Da Matrix: Water Solids (%): Location:	ate: 06/16/ te: 06/19/2 r (Surface,	21 13:35 21 13:11 Eff., Gro	und)	
Results by Semivolatile Organic Fuels							
Parameter Diesel Range Organics	<u>Result Qual</u> 0.366 U	<u>LOQ/CL</u> 0.732	<u>DL</u> 0.220	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/24/21 16:40
Surrogates							
5a Androstane (surr)	87.7	50-150		%	1		06/24/21 16:40
Batch Information							
Analytical Batch: XFC15969 Analytical Method: AK102 Analyst: IVM Analytical Date/Time: 06/24/21 16:40 Container ID: 1213489001-A			Prep Batch: Prep Method Prep Date/Tin Prep Initial W Prep Extract	XXX45026 : SW3520C me: 06/23/2 /t./Vol.: 820 Vol: 1 mL	; 21 15:38 mL		
<u>Parameter</u> Residual Range Organics	<u>Result Qual</u> 0.305 U	<u>LOQ/CL</u> 0.610	<u>DL</u> 0.183	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/24/21 16:40
Surrogates							
n-Triacontane-d62 (surr)	98.9	50-150		%	1		06/24/21 16:40
Batch Information							
Analytical Batch: XFC15969 Analytical Method: AK103 Analyst: IVM Analytical Date/Time: 06/24/21 16:40 Container ID: 1213489001-A			Prep Batch: Prep Method Prep Date/Tir Prep Initial W Prep Extract	XXX45026 : SW3520C me: 06/23/2 /t./Vol.: 820 Vol: 1 mL	; 21 15:38 mL		

Print Date: 06/29/2021 3:39:58PM

J flagging is activated



Results of 18113-2021PreTreatment							
Client Sample ID: 18113-2021PreTrea Client Project ID: Haines Station GW Lab Sample ID: 1213489002 Lab Project ID: 1213489	tment Freatment		Collection Da Received Da Matrix: Wate Solids (%): Location:	ate: 06/16/ ite: 06/19/2 r (Surface,	21 13:46 21 13:11 Eff., Gro	und)	
Results by Semivolatile Organic Fuels	;						
						Allowable	
<u>Parameter</u> Diesel Range Organics	<u>Result Qual</u> 0.277 J	<u>LOQ/CL</u> 0.667	<u>DL</u> 0.200	<u>Units</u> mg/L	<u>DF</u> 1	Limits	<u>Date Analyzed</u> 06/24/21 16:50
Surrogates							
5a Androstane (surr)	89.2	50-150		%	1		06/24/21 16:50
Batch Information							
Analytical Batch: XFC15969 Analytical Method: AK102 Analyst: IVM Analytical Date/Time: 06/24/21 16:50 Container ID: 1213489002-A			Prep Batch: Prep Method Prep Date/Ti Prep Initial W Prep Extract	XXX45026 : SW3520C me: 06/23/2 /t./Vol.: 900 Vol: 1 mL	; 21 15:38 mL		
<u>Parameter</u> Residual Range Organics	<u>Result Qual</u> 0.265 J	<u>LOQ/CL</u> 0.556	<u>DL</u> 0.167	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/24/21 16:50
Surrogates							
n-Triacontane-d62 (surr)	98.3	50-150		%	1		06/24/21 16:50
Batch Information							
Analytical Batch: XFC15969 Analytical Method: AK103 Analyst: IVM Analytical Date/Time: 06/24/21 16:50 Container ID: 1213489002-A			Prep Batch: Prep Method Prep Date/Ti Prep Initial W Prep Extract	XXX45026 : SW3520C me: 06/23/2 /t./Vol.: 900 Vol: 1 mL	; 21 15:38 mL		

J flagging is activated

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SGS

Method Blank Blank ID: MB for HBN 1821246 [XXX/45026]		Water (Surfa	ice, Eff., Ground)	
)			
<u>sults</u> 00U	<u>LOQ/CL</u> 0.600	<u>DL</u> 0.180	<u>Units</u> mg/L	
7	60-120		%	
:41:00PM	Prep Bato Prep Metl Prep Date Prep Initia Prep Extr	h: XXX45026 hod: SW35200 e/Time: 6/23/2 al Wt./Vol.: 100 act Vol: 1 mL	C 021 3:38:55PM 00 mL	
	7 5:41:00PM	7 60-120 Prep Bato Prep Meth Prep Date Prep Initia Prep Extra	7 60-120 Prep Batch: XXX45026 Prep Method: SW35200 Prep Date/Time: 6/23/2 Prep Initial Wt./Vol.: 100 Prep Extract Vol: 1 mL	7 60-120 % Prep Batch: XXX45026 Prep Method: SW3520C Prep Date/Time: 6/23/2021 3:38:55PM Prep Initial Wt./Vol.: 1000 mL Prep Extract Vol: 1 mL



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213489 [XXX45026] Blank Spike Lab ID: 1618202 Date Analyzed: 06/24/2021 16:20 Spike Duplicate ID: LCSD for HBN 1213489 [XXX45026] Spike Duplicate Lab ID: 1618203 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213489001, 1213489002

Results by AK102			_						
		Blank Spike	e (mg/L)	5	pike Duplic	cate (mg/L)			
<u>Parameter</u>	Spike	Result	<u>Rec (%)</u>	Spike	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Diesel Range Organics	5	4.66	93	5	4.73	95	(75-125)	1.40	(< 20)
Surrogates									
5a Androstane (surr)	0.1		97	0.1		101	(60-120)	3.90	
Batch Information									
Analytical Batch: XFC15969 Analytical Method: AK102				Pre Pre	Batch: X	XX45026 SW3520C			
Instrument: Agilent 7890B R				Pre	o Date/Tim	e: 06/23/202	1 15:38		
Analyst: IVM				Spil Dup	e Init Wt./\ e Init Wt./\	/ol.: 5 mg/L /ol.: 5 mg/L	Extract Vol: Extract Vol:	1 mL 1 mL	

Print Date: 06/29/2021 3:40:03PM

SGS

Method Blank Blank ID: MB for HBN 1821 Blank Lab ID: 1618201 QC for Samples: 1213489001, 1213489002	1246 [XXX/45026]	Matrix	k: Water (Surfa	ice, Eff., Ground)	
Results by AK103					
<u>Parameter</u> Residual Range Organics	<u>Results</u> 0.250U	<u>LOQ/CL</u> 0.500	<u>DL</u> 0.150	<u>Units</u> mg/L	
Surrogates					
n-Triacontane-d62 (surr)	113	60-120		%	
atch Information					
Analytical Batch: XFC159 Analytical Method: AK103 Instrument: Agilent 7890B Analyst: IVM Analytical Date/Time: 6/24	69 R 4/2021 5:41:00PM	Prep Ba Prep Me Prep Da Prep Init Prep Ex	tch: XXX45026 hthod: SW35200 te/Time: 6/23/2 ial Wt./Vol.: 10 tract Vol: 1 mL	C 021 3:38:55PM 00 mL	

Print Date: 06/29/2021 3:40:06PM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213489 [XXX45026] Blank Spike Lab ID: 1618202 Date Analyzed: 06/24/2021 16:20 Spike Duplicate ID: LCSD for HBN 1213489 [XXX45026] Spike Duplicate Lab ID: 1618203 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213489001, 1213489002

