

Laboratory Report of Analysis

To: Kenai Watershed Forum
44129 Sterling Highway
Soldotna, AK 99669
(907)260-5449

Report Number: **1212341**

Client Project: **Kenai River Water Quality**

Dear Branden Bornemann,

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: **Kenai Watershed Forum**
 SGS Project: **1212341**
 Project Name/Site: **Kenai River Water Quality**
 Project Contact: **Branden Bornemann**

Refer to sample receipt form for information on sample condition.

RM22-Soldotna Creek (1212341026) PS

200.7 Total Metals: Ca, Mg, Fe were analyzed by ALS of Kelso, WA.

1212275001MS (1610220) MS

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

1212334001MS (1610222) MS

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

1212341018MS (1610224) MS

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

1212275001MSD (1610221) MSD

4500NO3-F - Nitrate/Nitrite - MSD recovery for Total Nitrate/Nitrite is outside of QC criteria. Refer to LCS for accuracy requirements.

1212334001MSD (1610223) MSD

4500NO3-F - Nitrate/Nitrite - MSD recovery for Total Nitrate/Nitrite is outside of QC criteria. Refer to LCS for accuracy requirements.

1212341018MSD (1610225) MSD

4500NO3-F - Nitrate/Nitrite - MSD recovery for Total Nitrate/Nitrite is outside of QC criteria. Refer to LCS for accuracy requirements.

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

Print Date: 06/11/2021 4:33:47PM

Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. The results apply to the samples as received. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

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

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 DW Chemistry (Provisionally Certified as of 05/27/2021 for Mercury by EPA200.8, Nitrate as N by SM 4500NO3-F and VOCs by EPA 524.2) & 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

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>
RM70- Jim's Landing	1212341001	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM74-Russian River	1212341002	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM79.5-Juneau Creek	1212341003	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM82-Kenai Lake Bridge	1212341004	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM22-Soldotna Creek	1212341005	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM23-Swiftwater	1212341006	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM31-Morgan's Landing	1212341007	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM30-Funny River	1212341008	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM31-Morgan's Landing DUP	1212341009	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM36-Moose River	1212341010	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM40-Bing's Landing	1212341011	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM43-Upstream of Dow Island	1212341012	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM44-Mouth of Killey River	1212341013	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM50-Skilak Lake Outflow	1212341014	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM0-No Name Creek	1212341015	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM0-No Name Creek DUP	1212341016	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM1.5-Kenai City Dock	1212341017	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM6.5-Cunning Hem	1212341018	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM10-Beaver Creek	1212341019	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM10.1-Kenai River	1212341020	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM12.5-Pillars	1212341021	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM18-Poachers Cove	1212341022	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM19-Slikok Creek	1212341023	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM21-Soldotna Bridge	1212341024	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM22-Soldotna Creek Diss	1212341025	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM22-Soldotna Creek	1212341026	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM23-Swiftwater Park Diss	1212341027	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM23-Swiftwater Park	1212341028	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM30-Funny River Diss	1212341029	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM30-Funny River	1212341030	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM31-Morgan's Landing Diss	1212341031	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM31-Morgan's Landing	1212341032	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM36-Moose River Diss	1212341033	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM40-Bing's Landing Diss	1212341034	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM43-Upstream of Dow Island	1212341035	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM44-Mouth of Killey River Dis	1212341036	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM50-Skilak Lake Outlet Diss	1212341037	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM70-Jim's Landing Diss	1212341038	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM74-Russian River Diss	1212341039	05/11/2021	05/12/2021	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>
RM82-Kenai Lake Bridge Diss	1212341040	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM79.5 Juneau Creek Diss	1212341041	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
Rm10.1-Kenai River Diss	1212341042	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM10.1-Kenai River	1212341043	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM12.5-Pillar Diss	1212341044	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM12.5-Pillars	1212341045	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM18-Poachers Cove Diss	1212341046	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM18-Poachers Cove	1212341047	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM19-Slikok Creek Diss	1212341048	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM19-Slikok Creek	1212341049	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM21-Soldotna Bridge Diss	1212341050	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM21-Soldotna Bridge	1212341051	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM0-No Name Creek Dup	1212341052	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM0-No Name Creek DUP Diss	1212341053	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM0-No Name Creek	1212341054	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM0-No Name Creek Diss	1212341055	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM1.5-Kenai City Dock Diss	1212341056	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM1.5-Kenai City Dock	1212341057	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM6.5-Cunningham Park Diss	1212341058	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM6.5-Cunningham Park	1212341059	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM10-Beaver creek Diss	1212341060	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)
RM10-Beaver Creek	1212341061	05/11/2021	05/12/2021	Water (Surface, Eff., Ground)

Method

EP200.8

SM21 4500NO3-F

SM21 4500P-B,E

Method Description

Metals in Drinking Water by ICP-MS DISSO

Nitrate/Nitrite Flow injection Pres.

Total Phosphorus (W)

Detectable Results Summary

Client Sample ID: **RM70- Jim's Landing**

Lab Sample ID: 1212341001

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.745	mg/L

Client Sample ID: **RM74-Russian River**

Lab Sample ID: 1212341002

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	1.12	mg/L

Client Sample ID: **RM79.5-Juneau Creek**

Lab Sample ID: 1212341003

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.869	mg/L
Total Phosphorus	0.0212J	mg/L

Client Sample ID: **RM82-Kenai Lake Bridge**

Lab Sample ID: 1212341004

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.454	mg/L

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

Lab Sample ID: 1212341005

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Phosphorus	0.0804	mg/L

Client Sample ID: **RM23-Swiftwater**

Lab Sample ID: 1212341006

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.239	mg/L
Total Phosphorus	0.0163J	mg/L

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

Lab Sample ID: 1212341007

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.250	mg/L
Total Phosphorus	0.0392J	mg/L

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

Lab Sample ID: 1212341008

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.0746J	mg/L
Total Phosphorus	0.0396J	mg/L

Client Sample ID: **RM31-Morgan's Landing DUP**

Lab Sample ID: 1212341009

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.226	mg/L
Total Phosphorus	0.0174J	mg/L

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

Lab Sample ID: 1212341010

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Phosphorus	0.0391J	mg/L

Client Sample ID: **RM40-Bing's Landing**

Lab Sample ID: 1212341011

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.330	mg/L

Client Sample ID: **RM43-Upstream of Dow Island**

Lab Sample ID: 1212341012

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.360	mg/L
Total Phosphorus	0.0228J	mg/L

Print Date: 06/11/2021 4:33:54PM

SGS North America Inc.

200 West Potter Drive, Anchorage, AK 99518
t 907.562.2343 f 907.561.5301 www.us.sgs.com

Member of SGS Group

Detectable Results Summary

Client Sample ID: **RM44-Mouth of Killey River**

Lab Sample ID: 1212341013

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.603	mg/L
Total Phosphorus	0.0151J	mg/L

Client Sample ID: **RM50-Skilak Lake Outflow**

Lab Sample ID: 1212341014

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.199J	mg/L

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

Lab Sample ID: 1212341015

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.119J	mg/L
Total Phosphorus	0.0416	mg/L

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

Lab Sample ID: 1212341016

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.122J	mg/L
Total Phosphorus	0.0394J	mg/L

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

Lab Sample ID: 1212341017

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.198J	mg/L
Total Phosphorus	0.242	mg/L

Client Sample ID: **RM6.5-Cunning Hem**

Lab Sample ID: 1212341018

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.225	mg/L
Total Phosphorus	0.189	mg/L

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

Lab Sample ID: 1212341019

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.109J	mg/L
Total Phosphorus	0.0843	mg/L

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

Lab Sample ID: 1212341020

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.228	mg/L
Total Phosphorus	0.0141J	mg/L

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

Lab Sample ID: 1212341021

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.259	mg/L
Total Phosphorus	0.0195J	mg/L

Client Sample ID: **RM18-Poachers Cove**

Lab Sample ID: 1212341022

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.319	mg/L
Total Phosphorus	0.0178J	mg/L

Detectable Results Summary

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

Lab Sample ID: 1212341023

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.0930J	mg/L
Total Phosphorus	0.0286J	mg/L

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

Lab Sample ID: 1212341024

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.328	mg/L
Total Phosphorus	0.0472	mg/L

Client Sample ID: **RM22-Soldotna Creek Diss**

Lab Sample ID: 1212341025

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Arsenic	4.86J	ug/L

Client Sample ID: **RM23-Swiftwater Park Diss**

Lab Sample ID: 1212341027

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Copper	0.398J	ug/L
Lead	0.128J	ug/L

Client Sample ID: **RM31-Morgan's Landing Diss**

Lab Sample ID: 1212341031

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Arsenic	2.70J	ug/L
Copper	0.455J	ug/L
Lead	0.114J	ug/L

Client Sample ID: **RM36-Moose River Diss**

Lab Sample ID: 1212341033

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Arsenic	4.88J	ug/L
Copper	0.368J	ug/L
Lead	0.0735J	ug/L

Client Sample ID: **RM40-Bing's Landing Diss**

Lab Sample ID: 1212341034

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Copper	0.545J	ug/L
Lead	0.127J	ug/L

Client Sample ID: **RM43-Upstream of Dow Island**

Lab Sample ID: 1212341035

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Copper	0.959J	ug/L
Lead	0.187J	ug/L

Client Sample ID: **RM44-Mouth of Killey River Dis**

Lab Sample ID: 1212341036

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Copper	0.710J	ug/L
Lead	0.0830J	ug/L

Client Sample ID: **RM70-Jim's Landing Diss**

Lab Sample ID: 1212341038

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Copper	0.348J	ug/L
Lead	0.0763J	ug/L

Detectable Results Summary

Client Sample ID: **RM82-Kenai Lake Bridge Diss**

Lab Sample ID: 1212341040

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Copper	0.603J	ug/L
Lead	0.156J	ug/L
Zinc	4.36J	ug/L

Client Sample ID: **RM79.5 Juneau Creek Diss**

Lab Sample ID: 1212341041

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Copper	0.679J	ug/L
Lead	0.228	ug/L
Zinc	3.12J	ug/L

Client Sample ID: **RM21-Soldotna Bridge Diss**

Lab Sample ID: 1212341050

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Copper	0.599J	ug/L

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

Lab Sample ID: 1212341056

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Arsenic	1.79J	ug/L
Copper	1.72	ug/L

Client Sample ID: **RM10-Beaver creek Diss**

Lab Sample ID: 1212341060

Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Arsenic	2.62J	ug/L

Results of RM70- Jim's Landing

Client Sample ID: **RM70- Jim's Landing**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341001
 Lab Project ID: 1212341

Collection Date: 05/11/21 10:25
 Received Date: 05/12/21 08:16
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.745	0.200	0.0500	mg/L	2		05/15/21 13:09

Batch Information

Analytical Batch: WFI2930
 Analytical Method: SM21 4500NO3-F
 Analyst: EBH
 Analytical Date/Time: 05/15/21 13:09
 Container ID: 1212341001-A

<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 Phosphorus	0.0200 U	0.0400	0.0120	mg/L	1		05/18/21 18:47

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/18/21 18:47
 Container ID: 1212341001-A

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/21 14:53
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Results of RM74-Russian River

Client Sample ID: **RM74-Russian River**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341002
 Lab Project ID: 1212341

Collection Date: 05/11/21 09:34
 Received Date: 05/12/21 08:16
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	1.12	0.200	0.0500	mg/L	2		05/15/21 13:11

Batch Information

Analytical Batch: WFI2930
 Analytical Method: SM21 4500NO3-F
 Analyst: EBH
 Analytical Date/Time: 05/15/21 13:11
 Container ID: 1212341002-A

<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 Phosphorus	0.0200 U	0.0400	0.0120	mg/L	1		05/18/21 18:48

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/18/21 18:48
 Container ID: 1212341002-A

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/21 14:53
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Results of RM79.5-Juneau Creek

Client Sample ID: **RM79.5-Juneau Creek**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341003
 Lab Project ID: 1212341

Collection Date: 05/11/21 08:36
 Received Date: 05/12/21 08:16
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.869	0.200	0.0500	mg/L	2		05/15/21 13:13

Batch Information

Analytical Batch: WFI2930
 Analytical Method: SM21 4500NO3-F
 Analyst: EBH
 Analytical Date/Time: 05/15/21 13:13
 Container ID: 1212341003-A

<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 Phosphorus	0.0212 J	0.0400	0.0120	mg/L	1		05/18/21 18:49

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/18/21 18:49
 Container ID: 1212341003-A

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/21 14:53
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Results of RM82-Kenai Lake Bridge

Client Sample ID: **RM82-Kenai Lake Bridge**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341004
 Lab Project ID: 1212341

Collection Date: 05/11/21 07:56
 Received Date: 05/12/21 08:16
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.454	0.200	0.0500	mg/L	2		05/15/21 13:14

Batch Information

Analytical Batch: WFI2930
 Analytical Method: SM21 4500NO3-F
 Analyst: EBH
 Analytical Date/Time: 05/15/21 13:14
 Container ID: 1212341004-A

<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 Phosphorus	0.0200 U	0.0400	0.0120	mg/L	1		05/18/21 18:50

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/18/21 18:50
 Container ID: 1212341004-A

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/21 14:53
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Results of RM22-Soldotna Creek

Client Sample ID: **RM22-Soldotna Creek**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341005
 Lab Project ID: 1212341

Collection Date: 05/11/21 11:34
 Received Date: 05/12/21 08:16
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.100 U	0.200	0.0500	mg/L	2		05/15/21 13:16

Batch Information

Analytical Batch: WFI2930
 Analytical Method: SM21 4500NO3-F
 Analyst: EBH
 Analytical Date/Time: 05/15/21 13:16
 Container ID: 1212341005-A

<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 Phosphorus	0.0804	0.0400	0.0120	mg/L	1		05/18/21 18:51

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/18/21 18:51
 Container ID: 1212341005-A

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/21 14:53
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Results of RM23-Swiftwater

Client Sample ID: **RM23-Swiftwater**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341006
 Lab Project ID: 1212341

Collection Date: 05/11/21 11:06
 Received Date: 05/12/21 08:16
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.239	0.200	0.0500	mg/L	2		05/15/21 13:18

Batch Information

Analytical Batch: WFI2930
 Analytical Method: SM21 4500NO3-F
 Analyst: EBH
 Analytical Date/Time: 05/15/21 13:18
 Container ID: 1212341006-A

<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 Phosphorus	0.0163 J	0.0400	0.0120	mg/L	1		05/18/21 18:52

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/18/21 18:52
 Container ID: 1212341006-A

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/21 14:53
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Results of RM31-Morgan's Landing

Client Sample ID: **RM31-Morgan's Landing**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341007
 Lab Project ID: 1212341

Collection Date: 05/11/21 10:13
 Received Date: 05/12/21 08:16
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.250	0.200	0.0500	mg/L	2		05/15/21 13:20

Batch Information

Analytical Batch: WFI2930
 Analytical Method: SM21 4500NO3-F
 Analyst: EBH
 Analytical Date/Time: 05/15/21 13:20
 Container ID: 1212341007-A

<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 Phosphorus	0.0392 J	0.0400	0.0120	mg/L	1		05/18/21 18:53

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/18/21 18:53
 Container ID: 1212341007-A

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/21 14:53
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Results of RM30-Funny River

Client Sample ID: **RM30-Funny River**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341008
 Lab Project ID: 1212341

Collection Date: 05/11/21 09:06
 Received Date: 05/12/21 08:16
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.0746 J	0.200	0.0500	mg/L	2		05/15/21 13:27

Batch Information

Analytical Batch: WFI2930
 Analytical Method: SM21 4500NO3-F
 Analyst: EBH
 Analytical Date/Time: 05/15/21 13:27
 Container ID: 1212341008-A

<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 Phosphorus	0.0396 J	0.0400	0.0120	mg/L	1		05/18/21 18:56

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/18/21 18:56
 Container ID: 1212341008-A

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/21 14:53
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Results of RM31-Morgan's Landing DUP

Client Sample ID: **RM31-Morgan's Landing DUP**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341009
 Lab Project ID: 1212341

Collection Date: 05/11/21 10:13
 Received Date: 05/12/21 08:16
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.226	0.200	0.0500	mg/L	2		05/15/21 13:28

Batch Information

Analytical Batch: WFI2930
 Analytical Method: SM21 4500NO3-F
 Analyst: EBH
 Analytical Date/Time: 05/15/21 13:28
 Container ID: 1212341009-A

<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 Phosphorus	0.0174 J	0.0400	0.0120	mg/L	1		05/18/21 18:57

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/18/21 18:57
 Container ID: 1212341009-A

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/21 14:53
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Results of RM36-Moose River

Client Sample ID: **RM36-Moose River**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341010
 Lab Project ID: 1212341

Collection Date: 05/11/21 10:50
 Received Date: 05/12/21 08:16
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.100 U	0.200	0.0500	mg/L	2		05/15/21 13:30

Batch Information

Analytical Batch: WFI2930
 Analytical Method: SM21 4500NO3-F
 Analyst: EBH
 Analytical Date/Time: 05/15/21 13:30
 Container ID: 1212341010-A

<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 Phosphorus	0.0391 J	0.0400	0.0120	mg/L	1		05/18/21 18:57

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/18/21 18:57
 Container ID: 1212341010-A

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/21 14:53
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Results of RM40-Bing's Landing

Client Sample ID: **RM40-Bing's Landing**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341011
 Lab Project ID: 1212341

Collection Date: 05/11/21 09:50
 Received Date: 05/12/21 08:16
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.330	0.200	0.0500	mg/L	2		05/15/21 13:32

Batch Information

Analytical Batch: WFI2930
 Analytical Method: SM21 4500NO3-F
 Analyst: EBH
 Analytical Date/Time: 05/15/21 13:32
 Container ID: 1212341011-A

<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 Phosphorus	0.0200 U	0.0400	0.0120	mg/L	1		05/18/21 18:58

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/18/21 18:58
 Container ID: 1212341011-A

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/21 14:53
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Results of RM43-Upstream of Dow Island

Client Sample ID: **RM43-Upstream of Dow Island**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341012
 Lab Project ID: 1212341

Collection Date: 05/11/21 09:34
 Received Date: 05/12/21 08:16
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.360	0.200	0.0500	mg/L	2		05/15/21 13:34

Batch Information

Analytical Batch: WFI2930
 Analytical Method: SM21 4500NO3-F
 Analyst: EBH
 Analytical Date/Time: 05/15/21 13:34
 Container ID: 1212341012-A

<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 Phosphorus	0.0228 J	0.0400	0.0120	mg/L	1		05/18/21 18:59

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/18/21 18:59
 Container ID: 1212341012-A

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/21 14:53
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Results of RM44-Mouth of Killey River

Client Sample ID: **RM44-Mouth of Killey River**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341013
 Lab Project ID: 1212341

Collection Date: 05/11/21 08:57
 Received Date: 05/12/21 08:16
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.603	0.200	0.0500	mg/L	2		05/15/21 13:35

Batch Information

Analytical Batch: WFI2930
 Analytical Method: SM21 4500NO3-F
 Analyst: EBH
 Analytical Date/Time: 05/15/21 13:35
 Container ID: 1212341013-A

<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 Phosphorus	0.0151 J	0.0400	0.0120	mg/L	1		05/18/21 19:00

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/18/21 19:00
 Container ID: 1212341013-A

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/21 14:53
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Results of RM50-Skilak Lake Outflow

Client Sample ID: **RM50-Skilak Lake Outflow**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341014
 Lab Project ID: 1212341

Collection Date: 05/11/21 07:21
 Received Date: 05/12/21 08:16
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.199 J	0.200	0.0500	mg/L	2		05/15/21 13:37

Batch Information

Analytical Batch: WFI2930
 Analytical Method: SM21 4500NO3-F
 Analyst: EBH
 Analytical Date/Time: 05/15/21 13:37
 Container ID: 1212341014-A

<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 Phosphorus	0.0200 U	0.0400	0.0120	mg/L	1		05/18/21 19:04

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/18/21 19:04
 Container ID: 1212341014-A

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/21 14:53
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Results of RM0-No Name Creek

Client Sample ID: **RM0-No Name Creek**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341015
 Lab Project ID: 1212341

Collection Date: 05/11/21 10:10
 Received Date: 05/12/21 08:16
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.119 J	0.200	0.0500	mg/L	2		05/15/21 13:39

Batch Information

Analytical Batch: WFI2930
 Analytical Method: SM21 4500NO3-F
 Analyst: EBH
 Analytical Date/Time: 05/15/21 13:39
 Container ID: 1212341015-A

<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 Phosphorus	0.0416	0.0400	0.0120	mg/L	1		05/18/21 19:09

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/18/21 19:09
 Container ID: 1212341015-A

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/21 14:53
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Results of RM0-No Name Creek DUP

Client Sample ID: **RM0-No Name Creek DUP**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341016
 Lab Project ID: 1212341

Collection Date: 05/11/21 10:18
 Received Date: 05/12/21 08:16
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.122 J	0.200	0.0500	mg/L	2		05/15/21 13:41

Batch Information

Analytical Batch: WFI2930
 Analytical Method: SM21 4500NO3-F
 Analyst: EBH
 Analytical Date/Time: 05/15/21 13:41
 Container ID: 1212341016-A

<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 Phosphorus	0.0394 J	0.0400	0.0120	mg/L	1		05/18/21 19:10

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/18/21 19:10
 Container ID: 1212341016-A

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/21 14:53
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Results of RM1.5-Kenai City Dock

Client Sample ID: **RM1.5-Kenai City Dock**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341017
 Lab Project ID: 1212341

Collection Date: 05/11/21 09:29
 Received Date: 05/12/21 08:16
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.198 J	0.200	0.0500	mg/L	2		05/15/21 13:42

Batch Information

Analytical Batch: WFI2930
 Analytical Method: SM21 4500NO3-F
 Analyst: EBH
 Analytical Date/Time: 05/15/21 13:42
 Container ID: 1212341017-A

<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 Phosphorus	0.242	0.0400	0.0120	mg/L	1		05/18/21 19:11

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/18/21 19:11
 Container ID: 1212341017-A

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/21 14:53
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Results of RM6.5-Cunning Hem

Client Sample ID: **RM6.5-Cunning Hem**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341018
 Lab Project ID: 1212341

Collection Date: 05/11/21 09:15
 Received Date: 05/12/21 08:16
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.225	0.200	0.0500	mg/L	2		05/15/21 13:49

Batch Information

Analytical Batch: WFI2930
 Analytical Method: SM21 4500NO3-F
 Analyst: EBH
 Analytical Date/Time: 05/15/21 13:49
 Container ID: 1212341018-A

<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 Phosphorus	0.189	0.0400	0.0120	mg/L	1		05/18/21 19:12

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/18/21 19:12
 Container ID: 1212341018-A

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/21 14:53
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Results of RM10-Beaver Creek

Client Sample ID: **RM10-Beaver Creek**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341019
 Lab Project ID: 1212341

Collection Date: 05/11/21 10:05
 Received Date: 05/12/21 08:16
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.109 J	0.200	0.0500	mg/L	2		05/15/21 13:55

Batch Information

Analytical Batch: WFI2930
 Analytical Method: SM21 4500NO3-F
 Analyst: EBH
 Analytical Date/Time: 05/15/21 13:55
 Container ID: 1212341019-A

<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 Phosphorus	0.0843	0.0400	0.0120	mg/L	1		05/18/21 19:13

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/18/21 19:13
 Container ID: 1212341019-A

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/21 14:53
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Results of RM10.1-Kenai River

Client Sample ID: **RM10.1-Kenai River**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341020
 Lab Project ID: 1212341

Collection Date: 05/11/21 10:30
 Received Date: 05/12/21 08:16
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.228	0.200	0.0500	mg/L	2		05/15/21 13:56

Batch Information

Analytical Batch: WFI2930
 Analytical Method: SM21 4500NO3-F
 Analyst: EBH
 Analytical Date/Time: 05/15/21 13:56
 Container ID: 1212341020-A

<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 Phosphorus	0.0141 J	0.0400	0.0120	mg/L	1		05/18/21 19:14

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/18/21 19:14
 Container ID: 1212341020-A

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/21 14:53
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Results of RM12.5-Pillars

Client Sample ID: **RM12.5-Pillars**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341021
 Lab Project ID: 1212341

Collection Date: 05/11/21 10:50
 Received Date: 05/12/21 08:16
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.259	0.200	0.0500	mg/L	2		05/15/21 13:58

Batch Information

Analytical Batch: WFI2930
 Analytical Method: SM21 4500NO3-F
 Analyst: EBH
 Analytical Date/Time: 05/15/21 13:58
 Container ID: 1212341021-A

<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 Phosphorus	0.0195 J	0.0400	0.0120	mg/L	1		05/18/21 19:15

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/18/21 19:15
 Container ID: 1212341021-A

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/21 14:53
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Results of RM18-Poachers Cove

Client Sample ID: **RM18-Poachers Cove**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341022
 Lab Project ID: 1212341

Collection Date: 05/11/21 11:25
 Received Date: 05/12/21 08:16
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.319	0.200	0.0500	mg/L	2		05/15/21 14:00

Batch Information

Analytical Batch: WFI2930
 Analytical Method: SM21 4500NO3-F
 Analyst: EBH
 Analytical Date/Time: 05/15/21 14:00
 Container ID: 1212341022-A

<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 Phosphorus	0.0178 J	0.0400	0.0120	mg/L	1		05/18/21 19:15

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/18/21 19:15
 Container ID: 1212341022-A

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/21 14:53
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Results of RM19-Slikok Creek

Client Sample ID: **RM19-Slikok Creek**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341023
 Lab Project ID: 1212341

Collection Date: 05/11/21 12:05
 Received Date: 05/12/21 08:16
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.0930 J	0.200	0.0500	mg/L	2		05/15/21 14:02

Batch Information

Analytical Batch: WFI2930
 Analytical Method: SM21 4500NO3-F
 Analyst: EBH
 Analytical Date/Time: 05/15/21 14:02
 Container ID: 1212341023-A

<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 Phosphorus	0.0286 J	0.0400	0.0120	mg/L	1		05/18/21 19:18

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/18/21 19:18
 Container ID: 1212341023-A

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/21 14:53
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Results of RM21-Soldotna Bridge

Client Sample ID: **RM21-Soldotna Bridge**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341024
 Lab Project ID: 1212341

Collection Date: 05/11/21 12:05
 Received Date: 05/12/21 08:16
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.328	0.200	0.0500	mg/L	2		05/15/21 14:03

Batch Information

Analytical Batch: WFI2930
 Analytical Method: SM21 4500NO3-F
 Analyst: EBH
 Analytical Date/Time: 05/15/21 14:03
 Container ID: 1212341024-A

<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 Phosphorus	0.0472	0.0400	0.0120	mg/L	1		05/18/21 19:19

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/18/21 19:19
 Container ID: 1212341024-A

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/21 14:53
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Results of RM22-Soldotna Creek Diss

Client Sample ID: **RM22-Soldotna Creek Diss**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341025
 Lab Project ID: 1212341

Collection Date: 05/11/21 11:33
 Received Date: 05/12/21 08:16
 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>
Arsenic	4.86 J	5.00	1.50	ug/L	1		05/21/21 07:21
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/21/21 07:21
Chromium	2.50 U	5.00	2.50	ug/L	1		05/21/21 07:21
Copper	0.500 U	1.00	0.310	ug/L	1		05/21/21 07:21
Lead	0.100 U	0.200	0.0700	ug/L	1		05/21/21 07:21
Zinc	5.00 U	10.0	3.10	ug/L	1		05/21/21 07:21

Batch Information

Analytical Batch: MMS11107
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 05/21/21 07:21
 Container ID: 1212341025-A

Prep Batch: MXX34173
 Prep Method: E200.2
 Prep Date/Time: 05/14/21 09:40
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM23-Swiftwater Park Diss

Client Sample ID: **RM23-Swiftwater Park Diss**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341027
 Lab Project ID: 1212341

Collection Date: 05/11/21 11:05
 Received Date: 05/12/21 08:16
 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>
Arsenic	2.50 U	5.00	1.50	ug/L	1		05/21/21 07:33
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/21/21 07:33
Chromium	2.50 U	5.00	2.50	ug/L	1		05/21/21 07:33
Copper	0.398 J	1.00	0.310	ug/L	1		05/21/21 07:33
Lead	0.128 J	0.200	0.0700	ug/L	1		05/21/21 07:33
Zinc	5.00 U	10.0	3.10	ug/L	1		05/21/21 07:33

Batch Information

Analytical Batch: MMS11107
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 05/21/21 07:33
 Container ID: 1212341027-A

Prep Batch: MXX34173
 Prep Method: E200.2
 Prep Date/Time: 05/14/21 09:40
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM30-Funny River Diss

Client Sample ID: **RM30-Funny River Diss**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341029
 Lab Project ID: 1212341

Collection Date: 05/11/21 09:06
 Received Date: 05/12/21 08:16
 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>
Arsenic	2.50 U	5.00	1.50	ug/L	1		05/21/21 07:36
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/21/21 07:36
Chromium	2.50 U	5.00	2.50	ug/L	1		05/21/21 07:36
Copper	0.500 U	1.00	0.310	ug/L	1		05/21/21 07:36
Lead	0.100 U	0.200	0.0700	ug/L	1		05/21/21 07:36
Zinc	5.00 U	10.0	3.10	ug/L	1		05/21/21 07:36

Batch Information

Analytical Batch: MMS11107
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 05/21/21 07:36
 Container ID: 1212341029-A

Prep Batch: MXX34173
 Prep Method: E200.2
 Prep Date/Time: 05/14/21 09:40
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM31-Morgan's Landing Diss

Client Sample ID: **RM31-Morgan's Landing Diss**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341031
 Lab Project ID: 1212341

Collection Date: 05/11/21 10:13
 Received Date: 05/12/21 08:16
 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>
Arsenic	2.70 J	5.00	1.50	ug/L	1		05/21/21 07:39
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/21/21 07:39
Chromium	2.50 U	5.00	2.50	ug/L	1		05/21/21 07:39
Copper	0.455 J	1.00	0.310	ug/L	1		05/21/21 07:39
Lead	0.114 J	0.200	0.0700	ug/L	1		05/21/21 07:39
Zinc	5.00 U	10.0	3.10	ug/L	1		05/21/21 07:39

Batch Information

Analytical Batch: MMS11107
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 05/21/21 07:39
 Container ID: 1212341031-A

Prep Batch: MXX34173
 Prep Method: E200.2
 Prep Date/Time: 05/14/21 09:40
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM36-Moose River Diss

Client Sample ID: **RM36-Moose River Diss**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341033
 Lab Project ID: 1212341

Collection Date: 05/11/21 10:50
 Received Date: 05/12/21 08:16
 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>
Arsenic	4.88 J	5.00	1.50	ug/L	1		05/21/21 08:57
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/21/21 08:57
Chromium	2.50 U	5.00	2.50	ug/L	1		05/21/21 08:57
Copper	0.368 J	1.00	0.310	ug/L	1		05/21/21 08:57
Lead	0.0735 J	0.200	0.0700	ug/L	1		05/21/21 08:57
Zinc	5.00 U	10.0	3.10	ug/L	1		05/21/21 08:57

Batch Information

Analytical Batch: MMS11107
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 05/21/21 08:57
 Container ID: 1212341033-A

Prep Batch: MXX34173
 Prep Method: E200.2
 Prep Date/Time: 05/14/21 09:40
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM40-Bing's Landing Diss

Client Sample ID: **RM40-Bing's Landing Diss**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341034
 Lab Project ID: 1212341

Collection Date: 05/11/21 09:58
 Received Date: 05/12/21 08:16
 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>
Arsenic	2.50 U	5.00	1.50	ug/L	1		05/21/21 09:00
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/21/21 09:00
Chromium	2.50 U	5.00	2.50	ug/L	1		05/21/21 09:00
Copper	0.545 J	1.00	0.310	ug/L	1		05/21/21 09:00
Lead	0.127 J	0.200	0.0700	ug/L	1		05/21/21 09:00
Zinc	5.00 U	10.0	3.10	ug/L	1		05/21/21 09:00

Batch Information

Analytical Batch: MMS11107
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 05/21/21 09:00
 Container ID: 1212341034-A

Prep Batch: MXX34173
 Prep Method: E200.2
 Prep Date/Time: 05/14/21 09:40
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM43-Upstream of Dow Island

Client Sample ID: **RM43-Upstream of Dow Island**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341035
 Lab Project ID: 1212341

Collection Date: 05/11/21 09:34
 Received Date: 05/12/21 08:16
 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>
Arsenic	2.50 U	5.00	1.50	ug/L	1		05/21/21 09:03
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/21/21 09:03
Chromium	2.50 U	5.00	2.50	ug/L	1		05/21/21 09:03
Copper	0.959 J	1.00	0.310	ug/L	1		05/21/21 09:03
Lead	0.187 J	0.200	0.0700	ug/L	1		05/21/21 09:03
Zinc	5.00 U	10.0	3.10	ug/L	1		05/21/21 09:03

Batch Information

Analytical Batch: MMS11107
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 05/21/21 09:03
 Container ID: 1212341035-A

Prep Batch: MXX34173
 Prep Method: E200.2
 Prep Date/Time: 05/14/21 09:40
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM44-Mouth of Killey River Dis

Client Sample ID: **RM44-Mouth of Killey River Dis**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341036
 Lab Project ID: 1212341

Collection Date: 05/11/21 08:57
 Received Date: 05/12/21 08:16
 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>
Arsenic	2.50 U	5.00	1.50	ug/L	1		05/21/21 09:06
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/21/21 09:06
Chromium	2.50 U	5.00	2.50	ug/L	1		05/21/21 09:06
Copper	0.710 J	1.00	0.310	ug/L	1		05/21/21 09:06
Lead	0.0830 J	0.200	0.0700	ug/L	1		05/21/21 09:06
Zinc	5.00 U	10.0	3.10	ug/L	1		05/21/21 09:06

Batch Information

Analytical Batch: MMS11107
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 05/21/21 09:06
 Container ID: 1212341036-A

Prep Batch: MXX34173
 Prep Method: E200.2
 Prep Date/Time: 05/14/21 09:40
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM50-Skilak Lake Outlet Diss

Client Sample ID: **RM50-Skilak Lake Outlet Diss**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341037
 Lab Project ID: 1212341

Collection Date: 05/11/21 07:22
 Received Date: 05/12/21 08:16
 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>
Arsenic	2.50 U	5.00	1.50	ug/L	1		05/21/21 09:09
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/21/21 09:09
Chromium	2.50 U	5.00	2.50	ug/L	1		05/21/21 09:09
Copper	0.500 U	1.00	0.310	ug/L	1		05/21/21 09:09
Lead	0.100 U	0.200	0.0700	ug/L	1		05/21/21 09:09
Zinc	5.00 U	10.0	3.10	ug/L	1		05/21/21 09:09

Batch Information

Analytical Batch: MMS11107
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 05/21/21 09:09
 Container ID: 1212341037-A

Prep Batch: MXX34173
 Prep Method: E200.2
 Prep Date/Time: 05/14/21 09:40
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM70-Jim's Landing Diss

Client Sample ID: **RM70-Jim's Landing Diss**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341038
 Lab Project ID: 1212341

Collection Date: 05/11/21 10:25
 Received Date: 05/12/21 08:16
 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>
Arsenic	2.50 U	5.00	1.50	ug/L	1		05/21/21 09:13
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/21/21 09:13
Chromium	2.50 U	5.00	2.50	ug/L	1		05/21/21 09:13
Copper	0.348 J	1.00	0.310	ug/L	1		05/21/21 09:13
Lead	0.0763 J	0.200	0.0700	ug/L	1		05/21/21 09:13
Zinc	5.00 U	10.0	3.10	ug/L	1		05/21/21 09:13

Batch Information

Analytical Batch: MMS11107
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 05/21/21 09:13
 Container ID: 1212341038-A

Prep Batch: MXX34173
 Prep Method: E200.2
 Prep Date/Time: 05/14/21 09:40
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM74-Russian River Diss

Client Sample ID: **RM74-Russian River Diss**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341039
 Lab Project ID: 1212341

Collection Date: 05/11/21 09:34
 Received Date: 05/12/21 08:16
 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>
Arsenic	2.50 U	5.00	1.50	ug/L	1		05/21/21 07:27
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/21/21 07:27
Chromium	2.50 U	5.00	2.50	ug/L	1		05/21/21 07:27
Copper	0.500 U	1.00	0.310	ug/L	1		05/21/21 07:27
Lead	0.100 U	0.200	0.0700	ug/L	1		05/21/21 07:27
Zinc	5.00 U	10.0	3.10	ug/L	1		05/21/21 07:27

Batch Information

Analytical Batch: MMS11107
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 05/21/21 07:27
 Container ID: 1212341039-A

Prep Batch: MXX34173
 Prep Method: E200.2
 Prep Date/Time: 05/14/21 09:40
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM82-Kenai Lake Bridge Diss

Client Sample ID: **RM82-Kenai Lake Bridge Diss**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341040
 Lab Project ID: 1212341

Collection Date: 05/11/21 07:56
 Received Date: 05/12/21 08:16
 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>
Arsenic	2.50 U	5.00	1.50	ug/L	1		05/21/21 09:16
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/21/21 09:16
Chromium	2.50 U	5.00	2.50	ug/L	1		05/21/21 09:16
Copper	0.603 J	1.00	0.310	ug/L	1		05/21/21 09:16
Lead	0.156 J	0.200	0.0700	ug/L	1		05/21/21 09:16
Zinc	4.36 J	10.0	3.10	ug/L	1		05/21/21 09:16

Batch Information

Analytical Batch: MMS11107
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 05/21/21 09:16
 Container ID: 1212341040-A

Prep Batch: MXX34173
 Prep Method: E200.2
 Prep Date/Time: 05/14/21 09:40
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM79.5 Juneau Creek Diss

Client Sample ID: **RM79.5 Juneau Creek Diss**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341041
 Lab Project ID: 1212341

Collection Date: 05/11/21 08:36
 Received Date: 05/12/21 08:16
 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>
Arsenic	2.50 U	5.00	1.50	ug/L	1		05/21/21 09:19
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/21/21 09:19
Chromium	2.50 U	5.00	2.50	ug/L	1		05/21/21 09:19
Copper	0.679 J	1.00	0.310	ug/L	1		05/21/21 09:19
Lead	0.228	0.200	0.0700	ug/L	1		05/21/21 09:19
Zinc	3.12 J	10.0	3.10	ug/L	1		05/21/21 09:19

Batch Information

Analytical Batch: MMS11107
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 05/21/21 09:19
 Container ID: 1212341041-A

Prep Batch: MXX34173
 Prep Method: E200.2
 Prep Date/Time: 05/14/21 09:40
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of Rm10.1-Kenai River Diss

Client Sample ID: **Rm10.1-Kenai River Diss**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341042
 Lab Project ID: 1212341

Collection Date: 05/11/21 10:30
 Received Date: 05/12/21 08:16
 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>
Arsenic	2.50 U	5.00	1.50	ug/L	1		05/21/21 09:22
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/21/21 09:22
Chromium	2.50 U	5.00	2.50	ug/L	1		05/21/21 09:22
Copper	0.500 U	1.00	0.310	ug/L	1		05/21/21 09:22
Lead	0.100 U	0.200	0.0700	ug/L	1		05/21/21 09:22
Zinc	5.00 U	10.0	3.10	ug/L	1		05/21/21 09:22

Batch Information

Analytical Batch: MMS11107
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 05/21/21 09:22
 Container ID: 1212341042-A

Prep Batch: MXX34173
 Prep Method: E200.2
 Prep Date/Time: 05/14/21 09:40
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM12.5-Pillar Diss

Client Sample ID: **RM12.5-Pillar Diss**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341044
 Lab Project ID: 1212341

Collection Date: 05/11/21 10:50
 Received Date: 05/12/21 08:16
 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>
Arsenic	2.50 U	5.00	1.50	ug/L	1		05/21/21 09:25
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/21/21 09:25
Chromium	2.50 U	5.00	2.50	ug/L	1		05/21/21 09:25
Copper	0.500 U	1.00	0.310	ug/L	1		05/21/21 09:25
Lead	0.100 U	0.200	0.0700	ug/L	1		05/21/21 09:25
Zinc	5.00 U	10.0	3.10	ug/L	1		05/21/21 09:25

Batch Information

Analytical Batch: MMS11107
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 05/21/21 09:25
 Container ID: 1212341044-A

Prep Batch: MXX34173
 Prep Method: E200.2
 Prep Date/Time: 05/14/21 09:40
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM18-Poachers Cove Diss

Client Sample ID: **RM18-Poachers Cove Diss**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341046
 Lab Project ID: 1212341

Collection Date: 05/11/21 11:25
 Received Date: 05/12/21 08:16
 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>
Arsenic	2.50 U	5.00	1.50	ug/L	1		05/21/21 09:34
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/21/21 09:34
Chromium	2.50 U	5.00	2.50	ug/L	1		05/21/21 09:34
Copper	0.500 U	1.00	0.310	ug/L	1		05/21/21 09:34
Lead	0.100 U	0.200	0.0700	ug/L	1		05/21/21 09:34
Zinc	5.00 U	10.0	3.10	ug/L	1		05/21/21 09:34

Batch Information

Analytical Batch: MMS11107
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 05/21/21 09:34
 Container ID: 1212341046-A

Prep Batch: MXX34173
 Prep Method: E200.2
 Prep Date/Time: 05/14/21 09:40
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM19-Slikok Creek Diss

Client Sample ID: **RM19-Slikok Creek Diss**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341048
 Lab Project ID: 1212341

Collection Date: 05/11/21 12:09
 Received Date: 05/12/21 08:16
 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>
Arsenic	2.50 U	5.00	1.50	ug/L	1		05/21/21 09:37
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/21/21 09:37
Chromium	2.50 U	5.00	2.50	ug/L	1		05/21/21 09:37
Copper	0.500 U	1.00	0.310	ug/L	1		05/21/21 09:37
Lead	0.100 U	0.200	0.0700	ug/L	1		05/21/21 09:37
Zinc	5.00 U	10.0	3.10	ug/L	1		05/21/21 09:37

Batch Information

Analytical Batch: MMS11107
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 05/21/21 09:37
 Container ID: 1212341048-A

Prep Batch: MXX34173
 Prep Method: E200.2
 Prep Date/Time: 05/14/21 09:40
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM21-Soldotna Bridge Diss

Client Sample ID: **RM21-Soldotna Bridge Diss**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341050
 Lab Project ID: 1212341

Collection Date: 05/11/21 10:02
 Received Date: 05/12/21 08:16
 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>
Arsenic	2.50 U	5.00	1.50	ug/L	1		05/21/21 09:40
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/21/21 09:40
Chromium	2.50 U	5.00	2.50	ug/L	1		05/21/21 09:40
Copper	0.599 J	1.00	0.310	ug/L	1		05/21/21 09:40
Lead	0.100 U	0.200	0.0700	ug/L	1		05/21/21 09:40
Zinc	5.00 U	10.0	3.10	ug/L	1		05/21/21 09:40

Batch Information

Analytical Batch: MMS11107
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 05/21/21 09:40
 Container ID: 1212341050-A

Prep Batch: MXX34173
 Prep Method: E200.2
 Prep Date/Time: 05/14/21 09:40
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM0-No Name Creek DUP Diss

Client Sample ID: **RM0-No Name Creek DUP Diss**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341053
 Lab Project ID: 1212341

Collection Date: 05/11/21 10:20
 Received Date: 05/12/21 08:16
 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>
Arsenic	2.50 U	5.00	1.50	ug/L	1		05/21/21 09:43
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/21/21 09:43
Chromium	2.50 U	5.00	2.50	ug/L	1		05/21/21 09:43
Copper	0.500 U	1.00	0.310	ug/L	1		05/21/21 09:43
Lead	0.100 U	0.200	0.0700	ug/L	1		05/21/21 09:43
Zinc	5.00 U	10.0	3.10	ug/L	1		05/21/21 09:43

Batch Information

Analytical Batch: MMS11107
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 05/21/21 09:43
 Container ID: 1212341053-A

Prep Batch: MXX34173
 Prep Method: E200.2
 Prep Date/Time: 05/14/21 09:40
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM0-No Name Creek Diss

Client Sample ID: **RM0-No Name Creek Diss**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341055
 Lab Project ID: 1212341

Collection Date: 05/11/21 10:11
 Received Date: 05/12/21 08:16
 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>
Arsenic	2.50 U	5.00	1.50	ug/L	1		05/21/21 09:46
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/21/21 09:46
Chromium	2.50 U	5.00	2.50	ug/L	1		05/21/21 09:46
Copper	0.500 U	1.00	0.310	ug/L	1		05/21/21 09:46
Lead	0.100 U	0.200	0.0700	ug/L	1		05/21/21 09:46
Zinc	5.00 U	10.0	3.10	ug/L	1		05/21/21 09:46

Batch Information

Analytical Batch: MMS11107
 Analytical Method: EP200.8
 Analyst: DMM
 Analytical Date/Time: 05/21/21 09:46
 Container ID: 1212341055-A

Prep Batch: MXX34173
 Prep Method: E200.2
 Prep Date/Time: 05/14/21 09:40
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM1.5-Kenai City Dock Diss

Client Sample ID: **RM1.5-Kenai City Dock Diss**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341056
 Lab Project ID: 1212341

Collection Date: 05/11/21 09:30
 Received Date: 05/12/21 08:16
 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>
Arsenic	1.79 J	5.00	1.50	ug/L	1		05/21/21 11:26
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/21/21 11:26
Chromium	2.50 U	5.00	2.50	ug/L	1		05/21/21 11:26
Copper	1.72	1.00	0.310	ug/L	1		05/21/21 11:26
Lead	0.100 U	0.200	0.0700	ug/L	1		05/21/21 11:26
Zinc	5.00 U	10.0	3.10	ug/L	1		05/21/21 11:26

Batch Information

Analytical Batch: MMS11107
 Analytical Method: EP200.8
 Analyst: ACF
 Analytical Date/Time: 05/21/21 11:26
 Container ID: 1212341056-A

Prep Batch: MXX34174
 Prep Method: E200.2
 Prep Date/Time: 05/14/21 10:30
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM6.5-Cunningham Park Diss

Client Sample ID: **RM6.5-Cunningham Park Diss**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341058
 Lab Project ID: 1212341

Collection Date: 05/11/21 09:15
 Received Date: 05/12/21 08:16
 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>
Arsenic	2.50 U	5.00	1.50	ug/L	1		05/21/21 11:35
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/21/21 11:35
Chromium	2.50 U	5.00	2.50	ug/L	1		05/21/21 11:35
Copper	0.500 U	1.00	0.310	ug/L	1		05/21/21 11:35
Lead	0.100 U	0.200	0.0700	ug/L	1		05/21/21 11:35
Zinc	5.00 U	10.0	3.10	ug/L	1		05/21/21 11:35

Batch Information

Analytical Batch: MMS11107
 Analytical Method: EP200.8
 Analyst: ACF
 Analytical Date/Time: 05/21/21 11:35
 Container ID: 1212341058-A

Prep Batch: MXX34174
 Prep Method: E200.2
 Prep Date/Time: 05/14/21 10:30
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of RM10-Beaver creek Diss

Client Sample ID: **RM10-Beaver creek Diss**
 Client Project ID: **Kenai River Water Quality**
 Lab Sample ID: 1212341060
 Lab Project ID: 1212341

Collection Date: 05/11/21 10:05
 Received Date: 05/12/21 08:16
 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>
Arsenic	2.62 J	5.00	1.50	ug/L	1		05/21/21 11:38
Cadmium	0.250 U	0.500	0.150	ug/L	1		05/21/21 11:38
Chromium	2.50 U	5.00	2.50	ug/L	1		05/21/21 11:38
Copper	0.500 U	1.00	0.310	ug/L	1		05/21/21 11:38
Lead	0.100 U	0.200	0.0700	ug/L	1		05/21/21 11:38
Zinc	5.00 U	10.0	3.10	ug/L	1		05/21/21 11:38

Batch Information

Analytical Batch: MMS11107
 Analytical Method: EP200.8
 Analyst: ACF
 Analytical Date/Time: 05/21/21 11:38
 Container ID: 1212341060-A

Prep Batch: MXX34174
 Prep Method: E200.2
 Prep Date/Time: 05/14/21 10:30
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Method Blank

Blank ID: MB for HBN 1819376 [MXX/34173]
Blank Lab ID: 1610041

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1212341025, 1212341027, 1212341029, 1212341031, 1212341033, 1212341034, 1212341035, 1212341036, 1212341037, 1212341038, 1212341039, 1212341040, 1212341041, 1212341042, 1212341044, 1212341046, 1212341048, 1212341050, 1212341053, 1212341055

Results by EP200.8

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Arsenic	2.50U	5.00	1.50	ug/L
Cadmium	0.250U	0.500	0.150	ug/L
Chromium	2.50U	5.00	2.50	ug/L
Copper	0.500U	1.00	0.310	ug/L
Lead	0.100U	0.200	0.0700	ug/L
Zinc	5.00U	10.0	3.10	ug/L

Batch Information

Analytical Batch: MMS11107
Analytical Method: EP200.8
Instrument: Perkin Elmer Nexlon P5
Analyst: DMM
Analytical Date/Time: 5/21/2021 7:12:17AM

Prep Batch: MXX34173
Prep Method: E200.2
Prep Date/Time: 5/14/2021 9:40:09AM
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1212341 [MXX34173]

Blank Spike Lab ID: 1610042

Date Analyzed: 05/21/2021 07:15

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1212341025, 1212341027, 1212341029, 1212341031, 1212341033, 1212341034, 1212341035, 1212341036, 1212341037, 1212341038, 1212341039, 1212341040, 1212341041, 1212341042, 1212341044, 1212341046, 1212341048, 1212341050, 1212341053, 1212341055

Results by EP200.8

Blank Spike (ug/L)				
Parameter	Spike	Result	Rec (%)	CL
Arsenic	1000	1030	103	(85-115)
Cadmium	100	104	104	(85-115)
Chromium	400	417	104	(85-115)
Copper	1000	1070	107	(85-115)
Lead	1000	1050	105	(85-115)
Zinc	1000	1070	107	(85-115)

Batch Information

Analytical Batch: MMS11107

Analytical Method: EP200.8

Instrument: Perkin Elmer Nexlon P5

Analyst: DMM

Prep Batch: MXX34173

Prep Method: E200.2

Prep Date/Time: 05/14/2021 09:40

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

Dupe Init Wt./Vol.: Extract Vol:

Matrix Spike Summary

Original Sample ID: 1212341025
MS Sample ID: 1610044 MS
MSD Sample ID:

Analysis Date: 05/21/2021 7:21
Analysis Date: 05/21/2021 7:24
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1212341025, 1212341027, 1212341029, 1212341031, 1212341033, 1212341034, 1212341035,
1212341036, 1212341037, 1212341038, 1212341039

Results by EP200.8

Parameter	Sample	Matrix Spike (ug/L)			Spike Duplicate (ug/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Arsenic	4.86J	1000	1040	104				70-130		
Cadmium	0.250U	100	105	105				70-130		
Chromium	2.50U	400	411	103				70-130		
Copper	0.500U	1000	1070	107				70-130		
Lead	0.100U	1000	1040	104				70-130		
Zinc	5.00U	1000	1070	107				70-130		

Batch Information

Analytical Batch: MMS11107
Analytical Method: EP200.8
Instrument: Perkin Elmer Nexlon P5
Analyst: DMM
Analytical Date/Time: 5/21/2021 7:24:25AM

Prep Batch: MXX34173
Prep Method: DW Digest for Metals on ICP-MS
Prep Date/Time: 5/14/2021 9:40:09AM
Prep Initial Wt./Vol.: 20.00mL
Prep Extract Vol: 50.00mL

Print Date: 06/11/2021 4:34:05PM

Matrix Spike Summary

Original Sample ID: 1212341040
MS Sample ID: 1610045 MS
MSD Sample ID:

Analysis Date: 05/21/2021 9:16
Analysis Date: 05/21/2021 7:30
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1212341027, 1212341029, 1212341031, 1212341033, 1212341034, 1212341035, 1212341036, 1212341037, 1212341038, 1212341039, 1212341040, 1212341041, 1212341042, 1212341044, 1212341046, 1212341048, 1212341050, 1212341053, 1212341055

Results by EP200.8

Parameter	Sample	Matrix Spike (ug/L)			Spike Duplicate (ug/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Arsenic	2.50U	1000	1030	103				70-130		
Cadmium	0.250U	100	103	103				70-130		
Chromium	2.50U	400	400	100				70-130		
Copper	0.603J	1000	1050	105				70-130		
Lead	0.156J	1000	1050	105				70-130		
Zinc	4.36J	1000	1050	105				70-130		

Batch Information

Analytical Batch: MMS11107
Analytical Method: EP200.8
Instrument: Perkin Elmer Nexlon P5
Analyst: DMM
Analytical Date/Time: 5/21/2021 7:30:28AM

Prep Batch: MXX34173
Prep Method: DW Digest for Metals on ICP-MS
Prep Date/Time: 5/14/2021 9:40:09AM
Prep Initial Wt./Vol.: 20.00mL
Prep Extract Vol: 50.00mL

Print Date: 06/11/2021 4:34:05PM

Method Blank

Blank ID: MB for HBN 1819377 [MXX/34174]
Blank Lab ID: 1610046

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1212341056, 1212341058, 1212341060

Results by EP200.8

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Arsenic	2.50U	5.00	1.50	ug/L
Cadmium	0.250U	0.500	0.150	ug/L
Chromium	2.50U	5.00	2.50	ug/L
Copper	0.500U	1.00	0.310	ug/L
Lead	0.100U	0.200	0.0700	ug/L
Zinc	5.00U	10.0	3.10	ug/L

Batch Information

Analytical Batch: MMS11107
Analytical Method: EP200.8
Instrument: Perkin Elmer Nexlon P5
Analyst: ACF
Analytical Date/Time: 5/21/2021 10:58:59AM

Prep Batch: MXX34174
Prep Method: E200.2
Prep Date/Time: 5/14/2021 10:30:13AM
Prep Initial Wt./Vol.: 20 mL
Prep Extract Vol: 50 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1212341 [MXX34174]

Blank Spike Lab ID: 1610047

Date Analyzed: 05/21/2021 11:02

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1212341056, 1212341058, 1212341060

Results by EP200.8

Blank Spike (ug/L)				
Parameter	Spike	Result	Rec (%)	CL
Arsenic	1000	1060	106	(85-115)
Cadmium	100	104	104	(85-115)
Chromium	400	410	103	(85-115)
Copper	1000	1100	110	(85-115)
Lead	1000	1070	107	(85-115)
Zinc	1000	1090	109	(85-115)

Batch Information

Analytical Batch: MMS11107

Analytical Method: EP200.8

Instrument: Perkin Elmer Nexlon P5

Analyst: ACF

Prep Batch: MXX34174

Prep Method: E200.2

Prep Date/Time: 05/14/2021 10:30

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

Dupe Init Wt./Vol.: Extract Vol:

Matrix Spike Summary

Original Sample ID: 1610049
MS Sample ID: 1610050 MS
MSD Sample ID:

Analysis Date: 05/21/2021 11:08
Analysis Date: 05/21/2021 11:11
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1212341056, 1212341058, 1212341060

Results by EP200.8

Parameter	Sample	Matrix Spike (ug/L)			Spike Duplicate (ug/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Arsenic	2.50U	1000	1030	103				70-130		
Cadmium	0.250U	100	104	104				70-130		
Chromium	2.50U	400	386	97				70-130		
Copper	0.500U	1000	1030	103				70-130		
Lead	0.100U	1000	1060	106				70-130		
Zinc	6.47J	1000	1040	103				70-130		

Batch Information

Analytical Batch: MMS11107
Analytical Method: EP200.8
Instrument: Perkin Elmer Nexlon P5
Analyst: ACF
Analytical Date/Time: 5/21/2021 11:11:06AM

Prep Batch: MXX34174
Prep Method: DW Digest for Metals on ICP-MS
Prep Date/Time: 5/14/2021 10:30:13AM
Prep Initial Wt./Vol.: 20.00mL
Prep Extract Vol: 50.00mL

Print Date: 06/11/2021 4:34:11PM

Matrix Spike Summary

Original Sample ID: 1610051
MS Sample ID: 1610052 MS
MSD Sample ID:

Analysis Date: 05/21/2021 11:14
Analysis Date: 05/21/2021 11:17
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1212341056, 1212341058, 1212341060

Results by EP200.8

Parameter	Sample	Matrix Spike (ug/L)			Spike Duplicate (ug/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Arsenic	2.50U	1000	1010	101				70-130		
Cadmium	0.250U	100	103	103				70-130		
Chromium	2.50U	400	388	97				70-130		
Copper	1.95	1000	1020	102				70-130		
Lead	0.137J	1000	1060	106				70-130		
Zinc	79.8	1000	1130	105				70-130		

Batch Information

Analytical Batch: MMS11107
Analytical Method: EP200.8
Instrument: Perkin Elmer Nexlon P5
Analyst: ACF
Analytical Date/Time: 5/21/2021 11:17:10AM

Prep Batch: MXX34174
Prep Method: DW Digest for Metals on ICP-MS
Prep Date/Time: 5/14/2021 10:30:13AM
Prep Initial Wt./Vol.: 20.00mL
Prep Extract Vol: 50.00mL

Print Date: 06/11/2021 4:34:11PM

Method Blank

Blank ID: MB for HBN 1819451 (WFI/2930)
Blank Lab ID: 1610234

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1212341001, 1212341002, 1212341003, 1212341004, 1212341005, 1212341006, 1212341007, 1212341008, 1212341009,
1212341010, 1212341011, 1212341012, 1212341013, 1212341014, 1212341015, 1212341016, 1212341017, 1212341018,
1212341019, 1212341020, 1212341021, 1212341022, 1212341023, 1212341024

Results by SM21 4500NO3-F

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

Batch Information

Analytical Batch: WFI2930
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: EBH
Analytical Date/Time: 5/15/2021 1:46:00PM

Method Blank

Blank ID: MB for HBN 1819451 (WFI/2930)
Blank Lab ID: 1610240

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1212341001, 1212341002, 1212341003, 1212341004, 1212341005, 1212341006, 1212341007, 1212341008, 1212341009, 1212341010, 1212341011, 1212341012, 1212341013, 1212341014, 1212341015, 1212341016, 1212341017

Results by SM21 4500NO3-F

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

Batch Information

Analytical Batch: WFI2930
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: EBH
Analytical Date/Time: 5/15/2021 12:19:51PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1212341 [WFI2930]

Blank Spike Lab ID: 1610236

Date Analyzed: 05/15/2021 13:44

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1212341001, 1212341002, 1212341003, 1212341004, 1212341005, 1212341006, 1212341007, 1212341008, 1212341009, 1212341010, 1212341011, 1212341012, 1212341013, 1212341014, 1212341015, 1212341016, 1212341017, 1212341018, 1212341019, 1212341020, 1212341021,

Results by SM21 4500NO3-F

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Nitrate-N	2.5	2.67	107	(70-130)
Nitrite-N	2.5	2.49	100	(90-110)
Total Nitrate/Nitrite-N	5	5.16	103	(90-110)

Batch Information

Analytical Batch: WFI2930

Analytical Method: SM21 4500NO3-F

Instrument: Astoria segmented flow

Analyst: EBH

Blank Spike Summary

Blank Spike ID: LCS for HBN 1212341 [WFI2930]

Blank Spike Lab ID: 1610242

Date Analyzed: 05/15/2021 12:18

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1212341001, 1212341002, 1212341003, 1212341004, 1212341005, 1212341006, 1212341007, 1212341008, 1212341009, 1212341010, 1212341011, 1212341012, 1212341013, 1212341014, 1212341015, 1212341016, 1212341017

Results by SM21 4500NO3-F

Blank Spike (mg/L)				
Parameter	Spike	Result	Rec (%)	CL
Nitrate-N	2.5	2.63	105	(70-130)
Nitrite-N	2.5	2.48	99	(90-110)
Total Nitrate/Nitrite-N	5	5.11	102	(90-110)

Batch Information

Analytical Batch: WFI2930

Analytical Method: SM21 4500NO3-F

Instrument: Astoria segmented flow

Analyst: EBH

Matrix Spike Summary

Original Sample ID: 1212275001
MS Sample ID: 1610220 MS
MSD Sample ID: 1610221 MSD

Analysis Date: 05/15/2021 11:37
Analysis Date: 05/15/2021 11:39
Analysis Date: 05/15/2021 11:41
Matrix: Drinking Water

QC for Samples:

Results by SM21 4500NO3-F

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Nitrate/Nitrite-N	0.100U	5.00	5.64	113 *	5.00	5.61	112 *	90-110	0.63	(< 25)

Batch Information

Analytical Batch: WFI2930
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: EBH
Analytical Date/Time: 5/15/2021 11:39:00AM

Print Date: 06/11/2021 4:34:18PM

Matrix Spike Summary

Original Sample ID: 1212334001
MS Sample ID: 1610222 MS
MSD Sample ID: 1610223 MSD

Analysis Date: 05/15/2021 13:04
Analysis Date: 05/15/2021 13:06
Analysis Date: 05/15/2021 13:07
Matrix: Drinking Water

QC for Samples: 1212341001, 1212341002, 1212341003, 1212341004, 1212341005, 1212341006, 1212341007, 1212341008, 1212341009, 1212341010, 1212341011, 1212341012, 1212341013, 1212341014, 1212341015, 1212341016, 1212341017, 1212341018

Results by SM21 4500NO3-F

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Nitrate/Nitrite-N	0.200	5.00	5.97	115 *	5.00	5.89	114 *	90-110	1.40	(< 25)

Batch Information

Analytical Batch: WFI2930
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: EBH
Analytical Date/Time: 5/15/2021 1:06:00PM

Print Date: 06/11/2021 4:34:18PM

Matrix Spike Summary

Original Sample ID: 1212341018
MS Sample ID: 1610224 MS
MSD Sample ID: 1610225 MSD

Analysis Date: 05/15/2021 13:49
Analysis Date: 05/15/2021 13:51
Analysis Date: 05/15/2021 13:53
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1212341001, 1212341002, 1212341003, 1212341004, 1212341005, 1212341006, 1212341007, 1212341008, 1212341009, 1212341010, 1212341011, 1212341012, 1212341013, 1212341014, 1212341015, 1212341016, 1212341017, 1212341018, 1212341019, 1212341020, 1212341021.

Results by SM21 4500NO3-F

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Nitrate/Nitrite-N	0.225	5.00	6.14	118 *	5.00	5.87	113 *	90-110	4.40	(< 25)

Batch Information

Analytical Batch: WFI2930
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: EBH
Analytical Date/Time: 5/15/2021 1:51:00PM

Print Date: 06/11/2021 4:34:18PM

Method Blank

Blank ID: MB for HBN 1819576 [WXX/13700]
Blank Lab ID: 1610767

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1212341001, 1212341002, 1212341003, 1212341004, 1212341005, 1212341006, 1212341007, 1212341008, 1212341009, 1212341010, 1212341011, 1212341012, 1212341013

Results by SM21 4500P-B,E

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Total Phosphorus	0.0200U	0.0400	0.0120	mg/L

Batch Information

Analytical Batch: WDA4979
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 5/18/2021 6:32:29PM

Prep Batch: WXX13700
Prep Method: SM21 4500P-B,E
Prep Date/Time: 5/18/2021 2:53:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 06/11/2021 4:34:19PM

Method Blank

Blank ID: MB for HBN 1819576 [WXX/13700]
Blank Lab ID: 1610772

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1212341001, 1212341002, 1212341003, 1212341004, 1212341005, 1212341006, 1212341007, 1212341008, 1212341009,
1212341010, 1212341011, 1212341012, 1212341013, 1212341014, 1212341015, 1212341016, 1212341017, 1212341018,
1212341019, 1212341020, 1212341021, 1212341022, 1212341023, 1212341024

Results by SM21 4500P-B,E

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Total Phosphorus	0.0200U	0.0400	0.0120	mg/L

Batch Information

Analytical Batch: WDA4979
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 5/18/2021 7:01:52PM

Prep Batch: WXX13700
Prep Method: SM21 4500P-B,E
Prep Date/Time: 5/18/2021 2:53:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1212341 [WXX13700]
 Blank Spike Lab ID: 1610768
 Date Analyzed: 05/18/2021 18:33

Spike Duplicate ID: LCSD for HBN 1212341 [WXX13700]
 Spike Duplicate Lab ID: 1610769
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1212341001, 1212341002, 1212341003, 1212341004, 1212341005, 1212341006, 1212341007, 1212341008, 1212341009, 1212341010, 1212341011, 1212341012, 1212341013

Results by SM21 4500P-B,E

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Phosphorus	0.2	0.192	96	0.2	0.190	95	(75-125)	1.30	(< 25)

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: EWW

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/2021 14:53
 Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL
 Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1212341 [WXX13700]
 Blank Spike Lab ID: 1610773
 Date Analyzed: 05/18/2021 19:02

Spike Duplicate ID: LCSD for HBN 1212341 [WXX13700]
 Spike Duplicate Lab ID: 1610774
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1212341001, 1212341002, 1212341003, 1212341004, 1212341005, 1212341006, 1212341007, 1212341008, 1212341009, 1212341010, 1212341011, 1212341012, 1212341013, 1212341014, 1212341015, 1212341016, 1212341017, 1212341018, 1212341019, 1212341020, 1212341021,

Results by SM21 4500P-B,E

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Phosphorus	0.2	0.195	98	0.2	0.192	96	(75-125)	1.70	(< 25)

Batch Information

Analytical Batch: WDA4979
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: EWW

Prep Batch: WXX13700
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/18/2021 14:53
 Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL
 Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

Matrix Spike Summary

Original Sample ID: 1212207001
MS Sample ID: 1610770 MS
MSD Sample ID: 1610771 MSD

Analysis Date: 05/18/2021 18:41
Analysis Date: 05/18/2021 18:44
Analysis Date: 05/18/2021 18:45
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1212341001, 1212341002, 1212341003, 1212341004, 1212341005, 1212341006, 1212341007, 1212341008, 1212341009, 1212341010, 1212341011, 1212341012, 1212341013, 1212341014

Results by SM21 4500P-B,E

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Phosphorus	0.0339J	0.200	.232	99	0.200	0.248	107	75-125	6.90	(< 25)

Batch Information

Analytical Batch: WDA4979
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 5/18/2021 6:44:12PM

Prep Batch: WXX13700
Prep Method: Total Phosphorus (W) Ext.
Prep Date/Time: 5/18/2021 2:53:00PM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 06/11/2021 4:34:23PM

Matrix Spike Summary

Original Sample ID: 1212341014
MS Sample ID: 1610775 MS
MSD Sample ID: 1610776 MSD

Analysis Date: 05/18/2021 19:04
Analysis Date: 05/18/2021 19:07
Analysis Date: 05/18/2021 19:08
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1212341001, 1212341002, 1212341003, 1212341004, 1212341005, 1212341006, 1212341007, 1212341008, 1212341009, 1212341010, 1212341011, 1212341012, 1212341013, 1212341014, 1212341015, 1212341016, 1212341017, 1212341018, 1212341019, 1212341020, 1212341021.

Results by SM21 4500P-B,E

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Phosphorus	0.0200U	0.200	.198	99	0.200	0.202	101	75-125	2.40	(< 25)

Batch Information

Analytical Batch: WDA4979
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 5/18/2021 7:07:44PM

Prep Batch: WXX13700
Prep Method: Total Phosphorus (W) Ext.
Prep Date/Time: 5/18/2021 2:53:00PM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 06/11/2021 4:34:23PM



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Instructions: See

Omissions may delay the onset of analysis.

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Page ____ of ____

CLIENT: Kenai Watershed Forum		Section 3		Preservative	
CONTACT: Benjamin Meyer		PHONE #: 907-232-0290			
PROJECT NAME: Kenai River Water Quality		PROJECT/ PWSID/ PERMIT#:			
REPORTS TO: Benjamin Meyer		E-MAIL: ben@kenaiwatershed.org			
INVOICE TO:		Profile #:			
		QUOTE #:			
		P.O. #:			
RESERVED for lab use		SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE
(1A)	RM 70 - Jim's Landing	5/11/21	10:25		
(2A)	RM 74 - Russian River	5/11/21	9:34		
(3A)	RM 74.5 - Sweeney Creek	5/11/21	8:36		
(4A)	RM 82 - Kagan Lake Bridge	5/11/21	7:56		
Section 2					
CONTAINERS					
#	Comp Grab	MI (Multi-Incremental)			
1	grab				
1					
1					
1					
Analysis*					
NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS					
REMARKS/LOC ID					
Section 4					
DOD Project?		Yes	No	Data Deliverable Requirements:	
Cooler ID:		Requested Turnaround Time and/or Special Instructions:			
Temp Blank °C: 1.4 DSS		Chain of Custody Seal: (Circle) IF <input checked="" type="checkbox"/> INTACT <input type="checkbox"/> BROKEN <input type="checkbox"/> ABSENT			
Cooler Temp: 1.4 DSS		Delivery Method: Hand Delivery <input checked="" type="checkbox"/> Commercial Delivery <input type="checkbox"/> Agent			

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



1212341

www.us.sgs.com



CLIENT: Kenai Watershed Forum		Instructions: Omissions		
CONTACT: Benjamin Meyer		Section 3		
PHONE #: 907-232-0280		Preservative		
PROJECT/ PWSID/ PERMIT#: Kenai River Water Quality		#		
REPORTS TO: Benjamin Meyer		CONTAINER		
E-MAIL: ben@kenaiwatershed.org		Comp		
Profile #:		Grab		
QUOTE #:		MI		
P.O. #:		(Multi-Incremental)		
RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE
(8A)	RM 22 - Soldotna Creek	5/11/21	11:34	
(6A)	RM 23 - Swiftwater	5/11/21	11:06	
(7A)	RM 31 - Magoon's Landing	5/11/21	10:13	
(8A)	RM 30 - Frying River		9:06	
(9A)	RM 31 - Magoon's Landing Dup		10:13	
(10A)	RM 36 - Moose River		10:50	
(11A)	RM 40 - Bing's Landing		9:50	
(12A)	RM 43 - Upper at Bear Island		9:34	
(13A)	RM 44 - Muddy River		8:57	
(14A)	RM 50 - Skillet Lake		7:21	
Relinquished By: (1) [Signature]				
Relinquished By: (2) [Signature]				
Relinquished By: (3) [Signature]				
Relinquished By: (4) [Signature]				

Section 4		Section 5	
Analysis*		Data Deliverable Requirements:	
NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS		Cooler ID:	
REMARKS/LOC ID		Requested Turnaround Time and/or Special Instructions:	
		Temp Blank °C: 1.4 0.58	
		or Ambient []	
		Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT	
		Delivery Method: Hand Delivery [] Commercial Delivery [X]	



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

CLIENT: Kenai Watershed Forum

CONTACT: Benjamin Meyer

PHONE #: 907-232-0280

PROJECT/ PWSID/ PERMIT#:

PROJECT NAME: Kenai River Water Quality

REPORTS TO: Benjamin Meyer

INVOICE TO:

E-MAIL: ben@kenaiwatershed.org

Profile #:

QUOTE #:

P.O. #:

Section 1

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

Section 3

Preservative

Section 2

RESERVED for lab use

SAMPLE IDENTIFICATION

DATE mm/dd/yy

TIME HH:MM

MATRIX/ MATRIX CODE

35A

RM 4B - upstream of Point Island

5/11/21

7:34

36A

RM 44 - mouth of Kelley River

5/11/21

8:57

37A

RM 50 - skid lake outlet

5/11/21

7:22

38A

RM 70 - Jim's Landing

10:25

39A

RM 74 - Russian Road

9:34

40A

RM 82 - Kenai Lk Bridge

7:56

41A

RM 85 - Sumner Creek

8:36

Section 4

DOD Project? Yes No

Section 5

Relinquished By: (1) Ben Meyer

Relinquished By: (2)

Relinquished By: (3)

Relinquished By: (4)

Section 5

Received By:

Received By:

Received By:

Received For Laboratory By:

Section 6

Received By:

Received By:

Received By:

Received For Laboratory By:

Section 7

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Received For Laboratory By:

Section 8

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Section 9

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Section 77

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Received By:



SGS North America Inc.
CHAIN OF CUSTODY RECORD

www.us.sgs.com

Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.										Page 1 of 1	
Section 1										Section 3	
CLIENT: Kenai Watershed Forum										Preservative	
CONTACT: Benjamin Meyer										Analysis*	
PROJECT/ PWSID/ PERMIT#: 907-232-0280										NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS	
REPORTS TO: Benjamin Meyer										REMARKS/LOC ID	
INVOICE TO: [Signature]											
E-MAIL: ben@kenaiwatershed.org											
Profile #: [Blank]											
QUOTE #: [Blank]											
P.O. #: [Blank]											
Section 2										Section 4	
RESERVED for lab use										DOD Project? Yes/No	
SAMPLE IDENTIFICATION										Cooler ID:	
DATE mm/dd/yy										Requested Turnaround Time and/or Special Instructions:	
TIME HH:MM										200.7 = total 200.8 = dissolved	
MATRIX CODE										Chain of Custody Seal: (Circle)	
DATE										Temp Blank °C: or Ambient []	
TIME										Delivery Method: Hand Delivery [] Commercial Delivery []	
Received By:											
Received By:											
Received By:											
Received For Laboratory By:											

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SGS North America Inc.

2002. 2. Total

CLIENT: Kenai Watershed Forum										Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.									
CONTACT: Benjamin Meyer										PHONE #: 907-232-0280									
PROJECT NAME: Kenai River Water Quality										PROJECT/ PWSID/ PERMIT#:									
REPORTS TO: Benjamin Meyer										E-MAIL: ben@kenaiwatershed.org									
INVOICE TO:										Profile #:									
QUOTE #:										P.O. #:									
RESERVED for lab use										MATRIX/ MATRIX CODE									
SAMPLE IDENTIFICATION										DATE mm/dd/yy									
TIME HH:MM										TIME HH:MM									
RM 0 - Duane Creek										5/11/21 10:17									
RM 0 - No Name Creek										5/11/21 10:20									
RM 1.5 - Kenai City Dock										5/11/21 10:12									
RM 6.5 - Cunningham Fork										10:11									
RM 10 - Beaver Creek										9:30									
RM 10 - Beaver Creek										9:30									
RM 10 - Beaver Creek										9:15									
RM 10 - Beaver Creek										9:15									
RM 10 - Beaver Creek										10:05									
RM 10 - Beaver Creek										10:05									
Relinquished By: (1)										Received By:									
Relinquished By: (2)										Received By:									
Relinquished By: (3)										Received By:									
Relinquished By: (4)										Received For Laboratory By:									
Date										Date									
Date										Date									
Date										Date									
Date										Date									

AIRBILL 8460528

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

Signed.....

Date

Called

Grant Aviation

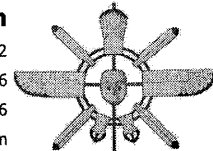
6520 Kulis Dr. Anchorage, AK 99502

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

Receiver: SGS
907-550-3217

Sender: benjamin meyer

Flight Departs: May 11 21 3:25 PM

Accepted: Tue, May 11 21 3:03:00 PM

Description & Comment	Quan.	Wgt.	Handle Fee	Hazmat Fee	Total
water samples SGS	1	50	-	-	\$28.24
Total Tax:					\$1.76
Total Payments made:					\$30.00
Total Unpaid:					\$0.00

Received in good condition by:

CUSTOMER COPY

AIRBILL 8460528

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

Signed.....

Date

Grant Aviation

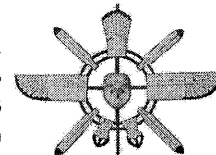
6520 Kulis Dr. Anchorage, AK 99502

Phone: 1 (888) 359-4726

Freephone: 1 (888) 359-4726

Email: res@flygrant.com

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GRANT AVIATION

FREIGHT DETAILS

FROM/TO: Kenai -> Anchorage International

Receiver: SGS
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Sender: benjamin meyer

Flight Departs: May 11 21 3:25 PM

Accepted: Tue, May 11 21 3:03:00 PM

Description & Comment	Quan.	Wgt.	Handle Fee	Hazmat Fee	Total
water samples SGS	1	50	-	-	\$28.24
TAX: Federal Excise Tax					\$1.76
Total Payments made:					\$30.00
Total Unpaid:					\$0.00

TERMS AND CONDITIONS

Consignment Note Text

Alert Expeditors Inc.

#410799

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

Date 5-1-82

From _____

To _____

Collect ☐Prepay ☐Advance Charges ☐

Job # _____

PO# _____

Shipped Signature _____

Received By: M. [Signature]

114 Total Charge

Page 86 of 130



e-Sample Receipt Form

SGS Workorder #:

1212341

1212341

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	@ 1.4 °C	Therm. ID: D55
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>
1212341001-A	H2SO4 to pH < 2	OK	1212341050-A	HNO3 to pH < 2	OK
1212341002-A	H2SO4 to pH < 2	OK	1212341051-A	HNO3 to pH < 2	OK
1212341003-A	H2SO4 to pH < 2	OK	1212341052-A	HNO3 to pH < 2	OK
1212341004-A	H2SO4 to pH < 2	OK	1212341053-A	HNO3 to pH < 2	OK
1212341005-A	H2SO4 to pH < 2	OK	1212341054-A	HNO3 to pH < 2	OK
1212341006-A	H2SO4 to pH < 2	OK	1212341055-A	HNO3 to pH < 2	OK
1212341007-A	H2SO4 to pH < 2	OK	1212341056-A	HNO3 to pH < 2	OK
1212341008-A	H2SO4 to pH < 2	OK	1212341057-A	HNO3 to pH < 2	OK
1212341009-A	H2SO4 to pH < 2	OK	1212341058-A	HNO3 to pH < 2	OK
1212341010-A	H2SO4 to pH < 2	OK	1212341059-A	HNO3 to pH < 2	OK
1212341011-A	H2SO4 to pH < 2	OK	1212341060-A	HNO3 to pH < 2	OK
1212341012-A	H2SO4 to pH < 2	OK	1212341061-A	HNO3 to pH < 2	OK
1212341013-A	H2SO4 to pH < 2	OK			
1212341014-A	H2SO4 to pH < 2	OK			
1212341015-A	H2SO4 to pH < 2	OK			
1212341016-A	H2SO4 to pH < 2	OK			
1212341017-A	H2SO4 to pH < 2	OK			
1212341018-A	H2SO4 to pH < 2	OK			
1212341019-A	H2SO4 to pH < 2	OK			
1212341020-A	H2SO4 to pH < 2	OK			
1212341021-A	H2SO4 to pH < 2	OK			
1212341022-A	H2SO4 to pH < 2	OK			
1212341023-A	H2SO4 to pH < 2	OK			
1212341024-A	H2SO4 to pH < 2	OK			
1212341025-A	HNO3 to pH < 2	OK			
1212341026-A	HNO3 to pH < 2	OK			
1212341027-A	HNO3 to pH < 2	OK			
1212341028-A	HNO3 to pH < 2	OK			
1212341029-A	HNO3 to pH < 2	OK			
1212341030-A	HNO3 to pH < 2	OK			
1212341031-A	HNO3 to pH < 2	OK			
1212341032-A	HNO3 to pH < 2	OK			
1212341033-A	HNO3 to pH < 2	OK			
1212341034-A	HNO3 to pH < 2	OK			
1212341035-A	HNO3 to pH < 2	OK			
1212341036-A	HNO3 to pH < 2	OK			
1212341037-A	HNO3 to pH < 2	OK			
1212341038-A	HNO3 to pH < 2	OK			
1212341039-A	HNO3 to pH < 2	OK			
1212341040-A	HNO3 to pH < 2	OK			
1212341041-A	HNO3 to pH < 2	OK			
1212341042-A	HNO3 to pH < 2	OK			
1212341043-A	HNO3 to pH < 2	OK			
1212341044-A	HNO3 to pH < 2	OK			
1212341045-A	HNO3 to pH < 2	OK			
1212341046-A	HNO3 to pH < 2	OK			
1212341047-A	HNO3 to pH < 2	OK			
1212341048-A	HNO3 to pH < 2	OK			
1212341049-A	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.



May 27, 2021

Service Request No:K2105405

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

Laboratory Results for: 1212341

Dear Julie,

Enclosed are the results of the sample(s) submitted to our laboratory May 14, 2021
For your reference, these analyses have been assigned our service request number **K2105405**.

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

Please contact me if you have any questions. My extension is 3364. You may also contact me via email at howard.holmes@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Howard Holmes
Project Manager

ADDRESS 1317 S. 13th Avenue, Kelso, WA 98626
PHONE +1 360 577 7222 | FAX +1 360 636 1068
ALS Group USA, Corp.
dba ALS Environmental



Narrative Documents

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

Client: SGS North America, Inc. (SGS Environmental)
Project: 1212341
Sample Matrix: Water

Service Request: K2105405
Date Received: 05/14/2021

CASE NARRATIVE

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

Sample Receipt:

Fourteen water samples were received for analysis at ALS Environmental on 05/14/2021. Any discrepancies upon initial sample inspection are annotated on the sample receipt and preservation form included within this report. The samples were stored at minimum in accordance with the analytical method requirements.

Metals:

No significant anomalies were noted with this analysis.

Approved by



Date

05/27/2021

SAMPLE DETECTION SUMMARY

CLIENT ID: RM22-Soldotna Creek				Lab ID: K2105405-001		
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	12.5		0.003	0.021	mg/L	200.7
Iron	1.03		0.008	0.021	mg/L	200.7
Magnesium	3.57		0.0004	0.0053	mg/L	200.7
CLIENT ID: RM23-Swiftwater Park				Lab ID: K2105405-002		
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	10.7		0.003	0.021	mg/L	200.7
Iron	0.418		0.008	0.021	mg/L	200.7
Magnesium	1.28		0.0004	0.0053	mg/L	200.7
CLIENT ID: RM30-Funny River				Lab ID: K2105405-003		
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	5.09		0.003	0.021	mg/L	200.7
Iron	0.807		0.008	0.021	mg/L	200.7
Magnesium	1.79		0.0004	0.0053	mg/L	200.7
CLIENT ID: RM31-Morgan's Landing				Lab ID: K2105405-004		
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	11.1		0.003	0.021	mg/L	200.7
Iron	0.417		0.008	0.021	mg/L	200.7
Magnesium	1.32		0.0004	0.0053	mg/L	200.7
CLIENT ID: RM10.1-Kenai River				Lab ID: K2105405-005		
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	9.98		0.003	0.021	mg/L	200.7
Iron	0.427		0.008	0.021	mg/L	200.7
Magnesium	1.31		0.0004	0.0053	mg/L	200.7
CLIENT ID: RM12.5-Pillars				Lab ID: K2105405-006		
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	10.0		0.003	0.021	mg/L	200.7
Iron	0.471		0.008	0.021	mg/L	200.7
Magnesium	1.28		0.0004	0.0053	mg/L	200.7
CLIENT ID: RM18-Poachers Cove				Lab ID: K2105405-007		
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	10.1		0.003	0.021	mg/L	200.7
Iron	0.546		0.008	0.021	mg/L	200.7
Magnesium	1.27		0.0004	0.0053	mg/L	200.7
CLIENT ID: RM19-Slikok Creek				Lab ID: K2105405-008		
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	7.80		0.003	0.021	mg/L	200.7
Iron	0.605		0.008	0.021	mg/L	200.7
Magnesium	2.30		0.0004	0.0053	mg/L	200.7

SAMPLE DETECTION SUMMARY

CLIENT ID: RM19-Slikok Creek	Lab ID: K2105405-008
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Analyte	Results	Flag	MDL	MRL	Units	Method
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CLIENT ID: RM21-Solotna Bridge	Lab ID: K2105405-009
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Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	9.59		0.003	0.021	mg/L	200.7
Iron	0.526		0.008	0.021	mg/L	200.7
Magnesium	1.30		0.0004	0.0053	mg/L	200.7

CLIENT ID: RM0-No Name Creek Dup	Lab ID: K2105405-010
---	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	9.04		0.003	0.021	mg/L	200.7
Iron	4.62		0.008	0.021	mg/L	200.7
Magnesium	4.06		0.0004	0.0053	mg/L	200.7

CLIENT ID: RM0-No Name Creek	Lab ID: K2105405-011
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Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	9.07		0.003	0.021	mg/L	200.7
Iron	4.35		0.008	0.021	mg/L	200.7
Magnesium	4.04		0.0004	0.0053	mg/L	200.7

CLIENT ID: RM1.5-Kenai City Dock	Lab ID: K2105405-012
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Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	50.7		0.003	0.021	mg/L	200.7
Iron	7.30		0.008	0.021	mg/L	200.7
Magnesium	134		0.008	0.11	mg/L	200.7

CLIENT ID: RM6.5-Cunningham Park	Lab ID: K2105405-013
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Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	11.4		0.003	0.021	mg/L	200.7
Iron	5.60		0.008	0.021	mg/L	200.7
Magnesium	2.97		0.0004	0.0053	mg/L	200.7

CLIENT ID: RM10-Beaver Creek	Lab ID: K2105405-014
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Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	11.1		0.003	0.021	mg/L	200.7
Iron	2.83		0.008	0.021	mg/L	200.7
Magnesium	2.86		0.0004	0.0053	mg/L	200.7



Sample Receipt Information

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

Client: SGS North America, Inc. (SGS Environmental)
Project: 1212341

Service Request:K2105405

SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
K2105405-001	RM22-Soldotna Creek	5/11/2021	1135
K2105405-002	RM23-Swiftwater Park	5/11/2021	1110
K2105405-003	RM30-Funny River	5/11/2021	0906
K2105405-004	RM31-Morgan's Landing	5/11/2021	1013
K2105405-005	RM10.1-Kenai River	5/11/2021	1030
K2105405-006	RM12.5-Pillars	5/11/2021	1050
K2105405-007	RM18-Poachers Cove	5/11/2021	1125
K2105405-008	RM19-Slikok Creek	5/11/2021	1209
K2105405-009	RM21-Solotna Bridge	5/11/2021	0953
K2105405-010	RM0-No Name Creek Dup	5/11/2021	1017
K2105405-011	RM0-No Name Creek	5/11/2021	1012
K2105405-012	RM1.5-Kenai City Dock	5/11/2021	0930
K2105405-013	RM6.5-Cunningham Park	5/11/2021	0915
K2105405-014	RM10-Beaver Creek	5/11/2021	1005

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



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

CLIENT: SGS North America Inc. - Alaska Division					SGS Reference: ALS Kelso					Page 1 of 2			
CONTACT: Julie Shumway		PHONE NO: (907) 562-2343			Additional Comments: All soils report out in dry weight unless								
PROJECT NAME: 1212341		PWSID#:			# C O N T A I N E R S	Preserv- ative Used:	HNO3	TYPE C = COMP G = GRAB MI = Multi Incre- mental Soils	200.7 Total Metals: Ca, Mg, Fe	MS	MSD	SGS lab #	Location ID
REPORTS TO: Julie Shumway		E-MAIL: Julie.Shumway@sgs.com Env.Alaska.RefLabTeam@sgs.com											
INVOICE TO: SGS - Alaska		QUOTE #: 657849											
RESERVED for lab use		P.O. #:											
SAMPLE IDENTIFICATION		DATE mm/dd/yy	TIME HHMM	MATRIX/ MATRIX CODE									
RM22-Soldotna Creek		05/11/2021	11:35:00	Water	1		X					1212341026	
RM23-Swiftwater Park		05/11/2021	11:10:00	Water	1		X					1212341028	
RM30-Funny River		05/11/2021	09:06:00	Water	1		X					1212341030	
RM31-Morgan's Landing		05/11/2021	10:13:00	Water	1		X					1212341032	
RM10.1-Kenai River		05/11/2021	10:30:00	Water	1		X					1212341043	
RM12.5-Pillars		05/11/2021	10:50:00	Water	1		X					1212341045	
RM18-Poachers Cove		05/11/2021	11:25:00	Water	1		X					1212341047	
RM19-Slikok Creek		05/11/2021	12:09:00	Water	1		X					1212341049	
RM21-Soldotna Bridge		05/11/2021	09:53:00	Water	1		X					1212341051	
RM0-No Name Creek Dup		05/11/2021	10:17:00	Water	1		X					1212341052	
Relinquished By: (1)		Date	Time	Received By:		DOD Project? <i>NO</i>			Data Deliverable Requirements:				
<i>[Signature]</i>		5/13/21	1037	<i>[Signature]</i>		Report to DL (J Flags)? <i>YES</i>			Level 2				
Relinquished By: (2)		Date	Time	Received By:		Cooler ID:							
						Requested Turnaround Time and-or Special Instructions:							
Relinquished By: (3)		Date	Time	Received By:		Temp Blank °C:							
						Chain of Custody Seal: (Circle)							
Relinquished By: (4)		Date	Time	Received For Laboratory By:		or Ambient []							
						INTACT BROKEN ABSENT							

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

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

[illegible]

www.us.sgs.com

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

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

Cooler Receipt and Preservation Form

PM

Client S61 Service Request K21
Received: 5/14/12 Opened: 5/14/12 By: BR Unloaded: 5/14/12 By: BR

- Samples were received via? USPS Fed Ex UPS DHL PDX Courier Hand Delivered
 - Samples were received in: (circle) Cooler Box Envelope Other NA
 - Were custody seals on coolers? NA Y N If yes, how many and where? 2 on sides
If present, were custody seals intact? Y N If present, were they signed and dated? Y N
 - Was a Temperature Blank present in cooler? NA Y N If yes, notate the temperature in the appropriate column below:
If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
 - Were samples received within the method specified temperature ranges? NA Y N
If no, were they received on ice and same day as collected? If not, notate the cooler # below and notify the PM. NA Y N
- If applicable, tissue samples were received: Frozen Partially Thawed Thawed

Temp Blank	Sample Temp	IR Gun	Cooler #/COC ID / NA	Out of temp indicate with "X"	PM Notified If out of temp	Tracking Number NA	Filed
3.6	—	11202				148348015584	

- Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves foam
- Were custody papers properly filled out (ink, signed, etc.)? NA Y N
- Were samples received in good condition (unbroken) NA Y N
- Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
- Did all sample labels and tags agree with custody papers? NA Y N
- Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
- Were the pH-preserved bottles (see SMO GEN SOP) received at the appropriate pH? Indicate in the table below NA Y N
- Were VOA vials received without headspace? Indicate in the table below NA Y N
- Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Head- space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, Resolutions: _____



Miscellaneous Forms

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

Inorganic Data Qualifiers

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

Metals Data Qualifiers

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

Organic Data Qualifiers

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

Additional Petroleum Hydrocarbon Specific Qualifiers

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

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

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

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

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

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: SGS North America, Inc. (SGS Environmental)
Project: 1212341/

Service Request: K2105405

Sample Name: RM22-Soldotna Creek
Lab Code: K2105405-001
Sample Matrix: Water

Date Collected: 05/11/21**Date Received:** 05/14/21

Analysis Method
200.7

Extracted/Digested By
ABOYER

Analyzed By
RMOORE

Sample Name: RM23-Swiftwater Park
Lab Code: K2105405-002
Sample Matrix: Water

Date Collected: 05/11/21**Date Received:** 05/14/21

Analysis Method
200.7

Extracted/Digested By
ABOYER

Analyzed By
RMOORE

Sample Name: RM30-Funny River
Lab Code: K2105405-003
Sample Matrix: Water

Date Collected: 05/11/21**Date Received:** 05/14/21

Analysis Method
200.7

Extracted/Digested By
ABOYER

Analyzed By
RMOORE

Sample Name: RM31-Morgan's Landing
Lab Code: K2105405-004
Sample Matrix: Water

Date Collected: 05/11/21**Date Received:** 05/14/21

Analysis Method
200.7

Extracted/Digested By
ABOYER

Analyzed By
RMOORE

Sample Name: RM10.1-Kenai River
Lab Code: K2105405-005
Sample Matrix: Water

Date Collected: 05/11/21**Date Received:** 05/14/21

Analysis Method
200.7

Extracted/Digested By
ABOYER

Analyzed By
RMOORE

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: SGS North America, Inc. (SGS Environmental)
Project: 1212341/

Service Request: K2105405

Sample Name: RM12.5-Pillars
Lab Code: K2105405-006
Sample Matrix: Water

Date Collected: 05/11/21**Date Received:** 05/14/21

Analysis Method
200.7

Extracted/Digested By
ABOYER

Analyzed By
RMOORE

Sample Name: RM18-Poachers Cove
Lab Code: K2105405-007
Sample Matrix: Water

Date Collected: 05/11/21**Date Received:** 05/14/21

Analysis Method
200.7

Extracted/Digested By
ABOYER

Analyzed By
RMOORE

Sample Name: RM19-Slikok Creek
Lab Code: K2105405-008
Sample Matrix: Water

Date Collected: 05/11/21**Date Received:** 05/14/21

Analysis Method
200.7

Extracted/Digested By
ABOYER

Analyzed By
RMOORE

Sample Name: RM21-Solotna Bridge
Lab Code: K2105405-009
Sample Matrix: Water

Date Collected: 05/11/21**Date Received:** 05/14/21

Analysis Method
200.7

Extracted/Digested By
ABOYER

Analyzed By
RMOORE

Sample Name: RM0-No Name Creek Dup
Lab Code: K2105405-010
Sample Matrix: Water

Date Collected: 05/11/21**Date Received:** 05/14/21

Analysis Method
200.7

Extracted/Digested By
ABOYER

Analyzed By
RMOORE

ALS Group USA, Corp.

dba ALS Environmental

Analyst Summary report

Client: SGS North America, Inc. (SGS Environmental)
Project: 1212341/

Service Request: K2105405

Sample Name: RM0-No Name Creek
Lab Code: K2105405-011
Sample Matrix: Water

Date Collected: 05/11/21
Date Received: 05/14/21

Analysis Method
200.7

Extracted/Digested By
ABOYER

Analyzed By
RMOORE

Sample Name: RM1.5-Kenai City Dock
Lab Code: K2105405-012
Sample Matrix: Water

Date Collected: 05/11/21
Date Received: 05/14/21

Analysis Method
200.7

Extracted/Digested By
ABOYER

Analyzed By
RMOORE

Sample Name: RM6.5-Cunningham Park
Lab Code: K2105405-013
Sample Matrix: Water

Date Collected: 05/11/21
Date Received: 05/14/21

Analysis Method
200.7

Extracted/Digested By
ABOYER

Analyzed By
RMOORE

Sample Name: RM10-Beaver Creek
Lab Code: K2105405-014
Sample Matrix: Water

Date Collected: 05/11/21
Date Received: 05/14/21

Analysis Method
200.7

Extracted/Digested By
ABOYER

Analyzed By
RMOORE



Sample Results

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



Metals

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

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: SGS North America, Inc. (SGS Environmental)
Project: 1212341
Sample Matrix: Water
Sample Name: RM22-Soldotna Creek
Lab Code: K2105405-001

Service Request: K2105405
Date Collected: 05/11/21 11:35
Date Received: 05/14/21 10:00
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.7	12.5	mg/L	0.021	0.003	1	05/21/21 15:42	05/19/21	
Iron	200.7	1.03	mg/L	0.021	0.008	1	05/21/21 15:42	05/19/21	
Magnesium	200.7	3.57	mg/L	0.0053	0.0004	1	05/21/21 15:42	05/19/21	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: SGS North America, Inc. (SGS Environmental)
Project: 1212341
Sample Matrix: Water
Sample Name: RM23-Swiftwater Park
Lab Code: K2105405-002

Service Request: K2105405
Date Collected: 05/11/21 11:10
Date Received: 05/14/21 10:00
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.7	10.7	mg/L	0.021	0.003	1	05/21/21 15:49	05/19/21	
Iron	200.7	0.418	mg/L	0.021	0.008	1	05/21/21 15:49	05/19/21	
Magnesium	200.7	1.28	mg/L	0.0053	0.0004	1	05/21/21 15:49	05/19/21	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: SGS North America, Inc. (SGS Environmental)
Project: 1212341
Sample Matrix: Water
Sample Name: RM30-Funny River
Lab Code: K2105405-003

Service Request: K2105405
Date Collected: 05/11/21 09:06
Date Received: 05/14/21 10:00
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.7	5.09	mg/L	0.021	0.003	1	05/21/21 15:57	05/19/21	
Iron	200.7	0.807	mg/L	0.021	0.008	1	05/21/21 15:57	05/19/21	
Magnesium	200.7	1.79	mg/L	0.0053	0.0004	1	05/21/21 15:57	05/19/21	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: SGS North America, Inc. (SGS Environmental)
Project: 1212341
Sample Matrix: Water
Sample Name: RM31-Morgan's Landing
Lab Code: K2105405-004

Service Request: K2105405
Date Collected: 05/11/21 10:13
Date Received: 05/14/21 10:00
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.7	11.1	mg/L	0.021	0.003	1	05/21/21 16:00	05/19/21	
Iron	200.7	0.417	mg/L	0.021	0.008	1	05/21/21 16:00	05/19/21	
Magnesium	200.7	1.32	mg/L	0.0053	0.0004	1	05/21/21 16:00	05/19/21	

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Analytical Report

Client: SGS North America, Inc. (SGS Environmental)
Project: 1212341
Sample Matrix: Water
Sample Name: RM10.1-Kenai River
Lab Code: K2105405-005

Service Request: K2105405
Date Collected: 05/11/21 10:30
Date Received: 05/14/21 10:00
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.7	9.98	mg/L	0.021	0.003	1	05/21/21 16:10	05/19/21	
Iron	200.7	0.427	mg/L	0.021	0.008	1	05/21/21 16:10	05/19/21	
Magnesium	200.7	1.31	mg/L	0.0053	0.0004	1	05/21/21 16:10	05/19/21	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: SGS North America, Inc. (SGS Environmental)
Project: 1212341
Sample Matrix: Water
Sample Name: RM12.5-Pillars
Lab Code: K2105405-006

Service Request: K2105405
Date Collected: 05/11/21 10:50
Date Received: 05/14/21 10:00
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.7	10.0	mg/L	0.021	0.003	1	05/21/21 16:12	05/19/21	
Iron	200.7	0.471	mg/L	0.021	0.008	1	05/21/21 16:12	05/19/21	
Magnesium	200.7	1.28	mg/L	0.0053	0.0004	1	05/21/21 16:12	05/19/21	

ALS Group USA, Corp.
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Analytical Report

Client: SGS North America, Inc. (SGS Environmental)
Project: 1212341
Sample Matrix: Water
Sample Name: RM18-Poachers Cove
Lab Code: K2105405-007

Service Request: K2105405
Date Collected: 05/11/21 11:25
Date Received: 05/14/21 10:00
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.7	10.1	mg/L	0.021	0.003	1	05/21/21 16:15	05/19/21	
Iron	200.7	0.546	mg/L	0.021	0.008	1	05/21/21 16:15	05/19/21	
Magnesium	200.7	1.27	mg/L	0.0053	0.0004	1	05/21/21 16:15	05/19/21	

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Analytical Report

Client: SGS North America, Inc. (SGS Environmental)
Project: 1212341
Sample Matrix: Water
Sample Name: RM19-Slikok Creek
Lab Code: K2105405-008

Service Request: K2105405
Date Collected: 05/11/21 12:09
Date Received: 05/14/21 10:00
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.7	7.80	mg/L	0.021	0.003	1	05/21/21 16:18	05/19/21	
Iron	200.7	0.605	mg/L	0.021	0.008	1	05/21/21 16:18	05/19/21	
Magnesium	200.7	2.30	mg/L	0.0053	0.0004	1	05/21/21 16:18	05/19/21	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: SGS North America, Inc. (SGS Environmental)
Project: 1212341
Sample Matrix: Water
Sample Name: RM21-Solotna Bridge
Lab Code: K2105405-009

Service Request: K2105405
Date Collected: 05/11/21 09:53
Date Received: 05/14/21 10:00
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.7	9.59	mg/L	0.021	0.003	1	05/21/21 16:20	05/19/21	
Iron	200.7	0.526	mg/L	0.021	0.008	1	05/21/21 16:20	05/19/21	
Magnesium	200.7	1.30	mg/L	0.0053	0.0004	1	05/21/21 16:20	05/19/21	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: SGS North America, Inc. (SGS Environmental)
Project: 1212341
Sample Matrix: Water
Sample Name: RM0-No Name Creek Dup
Lab Code: K2105405-010

Service Request: K2105405
Date Collected: 05/11/21 10:17
Date Received: 05/14/21 10:00
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.7	9.04	mg/L	0.021	0.003	1	05/21/21 16:23	05/19/21	
Iron	200.7	4.62	mg/L	0.021	0.008	1	05/21/21 16:23	05/19/21	
Magnesium	200.7	4.06	mg/L	0.0053	0.0004	1	05/21/21 16:23	05/19/21	

ALS Group USA, Corp.
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Analytical Report

Client: SGS North America, Inc. (SGS Environmental)
Project: 1212341
Sample Matrix: Water
Sample Name: RM0-No Name Creek
Lab Code: K2105405-011

Service Request: K2105405
Date Collected: 05/11/21 10:12
Date Received: 05/14/21 10:00
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.7	9.07	mg/L	0.021	0.003	1	05/21/21 16:26	05/19/21	
Iron	200.7	4.35	mg/L	0.021	0.008	1	05/21/21 16:26	05/19/21	
Magnesium	200.7	4.04	mg/L	0.0053	0.0004	1	05/21/21 16:26	05/19/21	

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Analytical Report

Client: SGS North America, Inc. (SGS Environmental)
Project: 1212341
Sample Matrix: Water
Sample Name: RM1.5-Kenai City Dock
Lab Code: K2105405-012

Service Request: K2105405
Date Collected: 05/11/21 09:30
Date Received: 05/14/21 10:00
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.7	50.7	mg/L	0.021	0.003	1	05/21/21 16:28	05/19/21	
Iron	200.7	7.30	mg/L	0.021	0.008	1	05/21/21 16:28	05/19/21	
Magnesium	200.7	134	mg/L	0.11	0.008	20	05/21/21 19:09	05/19/21	

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Analytical Report

Client: SGS North America, Inc. (SGS Environmental)
Project: 1212341
Sample Matrix: Water
Sample Name: RM6.5-Cunningham Park
Lab Code: K2105405-013

Service Request: K2105405
Date Collected: 05/11/21 09:15
Date Received: 05/14/21 10:00
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.7	11.4	mg/L	0.021	0.003	1	05/21/21 16:31	05/19/21	
Iron	200.7	5.60	mg/L	0.021	0.008	1	05/21/21 16:31	05/19/21	
Magnesium	200.7	2.97	mg/L	0.0053	0.0004	1	05/21/21 16:31	05/19/21	

ALS Group USA, Corp.
dba ALS Environmental

Analytical Report

Client: SGS North America, Inc. (SGS Environmental)
Project: 1212341
Sample Matrix: Water
Sample Name: RM10-Beaver Creek
Lab Code: K2105405-014

Service Request: K2105405
Date Collected: 05/11/21 10:05
Date Received: 05/14/21 10:00
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.7	11.1	mg/L	0.021	0.003	1	05/21/21 16:33	05/19/21	
Iron	200.7	2.83	mg/L	0.021	0.008	1	05/21/21 16:33	05/19/21	
Magnesium	200.7	2.86	mg/L	0.0053	0.0004	1	05/21/21 16:33	05/19/21	



QC Summary Forms

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Metals

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Analytical Report

Client: SGS North America, Inc. (SGS Environmental)
Project: 1212341
Sample Matrix: Water
Sample Name: Method Blank
Lab Code: KQ2108770-01

Service Request: K2105405
Date Collected: NA
Date Received: NA
Basis: NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.7	ND U	mg/L	0.021	0.003	1	05/21/21 15:37	05/19/21	
Iron	200.7	ND U	mg/L	0.021	0.008	1	05/21/21 15:37	05/19/21	
Magnesium	200.7	ND U	mg/L	0.0053	0.0004	1	05/21/21 15:37	05/19/21	

ALS Group USA, Corp.
dba ALS Environmental

QA/QC Report

Client: SGS North America, Inc. (SGS Environmental)
Project: 1212341
Sample Matrix: Water

Service Request: K2105405
Date Collected: 05/11/21
Date Received: 05/14/21
Date Analyzed: 05/21/21
Date Extracted: 05/19/21

Matrix Spike Summary
Total Metals

Sample Name: RM22-Soldotna Creek
Lab Code: K2105405-001
Analysis Method: 200.7
Prep Method: EPA CLP ILM04.0

Units: mg/L
Basis: NA

Matrix Spike
KQ2108770-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Calcium	12.5	21.7	10.0	92	70-130
Iron	1.03	1.98	1.00	95	70-130
Magnesium	3.57	14.1	10.0	105	70-130

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

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

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

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

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QA/QC Report

Client: SGS North America, Inc. (SGS Environmental)
Project: 1212341
Sample Matrix: Water

Service Request: K2105405
Date Collected: 05/11/21
Date Received: 05/14/21
Date Analyzed: 05/21/21
Date Extracted: 05/19/21

Matrix Spike Summary
Total Metals

Sample Name: RM23-Swiftwater Park
Lab Code: K2105405-002
Analysis Method: 200.7
Prep Method: EPA CLP ILM04.0

Units: mg/L
Basis: NA

Matrix Spike
KQ2108770-06

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Calcium	10.7	20.7	10.0	100	70-130
Iron	0.418	1.45	1.00	103	70-130
Magnesium	1.28	12.4	10.0	111	70-130

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

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

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

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

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QA/QC Report

Client: SGS North America, Inc. (SGS Environmental)
Project 1212341
Sample Matrix: Water

Service Request: K2105405**Date Collected:** 05/11/21**Date Received:** 05/14/21**Date Analyzed:** 05/21/21**Replicate Sample Summary****Total Metals****Sample Name:** RM22-Soldotna Creek**Units:** mg/L**Lab Code:** K2105405-001**Basis:** NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2108770-03	Average	RPD	RPD Limit
					Result			
Calcium	200.7	0.021	0.003	12.5	12.4	12.5	<1	20
Iron	200.7	0.021	0.008	1.03	1.02	1.03	<1	20
Magnesium	200.7	0.0053	0.0004	3.57	3.56	3.57	<1	20

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

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

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

ALS Group USA, Corp.

dba ALS Environmental

QA/QC Report

Client: SGS North America, Inc. (SGS Environmental)
Project 1212341
Sample Matrix: Water

Service Request: K2105405**Date Collected:** 05/11/21**Date Received:** 05/14/21**Date Analyzed:** 05/21/21**Replicate Sample Summary****Total Metals****Sample Name:** RM23-Swiftwater Park**Units:** mg/L**Lab Code:** K2105405-002**Basis:** NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample KQ2108770-05	Average	RPD	RPD Limit
					Result			
Calcium	200.7	0.021	0.003	10.7	10.7	10.7	<1	20
Iron	200.7	0.021	0.008	0.418	0.419	0.419	<1	20
Magnesium	200.7	0.0053	0.0004	1.28	1.28	1.28	<1	20

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

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

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

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dba ALS Environmental

QA/QC Report

Client: SGS North America, Inc. (SGS Environmental)
Project: 1212341
Sample Matrix: Water

Service Request: K2105405
Date Analyzed: 05/21/21

Lab Control Sample Summary
Total Metals

Units:mg/L
Basis:NA

Lab Control Sample
KQ2108770-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Calcium	200.7	12.1	12.5	96	85-115
Iron	200.7	2.45	2.50	98	85-115
Magnesium	200.7	13.0	12.5	104	85-115