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**2024 GROUNDWATER MONITORING REPORT
SOLDOTNA REPEATER SITE
ADEC FILE NO. 2320.38.005**

AT&T Alaska Sites

Prepared for:



December 2024

2024 GROUNDWATER MONITORING REPORT SOLDOTNA REPEATER SITE

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SOLDOTNA REPEATER STATION SITE
(2011 Google Earth™ Image)

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ACRONYMS & ABBREVIATIONS

ADEC	Alaska Department of Environmental Conservation
ALTA	Alta Geosciences, Inc.
BGS	below ground surface
DRO	Diesel-range organics
ISCO	In-Situ Chemical Oxidation
LCS	lab control sample
LNAPL	Light nonaqueous phase liquid
mg/L	Milligrams per liter
ml	Milliliters
MSL	mean sea level
MS/MSD	matrix spike/matrix spike duplicate
PQL	practical quantitation limit
QA	quality assurance
QC	quality control
RPD	relative percent difference

EXECUTIVE SUMMARY

This report documents groundwater conditions at the AT&T Soldotna Repeater Site in 2024. The work was performed by ALTA Geosciences, Inc. on behalf of Avangrid Renewables Holdings, Inc., which is performing investigation and remediation at this site pursuant to a stock purchase agreement.

Groundwater monitoring was conducted on October 23, 2024, and consisted of measuring water levels and collecting groundwater samples for laboratory analysis of diesel-range organics (DRO).

As recommended in the **2021 Groundwater Monitoring Report - Soldotna Repeater Site** (ALTA, February 2022) and subsequent reports, the soil vapor extraction system has not been operated since 2021.

The most significant findings from this year's monitoring include:

- 1.) The sample collected from well MW-16 (downgradient well) contained 0.71 mg/L DRO, well below ADEC cleanup criteria (1.5 mg/L DRO). DRO concentration in this well has not exceeded ADEC criteria since 2015.
- 2.) As in prior years, the other wells which contained detectable DRO were MW-6 (1.46 mg/L) and MW-11 (21.3 mg/L).
- 3.) Measurable LNAPL was not detected in any well, although a visible sheen was noted in MW-11. No hydrocarbon product was recovered in 2024 as discussed in **LNAPL Recovery Assessment** (ALTA, December 9, 2021).
- 4.) Groundwater levels were slightly deeper than those observed in 2023.
- 5.) The DRO plume continues to occupy a narrow northwest trending area that is constrained on the west and northwest by wells MW-16 and MW-17. All evidence indicates that the plume is stable and not migrating.

1.0 INTRODUCTION

This **2024 Groundwater Monitoring Report** summarizes current groundwater conditions at the AT&T Soldotna Repeater Site located at approximately Mile 3.5 of the Kenai Spur Highway, north of Soldotna AK (Figure 1) corresponding to 60° 31' 54" north latitude and 151° 05' 00" west longitude at an elevation of 167 feet.

This document has been prepared by ALTA Geosciences, Inc. (ALTA), for Avangrid Renewables Holdings, Inc., which is conducting investigations and remediation at this site pursuant to a stock purchase agreement.

1.1 BACKGROUND

Underground fuel lines formerly connected a 10,000-gallon diesel aboveground storage tank (AST) installed in the mid-1960s with smaller tanks located at the Dormitory, Equipment Building, and Auto Maintenance Shop. The fuel lines were traced during the **Phase 2 Site Investigation, Soldotna Microwave Repeater Site, Soldotna, Alaska** (Woodward-Clyde Consultants, January 13, 1998), and several test pits were excavated at pipeline joints and elbows. The lines were found to be in generally good condition except in the area between the Dormitory and Equipment Buildings where the lines had been placed in a corrugated metal culvert apparently to protect them from being crushed by vehicular traffic. Unfortunately, the culverts held water which in turn corroded the fuel lines and resulted in fuel leakage. The results of the 1995 Phase 2 investigation identified soil contamination to a depth of approximately 30 feet below ground surface (bgs) on the northwest side of the Dormitory.

Several investigations were subsequently conducted to further assess the extent of soil and groundwater contamination. The **2006 Groundwater Summary Report, Soldotna Repeater Site** (ALTA, January 2007) summarizes the activities and findings from these previous investigations. Diesel-range organics (DRO) is the principal contaminant in both soil and groundwater with little to no gasoline-range organics (GRO) or benzene, toluene, ethylbenzene, and xylenes (BTEX) present.

A soil remediation was performed at the site in September 2007 (**Construction Completion Report - 2007 Interim Soil Remediation, Soldotna Repeater Site**, ALTA, April 2008). The work involved excavating soils impacted by diesel fuel to the extent practicable along the old fuel line alignments. The lines were found to be in generally good condition except in the area between the Dormitory and Equipment Building, where DRO impacts were identified to a depth of approximately 30 feet below ground surface. The removed pipelines were drained of residual product, cleaned using high pressure hot water, and disposed of as scrap metal for recycling.

Excavations were backfilled using clean, imported sand and gravel, to match pre-existing grade. The principal findings from this cleanup action were:

- Excavation of contaminated soil, to a depth of approximately 10 feet below ground, and removal of the old fuel piping in the area between the dormitory and equipment building ASTs was generally successful. No groundwater was encountered in the excavation.
- Soil containing DRO concentrations above 250 mg/kg (ADEC's migration to groundwater criteria) remains at depths below approximately 10 feet in the area below the northern fuel pipeline, and in excavation sidewalls directly below both the Dormitory Building and the Equipment Building, and the AST location. Further excavation in these areas was not possible due to the concern of undermining the building foundations. Contaminated soil above 250 mg/kg DRO also remains in the northern excavation sidewall due to the close proximity of several live power lines, which prevented further excavation.
- Confirmation sampling results reported concentrations of DRO exceeding ADEC's Maximum Allowable Concentration at two locations.
- A total of 833.8 tons of DRO-contaminated soil was transported to ASR's Anchorage thermal desorption facility for treatment.

A bioventing/soil vapor extraction (SVE) system was installed in late 2007/early 2008 and has been in operation during nonfreezing periods to remediate hydrocarbon impacted soils in the vadose zone through 2021 (ALTA, 2007b).

ALTA began recovering light non-aqueous phase liquid (LNAPL) from well MW-11 in October 2007 using absorbent socks. By November 2019, a total of 3.28 liters of NAPL had been recovered from the well. A study performed in 2022 (***LNAPL Recovery Assessment, AT&T Soldotna Repeater Station Site***, ALTA December 9, 2022) suggests that this number may be inflated somewhat by breakthrough of plain water through the hydrophobic sleeve and that all NAPL has been recovered to the extent practicable. The results of this study are summarized in Section 2.1.

An in-situ chemical oxidation (ISCO) test was conducted as a single batch application in the fall of 2010 to reduce hydrocarbon impacts in the source area (***2010 ISCO Pilot Test Report – Soldotna Repeater Station Site***, ALAT April 2011). The 2010 ISCO program used base-activated persulfate technology using sodium persulfate as the oxidant and sodium hypochlorite as the base. The results of this study concluded that the mass of hydrocarbon in the subsurface would require a very large quantity of persulfate oxidant to achieve any significant result.

A receptor survey was performed in early 2022 as described in ***Receptor Survey, AT&T Soldotna Repeater Station Site*** (ALTA February 8, 2022). Key findings included:

- Only two residences are present downgradient from the site, approximately 500 feet downgradient from the site. Both are assumed to be on private wells. On site monitoring well MW-16 is located downgradient from the contaminant plume and upgradient from the private water wells. Well MW-16 has had no detectable DRO from 2016 through 2022. DRO was detected in the well in 2024 at 0.71 mg/L, well below ADEC criteria of 1.5 mg/L. The residences are located approximately 50 feet lower than the AT&T site and wells are believed to be screened approximately 90 feet below ground surface in a lower aquifer zone than the aquifer zone impacted by contamination from the site.
- The Kenai River is located approximately one-half mile downgradient (west) of the site at an elevation of approximately 12 feet, approximately 150 feet lower than the site.

In 2017, groundwater samples from wells MW-6, MW-11 and MW-16 were analyzed for volatile organic compounds (VOCs) and polycyclic aromatic hydrocarbons (PAHs) by EPA Methods 8260C and 8270D respectively (**2017 Groundwater Monitoring Report - Soldotna Repeater Site, Soldotna, Alaska**, ALTA April 2018). No exceedances of ADEC criteria for VOCs or PAHs were observed in the sample from MW-16. The sample from MW-6 exceeded ADEC criteria for naphthalene (87.5 ug/L vs the ADEC criteria of 1.7 ug/L). The sample from MW-11 also exceeded the ADEC criteria for naphthalene (114 ug/L) as well as 1-methylnaphthalene (39.8 ug/L) and 2-methylnaphthalene (45.5 ug/L) as compared to the ADEC cleanup levels for these compounds of 11 ug/L and 36 ug/L, respectively. Both wells also had highly elevated levels of DRO in 2017 (8,920 ug/L and 8,830 ug/L respectively) far exceeding the ADEC cleanup level of 1,500 ug/L.