Results by AK103									
		Blank Spike	e (mg/L)	5	Spike Duplie	cate (mg/L)			
<u>Parameter</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Residual Range Organics	5	4.62	93	5	4.71	94	(60-120)	1.80	(< 20)
Surrogates									
n-Triacontane-d62 (surr)	0.1		100	0.1		108	(60-120)	7.70	
Batch Information									
Analytical Batch: XFC15969				Pre	p Batch: X	XX45026			
Analytical Method: AK103				Pre	p Method:	SW3520C			
Instrument: Agilent 7890B R				Pre	p Date/Tim	e: 06/23/202	1 15:38		
Analyst: IVM				Spi	ke Init Wt./\	/ol.: 5 mg/L	Extract Vol:	1 mL	
				Dup	e Init Wt./\	/ol.: 5 mg/L	Extract Vol:	1 mL	

Print Date: 06/29/2021 3:40:08PM



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1213489

ICA INC. CHAIN OF CUSTODY RECORD

SGS Environmental Services 200 West Potter Road Anchorage, AK 99518 (907) 562-2343 www.sgs.com/alaska

			PH	36564	1<								www.sg	js.com/alaska
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*	CONTACT: Andy Coulson PHONE #: 907-2	72-9336	SEC	TION 3				PR	ESERVATI	/E				
	PROJECT Haines Station PROJECT/ NAME: (a) Treatment Project/ PWSID/ PERMIT #:		# C	SAMPLE TYPE:	НСІ	HCI	HCI							
Ŭ	REPORTS TO: Andy Coulson E-MAIL: acoulsor	n@emi-alaska.com	O N T	Comp Grab	101)	AK	30)							
-	INVOICE TO: Delta Western QUOTE #: P.O. #:		A I N	MI (Multi- incre-	(AK	RRO (03)	X (82							
SA	RESERVED FOR LAB SAMPLE IDENTIFICATION DATE MM/DD/YY	TIME MATRIX/ HH:MM CODE	E R S	mental)	GRO	DRO/1 102/1	BTE)							REMARKS/ LOC ID
anagement	AB 18113-2021 post 1 catant 06/16/21 2010 18113-2021 are treatment 06/16/21	17:75 W 17:46 W	2	6		X								
S Group M														
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ved - SGS			3	$\overline{\Lambda}$,	SECT	ION 4 D	OD Project	?NO		DATA I	DELIVER	RABLE REQUIREMENTS:
ights reser	Aury an 06/17/21	11:00 Da	h {	\mathcal{N}	\checkmark	_	COC ID Cooler): ID:						
2014 - Ali r		IME RECEIVED	βY:	10			REQUES	STED TUR	NAROUND T	IME AND	/OR SPE	CIAL INS	STRUCTI	ONS
rica Inc 2	RELINQUIGHED BY:(3) DATE T		ΞΥ:		>		Null's	TE	M <u>P. BLANK</u>	°C;		CHAIN	NOFCU	STODY SEAL: (CIRCLE)
North Ame	RELINQUISHED BY:(4) DATE T	IME RECEIVED F	ORLA	BORATO	RY BY	4A	1.0	05+ Or	<u>3.7 (</u>			AWC /INT/	ACT I	A BROKEN ABSENT
© SGS	6/19/2/	1311 Mully	Q	lla	r n	ap.	(8	See attach	ed Sample Re	ceipt Form	n)	(Sei	e attache	d Sample Receipt Form)

http://www.sgs.com/terms-and-conditions

F101_eCOC_Revised_2014-12-10

e-Sample Receipt Form FBK

	e eampie	Receipers				
363	SGS Workorder #:	E	MI GWT		EMI	GWT
Review	I Criteria	Condition (Yes,	No, N/A	Exceptions	Noted bel	ow
Chain of Cus	stody / Temperature Reguir	ements	Exemp	tion permitted if	sampler hand	carries/delive
Wer	re Custody Seals intact? Note # & le	ocation Yes	n an that and H ard and the second sec	dedition in the second data		
	COC accompanied sa	mples? Yes				
DOD: Were sample	s received in COC corresponding co	oolers? N/A				
	**Exemption permitted if of	chilled & colle	cted <8 hours ago, or	for samples whe	ere chilling is n	ot required
Temperature bl	ank compliant* (i.e., 0-6 °C afte	r CF)? Yes	Cooler ID:	1 @	3.4 °C	Therm. ID:
			Cooler ID:	@	°C	Therm. ID:
If samples received without a temper	ature blank, the "cooler temperature" will	be	Cooler ID:	@	°C	Therm. ID:
be noted if r	will be noted to the right. "ambient" or "chi neither is available.		Cooler ID:	@	°C	Therm. ID:
	be noted it neither is available. *If >6°C, were samples collected <8 hours a If <0°C, were sample containers ice f					
*lf >6°C, w	ere samples collected <8 hours	ago?				
lf <0	°C, were sample containers ice	free?				
Note: Identify containers re	ceived at non-compliant temper	ature.				
Use fo	orm FS-0029 if more space is ne	eeded.				
						,
			line and the state of the state			
Holding Time / Docum	entation / Sample Condition Re		Note: Refer to form F	-083 "Sample G	iuide" for speci	fic holding tin
200 samples match COC (i.	.e.,sample iDs,dates/times colle					
	mil, fecold details & logili per co					
Wore complex in containe	eandition (no looks/aracka/broad					
	conulion (no leaks/cracks/breat	kaye) / Tes				
Were analytical requests clear?	(i.e., method is specified for an	alyses				
with multiple	option for analysis (Ex: BTEX, M	Vetals)				
Woro Trip Planka (i.e.		Tes				
Wore all water VOA viale free	vOAS, LL-Hy) in cooler with sar					
	\geq of fielduspace (i.e., bubbles \geq t					
Wora all call V	(OAs field extracted with McOH	DED2 NIA				
Were all soil V Ear Bush/Short Hold T	OAs field extracted with MeOH	+BFB? N/A				
Were all soil V For Rush/Short Hold T	OAs field extracted with MeOH- ime, was RUSH/Short HT emai	+BFB? N/A I sent? N/A				
Were all soil V For Rush/Short Hold T Note to Client: An	OAs field extracted with MeOH- Time, was RUSH/Short HT emain ny "No", answer above indicates nor	+BFB? N/A I sent? N/A n-compliance	with standard procedu	res and may im	pact data quali	ity.
Were all soil V For Rush/Short Hold T Note to Client: Ar	OAs field extracted with MeOH- ime, was RUSH/Short HT emainy "No", answer above indicates nor Additiona	+BFB? N/A I sent? N/A n-compliance Il notes (if a	with standard procedu	res and may im	pact data quali	ity.
Were all soil V For Rush/Short Hold T Note to Client: A	OAs field extracted with MeOH- Time, was RUSH/Short HT emainy "No", answer above indicates nor Additiona	+BFB? N/A Il sent? N/A n-compliance Il notes (if a	with standard procedu	res and may im	pact data quali	ity.
Were all soil V For Rush/Short Hold T Note to Client: Ar SGS Profile #	OAs field extracted with MeOH- Time, was RUSH/Short HT emainy "No", answer above indicates nor Additiona	+BFB? N/A I sent? N/A n-compliance I notes (if a	with standard procedu	res and may im O	pact data quali	ity.
e-Sam<u>ple Receipt Form</u>

