Laboratory Report of Analysis

To: Kenai Watershed Forum
44129 Sterling Hwy
Soldotna, AK 99669

Report Number: **1233640**

Client Project: **Kenai River Baseline Water Qu.**

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 Curtis 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.

Curtis Whisman
2023.07.31 15:47:29 -08'00'

Curtis Whisman Date
Project Manager
curtis.whisman@sgs.com

SGS North America Inc. 200 West Potter Drive, Anchorage, AK 99518
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Case Narrative

SGS Client: **Kenai Watershed Forum**
SGS Project: **1233640**
Project Name/Site: **Kenai River Baseline Water Qu.**
Project Contact: **Benjamin Meyer**

Refer to sample receipt form for information on sample condition.

1233640007MS (1723638) MS

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

*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 (Provisionally Certified as of 6/05/2023 for Orthophosphate SM4500P-E and 7/12/2023 for Nitrate-N and Nitrate-Nitrite as N EPA300.0 & SM4500NO3-F) & 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	Matrix
RM0-No Name Creek	1233640001	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM0-No Name Creek DUP	1233640002	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM1.5-Kenai City Dock	1233640003	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM6.5-Cunningham Park	1233640004	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM10-Beaver Creek	1233640005	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM10.1-Kenai River	1233640006	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM12.5-Pillars	1233640007	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM18-Poacher's Cove	1233640008	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM19-Slikok Creek	1233640009	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM21-Soldotna Bridge	1233640010	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM22-Soldotna Creek	1233640011	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM 23-Swiftwater Park	1233640012	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM30-Funny River	1233640013	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM31-Morgan's Landing	1233640014	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM36-Moose River	1233640015	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM36-Moose River DUP	1233640016	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM40-Bing's Landing	1233640017	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM43-Upstream of Dow Island	1233640018	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM44-Mouth of Killey River	1233640019	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM50-Skilak Lake Outflow	1233640020	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM70-Jim's Landing	1233640021	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM74-Russian River	1233640022	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM82-Kenai Lake Bridge	1233640023	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM79.5-Juneau Creek	1233640024	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
TRIP BLANK	1233640025	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM 0 - No Name Creek	1233640026	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM 0 - No Name Creek - DUP	1233640027	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM 1.5- Kenai City Dock	1233640028	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM 6.5- Cunningham Park	1233640029	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
Rm 10 - Beaver Creek	1233640030	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM 10.1 - Kenai River	1233640031	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM 12.5 - Pillars	1233640032	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM 18 - Poacher's Cove	1233640033	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM 19 - Slikok Creek	1233640034	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM 21 - Soldotna Bridge	1233640035	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM 22 - Soldotna Creek	1233640036	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM 23 - Swiftwater Park	1233640037	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM 30 - Funny River	1233640038	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM 31 - Morgan's Landing	1233640039	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)

Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
RM 36 - Moose River	1233640040	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM 36 - Moose River - DUP	1233640041	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM 40 - Bing's Landing	1233640042	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM 43 - Upstream of Dow Island	1233640043	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM 44 - Mouth of Killey Valley	1233640044	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM 50 - Skilak Lake Outflow	1233640045	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM 70 - Jim's Landing	1233640046	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM 74 - Russian River	1233640047	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM 82 - Kenai Lake Bridge	1233640048	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM 79.5 - Juneau Creek	1233640049	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM 1.5 Kenai City Dock FB	1233640050	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)
RM 21 - Soldotna Bridge FB	1233640051	07/18/2023	07/18/2023	Water (Surface, Eff., Ground)

Method	Method Description
EP200.8	Metals in Drinking Water by ICP-MS DISSO
EP200.8	Metals in Water by 200.8 ICP-MS
SM21 4500NO3-F	Nitrate/Nitrite Flow injection Pres.
SM21 4500P-B,E	Total Phosphorus (W)
SW8260D	Volatile Organic Compounds (W)

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Detectable Results Summary

Client Sample ID: **RM0-No Name Creek**
Lab Sample ID: 1233640001

	Parameter	Result	Units
Dissolved Metals by ICP/MS	Arsenic	2.92J	ug/L
	Copper	1.29J	ug/L
	Zinc	7.16J	ug/L
Waters Department	Total Nitrate/Nitrite-N	0.109J	mg/L
	Total Phosphorus	0.0255J	mg/L

Client Sample ID: **RM0-No Name Creek DUP**
Lab Sample ID: 1233640002

	Parameter	Result	Units
Dissolved Metals by ICP/MS	Arsenic	2.78J	ug/L
	Copper	1.21J	ug/L
	Zinc	6.93J	ug/L
Waters Department	Total Nitrate/Nitrite-N	0.0802J	mg/L
	Total Phosphorus	0.0276J	mg/L

Client Sample ID: **RM1.5-Kenai City Dock**
Lab Sample ID: 1233640003

	Parameter	Result	Units
Dissolved Metals by ICP/MS	Arsenic	1.78J	ug/L
	Copper	1.78J	ug/L
	Zinc	6.58J	ug/L
Waters Department	Total Nitrate/Nitrite-N	0.197J	mg/L
	Total Phosphorus	0.888	mg/L

Client Sample ID: **RM6.5-Cunningham Park**
Lab Sample ID: 1233640004

	Parameter	Result	Units
Dissolved Metals by ICP/MS	Zinc	3.91J	ug/L
Waters Department	Total Nitrate/Nitrite-N	0.197J	mg/L
	Total Phosphorus	0.0368J	mg/L

Client Sample ID: **RM10-Beaver Creek**
Lab Sample ID: 1233640005

	Parameter	Result	Units
Dissolved Metals by ICP/MS	Arsenic	3.49J	ug/L
	Zinc	5.03J	ug/L
Waters Department	Total Phosphorus	0.0502	mg/L

Client Sample ID: **RM10.1-Kenai River**
Lab Sample ID: 1233640006

	Parameter	Result	Units
Dissolved Metals by ICP/MS	Zinc	3.36J	ug/L
Waters Department	Total Nitrate/Nitrite-N	0.223	mg/L
	Total Phosphorus	0.0124J	mg/L

Client Sample ID: **RM12.5-Pillars**
Lab Sample ID: 1233640007

	Parameter	Result	Units
Dissolved Metals by ICP/MS	Zinc	3.58J	ug/L
Waters Department	Total Nitrate/Nitrite-N	0.233	mg/L

Detectable Results Summary

Client Sample ID: **RM18-Poacher's Cove**
Lab Sample ID: 1233640008

	Parameter	Result	Units
Dissolved Metals by ICP/MS	Zinc	5.41J	ug/L
Waters Department	Total Nitrate/Nitrite-N	0.298	mg/L

Client Sample ID: **RM19-Slikok Creek**
Lab Sample ID: 1233640009

	Parameter	Result	Units
Dissolved Metals by ICP/MS	Arsenic	2.11J	ug/L
	Zinc	6.30J	ug/L
Waters Department	Total Nitrate/Nitrite-N	0.121J	mg/L
	Total Phosphorus	0.0131J	mg/L

Client Sample ID: **RM21-Soldotna Bridge**
Lab Sample ID: 1233640010

	Parameter	Result	Units
Dissolved Metals by ICP/MS	Zinc	4.30J	ug/L
Waters Department	Total Nitrate/Nitrite-N	0.248	mg/L

Client Sample ID: **RM22-Soldotna Creek**
Lab Sample ID: 1233640011

	Parameter	Result	Units
Dissolved Metals by ICP/MS	Arsenic	7.51	ug/L
	Zinc	4.23J	ug/L
Waters Department	Total Nitrate/Nitrite-N	0.0798J	mg/L
	Total Phosphorus	0.0859	mg/L

Client Sample ID: **RM 23-Swiftwater Park**
Lab Sample ID: 1233640012

	Parameter	Result	Units
Dissolved Metals by ICP/MS	Arsenic	4.80J	ug/L
	Cadmium	0.331J	ug/L
	Copper	4.15	ug/L
	Lead	3.68	ug/L
	Zinc	7.11J	ug/L
Waters Department	Total Nitrate/Nitrite-N	0.266	mg/L
	Total Phosphorus	0.0353J	mg/L

Client Sample ID: **RM30-Funny River**
Lab Sample ID: 1233640013

	Parameter	Result	Units
Dissolved Metals by ICP/MS	Arsenic	2.03J	ug/L
	Zinc	4.03J	ug/L
Waters Department	Total Nitrate/Nitrite-N	0.0866J	mg/L
	Total Phosphorus	0.0230J	mg/L

Client Sample ID: **RM31-Morgan's Landing**
Lab Sample ID: 1233640014

	Parameter	Result	Units
Waters Department	Total Nitrate/Nitrite-N	0.233	mg/L

Client Sample ID: **RM36-Moose River**
Lab Sample ID: 1233640015

	Parameter	Result	Units
Waters Department	Total Phosphorus	0.0123J	mg/L

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Detectable Results Summary

Client Sample ID: **RM36-Moose River DUP**
Lab Sample ID: 1233640016
Waters Department

Parameter	Result	Units
Total Phosphorus	0.0137J	mg/L

Client Sample ID: **RM40-Bing's Landing**
Lab Sample ID: 1233640017
Waters Department

Parameter	Result	Units
Total Nitrate/Nitrite-N	0.217	mg/L

Client Sample ID: **RM43-Upstream of Dow Island**
Lab Sample ID: 1233640018
Waters Department

Parameter	Result	Units
Total Nitrate/Nitrite-N	0.215	mg/L

Client Sample ID: **RM44-Mouth of Killey River**
Lab Sample ID: 1233640019
Waters Department

Parameter	Result	Units
Total Nitrate/Nitrite-N	0.0514J	mg/L
Total Phosphorus	0.0273J	mg/L

Client Sample ID: **RM50-Skilak Lake Outflow**
Lab Sample ID: 1233640020
Waters Department

Parameter	Result	Units
Total Nitrate/Nitrite-N	0.225	mg/L

Client Sample ID: **RM70-Jim's Landing**
Lab Sample ID: 1233640021
Waters Department

Parameter	Result	Units
Total Nitrate/Nitrite-N	0.286	mg/L

Client Sample ID: **RM74-Russian River**
Lab Sample ID: 1233640022
Waters Department

Parameter	Result	Units
Total Nitrate/Nitrite-N	0.451	mg/L

Client Sample ID: **RM82-Kenai Lake Bridge**
Lab Sample ID: 1233640023
Waters Department

Parameter	Result	Units
Total Nitrate/Nitrite-N	0.288	mg/L

Client Sample ID: **RM79.5-Juneau Creek**
Lab Sample ID: 1233640024
Waters Department

Parameter	Result	Units
Total Nitrate/Nitrite-N	0.327	mg/L

Client Sample ID: **RM 0 - No Name Creek**
Lab Sample ID: 1233640026
Metals by ICP/MS

Parameter	Result	Units
Calcium	6020	ug/L
Copper	1.16J	ug/L
Iron	5350	ug/L
Magnesium	1540	ug/L
Zinc	16.4	ug/L

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Detectable Results Summary

Client Sample ID: **RM 0 - No Name Creek - DUP**
Lab Sample ID: 1233640027

Metals by ICP/MS

Parameter	Result	Units
Calcium	6400	ug/L
Copper	1.19J	ug/L
Iron	5530	ug/L
Magnesium	1720	ug/L
Zinc	16.0	ug/L

Client Sample ID: **RM 1.5- Kenai City Dock**
Lab Sample ID: 1233640028

Metals by ICP/MS

Parameter	Result	Units
Calcium	16800	ug/L
Copper	23.4	ug/L
Iron	15900	ug/L
Magnesium	8660	ug/L
Zinc	69.6	ug/L

Client Sample ID: **RM 6.5- Cunningham Park**
Lab Sample ID: 1233640029

Metals by ICP/MS

Parameter	Result	Units
Calcium	13500	ug/L
Copper	2.11J	ug/L
Iron	1580	ug/L
Magnesium	1660	ug/L
Zinc	14.3	ug/L

Client Sample ID: **Rm 10 - Beaver Creek**
Lab Sample ID: 1233640030

Metals by ICP/MS

Parameter	Result	Units
Calcium	12300	ug/L
Iron	1950	ug/L
Magnesium	2650	ug/L
Zinc	17.1	ug/L

Client Sample ID: **RM 10.1 - Kenai River**
Lab Sample ID: 1233640031

Metals by ICP/MS

Parameter	Result	Units
Calcium	12700	ug/L
Copper	1.57J	ug/L
Iron	963	ug/L
Magnesium	1320	ug/L
Zinc	16.9	ug/L

Client Sample ID: **RM 12.5 - Pillars**
Lab Sample ID: 1233640032

Metals by ICP/MS

Parameter	Result	Units
Calcium	13100	ug/L
Copper	1.67J	ug/L
Iron	756	ug/L
Magnesium	1270	ug/L
Zinc	14.6	ug/L

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Detectable Results Summary

Client Sample ID: **RM 18 - Poacher's Cove**
Lab Sample ID: 1233640033

Metals by ICP/MS

Parameter	Result	Units
Calcium	12900	ug/L
Copper	4.88	ug/L
Iron	691	ug/L
Magnesium	1180	ug/L
Zinc	13.4	ug/L

Client Sample ID: **RM 19 - Slikok Creek**
Lab Sample ID: 1233640034

Metals by ICP/MS

Parameter	Result	Units
Calcium	12400	ug/L
Iron	1320	ug/L
Magnesium	3010	ug/L
Zinc	16.0	ug/L

Client Sample ID: **RM 21 - Soldotna Bridge**
Lab Sample ID: 1233640035

Metals by ICP/MS

Parameter	Result	Units
Calcium	12900	ug/L
Copper	1.12J	ug/L
Iron	697	ug/L
Magnesium	1200	ug/L
Zinc	15.1	ug/L

Client Sample ID: **RM 22 - Soldotna Creek**
Lab Sample ID: 1233640036

Metals by ICP/MS

Parameter	Result	Units
Calcium	16800	ug/L
Iron	896	ug/L
Magnesium	4160	ug/L
Zinc	15.2	ug/L