1.2 PURPOSE AND SCOPE

ALTA is performing groundwater monitoring as part of on-going remediation and monitoring efforts. Sampling and analysis activities are performed in accordance with **Field Sampling/Quality Assurance Project Plan** (ALTA, 2021, hereafter referred to as the FS/QAPP) and ADEC's **Field Sampling Guidance** (January 2022)

1.3 HYDROGEOLOGIC CONDITIONS

The hydrogeologic stratigraphy at the site is described in the **2006 Site Investigation Report Soldotna Repeater Site** (ALTA January 2007) and in the **2009 Site Investigation Report – Soldotna Repeater Station Site** (ALTA September 2010) and is summarized below.

A layer of fill or disturbed soil comprised mainly of gravelly sand is present in the developed portion of the site from the surface to a depth of 2 to 8 feet. The fill typically overlies a silt and clay layer 2 to 5 feet thick that is correlated across much of the site. A layer of clean, well sorted sand 13 to 27 feet thick occurs immediately below the silt in most locations and is a distinctive stratigraphic unit at the site. The contact between the clean sand and the silt layer

is often separated with a thin gravel layer composed of coarse sand, coarse gravel, cobbles, and boulders.

The aquitard (or “perching layer”) which separates uppermost perched groundwater zone from the regional aquifer is a stiff, blue-gray to greenish-gray silt with layers of hard gray clay underlying the sand/gravel units and is at least 16 feet thick at MW-10, where it was most deeply penetrated.

Groundwater in the monitoring wells occurs between 20 and 45 feet bgs under unconfined conditions at elevations between 128 and 141 feet mean sea level (MSL). The groundwater does not appear to be part of the regional aquifer system but rather occurs as a localized perched aquifer that derives water solely from infiltration on the hilltop site.

The groundwater in the perched aquifer occurs in the clean sand unit and basal gravelly zone. The underlying greenish-gray silt is saturated in most areas but acts as a perching layer for groundwater in the much more permeable sand unit. The saturated thicknesses in these units range from zero to more than 10 feet at MW-5. Groundwater flow patterns are affected by water levels. Between 2006 and 2011, water levels continually dropped which resulted in the saturated thicknesses of the wells decreasing, significant clean sand unit “dry zones” emerging, and the topography of the silt layer becoming increasingly influential on groundwater flow patterns.

In 2011 water levels began rising and rose several feet in all the wells and as much as 10 feet in well MW-8. By December 2013, all of the previous dry zones were saturated. Water levels began declining again in 2014 and this continued through 2017 resulting in an unsaturated “dry zone” emerging again at MW-10 as identified in the 2015 monitoring report. Rising water levels in 2022 and 2023 resulted in this dry zone completely disappearing in 2023.

2.0 2024 REMEDIATION ACTIVITIES

2.1 PRODUCT RECOVERY

ALTA began recovering LNAPL from well MW-11 in October 2007 using absorbent socks. Sorbent socks were replaced every two or three months as they became saturated. By November 2019, a total of 3.28 liters of NAPL had been recovered from the well. Beginning in 2020 the amount of liquid recovered in the socks decreased dramatically and we became concerned that the hydrophobic nature of the sleeves that surround the absorbent material may be less than perfect, allowing water to enter the absorbent material and thus be calculated as NAPL. To evaluate this, we performed an assessment of the sorbent socks as described in ***LNAPL Recovery Assessment, AT&T Soldotna Repeater Station Site*** (ALTA December 9, 2022).

This study showed that even if the sock was immersed in plain water, a small amount of water would be absorbed by the sock that was consistent with the amounts calculated for 2020 and 2021. At the same time, no sock was placed in well MW-11 and the well was monitored every two months for the presence of LNAPL and no LNAPL was measured. From this data, we concluded that no significant LNAPL has been recovered from the well since 2019 and that further LNAPL recovery is not technically practicable.

2.2 SOIL VAPOR EXTRACTION SYSTEM

As recommended in the ***2021 Groundwater Monitoring Report - Soldotna Repeater Site*** (ALTA, February 2022) the soil vapor extraction system has not been operated since 2022.

3.0 2024 GROUNDWATER MONITORING AND RESULTS

3.1 REVISIONS TO THE GROUNDWATER MONITORING PROGRAM

Well MW-01 was abandoned in 2010 as discussed in **2010 Groundwater Monitoring Report - Soldotna Repeater Site** (ALTA January 2011). The well was functionally replaced by MW-11 which had a more appropriate screened interval.

Following the 2017 groundwater monitoring event, ALTA proposed several changes to the groundwater monitoring program. Principal among these was discontinuance of sampling of the following wells: MW-2; MW-3/3R; MW-7; MW-8; MW-12; MW-13 and MW-14. The reasons for this as described in the **2017 Groundwater Monitoring Report** were either that the well had a long-documented history of no significant detections, or that the well is most commonly dry. These proposals were accepted by ADEC.

Several site monitoring wells were decommissioned in 2024 prior to the groundwater monitoring event. The wells were decommissioned as specified in the **Well Decommissioning Plan, Soldotna Repeater Station Site** (ALTA January 22, 2024) as subsequently approved by ADEC. Wells to be decommissioned included wells MW-2, MW-3R, MW-5, MW-7, MW-8, MW-10, MW-12, MW-13, MW-14 and MW-15. These wells were decommissioned on October 22, 2024 (**Well Decommissioning Report, AT&T Soldotna Repeater Station Site**, ALTA October 28, 2024). This left the following wells available for monitoring: MW-6, MW-9, MW-11, MW-16 and MW-17.

3.2 2024 GROUNDWATER MONITORING EVENT

The 2024 groundwater monitoring event occurred on October 23, 2024. Sampling was performed by a “Qualified Sampler” as required by ADEC.

3.3 GROUNDWATER LEVELS

3.3.1 Groundwater Measurements

The depth to groundwater in monitoring wells was measured to the nearest 0.01 foot using an interface probe on October 23, 2024, as shown on Table 1. No measurable LNAPL was detected in any well. Groundwater levels were approximately 1.2 feet deeper than those observed in 2023.

3.4 GROUNDWATER SAMPLING AND ANALYSIS

3.4.1 Groundwater Sampling Procedures

Groundwater samples were collected from the project monitoring wells on October 24, 2024, for field and analytical laboratory testing. Samples were collected from the specified wells in accordance with the **Field Sampling/Quality Assurance Project Plan** (ALTA, September 2021, hereafter referred to as the FS/QAPP). The wells were purged using a submersible

pump with disposable tubing while measuring groundwater temperature, pH, conductivity and turbidity. The field sampling data sheets are presented in Appendixes A. Field parameter equipment was calibrated by the vendor, and the calibrations were checked on site prior to use. The pump intake was placed at the midpoint of the well screen.

Wells were purged and sampled using low flow sampling procedures until field parameter measurements stabilized within allowable parameters in general accordance with ***Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures*** (USEPA, EPA/540/S-95/504, April 1996) and ***Standard Practice for Low-Flow Purging and Sampling for Wells and Devices Used for Ground-Water Quality Investigations*** (ASTM D 6771 – 02). Table 2 provides a summary of the data collected at the time of sampling.

Purging and sampling was performed using a Proactive “Mini-Monsoon” submersible pump. A new pump was acquired for the 2024 sampling event. Flow rate was controlled using a factory calibrated adjustable flow meter (McMaster-Carr 4351K141). New disposable tubing was used for each well. The pump and flow meter were decontaminated between each well as described below.

Field sampling forms are presented in Appendix A. Samples were collected from all site wells with the exceptions and qualifications described below:

- Groundwater samples could not be collected from wells MW-9 as the water level in the well was below the bottom of the screen section.
- Slight hydrocarbon sheen was noted on the purge water from MW-11. This was removed using absorbent pillows.

All samples collected were analyzed for DRO by Alaska method AK-102.

Groundwater samples were placed directly into laboratory supplied amber glass bottles preserved with hydrochloric acid. Samples were placed into a cooler with synthetic ice together with a temperature blank and kept refrigerated until delivered to the analytical laboratory.

3.4.2 Decontamination Procedures

New disposable tubing was used for each well. The pump and flow meter were decontaminated between each well as follows:

- The pump, flow meter, and such electrical cabling as was in contact with groundwater were placed in 5-gallon bucket containing a solution of water and laboratory-grade, cleaning detergent (i.e. Alconox) and allowed to circulate for five minutes.
- The equipment was then transferred to another 5-gallon bucket containing clean water and circulated for five minutes.

- The equipment was then transferred to a third 5-gallon bucket containing clean water and again circulated for five minutes.

Well sounders were similarly decontaminated.