THE R. LEWIS CO.	CCC	
	202	

202	SGS Workorder #:	1	213489	12	213489
Revie	w Criteria	Condition (Yes,	No, N/A	Exceptions Not	ed below
Chain of C	ustody / Temperature Requi	rements	N/A Exemption	on permitted if sampl	er hand carries/delivers.
V	Vere Custody Seals intact? Note # &	location Yes	1F, 1B		
	COC accompanied sa	amples? Yes			
DOD: Were sam	ples received in COC corresponding of	coolers? N/A			
	N/A **Exemption permitted if	chilled & colle	ected <8 hours ago, or fo	r samples where chi	ling is not required
Temperature	blank compliant* (i.e., 0-6 °C afte	er CF)? Yes	Cooler ID: 1	@	1.6 °C Therm. ID: D57
			Cooler ID:	@	°C Therm. ID:
If samples received without a tem documented instead & "COOLER TEM	perature blank, the "cooler temperature" wil P" will be noted to the right, "ambient" or "ch	l be hilled" will	Cooler ID:	@	°C Therm. ID:
be noted	l if neither is available.		Cooler ID:	@	°C Therm. ID:
			Cooler ID:	@	°C Therm. ID:
*lf >6°C,	were samples collected <8 hours	s ago? N/A			
16	10°C wore comple containers in	free?			
If	 vere sample containers ice 	n/A			
Noto: Idontify containers	reactived at non-compliant temps	roturo			
Use	e form FS-0029 if more space is n	leeded.			
Holding Time / Doc	umentation / Sample Condition R	equirements	Note: Refer to form F-083 "	Sample Guide" for spec	ific holding times.
We	re samples received within holding	g time? Yes			
Do samples match COC**	(i.e.,sample IDs,dates/times colle	ected)? Yes			
**Note: If times differ	<1hr, record details & login per C	OC.			
***Note: If sample information on conta	iners differs from COC, SGS will default to	COC informatior			
Were analytical requests clea	ar? (i.e., method is specified for an	nalyses Yes			
with multip	ble option for analysis (Ex: BTEX,	Metals)			
	h un a lun a a a lu a lu a a a a a a a a a a a a a		N/A ***Exem	ption permitted for m	etais (e.g,200.8/6020A).
Were proper containers (type/mass/volume/preservative***)used? Yes			
	Volatile / I.IHo Reo	uiremente			
Were Trin Blanks (i e	. VOAs. LL-Hg) in cooler with sa	mples? N/A			
Were all water VOA vials f	ree of headspace (i.e., hubbles <	6mm)? N/A			
Were all soi	VOAs field extracted with MeOH	+BFB? N/A			
Note to Client:	Any "No" answer above indicates no	n-compliance	with standard procedure	s and may impact de	ata quality
Note to Olient.			mar standard procedure	o and may impact us	ia quanty.
	Additiona	al notes (if a	pplicable):		



Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container</u> Condition	<u>Container Id</u>	<u>Preservative</u>	<u>Container</u> <u>Condition</u>
1213489001-A 1213489001-B 1213489002-A 1213489002-B	HCL to pH < 2 HCL to pH < 2 HCL to pH < 2 HCL to pH < 2	ОК ОК ОК ОК			

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

OK - The container was received at an acceptable pH for the analysis requested.

BU - The container was received with headspace greater than 6mm.

DM - The container was received damaged.

FR - The container was received frozen and not usable for Bacteria or BOD analyses.

IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.

NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.

PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis

requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added. QN - Insufficient sample quantity provided.

Laboratory Data Review Checklist

Completed By:

Andy Coulson

Title:

Environmental Scientist

Date:

24 August 2021

Consultant Firm:

EMI

Laboratory Name:

SGS Anchorage

Laboratory Report Number:

1213489

Laboratory Report Date:

06/29/2021

CS Site Name:

Delta Western Station Haines

ADEC File Number:

1508.38.020

Hazard Identification Number:

25489

Laboratory Report Date:

06/29/2021

CS Site Name:

Delta Western Station Haines

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

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

	Yes No N/A Comments:
	b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses ADEC CS approved?
	Yes No N/A Comments:
	All samples analyzed at SGS Anchorage
<u>(</u>	Chain of Custody (CoC)
	a. CoC information completed, signed, and dated (including released/received by)?
	Yes No N/A Comments:
	b. Correct analyses requested?
	Yes \boxtimes No \square N/A \square Comments:
Ī	Laboratory Sample Receipt Documentation
	a. Sample/cooler temperature documented and within range at receipt (0° to 6° C)?
	Yes \boxtimes No \square N/A \square Comments:
	h. General and the second difference of the second VOC soil (CDO DTEV)

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

Yes \boxtimes No \square N/A \square Comments:

Laboratory Report Date:

 06/29/2021

 CS Site Name:

 Delta Western Station Haines

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

 Yes⊠ No□ N/A□ Comments:

 All samples in good condition

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, etc.?

Yes⊠	No□	N/A	Comments:			

No discrepancies noted

e. Data quality or usability affected?

Comments:

No effect on data quality or usability

4. Case Narrative

a. Present and understandable?

Yes \boxtimes No \square N/A \square Comments:

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

Yes \square No \square N/A \boxtimes Comments:

No errors noted

c. Were all corrective actions documented?

Yes \square No \square N/A \boxtimes Comments:

No correct actions necessary

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

Comments:

No effect on data quality or usability

Laboratory Report Date:

06/29/2021

CS Site Name:

Delta Western Station Haines

5. <u>Samples Results</u>

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

Yes \boxtimes No \square N/A \square Comments:

b. All applicable holding times met?

Yes⊠	No□	N/A	Comments:
------	-----	-----	-----------

c. All soils reported on a dry weight basis?

Yes \square No \square N/A \boxtimes Comments:

Only water samples

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

Yes \boxtimes No \square N/A \square Comments:

e. Data quality or usability affected?

No effect on data quality or usability

6. QC Samples

- a. Method Blank
 - i. One method blank reported per matrix, analysis and 20 samples?

Yes \boxtimes No \square N/A \square Comments:

ii. All method blank results less than limit of quantitation (LOQ) or project specified objectives?Yes⊠ No□ N/A□ Comments:

Laboratory Report Date:

06/29/2021

CS Site Name:

Delta Western Station Haines

iii. If above LOQ or project specified objectives, what samples are affected? Comments:

No samples affected

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

Yes \square No \square N/A \boxtimes Comments:

No samples affected

v. Data quality or usability affected?

Comments:

No effect on data quality or usability

- 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 \boxtimes No \square N/A \square Comments:

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

Yes \square No \square N/A \boxtimes Comments:

No inorganic analyses requested

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

Yes \boxtimes No \square N/A \square Comments:

iv Precision

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

Yes \boxtimes No \square N/A \square Comments:

Laboratory Report Date:

06/29/2021

CS Site Name:

Delta Western Station Haines

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

No samples affected

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

Yes \square No \square N/A \boxtimes Comments:

No samples affected

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

Comments:

No effect on data quality or usability

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Note: Leave blank if not required for project

i. Organics - One MS/MSD reported per matrix, analysis and 20 samples?

