



Laboratory Report of Analysis

To: ADEC-Air & Water Quality
555 Cordova St
Anchorage, AK 99501
907-741-1026

Report Number: **1222417**

Client Project: **Kenai River Metals Monitoring**

Dear Sarah Apsens,

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

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

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

Sincerely,
SGS North America Inc.

Alexandra Lambe
Project Manager
Alexandra.Lambe@sgs.com

Date

Case Narrative

SGS Client: **ADEC-Air & Water Quality**
SGS Project: **1222417**
Project Name/Site: **Kenai River Metals Monitoring**
Project Contact: **Sarah Apsens**

Refer to sample receipt form for information on sample condition.

1222383005DUP (1665079) DUP

2540C - Total Dissolved Solids - Sample duplicate RPD was outside of acceptance limits. Refer to LCS/LCSD RPD for batch precision.

TOC was analyzed by SGS of Dayton, NJ.

*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, indemnification and jurisdiction issues defined therein.

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

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 DW Chemistry (Provisionally Certified as of 05/31/2022 for Fluoride by EPA 300.0 and Nitrate as N by SM 4500NO3-F) & Microbiology & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020B, 7470A, 7471B, 8015C, 8021B, 8082A, 8260D, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

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

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

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



Sample Summary

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Collected</u>	<u>Received</u>	<u>Matrix</u>
RM 5	1222417001	05/17/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 82.1	1222417002	05/17/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 40	1222417003	05/17/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 21	1222417004	05/16/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 70	1222417005	05/17/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 20.75 DUP	1222417006	05/16/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 20.75	1222417007	05/16/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 31	1222417008	05/18/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 82 DUP	1222417009	05/17/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 82	1222417010	05/17/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 23	1222417011	05/18/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 21.1	1222417012	05/16/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 76	1222417013	05/17/2022	05/19/2022	Water (Surface, Eff., Ground)
Field Blank	1222417014	05/17/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 19	1222417015	05/16/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 12.75	1222417016	05/16/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 19.1 DUP	1222417017	05/16/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 19.1	1222417018	05/16/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 10.1 DUP	1222417019	05/16/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 10.1	1222417020	05/16/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 5	1222417021	05/17/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 82.1	1222417022	05/17/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 40	1222417023	05/17/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 21	1222417024	05/16/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 70	1222417025	05/17/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 20.75 DUP	1222417026	05/16/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 20.75	1222417027	05/16/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 31	1222417028	05/18/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 82 DUP	1222417029	05/17/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 82	1222417030	05/17/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 23	1222417031	05/18/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 21.1	1222417032	05/16/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 76	1222417033	05/17/2022	05/19/2022	Water (Surface, Eff., Ground)
Field Blank	1222417034	05/17/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 19	1222417035	05/16/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 12.75	1222417036	05/16/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 19.1 DUP	1222417037	05/16/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 19.1	1222417038	05/16/2022	05/19/2022	Water (Surface, Eff., Ground)
RM 10.1 DUP	1222417039	05/16/2022	05/19/2022	Water (Surface, Eff., Ground)

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Sample Summary

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Collected</u>	<u>Received</u>	<u>Matrix</u>
RM 10.1	1222417040	05/16/2022	05/19/2022	Water (Surface, Eff., Ground)

<u>Method</u>	<u>Method Description</u>
SM21 2340B	Hardness as CaCO3 by ICP-MS
EP200.8	Metals in Drinking Water by ICP-MS DISSO
EP200.8	Metals in Water by 200.8 ICP-MS
SM21 2540C	Total Dissolved Solids SM18 2540C

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Detectable Results Summary

Client Sample ID: **RM 5**
 Lab Sample ID: 1222417001

Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	19000	ug/L
Hardness as CaCO3	52.3	mg/L
Magnesium	1170	ug/L
Total Dissolved Solids	459	mg/L

Waters Department

Client Sample ID: **RM 82.1**
 Lab Sample ID: 1222417002

Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	23800	ug/L
Copper	22.7	ug/L
Hardness as CaCO3	144	mg/L
Magnesium	20600	ug/L
Zinc	52.5	ug/L
Total Dissolved Solids	74.0	mg/L

Waters Department

Client Sample ID: **RM 40**
 Lab Sample ID: 1222417003

Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	13600	ug/L
Hardness as CaCO3	38.3	mg/L
Magnesium	1030	ug/L
Total Dissolved Solids	50.0	mg/L

Waters Department

Client Sample ID: **RM 21**
 Lab Sample ID: 1222417004

Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	13000	ug/L
Hardness as CaCO3	38.2	mg/L
Magnesium	1370	ug/L
Total Dissolved Solids	65.0	mg/L

Waters Department

Client Sample ID: **RM 70**
 Lab Sample ID: 1222417005

Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	18900	ug/L
Hardness as CaCO3	52.2	mg/L
Magnesium	1190	ug/L
Total Dissolved Solids	73.0	mg/L

Waters Department

Client Sample ID: **RM 20.75 DUP**
 Lab Sample ID: 1222417006

Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	13300	ug/L
Copper	10.4	ug/L
Hardness as CaCO3	38.9	mg/L
Magnesium	1400	ug/L
Total Dissolved Solids	65.0	mg/L

Waters Department

Detectable Results Summary

Client Sample ID: **RM 20.75**
 Lab Sample ID: 1222417007

Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	13200	ug/L
Hardness as CaCO ₃	38.8	mg/L
Magnesium	1400	ug/L
Total Dissolved Solids	71.0	mg/L

Waters Department

Client Sample ID: **RM 31**
 Lab Sample ID: 1222417008

Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	14900	ug/L
Hardness as CaCO ₃	42.9	mg/L
Magnesium	1390	ug/L
Total Dissolved Solids	75.0	mg/L

Waters Department

Client Sample ID: **RM 82 DUP**
 Lab Sample ID: 1222417009

Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	18000	ug/L
Hardness as CaCO ₃	49.7	mg/L
Magnesium	1150	ug/L
Total Dissolved Solids	68.0	mg/L

Waters Department

Client Sample ID: **RM 82**
 Lab Sample ID: 1222417010

Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	18300	ug/L
Hardness as CaCO ₃	50.6	mg/L
Magnesium	1170	ug/L
Total Dissolved Solids	61.0	mg/L

Waters Department

Client Sample ID: **RM 23**
 Lab Sample ID: 1222417011

Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	14300	ug/L
Hardness as CaCO ₃	41.4	mg/L
Magnesium	1380	ug/L
Total Dissolved Solids	69.0	mg/L

Waters Department

Client Sample ID: **RM 21.1**
 Lab Sample ID: 1222417012

Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	12800	ug/L
Hardness as CaCO ₃	37.6	mg/L
Magnesium	1380	ug/L

Client Sample ID: **RM 76**

Lab Sample ID: 1222417013

Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	18300	ug/L
Hardness as CaCO ₃	50.5	mg/L
Magnesium	1160	ug/L
Total Dissolved Solids	22.0	mg/L

Waters Department

Detectable Results Summary

Client Sample ID: **Field Blank**

Lab Sample ID: 1222417014

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Dissolved Solids	18.0	mg/L

Client Sample ID: **RM 19**

Lab Sample ID: 1222417015

Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	10500	ug/L
Hardness as CaCO ₃	36.4	mg/L
Magnesium	2440	ug/L
Total Dissolved Solids	80.0	mg/L

Waters Department

Client Sample ID: **RM 12.75**

Lab Sample ID: 1222417016

Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	13300	ug/L
Hardness as CaCO ₃	39.0	mg/L
Magnesium	1380	ug/L
Total Dissolved Solids	63.0	mg/L

Waters Department

Client Sample ID: **RM 19.1 DUP**

Lab Sample ID: 1222417017

Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	12700	ug/L
Hardness as CaCO ₃	36.8	mg/L
Magnesium	1250	ug/L
Total Dissolved Solids	74.0	mg/L

Waters Department

Client Sample ID: **RM 19.1**

Lab Sample ID: 1222417018

Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	12900	ug/L
Hardness as CaCO ₃	37.5	mg/L
Magnesium	1290	ug/L
Total Dissolved Solids	49.0	mg/L

Waters Department

Client Sample ID: **RM 10.1 DUP**

Lab Sample ID: 1222417019

Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	13100	ug/L
Hardness as CaCO ₃	38.4	mg/L
Magnesium	1370	ug/L
Total Dissolved Solids	61.0	mg/L

Waters Department

Client Sample ID: **RM 10.1**

Lab Sample ID: 1222417020

Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	13600	ug/L
Copper	5.47	ug/L
Hardness as CaCO ₃	39.8	mg/L
Magnesium	1410	ug/L
Total Dissolved Solids	69.0	mg/L

Waters Department

Detectable Results Summary

Client Sample ID: **RM 5**

Lab Sample ID: 1222417021

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	291	ug/L
Calcium	20600	ug/L
Copper	3.23	ug/L
Magnesium	16100	ug/L
Potassium	5770	ug/L
Sodium	115000	ug/L
Zinc	107	ug/L

Client Sample ID: **RM 82.1**

Lab Sample ID: 1222417022

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	171	ug/L
Calcium	20300	ug/L
Magnesium	1270	ug/L
Potassium	713	ug/L
Sodium	1870	ug/L
Zinc	99.9	ug/L

Client Sample ID: **RM 40**

Lab Sample ID: 1222417023

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	82.3	ug/L
Calcium	14500	ug/L
Copper	5.32	ug/L
Magnesium	1050	ug/L
Potassium	887	ug/L
Sodium	1650	ug/L
Zinc	120	ug/L

Client Sample ID: **RM 21**

Lab Sample ID: 1222417024

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	56.9	ug/L
Calcium	14200	ug/L
Magnesium	1460	ug/L
Potassium	958	ug/L
Sodium	2140	ug/L
Zinc	128	ug/L

Client Sample ID: **RM 70**

Lab Sample ID: 1222417025

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	22.5	ug/L
Calcium	19800	ug/L
Magnesium	1220	ug/L
Potassium	576	ug/L
Sodium	1690	ug/L
Zinc	132	ug/L

Detectable Results Summary

Client Sample ID: **RM 20.75 DUP**

Lab Sample ID: 1222417026

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	54.8	ug/L
Calcium	13800	ug/L
Magnesium	1410	ug/L
Potassium	919	ug/L
Sodium	2050	ug/L
Zinc	84.6	ug/L

Client Sample ID: **RM 20.75**

Lab Sample ID: 1222417027

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	33.5	ug/L
Calcium	14400	ug/L
Magnesium	1470	ug/L
Potassium	961	ug/L
Sodium	2150	ug/L
Zinc	57.7	ug/L

Client Sample ID: **RM 31**

Lab Sample ID: 1222417028

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	24.0	ug/L
Calcium	16100	ug/L
Magnesium	1480	ug/L
Potassium	970	ug/L
Sodium	2090	ug/L
Zinc	108	ug/L

Client Sample ID: **RM 82 DUP**

Lab Sample ID: 1222417029

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	19200	ug/L
Magnesium	1230	ug/L
Potassium	642	ug/L
Sodium	1640	ug/L
Zinc	96.2	ug/L

Client Sample ID: **RM 82**

Lab Sample ID: 1222417030

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	18800	ug/L
Magnesium	1200	ug/L
Potassium	619	ug/L
Sodium	1550	ug/L
Zinc	151	ug/L

Detectable Results Summary

Client Sample ID: **RM 23**
 Lab Sample ID: 1222417031
Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	15400	ug/L
Magnesium	1450	ug/L
Potassium	975	ug/L
Sodium	2190	ug/L
Zinc	125	ug/L

Client Sample ID: **RM 21.1**
 Lab Sample ID: 1222417032
Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	54.2	ug/L
Calcium	13700	ug/L
Magnesium	1430	ug/L
Potassium	938	ug/L
Sodium	2090	ug/L
Zinc	130	ug/L

Client Sample ID: **RM 76**
 Lab Sample ID: 1222417033
Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	18800	ug/L
Magnesium	1180	ug/L
Potassium	580	ug/L
Sodium	1550	ug/L
Zinc	120	ug/L

Client Sample ID: **Field Blank**
 Lab Sample ID: 1222417034
Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	59.2	ug/L
Zinc	138	ug/L

Client Sample ID: **RM 19**
 Lab Sample ID: 1222417035
Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	117	ug/L
Calcium	11100	ug/L
Magnesium	2610	ug/L
Potassium	1230	ug/L
Sodium	3430	ug/L
Zinc	148	ug/L

Client Sample ID: **RM 12.75**
 Lab Sample ID: 1222417036
Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	39.3	ug/L
Calcium	14100	ug/L
Magnesium	1420	ug/L
Potassium	939	ug/L
Sodium	2090	ug/L
Zinc	105	ug/L

Detectable Results Summary

Client Sample ID: **RM 19.1 DUP**

Lab Sample ID: 1222417037

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	61.0	ug/L
Calcium	13500	ug/L
Copper	22.0	ug/L
Magnesium	1320	ug/L
Potassium	894	ug/L
Sodium	1870	ug/L
Zinc	93.5	ug/L

Client Sample ID: **RM 19.1**

Lab Sample ID: 1222417038

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	13700	ug/L
Magnesium	1350	ug/L
Potassium	911	ug/L
Sodium	1910	ug/L
Zinc	117	ug/L

Client Sample ID: **RM 10.1 DUP**

Lab Sample ID: 1222417039

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	21.1	ug/L
Calcium	13800	ug/L
Magnesium	1390	ug/L
Potassium	915	ug/L
Sodium	2020	ug/L
Zinc	89.1	ug/L

Client Sample ID: **RM 10.1**

Lab Sample ID: 1222417040

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	14100	ug/L
Magnesium	1430	ug/L
Potassium	946	ug/L
Sodium	2090	ug/L
Zinc	77.4	ug/L



Results of RM 5

Client Sample ID: RM 5
Client Project ID: Kenai River Metals Monitoring
Lab Sample ID: 1222417001
Lab Project ID: 1222417

Collection Date: 05/17/22 15:21
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Metals by ICP/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows include Calcium, Copper, Magnesium, and Zinc.

Batch Information

Analytical Batch: MMS11573
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/06/22 18:48
Container ID: 1222417001-C
Prep Batch: MXX35132
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Hardness as CaCO3.

Batch Information

Analytical Batch: MMS11573
Analytical Method: SM21 2340B
Analyst: DMM
Analytical Date/Time: 06/06/22 18:48
Container ID: 1222417001-C
Prep Batch: MXX35132
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM

Results of RM 5

Client Sample ID: **RM 5**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1222417001
 Lab Project ID: 1222417

Collection Date: 05/17/22 15:21
 Received Date: 05/19/22 09:38
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Dissolved Solids	459	10.0	3.10	mg/L	1		05/23/22 19:52

Batch Information

Analytical Batch: STS7269
 Analytical Method: SM21 2540C
 Analyst: NRZ
 Analytical Date/Time: 05/23/22 19:52
 Container ID: 1222417001-B

Print Date: 06/16/2022 1:17:52PM



Results of **RM 82.1**

Client Sample ID: **RM 82.1**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417002
Lab Project ID: 1222417

Collection Date: 05/17/22 10:50
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Calcium	23800	500	150	ug/L	1		06/06/22 18:59
Copper	22.7	3.00	1.00	ug/L	1		06/06/22 18:59
Magnesium	20600	50.0	15.0	ug/L	1		06/06/22 18:59
Zinc	52.5	10.0	3.10	ug/L	1		06/06/22 18:59

Batch Information

Analytical Batch: MMS11573
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/06/22 18:59
Container ID: 1222417002-C

Prep Batch: MXX35132
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Hardness as CaCO3	144	5.00	5.00	mg/L	1		06/06/22 18:59

Batch Information

Analytical Batch: MMS11573
Analytical Method: SM21 2340B
Analyst: DMM
Analytical Date/Time: 06/06/22 18:59
Container ID: 1222417002-C

Prep Batch: MXX35132
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of RM 82.1

Client Sample ID: **RM 82.1**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417002
Lab Project ID: 1222417

Collection Date: 05/17/22 10:50
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Dissolved Solids	74.0	10.0	3.10	mg/L	1		05/23/22 19:52

Batch Information

Analytical Batch: STS7269
Analytical Method: SM21 2540C
Analyst: NRZ
Analytical Date/Time: 05/23/22 19:52
Container ID: 1222417002-B

Print Date: 06/16/2022 1:17:52PM

Results of RM 40

Client Sample ID: **RM 40**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1222417003
 Lab Project ID: 1222417

Collection Date: 05/17/22 13:50
 Received Date: 05/19/22 09:38
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Calcium	13600	500	150	ug/L	1		06/06/22 19:02
Copper	3.00 U	3.00	1.00	ug/L	1		06/06/22 19:02
Magnesium	1030	50.0	15.0	ug/L	1		06/06/22 19:02
Zinc	10.0 U	10.0	3.10	ug/L	1		06/06/22 19:02

Batch Information

Analytical Batch: MMS11573
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 06/06/22 19:02
 Container ID: 1222417003-C

Prep Batch: MXX35132
 Prep Method: E200.2
 Prep Date/Time: 06/01/22 13:15
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Hardness as CaCO3	38.3	5.00	5.00	mg/L	1		06/06/22 19:02

Batch Information

Analytical Batch: MMS11573
 Analytical Method: SM21 2340B
 Analyst: DMM
 Analytical Date/Time: 06/06/22 19:02
 Container ID: 1222417003-C

Prep Batch: MXX35132
 Prep Method: E200.2
 Prep Date/Time: 06/01/22 13:15
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL



Results of RM 40

Client Sample ID: **RM 40**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417003
Lab Project ID: 1222417

Collection Date: 05/17/22 13:50
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Dissolved Solids	50.0	10.0	3.10	mg/L	1		05/23/22 19:52

Batch Information

Analytical Batch: STS7269
Analytical Method: SM21 2540C
Analyst: NRZ
Analytical Date/Time: 05/23/22 19:52
Container ID: 1222417003-B

Print Date: 06/16/2022 1:17:52PM



Results of **RM 21**

Client Sample ID: **RM 21**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417004
Lab Project ID: 1222417

Collection Date: 05/16/22 10:20
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Calcium	13000	500	150	ug/L	1		06/06/22 19:04
Copper	3.00 U	3.00	1.00	ug/L	1		06/06/22 19:04
Magnesium	1370	50.0	15.0	ug/L	1		06/06/22 19:04
Zinc	10.0 U	10.0	3.10	ug/L	1		06/06/22 19:04

Batch Information

Analytical Batch: MMS11573
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/06/22 19:04
Container ID: 1222417004-C

Prep Batch: MXX35132
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Hardness as CaCO3	38.2	5.00	5.00	mg/L	1		06/06/22 19:04

Batch Information

Analytical Batch: MMS11573
Analytical Method: SM21 2340B
Analyst: DMM
Analytical Date/Time: 06/06/22 19:04
Container ID: 1222417004-C

Prep Batch: MXX35132
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of **RM 21**

Client Sample ID: **RM 21**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417004
Lab Project ID: 1222417

Collection Date: 05/16/22 10:20
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Dissolved Solids	65.0	10.0	3.10	mg/L	1		05/23/22 19:52

Batch Information

Analytical Batch: STS7269
Analytical Method: SM21 2540C
Analyst: NRZ
Analytical Date/Time: 05/23/22 19:52
Container ID: 1222417004-B

Print Date: 06/16/2022 1:17:52PM



Results of **RM 70**

Client Sample ID: **RM 70**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417005
Lab Project ID: 1222417

Collection Date: 05/17/22 12:55
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Calcium	18900	500	150	ug/L	1		06/06/22 19:12
Copper	3.00 U	3.00	1.00	ug/L	1		06/06/22 19:12
Magnesium	1190	50.0	15.0	ug/L	1		06/06/22 19:12
Zinc	10.0 U	10.0	3.10	ug/L	1		06/06/22 19:12

Batch Information

Analytical Batch: MMS11573
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/06/22 19:12
Container ID: 1222417005-C

Prep Batch: MXX35132
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Hardness as CaCO3	52.2	5.00	5.00	mg/L	1		06/06/22 19:12

Batch Information

Analytical Batch: MMS11573
Analytical Method: SM21 2340B
Analyst: DMM
Analytical Date/Time: 06/06/22 19:12
Container ID: 1222417005-C

Prep Batch: MXX35132
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM

Results of RM 70

Client Sample ID: **RM 70**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1222417005
 Lab Project ID: 1222417

Collection Date: 05/17/22 12:55
 Received Date: 05/19/22 09:38
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Dissolved Solids	73.0	10.0	3.10	mg/L	1		05/23/22 19:52

Batch Information

Analytical Batch: STS7269
 Analytical Method: SM21 2540C
 Analyst: NRZ
 Analytical Date/Time: 05/23/22 19:52
 Container ID: 1222417005-B

Print Date: 06/16/2022 1:17:52PM



Results of **RM 20.75 DUP**

Client Sample ID: **RM 20.75 DUP**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417006
Lab Project ID: 1222417

Collection Date: 05/16/22 11:00
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Calcium	13300	500	150	ug/L	1		06/06/22 19:15
Copper	10.4	3.00	1.00	ug/L	1		06/06/22 19:15
Magnesium	1400	50.0	15.0	ug/L	1		06/06/22 19:15
Zinc	10.0 U	10.0	3.10	ug/L	1		06/06/22 19:15

Batch Information

Analytical Batch: MMS11573
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/06/22 19:15
Container ID: 1222417006-C

Prep Batch: MXX35132
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Hardness as CaCO3	38.9	5.00	5.00	mg/L	1		06/06/22 19:15

Batch Information

Analytical Batch: MMS11573
Analytical Method: SM21 2340B
Analyst: DMM
Analytical Date/Time: 06/06/22 19:15
Container ID: 1222417006-C

Prep Batch: MXX35132
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of RM 20.75 DUP

Client Sample ID: **RM 20.75 DUP**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417006
Lab Project ID: 1222417

Collection Date: 05/16/22 11:00
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Dissolved Solids	65.0	10.0	3.10	mg/L	1		05/23/22 19:52

Batch Information

Analytical Batch: STS7269
Analytical Method: SM21 2540C
Analyst: NRZ
Analytical Date/Time: 05/23/22 19:52
Container ID: 1222417006-B

Print Date: 06/16/2022 1:17:52PM



Results of **RM 20.75**

Client Sample ID: **RM 20.75**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417007
Lab Project ID: 1222417

Collection Date: 05/16/22 11:00
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Calcium	13200	500	150	ug/L	1		06/06/22 19:18
Copper	3.00 U	3.00	1.00	ug/L	1		06/06/22 19:18
Magnesium	1400	50.0	15.0	ug/L	1		06/06/22 19:18
Zinc	10.0 U	10.0	3.10	ug/L	1		06/06/22 19:18

Batch Information

Analytical Batch: MMS11573
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/06/22 19:18
Container ID: 1222417007-C

Prep Batch: MXX35132
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Hardness as CaCO3	38.8	5.00	5.00	mg/L	1		06/06/22 19:18

Batch Information

Analytical Batch: MMS11573
Analytical Method: SM21 2340B
Analyst: DMM
Analytical Date/Time: 06/06/22 19:18
Container ID: 1222417007-C

Prep Batch: MXX35132
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of RM 20.75

Client Sample ID: **RM 20.75**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417007
Lab Project ID: 1222417

Collection Date: 05/16/22 11:00
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Dissolved Solids	71.0	10.0	3.10	mg/L	1		05/23/22 19:52

Batch Information

Analytical Batch: STS7269
Analytical Method: SM21 2540C
Analyst: NRZ
Analytical Date/Time: 05/23/22 19:52
Container ID: 1222417007-B

Print Date: 06/16/2022 1:17:52PM



Results of **RM 31**

Client Sample ID: **RM 31**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417008
Lab Project ID: 1222417

Collection Date: 05/18/22 09:40
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Calcium	14900	500	150	ug/L	1		06/06/22 19:21
Copper	3.00 U	3.00	1.00	ug/L	1		06/06/22 19:21
Magnesium	1390	50.0	15.0	ug/L	1		06/06/22 19:21
Zinc	10.0 U	10.0	3.10	ug/L	1		06/06/22 19:21

Batch Information

Analytical Batch: MMS11573
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/06/22 19:21
Container ID: 1222417008-C

Prep Batch: MXX35132
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Hardness as CaCO3	42.9	5.00	5.00	mg/L	1		06/06/22 19:21

Batch Information

Analytical Batch: MMS11573
Analytical Method: SM21 2340B
Analyst: DMM
Analytical Date/Time: 06/06/22 19:21
Container ID: 1222417008-C

Prep Batch: MXX35132
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM

Results of RM 31

Client Sample ID: **RM 31**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1222417008
 Lab Project ID: 1222417

Collection Date: 05/18/22 09:40
 Received Date: 05/19/22 09:38
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Dissolved Solids	75.0	10.0	3.10	mg/L	1		05/23/22 19:52

Batch Information

Analytical Batch: STS7269
 Analytical Method: SM21 2540C
 Analyst: NRZ
 Analytical Date/Time: 05/23/22 19:52
 Container ID: 1222417008-B

Print Date: 06/16/2022 1:17:52PM

Results of RM 82 DUP

Client Sample ID: **RM 82 DUP**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1222417009
 Lab Project ID: 1222417

Collection Date: 05/17/22 11:10
 Received Date: 05/19/22 09:38
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Calcium	18000	500	150	ug/L	1		06/06/22 19:23
Copper	3.00 U	3.00	1.00	ug/L	1		06/06/22 19:23
Magnesium	1150	50.0	15.0	ug/L	1		06/06/22 19:23
Zinc	10.0 U	10.0	3.10	ug/L	1		06/06/22 19:23

Batch Information

Analytical Batch: MMS11573
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 06/06/22 19:23
 Container ID: 1222417009-C

Prep Batch: MXX35132
 Prep Method: E200.2
 Prep Date/Time: 06/01/22 13:15
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Hardness as CaCO3	49.7	5.00	5.00	mg/L	1		06/06/22 19:23

Batch Information

Analytical Batch: MMS11573
 Analytical Method: SM21 2340B
 Analyst: DMM
 Analytical Date/Time: 06/06/22 19:23
 Container ID: 1222417009-C

Prep Batch: MXX35132
 Prep Method: E200.2
 Prep Date/Time: 06/01/22 13:15
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 82 DUP

Client Sample ID: **RM 82 DUP**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1222417009
 Lab Project ID: 1222417

Collection Date: 05/17/22 11:10
 Received Date: 05/19/22 09:38
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Dissolved Solids	68.0	10.0	3.10	mg/L	1		05/23/22 19:52

Batch Information

Analytical Batch: STS7269
 Analytical Method: SM21 2540C
 Analyst: NRZ
 Analytical Date/Time: 05/23/22 19:52
 Container ID: 1222417009-B

Print Date: 06/16/2022 1:17:52PM



Results of **RM 82**

Client Sample ID: **RM 82**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417010
Lab Project ID: 1222417

Collection Date: 05/17/22 11:10
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Calcium	18300	500	150	ug/L	1		06/06/22 19:26
Copper	3.00 U	3.00	1.00	ug/L	1		06/06/22 19:26
Magnesium	1170	50.0	15.0	ug/L	1		06/06/22 19:26
Zinc	10.0 U	10.0	3.10	ug/L	1		06/06/22 19:26

Batch Information

Analytical Batch: MMS11573
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/06/22 19:26
Container ID: 1222417010-C

Prep Batch: MXX35132
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Hardness as CaCO3	50.6	5.00	5.00	mg/L	1		06/06/22 19:26

Batch Information

Analytical Batch: MMS11573
Analytical Method: SM21 2340B
Analyst: DMM
Analytical Date/Time: 06/06/22 19:26
Container ID: 1222417010-C

Prep Batch: MXX35132
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM

Results of RM 82

Client Sample ID: **RM 82**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1222417010
 Lab Project ID: 1222417

Collection Date: 05/17/22 11:10
 Received Date: 05/19/22 09:38
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Dissolved Solids	61.0	10.0	3.10	mg/L	1		05/23/22 19:52

Batch Information

Analytical Batch: STS7269
 Analytical Method: SM21 2540C
 Analyst: NRZ
 Analytical Date/Time: 05/23/22 19:52
 Container ID: 1222417010-B

Print Date: 06/16/2022 1:17:52PM



Results of **RM 23**

Client Sample ID: **RM 23**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417011
Lab Project ID: 1222417

Collection Date: 05/18/22 10:35
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Calcium	14300	500	150	ug/L	1		06/06/22 19:29
Copper	3.00 U	3.00	1.00	ug/L	1		06/06/22 19:29
Magnesium	1380	50.0	15.0	ug/L	1		06/06/22 19:29
Zinc	10.0 U	10.0	3.10	ug/L	1		06/06/22 19:29

Batch Information

Analytical Batch: MMS11573
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/06/22 19:29
Container ID: 1222417011-C

Prep Batch: MXX35132
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Hardness as CaCO3	41.4	5.00	5.00	mg/L	1		06/06/22 19:29

Batch Information

Analytical Batch: MMS11573
Analytical Method: SM21 2340B
Analyst: DMM
Analytical Date/Time: 06/06/22 19:29
Container ID: 1222417011-C

Prep Batch: MXX35132
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of **RM 23**

Client Sample ID: **RM 23**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417011
Lab Project ID: 1222417

Collection Date: 05/18/22 10:35
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Dissolved Solids	69.0	10.0	3.10	mg/L	1		05/23/22 19:52

Batch Information

Analytical Batch: STS7269
Analytical Method: SM21 2540C
Analyst: NRZ
Analytical Date/Time: 05/23/22 19:52
Container ID: 1222417011-B

Print Date: 06/16/2022 1:17:52PM

Results of RM 21.1

Client Sample ID: **RM 21.1**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1222417012
 Lab Project ID: 1222417

Collection Date: 05/16/22 10:00
 Received Date: 05/19/22 09:38
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Calcium	12800	500	150	ug/L	1		06/06/22 19:31
Copper	3.00 U	3.00	1.00	ug/L	1		06/06/22 19:31
Magnesium	1380	50.0	15.0	ug/L	1		06/06/22 19:31
Zinc	10.0 U	10.0	3.10	ug/L	1		06/06/22 19:31

Batch Information

Analytical Batch: MMS11573
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 06/06/22 19:31
 Container ID: 1222417012-C

Prep Batch: MXX35132
 Prep Method: E200.2
 Prep Date/Time: 06/01/22 13:15
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Hardness as CaCO3	37.6	5.00	5.00	mg/L	1		06/06/22 19:31

Batch Information

Analytical Batch: MMS11573
 Analytical Method: SM21 2340B
 Analyst: DMM
 Analytical Date/Time: 06/06/22 19:31
 Container ID: 1222417012-C

Prep Batch: MXX35132
 Prep Method: E200.2
 Prep Date/Time: 06/01/22 13:15
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL



Results of RM 21.1

Client Sample ID: **RM 21.1**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417012
Lab Project ID: 1222417

Collection Date: 05/16/22 10:00
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Dissolved Solids	10.0 U	10.0	3.10	mg/L	1		05/23/22 21:51

Batch Information

Analytical Batch: STS7270
Analytical Method: SM21 2540C
Analyst: NRZ
Analytical Date/Time: 05/23/22 21:51
Container ID: 1222417012-B

Print Date: 06/16/2022 1:17:52PM

Results of RM 76

Client Sample ID: **RM 76**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1222417013
 Lab Project ID: 1222417

Collection Date: 05/17/22 12:08
 Received Date: 05/19/22 09:38
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Calcium	18300	500	150	ug/L	1		06/06/22 18:53
Copper	3.00 U	3.00	1.00	ug/L	1		06/06/22 18:53
Magnesium	1160	50.0	15.0	ug/L	1		06/06/22 18:53
Zinc	10.0 U	10.0	3.10	ug/L	1		06/06/22 18:53

Batch Information

Analytical Batch: MMS11573
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 06/06/22 18:53
 Container ID: 1222417013-C

Prep Batch: MXX35132
 Prep Method: E200.2
 Prep Date/Time: 06/01/22 13:15
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Hardness as CaCO3	50.5	5.00	5.00	mg/L	1		06/06/22 18:53

Batch Information

Analytical Batch: MMS11573
 Analytical Method: SM21 2340B
 Analyst: DMM
 Analytical Date/Time: 06/06/22 18:53
 Container ID: 1222417013-C

Prep Batch: MXX35132
 Prep Method: E200.2
 Prep Date/Time: 06/01/22 13:15
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL



Results of RM 76

Client Sample ID: **RM 76**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417013
Lab Project ID: 1222417

Collection Date: 05/17/22 12:08
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Dissolved Solids	22.0	10.0	3.10	mg/L	1		05/23/22 21:51

Batch Information

Analytical Batch: STS7270
Analytical Method: SM21 2540C
Analyst: NRZ
Analytical Date/Time: 05/23/22 21:51
Container ID: 1222417013-B

Print Date: 06/16/2022 1:17:52PM

Results of Field Blank

Client Sample ID: **Field Blank**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1222417014
 Lab Project ID: 1222417

Collection Date: 05/17/22 11:20
 Received Date: 05/19/22 09:38
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Calcium	500 U	500	150	ug/L	1		06/06/22 19:34
Copper	3.00 U	3.00	1.00	ug/L	1		06/06/22 19:34
Magnesium	50.0 U	50.0	15.0	ug/L	1		06/06/22 19:34
Zinc	10.0 U	10.0	3.10	ug/L	1		06/06/22 19:34

Batch Information

Analytical Batch: MMS11573
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 06/06/22 19:34
 Container ID: 1222417014-C

Prep Batch: MXX35132
 Prep Method: E200.2
 Prep Date/Time: 06/01/22 13:15
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Hardness as CaCO3	5.00 U	5.00	5.00	mg/L	1		06/06/22 19:34

Batch Information

Analytical Batch: MMS11573
 Analytical Method: SM21 2340B
 Analyst: DMM
 Analytical Date/Time: 06/06/22 19:34
 Container ID: 1222417014-C

Prep Batch: MXX35132
 Prep Method: E200.2
 Prep Date/Time: 06/01/22 13:15
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL



Results of Field Blank

Client Sample ID: **Field Blank**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417014
Lab Project ID: 1222417

Collection Date: 05/17/22 11:20
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Dissolved Solids	18.0	10.0	3.10	mg/L	1		05/23/22 21:51

Batch Information

Analytical Batch: STS7270
Analytical Method: SM21 2540C
Analyst: NRZ
Analytical Date/Time: 05/23/22 21:51
Container ID: 1222417014-B

Print Date: 06/16/2022 1:17:52PM

Results of RM 19

Client Sample ID: **RM 19**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1222417015
 Lab Project ID: 1222417

Collection Date: 05/16/22 15:35
 Received Date: 05/19/22 09:38
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Calcium	10500	500	150	ug/L	1		06/06/22 19:37
Copper	3.00 U	3.00	1.00	ug/L	1		06/06/22 19:37
Magnesium	2440	50.0	15.0	ug/L	1		06/06/22 19:37
Zinc	10.0 U	10.0	3.10	ug/L	1		06/06/22 19:37

Batch Information

Analytical Batch: MMS11573
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 06/06/22 19:37
 Container ID: 1222417015-C

Prep Batch: MXX35132
 Prep Method: E200.2
 Prep Date/Time: 06/01/22 13:15
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Hardness as CaCO3	36.4	5.00	5.00	mg/L	1		06/06/22 19:37

Batch Information

Analytical Batch: MMS11573
 Analytical Method: SM21 2340B
 Analyst: DMM
 Analytical Date/Time: 06/06/22 19:37
 Container ID: 1222417015-C

Prep Batch: MXX35132
 Prep Method: E200.2
 Prep Date/Time: 06/01/22 13:15
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL



Results of RM 19

Client Sample ID: **RM 19**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417015
Lab Project ID: 1222417

Collection Date: 05/16/22 15:35
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Dissolved Solids	80.0	10.0	3.10	mg/L	1		05/23/22 21:51

Batch Information

Analytical Batch: STS7270
Analytical Method: SM21 2540C
Analyst: NRZ
Analytical Date/Time: 05/23/22 21:51
Container ID: 1222417015-B

Print Date: 06/16/2022 1:17:52PM



Results of **RM 12.75**

Client Sample ID: **RM 12.75**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417016
Lab Project ID: 1222417

Collection Date: 05/16/22 15:00
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Calcium	13300	500	150	ug/L	1		06/06/22 19:45
Copper	3.00 U	3.00	1.00	ug/L	1		06/06/22 19:45
Magnesium	1380	50.0	15.0	ug/L	1		06/06/22 19:45
Zinc	10.0 U	10.0	3.10	ug/L	1		06/06/22 19:45

Batch Information

Analytical Batch: MMS11573
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/06/22 19:45
Container ID: 1222417016-C

Prep Batch: MXX35132
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Hardness as CaCO3	39.0	5.00	5.00	mg/L	1		06/06/22 19:45

Batch Information

Analytical Batch: MMS11573
Analytical Method: SM21 2340B
Analyst: DMM
Analytical Date/Time: 06/06/22 19:45
Container ID: 1222417016-C

Prep Batch: MXX35132
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of RM 12.75

Client Sample ID: **RM 12.75**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417016
Lab Project ID: 1222417

Collection Date: 05/16/22 15:00
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Dissolved Solids	63.0	10.0	3.10	mg/L	1		05/23/22 21:51

Batch Information

Analytical Batch: STS7270
Analytical Method: SM21 2540C
Analyst: NRZ
Analytical Date/Time: 05/23/22 21:51
Container ID: 1222417016-B

Print Date: 06/16/2022 1:17:52PM



Results of RM 19.1 DUP

Client Sample ID: RM 19.1 DUP
Client Project ID: Kenai River Metals Monitoring
Lab Sample ID: 1222417017
Lab Project ID: 1222417

Collection Date: 05/16/22 16:00
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Metals by ICP/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows include Calcium, Copper, Magnesium, and Zinc.

Batch Information

Analytical Batch: MMS11573
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/06/22 19:48
Container ID: 1222417017-C
Prep Batch: MXX35132
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Hardness as CaCO3.

Batch Information

Analytical Batch: MMS11573
Analytical Method: SM21 2340B
Analyst: DMM
Analytical Date/Time: 06/06/22 19:48
Container ID: 1222417017-C
Prep Batch: MXX35132
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM

Results of RM 19.1 DUP

Client Sample ID: **RM 19.1 DUP**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1222417017
 Lab Project ID: 1222417

Collection Date: 05/16/22 16:00
 Received Date: 05/19/22 09:38
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Dissolved Solids	74.0	10.0	3.10	mg/L	1		05/23/22 21:51

Batch Information

Analytical Batch: STS7270
 Analytical Method: SM21 2540C
 Analyst: NRZ
 Analytical Date/Time: 05/23/22 21:51
 Container ID: 1222417017-B

Print Date: 06/16/2022 1:17:52PM



Results of **RM 19.1**

Client Sample ID: **RM 19.1**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417018
Lab Project ID: 1222417

Collection Date: 05/16/22 16:00
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Calcium	12900	500	150	ug/L	1		06/06/22 19:50
Copper	3.00 U	3.00	1.00	ug/L	1		06/06/22 19:50
Magnesium	1290	50.0	15.0	ug/L	1		06/06/22 19:50
Zinc	10.0 U	10.0	3.10	ug/L	1		06/06/22 19:50

Batch Information

Analytical Batch: MMS11573	Prep Batch: MXX35132
Analytical Method: EP200.8	Prep Method: E200.2
Analyst: DMM	Prep Date/Time: 06/01/22 13:15
Analytical Date/Time: 06/06/22 19:50	Prep Initial Wt./Vol.: 20 mL
Container ID: 1222417018-C	Prep Extract Vol: 50 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Hardness as CaCO3	37.5	5.00	5.00	mg/L	1		06/06/22 19:50

Batch Information

Analytical Batch: MMS11573	Prep Batch: MXX35132
Analytical Method: SM21 2340B	Prep Method: E200.2
Analyst: DMM	Prep Date/Time: 06/01/22 13:15
Analytical Date/Time: 06/06/22 19:50	Prep Initial Wt./Vol.: 20 mL
Container ID: 1222417018-C	Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM

Results of RM 19.1

Client Sample ID: **RM 19.1**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1222417018
 Lab Project ID: 1222417

Collection Date: 05/16/22 16:00
 Received Date: 05/19/22 09:38
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Dissolved Solids	49.0	10.0	3.10	mg/L	1		05/23/22 21:51

Batch Information

Analytical Batch: STS7270
 Analytical Method: SM21 2540C
 Analyst: NRZ
 Analytical Date/Time: 05/23/22 21:51
 Container ID: 1222417018-B

Print Date: 06/16/2022 1:17:52PM



Results of RM 10.1 DUP

Client Sample ID: RM 10.1 DUP
Client Project ID: Kenai River Metals Monitoring
Lab Sample ID: 1222417019
Lab Project ID: 1222417

Collection Date: 05/16/22 14:34
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Metals by ICP/MS

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows include Calcium, Copper, Magnesium, and Zinc.

Batch Information

Analytical Batch: MMS11573
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/06/22 19:53
Container ID: 1222417019-C
Prep Batch: MXX35132
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Hardness as CaCO3.

Batch Information

Analytical Batch: MMS11573
Analytical Method: SM21 2340B
Analyst: DMM
Analytical Date/Time: 06/06/22 19:53
Container ID: 1222417019-C
Prep Batch: MXX35132
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of **RM 10.1 DUP**

Client Sample ID: **RM 10.1 DUP**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417019
Lab Project ID: 1222417

Collection Date: 05/16/22 14:34
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Dissolved Solids	61.0	10.0	3.10	mg/L	1		05/23/22 21:51

Batch Information

Analytical Batch: STS7270
Analytical Method: SM21 2540C
Analyst: NRZ
Analytical Date/Time: 05/23/22 21:51
Container ID: 1222417019-B

Print Date: 06/16/2022 1:17:52PM



Results of **RM 10.1**

Client Sample ID: **RM 10.1**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417020
Lab Project ID: 1222417

Collection Date: 05/16/22 14:34
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Calcium	13600	500	150	ug/L	1		06/06/22 19:56
Copper	5.47	3.00	1.00	ug/L	1		06/06/22 19:56
Magnesium	1410	50.0	15.0	ug/L	1		06/06/22 19:56
Zinc	10.0 U	10.0	3.10	ug/L	1		06/06/22 19:56

Batch Information

Analytical Batch: MMS11573	Prep Batch: MXX35132
Analytical Method: EP200.8	Prep Method: E200.2
Analyst: DMM	Prep Date/Time: 06/01/22 13:15
Analytical Date/Time: 06/06/22 19:56	Prep Initial Wt./Vol.: 20 mL
Container ID: 1222417020-C	Prep Extract Vol: 50 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Hardness as CaCO3	39.8	5.00	5.00	mg/L	1		06/06/22 19:56

Batch Information

Analytical Batch: MMS11573	Prep Batch: MXX35132
Analytical Method: SM21 2340B	Prep Method: E200.2
Analyst: DMM	Prep Date/Time: 06/01/22 13:15
Analytical Date/Time: 06/06/22 19:56	Prep Initial Wt./Vol.: 20 mL
Container ID: 1222417020-C	Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of RM 10.1

Client Sample ID: **RM 10.1**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417020
Lab Project ID: 1222417

Collection Date: 05/16/22 14:34
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Dissolved Solids	69.0	10.0	3.10	mg/L	1		05/23/22 21:51

Batch Information

Analytical Batch: STS7270
Analytical Method: SM21 2540C
Analyst: NRZ
Analytical Date/Time: 05/23/22 21:51
Container ID: 1222417020-B

Print Date: 06/16/2022 1:17:52PM



Results of RM 5

Client Sample ID: **RM 5**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417021
Lab Project ID: 1222417

Collection Date: 05/17/22 15:21
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Aluminum	291	20.0	6.20	ug/L	1		06/13/22 06:37
Cadmium	0.500 U	0.500	0.150	ug/L	1		06/13/22 06:37
Calcium	20600	500	150	ug/L	1		06/13/22 06:37
Copper	3.23	3.00	1.00	ug/L	1		06/13/22 06:37
Lead	2.00 U	2.00	0.500	ug/L	1		06/13/22 06:37
Magnesium	16100	50.0	15.0	ug/L	1		06/13/22 06:37
Potassium	5770	500	150	ug/L	1		06/13/22 06:37
Selenium	5.00 U	5.00	1.50	ug/L	1		06/13/22 06:37
Sodium	115000	500	150	ug/L	1		06/13/22 06:37
Zinc	107	10.0	3.10	ug/L	1		06/13/22 06:37

Batch Information

Analytical Batch: MMS11578
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/13/22 06:37
Container ID: 1222417021-A

Prep Batch: MXX35133
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of RM 82.1

Client Sample ID: **RM 82.1**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417022
Lab Project ID: 1222417

Collection Date: 05/17/22 10:50
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Aluminum	171	20.0	6.20	ug/L	1		06/13/22 06:39
Cadmium	0.500 U	0.500	0.150	ug/L	1		06/13/22 06:39
Calcium	20300	500	150	ug/L	1		06/13/22 06:39
Copper	3.00 U	3.00	1.00	ug/L	1		06/13/22 06:39
Lead	2.00 U	2.00	0.500	ug/L	1		06/13/22 06:39
Magnesium	1270	50.0	15.0	ug/L	1		06/13/22 06:39
Potassium	713	500	150	ug/L	1		06/13/22 06:39
Selenium	5.00 U	5.00	1.50	ug/L	1		06/13/22 06:39
Sodium	1870	500	150	ug/L	1		06/13/22 06:39
Zinc	99.9	10.0	3.10	ug/L	1		06/13/22 06:39

Batch Information

Analytical Batch: MMS11578
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/13/22 06:39
Container ID: 1222417022-A

Prep Batch: MXX35133
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of RM 40

Client Sample ID: **RM 40**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417023
Lab Project ID: 1222417

Collection Date: 05/17/22 13:50
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Aluminum	82.3	20.0	6.20	ug/L	1		06/13/22 06:26
Cadmium	0.500 U	0.500	0.150	ug/L	1		06/13/22 06:26
Calcium	14500	500	150	ug/L	1		06/13/22 06:26
Copper	5.32	3.00	1.00	ug/L	1		06/13/22 06:26
Lead	2.00 U	2.00	0.500	ug/L	1		06/13/22 06:26
Magnesium	1050	50.0	15.0	ug/L	1		06/13/22 06:26
Potassium	887	500	150	ug/L	1		06/13/22 06:26
Selenium	5.00 U	5.00	1.50	ug/L	1		06/13/22 06:26
Sodium	1650	500	150	ug/L	1		06/13/22 06:26
Zinc	120	10.0	3.10	ug/L	1		06/13/22 06:26

Batch Information

Analytical Batch: MMS11578
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/13/22 06:26
Container ID: 1222417023-A

Prep Batch: MXX35133
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of RM 21

Client Sample ID: **RM 21**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417024
Lab Project ID: 1222417

Collection Date: 05/16/22 10:20
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Aluminum	56.9	20.0	6.20	ug/L	1		06/13/22 06:42
Cadmium	0.500 U	0.500	0.150	ug/L	1		06/13/22 06:42
Calcium	14200	500	150	ug/L	1		06/13/22 06:42
Copper	3.00 U	3.00	1.00	ug/L	1		06/13/22 06:42
Lead	2.00 U	2.00	0.500	ug/L	1		06/13/22 06:42
Magnesium	1460	50.0	15.0	ug/L	1		06/13/22 06:42
Potassium	958	500	150	ug/L	1		06/13/22 06:42
Selenium	5.00 U	5.00	1.50	ug/L	1		06/13/22 06:42
Sodium	2140	500	150	ug/L	1		06/13/22 06:42
Zinc	128	10.0	3.10	ug/L	1		06/13/22 06:42

Batch Information

Analytical Batch: MMS11578
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/13/22 06:42
Container ID: 1222417024-A

Prep Batch: MXX35133
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of RM 70

Client Sample ID: **RM 70**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417025
Lab Project ID: 1222417

Collection Date: 05/17/22 12:55
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Aluminum	22.5	20.0	6.20	ug/L	1		06/13/22 06:50
Cadmium	0.500 U	0.500	0.150	ug/L	1		06/13/22 06:50
Calcium	19800	500	150	ug/L	1		06/13/22 06:50
Copper	3.00 U	3.00	1.00	ug/L	1		06/13/22 06:50
Lead	2.00 U	2.00	0.500	ug/L	1		06/13/22 06:50
Magnesium	1220	50.0	15.0	ug/L	1		06/13/22 06:50
Potassium	576	500	150	ug/L	1		06/13/22 06:50
Selenium	5.00 U	5.00	1.50	ug/L	1		06/13/22 06:50
Sodium	1690	500	150	ug/L	1		06/13/22 06:50
Zinc	132	10.0	3.10	ug/L	1		06/13/22 06:50

Batch Information

Analytical Batch: MMS11578
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/13/22 06:50
Container ID: 1222417025-A

Prep Batch: MXX35133
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of RM 20.75 DUP

Client Sample ID: **RM 20.75 DUP**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417026
Lab Project ID: 1222417

Collection Date: 05/16/22 11:00
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Aluminum	54.8	20.0	6.20	ug/L	1		06/13/22 06:53
Cadmium	0.500 U	0.500	0.150	ug/L	1		06/13/22 06:53
Calcium	13800	500	150	ug/L	1		06/13/22 06:53
Copper	3.00 U	3.00	1.00	ug/L	1		06/13/22 06:53
Lead	2.00 U	2.00	0.500	ug/L	1		06/13/22 06:53
Magnesium	1410	50.0	15.0	ug/L	1		06/13/22 06:53
Potassium	919	500	150	ug/L	1		06/13/22 06:53
Selenium	5.00 U	5.00	1.50	ug/L	1		06/13/22 06:53
Sodium	2050	500	150	ug/L	1		06/13/22 06:53
Zinc	84.6	10.0	3.10	ug/L	1		06/13/22 06:53

Batch Information

Analytical Batch: MMS11578
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/13/22 06:53
Container ID: 1222417026-A

Prep Batch: MXX35133
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of RM 20.75

Client Sample ID: **RM 20.75**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417027
Lab Project ID: 1222417

Collection Date: 05/16/22 11:00
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Aluminum	33.5	20.0	6.20	ug/L	1		06/13/22 06:56
Cadmium	0.500 U	0.500	0.150	ug/L	1		06/13/22 06:56
Calcium	14400	500	150	ug/L	1		06/13/22 06:56
Copper	3.00 U	3.00	1.00	ug/L	1		06/13/22 06:56
Lead	2.00 U	2.00	0.500	ug/L	1		06/13/22 06:56
Magnesium	1470	50.0	15.0	ug/L	1		06/13/22 06:56
Potassium	961	500	150	ug/L	1		06/13/22 06:56
Selenium	5.00 U	5.00	1.50	ug/L	1		06/13/22 06:56
Sodium	2150	500	150	ug/L	1		06/13/22 06:56
Zinc	57.7	10.0	3.10	ug/L	1		06/13/22 06:56

Batch Information

Analytical Batch: MMS11578
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/13/22 06:56
Container ID: 1222417027-A

Prep Batch: MXX35133
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of RM 31

Client Sample ID: **RM 31**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417028
Lab Project ID: 1222417

Collection Date: 05/18/22 09:40
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Aluminum	24.0	20.0	6.20	ug/L	1		06/13/22 06:58
Cadmium	0.500 U	0.500	0.150	ug/L	1		06/13/22 06:58
Calcium	16100	500	150	ug/L	1		06/13/22 06:58
Copper	3.00 U	3.00	1.00	ug/L	1		06/13/22 06:58
Lead	2.00 U	2.00	0.500	ug/L	1		06/13/22 06:58
Magnesium	1480	50.0	15.0	ug/L	1		06/13/22 06:58
Potassium	970	500	150	ug/L	1		06/13/22 06:58
Selenium	5.00 U	5.00	1.50	ug/L	1		06/13/22 06:58
Sodium	2090	500	150	ug/L	1		06/13/22 06:58
Zinc	108	10.0	3.10	ug/L	1		06/13/22 06:58

Batch Information

Analytical Batch: MMS11578
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/13/22 06:58
Container ID: 1222417028-A

Prep Batch: MXX35133
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of RM 82 DUP

Client Sample ID: **RM 82 DUP**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417029
Lab Project ID: 1222417

Collection Date: 05/17/22 11:10
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Aluminum	20.0 U	20.0	6.20	ug/L	1		06/13/22 06:31
Cadmium	0.500 U	0.500	0.150	ug/L	1		06/13/22 06:31
Calcium	19200	500	150	ug/L	1		06/13/22 06:31
Copper	3.00 U	3.00	1.00	ug/L	1		06/13/22 06:31
Lead	2.00 U	2.00	0.500	ug/L	1		06/13/22 06:31
Magnesium	1230	50.0	15.0	ug/L	1		06/13/22 06:31
Potassium	642	500	150	ug/L	1		06/13/22 06:31
Selenium	5.00 U	5.00	1.50	ug/L	1		06/13/22 06:31
Sodium	1640	500	150	ug/L	1		06/13/22 06:31
Zinc	96.2	10.0	3.10	ug/L	1		06/13/22 06:31

Batch Information

Analytical Batch: MMS11578
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/13/22 06:31
Container ID: 1222417029-A

Prep Batch: MXX35133
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of RM 82

Client Sample ID: **RM 82**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417030
Lab Project ID: 1222417

Collection Date: 05/17/22 11:10
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Aluminum	20.0 U	20.0	6.20	ug/L	1		06/13/22 07:01
Cadmium	0.500 U	0.500	0.150	ug/L	1		06/13/22 07:01
Calcium	18800	500	150	ug/L	1		06/13/22 07:01
Copper	3.00 U	3.00	1.00	ug/L	1		06/13/22 07:01
Lead	2.00 U	2.00	0.500	ug/L	1		06/13/22 07:01
Magnesium	1200	50.0	15.0	ug/L	1		06/13/22 07:01
Potassium	619	500	150	ug/L	1		06/13/22 07:01
Selenium	5.00 U	5.00	1.50	ug/L	1		06/13/22 07:01
Sodium	1550	500	150	ug/L	1		06/13/22 07:01
Zinc	151	10.0	3.10	ug/L	1		06/13/22 07:01

Batch Information

Analytical Batch: MMS11578
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/13/22 07:01
Container ID: 1222417030-A

Prep Batch: MXX35133
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of RM 23

Client Sample ID: **RM 23**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417031
Lab Project ID: 1222417

Collection Date: 05/18/22 10:35
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Aluminum	20.0 U	20.0	6.20	ug/L	1		06/13/22 07:04
Cadmium	0.500 U	0.500	0.150	ug/L	1		06/13/22 07:04
Calcium	15400	500	150	ug/L	1		06/13/22 07:04
Copper	3.00 U	3.00	1.00	ug/L	1		06/13/22 07:04
Lead	2.00 U	2.00	0.500	ug/L	1		06/13/22 07:04
Magnesium	1450	50.0	15.0	ug/L	1		06/13/22 07:04
Potassium	975	500	150	ug/L	1		06/13/22 07:04
Selenium	5.00 U	5.00	1.50	ug/L	1		06/13/22 07:04
Sodium	2190	500	150	ug/L	1		06/13/22 07:04
Zinc	125	10.0	3.10	ug/L	1		06/13/22 07:04

Batch Information

Analytical Batch: MMS11578
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/13/22 07:04
Container ID: 1222417031-A

Prep Batch: MXX35133
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of RM 21.1

Client Sample ID: **RM 21.1**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417032
Lab Project ID: 1222417

Collection Date: 05/16/22 10:00
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Aluminum	54.2	20.0	6.20	ug/L	1		06/13/22 07:06
Cadmium	0.500 U	0.500	0.150	ug/L	1		06/13/22 07:06
Calcium	13700	500	150	ug/L	1		06/13/22 07:06
Copper	3.00 U	3.00	1.00	ug/L	1		06/13/22 07:06
Lead	2.00 U	2.00	0.500	ug/L	1		06/13/22 07:06
Magnesium	1430	50.0	15.0	ug/L	1		06/13/22 07:06
Potassium	938	500	150	ug/L	1		06/13/22 07:06
Selenium	5.00 U	5.00	1.50	ug/L	1		06/13/22 07:06
Sodium	2090	500	150	ug/L	1		06/13/22 07:06
Zinc	130	10.0	3.10	ug/L	1		06/13/22 07:06

Batch Information

Analytical Batch: MMS11578
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/13/22 07:06
Container ID: 1222417032-A

Prep Batch: MXX35133
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of RM 76

Client Sample ID: **RM 76**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417033
Lab Project ID: 1222417

Collection Date: 05/17/22 12:08
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Aluminum	20.0 U	20.0	6.20	ug/L	1		06/13/22 07:09
Cadmium	0.500 U	0.500	0.150	ug/L	1		06/13/22 07:09
Calcium	18800	500	150	ug/L	1		06/13/22 07:09
Copper	3.00 U	3.00	1.00	ug/L	1		06/13/22 07:09
Lead	2.00 U	2.00	0.500	ug/L	1		06/13/22 07:09
Magnesium	1180	50.0	15.0	ug/L	1		06/13/22 07:09
Potassium	580	500	150	ug/L	1		06/13/22 07:09
Selenium	5.00 U	5.00	1.50	ug/L	1		06/13/22 07:09
Sodium	1550	500	150	ug/L	1		06/13/22 07:09
Zinc	120	10.0	3.10	ug/L	1		06/13/22 07:09

Batch Information

Analytical Batch: MMS11578
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/13/22 07:09
Container ID: 1222417033-A

Prep Batch: MXX35133
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of Field Blank

Client Sample ID: **Field Blank**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417034
Lab Project ID: 1222417

Collection Date: 05/17/22 11:20
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Aluminum	59.2	20.0	6.20	ug/L	1		06/13/22 07:12
Cadmium	0.500 U	0.500	0.150	ug/L	1		06/13/22 07:12
Calcium	500 U	500	150	ug/L	1		06/13/22 07:12
Copper	3.00 U	3.00	1.00	ug/L	1		06/13/22 07:12
Lead	2.00 U	2.00	0.500	ug/L	1		06/13/22 07:12
Magnesium	50.0 U	50.0	15.0	ug/L	1		06/13/22 07:12
Potassium	500 U	500	150	ug/L	1		06/13/22 07:12
Selenium	5.00 U	5.00	1.50	ug/L	1		06/13/22 07:12
Sodium	500 U	500	150	ug/L	1		06/13/22 07:12
Zinc	138	10.0	3.10	ug/L	1		06/13/22 07:12

Batch Information

Analytical Batch: MMS11578
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/13/22 07:12
Container ID: 1222417034-A

Prep Batch: MXX35133
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of RM 19

Client Sample ID: **RM 19**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417035
Lab Project ID: 1222417

Collection Date: 05/16/22 15:35
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Aluminum	117	20.0	6.20	ug/L	1		06/13/22 07:15
Cadmium	0.500 U	0.500	0.150	ug/L	1		06/13/22 07:15
Calcium	11100	500	150	ug/L	1		06/13/22 07:15
Copper	3.00 U	3.00	1.00	ug/L	1		06/13/22 07:15
Lead	2.00 U	2.00	0.500	ug/L	1		06/13/22 07:15
Magnesium	2610	50.0	15.0	ug/L	1		06/13/22 07:15
Potassium	1230	500	150	ug/L	1		06/13/22 07:15
Selenium	5.00 U	5.00	1.50	ug/L	1		06/13/22 07:15
Sodium	3430	500	150	ug/L	1		06/13/22 07:15
Zinc	148	10.0	3.10	ug/L	1		06/13/22 07:15

Batch Information

Analytical Batch: MMS11578
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/13/22 07:15
Container ID: 1222417035-A

Prep Batch: MXX35133
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of RM 12.75

Client Sample ID: **RM 12.75**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417036
Lab Project ID: 1222417

Collection Date: 05/16/22 15:00
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Aluminum	39.3	20.0	6.20	ug/L	1		06/13/22 07:23
Cadmium	0.500 U	0.500	0.150	ug/L	1		06/13/22 07:23
Calcium	14100	500	150	ug/L	1		06/13/22 07:23
Copper	3.00 U	3.00	1.00	ug/L	1		06/13/22 07:23
Lead	2.00 U	2.00	0.500	ug/L	1		06/13/22 07:23
Magnesium	1420	50.0	15.0	ug/L	1		06/13/22 07:23
Potassium	939	500	150	ug/L	1		06/13/22 07:23
Selenium	5.00 U	5.00	1.50	ug/L	1		06/13/22 07:23
Sodium	2090	500	150	ug/L	1		06/13/22 07:23
Zinc	105	10.0	3.10	ug/L	1		06/13/22 07:23

Batch Information

Analytical Batch: MMS11578
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/13/22 07:23
Container ID: 1222417036-A

Prep Batch: MXX35133
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of RM 19.1 DUP

Client Sample ID: **RM 19.1 DUP**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417037
Lab Project ID: 1222417

Collection Date: 05/16/22 16:00
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Aluminum	61.0	20.0	6.20	ug/L	1		06/13/22 07:25
Cadmium	0.500 U	0.500	0.150	ug/L	1		06/13/22 07:25
Calcium	13500	500	150	ug/L	1		06/13/22 07:25
Copper	22.0	3.00	1.00	ug/L	1		06/13/22 07:25
Lead	2.00 U	2.00	0.500	ug/L	1		06/13/22 07:25
Magnesium	1320	50.0	15.0	ug/L	1		06/13/22 07:25
Potassium	894	500	150	ug/L	1		06/13/22 07:25
Selenium	5.00 U	5.00	1.50	ug/L	1		06/13/22 07:25
Sodium	1870	500	150	ug/L	1		06/13/22 07:25
Zinc	93.5	10.0	3.10	ug/L	1		06/13/22 07:25

Batch Information

Analytical Batch: MMS11578
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/13/22 07:25
Container ID: 1222417037-A

Prep Batch: MXX35133
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of RM 19.1

Client Sample ID: **RM 19.1**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417038
Lab Project ID: 1222417

Collection Date: 05/16/22 16:00
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Aluminum	20.0 U	20.0	6.20	ug/L	1		06/13/22 07:28
Cadmium	0.500 U	0.500	0.150	ug/L	1		06/13/22 07:28
Calcium	13700	500	150	ug/L	1		06/13/22 07:28
Copper	3.00 U	3.00	1.00	ug/L	1		06/13/22 07:28
Lead	2.00 U	2.00	0.500	ug/L	1		06/13/22 07:28
Magnesium	1350	50.0	15.0	ug/L	1		06/13/22 07:28
Potassium	911	500	150	ug/L	1		06/13/22 07:28
Selenium	5.00 U	5.00	1.50	ug/L	1		06/13/22 07:28
Sodium	1910	500	150	ug/L	1		06/13/22 07:28
Zinc	117	10.0	3.10	ug/L	1		06/13/22 07:28

Batch Information

Analytical Batch: MMS11578
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/13/22 07:28
Container ID: 1222417038-A

Prep Batch: MXX35133
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of RM 10.1 DUP

Client Sample ID: **RM 10.1 DUP**
Client Project ID: **Kenai River Metals Monitoring**
Lab Sample ID: 1222417039
Lab Project ID: 1222417

Collection Date: 05/16/22 14:34
Received Date: 05/19/22 09:38
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Aluminum	21.1	20.0	6.20	ug/L	1		06/13/22 07:31
Cadmium	0.500 U	0.500	0.150	ug/L	1		06/13/22 07:31
Calcium	13800	500	150	ug/L	1		06/13/22 07:31
Copper	3.00 U	3.00	1.00	ug/L	1		06/13/22 07:31
Lead	2.00 U	2.00	0.500	ug/L	1		06/13/22 07:31
Magnesium	1390	50.0	15.0	ug/L	1		06/13/22 07:31
Potassium	915	500	150	ug/L	1		06/13/22 07:31
Selenium	5.00 U	5.00	1.50	ug/L	1		06/13/22 07:31
Sodium	2020	500	150	ug/L	1		06/13/22 07:31
Zinc	89.1	10.0	3.10	ug/L	1		06/13/22 07:31

Batch Information

Analytical Batch: MMS11578
Analytical Method: EP200.8
Analyst: DMM
Analytical Date/Time: 06/13/22 07:31
Container ID: 1222417039-A

Prep Batch: MXX35133
Prep Method: E200.2
Prep Date/Time: 06/01/22 13:15
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM



Results of RM 10.1

Client Sample ID: **RM 10.1**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1222417040
 Lab Project ID: 1222417

Collection Date: 05/16/22 14:34
 Received Date: 05/19/22 09:38
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Aluminum	20.0 U	20.0	6.20	ug/L	1		06/13/22 07:34
Cadmium	0.500 U	0.500	0.150	ug/L	1		06/13/22 07:34
Calcium	14100	500	150	ug/L	1		06/13/22 07:34
Copper	3.00 U	3.00	1.00	ug/L	1		06/13/22 07:34
Lead	2.00 U	2.00	0.500	ug/L	1		06/13/22 07:34
Magnesium	1430	50.0	15.0	ug/L	1		06/13/22 07:34
Potassium	946	500	150	ug/L	1		06/13/22 07:34
Selenium	5.00 U	5.00	1.50	ug/L	1		06/13/22 07:34
Sodium	2090	500	150	ug/L	1		06/13/22 07:34
Zinc	77.4	10.0	3.10	ug/L	1		06/13/22 07:34

Batch Information

Analytical Batch: MMS11578
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 06/13/22 07:34
 Container ID: 1222417040-A

Prep Batch: MXX35133
 Prep Method: E200.2
 Prep Date/Time: 06/01/22 13:15
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Print Date: 06/16/2022 1:17:52PM

Method Blank

Blank ID: MB for HBN 1836811 [MXX/35132]
 Blank Lab ID: 1666098

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1222417001, 1222417002, 1222417003, 1222417004, 1222417005, 1222417006, 1222417007, 1222417008, 1222417009,
 1222417010, 1222417011, 1222417012, 1222417013, 1222417014, 1222417015, 1222417016, 1222417017, 1222417018,
 1222417019, 1222417020

Results by EP200.8

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Calcium	250U	500	150	ug/L
Copper	1.50U	3.00	1.00	ug/L
Magnesium	25.0U	50.0	15.0	ug/L
Zinc	5.00U	10.0	3.10	ug/L

Batch Information

Analytical Batch: MMS11573
 Analytical Method: EP200.8
 Instrument: P7 Agilent 7800
 Analyst: DMM
 Analytical Date/Time: 6/6/2022 6:40:31PM

Prep Batch: MXX35132
 Prep Method: E200.2
 Prep Date/Time: 6/1/2022 1:15:26PM
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1222417 [MXX35132]
 Blank Spike Lab ID: 1666099
 Date Analyzed: 06/06/2022 18:43

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1222417001, 1222417002, 1222417003, 1222417004, 1222417005, 1222417006, 1222417007,
 1222417008, 1222417009, 1222417010, 1222417011, 1222417012, 1222417013, 1222417014,
 1222417015, 1222417016, 1222417017, 1222417018, 1222417019, 1222417020

Results by EP200.8

Parameter	Blank Spike (ug/L)			CL
	Spike	Result	Rec (%)	
Calcium	10000	9900	99	(85-115)
Copper	1000	1020	102	(85-115)
Magnesium	10000	9790	98	(85-115)
Zinc	1000	999	100	(85-115)

Batch Information

Analytical Batch: **MMS11573**
 Analytical Method: **EP200.8**
 Instrument: **P7 Agilent 7800**
 Analyst: **DMM**

Prep Batch: **MXX35132**
 Prep Method: **E200.2**
 Prep Date/Time: **06/01/2022 13:15**
 Spike Init Wt./Vol.: 10000 ug/L Extract Vol: 50 mL
 Dupe Init Wt./Vol.: Extract Vol:



Matrix Spike Summary

Original Sample ID: 1666106
MS Sample ID: 1666111 MS
MSD Sample ID:

Analysis Date: 06/06/2022 18:48
Analysis Date: 06/06/2022 18:51
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1222417001, 1222417002, 1222417003, 1222417004, 1222417005, 1222417006, 1222417007, 1222417008, 1222417009, 1222417010, 1222417011, 1222417012, 1222417013

Results by EP200.8

Parameter	Sample	Matrix Spike (ug/L)			Spike Duplicate (ug/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Calcium	19000	10000	28700	97				70-130		
Copper	1.50U	1000	1020	102				70-130		
Magnesium	1170	10000	11100	99				70-130		
Zinc	5.00U	1000	1000	100				70-130		

Batch Information

Analytical Batch: MMS11573
Analytical Method: EP200.8
Instrument: P7 Agilent 7800
Analyst: DMM
Analytical Date/Time: 6/6/2022 6:51:18PM

Prep Batch: MX35132
Prep Method: DW Digest for Metals on ICP-MS
Prep Date/Time: 6/1/2022 1:15:26PM
Prep Initial Wt./Vol.: 20.00mL
Prep Extract Vol: 50.00mL

Print Date: 06/16/2022 1:18:00PM



Matrix Spike Summary

Original Sample ID: 1666110
MS Sample ID: 1666112 MS
MSD Sample ID:

Analysis Date: 06/06/2022 18:53
Analysis Date: 06/06/2022 18:56
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1222417002, 1222417003, 1222417004, 1222417005, 1222417006, 1222417007, 1222417008, 1222417009, 1222417010, 1222417011, 1222417012, 1222417013, 1222417014, 1222417015, 1222417016, 1222417017, 1222417018, 1222417019, 1222417020

Results by EP200.8

Parameter	Sample	Matrix Spike (ug/L)			Spike Duplicate (ug/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Calcium	18300	10000	28000	97				70-130		
Copper	1.77J	1000	1010	101				70-130		
Magnesium	1160	10000	11100	99				70-130		
Zinc	5.00U	1000	991	99				70-130		

Batch Information

Analytical Batch: MMS11573
Analytical Method: EP200.8
Instrument: P7 Agilent 7800
Analyst: DMM
Analytical Date/Time: 6/6/2022 6:56:41PM

Prep Batch: MX35132
Prep Method: DW Digest for Metals on ICP-MS
Prep Date/Time: 6/1/2022 1:15:26PM
Prep Initial Wt./Vol.: 20.00mL
Prep Extract Vol: 50.00mL

Print Date: 06/16/2022 1:18:00PM

Method Blank

Blank ID: MB for HBN 1836814 [MXX/35133]
 Blank Lab ID: 1666113

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1222417021, 1222417022, 1222417023, 1222417024, 1222417025, 1222417026, 1222417027, 1222417028, 1222417029,
 1222417030, 1222417031, 1222417032, 1222417033, 1222417034, 1222417035, 1222417036, 1222417037, 1222417038,
 1222417039, 1222417040

Results by EP200.8

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Aluminum	19.7J	20.0	6.20	ug/L
Cadmium	0.250U	0.500	0.150	ug/L
Calcium	250U	500	150	ug/L
Copper	1.50U	3.00	1.00	ug/L
Lead	1.00U	2.00	0.500	ug/L
Magnesium	25.0U	50.0	15.0	ug/L
Potassium	250U	500	150	ug/L
Selenium	2.50U	5.00	1.50	ug/L
Sodium	250U	500	150	ug/L
Zinc	5.00U	10.0	3.10	ug/L

Batch Information

Analytical Batch: MMS11578
 Analytical Method: EP200.8
 Instrument: P7 Agilent 7800
 Analyst: DMM
 Analytical Date/Time: 6/13/2022 6:18:23AM

Prep Batch: MXX35133
 Prep Method: E200.2
 Prep Date/Time: 6/1/2022 1:15:13PM
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1222417 [MXX35133]
 Blank Spike Lab ID: 1666114
 Date Analyzed: 06/13/2022 06:21

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1222417021, 1222417022, 1222417023, 1222417024, 1222417025, 1222417026, 1222417027,
 1222417028, 1222417029, 1222417030, 1222417031, 1222417032, 1222417033, 1222417034,
 1222417035, 1222417036, 1222417037, 1222417038, 1222417039, 1222417040

Results by EP200.8

Parameter	Blank Spike (ug/L)			CL
	Spike	Result	Rec (%)	
Aluminum	1000	1100	110	(85-115)
Cadmium	100	104	104	(85-115)
Calcium	10000	10500	105	(85-115)
Copper	1000	1050	105	(85-115)
Lead	1000	1060	106	(85-115)
Magnesium	10000	10400	104	(85-115)
Potassium	10000	10500	105	(85-115)
Selenium	1000	1030	103	(85-115)
Sodium	10000	10300	103	(85-115)
Zinc	1000	1030	103	(85-115)

Batch Information

Analytical Batch: **MMS11578**
 Analytical Method: **EP200.8**
 Instrument: **P7 Agilent 7800**
 Analyst: **DMM**

Prep Batch: **MXX35133**
 Prep Method: **E200.2**
 Prep Date/Time: **06/01/2022 13:15**
 Spike Init Wt./Vol.: 1000 ug/L Extract Vol: 50 mL
 Dupe Init Wt./Vol.: Extract Vol:



Matrix Spike Summary

Original Sample ID: 1666116
MS Sample ID: 1666117 MS
MSD Sample ID:

Analysis Date: 06/13/2022 6:26
Analysis Date: 06/13/2022 6:29
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1222417021, 1222417022, 1222417023, 1222417024, 1222417025, 1222417026, 1222417027, 1222417028, 1222417029

Results by EP200.8

Parameter	Sample	Matrix Spike (ug/L)			Spike Duplicate (ug/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Aluminum	82.3	1000	1130	104				70-130		
Cadmium	0.250U	100	103	103				70-130		
Calcium	14500	10000	24300	98				70-130		
Copper	5.32	1000	1050	105				70-130		
Lead	1.00U	1000	1070	107				70-130		
Magnesium	1050	10000	11200	102				70-130		
Potassium	887	10000	11200	103				70-130		
Selenium	2.50U	1000	1020	102				70-130		
Sodium	1650	10000	11800	101				70-130		
Zinc	120	1000	1150	103				70-130		

Batch Information

Analytical Batch: MMS11578
Analytical Method: EP200.8
Instrument: P7 Agilent 7800
Analyst: DMM
Analytical Date/Time: 6/13/2022 6:29:09AM

Prep Batch: MXX35133
Prep Method: DW Digest for Metals on ICP-MS
Prep Date/Time: 6/1/2022 1:15:13PM
Prep Initial Wt./Vol.: 20.00mL
Prep Extract Vol: 50.00mL

Print Date: 06/16/2022 1:18:08PM

Matrix Spike Summary

Original Sample ID: 1666118
 MS Sample ID: 1666119 MS
 MSD Sample ID:

Analysis Date: 06/13/2022 6:31
 Analysis Date: 06/13/2022 6:34
 Analysis Date:
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1222417024, 1222417025, 1222417026, 1222417027, 1222417028, 1222417029, 1222417030,
 1222417031, 1222417032, 1222417033, 1222417034, 1222417035, 1222417036, 1222417037,
 1222417038, 1222417039, 1222417040

Results by EP200.8

Parameter	Sample	Matrix Spike (ug/L)			Spike Duplicate (ug/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Aluminum	16.9J	1000	1150	113				70-130		
Cadmium	0.250U	100	104	104				70-130		
Calcium	19200	10000	29600	104				70-130		
Copper	1.50U	1000	1070	107				70-130		
Lead	0.598J	1000	1080	107				70-130		
Magnesium	1230	10000	11600	104				70-130		
Potassium	642	10000	11200	106				70-130		
Selenium	2.50U	1000	1040	104				70-130		
Sodium	1640	10000	11900	103				70-130		
Zinc	96.2	1000	1160	106				70-130		

Batch Information

Analytical Batch: MMS11578
 Analytical Method: EP200.8
 Instrument: P7 Agilent 7800
 Analyst: DMM
 Analytical Date/Time: 6/13/2022 6:34:32AM

Prep Batch: MXX35133
 Prep Method: DW Digest for Metals on ICP-MS
 Prep Date/Time: 6/1/2022 1:15:13PM
 Prep Initial Wt./Vol.: 20.00mL
 Prep Extract Vol: 50.00mL

Method Blank

Blank ID: MB for HBN 1836495 [STS/7269]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1665075

QC for Samples:

1222417001, 1222417002, 1222417003, 1222417004, 1222417005, 1222417006, 1222417007, 1222417008, 1222417009, 1222417010, 1222417011

Results by SM21 2540C

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Total Dissolved Solids	5.00U	10.0	3.10	mg/L

Batch Information

Analytical Batch: STS7269

Analytical Method: SM21 2540C

Instrument:

Analyst: NRZ

Analytical Date/Time: 5/23/2022 7:52:08PM

Print Date: 06/16/2022 1:18:09PM

Duplicate Sample Summary

Original Sample ID: 1222376001
 Duplicate Sample ID: 1665078
 QC for Samples:

Analysis Date: 05/23/2022 19:52
 Matrix: Drinking Water

Results by SM21 2540C

<u>NAME</u>	<u>Original</u>	<u>Duplicate</u>	<u>Units</u>	<u>RPD (%)</u>	<u>RPD CL</u>
Total Dissolved Solids	316	306	mg/L	3.20	(< 5)

Batch Information

Analytical Batch: STS7269
 Analytical Method: SM21 2540C
 Instrument:
 Analyst: NRZ

Duplicate Sample Summary

Original Sample ID: 1222383005
 Duplicate Sample ID: 1665079

Analysis Date: 05/23/2022 19:52
 Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1222417001, 1222417002, 1222417003, 1222417004, 1222417005, 1222417006, 1222417007, 1222417008,
 1222417009, 1222417010, 1222417011

Results by SM21 2540C

<u>NAME</u>	<u>Original</u>	<u>Duplicate</u>	<u>Units</u>	<u>RPD (%)</u>	<u>RPD CL</u>
Total Dissolved Solids	3460	2180	mg/L	45.40*	(< 5)

Batch Information

Analytical Batch: STS7269
 Analytical Method: SM21 2540C
 Instrument:
 Analyst: NRZ

Blank Spike Summary

Blank Spike ID: LCS for HBN 1222417 [STS7269]
 Blank Spike Lab ID: 1665076
 Date Analyzed: 05/23/2022 19:52

Spike Duplicate ID: LCSD for HBN 1222417 [STS7269]
 Spike Duplicate Lab ID: 1665077
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1222417001, 1222417002, 1222417003, 1222417004, 1222417005, 1222417006, 1222417007, 1222417008, 1222417009, 1222417010, 1222417011

Results by SM21 2540C

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Dissolved Solids	333	306	92	333	300	90	(75-125)	2.00	(< 5)

Batch Information

Analytical Batch: STS7269
 Analytical Method: SM21 2540C
 Instrument:
 Analyst: NRZ



Method Blank

Blank ID: MB for HBN 1836497 [STS/7270]
Blank Lab ID: 1665103

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1222417012, 1222417013, 1222417014, 1222417015, 1222417016, 1222417017, 1222417018, 1222417019, 1222417020

Results by SM21 2540C

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Total Dissolved Solids	6.00J	10.0	3.10	mg/L

Batch Information

Analytical Batch: STS7270
Analytical Method: SM21 2540C
Instrument:
Analyst: NRZ
Analytical Date/Time: 5/23/2022 9:51:09PM

Print Date: 06/16/2022 1:18:14PM

Duplicate Sample Summary

Original Sample ID: 1222442003
 Duplicate Sample ID: 1665106

Analysis Date: 05/23/2022 21:51
 Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1222417012, 1222417013, 1222417014, 1222417015, 1222417016, 1222417017, 1222417018, 1222417019, 1222417020

Results by SM21 2540C

<u>NAME</u>	<u>Original</u>	<u>Duplicate</u>	<u>Units</u>	<u>RPD (%)</u>	<u>RPD CL</u>
Total Dissolved Solids	176	184	mg/L	4.40	(< 5)

Batch Information

Analytical Batch: STS7270
 Analytical Method: SM21 2540C
 Instrument:
 Analyst: NRZ

Blank Spike Summary

Blank Spike ID: LCS for HBN 1222417 [STS7270]
 Blank Spike Lab ID: 1665104
 Date Analyzed: 05/23/2022 21:51

Spike Duplicate ID: LCSD for HBN 1222417 [STS7270]
 Spike Duplicate Lab ID: 1665105
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1222417012, 1222417013, 1222417014, 1222417015, 1222417016, 1222417017, 1222417018, 1222417019, 1222417020

Results by SM21 2540C

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Dissolved Solids	333	290	87	333	295	89	(75-125)	1.70	(< 5)

Batch Information

Analytical Batch: **STS7270**
 Analytical Method: **SM21 2540C**
 Instrument:
 Analyst: **NRZ**



SGS North America Inc.
CHAIN OF CUSTODY RECORD

1222417

Cooler 1 of 2



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CLIENT: Alaska Department of Environmental Conservation					Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.					Page 1 of 1		
CONTACT: Sarah Apsens					PHONE #: 907 741 1026		Section 3		Preservative			
PROJECT NAME: Kenai River Metals Monitoring					PROJECT/PWSID/PERMIT#:		CONTAINER #	HNO3				NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS
REPORTS TO: Sarah Apsens					E-MAIL: sarah.apsens@alaska.gov			Analysis*				
INVOICE TO: sarah.apsens@alaska.gov dec.water.contracts@alaska.gov					QUOTE #: NTP 22*384			DOC 530B TDS 2540C 200.8 metals 2340B Hardness 200.8 dissolved metals				
P.O. #: Term contract #18-220-20-2					Profile #: 366978AL			MI (Multi-incremental)				
RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/MATRIX CODE								REMARKS/LOC ID
1AC 21A	RM 5	5/17/22	15:21	W	4	Grab	X	X	X	X		
2AC 22A	RM 82.1		10:50				X	X	X	X		
3AC 23A	RM 40		13:50				X	X	X	X		
4AC 24A	RM 21	5/16/22	10:20				X	X	X	X		
5AC 25A	RM 70	5/17/22	12:55				X	X	X	X		
6AC 26A	RM 20.75 DUP	5/16/22	11:00				X	X	X	X		
7AC 27A	RM 20.75	5/16/22	11:00				X	X	X	X		
8AC 28A	RM 31	5/18/22	09:40				X	X	X	X		
9AC 29A	RM 82	5/17/22	11:10				X	X	X	X		
10AC 20A	RM 82	5/17/22	11:10				X	X	X	X		
Relinquished By: (1) <i>[Signature]</i>					Date	Time	Received By:					
					5/18/22	13:14	<i>[Signature]</i>					
Relinquished By: (2)					Date	Time	Received By:					
Relinquished By: (3)					Date	Time	Received By:					
Relinquished By: (4)					Date	Time	Received For Laboratory By:					
					5/19/22	0938	<i>[Signature]</i>					
Section 4							DOD Project? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Data Deliverable Requirements:			
Cooler ID:							Requested Turnaround Time and/or Special Instructions:					
Temp Blank °C: <u>0 cooler temp</u> <u>4.5 053</u>							Chain of Custody Seal: (Circle) <input checked="" type="checkbox"/> INTACT <input type="checkbox"/> BROKEN <input type="checkbox"/> ABSENT					
Delivery Method: Hand Delivery <input checked="" type="checkbox"/> Commercial Delivery <input type="checkbox"/>												

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CHAIN OF CUSTODY RECORD

1222417

Cooler 2 of 2



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CLIENT: Alaska Department of Environmental Conservation					Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.					Page 1 of 1																																																																																																																																																																						
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PROJECT NAME: Kenai River Metals Monitoring					PROJECT/ PWSID/ PERMIT#:		# CONTAINER S Comp Grab MI (Multi-incremental)		HNO3 Analysis*			NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS																																																																																																																																																																				
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<table border="1"> <thead> <tr> <th>RESERVED for lab use</th> <th>SAMPLE IDENTIFICATION</th> <th>DATE mm/dd/yy</th> <th>TIME HH:MM</th> <th>MATRIX/ MATRIX CODE</th> <th>#</th> <th>CONTAINER S</th> <th>Comp</th> <th>Grab</th> <th>MI (Multi-incremental)</th> <th>DOC 530B</th> <th>TDS 2540C</th> <th>200.8 metals 2340B Hardness</th> <th>200.8 dissolved metals</th> <th>REMARKS/LOC ID</th> </tr> </thead> <tbody> <tr> <td>11AC 21A</td> <td>RM 23</td> <td>5/18/22</td> <td>10:35</td> <td>W</td> <td>4</td> <td></td> <td>Grab</td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td>12AC 22A</td> <td>RM 21.1</td> <td>5/16/22</td> <td>10:00</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td>13AC 33A</td> <td>RM 76</td> <td>5/17/22</td> <td>12:08</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td>14AC 34A</td> <td>Field Blank</td> <td>5/17/22</td> <td>11:20</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td>15AC 35A</td> <td>RM 19</td> <td>5/16/22</td> <td>15:36</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td>16AC 36A</td> <td>RM 12.75</td> <td>5/16/22</td> <td>15:00</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td>17AC 37A</td> <td>RM 19.1 DUP</td> <td>5/16/22</td> <td>16:00</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td>18AC 38A</td> <td>RM 19.1</td> <td>5/16/22</td> <td>16:00</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td>19AC 39A</td> <td>RM 10.1 DUP</td> <td>5/16/22</td> <td>14:34</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td>20AC 40A</td> <td>RM 10.1</td> <td>5/16/22</td> <td>14:34</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> </tr> </tbody> </table>												RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	#	CONTAINER S	Comp	Grab	MI (Multi-incremental)	DOC 530B	TDS 2540C	200.8 metals 2340B Hardness	200.8 dissolved metals	REMARKS/LOC ID	11AC 21A	RM 23	5/18/22	10:35	W	4		Grab			X	X	X	X		12AC 22A	RM 21.1	5/16/22	10:00							X	X	X	X		13AC 33A	RM 76	5/17/22	12:08							X	X	X	X		14AC 34A	Field Blank	5/17/22	11:20							X	X	X	X		15AC 35A	RM 19	5/16/22	15:36							X	X	X	X		16AC 36A	RM 12.75	5/16/22	15:00							X	X	X	X		17AC 37A	RM 19.1 DUP	5/16/22	16:00							X	X	X	X		18AC 38A	RM 19.1	5/16/22	16:00							X	X	X	X		19AC 39A	RM 10.1 DUP	5/16/22	14:34							X	X	X	X		20AC 40A	RM 10.1	5/16/22	14:34							X	X	X	X	
RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	#	CONTAINER S	Comp	Grab	MI (Multi-incremental)	DOC 530B	TDS 2540C	200.8 metals 2340B Hardness	200.8 dissolved metals	REMARKS/LOC ID																																																																																																																																																																		
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12AC 22A	RM 21.1	5/16/22	10:00							X	X	X	X																																																																																																																																																																			
13AC 33A	RM 76	5/17/22	12:08							X	X	X	X																																																																																																																																																																			
14AC 34A	Field Blank	5/17/22	11:20							X	X	X	X																																																																																																																																																																			
15AC 35A	RM 19	5/16/22	15:36							X	X	X	X																																																																																																																																																																			
16AC 36A	RM 12.75	5/16/22	15:00							X	X	X	X																																																																																																																																																																			
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18AC 38A	RM 19.1	5/16/22	16:00							X	X	X	X																																																																																																																																																																			
19AC 39A	RM 10.1 DUP	5/16/22	14:34							X	X	X	X																																																																																																																																																																			
20AC 40A	RM 10.1	5/16/22	14:34							X	X	X	X																																																																																																																																																																			
Relinquished By: (1) <i>[Signature]</i>					Date: 5/18/22		Time: 13:14		Received By: <i>[Signature]</i>			Section 4 DOD Project? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Data Deliverable Requirements:																																																																																																																																																																		
Relinquished By: (2)					Date:		Time:		Received By:			Requested Turnaround Time and/or Special Instructions:																																																																																																																																																																				
Relinquished By: (3)					Date:		Time:		Received By:			Temp Blank °C: 2) cooler temp: 1-2 0.52		Chain of Custody Seal: (Circle)																																																																																																																																																																		
Relinquished By: (4)					Date: 5/19/22		Time: 0938		Received For Laboratory By: <i>[Signature]</i>			or Ambient []		INTACT <input type="checkbox"/> BROKEN <input type="checkbox"/> ABSENT <input checked="" type="checkbox"/>																																																																																																																																																																		
Delivery Method: Hand Delivery <input checked="" type="checkbox"/> Commercial Delivery <input type="checkbox"/>																																																																																																																																																																																

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Project Information Form

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

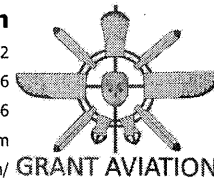
Client Name:	ADEC
Project:	Kenai River Metals Monitoring
Date:	5/19/2022
Reason for Clarification:	Analytical requests
Notes:	200.8 Total Metals = Line Item #1 200.8 Diss. Metals = Line Item #6 (also needs lab filter, then preservation)

AIRBILL 9888439

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: May 18 22 2:40 PM

Receiver: allie lambre
 907-550-3217

Sender: sarah apsens
 360-204-1588

Accepted: Wed, May 18 22 1:43:00 PM

Description & Comment	Quan.	Wgt.	Handle Fee	Hazmat Fee	Total
Standard Freight	2	69	-	-	\$51.95

Total Tax: \$3.25

Total Payments made: \$55.20

Total Unpaid: \$0.00

Received in good condition by:

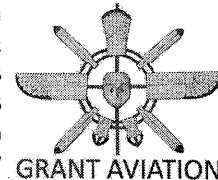
CUSTOMER COPY

AIRBILL 9888439

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: May 18 22 2:40 PM

Receiver: allie lambre
 907-550-3217

Sender: sarah apsens
 360-204-1588

Accepted: Wed, May 18 22 1:43:00 PM

Description & Comment	Quan.	Wgt.	Handle Fee	Hazmat Fee	Total
Standard Freight	2	69	-	-	\$51.95
TAX: Federal Excise Tax					\$3.25

Total Payments made: \$55.20

Total Unpaid: \$0.00

TERMS AND CONDITIONS

Consignemnt Note Text



SGS Workorder #:

1222417

1222417

Review Criteria	Condition (Yes, No, N/A)	Exceptions Noted below
-----------------	--------------------------	------------------------

Chain of Custody / Temperature Requirements	Note: Temperature and COC seal information is found on the chain of custody form	
--	--	--

DOD only: Did all sample coolers have a corresponding COC?	N/A	
If <0°C, were sample containers ice free?	N/A	
Note containers received with ice:		
Identify any containers received at non-compliant temperature: (Use form FS-0029 if more space is needed)		

Holding Time / Documentation / Sample Condition Requirement	Note: Refer to form F-083 "Sample Guide" for specific holding times and sample containers.	
--	--	--

Were samples received within analytical holding time?	Yes	
Do sample labels match COC? Record discrepancies.	Yes	
Note: If information on containers differs from COC, default to COC information for login. If times differ <1hr, record details & login per COC.		
Were analytical requests clear? <i>(i.e. method is specified for analyses with multiple option for method (Eg, BTEX 8021 vs 8260, Metals 6020 vs 200.8)</i>	Yes	
Were proper containers (type/mass/volume/preservative)used? Note: Exemption for metals analysis by 200.8/6020 in water.	Yes	

Volatile Analysis Requirements (VOC, GRO, LL-Hg, etc.)		
---	--	--

Were all soil VOAs received with a corresponding % solids container?	N/A	
Were Trip Blanks (e.g., VOAs, LL-Hg) in cooler with samples?	N/A	
Were all water VOA vials free of headspace (e.g., bubbles ≤ 6mm)?	N/A	
Were all soil VOAs field extracted with Methanol+BFB?	N/A	

Note to Client: Any "No", answer above indicates non-compliance with standard procedures and may impact data quality.

Additional notes (if applicable):
--



Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>	<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>
1222417001-A	No Preservative Required	OK	1222417017-B	No Preservative Required	OK
1222417001-B	No Preservative Required	OK	1222417017-C	HNO3 to pH < 2	OK
1222417001-C	HNO3 to pH < 2	OK	1222417018-A	No Preservative Required	OK
1222417002-A	No Preservative Required	OK	1222417018-B	No Preservative Required	OK
1222417002-B	No Preservative Required	OK	1222417018-C	HNO3 to pH < 2	OK
1222417002-C	HNO3 to pH < 2	OK	1222417019-A	No Preservative Required	OK
1222417003-A	No Preservative Required	OK	1222417019-B	No Preservative Required	OK
1222417003-B	No Preservative Required	OK	1222417019-C	HNO3 to pH < 2	OK
1222417003-C	HNO3 to pH < 2	OK	1222417020-A	No Preservative Required	OK
1222417004-A	No Preservative Required	OK	1222417020-B	No Preservative Required	OK
1222417004-B	No Preservative Required	OK	1222417020-C	HNO3 to pH < 2	OK
1222417004-C	HNO3 to pH < 2	OK	1222417021-A	No Preservative Required	OK
1222417005-A	No Preservative Required	OK	1222417022-A	No Preservative Required	OK
1222417005-B	No Preservative Required	OK	1222417023-A	No Preservative Required	OK
1222417005-C	HNO3 to pH < 2	OK	1222417024-A	No Preservative Required	OK
1222417006-A	No Preservative Required	OK	1222417025-A	No Preservative Required	OK
1222417006-B	No Preservative Required	OK	1222417026-A	No Preservative Required	OK
1222417006-C	HNO3 to pH < 2	OK	1222417027-A	No Preservative Required	OK
1222417007-A	No Preservative Required	OK	1222417028-A	No Preservative Required	OK
1222417007-B	No Preservative Required	OK	1222417029-A	No Preservative Required	OK
1222417007-C	HNO3 to pH < 2	OK	1222417030-A	No Preservative Required	OK
1222417008-A	No Preservative Required	OK	1222417031-A	No Preservative Required	OK
1222417008-B	No Preservative Required	OK	1222417032-A	No Preservative Required	OK
1222417008-C	HNO3 to pH < 2	OK	1222417033-A	No Preservative Required	OK
1222417009-A	No Preservative Required	OK	1222417034-A	No Preservative Required	OK
1222417009-B	No Preservative Required	OK	1222417035-A	No Preservative Required	OK
1222417009-C	HNO3 to pH < 2	OK	1222417036-A	No Preservative Required	OK
1222417010-A	No Preservative Required	OK	1222417037-A	No Preservative Required	OK
1222417010-B	No Preservative Required	OK	1222417038-A	No Preservative Required	OK
1222417010-C	HNO3 to pH < 2	OK	1222417039-A	No Preservative Required	OK
1222417011-A	No Preservative Required	OK	1222417040-A	No Preservative Required	OK
1222417011-B	No Preservative Required	OK			
1222417011-C	HNO3 to pH < 2	OK			
1222417012-A	No Preservative Required	OK			
1222417012-B	No Preservative Required	OK			
1222417012-C	HNO3 to pH < 2	OK			
1222417013-A	No Preservative Required	OK			
1222417013-B	No Preservative Required	OK			
1222417013-C	HNO3 to pH < 2	OK			
1222417014-A	No Preservative Required	OK			
1222417014-B	No Preservative Required	OK			
1222417014-C	HNO3 to pH < 2	OK			
1222417015-A	No Preservative Required	OK			
1222417015-B	No Preservative Required	OK			
1222417015-C	HNO3 to pH < 2	OK			
1222417016-A	No Preservative Required	OK			
1222417016-B	No Preservative Required	OK			
1222417016-C	HNO3 to pH < 2	OK			
1222417017-A	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.

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

SGS North America, Inc.

1222417

PO#1222417

SGS Job Number: JD45926

Sampling Dates: 05/16/22 - 05/18/22



Report to:

SGS North America, Inc.
200 West Potter Drive
Anchorage, AK 99518
julie.shumway@sgs.com; env.alaska.reflabteam@sgs.com
ATTN: Julie Shumway

Total number of pages in report: 36



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

David Chastain
General Manager

Client Service contact: Tammy McCloskey 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA(68-00408), RI, SC, TX, UT, VA, WV

This report shall not be reproduced, except in its entirety, without the written approval of SGS.
Test results relate only to samples analyzed.

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Sample Summary

SGS North America, Inc.

Job No: JD45926

1222417

Project No: PO#1222417

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
JD45926-1	05/17/22	15:21	05/27/22	AQ	Water	RM 5
JD45926-2	05/17/22	10:50	05/27/22	AQ	Water	RM 82.1
JD45926-3	05/17/22	13:50	05/27/22	AQ	Water	RM 40
JD45926-4	05/16/22	10:20	05/27/22	AQ	Water	RM 21
JD45926-5	05/17/22	12:55	05/27/22	AQ	Water	RM 70
JD45926-6	05/16/22	11:00	05/27/22	AQ	Water	RM 20.75 DUP
JD45926-7	05/16/22	11:00	05/27/22	AQ	Water	RM 20.75
JD45926-8	05/18/22	09:40	05/27/22	AQ	Water	RM 31
JD45926-9	05/17/22	11:10	05/27/22	AQ	Water	RM 82 DUP
JD45926-10	05/17/22	11:10	05/27/22	AQ	Water	RM 82
JD45926-11	05/18/22	10:35	05/27/22	AQ	Water	RM 23
JD45926-12	05/16/22	10:00	05/27/22	AQ	Water	RM 21.1
JD45926-13	05/17/22	12:08	05/27/22	AQ	Water	RM 76



Sample Summary

(continued)

SGS North America, Inc.

Job No: JD45926

1222417

Project No: PO#1222417

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JD45926-14	05/17/22	11:20	05/27/22	AQ	Field Blank Water	FIELD BLANK
JD45926-15	05/16/22	15:35	05/27/22	AQ	Water	RM 19
JD45926-16	05/16/22	15:00	05/27/22	AQ	Water	RM 12.75
JD45926-17	05/16/22	16:00	05/27/22	AQ	Water	RM 19.1 DUP
JD45926-18	05/16/22	16:00	05/27/22	AQ	Water	RM 19.1
JD45926-19	05/16/22	14:34	05/27/22	AQ	Water	RM 10.1 DUP
JD45926-20	05/16/22	14:34	05/27/22	AQ	Water	RM 10.1

CASE NARRATIVE / CONFORMANCE SUMMARY

Client: SGS North America, Inc.

Job No: JD45926

Site: 1222417

Report Date 6/10/2022 11:02:19 A

On 05/27/2022, 19 Sample(s), 0 Trip Blank(s) and 1 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 2.8 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD45926 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

General Chemistry By Method SM5310 B-11

Matrix: AQ

Batch ID: GP40489

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD45926-1MS, JD45926-1MSD were used as the QC samples for Total Organic Carbon.

Matrix: AQ

Batch ID: GP40524

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD45926-11MS, JD45926-11MSD were used as the QC samples for Total Organic Carbon.

SGS North America Inc. certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

SGS North America Inc. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Friday, June 10, 2022

Page 1 of 1

Summary of Hits

Job Number: JD45926
Account: SGS North America, Inc.
Project: 1222417
Collected: 05/16/22 thru 05/18/22



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD45926-1	RM 5					
Total Organic Carbon		4.3	1.0	0.72	mg/l	SM5310 B-11
JD45926-2	RM 82.1					
Total Organic Carbon		2.1	1.0	0.72	mg/l	SM5310 B-11
JD45926-3	RM 40					
Total Organic Carbon		1.4	1.0	0.72	mg/l	SM5310 B-11
JD45926-4	RM 21					
Total Organic Carbon		2.7	1.0	0.72	mg/l	SM5310 B-11
JD45926-5	RM 70					
Total Organic Carbon		1.5	1.0	0.72	mg/l	SM5310 B-11
JD45926-6	RM 20.75 DUP					
Total Organic Carbon		2.7	1.0	0.72	mg/l	SM5310 B-11
JD45926-7	RM 20.75					
Total Organic Carbon		2.7	1.0	0.72	mg/l	SM5310 B-11
JD45926-8	RM 31					
Total Organic Carbon		2.6	1.0	0.72	mg/l	SM5310 B-11
JD45926-9	RM 82 DUP					
Total Organic Carbon		1.3	1.0	0.72	mg/l	SM5310 B-11
JD45926-10	RM 82					
Total Organic Carbon		1.2	1.0	0.72	mg/l	SM5310 B-11
JD45926-11	RM 23					
Total Organic Carbon		2.7	1.0	0.72	mg/l	SM5310 B-11

Summary of Hits

Job Number: JD45926
Account: SGS North America, Inc.
Project: 1222417
Collected: 05/16/22 thru 05/18/22



Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

JD45926-12 RM 21.1

Total Organic Carbon	2.3	1.0	0.72	mg/l	SM5310 B-11
----------------------	-----	-----	------	------	-------------

JD45926-13 RM 76

No hits reported in this sample.

JD45926-14 FIELD BLANK

No hits reported in this sample.

JD45926-15 RM 19

Total Organic Carbon	9.4	1.0	0.72	mg/l	SM5310 B-11
----------------------	-----	-----	------	------	-------------

JD45926-16 RM 12.75

Total Organic Carbon	1.9	1.0	0.72	mg/l	SM5310 B-11
----------------------	-----	-----	------	------	-------------

JD45926-17 RM 19.1 DUP

Total Organic Carbon	1.8	1.0	0.72	mg/l	SM5310 B-11
----------------------	-----	-----	------	------	-------------

JD45926-18 RM 19.1

Total Organic Carbon	2.0	1.0	0.72	mg/l	SM5310 B-11
----------------------	-----	-----	------	------	-------------

JD45926-19 RM 10.1 DUP

Total Organic Carbon	2.3	1.0	0.72	mg/l	SM5310 B-11
----------------------	-----	-----	------	------	-------------

JD45926-20 RM 10.1

Total Organic Carbon	1.9	1.0	0.72	mg/l	SM5310 B-11
----------------------	-----	-----	------	------	-------------

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: RM 5	Date Sampled: 05/17/22
Lab Sample ID: JD45926-1	Date Received: 05/27/22
Matrix: AQ - Water	Percent Solids: n/a
Project: 1222417	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Total Organic Carbon	4.3	1.0	0.72	mg/l	1	06/03/22 22:59 NA	SM5310	B-11

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

4.1
4

Report of Analysis

Client Sample ID: RM 82.1	Date Sampled: 05/17/22
Lab Sample ID: JD45926-2	Date Received: 05/27/22
Matrix: AQ - Water	Percent Solids: n/a
Project: 1222417	

4.2
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Total Organic Carbon	2.1	1.0	0.72	mg/l	1	06/03/22 23:35 NA	SM5310	B-11

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL



Report of Analysis

Client Sample ID: RM 40	Date Sampled: 05/17/22
Lab Sample ID: JD45926-3	Date Received: 05/27/22
Matrix: AQ - Water	Percent Solids: n/a
Project: 1222417	

4.3
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Total Organic Carbon	1.4	1.0	0.72	mg/l	1	06/03/22 23:43 NA	SM5310	B-11

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL



Report of Analysis

Client Sample ID: RM 21	Date Sampled: 05/16/22
Lab Sample ID: JD45926-4	Date Received: 05/27/22
Matrix: AQ - Water	Percent Solids: n/a
Project: 1222417	

4.4
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Total Organic Carbon	2.7	1.0	0.72	mg/l	1	06/03/22 23:54 NA	SM5310	B-11

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL



Report of Analysis

Client Sample ID: RM 70	Date Sampled: 05/17/22
Lab Sample ID: JD45926-5	Date Received: 05/27/22
Matrix: AQ - Water	Percent Solids: n/a
Project: 1222417	

4.5
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Total Organic Carbon	1.5	1.0	0.72	mg/l	1	06/04/22 00:05 NA	SM5310	B-11

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: RM 20.75 DUP	Date Sampled: 05/16/22
Lab Sample ID: JD45926-6	Date Received: 05/27/22
Matrix: AQ - Water	Percent Solids: n/a
Project: 1222417	

4.6
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Total Organic Carbon	2.7	1.0	0.72	mg/l	1	06/04/22 00:17 NA	SM5310	B-11

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL



Report of Analysis

Client Sample ID: RM 20.75	Date Sampled: 05/16/22
Lab Sample ID: JD45926-7	Date Received: 05/27/22
Matrix: AQ - Water	Percent Solids: n/a
Project: 1222417	

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Total Organic Carbon	2.7	1.0	0.72	mg/l	1	06/04/22 00:28 NA	SM5310	B-11

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

4.7
4

Report of Analysis

Client Sample ID: RM 31	Date Sampled: 05/18/22
Lab Sample ID: JD45926-8	Date Received: 05/27/22
Matrix: AQ - Water	Percent Solids: n/a
Project: 1222417	

4.8
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Total Organic Carbon	2.6	1.0	0.72	mg/l	1	06/04/22 00:39 NA	SM5310	B-11

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: RM 82 DUP	Date Sampled: 05/17/22
Lab Sample ID: JD45926-9	Date Received: 05/27/22
Matrix: AQ - Water	Percent Solids: n/a
Project: 1222417	

4.9
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Total Organic Carbon	1.3	1.0	0.72	mg/l	1	06/04/22 01:23 NA	SM5310	B-11

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL



Report of Analysis

Client Sample ID: RM 82	Date Sampled: 05/17/22
Lab Sample ID: JD45926-10	Date Received: 05/27/22
Matrix: AQ - Water	Percent Solids: n/a
Project: 1222417	

4.10
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Total Organic Carbon	1.2	1.0	0.72	mg/l	1	06/04/22 01:34 NA	SM5310	B-11

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL



Report of Analysis

Client Sample ID: RM 23	Date Sampled: 05/18/22
Lab Sample ID: JD45926-11	Date Received: 05/27/22
Matrix: AQ - Water	Percent Solids: n/a
Project: 1222417	

4.11
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Total Organic Carbon	2.7	1.0	0.72	mg/l	1	06/06/22 20:51 MB	SM5310	B-11

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL



Report of Analysis

Client Sample ID: RM 21.1	Date Sampled: 05/16/22
Lab Sample ID: JD45926-12	Date Received: 05/27/22
Matrix: AQ - Water	Percent Solids: n/a
Project: 1222417	

4.12
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed By	Method
Total Organic Carbon	2.3	1.0	0.72	mg/l	1	06/06/22 21:22 MB	SM5310 B-11

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: RM 76	Date Sampled: 05/17/22
Lab Sample ID: JD45926-13	Date Received: 05/27/22
Matrix: AQ - Water	Percent Solids: n/a
Project: 1222417	

4.13
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Total Organic Carbon	0.72 U	1.0	0.72	mg/l	1	06/06/22 21:33 MB	SM5310	B-11

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL



Report of Analysis

Client Sample ID: FIELD BLANK	Date Sampled: 05/17/22
Lab Sample ID: JD45926-14	Date Received: 05/27/22
Matrix: AQ - Field Blank Water	Percent Solids: n/a
Project: 1222417	

4.14
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Total Organic Carbon	0.72 U	1.0	0.72	mg/l	1	06/06/22 21:44 MB	SM5310	B-11

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID: RM 19	Date Sampled: 05/16/22
Lab Sample ID: JD45926-15	Date Received: 05/27/22
Matrix: AQ - Water	Percent Solids: n/a
Project: 1222417	

4.15
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Total Organic Carbon	9.4	1.0	0.72	mg/l	1	06/06/22 21:56 MB	SM5310	B-11

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL



Report of Analysis

Client Sample ID: RM 12.75	Date Sampled: 05/16/22
Lab Sample ID: JD45926-16	Date Received: 05/27/22
Matrix: AQ - Water	Percent Solids: n/a
Project: 1222417	

4.16
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed By	Method
Total Organic Carbon	1.9	1.0	0.72	mg/l	1	06/06/22 22:29 MB	SM5310 B-11

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL



Report of Analysis

Client Sample ID: RM 19.1 DUP	Date Sampled: 05/16/22
Lab Sample ID: JD45926-17	Date Received: 05/27/22
Matrix: AQ - Water	Percent Solids: n/a
Project: 1222417	

4.17
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Total Organic Carbon	1.8	1.0	0.72	mg/l	1	06/06/22 22:43 MB	SM5310	B-11

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL



Report of Analysis

Client Sample ID: RM 19.1	Date Sampled: 05/16/22
Lab Sample ID: JD45926-18	Date Received: 05/27/22
Matrix: AQ - Water	Percent Solids: n/a
Project: 1222417	

4.18
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Total Organic Carbon	2.0	1.0	0.72	mg/l	1	06/06/22 22:52 MB	SM5310	B-11

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL



Report of Analysis

Client Sample ID: RM 10.1 DUP	Date Sampled: 05/16/22
Lab Sample ID: JD45926-19	Date Received: 05/27/22
Matrix: AQ - Water	Percent Solids: n/a
Project: 1222417	

4.19
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed By	Method
Total Organic Carbon	2.3	1.0	0.72	mg/l	1	06/06/22 23:15 MB	SM5310 B-11

RL = Reporting Limit
 MDL = Method Detection Limit

U = Indicates a result < MDL
 B = Indicates a result > = MDL but < RL



Report of Analysis

Client Sample ID: RM 10.1	Date Sampled: 05/16/22
Lab Sample ID: JD45926-20	Date Received: 05/27/22
Matrix: AQ - Water	Percent Solids: n/a
Project: 1222417	

4.20
4

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Total Organic Carbon	1.9	1.0	0.72	mg/l	1	06/06/22 23:30 MB	SM5310	B-11

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

SGS North America Inc.
CHAIN OF CUSTODY RECORD



JD45926
Locations Nationwide
Alaska Florida
New Jersey Colorado
Texas North Carolina
Virginia Louisiana
www.us.sgs.com

CLIENT: SGS North America Inc. - Alaska Division				SGS Reference: SGS Dayton, NJ				Page 1 of 2	
CONTACT: Julie Shumway		PHONE NO: (907) 562-2343		Additional Comments: All soils report out in dry weight unless					
PROJECT NAME: 1222417		PWSID#: _____		# PRESERVATIVE USED: NONE TYPE: C = COMP, G = GRAB, MI = Multi Incremental Soils TOC: _____ MS: _____ MSD: _____	REPORTS TO: Julie Shumway		E-MAIL: Julie.Shumway@sgs.com		
INVOICE TO: SGS - Alaska		QUOTE #: _____			RM 5		Date: 05/17/2022		
env.alaska.accounting@sgs.com		P.O. #: 1222417			RM 82.1		Date: 05/17/2022		
					RM 40		Date: 05/17/2022		
RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HHMM	MATRIX/MATRIX CODE			SGS lab #	Location ID	
1	RM 5	05/17/2022	15:21:00	Water	2	X	1222417001		
2	RM 82.1	05/17/2022	10:50:00	Water	2	X	1222417002		
3	RM 40	05/17/2022	13:50:00	Water	2	X	1222417003		
4	RM 21	05/16/2022	10:20:00	Water	2	X	1222417004		
5	RM 70	05/17/2022	12:55:00	Water	2	X	1222417005		
6	RM 20.75 DUP	05/16/2022	11:00:00	Water	2	X	1222417006		
7	RM 20.75	05/16/2022	11:00:00	Water	2	X	1222417007		
8	RM 31	05/18/2022	09:40:00	Water	2	X	1222417008		
9	RM 82 DUP	05/17/2022	11:10:00	Water	2	X	1222417009		
10	RM 82	05/17/2022	11:10:00	Water	2	X	1222417010		
Relinquished By: (1)		Date	Time	Received By:		DOD Project? NO		Data Deliverable Requirements:	
<i>[Signature]</i>		5/17/22	11:26	<i>[Signature]</i>		Report to DL (J Flags)? NO		Level 2 + SGS EDD	
Relinquished By: (2)		Date	Time	Received By:		Cooler ID:			
<i>[Signature]</i>		5/17/22	10:10	<i>[Signature]</i>		Requested Turnaround Time and-or Special Instructions:			
Relinquished By: (3)		Date	Time	Received By:		Temp Blank °C: 3.1 °C (EM)		Chain of Custody Seal: (Circle)	
Relinquished By: (4)		Date	Time	Received For Laboratory By:		or Ambient []		INTACT BROKEN ABSENT	

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

http://www.sgs.com/terms_and_conditions.htm

Fx 1483-4902 3045

F088_COC_REF_LAB_20190411

Initial Assessment *ARZB*
 Label Verification _____



SGS North America Inc.
CHAIN OF CUSTODY RECORD



Locations Nationwide **JD45926**
 Alaska Florida
 New Jersey Colorado
 Texas North Carolina
 Virginia Louisiana
www.us.sgs.com

CLIENT: SGS North America Inc. - Alaska Division				SGS Reference: SGS Dayton, NJ				Page 2 of 2		
CONTACT: Julie Shumway		PHONE NO: (907) 562-2343		Additional Comments: All soils report out in dry weight unless						
PROJECT NAME: 1222417		PWSID#: _____		# Preservative Used: NONE TYPE: C = COMP G = GRAB MI = Multi Incremental Soils TOC MS MSD SGS lab # Location ID						
REPORTS TO: Julie Shumway		E-MAIL: Julie.Shumway@sgs.com								
INVOICE TO: SGS - Alaska		QUOTE #: _____								
env.alaska.accounting@sgs.com		P.O. #: 1222417								
RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HHMM	MATRIX/ MATRIX CODE	#	TOC	MS	MSD	SGS lab #	Location ID
11	RM 23	05/18/2022	10:35:00	Water	2	X			1222417011	
12	RM 21.1	05/16/2022	10:00:00	Water	2	X			1222417012	
13	RM 76	05/17/2022	12:08:00	Water	2	X			1222417013	
14	Field Blank	05/17/2022	11:20:00	Water	2	X			1222417014	
15	RM 19	05/16/2022	15:35:00	Water	2	X			1222417015	
16	RM 12.75	05/16/2022	15:00:00	Water	2	X			1222417016	
17	RM 19.1 DUP	05/16/2022	16:00:00	Water	2	X			1222417017	
18	RM 19.1	05/16/2022	16:00:00	Water	2	X			1222417018	
19	RM 10.1 DUP	05/16/2022	14:34:00	Water	2	X			1222417019	
20	RM 10.1	05/16/2022	14:34:00	Water	2	X			1222417020	
Relinquished By: (1)		Date	Time	Received By:	DOD Project?		NO		Data Deliverable Requirements:	
<i>J. Shumway</i>		5/26/22	11:26	<i>FX</i>	Report to DL (J Flags)?		NO		Level 2 + SGS EDD	
Relinquished By: (2)		Date	Time	Received By:	Cooler ID:					
<i>FX</i>		5/27/22	10:00	<i>[Signature]</i>	Requested Turnaround Time and-or Special Instructions:					
Relinquished By: (3)		Date	Time	Received By:	Temp Blank °C:		Chain of Custody Seal: (Circle)			
Relinquished By: (4)		Date	Time	Received For Laboratory By:	or Ambient []		INTACT BROKEN ABSENT			

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

http://www.sgs.com/terms_and_conditions.htm

F088_COC_REF_LAB_20190411



SGS Sample Receipt Summary

Job Number: JD45926

Client: _____

Project: _____

Date / Time Received: 6/1/2022 10:00:00 AM

Delivery Method: _____

Airbill #'s: _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.1);

Cooler Temps (Corrected) °C: Cooler 1: (2.8);

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | <u>IR Gun</u> | |
| 3. Cooler media: | <u>Ice (Bag)</u> | |
| 4. No. Coolers: | <u>1</u> | |

Quality Control Preservation

Y or N

N/A

- | | | | |
|---------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample: | <u>Intact</u> | |

Sample Integrity - Instructions

Y or N

N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Test Strip Lot #s:	pH 1-12: <u>231619</u>	pH 12+: <u>203117A</u>	Other: (Specify) _____
--------------------	------------------------	------------------------	------------------------

Comments

SM089-03
Rev. Date 12/7/17

JD45926: Chain of Custody

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5.1
5

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD45926
Account: SGS/SAKA - SGS North America, Inc.
Project: 1222417

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Total Organic Carbon	GP40489/GN29953	1.0	0.0	mg/l	10	9.40	94.0	90-110%
Total Organic Carbon	GP40524/GN30006	1.0	0.0	mg/l	10	9.99	99.9	90-110%

Associated Samples:

Batch GP40489: JD45926-1, JD45926-2, JD45926-3, JD45926-4, JD45926-5, JD45926-6, JD45926-7, JD45926-8, JD45926-9, JD45926-10

Batch GP40524: JD45926-11, JD45926-12, JD45926-13, JD45926-14, JD45926-15, JD45926-16, JD45926-17, JD45926-18, JD45926-19, JD45926-20

(*) Outside of QC limits

6.1
6

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD45926
Account: SGS/SAKA - SGS North America, Inc.
Project: 1222417

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Total Organic Carbon	GP40489/GN29953	JD45926-1	mg/l	4.3	10	16.9	126.0	71-132%
Total Organic Carbon	GP40524/GN30006	JD45926-11	mg/l	2.7	10	14.3	116.0	71-132%

Associated Samples:

Batch GP40489: JD45926-1, JD45926-2, JD45926-3, JD45926-4, JD45926-5, JD45926-6, JD45926-7, JD45926-8, JD45926-9, JD45926-10

Batch GP40524: JD45926-11, JD45926-12, JD45926-13, JD45926-14, JD45926-15, JD45926-16, JD45926-17, JD45926-18, JD45926-19, JD45926-20

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

6.2
6

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD45926
Account: SGS/SAKA - SGS North America, Inc.
Project: 1222417

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Total Organic Carbon	GP40489/GN29953	JD45926-1	mg/l	4.3	10	17.1	1.2	10%
Total Organic Carbon	GP40524/GN30006	JD45926-11	mg/l	2.7	10	14.6	2.1	10%

Associated Samples:

Batch GP40489: JD45926-1, JD45926-2, JD45926-3, JD45926-4, JD45926-5, JD45926-6, JD45926-7, JD45926-8, JD45926-9, JD45926-10

Batch GP40524: JD45926-11, JD45926-12, JD45926-13, JD45926-14, JD45926-15, JD45926-16, JD45926-17, JD45926-18, JD45926-19, JD45926-20

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

6.3
6