3.4.3 Investigation Derived Waste

As described in the amendment to the FS/QAPP (and as approved by ADEC) well purge and decontamination water was treated on site using hydrocarbon absorbent pillows to remove sheen and then using a five-gallon Carbon Filter System (CFS). The purge water was then spread on site in the northeast portion of the site over 100 feet from the nearest drinking water well. The CFS is retained for potential future use.

3.4.4 Analytical Procedures

Laboratory analyses were performed by SGS Environmental Services (SGS) in Anchorage, Alaska. Laboratory analysis certificates are presented in Appendix C.

3.4.5 Quality Assurance Summary

Appendix B contains the quality assurance summary report and the completed ADEC Laboratory Data Review Checklists.

The Quality Assurance review included, where appropriate, evaluation of holding times, blanks, matrix spike (MS) and laboratory control sample (LCS) recoveries, duplicate sample relative percent differences (RPDs), reporting limits, and overall assessment of data in the sample

No significant QA anomalies were noted. All data are considered valid and usable for the intended purpose.

3.5 GROUNDWATER DATA RESULTS

3.5.1 DRO

Table 3 is a summary of DRO analyses for site monitoring wells. Figure 2 shows the DRO groundwater sample results for the 2024 sampling event.

The only well that contained detectable DRO above ADEC criteria (1.5 mg/L DRO) was MW-MW-11 (21.3 mg/L). Detectable DRO was also reported in the samples from wells MW-6 (1.46 mg/L) and MW-16 (0.71mg/L).

4.0 CONCLUSIONS

The only well which contained detectable DRO above ADEC criteria (1.5 mg/L DRO) was MW-11 (21.3 mg/L). Detectable DRO was also reported in the samples from wells MW-6 (1.46 mg/L) and MW-16 (0.71mg/L).

The DRO plume extent has been adequately characterized and is restricted to the AT&T property.

Groundwater levels were approximately 1.2 feet deeper than those observed in 2023.

The plume appears to be stable and not migrating.

5.0 RECOMMENDATIONS

Based on the data collected to date, we make the following recommendations:

- Per discussions with ADEC, obtain a groundwater sample from the onsite domestic well and analyze for DRO, PAHs and VOCs.
- Per ADEC request, we will sample wells MW-6 and MW-11 and analyze for PAHs.
- Prepare the soil sampling and analysis report for the soil borings performed at the site in 2024.
- As requested by ADEC, perform a Mann-Kendall analysis for DRO in wells MW-6 and MW-11.
- Perform the Cumulative Risk Calculator for the site.
- Decommission the remaining monitoring wells at the site following receipt of ADEC approval.
- Prepare the draft Environmental Covenant for the site.

6.0 REFERENCES

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TABLES

Table 1 - Water Level Data - AT&T Soldotna Repeater Station Site

Well No	Gauge Date	Elevation TOC	DTW (feet)	LNAPL	Potentiometric
				Thicknes (feet)	Surface (ft MSL)
SOL-MW-06	2006-05-23	164.70	33.72	--	130.98
	2006-08-23	164.70	30.50	--	134.20
	2006-09-14	164.70	31.23	--	133.47
	2006-12-06	164.70	32.57	--	132.13
	2007-07-03	164.70	33.90	--	130.80
	2007-10-10	164.70	34.39	--	130.31
	2008-05-27	164.70	34.79	--	129.91
	2008-10-15	164.70	34.82	--	129.88
	2009-06-08	164.70	34.49	--	130.21
	2009-09-24	164.70	34.74	--	129.96
	2010-06-07	164.70	35.26	--	129.44
	2010-09-07	164.70	35.36	--	129.34
	2010-10-12	164.70	33.63	--	131.07
	2010-10-27	164.70	34.37	--	130.33
	2010-11-22	164.70	34.56	--	130.14
	2011-01-18	164.70	34.82	--	129.88
	2011-06-06	164.70	35.15	--	129.55
	2011-09-28	164.70	35.40	--	129.30
	2012-05-16	164.70	34.99	--	129.71
	2012-06-11	164.70	34.95	--	129.75
	2012-10-09	164.70	34.34	--	130.36
	2013-05-22	164.70	33.52	--	131.18
	2013-09-24	164.70	33.71	--	130.99
	2013-12-05	164.70	32.88	--	131.82
	2014-04-13	164.70	32.69	--	132.01
	2014-10-16	164.70	33.44	--	131.26
	2015-09-22	164.70	34.36	--	130.34
	2016-09-20	164.70	34.35	--	136.45
	2017-07-19	164.70	34.55	--	136.25
	2018-11-07	164.70	34.14	--	136.66
2019-10-23	164.70	33.94	--	136.86	
2020-10-05	164.70	33.74	--	137.06	
2021-10-20	164.70	34.19	--	136.61	
2022-10-05	164.70	33.01	--	137.79	
2023-10-17	164.70	32.27	--	138.53	
2024-10-23	164.70	33.47	--	131.23	
SOL-MW-09	2006-08-23	164.14	30.88	--	133.26
	2006-09-14	164.14	31.24	--	132.90
	2006-12-06	164.14	32.27	--	131.87
	2007-07-03	164.14	33.93	--	130.21
	2007-10-10	164.14	dry	--	dry
	2008-05-27	164.14	dry	--	dry
	2008-10-15	164.14	dry	--	dry
	2009-06-08	164.14	dry	--	dry
	2009-09-24	164.14	dry	--	dry
	2010-06-07	164.14	dry	--	dry
	2010-09-07	164.14	dry	--	dry
	2010-10-12	164.14	dry	--	dry
	2010-10-27	164.14	dry	--	dry
	2010-11-22	164.14	dry	--	dry
2011-01-18	164.14	dry	--	dry	
2011-06-06	164.14	dry	--	dry	
2011-09-28	164.14	dry	--	dry	

Table 1 - Water Level Data - AT&T Soldotna Repeater Station Site

Well No	Gauge Date	Elevation TOC	DTW (feet)	LNAPL	Potentiometric
				Thicknes (feet)	Surface (ft MSL)
	2012-05-16	164.14	dry	--	dry
	2012-06-11	164.14	dry	--	dry
	2012-10-09	164.14	dry	--	dry
	2013-05-22	164.14	33.35	--	130.79
	2013-09-24	164.14	33.38	--	130.76
	2013-12-05	164.14	32.51	--	131.63
	2014-04-13	164.14	32.33	--	131.81
	2014-10-16	164.14	33.12	--	131.02
	2015-09-22	164.14	dry	--	dry
	2016-09-20	170.17	dry	--	dry
	2017-07-19	170.17	dry	--	dry
	2018-11-07	170.17	dry	--	dry
	2019-10-23	170.17	34.32	--	135.85
	2020-10-05	170.17	33.61	--	136.56
	2021-10-20	170.17	dry	--	dry
	2022-10-05	170.17	dry	--	dry
	2023-10-17	170.17	31.82	--	138.35
	2024-10-23	170.17	dry	--	dry
SOL-MW-11	2006-08-23	163.87	30.32	--	133.55
	2006-09-14	163.87	30.35	--	133.52
	2006-12-06	163.87	30.12	--	133.75
	2007-07-03	163.87	33.12	2.02	132.43
	2007-10-10	163.87	32.52	0.41	131.69
	2008-05-27	163.87	32.10	0.01	131.78
	2008-10-15	163.87	31.56	0.01	132.32
	2009-06-09	163.87	31.65	--	132.22
	2009-09-24	163.87	32.13	--	131.74
	2010-06-07	163.87	32.88	--	130.99
	2010-09-07	163.87	32.92	--	130.95
	2010-10-12	163.87	32.08	--	131.79
	2010-10-27	163.87	32.70	--	131.17
	2010-11-22	163.87	32.91	--	130.96
	2011-01-18	163.87	33.04	0.01	130.84
	2011-06-06	163.87	33.36	--	130.51
	2011-09-28	163.87	32.77	0.01	131.11
	2012-05-16	163.87	31.45	--	132.42
	2012-06-11	163.87	31.09	0.09	132.85
	2012-10-09	163.87	29.66	--	134.21
	2013-05-22	163.87	29.28	--	134.59
	2013-09-24	163.87	29.56	--	134.31
	2013-12-05	163.87	29.42	--	134.45
	2014-04-13	163.87	29.42	--	134.45
	2014-10-16	163.87	30.00	0.03	133.89
	2015-09-22	163.87	30.76	--	133.11
	2016-09-20	169.96	30.38	--	139.58
2017-07-19	169.96	31.15	0.02	138.83	
2018-11-07	169.96	30.39	--	139.57	
2019-10-23	169.96	30.23	--	139.73	
2020-10-05	169.96	29.44	--	140.52	
2021-10-20	169.96	30.28	--	139.68	
2022-10-05	169.96	29.04	--	140.92	
2023-10-17	169.96	28.66	--	141.30	
2024-10-23	169.96	29.24	--	140.72	