Yes \square No \square N/A \square Comments:

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

Yes \square No \square N/A \square Comments:

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

Yes \square No \square N/A \square Comments:

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

Yes \square No \square N/A \square Comments:

Laboratory Report Date:

06/29/2021

CS Site Name:

Delta Western Station Haines

- v. If %R or RPD is outside of acceptable limits, what samples are affected? Comments:
- vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes \square No \square N/A \square Comment
--

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

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

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

Yes \boxtimes No \square N/A \square Comments:

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

Yes \boxtimes No \square N/A \square Comments:

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

Yes \square No \square N/A \boxtimes Comments:

No samples affected

iv. Data quality or usability affected?

Comments:

No effect on data quality or usability

Laboratory Report Date:

06/29/2021

CS Site Name:

Delta Western Station Haines

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

Yes \square No \boxtimes N/A \square Comments:

No volatile analyses requested

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 \square No \square N/A \boxtimes Comments:

iii. All results less than LOQ and project specified objectives?

Yes \square No \square N/A \boxtimes Comments:

iv. If above LOQ or project specified objectives, what samples are affected? Comments:

v. Data quality or usability affected?

Comments:

No effect on data quality or usability

- f. Field Duplicate
 - i. One field duplicate submitted per matrix, analysis and 10 project samples?

Yes \square No \boxtimes N/A \square Comments:

ii. Submitted blind to lab?

Yes \square No \square N/A \boxtimes Comments:

Laboratory Report Date:

06/29/2021

CS Site Name:

Delta Western Station Haines

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

RPD (%) = Absolute value of: $(R_1-R_2)/((R_1+R_2)/2)$ x 100

Where $R_1 =$ Sample Concentration $R_2 =$ Field Duplicate Concentration

Yes \square No \square N/A \boxtimes Comments:

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

No effect on data usability

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

Yes \square No \square N/A \boxtimes Comments:

Samples were collected directly from system outlets into laboratory contrainers

i. All results less than LOQ and project specified objectives?

Yes \boxtimes No \square N/A \square Comments:

ii. If above LOQ or project specified objectives, what samples are affected?

Comments:

No samples affected

iii. Data quality or usability affected?

Comments:

No effect on data quality or usability

Laboratory Report Date:

06/29/2021

CS Site Name:

Delta Western Station Haines

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

a. Defined and appropriate?

Yes \boxtimes No \square N/A \square Comments:



Laboratory Report of Analysis

To: Delta Western-Anchorage 206 E Fireweed Ln #201 Anchorage, AK 99503 907-275-4159

Report Number: 1213490

Client Project: Haines Station Surface Water

Dear Shayla Marshall,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Alexandra at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely, SGS North America Inc. Stephen C. Ede Stephen C. Ede 2021.06.29 16:48:36 -08'00'

Alexandra Daniel Project Manager Alexandra.Daniel@sgs.com Date

Print Date: 06/29/2021 3:42:02PM

SGS North America Inc.

200 West Potter Drive, Anchorage, AK 99518 t 907.562.2343 f 907.561.5301 www.us.sgs.com Results via Engage

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Case Narrative

SGS Client: Delta Western-Anchorage SGS Project: 1213490 Project Name/Site: Haines Station Surface Water Project Contact: Shayla Marshall

Refer to sample receipt form for information on sample condition.

*QC comments may be associated with the field samples found in this report. When applicable, comments will be applied to associated field samples.

Print Date: 06/29/2021 3:42:03PM

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Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <<u>http://www.sgs.com/en/Terms-and-Conditions.aspx></u>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the context or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 DW Chemistry (Provisionally Certified as of 05/27/2021 for Mercury by EPA200.8, Nitrate as N by SM 4500NO3-F and VOCs by EPA 524.2) & Microbiology & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the

The following descriptors or qualifiers may be found in your report:

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
В	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
TNTC	Too Numerous To Count
U	Indicates the analyte was analyzed for but not detected.
Sample summaries which i All DRO/RRO analyses are	nclude a result for "Total Solids" have already been adjusted for moisture content. • integrated per SOP.

Print Date: 06/29/2021 3:42:06PM

Note:



Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	<u>Matrix</u>
18113-SW1-061621	1213490001	06/16/2021	06/19/2021	Water (Surface, Eff., Ground)
18113-SW3-061621	1213490002	06/16/2021	06/19/2021	Water (Surface, Eff., Ground)
18113-SW4-061621	1213490003	06/16/2021	06/19/2021	Water (Surface, Eff., Ground)

<u>Method</u>

AK102 AK103 <u>Method Description</u> Diesel/Residual Range Organics Water Diesel/Residual Range Organics Water

Print Date: 06/29/2021 3:42:07PM



Detectable Results Summary

Client Sample ID: 18113-SW1-061621 Lab Sample ID: 1213490001 Semivolatile Organic Fuels	<u>Parameter</u> Residual Range Organics	<u>Result</u> 0.219J	<u>Units</u> mg/L
Client Sample ID: 18113-SW3-061621 Lab Sample ID: 1213490002 Semivolatile Organic Fuels	<u>Parameter</u> Residual Range Organics	<u>Result</u> 0.222J	<u>Units</u> mg/L
Client Sample ID: 18113-SW4-061621 Lab Sample ID: 1213490003 Semivolatile Organic Fuels	<u>Parameter</u> Diesel Range Organics Residual Range Organics	<u>Result</u> 0.226J 0.227J	<u>Units</u> mg/L mg/L

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SGS North America Inc.

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Client Sample ID: 18113-SW1-061621 Client Project ID: Haines Station Surface Water Lab Sample ID: 1213490001 Lab Project ID: 1213490			Collection Da Received Da Matrix: Wate Solids (%): Location:	ate: 06/16/ ate: 06/19/2 r (Surface,	21 08:42 21 13:11 Eff., Gro	und)	
esults by Semivolatile Organic Fuels	5		_				
<u>rameter</u> esel Range Organics	<u>Result Qual</u> 0.308 U	<u>LOQ/CL</u> 0.615	<u>DL</u> 0.185	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyze</u> 06/24/21 17:0
rogates Androstane (surr)	93.6	50-150		%	1		06/24/21 17:0
Analytical Batch: XFC15969 Analytical Method: AK102 Analyst: IVM Analytical Date/Time: 06/24/21 17:00 Container ID: 1213490001-A			Prep Batch: Prep Method Prep Date/Ti Prep Initial V Prep Extract	XXX45026 l: SW3520C me: 06/23/2 Vt./Vol.: 975 Vol: 1 mL	; 21 15:38 5 mL		
r <u>ameter</u> sidual Range Organics	<u>Result Qual</u> 0.219 J	<u>LOQ/CL</u> 0.513	<u>DL</u> 0.154	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyze</u> 06/24/21 17:
rogates Friacontane-d62 (surr)	106	50-150		%	1		06/24/21 17:
tch Information							
Analytical Batch: XFC15969 Analytical Method: AK103 Analyst: IVM Analytical Date/Time: 06/24/21 17:00 Container ID: 1213490001-A			Prep Batch: Prep Method Prep Date/Ti Prep Initial V Prep Extract	XXX45026 l: SW3520C me: 06/23/2 Vt./Vol.: 975 Vol: 1 mL	; 21 15:38 5 mL		