Client Sample ID: **RM 23 - Swiftwater Park**
Lab Sample ID: 1233640037

Metals by ICP/MS

Parameter	Result	Units
Calcium	13400	ug/L
Copper	1.81J	ug/L
Iron	1320	ug/L
Magnesium	1480	ug/L
Zinc	15.2	ug/L

Client Sample ID: **RM 30 - Funny River**
Lab Sample ID: 1233640038

Metals by ICP/MS

Parameter	Result	Units
Calcium	10300	ug/L
Iron	734	ug/L
Magnesium	2890	ug/L
Zinc	11.4	ug/L

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Detectable Results Summary

Client Sample ID: **RM 31 - Morgan's Landing**
Lab Sample ID: 1233640039

Metals by ICP/MS	Parameter	Result	Units
	Calcium	10100	ug/L
	Iron	561	ug/L
	Magnesium	948	ug/L
	Zinc	10.2	ug/L

Client Sample ID: **RM 36 - Moose River**
Lab Sample ID: 1233640040

Metals by ICP/MS	Parameter	Result	Units
	Calcium	21400	ug/L
	Iron	581	ug/L
	Magnesium	2880	ug/L

Client Sample ID: **RM 36 - Moose River - DUP**
Lab Sample ID: 1233640041

Metals by ICP/MS	Parameter	Result	Units
	Calcium	22100	ug/L
	Iron	577	ug/L
	Magnesium	3010	ug/L

Client Sample ID: **RM 40 - Bing's Landing**
Lab Sample ID: 1233640042

Metals by ICP/MS	Parameter	Result	Units
	Calcium	12800	ug/L
	Iron	477	ug/L
	Magnesium	1060	ug/L

Client Sample ID: **RM 43 - Upstream of Dow Island**
Lab Sample ID: 1233640043

Metals by ICP/MS	Parameter	Result	Units
	Calcium	12700	ug/L
	Iron	592	ug/L
	Magnesium	1090	ug/L

Client Sample ID: **RM 44 - Mouth of Killey Valley**
Lab Sample ID: 1233640044

Metals by ICP/MS	Parameter	Result	Units
	Calcium	6960	ug/L
	Iron	3300	ug/L
	Magnesium	2090	ug/L

Client Sample ID: **RM 50 - Skilak Lake Outflow**
Lab Sample ID: 1233640045

Metals by ICP/MS	Parameter	Result	Units
	Calcium	13000	ug/L
	Magnesium	902	ug/L

Client Sample ID: **RM 70 - Jim's Landing**
Lab Sample ID: 1233640046

Metals by ICP/MS	Parameter	Result	Units
	Calcium	16600	ug/L
	Iron	118J	ug/L
	Magnesium	1220	ug/L

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Detectable Results Summary

Client Sample ID: **RM 74 - Russian River**
Lab Sample ID: 1233640047

Metals by ICP/MS

Parameter	Result	Units
Calcium	18500	ug/L
Magnesium	1090	ug/L

Client Sample ID: **RM 82 - Kenai Lake Bridge**
Lab Sample ID: 1233640048

Metals by ICP/MS

Parameter	Result	Units
Calcium	16800	ug/L
Iron	83.8J	ug/L
Magnesium	1190	ug/L

Client Sample ID: **RM 79.5 - Juneau Creek**
Lab Sample ID: 1233640049

Metals by ICP/MS

Parameter	Result	Units
Calcium	16500	ug/L
Magnesium	1090	ug/L

Client Sample ID: **RM 1.5 Kenai City Dock FB**
Lab Sample ID: 1233640050

Dissolved Metals by ICP/MS

Parameter	Result	Units
Zinc	4.31J	ug/L

Client Sample ID: **RM 21 - Soldotna Bridge FB**
Lab Sample ID: 1233640051

Dissolved Metals by ICP/MS

Parameter	Result	Units
Zinc	3.54J	ug/L

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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 Qu.**
Lab Sample ID: 1233640001
Lab Project ID: 1233640

Collection Date: 07/18/23 11:12
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Dissolved Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	2.92	J	5.00	1.50	2.50	ug/L	1		07/27/23 17:01
Cadmium	0.250	U	0.500	0.150	0.250	ug/L	1		07/27/23 17:01
Chromium	2.50	U	5.00	2.50	2.50	ug/L	1		07/27/23 17:01
Copper	1.29	J	3.00	1.00	1.50	ug/L	1		07/27/23 17:01
Lead	1.00	U	2.00	0.500	1.00	ug/L	1		07/27/23 17:01
Zinc	7.16	J	10.0	3.10	5.00	ug/L	1		07/27/23 17:01

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 17:01
Container ID: 1233640001-B

Prep Batch: MXX36032
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Results of **RM0-No Name Creek**

Client Sample ID: **RM0-No Name Creek**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640001
Lab Project ID: 1233640

Collection Date: 07/18/23 11:12
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.109	J	0.200	0.0500	0.100	mg/L	2		07/20/23 16:04

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Analyst: EBH
Analytical Date/Time: 07/20/23 16:04
Container ID: 1233640001-A

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0255	J	0.0400	0.0120	0.0200	mg/L	1		07/31/23 10:40

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Analyst: MEB
Analytical Date/Time: 07/31/23 10:40
Container ID: 1233640001-A

Prep Batch: WXX14861
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/28/23 17:00
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **RM0-No Name Creek DUP**

Client Sample ID: **RM0-No Name Creek DUP**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640002
Lab Project ID: 1233640

Collection Date: 07/18/23 11:25
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Dissolved Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	2.78	J	5.00	1.50	2.50	ug/L	1		07/27/23 17:04
Cadmium	0.250	U	0.500	0.150	0.250	ug/L	1		07/27/23 17:04
Chromium	2.50	U	5.00	2.50	2.50	ug/L	1		07/27/23 17:04
Copper	1.21	J	3.00	1.00	1.50	ug/L	1		07/27/23 17:04
Lead	1.00	U	2.00	0.500	1.00	ug/L	1		07/27/23 17:04
Zinc	6.93	J	10.0	3.10	5.00	ug/L	1		07/27/23 17:04

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 17:04
Container ID: 1233640002-B

Prep Batch: MXX36032
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Results of **RM0-No Name Creek DUP**

Client Sample ID: **RM0-No Name Creek DUP**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640002
Lab Project ID: 1233640

Collection Date: 07/18/23 11:25
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.0802	J	0.200	0.0500	0.100	mg/L	2		07/20/23 16:06

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Analyst: EBH
Analytical Date/Time: 07/20/23 16:06
Container ID: 1233640002-A

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0276	J	0.0400	0.0120	0.0200	mg/L	1		07/31/23 12:56

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Analyst: MEB
Analytical Date/Time: 07/31/23 12:56
Container ID: 1233640002-A

Prep Batch: WXX14862
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/28/23 17:00
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 Qu.**
Lab Sample ID: 1233640003
Lab Project ID: 1233640

Collection Date: 07/18/23 10:30
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Dissolved Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	1.78	J	5.00	1.50	2.50	ug/L	1		07/27/23 17:06
Cadmium	0.250	U	0.500	0.150	0.250	ug/L	1		07/27/23 17:06
Chromium	2.50	U	5.00	2.50	2.50	ug/L	1		07/27/23 17:06
Copper	1.78	J	3.00	1.00	1.50	ug/L	1		07/27/23 17:06
Lead	1.00	U	2.00	0.500	1.00	ug/L	1		07/27/23 17:06
Zinc	6.58	J	10.0	3.10	5.00	ug/L	1		07/27/23 17:06

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 17:06
Container ID: 1233640003-B

Prep Batch: MXX36032
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
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 Qu.**
Lab Sample ID: 1233640003
Lab Project ID: 1233640

Collection Date: 07/18/23 10:30
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzene	0.200	U	0.400	0.120	0.200	ug/L	1		07/25/23 20:55
Ethylbenzene	0.500	U	1.00	0.310	0.500	ug/L	1		07/25/23 20:55
o-Xylene	0.500	U	1.00	0.310	0.500	ug/L	1		07/25/23 20:55
P & M -Xylene	1.00	U	2.00	0.620	1.00	ug/L	1		07/25/23 20:55
Toluene	0.500	U	1.00	0.310	0.500	ug/L	1		07/25/23 20:55
Xylenes (total)	1.50	U	3.00	1.00	1.50	ug/L	1		07/25/23 20:55
Surrogates									
1,2-Dichloroethane-D4 (surr)	105		81-118			%	1		07/25/23 20:55
4-Bromofluorobenzene (surr)	102		85-114			%	1		07/25/23 20:55
Toluene-d8 (surr)	98.2		89-112			%	1		07/25/23 20:55

Batch Information

Analytical Batch: VMS22601
Analytical Method: SW8260D
Analyst: JY
Analytical Date/Time: 07/25/23 20:55
Container ID: 1233640003-E

Prep Batch: VXX40176
Prep Method: SW5030B
Prep Date/Time: 07/25/23 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **RM1.5-Kenai City Dock**

Client Sample ID: **RM1.5-Kenai City Dock**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640003
Lab Project ID: 1233640

Collection Date: 07/18/23 10:30
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.197	J	0.200	0.0500	0.100	mg/L	2		07/20/23 16:07

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Analyst: EBH
Analytical Date/Time: 07/20/23 16:07
Container ID: 1233640003-A

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.888		0.200	0.0600	0.100	mg/L	5		07/31/23 13:48

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Analyst: MEB
Analytical Date/Time: 07/31/23 13:48
Container ID: 1233640003-A

Prep Batch: WXX14863
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/31/23 10:35
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **RM6.5-Cunningham Park**

Client Sample ID: **RM6.5-Cunningham Park**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640004
Lab Project ID: 1233640

Collection Date: 07/18/23 09:05
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Dissolved Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	2.50	U	5.00	1.50	2.50	ug/L	1		07/27/23 17:14
Cadmium	0.250	U	0.500	0.150	0.250	ug/L	1		07/27/23 17:14
Chromium	2.50	U	5.00	2.50	2.50	ug/L	1		07/27/23 17:14
Copper	1.50	U	3.00	1.00	1.50	ug/L	1		07/27/23 17:14
Lead	1.00	U	2.00	0.500	1.00	ug/L	1		07/27/23 17:14
Zinc	3.91	J	10.0	3.10	5.00	ug/L	1		07/27/23 17:14

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 17:14
Container ID: 1233640004-B

Prep Batch: MXX36032
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
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 Qu.**
Lab Sample ID: 1233640004
Lab Project ID: 1233640

Collection Date: 07/18/23 09:05
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzene	0.200	U	0.400	0.120	0.200	ug/L	1		07/25/23 21:10
Ethylbenzene	0.500	U	1.00	0.310	0.500	ug/L	1		07/25/23 21:10
o-Xylene	0.500	U	1.00	0.310	0.500	ug/L	1		07/25/23 21:10
P & M -Xylene	1.00	U	2.00	0.620	1.00	ug/L	1		07/25/23 21:10
Toluene	0.500	U	1.00	0.310	0.500	ug/L	1		07/25/23 21:10
Xylenes (total)	1.50	U	3.00	1.00	1.50	ug/L	1		07/25/23 21:10
Surrogates									
1,2-Dichloroethane-D4 (surr)	104		81-118			%	1		07/25/23 21:10
4-Bromofluorobenzene (surr)	102		85-114			%	1		07/25/23 21:10
Toluene-d8 (surr)	98.8		89-112			%	1		07/25/23 21:10

Batch Information

Analytical Batch: VMS22601
Analytical Method: SW8260D
Analyst: JY
Analytical Date/Time: 07/25/23 21:10
Container ID: 1233640004-D

Prep Batch: VXX40176
Prep Method: SW5030B
Prep Date/Time: 07/25/23 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **RM6.5-Cunningham Park**

Client Sample ID: **RM6.5-Cunningham Park**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640004
Lab Project ID: 1233640

Collection Date: 07/18/23 09:05
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.197	J	0.200	0.0500	0.100	mg/L	2		07/20/23 16:09

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Analyst: EBH
Analytical Date/Time: 07/20/23 16:09
Container ID: 1233640004-A

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0368	J	0.0400	0.0120	0.0200	mg/L	1		07/31/23 12:57

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Analyst: MEB
Analytical Date/Time: 07/31/23 12:57
Container ID: 1233640004-A

Prep Batch: WXX14862
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/28/23 17:00
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **RM10-Beaver Creek**

Client Sample ID: **RM10-Beaver Creek**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640005
Lab Project ID: 1233640

Collection Date: 07/18/23 09:45
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Dissolved Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	3.49	J	5.00	1.50	2.50	ug/L	1		07/27/23 17:17
Cadmium	0.250	U	0.500	0.150	0.250	ug/L	1		07/27/23 17:17
Chromium	2.50	U	5.00	2.50	2.50	ug/L	1		07/27/23 17:17
Copper	1.50	U	3.00	1.00	1.50	ug/L	1		07/27/23 17:17
Lead	1.00	U	2.00	0.500	1.00	ug/L	1		07/27/23 17:17
Zinc	5.03	J	10.0	3.10	5.00	ug/L	1		07/27/23 17:17

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 17:17
Container ID: 1233640005-B

Prep Batch: MXX36032
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
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 Qu.**
Lab Sample ID: 1233640005
Lab Project ID: 1233640

Collection Date: 07/18/23 09:45
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	0.100	mg/L	2		07/20/23 16:16

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Analyst: EBH
Analytical Date/Time: 07/20/23 16:16
Container ID: 1233640005-A

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0502		0.0400	0.0120	0.0200	mg/L	1		07/31/23 13:00

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Analyst: MEB
Analytical Date/Time: 07/31/23 13:00
Container ID: 1233640005-A

Prep Batch: WXX14862
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/28/23 17:00
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **RM10.1-Kenai River**

Client Sample ID: **RM10.1-Kenai River**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640006
Lab Project ID: 1233640

Collection Date: 07/18/23 10:15
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Dissolved Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	2.50	U	5.00	1.50	2.50	ug/L	1		07/27/23 17:19
Cadmium	0.250	U	0.500	0.150	0.250	ug/L	1		07/27/23 17:19
Chromium	2.50	U	5.00	2.50	2.50	ug/L	1		07/27/23 17:19
Copper	1.50	U	3.00	1.00	1.50	ug/L	1		07/27/23 17:19
Lead	1.00	U	2.00	0.500	1.00	ug/L	1		07/27/23 17:19
Zinc	3.36	J	10.0	3.10	5.00	ug/L	1		07/27/23 17:19