Table 1 - Water Level Data - AT&T Soldotna Repeater Station Site

Well No	Gauge Date	Elevation TOC	DTW (feet)	LNAPL Thicknes (feet)	Potentiometric Surface (ft MSL)
SOL-MW-16	2013-12-05	162.97	31.07	--	131.90
	2014-04-13	162.97	30.90	--	132.07
	2014-10-16	162.97	31.74	--	131.23
	2015-09-22	162.97	32.99	--	129.98
	2016-09-20	168.57	33.05	--	135.52
	2017-07-19	168.57	33.31	--	135.26
	2018-11-07	168.57	32.79	--	135.78
	2019-10-23	168.57	32.59	--	135.98
	2020-10-05	168.57	32.11	--	136.46
	2021-10-20	168.57	32.78	--	135.79
	2022-10-05	168.57	31.29	--	137.28
	2023-10-17	168.57	30.45	--	138.12
	2024-10-23	168.57	31.80	--	136.77
SOL-MW-17	2013-12-05	162.49	31.26	--	131.23
	2014-04-13	162.49	31.09	--	131.40
	2014-10-16	162.49	31.89	--	130.60
	2015-09-22	162.49	32.91	--	129.58
	2016-09-20	169.06	32.89	--	136.17
	2017-07-19	169.06	33.08	--	135.98
	2018-11-07	169.06	32.56	--	136.50
	2019-10-23	169.06	32.49	--	136.57
	2020-10-05	169.06	32.12	--	136.94
	2021-10-20	169.06	32.67	--	136.39
	2022-10-05	169.06	31.40	--	137.66
	2023-10-17	169.06	30.66	--	138.40
	2024-10-23	169.06	31.79	--	137.27

Notes: -- Not present.
dry The measured depth to water is below the screened interval.
ft MSL Feet above mean sea level.
DTW Depth to groundwater (in feet below TOC).
LNAPL Light non-aqueous phase liquid
TOC Top of casing.

Table 2. 2024 groundwater sampling field data, Soldotna Repeater Site

Sample Location	Date	Water		ORP (mV)	Temp. (°C)	Cond. (mS/cm)	DO (mg/L)	Turbidity/Comments (NTU)
		Purged (gal)	pH (std units)					
SOL-MW-06	23-Oct-24	2	6.68	--	8.10	302	--	4.73
SOL-MW-11	23-Oct-24	2	6.65	--	7.1	511	--	4.89
SOL-MW-16	23-Oct-24	2	6.62	--	6.1	317	--	3.53
SOL-MW-17	23-Oct-24	2	6.79	--	6.79	325	--	4.09

-- not measured

Table 3 - Summary of groundwater DRO analyses,

Well ID	Lab ID	Sample date	DRO (mg/L)
SOL-MW-06	APE0058-06	5/23/2006	8.4
	APH0102-03	8/23/2006	8.03
	AQG0011-06	7/3/2007	3.2
	AQJ0083-06	10/11/2007	3.23
	1082819008	6/17/2008	4.97
	1086144008	11/4/2008	16.9
	1092532007	6/8/2009	9.37
	1095230007	9/24/2009	11.6 J
	1102591007	6/7/2010	7.3
	1104764007	9/8/2010	16.5
	1106296001	11/22/2010	16.7
	1110207002	1/18/2011	64.7
	1112373006	6/7/2011	16.7
	1114742006	9/28/2011	24
	1122224006	6/11/2012	27.8
	1125020006	10/9/2012	35.7
	1132528005	6/19/2013	17
	1134705005	9/24/2013	2.22 J
	1142743005	6/25/2014	10.2
	1145213005	10/16/2014	4.77
	1155574005	9/23/2015	5.89
	1163575001	6/29/2016	7.66
	1165617005	9/20/2016	7.64
	1174733003	7/20/2017	8.92
	1186392001	11/7/2018	8.31
	1196424001	10/23/2019	1.25
	1205482001	10/5/2020	2.89
	1217031001	10/20/2021	2.1
	1226121001	10/5/2022	1.05
	1235898001	10/17/2023	2.15
	1246231001	10/23/2024	1.46

Table 3 - Summary of groundwater DRO analyses,

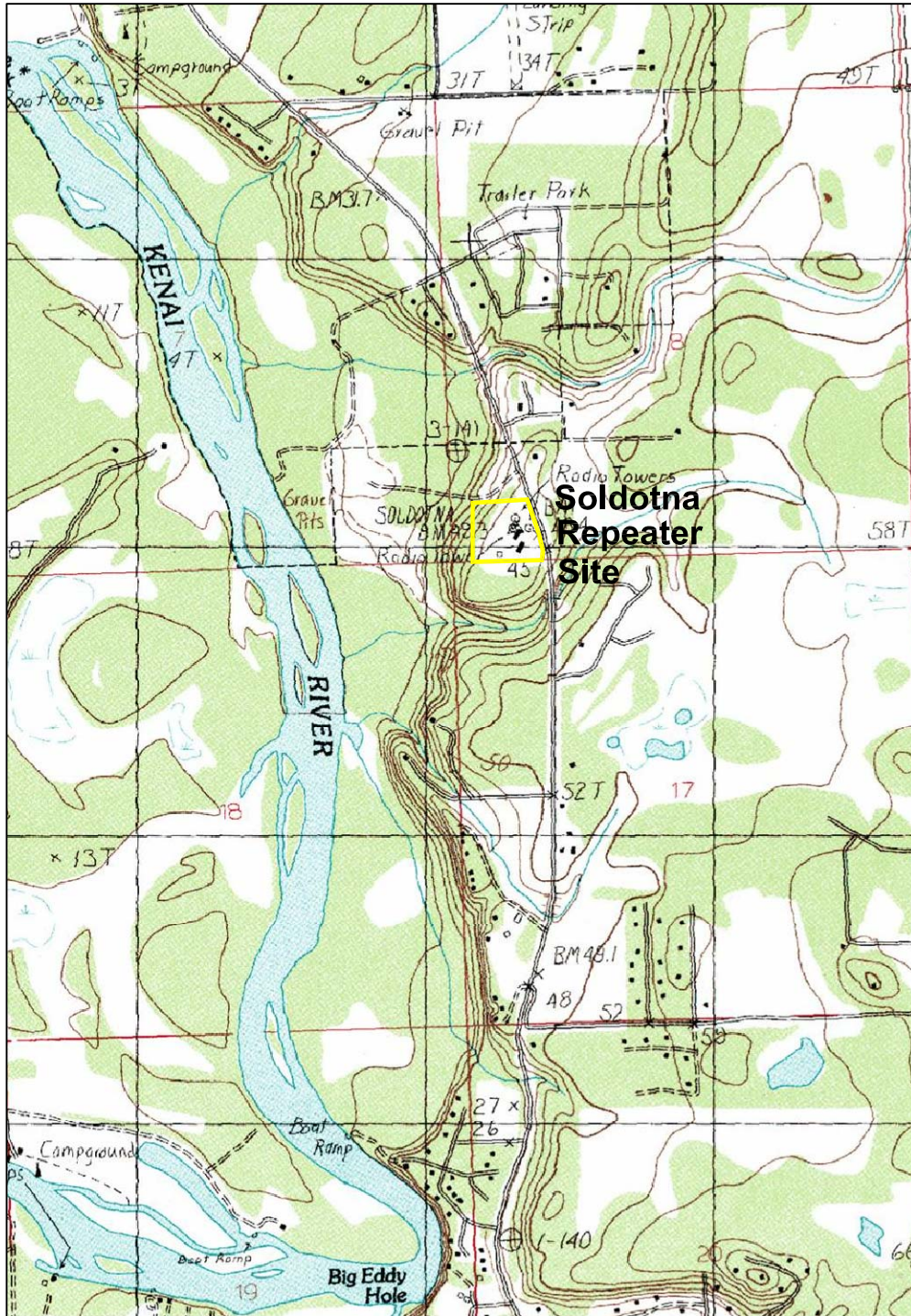
Well ID	Lab ID	Sample date	DRO (mg/L)
SOL-MW-11	APH0102-07	8/23/2006	35.9
	1092532010	6/8/2009	26.4
	1095230010	9/24/2009	14.8
	1102591010	6/7/2010	21.8
	1104764010	9/8/2010	59.3
	1106296002	11/22/2010	42.9
	1112373009	6/7/2011	101
	1125020009	10/9/2012	37.2
	1132528009	6/19/2013	58.4
	1134705009	9/24/2013	5.51
	1142743009	6/25/2014	14.5
	1155574009	9/23/2015	20.2
	1165617008	9/20/2016	12.2
	1174733006	7/20/2017	8.83
	1186392002	11/7/2018	11.9
	1196424003	10/23/2019	6.57
	1205482004	10/5/2020	13.4
	1217031004	10/20/2021	10.7
	1226121002	10/5/2022	12.2
	1235898002	10/17/2023	10.3
1246231002	10/23/2024	20.9	
1246231005	10/23/2024	21.3	
SOL-MW-16	1135385003	10/29/2013	2.53
	1141242002	4/3/2014	0.739
	1141888002	5/12/2014	0.6 U
	1142743013	6/25/2014	0.6 U
	1145213011	10/16/2014	0.652 U
	1155574013	9/23/2015	2.6
	1163575002	6/29/2016	0.748
	1165617009	9/20/2016	0.929
	1174733007	7/20/2017	0.6 U
	1186392003	11/7/2018	0.61 U
	1196424004	10/23/2019	0.612 U
	1205482006	10/5/2020	0.6 U
	1217031005	10/20/2021	0.638 U
	1226121003	10/5/2022	0.508 U
	1235898003	10/17/2023	0.686
1246231003	10/23/2024	0.71	