Print Date: 06/29/2021 3:42:10PM

-

J flagging is activated

Results of 18113-SW3-061621 Client Sample ID: 18113-SW3-061621 Client Project ID: Haines Station Surf ab Sample ID: 1213490002 ab Project ID: 1213490	Collection Date: 06/16/21 09:15 Received Date: 06/19/21 13:11 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:								
Results by Semivolatile Organic Fuels	3								
<u>Parameter</u> Diesel Range Organics	<u>Result Qual</u> 0.316 U	<u>LOQ/CL</u> 0.632	<u>DL</u> 0.189	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyze</u> 06/24/21 17:1		
r rogates a Androstane (surr)	85	50-150		%	1		06/24/21 17:1		
Analytical Batch: XFC15969 Analytical Method: AK102 Analyst: IVM Analytical Date/Time: 06/24/21 17:10 Container ID: 1213490002-A			Prep Batch: Prep Method Prep Date/Ti Prep Initial W Prep Extract	XXX45026 I: SW3520C Ime: 06/23/2 Vt./Vol.: 950 Vol: 1 mL	C 21 15:38) mL				
<u>Parameter</u> Residual Range Organics	<u>Result Qual</u> 0.222 J	<u>LOQ/CL</u> 0.526	<u>DL</u> 0.158	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyze</u> 06/24/21 17:1		
rrogates									
-Triacontane-d62 (surr)	94	50-150		%	1		06/24/21 17:1		
Analytical Batch: XFC15969 Analytical Method: AK103 Analyst: IVM Analytical Date/Time: 06/24/21 17:10 Container ID: 1213490002-A			Prep Batch: Prep Method Prep Date/Ti Prep Initial W Prep Extract	XXX45026 I: SW3520C me: 06/23/2 Vt./Vol.: 950 Vol: 1 mL	C 21 15:38) mL				

J flagging is activated

Results of 18113-SW4-061621								
Client Sample ID: 18113-SW4-06162 Client Project ID: Haines Station Su Lab Sample ID: 1213490003 Lab Project ID: 1213490	Collection Date: 06/16/21 09:25 Received Date: 06/19/21 13:11 Matrix: Water (Surface, Eff., Ground) Solids (%): Location:							
Results by Semivolatile Organic Fue	els							
<u>Parameter</u> Diesel Range Organics	<u>ResultQual</u> 0.226 J	<u>LOQ/CL</u> 0.632	<u>DL</u> 0.189	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/24/21 17:21	
urrogates 5a Androstane (surr)	91.9	50-150		%	1		06/24/21 17:21	
Batch Information								
Analytical Batch: XFC15969 Analytical Method: AK102 Analyst: IVM Analytical Date/Time: 06/24/21 17:21 Container ID: 1213490003-A			Prep Batch: Prep Method Prep Date/Ti Prep Initial W Prep Extract	XXX45026 : SW3520C me: 06/23/2 /t./Vol.: 950 Vol: 1 mL	; 21 15:38) mL			
Parameter Residual Range Organics	<u>Result Qual</u> 0.227 J	<u>LOQ/CL</u> 0.526	<u>DL</u> 0.158	<u>Units</u> mg/L	<u>DF</u> 1	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u> 06/24/21 17:21	
urrogates	400	50.450		0/	4		00/04/04 47:04	
n-Thacontane-do2 (surr)	102	50-150		70	1		00/24/21 17:21	
Batch Information Analytical Batch: XFC15969 Analytical Method: AK103 Analyst: IVM Analytical Date/Time: 06/24/21 17:21 Container ID: 1213490003-A			Prep Batch: Prep Method Prep Date/Ti Prep Initial W Prep Extract	XXX45026 : SW3520C me: 06/23/2 /t./Vol.: 950 Vol: 1 mL	; 21 15:38) mL			

J flagging is activated

Member of SGS Group

SGS	
	-

Method Blank)			
Blank ID: MB for HBN 182 Blank Lab ID: 1618201	21246 [XXX/45026]	Matrix	x: Water (Surfa	ace, Eff., Ground)	
QC for Samples: 1213490001, 1213490002, 1	1213490003				
Results by AK102					
Parameter	Results	 LOQ/CL	<u>DL</u>	<u>Units</u>	
Diesel Range Organics	0.300U	0.600	0.180	mg/L	
Surrogates					
5a Androstane (surr)	94.7	60-120		%	
Batch Information					
Analytical Batch: XFC15	969	Prep Ba	tch: XXX45026		
Analytical Method: AK10	2	Prep Me	ethod: SW3520	C	
Instrument: Agilent 7890	BR	Prep Da Prop Ini	tie/Time: 6/23/2	021 3:38:55PM	
			tial VVL/VOL. 10	00 IIIL	

Print Date: 06/29/2021 3:42:13PM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213490 [XXX45026] Blank Spike Lab ID: 1618202 Date Analyzed: 06/24/2021 16:20 Spike Duplicate ID: LCSD for HBN 1213490 [XXX45026] Spike Duplicate Lab ID: 1618203 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213490001, 1213490002, 1213490003

Results by AK102									
	e (mg/L)	5							
<u>Parameter</u>	Spike	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Diesel Range Organics	5	4.66	93	5	4.73	95	(75-125)	1.40	(< 20)
Surrogates									
5a Androstane (surr)	0.1		97	0.1		101	(60-120)	3.90	
Batch Information									
Analytical Batch: XFC15969 Analytical Method: AK102				Pre Pre	p Batch: X p Method:	XX45026 SW3520C			
Instrument: Agilent 7890B R				Pre	p Date/Tim	e: 06/23/202	1 15:38		
Analyst: IVM				Spil Dup	ke Init Wt./\ be Init Wt./\	/ol.: 5 mg/L /ol.: 5 mg/L	Extract Vol: Extract Vol:	: 1 mL 1 mL	

Print Date: 06/29/2021 3:42:15PM

SGS	
	-

Method Blank Blank ID: MB for HBN 1821 Blank Lab ID: 1618201	246 [XXX/45026]	Matrix	:: Water (Surfa	ce, Eff., Ground)	
QC for Samples: 1213490001, 1213490002, 12	13490003				
Results by AK103)			
Parameter Residual Range Organics	<u>Results</u> 0.250U	<u>LOQ/CL</u> 0.500	<u>DL</u> 0.150	<u>Units</u> mg/L	
Surrogates					
n-Triacontane-d62 (surr)	113	60-120		%	
Batch Information					
Analytical Batch: XFC1596	69	Prep Ba	tch: XXX45026		
Analytical Method: AK103		Prep Me	thod: SW35200		
Instrument: Agilent 7890B	R	Prep Da	te/Time: 6/23/20	021 3:38:55PM	
Analyst: 1010 Analytical Date/Time: 6/24	/2021 5·41·00PM	Prep Init Prep Exi	ract Vol: 1 ml	JU ML	
· ····· , ··· · · · · · · · · · · · · ·					