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 17:19
Container ID: 1233640006-B

Prep Batch: MXX36032
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
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 Qu.**
Lab Sample ID: 1233640006
Lab Project ID: 1233640

Collection Date: 07/18/23 10:15
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.223		0.200	0.0500	0.100	mg/L	2		07/20/23 16:18

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Analyst: EBH
Analytical Date/Time: 07/20/23 16:18
Container ID: 1233640006-A

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0124	J	0.0400	0.0120	0.0200	mg/L	1		07/31/23 13:01

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Analyst: MEB
Analytical Date/Time: 07/31/23 13:01
Container ID: 1233640006-A

Prep Batch: WXX14862
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/28/23 17:00
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **RM12.5-Pillars**

Client Sample ID: **RM12.5-Pillars**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640007
Lab Project ID: 1233640

Collection Date: 07/18/23 10:35
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Dissolved Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	2.50	U	5.00	1.50	2.50	ug/L	1		07/27/23 17:22
Cadmium	0.250	U	0.500	0.150	0.250	ug/L	1		07/27/23 17:22
Chromium	2.50	U	5.00	2.50	2.50	ug/L	1		07/27/23 17:22
Copper	1.50	U	3.00	1.00	1.50	ug/L	1		07/27/23 17:22
Lead	1.00	U	2.00	0.500	1.00	ug/L	1		07/27/23 17:22
Zinc	3.58	J	10.0	3.10	5.00	ug/L	1		07/27/23 17:22

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 17:22
Container ID: 1233640007-B

Prep Batch: MXX36032
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
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 Qu.**
Lab Sample ID: 1233640007
Lab Project ID: 1233640

Collection Date: 07/18/23 10:35
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.233		0.200	0.0500	0.100	mg/L	2		07/20/23 16:27

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Analyst: EBH
Analytical Date/Time: 07/20/23 16:27
Container ID: 1233640007-A

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0200	U	0.0400	0.0120	0.0200	mg/L	1		07/31/23 13:02

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Analyst: MEB
Analytical Date/Time: 07/31/23 13:02
Container ID: 1233640007-A

Prep Batch: WXX14862
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/28/23 17:00
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **RM18-Poacher's Cove**

Client Sample ID: **RM18-Poacher's Cove**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640008
Lab Project ID: 1233640

Collection Date: 07/18/23 10:55
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Dissolved Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	2.50	U	5.00	1.50	2.50	ug/L	1		07/27/23 17:25
Cadmium	0.250	U	0.500	0.150	0.250	ug/L	1		07/27/23 17:25
Chromium	2.50	U	5.00	2.50	2.50	ug/L	1		07/27/23 17:25
Copper	1.50	U	3.00	1.00	1.50	ug/L	1		07/27/23 17:25
Lead	1.00	U	2.00	0.500	1.00	ug/L	1		07/27/23 17:25
Zinc	5.41	J	10.0	3.10	5.00	ug/L	1		07/27/23 17:25

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 17:25
Container ID: 1233640008-B

Prep Batch: MXX36032
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
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 Qu.**
Lab Sample ID: 1233640008
Lab Project ID: 1233640

Collection Date: 07/18/23 10:55
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.298		0.200	0.0500	0.100	mg/L	2		07/20/23 16:32

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Analyst: EBH
Analytical Date/Time: 07/20/23 16:32
Container ID: 1233640008-A

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0200	U	0.0400	0.0120	0.0200	mg/L	1		07/31/23 13:05

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Analyst: MEB
Analytical Date/Time: 07/31/23 13:05
Container ID: 1233640008-A

Prep Batch: WXX14862
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/28/23 17:00
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 Qu.**
Lab Sample ID: 1233640009
Lab Project ID: 1233640

Collection Date: 07/18/23 11:06
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Dissolved Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	2.11	J	5.00	1.50	2.50	ug/L	1		07/27/23 17:27
Cadmium	0.250	U	0.500	0.150	0.250	ug/L	1		07/27/23 17:27
Chromium	2.50	U	5.00	2.50	2.50	ug/L	1		07/27/23 17:27
Copper	1.50	U	3.00	1.00	1.50	ug/L	1		07/27/23 17:27
Lead	1.00	U	2.00	0.500	1.00	ug/L	1		07/27/23 17:27
Zinc	6.30	J	10.0	3.10	5.00	ug/L	1		07/27/23 17:27

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 17:27
Container ID: 1233640009-B

Prep Batch: MXX36032
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
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 Qu.**
Lab Sample ID: 1233640009
Lab Project ID: 1233640

Collection Date: 07/18/23 11:06
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.121	J	0.200	0.0500	0.100	mg/L	2		07/20/23 16:34

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Analyst: EBH
Analytical Date/Time: 07/20/23 16:34
Container ID: 1233640009-A

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0131	J	0.0400	0.0120	0.0200	mg/L	1		07/31/23 13:06

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Analyst: MEB
Analytical Date/Time: 07/31/23 13:06
Container ID: 1233640009-A

Prep Batch: WXX14862
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/28/23 17:00
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **RM21-Soldotna Bridge**

Client Sample ID: **RM21-Soldotna Bridge**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640010
Lab Project ID: 1233640

Collection Date: 07/18/23 10:34
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Dissolved Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	2.50	U	5.00	1.50	2.50	ug/L	1		07/27/23 17:30
Cadmium	0.250	U	0.500	0.150	0.250	ug/L	1		07/27/23 17:30
Chromium	2.50	U	5.00	2.50	2.50	ug/L	1		07/27/23 17:30
Copper	1.50	U	3.00	1.00	1.50	ug/L	1		07/27/23 17:30
Lead	1.00	U	2.00	0.500	1.00	ug/L	1		07/27/23 17:30
Zinc	4.30	J	10.0	3.10	5.00	ug/L	1		07/27/23 17:30

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 17:30
Container ID: 1233640010-B

Prep Batch: MXX36032
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
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 Qu.**
Lab Sample ID: 1233640010
Lab Project ID: 1233640

Collection Date: 07/18/23 10:34
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.248		0.200	0.0500	0.100	mg/L	2		07/20/23 16:35

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Analyst: EBH
Analytical Date/Time: 07/20/23 16:35
Container ID: 1233640010-A

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0200	U	0.0400	0.0120	0.0200	mg/L	1		07/31/23 13:07

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Analyst: MEB
Analytical Date/Time: 07/31/23 13:07
Container ID: 1233640010-A

Prep Batch: WXX14862
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/28/23 17:00
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 07/31/2023 2:54:53PM

J flagging is activated

Results of **RM22-Soldotna Creek**

Client Sample ID: **RM22-Soldotna Creek**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640011
Lab Project ID: 1233640

Collection Date: 07/18/23 09:09
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Dissolved Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	7.51		5.00	1.50	2.50	ug/L	1		07/27/23 17:32
Cadmium	0.250	U	0.500	0.150	0.250	ug/L	1		07/27/23 17:32
Chromium	2.50	U	5.00	2.50	2.50	ug/L	1		07/27/23 17:32
Copper	1.50	U	3.00	1.00	1.50	ug/L	1		07/27/23 17:32
Lead	1.00	U	2.00	0.500	1.00	ug/L	1		07/27/23 17:32
Zinc	4.23	J	10.0	3.10	5.00	ug/L	1		07/27/23 17:32

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 17:32
Container ID: 1233640011-B

Prep Batch: MXX36032
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
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 Qu.**
Lab Sample ID: 1233640011
Lab Project ID: 1233640

Collection Date: 07/18/23 09:09
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.0798	J	0.200	0.0500	0.100	mg/L	2		07/20/23 16:37

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Analyst: EBH
Analytical Date/Time: 07/20/23 16:37
Container ID: 1233640011-A

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0859		0.0400	0.0120	0.0200	mg/L	1		07/31/23 13:08

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Analyst: MEB
Analytical Date/Time: 07/31/23 13:08
Container ID: 1233640011-A

Prep Batch: WXX14862
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/28/23 17:00
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 07/31/2023 2:54:53PM

J flagging is activated

Results of **RM 23-Swiftwater Park**

Client Sample ID: **RM 23-Swiftwater Park**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640012
Lab Project ID: 1233640

Collection Date: 07/18/23 09:51
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Dissolved Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	4.80	J	5.00	1.50	2.50	ug/L	1		07/27/23 17:35
Cadmium	0.331	J	0.500	0.150	0.250	ug/L	1		07/27/23 17:35
Chromium	2.50	U	5.00	2.50	2.50	ug/L	1		07/27/23 17:35
Copper	4.15		3.00	1.00	1.50	ug/L	1		07/27/23 17:35
Lead	3.68		2.00	0.500	1.00	ug/L	1		07/27/23 17:35
Zinc	7.11	J	10.0	3.10	5.00	ug/L	1		07/27/23 17:35

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 17:35
Container ID: 1233640012-B

Prep Batch: MXX36032
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Results of **RM 23-Swiftwater Park**

Client Sample ID: **RM 23-Swiftwater Park**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640012
Lab Project ID: 1233640

Collection Date: 07/18/23 09:51
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.266		0.200	0.0500	0.100	mg/L	2		07/20/23 16:39

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Analyst: EBH
Analytical Date/Time: 07/20/23 16:39
Container ID: 1233640012-A

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0353	J	0.0400	0.0120	0.0200	mg/L	1		07/31/23 13:09

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Analyst: MEB
Analytical Date/Time: 07/31/23 13:09
Container ID: 1233640012-A

Prep Batch: WXX14862
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/28/23 17:00
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 07/31/2023 2:54:53PM

J flagging is activated

Results of **RM30-Funny River**

Client Sample ID: **RM30-Funny River**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640013
Lab Project ID: 1233640

Collection Date: 07/18/23 11:35
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Dissolved Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	2.03	J	5.00	1.50	2.50	ug/L	1		07/27/23 17:38
Cadmium	0.250	U	0.500	0.150	0.250	ug/L	1		07/27/23 17:38
Chromium	2.50	U	5.00	2.50	2.50	ug/L	1		07/27/23 17:38
Copper	1.50	U	3.00	1.00	1.50	ug/L	1		07/27/23 17:38
Lead	1.00	U	2.00	0.500	1.00	ug/L	1		07/27/23 17:38
Zinc	4.03	J	10.0	3.10	5.00	ug/L	1		07/27/23 17:38

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 17:38
Container ID: 1233640013-B

Prep Batch: MXX36032
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
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 Qu.**
Lab Sample ID: 1233640013
Lab Project ID: 1233640

Collection Date: 07/18/23 11:35
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.0866	J	0.200	0.0500	0.100	mg/L	2		07/20/23 16:41

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Analyst: EBH
Analytical Date/Time: 07/20/23 16:41
Container ID: 1233640013-A

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0230	J	0.0400	0.0120	0.0200	mg/L	1		07/31/23 13:10

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Analyst: MEB
Analytical Date/Time: 07/31/23 13:10
Container ID: 1233640013-A

Prep Batch: WXX14862
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/28/23 17:00
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **RM31-Morgan's Landing**

Client Sample ID: **RM31-Morgan's Landing**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640014
Lab Project ID: 1233640

Collection Date: 07/18/23 09:25
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.233		0.200	0.0500	0.100	mg/L	2		07/20/23 16:42

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Analyst: EBH
Analytical Date/Time: 07/20/23 16:42
Container ID: 1233640014-A

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0200	U	0.0400	0.0120	0.0200	mg/L	1		07/31/23 13:11

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Analyst: MEB
Analytical Date/Time: 07/31/23 13:11
Container ID: 1233640014-A

Prep Batch: WXX14862
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/28/23 17:00
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **RM36-Moose River**

Client Sample ID: **RM36-Moose River**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640015
Lab Project ID: 1233640

Collection Date: 07/18/23 10:05
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	0.100	mg/L	2		07/20/23 16:49

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Analyst: EBH
Analytical Date/Time: 07/20/23 16:49
Container ID: 1233640015-A

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0123	J	0.0400	0.0120	0.0200	mg/L	1		07/31/23 13:12

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Analyst: MEB
Analytical Date/Time: 07/31/23 13:12
Container ID: 1233640015-A

Prep Batch: WXX14862
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/28/23 17:00
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 Qu.**
Lab Sample ID: 1233640016
Lab Project ID: 1233640

Collection Date: 07/18/23 10:20
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	0.100	mg/L	2		07/20/23 16:51

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Analyst: EBH
Analytical Date/Time: 07/20/23 16:51
Container ID: 1233640016-A

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0137	J	0.0400	0.0120	0.0200	mg/L	1		07/31/23 13:13

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Analyst: MEB
Analytical Date/Time: 07/31/23 13:13
Container ID: 1233640016-A

Prep Batch: WXX14862
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/28/23 17:00
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **RM40-Bing's Landing**

Client Sample ID: **RM40-Bing's Landing**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640017
Lab Project ID: 1233640

Collection Date: 07/18/23 10:25
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzene	0.200	U	0.400	0.120	0.200	ug/L	1		07/25/23 21:25
Ethylbenzene	0.500	U	1.00	0.310	0.500	ug/L	1		07/25/23 21:25
o-Xylene	0.500	U	1.00	0.310	0.500	ug/L	1		07/25/23 21:25
P & M -Xylene	1.00	U	2.00	0.620	1.00	ug/L	1		07/25/23 21:25
Toluene	0.500	U	1.00	0.310	0.500	ug/L	1		07/25/23 21:25
Xylenes (total)	1.50	U	3.00	1.00	1.50	ug/L	1		07/25/23 21:25
Surrogates									
1,2-Dichloroethane-D4 (surr)	107		81-118			%	1		07/25/23 21:25
4-Bromofluorobenzene (surr)	101		85-114			%	1		07/25/23 21:25
Toluene-d8 (surr)	99.2		89-112			%	1		07/25/23 21:25

Batch Information

Analytical Batch: VMS22601
Analytical Method: SW8260D
Analyst: JY
Analytical Date/Time: 07/25/23 21:25
Container ID: 1233640017-C

Prep Batch: VXX40176
Prep Method: SW5030B
Prep Date/Time: 07/25/23 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **RM40-Bing's Landing**

