

Laboratory Report of Analysis

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

Report Number: **1214479**

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 Daniel
Project Manager
Alexandra.Daniel@sgs.com

Date

Case Narrative

SGS Client: **ADEC-Air & Water Quality**
SGS Project: **1214479**
Project Name/Site: **Kenai River Metals Monitoring**
Project Contact: **Sarah Apsens**

Refer to sample receipt form for information on sample condition.

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

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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 & 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	1214479001	07/20/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 5 DUP	1214479002	07/20/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 31	1214479003	07/20/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 19	1214479004	07/19/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 19.1	1214479005	07/19/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 19.1 DUP	1214479006	07/19/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 20.75	1214479007	07/19/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 12.75	1214479008	07/19/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 40	1214479009	07/20/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 70	1214479010	07/20/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 10.1 DUP	1214479011	07/19/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 10.1	1214479012	07/19/2021	07/21/2021	Water (Surface, Eff., Ground)
Field Blank	1214479013	07/19/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 21	1214479014	07/20/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 21 DUP	1214479015	07/20/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 21.1	1214479016	07/20/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 76	1214479017	07/20/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 23	1214479018	07/20/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 5	1214479019	07/20/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 5 DUP	1214479020	07/20/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 31	1214479021	07/20/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 19	1214479022	07/19/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 19.1	1214479023	07/19/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 19.1 DUP	1214479024	07/19/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 20.75	1214479025	07/19/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 12.75	1214479026	07/19/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 40	1214479027	07/20/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 70	1214479028	07/20/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 10.1 DUP	1214479029	07/19/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 10.1	1214479030	07/19/2021	07/21/2021	Water (Surface, Eff., Ground)
Field Blank	1214479031	07/19/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 21	1214479032	07/20/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 21 DUP	1214479033	07/20/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 21.1	1214479034	07/20/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 76	1214479035	07/20/2021	07/21/2021	Water (Surface, Eff., Ground)
RM 23	1214479036	07/20/2021	07/21/2021	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>
<u>Method</u>	<u>Method Description</u>			
SM 5310B	Dissolved Organic Carbon			
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: 1214479001

Metals by ICP/MS

Parameter	Result	Units
Calcium	14800	ug/L
Copper	9.13	ug/L
Hardness as CaCO ₃	52.3	mg/L
Magnesium	3720	ug/L
Zinc	23.3	ug/L
TOC Average, Dissolved	0.620J	mg/L
Total Dissolved Solids	96.0	mg/L

Waters Department

Client Sample ID: **RM 5 DUP**

Lab Sample ID: 1214479002

Metals by ICP/MS

Parameter	Result	Units
Calcium	14700	ug/L
Copper	9.97	ug/L
Hardness as CaCO ₃	51.9	mg/L
Magnesium	3700	ug/L
Zinc	22.9	ug/L
TOC Average, Dissolved	0.670J	mg/L
Total Dissolved Solids	78.0	mg/L

Waters Department

Client Sample ID: **RM 31**

Lab Sample ID: 1214479003

Metals by ICP/MS

Parameter	Result	Units
Calcium	13300	ug/L
Copper	1.26	ug/L
Hardness as CaCO ₃	38.7	mg/L
Magnesium	1330	ug/L
Zinc	4.41J	ug/L
TOC Average, Dissolved	0.521J	mg/L
Total Dissolved Solids	64.0	mg/L

Waters Department

Client Sample ID: **RM 19**

Lab Sample ID: 1214479004

Metals by ICP/MS

Parameter	Result	Units
Calcium	21200	ug/L
Hardness as CaCO ₃	75.5	mg/L
Magnesium	5500	ug/L
TOC Average, Dissolved	5.98	mg/L
Total Dissolved Solids	121	mg/L

Waters Department

Client Sample ID: **RM 19.1**

Lab Sample ID: 1214479005

Metals by ICP/MS

Parameter	Result	Units
Calcium	13100	ug/L
Copper	0.726J	ug/L
Hardness as CaCO ₃	37.7	mg/L
Magnesium	1180	ug/L
Zinc	4.27J	ug/L
TOC Average, Dissolved	0.513J	mg/L
Total Dissolved Solids	72.0	mg/L

Waters Department

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Detectable Results Summary

Client Sample ID: **RM 19.1 DUP**

Lab Sample ID: 1214479006

Metals by ICP/MS

Parameter	Result	Units
Calcium	13300	ug/L
Copper	1.01	ug/L
Hardness as CaCO ₃	38.1	mg/L
Magnesium	1180	ug/L
Zinc	3.53J	ug/L
TOC Average, Dissolved	0.756J	mg/L
Total Dissolved Solids	53.0	mg/L

Waters Department

Client Sample ID: **RM 20.75**

Lab Sample ID: 1214479007

Metals by ICP/MS

Parameter	Result	Units
Calcium	13200	ug/L
Copper	0.748J	ug/L
Hardness as CaCO ₃	38.0	mg/L
Magnesium	1190	ug/L
TOC Average, Dissolved	0.732J	mg/L
Total Dissolved Solids	64.0	mg/L

Waters Department

Client Sample ID: **RM 12.75**

Lab Sample ID: 1214479008

Metals by ICP/MS

Parameter	Result	Units
Calcium	13200	ug/L
Copper	0.509J	ug/L
Hardness as CaCO ₃	37.5	mg/L
Magnesium	1130	ug/L
TOC Average, Dissolved	0.518J	mg/L
Total Dissolved Solids	68.0	mg/L

Waters Department

Client Sample ID: **RM 40**

Lab Sample ID: 1214479009

Metals by ICP/MS

Parameter	Result	Units
Calcium	13400	ug/L
Copper	1.23	ug/L
Hardness as CaCO ₃	38.9	mg/L
Magnesium	1310	ug/L
Zinc	3.97J	ug/L
TOC Average, Dissolved	0.486J	mg/L
Total Dissolved Solids	61.0	mg/L

Waters Department

Client Sample ID: **RM 70**

Lab Sample ID: 1214479010

Metals by ICP/MS

Parameter	Result	Units
Calcium	18300	ug/L
Copper	0.324J	ug/L
Hardness as CaCO ₃	51.2	mg/L
Magnesium	1320	ug/L
TOC Average, Dissolved	0.586J	mg/L
Total Dissolved Solids	99.0	mg/L

Waters Department

Detectable Results Summary

Client Sample ID: **RM 10.1 DUP**

Lab Sample ID: 1214479011

Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	13500	ug/L
Copper	0.550J	ug/L
Hardness as CaCO ₃	38.5	mg/L
Magnesium	1170	ug/L
TOC Average, Dissolved	0.599J	mg/L
Total Dissolved Solids	100	mg/L

Waters Department

Client Sample ID: **RM 10.1**

Lab Sample ID: 1214479012

Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	13300	ug/L
Copper	0.555J	ug/L
Hardness as CaCO ₃	37.8	mg/L
Magnesium	1130	ug/L
TOC Average, Dissolved	0.563J	mg/L
Total Dissolved Solids	76.0	mg/L

Waters Department

Client Sample ID: **Field Blank**

Lab Sample ID: 1214479013

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Dissolved Solids	20.0	mg/L

Client Sample ID: **RM 21**

Lab Sample ID: 1214479014

Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	13600	ug/L
Copper	1.58	ug/L
Hardness as CaCO ₃	40.1	mg/L
Magnesium	1480	ug/L
Zinc	6.69J	ug/L
Total Dissolved Solids	68.0	mg/L

Waters Department

Client Sample ID: **RM 21 DUP**

Lab Sample ID: 1214479015

Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Calcium	13500	ug/L
Copper	1.55	ug/L
Hardness as CaCO ₃	39.8	mg/L
Magnesium	1480	ug/L
Zinc	4.74J	ug/L
TOC Average, Dissolved	0.420J	mg/L
Total Dissolved Solids	82.0	mg/L

Waters Department

Detectable Results Summary

Client Sample ID: **RM 21.1**
Lab Sample ID: 1214479016

Metals by ICP/MS

Parameter	Result	Units
Calcium	13700	ug/L
Copper	1.18	ug/L
Hardness as CaCO ₃	40.0	mg/L
Magnesium	1400	ug/L
Zinc	10.1	ug/L
TOC Average, Dissolved	0.697J	mg/L
Total Dissolved Solids	76.0	mg/L

Waters Department

Client Sample ID: **RM 76**
Lab Sample ID: 1214479017

Metals by ICP/MS

Parameter	Result	Units
Calcium	18000	ug/L
Copper	0.427J	ug/L
Hardness as CaCO ₃	49.9	mg/L
Magnesium	1200	ug/L
TOC Average, Dissolved	0.599J	mg/L
Total Dissolved Solids	60.0	mg/L

Waters Department

Client Sample ID: **RM 23**
Lab Sample ID: 1214479018

Metals by ICP/MS

Parameter	Result	Units
Calcium	13700	ug/L
Copper	1.77	ug/L
Hardness as CaCO ₃	39.8	mg/L
Magnesium	1360	ug/L
Zinc	5.59J	ug/L
TOC Average, Dissolved	0.501J	mg/L
Total Dissolved Solids	70.0	mg/L

Waters Department

Client Sample ID: **RM 5**
Lab Sample ID: 1214479019

Dissolved Metals by ICP/MS

Parameter	Result	Units
Aluminum	343	ug/L
Calcium	13400	ug/L
Copper	0.533J	ug/L
Lead	0.148J	ug/L
Magnesium	1190	ug/L
Potassium	1060	ug/L
Sodium	2250	ug/L
Zinc	3.33J	ug/L

Detectable Results Summary

Client Sample ID: **RM 5 DUP**

Lab Sample ID: 1214479020

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	351	ug/L
Calcium	13300	ug/L
Copper	0.540J	ug/L
Lead	0.152J	ug/L
Magnesium	1180	ug/L
Potassium	1060	ug/L
Sodium	2230	ug/L

Client Sample ID: **RM 31**

Lab Sample ID: 1214479021

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	90.2	ug/L
Calcium	13900	ug/L
Lead	0.118J	ug/L
Magnesium	981	ug/L
Potassium	893	ug/L
Sodium	1300	ug/L
Zinc	5.17J	ug/L

Client Sample ID: **RM 19**

Lab Sample ID: 1214479022

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	9.68J	ug/L
Calcium	22400	ug/L
Magnesium	5200	ug/L
Potassium	1350	ug/L
Sodium	6000	ug/L
Zinc	3.10J	ug/L

Client Sample ID: **RM 19.1**

Lab Sample ID: 1214479023

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	28.0	ug/L
Calcium	13400	ug/L
Magnesium	910	ug/L
Potassium	837	ug/L
Sodium	1270	ug/L

Client Sample ID: **RM 19.1 DUP**

Lab Sample ID: 1214479024

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	29.4	ug/L
Calcium	13300	ug/L
Magnesium	898	ug/L
Potassium	828	ug/L
Sodium	1250	ug/L
Zinc	3.15J	ug/L

Detectable Results Summary

Client Sample ID: **RM 20.75**

Lab Sample ID: 1214479025

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	29.6	ug/L
Calcium	13400	ug/L
Magnesium	905	ug/L
Potassium	833	ug/L
Sodium	1250	ug/L

Client Sample ID: **RM 12.75**

Lab Sample ID: 1214479026

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	26.8	ug/L
Calcium	13400	ug/L
Magnesium	913	ug/L
Potassium	820	ug/L
Sodium	1280	ug/L
Zinc	7.72J	ug/L

Client Sample ID: **RM 40**

Lab Sample ID: 1214479027

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	75.6	ug/L
Calcium	13300	ug/L
Magnesium	867	ug/L
Potassium	836	ug/L
Sodium	1180	ug/L
Zinc	6.00J	ug/L

Client Sample ID: **RM 70**

Lab Sample ID: 1214479028

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	13.4J	ug/L
Calcium	17900	ug/L
Magnesium	1120	ug/L
Potassium	572	ug/L
Sodium	1350	ug/L
Zinc	3.66J	ug/L

Client Sample ID: **RM 10.1 DUP**

Lab Sample ID: 1214479029

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	23.2	ug/L
Calcium	13500	ug/L
Magnesium	907	ug/L
Potassium	826	ug/L
Sodium	1270	ug/L

Detectable Results Summary

Client Sample ID: **RM 10.1**

Lab Sample ID: 1214479030

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	22.3	ug/L
Calcium	13600	ug/L
Magnesium	926	ug/L
Potassium	831	ug/L
Sodium	1290	ug/L

Client Sample ID: **Field Blank**

Lab Sample ID: 1214479031

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Zinc	3.46J	ug/L

Client Sample ID: **RM 21**

Lab Sample ID: 1214479032

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	86.9	ug/L
Calcium	13500	ug/L
Magnesium	948	ug/L
Potassium	876	ug/L
Sodium	1320	ug/L

Client Sample ID: **RM 21 DUP**

Lab Sample ID: 1214479033

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	91.2	ug/L
Calcium	13400	ug/L
Magnesium	945	ug/L
Potassium	871	ug/L
Sodium	1300	ug/L
Zinc	16.8	ug/L

Client Sample ID: **RM 21.1**

Lab Sample ID: 1214479034

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	102	ug/L
Calcium	13500	ug/L
Magnesium	951	ug/L
Potassium	882	ug/L
Sodium	1290	ug/L

Client Sample ID: **RM 76**

Lab Sample ID: 1214479035

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	15.7J	ug/L
Calcium	17900	ug/L
Magnesium	1120	ug/L
Potassium	586	ug/L
Sodium	1340	ug/L

Detectable Results Summary

Client Sample ID: **RM 23**

Lab Sample ID: 1214479036

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	80.4	ug/L
Calcium	13700	ug/L
Copper	1.58	ug/L
Lead	0.121J	ug/L
Magnesium	978	ug/L
Potassium	889	ug/L
Sodium	1350	ug/L
Zinc	7.68J	ug/L

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Results of RM 5

Client Sample ID: **RM 5**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479001
 Lab Project ID: 1214479

Collection Date: 07/20/21 15:25
 Received Date: 07/21/21 16:56
 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	14800	500	150	ug/L	1		08/04/21 15:11
Copper	9.13	1.00	0.310	ug/L	1		08/04/21 15:11
Magnesium	3720	50.0	15.0	ug/L	1		08/04/21 15:11
Zinc	23.3	10.0	3.10	ug/L	1		08/04/21 15:11

Batch Information

Analytical Batch: MMS11226
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:11
 Container ID: 1214479001-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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	52.3	5.00	5.00	mg/L	1		08/04/21 15:11

Batch Information

Analytical Batch: MMS11226
 Analytical Method: SM21 2340B
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:11
 Container ID: 1214479001-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 5

Client Sample ID: **RM 5**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479001
 Lab Project ID: 1214479

Collection Date: 07/20/21 15:25
 Received Date: 07/21/21 16:56
 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>
TOC Average, Dissolved	0.620 J	1.00	0.400	mg/L	1		07/24/21 22:41

Batch Information

Analytical Batch: WTC3117
 Analytical Method: SM 5310B
 Analyst: EWW
 Analytical Date/Time: 07/24/21 22:41
 Container ID: 1214479001-C

<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	96.0	20.0	6.20	mg/L	1		07/24/21 23:56

Batch Information

Analytical Batch: STS7051
 Analytical Method: SM21 2540C
 Analyst: NRZ
 Analytical Date/Time: 07/24/21 23:56
 Container ID: 1214479001-B

Results of RM 5 DUP

Client Sample ID: **RM 5 DUP**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479002
 Lab Project ID: 1214479

Collection Date: 07/20/21 15:25
 Received Date: 07/21/21 16:56
 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	14700	500	150	ug/L	1		08/04/21 15:14
Copper	9.97	1.00	0.310	ug/L	1		08/04/21 15:14
Magnesium	3700	50.0	15.0	ug/L	1		08/04/21 15:14
Zinc	22.9	10.0	3.10	ug/L	1		08/04/21 15:14

Batch Information

Analytical Batch: MMS11226
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:14
 Container ID: 1214479002-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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	51.9	5.00	5.00	mg/L	1		08/04/21 15:14

Batch Information

Analytical Batch: MMS11226
 Analytical Method: SM21 2340B
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:14
 Container ID: 1214479002-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 5 DUP

Client Sample ID: **RM 5 DUP**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479002
 Lab Project ID: 1214479

Collection Date: 07/20/21 15:25
 Received Date: 07/21/21 16:56
 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>
TOC Average, Dissolved	0.670 J	1.00	0.400	mg/L	1		07/24/21 23:01

Batch Information

Analytical Batch: WTC3117
 Analytical Method: SM 5310B
 Analyst: EWW
 Analytical Date/Time: 07/24/21 23:01
 Container ID: 1214479002-C

<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	78.0	20.0	6.20	mg/L	1		07/24/21 23:56

Batch Information

Analytical Batch: STS7051
 Analytical Method: SM21 2540C
 Analyst: NRZ
 Analytical Date/Time: 07/24/21 23:56
 Container ID: 1214479002-B

Results of RM 31

Client Sample ID: **RM 31**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479003
 Lab Project ID: 1214479

Collection Date: 07/20/21 11:50
 Received Date: 07/21/21 16:56
 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		08/04/21 15:17
Copper	1.26	1.00	0.310	ug/L	1		08/04/21 15:17
Magnesium	1330	50.0	15.0	ug/L	1		08/04/21 15:17
Zinc	4.41 J	10.0	3.10	ug/L	1		08/04/21 15:17

Batch Information

Analytical Batch: MMS11226
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:17
 Container ID: 1214479003-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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	38.7	5.00	5.00	mg/L	1		08/04/21 15:17

Batch Information

Analytical Batch: MMS11226
 Analytical Method: SM21 2340B
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:17
 Container ID: 1214479003-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 31

Client Sample ID: **RM 31**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479003
 Lab Project ID: 1214479

Collection Date: 07/20/21 11:50
 Received Date: 07/21/21 16:56
 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>
TOC Average, Dissolved	0.521 J	1.00	0.400	mg/L	1		07/24/21 23:17

Batch Information

Analytical Batch: WTC3117
 Analytical Method: SM 5310B
 Analyst: EWW
 Analytical Date/Time: 07/24/21 23:17
 Container ID: 1214479003-C

<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	64.0	10.0	3.10	mg/L	1		07/24/21 23:56

Batch Information

Analytical Batch: STS7051
 Analytical Method: SM21 2540C
 Analyst: NRZ
 Analytical Date/Time: 07/24/21 23:56
 Container ID: 1214479003-B

Results of RM 19

Client Sample ID: **RM 19**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479004
 Lab Project ID: 1214479

Collection Date: 07/19/21 12:48
 Received Date: 07/21/21 16:56
 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	21200	500	150	ug/L	1		08/04/21 15:19
Copper	0.500 U	1.00	0.310	ug/L	1		08/04/21 15:19
Magnesium	5500	50.0	15.0	ug/L	1		08/04/21 15:19
Zinc	5.00 U	10.0	3.10	ug/L	1		08/04/21 15:19

Batch Information

Analytical Batch: MMS11226
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:19
 Container ID: 1214479004-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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 CaCO ₃	75.5	5.00	5.00	mg/L	1		08/04/21 15:19

Batch Information

Analytical Batch: MMS11226
 Analytical Method: SM21 2340B
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:19
 Container ID: 1214479004-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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: 1214479004
 Lab Project ID: 1214479

Collection Date: 07/19/21 12:48
 Received Date: 07/21/21 16:56
 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>
TOC Average, Dissolved	5.98	1.00	0.400	mg/L	1		07/24/21 23:34

Batch Information

Analytical Batch: WTC3117
 Analytical Method: SM 5310B
 Analyst: EWW
 Analytical Date/Time: 07/24/21 23:34
 Container ID: 1214479004-C

<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	121	10.0	3.10	mg/L	1		07/24/21 23:56

Batch Information

Analytical Batch: STS7051
 Analytical Method: SM21 2540C
 Analyst: NRZ
 Analytical Date/Time: 07/24/21 23:56
 Container ID: 1214479004-B

Results of RM 19.1

Client Sample ID: **RM 19.1**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479005
 Lab Project ID: 1214479

Collection Date: 07/19/21 13:20
 Received Date: 07/21/21 16:56
 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	13100	500	150	ug/L	1		08/04/21 15:22
Copper	0.726 J	1.00	0.310	ug/L	1		08/04/21 15:22
Magnesium	1180	50.0	15.0	ug/L	1		08/04/21 15:22
Zinc	4.27 J	10.0	3.10	ug/L	1		08/04/21 15:22

Batch Information

Analytical Batch: MMS11226
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:22
 Container ID: 1214479005-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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	37.7	5.00	5.00	mg/L	1		08/04/21 15:22

Batch Information

Analytical Batch: MMS11226
 Analytical Method: SM21 2340B
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:22
 Container ID: 1214479005-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 19.1

Client Sample ID: **RM 19.1**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479005
 Lab Project ID: 1214479

Collection Date: 07/19/21 13:20
 Received Date: 07/21/21 16:56
 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>
TOC Average, Dissolved	0.513 J	1.00	0.400	mg/L	1		07/24/21 23:52

Batch Information

Analytical Batch: WTC3117
 Analytical Method: SM 5310B
 Analyst: EWW
 Analytical Date/Time: 07/24/21 23:52
 Container ID: 1214479005-C

<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	72.0	10.0	3.10	mg/L	1		07/24/21 23:56

Batch Information

Analytical Batch: STS7051
 Analytical Method: SM21 2540C
 Analyst: NRZ
 Analytical Date/Time: 07/24/21 23:56
 Container ID: 1214479005-B

Results of RM 19.1 DUP

Client Sample ID: **RM 19.1 DUP**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479006
 Lab Project ID: 1214479

Collection Date: 07/19/21 13:20
 Received Date: 07/21/21 16:56
 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		08/04/21 14:50
Copper	1.01	1.00	0.310	ug/L	1		08/04/21 14:50
Magnesium	1180	50.0	15.0	ug/L	1		08/04/21 14:50
Zinc	3.53 J	10.0	3.10	ug/L	1		08/04/21 14:50

Batch Information

Analytical Batch: MMS11226
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/04/21 14:50
 Container ID: 1214479006-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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	38.1	5.00	5.00	mg/L	1		08/04/21 14:50

Batch Information

Analytical Batch: MMS11226
 Analytical Method: SM21 2340B
 Analyst: AKA
 Analytical Date/Time: 08/04/21 14:50
 Container ID: 1214479006-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 19.1 DUP

Client Sample ID: **RM 19.1 DUP**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479006
 Lab Project ID: 1214479

Collection Date: 07/19/21 13:20
 Received Date: 07/21/21 16:56
 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>
TOC Average, Dissolved	0.756 J	1.00	0.400	mg/L	1		07/25/21 00:59

Batch Information

Analytical Batch: WTC3117
 Analytical Method: SM 5310B
 Analyst: EWW
 Analytical Date/Time: 07/25/21 00:59
 Container ID: 1214479006-C

<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	53.0	10.0	3.10	mg/L	1		07/24/21 23:56

Batch Information

Analytical Batch: STS7051
 Analytical Method: SM21 2540C
 Analyst: NRZ
 Analytical Date/Time: 07/24/21 23:56
 Container ID: 1214479006-B

Results of RM 20.75

Client Sample ID: **RM 20.75**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479007
 Lab Project ID: 1214479

Collection Date: 07/19/21 13:39
 Received Date: 07/21/21 16:56
 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		08/04/21 15:25
Copper	0.748 J	1.00	0.310	ug/L	1		08/04/21 15:25
Magnesium	1190	50.0	15.0	ug/L	1		08/04/21 15:25
Zinc	5.00 U	10.0	3.10	ug/L	1		08/04/21 15:25

Batch Information

Analytical Batch: MMS11226
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:25
 Container ID: 1214479007-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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	38.0	5.00	5.00	mg/L	1		08/04/21 15:25

Batch Information

Analytical Batch: MMS11226
 Analytical Method: SM21 2340B
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:25
 Container ID: 1214479007-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 20.75

Client Sample ID: **RM 20.75**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479007
 Lab Project ID: 1214479

Collection Date: 07/19/21 13:39
 Received Date: 07/21/21 16:56
 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>
TOC Average, Dissolved	0.732 J	1.00	0.400	mg/L	1		07/25/21 01:23

Batch Information

Analytical Batch: WTC3117
 Analytical Method: SM 5310B
 Analyst: EWW
 Analytical Date/Time: 07/25/21 01:23
 Container ID: 1214479007-C

<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	64.0	10.0	3.10	mg/L	1		07/24/21 23:56

Batch Information

Analytical Batch: STS7051
 Analytical Method: SM21 2540C
 Analyst: NRZ
 Analytical Date/Time: 07/24/21 23:56
 Container ID: 1214479007-B

Results of RM 12.75

Client Sample ID: **RM 12.75**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479008
 Lab Project ID: 1214479

Collection Date: 07/19/21 12:01
 Received Date: 07/21/21 16:56
 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		08/04/21 15:27
Copper	0.509 J	1.00	0.310	ug/L	1		08/04/21 15:27
Magnesium	1130	50.0	15.0	ug/L	1		08/04/21 15:27
Zinc	5.00 U	10.0	3.10	ug/L	1		08/04/21 15:27

Batch Information

Analytical Batch: MMS11226
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:27
 Container ID: 1214479008-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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	37.5	5.00	5.00	mg/L	1		08/04/21 15:27

Batch Information

Analytical Batch: MMS11226
 Analytical Method: SM21 2340B
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:27
 Container ID: 1214479008-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 12.75

Client Sample ID: **RM 12.75**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479008
 Lab Project ID: 1214479

Collection Date: 07/19/21 12:01
 Received Date: 07/21/21 16:56
 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>
TOC Average, Dissolved	0.518 J	1.00	0.400	mg/L	1		07/25/21 01:51

Batch Information

Analytical Batch: WTC3117
 Analytical Method: SM 5310B
 Analyst: EWW
 Analytical Date/Time: 07/25/21 01:51
 Container ID: 1214479008-C

<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		07/24/21 23:56

Batch Information

Analytical Batch: STS7051
 Analytical Method: SM21 2540C
 Analyst: NRZ
 Analytical Date/Time: 07/24/21 23:56
 Container ID: 1214479008-B

Results of RM 40

Client Sample ID: **RM 40**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479009
 Lab Project ID: 1214479

Collection Date: 07/20/21 11:10
 Received Date: 07/21/21 16:56
 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	13400	500	150	ug/L	1		08/04/21 15:30
Copper	1.23	1.00	0.310	ug/L	1		08/04/21 15:30
Magnesium	1310	50.0	15.0	ug/L	1		08/04/21 15:30
Zinc	3.97 J	10.0	3.10	ug/L	1		08/04/21 15:30

Batch Information

Analytical Batch: MMS11226
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:30
 Container ID: 1214479009-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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 CaCO ₃	38.9	5.00	5.00	mg/L	1		08/04/21 15:30

Batch Information

Analytical Batch: MMS11226
 Analytical Method: SM21 2340B
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:30
 Container ID: 1214479009-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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: 1214479009
 Lab Project ID: 1214479

Collection Date: 07/20/21 11:10
 Received Date: 07/21/21 16:56
 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>
TOC Average, Dissolved	0.486 J	1.00	0.400	mg/L	1		07/25/21 02:10

Batch Information

Analytical Batch: WTC3117
 Analytical Method: SM 5310B
 Analyst: EWW
 Analytical Date/Time: 07/25/21 02:10
 Container ID: 1214479009-C

<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		07/24/21 23:56

Batch Information

Analytical Batch: STS7051
 Analytical Method: SM21 2540C
 Analyst: NRZ
 Analytical Date/Time: 07/24/21 23:56
 Container ID: 1214479009-B

Results of RM 70

Client Sample ID: **RM 70**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479010
 Lab Project ID: 1214479

Collection Date: 07/20/21 10:20
 Received Date: 07/21/21 16:56
 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		08/04/21 15:33
Copper	0.324 J	1.00	0.310	ug/L	1		08/04/21 15:33
Magnesium	1320	50.0	15.0	ug/L	1		08/04/21 15:33
Zinc	5.00 U	10.0	3.10	ug/L	1		08/04/21 15:33

Batch Information

Analytical Batch: MMS11226
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:33
 Container ID: 1214479010-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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	51.2	5.00	5.00	mg/L	1		08/04/21 15:33

Batch Information

Analytical Batch: MMS11226
 Analytical Method: SM21 2340B
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:33
 Container ID: 1214479010-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 70

Client Sample ID: **RM 70**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479010
 Lab Project ID: 1214479

Collection Date: 07/20/21 10:20
 Received Date: 07/21/21 16:56
 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>
TOC Average, Dissolved	0.586 J	1.00	0.400	mg/L	1		07/25/21 02:34

Batch Information

Analytical Batch: WTC3117
 Analytical Method: SM 5310B
 Analyst: EWW
 Analytical Date/Time: 07/25/21 02:34
 Container ID: 1214479010-C

<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	99.0	10.0	3.10	mg/L	1		07/24/21 23:56

Batch Information

Analytical Batch: STS7051
 Analytical Method: SM21 2540C
 Analyst: NRZ
 Analytical Date/Time: 07/24/21 23:56
 Container ID: 1214479010-B

Results of RM 10.1 DUP

Client Sample ID: **RM 10.1 DUP**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479011
 Lab Project ID: 1214479

Collection Date: 07/19/21 11:30
 Received Date: 07/21/21 16:56
 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	13500	500	150	ug/L	1		08/04/21 15:35
Copper	0.550 J	1.00	0.310	ug/L	1		08/04/21 15:35
Magnesium	1170	50.0	15.0	ug/L	1		08/04/21 15:35
Zinc	5.00 U	10.0	3.10	ug/L	1		08/04/21 15:35

Batch Information

Analytical Batch: MMS11226
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:35
 Container ID: 1214479011-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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	38.5	5.00	5.00	mg/L	1		08/04/21 15:35

Batch Information

Analytical Batch: MMS11226
 Analytical Method: SM21 2340B
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:35
 Container ID: 1214479011-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 10.1 DUP

Client Sample ID: **RM 10.1 DUP**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479011
 Lab Project ID: 1214479

Collection Date: 07/19/21 11:30
 Received Date: 07/21/21 16:56
 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>
TOC Average, Dissolved	0.599 J	1.00	0.400	mg/L	1		07/25/21 02:56

Batch Information

Analytical Batch: WTC3117
 Analytical Method: SM 5310B
 Analyst: EWW
 Analytical Date/Time: 07/25/21 02:56
 Container ID: 1214479011-C

<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	100	10.0	3.10	mg/L	1		07/24/21 23:56

Batch Information

Analytical Batch: STS7051
 Analytical Method: SM21 2540C
 Analyst: NRZ
 Analytical Date/Time: 07/24/21 23:56
 Container ID: 1214479011-B

Results of RM 10.1

Client Sample ID: **RM 10.1**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479012
 Lab Project ID: 1214479

Collection Date: 07/19/21 11:30
 Received Date: 07/21/21 16:56
 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		08/04/21 15:44
Copper	0.555 J	1.00	0.310	ug/L	1		08/04/21 15:44
Magnesium	1130	50.0	15.0	ug/L	1		08/04/21 15:44
Zinc	5.00 U	10.0	3.10	ug/L	1		08/04/21 15:44

Batch Information

Analytical Batch: MMS11226
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:44
 Container ID: 1214479012-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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	37.8	5.00	5.00	mg/L	1		08/04/21 15:44

Batch Information

Analytical Batch: MMS11226
 Analytical Method: SM21 2340B
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:44
 Container ID: 1214479012-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 10.1

Client Sample ID: **RM 10.1**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479012
 Lab Project ID: 1214479

Collection Date: 07/19/21 11:30
 Received Date: 07/21/21 16:56
 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>
TOC Average, Dissolved	0.563 J	1.00	0.400	mg/L	1		07/25/21 03:23

Batch Information

Analytical Batch: WTC3117
 Analytical Method: SM 5310B
 Analyst: EWW
 Analytical Date/Time: 07/25/21 03:23
 Container ID: 1214479012-C

<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	76.0	10.0	3.10	mg/L	1		07/24/21 23:56

Batch Information

Analytical Batch: STS7051
 Analytical Method: SM21 2540C
 Analyst: NRZ
 Analytical Date/Time: 07/24/21 23:56
 Container ID: 1214479012-B

Results of Field Blank

Client Sample ID: **Field Blank**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479013
 Lab Project ID: 1214479

Collection Date: 07/19/21 11:35
 Received Date: 07/21/21 16:56
 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	250 U	500	150	ug/L	1		08/04/21 15:46
Copper	0.500 U	1.00	0.310	ug/L	1		08/04/21 15:46
Magnesium	25.0 U	50.0	15.0	ug/L	1		08/04/21 15:46
Zinc	5.00 U	10.0	3.10	ug/L	1		08/04/21 15:46

Batch Information

Analytical Batch: MMS11226
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:46
 Container ID: 1214479013-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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 CaCO ₃	5.00 U	5.00	5.00	mg/L	1		08/04/21 15:46

Batch Information

Analytical Batch: MMS11226
 Analytical Method: SM21 2340B
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:46
 Container ID: 1214479013-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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: 1214479013
 Lab Project ID: 1214479

Collection Date: 07/19/21 11:35
 Received Date: 07/21/21 16:56
 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>
TOC Average, Dissolved	0.500 U	1.00	0.400	mg/L	1		07/25/21 03:44

Batch Information

Analytical Batch: WTC3117
 Analytical Method: SM 5310B
 Analyst: EWW
 Analytical Date/Time: 07/25/21 03:44
 Container ID: 1214479013-C

<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	20.0	10.0	3.10	mg/L	1		07/24/21 23:56

Batch Information

Analytical Batch: STS7051
 Analytical Method: SM21 2540C
 Analyst: NRZ
 Analytical Date/Time: 07/24/21 23:56
 Container ID: 1214479013-B

Results of RM 21

Client Sample ID: **RM 21**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479014
 Lab Project ID: 1214479

Collection Date: 07/20/21 13:55
 Received Date: 07/21/21 16:56
 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		08/04/21 15:49
Copper	1.58	1.00	0.310	ug/L	1		08/04/21 15:49
Magnesium	1480	50.0	15.0	ug/L	1		08/04/21 15:49
Zinc	6.69 J	10.0	3.10	ug/L	1		08/04/21 15:49

Batch Information

Analytical Batch: MMS11226
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:49
 Container ID: 1214479014-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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	40.1	5.00	5.00	mg/L	1		08/04/21 15:49

Batch Information

Analytical Batch: MMS11226
 Analytical Method: SM21 2340B
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:49
 Container ID: 1214479014-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 21

Client Sample ID: **RM 21**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479014
 Lab Project ID: 1214479

Collection Date: 07/20/21 13:55
 Received Date: 07/21/21 16:56
 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>
TOC Average, Dissolved	0.500 U	1.00	0.400	mg/L	1		07/25/21 04:12

Batch Information

Analytical Batch: WTC3117
 Analytical Method: SM 5310B
 Analyst: EWW
 Analytical Date/Time: 07/25/21 04:12
 Container ID: 1214479014-C

<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		07/24/21 23:56

Batch Information

Analytical Batch: STS7051
 Analytical Method: SM21 2540C
 Analyst: NRZ
 Analytical Date/Time: 07/24/21 23:56
 Container ID: 1214479014-B

Results of RM 21 DUP

Client Sample ID: **RM 21 DUP**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479015
 Lab Project ID: 1214479

Collection Date: 07/20/21 13:55
 Received Date: 07/21/21 16:56
 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	13500	500	150	ug/L	1		08/04/21 15:52
Copper	1.55	1.00	0.310	ug/L	1		08/04/21 15:52
Magnesium	1480	50.0	15.0	ug/L	1		08/04/21 15:52
Zinc	4.74 J	10.0	3.10	ug/L	1		08/04/21 15:52

Batch Information

Analytical Batch: MMS11226
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:52
 Container ID: 1214479015-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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	39.8	5.00	5.00	mg/L	1		08/04/21 15:52

Batch Information

Analytical Batch: MMS11226
 Analytical Method: SM21 2340B
 Analyst: AKA
 Analytical Date/Time: 08/04/21 15:52
 Container ID: 1214479015-A

Prep Batch: MXX34444
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 21 DUP

Client Sample ID: **RM 21 DUP**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479015
 Lab Project ID: 1214479

Collection Date: 07/20/21 13:55
 Received Date: 07/21/21 16:56
 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>
TOC Average, Dissolved	0.420 J	1.00	0.400	mg/L	1		07/25/21 04:31

Batch Information

Analytical Batch: WTC3117
 Analytical Method: SM 5310B
 Analyst: EWW
 Analytical Date/Time: 07/25/21 04:31
 Container ID: 1214479015-C

<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	82.0	10.0	3.10	mg/L	1		07/24/21 23:56

Batch Information

Analytical Batch: STS7051
 Analytical Method: SM21 2540C
 Analyst: NRZ
 Analytical Date/Time: 07/24/21 23:56
 Container ID: 1214479015-B

Results of RM 21.1

Client Sample ID: **RM 21.1**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479016
 Lab Project ID: 1214479

Collection Date: 07/20/21 13:38
 Received Date: 07/21/21 16:56
 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	13700	500	150	ug/L	1		08/05/21 13:22
Copper	1.18	1.00	0.310	ug/L	1		08/05/21 13:22
Magnesium	1400	50.0	15.0	ug/L	1		08/05/21 13:22
Zinc	10.1	10.0	3.10	ug/L	1		08/05/21 13:22

Batch Information

Analytical Batch: MMS11228
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/05/21 13:22
 Container ID: 1214479016-A

Prep Batch: MXX34445
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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	40.0	5.00	5.00	mg/L	1		08/05/21 13:22

Batch Information

Analytical Batch: MMS11228
 Analytical Method: SM21 2340B
 Analyst: AKA
 Analytical Date/Time: 08/05/21 13:22
 Container ID: 1214479016-A

Prep Batch: MXX34445
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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: 1214479016
 Lab Project ID: 1214479

Collection Date: 07/20/21 13:38
 Received Date: 07/21/21 16:56
 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>
TOC Average, Dissolved	0.697 J	1.00	0.400	mg/L	1		07/25/21 05:32

Batch Information

Analytical Batch: WTC3117
 Analytical Method: SM 5310B
 Analyst: EWW
 Analytical Date/Time: 07/25/21 05:32
 Container ID: 1214479016-C

<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	76.0	10.0	3.10	mg/L	1		07/24/21 23:56

Batch Information

Analytical Batch: STS7051
 Analytical Method: SM21 2540C
 Analyst: NRZ
 Analytical Date/Time: 07/24/21 23:56
 Container ID: 1214479016-B

Results of RM 76

Client Sample ID: **RM 76**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479017
 Lab Project ID: 1214479

Collection Date: 07/20/21 09:55
 Received Date: 07/21/21 16:56
 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		08/05/21 13:27
Copper	0.427 J	1.00	0.310	ug/L	1		08/05/21 13:27
Magnesium	1200	50.0	15.0	ug/L	1		08/05/21 13:27
Zinc	5.00 U	10.0	3.10	ug/L	1		08/05/21 13:27

Batch Information

Analytical Batch: MMS11228
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/05/21 13:27
 Container ID: 1214479017-A

Prep Batch: MXX34445
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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	49.9	5.00	5.00	mg/L	1		08/05/21 13:27

Batch Information

Analytical Batch: MMS11228
 Analytical Method: SM21 2340B
 Analyst: AKA
 Analytical Date/Time: 08/05/21 13:27
 Container ID: 1214479017-A

Prep Batch: MXX34445
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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: 1214479017
 Lab Project ID: 1214479

Collection Date: 07/20/21 09:55
 Received Date: 07/21/21 16:56
 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>
TOC Average, Dissolved	0.599 J	1.00	0.400	mg/L	1		07/25/21 05:54

Batch Information

Analytical Batch: WTC3117
 Analytical Method: SM 5310B
 Analyst: EWW
 Analytical Date/Time: 07/25/21 05:54
 Container ID: 1214479017-C

<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	60.0	10.0	3.10	mg/L	1		07/24/21 23:56

Batch Information

Analytical Batch: STS7051
 Analytical Method: SM21 2540C
 Analyst: NRZ
 Analytical Date/Time: 07/24/21 23:56
 Container ID: 1214479017-B

Results of RM 23

Client Sample ID: **RM 23**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479018
 Lab Project ID: 1214479

Collection Date: 07/20/21 13:00
 Received Date: 07/21/21 16:56
 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	13700	500	150	ug/L	1		08/05/21 13:32
Copper	1.77	1.00	0.310	ug/L	1		08/05/21 13:32
Magnesium	1360	50.0	15.0	ug/L	1		08/05/21 13:32
Zinc	5.59 J	10.0	3.10	ug/L	1		08/05/21 13:32

Batch Information

Analytical Batch: MMS11228
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/05/21 13:32
 Container ID: 1214479018-A

Prep Batch: MXX34445
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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	39.8	5.00	5.00	mg/L	1		08/05/21 13:32

Batch Information

Analytical Batch: MMS11228
 Analytical Method: SM21 2340B
 Analyst: AKA
 Analytical Date/Time: 08/05/21 13:32
 Container ID: 1214479018-A

Prep Batch: MXX34445
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 23

Client Sample ID: **RM 23**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479018
 Lab Project ID: 1214479

Collection Date: 07/20/21 13:00
 Received Date: 07/21/21 16:56
 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>
TOC Average, Dissolved	0.501 J	1.00	0.400	mg/L	1		07/25/21 06:13

Batch Information

Analytical Batch: WTC3117
 Analytical Method: SM 5310B
 Analyst: EWW
 Analytical Date/Time: 07/25/21 06:13
 Container ID: 1214479018-C

<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	70.0	10.0	3.10	mg/L	1		07/24/21 23:56

Batch Information

Analytical Batch: STS7051
 Analytical Method: SM21 2540C
 Analyst: NRZ
 Analytical Date/Time: 07/24/21 23:56
 Container ID: 1214479018-B

Results of RM 5

Client Sample ID: **RM 5**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479019
 Lab Project ID: 1214479

Collection Date: 07/20/21 15:25
 Received Date: 07/21/21 16:56
 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	343	20.0	6.20	ug/L	1		08/05/21 13:35
Cadmium	0.250 U	0.500	0.150	ug/L	1		08/05/21 13:35
Calcium	13400	500	150	ug/L	1		08/05/21 13:35
Copper	0.533 J	1.00	0.310	ug/L	1		08/05/21 13:35
Lead	0.148 J	0.200	0.0700	ug/L	1		08/05/21 13:35
Magnesium	1190	50.0	15.0	ug/L	1		08/05/21 13:35
Potassium	1060	500	150	ug/L	1		08/05/21 13:35
Selenium	2.50 U	5.00	1.50	ug/L	1		08/05/21 13:35
Sodium	2250	500	150	ug/L	1		08/05/21 13:35
Zinc	3.33 J	10.0	3.10	ug/L	1		08/05/21 13:35

Batch Information

Analytical Batch: MMS11228
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/05/21 13:35
 Container ID: 1214479019-A

Prep Batch: MXX34445
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 5 DUP

Client Sample ID: **RM 5 DUP**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479020
 Lab Project ID: 1214479

Collection Date: 07/20/21 15:25
 Received Date: 07/21/21 16:56
 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	351	20.0	6.20	ug/L	1		08/05/21 13:38
Cadmium	0.250 U	0.500	0.150	ug/L	1		08/05/21 13:38
Calcium	13300	500	150	ug/L	1		08/05/21 13:38
Copper	0.540 J	1.00	0.310	ug/L	1		08/05/21 13:38
Lead	0.152 J	0.200	0.0700	ug/L	1		08/05/21 13:38
Magnesium	1180	50.0	15.0	ug/L	1		08/05/21 13:38
Potassium	1060	500	150	ug/L	1		08/05/21 13:38
Selenium	2.50 U	5.00	1.50	ug/L	1		08/05/21 13:38
Sodium	2230	500	150	ug/L	1		08/05/21 13:38
Zinc	5.00 U	10.0	3.10	ug/L	1		08/05/21 13:38

Batch Information

Analytical Batch: MMS11228
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/05/21 13:38
 Container ID: 1214479020-A

Prep Batch: MXX34445
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 31

Client Sample ID: **RM 31**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479021
 Lab Project ID: 1214479

Collection Date: 07/20/21 11:50
 Received Date: 07/21/21 16:56
 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	90.2	20.0	6.20	ug/L	1		08/05/21 13:40
Cadmium	0.250 U	0.500	0.150	ug/L	1		08/05/21 13:40
Calcium	13900	500	150	ug/L	1		08/05/21 13:40
Copper	0.500 U	1.00	0.310	ug/L	1		08/05/21 13:40
Lead	0.118 J	0.200	0.0700	ug/L	1		08/05/21 13:40
Magnesium	981	50.0	15.0	ug/L	1		08/05/21 13:40
Potassium	893	500	150	ug/L	1		08/05/21 13:40
Selenium	2.50 U	5.00	1.50	ug/L	1		08/05/21 13:40
Sodium	1300	500	150	ug/L	1		08/05/21 13:40
Zinc	5.17 J	10.0	3.10	ug/L	1		08/05/21 13:40

Batch Information

Analytical Batch: MMS11228
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/05/21 13:40
 Container ID: 1214479021-A

Prep Batch: MXX34445
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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: 1214479022
 Lab Project ID: 1214479

Collection Date: 07/19/21 12:48
 Received Date: 07/21/21 16:56
 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	9.68 J	20.0	6.20	ug/L	1		08/05/21 13:43
Cadmium	0.250 U	0.500	0.150	ug/L	1		08/05/21 13:43
Calcium	22400	500	150	ug/L	1		08/05/21 13:43
Copper	0.500 U	1.00	0.310	ug/L	1		08/05/21 13:43
Lead	0.100 U	0.200	0.0700	ug/L	1		08/05/21 13:43
Magnesium	5200	50.0	15.0	ug/L	1		08/05/21 13:43
Potassium	1350	500	150	ug/L	1		08/05/21 13:43
Selenium	2.50 U	5.00	1.50	ug/L	1		08/05/21 13:43
Sodium	6000	500	150	ug/L	1		08/05/21 13:43
Zinc	3.10 J	10.0	3.10	ug/L	1		08/05/21 13:43

Batch Information

Analytical Batch: MMS11228
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/05/21 13:43
 Container ID: 1214479022-A

Prep Batch: MXX34445
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 19.1

Client Sample ID: **RM 19.1**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479023
 Lab Project ID: 1214479

Collection Date: 07/19/21 13:20
 Received Date: 07/21/21 16:56
 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	28.0	20.0	6.20	ug/L	1		08/05/21 13:51
Cadmium	0.250 U	0.500	0.150	ug/L	1		08/05/21 13:51
Calcium	13400	500	150	ug/L	1		08/05/21 13:51
Copper	0.500 U	1.00	0.310	ug/L	1		08/05/21 13:51
Lead	0.100 U	0.200	0.0700	ug/L	1		08/05/21 13:51
Magnesium	910	50.0	15.0	ug/L	1		08/05/21 13:51
Potassium	837	500	150	ug/L	1		08/05/21 13:51
Selenium	2.50 U	5.00	1.50	ug/L	1		08/05/21 13:51
Sodium	1270	500	150	ug/L	1		08/05/21 13:51
Zinc	5.00 U	10.0	3.10	ug/L	1		08/05/21 13:51

Batch Information

Analytical Batch: MMS11228
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/05/21 13:51
 Container ID: 1214479023-A

Prep Batch: MXX34445
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 19.1 DUP

Client Sample ID: **RM 19.1 DUP**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479024
 Lab Project ID: 1214479

Collection Date: 07/19/21 13:20
 Received Date: 07/21/21 16:56
 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	29.4	20.0	6.20	ug/L	1		08/05/21 13:54
Cadmium	0.250 U	0.500	0.150	ug/L	1		08/05/21 13:54
Calcium	13300	500	150	ug/L	1		08/05/21 13:54
Copper	0.500 U	1.00	0.310	ug/L	1		08/05/21 13:54
Lead	0.100 U	0.200	0.0700	ug/L	1		08/05/21 13:54
Magnesium	898	50.0	15.0	ug/L	1		08/05/21 13:54
Potassium	828	500	150	ug/L	1		08/05/21 13:54
Selenium	2.50 U	5.00	1.50	ug/L	1		08/05/21 13:54
Sodium	1250	500	150	ug/L	1		08/05/21 13:54
Zinc	3.15 J	10.0	3.10	ug/L	1		08/05/21 13:54

Batch Information

Analytical Batch: MMS11228
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/05/21 13:54
 Container ID: 1214479024-A

Prep Batch: MXX34445
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 20.75

Client Sample ID: **RM 20.75**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479025
 Lab Project ID: 1214479

Collection Date: 07/19/21 13:29
 Received Date: 07/21/21 16:56
 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	29.6	20.0	6.20	ug/L	1		08/05/21 13:57
Cadmium	0.250 U	0.500	0.150	ug/L	1		08/05/21 13:57
Calcium	13400	500	150	ug/L	1		08/05/21 13:57
Copper	0.500 U	1.00	0.310	ug/L	1		08/05/21 13:57
Lead	0.100 U	0.200	0.0700	ug/L	1		08/05/21 13:57
Magnesium	905	50.0	15.0	ug/L	1		08/05/21 13:57
Potassium	833	500	150	ug/L	1		08/05/21 13:57
Selenium	2.50 U	5.00	1.50	ug/L	1		08/05/21 13:57
Sodium	1250	500	150	ug/L	1		08/05/21 13:57
Zinc	5.00 U	10.0	3.10	ug/L	1		08/05/21 13:57

Batch Information

Analytical Batch: MMS11228
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/05/21 13:57
 Container ID: 1214479025-A

Prep Batch: MXX34445
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 12.75

Client Sample ID: **RM 12.75**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479026
 Lab Project ID: 1214479

Collection Date: 07/19/21 12:01
 Received Date: 07/21/21 16:56
 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	26.8	20.0	6.20	ug/L	1		08/05/21 13:59
Cadmium	0.250 U	0.500	0.150	ug/L	1		08/05/21 13:59
Calcium	13400	500	150	ug/L	1		08/05/21 13:59
Copper	0.500 U	1.00	0.310	ug/L	1		08/05/21 13:59
Lead	0.100 U	0.200	0.0700	ug/L	1		08/05/21 13:59
Magnesium	913	50.0	15.0	ug/L	1		08/05/21 13:59
Potassium	820	500	150	ug/L	1		08/05/21 13:59
Selenium	2.50 U	5.00	1.50	ug/L	1		08/05/21 13:59
Sodium	1280	500	150	ug/L	1		08/05/21 13:59
Zinc	7.72 J	10.0	3.10	ug/L	1		08/05/21 13:59

Batch Information

Analytical Batch: MMS11228
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/05/21 13:59
 Container ID: 1214479026-A

Prep Batch: MXX34445
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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: 1214479027
 Lab Project ID: 1214479

Collection Date: 07/20/21 11:10
 Received Date: 07/21/21 16:56
 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	75.6	20.0	6.20	ug/L	1		08/05/21 14:02
Cadmium	0.250 U	0.500	0.150	ug/L	1		08/05/21 14:02
Calcium	13300	500	150	ug/L	1		08/05/21 14:02
Copper	0.500 U	1.00	0.310	ug/L	1		08/05/21 14:02
Lead	0.100 U	0.200	0.0700	ug/L	1		08/05/21 14:02
Magnesium	867	50.0	15.0	ug/L	1		08/05/21 14:02
Potassium	836	500	150	ug/L	1		08/05/21 14:02
Selenium	2.50 U	5.00	1.50	ug/L	1		08/05/21 14:02
Sodium	1180	500	150	ug/L	1		08/05/21 14:02
Zinc	6.00 J	10.0	3.10	ug/L	1		08/05/21 14:02

Batch Information

Analytical Batch: MMS11228
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/05/21 14:02
 Container ID: 1214479027-A

Prep Batch: MXX34445
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 70

Client Sample ID: **RM 70**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479028
 Lab Project ID: 1214479

Collection Date: 07/20/21 10:20
 Received Date: 07/21/21 16:56
 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	13.4 J	20.0	6.20	ug/L	1		08/05/21 14:05
Cadmium	0.250 U	0.500	0.150	ug/L	1		08/05/21 14:05
Calcium	17900	500	150	ug/L	1		08/05/21 14:05
Copper	0.500 U	1.00	0.310	ug/L	1		08/05/21 14:05
Lead	0.100 U	0.200	0.0700	ug/L	1		08/05/21 14:05
Magnesium	1120	50.0	15.0	ug/L	1		08/05/21 14:05
Potassium	572	500	150	ug/L	1		08/05/21 14:05
Selenium	2.50 U	5.00	1.50	ug/L	1		08/05/21 14:05
Sodium	1350	500	150	ug/L	1		08/05/21 14:05
Zinc	3.66 J	10.0	3.10	ug/L	1		08/05/21 14:05

Batch Information

Analytical Batch: MMS11228
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/05/21 14:05
 Container ID: 1214479028-A

Prep Batch: MXX34445
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 10.1 DUP

Client Sample ID: **RM 10.1 DUP**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479029
 Lab Project ID: 1214479

Collection Date: 07/19/21 11:30
 Received Date: 07/21/21 16:56
 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	23.2	20.0	6.20	ug/L	1		08/05/21 14:07
Cadmium	0.250 U	0.500	0.150	ug/L	1		08/05/21 14:07
Calcium	13500	500	150	ug/L	1		08/05/21 14:07
Copper	0.500 U	1.00	0.310	ug/L	1		08/05/21 14:07
Lead	0.100 U	0.200	0.0700	ug/L	1		08/05/21 14:07
Magnesium	907	50.0	15.0	ug/L	1		08/05/21 14:07
Potassium	826	500	150	ug/L	1		08/05/21 14:07
Selenium	2.50 U	5.00	1.50	ug/L	1		08/05/21 14:07
Sodium	1270	500	150	ug/L	1		08/05/21 14:07
Zinc	5.00 U	10.0	3.10	ug/L	1		08/05/21 14:07

Batch Information

Analytical Batch: MMS11228
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/05/21 14:07
 Container ID: 1214479029-A

Prep Batch: MXX34445
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 10.1

Client Sample ID: **RM 10.1**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479030
 Lab Project ID: 1214479

Collection Date: 07/19/21 11:30
 Received Date: 07/21/21 16:56
 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	22.3	20.0	6.20	ug/L	1		08/05/21 14:10
Cadmium	0.250 U	0.500	0.150	ug/L	1		08/05/21 14:10
Calcium	13600	500	150	ug/L	1		08/05/21 14:10
Copper	0.500 U	1.00	0.310	ug/L	1		08/05/21 14:10
Lead	0.100 U	0.200	0.0700	ug/L	1		08/05/21 14:10
Magnesium	926	50.0	15.0	ug/L	1		08/05/21 14:10
Potassium	831	500	150	ug/L	1		08/05/21 14:10
Selenium	2.50 U	5.00	1.50	ug/L	1		08/05/21 14:10
Sodium	1290	500	150	ug/L	1		08/05/21 14:10
Zinc	5.00 U	10.0	3.10	ug/L	1		08/05/21 14:10

Batch Information

Analytical Batch: MMS11228
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/05/21 14:10
 Container ID: 1214479030-A

Prep Batch: MXX34445
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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: 1214479031
 Lab Project ID: 1214479

Collection Date: 07/19/21 11:35
 Received Date: 07/21/21 16:56
 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	10.0 U	20.0	6.20	ug/L	1		08/05/21 14:13
Cadmium	0.250 U	0.500	0.150	ug/L	1		08/05/21 14:13
Calcium	250 U	500	150	ug/L	1		08/05/21 14:13
Copper	0.500 U	1.00	0.310	ug/L	1		08/05/21 14:13
Lead	0.100 U	0.200	0.0700	ug/L	1		08/05/21 14:13
Magnesium	25.0 U	50.0	15.0	ug/L	1		08/05/21 14:13
Potassium	250 U	500	150	ug/L	1		08/05/21 14:13
Selenium	2.50 U	5.00	1.50	ug/L	1		08/05/21 14:13
Sodium	250 U	500	150	ug/L	1		08/05/21 14:13
Zinc	3.46 J	10.0	3.10	ug/L	1		08/05/21 14:13

Batch Information

Analytical Batch: MMS11228
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/05/21 14:13
 Container ID: 1214479031-A

Prep Batch: MXX34445
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 21

Client Sample ID: **RM 21**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479032
 Lab Project ID: 1214479

Collection Date: 07/20/21 13:55
 Received Date: 07/21/21 16:56
 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	86.9	20.0	6.20	ug/L	1		08/05/21 14:16
Cadmium	0.250 U	0.500	0.150	ug/L	1		08/05/21 14:16
Calcium	13500	500	150	ug/L	1		08/05/21 14:16
Copper	0.500 U	1.00	0.310	ug/L	1		08/05/21 14:16
Lead	0.100 U	0.200	0.0700	ug/L	1		08/05/21 14:16
Magnesium	948	50.0	15.0	ug/L	1		08/05/21 14:16
Potassium	876	500	150	ug/L	1		08/05/21 14:16
Selenium	2.50 U	5.00	1.50	ug/L	1		08/05/21 14:16
Sodium	1320	500	150	ug/L	1		08/05/21 14:16
Zinc	5.00 U	10.0	3.10	ug/L	1		08/05/21 14:16

Batch Information

Analytical Batch: MMS11228
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/05/21 14:16
 Container ID: 1214479032-A

Prep Batch: MXX34445
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 21 DUP

Client Sample ID: **RM 21 DUP**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479033
 Lab Project ID: 1214479

Collection Date: 07/20/21 13:55
 Received Date: 07/21/21 16:56
 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	91.2	20.0	6.20	ug/L	1		08/05/21 14:24
Cadmium	0.250 U	0.500	0.150	ug/L	1		08/05/21 14:24
Calcium	13400	500	150	ug/L	1		08/05/21 14:24
Copper	0.500 U	1.00	0.310	ug/L	1		08/05/21 14:24
Lead	0.100 U	0.200	0.0700	ug/L	1		08/05/21 14:24
Magnesium	945	50.0	15.0	ug/L	1		08/05/21 14:24
Potassium	871	500	150	ug/L	1		08/05/21 14:24
Selenium	2.50 U	5.00	1.50	ug/L	1		08/05/21 14:24
Sodium	1300	500	150	ug/L	1		08/05/21 14:24
Zinc	16.8	10.0	3.10	ug/L	1		08/05/21 14:24

Batch Information

Analytical Batch: MMS11228
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/05/21 14:24
 Container ID: 1214479033-A

Prep Batch: MXX34445
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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: 1214479034
 Lab Project ID: 1214479

Collection Date: 07/20/21 13:38
 Received Date: 07/21/21 16:56
 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	102	20.0	6.20	ug/L	1		08/05/21 14:26
Cadmium	0.250 U	0.500	0.150	ug/L	1		08/05/21 14:26
Calcium	13500	500	150	ug/L	1		08/05/21 14:26
Copper	0.500 U	1.00	0.310	ug/L	1		08/05/21 14:26
Lead	0.100 U	0.200	0.0700	ug/L	1		08/05/21 14:26
Magnesium	951	50.0	15.0	ug/L	1		08/05/21 14:26
Potassium	882	500	150	ug/L	1		08/05/21 14:26
Selenium	2.50 U	5.00	1.50	ug/L	1		08/05/21 14:26
Sodium	1290	500	150	ug/L	1		08/05/21 14:26
Zinc	5.00 U	10.0	3.10	ug/L	1		08/05/21 14:26

Batch Information

Analytical Batch: MMS11228
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/05/21 14:26
 Container ID: 1214479034-A

Prep Batch: MXX34445
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 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: 1214479035
 Lab Project ID: 1214479

Collection Date: 07/20/21 09:55
 Received Date: 07/21/21 16:56
 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	15.7 J	20.0	6.20	ug/L	1		08/05/21 14:32
Cadmium	0.250 U	0.500	0.150	ug/L	1		08/05/21 14:32
Calcium	17900	500	150	ug/L	1		08/05/21 14:32
Copper	0.500 U	1.00	0.310	ug/L	1		08/05/21 14:32
Lead	0.100 U	0.200	0.0700	ug/L	1		08/05/21 14:32
Magnesium	1120	50.0	15.0	ug/L	1		08/05/21 14:32
Potassium	586	500	150	ug/L	1		08/05/21 14:32
Selenium	2.50 U	5.00	1.50	ug/L	1		08/05/21 14:32
Sodium	1340	500	150	ug/L	1		08/05/21 14:32
Zinc	5.00 U	10.0	3.10	ug/L	1		08/05/21 14:32

Batch Information

Analytical Batch: MMS11228
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/05/21 14:32
 Container ID: 1214479035-A

Prep Batch: MXX34445
 Prep Method: E200.2
 Prep Date/Time: 07/23/21 12:35
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM 23

Client Sample ID: **RM 23**
 Client Project ID: **Kenai River Metals Monitoring**
 Lab Sample ID: 1214479036
 Lab Project ID: 1214479

Collection Date: 07/20/21 13:00
 Received Date: 07/21/21 16:56
 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	80.4	20.0	6.20	ug/L	1		08/11/21 12:07
Cadmium	0.250 U	0.500	0.150	ug/L	1		08/11/21 12:07
Calcium	13700	500	150	ug/L	1		08/11/21 12:07
Copper	1.58	1.00	0.310	ug/L	1		08/11/21 12:07
Lead	0.121 J	0.200	0.0700	ug/L	1		08/11/21 12:07
Magnesium	978	50.0	15.0	ug/L	1		08/11/21 12:07
Potassium	889	500	150	ug/L	1		08/11/21 12:07
Selenium	2.50 U	5.00	1.50	ug/L	1		08/11/21 12:07
Sodium	1350	500	150	ug/L	1		08/11/21 12:07
Zinc	7.68 J	10.0	3.10	ug/L	1		08/11/21 12:07

Batch Information

Analytical Batch: MMS11239
 Analytical Method: EP200.8
 Analyst: AKA
 Analytical Date/Time: 08/11/21 12:07
 Container ID: 1214479036-A

Prep Batch: MXX34513
 Prep Method: E200.2
 Prep Date/Time: 08/10/21 11:57
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Method Blank

Blank ID: MB for HBN 1822856 [MXX/34444]
Blank Lab ID: 1625122

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1214479001, 1214479002, 1214479003, 1214479004, 1214479005, 1214479006, 1214479007, 1214479008, 1214479009, 1214479010, 1214479011, 1214479012, 1214479013, 1214479014, 1214479015

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	0.500U	1.00	0.310	ug/L
Magnesium	25.0U	50.0	15.0	ug/L
Zinc	5.00U	10.0	3.10	ug/L

Batch Information

Analytical Batch: MMS11226
Analytical Method: EP200.8
Instrument: P7 Agilent 7800
Analyst: AKA
Analytical Date/Time: 8/4/2021 2:36:37PM

Prep Batch: MXX34444
Prep Method: E200.2
Prep Date/Time: 7/23/2021 12:35:05PM
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1214479 [MXX34444]

Blank Spike Lab ID: 1625123

Date Analyzed: 08/04/2021 14:39

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1214479001, 1214479002, 1214479003, 1214479004, 1214479005, 1214479006, 1214479007, 1214479008, 1214479009, 1214479010, 1214479011, 1214479012, 1214479013, 1214479014, 1214479015

Results by EP200.8

Blank Spike (ug/L)

Parameter	Spike	Result	Rec (%)	CL
Calcium	10000	10200	102	(85-115)
Copper	1000	1040	104	(85-115)
Magnesium	10000	10900	109	(85-115)
Zinc	1000	1020	102	(85-115)

Batch Information

Analytical Batch: MMS11226

Analytical Method: EP200.8

Instrument: P7 Agilent 7800

Analyst: AKA

Prep Batch: MXX34444

Prep Method: E200.2

Prep Date/Time: 07/23/2021 12:35

Spike Init Wt./Vol.: 10000 ug/L Extract Vol: 50 mL

Dupe Init Wt./Vol.: Extract Vol:

Matrix Spike Summary

Original Sample ID: 1625170
MS Sample ID: 1625173 MS
MSD Sample ID:

Analysis Date: 08/04/2021 14:44
Analysis Date: 08/04/2021 14:47
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1214479001, 1214479002, 1214479003, 1214479004, 1214479005, 1214479006

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	374J	10000	10500	101				70-130		
Copper	12.2	1000	1050	103				70-130		
Magnesium	206	10000	11000	108				70-130		

Batch Information

Analytical Batch: MMS11226
Analytical Method: EP200.8
Instrument: P7 Agilent 7800
Analyst: AKA
Analytical Date/Time: 8/4/2021 2:47:24PM

Prep Batch: MXX34444
Prep Method: DW Digest for Metals on ICP-MS
Prep Date/Time: 7/23/2021 12:35:05PM
Prep Initial Wt./Vol.: 20.00mL
Prep Extract Vol: 50.00mL

Print Date: 08/12/2021 9:16:55AM

Matrix Spike Summary

Original Sample ID: 1214479006
MS Sample ID: 1625174 MS
MSD Sample ID:

Analysis Date: 08/04/2021 14:50
Analysis Date: 08/04/2021 14:52
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1214479001, 1214479002, 1214479003, 1214479004, 1214479005, 1214479006, 1214479007, 1214479008, 1214479009, 1214479010, 1214479011, 1214479012, 1214479013, 1214479014, 1214479015

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	13300	10000	22900	96				70-130		
Copper	1.01	1000	1040	104				70-130		
Magnesium	1180	10000	11800	106				70-130		
Zinc	3.53J	1000	1020	102				70-130		

Batch Information

Analytical Batch: MMS11226
Analytical Method: EP200.8
Instrument: P7 Agilent 7800
Analyst: AKA
Analytical Date/Time: 8/4/2021 2:52:46PM

Prep Batch: MXX34444
Prep Method: DW Digest for Metals on ICP-MS
Prep Date/Time: 7/23/2021 12:35:05PM
Prep Initial Wt./Vol.: 20.00mL
Prep Extract Vol: 50.00mL

Print Date: 08/12/2021 9:16:55AM

Method Blank

Blank ID: MB for HBN 1822857 [MXX/34445]
Blank Lab ID: 1625125

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1214479016, 1214479017, 1214479018, 1214479019, 1214479020, 1214479021, 1214479022, 1214479023, 1214479024, 1214479025, 1214479026, 1214479027, 1214479028, 1214479029, 1214479030, 1214479031, 1214479032, 1214479033, 1214479034, 1214479035

Results by EP200.8

Parameter	Results	LOQ/CL	DL	Units
Aluminum	10.0U	20.0	6.20	ug/L
Cadmium	0.250U	0.500	0.150	ug/L
Calcium	250U	500	150	ug/L
Copper	0.500U	1.00	0.310	ug/L
Lead	0.100U	0.200	0.0700	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: MMS11228
Analytical Method: EP200.8
Instrument: P7 Agilent 7800
Analyst: AKA
Analytical Date/Time: 8/5/2021 1:08:30PM

Prep Batch: MXX34445
Prep Method: E200.2
Prep Date/Time: 7/23/2021 12:35:04PM
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1214479 [MXX34445]

Blank Spike Lab ID: 1625126

Date Analyzed: 08/05/2021 13:11

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1214479016, 1214479017, 1214479018, 1214479019, 1214479020, 1214479021, 1214479022, 1214479023, 1214479024, 1214479025, 1214479026, 1214479027, 1214479028, 1214479029, 1214479030, 1214479031, 1214479032, 1214479033, 1214479034, 1214479035

Results by EP200.8

Blank Spike (ug/L)

Parameter	Spike	Result	Rec (%)	CL
Aluminum	1000	987	99	(85-115)
Cadmium	100	100	100	(85-115)
Calcium	10000	9920	99	(85-115)
Copper	1000	1010	101	(85-115)
Lead	1000	1020	102	(85-115)
Magnesium	10000	10000	100	(85-115)
Potassium	10000	9990	100	(85-115)
Selenium	1000	1010	101	(85-115)
Sodium	10000	10000	100	(85-115)
Zinc	1000	1020	102	(85-115)

Batch Information

Analytical Batch: MMS11228

Analytical Method: EP200.8

Instrument: P7 Agilent 7800

Analyst: AKA

Prep Batch: MXX34445

Prep Method: E200.2

Prep Date/Time: 07/23/2021 12:35

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

Dupe Init Wt./Vol.: Extract Vol:

Matrix Spike Summary

Original Sample ID: 1625175
MS Sample ID: 1625176 MS
MSD Sample ID:

Analysis Date: 08/05/2021 14:59
Analysis Date: 08/05/2021 15:02
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1214479016, 1214479017, 1214479018, 1214479019, 1214479020, 1214479021, 1214479022, 1214479023, 1214479024, 1214479025, 1214479026, 1214479027, 1214479028, 1214479029, 1214479030, 1214479031, 1214479032, 1214479033, 1214479034

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	1230	1000	2480	125				70-130		
Cadmium	0.250U	100	101	101				70-130		
Calcium	13700	10000	23700	100				70-130		
Copper	1.18	1000	1020	102				70-130		
Lead	0.379	1000	1030	103				70-130		
Magnesium	1400	10000	11500	101				70-130		
Potassium	1200	10000	11400	102				70-130		
Selenium	2.50U	1000	1020	102				70-130		
Sodium	1400	10000	11500	101				70-130		
Zinc	10.1	1000	1040	103				70-130		

Batch Information

Analytical Batch: MMS11228
Analytical Method: EP200.8
Instrument: P7 Agilent 7800
Analyst: AKA
Analytical Date/Time: 8/5/2021 3:02:07PM

Prep Batch: MX34445
Prep Method: DW Digest for Metals on ICP-MS
Prep Date/Time: 7/23/2021 12:35:04PM
Prep Initial Wt./Vol.: 20.00mL
Prep Extract Vol: 50.00mL

Print Date: 08/12/2021 9:17:04AM

Matrix Spike Summary

Original Sample ID: 1625177
MS Sample ID: 1625178 MS
MSD Sample ID:

Analysis Date: 08/05/2021 13:27
Analysis Date: 08/05/2021 13:30
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1214479017, 1214479018, 1214479019, 1214479020, 1214479021, 1214479022, 1214479023, 1214479024, 1214479025, 1214479026, 1214479027, 1214479028, 1214479029, 1214479030, 1214479031, 1214479032, 1214479033, 1214479034, 1214479035

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	81.7	1000	1110	103				70-130		
Cadmium	0.250U	100	101	101				70-130		
Calcium	18000	10000	28000	100				70-130		
Copper	0.427J	1000	1020	101				70-130		
Lead	0.382	1000	1040	104				70-130		
Magnesium	1200	10000	11300	101				70-130		
Potassium	614	10000	10800	102				70-130		
Selenium	2.50U	1000	1030	103				70-130		
Sodium	1420	10000	11500	101				70-130		
Zinc	5.00U	1000	1030	103				70-130		

Batch Information

Analytical Batch: MMS11228
Analytical Method: EP200.8
Instrument: P7 Agilent 7800
Analyst: AKA
Analytical Date/Time: 8/5/2021 1:30:09PM

Prep Batch: MX34445
Prep Method: DW Digest for Metals on ICP-MS
Prep Date/Time: 7/23/2021 12:35:04PM
Prep Initial Wt./Vol.: 20.00mL
Prep Extract Vol: 50.00mL

Print Date: 08/12/2021 9:17:04AM

Method Blank

Blank ID: MB for HBN 1823845 [MXX/34513]
Blank Lab ID: 1629053

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1214479036

Results by EP200.8

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Aluminum	10.0U	20.0	6.20	ug/L
Cadmium	0.250U	0.500	0.150	ug/L
Calcium	250U	500	150	ug/L
Copper	0.500U	1.00	0.310	ug/L
Lead	0.100U	0.200	0.0700	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	3.78J	10.0	3.10	ug/L

Batch Information

Analytical Batch: MMS11239
Analytical Method: EP200.8
Instrument: P7 Agilent 7800
Analyst: AKA
Analytical Date/Time: 8/11/2021 11:48:15AM

Prep Batch: MXX34513
Prep Method: E200.2
Prep Date/Time: 8/10/2021 11:57:50AM
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1214479 [MXX34513]

Blank Spike Lab ID: 1629054

Date Analyzed: 08/11/2021 11:50

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1214479036

Results by EP200.8

Blank Spike (ug/L)

Parameter	Spike	Result	Rec (%)	CL
Aluminum	1000	1000	100	(85-115)
Cadmium	100	102	102	(85-115)
Calcium	10000	10300	103	(85-115)
Copper	1000	1040	104	(85-115)
Lead	1000	1030	103	(85-115)
Magnesium	10000	10100	101	(85-115)
Potassium	10000	10200	102	(85-115)
Selenium	1000	1040	104	(85-115)
Sodium	10000	10200	102	(85-115)
Zinc	1000	1060	106	(85-115)

Batch Information

Analytical Batch: MMS11239

Analytical Method: EP200.8

Instrument: P7 Agilent 7800

Analyst: AKA

Prep Batch: MXX34513

Prep Method: E200.2

Prep Date/Time: 08/10/2021 11:57

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

Dupe Init Wt./Vol.: Extract Vol:

Matrix Spike Summary

Original Sample ID: 1629099
MS Sample ID: 1629100 MS
MSD Sample ID:

Analysis Date: 08/11/2021 11:53
Analysis Date: 08/11/2021 11:56
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1214479036

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	10.0U	1000	1010	101				70-130		
Cadmium	0.250U	100	102	102				70-130		
Calcium	250U	10000	10200	102				70-130		
Copper	12.7	1000	1020	101				70-130		
Lead	1.31	1000	1030	103				70-130		
Magnesium	94.9	10000	10300	102				70-130		
Potassium	525	10000	10600	101				70-130		
Selenium	2.50U	1000	1040	104				70-130		
Sodium	131000	10000	139000	84				70-130		
Zinc	13.5	1000	1060	104				70-130		

Batch Information

Analytical Batch: MMS11239
Analytical Method: EP200.8
Instrument: P7 Agilent 7800
Analyst: AKA
Analytical Date/Time: 8/11/2021 11:56:20AM

Prep Batch: MXX34513
Prep Method: DW Digest for Metals on ICP-MS
Prep Date/Time: 8/10/2021 11:57:50AM
Prep Initial Wt./Vol.: 20.00mL
Prep Extract Vol: 50.00mL

Print Date: 08/12/2021 9:17:13AM

Matrix Spike Summary

Original Sample ID: 1629286
MS Sample ID: 1629287 MS
MSD Sample ID:

Analysis Date: 08/11/2021 11:59
Analysis Date: 08/11/2021 12:01
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1214479036

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	22.1	1000	1010	99				70-130		
Cadmium	0.250U	100	99.8	100				70-130		
Calcium	64400	10000	76900	125				70-130		
Copper	2.70	1000	1010	101				70-130		
Lead	0.997	1000	1030	103				70-130		
Magnesium	18600	10000	29000	105				70-130		
Potassium	1470	10000	11500	101				70-130		
Selenium	1.52J	1000	1040	104				70-130		
Sodium	3120	10000	13100	100				70-130		
Zinc	19.2	1000	1050	103				70-130		

Batch Information

Analytical Batch: MMS11239
Analytical Method: EP200.8
Instrument: P7 Agilent 7800
Analyst: AKA
Analytical Date/Time: 8/11/2021 12:01:44PM

Prep Batch: MXX34513
Prep Method: DW Digest for Metals on ICP-MS
Prep Date/Time: 8/10/2021 11:57:50AM
Prep Initial Wt./Vol.: 20.00mL
Prep Extract Vol: 50.00mL

Print Date: 08/12/2021 9:17:13AM

Method Blank

Blank ID: MB for HBN 1822930 [STS/7051]
Blank Lab ID: 1625473

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1214479001, 1214479002, 1214479003, 1214479004, 1214479005, 1214479006, 1214479007, 1214479008, 1214479009,
1214479010, 1214479011, 1214479012, 1214479013, 1214479014, 1214479015, 1214479016, 1214479017, 1214479018

Results by SM21 2540C

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Total Dissolved Solids	7.00J	10.0	3.10	mg/L

Batch Information

Analytical Batch: STS7051
Analytical Method: SM21 2540C
Instrument:
Analyst: NRZ
Analytical Date/Time: 7/24/2021 11:56:19PM

Print Date: 08/12/2021 9:17:15AM



Duplicate Sample Summary

Original Sample ID: 1214368004

Duplicate Sample ID: 1625476

QC for Samples:

Analysis Date: 07/24/2021 23:56

Matrix: Water (Surface, Eff., Ground)

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	3050	3094	mg/L	1.30	(< 5)

Batch Information

Analytical Batch: STS7051

Analytical Method: SM21 2540C

Instrument:

Analyst: NRZ

Print Date: 08/12/2021 9:17:16AM

SGS North America Inc.

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

Member of SGS Group

Duplicate Sample Summary

Original Sample ID: 1214385001

Duplicate Sample ID: 1625477

Analysis Date: 07/24/2021 23:56

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1214479001, 1214479002, 1214479003, 1214479004, 1214479005, 1214479006, 1214479007, 1214479008, 1214479009, 1214479010, 1214479011, 1214479012, 1214479013, 1214479014, 1214479015, 1214479016,

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	587	614	mg/L	4.50	(< 5)

Batch Information

Analytical Batch: STS7051

Analytical Method: SM21 2540C

Instrument:

Analyst: NRZ

Print Date: 08/12/2021 9:17:16AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1214479 [STS7051]
 Blank Spike Lab ID: 1625474
 Date Analyzed: 07/24/2021 23:56

Spike Duplicate ID: LCSD for HBN 1214479 [STS7051]
 Spike Duplicate Lab ID: 1625475
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1214479001, 1214479002, 1214479003, 1214479004, 1214479005, 1214479006, 1214479007, 1214479008, 1214479009, 1214479010, 1214479011, 1214479012, 1214479013, 1214479014, 1214479015, 1214479016, 1214479017, 1214479018

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	304	91	333	311	93	(75-125)	2.30	(< 5)

Batch Information

Analytical Batch: STS7051
 Analytical Method: SM21 2540C
 Instrument:
 Analyst: NRZ

Daniel, Alexandra (Anchorage)

From: Apsens, Sarah J (DEC) <sarah.apsens@alaska.gov>
Sent: Wednesday, July 28, 2021 11:53 AM
To: Daniel, Alexandra (Anchorage)
Subject: [EXTERNAL] RE: 1214479 - RM 40 & RM 70

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi Allie,

RM 40 and RM 70 should undergo the same analysis as the other samples in the workorder. That was an error by me on the COC. Thank you for catching that error!

From: Daniel, Alexandra (Anchorage) <Alexandra.Daniel@sgs.com>
Sent: Wednesday, July 28, 2021 11:42 AM
To: Apsens, Sarah J (DEC) <sarah.apsens@alaska.gov>
Subject: 1214479 - RM 40 & RM 70

Hi Sarah,

I noticed samples RM 40 and RM 70 did not have any analyses selected on the COC (COC attached). They were both logged in for the same analyses as the other samples on this workorder, let me know if I need to cancel anything.

Thanks,

Allie Daniel
Industries & Environment
Project Manager

SGS North America Inc.
200 West Potter Dr
99518 – Anchorage
Main: +01 907 562 2343
Direct: +01 907 550 3217
E-mail: Alexandra.Daniel@sgs.com

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SGS North America Inc.
AIN OF CUSTODY RECORD

1214479



Cooler 1 of 2

#366978

www.us.sgs.com

CLIENT: Alaska Department of Environmental Conservation		Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.	
CONTACT: Sara Apsens		Section 3 Preservative	
PROJECT: NAME: Kenai River Metals Monitoring		Analysis*	
REPORTS TO: Sara Apsens		NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS	
INVOICE TO: cc: sara.apsens@alaska.gov DeWaters: contact@alaska.gov		REMARKS/LOC ID	
QUOTE #: NTP# 21-557 P.O. #: 18-220-20-2			
E-MAIL: Sara.Apsens@alaska.gov			
Profile #:			
DATE			
TIME			
HH:MM			
MATRIX CODE			
SAMPLE IDENTIFICATION			
RESERVED for lab use			
RM 5			
RM 5 DUP			
RM 31			
RM 19			
RM 19.1			
RM 19.1 DUP			
RM 20.75			
RM 12.75			
RM 40			
RM 70			
Relinquished By: (1)		Data Deliverable Requirements:	
Relinquished By: (2)		Section 4 Cooler ID:	
Relinquished By: (3)		Requested Turnaround Time and/or Special Instructions:	
Relinquished By: (4)		Temp Blank °C: 24.058	
		Chain of Custody Seal: (Circle)	
		INTACT BROKEN ABSENT	
		Delivery Method: Hand Delivery [] Commerical Delivery [X] Alet	

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

AIRBILL 8729051

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

Signed.....

Date

Grant Aviation

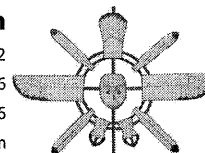
6520 Kulis Dr. Anchorage, AK 99502

Phone: 1 (888) 359-4726

Freephone: 1 (888) 359-4726

Email: res@flygrant.com

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



GRANT AVIATION

FREIGHT DETAILS

FROM/TO: Kenai -> Anchorage International

Flight Departs: Jul 21 21 12:40 PM

Receiver: SGS ATTN ALLIE
DANIEL
907-550-3217

Sender: ALASKA DEPT OF
ENIRONMENTAL CONSERVATION
907-741-1026

Accepted: Wed, Jul 21 21 11:52:00 AM

Description & Comment	Quan.	Wgt.	Handle Fee	Hazmat Fee	Total
water samples	2	60	-	-	\$33.88
Total Tax:					\$2.12
Total Payments made:					\$36.00
Total Unpaid:					\$0.00

Received in good condition by:

CUSTOMER COPY

AIRBILL 8729051

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

Signed.....

Date

Grant Aviation

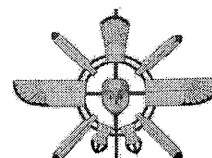
6520 Kulis Dr. Anchorage, AK 99502

Phone: 1 (888) 359-4726

Freephone: 1 (888) 359-4726

Email: res@flygrant.com

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



GRANT AVIATION

FREIGHT DETAILS

FROM/TO: Kenai -> Anchorage International

Flight Departs: Jul 21 21 12:40 PM

Receiver: SGS ATTN ALLIE
DANIEL
907-550-3217

Sender: ALASKA DEPT OF
ENIRONMENTAL CONSERVATION
907-741-1026

Accepted: Wed, Jul 21 21 11:52:00 AM

Description & Comment	Quan.	Wgt.	Handle Fee	Hazmat Fee	Total
water samples	2	60	-	-	\$33.88
TAX: Federal Excise Tax					\$2.12
Total Payments made:					\$36.00
Total Unpaid:					\$0.00

TERMS AND CONDITIONS

Consignemnt Note Text

Alert Expeditors Inc.

#413305

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

Date 7/21/01
From A. D. & C.
To SC-5

Collect ☐ Prepay ☐ Advance Charges ☐

Job # PO# G. 072951

Sample

Shipped Signature TLK

Total Charge

Received By: _____

Page 88 of 91



e-Sample Receipt Form

SGS Workorder #:

1214479

1214479

Review Criteria		Condition (Yes, No, N/A)		Exceptions Noted below	
Chain of Custody / Temperature Requirements		N/A		Exemption permitted if sampler hand carries/delivers.	
Were Custody Seals intact? Note # & location		Yes	1F		
COC accompanied samples?		Yes			
DOD: Were samples received in COC corresponding coolers?		N/A			
N/A **Exemption permitted if chilled & collected <8 hours ago, or for samples where chilling is not required					
Temperature blank compliant* (i.e., 0-6 °C after CF)?		Yes	Cooler ID: 1	@ 3.4 °C	Therm. ID: D58
If samples received without a temperature blank, the "cooler temperature" will be documented instead & "COOLER TEMP" will be noted to the right. "ambient" or "chilled" will be noted if neither is available.			Cooler ID:	@	°C Therm. ID:
			Cooler ID:	@	°C Therm. ID:
			Cooler ID:	@	°C Therm. ID:
			Cooler ID:	@	°C Therm. ID:
*If >6°C, were samples collected <8 hours ago?		N/A			
If <0°C, were sample containers ice free?		N/A			
Note: Identify containers received at non-compliant temperature . Use form FS-0029 if more space is needed.					
Holding Time / Documentation / Sample Condition Requirements		Note: Refer to form F-083 "Sample Guide" for specific holding times.			
Were samples received within holding time?		Yes			
Do samples match COC** (i.e., sample IDs, dates/times collected)?		Yes			
**Note: If times differ <1hr, record details & login per COC.					
***Note: If sample information on containers differs from COC, SGS will default to COC information					
Were analytical requests clear? (i.e., method is specified for analyses with multiple option for analysis (Ex: BTEX, Metals)		Yes			
Were proper containers (type/mass/volume/preservative***) used?		Yes	N/A ***Exemption permitted for metals (e.g. 200.8/6020A).		
Volatile / LL-Hg Requirements					
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samples?		N/A			
Were all water VOA vials free of headspace (i.e., bubbles ≤ 6mm)?		N/A			
Were all soil VOAs field extracted with MeOH+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>
1214479001-A	HNO3 to pH < 2	OK	1214479013-B	No Preservative Required	OK
1214479001-B	No Preservative Required	OK	1214479013-C	No Preservative Required	OK
1214479001-C	No Preservative Required	OK	1214479013-D	HCL to pH < 2	OK
1214479001-D	HCL to pH < 2	OK	1214479014-A	HNO3 to pH < 2	OK
1214479002-A	HNO3 to pH < 2	OK	1214479014-B	No Preservative Required	OK
1214479002-B	No Preservative Required	OK	1214479014-C	No Preservative Required	OK
1214479002-C	No Preservative Required	OK	1214479014-D	HCL to pH < 2	OK
1214479002-D	HCL to pH < 2	OK	1214479015-A	HNO3 to pH < 2	OK
1214479003-A	HNO3 to pH < 2	OK	1214479015-B	No Preservative Required	OK
1214479003-B	No Preservative Required	OK	1214479015-C	No Preservative Required	OK
1214479003-C	No Preservative Required	OK	1214479015-D	HCL to pH < 2	OK
1214479003-D	HCL to pH < 2	OK	1214479016-A	HNO3 to pH < 2	OK
1214479004-A	HNO3 to pH < 2	OK	1214479016-B	No Preservative Required	OK
1214479004-B	No Preservative Required	OK	1214479016-C	No Preservative Required	OK
1214479004-C	No Preservative Required	OK	1214479016-D	HCL to pH < 2	OK
1214479004-D	HCL to pH < 2	OK	1214479017-A	HNO3 to pH < 2	OK
1214479005-A	HNO3 to pH < 2	OK	1214479017-B	No Preservative Required	OK
1214479005-B	No Preservative Required	OK	1214479017-C	No Preservative Required	OK
1214479005-C	No Preservative Required	OK	1214479017-D	HCL to pH < 2	OK
1214479005-D	HCL to pH < 2	OK	1214479018-A	HNO3 to pH < 2	OK
1214479006-A	HNO3 to pH < 2	OK	1214479018-B	No Preservative Required	OK
1214479006-B	No Preservative Required	OK	1214479018-C	No Preservative Required	OK
1214479006-C	No Preservative Required	OK	1214479018-D	HCL to pH < 2	OK
1214479006-D	HCL to pH < 2	OK	1214479019-A	No Preservative Required	OK
1214479007-A	HNO3 to pH < 2	OK	1214479019-B	HNO3 to pH < 2	OK
1214479007-B	No Preservative Required	OK	1214479020-A	No Preservative Required	OK
1214479007-C	No Preservative Required	OK	1214479020-B	HNO3 to pH < 2	OK
1214479007-D	HCL to pH < 2	OK	1214479021-A	No Preservative Required	OK
1214479008-A	HNO3 to pH < 2	OK	1214479021-B	HNO3 to pH < 2	OK
1214479008-B	No Preservative Required	OK	1214479022-A	No Preservative Required	OK
1214479008-C	No Preservative Required	OK	1214479022-B	HNO3 to pH < 2	OK
1214479008-D	HCL to pH < 2	OK	1214479023-A	No Preservative Required	OK
1214479009-A	HNO3 to pH < 2	OK	1214479023-B	HNO3 to pH < 2	OK
1214479009-B	No Preservative Required	OK	1214479024-A	No Preservative Required	OK
1214479009-C	No Preservative Required	OK	1214479024-B	HNO3 to pH < 2	OK
1214479009-D	HCL to pH < 2	OK	1214479025-A	No Preservative Required	OK
1214479010-A	HNO3 to pH < 2	OK	1214479025-B	HNO3 to pH < 2	OK
1214479010-B	No Preservative Required	OK	1214479026-A	No Preservative Required	OK
1214479010-C	No Preservative Required	OK	1214479026-B	HNO3 to pH < 2	OK
1214479010-D	HCL to pH < 2	OK	1214479027-A	No Preservative Required	OK
1214479011-A	HNO3 to pH < 2	OK	1214479027-B	HNO3 to pH < 2	OK
1214479011-B	No Preservative Required	OK	1214479028-A	No Preservative Required	OK
1214479011-C	No Preservative Required	OK	1214479028-B	HNO3 to pH < 2	OK
1214479011-D	HCL to pH < 2	OK	1214479029-A	No Preservative Required	OK
1214479012-A	HNO3 to pH < 2	OK	1214479029-B	HNO3 to pH < 2	OK
1214479012-B	No Preservative Required	OK	1214479030-A	No Preservative Required	OK
1214479012-C	No Preservative Required	OK	1214479030-B	HNO3 to pH < 2	OK
1214479012-D	HCL to pH < 2	OK	1214479031-A	No Preservative Required	OK
1214479013-A	HNO3 to pH < 2	OK	1214479031-B	HNO3 to pH < 2	OK

<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>	<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>
1214479032-A	No Preservative Required	OK			
1214479032-B	HNO3 to pH < 2	OK			
1214479033-A	No Preservative Required	OK			
1214479033-B	HNO3 to pH < 2	OK			
1214479034-A	No Preservative Required	OK			
1214479034-B	HNO3 to pH < 2	OK			
1214479035-A	No Preservative Required	OK			
1214479035-B	HNO3 to pH < 2	OK			
1214479036-A	No Preservative Required	OK			
1214479036-B	HNO3 to pH < 2	OK			

Container Condition Glossary

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

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

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

DM - The container was received damaged.

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

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

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

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

PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

QN - Insufficient sample quantity provided.