Blank Spike Summary

Blank Spike ID: LCS for HBN 1213490 [XXX45026] Blank Spike Lab ID: 1618202 Date Analyzed: 06/24/2021 16:20 Spike Duplicate ID: LCSD for HBN 1213490 [XXX45026] Spike Duplicate Lab ID: 1618203 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1213490001, 1213490002, 1213490003

Results by AK103			_						
		Blank Spike	e (mg/L)	:	Spike Dupli	cate (mg/L)			
<u>Parameter</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>Spike</u>	Result	<u>Rec (%)</u>	<u>CL</u>	<u>RPD (%)</u>	RPD CL
Residual Range Organics	5	4.62	93	5	4.71	94	(60-120)	1.80	(< 20)
Surrogates									
n-Triacontane-d62 (surr)	0.1		100	0.1		108	(60-120)	7.70	
Batch Information									
Analytical Batch: XFC15969				Pre	p Batch: X	XX45026			
Analytical Method: AK103				Pre	p Method:	SW3520C			
Instrument: Agilent 7890B R				Pre	p Date/Tim	e: 06/23/202	1 15:38		
Analyst: IVM				Spi	ke Init Wt./\	/ol.: 5 mg/L	Extract Vol:	1 mL	
				Duj	be Init Wt./\	/ol.: 5 mg/L	Extract Vol:	1 mL	

Print Date: 06/29/2021 3:42:18PM



SGS NORTH AMERICA INC. CHAIN OF CUSTODY RECORD

SGS Environmental Services 200 West Potter Road Anchorage, AK 99518 (907) 562-2343 www.sgs.com/alaska

	·*						PH?	5656	95									
	CLIENT: EMI					INSTR	RUCTI	ONS:	SECT	IONS	1-5 M	UST B	E FILI	LED C	UT. IS		1 1	
ł	CONTACT: Andy Coulson	^{DNE #:} 907-	272-9330	6	SEC	TION 3				F	PRES		12	134	190)	Page of	
FCTION	PROJECT Haines Station NAME: SUFFACE WATER PRO PROJECT HAINES STATION	DJECT/ SID/ RMIT #:	,		# C	SAMPLE TYPE:	HCL	HCL	HCL	None								-
S.	REPORTS TO: Andy Coulson	IAIL: acouls	on@emi-al	aska.com	N T	Comp Grab	101)	AK		()		, isa			1			
	INVOICE TO: Delta Western QU	OTE #:). #:			A I N	MI (Multi- incre-	(AK	RRO (/ 03)	(624)	H (625								
Γ	RESERVED	DATE MM/DD/YY	TIME HH:MM	MATRIX/ MATRIX CODE	E R S	mental)	GRO	DRO/1 102/1	TAH	TAq							REMARKS/ LOC ID	1
	(A-B) 18117-5W1-061621	06/16/2	08-42	W	2	G		X										
	18117 - SW3D61621	06/16/2	09-15	W	d	6		X										
e N	340 18113- 544-06162	06/16/21	01.75	W	2	6												
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		DATE	ТІМЕ	RECEIVED	Y:	11		~	REQUE	STED T	URNARO		ME AND/	OR SPE	CIAL IN	STRUCT	IONS	
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	RELINQUISHED BY:(4)	DATE	TIME	RECEIVED	ORLA	BORATO	RY BY	м	1.0 .	c	R AME	SIENT []		NT	ACT	BROKEN ABSI	ENT
		-uliana	1511	mill	¥ C	Der	~			(See atta	ched Sar	nple Rec	elpt Form	1)	(86	e attach	ad Sample Receipt Fo	im)
														ht	tp://ww	w.sgs.c	om/terms-and-con	iditions

