

Laboratory Report of Analysis

To:	Kenai	Watershed	Forum
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Report Number: 1221998

Client Project: Kenai River Baseline Water Qua

Dear Benjamin Meyer,

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 Lambe
Project Manager
Alexandra.Lambe@sgs.com

Date

Print Date: 05/23/2022 8:21:47AM Results via Engage



Case Narrative

SGS Client: **Kenai Watershed Forum** SGS Project: **1221998**

Project Name/Site: **Kenai River Baseline Water Qua**Project Contact: **Benjamin Meyer**

Refer to sample receipt form for information on sample condition.

1221966001-C(1663719MS) (1663721) MS

4500NO3-F - Nitrate/Nitrite - MS recovery for total nitrate/nitrite is outside of QC criteria. Refer to LCS for accuracy requirements.

1221966001-C(1663719MSD) (1663722) MSD

4500NO3-F - Nitrate/Nitrite - MS recovery for total nitrate/nitrite and nitrate is outside of QC criteria. Refer to LCS for accuracy requirements.

1221998008MSD (1663724) MSD

4500NO3-F - Nitrate/Nitrite - MS recovery for total nitrate/nitrite is outside of QC criteria. Refer to LCS for accuracy requirements.

1221998005(1664033MS) (1663834) MS

WK.365.3T1- Total Phosphorus- MS recovery does not meet the QC criteria. Refer to the LCS for accuracy.

1221998005(1664033MSD) (1663835) MSD

WK.365.3T1- Total Phosphorus- MSD recovery does not meet the QC criteria. Refer to the LCSD for accuracy.

MB for HBN 1836326 [MXX/35114] (1664384) MB

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200.7 - Total Calcium, Iron, and Magnesium were analyzed by ALS of Kelso, WA.

*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 http://www.sgs.com/en/Terms-and-Conditions.aspx. 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 & 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 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., 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.

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.

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Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	<u>Matrix</u>
RM0- No Name Creek	1221998001	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM1.5-Kenai City Dock-DUP	1221998002	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM1.5-Kenai City Dock	1221998003	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM6.5-Cunningham Park	1221998004	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM10-Beaver Creek	1221998005	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM10.1-Kenai River	1221998006	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM12.5-Pillars	1221998007	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM18-Poacher's Cove	1221998008	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM19-Slikok Creek	1221998009	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM21-Soldotna Bridge	1221998010	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM22-Soldotna Creek	1221998011	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM23-Swiftwater Park	1221998012	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM30-Funny River	1221998013	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM31-Morgan's Landing	1221998014	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM36-Moose River	1221998015	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM36-Moose River-DUP	1221998016	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM40-Bing's Landing	1221998017	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM43-Upstream of Dow Island	1221998018	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM44-Mouth of Killey River	1221998019	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM50-Skilak Lake Outflow	1221998020	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM70-Jim's Landing	1221998021	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM74-Russian River	1221998022	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM82-Kenai Lake Bridge	1221998023	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM79.5-Juneau Creek	1221998024	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM0- No Name Creek	1221998025	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM1.5-Kenai City Dock-DUP	1221998026	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM1.5-Kenai City Dock	1221998027	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM6.5-Cunningham Park	1221998028	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM10-Beaver Creek	1221998029	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM10.1-Kenai River	1221998030	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM12.5-Pillars	1221998031	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM18-Poacher's Cove	1221998032	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM19-Slikok Creek	1221998033	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM21-Soldotna Bridge	1221998034	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM22-Soldotna Creek	1221998035	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM23-Swiftwater Park	1221998036	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)
RM30-Funny River	1221998037	05/03/2022	05/03/2022	Water (Surface, Eff., Ground)

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SM21 4500NO3-F

Sample Summary

<u>Client Sample ID</u> <u>Lab Sample ID</u> <u>Collected</u> <u>Received</u> <u>Matrix</u>

Method Description

EP200.8 Metals in Drinking Water by ICP-MS DISSO

Nitrate/Nitrite Flow injection Pres.

SM21 4500P-B,E Total Phosphorus (W)

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Detectable Results Summary

Client Sample ID: RM0- No Name Creek		- "	
Lab Sample ID: 1221998001	Parameter The state of the stat	Result	<u>Units</u>
Waters Department	Total Nitrate/Nitrite-N	0.119J	mg/L
	Total Phosphorus	0.0309J	mg/L
Client Sample ID: RM1.5-Kenai City Dock-D	UP		
Lab Sample ID: 1221998002	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Waters Department	Total Nitrate/Nitrite-N	0.242	mg/L
	Total Phosphorus	0.187	mg/L
Client Sample ID: RM1.5-Kenai City Dock			
Lab Sample ID: 1221998003	Parameter	Result	<u>Units</u>
Waters Department	Total Nitrate/Nitrite-N	2.49	mg/L
	Total Phosphorus	0.180	mg/L
Client Sample ID: RM6.5-Cunningham Park			-
Lab Sample ID: 1221998004		Dogult	Linita
·	<u>Parameter</u> Total Nitrate/Nitrite-N	<u>Result</u> 0.207	<u>Units</u> mg/L
Waters Department	Total Phosphorus	0.614	mg/L
	Total i Hospilorus	0.014	mg/L
Client Sample ID: RM10-Beaver Creek			
Lab Sample ID: 1221998005	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Waters Department	Total Phosphorus	0.0607	mg/L
Client Sample ID: RM10.1-Kenai River			
Lab Sample ID: 1221998006	<u>Parameter</u>	Result	<u>Units</u>
Waters Department	Total Nitrate/Nitrite-N	0.167J	mg/L
•	Total Phosphorus	0.0254J	mg/L
Client Sample ID: RM12.5-Pillars			
Lab Sample ID: 1221998007	Parameter	Result	<u>Units</u>
Waters Department	Total Nitrate/Nitrite-N	0.191J	mg/L
Waters Department	Total Phosphorus	0.0193J	mg/L
Client Commis ID: DM40 December Com	•		3.
Client Sample ID: RM18-Poacher's Cove Lab Sample ID: 1221998008	Danamatan	Decemb	11-24-
·	Parameter Total Nitrate/Nitrite-N	Result	<u>Units</u>
Waters Department		1.38 0.0214J	mg/L
	Total Phosphorus	0.02143	mg/L
Client Sample ID: RM19-Slikok Creek			
Lab Sample ID: 1221998009	<u>Parameter</u>	Result	<u>Units</u>
Waters Department	Total Nitrate/Nitrite-N	0.535	mg/L
	Total Phosphorus	0.0252J	mg/L
Client Sample ID: RM21-Soldotna Bridge			
Lab Sample ID: 1221998010	<u>Parameter</u>	Result	<u>Units</u>
Waters Department	Total Nitrate/Nitrite-N	0.811	mg/L
•	Total Phosphorus	0.0221J	mg/L

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Client Sample ID: RM22-Soldotna Creek			
Lab Sample ID: 1221998011	<u>Parameter</u>	Result	<u>Units</u>
Waters Department	Total Nitrate/Nitrite-N	0.0866J	mg/L
	Total Phosphorus	0.0723	mg/L
Client Sample ID: RM23-Swiftwater Park			
Lab Sample ID: 1221998012	Parameter	Result	Units
Waters Department	Total Nitrate/Nitrite-N	0.722	mg/L
- I a a a a a a a a a a a a a a a a a a	Total Phosphorus	0.0208J	mg/L
Client Sample ID: RM30-Funny River			_
Lab Sample ID: 1221998013	Parameter	Result	<u>Units</u>
Waters Department	Total Nitrate/Nitrite-N	0.260	mg/L
Waters Department	Total Phosphorus	0.0527	mg/L
Olicat Consula ID: DM04 Manuaria Landi	·	0.002.	g/ =
Client Sample ID: RM31-Morgan's Landi	<u> </u>	-	
Lab Sample ID: 1221998014	Parameter	Result	<u>Units</u>
Waters Department	Total Nitrate/Nitrite-N	0.134J 0.0158J	mg/L
	Total Phosphorus	0.01563	mg/L
Client Sample ID: RM36-Moose River			
Lab Sample ID: 1221998015	<u>Parameter</u>	Result	<u>Units</u>
Waters Department	Total Phosphorus	0.0522	mg/L
Client Sample ID: RM36-Moose River-DL	JP		
Lab Sample ID: 1221998016	<u>Parameter</u>	Result	<u>Units</u>
Waters Department	Total Phosphorus	0.0498	mg/L
Client Sample ID: RM40-Bing's Landing			
Lab Sample ID: 1221998017	Parameter	Result	<u>Units</u>
Waters Department	Total Nitrate/Nitrite-N	0.269	mg/L
Client Sample ID: RM43-Upstream of Do	w lolond		· ·
Lab Sample ID: 1221998018		Popult	Unito
•	<u>Parameter</u> Total Nitrate/Nitrite-N	<u>Result</u> 0.299	<u>Units</u> mg/L
Waters Department		0.299	mg/L
Client Sample ID: RM44-Mouth of Killey	River		
Lab Sample ID: 1221998019	<u>Parameter</u>	Result	<u>Units</u>
Waters Department	Total Nitrate/Nitrite-N	0.214	mg/L
Client Sample ID: RM50-Skilak Lake Out	flow		
Lab Sample ID: 1221998020	<u>Parameter</u>	Result	<u>Units</u>
Waters Department	Total Nitrate/Nitrite-N	0.234	mg/L
Client Sample ID: RM70-Jim's Landing			
Lab Sample ID: 1221998021	Parameter	Result	<u>Units</u>
Waters Department	Total Nitrate/Nitrite-N	0.629	mg/L
Client Sample ID: RM74-Russian River			
Lab Sample ID: 1221998022	Parameter	<u>Result</u>	<u>Units</u>
Waters Department	Total Nitrate/Nitrite-N	1.14	mg/L
Waters Department	Total Parato/Paritto-14	1.17	mg/L

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Detectable Results Summary

Client Sample ID: RM82-Kenai Lake B Lab Sample ID: 1221998023	-	Danult	Llaita
	Parameter	Result	<u>Units</u>
Waters Department	Total Nitrate/Nitrite-N	12.7	mg/L
Client Sample ID: RM79.5-Juneau Cre	ek		
Lab Sample ID: 1221998024	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Waters Department	Total Nitrate/Nitrite-N	0.625	mg/L
Client Sample ID: RM0- No Name Cred	ek		
Lab Sample ID: 1221998025	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Dissolved Metals by ICP/MS	Copper	2.19J	ug/L
	Zinc	5.17J	ug/L
Client Sample ID: RM1.5-Kenai City D	ock-DUP		
Lab Sample ID: 1221998026	Parameter	Result	<u>Units</u>
Dissolved Metals by ICP/MS	Arsenic	2.67J	ug/L
DISSUIVEU INICIAIS DY IOF/IVIS	Copper	12.2	ug/L
	Zinc	3.89J	ug/L
011 10 115 5		0.000	~3, -
Client Sample ID: RM1.5-Kenai City D			
Lab Sample ID: 1221998027	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Dissolved Metals by ICP/MS	Arsenic	2.06J	ug/L
	Copper	15.2	ug/L
	Zinc	5.15J	ug/L
Client Sample ID: RM6.5-Cunningham	ı Park		
Lab Sample ID: 1221998028	<u>Parameter</u>	Result	<u>Units</u>
Dissolved Metals by ICP/MS	Arsenic	1.90J	ug/L
•	Lead	0.526J	ug/L
Client Sample ID: RM10-Beaver Creek			
Lab Sample ID: 1221998029	Parameter	Result	Units
Dissolved Metals by ICP/MS	Arsenic	2.72J	ug/L
Dissolved metals by for /mo	Lead	0.547J	ug/L
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Client Sample ID: RM10.1-Kenai River			
Lab Sample ID: 1221998030	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Dissolved Metals by ICP/MS	Arsenic	1.57J	ug/L
	Lead	0.767J	ug/L
	Zinc	6.37J	ug/L
Client Sample ID: RM12.5-Pillars			
Lab Sample ID: 1221998031	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Dissolved Metals by ICP/MS	Arsenic	2.00J	ug/L
-	Lead	3.09	ug/L
	Zinc	4.12J	ug/L
Client Sample ID: RM18-Poacher's Co	ove		
Lab Sample ID: 1221998032	<u>Parameter</u>	Result	<u>Units</u>
Dissolved Metals by ICP/MS	Arsenic	1.75J	ug/L
DISSUIVED WIELDIS BY IOF/IVIS	Zinc	12.2	ug/L

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Detectable Results Summary

Client Sample ID: RM19-Slikok Creek			
Lab Sample ID: 1221998033	<u>Parameter</u>	Result	<u>Units</u>
Dissolved Metals by ICP/MS	Arsenic	2.07J	ug/L
	Copper	1.07J	ug/L
	Lead	1.04J	ug/L
	Zinc	13.6	ug/L
Client Sample ID: RM21-Soldotna Bridge			
Lab Sample ID: 1221998034	<u>Parameter</u>	Result	<u>Units</u>
Dissolved Metals by ICP/MS	Arsenic	2.00J	ug/L
Client Sample ID: RM22-Soldotna Creek			
Lab Sample ID: 1221998035	<u>Parameter</u>	Result	<u>Units</u>
Dissolved Metals by ICP/MS	Arsenic	3.91J	ug/L
	Zinc	3.36J	ug/L
Client Sample ID: RM23-Swiftwater Park			
Lab Sample ID: 1221998036	<u>Parameter</u>	Result	<u>Units</u>
Dissolved Metals by ICP/MS	Arsenic	2.03J	ug/L
Client Sample ID: RM30-Funny River			
Lab Sample ID: 1221998037	<u>Parameter</u>	Result	<u>Units</u>
Dissolved Metals by ICP/MS	Arsenic	1.87J	ug/L

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Results of RM0- No Name Creek

Client Sample ID: RM0- No Name Creek

Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998001 Lab Project ID: 1221998

Collection Date: 05/03/22 10:00 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Waters Department

Allowable Result Qual <u>Parameter</u> LOQ/CL <u>DL</u> <u>Units</u> DF **Limits** Date Analyzed Total Nitrate/Nitrite-N 0.119 J 0.200 0.0500 mg/L 2 05/12/22 12:15

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F

Analyst: EBH

Analytical Date/Time: 05/12/22 12:15 Container ID: 1221998001-A

<u>Allowable</u> Parameter Result Qual LOQ/CL <u>DL</u> <u>Units</u> <u>DF</u> <u>Limits</u> Date Analyzed **Total Phosphorus** 0.0400 0.0120 0.0309 J mg/L 1 05/11/22 13:41

Batch Information

Analytical Batch: WDA5201 Analytical Method: SM21 4500P-B,E

Analyst: RJC

Analytical Date/Time: 05/11/22 13:41 Container ID: 1221998001-A

Prep Batch: WXX14200 Prep Method: SM21 4500P-B,E Prep Date/Time: 05/11/22 10:00 Prep Initial Wt./Vol.: 25 mL Prep Extract Vol: 25 mL



Results of RM1.5-Kenai City Dock-DUP

Client Sample ID: RM1.5-Kenai City Dock-DUP Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998002 Lab Project ID: 1221998

Collection Date: 05/03/22 09:15 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Waters Department

Allowable Parameter Result Qual LOQ/CL <u>DL</u> <u>Units</u> DF **Limits** Date Analyzed Total Nitrate/Nitrite-N 0.242 0.200 0.0500 mg/L 2 05/12/22 12:16

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F

Analyst: EBH

Analytical Date/Time: 05/12/22 12:16 Container ID: 1221998002-A

<u>Allowable</u> Parameter Result Qual LOQ/CL <u>DL</u> <u>Units</u> <u>DF</u> <u>Limits</u> Date Analyzed **Total Phosphorus** 0.0400 0.0120 0.187 mg/L 1 05/11/22 13:42

Batch Information

Analytical Batch: WDA5201 Analytical Method: SM21 4500P-B,E

Analyst: RJC

Analytical Date/Time: 05/11/22 13:42 Container ID: 1221998002-A

Prep Batch: WXX14200 Prep Method: SM21 4500P-B,E Prep Date/Time: 05/11/22 10:00 Prep Initial Wt./Vol.: 25 mL Prep Extract Vol: 25 mL



Results of RM1.5-Kenai City Dock

Client Sample ID: RM1.5-Kenai City Dock
Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998003 Lab Project ID: 1221998 Collection Date: 05/03/22 09:10 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Waters Department

Allowable Parameter Result Qual LOQ/CL <u>DL</u> <u>Units</u> DF **Limits** Date Analyzed Total Nitrate/Nitrite-N 2.49 0.200 0.0500 mg/L 2 05/12/22 12:18

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F

Analyst: EBH

Analytical Date/Time: 05/12/22 12:18 Container ID: 1221998003-A

<u>Allowable</u> Parameter Result Qual LOQ/CL <u>DL</u> <u>Units</u> <u>DF</u> <u>Limits</u> Date Analyzed **Total Phosphorus** 0.0400 0.0120 0.180 mg/L 1 05/11/22 13:43

Batch Information

Analytical Batch: WDA5201 Analytical Method: SM21 4500P-B,E

Analyst: RJC

Analytical Date/Time: 05/11/22 13:43 Container ID: 1221998003-A Prep Batch: WXX14200 Prep Method: SM21 4500P-B,E Prep Date/Time: 05/11/22 10:00 Prep Initial Wt./Vol.: 25 mL Prep Extract Vol: 25 mL

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Results of RM6.5-Cunningham Park

Client Sample ID: RM6.5-Cunningham Park
Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998004 Lab Project ID: 1221998 Collection Date: 05/03/22 09:39 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Waters Department

Allowable Parameter Result Qual LOQ/CL <u>DL</u> <u>Units</u> DF **Limits** Date Analyzed Total Nitrate/Nitrite-N 0.207 0.200 0.0500 mg/L 2 05/12/22 12:20

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F

Analyst: EBH

Analytical Date/Time: 05/12/22 12:20 Container ID: 1221998004-A

<u>Allowable</u> Parameter Result Qual LOQ/CL <u>DL</u> <u>Units</u> <u>DF</u> <u>Limits</u> Date Analyzed **Total Phosphorus** 0.0600 0.614 0.200 mg/L 1 05/11/22 17:45

Batch Information

Analytical Batch: WDA5201 Analytical Method: SM21 4500P-B,E

Analyst: RJC

Analytical Date/Time: 05/11/22 17:45 Container ID: 1221998004-A Prep Batch: WXX14200 Prep Method: SM21 4500P-B,E Prep Date/Time: 05/11/22 15:30 Prep Initial Wt./Vol.: 5 mL Prep Extract Vol: 25 mL

Print Date: 05/23/2022 8:21:54AM J flagging is activated

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Results of RM10-Beaver Creek

Client Sample ID: RM10-Beaver Creek

Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998005 Lab Project ID: 1221998