Table 3 - Summary of groundwater DRO analyses,

Well ID	Lab ID	Sample date	DRO (mg/L)
SOL-MW-17	1135385002	10/29/2013	0.196 U
	1142743014	6/25/2014	0.6 U
	1145213012	10/16/2014	0.625 U
	1155574014	9/23/2015	0.636 U
	1163575003	6/29/2016	0.605 U
	1165617010	9/20/2016	0.62 U
	1174733010	7/20/2017	0.61 U
	1186392006	11/7/2018	0.625 U
	1196424005	10/23/2019	0.615 U
	1205482005	10/5/2020	0.6 U
	1217031006	10/20/2021	0.6 U
	1226121004	10/5/2022	0.526 U
	1235898004	10/17/2023	0.941
	1246231004	10/23/2024	0.612 U

Notes: "#.### " Reported concentration exceeds ADEC criteria
 "U" Analyte not detected at reporting limit shown
 "J" Estimated concentration

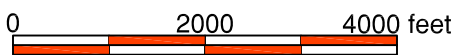
FIGURES



Base map: Kenai (C3) SW (1986)



Scale



ALTA GEOSCIENCES, INC.

Environmental & Geotechnical Solutions
Bothell, Washington

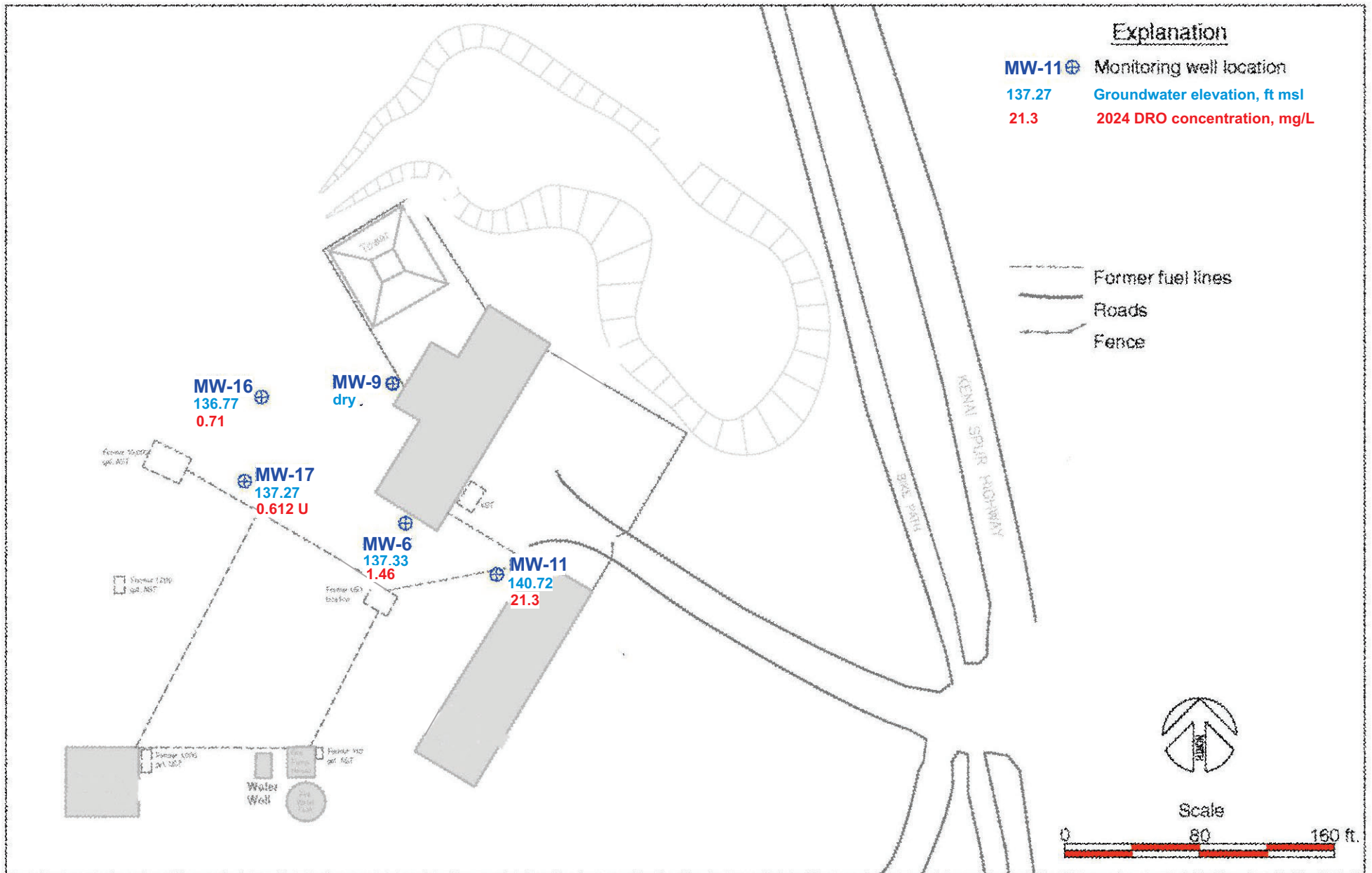
Prepared for: *ScottishPower Holdings, Inc.*

Soldotna Repeater Site

Site Location Map

FIGURE

1



ALTA GEOSCIENCES, INC.
Bothell, Washington

Prepared For:
Avangrid Renewables Holdings, Inc.

SOLDOTNA REPEATER STATION SITE

2024 GROUNDWATER MONITORING

FIGURE

3

APPENDIX A

FIELD SAMPLING FORMS

Field Notebook and Groundwater Sampling Field Logs

Project/Phase: <i>Soldotna Tok</i>	
Date: <i>10-23-24</i>	By: <i>JY</i>
Analyses: DRO	
Volume purged: <i>2 gal</i>	

WELL NO.: <i>MW-6</i>
WELL DIAM.: <i>2"</i>
TOTAL DEPTH: <i>40.60</i>
QA SAMPLES: <i>.NA</i>

Time	DTW (ft)	ORP (mv)	Sp Cond (mS/cm)	pH	Temp. deg. C	Turbidity (ntu)	Purge Rate (gph)	Comments
Stabilization goals>	0.33 ft	+/- 3%	<i>US</i> +/- 3%	+/- 0.1	+/- 1	<5	8 gph	
<i>1029</i>	<i>33.47</i>	START						
<i>1035</i>	<i>33.49</i>		<i>300</i>	<i>6.73</i>	<i>6.3</i>	<i>13.06</i>	<i>8</i>	
<i>1040</i>	<i>33.50</i>		<i>302</i>	<i>6.74</i>	<i>7.2</i>	<i>10.25</i>	<i>8</i>	
<i>1045</i>	<i>33.51</i>		<i>301</i>	<i>6.74</i>	<i>8.2</i>	<i>7.15</i>	<i>8</i>	
<i>1050</i>	<i>33.52</i>		<i>302</i>	<i>6.69</i>	<i>8.1</i>	<i>4.73</i>	<i>8</i>	
<i>1055</i>	<i>Sampled</i>							

Flow meter conversions: 1.0 L/min = 16 gph 0.5 L/min = 8 gph 0.2 L/min = 3.2 gph
 Optional parameters: TOTAL DEPTH, ORP, VOLUME PURGED (if flow rate monitored)
 Other comments:

Project/Phase: <i>Soldotna Tok</i>	
Date: <i>10-23-24</i>	By: <i>JY</i>
Analyses: DRO	
Volume purged: <i>2 gal</i>	

WELL NO.: <i>MW-11</i>
WELL DIAM.: <i>2"</i>
TOTAL DEPTH: <i>37.06</i>
QA SAMPLES: <i>Duplicate @ 0800</i>

Time	DTW (ft)	ORP (mv)	Sp Cond (mS/cm)	pH	Temp. deg. C	Turbidity (ntu)	Purge Rate (gph)	Comments
Stabilization goals>	0.33 ft	+/- 3%	+/- 3%	+/- 0.1	+/- 1	<5	8 gph	
<i>1115</i>	<i>29.24</i>	START						<i>Sheen</i>
<i>1120</i>	<i>31.26</i>		<i>507</i>	<i>6.70</i>	<i>5.1</i>	<i>41.08</i>	<i>8</i>	<i>"</i>
<i>1125</i>	<i>31.67</i>		<i>505</i>	<i>6.71</i>	<i>5.3</i>	<i>38.42</i>	<i>6</i>	<i>"</i>
<i>1130</i>	<i>32.14</i>		<i>503</i>	<i>6.71</i>	<i>6.0</i>	<i>18.49</i>	<i>6</i>	<i>"</i>
<i>1135</i>	<i>32.38</i>		<i>503</i>	<i>6.69</i>	<i>6.9</i>	<i>7.21</i>	<i>6</i>	<i>"</i>
<i>1140</i>	<i>32.58</i>		<i>506</i>	<i>6.64</i>	<i>7.2</i>	<i>5.14</i>	<i>6</i>	<i>"</i>
<i>1145</i>	<i>32.79</i>		<i>511</i>	<i>6.65</i>	<i>7.1</i>	<i>4.89</i>	<i>6</i>	<i>"</i>
<i>1150</i>	<i>Sampled</i>							

Flow meter conversions: 1.0 L/min = 16 gph 0.5 L/min = 8 gph 0.2 L/min = 3.2 gph
 Optional parameters: TOTAL DEPTH, ORP, VOLUME PURGED (if flow rate monitored)
 Other comments:

Project/Phase: <i>10k Saldotna</i>	
Date: <i>10/23/24</i>	By: <i>JY</i>
Analyses: DRO	
Volume purged: <i>2 gal</i>	

WELL NO.: <i>MW-16</i>
WELL DIAM.: <i>2"</i>
TOTAL DEPTH: <i>42.52</i>
QA SAMPLES: <i>NA</i>

Time	DTW (ft)	ORP (mv)	Sp Cond (mS/cm)	pH	Temp. deg. C	Turbidity (ntu)	Purge Rate (gph)	Comments
Stabilization goals>	0.33 ft	+/- 3%	<i>45</i> +/- 3%	+/- 0.1	+/- 1	<5	8 gph	
<i>0912</i>	<i>31.80</i>	START						<i>Clear</i>
<i>0917</i>	<i>32.19</i>		<i>318</i>	<i>6.71</i>	<i>5.1</i>	<i>25.72</i>	<i>8</i>	
<i>0922</i>	<i>32.47</i>		<i>314</i>	<i>6.69</i>	<i>5.9</i>	<i>12.07</i>	<i>8</i>	
<i>0927</i>	<i>32.61</i>		<i>316</i>	<i>6.61</i>	<i>5.9</i>	<i>5.29</i>	<i>8</i>	
<i>0932</i>	<i>32.74</i>		<i>317</i>	<i>6.62</i>	<i>6.1</i>	<i>3.53</i>	<i>8</i>	
<i>0935</i>	<i>sampled</i>							

Flow meter conversions: 1.0 L/min = 16 gph 0.5 L/min = 8 gph 0.2 L/min = 3.2 gph
 Optional parameters: TOTAL DEPTH, ORP, VOLUME PURGED (if flow rate monitored)
 Other comments:

Project/Phase: <i>Soldotna Tok</i>	
Date: <i>10-23-24</i>	By: <i>JY</i>
Analyses: DRO	
Volume purged: <i>29a1</i>	

WELL NO.: <i>MW-17</i>
WELL DIAM.: <i>2"</i>
TOTAL DEPTH: <i>42.11</i>
QA SAMPLES: <i>NA</i>

Time	DTW (ft)	ORP (mv)	Sp Cond (mS/cm)	pH	Temp. deg. C	Turbidity (ntu)	Purge Rate (gph)	Comments
Stabilization goals>	0.33 ft	+/- 3%	45 +/- 3%	+/- 0.1	+/- 1	<5	8 gph	
<i>0947</i>	<i>31.79</i>	START						<i>clear</i>
<i>0952</i>	<i>32.19</i>		<i>321</i>	<i>6.84</i>	<i>4.6</i>	<i>10.78</i>	<i>8</i>	
<i>0957</i>	<i>32.30</i>		<i>321</i>	<i>6.85</i>	<i>5.7</i>	<i>8.71</i>	<i>8</i>	
<i>1002</i>	<i>32.34</i>		<i>321</i>	<i>6.82</i>	<i>5.8</i>	<i>5.77</i>	<i>8</i>	
<i>1007</i>	<i>32.36</i>		<i>325</i>	<i>6.79</i>	<i>6.1</i>	<i>4.09</i>	<i>8</i>	
<i>1010</i>	<i>sampled</i>							

Flow meter conversions: 1.0 L/min = 16 gph 0.5 L/min = 8 gph 0.2 L/min = 3.2 gph
 Optional parameters: TOTAL DEPTH, ORP, VOLUME PURGED (if flow rate monitored)
 Other comments:

Project/Phase: <i>Soldotna Tok</i>	
Date: <i>10-23-24</i>	By: <i>Jy</i>
Analyses: <i>DRO</i>	
Volume purged:	

WELL NO.: <i>MW-9</i>
WELL DIAM.: <i>2"</i>
TOTAL DEPTH: <i>40.10</i>
QA SAMPLES:

Time	DTW (ft)	ORP (mv)	Sp Cond (mS/cm)	pH	Temp. deg. C	Turbidity (ntu)	Purge Rate (gph)	Comments
Stabilization goals>	0.33 ft	+/- 3%	+/- 3%	+/- 0.1	+/- 1	<5	8 gph	
	<i>33.25</i>	START						

Flow meter conversions: 1.0 L/min = 16 gph 0.5 L/min = 8 gph 0.2 L/min = 3.2 gph
 Optional parameters: TOTAL DEPTH, ORP, VOLUME PURGED (if flow rate monitored)
 Other comments:

Insufficient water to sample

APPENDIX B

DATA QUALITY REVIEW REPORTS & ADEC LABORATORY DATA REVIEW

ADEC Contaminated Sites Program Laboratory Data Review Checklist

Completed By:	ALEX TULA	CS Site Name:	AT& SOLDOTNA REPEATER STATION	Lab Name:	SGS ENVIRONM ENTAL SERVICES
Title:		ADEC File No.:	2320.38.005	Lab Report No.:	1246231
Consulting Firm:	ALTA GEOSCIEN CES, INC.	Hazard ID No.:	2946	Lab Report Date:	Nov. 19, 2024

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

1. Laboratory

- a. Did an ADEC Contaminated Sites Laboratory Approval Program (CS-LAP) approved laboratory receive and perform all of the submitted sample analyses?
Yes No N/A
Comments: Click or tap here to enter text.
- b. If the samples were transferred to another “network” laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses CS-LAP approved?
Yes No N/A
Comments: Click or tap here to enter text.

2. Chain of Custody (CoC)

- a. Is the CoC information completed, signed, and dated (including released/received by)?
Yes No N/A
Comments: Click or tap here to enter text.
- b. Were the correct analyses requested?
Yes No N/A
Analyses requested: Click or tap here to enter text.
Comments: Click or tap here to enter text.

CS Site Name: AT& SOLDOTNA REPEATER STATION

Lab Report No.: 1246231

3. Laboratory Sample Receipt Documentation

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

Yes No N/A

Cooler temperature(s): Click or tap here to enter text.

Sample temperature(s): Click or tap here to enter text.

Comments: Click or tap here to enter text.

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

Yes No N/A

Comments: Click or tap here to enter text.

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

Yes No N/A

Comments: Click or tap here to enter text.

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

Yes No N/A

Comments: Click or tap here to enter text.

- e. Is the data quality or usability affected?

Yes No N/A

Comments: Click or tap here to enter text.

4. Case Narrative

- a. Is the case narrative present and understandable?

Yes No N/A

Comments: Click or tap here to enter text.

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

Yes No N/A

Comments:

Were all the corrective actions documented?

Yes No N/A

Comments: Click or tap here to enter text.

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

Comments: NONE

5. Sample Results

- a. Are the correct analyses performed/reported as requested on CoC?
Yes No N/A
Comments: Click or tap here to enter text.
- b. Are all applicable holding times met?
Yes No N/A
Comments: Click or tap here to enter text.
- c. Are all soils reported on a dry weight basis?
Yes No N/A
Comments: Click or tap here to enter text.
- d. Are the reported limits of quantitation (LoQ) or limits of detections (LOD), or reporting limits (RL) less than the Cleanup Level or the action level for the project?
Yes No N/A
Comments: Click or tap here to enter text.
- e. Is the data quality or usability affected?
Yes No N/A
Comments: Click or tap here to enter text.

6. QC Samples

- a. Method Blank
- i. Was one method blank reported per matrix, analysis, and 20 samples?
Yes No N/A
Comments: Click or tap here to enter text.
- ii. Are all method blank results less than LOQ (or RL)?
Yes No
Comments: Click or tap here to enter text.
- iii. If above LoQ or RL, what samples are affected?
Comments: Click or tap here to enter text.
- iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?
Yes No N/A
Comments: Click or tap here to enter text.
- v. Data quality or usability affected?
Yes No N/A

Comments: Click or tap here to enter text.

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

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

Yes No N/A

Comments: Click or tap here to enter text.

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

Yes No N/A

Comments: Click or tap here to enter text.

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

Yes No N/A

Comments: Click or tap here to enter text.

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

Yes No N/A

Comments: Click or tap here to enter text.

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

Comments: Click or tap here to enter text.

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

Yes No N/A

Comments: Click or tap here to enter text.

- vii. Is the data quality or usability affected?

Yes No N/A

Comments: Click or tap here to enter text.

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

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

CS Site Name: AT& SOLDOTNA REPEATER STATION

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Yes No N/A

Comments: Click or tap here to enter text.

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

Yes No N/A

Comments: Click or tap here to enter text.

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

Yes No N/A

Comments: Click or tap here to enter text.

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

Yes No N/A

Comments: Click or tap here to enter text.

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

Comments: Click or tap here to enter text.

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

Yes No N/A

Comments: Click or tap here to enter text.

- vii. Is the data quality or usability affected?

Yes No N/A

Comments: Click or tap here to enter text.

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

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

Yes No N/A

Comments: Click or tap here to enter text.

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

Yes No N/A

Comments: Click or tap here to enter text.

CS Site Name: AT& SOLDOTNA REPEATER STATION

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

Yes No N/A

Comments: Click or tap here to enter text.

- iv. Is the data quality or usability affected?

Yes No N/A

Comments: Click or tap here to enter text.

e. Trip Blanks

- i. Is one trip blank reported per matrix, analysis, and for each cooler containing volatile samples? Yes No N/A

Comments: Click or tap here to enter text.

- ii. Are all results less than LoQ or RL?

Yes No N/A

Comments: Click or tap here to enter text.

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

Comments: Click or tap here to enter text.

- iv. Is the data quality or usability affected?

Yes No N/A

Comments: Click or tap here to enter text.

f. Field Duplicate

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

Yes No N/A

Comments: Click or tap here to enter text.

- ii. Was the duplicate submitted blind to lab?

Yes No N/A

Comments: Click or tap here to enter text.

CS Site Name: AT& SOLDOTNA REPEATER STATION

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

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

Where R_1 = Sample Concentration

R_2 = Field Duplicate Concentration

Is the data quality or usability affected? (Explain)

Yes No N/A

Comments: Click or tap here to enter text.

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

Yes No N/A

Comments: Click or tap here to enter text.

g. Decontamination or Equipment Blanks

- i. Were decontamination or equipment blanks collected?

Yes No N/A

Comments: Click or tap here to enter text.

- ii. Are all results less than LoQ or RL?

Yes No N/A

Comments: Click or tap here to enter text.

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

Comments: Click or tap here to enter text.

- iv. Are data quality or usability affected?

Yes No N/A

Comments: Click or tap here to enter text.

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

- a. Are they defined and appropriate?

Yes No N/A

Comments: Click or tap here to enter text.

APPENDIX C

LABORATORY ANALYSIS CERTIFICATES

SGS Environmental Services Work Order 235898



Laboratory Report of Analysis

To: ALTA Geosciences, Inc.
2020 Maltby Rd Ste 7 #197
Bothell, WA 98021

Report Number: **1246231**

Client Project: **Soldotna AT+T**

Dear Alex Tula,

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 Justin 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.

Justin Nelson
Project Manager
Justin.Nelson@sgs.com

Date

Case Narrative

SGS Client: **ALTA Geosciences, Inc.**

SGS Project: **1246231**

Project Name/Site: **Soldotna AT+T**

Project Contact: **Alex Tula**

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: 11/19/2024 3:32:34PM

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 <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification 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 & 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, 8270E, 8270E-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 SGS QAP and, when applicable, other regulatory authorities.

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.
B	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., 3/4 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.

Note: Sample summaries which include a result for "Total Solids" have already been adjusted for moisture content. All DRO/RRO analyses are integrated per SOP.

Sample Summary

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Collected</u>	<u>Received</u>	<u>Matrix</u>
MW-6	1246231001	10/23/2024	10/25/2024	Water (Surface, Eff., Ground)
MW-11	1246231002	10/23/2024	10/25/2024	Water (Surface, Eff., Ground)
MW-16	1246231003	10/23/2024	10/25/2024	Water (Surface, Eff., Ground)
MW-17	1246231004	10/23/2024	10/25/2024	Water (Surface, Eff., Ground)
Duplicate	1246231005	10/23/2024	10/25/2024	Water (Surface, Eff., Ground)

<u>Method</u>	<u>Method Description</u>
AK102	DRO Low Volume (W)

Print Date: 11/19/2024 3:32:39PM

Detectable Results Summary

Client Sample ID: MW-6			
Lab Sample ID: 1246231001	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Semivolatile Organic Fuels	Diesel Range Organics	1.46	mg/L
Client Sample ID: MW-11			
Lab Sample ID: 1246231002	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Semivolatile Organic Fuels	Diesel Range Organics	20.9	mg/L
Client Sample ID: MW-16			
Lab Sample ID: 1246231003	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Semivolatile Organic Fuels	Diesel Range Organics	0.710	mg/L
Client Sample ID: Duplicate			
Lab Sample ID: 1246231005	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Semivolatile Organic Fuels	Diesel Range Organics	21.3	mg/L

Print Date: 11/19/2024 3:32:41PM

Results of MW-6

Client Sample ID: **MW-6**
 Client Project ID: **Soldotna AT+T**
 Lab Sample ID: 1246231001
 Lab Project ID: 1246231

Collection Date: 10/23/24 10:55
 Received Date: 10/25/24 11:12
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	1.46		0.517	0.172	mg/L	1		11/15/24 14:05
Surrogates								
5a Androstane (surr)	64.8		50-150		%	1		11/15/24 14:05

Batch Information

Analytical Batch: XFC17110
 Analytical Method: AK102
 Analyst: T.L
 Analytical Date/Time: 11/15/24 14:05
 Container ID: 1246231001-A

Prep Batch: XXX50735
 Prep Method: SW3520C
 Prep Date/Time: 11/01/24 18:11
 Prep Initial Wt./Vol.: 290 mL
 Prep Extract Vol: 1 mL

Print Date: 11/19/2024 3:32:43PM

Results of MW-11

Client Sample ID: **MW-11**
 Client Project ID: **Soldotna AT+T**
 Lab Sample ID: 1246231002
 Lab Project ID: 1246231

Collection Date: 10/23/24 11:50
 Received Date: 10/25/24 11:12
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	20.9		0.500	0.167	mg/L	1		11/15/24 14:15
Surrogates								
5a Androstane (surr)	105		50-150		%	1		11/15/24 14:15

Batch Information

Analytical Batch: XFC17110
 Analytical Method: AK102
 Analyst: T.L
 Analytical Date/Time: 11/15/24 14:15
 Container ID: 1246231002-A

Prep Batch: XXX50735
 Prep Method: SW3520C
 Prep Date/Time: 11/01/24 18:11
 Prep Initial Wt./Vol.: 300 mL
 Prep Extract Vol: 1 mL

Results of MW-16

Client Sample ID: **MW-16**
 Client Project ID: **Soldotna AT+T**
 Lab Sample ID: 1246231003
 Lab Project ID: 1246231

Collection Date: 10/23/24 09:35
 Received Date: 10/25/24 11:12
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	0.710		0.612	0.204	mg/L	1		11/15/24 14:24
Surrogates								
5a Androstane (surr)	65.8		50-150		%	1		11/15/24 14:24

Batch Information

Analytical Batch: XFC17110
 Analytical Method: AK102
 Analyst: T.L
 Analytical Date/Time: 11/15/24 14:24
 Container ID: 1246231003-A

Prep Batch: XXX50735
 Prep Method: SW3520C
 Prep Date/Time: 11/01/24 18:11
 Prep Initial Wt./Vol.: 245 mL
 Prep Extract Vol: 1 mL

Results of MW-17

Client Sample ID: **MW-17**

Client Project ID: **Soldotna AT+T**

Lab Sample ID: 1246231004

Lab Project ID: 1246231

Collection Date: 10/23/24 10:10

Received Date: 10/25/24 11:12

Matrix: Water (Surface, Eff., Ground)

Solids (%):

Location:

Results by Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	0.612	U	0.612	0.204	mg/L	1		11/15/24 14:34

Surrogates

5a Androstane (surr)	74.4		50-150		%	1		11/15/24 14:34
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Batch Information

Analytical Batch: XFC17110

Analytical Method: AK102

Analyst: T.L

Analytical Date/Time: 11/15/24 14:34

Container ID: 1246231004-A

Prep Batch: XXX50735

Prep Method: SW3520C

Prep Date/Time: 11/01/24 18:11

Prep Initial Wt./Vol.: 245 mL

Prep Extract Vol: 1 mL

Print Date: 11/19/2024 3:32:43PM

Results of Duplicate

Client Sample ID: **Duplicate**
 Client Project ID: **Soldotna AT+T**
 Lab Sample ID: 1246231005
 Lab Project ID: 1246231

Collection Date: 10/23/24 08:00
 Received Date: 10/25/24 11:12
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Semivolatile Organic Fuels

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Diesel Range Organics	21.3		0.500	0.167	mg/L	1		11/15/24 14:43

Surrogates

5a Androstane (surr)	87.2		50-150		%	1		11/15/24 14:43
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Batch Information

Analytical Batch: XFC17110
 Analytical Method: AK102
 Analyst: T.L
 Analytical Date/Time: 11/15/24 14:43
 Container ID: 1246231005-A

Prep Batch: XXX50735
 Prep Method: SW3520C
 Prep Date/Time: 11/01/24 18:11
 Prep Initial Wt./Vol.: 300 mL
 Prep Extract Vol: 1 mL

Print Date: 11/19/2024 3:32:43PM



Method Blank

Blank ID: MB for HBN 1902871 [XXX/50735]
Blank Lab ID: 1799121

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1246231001, 1246231002, 1246231003, 1246231004, 1246231005

Results by AK102

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>
Diesel Range Organics	0.450U	0.600	0.200	0.450	mg/L
Surrogates					
5a Androstane (surr)	62.8	60-120		0	%

Batch Information

Analytical Batch: XFC17110
Analytical Method: AK102
Instrument: Agilent 7890B F
Analyst: T.L
Analytical Date/Time: 11/15/2024 12:58:00PM

Prep Batch: XXX50735
Prep Method: SW3520C
Prep Date/Time: 11/1/2024 6:11:00PM
Prep Initial Wt./Vol.: 250 mL
Prep Extract Vol: 1 mL

Print Date: 11/19/2024 3:32:46PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1246231 [XXX50735]
 Blank Spike Lab ID: 1799122
 Date Analyzed: 11/15/2024 13:08

Spike Duplicate ID: LCSD for HBN 1246231 [XXX50735]
 Spike Duplicate Lab ID: 1799123
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1246231001, 1246231002, 1246231003, 1246231004, 1246231005

Results by AK102

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Diesel Range Organics	20	16.5	82	20	16.9	84	(75-125)	2.30	(< 20)
Surrogates									
5a Androstane (surr)	0.4		90	0.4		94	(60-120)	4.90	

Batch Information

Analytical Batch: **XFC17110**
 Analytical Method: **AK102**
 Instrument: **Agilent 7890B F**
 Analyst: **T.L**

Prep Batch: **XXX50735**
 Prep Method: **SW3520C**
 Prep Date/Time: **11/01/2024 18:11**
 Spike Init Wt./Vol.: 0.4 mg/L Extract Vol: 1 mL
 Dupe Init Wt./Vol.: 0.4 mg/L Extract Vol: 1 mL

Print Date: 11/19/2024 3:32:50PM



SGS North America Inc.
CHAIN OF CUSTODY RECORD

1246231



Profile #: 338622 Int. *gm*

www.us.sgs.com

CLIENT: <i>Alta GeoScience</i>					Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.					Page <i>1</i> of <i>1</i>		
CONTACT: <i>Alex Tula</i>			PHONE #: <i>206-979-8282</i>		Section 3		Preservative					
PROJECT NAME: <i>Soldotna AT2T</i>			Project/Permit Number:		#		<i>HEL</i>					
REPORTS TO: <i>Alex Tula</i>			NPDL Number(DOD):		CONTAINERS							
INVOICE TO: <i>Alex Tula</i>			E-MAIL: <i>ATula@AltaGeo.com</i>		Sample Type		Analysis*					NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS
			QUOTE #:		Comp							
			P.O. #:		Grab							REMARKS/LOC ID
					MI							
RESERVED for lab use	SAMPLE IDENTIFICATION		DATE mm/dd/yy	TIME HH:MM	MATRIX/MATRIX CODE							
<i>1AB</i>	<i>MW-6</i>		<i>10/23/24</i>	<i>1055</i>	<i>water</i>	<i>2</i>	<i>6</i>	<i>2</i>				
<i>2AB</i>	<i>MW-11</i>		<i>10/23/24</i>	<i>1150</i>	<i>L</i>	<i>2</i>	<i>1</i>	<i>2</i>				
<i>3AB</i>	<i>MW-16</i>		<i>10/23/24</i>	<i>0935</i>	<i>L</i>	<i>2</i>	<i>1</i>	<i>2</i>				
<i>4AB</i>	<i>MW-17</i>		<i>10/23/24</i>	<i>1010</i>	<i>L</i>	<i>2</i>	<i>1</i>	<i>2</i>				
<i>5AB</i>	<i>Duplicate</i>		<i>10/23/24</i>	<i>0800</i>	<i>L</i>	<i>2</i>	<i>1</i>	<i>2</i>				
Comments:												
DOD Project? YES NO			Turnaround Time Requested			SGS Sample Receipt (Lab Use Only)						
Data Deliverables Requested			<u>Standard</u>			Delivery Method: Client <u>Commercial</u>			Chain of Custody Seal Condition:			
DataView Level 4 SEDD ERPIMS EQUIS Other:			Rush Requested Rush Report Date:			Did each cooler have a corresponding COC? <u>Yes</u> No			<u>INTACT</u> BROKEN ABSENT			
RELINQUISHED BY: <i>[Signature]</i>			DATE: <i>10/25/24</i>	TIME: <i>0715</i>	RECEIVED BY: <i>[Signature]</i>	Cooler ID	Temperature (°C)		Therm. ID	If more than three coolers are received, or for documentation of non-compliant coolers, use form FS-0029.		
						<i>1. (Anc)</i>	<i>2.2</i>		<i>050</i>			
						<i>2.</i>						
						<i>3.</i>				Initials: _____		
			<i>10/25/24</i>	<i>1112</i>	<i>[Signature]</i>	Note: If temp. is outside 0-6° and samples were not taken <8 hours ago OR are waste samples, Client or PM should initial here or attach an email change order to proceed with analysis. If ice is present, note on form F102B.						
Laboratory Use Only						http://www.sgs.com/terms-and-conditions						



1246231



SAMPLE RECEIPT FORM

Project Manager Completion				
Was all necessary information recorded on the COC upon receipt? (Temperature, COC seals, etc.?)	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A	
Was temperature between 0-6° C?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A	If "No", are the samples either exempt* or sampled <8 hours prior to receipt?
Were all analyses received within holding time*?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A	
Was a method specified for each analysis, where applicable? If no, please note correct methods.	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A	AK102
Are compound lists specified, where applicable? For project specific or special compound lists please note correct analysis code.	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A	
If rush was requested by the client, was the requested TAT approved?	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A	If "NO", what is the approved TAT?
If SEDD Deliverables are required, were Location ID's and an NPDL Number provided?	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A	If "NO", contact client for information.
Sample Login Completion				
Do ID's on sample containers match COC?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A	
If provided on containers, do dates/times collected match COC?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A	Note: If times differ <1 hr., record details below and login per COC.
Were all sample containers received in good condition?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A	
Were proper containers (type/mass/volume/preservative) received for all samples? *See form F-083 "Sample Guide"	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A	Note: If 200.8/6020 Total Metals are received unpreserved, preserve, and note HNO3 lot here: If 200.8/6020 Dissolved Metals are received unpreserved, log in for LABFILTER and do not preserve. For all non-metals methods, inform Project Manager.
Were Trip Blanks (VOC, GRO, Low-Level Hg, etc.) received with samples, where applicable*?	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A	
Were all VOA vials free of headspace >6mm?	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A	
Were all soil VOA samples received field extracted with Methanol?	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A	
Did all soil VOA samples have an accompanying unpreserved container for % solids?	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A	
If special handling is required, were containers labelled appropriately? e.g. MI/ISM, foreign soils, lab filter, Ref Lab, limited volume	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A	
For Rush/Short Holding time, was the lab notified?	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A	
For any question answered "NO", was the Project Manager notified?	<input type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A	PM Initials:
Was Peer Review of sample numbering/labelling completed?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A	Reviewer Initials: <i>mya</i>
Additional Notes/Clarification where Applicable, including resolution of "No" answers when a change order is not attached:				



Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>	<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>
1246231001-A	HCL to pH < 2	OK			
1246231001-B	HCL to pH < 2	OK			
1246231002-A	HCL to pH < 2	OK			
1246231002-B	HCL to pH < 2	OK			
1246231003-A	HCL to pH < 2	OK			
1246231003-B	HCL to pH < 2	OK			
1246231004-A	HCL to pH < 2	OK			
1246231004-B	HCL to pH < 2	OK			
1246231005-A	HCL to pH < 2	OK			
1246231005-B	HCL to pH < 2	OK			

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.