Page 13 of 16

e-Sample Receipt Form FBK

<u>
</u>

	SGS Workorder #:		EMI SV	N	•	EMI	SW	
Review C	Criteria	Condition (Yes,	No, N/A	Exce	ptions N	oted belo	w	
Chain of Cust	ody / Temperature Require	ments		Exemption per	nitted if san	npler hand (carries/delive	rs.
Were	Custody Seals intact? Note # & lov	cation Yes		······				
	COC accompanied sam	ples? Yes						
DOD: Were samples	received in COC corresponding cor	olers? N/A						
	**Exemption permitted if ch	nilled & colle	cted <8 hours	s ago, or for samp	oles where a	chilling is no	ot required	
Temperature bla	nk compliant* (i.e., 0-6 °C after	CF)? Yes	Cooler ID:	1	@	3.4 °C	Therm. ID:	50
			Cooler ID:		@	°C	Therm. ID:	
If samples received without a temperate	ure blank, the "cooler temperature" will be	9 - d" uill	Cooler ID:		@	°C	Therm. ID:	
be noted if ne	ither is available.		Cooler ID:		@	°C	Therm. ID:	
*lf >6°C, wei	re samples collected <8 hours a	1go?						
lf <0°ſ	C, were sample containers ice f	ree?						
Holding Time / Docume Do samples match COC** (i.e	Intation / Sample Condition Rec .,sample IDs,dates/times collec	ted)? N/C	Note: Refer	to form F-083 "Sa	ample Guide	•" for specif	ic holding tim	es.
Holding Time / Docume Do samples match COC** (i.e **Note: If times differ <1h	entation / Sample Condition Rec .,sample IDs,dates/times collec Ir, record details & login per CO differe from COC, SGS will default to CO	ted)? N/C C.	Note: Refer t	to form F-083 "Sa	ample Guide	∍" for specif	ic holding tim	es.
Holding Time / Docume Do samples match COC** (i.e **Note: If times differ <1h **Note: If sample information on containers Were samples in good co	entation / Sample Condition Rec .,sample IDs,dates/times collec Ir, record details & login per CO differs from COC, SGS will default to CC ondition (no leaks/cracks/breaka	ted)? N/C C. C information	Note: Refer	to form F-083 "Sa	ample Guide	er for specif	ic holding tim	Ies.
Holding Time / Docume Do samples match COC** (i.e **Note: If times differ <1h **Note: If sample information on containers Were samples in good co Were analytical requests clear? (i with multiple or	entation / Sample Condition Rec a.,sample IDs,dates/times collec rr, record details & login per CO differs from COC, SGS will default to CC ondition (no leaks/cracks/breaka i.e., method is specified for ana ption for analysis (Ex: BTEX, Me	ited)? N/C C. C informatior age)? Yes Ilyses etals) Yes	Note: Refer	to form F-083 "Sa	ample Guide	" for specif	ic holding tin	ies.
Holding Time / Docume Do samples match COC** (i.e **Note: If times differ <1h **Note: If sample information on containers Were samples in good co Were analytical requests clear? (i with multiple op Were Trip Blanks (i.e., Vo	entation / Sample Condition Rec a, sample IDs, dates/times collec r, record details & login per CO differs from COC, SGS will default to CC Dondition (no leaks/cracks/breaka i.e., method is specified for ana ption for analysis (Ex: BTEX, Me OAs, LL-Hg) in cooler with sam	uirements ited)? N/C iC. DC informatior age)? Yes ilyses etals) Yes ples? N/A	Note: Refer	to form F-083 "Sa	ample Guide	" for specif	ic holding tin	ies.
Holding Time / Docume Do samples match COC** (i.e **Note: If times differ <1h **Note: If sample information on containers Were samples in good co Were analytical requests clear? (i with multiple of Were Trip Blanks (i.e., Vo Were all water VOA vials free of	antation / Sample Condition Rec a.,sample IDs,dates/times collec ir, record details & login per CO differs from COC, SGS will default to CC ondition (no leaks/cracks/breaka i.e., method is specified for ana ption for analysis (Ex: BTEX, Ma OAs, LL-Hg) in cooler with samp of headspace (i.e., bubbles ≤ 6r	ited)? N/C C. C informatior age)? Yes llyses etals) Ples? N/A mm)? N/A	Note: Refer	to form F-083 "Sa	ample Guide	" for specif	ic holding tin	Ies.
Holding Time / Docume Do samples match COC** (i.e **Note: If times differ <1h **Note: If sample information on containers Were samples in good co Were analytical requests clear? (with multiple op Were Trip Blanks (i.e., VO Were all water VOA vials free of Were all soil VO	entation / Sample Condition Rec a, sample IDs, dates/times collec r, record details & login per CO differs from COC, SGS will default to CC ondition (no leaks/cracks/breaka 'i.e., method is specified for ana ption for analysis (Ex: BTEX, Me OAs, LL-Hg) in cooler with samp of headspace (i.e., bubbles ≤ 6r)As field extracted with MeOH+H	ited)? N/C C. C informatior age)? Yes ilyses etals) Yes ples? N/A mm)? N/A BFB? N/A	Note: Refer	to form F-083 "Sa	ample Guide	" for specif	ic holding tin	IES.
Holding Time / Docume Do samples match COC** (i.e **Note: If times differ <1h **Note: If sample information on containers Were samples in good co Were analytical requests clear? (with multiple of Were Trip Blanks (i.e., Vo Were all water VOA vials free of Were all soil VO For Rush/Short Hold Tin	entation / Sample Condition Rec a.,sample IDs,dates/times collec b.,sample IDs,dates/times collec b., record details & login per CO condition (no leaks/cracks/break (i.e., method is specified for ana ption for analysis (Ex: BTEX, M OAs, LL-Hg) in cooler with sam of headspace (i.e., bubbles ≤ 6r)As field extracted with MeOH+H ne, was RUSH/Short HT email s	iuirements ited)? N/C iC. DC informatior age)? Yes ilyses etals) Yes ples? N/A mm)? N/A BFB? N/A sent? N/A	Note: Refer	to form F-083 "Sa	ample Guide	" for specif	ic holding tin	es.
Holding Time / Docume Do samples match COC** (i.e **Note: If times differ <1h **Note: If sample information on containers Were samples in good co Were analytical requests clear? (with multiple o Were Trip Blanks (i.e., V4 Were all water VOA vials free o Were all soil VO For Rush/Short Hold Tin Note to Client: Any	entation / Sample Condition Rec a, sample IDs, dates/times collec r, record details & login per CO differs from COC, SGS will default to CC ondition (no leaks/cracks/breaka (i.e., method is specified for ana ption for analysis (Ex: BTEX, M OAs, LL-Hg) in cooler with sample of headspace (i.e., bubbles ≤ 6r)As field extracted with MeOH+H ne, was RUSH/Short HT email so "No", answer above indicates non-	uirements ted)? N/C C. C informatior age)? Yes etals) Yes ples? N/A mm)? N/A BFB? N/A sent? N/A compliance	Note: Refer	to form F-083 "Sa	ample Guide	" for specif	ic holding tim	105.
Holding Time / Docume Do samples match COC** (i.e **Note: If times differ <1h **Note: If sample information on containers Were samples in good co Were analytical requests clear? (with multiple of Were analytical requests clear? (with multiple of Were Trip Blanks (i.e., VA Were all water VOA vials free of Were all soil VC For Rush/Short Hold Tin Note to Client: Any	entation / Sample Condition Rec a, sample IDs, dates/times collec r, record details & login per CO differs from COC, SGS will default to CC ondition (no leaks/cracks/breaka (i.e., method is specified for ana ption for analysis (Ex: BTEX, M OAs, LL-Hg) in cooler with sam of headspace (i.e., bubbles ≤ 6r)As field extracted with MeOH+H ne, was RUSH/Short HT email s ' "No", answer above indicates non- Additional	uirements ited)? N/C iC. DC informatior age)? Yes ilyses etals) Yes ples? N/A mm)? N/A BFB? N/A sent? N/A compliance notes (if a	Note: Refer	to form F-083 "Sa	ample Guide	" for specif	ic holding tim	

000	e-Sam	ple Receir	ot Form	1			
202	SGS Workorder #:		1213	490	1	213	490
R	eview Criteria	Condition (Yes	s, No, N/A	E	ceptions No	ted belc	W
<u>Chain</u>	of Custody / Temperature Requi	irements		N/A Exemption	permitted if samp	oler hand o	carries/delivers
	Were Custody Seals intact? Note # &	location Yes	1F,1B				
	COC accompanied s	amples? Yes	5				
DOD: Were	samples received in COC corresponding	coolers? N/A					
	N/A **Exemption permitted if	chilled & coll	ected <8	hours ago, or for s	amples where ch	illing is no	t required
Tempera	ature blank compliant* (i.e., 0-6 °C afte	er CF)? Yes	Cooler	ID: 1	@	3.4 °C	Therm. ID: D
lf	- 4		Cooler	ID:	@	°C	Therm. ID:
ocumented instead & "COOLER	TEMP" will be noted to the right. "ambient" or "cl	hilled" will	Cooler	ID:	@	°C	Therm. ID:
be	noted if neither is available.		Cooler	ID:	@	°C	Therm. ID:
			Cooler	ID:	@	°C	Therm. ID:
*1t >	6°C, were samples collected <8 hours	s ago? N/A					
	If <0°C, were sample containers ice	e free? N/A					
Note: Identify contain	ners received at non-compliant tempe	erature.					
	Ose form F3-0029 If more space is f	leeueu.					
Holding Time /	Decumentation / Sample Condition P	oquiromont	Note: De		male Quide" for an	oific holding	times
Holding Time /	Were samples received within holdin	a time?	Nole: Re	101 1010111 F-083 Sa	imple Guide for spe	cine noiaing	umes.
Do samples match C(OC** (i.e. sample IDs dates/times coll	ected)? Yes					
**Note: If times d	liffer <1hr record details & login per C	COC					
*Note: If sample information on	containers differs from COC_SGS will default to	COC informatio	n				
Wore applytical requests	clear? (i.e. mothed is specified for a						
with m	ultiple option for analysis (Ex: BTEX.	Metals)					
		/					
				N/A ***Exempti	on permitted for r	netals (e c	1 200 8/6020B
Were proper containe	ars (type/mass/yolume/preservative***						,200.0/00200
	sis (type/mass/volume/preservative		2				
	Volatile / LL-Hg Rec	nuirements	3				
Were Trip Blanks	s (i.e., VOAs, LL-Hg) in cooler with sa	mples? N/A					
Were all water VOA vi	als free of headspace (i.e., bubbles \leq	6mm)? N/A					
Were a	Il soil VOAs field extracted with MeOF	+BEB? N/A					
Note to Cl	in the second seco			dard procedures	and may impact of	data quality	,
	Tent. Any No , answer above indicates no		e with Star	idaid procedures a	and may impact o		y.
	Additiona	al notes (if	applicab	ole):			



Sample Containers and Preservatives

Container Id	<u>Preservative</u>	<u>Container</u> Condition	Container Id	<u>Preservative</u>	<u>Container</u> <u>Condition</u>
1213490001-A	HCL to $pH < 2$	ОК			
1213490001-B	HCL to pH < 2	OK			
1213490002-A	HCL to pH < 2	OK			
1213490002-В	HCL to pH < 2	OK			
1213490003-A	HCL to $pH < 2$	OK			
1213490003-B	HCL to pH < 2	ОК			

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates than an inappropriate container was submitted.