Collection Date: 05/03/22 10:51 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Waters Department

Allowable Result Qual Parameter LOQ/CL <u>DL</u> <u>Units</u> DF **Limits** Date Analyzed Total Nitrate/Nitrite-N 0.100 U 0.200 0.0500 mg/L 2 05/12/22 12:22

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F

Analyst: EBH

Analytical Date/Time: 05/12/22 12:22 Container ID: 1221998005-A

						<u>Allowable</u>	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Total Phosphorus	0.0607	0.0400	0.0120	mg/L	1		05/17/22 12:53

Batch Information

Analytical Batch: WDA5203 Analytical Method: SM21 4500P-B,E

Analyst: RJC

Analytical Date/Time: 05/17/22 12:53 Container ID: 1221998005-A

Prep Batch: WXX14205 Prep Method: SM21 4500P-B,E Prep Date/Time: 05/17/22 10:30 Prep Initial Wt./Vol.: 25 mL Prep Extract Vol: 25 mL

Print Date: 05/23/2022 8:21:54AM J flagging is activated

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Results of RM10.1-Kenai River

Client Sample ID: RM10.1-Kenai River

Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998006 Lab Project ID: 1221998 Collection Date: 05/03/22 11:23 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Waters Department

Allowable Result Qual <u>Parameter</u> LOQ/CL <u>DL</u> <u>Units</u> DF **Limits** Date Analyzed Total Nitrate/Nitrite-N 0.167 J 0.200 0.0500 mg/L 2 05/12/22 12:23

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F

Analyst: EBH

Analytical Date/Time: 05/12/22 12:23 Container ID: 1221998006-A

<u>Allowable</u> Parameter Result Qual LOQ/CL <u>DL</u> <u>Units</u> <u>DF</u> **Limits** Date Analyzed **Total Phosphorus** 0.0254 J 0.0400 0.0120 mg/L 1 05/11/22 13:50

Batch Information

Analytical Batch: WDA5201 Analytical Method: SM21 4500P-B,E

Analyst: RJC

Analytical Date/Time: 05/11/22 13:50 Container ID: 1221998006-A Prep Batch: WXX14200
Prep Method: SM21 4500P-B,E
Prep Date/Time: 05/11/22 10:00
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/23/2022 8:21:54AM J flagging is activated

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Results of RM12.5-Pillars

Client Sample ID: RM12.5-Pillars

Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998007 Lab Project ID: 1221998

Collection Date: 05/03/22 11:50 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Waters Department

Allowable Result Qual <u>Parameter</u> LOQ/CL <u>DL</u> <u>Units</u> DF **Limits** Date Analyzed Total Nitrate/Nitrite-N 0.191 J 0.200 0.0500 mg/L 2 05/12/22 12:25

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F

Analyst: EBH

Analytical Date/Time: 05/12/22 12:25 Container ID: 1221998007-A

<u>Allowable</u> Parameter Result Qual LOQ/CL <u>DL</u> <u>Units</u> <u>DF</u> **Limits** Date Analyzed **Total Phosphorus** 0.0400 0.0120 0.0193 J mg/L 1 05/11/22 13:51

Batch Information

Analytical Batch: WDA5201 Analytical Method: SM21 4500P-B,E

Analyst: RJC

Analytical Date/Time: 05/11/22 13:51 Container ID: 1221998007-A

Prep Batch: WXX14200 Prep Method: SM21 4500P-B,E Prep Date/Time: 05/11/22 10:00 Prep Initial Wt./Vol.: 25 mL Prep Extract Vol: 25 mL

Print Date: 05/23/2022 8:21:54AM J flagging is activated

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Results of RM18-Poacher's Cove

Client Sample ID: RM18-Poacher's Cove

Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998008 Lab Project ID: 1221998 Collection Date: 05/03/22 12:24 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Waters Department

Allowable Result Qual Parameter LOQ/CL <u>DL</u> <u>Units</u> DF **Limits** Date Analyzed Total Nitrate/Nitrite-N 1.38 0.200 0.0500 mg/L 2 05/12/22 12:32

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F

Analyst: EBH

Analytical Date/Time: 05/12/22 12:32 Container ID: 1221998008-A

						Allowable	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Total Phosphorus	0.0214 J	0.0400	0.0120	mg/L	1		05/11/22 13:52

Batch Information

Analytical Batch: WDA5201 Analytical Method: SM21 4500P-B,E

Analyst: RJC

Analytical Date/Time: 05/11/22 13:52 Container ID: 1221998008-A Prep Batch: WXX14200
Prep Method: SM21 4500P-B,E
Prep Date/Time: 05/11/22 10:00
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL



Results of RM19-Slikok Creek

Client Sample ID: RM19-Slikok Creek

Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998009 Lab Project ID: 1221998 Collection Date: 05/03/22 11:20 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Waters Department

Allowable <u>Parameter</u> Result Qual LOQ/CL <u>DL</u> <u>Units</u> DF **Limits** Date Analyzed Total Nitrate/Nitrite-N 0.535 0.200 0.0500 mg/L 2 05/12/22 12:37

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F

Analyst: EBH

Analytical Date/Time: 05/12/22 12:37 Container ID: 1221998009-A

						Allowable	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Total Phosphorus	0.0252 J	0.0400	0.0120	mg/L	1		05/11/22 13:52

Batch Information

Analytical Batch: WDA5201 Analytical Method: SM21 4500P-B,E

Analyst: RJC

Analytical Date/Time: 05/11/22 13:52 Container ID: 1221998009-A Prep Batch: WXX14200 Prep Method: SM21 4500P-B,E Prep Date/Time: 05/11/22 10:00 Prep Initial Wt./Vol.: 25 mL Prep Extract Vol: 25 mL

Print Date: 05/23/2022 8:21:54AM J flagging is activated

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Results of RM21-Soldotna Bridge

Client Sample ID: RM21-Soldotna Bridge
Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998010 Lab Project ID: 1221998 Collection Date: 05/03/22 10:45 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Waters Department

Allowable <u>Parameter</u> Result Qual LOQ/CL <u>DL</u> <u>Units</u> DF **Limits** Date Analyzed Total Nitrate/Nitrite-N 0.811 0.200 0.0500 mg/L 2 05/12/22 12:39

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F

Analyst: EBH

Analytical Date/Time: 05/12/22 12:39 Container ID: 1221998010-A

<u>Allowable</u> Parameter Result Qual LOQ/CL <u>DL</u> <u>Units</u> <u>DF</u> <u>Limits</u> Date Analyzed **Total Phosphorus** 0.0400 0.0120 0.0221 J mg/L 1 05/11/22 13:53

Batch Information

Analytical Batch: WDA5201 Analytical Method: SM21 4500P-B,E

Analyst: RJC

Analytical Date/Time: 05/11/22 13:53 Container ID: 1221998010-A Prep Batch: WXX14200 Prep Method: SM21 4500P-B,E Prep Date/Time: 05/11/22 10:00 Prep Initial Wt./Vol.: 25 mL Prep Extract Vol: 25 mL



Results of RM22-Soldotna Creek

Client Sample ID: RM22-Soldotna Creek

Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998011 Lab Project ID: 1221998 Collection Date: 05/03/22 10:03 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Waters Department

Allowable Result Qual <u>Parameter</u> LOQ/CL <u>DL</u> <u>Units</u> DF **Limits** Date Analyzed Total Nitrate/Nitrite-N 0.0866 J 0.200 0.0500 mg/L 2 05/12/22 12:41

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F

Analyst: EBH

Analytical Date/Time: 05/12/22 12:41 Container ID: 1221998011-A

<u>Allowable</u> Parameter Result Qual LOQ/CL <u>DL</u> <u>Units</u> <u>DF</u> **Limits** Date Analyzed **Total Phosphorus** 0.0400 0.0120 0.0723 mg/L 1 05/11/22 13:54

Batch Information

Analytical Batch: WDA5201 Analytical Method: SM21 4500P-B,E

Analyst: RJC

Analytical Date/Time: 05/11/22 13:54 Container ID: 1221998011-A Prep Batch: WXX14200 Prep Method: SM21 4500P-B,E Prep Date/Time: 05/11/22 10:00 Prep Initial Wt./Vol.: 25 mL Prep Extract Vol: 25 mL

Print Date: 05/23/2022 8:21:54AM J flagging is activated

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Results of RM23-Swiftwater Park

Client Sample ID: RM23-Swiftwater Park

Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998012 Lab Project ID: 1221998 Collection Date: 05/03/22 12:08 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Waters Department

Allowable <u>Parameter</u> Result Qual LOQ/CL <u>DL</u> <u>Units</u> DF **Limits** Date Analyzed Total Nitrate/Nitrite-N 0.722 0.200 0.0500 mg/L 2 05/12/22 12:43

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F

Analyst: EBH

Analytical Date/Time: 05/12/22 12:43 Container ID: 1221998012-A

<u>Allowable</u> Parameter Result Qual LOQ/CL <u>DL</u> <u>Units</u> <u>DF</u> **Limits** Date Analyzed **Total Phosphorus** 0.0400 0.0120 0.0208 J mg/L 1 05/11/22 13:55

Batch Information

Analytical Batch: WDA5201 Analytical Method: SM21 4500P-B,E

Analyst: RJC

Analytical Date/Time: 05/11/22 13:55 Container ID: 1221998012-A Prep Batch: WXX14200
Prep Method: SM21 4500P-B,E
Prep Date/Time: 05/11/22 10:00
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL



Results of RM30-Funny River

Client Sample ID: RM30-Funny River

Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998013 Lab Project ID: 1221998

Collection Date: 05/03/22 08:33 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Waters Department

Allowable Parameter Result Qual LOQ/CL <u>DL</u> <u>Units</u> DF **Limits** Date Analyzed Total Nitrate/Nitrite-N 0.260 0.200 0.0500 mg/L 2 05/12/22 12:44

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F

Analyst: EBH

Analytical Date/Time: 05/12/22 12:44 Container ID: 1221998013-A

<u>Allowable</u> Parameter Result Qual LOQ/CL <u>DL</u> <u>Units</u> <u>DF</u> **Limits** Date Analyzed **Total Phosphorus** 0.0400 0.0120 0.0527 mg/L 1 05/11/22 13:56

Batch Information

Analytical Batch: WDA5201 Analytical Method: SM21 4500P-B,E

Analyst: RJC

Analytical Date/Time: 05/11/22 13:56 Container ID: 1221998013-A

Prep Batch: WXX14200 Prep Method: SM21 4500P-B,E Prep Date/Time: 05/11/22 10:00 Prep Initial Wt./Vol.: 25 mL Prep Extract Vol: 25 mL

Print Date: 05/23/2022 8:21:54AM J flagging is activated

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Results of RM31-Morgan's Landing

Client Sample ID: RM31-Morgan's Landing Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998014 Lab Project ID: 1221998

Collection Date: 05/03/22 11:00 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Waters Department

Allowable Result Qual Parameter LOQ/CL <u>DL</u> <u>Units</u> DF **Limits** Date Analyzed Total Nitrate/Nitrite-N 0.134 J 0.200 0.0500 mg/L 2 05/12/22 12:46

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F

Analyst: EBH

Analytical Date/Time: 05/12/22 12:46 Container ID: 1221998014-A

<u>Allowable</u> Parameter Result Qual LOQ/CL <u>DL</u> <u>Units</u> <u>DF</u> <u>Limits</u> Date Analyzed **Total Phosphorus** 0.0400 0.0120 0.0158 J mg/L 1 05/11/22 13:58

Batch Information

Analytical Batch: WDA5201 Analytical Method: SM21 4500P-B,E

Analyst: RJC

Analytical Date/Time: 05/11/22 13:58 Container ID: 1221998014-A

Prep Batch: WXX14200 Prep Method: SM21 4500P-B,E Prep Date/Time: 05/11/22 10:00 Prep Initial Wt./Vol.: 25 mL Prep Extract Vol: 25 mL

Print Date: 05/23/2022 8:21:54AM J flagging is activated

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Results of RM36-Moose River

Client Sample ID: RM36-Moose River

Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998015 Lab Project ID: 1221998 Collection Date: 05/03/22 10:15 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Waters Department

Allowable Result Qual <u>Parameter</u> LOQ/CL <u>DL</u> <u>Units</u> DF **Limits** Date Analyzed Total Nitrate/Nitrite-N 0.100 U 0.200 0.0500 mg/L 2 05/12/22 12:48

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F

Analyst: EBH

Analytical Date/Time: 05/12/22 12:48 Container ID: 1221998015-A

						Allowable	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Total Phosphorus	0.0522	0.0400	0.0120	mg/L	1		05/11/22 13:59

Batch Information

Analytical Batch: WDA5201 Analytical Method: SM21 4500P-B,E

Analyst: RJC

Analytical Date/Time: 05/11/22 13:59 Container ID: 1221998015-A Prep Batch: WXX14200 Prep Method: SM21 4500P-B,E Prep Date/Time: 05/11/22 10:00 Prep Initial Wt./Vol.: 25 mL Prep Extract Vol: 25 mL



Results of RM36-Moose River-DUP

Client Sample ID: RM36-Moose River-DUP Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998016 Lab Project ID: 1221998

Collection Date: 05/03/22 10:15 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Waters Department

Allowable Result Qual <u>Parameter</u> LOQ/CL <u>DL</u> <u>Units</u> DF **Limits** Date Analyzed Total Nitrate/Nitrite-N 0.100 U 0.200 0.0500 mg/L 2 05/12/22 12:55

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F

Analyst: EBH

Analytical Date/Time: 05/12/22 12:55 Container ID: 1221998016-A

						<u>Allowable</u>	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Total Phosphorus	0.0498	0.0400	0.0120	mg/L	1		05/17/22 12:54

Batch Information

Analytical Batch: WDA5203 Analytical Method: SM21 4500P-B,E

Analyst: RJC

Analytical Date/Time: 05/17/22 12:54 Container ID: 1221998016-A

Prep Batch: WXX14205 Prep Method: SM21 4500P-B,E Prep Date/Time: 05/17/22 10:30 Prep Initial Wt./Vol.: 25 mL Prep Extract Vol: 25 mL

Print Date: 05/23/2022 8:21:54AM J flagging is activated

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Results of RM40-Bing's Landing

Client Sample ID: RM40-Bing's Landing

Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998017 Lab Project ID: 1221998 Collection Date: 05/03/22 10:10 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Waters Department

Allowable <u>Parameter</u> Result Qual LOQ/CL <u>DL</u> <u>Units</u> DF **Limits** Date Analyzed Total Nitrate/Nitrite-N 0.269 0.200 0.0500 mg/L 2 05/09/22 15:03

Batch Information

Analytical Batch: WFI2987

Analytical Method: SM21 4500NO3-F

Analyst: DMM

Analytical Date/Time: 05/09/22 15:03 Container ID: 1221998017-A

						Allowable	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Total Phosphorus	0.0200 U	0.0400	0.0120	mg/L	1		05/17/22 12:55

Batch Information

Analytical Batch: WDA5203 Analytical Method: SM21 4500P-B,E

Analyst: RJC

Analytical Date/Time: 05/17/22 12:55 Container ID: 1221998017-A Prep Batch: WXX14205 Prep Method: SM21 4500P-B,E Prep Date/Time: 05/17/22 10:30 Prep Initial Wt./Vol.: 25 mL Prep Extract Vol: 25 mL



Results of RM43-Upstream of Dow Island

Client Sample ID: RM43-Upstream of Dow Island Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998018 Lab Project ID: 1221998 Collection Date: 05/03/22 09:30 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Waters Department

Allowable Parameter Result Qual LOQ/CL <u>DL</u> <u>Units</u> DF **Limits** Date Analyzed Total Nitrate/Nitrite-N 0.299 0.200 0.0500 mg/L 2 05/12/22 12:57

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F

Analyst: EBH

Analytical Date/Time: 05/12/22 12:57 Container ID: 1221998018-A

<u>Allowable</u> Parameter Result Qual LOQ/CL <u>DL</u> <u>Units</u> <u>DF</u> <u>Limits</u> Date Analyzed **Total Phosphorus** 0.0400 0.0120 0.0200 U mg/L 1 05/17/22 12:56

Batch Information

Analytical Batch: WDA5203 Analytical Method: SM21 4500P-B,E

Analyst: RJC

Analytical Date/Time: 05/17/22 12:56 Container ID: 1221998018-A

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Prep Batch: WXX14205 Prep Method: SM21 4500P-B,E Prep Date/Time: 05/17/22 10:30 Prep Initial Wt./Vol.: 25 mL Prep Extract Vol: 25 mL

Print Date: 05/23/2022 8:21:54AM J flagging is activated

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Results of RM44-Mouth of Killey River

Client Sample ID: RM44-Mouth of Killey River
Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998019 Lab Project ID: 1221998 Collection Date: 05/03/22 09:20 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Waters Department

Allowable Parameter Result Qual LOQ/CL <u>DL</u> <u>Units</u> DF **Limits** Date Analyzed Total Nitrate/Nitrite-N 0.214 0.200 0.0500 mg/L 2 05/12/22 12:58

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F

Analyst: EBH

Analytical Date/Time: 05/12/22 12:58 Container ID: 1221998019-A

<u>Allowable</u> Parameter Result Qual LOQ/CL <u>DL</u> <u>Units</u> <u>DF</u> <u>Limits</u> Date Analyzed **Total Phosphorus** 0.0120 0.0200 U 0.0400 mg/L 1 05/17/22 12:56

Batch Information

Analytical Batch: WDA5203 Analytical Method: SM21 4500P-B,E

Analyst: RJC

Analytical Date/Time: 05/17/22 12:56 Container ID: 1221998019-A Prep Batch: WXX14205 Prep Method: SM21 4500P-B,E Prep Date/Time: 05/17/22 10:30 Prep Initial Wt./Vol.: 25 mL Prep Extract Vol: 25 mL

Print Date: 05/23/2022 8:21:54AM J flagging is activated

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Results of RM50-Skilak Lake Outflow

Client Sample ID: RM50-Skilak Lake Outflow Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998020 Lab Project ID: 1221998

Collection Date: 05/03/22 07:30 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Waters Department

Allowable <u>Parameter</u> Result Qual LOQ/CL <u>DL</u> <u>Units</u> DF **Limits** Date Analyzed Total Nitrate/Nitrite-N 0.234 0.200 0.0500 mg/L 2 05/12/22 13:00

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F

Analyst: EBH

Analytical Date/Time: 05/12/22 13:00 Container ID: 1221998020-A

<u>Allowable</u> Parameter Result Qual LOQ/CL <u>DL</u> <u>Units</u> <u>DF</u> <u>Limits</u> Date Analyzed **Total Phosphorus** 0.0400 0.0120 0.0200 U mg/L 1 05/17/22 12:57

Batch Information

Analytical Batch: WDA5203 Analytical Method: SM21 4500P-B,E

Analyst: RJC

Analytical Date/Time: 05/17/22 12:57 Container ID: 1221998020-A

Prep Batch: WXX14205 Prep Method: SM21 4500P-B,E Prep Date/Time: 05/17/22 10:30 Prep Initial Wt./Vol.: 25 mL Prep Extract Vol: 25 mL



Results of RM70-Jim's Landing

Client Sample ID: RM70-Jim's Landing

Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998021 Lab Project ID: 1221998 Collection Date: 05/03/22 10:32 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Waters Department

Allowable <u>Parameter</u> Result Qual LOQ/CL <u>DL</u> <u>Units</u> DF **Limits** Date Analyzed Total Nitrate/Nitrite-N 0.629 0.200 0.0500 mg/L 2 05/12/22 13:02

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F

Analyst: EBH

Analytical Date/Time: 05/12/22 13:02 Container ID: 1221998021-A

						Allowable	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Total Phosphorus	0.0200 U	0.0400	0.0120	mg/L	1		05/17/22 12:58

Batch Information

Analytical Batch: WDA5203 Analytical Method: SM21 4500P-B,E

Analyst: RJC

Analytical Date/Time: 05/17/22 12:58 Container ID: 1221998021-A

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Prep Batch: WXX14205 Prep Method: SM21 4500P-B,E Prep Date/Time: 05/17/22 10:30 Prep Initial Wt./Vol.: 25 mL Prep Extract Vol: 25 mL



Results of RM74-Russian River

Client Sample ID: RM74-Russian River

Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998022 Lab Project ID: 1221998 Collection Date: 05/03/22 09:45 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Waters Department

Allowable <u>Parameter</u> Result Qual LOQ/CL <u>DL</u> <u>Units</u> DF **Limits** Date Analyzed Total Nitrate/Nitrite-N 1.14 0.200 0.0500 mg/L 2 05/12/22 13:04

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F

Analyst: EBH

Analytical Date/Time: 05/12/22 13:04 Container ID: 1221998022-A

<u>Allowable</u> Parameter Result Qual LOQ/CL <u>DL</u> <u>Units</u> <u>DF</u> **Limits** Date Analyzed **Total Phosphorus** 0.0400 0.0120 0.0200 U mg/L 1 05/17/22 13:03

Batch Information

Analytical Batch: WDA5203 Analytical Method: SM21 4500P-B,E

Analyst: RJC

Analytical Date/Time: 05/17/22 13:03 Container ID: 1221998022-A Prep Batch: WXX14205 Prep Method: SM21 4500P-B,E Prep Date/Time: 05/17/22 10:30 Prep Initial Wt./Vol.: 25 mL Prep Extract Vol: 25 mL



Results of RM82-Kenai Lake Bridge

Client Sample ID: RM82-Kenai Lake Bridge Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998023 Lab Project ID: 1221998

Collection Date: 05/03/22 07:55 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Waters Department

Allowable Parameter Result Qual LOQ/CL <u>DL</u> <u>Units</u> DF **Limits** Date Analyzed Total Nitrate/Nitrite-N 12.7 0.400 0.100 mg/L 4 05/12/22 13:37

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F

Analyst: EBH

Analytical Date/Time: 05/12/22 13:37 Container ID: 1221998023-A

<u>Allowable</u> Parameter Result Qual LOQ/CL <u>DL</u> <u>Units</u> <u>DF</u> <u>Limits</u> Date Analyzed **Total Phosphorus** 0.0120 0.0200 U 0.0400 mg/L 1 05/17/22 13:04

Batch Information

Analytical Batch: WDA5203 Analytical Method: SM21 4500P-B,E

Analyst: RJC

Analytical Date/Time: 05/17/22 13:04 Container ID: 1221998023-A

Prep Batch: WXX14205 Prep Method: SM21 4500P-B,E Prep Date/Time: 05/17/22 10:30 Prep Initial Wt./Vol.: 25 mL Prep Extract Vol: 25 mL

Print Date: 05/23/2022 8:21:54AM J flagging is activated

200 West Potter Drive Anchorage, AK 95518 SGS North America Inc. t 907.562.2343 f 907.561.5301 www.us.sgs.com



Results of RM79.5-Juneau Creek

Client Sample ID: RM79.5-Juneau Creek

Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998024 Lab Project ID: 1221998 Collection Date: 05/03/22 08:50 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Waters Department

Allowable <u>Parameter</u> Result Qual LOQ/CL <u>DL</u> <u>Units</u> DF **Limits** Date Analyzed Total Nitrate/Nitrite-N 0.625 0.200 0.0500 mg/L 2 05/12/22 13:07

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F

Analyst: EBH

Analytical Date/Time: 05/12/22 13:07 Container ID: 1221998024-A

<u>Allowable</u> Parameter Result Qual LOQ/CL <u>DL</u> <u>Units</u> <u>DF</u> **Limits** Date Analyzed **Total Phosphorus** 0.0400 0.0120 0.0200 U mg/L 1 05/17/22 13:05

Batch Information

Analytical Batch: WDA5203 Analytical Method: SM21 4500P-B,E

Analyst: RJC

Analytical Date/Time: 05/17/22 13:05 Container ID: 1221998024-A Prep Batch: WXX14205 Prep Method: SM21 4500P-B,E Prep Date/Time: 05/17/22 10:30 Prep Initial Wt./Vol.: 25 mL Prep Extract Vol: 25 mL

Print Date: 05/23/2022 8:21:54AM J flagging is activated

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



Results of RM0- No Name Creek

Client Sample ID: RM0- No Name Creek

Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998025 Lab Project ID: 1221998 Collection Date: 05/03/22 10:00 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Dissolved Metals by ICP/MS

						<u>Allowable</u>	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Arsenic	2.50 U	5.00	1.50	ug/L	1		05/19/22 14:51
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/19/22 14:51
Chromium	2.50 U	5.00	2.50	ug/L	1		05/19/22 14:51
Copper	2.19 J	3.00	1.00	ug/L	1		05/19/22 14:51
Lead	1.00 U	2.00	0.500	ug/L	1		05/19/22 14:51
Zinc	5.17 J	10.0	3.10	ug/L	1		05/19/22 14:51

Batch Information

Analytical Batch: MMS11558 Analytical Method: EP200.8

Analyst: DSD

Analytical Date/Time: 05/19/22 14:51 Container ID: 1221998025-A Prep Batch: MXX35113 Prep Method: E200.2

Prep Date/Time: 05/19/22 07:54 Prep Initial Wt./Vol.: 20 mL Prep Extract Vol: 50 mL



Results of RM1.5-Kenai City Dock-DUP

Client Sample ID: RM1.5-Kenai City Dock-DUP
Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998026 Lab Project ID: 1221998 Collection Date: 05/03/22 09:15 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Dissolved Metals by ICP/MS

						<u>Allowable</u>	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Arsenic	2.67 J	5.00	1.50	ug/L	1		05/19/22 14:54
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/19/22 14:54
Chromium	2.50 U	5.00	2.50	ug/L	1		05/19/22 14:54
Copper	12.2	3.00	1.00	ug/L	1		05/19/22 14:54
Lead	1.00 U	2.00	0.500	ug/L	1		05/19/22 14:54
Zinc	3.89 J	10.0	3.10	ug/L	1		05/19/22 14:54

Batch Information

Analytical Batch: MMS11558 Analytical Method: EP200.8

Analyst: DSD

Analytical Date/Time: 05/19/22 14:54 Container ID: 1221998026-A Prep Batch: MXX35113 Prep Method: E200.2

Prep Date/Time: 05/19/22 07:54 Prep Initial Wt./Vol.: 20 mL Prep Extract Vol: 50 mL



Results of RM1.5-Kenai City Dock

Client Sample ID: RM1.5-Kenai City Dock

Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998027 Lab Project ID: 1221998 Collection Date: 05/03/22 09:10 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Dissolved Metals by ICP/MS

						<u>Allowable</u>	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Arsenic	2.06 J	5.00	1.50	ug/L	1		05/19/22 14:57
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/19/22 14:57
Chromium	2.50 U	5.00	2.50	ug/L	1		05/19/22 14:57
Copper	15.2	3.00	1.00	ug/L	1		05/19/22 14:57
Lead	1.00 U	2.00	0.500	ug/L	1		05/19/22 14:57
Zinc	5.15 J	10.0	3.10	ug/L	1		05/19/22 14:57

Batch Information

Analytical Batch: MMS11558 Analytical Method: EP200.8

Analyst: DSD

Analytical Date/Time: 05/19/22 14:57 Container ID: 1221998027-A Prep Batch: MXX35113 Prep Method: E200.2

Prep Date/Time: 05/19/22 07:54 Prep Initial Wt./Vol.: 20 mL Prep Extract Vol: 50 mL



Results of RM6.5-Cunningham Park

Client Sample ID: RM6.5-Cunningham Park
Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998028 Lab Project ID: 1221998 Collection Date: 05/03/22 09:39 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Dissolved Metals by ICP/MS

						<u>Allowable</u>	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Arsenic	1.90 J	5.00	1.50	ug/L	1		05/19/22 14:59
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/19/22 14:59
Chromium	2.50 U	5.00	2.50	ug/L	1		05/19/22 14:59
Copper	1.50 U	3.00	1.00	ug/L	1		05/19/22 14:59
Lead	0.526 J	2.00	0.500	ug/L	1		05/19/22 14:59
Zinc	5.00 U	10.0	3.10	ug/L	1		05/19/22 14:59

Batch Information

Analytical Batch: MMS11558 Analytical Method: EP200.8

Analyst: DSD

Analytical Date/Time: 05/19/22 14:59 Container ID: 1221998028-A Prep Batch: MXX35113 Prep Method: E200.2

Prep Date/Time: 05/19/22 07:54 Prep Initial Wt./Vol.: 20 mL Prep Extract Vol: 50 mL



Results of RM10-Beaver Creek

Client Sample ID: RM10-Beaver Creek

Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998029 Lab Project ID: 1221998 Collection Date: 05/03/22 10:51 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Dissolved Metals by ICP/MS

						<u>Allowable</u>	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Arsenic	2.72 J	5.00	1.50	ug/L	1		05/19/22 15:02
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/19/22 15:02
Chromium	2.50 U	5.00	2.50	ug/L	1		05/19/22 15:02
Copper	1.50 U	3.00	1.00	ug/L	1		05/19/22 15:02
Lead	0.547 J	2.00	0.500	ug/L	1		05/19/22 15:02
Zinc	5.00 U	10.0	3.10	ug/L	1		05/19/22 15:02

Batch Information

Analytical Batch: MMS11558 Analytical Method: EP200.8

Analyst: DSD

Analytical Date/Time: 05/19/22 15:02 Container ID: 1221998029-A Prep Batch: MXX35113 Prep Method: E200.2

Prep Date/Time: 05/19/22 07:54 Prep Initial Wt./Vol.: 20 mL Prep Extract Vol: 50 mL



Results of RM10.1-Kenai River

Client Sample ID: RM10.1-Kenai River

Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998030 Lab Project ID: 1221998 Collection Date: 05/03/22 11:23 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Dissolved Metals by ICP/MS

						<u>Allowable</u>	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Arsenic	1.57 J	5.00	1.50	ug/L	1		05/19/22 15:05
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/19/22 15:05
Chromium	2.50 U	5.00	2.50	ug/L	1		05/19/22 15:05
Copper	1.50 U	3.00	1.00	ug/L	1		05/19/22 15:05
Lead	0.767 J	2.00	0.500	ug/L	1		05/19/22 15:05
Zinc	6.37 J	10.0	3.10	ug/L	1		05/19/22 15:05

Batch Information

Analytical Batch: MMS11558 Analytical Method: EP200.8

Analyst: DSD

Analytical Date/Time: 05/19/22 15:05 Container ID: 1221998030-A Prep Batch: MXX35113 Prep Method: E200.2

Prep Date/Time: 05/19/22 07:54 Prep Initial Wt./Vol.: 20 mL Prep Extract Vol: 50 mL



Results of RM12.5-Pillars

Client Sample ID: RM12.5-Pillars

Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998031 Lab Project ID: 1221998 Collection Date: 05/03/22 11:50 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Dissolved Metals by ICP/MS

						<u>Allowable</u>	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Arsenic	2.00 J	5.00	1.50	ug/L	1		05/19/22 15:07
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/19/22 15:07
Chromium	2.50 U	5.00	2.50	ug/L	1		05/19/22 15:07
Copper	1.50 U	3.00	1.00	ug/L	1		05/19/22 15:07
Lead	3.09	2.00	0.500	ug/L	1		05/19/22 15:07
Zinc	4.12 J	10.0	3.10	ug/L	1		05/19/22 15:07

Batch Information

Analytical Batch: MMS11558 Analytical Method: EP200.8

Analyst: DSD

Analytical Date/Time: 05/19/22 15:07 Container ID: 1221998031-A Prep Batch: MXX35113 Prep Method: E200.2

Prep Date/Time: 05/19/22 07:54 Prep Initial Wt./Vol.: 20 mL Prep Extract Vol: 50 mL



Results of RM18-Poacher's Cove

Client Sample ID: RM18-Poacher's Cove

Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998032 Lab Project ID: 1221998 Collection Date: 05/03/22 12:24 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Dissolved Metals by ICP/MS

						<u>Allowable</u>	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Arsenic	1.75 J	5.00	1.50	ug/L	1		05/19/22 15:10
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/19/22 15:10
Chromium	2.50 U	5.00	2.50	ug/L	1		05/19/22 15:10
Copper	1.50 U	3.00	1.00	ug/L	1		05/19/22 15:10
Lead	1.00 U	2.00	0.500	ug/L	1		05/19/22 15:10
Zinc	12.2	10.0	3.10	ug/L	1		05/19/22 15:10

Batch Information

Analytical Batch: MMS11558 Analytical Method: EP200.8

Analyst: DSD

Analytical Date/Time: 05/19/22 15:10 Container ID: 1221998032-A Prep Batch: MXX35113 Prep Method: E200.2

Prep Date/Time: 05/19/22 07:54 Prep Initial Wt./Vol.: 20 mL Prep Extract Vol: 50 mL



Results of RM19-Slikok Creek

Client Sample ID: RM19-Slikok Creek

Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998033 Lab Project ID: 1221998

Collection Date: 05/03/22 11:20 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Dissolved Metals by ICP/MS

						<u>Allowable</u>	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Arsenic	2.07 J	5.00	1.50	ug/L	1		05/19/22 15:46
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/19/22 15:46
Chromium	2.50 U	5.00	2.50	ug/L	1		05/19/22 15:46
Copper	1.07 J	3.00	1.00	ug/L	1		05/19/22 15:46
Lead	1.04 J	2.00	0.500	ug/L	1		05/19/22 15:46
Zinc	13.6	10.0	3.10	ug/L	1		05/19/22 15:46

Batch Information

Analytical Batch: MMS11558 Analytical Method: EP200.8

Analyst: DSD

Analytical Date/Time: 05/19/22 15:46 Container ID: 1221998033-A

Prep Batch: MXX35114 Prep Method: E200.2

Prep Date/Time: 05/19/22 09:07 Prep Initial Wt./Vol.: 20 mL Prep Extract Vol: 50 mL



Results of RM21-Soldotna Bridge

Client Sample ID: RM21-Soldotna Bridge

Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998034 Lab Project ID: 1221998 Collection Date: 05/03/22 10:45 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Dissolved Metals by ICP/MS

						<u>Allowable</u>	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Arsenic	2.00 J	5.00	1.50	ug/L	1		05/19/22 15:48
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/19/22 15:48
Chromium	2.50 U	5.00	2.50	ug/L	1		05/19/22 15:48
Copper	1.50 U	3.00	1.00	ug/L	1		05/19/22 15:48
Lead	1.00 U	2.00	0.500	ug/L	1		05/19/22 15:48
Zinc	5.00 U	10.0	3.10	ug/L	1		05/19/22 15:48

Batch Information

Analytical Batch: MMS11558 Analytical Method: EP200.8

Analyst: DSD

Analytical Date/Time: 05/19/22 15:48 Container ID: 1221998034-A Prep Batch: MXX35114 Prep Method: E200.2

Prep Date/Time: 05/19/22 09:07 Prep Initial Wt./Vol.: 20 mL Prep Extract Vol: 50 mL



Results of RM22-Soldotna Creek

Client Sample ID: RM22-Soldotna Creek

Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998035 Lab Project ID: 1221998 Collection Date: 05/03/22 10:03 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Dissolved Metals by ICP/MS

						<u>Allowable</u>	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Arsenic	3.91 J	5.00	1.50	ug/L	1		05/19/22 15:51
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/19/22 15:51
Chromium	2.50 U	5.00	2.50	ug/L	1		05/19/22 15:51
Copper	1.50 U	3.00	1.00	ug/L	1		05/19/22 15:51
Lead	1.00 U	2.00	0.500	ug/L	1		05/19/22 15:51
Zinc	3.36 J	10.0	3.10	ug/L	1		05/19/22 15:51

Batch Information

Analytical Batch: MMS11558 Analytical Method: EP200.8

Analyst: DSD

Analytical Date/Time: 05/19/22 15:51 Container ID: 1221998035-A Prep Batch: MXX35114 Prep Method: E200.2

Prep Date/Time: 05/19/22 09:07 Prep Initial Wt./Vol.: 20 mL Prep Extract Vol: 50 mL



Results of RM23-Swiftwater Park

Client Sample ID: RM23-Swiftwater Park

Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998036 Lab Project ID: 1221998 Collection Date: 05/03/22 12:08 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Dissolved Metals by ICP/MS

						<u>Allowable</u>	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Arsenic	2.03 J	5.00	1.50	ug/L	1		05/19/22 15:59
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/19/22 15:59
Chromium	2.50 U	5.00	2.50	ug/L	1		05/19/22 15:59
Copper	1.50 U	3.00	1.00	ug/L	1		05/19/22 15:59
Lead	1.00 U	2.00	0.500	ug/L	1		05/19/22 15:59
Zinc	5.00 U	10.0	3.10	ug/L	1		05/19/22 15:59

Batch Information

Analytical Batch: MMS11558 Analytical Method: EP200.8

Analyst: DSD

Analytical Date/Time: 05/19/22 15:59 Container ID: 1221998036-A Prep Batch: MXX35114 Prep Method: E200.2

Prep Date/Time: 05/19/22 09:07 Prep Initial Wt./Vol.: 20 mL Prep Extract Vol: 50 mL



Results of RM30-Funny River

Client Sample ID: RM30-Funny River

Client Project ID: Kenai River Baseline Water Qua

Lab Sample ID: 1221998037 Lab Project ID: 1221998 Collection Date: 05/03/22 08:33 Received Date: 05/03/22 16:57 Matrix: Water (Surface, Eff., Ground)

Solids (%): Location:

Results by Dissolved Metals by ICP/MS

						<u>Allowable</u>	
<u>Parameter</u>	Result Qual	LOQ/CL	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Limits</u>	Date Analyzed
Arsenic	1.87 J	5.00	1.50	ug/L	1		05/19/22 16:02
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/19/22 16:02
Chromium	2.50 U	5.00	2.50	ug/L	1		05/19/22 16:02
Copper	1.50 U	3.00	1.00	ug/L	1		05/19/22 16:02
Lead	1.00 U	2.00	0.500	ug/L	1		05/19/22 16:02
Zinc	5.00 U	10.0	3.10	ug/L	1		05/19/22 16:02

Batch Information

Analytical Batch: MMS11558 Analytical Method: EP200.8

Analyst: DSD

Analytical Date/Time: 05/19/22 16:02 Container ID: 1221998037-A Prep Batch: MXX35114 Prep Method: E200.2

Prep Date/Time: 05/19/22 09:07 Prep Initial Wt./Vol.: 20 mL Prep Extract Vol: 50 mL



Method Blank

Blank ID: MB for HBN 1836324 [MXX/35113]

Blank Lab ID: 1664371

QC for Samples:

 $1221998025,\,1221998026,\,1221998027,\,1221998028,\,1221998029,\,1221998030,\,1221998031,\,1221998032$

Results by EP200.8

<u>Parameter</u>	<u>Results</u>	LOQ/CL	<u>DL</u>	<u>Units</u>
Arsenic	2.50U	5.00	1.50	ug/L
Cadmium	0.250U	0.500	0.150	ug/L
Chromium	2.50U	5.00	2.50	ug/L
Copper	1.50U	3.00	1.00	ug/L
Lead	1.00U	2.00	0.500	ug/L
Zinc	5.00U	10.0	3.10	ug/L

Batch Information

Analytical Batch: MMS11558 Analytical Method: EP200.8 Instrument: P7 Agilent 7800

Analyst: DSD

Analytical Date/Time: 5/19/2022 1:51:36PM

Prep Batch: MXX35113 Prep Method: E200.2

Prep Date/Time: 5/19/2022 7:54:41AM

Matrix: Water (Surface, Eff., Ground)

Prep Initial Wt./Vol.: 20 mL Prep Extract Vol: 50 mL

Print Date: 05/23/2022 8:21:58AM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1221998 [MXX35113]

Blank Spike Lab ID: 1664372 Date Analyzed: 05/19/2022 13:54

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1221998025, 1221998026, 1221998027, 1221998028, 1221998029, 1221998030, 1221998031,

1221998032

Results by EP200.8

Blank Spike (ug/L)							
<u>Parameter</u>	Spike	Result	Rec (%)	<u>CL</u>			
Arsenic	1000	1010	101	(85-115)			
Cadmium	100	101	101	(85-115)			
Chromium	400	398	100	(85-115)			
Copper	1000	1040	104	(85-115)			
Lead	1000	1000	100	(85-115)			
Zinc	1000	1020	102	(85-115)			

Batch Information

Analytical Batch: MMS11558
Analytical Method: EP200.8

Instrument: P7 Agilent 7800

Analyst: **DSD**

Prep Batch: MXX35113
Prep Method: E200.2

Prep Date/Time: 05/19/2022 07:54

Spike Init Wt./Vol.: 1000 ug/L Extract Vol: 50 mL

Dupe Init Wt./Vol.: Extract Vol:

Print Date: 05/23/2022 8:21:59AM



Matrix Spike Summary

 Original Sample ID: 1664370
 Analysis Date: 05/19/2022 14:13

 MS Sample ID: 1664375 MS
 Analysis Date: 05/19/2022 14:16

MSD Sample ID:

Analysis Date:

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1221998025, 1221998026, 1221998027, 1221998028, 1221998029, 1221998030, 1221998031,

1221998032

Results by EP200.8

		Ма	trix Spike (ug/L)	Spik	e Duplicate	e (ug/L)			
<u>Parameter</u>	<u>Sample</u>	Spike	Result	Rec (%)	<u>Spike</u>	Result	Rec (%)	CL	RPD (%)	RPD CL
Arsenic	2.50U	1000	1000	100				70-130		
Cadmium	0.250U	100	99.5	100				70-130		
Chromium	2.50U	400	401	100				70-130		
Copper	1.60J	1000	1030	103				70-130		
Lead	1.00U	1000	1020	102				70-130		
Zinc	12.5	1000	1010	100				70-130		

Batch Information

Analytical Batch: MMS11558 Analytical Method: EP200.8

Instrument: P7 Agilent 7800

Analyst: DSD

Analytical Date/Time: 5/19/2022 2:16:28PM

Prep Batch: MXX35113

Prep Method: DW Digest for Metals on ICP-MS

Prep Date/Time: 5/19/2022 7:54:41AM

Prep Initial Wt./Vol.: 20.00mL Prep Extract Vol: 50.00mL

Print Date: 05/23/2022 8:22:01AM



Method Blank

Blank ID: MB for HBN 1836326 [MXX/35114]

Blank Lab ID: 1664384

QC for Samples:

1221998033, 1221998034, 1221998035, 1221998036, 1221998037

Matrix: Water (Surface, Eff., Ground)

Results by EP200.8

<u>Parameter</u>	<u>Results</u>	LOQ/CL	<u>DL</u>	<u>Units</u>
Arsenic	2.50U	5.00	1.50	ug/L
Cadmium	0.250U	0.500	0.150	ug/L
Chromium	2.50U	5.00	2.50	ug/L
Copper	1.50U	3.00	1.00	ug/L
Lead	1.00U	2.00	0.500	ug/L
Zinc	5.00U	10.0	3.10	ug/L

Batch Information

Analytical Batch: MMS11558 Analytical Method: EP200.8

Instrument: P7 Agilent 7800

Analyst: DSD

Analytical Date/Time: 5/19/2022 3:27:25PM

Prep Batch: MXX35114 Prep Method: E200.2

Prep Date/Time: 5/19/2022 9:07:31AM

Prep Initial Wt./Vol.: 20 mL Prep Extract Vol: 50 mL

Print Date: 05/23/2022 8:22:02AM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1221998 [MXX35114]

Blank Spike Lab ID: 1664385 Date Analyzed: 05/19/2022 15:30

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1221998033, 1221998034, 1221998035, 1221998036, 1221998037

Results by EP200.8

	E	Blank Spike	e (ug/L)	
<u>Parameter</u>	Spike	Result	Rec (%)	<u>CL</u>
Arsenic	1000	992	99	(85-115)
Cadmium	100	98.5	99	(85-115)
Chromium	400	400	100	(85-115)
Copper	1000	1040	104	(85-115)
Lead	1000	1020	102	(85-115)
Zinc	1000	987	99	(85-115)

Batch Information

Analytical Batch: MMS11558
Analytical Method: EP200.8

Instrument: P7 Agilent 7800

Analyst: **DSD**

Prep Batch: MXX35114
Prep Method: E200.2

Prep Date/Time: 05/19/2022 09:07

Spike Init Wt./Vol.: 1000 ug/L Extract Vol: 50 mL

Dupe Init Wt./Vol.: Extract Vol:

Print Date: 05/23/2022 8:22:04AM



Matrix Spike Summary

 Original Sample ID: 1664376
 Analysis Date: 05/19/2022 15:35

 MS Sample ID: 1664387 MS
 Analysis Date: 05/19/2022 15:38

MSD Sample ID: Analysis Date:

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1221998033, 1221998034, 1221998035, 1221998036, 1221998037

Results by EP200.8

		Ма	trix Spike (ug/L)	Spik	e Duplicate	e (ug/L)			
<u>Parameter</u>	<u>Sample</u>	Spike	Result	Rec (%)	<u>Spike</u>	Result	Rec (%)	CL	RPD (%)	RPD CL
Arsenic	6.28	1000	999	99				70-130		
Cadmium	0.250U	100	97.8	98				70-130		
Chromium	2.50U	400	399	100				70-130		
Copper	1.50U	1000	1030	103				70-130		
Lead	0.502J	1000	997	100				70-130		
Zinc	9.87J	1000	991	98				70-130		

Batch Information

Analytical Batch: MMS11558 Analytical Method: EP200.8 Instrument: P7 Agilent 7800

Analyst: DSD

Analytical Date/Time: 5/19/2022 3:38:11PM

Prep Batch: MXX35114

Prep Method: DW Digest for Metals on ICP-MS Prep Date/Time: 5/19/2022 9:07:31AM

Prep Initial Wt./Vol.: 20.00mL Prep Extract Vol: 50.00mL

Print Date: 05/23/2022 8:22:06AM



Method Blank

Blank ID: MB for HBN 1836011 [WFI/2987]

Blank Lab ID: 1663387

QC for Samples: 1221998017

Matrix: Water (Surface, Eff., Ground)

Results by SM21 4500NO3-F

<u>Parameter</u>	Results	LOQ/CL	<u>DL</u>	<u>Units</u>
Nitrate-N	0.100U	0.200	0.0500	mg/L
Nitrite-N	0.100U	0.200	0.0500	mg/L
Total Nitrate/Nitrite-N	0.100U	0.200	0.0500	mg/L

Batch Information

Analytical Batch: WFI2987

Analytical Method: SM21 4500NO3-F Instrument: Astoria segmented flow

Analyst: DMM

Analytical Date/Time: 5/9/2022 2:21:43PM

Print Date: 05/23/2022 8:22:07AM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1221998 [WFI2987]

Blank Spike Lab ID: 1663388 Date Analyzed: 05/09/2022 14:19

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1221998017

Results by SM21 4500NO3-F

Blank Spike (mg/L)											
<u>Parameter</u>	<u>Spike</u>	Result	Rec (%)	CL							
Nitrate-N	2.5	2.44	98	(70-130)							
Nitrite-N	2.5	2.52	101	(90-110)							
Total Nitrate/Nitrite-N	5	4.96	99	(90-110)							

Batch Information

Analytical Batch: WFI2987

Analytical Method: **SM21 4500NO3-F** Instrument: **Astoria segmented flow**

Analyst: DMM

Print Date: 05/23/2022 8:22:10AM



Matrix Spike Summary

Original Sample ID: 1221920001 MS Sample ID: 1663385 MS MSD Sample ID: 1663386 MSD

QC for Samples:

Analysis Date: 05/09/2022 13:39 Analysis Date: 05/09/2022 13:41 Analysis Date: 05/09/2022 13:43

Matrix: Drinking Water

Results by SM21 4500NO3-F

Matrix Spike (mg/L) Spike Duplicate (mg/L)

<u>Parameter</u> <u>Sample</u> Spike Result Rec (%) Spike Result Rec (%) CL RPD (%) RPD CL Total Nitrate/Nitrite-N 0.657 5.00 5.66 100 5.00 5.74 102 90-110 1.40 (< 25)

Batch Information

Analytical Batch: WFI2987

Analytical Method: SM21 4500NO3-F Instrument: Astoria segmented flow

Analyst: DMM

Analytical Date/Time: 5/9/2022 1:41:29PM

Print Date: 05/23/2022 8:22:11AM



Matrix Spike Summary

Original Sample ID: 1221858007 MS Sample ID: 1663389 MS MSD Sample ID: 1663390 MSD

QC for Samples: 1221998017

Analysis Date: 05/09/2022 14:25 Analysis Date: 05/09/2022 14:26 Analysis Date: 05/09/2022 14:28

Matrix: Drinking Water

Results by SM21 4500NO3-F

Matrix Spike (mg/L) Spike Duplicate (mg/L)

<u>Parameter</u> <u>Sample</u> Spike Result Rec (%) Spike Result Rec (%) CL RPD (%) RPD CL Total Nitrate/Nitrite-N 0.200U 5.00 4.84 97 5.00 4.90 98 90-110 1.10 (< 25)

Batch Information

Analytical Batch: WFI2987

Analytical Method: SM21 4500NO3-F Instrument: Astoria segmented flow

Analyst: DMM

Analytical Date/Time: 5/9/2022 2:26:58PM

Print Date: 05/23/2022 8:22:11AM



Method Blank

Blank ID: MB for HBN 1836109 (WFI/2988)

Blank Lab ID: 1663732

QC for Samples:

1221998001, 1221998002, 1221998003, 1221998004, 1221998005, 1221998006, 1221998007, 1221998008, 1221998009, 1221998010, 1221998011, 1221998012, 1221998013, 1221998014, 1221998015, 1221998016, 1221998018, 1221998019,

Matrix: Water (Surface, Eff., Ground)

1221998020, 1221998021, 1221998022, 1221998023, 1221998024

Results by SM21 4500NO3-F

<u>Parameter</u>	<u>Results</u>	LOQ/CL	<u>DL</u>	<u>Units</u>
Nitrate-N	0.100U	0.200	0.0500	mg/L
Nitrite-N	0.100U	0.200	0.0500	mg/L
Total Nitrate/Nitrite-N	0.100U	0.200	0.0500	mg/L

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F Instrument: Astoria segmented flow

Analyst: EBH

Analytical Date/Time: 5/12/2022 12:29:06PM

Print Date: 05/23/2022 8:22:12AM



Method Blank

Blank ID: MB for HBN 1836109 (WFI/2988)

Blank Lab ID: 1663739

QC for Samples:

1221998001, 1221998002, 1221998003, 1221998004, 1221998005, 1221998006, 1221998007

Results by SM21 4500NO3-F

<u>Parameter</u>	Results	LOQ/CL	<u>DL</u>	<u>Units</u>
Nitrate-N	0.100U	0.200	0.0500	mg/L
Nitrite-N	0.100U	0.200	0.0500	mg/L
Total Nitrate/Nitrite-N	0.100U	0.200	0.0500	mg/L

Matrix: Water (Surface, Eff., Ground)

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F Instrument: Astoria segmented flow

Analyst: EBH

Analytical Date/Time: 5/12/2022 11:41:51AM

Print Date: 05/23/2022 8:22:12AM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1221998 [WFI2988]

Blank Spike Lab ID: 1663734 Date Analyzed: 05/12/2022 12:27

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1221998001, 1221998002, 1221998003, 1221998004, 1221998005, 1221998006, 1221998007,

1221998008, 1221998009, 1221998010, 1221998011, 1221998012, 1221998013, 1221998014, 1221998015, 1221998016, 1221998018, 1221998019, 1221998020, 1221998021, 1221998022,

Results by SM21 4500NO3-F

Blank Spike (mg/L)

<u>Parameter</u>	Spike	Result	Rec (%)	CL
Nitrate-N	2.5	2.63	105	(70-130)
Nitrite-N	2.5	2.50	100	(90-110)
Total Nitrate/Nitrite-N	5	5.13	103	(90-110)

Batch Information

Analytical Batch: WFI2988

Analytical Method: **SM21 4500NO3-F** Instrument: **Astoria segmented flow**

Analyst: EBH

Print Date: 05/23/2022 8:22:15AM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1221998 [WFI2988]

Blank Spike Lab ID: 1663741 Date Analyzed: 05/12/2022 11:40

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1221998001, 1221998002, 1221998003, 1221998004, 1221998005, 1221998006, 1221998007

Results by SM21 4500NO3-F

Blank Spike (mg/L)										
<u>Parameter</u>	Spike	Result	Rec (%)	<u>CL</u>						
Nitrate-N	2.5	2.46	98	(70-130)						
Nitrite-N	2.5	2.49	99	(90-110)						
Total Nitrate/Nitrite-N	5	4.95	99	(90-110)						

Batch Information

Analytical Batch: WFI2988

Analytical Method: **SM21 4500NO3-F** Instrument: **Astoria segmented flow**

Analyst: EBH

Print Date: 05/23/2022 8:22:15AM



Matrix Spike Summary

 Original Sample ID: 1663719
 Analysis Date: 05/12/2022 11:50

 MS Sample ID: 1663721 MS
 Analysis Date: 05/12/2022 11:52

 MSD Sample ID: 1663722 MSD
 Analysis Date: 05/12/2022 11:54

Matrix: Drinking Water

QC for Samples: 1221998001, 1221998002, 1221998003, 1221998004, 1221998005, 1221998006, 1221998007,

1221998008

Results by SM21 4500NO3-F

		Matrix Spike (mg/L)			Spike	e Duplicate	e (mg/L)			
<u>Parameter</u>	<u>Sample</u>	Spike	Result	Rec (%)	Spike	Result	Rec (%)	<u>CL</u>	RPD (%)	RPD CL
Nitrate-N	0.383	2.50	3.63	130	2.50	3.73	134 *	70-130	2.70	(< 25)
Nitrite-N	0.100U	2.50	2.3	92	2.50	2.45	98	90-110	6.10	(< 25)

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F Instrument: Astoria segmented flow

Analyst: EBH

Analytical Date/Time: 5/12/2022 11:52:21AM

Print Date: 05/23/2022 8:22:16AM



QC for Samples:

Matrix Spike Summary

 Original Sample ID: 1221998008
 Analysis Date: 05/12/2022 12:32

 MS Sample ID: 1663723 MS
 Analysis Date: 05/12/2022 12:34

 MSD Sample ID: 1663724 MSD
 Analysis Date: 05/12/2022 12:36

 Matrix: Water (Surface, Eff., Ground)

1221998001, 1221998002, 1221998003, 1221998004, 1221998005, 1221998006, 1221998007,

1221998008, 1221998009, 1221998010, 1221998011, 1221998012, 1221998013, 1221998014, 1221998015, 1221998016, 1221998018, 1221998019, 1221998020, 1221998021, 1221998022.

Results by SM21 4500NO3-F

Matrix Spike (mg/L) Spike Duplicate (mg/L)

RPD CL <u>Parameter</u> <u>Sample</u> Spike Result Rec (%) Spike Result Rec (%) RPD (%) CL Total Nitrate/Nitrite-N 1.38 5.00 6.82 109 5.00 6.98 112 90-110 2.20 (< 25)

Batch Information

Analytical Batch: WFI2988

Analytical Method: SM21 4500NO3-F Instrument: Astoria segmented flow

Analyst: EBH

Analytical Date/Time: 5/12/2022 12:34:00PM

Print Date: 05/23/2022 8:22:16AM



Method Blank

Blank ID: MB for HBN 1836127 [WXX/14200]

Blank Lab ID: 1663831

QC for Samples:

1221998001, 1221998002, 1221998003, 1221998004, 1221998006, 1221998007, 1221998008, 1221998009, 1221998010,

1221998011, 1221998012, 1221998013, 1221998014, 1221998015

Results by SM21 4500P-B,E

 Parameter
 Results
 LOQ/CL
 DL
 Units

 Total Phosphorus
 0.0200U
 0.0400
 0.0120
 mg/L

Batch Information

Analytical Batch: WDA5201 Analytical Method: SM21 4500P-B,E Instrument: Discrete Analyzer 2

Analyst: RJC

Analytical Date/Time: 5/11/2022 1:36:00PM

Prep Batch: WXX14200

Prep Method: SM21 4500P-B,E

Prep Date/Time: 5/11/2022 10:00:00AM

Matrix: Water (Surface, Eff., Ground)

Prep Initial Wt./Vol.: 25 mL Prep Extract Vol: 25 mL

Print Date: 05/23/2022 8:22:17AM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1221998 [WXX14200]

Blank Spike Lab ID: 1663832 Date Analyzed: 05/11/2022 13:37 Spike Duplicate ID: LCSD for HBN 1221998

[WXX14200]

Spike Duplicate Lab ID: 1663833 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1221998001, 1221998002, 1221998003, 1221998004, 1221998006, 1221998007, 1221998008,

 $1221998009,\ 1221998010,\ 1221998011,\ 1221998012,\ 1221998013,\ 1221998014,\ 1221998015$

Results by SM21 4500P-B,E

Blank Spike (mg/L) Spike Duplicate (mg/L)

<u>Parameter</u> Spike Rec (%) Spike Rec (%) CL RPD (%) RPD CL Result Result **Total Phosphorus** 0.2 0.228 114 0.2 0.201 101 (75-125)12.50 (< 25)

Batch Information

Analytical Batch: WDA5201 Analytical Method: SM21 4500P-B,E Instrument: Discrete Analyzer 2

Analyst: RJC

Prep Batch: WXX14200
Prep Method: SM21 4500P-B,E
Prep Date/Time: 05/11/2022 10:00

Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

Print Date: 05/23/2022 8:22:20AM



Matrix Spike Summary

 Original Sample ID: 1664033
 Analysis Date: 05/11/2022 13:45

 MS Sample ID: 1663834 MS
 Analysis Date: 05/11/2022 13:48

 MSD Sample ID: 1663835 MSD
 Analysis Date: 05/11/2022 13:49

 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1221998001, 1221998002, 1221998003, 1221998004, 1221998006, 1221998007, 1221998008,

1221998009, 1221998010, 1221998011, 1221998012, 1221998013, 1221998014, 1221998015

Results by SM21 4500P-B,E

Matrix Spike (mg/L) Spike Duplicate (mg/L)

Result Rec (%) RPD CL <u>Parameter</u> <u>Sample</u> Spike Result RPD (%) Rec (%) Spike CL **Total Phosphorus** 0.0617 0.200 .0678 0.200 0.0644 75-125 5.10 (< 25)

Batch Information

Analytical Batch: WDA5201 Analytical Method: SM21 4500P-B,E

Instrument: Discrete Analyzer 2

Analyst: RJC

Analytical Date/Time: 5/11/2022 1:48:00PM

Prep Batch: WXX14200

Prep Method: Total Phosphorus (W) Ext. Prep Date/Time: 5/11/2022 10:00:00AM

Prep Initial Wt./Vol.: 25.00mL Prep Extract Vol: 25.00mL

Print Date: 05/23/2022 8:22:21AM



Method Blank

Blank ID: MB for HBN 1836316 [WXX/14205]

Blank Lab ID: 1664342

QC for Samples:

1221998005, 1221998016, 1221998017, 1221998018, 1221998019, 1221998020, 1221998021, 1221998022, 1221998023,

1221998024

Results by SM21 4500P-B,E

 Parameter
 Results
 LOQ/CL
 DL
 Units

 Total Phosphorus
 0.0200U
 0.0400
 0.0120
 mg/L

Batch Information

Analytical Batch: WDA5203 Analytical Method: SM21 4500P-B,E Instrument: Discrete Analyzer 2

Analyst: RJC

Analytical Date/Time: 5/17/2022 12:50:11PM

Prep Batch: WXX14205

Prep Method: SM21 4500P-B,E

Prep Date/Time: 5/17/2022 10:30:00AM

Matrix: Water (Surface, Eff., Ground)

Prep Initial Wt./Vol.: 25 mL Prep Extract Vol: 25 mL

Print Date: 05/23/2022 8:22:22AM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1221998 [WXX14205]

Blank Spike Lab ID: 1664343 Date Analyzed: 05/17/2022 12:51 Spike Duplicate ID: LCSD for HBN 1221998

[WXX14205]

Spike Duplicate Lab ID: 1664344 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1221998005, 1221998016, 1221998017, 1221998018, 1221998019, 1221998020, 1221998021,

1221998022, 1221998023, 1221998024

Results by SM21 4500P-B,E

Blank Spike (mg/L) Spike Duplicate (mg/L)

<u>Parameter</u> Spike Rec (%) Spike Rec (%) CL RPD (%) RPD CL Result Result **Total Phosphorus** 0.193 0.2 0.203 101 0.2 97 (75-125)4.80 (< 25)

Batch Information

Analytical Batch: WDA5203 Analytical Method: SM21 4500P-B,E Instrument: Discrete Analyzer 2

Analyst: RJC

Prep Batch: WXX14205
Prep Method: SM21 4500P-B,E
Prep Date/Time: 05/17/2022 10:30

Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

Print Date: 05/23/2022 8:22:25AM



Matrix Spike Summary

 Original Sample ID: 1221998021
 Analysis Date: 05/17/2022 12:58

 MS Sample ID: 1664345 MS
 Analysis Date: 05/17/2022 13:01

 MSD Sample ID: 1664346 MSD
 Analysis Date: 05/17/2022 13:02

 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1221998005, 1221998016, 1221998017, 1221998018, 1221998019, 1221998020, 1221998021,

1221998022, 1221998023, 1221998024

Results by SM21 4500P-B,E

Matrix Spike (mg/L) Spike Duplicate (mg/L)

Result <u>Parameter</u> <u>Sample</u> Spike Result Rec (%) Spike Rec (%) RPD (%) RPD CL CL **Total Phosphorus** 0.0200U 0.200 .2 100 0.200 0.196 98 75-125 1.80 (< 25)

Batch Information

Analytical Batch: WDA5203 Analytical Method: SM21 4500P-B,E Instrument: Discrete Analyzer 2

Analyst: RJC

Analytical Date/Time: 5/17/2022 1:01:00PM

Prep Batch: WXX14205

Prep Method: Total Phosphorus (W) Ext. Prep Date/Time: 5/17/2022 10:30:00AM

Prep Initial Wt./Vol.: 25.00mL Prep Extract Vol: 25.00mL

Print Date: 05/23/2022 8:22:26AM



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1221998



w.us.sgs.com Instructions: Sections 1 - o must be mileu out. CLIENT: Kenai Watershed Forum Omissions may delay the onset of analysis. PHONE #: CONTACT: **Benjamin Meyer** Section 3 907-232-0280 Preservative PROJECT/ **PROJECT** # Kenai River Baseline PWSID/ NAME: Water Quality Monitoring PERMIT#: \mathbf{C} E-MAIL: 0 Comp **REPORTS TO:** ben@kenaiwatershed.org Analysis* N NOTE: P# 383466 XI Benjamin Meyer Profile #: T Grab Dissolved Metals (200.8) *The following analyses A QUOTE #: MI INVOICE TO: require specific method Total Metals (200.7) I and/or compound list: BTEX, (Multi-P.O. #: Kenai Watershed Forum N incre-Metals, PFAS MATRIX/ E mental) RESERVED DATE TIME R SAMPLE IDENTIFICATION **MATRIX** for lab use HH:MM mm/dd/yy S REMARKS/LOC ID CODE RM 0 - No Name Creek 5/3/2022 10:00 3 water X X X RM 1.5 - Kenai City Dock - DUP 9:15 5/3/2022 3 water х х х RM 1.5 - Kenai City Dock 5/3/2022 3 9:10 water Х Х X RM 6.5 - Cunningham Park 9:39 5/3/2022 water 3 Х X X RM 10 - Beaver Creek 5/3/2022 3 water X X х RM 10.1 - Kenai River 5/3/2022 water 3 х X Х RM 12.5 - Pillars 5/3/2022 3 water Х X Х RM 18 - Poacher's Cove 5/3/2022 3 water х Х Х 11:20 RM 19 - Slikok Creek 5/3/2022 3 water Х Х X M 21 - Soldotna Bridge 10:45 5/3/2022 water 3 х х х DOD Project? Yes No Section 4 Data Deliverable Requirements: Relinquished By: (1) Date Time Received By: 5/3/2022 Please include Electronic Data Cooler ID: Delivery files. Relinquished By: (2) Date Time Received By: Requested Turnaround Time and/or Special Instructions: Relinquished By: (3) Date Time Received By: Temp Blank °C: Chain of Custody Seal: (Circle) Relinquished By: (4) Received For Laboratory By: INTACT BROKEN ABSENT or Ambient [] Delivery Method: Hand Delivery[] Commercial Delivery 1)



SGS North America Inc. CHAIN OF CUSTODY RECORD

1221998



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1	CONTACT: PHO Benjamin Meyer	ONE #: 907-2	32-0280		Sec	tion 3					Pre	eservat	ive			Page _2_ of
Section	PROJECT Kenai River Baseline PRO NAME: Water Quality Monitoring PER	JECT/ ID/ MIT#:			# C		47.5 ⁵	Od HTMC	5 Inc	,/	$\overline{/}$	$\overline{/}$		$\overline{/}$	//	
נט	REPORTS TO: E-M	AIL: ben@	kenaiwater	shed.org	O N	Comp					Anal	ysis*				
	Benjamin Meyer Pro	file #:			T	Grab			S							NOTE: *The following analyses
	INVOICE TO: QUO	OTE #:			A I	МІ	SM21	"	/leta							require specific method
	Kenai Watershed Forum P.O	.#:			N	(Multi- incre-	'NO2(\$	etals	ed N							and/or compound list: BTEX Metals, PFAS
	RESERVED SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	E R S	mental)	Total NO3/NO2(SM21 4500NO3-F), Total P(SM4500)	Total Metals (200.7)	Dissolved Metals (200.8)							REMARKS/LOC ID
	RM 22 - Soldotna Creek	5/3/2022	10:03	water	3		х	X	х							
	RM 23 - Swiftwater Park	5/3/2022	12:08	water	3		х	х	х							
tion 2	ARM 30 - Funny River	5/3/2022	8:33	water	3		х	х	х							
	RM 31 - Morgan's Landing	5/3/2022	11:00	water	2		х	х		·						
ectic	RM 36 - Moose River	5/3/2022	10:15	water	2		х	х								
Š	RM 36 - Moose River-DUP	5/3/2022	10:15	water	2		х	х								`
	MA 40 - Bing's Landing	5/3/2022	0:10	water	2		х	х								
	RM 43 - Upstream of Dow Island	5/3/2022	9:30	water	2		х	х								
	(9) #B RM 44 - Mouth of Killey River	5/3/2022	9:20	water	2		х	х								
	RM 50 - Skilak Lake Outflow	5/3/2022	7:30	water	2		х	х								
	Relinquished By: (1)	Date T	ime _	Received By					Sect	on 4	DOE) Proje	ct? Yes	(N)	Data Deli	verable Requirements:
	Benjama Mayer Relinquished By: (2)	5/3/2022	155PM	'												nclude Electronic Data
	Relinquished By: (2)	Date T	ime	Received By					Coole		ırnaroı	und Tin	no and/o	or Spec	ial Instruct	Delivery files.
S	· · · · · · · · · · · · · · · · · · ·								Neque	steu it	ii iiai Oi	una m	ile allu/c	Ji Spec	iai ilisti uct	ions.
Section	D. F	2														
Š	Relinquished By: (3)	Date T	ime	Received By								1 1 00				
										(_	emp B	lank °C	2		Chain of Custody Seal: (Circle)	
	Relinquished By: (4)	l til	ime	Received Fo	r Laboi i	atory By	•				or Am	bient []		MTACT	BROKEN ABSENT
		5/3/22	1057	1 Star	1111	MC	نس							elivervi	1 Comme	rical Delivery (2)
			, , ,	W VVV	V Y (1)	11 U	raidhidil	<u>addabbli</u>	<u> takkishii</u>		· · · · · · · · ·	<i></i>		y	1 Comme	



SGS North America Inc. CHAIN OF CUSTODY RECORD

1221998



www.us.sgs.com CLIENT: Instructions: Sections 1 - 5 must be filled out. Kenai Watershed Forum Omissions may delay the onset of analysis. CONTACT: PHONE #: Benjamin Meyer Section 3 907-232-0280 Preservative **PROJECT** PROJECT/ Kenai River Baseline PWSID/ NAME: Water Quality Monitoring PERMIT#: C E-MAIL: 0 **REPORTS TO:** Comp ben@kenajwatershed.org Analysis* N NOTE: Profile #: Benjamin Meyer T Grab Dissolved Metals (200.8) The following analyses A QUOTE #: require specific method INVOICE TO: ΜI **Total Metals** and/or compound list: BTEX, P.O. #: (Multi-Kenai Watershed Forum Metals, PFAS incre-WATRIX/ E RESERVED mental) DATE TIME R SAMPLE IDENTIFICATION MATRIX for lab use mm/dd/yy HH:MM S REMARKS/LOC ID CODE RM 70 - Jim's Landing 5/3/2022 2 water Х X RM 74 - Russian River 5/3/2022 2 water Х х 5/3/2022 RM 82 - Kenai Lake Bridge water 2 X X RM 79.5 - Juneau Creek 5/3/2022 water 2 х Section 4 DOD Project? Yes (No) Data Deliverable Requirements: Relinquished By: (1) Date Time Received By: 5/3/2022 1:55PM Please include Electronic Data Delivery files. Cooler ID: Relinquished By: (2) Date Time Received By: Requested Turnaround Time and/or Special Instructions: Relinquished By: (3) Date Time Received By: Temp Blank °C: Chain of Custody Seal: (Circle) Relinquished By; (4) Date Time Received For Laboratory By: INTACT BROKEN ABSENT or Ambient [] Delivery Method: Hand Delivery [-] Commerical Delivery [-]



Project Information Form

This form provides clarification and/or additional information for sample login, and should be scanned with the receiving paperwork.

Client Name: Kenai Watershed Forum

Project: Kenai River Baseline Water Quality Monitoring

Date: 5/3/2022

Reason for Analytical request clarification (per quote

Clarification: 383466)

Notes: 4500 Total Nitrate+Nitrite

4500 Total Phosphorus

200.7 Total Metals (Ca, Mg, Fe)

<REF LAB: ALS Kelso, WA>

200.8 Dissolved Metals (As, Cd, Cr, Cu, Pb, Zn)

AIRBILL 9820342

I hereby declare that the goods contained herein do not contain dangerous goods.

Signed..... Date **Grant Aviation**

6420 Kulis Dr. Anchorage, AK 99502

Phone: 1 (888) 359-4726 🌹 Freephone: 1 (888) 359-4726

Email: res@flygrant.com

Web: http://www.flygrant.com/ GRANT AVIATION

FREIGHT DETAILS

FROM/TO: Kenai -> Anchorage International

Receiver: Alert 907-272-0349

Sender: Benjamin Meyer

907-232-0280

Flight Departs: May 3 22 3:25 PM

Accepted: Tue, May 3 22 2:57:00 PM

Description & Comment	Quan.	Wgt.	Handle Fee	Hazmat Fee	Total	
Standard Freight	2	81	-	-	\$45.74	
	Total Tax					
			Total Pa	yments made:	\$0.00	
Received in good condition by:	•••••		To	otal Unpaid:	\$48.60	

CUSTOMER COPY

AIRBILL 9820342

I hereby declare that the goods contained herein do not contain dangerous goods.

Signed.....

Date

Grant Aviation

6420 Kulis Dr. Anchorage, AK 99502

Phone: 1 (888) 359-4726 Freephone: 1 (888) 359-4726

Email: res@flygrant.com

Web: http://www.flygrant.com/ GRANT AVIATION



FREIGHT DETAILS

FROM/TO: Kenai -> Anchorage International

Receiver: Alert 907-272-0349

Sender: Benjamin Meyer

907-232-0280

Flight Departs: May 3 22 3:25 PM

Accepted: Tue, May 3 22 2:57:00 PM

Description & Comment	Quan.	Wgt.	Handle Fee	Hazmat Fee	Total
Standard Freight	2	81	-	-	\$45.74
TAX: Federal Excise Tax					\$2.86
			Total Pa	yments made:	\$0.00
			To	otal Unpaid:	\$48.60

TERMS AND CONDITIONS

Consignemnt Note Text

and the series of the To		요하는 생생님, 말이 있습니다. 	
From			
Го			
Collect	Prepay	Adv	vance Charges
Job#	PO# /	15	25342
	2 /		
	37		
<u> </u>			

Shipped Signature



e-Sample Receipt Form

SGS Workorder #:

1221998

1221998

Review Criteria	Condition (Yes	, No, N/A Exceptions Noted below
Chain of Custody / Temperature Requirements		Note: Temperature and COC seal information is found on the chain of custody form
DOD only: Did all sample coolers have a corresponding		
If <0°C, were sample containers ice		
Note containers receiv		
Note containers receive	eu wiiii ice	
Identify any containers received at non-complicat to		
Identify any containers received at non-compliant te	emperature	
(Use form FS-0029 if more space	is needed)	
,	,	
Holding Time / Documentation / Sample Condition Req	quirement	Note: Refer to form F-083 "Sample Guide" for specific holding times and sample containers.
Were samples received within analytical holding	-	
Do sample labels match COC? Record discrepa		
·		
Note: If information on containers differs from COC, default information for login. If times differ <1hr, record details & login		
information for login. If times differ < fiff, record details & login	per coc.	
Were analytical requests	clear? Yes	
(i.e. method is specified for analyses with multiple option for me	ethod	
(Eg, BTEX 8021 vs 8260, Metals 6020 vs 200.8)		
Were proper containers (type/mass/volume/preservative)		
Note: Exemption for metals analysis by 200.8/6020 in wa	ater.	2mL HNO3 added to container 1B.
Volatile Analysis Requirements (VOC, GRO, LL-Hg	a. etc.)	
Were all soil VOAs received with a corresponding % solids cont		
Were Trip Blanks (e.g., VOAs, LL-Hg) in cooler with san		
Were all water VOA vials free of headspace (e.g., bubbles ≤ 6		
Were all soil VOAs field extracted with Methanol-		
Note to Client: Any "No", answer above indicates non-	compliance	e with standard procedures and may impact data quality.
·	•	applicable):

F102b_SRFpm_20210526 Page 75 of 137



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>
1221998001-A	H2SO4 to pH < 2	OK	1221998026-A	HNO3 to pH < 2	OK
1221998001-B	HNO3 to pH < 2	PA	1221998027-A	HNO3 to pH < 2	OK
1221998002-A	H2SO4 to pH < 2	OK	1221998028-A	HNO3 to pH < 2	OK
1221998002-B	HNO3 to pH < 2	OK	1221998029-A	HNO3 to pH < 2	OK
1221998003-A	H2SO4 to pH < 2	OK	1221998030-A	HNO3 to pH < 2	OK
1221998003 A	HNO3 to pH < 2	OK	1221998031-A	HNO3 to pH < 2	OK
1221998004-A	H2SO4 to pH < 2	OK	1221998031-A	HNO3 to pH < 2	OK
1221998004-B	HNO3 to pH < 2	OK	1221998033-A	HNO3 to pH < 2	OK
1221998005-A	H2SO4 to pH < 2	OK	1221998034-A	HNO3 to pH < 2	OK
1221998005 A	HNO3 to pH < 2	OK	1221998035-A	HNO3 to pH < 2	OK
1221998005 B	H2SO4 to pH < 2	OK	1221998036-A	HNO3 to pH < 2	OK
1221998006-B	HNO3 to pH < 2	OK	1221998037-A	HNO3 to pH < 2	OK
1221998000 B	H2SO4 to pH < 2	OK	1221770037 A		OK
1221998007-A	HNO3 to pH < 2	OK			
1221998007-B	H2SO4 to pH < 2	OK			
1221998008-A 1221998008-B	HNO3 to pH < 2	OK			
1221998008-B	H2SO4 to pH < 2	OK			
	HNO3 to pH < 2				
1221998009-B	H2SO4 to pH < 2	OK			
1221998010-A	HNO3 to pH < 2	OK			
1221998010-B	H2SO4 to pH < 2	OK			
1221998011-A	•	OK			
1221998011-B	HNO3 to pH < 2	OK			
1221998012-A	H2SO4 to pH < 2	OK			
1221998012-B	HNO3 to pH < 2	OK			
1221998013-A	H2SO4 to pH < 2	OK			
1221998013-B	HNO3 to pH < 2	OK			
1221998014-A	H2SO4 to pH < 2	OK			
1221998014-B	HNO3 to pH < 2	OK			
1221998015-A	H2SO4 to pH < 2	OK			
1221998015-B	HNO3 to pH < 2	OK			
1221998016-A	H2SO4 to pH < 2	OK			
1221998016-B	HNO3 to pH < 2	OK			
1221998017-A	H2SO4 to pH < 2	OK			
1221998017-B	HNO3 to pH < 2	OK			
1221998018-A	H2SO4 to pH < 2	OK			
1221998018-B	HNO3 to pH < 2	OK			
1221998019-A	H2SO4 to pH < 2	OK			
1221998019-B	HNO3 to pH < 2	OK			
1221998020-A	H2SO4 to pH < 2	OK			
1221998020-В	HNO3 to pH < 2	OK			
1221998021-A	H2SO4 to pH < 2	OK			
1221998021-B	HNO3 to pH < 2	OK			
1221998022-A	H2SO4 to $pH < 2$	OK			
1221998022-B	HNO3 to pH < 2	OK			
1221998023-A	H2SO4 to pH < 2	OK			
1221998023-B	HNO3 to pH < 2	OK			
1221998024-A	H2SO4 to pH < 2	OK			
1221998024-B	HNO3 to pH < 2	OK			
1221998025-A	HNO3 to pH < 2	OK			

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

<u>Condition</u>

<u>Container Id Preservative Container Id Preservative Container Id Cont</u>

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.
- $\ensuremath{\mathsf{BU}}$ 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.



Service Request No:K2204916

Julie Shumway SGS North America, Inc. 200 West Potter Drive Anchorage, AK 99518

Laboratory Results for: 1221998

Dear Julie,

Enclosed are the results of the sample(s) submitted to our laboratory May 06, 2022 For your reference, these analyses have been assigned our service request number **K2204916**.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please contact me if you have any questions. My extension is 3360. You may also contact me via email at Cody.Graves@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

for Cody Graves
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626

PHONE +1 360 577 7222 | FAX +1 360 636 1068

ALS Group USA, Corp.

dba ALS Environmental



Narrative Documents

ALS Environmental—Kelso Laboratory 1317 South 13th Avenue, Kelso, WA 98626 Phone (360) 577-7222 Fax (360) 425-9096 www.alsglobal.com



Client: SGS North America - AK (SGS Environmental) Service Request: K2204916

Project: 1221998 Date Received: 05/06/2022

Sample Matrix: Water

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples for the Tier II level requested by the client.

Sample Receipt:

Twenty four water samples were received for analysis at ALS Environmental on 05/06/2022. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: RM 0- No Name Creek	Lab ID: K2204916-001									
Analyte	Results	Flag	MDL	MRL	Units	Method				
Calcium	3.36		0.003	0.021	mg/L	200.7				
Iron	3.00		0.008	0.021	mg/L	200.7				
Magnesium	1.05		0.0004	0.0053	mg/L	200.7				
CLIENT ID: Rm1.5-Kenai City Dock-DUP		Lak	ID: K2204	916-002						
Analyte	Results	Flag	MDL	MRL	Units	Method				
Calcium	223		0.003	0.021	mg/L	200.7				
Iron	6.07		0.008	0.021	mg/L	200.7				
Magnesium	721		0.04	0.53	mg/L	200.7				
CLIENT ID: RM1.5-Kenai City Dock		Lak	ID: K2204	916-003						
Analyte	Results	Flag	MDL	MRL	Units	Method				
Calcium	242		0.003	0.021	mg/L	200.7				
Iron	4.24		0.008	0.021	mg/L	200.7				
Magnesium	726		0.04	0.53	mg/L	200.7				
CLIENT ID: RM6.5- Cunningham Park										
Analyte	Results	Flag	MDL	MRL	Units	Method				
Calcium	14.0		0.003	0.021	mg/L	200.7				
Iron	18.3		0.008	0.021	mg/L	200.7				
Magnesium	7.58		0.0004	0.0053	mg/L	200.7				
CLIENT ID: Rm10-Beaver Creek		Lak	ID: K2204	916-005						
Analyte	Results	Flag	MDL	MRL	Units	Method				
Calcium	6.18		0.003	0.021	mg/L	200.7				
Iron	2.33		0.008	0.021	mg/L	200.7				
Magnesium	1.66		0.0004	0.0053	mg/L	200.7				
CLIENT ID: RM10.1-Kenai River		Lak	ID: K2204	916-006						
Analyte	Results	Flag	MDL	MRL	Units	Method				
Calcium	10.9		0.003	0.021	mg/L	200.7				
Iron	0.531		0.008	0.021	mg/L	200.7				
Magnesium	1.73		0.0004	0.0053	mg/L	200.7				
CLIENT ID: Rm125-Pillars			ID: K2204	916-007						
Analyte	Results	Flag	MDL	MRL	Units	Method				
Calcium	10.9		0.003	0.021	mg/L	200.7				
Iron	0.455		0.008	0.021	mg/L	200.7				
Magnesium	1.70		0.0004	0.0053	mg/L	200.7				
CLIENT ID: RM18- Poacher's Cove		Lab	ID: K2204							
Analyte	Results	Flag	MDL	MRL	Units	Method				
Calcium	11.0		0.003	0.021	mg/L	200.7				
Iron	0.447		0.008	0.021	mg/L Page	e 81 of 137				



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: RM18- Poacher's Cove		Lat	D: K2204	1916-008								
Analyte	Results	Flag	MDL	MRL	Units	Method						
Magnesium	1.66		0.0004	0.0053	mg/L	200.7						
CLIENT ID: Rm19-Slikok Creek		Lak	D: K2204	1916-009								
Analyte	Results	Flag	MDL	MRL	Units	Method						
Calcium	5.91		0.003	0.021	mg/L	200.7						
Iron	0.641		0.008	0.021	mg/L	200.7						
Magnesium	1.69		0.0004	0.0053	mg/L	200.7						
CLIENT ID: RM21-Soldotna Bridge												
Analyte	Results	Flag	MDL	MRL	Units	Method						
Calcium	10.7		0.003	0.021	mg/L	200.7						
Iron	0.385		0.008	0.021	mg/L	200.7						
Magnesium	1.62		0.0004	0.0053	mg/L	200.7						
CLIENT ID: RM22-Soldotna Creek		Lat	D: K2204	1916-011								
Analyte	Results	Flag	MDL	MRL	Units	Method						
Calcium	9.45		0.003	0.021	mg/L	200.7						
Iron	0.507		0.008	0.021	mg/L	200.7						
Magnesium	2.80		0.0004	0.0053	mg/L	200.7						
CLIENT ID: RM23-Swiftwater Park	Lab ID: K2204916-012											
Analyte	Results	Flag	MDL	MRL	Units	Method						
Calcium	12.0		0.003	0.021	mg/L	200.7						
Iron	0.440		0.008	0.021	mg/L	200.7						
Magnesium	1.89		0.0004	0.0053	mg/L	200.7						
LIENT ID: RM30-Funny River		Lak	D: K2204	1916-013								
Analyte	Results	Flag	MDL	MRL	Units	Method						
Calcium	7.11		0.003	0.021	mg/L	200.7						
Iron	1.07		0.008	0.021	mg/L	200.7						
Magnesium	2.40		0.0004	0.0053	mg/L	200.7						
CLIENT ID: RM31- Morgan's Landing		Lak	D: K2204	1916-014								
Analyte	Results	Flag	MDL	MRL	Units	Method						
Calcium	12.2		0.003	0.021	mg/L	200.7						
Iron	0.473		0.008	0.021	mg/L	200.7						
Magnesium	1.70		0.0004	0.0053	mg/L	200.7						
CLIENT ID: RM36-Moose River		Lak	D: K2204	1916-015								
Analyte	Results	Flag	MDL	MRL	Units	Method						
Calcium	13.4		0.003	0.021	mg/L	200.7						
Iron	1.23		0.008	0.021	mg/L	200.7						
Magnesium	2.30		0.0004	0.0053	mg/L	200.7						



SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

CLIENT ID: RM36-Moose River-DUP	Lab ID: K2204916-016									
Analyte	Results	Flag	MDL	MRL	Units	Method				
Calcium	13.4		0.003	0.021	mg/L	200.7				
Iron	1.14		0.008	0.021	mg/L	200.7				
Magnesium	2.30		0.0004	0.0053	mg/L	200.7				
CLIENT ID: RM40-Bing's Landing		Lak	D: K2204	916-017						
Analyte	Results	Flag	MDL	MRL	Units	Method				
Calcium	11.3		0.003	0.021	mg/L	200.7				
Iron	0.168		0.008	0.021	mg/L	200.7				
Magnesium	1.12		0.0004	0.0053	mg/L	200.7				
LIENT ID: R43- Upstream of Dow Island			D: K2204	916-018						
Analyte	Results	Flag	MDL	MRL	Units	Method				
Calcium	11.1		0.003	0.021	mg/L	200.7				
Iron	0.162		0.008	0.021	mg/L	200.7				
Magnesium	1.09		0.0004	0.0053	mg/L	200.7				
CLIENT ID: R44-Mouth of Killey River	Lab ID: K2204916-019									
Analyte	Results	Flag	MDL	MRL	Units	Method				
Calcium	8.94		0.003	0.021	mg/L	200.7				
Iron	0.551		0.008	0.021	mg/L	200.7				
Magnesium	1.62		0.0004	0.0053	mg/L	200.7				
CLIENT ID: RM50-Skilak Lake Outflow		Lak	D: K2204	916-020						
Analyte	Results	Flag	MDL	MRL	Units	Method				
Calcium	11.5		0.003	0.021	mg/L	200.7				
Iron	0.114		0.008	0.021	mg/L	200.7				
Magnesium	0.973		0.0004	0.0053	mg/L	200.7				
CLIENT ID: RM70-Jim's Landing		Lak	D: K2204	916-021						
Analyte	Results	Flag	MDL	MRL	Units	Method				
Calcium	16.7		0.003	0.021	mg/L	200.7				
Iron	0.058		0.008	0.021	mg/L	200.7				
Magnesium	1.24		0.0004	0.0053	mg/L	200.7				
CLIENT ID: RM74- RussianRiver		Lak	ID: K2204	916-022						
Analyte	Results	Flag	MDL	MRL	Units	Method				
Calcium	19.7		0.003	0.021	mg/L	200.7				
Iron	0.062		0.008	0.021	mg/L	200.7				
Magnesium	1.23		0.0004	0.0053	mg/L	200.7				
CLIENT ID: RM82-Kenai Lake Bridge		Lak	ID: K2204							
Analyte	Results	Flag	MDL	MRL	Units	Method				
Calcium	14.6		0.003	0.021	mg/L	200.7				
Iron	0.041		0.008	0.021	mg/L Page	e 83 of 137				



200.7

SAMPLE DETECTION SUMMARY

This form includes only detections above the reporting levels. For a full listing of sample results, continue to the Sample Results section of this Report.

Lab ID: K2204916-023

0.0004

0.0053

mg/L

CLIENT ID: RM82-Kenai Lake Bridge

Magnesium

Analyte	Results	Flag	MDL	MRL	Units	Method						
Magnesium	1.15		0.0004	0.0053	mg/L	200.7						
CLIENT ID: RM79.5- Juneau Creek	Lab ID: K2204916-024											
Analyte	Results	Flag	MDL	MRL	Units	Method						
Calcium	16.9		0.003	0.021	mg/L	200.7						
Iron	0.107		0.008	0.021	mg/L	200.7						

1.33



Sample Receipt Information

ALS Environmental—Kelso Laboratory 1317 South 13th Avenue, Kelso, WA 98626 Phone (360) 577-7222 Fax (360) 425-9096 www.alsglobal.com **Project:** 1221998

Client:

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	<u>DATE</u>	<u>TIME</u>
K2204916-001	RM 0- No Name Creek	5/3/2022	1000
K2204916-002	Rm1.5-Kenai City Dock-DUP	5/3/2022	0915
K2204916-003	RM1.5-Kenai City Dock	5/3/2022	0910
K2204916-004	RM6.5- Cunningham Park	5/3/2022	0939
K2204916-005	Rm10-Beaver Creek	5/3/2022	1051
K2204916-006	RM10.1-Kenai River	5/3/2022	1123
K2204916-007	Rm125-Pillars	5/3/2022	1150
K2204916-008	RM18- Poacher's Cove	5/3/2022	1224
K2204916-009	Rm19-Slikok Creek	5/3/2022	1120
K2204916-010	RM21-Soldotna Bridge	5/3/2022	1045
K2204916-011	RM22-Soldotna Creek	5/3/2022	1003
K2204916-012	RM23-Swiftwater Park	5/3/2022	1208
K2204916-013	RM30-Funny River	5/3/2022	0833
K2204916-014	RM31- Morgan's Landing	5/3/2022	1100
K2204916-015	RM36-Moose River	5/3/2022	1015
K2204916-016	RM36-Moose River-DUP	5/3/2022	1015
K2204916-017	RM40-Bing's Landing	5/3/2022	1010
K2204916-018	R43- Upstream of Dow Island	5/3/2022	0930
K2204916-019	R44-Mouth of Killey River	5/3/2022	0920
K2204916-020	RM50-Skilak Lake Outflow	5/3/2022	0730
K2204916-021	RM70-Jim's Landing	5/3/2022	1032
K2204916-022	RM74- RussianRiver	5/3/2022	0945
K2204916-023	RM82-Kenai Lake Bridge	5/3/2022	0755
K2204916-024	RM79.5- Juneau Creek	5/3/2022	0850

SGS North America Inc. **CHAIN OF CUSTODY RECORD**



Locations Nationwide

Alaska

Florida Colorado

New Jersey

North Carolina

Texas

Louisiana

										10	2)	4916	Virginia www.us	Louisiana .sgs.com
CLIENT:	SGS North Ame	rica Inc Alas	ka Division		SG	S Refere	nce:			A	LS,	Kel	so, WA	4,3	Page 1 of 3
CONTACT:	Julie Shumway	PHONE NO:	(907) 56	2-2343	Add	tional	Com	nents	: All	soils	repo	rt out	in dry weigh	t unless	· V
PROJECT NAME:	1221998	PWSID#: NPDL#:			# C	Preserv- ative Used:	, Alabora	M _{O2}	YINO3	:					
REPORTS TO	: Julie Shumway	'	Julie.Shumwa RefLabTeam@		O N T	TYPE C = COMP	Ę		esium						
INVOICE TO: env.alask	SGS - Alaska a.accounting@sgs.com	QUOTE #: P.O. #:	1221		A 1 N	G = GRAB Mil = Multi	Total Calcium	Total Iron	Total Magnesium						
RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HHMM	MATRIX/ MATRIX CODE	E R S	Incre- mental Soils	200.7	200.7	200.7		MS	MSD	SGS lab #		Location ID
	RM 0- No Name Creek	05/03/2022	10:00:00	Water	1		X	X	X				1221998001		
	Rm1.5-Kenai City Dock-DUP		09:15:00	Water	1	_	X	X	X				1221998002		
	RM1.5-Kenai City Dock	05/03/2022	09:10:00	Water	1		<u>X</u>	X	X				1221998003		
	RM6.5-Cunningham Park	05/03/2022	09:39:00	Water	1		<u>X</u>	X	X				1221998004		
	Rm10-Beaver Creek	05/03/2022	10:51:00	Water	1	4	<u>X</u>	X	X				1221998005		
	RM10.1-Kenai River	05/03/2022	11:23:00	Water	1	<u> </u>	<u>X</u>	X	X				1221998006	ļ	
	RM125-Pillars	05/03/2022	11:50:00	Water	1		 X	X	X				1221998007		
	RM18-Poacher's Cove	05/03/2022	12:24:00	Water	1	-	X	X	X				1221998008		
	Rm19-Slikok Creek	05/03/2022	11:20:00	Water	1	 	X	X	X				1221998009		
	RM21-Soldotna Bridge	05/03/2022	10:45:00	Water	1		<u> </u>	X	X		<u></u>				
Relinquished	By: (1)	Date 5/5/22	Time (1884)	Received	Ву:				1	Projec rt to Di port as i	L (J FI	ags)?	Manager		rable Requirements:
			Received	ву <u>г</u>	and the second s				Cooler ID: Requested Turnaround Time a					cial Instructions:	
Relinquished	Ву: (3)	Date	Time	Received	Ву:				Temp	Blank	°C:			Chain of (Custody Seal: (Circle)
Relinquished	By: (4)	Date	Time	Received	For La	borator	у Ву:	\$4.j			or A	mbient	[]	INTACT	BROKEN ABSENT

[X 200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301

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

[5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557

SGS North America Inc. CHAIN OF CUSTODY RECORD



Locations Nationwide

Alaska

New Jersey

Florida Colorado

Texas Virginia North Carolina Louisiana

2704916

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CLIENT:	SGS North Ame	rica Inc Alas	ka Division		SGS Reference:								so, WA		Page 2 of 3
CONTACT:	Julie Shumway	PHONE NO:	(907) 56	2-2343	Addi	tional	Comr	nents	: All	soils	геро	rt out	t in dry weigh	t unless	<u> </u>
PROJECT NAME:	1221998	PWSID#: NPDL#:			# C	Preserv- ative Used:	YKIOS	HHO3	YIMO3						
REPORTS TO:	Julie Shumway		Julie.Shumwa RefLabTeam@		O N T	TYPE C = COMP	E S		esium						
INVOICE TO: env.alaska	SGS - Alaska a.accounting@sgs.com	QUOTE #: P.O. #:	1221		A I N	G = GRAB MI = Multi	Total Calcium	Total iron	200.7 Total Magnesium						
RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HHMM	MATRIX/ MATRIX CODE	R S	Incre- mental Solls	200.7	200.7	 		MS	MSD	SGS lab #		Location ID
	RM22-Soldotna Creek	05/03/2022	10:03:00	Water	1		X	Х	X	<u> </u>			1221998011		
	RM23-Swiftwater Park	05/03/2022	12:08:00	Water	1	ļ	X	Х	X			ļ	1221998012		
	RM30-Funny River	05/03/2022	08:33:00	Water	1		X	X	X				1221998013		
	RM31-Morgan's Landing	05/03/2022	11:00:00	Water	1		X	X	X		ļ	<u> </u>	1221998014		
	RM36-Moose River	05/03/2022	10:15:00	Water	1	4	X	X	X		ļ	<u> </u>	1221998015		
	RM36-Moose River-DUP	05/03/2022	10:15:00	Water	1		X	X	Х		<u> </u>		1221998016		
	RM40-Bing's Landing	05/03/2022	10:10:00	Water	1		X	X	X				1221998017		
	R43-Upstream of Dow Island		09:30:00	Water	1		X	X	X	<u> </u>	ļ		1221998018		
	R44-Mouth of Killey River	05/03/2022	09:20:00	Water	1		X	X	X	<u> </u>	ļ	-	1221998019		······································
	RM50-Skilak Lake Outflow	05/03/2022	07:30:00	Water	1		<u> </u>	X	<u> </u>			<u> </u>	1221998020		
Relinquished	By: (1)	Date 5/5/22	Time	Received	d By:				DOD Project? Report to DL (J Flags)? If J- Report as DL/LOD/LOQ. YES YES					1	erable Requirements: el 2 + SGS EDD
				Received	Ву:	CHARLES CONTROL OF THE PARTY OF			Cooler ID: Requested Turnaround Time and-or Special Instru						cial Instructions:
Relinquished By: (3) Date Time Received			Received	I By:					Temp Blank °C:					Chain of Custody Seal: (Circle)	
Relinquished By: (4) Date T			Time	Received	For La	borator	у Ву:				or A	mbien	INTACT BROKEN ABSENT		

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SGS North America Inc. CHAIN OF CUSTODY RECORD



Locations Nationwide

Alaska

Florida

New Jersey

Colorado

North Carolina

Texas

Louisiana

Kaacyallo Virginia

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CLIENT:	SGS North Ame	erica Inc Alas	ska Division			S Refere							so, 🛚			Page 3 of 3
CONTACT:	Julie Shumway	PHONE NO:	(907) 56	2-2343	Addi	tional	Comr	nents	s: All	soils	repo	rt out	in dr	y weigh	t unless	Ů
PROJECT NAME:	1221998	PWSID#: NPDL#:			# C	Preserv- ative Used:	HINO3	Moz	HHO3							
REPORTS TO:	Julie Shumway	E-MAIL: Env.Alaska.	Julie.Shumwa RefLabTeam@		O N T	TYPE C = COMP			1						A Proposition of the Control of the	
INVOICE TO: env.alask	SGS - Alaska a.accounting@sgs.com	QUOTE #: P.O. #:	1221		A I N	G = GRAB Mi = Multi	Total Calcium	Total iron	Total Magnesium						**************************************	
RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HHMM	MATRIX/ MATRIX CODE	R	incre- mental Soils	200.7	200.7	200.7		MS	MSD	SGS	S lab #		Location ID
	RM70-Jim's Landing	05/03/2022	10:32:00	Water	1		X	X	X		,			998021		
	RM74-Russian River	05/03/2022	09:45:00	Water	1		X	X	X			ļ	ļ	998022		
	RM82-Kenai Lake Bridge	05/03/2022	07:55:00	Water	1	ļ	 X	X	X	ļ		<u> </u>		998023		
	RM79.5-Juneau Creek	05/03/2022	08:50:00	Water	1	 	<u>X</u>	X	X				1221	998024		
Relinquished l	By: (1)	Date	Time	Received	By:				DOD	Projec	t?	\	YES	No	Data Delive	rable Requirements:
	hwnwell	5/5/22	0880	,					Repo	rt to D port as	L (J F	lags)? //LOQ.	YES		Lev	el 2 + SGS EDD
Relinquished	Ву: (2) /	5 4 22	Time	Received	Ву:				Coole Re		ted T	urnar	ound	Time ar	nd-or Spe	cial Instructions:
Relinquished l	Relinquished By: (3) Date Time Received			Received	By:			. –	Temp	Blank	°C:			····	Chain of (Custody Seal: (Circle)
Relinquished	celinquished By: (4) Date Time Ro			Received	d For Laboratory By:					or Ambient [] INTACT				BROKEN ABSENT		

[X 200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301 [5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557

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Page ____

Client	202		Cooler Receipt a	ind Prese			30 MC	20112		V
Received: 5	Teles	Opened:_\frac{\display}{2}	5/10/22	ву:		ce Request K Unloaded:	$\frac{1}{5} \frac{1}{4} \frac{1}{2}$	22By:	A	Contract of the State of the St
 Samples we Samples we Were <u>custod</u> 	ere received via? ere received in: (cir ly seals on coolers? ere custody seals in	USPS Co	Fed Ex Unoller Box	PS L Envelope yes, how man	OHL : ny and wh	PDX Other	Courie			
Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA		of temp e with "X"	PM Notified If out of ter		Tracking Num	ber NA 250	Filed
If no, take the samples of the sample of the samples of the sample	s received within the ney received on ice usue samples were to	representative ne method spec and same day received:	sample bottle contained cified temperature range as collected? If not, not rozen Partially Than	within the cos? ate the cooler wed Thaw	ooler; nota # below a	and notify the F	ın "Samp		У N N	
7. Were custod8. Were sampl9. Were all sam10. Did all sam	ple labels and tags	filled out (ink, I condition (un te (ie, analysis, agree with cus	broken) , preservation, etc.)?		Ory Ice	Sleeves		NA (Y) NA (Y) NA (Y) NA (Y) NA (Y)	N N N N	
13. Were VOA 14. Was C12/R	vials received with es negative?	hout headspace	(N SOP) received at the solution of the soluti	elow.	i		pelow	NA Y NA Y	N N	
	Il sterile microbiolo	i de la de la	Sample I	mark? (1) D on COC	<u>'</u>	Y N		Under filled	Overfille	<u> </u>
						ALEX TO THE TAX TO THE	and the state of t			
	Sample ID			lead- space Broke	рН		olume idded	Reagent Lot Number	Initials	Time
Notes Discr	epancies, Resol	utions:								
:	chancies, vesoi	u (10113		***************************************		· · · · · · · · · · · · · · · · · · ·		Page 9	0 of 137	

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1/13/22



Miscellaneous Forms

ALS Environmental—Kelso Laboratory 1317 South 13th Avenue, Kelso, WA 98626 Phone (360) 577-7222 Fax (360) 425-9096 www.alsglobal.com

Inorganic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- E The result is an estimate amount because the value exceeded the instrument calibration range.
- J The result is an estimated value.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
 DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.
- H The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

- # The control limit criteria is not applicable.
- J The result is an estimated value.
- E The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
- M The duplicate injection precision was not met.
- N The Matrix Spike sample recovery is not within control limits. See case narrative.
- S The reported value was determined by the Method of Standard Additions (MSA).
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- W The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
- i The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
- X See case narrative.
- + The correlation coefficient for the MSA is less than 0.995.
- Q See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

- * The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
 DOD-QSM 4.2 definition: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

- L The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
- H The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
- O The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
- Y The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
- Z The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEH	http://dec.alaska.gov/eh/lab/cs/csapproval.htm	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2795
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L16-58-R4
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Hawaii DOH	http://health.hawaii.gov/	-
ISO 17025	http://www.pjlabs.com/	L16-57
Louisiana DEQ	http://www.deq.louisiana.gov/page/la-lab-accreditation	03016
Maine DHS	http://www.maine.gov/dhhs/	WA01276
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-457
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA01276
New Jersey DEP	http://www.nj.gov/dep/enforcement/oqa.html	WA005
New York - DOH	https://www.wadsworth.org/regulatory/elap	12060
	https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/laboratory-certification-branch/non-field-lab-	
North Carolina DEQ	certification	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA100010
South Carolina DHEC	http://www.scdhec.gov/environment/EnvironmentalLabCertification/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704427
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C544
Wyoming (EPA Region 8)	https://www.epa.gov/region8-waterops/epa-region-8-certified-drinking-water-	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.ALSGlobal.com or at the accreditation bodies web site.

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

Acronyms

ASTM American Society for Testing and Materials

A2LA American Association for Laboratory Accreditation

CARB California Air Resources Board

CAS Number Chemical Abstract Service registry Number

CFC Chlorofluorocarbon
CFU Colony-Forming Unit

DEC Department of Environmental Conservation

DEQ Department of Environmental Quality

DHS Department of Health Services

DOE Department of Ecology
DOH Department of Health

EPA U. S. Environmental Protection Agency

ELAP Environmental Laboratory Accreditation Program

GC Gas Chromatography

GC/MS Gas Chromatography/Mass Spectrometry

LOD Limit of Detection
LOO Limit of Quantitation

LUFT Leaking Underground Fuel Tank

M Modified

MCL Maximum Contaminant Level is the highest permissible concentration of a substance

allowed in drinking water as established by the USEPA.

MDL Method Detection Limit
MPN Most Probable Number
MRL Method Reporting Limit

NA Not Applicable
NC Not Calculated

NCASI National Council of the Paper Industry for Air and Stream Improvement

ND Not Detected

NIOSH National Institute for Occupational Safety and Health

PQL Practical Quantitation Limit

RCRA Resource Conservation and Recovery Act

SIM Selected Ion Monitoring

TPH Total Petroleum Hydrocarbons

tr Trace level is the concentration of an analyte that is less than the PQL but greater than or

equal to the MDL.

Analyst Summary report

Client: SGS North America - AK (SGS Environmental)

Project: 1221998/

RM 0- No Name Creek

Date Collected: 05/3/22

Service Request: K2204916

Lab Code: K2204916-001 **Date Received:** 05/6/22

Sample Matrix: Water

Sample Name:

Analysis Method Extracted/Digested By Analyzed By
200.7 SSOLADEY AMCKORNEY

Sample Name: Rm1.5-Kenai City Dock-DUP Date Collected: 05/3/22

Lab Code: K2204916-002 **Date Received:** 05/6/22

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By
200.7 SSOLADEY AMCKORNEY

Sample Name: RM1.5-Kenai City Dock Date Collected: 05/3/22

Lab Code: K2204916-003 **Date Received:** 05/6/22

Sample Matrix: Water

Analysis MethodExtracted/Digested ByAnalyzed By200.7SSOLADEYAMCKORNEY

Sample Name: RM6.5- Cunningham Park Date Collected: 05/3/22

Lab Code: K2204916-004 **Date Received:** 05/6/22

Sample Matrix: Water

Analysis MethodExtracted/Digested ByAnalyzed By200.7SSOLADEYAMCKORNEY

Sample Name: Rm10-Beaver Creek Date Collected: 05/3/22

Lab Code: K2204916-005 Date Received: 05/6/22 Sample Matrix: Water

Analysis MethodExtracted/Digested ByAnalyzed By200.7SSOLADEYAMCKORNEY

Printed 5/12/2022 12:34:27 PM Superset Reference:22-0000626879 rev 00
Page 95 of 137

Analyst Summary report

Client: SGS North America - AK (SGS Environmental)

1221998/ **Project:**

Service Request: K2204916

Sample Name: RM10.1-Kenai River

Lab Code: K2204916-006

Sample Matrix: Water **Date Collected:** 05/3/22

Date Received: 05/6/22

Analysis Method

200.7

Extracted/Digested By

SSOLADEY

Analyzed By

AMCKORNEY

Sample Name: Rm12-.5-Pillars Lab Code: K2204916-007

Sample Matrix:

Water

Date Collected: 05/3/22

Date Received: 05/6/22

Analysis Method

200.7

Extracted/Digested By

SSOLADEY

Analyzed By

AMCKORNEY

Sample Name: RM18- Poacher's Cove

Lab Code:

K2204916-008

Sample Matrix: Water **Date Collected:** 05/3/22

Date Received: 05/6/22

Analysis Method

200.7

Extracted/Digested By

SSOLADEY

Analyzed By AMCKORNEY

Sample Name:

Rm19-Slikok Creek

Lab Code:

K2204916-009

Sample Matrix:

Water

Date Collected: 05/3/22 Date Received: 05/6/22

Analysis Method

200.7

Extracted/Digested By

SSOLADEY

Analyzed By AMCKORNEY

Sample Name:

RM21-Soldotna Bridge

Lab Code:

K2204916-010

Date Collected: 05/3/22

Sample Matrix:

Water

Date Received: 05/6/22

Analysis Method

200.7

Extracted/Digested By SSOLADEY

Analyzed By AMCKORNEY

Printed 5/12/2022 12:34:27 PM

Superset Reference:22-0000626879 rev 00 Page 96 of 137

Analyst Summary report

Service Request: K2204916

Client: SGS North America - AK (SGS Environmental)

Project: 1221998/

Sample Name: RM22-Soldotna Creek Date Collected: 05/3/22

Lab Code: K2204916-011 **Date Received:** 05/6/22

Sample Matrix: Water

Analysis MethodExtracted/Digested ByAnalyzed By200.7SSOLADEYAMCKORNEY

Sample Name: RM23-Swiftwater Park Date Collected: 05/3/22

Lab Code: K2204916-012 **Date Received:** 05/6/22

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By
200.7 SSOLADEY AMCKORNEY

Sample Name: RM30-Funny River Date Collected: 05/3/22

Lab Code: K2204916-013 Date Received: 05/6/22 Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

200.7 SSOLADEY AMCKORNEY

Sample Name: RM31- Morgan's Landing Date Collected: 05/3/22

Lab Code: K2204916-014 Date Received: 05/6/22 Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By
200.7 SSOLADEY AMCKORNEY

Sample Name:RM36-Moose RiverDate Collected: 05/3/22Lab Code:K2204916-015Date Received: 05/6/22

Lab Code: K2204916-015 Date Received: 05/6/22 Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By
200.7 SSOLADEY AMCKORNEY

Printed 5/12/2022 12:34:27 PM Superset Reference:22-0000626879 rev 00
Page 97 of 137

Analyst Summary report

Client: SGS North America - AK (SGS Environmental)

Project: 1221998/

RM36-Moose River-DUP **Date Collected:** 05/3/22

Service Request: K2204916

Lab Code: K2204916-016 **Date Received:** 05/6/22

Sample Matrix: Water

Sample Name:

Analysis MethodExtracted/Digested ByAnalyzed By200.7SSOLADEYAMCKORNEY

Sample Name: RM40-Bing's Landing Date Collected: 05/3/22

Lab Code: K2204916-017 **Date Received:** 05/6/22

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By
200.7 SSOLADEY AMCKORNEY

Sample Name: R43- Upstream of Dow Island Date Collected: 05/3/22

Lab Code: K2204916-018 **Date Received:** 05/6/22

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By
200.7 SSOLADEY AMCKORNEY

Sample Name: R44-Mouth of Killey River Date Collected: 05/3/22

Lab Code: K2204916-019
Sample Matrix: Water

Date Received: 05/6/22

Analysis MethodExtracted/Digested ByAnalyzed By200.7SSOLADEYAMCKORNEY

Sample Name: RM50-Skilak Lake Outflow Date Collected: 05/3/22

Lab Code:K2204916-020Date Received: 05/6/22Sample Matrix:Water

Analysis MethodExtracted/Digested ByAnalyzed By200.7SSOLADEYAMCKORNEY

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Analyst Summary report

Client: SGS North America - AK (SGS Environmental)

Project: 1221998/

Service Request: K2204916

Sample Name: RM70-Jim's Landing

Lab Code: K2204916-021

Sample Matrix: Water

Date Collected: 05/3/22

Date Received: 05/6/22

Analysis Method Extracted/Digested By Analyzed By

200.7 SSOLADEY AMCKORNEY

Sample Name: RM74- RussianRiver Date Collected: 05/3/22

Lab Code: K2204916-022 **Date Received:** 05/6/22

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

200.7 SSOLADEY AMCKORNEY

Sample Name: RM82-Kenai Lake Bridge Date Collected: 05/3/22

Lab Code: K2204916-023 **Date Received:** 05/6/22

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

200.7 SSOLADEY AMCKORNEY

Sample Name: RM79.5- Juneau Creek Date Collected: 05/3/22

Lab Code: K2204916-024 **Date Received:** 05/6/22

Sample Matrix: Water

Analysis Method Extracted/Digested By Analyzed By

200.7 SSOLADEY AMCKORNEY



Sample Results

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Analytical Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 **Date Collected:** 05/03/22 10:00 **Project:** 1221998

Date Received: 05/06/22 10:10 **Sample Matrix:** Water

Sample Name: RM 0- No Name Creek Basis: NA

Lab Code: K2204916-001

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	3.36	mg/L	0.021	0.003	1	05/11/22 13:11	05/10/22	
Iron	200.7	3.00	mg/L	0.021	0.008	1	05/11/22 13:11	05/10/22	
Magnesium	200.7	1.05	mg/L	0.0053	0.0004	1	05/11/22 13:11	05/10/22	

Analytical Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 **Date Collected:** 05/03/22 09:15 **Project:** 1221998 **Date Received:** 05/06/22 10:10 **Sample Matrix:** Water

Sample Name: Rm1.5-Kenai City Dock-DUP Basis: NA

Lab Code: K2204916-002

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	223	mg/L	0.021	0.003	1	05/11/22 13:19	05/10/22	
Iron	200.7	6.07	mg/L	0.021	0.008	1	05/11/22 13:19	05/10/22	
Magnesium	200.7	721	mg/L	0.53	0.04	100	05/11/22 13:51	05/10/22	

Analytical Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 **Date Collected:** 05/03/22 09:10 **Project:** 1221998 **Date Received:** 05/06/22 10:10 **Sample Matrix:** Water

Sample Name: RM1.5-Kenai City Dock Basis: NA

Lab Code: K2204916-003

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	242	mg/L	0.021	0.003	1	05/11/22 13:59	05/10/22	
Iron	200.7	4.24	mg/L	0.021	0.008	1	05/11/22 13:59	05/10/22	
Magnesium	200.7	726	mg/L	0.53	0.04	100	05/11/22 14:13	05/10/22	

Analytical Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 **Date Collected:** 05/03/22 09:39 **Project:** 1221998 **Date Received:** 05/06/22 10:10 **Sample Matrix:** Water

Sample Name: RM6.5- Cunningham Park Basis: NA

Lab Code: K2204916-004

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	14.0	mg/L	0.021	0.003	1	05/11/22 14:02	05/10/22	
Iron	200.7	18.3	mg/L	0.021	0.008	1	05/11/22 14:02	05/10/22	
Magnesium	200.7	7.58	mg/L	0.0053	0.0004	1	05/11/22 14:02	05/10/22	

Analytical Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 **Date Collected:** 05/03/22 10:51 **Project:** 1221998 **Date Received:** 05/06/22 10:10 **Sample Matrix:** Water

Rm10-Beaver Creek **Sample Name:** Basis: NA

Lab Code: K2204916-005

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	6.18	mg/L	0.021	0.003	1	05/11/22 14:05	05/10/22	
Iron	200.7	2.33	mg/L	0.021	0.008	1	05/11/22 14:05	05/10/22	
Magnesium	200.7	1.66	mg/L	0.0053	0.0004	1	05/11/22 14:05	05/10/22	

Analytical Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 **Date Collected:** 05/03/22 11:23 **Project:** 1221998 **Date Received:** 05/06/22 10:10 **Sample Matrix:** Water

Sample Name: RM10.1-Kenai River Basis: NA

Lab Code: K2204916-006

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	10.9	mg/L	0.021	0.003	1	05/11/22 14:07	05/10/22	
Iron	200.7	0.531	mg/L	0.021	0.008	1	05/11/22 14:07	05/10/22	
Magnesium	200.7	1.73	mg/L	0.0053	0.0004	1	05/11/22 14:07	05/10/22	

Analytical Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 **Date Collected:** 05/03/22 11:50 **Project:** 1221998 **Date Received:** 05/06/22 10:10 **Sample Matrix:** Water

Sample Name: Rm12-.5-Pillars Basis: NA

Lab Code: K2204916-007

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	10.9	mg/L	0.021	0.003	1	05/11/22 14:10	05/10/22	
Iron	200.7	0.455	mg/L	0.021	0.008	1	05/11/22 14:10	05/10/22	
Magnesium	200.7	1.70	mg/L	0.0053	0.0004	1	05/11/22 14:10	05/10/22	

Analytical Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 **Date Collected:** 05/03/22 12:24 **Project:** 1221998

Date Received: 05/06/22 10:10 **Sample Matrix:** Water

Sample Name: RM18- Poacher's Cove Basis: NA

Lab Code: K2204916-008

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	11.0	mg/L	0.021	0.003	1	05/11/22 14:26	05/10/22	
Iron	200.7	0.447	mg/L	0.021	0.008	1	05/11/22 14:26	05/10/22	
Magnesium	200.7	1.66	mg/L	0.0053	0.0004	1	05/11/22 14:26	05/10/22	

Analytical Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 **Date Collected:** 05/03/22 11:20 1221998

Date Received: 05/06/22 10:10 **Sample Matrix:** Water

Sample Name: Rm19-Slikok Creek Basis: NA

Lab Code: K2204916-009

Project:

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	5.91	mg/L	0.021	0.003	1	05/11/22 14:28	05/10/22	
Iron	200.7	0.641	mg/L	0.021	0.008	1	05/11/22 14:28	05/10/22	
Magnesium	200.7	1.69	mg/L	0.0053	0.0004	1	05/11/22 14:28	05/10/22	

Analytical Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 **Date Collected:** 05/03/22 10:45 **Project:** 1221998 **Date Received:** 05/06/22 10:10 **Sample Matrix:** Water

Sample Name: RM21-Soldotna Bridge Basis: NA

Lab Code: K2204916-010

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	10.7	mg/L	0.021	0.003	1	05/11/22 14:31	05/10/22	
Iron	200.7	0.385	mg/L	0.021	0.008	1	05/11/22 14:31	05/10/22	
Magnesium	200.7	1.62	mg/L	0.0053	0.0004	1	05/11/22 14:31	05/10/22	

Analytical Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 **Date Collected:** 05/03/22 10:03 **Project:** 1221998

Date Received: 05/06/22 10:10 **Sample Matrix:** Water

Sample Name: RM22-Soldotna Creek Basis: NA

Lab Code: K2204916-011

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	9.45	mg/L	0.021	0.003	1	05/11/22 14:34	05/10/22	
Iron	200.7	0.507	mg/L	0.021	0.008	1	05/11/22 14:34	05/10/22	
Magnesium	200.7	2.80	mg/L	0.0053	0.0004	1	05/11/22 14:34	05/10/22	

Analytical Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 **Date Collected:** 05/03/22 12:08 1221998

Date Received: 05/06/22 10:10 **Sample Matrix:** Water

Sample Name: RM23-Swiftwater Park Basis: NA

Lab Code: K2204916-012

Project:

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	12.0	mg/L	0.021	0.003	1	05/11/22 14:36	05/10/22	
Iron	200.7	0.440	mg/L	0.021	0.008	1	05/11/22 14:36	05/10/22	
Magnesium	200.7	1.89	mg/L	0.0053	0.0004	1	05/11/22 14:36	05/10/22	

Analytical Report

Client: SGS North America - AK (SGS Environmental)

K2204916-013

Lab Code:

Service Request: K2204916 **Date Collected:** 05/03/22 08:33 **Project:** 1221998

Date Received: 05/06/22 10:10 **Sample Matrix:** Water

Sample Name: RM30-Funny River Basis: NA

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	7.11	mg/L	0.021	0.003	1	05/11/22 14:39	05/10/22	
Iron	200.7	1.07	mg/L	0.021	0.008	1	05/11/22 14:39	05/10/22	
Magnesium	200.7	2.40	mg/L	0.0053	0.0004	1	05/11/22 14:39	05/10/22	

Analytical Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 **Date Collected:** 05/03/22 11:00 **Project:** 1221998

Date Received: 05/06/22 10:10 **Sample Matrix:** Water

Sample Name: RM31- Morgan's Landing Basis: NA Lab Code: K2204916-014

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	12.2	mg/L	0.021	0.003	1	05/11/22 14:42	05/10/22	
Iron	200.7	0.473	mg/L	0.021	0.008	1	05/11/22 14:42	05/10/22	
Magnesium	200.7	1.70	mg/L	0.0053	0.0004	1	05/11/22 14:42	05/10/22	

Analytical Report

Client: SGS North America - AK (SGS Environmental)

K2204916-015

Lab Code:

Service Request: K2204916 **Date Collected:** 05/03/22 10:15 **Project:** 1221998

Date Received: 05/06/22 10:10 **Sample Matrix:** Water

RM36-Moose River **Sample Name:** Basis: NA

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	13.4	mg/L	0.021	0.003	1	05/11/22 14:44	05/10/22	
Iron	200.7	1.23	mg/L	0.021	0.008	1	05/11/22 14:44	05/10/22	
Magnesium	200.7	2.30	mg/L	0.0053	0.0004	1	05/11/22 14:44	05/10/22	

Analytical Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 **Date Collected:** 05/03/22 10:15 **Project:** 1221998

Date Received: 05/06/22 10:10 **Sample Matrix:** Water

Sample Name: RM36-Moose River-DUP Basis: NA

Lab Code: K2204916-016

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	13.4	mg/L	0.021	0.003	1	05/11/22 14:47	05/10/22	
Iron	200.7	1.14	mg/L	0.021	0.008	1	05/11/22 14:47	05/10/22	
Magnesium	200.7	2.30	mg/L	0.0053	0.0004	1	05/11/22 14:47	05/10/22	

Analytical Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 **Date Collected:** 05/03/22 10:10 **Project:** 1221998 **Date Received:** 05/06/22 10:10 **Sample Matrix:** Water

Sample Name: RM40-Bing's Landing Basis: NA

Lab Code: K2204916-017

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	11.3	mg/L	0.021	0.003	1	05/11/22 14:50	05/10/22	
Iron	200.7	0.168	mg/L	0.021	0.008	1	05/11/22 14:50	05/10/22	
Magnesium	200.7	1.12	mg/L	0.0053	0.0004	1	05/11/22 14:50	05/10/22	

Analytical Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 **Date Collected:** 05/03/22 09:30 **Project:** 1221998 **Date Received:** 05/06/22 10:10 **Sample Matrix:** Water

Sample Name: R43- Upstream of Dow Island Basis: NA

Lab Code: K2204916-018

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	11.1	mg/L	0.021	0.003	1	05/11/22 15:00	05/10/22	
Iron	200.7	0.162	mg/L	0.021	0.008	1	05/11/22 15:00	05/10/22	
Magnesium	200.7	1.09	mg/L	0.0053	0.0004	1	05/11/22 15:00	05/10/22	

Analytical Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 **Date Collected:** 05/03/22 09:20 **Project:** 1221998

Date Received: 05/06/22 10:10 **Sample Matrix:** Water

Sample Name: R44-Mouth of Killey River Basis: NA

Lab Code: K2204916-019

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	8.94	mg/L	0.021	0.003	1	05/11/22 15:03	05/10/22	
Iron	200.7	0.551	mg/L	0.021	0.008	1	05/11/22 15:03	05/10/22	
Magnesium	200.7	1.62	mg/L	0.0053	0.0004	1	05/11/22 15:03	05/10/22	

Analytical Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 **Date Collected:** 05/03/22 07:30 **Project:** 1221998

Date Received: 05/06/22 10:10 **Sample Matrix:** Water

Sample Name: RM50-Skilak Lake Outflow Basis: NA

Lab Code: K2204916-020

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	11.5	mg/L	0.021	0.003	1	05/11/22 15:05	05/10/22	
Iron	200.7	0.114	mg/L	0.021	0.008	1	05/11/22 15:05	05/10/22	
Magnesium	200.7	0.973	mg/L	0.0053	0.0004	1	05/11/22 15:05	05/10/22	

Analytical Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 **Date Collected:** 05/03/22 10:32 **Project:** 1221998 **Date Received:** 05/06/22 10:10 **Sample Matrix:** Water

Sample Name: RM70-Jim's Landing Basis: NA

Lab Code: K2204916-021

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	16.7	mg/L	0.021	0.003	1	05/11/22 10:51	05/10/22	
Iron	200.7	0.058	mg/L	0.021	0.008	1	05/11/22 10:51	05/10/22	
Magnesium	200.7	1.24	mg/L	0.0053	0.0004	1	05/11/22 10:51	05/10/22	

Analytical Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 **Date Collected:** 05/03/22 09:45 **Project:** 1221998 **Date Received:** 05/06/22 10:10 **Sample Matrix:** Water

RM74- RussianRiver **Sample Name:** Basis: NA

Lab Code: K2204916-022

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	19.7	mg/L	0.021	0.003	1	05/11/22 11:01	05/10/22	
Iron	200.7	0.062	mg/L	0.021	0.008	1	05/11/22 11:01	05/10/22	
Magnesium	200.7	1.23	mg/L	0.0053	0.0004	1	05/11/22 11:01	05/10/22	

Analytical Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 **Date Collected:** 05/03/22 07:55 **Project:** 1221998 **Date Received:** 05/06/22 10:10 **Sample Matrix:** Water

Sample Name: RM82-Kenai Lake Bridge Basis: NA

Lab Code: K2204916-023

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	14.6	mg/L	0.021	0.003	1	05/11/22 11:04	05/10/22	
Iron	200.7	0.041	mg/L	0.021	0.008	1	05/11/22 11:04	05/10/22	
Magnesium	200.7	1.15	mg/L	0.0053	0.0004	1	05/11/22 11:04	05/10/22	

Analytical Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 **Date Collected:** 05/03/22 08:50 **Project:** 1221998

Date Received: 05/06/22 10:10 **Sample Matrix:** Water

Sample Name: RM79.5- Juneau Creek Basis: NA

Lab Code: K2204916-024

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	16.9	mg/L	0.021	0.003	1	05/11/22 11:14	05/10/22	
Iron	200.7	0.107	mg/L	0.021	0.008	1	05/11/22 11:14	05/10/22	
Magnesium	200.7	1.33	mg/L	0.0053	0.0004	1	05/11/22 11:14	05/10/22	



QC Summary Forms

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Analytical Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 Date Collected: NA 1221998

Project: Date Received: NA **Sample Matrix:** Water

Sample Name: Method Blank Basis: NA

Lab Code: KQ2207355-01

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	0.019 J	mg/L	0.021	0.003	1	05/11/22 13:06	05/10/22	
Iron	200.7	ND U	mg/L	0.021	0.008	1	05/11/22 13:06	05/10/22	
Magnesium	200.7	0.0028 J	mg/L	0.0053	0.0004	1	05/11/22 13:06	05/10/22	

Analytical Report

Client: SGS North America - AK (SGS Environmental) Service Request: K2204916

Project:1221998Date Collected:NASample Matrix:WaterDate Received:NA

Sample Name: Method Blank Basis: NA

Lab Code: KQ2207371-01

	Analysis							Date	
Analyte Name	Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Extracted	Q
Calcium	200.7	0.020 J	mg/L	0.021	0.003	1	05/11/22 10:26	05/10/22	
Iron	200.7	ND U	mg/L	0.021	0.008	1	05/11/22 10:26	05/10/22	
Magnesium	200.7	0.0022 J	mg/L	0.0053	0.0004	1	05/11/22 10:26	05/10/22	

QA/QC Report

Client: SGS North America - AK (SGS Environmental)

Service Request:

K2204916

Project: 1221998 **Sample Matrix:** Water

Date Collected:

05/03/22

Date Received:

05/06/22

Date Analyzed: Date Extracted: 05/11/22 05/10/22

Matrix Spike Summary

Total Metals

Sample Name: RM 0- No Name Creek

Units:

Basis:

mg/L NA

Lab Code: K2204916-001

Analysis Method: Prep Method:

200.7

EPA CLP ILM04.0

Matrix Spike

KQ2207355-03

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Calcium	3.36	13.1	10.0	98	70-130
Iron	3.00	3.94	1.00	94	70-130
Magnesium	1.05	11.4	10.0	104	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

QA/QC Report

Client: SGS North America - AK (SGS Environmental)

Service Request:

K2204916

Project: 1221998

Date Collected:

05/03/22

Date Received:

05/06/22

Date Analyzed: Date Extracted: 05/11/22 05/10/22

Matrix Spike Summary

Total Metals

Sample Name: Rm1.5-Kenai City Dock-DUP

Units: Basis: mg/L NA

Lab Code: Analysis Method: K2204916-002

Water

Prep Method:

Sample Matrix:

200.7 EPA CLP ILM04.0

Matrix Spike

KQ2207355-05

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Calcium	223	234	10.0	109 #	70-130
Iron	6.07	7.06	1.00	99 #	70-130
Magnesium	721	721	10.0	0#	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

QA/QC Report

Client: SGS North America - AK (SGS Environmental)

Service Request:

K2204916

Project: 1221998 **Sample Matrix:** Water

Date Collected:

05/03/22

Date Received:

05/06/22

Date Analyzed: Date Extracted: 05/11/22 05/10/22

Matrix Spike Summary

Total Metals

Sample Name:

RM70-Jim's Landing

Units: Basis:

mg/L NA

Lab Code:

K2204916-021

Analysis Method:

200.7

Prep Method:

EPA CLP ILM04.0

Matrix Spike

KQ2207371-03

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Calcium	16.7	26.9	10.0	102	70-130
Iron	0.058	1.14	1.00	108	70-130
Magnesium	1.24	11.8	10.0	106	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Matrix Spike and Matrix Spike Duplicate Data is presented for information purposes only. The matrix may or may not be relevant to samples reported in this report. The laboratory evaluates system performance based on the LCS and LCSD control limits.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916

Project 1221998

Date Collected: 05/03/22

Sample Matrix: Water

Date Received: 05/06/22 **Date Analyzed:** 05/11/22

Replicate Sample Summary

Total Metals

Sample Name: RM 0- No Name Creek

 $\textbf{Units:} \quad mg/L$

Basis: NA

Lab Code: K2204916-001

Duplicate Sample

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Sample KQ2207355-04 Result	Average	RPD	RPD Limit
Calcium	200.7	0.021	0.003	3.36	3.30	3.33	2	20
Iron	200.7	0.021	0.008	3.00	2.98	2.99	<1	20
Magnesium	200.7	0.0053	0.0004	1.05	1.03	1.04	2	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916

Project 1221998

Date Collected: 05/03/22

Sample Matrix: Water

Date Received: 05/06/22 **Date Analyzed:** 05/11/22

Replicate Sample Summary

Total Metals

Sample Name: Rm1.5-Kenai City Dock-DUP

 $\textbf{Units:} \quad mg/L$

Lab Code: K2204916-002

Basis: NA

Duplicate
Sample
V () 2207255 04

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Sample KQ2207355-06 Result	Average	RPD	RPD Limit
Calcium	200.7	0.021	0.003	223	224	224	<1	20
Iron	200.7	0.021	0.008	6.07	6.08	6.08	<1	20
Magnesium	200.7	0.53	0.04	721	712	717	1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 **Date Collected:** 05/03/22

Project 1221998 Sample Matrix: Water **Date Received:** 05/06/22

Date Analyzed: 05/11/22

Replicate Sample Summary

Total Metals

Sample Name: RM70-Jim's Landing Units: mg/L

Lab Code: K2204916-021 Basis: NA

Duplicate Sample **Analysis** Sample KQ2207371-04 **Analyte Name** Method **MRL MDL** Result Result Average **RPD RPD Limit** Calcium 200.7 0.003 16.7 16.3 16.5 2 20 0.021 Iron 200.7 0.021 0.0080.058 0.055 0.057 5 20 Magnesium 200.7 0.0053 0.0004 1.24 1.22 1.23 2 20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 **Project:** 1221998 **Date Analyzed:** 05/11/22

Sample Matrix: Water

Lab Control Sample Summary Total Metals

Units:mg/L Basis:NA

Lab Control Sample

KQ2207355-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Calcium	200.7	12.9	12.5	103	85-115
Iron	200.7	2.66	2.50	106	85-115
Magnesium	200.7	13.2	12.5	106	85-115

QA/QC Report

Client: SGS North America - AK (SGS Environmental)

Service Request: K2204916 **Project:** 1221998 **Date Analyzed:** 05/11/22

Sample Matrix: Water

Lab Control Sample Summary Total Metals

Units:mg/L Basis:NA

Lab Control Sample

KQ2207371-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Calcium	200.7	12.7	12.5	102	85-115
Iron	200.7	2.62	2.50	105	85-115
Magnesium	200.7	13.1	12.5	105	85-115