Client Sample ID: **RM40-Bing's Landing**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640017
Lab Project ID: 1233640

Collection Date: 07/18/23 10:25
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.217		0.200	0.0500	0.100	mg/L	2		07/20/23 16:53

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Analyst: EBH
Analytical Date/Time: 07/20/23 16:53
Container ID: 1233640017-A

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0200	U	0.0400	0.0120	0.0200	mg/L	1		07/31/23 13:13

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Analyst: MEB
Analytical Date/Time: 07/31/23 13:13
Container ID: 1233640017-A

Prep Batch: WXX14862
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/28/23 17:00
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 07/31/2023 2:54:53PM

J flagging is activated

Results of **RM43-Upstream of Dow Island**

Client Sample ID: **RM43-Upstream of Dow Island**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640018
Lab Project ID: 1233640

Collection Date: 07/18/23 08:18
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzene	0.200	U	0.400	0.120	0.200	ug/L	1		07/25/23 21:39
Ethylbenzene	0.500	U	1.00	0.310	0.500	ug/L	1		07/25/23 21:39
o-Xylene	0.500	U	1.00	0.310	0.500	ug/L	1		07/25/23 21:39
P & M -Xylene	1.00	U	2.00	0.620	1.00	ug/L	1		07/25/23 21:39
Toluene	0.500	U	1.00	0.310	0.500	ug/L	1		07/25/23 21:39
Xylenes (total)	1.50	U	3.00	1.00	1.50	ug/L	1		07/25/23 21:39
Surrogates									
1,2-Dichloroethane-D4 (surr)	105		81-118			%	1		07/25/23 21:39
4-Bromofluorobenzene (surr)	103		85-114			%	1		07/25/23 21:39
Toluene-d8 (surr)	99		89-112			%	1		07/25/23 21:39

Batch Information

Analytical Batch: VMS22601
Analytical Method: SW8260D
Analyst: JY
Analytical Date/Time: 07/25/23 21:39
Container ID: 1233640018-C

Prep Batch: VXX40176
Prep Method: SW5030B
Prep Date/Time: 07/25/23 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **RM43-Upstream of Dow Island**

Client Sample ID: **RM43-Upstream of Dow Island**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640018
Lab Project ID: 1233640

Collection Date: 07/18/23 08:18
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.215		0.200	0.0500	0.100	mg/L	2		07/20/23 16:55

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Analyst: EBH
Analytical Date/Time: 07/20/23 16:55
Container ID: 1233640018-A

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0200	U	0.0400	0.0120	0.0200	mg/L	1		07/31/23 13:16

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Analyst: MEB
Analytical Date/Time: 07/31/23 13:16
Container ID: 1233640018-A

Prep Batch: WXX14862
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/28/23 17:00
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **RM44-Mouth of Killey River**

Client Sample ID: **RM44-Mouth of Killey River**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640019
Lab Project ID: 1233640

Collection Date: 07/18/23 08:46
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.0514	J	0.200	0.0500	0.100	mg/L	2		07/20/23 16:56

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Analyst: EBH
Analytical Date/Time: 07/20/23 16:56
Container ID: 1233640019-A

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0273	J	0.0400	0.0120	0.0200	mg/L	1		07/31/23 13:17

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Analyst: MEB
Analytical Date/Time: 07/31/23 13:17
Container ID: 1233640019-A

Prep Batch: WXX14862
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/28/23 17:00
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 07/31/2023 2:54:53PM

J flagging is activated

Results of **RM50-Skilak Lake Outflow**

Client Sample ID: **RM50-Skilak Lake Outflow**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640020
Lab Project ID: 1233640

Collection Date: 07/18/23 09:21
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.225		0.200	0.0500	0.100	mg/L	2		07/20/23 16:58

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Analyst: EBH
Analytical Date/Time: 07/20/23 16:58
Container ID: 1233640020-A

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0200	U	0.0400	0.0120	0.0200	mg/L	1		07/31/23 13:18

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Analyst: MEB
Analytical Date/Time: 07/31/23 13:18
Container ID: 1233640020-A

Prep Batch: WXX14862
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/28/23 17:00
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 07/31/2023 2:54:53PM

J flagging is activated

Results of **RM70-Jim's Landing**

Client Sample ID: **RM70-Jim's Landing**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640021
Lab Project ID: 1233640

Collection Date: 07/18/23 10:33
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.286		0.200	0.0500	0.100	mg/L	2		07/20/23 17:00

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Analyst: EBH
Analytical Date/Time: 07/20/23 17:00
Container ID: 1233640021-A

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0200	U	0.0400	0.0120	0.0200	mg/L	1		07/31/23 13:19

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Analyst: MEB
Analytical Date/Time: 07/31/23 13:19
Container ID: 1233640021-A

Prep Batch: WXX14862
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/28/23 17:00
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 Qu.**
Lab Sample ID: 1233640022
Lab Project ID: 1233640

Collection Date: 07/18/23 09:53
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.451		0.200	0.0500	0.100	mg/L	2		07/20/23 17:02

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Analyst: EBH
Analytical Date/Time: 07/20/23 17:02
Container ID: 1233640022-A

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0200	U	0.0400	0.0120	0.0200	mg/L	1		07/31/23 13:49

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Analyst: MEB
Analytical Date/Time: 07/31/23 13:49
Container ID: 1233640022-A

Prep Batch: WXX14863
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/31/23 10:35
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 07/31/2023 2:54:53PM

J flagging is activated

Results of **RM82-Kenai Lake Bridge**

Client Sample ID: **RM82-Kenai Lake Bridge**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640023
Lab Project ID: 1233640

Collection Date: 07/18/23 08:08
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.288		0.200	0.0500	0.100	mg/L	2		07/20/23 17:03

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Analyst: EBH
Analytical Date/Time: 07/20/23 17:03
Container ID: 1233640023-A

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0200	U	0.0400	0.0120	0.0200	mg/L	1		07/31/23 13:52

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Analyst: MEB
Analytical Date/Time: 07/31/23 13:52
Container ID: 1233640023-A

Prep Batch: WXX14863
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/31/23 10:35
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 07/31/2023 2:54:53PM

J flagging is activated

Results of **RM79.5-Juneau Creek**

Client Sample ID: **RM79.5-Juneau Creek**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640024
Lab Project ID: 1233640

Collection Date: 07/18/23 08:50
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.327		0.200	0.0500	0.100	mg/L	2		07/20/23 17:05

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Analyst: EBH
Analytical Date/Time: 07/20/23 17:05
Container ID: 1233640024-A

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0200	U	0.0400	0.0120	0.0200	mg/L	1		07/31/23 13:53

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Analyst: MEB
Analytical Date/Time: 07/31/23 13:53
Container ID: 1233640024-A

Prep Batch: WXX14863
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/31/23 10:35
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 07/31/2023 2:54:53PM

J flagging is activated

Results of **TRIP BLANK**

Client Sample ID: **TRIP BLANK**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640025
Lab Project ID: 1233640

Collection Date: 07/18/23 08:50
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Volatile GC/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Benzene	0.200	U	0.400	0.120	0.200	ug/L	1		07/25/23 19:11
Ethylbenzene	0.500	U	1.00	0.310	0.500	ug/L	1		07/25/23 19:11
o-Xylene	0.500	U	1.00	0.310	0.500	ug/L	1		07/25/23 19:11
P & M -Xylene	1.00	U	2.00	0.620	1.00	ug/L	1		07/25/23 19:11
Toluene	0.500	U	1.00	0.310	0.500	ug/L	1		07/25/23 19:11
Xylenes (total)	1.50	U	3.00	1.00	1.50	ug/L	1		07/25/23 19:11
Surrogates									
1,2-Dichloroethane-D4 (surr)	109		81-118			%	1		07/25/23 19:11
4-Bromofluorobenzene (surr)	100		85-114			%	1		07/25/23 19:11
Toluene-d8 (surr)	98.8		89-112			%	1		07/25/23 19:11

Batch Information

Analytical Batch: VMS22601
Analytical Method: SW8260D
Analyst: JY
Analytical Date/Time: 07/25/23 19:11
Container ID: 1233640025-A

Prep Batch: VXX40176
Prep Method: SW5030B
Prep Date/Time: 07/25/23 06:00
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Results of **RM 0 - No Name Creek**

Client Sample ID: **RM 0 - No Name Creek**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640026
Lab Project ID: 1233640

Collection Date: 07/18/23 11:12
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Calcium	6020		500	150	250	ug/L	1		07/27/23 17:45
Copper	1.16	J	3.00	1.00	1.50	ug/L	1		07/27/23 17:45
Iron	5350		250	78.0	125	ug/L	1		07/27/23 17:45
Magnesium	1540		50.0	15.0	25.0	ug/L	1		07/27/23 17:45
Zinc	16.4		10.0	3.10	5.00	ug/L	1		07/27/23 17:45

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 17:45
Container ID: 1233640026-A

Prep Batch: MXX36032
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 07/31/2023 2:54:53PM

J flagging is activated

Results of **RM 0 - No Name Creek - DUP**

Client Sample ID: **RM 0 - No Name Creek - DUP**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640027
Lab Project ID: 1233640

Collection Date: 07/18/23 11:25
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Calcium	6400		500	150	250	ug/L	1		07/27/23 17:48
Copper	1.19	J	3.00	1.00	1.50	ug/L	1		07/27/23 17:48
Iron	5530		250	78.0	125	ug/L	1		07/27/23 17:48
Magnesium	1720		50.0	15.0	25.0	ug/L	1		07/27/23 17:48
Zinc	16.0		10.0	3.10	5.00	ug/L	1		07/27/23 17:48

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 17:48
Container ID: 1233640027-A

Prep Batch: MXX36032
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 07/31/2023 2:54:53PM

J flagging is activated

Results of **RM 1.5- Kenai City Dock**

Client Sample ID: **RM 1.5- Kenai City Dock**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640028
Lab Project ID: 1233640

Collection Date: 07/18/23 10:30
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Calcium	16800		500	150	250	ug/L	1		07/27/23 17:51
Copper	23.4		3.00	1.00	1.50	ug/L	1		07/27/23 17:51
Iron	15900		250	78.0	125	ug/L	1		07/27/23 17:51
Magnesium	8660		50.0	15.0	25.0	ug/L	1		07/27/23 17:51
Zinc	69.6		10.0	3.10	5.00	ug/L	1		07/27/23 17:51

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 17:51
Container ID: 1233640028-A

Prep Batch: MXX36032
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Results of **RM 6.5- Cunningham Park**

Client Sample ID: **RM 6.5- Cunningham Park**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640029
Lab Project ID: 1233640

Collection Date: 07/18/23 09:05
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Calcium	13500		500	150	250	ug/L	1		07/27/23 16:52
Copper	2.11	J	3.00	1.00	1.50	ug/L	1		07/27/23 16:52
Iron	1580		250	78.0	125	ug/L	1		07/27/23 16:52
Magnesium	1660		50.0	15.0	25.0	ug/L	1		07/27/23 16:52
Zinc	14.3		10.0	3.10	5.00	ug/L	1		07/27/23 16:52

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 16:52
Container ID: 1233640029-A

Prep Batch: MXX36032
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Results of **Rm 10 - Beaver Creek**

Client Sample ID: **Rm 10 - Beaver Creek**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640030
Lab Project ID: 1233640

Collection Date: 07/18/23 09:45
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Calcium	12300		500	150	250	ug/L	1		07/27/23 17:53
Copper	1.50	U	3.00	1.00	1.50	ug/L	1		07/27/23 17:53
Iron	1950		250	78.0	125	ug/L	1		07/27/23 17:53
Magnesium	2650		50.0	15.0	25.0	ug/L	1		07/27/23 17:53
Zinc	17.1		10.0	3.10	5.00	ug/L	1		07/27/23 17:53

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 17:53
Container ID: 1233640030-A

Prep Batch: MXX36032
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Results of **RM 10.1 - Kenai River**

Client Sample ID: **RM 10.1 - Kenai River**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640031
Lab Project ID: 1233640

Collection Date: 07/18/23 10:15
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Calcium	12700		500	150	250	ug/L	1		07/27/23 19:39
Copper	1.57	J	3.00	1.00	1.50	ug/L	1		07/27/23 19:39
Iron	963		250	78.0	125	ug/L	1		07/27/23 19:39
Magnesium	1320		50.0	15.0	25.0	ug/L	1		07/27/23 19:39
Zinc	16.9		10.0	3.10	5.00	ug/L	1		07/27/23 19:39

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 19:39
Container ID: 1233640031-A

Prep Batch: MXX36033
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Results of **RM 12.5 - Pillars**

Client Sample ID: **RM 12.5 - Pillars**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640032
Lab Project ID: 1233640

Collection Date: 07/18/23 10:35
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Calcium	13100		500	150	250	ug/L	1		07/27/23 19:41
Copper	1.67	J	3.00	1.00	1.50	ug/L	1		07/27/23 19:41
Iron	756		250	78.0	125	ug/L	1		07/27/23 19:41
Magnesium	1270		50.0	15.0	25.0	ug/L	1		07/27/23 19:41
Zinc	14.6		10.0	3.10	5.00	ug/L	1		07/27/23 19:41

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 19:41
Container ID: 1233640032-A

Prep Batch: MXX36033
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 07/31/2023 2:54:53PM

J flagging is activated

Results of **RM 18 - Poacher's Cove**

Client Sample ID: **RM 18 - Poacher's Cove**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640033
Lab Project ID: 1233640

Collection Date: 07/18/23 10:55
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Calcium	12900		500	150	250	ug/L	1		07/27/23 19:44
Copper	4.88		3.00	1.00	1.50	ug/L	1		07/27/23 19:44
Iron	691		250	78.0	125	ug/L	1		07/27/23 19:44
Magnesium	1180		50.0	15.0	25.0	ug/L	1		07/27/23 19:44
Zinc	13.4		10.0	3.10	5.00	ug/L	1		07/27/23 19:44

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 19:44
Container ID: 1233640033-A

Prep Batch: MXX36033
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Results of **RM 19 - Slikok Creek**

Client Sample ID: **RM 19 - Slikok Creek**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640034
Lab Project ID: 1233640

Collection Date: 07/18/23 11:06
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Calcium	12400		500	150	250	ug/L	1		07/27/23 19:52
Copper	1.50	U	3.00	1.00	1.50	ug/L	1		07/27/23 19:52
Iron	1320		250	78.0	125	ug/L	1		07/27/23 19:52
Magnesium	3010		50.0	15.0	25.0	ug/L	1		07/27/23 19:52
Zinc	16.0		10.0	3.10	5.00	ug/L	1		07/27/23 19:52

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 19:52
Container ID: 1233640034-A

Prep Batch: MXX36033
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Results of **RM 21 - Soldotna Bridge**

Client Sample ID: **RM 21 - Soldotna Bridge**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640035
Lab Project ID: 1233640

Collection Date: 07/18/23 10:34
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Calcium	12900		500	150	250	ug/L	1		07/27/23 19:54
Copper	1.12	J	3.00	1.00	1.50	ug/L	1		07/27/23 19:54
Iron	697		250	78.0	125	ug/L	1		07/27/23 19:54
Magnesium	1200		50.0	15.0	25.0	ug/L	1		07/27/23 19:54
Zinc	15.1		10.0	3.10	5.00	ug/L	1		07/27/23 19:54

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 19:54
Container ID: 1233640035-A

Prep Batch: MXX36033
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Results of **RM 22 - Soldotna Creek**

Client Sample ID: **RM 22 - Soldotna Creek**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640036
Lab Project ID: 1233640

Collection Date: 07/18/23 09:09
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Calcium	16800		500	150	250	ug/L	1		07/27/23 19:57
Copper	1.50	U	3.00	1.00	1.50	ug/L	1		07/27/23 19:57
Iron	896		250	78.0	125	ug/L	1		07/27/23 19:57
Magnesium	4160		50.0	15.0	25.0	ug/L	1		07/27/23 19:57
Zinc	15.2		10.0	3.10	5.00	ug/L	1		07/27/23 19:57

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 19:57
Container ID: 1233640036-A

Prep Batch: MXX36033
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Results of **RM 23 - Swiftwater Park**

Client Sample ID: **RM 23 - Swiftwater Park**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640037
Lab Project ID: 1233640

Collection Date: 07/18/23 09:31
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Calcium	13400		500	150	250	ug/L	1		07/27/23 19:59
Copper	1.81	J	3.00	1.00	1.50	ug/L	1		07/27/23 19:59
Iron	1320		250	78.0	125	ug/L	1		07/27/23 19:59
Magnesium	1480		50.0	15.0	25.0	ug/L	1		07/27/23 19:59
Zinc	15.2		10.0	3.10	5.00	ug/L	1		07/27/23 19:59

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 19:59
Container ID: 1233640037-A

Prep Batch: MXX36033
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Results of **RM 30 - Funny River**

Client Sample ID: **RM 30 - Funny River**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640038
Lab Project ID: 1233640

Collection Date: 07/18/23 11:35
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Calcium	10300		500	150	250	ug/L	1		07/27/23 20:02
Copper	1.50	U	3.00	1.00	1.50	ug/L	1		07/27/23 20:02
Iron	734		250	78.0	125	ug/L	1		07/27/23 20:02
Magnesium	2890		50.0	15.0	25.0	ug/L	1		07/27/23 20:02
Zinc	11.4		10.0	3.10	5.00	ug/L	1		07/27/23 20:02

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 20:02
Container ID: 1233640038-A

Prep Batch: MXX36033
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Results of **RM 31 - Morgan's Landing**

Client Sample ID: **RM 31 - Morgan's Landing**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640039
Lab Project ID: 1233640

Collection Date: 07/18/23 09:25
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Calcium	10100		500	150	250	ug/L	1		07/27/23 19:30
Copper	1.50	U	3.00	1.00	1.50	ug/L	1		07/27/23 19:30
Iron	561		250	78.0	125	ug/L	1		07/27/23 19:30
Magnesium	948		50.0	15.0	25.0	ug/L	1		07/27/23 19:30
Zinc	10.2		10.0	3.10	5.00	ug/L	1		07/27/23 19:30

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 19:30
Container ID: 1233640039-A

Prep Batch: MXX36033
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Results of **RM 36 - Moose River**

Client Sample ID: **RM 36 - Moose River**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640040
Lab Project ID: 1233640

Collection Date: 07/18/23 10:05
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Calcium	21400		500	150	250	ug/L	1		07/27/23 20:05
Iron	581		250	78.0	125	ug/L	1		07/27/23 20:05
Magnesium	2880		50.0	15.0	25.0	ug/L	1		07/27/23 20:05

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 20:05
Container ID: 1233640040-A

Prep Batch: MXX36033
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Results of **RM 36 - Moose River - DUP**

Client Sample ID: **RM 36 - Moose River - DUP**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640041
Lab Project ID: 1233640

Collection Date: 07/18/23 10:20
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Calcium	22100		500	150	250	ug/L	1		07/27/23 20:07
Iron	577		250	78.0	125	ug/L	1		07/27/23 20:07
Magnesium	3010		50.0	15.0	25.0	ug/L	1		07/27/23 20:07

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 20:07
Container ID: 1233640041-A

Prep Batch: MXX36033
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Results of **RM 40 - Bing's Landing**

Client Sample ID: **RM 40 - Bing's Landing**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640042
Lab Project ID: 1233640

Collection Date: 07/18/23 10:25
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Calcium	12800		500	150	250	ug/L	1		07/27/23 20:10
Iron	477		250	78.0	125	ug/L	1		07/27/23 20:10
Magnesium	1060		50.0	15.0	25.0	ug/L	1		07/27/23 20:10

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 20:10
Container ID: 1233640042-A

Prep Batch: MXX36033
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Results of **RM 43 - Upstream of Dow Island**

Client Sample ID: **RM 43 - Upstream of Dow Island**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640043
Lab Project ID: 1233640

Collection Date: 07/18/23 08:18
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Calcium	12700		500	150	250	ug/L	1		07/27/23 19:34
Iron	592		250	78.0	125	ug/L	1		07/27/23 19:34
Magnesium	1090		50.0	15.0	25.0	ug/L	1		07/27/23 19:34

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 19:34
Container ID: 1233640043-A

Prep Batch: MXX36033
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Results of **RM 44 - Mouth of Killey Valley**

Client Sample ID: **RM 44 - Mouth of Killey Valley**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640044
Lab Project ID: 1233640

Collection Date: 07/18/23 08:46
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Calcium	6960		500	150	250	ug/L	1		07/27/23 20:12
Iron	3300		250	78.0	125	ug/L	1		07/27/23 20:12
Magnesium	2090		50.0	15.0	25.0	ug/L	1		07/27/23 20:12

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 20:12
Container ID: 1233640044-A

Prep Batch: MXX36033
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Results of **RM 50 - Skilak Lake Outflow**

Client Sample ID: **RM 50 - Skilak Lake Outflow**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640045
Lab Project ID: 1233640

Collection Date: 07/18/23 09:21
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Calcium	13000		500	150	250	ug/L	1		07/27/23 20:15
Iron	125	U	250	78.0	125	ug/L	1		07/27/23 20:15
Magnesium	902		50.0	15.0	25.0	ug/L	1		07/27/23 20:15

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 20:15
Container ID: 1233640045-A

Prep Batch: MXX36033
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Results of **RM 70 - Jim's Landing**

Client Sample ID: **RM 70 - Jim's Landing**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640046
Lab Project ID: 1233640

Collection Date: 07/18/23 10:33
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Calcium	16600		500	150	250	ug/L	1		07/27/23 20:23
Iron	118	J	250	78.0	125	ug/L	1		07/27/23 20:23
Magnesium	1220		50.0	15.0	25.0	ug/L	1		07/27/23 20:23

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 20:23
Container ID: 1233640046-A

Prep Batch: MXX36033
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Results of **RM 74 - Russian River**

Client Sample ID: **RM 74 - Russian River**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640047
Lab Project ID: 1233640

Collection Date: 07/18/23 09:53
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Calcium	18500		500	150	250	ug/L	1		07/27/23 20:25
Iron	125	U	250	78.0	125	ug/L	1		07/27/23 20:25
Magnesium	1090		50.0	15.0	25.0	ug/L	1		07/27/23 20:25

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 20:25
Container ID: 1233640047-A

Prep Batch: MXX36033
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Results of **RM 82 - Kenai Lake Bridge**

Client Sample ID: **RM 82 - Kenai Lake Bridge**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640048
Lab Project ID: 1233640

Collection Date: 07/18/23 08:08
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Calcium	16800		500	150	250	ug/L	1		07/27/23 20:28
Iron	83.8	J	250	78.0	125	ug/L	1		07/27/23 20:28
Magnesium	1190		50.0	15.0	25.0	ug/L	1		07/27/23 20:28

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 20:28
Container ID: 1233640048-A

Prep Batch: MXX36033
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Results of **RM 79.5 - Juneau Creek**

Client Sample ID: **RM 79.5 - Juneau Creek**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640049
Lab Project ID: 1233640

Collection Date: 07/18/23 08:50
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Calcium	16500		500	150	250	ug/L	1		07/27/23 20:31
Iron	125	U	250	78.0	125	ug/L	1		07/27/23 20:31
Magnesium	1090		50.0	15.0	25.0	ug/L	1		07/27/23 20:31

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 20:31
Container ID: 1233640049-A

Prep Batch: MXX36033
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Results of **RM 1.5 Kenai City Dock FB**

Client Sample ID: **RM 1.5 Kenai City Dock FB**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640050
Lab Project ID: 1233640

Collection Date: 07/18/23 10:30
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Dissolved Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	2.50	U	5.00	1.50	2.50	ug/L	1		07/27/23 17:56
Cadmium	0.250	U	0.500	0.150	0.250	ug/L	1		07/27/23 17:56
Chromium	2.50	U	5.00	2.50	2.50	ug/L	1		07/27/23 17:56
Copper	1.50	U	3.00	1.00	1.50	ug/L	1		07/27/23 17:56
Lead	1.00	U	2.00	0.500	1.00	ug/L	1		07/27/23 17:56
Zinc	4.31	J	10.0	3.10	5.00	ug/L	1		07/27/23 17:56

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 17:56
Container ID: 1233640050-A

Prep Batch: MXX36032
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Results of **RM 21 - Soldotna Bridge FB**

Client Sample ID: **RM 21 - Soldotna Bridge FB**
Client Project ID: **Kenai River Baseline Water Qu.**
Lab Sample ID: 1233640051
Lab Project ID: 1233640

Collection Date: 07/18/23 10:34
Received Date: 07/18/23 17:04
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Dissolved Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	2.50	U	5.00	1.50	2.50	ug/L	1		07/27/23 16:56
Cadmium	0.250	U	0.500	0.150	0.250	ug/L	1		07/27/23 16:56
Chromium	2.50	U	5.00	2.50	2.50	ug/L	1		07/27/23 16:56
Copper	1.50	U	3.00	1.00	1.50	ug/L	1		07/27/23 16:56
Lead	1.00	U	2.00	0.500	1.00	ug/L	1		07/27/23 16:56
Zinc	3.54	J	10.0	3.10	5.00	ug/L	1		07/27/23 16:56

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Analyst: HGS
Analytical Date/Time: 07/27/23 16:56
Container ID: 1233640051-A

Prep Batch: MXX36032
Prep Method: E200.2
Prep Date/Time: 07/25/23 12:56
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Method Blank

Blank ID: MB for HBN 1859841 [MXX/36032]
Blank Lab ID: 1724393

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1233640001, 1233640002, 1233640003, 1233640004, 1233640005, 1233640006, 1233640007, 1233640008, 1233640009, 1233640010, 1233640011, 1233640012, 1233640013, 1233640026, 1233640027, 1233640028, 1233640029, 1233640030, 1233640050, 1233640051

Results by **EP200.8**

Parameter	Results	LOQ/CL	DL	LOD	Units
Arsenic	2.50U	5.00	1.50	2.50	ug/L
Cadmium	0.250U	0.500	0.150	0.250	ug/L
Calcium	250U	500	150	250	ug/L
Chromium	2.50U	5.00	2.50	2.50	ug/L
Copper	1.50U	3.00	1.00	1.50	ug/L
Iron	125U	250	78.0	125	ug/L
Lead	1.00U	2.00	0.500	1.00	ug/L
Magnesium	25.0U	50.0	15.0	25.0	ug/L
Zinc	5.00U	10.0	3.10	5.00	ug/L

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Instrument: P7 Agilent 7800
Analyst: HGS
Analytical Date/Time: 7/27/2023 4:45:12PM

Prep Batch: MXX36032
Prep Method: E200.2
Prep Date/Time: 7/25/2023 12:56:41PM
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

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

Blank Spike Summary

Blank Spike ID: LCS for HBN 1233640 [MXX36032]
Blank Spike Lab ID: 1724394
Date Analyzed: 07/27/2023 16:47

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1233640001, 1233640002, 1233640003, 1233640004, 1233640005, 1233640006, 1233640007, 1233640008, 1233640009, 1233640010, 1233640011, 1233640012, 1233640013, 1233640026, 1233640027, 1233640028, 1233640029, 1233640030, 1233640050, 1233640051

Results by **EP200.8**

Blank Spike (ug/L)

Parameter	Spike	Result	Rec (%)	CL
Arsenic	1000	933	93	(85-115)
Cadmium	100	94.9	95	(85-115)
Calcium	10000	9790	98	(85-115)
Chromium	400	384	96	(85-115)
Copper	1000	955	96	(85-115)
Iron	5000	5010	100	(85-115)
Lead	1000	1060	106	(85-115)
Magnesium	10000	10500	105	(85-115)
Zinc	1000	1040	104	(85-115)

Batch Information

Analytical Batch: **MMS12014**
Analytical Method: **EP200.8**
Instrument: **P7 Agilent 7800**
Analyst: **HGS**

Prep Batch: **MXX36032**
Prep Method: **E200.2**
Prep Date/Time: **07/25/2023 12:56**
Spike Init Wt./Vol.: 5000 ug/L Extract Vol: 50 mL
Dupe Init Wt./Vol.: Extract Vol:

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Matrix Spike Summary

Original Sample ID: 1233640029
MS Sample ID: 1724396 MS
MSD Sample ID:

Analysis Date: 07/27/2023 16:52
Analysis Date: 07/27/2023 16:55
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1233640029, 1233640051

Results by **EP200.8**

		Matrix Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Calcium	13500	10000	21800	84				70-130		
Copper	2.11J	1000	950	95				70-130		
Iron	1580	5000	6180	92				70-130		
Magnesium	1660	10000	11400	98				70-130		
Zinc	14.3	1000	1020	101				70-130		

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Instrument: P7 Agilent 7800
Analyst: HGS
Analytical Date/Time: 7/27/2023 4:55:03PM

Prep Batch: MXX36032
Prep Method: DW Digest for Metals on ICP-MS
Prep Date/Time: 7/25/2023 12:56:41PM
Prep Initial Wt./Vol.: 20.00mL
Prep Extract Vol: 50.00mL

Matrix Spike Summary

Original Sample ID: 1233640051
MS Sample ID: 1724397 MS
MSD Sample ID:

Analysis Date: 07/27/2023 16:56
Analysis Date: 07/27/2023 16:59
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1233640001, 1233640002, 1233640003, 1233640004, 1233640005, 1233640006, 1233640007, 1233640008, 1233640009, 1233640010, 1233640011, 1233640012, 1233640013, 1233640026, 1233640027, 1233640028, 1233640030, 1233640050, 1233640051

Results by **EP200.8**

		Matrix Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Arsenic	2.50U	1000	979	98				70-130		
Cadmium	0.250U	100	92.3	92				70-130		
Chromium	2.50U	400	374	93				70-130		
Copper	1.50U	1000	933	93				70-130		
Lead	1.00U	1000	954	95				70-130		
Zinc	3.54J	1000	982	98				70-130		

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Instrument: P7 Agilent 7800
Analyst: HGS
Analytical Date/Time: 7/27/2023 4:59:40PM

Prep Batch: MXX36032
Prep Method: DW Digest for Metals on ICP-MS
Prep Date/Time: 7/25/2023 12:56:41PM
Prep Initial Wt./Vol.: 20.00mL
Prep Extract Vol: 50.00mL

Print Date: 07/31/2023 2:55:03PM

Method Blank

Blank ID: MB for HBN 1859842 [MXX/36033]
Blank Lab ID: 1724398

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1233640031, 1233640032, 1233640033, 1233640034, 1233640035, 1233640036, 1233640037, 1233640038, 1233640039, 1233640040, 1233640041, 1233640042, 1233640043, 1233640044, 1233640045, 1233640046, 1233640047, 1233640048, 1233640049

Results by **EP200.8**

Parameter	Results	LOQ/CL	DL	LOD	Units
Calcium	250U	500	150	250	ug/L
Copper	1.50U	3.00	1.00	1.50	ug/L
Iron	125U	250	78.0	125	ug/L
Magnesium	25.0U	50.0	15.0	25.0	ug/L
Zinc	5.25J	10.0	3.10	5.00	ug/L

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Instrument: P7 Agilent 7800
Analyst: HGS
Analytical Date/Time: 7/27/2023 7:22:55PM

Prep Batch: MXX36033
Prep Method: E200.2
Prep Date/Time: 7/25/2023 12:56:59PM
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1233640 [MXX36033]
Blank Spike Lab ID: 1724399
Date Analyzed: 07/27/2023 19:25

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1233640031, 1233640032, 1233640033, 1233640034, 1233640035, 1233640036, 1233640037, 1233640038, 1233640039, 1233640040, 1233640041, 1233640042, 1233640043, 1233640044, 1233640045, 1233640046, 1233640047, 1233640048, 1233640049

Results by **EP200.8**

Blank Spike (ug/L)

Parameter	Spike	Result	Rec (%)	CL
Calcium	10000	9310	93	(85-115)
Copper	1000	938	94	(85-115)
Iron	5000	4760	95	(85-115)
Magnesium	10000	9500	95	(85-115)
Zinc	1000	947	95	(85-115)

Batch Information

Analytical Batch: **MMS12014**
Analytical Method: **EP200.8**
Instrument: **P7 Agilent 7800**
Analyst: **HGS**

Prep Batch: **MXX36033**
Prep Method: **E200.2**
Prep Date/Time: **07/25/2023 12:56**
Spike Init Wt./Vol.: 5000 ug/L Extract Vol: 50 mL
Dupe Init Wt./Vol.: Extract Vol:

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Matrix Spike Summary

Original Sample ID: 1233640039
MS Sample ID: 1724401 MS
MSD Sample ID:

Analysis Date: 07/27/2023 19:30
Analysis Date: 07/27/2023 19:32
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1233640039, 1233640043

Results by **EP200.8**

		Matrix Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Calcium	10100	10000	22700	125				70-130		
Copper	1.50U	1000	911	91				70-130		
Iron	561	5000	5560	100				70-130		
Magnesium	948	10000	10900	100				70-130		
Zinc	10.2	1000	971	96				70-130		

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Instrument: P7 Agilent 7800
Analyst: HGS
Analytical Date/Time: 7/27/2023 7:32:50PM

Prep Batch: MXX36033
Prep Method: DW Digest for Metals on ICP-MS
Prep Date/Time: 7/25/2023 12:56:59PM
Prep Initial Wt./Vol.: 20.00mL
Prep Extract Vol: 50.00mL

Print Date: 07/31/2023 2:55:09PM

Matrix Spike Summary

Original Sample ID: 1233640043
MS Sample ID: 1724402 MS
MSD Sample ID:

Analysis Date: 07/27/2023 19:34
Analysis Date: 07/27/2023 19:37
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1233640031, 1233640032, 1233640033, 1233640034, 1233640035, 1233640036, 1233640037, 1233640038, 1233640040, 1233640041, 1233640042, 1233640043, 1233640044, 1233640045, 1233640046, 1233640047, 1233640048, 1233640049

Results by **EP200.8**

		Matrix Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Calcium	12700	10000	21100	84				70-130		
Iron	592	5000	5240	93				70-130		
Magnesium	1090	10000	10300	92				70-130		

Batch Information

Analytical Batch: MMS12014
Analytical Method: EP200.8
Instrument: P7 Agilent 7800
Analyst: HGS
Analytical Date/Time: 7/27/2023 7:37:22PM

Prep Batch: MXX36033
Prep Method: DW Digest for Metals on ICP-MS
Prep Date/Time: 7/25/2023 12:56:59PM
Prep Initial Wt./Vol.: 20.00mL
Prep Extract Vol: 50.00mL

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Method Blank

Blank ID: MB for HBN 1859914 [VXX/40176]
Blank Lab ID: 1724702

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1233640003, 1233640004, 1233640017, 1233640018, 1233640025

Results by **SW8260D**

Parameter	Results	LOQ/CL	DL	LOD	Units
Benzene	0.200U	0.400	0.120	0.200	ug/L
Ethylbenzene	0.500U	1.00	0.310	0.500	ug/L
o-Xylene	0.500U	1.00	0.310	0.500	ug/L
P & M -Xylene	1.00U	2.00	0.620	1.00	ug/L
Toluene	0.500U	1.00	0.310	0.500	ug/L
Xylenes (total)	1.50U	3.00	1.00	1.50	ug/L
Surrogates					
1,2-Dichloroethane-D4 (surr)	104	81-118		0	%
4-Bromofluorobenzene (surr)	103	85-114		0	%
Toluene-d8 (surr)	99.5	89-112		0	%

Batch Information

Analytical Batch: VMS22601
Analytical Method: SW8260D
Instrument: VPA 780/5975 GC/MS
Analyst: JY
Analytical Date/Time: 7/25/2023 3:03:00PM

Prep Batch: VXX40176
Prep Method: SW5030B
Prep Date/Time: 7/25/2023 6:00:00AM
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

Leaching Blank

Blank ID: LB for HBN 1859662 [TCLP/12524
Blank Lab ID: 1723861

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1233640003, 1233640004, 1233640017, 1233640018, 1233640025

Results by **SW8260D**

Parameter	Results	LOQ/CL	DL	LOD	Units
Benzene	10.0U	20.0	6.00	10.0	ug/L
Surrogates					
1,2-Dichloroethane-D4 (surr)	104	81-118		0	%
4-Bromofluorobenzene (surr)	103	85-114		0	%
Toluene-d8 (surr)	98.5	89-112		0	%

Batch Information

Analytical Batch: VMS22601
Analytical Method: SW8260D
Instrument: VPA 780/5975 GC/MS
Analyst: JY
Analytical Date/Time: 7/26/2023 1:37:00AM

Prep Batch: VXX40176
Prep Method: SW5030B
Prep Date/Time: 7/25/2023 6:00:00AM
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

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Leaching Blank

Blank ID: LB for HBN 1859737 [TCLP/12525
Blank Lab ID: 1723986

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1233640003, 1233640004, 1233640017, 1233640018, 1233640025

Results by **SW8260D**

Parameter	Results	LOQ/CL	DL	LOD	Units
Benzene	10.0U	20.0	6.00	10.0	ug/L
Surrogates					
1,2-Dichloroethane-D4 (surr)	103	81-118		0	%
4-Bromofluorobenzene (surr)	102	85-114		0	%
Toluene-d8 (surr)	99.6	89-112		0	%

Batch Information

Analytical Batch: VMS22601
Analytical Method: SW8260D
Instrument: VPA 780/5975 GC/MS
Analyst: JY
Analytical Date/Time: 7/26/2023 1:23:00AM

Prep Batch: VXX40176
Prep Method: SW5030B
Prep Date/Time: 7/25/2023 6:00:00AM
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

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Leaching Blank

Blank ID: LB for HBN 1859820 [TCLP/12530
Blank Lab ID: 1724334

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1233640003, 1233640004, 1233640017, 1233640018, 1233640025

Results by **SW8260D**

Parameter	Results	LOQ/CL	DL	LOD	Units
Benzene	10.0U	20.0	6.00	10.0	ug/L
Surrogates					
1,2-Dichloroethane-D4 (surr)	101	81-118		0	%
4-Bromofluorobenzene (surr)	106	85-114		0	%
Toluene-d8 (surr)	100	89-112		0	%

Batch Information

Analytical Batch: VMS22601
Analytical Method: SW8260D
Instrument: VPA 780/5975 GC/MS
Analyst: JY
Analytical Date/Time: 7/26/2023 1:08:00AM

Prep Batch: VXX40176
Prep Method: SW5030B
Prep Date/Time: 7/25/2023 6:00:00AM
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 5 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1233640 [VXX40176]
Blank Spike Lab ID: 1724703
Date Analyzed: 07/25/2023 15:18

Spike Duplicate ID: LCSD for HBN 1233640 [VXX40176]
Spike Duplicate Lab ID: 1724704
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1233640003, 1233640004, 1233640017, 1233640018, 1233640025

Results by **SW8260D**

	Blank Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Benzene	30	30.8	103	30	30.3	101	(79-120)	1.60	(< 20)
Ethylbenzene	30	31.1	104	30	30.8	103	(79-121)	1.00	(< 20)
o-Xylene	30	30.2	101	30	29.7	99	(78-122)	1.70	(< 20)
P & M -Xylene	60	60.3	101	60	60.1	100	(80-121)	0.37	(< 20)
Toluene	30	28.8	96	30	28.4	95	(80-121)	1.50	(< 20)
Xylenes (total)	90	90.5	101	90	89.8	100	(79-121)	0.81	(< 20)
Surrogates									
1,2-Dichloroethane-D4 (surr)	30		97	30		98	(81-118)	0.89	
4-Bromofluorobenzene (surr)	30		99	30		100	(85-114)	1.00	
Toluene-d8 (surr)	30		100	30		100	(89-112)	0.00	

Batch Information

Analytical Batch: **VMS22601**
Analytical Method: **SW8260D**
Instrument: **VPA 780/5975 GC/MS**
Analyst: **JY**

Prep Batch: **VXX40176**
Prep Method: **SW5030B**
Prep Date/Time: **07/25/2023 06:00**
Spike Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL
Dupe Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL

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Method Blank

Blank ID: MB for HBN 1859626 (WFI/3055) Matrix: Water (Surface, Eff., Ground)
Blank Lab ID: 1723771

QC for Samples:
1233640001, 1233640002, 1233640003, 1233640004, 1233640005, 1233640006, 1233640007, 1233640008, 1233640009, 1233640010, 1233640011, 1233640012, 1233640013, 1233640014, 1233640015, 1233640016, 1233640017, 1233640018, 1233640019, 1233640020, 1233640021, 1233640022, 1233640023, 1233640024

Results by **SM21 4500NO3-F**

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

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: EBH
Analytical Date/Time: 7/20/2023 4:23:35PM

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Method Blank

Blank ID: MB for HBN 1859626 (WFI/3055)
Blank Lab ID: 1723779

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1233640001, 1233640002, 1233640003, 1233640004, 1233640005, 1233640006

Results by **SM21 4500NO3-F**

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

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: EBH
Analytical Date/Time: 7/20/2023 3:27:34PM

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1233640 [WFI3055]
Blank Spike Lab ID: 1723773
Date Analyzed: 07/20/2023 16:21

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1233640001, 1233640002, 1233640003, 1233640004, 1233640005, 1233640006, 1233640007, 1233640008, 1233640009, 1233640010, 1233640011, 1233640012, 1233640013, 1233640014, 1233640015, 1233640016, 1233640017, 1233640018, 1233640019, 1233640020, 1233640021,

Results by **SM21 4500NO3-F**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Nitrate-N	2.5	2.77	111	(70-130)
Nitrite-N	2.5	2.63	105	(90-110)
Total Nitrate/Nitrite-N	5	5.40	108	(90-110)

Batch Information

Analytical Batch: **WFI3055**
Analytical Method: **SM21 4500NO3-F**
Instrument: **Astoria segmented flow**
Analyst: **EBH**

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1233640 [WFI3055]
Blank Spike Lab ID: 1723781
Date Analyzed: 07/20/2023 15:25

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1233640001, 1233640002, 1233640003, 1233640004, 1233640005, 1233640006

Results by **SM21 4500NO3-F**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Nitrate-N	2.5	2.72	109	(70-130)
Nitrite-N	2.5	2.69	108	(90-110)
Total Nitrate/Nitrite-N	5	5.41	108	(90-110)

Batch Information

Analytical Batch: **WFI3055**
Analytical Method: **SM21 4500NO3-F**
Instrument: **Astoria segmented flow**
Analyst: **EBH**

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Matrix Spike Summary

Original Sample ID: 1233579003
MS Sample ID: 1723636 MS
MSD Sample ID: 1723637 MSD

Analysis Date: 07/20/2023 15:31
Analysis Date: 07/20/2023 15:32
Analysis Date: 07/20/2023 15:34
Matrix: Drinking Water

QC for Samples: 1233640001, 1233640002, 1233640003, 1233640004, 1233640005, 1233640006, 1233640007

Results by **SM21 4500NO3-F**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Nitrate/Nitrite-N	0.200U	5.00	4.87	98	5.00	4.72	94	90-110	3.20	(< 25)

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: EBH
Analytical Date/Time: 7/20/2023 3:32:00PM

Print Date: 07/31/2023 2:55:20PM

Matrix Spike Summary

Original Sample ID: 1233640007
MS Sample ID: 1723638 MS
MSD Sample ID: 1723639 MSD

Analysis Date: 07/20/2023 16:27
Analysis Date: 07/20/2023 16:28
Analysis Date: 07/20/2023 16:30
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1233640001, 1233640002, 1233640003, 1233640004, 1233640005, 1233640006, 1233640007, 1233640008, 1233640009, 1233640010, 1233640011, 1233640012, 1233640013, 1233640014, 1233640015, 1233640016, 1233640017, 1233640018, 1233640019, 1233640020, 1233640021,

Results by **SM21 4500NO3-F**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Nitrate/Nitrite-N	0.233	5.00	5.82	112 *	5.00	5.61	108	90-110	3.60	(< 25)

Batch Information

Analytical Batch: WFI3055
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: EBH
Analytical Date/Time: 7/20/2023 4:28:00PM

Print Date: 07/31/2023 2:55:20PM

Method Blank

Blank ID: MB for HBN 1860548 [WXX/14861]
Blank Lab ID: 1725884

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1233640001

Results by **SM21 4500P-B,E**

Parameter	Results	LOQ/CL	DL	LOD	Units
Total Phosphorus	0.0200U	0.0400	0.0120	0.0200	mg/L

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: MEB
Analytical Date/Time: 7/31/2023 10:13:14AM

Prep Batch: WXX14861
Prep Method: SM21 4500P-B,E
Prep Date/Time: 7/28/2023 5:00:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1233640 [WXX14861]
Blank Spike Lab ID: 1725885
Date Analyzed: 07/31/2023 10:14

Spike Duplicate ID: LCSD for HBN 1233640 [WXX14861]
Spike Duplicate Lab ID: 1725886
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1233640001

Results by **SM21 4500P-B,E**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Phosphorus	0.2	0.185	93	0.2	0.181	91	(75-125)	2.10	(< 25)

Batch Information

Analytical Batch: **WDA5565**
Analytical Method: **SM21 4500P-B,E**
Instrument: **Discrete Analyzer 2**
Analyst: **MEB**

Prep Batch: **WXX14861**
Prep Method: **SM21 4500P-B,E**
Prep Date/Time: **07/28/2023 17:00**
Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

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Matrix Spike Summary

Original Sample ID: 1233556001
MS Sample ID: 1725887 MS
MSD Sample ID: 1725888 MSD

QC for Samples: 1233640001

Analysis Date: 07/31/2023 10:16
Analysis Date: 07/31/2023 10:17
Analysis Date: 07/31/2023 10:18
Matrix: Water (Surface, Eff., Ground)

Results by **SM21 4500P-B,E**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Phosphorus	0.0200U	0.200	.212	106	0.200	0.210	105	75-125	0.76	(< 7)

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: MEB
Analytical Date/Time: 7/31/2023 10:17:09AM

Prep Batch: WXX14861
Prep Method: Total Phosphorus (W) Ext.
Prep Date/Time: 7/28/2023 5:00:00PM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 07/31/2023 2:55:27PM

Method Blank

Blank ID: MB for HBN 1860550 [WXX/14862]
Blank Lab ID: 1725894

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1233640002, 1233640004, 1233640005, 1233640006, 1233640007, 1233640008, 1233640009, 1233640010, 1233640011, 1233640012, 1233640013, 1233640014, 1233640015, 1233640016, 1233640017, 1233640018, 1233640019, 1233640020, 1233640021

Results by **SM21 4500P-B,E**

Parameter	Results	LOQ/CL	DL	LOD	Units
Total Phosphorus	0.0200U	0.0400	0.0120	0.0200	mg/L

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: MEB
Analytical Date/Time: 7/31/2023 12:53:57PM

Prep Batch: WXX14862
Prep Method: SM21 4500P-B,E
Prep Date/Time: 7/28/2023 5:00:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1233640 [WXX14862]
Blank Spike Lab ID: 1725895
Date Analyzed: 07/31/2023 12:54

Spike Duplicate ID: LCSD for HBN 1233640 [WXX14862]
Spike Duplicate Lab ID: 1725896
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1233640002, 1233640004, 1233640005, 1233640006, 1233640007, 1233640008, 1233640009, 1233640010, 1233640011, 1233640012, 1233640013, 1233640014, 1233640015, 1233640016, 1233640017, 1233640018, 1233640019, 1233640020, 1233640021

Results by **SM21 4500P-B,E**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Phosphorus	0.2	0.210	105	0.2	0.212	106	(75-125)	0.76	(< 25)

Batch Information

Analytical Batch: **WDA5565**
Analytical Method: **SM21 4500P-B,E**
Instrument: **Discrete Analyzer 2**
Analyst: **MEB**

Prep Batch: **WXX14862**
Prep Method: **SM21 4500P-B,E**
Prep Date/Time: **07/28/2023 17:00**
Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

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

Matrix Spike Summary

Original Sample ID: 1233640004
MS Sample ID: 1725897 MS
MSD Sample ID: 1725898 MSD

Analysis Date: 07/31/2023 12:57
Analysis Date: 07/31/2023 12:58
Analysis Date: 07/31/2023 12:59
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1233640002, 1233640004, 1233640005, 1233640006, 1233640007, 1233640008, 1233640009, 1233640010, 1233640011, 1233640012, 1233640013, 1233640014, 1233640015, 1233640016, 1233640017, 1233640018, 1233640019, 1233640020, 1233640021

Results by **SM21 4500P-B,E**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Phosphorus	0.0368J	0.200	.249	106	0.200	0.235	99	75-125	5.50	(< 7)

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: MEB
Analytical Date/Time: 7/31/2023 12:58:47PM

Prep Batch: WXX14862
Prep Method: Total Phosphorus (W) Ext.
Prep Date/Time: 7/28/2023 5:00:00PM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 07/31/2023 2:55:32PM

Method Blank

Blank ID: MB for HBN 1860551 [WXX/14863]
Blank Lab ID: 1725899

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1233640003, 1233640022, 1233640023, 1233640024

Results by **SM21 4500P-B,E**

Parameter	Results	LOQ/CL	DL	LOD	Units
Total Phosphorus	0.0200U	0.0400	0.0120	0.0200	mg/L

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: MEB
Analytical Date/Time: 7/31/2023 1:45:32PM

Prep Batch: WXX14863
Prep Method: SM21 4500P-B,E
Prep Date/Time: 7/31/2023 10:35:00AM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 07/31/2023 2:55:34PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1233640 [WXX14863]
Blank Spike Lab ID: 1725900
Date Analyzed: 07/31/2023 13:46

Spike Duplicate ID: LCSD for HBN 1233640 [WXX14863]
Spike Duplicate Lab ID: 1725901
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1233640003, 1233640022, 1233640023, 1233640024

Results by **SM21 4500P-B,E**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Phosphorus	0.2	0.216	108	0.2	0.206	103	(75-125)	4.70	(< 25)

Batch Information

Analytical Batch: **WDA5565**
Analytical Method: **SM21 4500P-B,E**
Instrument: **Discrete Analyzer 2**
Analyst: **MEB**

Prep Batch: **WXX14863**
Prep Method: **SM21 4500P-B,E**
Prep Date/Time: **07/31/2023 10:35**
Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

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

Matrix Spike Summary

Original Sample ID: 1233640022
MS Sample ID: 1725910 MS
MSD Sample ID: 1725911 MSD

Analysis Date: 07/31/2023 13:49
Analysis Date: 07/31/2023 13:50
Analysis Date: 07/31/2023 13:51
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1233640003, 1233640022, 1233640023, 1233640024

Results by **SM21 4500P-B,E**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Phosphorus	0.0200U	0.200	.18	90	0.200	0.181	90	75-125	0.11	(< 7)

Batch Information

Analytical Batch: WDA5565
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: MEB
Analytical Date/Time: 7/31/2023 1:50:27PM

Prep Batch: WXX14863
Prep Method: Total Phosphorus (W) Ext.
Prep Date/Time: 7/31/2023 10:35:00AM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 07/31/2023 2:55:39PM

Whisman, Curtis (Anchorage)

From: Benjamin Meyer <ben@kenaiwatershed.org>
Sent: Wednesday, July 19, 2023 5:04 PM
To: Whisman, Curtis (Anchorage)
Subject: [EXTERNAL] Re: 200.7 metals
Attachments: Kit Request Letter to SGS Summer 2023.docx

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Curtis,

Thank you for following up this afternoon. Attached is a letter I included with the original kit request for our July 18th samples prior to when you were assigned as project manager.

Our samples are not related to drinking water compliance, so if it is more economical to process the samples locally as opposed to a contract lab that works fine by me. In the past I know that ALS down in Washington had processed the 200.7 analyses for this project. As long as reporting and results related to accuracy and precision is not dissimilar though it would be fine by me to have them processed in Anchorage. If the difference between having them processed by SGS vs ALS is just a matter of drinking water certifications, our project does not relate to drinking water compliance. I'm not familiar with how the reporting format differs with or without that certification.

Thank you again and talk to you later,

Ben

On Wed, Jul 19, 2023 at 11:39 AM Whisman, Curtis (Anchorage) <Curtis.Whisman@sgs.com> wrote:

> Ben,
>
> For the Kenai River baseline WQM project I noticed you requested 200.7 metals for Ca, Mg, and Fe. We do not run metals by 200.7 and we would have to ship these to a reference lab to be analyzed (which will incur extra fees). We are currently DW certified to run these analytes under 200.8 method if that would be ok.
>
> Let me know if you have any questions.
>
> **Curtis Whisman**
>
> **Industries & Environment**

Project Manager

SGS North America Inc.

200 W Potter Dr.

Anchorage, AK 99518

Phone: (907) 562-2343

Email: curtis.whisman@sgs.com

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1233640

Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.

Section 1

CLIENT: Kenai Watershed Forum

CONTACT: Benjamin Meyer — PHONE #: 907-232-0280

PROJECT NAME: Kenai River Baseline Water Quality Monitoring — PROJECT/ PWSID/ PERMIT#:

REPORTS TO: Benjamin Meyer — E-MAIL: ben@kenaiwatershed.org — Profile #: 383466 (CSV)

INVOICE TO: Kenai Watershed Forum — QUOTE #: — P.O. #:

Section 3 — Preservative: H2SO4, HNO3, HCl

Section 2

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	# CONTAINERS	Comp / Grab / MI (Multi-incremental)	Analysis*: Total NO3/NO2(SM21 4500NO3-F), Total P(SM4500)	Total Metals (200.7)	Dissolved Metals (200.8)	BTEX (8260C)							REMARKS/LOC ID
1AC	RM 0 - No Name Creek	7/18/2023	11:12	water	3 ✓		x	x	x							1 NA	Dissolved metals samples are unfiltered and unpreserved
2AC	RM 0 - No Name Creek - DUP	7/18/2023	11:25	water	3		x	x	x							2 NA	Dissolved metals samples are unfiltered and unpreserved
3AG	RM 1.5 - Kenai City Dock	7/18/2023	10:30	water	7 ✓		x	x	x	x	EDD	AB				25 NA	Dissolved metals samples are unfiltered and unpreserved Field Blank Ind
4AF	RM 6.5 - Cunningham Park	7/18/2023	9:05	water	6 ✓		x	x	x	x						29 NA	Include site name on Trip Blank results. Diss metals samples unfiltered and unpreserved.
5AC	RM 10 - Beaver Creek	7/18/2023	9:45	water	3		x	x	x							30 NA	Dissolved metals samples are unfiltered and unpreserved
6AC	RM 10.1 - Kenai River	7/18/2023	10:15	water	3		x	x	x							31 NA	Dissolved metals samples are unfiltered and unpreserved
7AC	RM 12.5 - Pillars	7/18/2023	10:35	water	3		x	x	x							32 NA	Dissolved metals samples are unfiltered and unpreserved
8AC	RM 18 - Poacher's Cove	7/18/2023	10:55	water	3 ✓		x	x	x							34 NA	Dissolved metals samples are unfiltered and unpreserved
9AC	RM 19 - Slikok Creek	7/18/2023	11:06	water	3		x	x	x							35 NA	Dissolved metals samples are unfiltered and unpreserved. Field Blk Ind
10AD	RM 21 - Soldotna Bridge	7/18/2023	10:34	water	4 ✓		x	x	x							5 AB	

NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS

Section 5

	Date	Time	
Relinquished By: (1) Benjamin Meyer	7/18/2022	13:55	Received By:
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	07/18/23	1704	Received For Laboratory By:

Section 4 — DOD Project? Yes (No)

Cooler ID:

Data Deliverable Requirements: Please include Electronic Data Delivery files.

Requested Turnaround Time and/or Special Instructions:

Filter Dissolved metals samples at SGS. Please provide all Electronic Data Delivery (EDD) files on SGS Enegage when available.

Temp Blank °C: 4.0 1753 — or Ambient [ ]

Chain of Custody Seal: (Circle) IF INTACT BROKEN ABSENT

Delivery Method: Hand Delivery[ ] Commerical Delivery[ ] ALEX[ ]

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CHAIN OF CUSTODY RECORD

1233640

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Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.

Section 1

CLIENT: Kenai Watershed Forum

CONTACT: Benjamin Meyer — PHONE #: 907-232-0280

PROJECT NAME: Kenai River Baseline Water Quality Monitoring — PROJECT/ PWSID/ PERMIT#:

REPORTS TO: Benjamin Meyer — E-MAIL: ben@kenaiwatershed.org — Profile #:

INVOICE TO: Kenai Watershed Forum — QUOTE #: — P.O. #:

Section 3 — Preservative: H2SO4, HNO3

Section 2

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	# CONTAINERS	Comp Grab MI (Multi-incremental)	Analysis*: Total NO3/NO2(SM21 4500NO3-F), Total P(SM4500)	Total Metals (200.7)	Dissolved Metals (200.8)	BTEX (8260C)						REMARKS/LOC ID
11AC	RM 22 - Soldotna Creek	7/18/2023	9:09	water	3		x	x	x						37A	Dissolved metals samples are unfiltered and unpreserved
12AC	RM 23 - Swiftwater Park	7/18/2023	9:51	water	3		x	x	x						38A	Dissolved metals samples are unfiltered and unpreserved
13AC	RM 30 - Funny River	7/18/2023	11:35	water	3		x	x	x						39A	Dissolved metals samples are unfiltered and unpreserved
14AB	RM 31 - Morgan's Landing	7/18/2023	9:25	water	2		x	x							40A	
15AB	RM 36 - Moose River	7/18/2023	10:05	water	2		x	x							41A	
16AB	RM 36 - Moose River-DUP	7/18/2023	10:20	water	2		x	x							42A	
17AE	RM 40 - Bing's Landing	7/18/2023	10:25	water	5		x	x		x					43A	Trip blank 4/5/K
18AE	RM 43 - Upstream of Dow Island	7/18/2023	8:18	water	5		x	x		x					44A	Please include site name on Trip Blank sample name/results. B1
19AB	RM 44 - Mouth of Killey River	7/18/2023	8:46	water	2		x	x							45A	
20AB	RM 50 - Skilak Lake Outflow	7/18/2023	9:21	water	2		x	x							46A	

NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS

Section 5

	Date	Time	
Relinquished By: (1) Benjamin M	7/18/2023	13:55	Received By:
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	07/18/23	1704	Received For Laboratory By:

Section 4

DOD Project? Yes (No)

Cooler ID:

Data Deliverable Requirements:

Please include Electronic Data Delivery files.

Requested Turnaround Time and/or Special Instructions:

Filter Dissolved metals samples at SGS. Please provide all Electronic Data Delivery (EDD) files on SGS Enegage when available.

Temp Blank °C: 4.0 IR3 or Ambient [ ]

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Delivery Method: Hand Delivery[ ] Commerical Delivery[ ] Client

SGS

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CHAIN OF CUSTODY RECORD

1233640

Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.

Section 1

CLIENT:	Kenai Watershed Forum		
CONTACT:	Benjamin Meyer	PHONE #:	907-232-0280
PROJECT NAME:	Kenai River Baseline Water Quality Monitoring	PROJECT/ PWSID/ PERMIT#:	
REPORTS TO:	Benjamin Meyer	E-MAIL:	ben@kenaiwatershed.org
		Profile #:	
INVOICE TO:	Kenai Watershed Forum	QUOTE #:	
		P.O. #:	

Section 2

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	# CONTAINERS	Comp Grab MI (Multi-incremental)	Preservative: H2SO4	Preservative: HNO3	Analysis*: Total NO3/NO2(SM21 4500NO3-F), Total P(SM4500)	Analysis*: Total Metals (200.7)	REMARKS/LOC ID
21AB	RM 70 - Jim's Landing	7/18/2023	10:33	water	2				x	x	46 A
22AB	RM 74 - Russian River ✓	7/18/2023	9:53	water ✓	2				x	x	47 A
23AB	RM 82 - Kenai Lake Bridge	7/18/2023	8:08	water	2✓				x	x	48 A
24AB	RM 79.5 - Juneau Creek	7/18/2023	8:50	water	2✓				x	x	49 A
25AF											

NOTE:
*The following analyses require specific method and/or compound list: BTEX, Metals, PFAS

Section 5

	Date	Time	Received By:
Relinquished By: (1) Benjamin Meyer	7/18/2023	13:55	
Relinquished By: (2)			
Relinquished By: (3)			
Relinquished By: (4)	07/18/23	1704	Received For Laboratory By:

Section 4

DOD Project? Yes (No)

Cooler ID: _____

Data Deliverable Requirements:

Please include Electronic Data Delivery files.

Requested Turnaround Time and/or Special Instructions:

Please provide all Electronic Data Delivery (EDD) files on SGS Enegage when available.

Temp Blank °C: 4.0 ~~4.0~~ 3

or Ambient [ ]

Chain of Custody Seal: (Circle)

INTACT BROKEN ABSENT

Delivery Method: Hand Delivery[ ] Commerical Delivery [ ]

1233640

SGS

SAMPLE RECEIPT FORM

Project Manager Completion				
Was all necessary information recorded on the COC upon receipt? (temperature, COC seals, etc.?)	Yes	No	N/A	
Was temperature between 0-6° C?	Yes	No	N/A	If "No", are the samples either exempt* or sampled <8 hours prior to receipt?
Were all analyses received within holding time*?	Yes	No	N/A	
Was a method specified for each analysis, where applicable? If no, please note correct methods.	Yes	No	N/A	Labfilter Diss metals
Are compound lists specified, where applicable? For project specific or special compound lists please note correct analysis code.	Yes	No	N/A	200.7: Ca, Mg, Fe 200.8 Diss: MMSCNDW.1 (As, Cd, Cr, Cu, Pb, Zn)
If rush was requested by the client, was the requested TAT approved?	Yes	No	N/A	If "NO", what is the approved TAT?
If SEDD Deliverables are required, were Location ID's and an NPDL Number provided?	Yes	No	N/A	*If "NO", contact client for information.*
Sample Login Completion				
Do ID's on sample containers match COC?	Yes	No	N/A	
If provided on containers, do dates/times collected match COC?	Yes	No	N/A	Note: If times differ <1 hr., record details below and login per COC.
Were all sample containers received in good condition?	Yes	No	N/A	
Were proper containers (type/mass/volume/preservative) received for all samples? **See form F-083 "Sample Guide"*	Yes	No	N/A	*Note: If 200.8/6020 Total Metals are received unpreserved, preserve and note HNO3 lot here:* *If 200.8/6020 Dissolved Metals are received unpreserved, log in for LABFILTER and do not preserve.* *For all non-metals methods, inform Project Manager.*
Were Trip Blanks (VOC, GRO, Low-Level Hg, etc.) received with samples, where applicable*?	Yes	No	N/A	
Were all VOA vials free of headspace >6mm?	Yes	No	N/A	
Were all soil VOA samples received field extracted with Methanol?	Yes	No	N/A	
Did all soil VOA samples have an accompanying unpreserved container for % solids?	Yes	No	N/A	
If special handling is required, were containers labelled appropriately? e.g. MI/ISM, foreign soils, lab filter, Ref Lab, limited volume	Yes	No	N/A	
For Rush/Short Holding time, was the lab notified?	Yes	No	N/A	
For any question answered "NO", was the Project Manager notified?	Yes	No	N/A	PM Initials:
Was Peer Review of sample numbering/labelling completed?	Yes	No	N/A	Reviewer Initials: MAC JAC

Additional Notes/Clarification where Applicable, including resolution of "No" answers when a change order is not attached:

26-49A Created For 200.8 Metals per PM Mgr

F102B_SRF_10202022

AIRBILL 11963409

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/

FREIGHT DETAILS

FROM/TO: Kenai -> Anchorage International

Flight Departs: Jul 18 23 3:25 PM
Accepted: Tue, Jul 18 23 2:42:00 PM

Receiver: SGS
907-562-2343

Sender: Kenai Water shed forum
907-232-0280

Description & Comment	Quan.	Wgt.	Handle Fee	Hazmat Fee	Total
SGS	2	81	-	-	$60.99
				Total Tax:	$3.81
				Total Payments made:	$64.80
				Total Unpaid:	**$0.00**

Received in good condition by: .....

CUSTOMER COPY

AIRBILL 11963409

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/

FREIGHT DETAILS

FROM/TO: Kenai -> Anchorage International

Flight Departs: Jul 18 23 3:25 PM
Accepted: Tue, Jul 18 23 2:42:00 PM

Receiver: SGS
907-562-2343

Sender: Kenai Water shed forum
907-232-0280

Description & Comment	Quan.	Wgt.	Handle Fee	Hazmat Fee	Total
SGS	2	81	-	-	$60.99
TAX: Federal Excise Tax					$3.81
				Total Payments made:	$64.80
				Total Unpaid:	**$0.00**

TERMS AND CONDITIONS

Consignemnt Note Text

1233640

Alert Expeditors Inc.

#426671

Citywide Delivery • 440-3351
8421 Flamingo Drive • Anchorage, Alaska 99502

Date 7/18/23

From Kenai Lakeside

To SCS

Collect ☐	Prepay ☐	Advance Charges ☐
Job #	PO# Grant 1196349	

Smoke

1233640

Shipped Signature T/S

Total Charge

Received By:

Sample Containers and Preservatives

Container Id	Preservative	Container Condition
1233640001-A	H2SO4 to pH < 2	OK
1233640001-B	No Preservative Required	OK
1233640001-C	No Preservative Required	OK
1233640002-A	H2SO4 to pH < 2	OK
1233640002-B	HNO3 to pH < 2	OK
1233640002-C	No Preservative Required	OK
1233640003-A	H2SO4 to pH < 2	OK
1233640003-B	No Preservative Required	OK
1233640003-C	No Preservative Required	OK
1233640003-D	HCL to pH < 2	OK
1233640003-E	HCL to pH < 2	OK
1233640003-F	HCL to pH < 2	OK
1233640003-G	HCL to pH < 2	OK
1233640004-A	H2SO4 to pH < 2	OK
1233640004-B	No Preservative Required	OK
1233640004-C	No Preservative Required	OK
1233640004-D	HCL to pH < 2	OK
1233640004-E	HCL to pH < 2	OK
1233640004-F	HCL to pH < 2	OK
1233640005-A	H2SO4 to pH < 2	OK
1233640005-B	No Preservative Required	OK
1233640005-C	No Preservative Required	OK
1233640006-A	H2SO4 to pH < 2	OK
1233640006-B	No Preservative Required	OK
1233640006-C	No Preservative Required	OK
1233640007-A	H2SO4 to pH < 2	OK
1233640007-B	No Preservative Required	OK
1233640007-C	No Preservative Required	OK
1233640008-A	H2SO4 to pH < 2	OK
1233640008-B	No Preservative Required	OK
1233640008-C	No Preservative Required	OK
1233640009-A	H2SO4 to pH < 2	OK
1233640009-B	No Preservative Required	OK
1233640009-C	No Preservative Required	OK
1233640010-A	H2SO4 to pH < 2	OK
1233640010-B	No Preservative Required	OK
1233640010-C	No Preservative Required	OK
1233640010-D	No Preservative Required	OK
1233640011-A	H2SO4 to pH < 2	OK
1233640011-B	No Preservative Required	OK
1233640011-C	No Preservative Required	OK
1233640012-A	H2SO4 to pH < 2	OK
1233640012-B	No Preservative Required	OK
1233640012-C	No Preservative Required	OK
1233640013-A	H2SO4 to pH < 2	OK
1233640013-B	No Preservative Required	OK
1233640013-C	No Preservative Required	OK
1233640014-A	H2SO4 to pH < 2	OK
1233640015-A	H2SO4 to pH < 2	OK
1233640016-A	H2SO4 to pH < 2	OK
1233640017-A	H2SO4 to pH < 2	OK
1233640017-D	HCL to pH < 2	OK
1233640017-E	HCL to pH < 2	OK
1233640018-A	H2SO4 to pH < 2	OK
1233640018-D	HCL to pH < 2	OK
1233640018-E	HCL to pH < 2	OK
1233640019-A	H2SO4 to pH < 2	OK
1233640020-A	H2SO4 to pH < 2	OK
1233640021-A	H2SO4 to pH < 2	OK
1233640022-A	H2SO4 to pH < 2	OK
1233640023-A	H2SO4 to pH < 2	OK
1233640024-A	H2SO4 to pH < 2	OK
1233640024-B	HNO3 to pH < 2	OK
1233640025-A	HCL to pH < 2	OK
1233640025-B	HCL to pH < 2	OK
1233640025-C	HCL to pH < 2	OK
1233640025-D	HCL to pH < 2	OK
1233640025-E	HCL to pH < 2	OK
1233640025-F	HCL to pH < 2	OK
1233640026-A	HNO3 to pH < 2	OK
1233640027-A	HNO3 to pH < 2	OK
1233640028-A	HNO3 to pH < 2	OK
1233640029-A	HNO3 to pH < 2	OK
1233640030-A	HNO3 to pH < 2	OK
1233640031-A	HNO3 to pH < 2	OK
1233640032-A	HNO3 to pH < 2	OK
1233640033-A	HNO3 to pH < 2	OK
1233640034-A	HNO3 to pH < 2	OK
1233640035-A	HNO3 to pH < 2	OK
1233640036-A	HNO3 to pH < 2	OK
1233640037-A	HNO3 to pH < 2	OK
1233640038-A	HNO3 to pH < 2	OK
1233640039-A	HNO3 to pH < 2	OK
1233640040-A	HNO3 to pH < 2	OK
1233640041-A	HNO3 to pH < 2	OK
1233640042-A	HNO3 to pH < 2	OK
1233640043-A	HNO3 to pH < 2	OK
1233640044-A	HNO3 to pH < 2	OK
1233640045-A	HNO3 to pH < 2	OK
1233640046-A	HNO3 to pH < 2	OK
1233640047-A	HNO3 to pH < 2	OK
1233640048-A	HNO3 to pH < 2	OK
1233640049-A	HNO3 to pH < 2	OK
1233640050-A	No Preservative Required	OK
1233640050-B	No Preservative Required	OK
1233640051-A	No Preservative Required	OK
1233640051-B	No Preservative Required	OK

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition

Container Condition Glossary

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

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