- OK The container was received at an acceptable pH for the analysis requested.
- BU The container was received with headspace greater than 6mm.
- DM The container was received damaged.
- FR The container was received frozen and not usable for Bacteria or BOD analyses.
- IC The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.
- NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.
- PA The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.
- PH The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added. QN Insufficient sample quantity provided.

Laboratory Data Review Checklist

Completed By:

Andy Coulson

Title:

Environmental Scientist

Date:

24 August 2021

Consultant Firm:

EMI

Laboratory Name:

SGS Anchorage

Laboratory Report Number:

1213490

Laboratory Report Date:

06/29/2021

CS Site Name:

Delta Western Station Haines

ADEC File Number:

1508.38.020

Hazard Identification Number:

25489

Laboratory Report Date:

06/29/2021

CS Site Name:

Delta Western Station Haines

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

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

	Yes No N/A Comments:		
	b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses ADEC CS approved?		
	Yes No N/A Comments:		
	All samples analyzed at SGS Anchorage		
<u>C</u>	hain of Custody (CoC)		
	a. CoC information completed, signed, and dated (including released/received by)?		
	Yes No N/A Comments:		
	b. Correct analyses requested?		
	Yes \boxtimes No \square N/A \square Comments:		
3. <u>L</u>	aboratory Sample Receipt Documentation		
	a. Sample/cooler temperature documented and within range at receipt (0° to 6° C)?		
	Yes \boxtimes No \square N/A \square Comments:		

Volatile Chlorinated Solvents, etc.)?

Yes \boxtimes No \square N/A \square Comments:

Laboratory Report Date:

06/29/2021 CS Site Name: Delta Western Station Haines

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

Yes \boxtimes No \square N/A \square Comments:All samples in good condition

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, etc.?

	Yes \boxtimes No \square N/A \square	Comments:	
--	--	-----------	--

No discrepancies noted

e. Data quality or usability affected?

Comments:

No effect on data quality or usability

4. Case Narrative

a. Present and understandable?

Yes \boxtimes No \square N/A \square Comments:

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

Yes \square No \boxtimes N/A \square Comments:

No discrepancies noted

c. Were all corrective actions documented?

Yes \square No \square N/A \boxtimes Comments:

No corrective actions needed

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

Comments:

No effect on data quality or usability

Laboratory Report Date:

06/29/2021

CS Site Name:

Delta Western Station Haines

5. <u>Samples Results</u>

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

Yes \boxtimes No \square N/A \square Comments:

b. All applicable holding times met?

Yes⊠	No□	$N/A\square$	Comments:
------	-----	--------------	-----------

c. All soils reported on a dry weight basis?

Yes \square No \square N/A \boxtimes Comments:

Only water samples in this report

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

Yes \boxtimes No \square N/A \square Comments:

e. Data quality or usability affected?

No effect on data quality or usability

6. QC Samples

- a. Method Blank
 - i. One method blank reported per matrix, analysis and 20 samples?

Yes \boxtimes No \square N/A \square Comments:

ii. All method blank results less than limit of quantitation (LOQ) or project specified objectives?Yes⊠ No□ N/A□ Comments:

Laboratory Report Date:

06/29/2021

CS Site Name:

Delta Western Station Haines

iii. If above LOQ or project specified objectives, what samples are affected? Comments:

No samples affected

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

Yes \square No \square N/A \boxtimes Comments:

No samples affected

v. Data quality or usability affected?

Comments:

No effect on data quality or usability

- 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 \boxtimes No \square N/A \square Comments:

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

Yes \square No \square N/A \boxtimes Comments:

Only organic analyses requested

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

Yes \boxtimes No \square N/A \square Comments:

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

Yes \boxtimes No \square N/A \square Comments:

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

No samples affected

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

Yes \square No \square N/A \boxtimes Comments:

No samples affected

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

Comments:

No effect on data quality or usability

c. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Note: Leave blank if not required for project

i. Organics - One MS/MSD reported per matrix, analysis and 20 samples?

Yes \square No \square N/A \square Comments:

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

Yes \square No \square N/A \square Comments:

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

Yes \square No \square N/A \square Comments:

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

Yes \square No \square N/A \square Comments:

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- v. If %R or RPD is outside of acceptable limits, what samples are affected? Comments:
- vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

Yes \square No \square N/A \square Comment
--

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

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

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

Yes \boxtimes No \square N/A \square Comments:

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

Yes \boxtimes No \square N/A \square Comments:

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

Yes \square No \square N/A \boxtimes Comments:

No samples had failed recoveries

iv. Data quality or usability affected?

Comments:

No effect on data quality or usability

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

Yes \square No \square N/A \boxtimes Comments:

No volatile analyses requested

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 \square No \square N/A \boxtimes Comments:

No volatile analyses requested

iii. All results less than LOQ and project specified objectives?

Yes \square No \square N/A \boxtimes Comments:

No volatile analyses requested

iv. If above LOQ or project specified objectives, what samples are affected?

Comments:

No samples affected

v. Data quality or usability affected?

Comments:

No effect on data quality or usability

- f. Field Duplicate
 - i. One field duplicate submitted per matrix, analysis and 10 project samples?

Yes \boxtimes No \square N/A \square Comments:

Sample 18113-SW4-061621 is a duplicate of 18113-SW3-061621

ii. Submitted blind to lab?

Yes \boxtimes No \square N/A \square Comments:
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iii. Precision – All relative percent differences (RPD) less than specified project objectives? (Recommended: 30% water, 50% soil)

RPD (%) = Absolute value of: $(R_1-R_2)/((R_1+R_2)/2)$ x 100

Where $R_1 =$ Sample Concentration $R_2 =$ Field Duplicate Concentration

Yes \boxtimes No \square N/A \square Comments:

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

No effect on data quality or usability

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

Yes \square No \square N/A \boxtimes Comments:

Only disposable equipment was used to collect surface water samples.

i. All results less than LOQ and project specified objectives?

Yes \square No \square N/A \boxtimes Comments:

Only disposable equipment was used to collect surface water samples

ii. If above LOQ or project specified objectives, what samples are affected? Comments:

No samples affected

iii. Data quality or usability affected?

Comments:

No effect on data quality or usability

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

a. Defined and appropriate?

Yes \boxtimes No \square N/A \square Comments: