



## Laboratory Report of Analysis

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

Report Number: **1242017**

Client Project: **Kenai River Baseline Water**

Dear Benjamin Meyer,

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

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

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

Sincerely,  
SGS North America Inc.

Curtis Whisman  
Project Manager  
curtis.whisman@sgs.com

Date

## Case Narrative

SGS Client: **Kenai Watershed Forum**  
 SGS Project: **1242017**  
 Project Name/Site: **Kenai River Baseline Water**  
 Project Contact: **Benjamin Meyer**

Refer to sample receipt form for information on sample condition.

### **MB for HBN 1886232 [MXX/36637] (1765257) MB**

200.8 - Metals analyte zinc is detected in the MB above the LOQ. The associated sample concentrations are either 5 times greater or less than the concentration in the MB.

### **1242155001(1765262MS) (1765263) MS**

200.8 - Metals MS recovery for calcium does not meet QC criteria. Sample concentration is 4 times greater than the spike level.

200.7 - Ca, Cu, Fe, Mg, Zn were analyzed by ALS of Kelso, WA.

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

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## Laboratory Qualifiers

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

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

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 (DW Chemistry & Microbiology) (Provisionally Certified as of 06/13/2024 for TTHMs 524.2) & 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, 8270E, 8270E-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). SGS is only certified for the analytes listed on our Drinking Water Certification (DW methods: 200.8, 2130B, 2320B, 2510B, 300.0, 4500-CN-C,E, 4500-H-B, 4500-NO3-F, 4500-P-E and 524.2) and only those analytes will be reported to the State of Alaska for compliance. Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

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

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
B	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 3/4 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
TNTC	Too Numerous To Count
U	Indicates the analyte was analyzed for but not detected.

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

### Sample Summary

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Collected</u>	<u>Received</u>	<u>Matrix</u>
RM 0 - No Name Creek	1242017001	05/08/2024	05/09/2024	Water (Surface, Eff., Ground)
RM 0 - No Name Creek-DUP	1242017002	05/08/2024	05/09/2024	Water (Surface, Eff., Ground)
RM 1.5 - Kenai City Dock	1242017003	05/08/2024	05/09/2024	Water (Surface, Eff., Ground)
RM 6.5 - Cunningham Park	1242017004	05/08/2024	05/09/2024	Water (Surface, Eff., Ground)
RM 10 - Beaver Creek	1242017005	05/08/2024	05/09/2024	Water (Surface, Eff., Ground)
RM 10.1 - Kenai River	1242017006	05/08/2024	05/09/2024	Water (Surface, Eff., Ground)
RM 12.5 - Pillars	1242017007	05/08/2024	05/09/2024	Water (Surface, Eff., Ground)
RM 18 - Poacher's Cove	1242017008	05/08/2024	05/09/2024	Water (Surface, Eff., Ground)
RM 19 - Slikok Creek	1242017009	05/08/2024	05/09/2024	Water (Surface, Eff., Ground)
RM 19 - Slikok Creek - DUP	1242017010	05/08/2024	05/09/2024	Water (Surface, Eff., Ground)
RM 21 - Soldotna Bridge	1242017011	05/08/2024	05/09/2024	Water (Surface, Eff., Ground)
RM 22 - Soldotna Creek	1242017012	05/08/2024	05/09/2024	Water (Surface, Eff., Ground)
RM 23 - Swiftwater Park	1242017013	05/08/2024	05/09/2024	Water (Surface, Eff., Ground)
RM 30 - Funny River	1242017014	05/08/2024	05/09/2024	Water (Surface, Eff., Ground)
RM 31 - Morgan's Landing	1242017015	05/08/2024	05/09/2024	Water (Surface, Eff., Ground)
RM 36 - Moose River	1242017016	05/08/2024	05/09/2024	Water (Surface, Eff., Ground)
RM 40 - Bing's Landing	1242017017	05/08/2024	05/09/2024	Water (Surface, Eff., Ground)
RM 43 - Upstream of Dow Island	1242017018	05/08/2024	05/09/2024	Water (Surface, Eff., Ground)
RM 44 - Mouth of Killey River	1242017019	05/08/2024	05/09/2024	Water (Surface, Eff., Ground)
RM 50 - Skilak Lake Outflow	1242017020	05/08/2024	05/09/2024	Water (Surface, Eff., Ground)
RM 70 - Jim's Landing	1242017021	05/08/2024	05/09/2024	Water (Surface, Eff., Ground)
RM 74 - Russian River	1242017022	05/08/2024	05/09/2024	Water (Surface, Eff., Ground)
RM 82 - Kenai Lake Bridge	1242017023	05/08/2024	05/09/2024	Water (Surface, Eff., Ground)
RM 79.5 - Juneau Creek	1242017024	05/08/2024	05/09/2024	Water (Surface, Eff., Ground)
RM 6.5-Cunningham Park- FB	1242017025	05/08/2024	05/09/2024	Water (Surface, Eff., Ground)
RM 30-Funny River-FB	1242017026	05/08/2024	05/09/2024	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)

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## Detectable Results Summary

Client Sample ID: **RM 0 - No Name Creek**

Lab Sample ID: 1242017001

### Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Arsenic	1.85J	ug/L
Copper	1.23J	ug/L
Zinc	8.76J	ug/L
Total Nitrate/Nitrite-N	0.0606J	mg/L
Total Phosphorus	0.0391J	mg/L

### Waters Department

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

Lab Sample ID: 1242017002

### Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Arsenic	2.67J	ug/L
Copper	1.48J	ug/L
Zinc	14.0	ug/L
Total Phosphorus	0.0442	mg/L

### Waters Department

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

Lab Sample ID: 1242017003

### Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Arsenic	2.74J	ug/L
Copper	17.0	ug/L
Zinc	11.1	ug/L
Total Nitrate/Nitrite-N	0.236	mg/L
Total Phosphorus	0.486	mg/L

### Waters Department

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

Lab Sample ID: 1242017004

### Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Arsenic	1.60J	ug/L
Copper	1.86J	ug/L
Zinc	9.34J	ug/L
Total Nitrate/Nitrite-N	0.200	mg/L
Total Phosphorus	0.902	mg/L

### Waters Department

Client Sample ID: **RM 10 - Beaver Creek**

Lab Sample ID: 1242017005

### Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Arsenic	3.85J	ug/L
Copper	1.39J	ug/L
Zinc	11.2	ug/L
Total Phosphorus	0.207	mg/L

### Waters Department

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

Lab Sample ID: 1242017006

### Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Zinc	11.1	ug/L
Total Nitrate/Nitrite-N	0.273	mg/L
Total Phosphorus	0.0259J	mg/L

### Waters Department

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

Lab Sample ID: 1242017007

### Dissolved Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Zinc	14.3	ug/L
Total Nitrate/Nitrite-N	0.315	mg/L
Total Phosphorus	0.0172J	mg/L

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## Detectable Results Summary

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

Lab Sample ID: 1242017008

**Dissolved Metals by ICP/MS**

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Zinc	8.37J	ug/L
Total Nitrate/Nitrite-N	0.309	mg/L

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

Lab Sample ID: 1242017009

**Dissolved Metals by ICP/MS**

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Copper	1.00J	ug/L
Zinc	15.2	ug/L
Total Nitrate/Nitrite-N	0.0598J	mg/L
Total Phosphorus	0.0140J	mg/L

Client Sample ID: **RM 19 - Slikok Creek - DUP**

Lab Sample ID: 1242017010

**Dissolved Metals by ICP/MS**

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Zinc	9.59J	ug/L
Total Nitrate/Nitrite-N	0.0676J	mg/L
Total Phosphorus	0.0123J	mg/L

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

Lab Sample ID: 1242017011

**Dissolved Metals by ICP/MS**

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Zinc	5.74J	ug/L
Total Nitrate/Nitrite-N	0.294	mg/L

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

Lab Sample ID: 1242017012

**Dissolved Metals by ICP/MS**

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Arsenic	4.98J	ug/L
Zinc	8.58J	ug/L
Total Nitrate/Nitrite-N	0.0628J	mg/L
Total Phosphorus	0.0683	mg/L

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

Lab Sample ID: 1242017013

**Dissolved Metals by ICP/MS**

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Zinc	11.4	ug/L
Total Nitrate/Nitrite-N	0.305	mg/L

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

Lab Sample ID: 1242017014

**Dissolved Metals by ICP/MS**

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Arsenic	1.54J	ug/L
Copper	3.36	ug/L
Zinc	12.0	ug/L
Total Nitrate/Nitrite-N	0.136J	mg/L
Total Phosphorus	0.0392J	mg/L

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

Lab Sample ID: 1242017015

**Waters Department**

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

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

Lab Sample ID: 1242017016

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Phosphorus	0.0214J	mg/L

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## Detectable Results Summary

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

Lab Sample ID: 1242017017

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.397	mg/L

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

Lab Sample ID: 1242017018

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.459	mg/L

Client Sample ID: **RM 44 - Mouth of Killey River**

Lab Sample ID: 1242017019

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.823	mg/L

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

Lab Sample ID: 1242017020

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.305	mg/L

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

Lab Sample ID: 1242017021

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.859	mg/L

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

Lab Sample ID: 1242017022

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	1.75	mg/L

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

Lab Sample ID: 1242017023

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	1.15	mg/L

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

Lab Sample ID: 1242017024

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	1.32	mg/L

Client Sample ID: **RM 6.5-Cunningham Park- FB**

Lab Sample ID: 1242017025

**Dissolved Metals by ICP/MS**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Zinc	10.6	ug/L

Client Sample ID: **RM 30-Funny River-FB**

Lab Sample ID: 1242017026

**Dissolved Metals by ICP/MS**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Zinc	13.9	ug/L

## Results of RM 0 - No Name Creek

Client Sample ID: **RM 0 - No Name Creek**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017001  
 Lab Project ID: 1242017

Collection Date: 05/08/24 10:10  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Dissolved Metals by ICP/MS

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	1.85	J	5.00	1.50	3.75	ug/L	1		05/17/24 18:30
Cadmium	0.375	U	0.500	0.150	0.375	ug/L	1		05/17/24 18:30
Chromium	3.75	U	5.00	2.50	3.75	ug/L	1		05/17/24 18:30
Copper	1.23	J	3.00	1.00	2.25	ug/L	1		05/17/24 18:30
Lead	1.50	U	2.00	0.500	1.50	ug/L	1		05/17/24 18:30
Zinc	8.76	J	10.0	3.10	7.50	ug/L	1		05/17/24 18:30

## Batch Information

Analytical Batch: MMS12297  
 Analytical Method: EP200.8  
 Analyst: HGS  
 Analytical Date/Time: 05/17/24 18:30  
 Container ID: 1242017001-D

Prep Batch: MXX36614  
 Prep Method: E200.2  
 Prep Date/Time: 05/13/24 16:01  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL



## Results of RM 0 - No Name Creek

Client Sample ID: **RM 0 - No Name Creek**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017001  
 Lab Project ID: 1242017

Collection Date: 05/08/24 10:10  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.0606	J	0.200	0.0500	0.150	mg/L	2		05/14/24 11:28

## Batch Information

Analytical Batch: WFI3115  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AJP  
 Analytical Date/Time: 05/14/24 11:28  
 Container ID: 1242017001-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0391	J	0.0400	0.0120	0.0300	mg/L	1		05/17/24 11:30

## Batch Information

Analytical Batch: WDA5778  
 Analytical Method: SM21 4500P-B,E  
 Analyst: EBH  
 Analytical Date/Time: 05/17/24 11:30  
 Container ID: 1242017001-A

Prep Batch: WXX15238  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/16/24 17:42  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL

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

Client Sample ID: **RM 0 - No Name Creek-DUP**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017002  
 Lab Project ID: 1242017

Collection Date: 05/08/24 10:05  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Dissolved Metals by ICP/MS

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	2.67	J	5.00	1.50	3.75	ug/L	1		05/17/24 18:34
Cadmium	0.375	U	0.500	0.150	0.375	ug/L	1		05/17/24 18:34
Chromium	3.75	U	5.00	2.50	3.75	ug/L	1		05/17/24 18:34
Copper	1.48	J	3.00	1.00	2.25	ug/L	1		05/17/24 18:34
Lead	1.50	U	2.00	0.500	1.50	ug/L	1		05/17/24 18:34
Zinc	14.0	B	10.0	3.10	7.50	ug/L	1		05/30/24 19:15

## Batch Information

Analytical Batch: MMS12297  
 Analytical Method: EP200.8  
 Analyst: HGS  
 Analytical Date/Time: 05/17/24 18:34  
 Container ID: 1242017002-D

Prep Batch: MXX36614  
 Prep Method: E200.2  
 Prep Date/Time: 05/13/24 16:01  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL

Analytical Batch: MMS12308  
 Analytical Method: EP200.8  
 Analyst: ACF  
 Analytical Date/Time: 05/30/24 19:15  
 Container ID: 1242017002-D

Prep Batch: MXX36637  
 Prep Method: E200.2  
 Prep Date/Time: 05/28/24 13:00  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL

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

Client Sample ID: **RM 0 - No Name Creek-DUP**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017002  
 Lab Project ID: 1242017

Collection Date: 05/08/24 10:05  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.150	U	0.200	0.0500	0.150	mg/L	2		05/14/24 11:30

## Batch Information

Analytical Batch: WFI3115  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AJP  
 Analytical Date/Time: 05/14/24 11:30  
 Container ID: 1242017002-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0442		0.0400	0.0120	0.0300	mg/L	1		05/17/24 11:31

## Batch Information

Analytical Batch: WDA5778  
 Analytical Method: SM21 4500P-B,E  
 Analyst: EBH  
 Analytical Date/Time: 05/17/24 11:31  
 Container ID: 1242017002-A

Prep Batch: WXX15238  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/16/24 17:42  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL

## Results of RM 1.5 - Kenai City Dock

Client Sample ID: **RM 1.5 - Kenai City Dock**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017003  
 Lab Project ID: 1242017

Collection Date: 05/08/24 09:25  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Dissolved Metals by ICP/MS

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	2.74	J	5.00	1.50	3.75	ug/L	1		05/17/24 18:45
Cadmium	0.375	U	0.500	0.150	0.375	ug/L	1		05/17/24 18:45
Chromium	3.75	U	5.00	2.50	3.75	ug/L	1		05/17/24 18:45
Copper	17.0		3.00	1.00	2.25	ug/L	1		05/17/24 18:45
Lead	1.50	U	2.00	0.500	1.50	ug/L	1		05/17/24 18:45
Zinc	11.1	B	10.0	3.10	7.50	ug/L	1		05/30/24 19:18

## Batch Information

Analytical Batch: MMS12297  
 Analytical Method: EP200.8  
 Analyst: HGS  
 Analytical Date/Time: 05/17/24 18:45  
 Container ID: 1242017003-D

Prep Batch: MXX36614  
 Prep Method: E200.2  
 Prep Date/Time: 05/13/24 16:01  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL

Analytical Batch: MMS12308  
 Analytical Method: EP200.8  
 Analyst: ACF  
 Analytical Date/Time: 05/30/24 19:18  
 Container ID: 1242017003-D

Prep Batch: MXX36637  
 Prep Method: E200.2  
 Prep Date/Time: 05/28/24 13:00  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL

## Results of RM 1.5 - Kenai City Dock

Client Sample ID: **RM 1.5 - Kenai City Dock**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017003  
 Lab Project ID: 1242017

Collection Date: 05/08/24 09:25  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.236		0.200	0.0500	0.150	mg/L	2		05/14/24 11:32

## Batch Information

Analytical Batch: WFI3115  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AJP  
 Analytical Date/Time: 05/14/24 11:32  
 Container ID: 1242017003-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.486		0.200	0.0600	0.150	mg/L	1		05/17/24 11:35

## Batch Information

Analytical Batch: WDA5778  
 Analytical Method: SM21 4500P-B,E  
 Analyst: EBH  
 Analytical Date/Time: 05/17/24 11:35  
 Container ID: 1242017003-A

Prep Batch: WXX15238  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/16/24 17:42  
 Prep Initial Wt./Vol.: 5 mL  
 Prep Extract Vol: 25 mL

## Results of RM 6.5 - Cunningham Park

Client Sample ID: **RM 6.5 - Cunningham Park**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017004  
 Lab Project ID: 1242017

Collection Date: 05/08/24 09:11  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Dissolved Metals by ICP/MS

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	1.60	J	5.00	1.50	3.75	ug/L	1		05/17/24 18:48
Cadmium	0.375	U	0.500	0.150	0.375	ug/L	1		05/17/24 18:48
Chromium	3.75	U	5.00	2.50	3.75	ug/L	1		05/17/24 18:48
Copper	1.86	J	3.00	1.00	2.25	ug/L	1		05/17/24 18:48
Lead	1.50	U	2.00	0.500	1.50	ug/L	1		05/17/24 18:48
Zinc	9.34	J	10.0	3.10	7.50	ug/L	1		05/17/24 18:48

## Batch Information

Analytical Batch: MMS12297  
 Analytical Method: EP200.8  
 Analyst: HGS  
 Analytical Date/Time: 05/17/24 18:48  
 Container ID: 1242017004-D

Prep Batch: MXX36614  
 Prep Method: E200.2  
 Prep Date/Time: 05/13/24 16:01  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL

## Results of RM 6.5 - Cunningham Park

Client Sample ID: **RM 6.5 - Cunningham Park**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017004  
 Lab Project ID: 1242017

Collection Date: 05/08/24 09:11  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.200		0.200	0.0500	0.150	mg/L	2		05/14/24 11:34

## Batch Information

Analytical Batch: WFI3115  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AJP  
 Analytical Date/Time: 05/14/24 11:34  
 Container ID: 1242017004-A

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.902		0.200	0.0600	0.150	mg/L	1		05/23/24 14:11

## Batch Information

Analytical Batch: WDA5781  
 Analytical Method: SM21 4500P-B,E  
 Analyst: EBH  
 Analytical Date/Time: 05/23/24 14:11  
 Container ID: 1242017004-A

Prep Batch: WXX15243  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/23/24 10:30  
 Prep Initial Wt./Vol.: 5 mL  
 Prep Extract Vol: 25 mL

## Results of RM 10 - Beaver Creek

Client Sample ID: **RM 10 - Beaver Creek**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017005  
 Lab Project ID: 1242017

Collection Date: 05/08/24 10:00  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Dissolved Metals by ICP/MS

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	3.85	J	5.00	1.50	3.75	ug/L	1		05/17/24 18:50
Cadmium	0.375	U	0.500	0.150	0.375	ug/L	1		05/17/24 18:50
Chromium	3.75	U	5.00	2.50	3.75	ug/L	1		05/17/24 18:50
Copper	1.39	J	3.00	1.00	2.25	ug/L	1		05/17/24 18:50
Lead	1.50	U	2.00	0.500	1.50	ug/L	1		05/17/24 18:50
Zinc	11.2	B	10.0	3.10	7.50	ug/L	1		05/30/24 19:20

## Batch Information

Analytical Batch: MMS12297  
 Analytical Method: EP200.8  
 Analyst: HGS  
 Analytical Date/Time: 05/17/24 18:50  
 Container ID: 1242017005-D

Prep Batch: MXX36614  
 Prep Method: E200.2  
 Prep Date/Time: 05/13/24 16:01  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL

Analytical Batch: MMS12308  
 Analytical Method: EP200.8  
 Analyst: ACF  
 Analytical Date/Time: 05/30/24 19:20  
 Container ID: 1242017005-D

Prep Batch: MXX36637  
 Prep Method: E200.2  
 Prep Date/Time: 05/28/24 13:00  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL



## Results of RM 10 - Beaver Creek

Client Sample ID: **RM 10 - Beaver Creek**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017005  
 Lab Project ID: 1242017

Collection Date: 05/08/24 10:00  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.150	U	0.200	0.0500	0.150	mg/L	2		05/14/24 11:35

## Batch Information

Analytical Batch: WFI3115  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AJP  
 Analytical Date/Time: 05/14/24 11:35  
 Container ID: 1242017005-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.207		0.0400	0.0120	0.0300	mg/L	1		05/17/24 11:37

## Batch Information

Analytical Batch: WDA5778  
 Analytical Method: SM21 4500P-B,E  
 Analyst: EBH  
 Analytical Date/Time: 05/17/24 11:37  
 Container ID: 1242017005-A

Prep Batch: WXX15238  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/16/24 17:42  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL

## Results of RM 10.1 - Kenai River

Client Sample ID: **RM 10.1 - Kenai River**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017006  
 Lab Project ID: 1242017

Collection Date: 05/08/24 10:24  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Dissolved Metals by ICP/MS

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	3.75	U	5.00	1.50	3.75	ug/L	1		05/17/24 18:53
Cadmium	0.375	U	0.500	0.150	0.375	ug/L	1		05/17/24 18:53
Chromium	3.75	U	5.00	2.50	3.75	ug/L	1		05/17/24 18:53
Copper	2.25	U	3.00	1.00	2.25	ug/L	1		05/17/24 18:53
Lead	1.50	U	2.00	0.500	1.50	ug/L	1		05/17/24 18:53
Zinc	11.1	B	10.0	3.10	7.50	ug/L	1		05/30/24 19:23

## Batch Information

Analytical Batch: MMS12297  
 Analytical Method: EP200.8  
 Analyst: HGS  
 Analytical Date/Time: 05/17/24 18:53  
 Container ID: 1242017006-D

Prep Batch: MXX36614  
 Prep Method: E200.2  
 Prep Date/Time: 05/13/24 16:01  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL

Analytical Batch: MMS12308  
 Analytical Method: EP200.8  
 Analyst: ACF  
 Analytical Date/Time: 05/30/24 19:23  
 Container ID: 1242017006-D

Prep Batch: MXX36637  
 Prep Method: E200.2  
 Prep Date/Time: 05/28/24 13:00  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL

## Results of RM 10.1 - Kenai River

Client Sample ID: **RM 10.1 - Kenai River**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017006  
 Lab Project ID: 1242017

Collection Date: 05/08/24 10:24  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.273		0.200	0.0500	0.150	mg/L	2		05/14/24 11:37

## Batch Information

Analytical Batch: WFI3115  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AJP  
 Analytical Date/Time: 05/14/24 11:37  
 Container ID: 1242017006-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0259	J	0.0400	0.0120	0.0300	mg/L	1		05/17/24 11:38

## Batch Information

Analytical Batch: WDA5778  
 Analytical Method: SM21 4500P-B,E  
 Analyst: EBH  
 Analytical Date/Time: 05/17/24 11:38  
 Container ID: 1242017006-A

Prep Batch: WXX15238  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/16/24 17:42  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL

## Results of RM 12.5 - Pillars

Client Sample ID: **RM 12.5 - Pillars**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017007  
 Lab Project ID: 1242017

Collection Date: 05/08/24 10:45  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Dissolved Metals by ICP/MS

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	3.75	U	5.00	1.50	3.75	ug/L	1		05/17/24 18:55
Cadmium	0.375	U	0.500	0.150	0.375	ug/L	1		05/17/24 18:55
Chromium	3.75	U	5.00	2.50	3.75	ug/L	1		05/17/24 18:55
Copper	2.25	U	3.00	1.00	2.25	ug/L	1		05/17/24 18:55
Lead	1.50	U	2.00	0.500	1.50	ug/L	1		05/17/24 18:55
Zinc	14.3	B	10.0	3.10	7.50	ug/L	1		05/30/24 19:25

## Batch Information

Analytical Batch: MMS12297  
 Analytical Method: EP200.8  
 Analyst: HGS  
 Analytical Date/Time: 05/17/24 18:55  
 Container ID: 1242017007-D

Prep Batch: MXX36614  
 Prep Method: E200.2  
 Prep Date/Time: 05/13/24 16:01  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL

Analytical Batch: MMS12308  
 Analytical Method: EP200.8  
 Analyst: ACF  
 Analytical Date/Time: 05/30/24 19:25  
 Container ID: 1242017007-D

Prep Batch: MXX36637  
 Prep Method: E200.2  
 Prep Date/Time: 05/28/24 13:00  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL

## Results of RM 12.5 - Pillars

Client Sample ID: **RM 12.5 - Pillars**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017007  
 Lab Project ID: 1242017

Collection Date: 05/08/24 10:45  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.315		0.200	0.0500	0.150	mg/L	2		05/14/24 11:44

## Batch Information

Analytical Batch: WFI3115  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AJP  
 Analytical Date/Time: 05/14/24 11:44  
 Container ID: 1242017007-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0172	J	0.0400	0.0120	0.0300	mg/L	1		05/17/24 11:39

## Batch Information

Analytical Batch: WDA5778  
 Analytical Method: SM21 4500P-B,E  
 Analyst: EBH  
 Analytical Date/Time: 05/17/24 11:39  
 Container ID: 1242017007-A

Prep Batch: WXX15238  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/16/24 17:42  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL

## Results of RM 18 - Poacher's Cove

Client Sample ID: **RM 18 - Poacher's Cove**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017008  
 Lab Project ID: 1242017

Collection Date: 05/08/24 11:16  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Dissolved Metals by ICP/MS

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	3.75	U	5.00	1.50	3.75	ug/L	1		05/17/24 18:58
Cadmium	0.375	U	0.500	0.150	0.375	ug/L	1		05/17/24 18:58
Chromium	3.75	U	5.00	2.50	3.75	ug/L	1		05/17/24 18:58
Copper	2.25	U	3.00	1.00	2.25	ug/L	1		05/17/24 18:58
Lead	1.50	U	2.00	0.500	1.50	ug/L	1		05/17/24 18:58
Zinc	8.37	J	10.0	3.10	7.50	ug/L	1		05/17/24 18:58

## Batch Information

Analytical Batch: MMS12297  
 Analytical Method: EP200.8  
 Analyst: HGS  
 Analytical Date/Time: 05/17/24 18:58  
 Container ID: 1242017008-D

Prep Batch: MXX36614  
 Prep Method: E200.2  
 Prep Date/Time: 05/13/24 16:01  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL

## Results of RM 18 - Poacher's Cove

Client Sample ID: **RM 18 - Poacher's Cove**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017008  
 Lab Project ID: 1242017

Collection Date: 05/08/24 11:16  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.309		0.200	0.0500	0.150	mg/L	2		05/14/24 11:46

## Batch Information

Analytical Batch: WFI3115  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AJP  
 Analytical Date/Time: 05/14/24 11:46  
 Container ID: 1242017008-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0300	U	0.0400	0.0120	0.0300	mg/L	1		05/17/24 14:15

## Batch Information

Analytical Batch: WDA5779  
 Analytical Method: SM21 4500P-B,E  
 Analyst: EBH  
 Analytical Date/Time: 05/17/24 14:15  
 Container ID: 1242017008-A

Prep Batch: WXX15239  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/17/24 11:45  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL

## Results of RM 19 - Slikok Creek

Client Sample ID: **RM 19 - Slikok Creek**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017009  
 Lab Project ID: 1242017

Collection Date: 05/08/24 08:45  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Dissolved Metals by ICP/MS

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	3.75	U	5.00	1.50	3.75	ug/L	1		05/17/24 19:01
Cadmium	0.375	U	0.500	0.150	0.375	ug/L	1		05/17/24 19:01
Chromium	3.75	U	5.00	2.50	3.75	ug/L	1		05/17/24 19:01
Copper	1.00	J	3.00	1.00	2.25	ug/L	1		05/17/24 19:01
Lead	1.50	U	2.00	0.500	1.50	ug/L	1		05/17/24 19:01
Zinc	15.2	B	10.0	3.10	7.50	ug/L	1		05/30/24 19:33

## Batch Information

Analytical Batch: MMS12297  
 Analytical Method: EP200.8  
 Analyst: HGS  
 Analytical Date/Time: 05/17/24 19:01  
 Container ID: 1242017009-D

Prep Batch: MXX36614  
 Prep Method: E200.2  
 Prep Date/Time: 05/13/24 16:01  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL

Analytical Batch: MMS12308  
 Analytical Method: EP200.8  
 Analyst: ACF  
 Analytical Date/Time: 05/30/24 19:33  
 Container ID: 1242017009-D

Prep Batch: MXX36637  
 Prep Method: E200.2  
 Prep Date/Time: 05/28/24 13:00  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL



## Results of RM 19 - Slikok Creek

Client Sample ID: **RM 19 - Slikok Creek**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017009  
 Lab Project ID: 1242017

Collection Date: 05/08/24 08:45  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.0598	J	0.200	0.0500	0.150	mg/L	2		05/14/24 11:48

## Batch Information

Analytical Batch: WFI3115  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AJP  
 Analytical Date/Time: 05/14/24 11:48  
 Container ID: 1242017009-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0140	J	0.0400	0.0120	0.0300	mg/L	1		05/17/24 14:18

## Batch Information

Analytical Batch: WDA5779  
 Analytical Method: SM21 4500P-B,E  
 Analyst: EBH  
 Analytical Date/Time: 05/17/24 14:18  
 Container ID: 1242017009-A

Prep Batch: WXX15239  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/17/24 11:45  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL

## Results of RM 19 - Slikok Creek - DUP

Client Sample ID: **RM 19 - Slikok Creek - DUP**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017010  
 Lab Project ID: 1242017

Collection Date: 05/08/24 08:33  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Dissolved Metals by ICP/MS

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	3.75	U	5.00	1.50	3.75	ug/L	1		05/17/24 19:03
Cadmium	0.375	U	0.500	0.150	0.375	ug/L	1		05/17/24 19:03
Chromium	3.75	U	5.00	2.50	3.75	ug/L	1		05/17/24 19:03
Copper	2.25	U	3.00	1.00	2.25	ug/L	1		05/17/24 19:03
Lead	1.50	U	2.00	0.500	1.50	ug/L	1		05/17/24 19:03
Zinc	9.59	J	10.0	3.10	7.50	ug/L	1		05/17/24 19:03

## Batch Information

Analytical Batch: MMS12297  
 Analytical Method: EP200.8  
 Analyst: HGS  
 Analytical Date/Time: 05/17/24 19:03  
 Container ID: 1242017010-D

Prep Batch: MXX36614  
 Prep Method: E200.2  
 Prep Date/Time: 05/13/24 16:01  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL

## Results of RM 19 - Slikok Creek - DUP

Client Sample ID: **RM 19 - Slikok Creek - DUP**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017010  
 Lab Project ID: 1242017

Collection Date: 05/08/24 08:33  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.0676	J	0.200	0.0500	0.150	mg/L	2		05/14/24 11:49

## Batch Information

Analytical Batch: WFI3115  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AJP  
 Analytical Date/Time: 05/14/24 11:49  
 Container ID: 1242017010-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0123	J	0.0400	0.0120	0.0300	mg/L	1		05/17/24 14:19

## Batch Information

Analytical Batch: WDA5779  
 Analytical Method: SM21 4500P-B,E  
 Analyst: EBH  
 Analytical Date/Time: 05/17/24 14:19  
 Container ID: 1242017010-A

Prep Batch: WXX15239  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/17/24 11:45  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL

## Results of RM 21 - Soldotna Bridge

Client Sample ID: **RM 21 - Soldotna Bridge**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017011  
 Lab Project ID: 1242017

Collection Date: 05/08/24 09:15  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Dissolved Metals by ICP/MS

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	3.75	U	5.00	1.50	3.75	ug/L	1		05/17/24 19:06
Cadmium	0.375	U	0.500	0.150	0.375	ug/L	1		05/17/24 19:06
Chromium	3.75	U	5.00	2.50	3.75	ug/L	1		05/17/24 19:06
Copper	2.25	U	3.00	1.00	2.25	ug/L	1		05/17/24 19:06
Lead	1.50	U	2.00	0.500	1.50	ug/L	1		05/17/24 19:06
Zinc	5.74	J	10.0	3.10	7.50	ug/L	1		05/17/24 19:06

## Batch Information

Analytical Batch: MMS12297  
 Analytical Method: EP200.8  
 Analyst: HGS  
 Analytical Date/Time: 05/17/24 19:06  
 Container ID: 1242017011-D

Prep Batch: MXX36614  
 Prep Method: E200.2  
 Prep Date/Time: 05/13/24 16:01  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL

## Results of RM 21 - Soldotna Bridge

Client Sample ID: **RM 21 - Soldotna Bridge**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017011  
 Lab Project ID: 1242017

Collection Date: 05/08/24 09:15  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.294		0.200	0.0500	0.150	mg/L	2		05/14/24 11:51

## Batch Information

Analytical Batch: WFI3115  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AJP  
 Analytical Date/Time: 05/14/24 11:51  
 Container ID: 1242017011-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0300	U	0.0400	0.0120	0.0300	mg/L	1		05/17/24 14:20

## Batch Information

Analytical Batch: WDA5779  
 Analytical Method: SM21 4500P-B,E  
 Analyst: EBH  
 Analytical Date/Time: 05/17/24 14:20  
 Container ID: 1242017011-A

Prep Batch: WXX15239  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/17/24 11:45  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL

## Results of RM 22 - Soldotna Creek

Client Sample ID: **RM 22 - Soldotna Creek**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017012  
 Lab Project ID: 1242017

Collection Date: 05/08/24 07:18  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Dissolved Metals by ICP/MS

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	4.98	J	5.00	1.50	3.75	ug/L	1		05/17/24 19:14
Cadmium	0.375	U	0.500	0.150	0.375	ug/L	1		05/17/24 19:14
Chromium	3.75	U	5.00	2.50	3.75	ug/L	1		05/17/24 19:14
Copper	2.25	U	3.00	1.00	2.25	ug/L	1		05/17/24 19:14
Lead	1.50	U	2.00	0.500	1.50	ug/L	1		05/17/24 19:14
Zinc	8.58	J	10.0	3.10	7.50	ug/L	1		05/17/24 19:14

## Batch Information

Analytical Batch: MMS12297  
 Analytical Method: EP200.8  
 Analyst: HGS  
 Analytical Date/Time: 05/17/24 19:14  
 Container ID: 1242017012-D

Prep Batch: MXX36614  
 Prep Method: E200.2  
 Prep Date/Time: 05/13/24 16:01  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL

## Results of RM 22 - Soldotna Creek

Client Sample ID: **RM 22 - Soldotna Creek**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017012  
 Lab Project ID: 1242017

Collection Date: 05/08/24 07:18  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.0628	J	0.200	0.0500	0.150	mg/L	2		05/14/24 11:53

## Batch Information

Analytical Batch: WFI3115  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AJP  
 Analytical Date/Time: 05/14/24 11:53  
 Container ID: 1242017012-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0683		0.0400	0.0120	0.0300	mg/L	1		05/17/24 14:20

## Batch Information

Analytical Batch: WDA5779  
 Analytical Method: SM21 4500P-B,E  
 Analyst: EBH  
 Analytical Date/Time: 05/17/24 14:20  
 Container ID: 1242017012-A

Prep Batch: WXX15239  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/17/24 11:45  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL

## Results of RM 23 - Swiftwater Park

Client Sample ID: **RM 23 - Swiftwater Park**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017013  
 Lab Project ID: 1242017

Collection Date: 05/08/24 07:58  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Dissolved Metals by ICP/MS

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	3.75	U	5.00	1.50	3.75	ug/L	1		05/17/24 19:17
Cadmium	0.375	U	0.500	0.150	0.375	ug/L	1		05/17/24 19:17
Chromium	3.75	U	5.00	2.50	3.75	ug/L	1		05/17/24 19:17
Copper	2.25	U	3.00	1.00	2.25	ug/L	1		05/17/24 19:17
Lead	1.50	U	2.00	0.500	1.50	ug/L	1		05/17/24 19:17
Zinc	11.4	B	10.0	3.10	7.50	ug/L	1		05/30/24 19:36

## Batch Information

Analytical Batch: MMS12297  
 Analytical Method: EP200.8  
 Analyst: HGS  
 Analytical Date/Time: 05/17/24 19:17  
 Container ID: 1242017013-D

Prep Batch: MXX36614  
 Prep Method: E200.2  
 Prep Date/Time: 05/13/24 16:01  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL

Analytical Batch: MMS12308  
 Analytical Method: EP200.8  
 Analyst: ACF  
 Analytical Date/Time: 05/30/24 19:36  
 Container ID: 1242017013-D

Prep Batch: MXX36637  
 Prep Method: E200.2  
 Prep Date/Time: 05/28/24 13:00  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL



## Results of RM 23 - Swiftwater Park

Client Sample ID: **RM 23 - Swiftwater Park**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017013  
 Lab Project ID: 1242017

Collection Date: 05/08/24 07:58  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.305		0.200	0.0500	0.150	mg/L	2		05/14/24 11:55

## Batch Information

Analytical Batch: WFI3115  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AJP  
 Analytical Date/Time: 05/14/24 11:55  
 Container ID: 1242017013-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0300	U	0.0400	0.0120	0.0300	mg/L	1		05/17/24 14:24

## Batch Information

Analytical Batch: WDA5779  
 Analytical Method: SM21 4500P-B,E  
 Analyst: EBH  
 Analytical Date/Time: 05/17/24 14:24  
 Container ID: 1242017013-A

Prep Batch: WXX15239  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/17/24 11:45  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL

## Results of RM 30 - Funny River

Client Sample ID: **RM 30 - Funny River**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017014  
 Lab Project ID: 1242017

Collection Date: 05/08/24 11:17  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Dissolved Metals by ICP/MS

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	1.54	J	5.00	1.50	3.75	ug/L	1		05/17/24 19:19
Cadmium	0.375	U	0.500	0.150	0.375	ug/L	1		05/17/24 19:19
Chromium	3.75	U	5.00	2.50	3.75	ug/L	1		05/17/24 19:19
Copper	3.36		3.00	1.00	2.25	ug/L	1		05/17/24 19:19
Lead	1.50	U	2.00	0.500	1.50	ug/L	1		05/17/24 19:19
Zinc	12.0	B	10.0	3.10	7.50	ug/L	1		05/30/24 19:39

## Batch Information

Analytical Batch: MMS12297  
 Analytical Method: EP200.8  
 Analyst: HGS  
 Analytical Date/Time: 05/17/24 19:19  
 Container ID: 1242017014-D

Prep Batch: MXX36614  
 Prep Method: E200.2  
 Prep Date/Time: 05/13/24 16:01  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL

Analytical Batch: MMS12308  
 Analytical Method: EP200.8  
 Analyst: ACF  
 Analytical Date/Time: 05/30/24 19:39  
 Container ID: 1242017014-D

Prep Batch: MXX36637  
 Prep Method: E200.2  
 Prep Date/Time: 05/28/24 13:00  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL

## Results of RM 30 - Funny River

Client Sample ID: **RM 30 - Funny River**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017014  
 Lab Project ID: 1242017

Collection Date: 05/08/24 11:17  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.136	J	0.200	0.0500	0.150	mg/L	2		05/14/24 11:56

## Batch Information

Analytical Batch: WFI3115  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AJP  
 Analytical Date/Time: 05/14/24 11:56  
 Container ID: 1242017014-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0392	J	0.0400	0.0120	0.0300	mg/L	1		05/17/24 14:24

## Batch Information

Analytical Batch: WDA5779  
 Analytical Method: SM21 4500P-B,E  
 Analyst: EBH  
 Analytical Date/Time: 05/17/24 14:24  
 Container ID: 1242017014-A

Prep Batch: WXX15239  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/17/24 11:45  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL

## Results of RM 31 - Morgan's Landing

Client Sample ID: **RM 31 - Morgan's Landing**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017015  
 Lab Project ID: 1242017

Collection Date: 05/08/24 09:54  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</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	0.150	mg/L	2		05/14/24 11:58

## Batch Information

Analytical Batch: WFI3115  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AJP  
 Analytical Date/Time: 05/14/24 11:58  
 Container ID: 1242017015-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0300	U	0.0400	0.0120	0.0300	mg/L	1		05/17/24 14:25

## Batch Information

Analytical Batch: WDA5779  
 Analytical Method: SM21 4500P-B,E  
 Analyst: EBH  
 Analytical Date/Time: 05/17/24 14:25  
 Container ID: 1242017015-A

Prep Batch: WXX15239  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/17/24 11:45  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL

## Results of RM 36 - Moose River

Client Sample ID: **RM 36 - Moose River**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017016  
 Lab Project ID: 1242017

Collection Date: 05/08/24 09:11  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.150	U	0.200	0.0500	0.150	mg/L	2		05/14/24 12:00

## Batch Information

Analytical Batch: WFI3115  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AJP  
 Analytical Date/Time: 05/14/24 12:00  
 Container ID: 1242017016-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0214	J	0.0400	0.0120	0.0300	mg/L	1		05/17/24 14:26

## Batch Information

Analytical Batch: WDA5779  
 Analytical Method: SM21 4500P-B,E  
 Analyst: EBH  
 Analytical Date/Time: 05/17/24 14:26  
 Container ID: 1242017016-A

Prep Batch: WXX15239  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/17/24 11:45  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL

## Results of RM 40 - Bing's Landing

Client Sample ID: **RM 40 - Bing's Landing**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017017  
 Lab Project ID: 1242017

Collection Date: 05/08/24 10:55  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.397		0.200	0.0500	0.150	mg/L	2		05/14/24 12:07

## Batch Information

Analytical Batch: WFI3115  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AJP  
 Analytical Date/Time: 05/14/24 12:07  
 Container ID: 1242017017-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0300	U	0.0400	0.0120	0.0300	mg/L	1		05/17/24 14:27

## Batch Information

Analytical Batch: WDA5779  
 Analytical Method: SM21 4500P-B,E  
 Analyst: EBH  
 Analytical Date/Time: 05/17/24 14:27  
 Container ID: 1242017017-A

Prep Batch: WXX15239  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/17/24 11:45  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL

## Results of RM 43 - Upstream of Dow Island

Client Sample ID: **RM 43 - Upstream of Dow Island**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017018  
 Lab Project ID: 1242017

Collection Date: 05/08/24 10:15  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.459		0.200	0.0500	0.150	mg/L	2		05/14/24 12:12

## Batch Information

Analytical Batch: WFI3115  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AJP  
 Analytical Date/Time: 05/14/24 12:12  
 Container ID: 1242017018-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0300	U	0.0400	0.0120	0.0300	mg/L	1		05/17/24 14:28

## Batch Information

Analytical Batch: WDA5779  
 Analytical Method: SM21 4500P-B,E  
 Analyst: EBH  
 Analytical Date/Time: 05/17/24 14:28  
 Container ID: 1242017018-A

Prep Batch: WXX15239  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/17/24 11:45  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL

## Results of RM 44 - Mouth of Killey River

Client Sample ID: **RM 44 - Mouth of Killey River**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017019  
 Lab Project ID: 1242017

Collection Date: 05/08/24 09:45  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.823		0.200	0.0500	0.150	mg/L	2		05/14/24 12:14

## Batch Information

Analytical Batch: WFI3115  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AJP  
 Analytical Date/Time: 05/14/24 12:14  
 Container ID: 1242017019-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0300	U	0.0400	0.0120	0.0300	mg/L	1		05/17/24 14:29

## Batch Information

Analytical Batch: WDA5779  
 Analytical Method: SM21 4500P-B,E  
 Analyst: EBH  
 Analytical Date/Time: 05/17/24 14:29  
 Container ID: 1242017019-A

Prep Batch: WXX15239  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/17/24 11:45  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL



## Results of RM 50 - Skilak Lake Outflow

Client Sample ID: **RM 50 - Skilak Lake Outflow**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017020  
 Lab Project ID: 1242017

Collection Date: 05/08/24 08:50  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.305		0.200	0.0500	0.150	mg/L	2		05/14/24 12:16

## Batch Information

Analytical Batch: WFI3115  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AJP  
 Analytical Date/Time: 05/14/24 12:16  
 Container ID: 1242017020-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0300	U	0.0400	0.0120	0.0300	mg/L	1		05/17/24 14:30

## Batch Information

Analytical Batch: WDA5779  
 Analytical Method: SM21 4500P-B,E  
 Analyst: EBH  
 Analytical Date/Time: 05/17/24 14:30  
 Container ID: 1242017020-A

Prep Batch: WXX15239  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/17/24 11:45  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL

## Results of RM 70 - Jim's Landing

Client Sample ID: **RM 70 - Jim's Landing**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017021  
 Lab Project ID: 1242017

Collection Date: 05/08/24 10:05  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.859		0.200	0.0500	0.150	mg/L	2		05/14/24 12:17

## Batch Information

Analytical Batch: WFI3115  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AJP  
 Analytical Date/Time: 05/14/24 12:17  
 Container ID: 1242017021-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0300	U	0.0400	0.0120	0.0300	mg/L	1		05/17/24 14:31

## Batch Information

Analytical Batch: WDA5779  
 Analytical Method: SM21 4500P-B,E  
 Analyst: EBH  
 Analytical Date/Time: 05/17/24 14:31  
 Container ID: 1242017021-A

Prep Batch: WXX15239  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/17/24 11:45  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL

## Results of RM 74 - Russian River

Client Sample ID: **RM 74 - Russian River**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017022  
 Lab Project ID: 1242017

Collection Date: 05/08/24 09:24  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	1.75		0.200	0.0500	0.150	mg/L	2		05/14/24 12:19

## Batch Information

Analytical Batch: WFI3115  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AJP  
 Analytical Date/Time: 05/14/24 12:19  
 Container ID: 1242017022-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0300	U	0.0400	0.0120	0.0300	mg/L	1		05/17/24 14:32

## Batch Information

Analytical Batch: WDA5779  
 Analytical Method: SM21 4500P-B,E  
 Analyst: EBH  
 Analytical Date/Time: 05/17/24 14:32  
 Container ID: 1242017022-A

Prep Batch: WXX15239  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/17/24 11:45  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL

## Results of RM 82 - Kenai Lake Bridge

Client Sample ID: **RM 82 - Kenai Lake Bridge**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017023  
 Lab Project ID: 1242017

Collection Date: 05/08/24 07:50  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	1.15		0.200	0.0500	0.150	mg/L	2		05/14/24 12:21

## Batch Information

Analytical Batch: WFI3115  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AJP  
 Analytical Date/Time: 05/14/24 12:21  
 Container ID: 1242017023-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0300	U	0.0400	0.0120	0.0300	mg/L	1		05/17/24 14:35

## Batch Information

Analytical Batch: WDA5779  
 Analytical Method: SM21 4500P-B,E  
 Analyst: EBH  
 Analytical Date/Time: 05/17/24 14:35  
 Container ID: 1242017023-A

Prep Batch: WXX15239  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/17/24 11:45  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL

## Results of RM 79.5 - Juneau Creek

Client Sample ID: **RM 79.5 - Juneau Creek**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017024  
 Lab Project ID: 1242017

Collection Date: 05/08/24 08:37  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	1.32		0.200	0.0500	0.150	mg/L	2		05/14/24 12:23

## Batch Information

Analytical Batch: WFI3115  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AJP  
 Analytical Date/Time: 05/14/24 12:23  
 Container ID: 1242017024-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0300	U	0.0400	0.0120	0.0300	mg/L	1		05/17/24 14:36

## Batch Information

Analytical Batch: WDA5779  
 Analytical Method: SM21 4500P-B,E  
 Analyst: EBH  
 Analytical Date/Time: 05/17/24 14:36  
 Container ID: 1242017024-A

Prep Batch: WXX15239  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/17/24 11:45  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL

## Results of RM 6.5-Cunningham Park- FB

Client Sample ID: **RM 6.5-Cunningham Park- FB**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017025  
 Lab Project ID: 1242017

Collection Date: 05/08/24 09:22  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Dissolved Metals by ICP/MS

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	3.75	U	5.00	1.50	3.75	ug/L	1		05/17/24 19:22
Cadmium	0.375	U	0.500	0.150	0.375	ug/L	1		05/17/24 19:22
Chromium	3.75	U	5.00	2.50	3.75	ug/L	1		05/17/24 19:22
Copper	2.25	U	3.00	1.00	2.25	ug/L	1		05/17/24 19:22
Lead	1.50	U	2.00	0.500	1.50	ug/L	1		05/17/24 19:22
Zinc	10.6	B	10.0	3.10	7.50	ug/L	1		05/30/24 19:41

## Batch Information

Analytical Batch: MMS12297  
 Analytical Method: EP200.8  
 Analyst: HGS  
 Analytical Date/Time: 05/17/24 19:22  
 Container ID: 1242017025-C

Prep Batch: MXX36614  
 Prep Method: E200.2  
 Prep Date/Time: 05/13/24 16:01  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL

Analytical Batch: MMS12308  
 Analytical Method: EP200.8  
 Analyst: ACF  
 Analytical Date/Time: 05/30/24 19:41  
 Container ID: 1242017025-C

Prep Batch: MXX36637  
 Prep Method: E200.2  
 Prep Date/Time: 05/28/24 13:00  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL

## Results of RM 30-Funny River-FB

Client Sample ID: **RM 30-Funny River-FB**  
 Client Project ID: **Kenai River Baseline Water**  
 Lab Sample ID: 1242017026  
 Lab Project ID: 1242017

Collection Date: 05/08/24 11:17  
 Received Date: 05/09/24 08:40  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Dissolved Metals by ICP/MS

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Arsenic	3.75	U	5.00	1.50	3.75	ug/L	1		05/17/24 19:25
Cadmium	0.375	U	0.500	0.150	0.375	ug/L	1		05/17/24 19:25
Chromium	3.75	U	5.00	2.50	3.75	ug/L	1		05/17/24 19:25
Copper	2.25	U	3.00	1.00	2.25	ug/L	1		05/17/24 19:25
Lead	1.50	U	2.00	0.500	1.50	ug/L	1		05/17/24 19:25
Zinc	13.9	B	10.0	3.10	7.50	ug/L	1		05/30/24 19:44

## Batch Information

Analytical Batch: MMS12297  
 Analytical Method: EP200.8  
 Analyst: HGS  
 Analytical Date/Time: 05/17/24 19:25  
 Container ID: 1242017026-C

Prep Batch: MXX36614  
 Prep Method: E200.2  
 Prep Date/Time: 05/13/24 16:01  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL

Analytical Batch: MMS12308  
 Analytical Method: EP200.8  
 Analyst: ACF  
 Analytical Date/Time: 05/30/24 19:44  
 Container ID: 1242017026-C

Prep Batch: MXX36637  
 Prep Method: E200.2  
 Prep Date/Time: 05/28/24 13:00  
 Prep Initial Wt./Vol.: 20 mL  
 Prep Extract Vol: 50 mL

## Method Blank

Blank ID: MB for HBN 1881142 [MXX/36614]  
Blank Lab ID: 1763242

Matrix: Water (Surface, Eff., Ground)

### QC for Samples:

1242017001, 1242017002, 1242017003, 1242017004, 1242017005, 1242017006, 1242017007, 1242017008, 1242017009, 1242017010, 1242017011, 1242017012, 1242017013, 1242017014, 1242017025, 1242017026

## Results by EP200.8

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>
Arsenic	3.75U	5.00	1.50	3.75	ug/L
Cadmium	0.193J	0.500	0.150	0.375	ug/L
Chromium	3.75U	5.00	2.50	3.75	ug/L
Copper	2.25U	3.00	1.00	2.25	ug/L
Lead	1.50U	2.00	0.500	1.50	ug/L
Zinc	15.2*	10.0	3.10	7.50	ug/L

## Batch Information

Analytical Batch: MMS12297  
Analytical Method: EP200.8  
Instrument: P7 Agilent 7800  
Analyst: HGS  
Analytical Date/Time: 5/17/2024 6:23:00PM

Prep Batch: MXX36614  
Prep Method: E200.2  
Prep Date/Time: 5/13/2024 4:01:03PM  
Prep Initial Wt./Vol.: 20 mL  
Prep Extract Vol: 50 mL

Analytical Batch: MMS12299  
Analytical Method: EP200.8  
Instrument: P7 Agilent 7800  
Analyst: HGS  
Analytical Date/Time: 5/21/2024 4:26:15PM

Prep Batch: MXX36614  
Prep Method: E200.2  
Prep Date/Time: 5/13/2024 4:01:03PM  
Prep Initial Wt./Vol.: 20 mL  
Prep Extract Vol: 50 mL



## Blank Spike Summary

Blank Spike ID: LCS for HBN 1242017 [MXX36614]

Blank Spike Lab ID: 1763243

Date Analyzed: 05/17/2024 18:25

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1242017001, 1242017002, 1242017003, 1242017004, 1242017005, 1242017006, 1242017007, 1242017008, 1242017009, 1242017010, 1242017011, 1242017012, 1242017013, 1242017014, 1242017025, 1242017026

## Results by EP200.8

Parameter	Blank Spike (ug/L)			CL
	Spike	Result	Rec (%)	
Arsenic	1000	921	92	( 85-115 )
Cadmium	100	95.0	95	( 85-115 )
Chromium	400	385	96	( 85-115 )
Copper	1000	974	97	( 85-115 )
Lead	1000	973	97	( 85-115 )
Zinc	1000	990	99	( 85-115 )

## Batch Information

Analytical Batch: MMS12297

Analytical Method: EP200.8

Instrument: P7 Agilent 7800

Analyst: HGS

Prep Batch: MXX36614

Prep Method: E200.2

Prep Date/Time: 05/13/2024 16:01

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

Dupe Init Wt./Vol.: Extract Vol:

Print Date: 06/18/2024 8:36:35AM



### Matrix Spike Summary

Original Sample ID: 1242017001

MS Sample ID: 1763245 MS

MSD Sample ID:

Analysis Date: 05/17/2024 18:30

Analysis Date: 05/17/2024 18:33

Analysis Date:

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1242017001, 1242017002

### 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	1.85J	1000	874	87				70-130		
Cadmium	0.375U	100	91.3	91				70-130		
Chromium	3.75U	400	355	89				70-130		
Copper	1.23J	1000	894	89				70-130		
Lead	1.50U	1000	900	90				70-130		
Zinc	8.76J	1000	965	96				70-130		

### Batch Information

Analytical Batch: MMS12297

Analytical Method: EP200.8

Instrument: P7 Agilent 7800

Analyst: HGS

Analytical Date/Time: 5/17/2024 6:33:02PM

Prep Batch: MX36614

Prep Method: DW Digest for Metals on ICP-MS

Prep Date/Time: 5/13/2024 4:01:03PM

Prep Initial Wt./Vol.: 20.00mL

Prep Extract Vol: 50.00mL

Print Date: 06/18/2024 8:36:37AM

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## Matrix Spike Summary

Original Sample ID: 1242017002  
MS Sample ID: 1763246 MS  
MSD Sample ID:

Analysis Date: 05/17/2024 18:34  
Analysis Date: 05/17/2024 18:42  
Analysis Date:  
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1242017002, 1242017003, 1242017004, 1242017005, 1242017006, 1242017007, 1242017008, 1242017009, 1242017010, 1242017011, 1242017012, 1242017013, 1242017014, 1242017025, 1242017026

## 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	2.67J	1000	897	89				70-130		
Cadmium	0.375U	100	89.9	90				70-130		
Chromium	3.75U	400	363	91				70-130		
Copper	1.48J	1000	925	92				70-130		
Lead	1.50U	1000	895	90				70-130		

## Batch Information

Analytical Batch: MMS12297  
Analytical Method: EP200.8  
Instrument: P7 Agilent 7800  
Analyst: HGS  
Analytical Date/Time: 5/17/2024 6:42:46PM

Prep Batch: MXX36614  
Prep Method: DW Digest for Metals on ICP-MS  
Prep Date/Time: 5/13/2024 4:01:03PM  
Prep Initial Wt./Vol.: 20.00mL  
Prep Extract Vol: 50.00mL

Print Date: 06/18/2024 8:36:37AM



### Method Blank

Blank ID: MB for HBN 1886232 [MXX/36637]  
Blank Lab ID: 1765257

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1242017002, 1242017003, 1242017005, 1242017006, 1242017007, 1242017009, 1242017013, 1242017014, 1242017025, 1242017026

### Results by EP200.8

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>
Zinc	15.2*	10.0	3.10	7.50	ug/L

### Batch Information

Analytical Batch: MMS12308  
Analytical Method: EP200.8  
Instrument: P7 Agilent 7800  
Analyst: ACF  
Analytical Date/Time: 5/30/2024 6:48:58PM

Prep Batch: MXX36637  
Prep Method: E200.2  
Prep Date/Time: 5/28/2024 1:00:02PM  
Prep Initial Wt./Vol.: 20 mL  
Prep Extract Vol: 50 mL

Print Date: 06/18/2024 8:36:39AM

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## Blank Spike Summary

Blank Spike ID: LCS for HBN 1242017 [MXX36637]

Blank Spike Lab ID: 1765258

Date Analyzed: 05/30/2024 18:51

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1242017002, 1242017003, 1242017005, 1242017006, 1242017007, 1242017009, 1242017013, 1242017014, 1242017025, 1242017026

## Results by EP200.8

Parameter	Blank Spike (ug/L)			CL
	Spike	Result	Rec (%)	
Zinc	1000	952	95	( 85-115 )

## Batch Information

Analytical Batch: **MMS12308**

Analytical Method: **EP200.8**

Instrument: **P7 Agilent 7800**

Analyst: **ACF**

Prep Batch: **MXX36637**

Prep Method: **E200.2**

Prep Date/Time: **05/28/2024 13:00**

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

Dupe Init Wt./Vol.: Extract Vol:

Print Date: 06/18/2024 8:36:42AM

## Matrix Spike Summary

Original Sample ID: 1765262  
MS Sample ID: 1765263 MS  
MSD Sample ID:

Analysis Date: 05/30/2024 19:05  
Analysis Date: 05/30/2024 19:08  
Analysis Date:  
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1242017002, 1242017003, 1242017005, 1242017006, 1242017007, 1242017009, 1242017013,  
1242017014, 1242017025, 1242017026

## Results by EP200.8

Parameter	Sample	Matrix Spike (ug/L)			Spike Duplicate (ug/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Zinc	37.6	1000	960	92				70-130		

## Batch Information

Analytical Batch: MMS12308  
Analytical Method: EP200.8  
Instrument: P7 Agilent 7800  
Analyst: ACF  
Analytical Date/Time: 5/30/2024 7:08:24PM

Prep Batch: MX36637  
Prep Method: DW Digest for Metals on ICP-MS  
Prep Date/Time: 5/28/2024 1:00:02PM  
Prep Initial Wt./Vol.: 20.00mL  
Prep Extract Vol: 50.00mL

Print Date: 06/18/2024 8:36:45AM

## Method Blank

Blank ID: MB for HBN 1881831 (WFI/3115)  
Blank Lab ID: 1763359

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1242017001, 1242017002, 1242017003, 1242017004, 1242017005, 1242017006, 1242017007, 1242017008, 1242017009,  
1242017010, 1242017011, 1242017012, 1242017013, 1242017014, 1242017015, 1242017016, 1242017017, 1242017018,  
1242017019, 1242017020, 1242017021, 1242017022, 1242017023, 1242017024

## Results by SM21 4500NO3-F

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>
Nitrate-N	0.150U	0.200	0.0500	0.150	mg/L
Nitrite-N	0.150U	0.200	0.0500	0.150	mg/L
Total Nitrate/Nitrite-N	0.150U	0.200	0.0500	0.150	mg/L

## Batch Information

Analytical Batch: WFI3115  
Analytical Method: SM21 4500NO3-F  
Instrument: Astoria segmented flow  
Analyst: AJP  
Analytical Date/Time: 5/14/2024 12:03:50PM

Print Date: 06/18/2024 8:36:47AM

## Method Blank

Blank ID: MB for HBN 1881831 (WFI/3115)  
Blank Lab ID: 1763366

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1242017001, 1242017002, 1242017003, 1242017004, 1242017005, 1242017006, 1242017007, 1242017008, 1242017009, 1242017010, 1242017011, 1242017012, 1242017013, 1242017014, 1242017015, 1242017016

## Results by SM21 4500NO3-F

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>
Nitrate-N	0.150U	0.200	0.0500	0.150	mg/L
Nitrite-N	0.150U	0.200	0.0500	0.150	mg/L
Total Nitrate/Nitrite-N	0.150U	0.200	0.0500	0.150	mg/L

## Batch Information

Analytical Batch: WFI3115  
Analytical Method: SM21 4500NO3-F  
Instrument: Astoria segmented flow  
Analyst: AJP  
Analytical Date/Time: 5/14/2024 11:16:35AM

Print Date: 06/18/2024 8:36:47AM



## Blank Spike Summary

Blank Spike ID: LCS for HBN 1242017 [WFI3115]

Blank Spike Lab ID: 1763361

Date Analyzed: 05/14/2024 12:02

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1242017001, 1242017002, 1242017003, 1242017004, 1242017005, 1242017006, 1242017007, 1242017008, 1242017009, 1242017010, 1242017011, 1242017012, 1242017013, 1242017014, 1242017015, 1242017016, 1242017017, 1242017018, 1242017019, 1242017020, 1242017021,

## Results by SM21 4500NO3-F

Blank Spike (mg/L)				
Parameter	Spike	Result	Rec (%)	CL
Nitrate-N	2.5	2.50	100	( 70-130 )
Nitrite-N	2.5	2.50	100	( 90-110 )
Total Nitrate/Nitrite-N	5	5.00	100	( 90-110 )

## Batch Information

Analytical Batch: **WFI3115**

Analytical Method: **SM21 4500NO3-F**

Instrument: **Astoria segmented flow**

Analyst: **AJP**

Print Date: 06/18/2024 8:36:50AM

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1242017 [WFI3115]

Blank Spike Lab ID: 1763368

Date Analyzed: 05/14/2024 11:14

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1242017001, 1242017002, 1242017003, 1242017004, 1242017005, 1242017006, 1242017007, 1242017008, 1242017009, 1242017010, 1242017011, 1242017012, 1242017013, 1242017014, 1242017015, 1242017016

## Results by SM21 4500NO3-F

Blank Spike (mg/L)				
Parameter	Spike	Result	Rec (%)	CL
Nitrate-N	2.5	2.38	95	( 70-130 )
Nitrite-N	2.5	2.64	106	( 90-110 )
Total Nitrate/Nitrite-N	5	5.02	100	( 90-110 )

## Batch Information

Analytical Batch: WFI3115

Analytical Method: SM21 4500NO3-F

Instrument: Astoria segmented flow

Analyst: AJP

Print Date: 06/18/2024 8:36:50AM



### Matrix Spike Summary

Original Sample ID: 1242005001  
MS Sample ID: 1763350 MS  
MSD Sample ID: 1763351 MSD

Analysis Date: 05/14/2024 11:21  
Analysis Date: 05/14/2024 11:23  
Analysis Date: 05/14/2024 11:25  
Matrix: Drinking Water

QC for Samples: 1242017001, 1242017002, 1242017003, 1242017004, 1242017005, 1242017006, 1242017007, 1242017008, 1242017009, 1242017010, 1242017011, 1242017012, 1242017013, 1242017014, 1242017015, 1242017016, 1242017017

### 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	0.150U	2.50	2.44	98	2.50	2.46	98	90-110	0.79	(< 25 )

### Batch Information

Analytical Batch: WFI3115  
Analytical Method: SM21 4500NO3-F  
Instrument: Astoria segmented flow  
Analyst: AJP  
Analytical Date/Time: 5/14/2024 11:23:00AM

Print Date: 06/18/2024 8:36:52AM



### Matrix Spike Summary

Original Sample ID: 1242017017  
MS Sample ID: 1763352 MS  
MSD Sample ID: 1763353 MSD

Analysis Date: 05/14/2024 12:07  
Analysis Date: 05/14/2024 12:09  
Analysis Date: 05/14/2024 12:10  
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1242017001, 1242017002, 1242017003, 1242017004, 1242017005, 1242017006, 1242017007, 1242017008, 1242017009, 1242017010, 1242017011, 1242017012, 1242017013, 1242017014, 1242017015, 1242017016, 1242017017, 1242017018, 1242017019, 1242017020, 1242017021.

### 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	0.397	2.50	2.85	98	2.50	2.95	102	90-110	3.60	(< 25 )

### Batch Information

Analytical Batch: WFI3115  
Analytical Method: SM21 4500NO3-F  
Instrument: Astoria segmented flow  
Analyst: AJP  
Analytical Date/Time: 5/14/2024 12:09:00PM

Print Date: 06/18/2024 8:36:52AM



### Method Blank

Blank ID: MB for HBN 1883333 [WXX/15238]  
Blank Lab ID: 1763893

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1242017001, 1242017002, 1242017003, 1242017005, 1242017006, 1242017007

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

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>
Total Phosphorus	0.0300U	0.0400	0.0120	0.0300	mg/L

### Batch Information

Analytical Batch: WDA5778  
Analytical Method: SM21 4500P-B,E  
Instrument: Discrete Analyzer 2  
Analyst: EBH  
Analytical Date/Time: 5/17/2024 11:23:56AM

Prep Batch: WXX15238  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 5/16/2024 5:42:00PM  
Prep Initial Wt./Vol.: 25 mL  
Prep Extract Vol: 25 mL

Print Date: 06/18/2024 8:36:54AM

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## Blank Spike Summary

Blank Spike ID: LCS for HBN 1242017 [WXX15238]  
 Blank Spike Lab ID: 1763894  
 Date Analyzed: 05/17/2024 11:24

Spike Duplicate ID: LCSD for HBN 1242017 [WXX15238]  
 Spike Duplicate Lab ID: 1763895  
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1242017001, 1242017002, 1242017003, 1242017005, 1242017006, 1242017007

## 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	0.186	93	0.2	0.177	89	( 75-125 )	5.20	(< 25 )

## Batch Information

Analytical Batch: WDA5778  
 Analytical Method: SM21 4500P-B,E  
 Instrument: Discrete Analyzer 2  
 Analyst: EBH

Prep Batch: WXX15238  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/16/2024 17:42  
 Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL  
 Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

Print Date: 06/18/2024 8:36:57AM

## Matrix Spike Summary

Original Sample ID: 1242017002  
MS Sample ID: 1763896 MS  
MSD Sample ID: 1763897 MSD

Analysis Date: 05/17/2024 11:31  
Analysis Date: 05/17/2024 11:32  
Analysis Date: 05/17/2024 11:35  
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1242017001, 1242017002, 1242017003, 1242017005, 1242017006, 1242017007

## 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	0.0442	0.200	.243	100	0.200	0.240	98	75-125	1.40	(< 7 )

## Batch Information

Analytical Batch: WDA5778  
Analytical Method: SM21 4500P-B,E  
Instrument: Discrete Analyzer 2  
Analyst: EBH  
Analytical Date/Time: 5/17/2024 11:32:22AM

Prep Batch: WXX15238  
Prep Method: Total Phosphorus (W) Ext.  
Prep Date/Time: 5/16/2024 5:42:00PM  
Prep Initial Wt./Vol.: 25.00mL  
Prep Extract Vol: 25.00mL

Print Date: 06/18/2024 8:36:59AM



### Method Blank

Blank ID: MB for HBN 1883434 [WXX/15239]  
Blank Lab ID: 1763983

Matrix: Water (Surface, Eff., Ground)

### QC for Samples:

1242017008, 1242017009, 1242017010, 1242017011, 1242017012, 1242017013, 1242017014, 1242017015, 1242017016, 1242017017, 1242017018, 1242017019, 1242017020, 1242017021, 1242017022, 1242017023, 1242017024

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

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>
Total Phosphorus	0.0300U	0.0400	0.0120	0.0300	mg/L

### Batch Information

Analytical Batch: WDA5779  
Analytical Method: SM21 4500P-B,E  
Instrument: Discrete Analyzer 2  
Analyst: EBH  
Analytical Date/Time: 5/17/2024 2:12:10PM

Prep Batch: WXX15239  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 5/17/2024 11:45:00AM  
Prep Initial Wt./Vol.: 25 mL  
Prep Extract Vol: 25 mL

Print Date: 06/18/2024 8:37:01AM



## Blank Spike Summary

Blank Spike ID: LCS for HBN 1242017 [WXX15239]  
 Blank Spike Lab ID: 1763984  
 Date Analyzed: 05/17/2024 14:13

Spike Duplicate ID: LCSD for HBN 1242017 [WXX15239]  
 Spike Duplicate Lab ID: 1763985  
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1242017008, 1242017009, 1242017010, 1242017011, 1242017012, 1242017013, 1242017014, 1242017015, 1242017016, 1242017017, 1242017018, 1242017019, 1242017020, 1242017021, 1242017022, 1242017023, 1242017024

## 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	0.184	92	0.2	0.179	90	( 75-125 )	2.70	(< 25 )

## Batch Information

Analytical Batch: WDA5779  
 Analytical Method: SM21 4500P-B,E  
 Instrument: Discrete Analyzer 2  
 Analyst: EBH

Prep Batch: WXX15239  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/17/2024 11:45  
 Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL  
 Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

Print Date: 06/18/2024 8:37:05AM

## Matrix Spike Summary

Original Sample ID: 1242017008  
MS Sample ID: 1763986 MS  
MSD Sample ID: 1763987 MSD

Analysis Date: 05/17/2024 14:15  
Analysis Date: 05/17/2024 14:16  
Analysis Date: 05/17/2024 14:17  
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1242017008, 1242017009, 1242017010, 1242017011, 1242017012, 1242017013, 1242017014, 1242017015, 1242017016, 1242017017, 1242017018, 1242017019, 1242017020, 1242017021, 1242017022, 1242017023, 1242017024

## 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	0.0300U	0.200	.204	102	0.200	0.205	103	75-125	0.78	(< 7 )

## Batch Information

Analytical Batch: WDA5779  
Analytical Method: SM21 4500P-B,E  
Instrument: Discrete Analyzer 2  
Analyst: EBH  
Analytical Date/Time: 5/17/2024 2:16:04PM

Prep Batch: WXX15239  
Prep Method: Total Phosphorus (W) Ext.  
Prep Date/Time: 5/17/2024 11:45:00AM  
Prep Initial Wt./Vol.: 25.00mL  
Prep Extract Vol: 25.00mL

Print Date: 06/18/2024 8:37:06AM



#### Method Blank

Blank ID: MB for HBN 1885044 [WXX/15243]  
Blank Lab ID: 1764753

Matrix: Water (Surface, Eff., Ground)

QC for Samples:  
1242017004

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

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>
Total Phosphorus	0.0300U	0.0400	0.0120	0.0300	mg/L

#### Batch Information

Analytical Batch: WDA5781  
Analytical Method: SM21 4500P-B,E  
Instrument: Discrete Analyzer 2  
Analyst: EBH  
Analytical Date/Time: 5/23/2024 2:08:56PM

Prep Batch: WXX15243  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 5/23/2024 10:30:00AM  
Prep Initial Wt./Vol.: 25 mL  
Prep Extract Vol: 25 mL

Print Date: 06/18/2024 8:37:08AM

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## Blank Spike Summary

Blank Spike ID: LCS for HBN 1242017 [WXX15243]  
 Blank Spike Lab ID: 1764754  
 Date Analyzed: 05/23/2024 14:09

Spike Duplicate ID: LCSD for HBN 1242017 [WXX15243]  
 Spike Duplicate Lab ID: 1764755  
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1242017004

## 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	0.183	92	0.2	0.179	89	( 75-125 )	2.40	(< 25 )

## Batch Information

Analytical Batch: WDA5781  
 Analytical Method: SM21 4500P-B,E  
 Instrument: Discrete Analyzer 2  
 Analyst: EBH

Prep Batch: WXX15243  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 05/23/2024 10:30  
 Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL  
 Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

Print Date: 06/18/2024 8:37:12AM



### Matrix Spike Summary

Original Sample ID: 1242017004  
MS Sample ID: 1764756 MS  
MSD Sample ID: 1764757 MSD

Analysis Date: 05/23/2024 14:11  
Analysis Date: 05/23/2024 14:12  
Analysis Date: 05/23/2024 14:13  
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1242017004

### 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	0.902	1.00	1.82	92	1.00	1.79	89	75-125	1.60	(< 7 )

### Batch Information

Analytical Batch: WDA5781  
Analytical Method: SM21 4500P-B,E  
Instrument: Discrete Analyzer 2  
Analyst: EBH  
Analytical Date/Time: 5/23/2024 2:12:21PM

Prep Batch: WXX15243  
Prep Method: Total Phosphorus (W) Ext.  
Prep Date/Time: 5/23/2024 10:30:00AM  
Prep Initial Wt./Vol.: 5.00mL  
Prep Extract Vol: 25.00mL

Print Date: 06/18/2024 8:37:14AM

## Whisman, Curtis (Anchorage)

---

**From:** Benjamin Meyer <ben@kenaiwatershed.org>  
**Sent:** Friday, May 10, 2024 3:46 PM  
**To:** Whisman, Curtis (Anchorage)  
**Subject:** [EXTERNAL] Re: 1242017: Extra container

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

---

Hi Curtis,

Thank you for confirming this. We can discard this sample. There was a small miscommunication with one of our smalping teams, and I thought that container had been removed already. We are measuring dissolved metals samples at all sites downstream of River Mile 36 (Moose River), but not at that site itself.

Thank you again. Cheers -- Ben

On Fri, May 10, 2024 at 3:28 PM Whisman, Curtis (Anchorage) <[Curtis.Whisman@sgs.com](mailto:Curtis.Whisman@sgs.com)> wrote:

Ben,

We have received one extra container that was not noted on the COC. Sample #16, ID 'Moose River', had a container labeled for dissolved metals. Would you like us to proceed with analysis for that sample?

**Curtis Whisman**

**Industries & Environment**

Project Manager

SGS North America Inc.

200 W Potter Dr.

Anchorage, AK 99518

Phone: (907) 562-2343

Email: [curtis.whisman@sgs.com](mailto:curtis.whisman@sgs.com)



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## Whisman, Curtis (Anchorage)

---

**From:** Benjamin Meyer <ben@kenaiwatershed.org>  
**Sent:** Thursday, June 13, 2024 4:14 PM  
**To:** Whisman, Curtis (Anchorage)  
**Subject:** Re: [EXTERNAL] Re: 1242017: Metals

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

---

Hi Curtis,

It sounds like the 200.7 test is being phased out, so yes we will make 200.8 the protocol for both dissolved and total metals. I am fine with the results as is for this round of data.

I'll be sending in a bottle order for our July 23 sampling event in the near future.

Thanks again,

Ben

On Thu, Jun 13, 2024 at 3:24 PM Whisman, Curtis (Anchorage) <[Curtis.Whisman@sgs.com](mailto:Curtis.Whisman@sgs.com)> wrote:

Ben,

Just to confirm, are you OK with the 200.8 results, or should we rerun by 200.7?

Thanks.

**Curtis Whisman**

**Industries & Environment**

Project Manager

SGS North America Inc.

Phone: (907) 562-2343



---

**From:** Whisman, Curtis (Anchorage) <[Curtis.Whisman@sgs.com](mailto:Curtis.Whisman@sgs.com)>  
**Sent:** Wednesday, June 12, 2024 4:09 PM  
**To:** Benjamin Meyer <[ben@kenaiwatershed.org](mailto:ben@kenaiwatershed.org)>  
**Subject:** RE: [EXTERNAL] Re: 1242017: Metals

Ben,

Thanks for getting back to me. The news about 200.7 being phased out by ALS was a surprise to me to. We do have another lab that can run 200.7, we actually used them last year for you in workorder 1231846. I have compared the reporting limits from last year's report to what we have just received from ALS and the reporting limits are lower for ALS Kelso. Also, in the future if you want to stick with 200.8, we can run all the requested metals in house.

You are correct about the difference in 200.7 and 200.8

Let me know if you have any more questions.

**Curtis Whisman**

**Industries & Environment**

Project Manager

SGS North America Inc.

Phone: (907) 562-2343

---

**From:** Benjamin Meyer <[ben@kenaiwatershed.org](mailto:ben@kenaiwatershed.org)>  
**Sent:** Wednesday, June 12, 2024 3:26 PM  
**To:** Whisman, Curtis (Anchorage) <[Curtis.Whisman@sgs.com](mailto:Curtis.Whisman@sgs.com)>  
**Subject:** [EXTERNAL] Re: 1242017: Metals

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

---

Hi Curtis,

Thanks for letting me know. I recall we chatted about this last year on the phone, and it sounded like doing 200.8 for both dissolved and total metals made most sense. I was unaware that 200.7 was being phased out.

Am I correct that the difference is just that 200.7 uses ICP-AES, whereas 200.8 uses ICP-MS? If so, as long as both methods are within similar ranges of detection and other QC metrics, it is fine to use 200.8 for both. As long as it's clear which samples are dissolved metals and which are total metals, either is OK. I will update our QAPP in the near future to reflect this change.

Let me know what you think. Thanks very much,

Ben

On Wed, Jun 12, 2024 at 2:57 PM Whisman, Curtis (Anchorage) <[Curtis.Whisman@sgs.com](mailto:Curtis.Whisman@sgs.com)> wrote:

Ben,

We had shipped the 200.7 metals to ALS in Kelso, WA for analysis as we had done for this project in the past. We have received the data and they had run the metals by 200.8 instead as they are in the process of phasing out the 200.7 analysis. Is this OK, or would you like them to rerun by 200.7?

**Curtis Whisman**

**Industries & Environment**

Project Manager

SGS North America Inc.

200 W Potter Dr.

Anchorage, AK 99518

Phone: (907) 562-2343

Email: [curtis.whisman@sgs.com](mailto:curtis.whisman@sgs.com)



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CHAIN OF CUSTODY RECORD

1242017



Profile # 383466 CSW

Section 1					Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.										Page <u>1</u> of <u>3</u>					
CLIENT: Kenai Watershed Forum					Section 3					Preservative										
CONTACT: Benjamin Meyer PHONE #: 907-232-0280																				
PROJECT NAME: Kenai River Baseline Water Quality Monitoring PROJECT/ PWSID/ PERMIT#:					#					Analysis*							NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS			
REPORTS TO: Benjamin Meyer E-MAIL: ben@kenaiwatershed.org Profile #: QUOTE #: P.O. #:					Comp Grab MI (Multi-incremental)															
RESERVED for lab use		SAMPLE IDENTIFICATION		DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE				Total NO3/NO2(SM21 4500/NO3-F), Total P(SM4500)	Total Metals (200.7)	Dissolved Metals (200.8)								REMARKS/LOC ID
1A10D		RM 0 - No Name Creek		5/8/2024	10:10	water	3			x	x	x								27AB
2A10D		RM 0 - No Name Creek - DUP		5/8/2024	10:05	water	3			x	x	x								28AB
3A10D		RM 1.5 - Kenai City Dock		5/8/2024	9:25	water	3			x	x	x								29AB
4A10D		RM 6.5 - Cunningham Park		5/8/2024	9:11	water	3			x	x	x								30
5A10D		RM 10 - Beaver Creek		5/8/2024	10:00	water	3			x	x	x								
6A10D		RM 10.1 - Kenai River		5/8/2024	10:24	water	3			x	x	x								
7A10D		RM 12.5 - Pillars		5/8/2024	10:45	water	3			x	x	x								
8A10D		RM 18 - Poacher's Cove		5/8/2024	11:16	water	3			x	x	x								
9A10D		RM 19 - Slikok Creek		5/8/2024	8:45	water	3			x	x	x								
10A10D		RM 19 - Slikok Creek - DUP		5/8/2024	8:33	water	3			x	x	x								

Section 5				Section 4		DOD Project? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Data Deliverable Requirements: Please include Electronic Data Delivery files.	
Relinquished By: (1)		Date	Time	Received By:		Cooler ID:		Requested Turnaround Time and/or Special Instructions:	
B. Meyer		5/8/2022							
Relinquished By: (2)		Date	Time	Received By:					
Relinquished By: (3)		Date	Time	Received By:					
Relinquished By: (4)		Date	Time	Received For Laboratory By:		Temp Blank °C: 1R: 2.0 2B: 1.4 or Ambient [ ]		Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT	
				5/7/24 0840		C. Meyer		Delivery Method: Hand Delivery [ ] Commerical Delivery [ ]	

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1242017



CLIENT: Kenai Watershed Forum					Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.										Page 1 of 3						
CONTACT: Benjamin Meyer					PHONE #: 907-232-0280		Section 3		Preservative												
PROJECT NAME: Kenai River Baseline Water Quality Monitoring					PROJECT/ PWSID/ PERMIT#:		# CONTAINERS	Comp Grab MI (Multi-incremental)	Analysis*										NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS		
REPORTS TO: Benjamin Meyer					E-MAIL: ben@kenaiwatershed.org																
INVOICE TO: Kenai Watershed Forum					QUOTE #: P.O. #:																
RESERVED for lab use		SAMPLE IDENTIFICATION		DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE			Total NO3/NO2(SM21 4500NO3-F), Total P(SM4500)	Total Metals (200.7)	Dissolved Metals (200.8)										REMARKS/LOC ID
		RM 0 - No Name Creek		5/8/2024	10:10	water	3		x	x	x										
		RM 0 - No Name Creek - DUP		5/8/2024	10:05	water	3		x	x	x										
		RM 1.5 - Kenai City Dock		5/8/2024	9:25	water	3		x	x	x										
		RM 6.5 - Cunningham Park		5/8/2024	9:11	water	3		x	x	x										
		RM 10 - Beaver Creek		5/8/2024	10:00	water	3		x	x	x										
		RM 10.1 - Kenai River		5/8/2024	10:24	water	3		x	x	x										
		RM 12.5 - Pillars		5/8/2024	10:45	water	3		x	x	x										
		RM 18 - Poacher's Cove		5/8/2024	11:16	water	3		x	x	x										
		RM 19 - Slikok Creek		5/8/2024	8:45	water	3		x	x	x										
		RM 19 - Slikok Creek - DUP		5/8/2024	8:33	water	3		x	x	x										
Section 5	Relinquished By: (1)		Date	Time	Received By:		Section 4		DOD Project? Yes <input checked="" type="radio"/> No <input type="radio"/>		Data Deliverable Requirements: Please include Electronic Data Delivery files.										
	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: IR: 2.0 D21 2B: 1.4 P30		Chain of Custody Seal: (Circle) INTACT <input checked="" type="radio"/> BROKEN <input type="radio"/> ABSENT <input type="radio"/>												
	Relinquished By: (4)		Date	Time	Received For Laboratory By:		or Ambient [ ]		Delivery Method: Hand Delivery <input checked="" type="checkbox"/> Commercial Delivery <input type="checkbox"/>												



SGS North America Inc.  
CHAIN OF CUSTODY RECORD

1242017



www.us.sgs.com

CLIENT: Kenai Watershed Forum					Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.										Page <u>2</u> of <u>3</u>				
CONTACT: Benjamin Meyer					PHONE #: 907-232-0280		Section 3		Preservative										
PROJECT NAME: Kenai River Baseline Water Quality Monitoring					PROJECT/ PWSID/ PERMIT#:		# CONTAINERS	Analysis*										NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS	
REPORTS TO: Benjamin Meyer					E-MAIL: ben@kenaiwatershed.org														
INVOICE TO: Kenai Watershed Forum					QUOTE #: P.O. #:														
RESERVED for lab use		SAMPLE IDENTIFICATION		DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE		Total NO3/NO2(SM21 4500NO3-F), Total P(SM4500)	Total Metals (200.7)	Dissolved Metals (200.8)									REMARKS/LOC ID
		RM 21 - Soldotna Bridge		5/8/2024	9:15	water	3	x	x	x									
		RM 22 - Soldotna Creek		5/8/2024	7:18	water	3	x	x	x									
		RM 23 - Swiftwater Park		5/8/2024	7:58	water	3	x	x	x									
		RM 30 - Funny River		5/8/2024	11:17	water	3	x	x	x									
		RM 31 - Morgan's Landing		5/8/2024	9:54	water	2	x	x										
		RM 36 - Moose River		5/8/2024	9:11	water	2	x	x										
		RM 40 - Bing's Landing		5/8/2024	10:55	water	2	x	x										
		RM 43 - Upstream of Dow Island		5/8/2024	10:15	water	2	x	x										
		RM 44 - Mouth of Killey River		5/8/2024	9:45	water	2	x	x										
		RM 50 - Skilak Lake Outflow		5/8/2024	8:50	water	2	x	x										
Relinquished By: (1)		Date	Time	Received By:				Section 4		DOD Project? Yes <input checked="" type="radio"/> No <input type="radio"/>		Data Deliverable Requirements: Please include Electronic Data Delivery files.							
Relinquished By: (2)		Date	Time	Received By:				Cooler ID:		Requested Turnaround Time and/or Special Instructions:									
Relinquished By: (3)		Date	Time	Received By:															
Relinquished By: (4)		Date	Time	Received For Laboratory By:				Temp Blank °C: 18.2, 18.2, 20.1, 20.1, 20.1, 20.1 or Ambient [ ]		Chain of Custody Seal: (Circle) <input checked="" type="radio"/> INTACT <input type="radio"/> BROKEN <input type="radio"/> ABSENT									
										Delivery Method: Hand Delivery <input checked="" type="checkbox"/> Commercial Delivery <input type="checkbox"/>									

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







1242017



## SAMPLE RECEIPT FORM

Project Manager Completion			
Was all necessary information recorded on the COC upon receipt? (temperature, COC seals, etc.?)	<input checked="" type="radio"/> Yes	<input type="radio"/> No	N/A
Was temperature between 0-6° C?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	N/A If "No", are the samples either exempt* or sampled <8 hours prior to receipt?
Were all analyses received within holding time*?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	N/A
Was a method specified for each analysis, where applicable? If no, please note correct methods.	<input checked="" type="radio"/> Yes	<input type="radio"/> No	N/A Lab Filter
Are compound lists specified, where applicable? For project specific or special compound lists please note correct analysis code.	Yes	<input checked="" type="radio"/> No	N/A 200.8 D:35: As, Cd, Cr, Cu, Pb, Zn. 200.7: Ca, Mg, Fe, Zn, Cu
If rush was requested by the client, was the requested TAT approved?	Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A If "NO", what is the approved TAT?
If SEDD Deliverables are required, were Location ID's and an NPD L Number provided?	Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A If "NO", contact client for information.
Sample Login Completion			
Do ID's on sample containers match COC?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	N/A
If provided on containers, do dates/times collected match COC?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	N/A Note: If times differ <1 hr., record details below and login per COC.
Were all sample containers received in good condition?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	N/A
Were proper containers (type/mass/volume/preservative) received for all samples? *See form F-083 "Sample Guide"	<input checked="" type="radio"/> Yes	<input type="radio"/> No	N/A Note: If 200.8/6020 Total Metals are received unpreserved, preserve and note HNO3 lot here: If 200.8/6020 Dissolved Metals are received unpreserved, log in for LABFILTER and do not preserve. For all non-metals methods, inform Project Manager.
Were Trip Blanks (VOC, GRO, Low-Level Hg, etc.) received with samples, where applicable*?	Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
Were all VOA vials free of headspace >6mm?	Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
Were all soil VOA samples received field extracted with Methanol?	Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
Did all soil VOA samples have an accompanying unpreserved container for % solids?	Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
If special handling is required, were containers labelled appropriately? e.g. MI/ISM, foreign soils, lab filter, Ref Lab, limited volume	<input checked="" type="radio"/> Yes	<input type="radio"/> No	N/A Ref Lab, Filter
For Rush/Short Holding time, was the lab notified?	Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
For any question answered "NO", was the Project Manager notified?	Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A PM Initials:
Was Peer Review of sample numbering/labelling completed?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	N/A Reviewer Initials: EAH
Additional Notes/Clarification where Applicable, including resolution of "No" answers when a change order is not attached:			
Additional container for sample 16 received. Scheduled for dissolved metals per label.			

# AIRBILL 13566844

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

Signed.....

Date .....

Grant Aviation



**GRANT**  
AVIATION

6420 Kulis Dr. Anchorage, AK 99502

Phone: 1 (888) 359-4726

Freephone: 1 (888) 359-4726

Email: res@flygrant.com

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

## FREIGHT DETAILS

**FROM/TO:** Kenai -> Anchorage International

**Flight Departs:** May 8 24 2:55 PM

**Receiver:** SGS  
907-272-0349

**Sender:** Kenai WaterShed  
907-232-0280

**Accepted:** Wed, May 8 24 2:30:00 PM

Description & Comment	Quan.	Wgt.	Handle Fee	Hazmat Fee	Total
water samples	2	65	-	-	\$48.94
Total Tax:					\$3.06
Total Payments made:					\$52.00
Total Unpaid:					\$0.00

Received in good condition by: .....

## CUSTOMER COPY

# AIRBILL 13566844

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

Signed.....

Date .....

Grant Aviation



**GRANT**  
AVIATION

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**Accepted:** Wed, May 8 24 2:30:00 PM

Description & Comment	Quan.	Wgt.	Handle Fee	Hazmat Fee	Total
water samples	2	65	-	-	\$48.94
TAX: Federal Excise Tax					\$3.06
Total Payments made:					\$52.00
Total Unpaid:					\$0.00

## TERMS AND CONDITIONS

Consignemnt Note Text

1242017



**Alert Expeditors Inc.**

**#433291**

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

Date 5-9-24  
From Kona, Water-Shed

To SGS Labs Inc

Collect ☐ Prepay ☐ Advance Charges ☐

Job # Exit PO# Grant 13566574

Samples X 2

Shipped Signature [Signature]

Received By: [Signature]

Total Charge

1242017



## 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>
1242017001-A	H2SO4 to pH < 2	OK	1242017013-B	HNO3 to pH < 2	OK
1242017001-B	HNO3 to pH < 2	OK	1242017013-C	No Preservative Required	OK
1242017001-C	No Preservative Required	OK	1242017013-D	No Preservative Required	OK
1242017001-D	No Preservative Required	OK	1242017014-A	H2SO4 to pH < 2	OK
1242017002-A	H2SO4 to pH < 2	OK	1242017014-B	HNO3 to pH < 2	OK
1242017002-B	HNO3 to pH < 2	OK	1242017014-C	No Preservative Required	OK
1242017002-C	No Preservative Required	OK	1242017014-D	No Preservative Required	OK
1242017002-D	No Preservative Required	OK	1242017015-A	H2SO4 to pH < 2	OK
1242017003-A	H2SO4 to pH < 2	OK	1242017015-B	HNO3 to pH < 2	OK
1242017003-B	HNO3 to pH < 2	OK	1242017016-A	H2SO4 to pH < 2	OK
1242017003-C	No Preservative Required	OK	1242017016-B	HNO3 to pH < 2	OK
1242017003-D	No Preservative Required	OK	1242017016-C	No Preservative Required	OK
1242017004-A	H2SO4 to pH < 2	OK	1242017016-D	No Preservative Required	OK
1242017004-B	HNO3 to pH < 2	OK	1242017017-A	H2SO4 to pH < 2	OK
1242017004-C	No Preservative Required	OK	1242017017-B	HNO3 to pH < 2	OK
1242017004-D	No Preservative Required	OK	1242017018-A	H2SO4 to pH < 2	OK
1242017005-A	H2SO4 to pH < 2	OK	1242017018-B	HNO3 to pH < 2	OK
1242017005-B	HNO3 to pH < 2	OK	1242017019-A	H2SO4 to pH < 2	OK
1242017005-C	No Preservative Required	OK	1242017019-B	HNO3 to pH < 2	OK
1242017005-D	No Preservative Required	OK	1242017020-A	H2SO4 to pH < 2	OK
1242017006-A	H2SO4 to pH < 2	OK	1242017020-B	HNO3 to pH < 2	OK
1242017006-B	HNO3 to pH < 2	OK	1242017021-A	H2SO4 to pH < 2	OK
1242017006-C	No Preservative Required	OK	1242017021-B	HNO3 to pH < 2	OK
1242017006-D	No Preservative Required	OK	1242017022-A	H2SO4 to pH < 2	OK
1242017007-A	H2SO4 to pH < 2	OK	1242017022-B	HNO3 to pH < 2	OK
1242017007-B	HNO3 to pH < 2	OK	1242017023-A	H2SO4 to pH < 2	OK
1242017007-C	No Preservative Required	OK	1242017023-B	HNO3 to pH < 2	OK
1242017007-D	No Preservative Required	OK	1242017024-A	H2SO4 to pH < 2	OK
1242017008-A	H2SO4 to pH < 2	OK	1242017024-B	HNO3 to pH < 2	OK
1242017008-B	HNO3 to pH < 2	OK	1242017025-A	HNO3 to pH < 2	OK
1242017008-C	No Preservative Required	OK	1242017025-B	No Preservative Required	OK
1242017008-D	No Preservative Required	OK	1242017025-C	No Preservative Required	OK
1242017009-A	H2SO4 to pH < 2	OK	1242017026-A	HNO3 to pH < 2	OK
1242017009-B	HNO3 to pH < 2	OK	1242017026-B	No Preservative Required	OK
1242017009-C	No Preservative Required	OK	1242017026-C	No Preservative Required	OK
1242017009-D	No Preservative Required	OK			
1242017010-A	H2SO4 to pH < 2	OK			
1242017010-B	HNO3 to pH < 2	OK			
1242017010-C	No Preservative Required	OK			
1242017010-D	No Preservative Required	OK			
1242017011-A	H2SO4 to pH < 2	OK			
1242017011-B	HNO3 to pH < 2	OK			
1242017011-C	No Preservative Required	OK			
1242017011-D	No Preservative Required	OK			
1242017012-A	H2SO4 to pH < 2	OK			
1242017012-B	HNO3 to pH < 2	OK			
1242017012-C	No Preservative Required	OK			
1242017012-D	No Preservative Required	OK			
1242017013-A	H2SO4 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 31, 2024

Service Request No:K2405043

Justin Nelson  
SGS North America, Inc.  
200 West Potter Drive  
Anchorage, AK 99518

**Laboratory Results for: 1242017**

Dear Justin,

Enclosed are the results of the sample(s) submitted to our laboratory May 15, 2024  
For your reference, these analyses have been assigned our service request number **K2405043**.

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](http://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 3350. You may also contact me via email at [shari.endy@alsglobal.com](mailto:shari.endy@alsglobal.com).

Respectfully submitted,

**ALS Group USA, Corp. dba ALS Environmental**

Shari Endy  
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](http://www.alsglobal.com)



**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water

**Service Request:** K2405043  
**Date Received:** 05/15/2024

### CASE NARRATIVE

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

#### Sample Receipt:

Twenty six water samples were received for analysis at ALS Environmental on 05/15/2024. 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 05/31/2024



### SAMPLE DETECTION SUMMARY

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

<b>CLIENT ID: RM 0-No Name Creek</b>	<b>Lab ID: K2405043-001</b>
--------------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	6560		6	20	ug/L	200.8
Copper	0.96		0.05	0.10	ug/L	200.8
Iron	4850		0.3	2.0	ug/L	200.8
Magnesium	5210		2	10	ug/L	200.8
Zinc	4.3		0.5	2.0	ug/L	200.8

<b>CLIENT ID: RM 0-No Name Creek-DUP</b>	<b>Lab ID: K2405043-002</b>
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	6490		6	20	ug/L	200.8
Copper	1.04		0.05	0.10	ug/L	200.8
Iron	5270		0.3	2.0	ug/L	200.8
Magnesium	5290		2	10	ug/L	200.8
Zinc	4.8		0.5	2.0	ug/L	200.8

<b>CLIENT ID: RM 1.5-Kenai City Dock</b>	<b>Lab ID: K2405043-003</b>
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	62800		6	20	ug/L	200.8
Copper	17.4		0.05	0.10	ug/L	200.8
Iron	13500		0.3	2.0	ug/L	200.8
Magnesium	156000		2	10	ug/L	200.8
Zinc	40.9		0.5	2.0	ug/L	200.8

<b>CLIENT ID: RM 6.5-Cunningham Park</b>	<b>Lab ID: K2405043-004</b>
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	15200		6	20	ug/L	200.8
Copper	28.2		0.05	0.10	ug/L	200.8
Iron	19700		0.3	2.0	ug/L	200.8
Magnesium	8790		2	10	ug/L	200.8
Zinc	63.1		0.5	2.0	ug/L	200.8

<b>CLIENT ID: RM 10-Beaver Creek</b>	<b>Lab ID: K2405043-005</b>
--------------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	9310		6	20	ug/L	200.8
Copper	3.47		0.05	0.10	ug/L	200.8
Iron	5260		0.3	2.0	ug/L	200.8
Magnesium	2970		2	10	ug/L	200.8
Zinc	9.2		0.5	2.0	ug/L	200.8

<b>CLIENT ID: RM 10.1-Kenai River</b>	<b>Lab ID: K2405043-006</b>
---------------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	11500		6	20	ug/L	200.8
Copper	1.24		0.05	0.10	ug/L	200.8
Iron	729		0.3	2.0	ug/L	200.8

### SAMPLE DETECTION SUMMARY

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

<b>CLIENT ID: RM 10.1-Kenai River</b>	<b>Lab ID: K2405043-006</b>
---------------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Magnesium	1600		2	10	ug/L	200.8
Zinc	2.1		0.5	2.0	ug/L	200.8

<b>CLIENT ID: RM 12.5-Pillars</b>	<b>Lab ID: K2405043-007</b>
-----------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	11600		6	20	ug/L	200.8
Copper	0.82		0.05	0.10	ug/L	200.8
Iron	456		0.3	2.0	ug/L	200.8
Magnesium	1440		2	10	ug/L	200.8
Zinc	1.1	J	0.5	2.0	ug/L	200.8

<b>CLIENT ID: RM 18-Poacher's Cove</b>	<b>Lab ID: K2405043-008</b>
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	11600		6	20	ug/L	200.8
Copper	0.80		0.05	0.10	ug/L	200.8
Iron	447		0.3	2.0	ug/L	200.8
Magnesium	1440		2	10	ug/L	200.8
Zinc	1.5	J	0.5	2.0	ug/L	200.8

<b>CLIENT ID: RM 19-Slikok Creek</b>	<b>Lab ID: K2405043-009</b>
--------------------------------------	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	7580		6	20	ug/L	200.8
Copper	0.30		0.05	0.10	ug/L	200.8
Iron	983		0.3	2.0	ug/L	200.8
Magnesium	2330		2	10	ug/L	200.8
Zinc	0.9	J	0.5	2.0	ug/L	200.8

<b>CLIENT ID: RM 19-Slikok Creek-DUP</b>	<b>Lab ID: K2405043-010</b>
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	7750		6	20	ug/L	200.8
Copper	0.39		0.05	0.10	ug/L	200.8
Iron	981		0.3	2.0	ug/L	200.8
Magnesium	2330		2	10	ug/L	200.8
Zinc	3.1		0.5	2.0	ug/L	200.8

<b>CLIENT ID: RM 21-Soldotna Bridge</b>	<b>Lab ID: K2405043-011</b>
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Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	11000		6	20	ug/L	200.8
Copper	0.78		0.05	0.10	ug/L	200.8
Iron	463		0.3	2.0	ug/L	200.8
Magnesium	1430		2	10	ug/L	200.8
Zinc	1.0	J	0.5	2.0	ug/L	200.8

### SAMPLE DETECTION SUMMARY

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

<b>CLIENT ID: RM 22-Soldonta Creek</b>	<b>Lab ID: K2405043-012</b>
--	-----------------------------

Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	13700		6	20	ug/L	200.8
Copper	0.28		0.05	0.10	ug/L	200.8
Iron	1090		0.3	2.0	ug/L	200.8
Magnesium	4270		2	10	ug/L	200.8
Zinc	1.3	J	0.5	2.0	ug/L	200.8

<b>CLIENT ID: RM 23-Swiftwater Park</b>	<b>Lab ID: K2405043-013</b>
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Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	12100		6	20	ug/L	200.8
Copper	0.73		0.05	0.10	ug/L	200.8
Iron	401		0.3	2.0	ug/L	200.8
Magnesium	1560		2	10	ug/L	200.8
Zinc	1.4	J	0.5	2.0	ug/L	200.8

<b>CLIENT ID: RM 30-Funny River</b>	<b>Lab ID: K2405043-014</b>
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Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	5670		6	20	ug/L	200.8
Copper	2.06		0.05	0.10	ug/L	200.8
Iron	945		0.3	2.0	ug/L	200.8
Magnesium	2220		2	10	ug/L	200.8
Zinc	1.8	J	0.5	2.0	ug/L	200.8

<b>CLIENT ID: RM 31-Morgan's Landing</b>	<b>Lab ID: K2405043-015</b>
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Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	12300		6	20	ug/L	200.8
Copper	0.69		0.05	0.10	ug/L	200.8
Iron	392		0.3	2.0	ug/L	200.8
Magnesium	1490		2	10	ug/L	200.8
Zinc	1.6	J	0.5	2.0	ug/L	200.8

<b>CLIENT ID: RM 36-Moose River</b>	<b>Lab ID: K2405043-016</b>
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Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	13900		6	20	ug/L	200.8
Copper	0.32		0.05	0.10	ug/L	200.8
Iron	706		0.3	2.0	ug/L	200.8
Magnesium	2510		2	10	ug/L	200.8
Zinc	1.6	J	0.5	2.0	ug/L	200.8

<b>CLIENT ID: RM 40-Bing's Landing</b>	<b>Lab ID: K2405043-017</b>
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Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	11400		6	20	ug/L	200.8
Copper	0.79		0.05	0.10	ug/L	200.8
Iron	253		0.3	2.0	ug/L	200.8

### SAMPLE DETECTION SUMMARY

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

<b>CLIENT ID: RM 40-Bing's Landing</b>	<b>Lab ID: K2405043-017</b>
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Analyte	Results	Flag	MDL	MRL	Units	Method
Magnesium	1100		2	10	ug/L	200.8
Zinc	0.9	J	0.5	2.0	ug/L	200.8

<b>CLIENT ID: RM 43-Upstream of Dow Island</b>	<b>Lab ID: K2405043-018</b>
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Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	11500		6	20	ug/L	200.8
Copper	0.73		0.05	0.10	ug/L	200.8
Iron	270		0.3	2.0	ug/L	200.8
Magnesium	1100		2	10	ug/L	200.8
Zinc	0.9	J	0.5	2.0	ug/L	200.8

<b>CLIENT ID: RM 44-Mouth of Killey River</b>	<b>Lab ID: K2405043-019</b>
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Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	9420		6	20	ug/L	200.8
Copper	0.76		0.05	0.10	ug/L	200.8
Iron	454		0.3	2.0	ug/L	200.8
Magnesium	1610		2	10	ug/L	200.8
Zinc	0.5	J	0.5	2.0	ug/L	200.8

<b>CLIENT ID: RM 50-Skilak Lake Outflow</b>	<b>Lab ID: K2405043-020</b>
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Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	11800		6	20	ug/L	200.8
Copper	0.68		0.05	0.10	ug/L	200.8
Iron	201		0.3	2.0	ug/L	200.8
Magnesium	996		2	10	ug/L	200.8
Zinc	0.8	J	0.5	2.0	ug/L	200.8

<b>CLIENT ID: RM 70-Jim's Landing</b>	<b>Lab ID: K2405043-021</b>
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Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	15400		6	20	ug/L	200.8
Copper	0.85		0.05	0.10	ug/L	200.8
Iron	151		0.3	2.0	ug/L	200.8
Magnesium	1270		2	10	ug/L	200.8
Zinc	1.2	J	0.5	2.0	ug/L	200.8

<b>CLIENT ID: RM 74-Russian River</b>	<b>Lab ID: K2405043-022</b>
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Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	15500		6	20	ug/L	200.8
Copper	0.45		0.05	0.10	ug/L	200.8
Iron	55.6		0.3	2.0	ug/L	200.8
Magnesium	1040		2	10	ug/L	200.8

### SAMPLE DETECTION SUMMARY

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

<b>CLIENT ID: RM 82-Kenai Lake Bridge</b>	<b>Lab ID: K2405043-023</b>
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Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	15800		6	20	ug/L	200.8
Copper	0.77		0.05	0.10	ug/L	200.8
Iron	163		0.3	2.0	ug/L	200.8
Magnesium	1290		2	10	ug/L	200.8
Zinc	0.9	J	0.5	2.0	ug/L	200.8

<b>CLIENT ID: RM 79.5-Juneau Creek</b>	<b>Lab ID: K2405043-024</b>
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Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	14900		6	20	ug/L	200.8
Copper	0.76		0.05	0.10	ug/L	200.8
Iron	114		0.3	2.0	ug/L	200.8
Magnesium	1220		2	10	ug/L	200.8

<b>CLIENT ID: RM 6.5-Cunningham Park-FB</b>	<b>Lab ID: K2405043-025</b>
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Analyte	Results	Flag	MDL	MRL	Units	Method
Copper	0.08	J	0.05	0.10	ug/L	200.8
Iron	1.7	J	0.3	2.0	ug/L	200.8

<b>CLIENT ID: RM 30-Funny River-FB</b>	<b>Lab ID: K2405043-026</b>
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Analyte	Results	Flag	MDL	MRL	Units	Method
Copper	0.15		0.05	0.10	ug/L	200.8
Iron	0.7	J	0.3	2.0	ug/L	200.8
Zinc	0.6	J	0.5	2.0	ug/L	200.8



## 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](http://www.alsglobal.com)

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017

**Service Request:**K2405043

**SAMPLE CROSS-REFERENCE**

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
K2405043-001	RM 0-No Name Creek	5/8/2024	1010
K2405043-002	RM 0-No Name Creek-DUP	5/8/2024	1005
K2405043-003	RM 1.5-Kenai City Dock	5/8/2024	0925
K2405043-004	RM 6.5-Cunningham Park	5/8/2024	0911
K2405043-005	RM 10-Beaver Creek	5/8/2024	1000
K2405043-006	RM 10.1-Kenai River	5/8/2024	1024
K2405043-007	RM 12.5-Pillars	5/8/2024	1045
K2405043-008	RM 18-Poacher's Cove	5/8/2024	1116
K2405043-009	RM 19-Slikok Creek	5/8/2024	0845
K2405043-010	RM 19-Slikok Creek-DUP	5/8/2024	0833
K2405043-011	RM 21-Soldotna Bridge	5/8/2024	0915
K2405043-012	RM 22-Soldonta Creek	5/8/2024	0718
K2405043-013	RM 23-Swiftwater Park	5/8/2024	0758
K2405043-014	RM 30-Funny River	5/8/2024	1117
K2405043-015	RM 31-Morgan's Landing	5/8/2024	0954
K2405043-016	RM 36-Moose River	5/8/2024	0911
K2405043-017	RM 40-Bing's Landing	5/8/2024	1055
K2405043-018	RM 43-Upstream of Dow Island	5/8/2024	1015
K2405043-019	RM 44-Mouth of Killey River	5/8/2024	0945
K2405043-020	RM 50-Skilak Lake Outflow	5/8/2024	0850
K2405043-021	RM 70-Jim's Landing	5/8/2024	1005
K2405043-022	RM 74-Russian River	5/8/2024	0924
K2405043-023	RM 82-Kenai Lake Bridge	5/8/2024	0750
K2405043-024	RM 79.5-Juneau Creek	5/8/2024	0837
K2405043-025	RM 6.5-Cunningham Park-FB	5/8/2024	0922
K2405043-026	RM 30-Funny River-FB	5/8/2024	1117



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Alaska	Florida
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Virginia	Louisiana

K24105043

[ 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

REVIEWED *gm* 97

SGS North America Inc.  
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New Jersey Colorado  
Texas North Carolina  
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CLIENT: SGS North America Inc. - Alaska Division					SGS Reference: <b>ALS Kelso, WA</b>					Page 2 of 3																
CONTACT: Justin Nelson PHONE NO: (907) 562-2343					Additional Comments: All soils report out in dry weight unless																					
PROJECT NAME: 1242017 PWSID#: NPD#: E-MAIL: Justin.Nelson@sgs.com Env.Alaska.RefLabTeam@sgs.com					<table border="1"> <tr> <td rowspan="3">#</td> <td rowspan="3">Preservative Used:</td> <td rowspan="3">HNO3</td> <td rowspan="3">TYPE</td> <td rowspan="3">C = COMP G = GRAB MI = Multi Incremental Soils</td> <td rowspan="3">200.7: Ca, Cu, Fe, Mg, Zn</td> <td rowspan="3">MS</td> <td rowspan="3">MSD</td> <td rowspan="3">SGS lab #</td> <td rowspan="3">Location ID</td> </tr> <tr></tr> <tr></tr> </table>							#	Preservative Used:	HNO3	TYPE	C = COMP G = GRAB MI = Multi Incremental Soils	200.7: Ca, Cu, Fe, Mg, Zn	MS	MSD	SGS lab #	Location ID					
#	Preservative Used:	HNO3	TYPE	C = COMP G = GRAB MI = Multi Incremental Soils																		200.7: Ca, Cu, Fe, Mg, Zn	MS	MSD	SGS lab #	Location ID
REPORTS TO: Justin.Nelson																										
INVOICE TO: SGS - Alaska QUOTE #: env.alaska.accounting@sgs.com P.O. #: 1242017																										
RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HHMM	MATRIX/MATRIX CODE	#	Preservative Used:	HNO3	TYPE	C = COMP G = GRAB MI = Multi Incremental Soils	200.7: Ca, Cu, Fe, Mg, Zn	MS	MSD	SGS lab #	Location ID												
	RM 21 - Soldotna Bridge	05/08/2024	09:15:00	Water	1			X					1242017011													
	RM 22 - Soldotna Creek	05/08/2024	07:18:00	Water	1			X					1242017012													
	RM 23 - Swiftwater Park	05/08/2024	07:58:00	Water	1			X					1242017013													
	RM 30 - Funny River	05/08/2024	11:17:00	Water	1			X					1242017014													
	RM 31 - Morgan's Landing	05/08/2024	09:54:00	Water	1			X					1242017015													
	RM 36 - Moose River	05/08/2024	09:11:00	Water	1			X					1242017016													
	RM 40 - Bing's Landing	05/08/2024	10:55:00	Water	1			X					1242017017													
	RM 43 - Upstream of Dow Island	05/08/2024	10:15:00	Water	1			X					1242017018													
	RM 44 - Mouth of Killey River	05/08/2024	09:45:00	Water	1			X					1242017019													
	RM 50 - Skilak Lake Outflow	05/08/2024	08:50:00	Water	1			X					1242017020													
Relinquished By: (1)		Date	Time	Received By:		DOD Project?		NO		Data Deliverable Requirements:																
[Signature]		5/13/24	1030	[Signature] 1020 5/15/24		Report to DL (J Flags)?		YES		Level 2 + SGS EDD																
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>

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PM SE

# Cooler Receipt and Preservation Form

Client SGS

Service Request K24 05043

Received: 5/15/24 Opened: 5/15/24 By: HS Unloaded: 5/15/24 By: HS

1. Samples were received via? USPS Fed Ex UPS DHL PDX Courier Hand Delivered
2. Samples were received in: (circle) Cooler Box Envelope Other NA
3. Were custody seals on coolers? NA Y N If yes, how many and where? 2 front
4. If present, were custody seals intact? Y N If present, were they signed and dated? Y N

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
	<u>18.7</u>	<u>LA06</u>					

4. Was a Temperature Blank present in cooler? NA Y N If yes, notate the temperature in the appropriate column above:  
If no, take the temperature of a representative sample bottle contained within the cooler; notate in the column "Sample Temp":
5. 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 # above and notify the PM. NA Y N
- If applicable, tissue samples were received: Frozen Partially Thawed Thawed
6. Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves
7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
8. Were samples received in good condition (unbroken) NA Y N
9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N
10. Did all sample labels and tags agree with custody papers? NA Y N
11. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
12. Were the pH-preserved bottles (see SMO GEN SOP) received at the appropriate pH? Indicate in the table below NA Y N
13. Were VOA vials received without headspace? Indicate in the table below NA Y N
14. Was C12/Res negative? NA Y N
15. Were samples received within the method specified time limit? If not, notate the error below and notify the PM NA Y N
16. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? NA Y N Underfilled Overfilled

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: Temp non issue due to analysis



## Miscellaneous Forms

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

### Inorganic Data Qualifiers

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

### Metals Data Qualifiers

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

### Organic Data Qualifiers

- \* The result is an outlier. See case narrative.
- # The control limit criteria is not applicable. See case narrative.
- A A tentatively identified compound, a suspected aldol-condensation product.
- B The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
- C The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
- D The reported result is from a dilution.
- E The result is an estimated value over the calibration range.
- J The result is an estimated value between the MDL and the MRL.
- 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**

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



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Analyst Summary report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017/

**Service Request:** K2405043

**Sample Name:** RM 0-No Name Creek  
**Lab Code:** K2405043-001  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**Extracted/Digested By**  
ABOYER

**Analyzed By**  
KLINN

**Sample Name:** RM 0-No Name Creek-DUP  
**Lab Code:** K2405043-002  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**Extracted/Digested By**  
ABOYER

**Analyzed By**  
KLINN

**Sample Name:** RM 1.5-Kenai City Dock  
**Lab Code:** K2405043-003  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**Extracted/Digested By**  
ABOYER

**Analyzed By**  
KLINN

**Sample Name:** RM 6.5-Cunningham Park  
**Lab Code:** K2405043-004  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**Extracted/Digested By**  
ABOYER

**Analyzed By**  
KLINN

**Sample Name:** RM 10-Beaver Creek  
**Lab Code:** K2405043-005  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**Extracted/Digested By**  
ABOYER

**Analyzed By**  
KLINN

ALS Group USA, Corp.  
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Analyst Summary report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017/

**Service Request:** K2405043

**Sample Name:** RM 10.1-Kenai River  
**Lab Code:** K2405043-006  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**Extracted/Digested By**  
ABOYER

**Analyzed By**  
KLINN

**Sample Name:** RM 12.5-Pillars  
**Lab Code:** K2405043-007  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**Extracted/Digested By**  
ABOYER

**Analyzed By**  
KLINN

**Sample Name:** RM 18-Poacher's Cove  
**Lab Code:** K2405043-008  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**Extracted/Digested By**  
ABOYER

**Analyzed By**  
KLINN

**Sample Name:** RM 19-Slikok Creek  
**Lab Code:** K2405043-009  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**Extracted/Digested By**  
ABOYER

**Analyzed By**  
KLINN

**Sample Name:** RM 19-Slikok Creek-DUP  
**Lab Code:** K2405043-010  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**Extracted/Digested By**  
ABOYER

**Analyzed By**  
KLINN

ALS Group USA, Corp.  
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Analyst Summary report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017/

**Service Request:** K2405043

**Sample Name:** RM 21-Soldotna Bridge  
**Lab Code:** K2405043-011  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**Extracted/Digested By**  
ABOYER

**Analyzed By**  
KLINN

**Sample Name:** RM 22-Soldonta Creek  
**Lab Code:** K2405043-012  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**Extracted/Digested By**  
ABOYER

**Analyzed By**  
KLINN

**Sample Name:** RM 23-Swiftwater Park  
**Lab Code:** K2405043-013  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**Extracted/Digested By**  
ABOYER

**Analyzed By**  
KLINN

**Sample Name:** RM 30-Funny River  
**Lab Code:** K2405043-014  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**Extracted/Digested By**  
ABOYER

**Analyzed By**  
KLINN

**Sample Name:** RM 31-Morgan's Landing  
**Lab Code:** K2405043-015  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**Extracted/Digested By**  
ABOYER

**Analyzed By**  
KLINN

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dba ALS Environmental

Analyst Summary report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017/

**Service Request:** K2405043

**Sample Name:** RM 36-Moose River  
**Lab Code:** K2405043-016  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**Extracted/Digested By**  
ABOYER

**Analyzed By**  
KLINN

**Sample Name:** RM 40-Bing's Landing  
**Lab Code:** K2405043-017  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**Extracted/Digested By**  
ABOYER

**Analyzed By**  
KLINN

**Sample Name:** RM 43-Upstream of Dow Island  
**Lab Code:** K2405043-018  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**Extracted/Digested By**  
ABOYER

**Analyzed By**  
KLINN

**Sample Name:** RM 44-Mouth of Killey River  
**Lab Code:** K2405043-019  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**Extracted/Digested By**  
ABOYER

**Analyzed By**  
KLINN

**Sample Name:** RM 50-Skilak Lake Outflow  
**Lab Code:** K2405043-020  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**Extracted/Digested By**  
ABOYER

**Analyzed By**  
KLINN

ALS Group USA, Corp.  
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Analyst Summary report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017/

**Service Request:** K2405043

**Sample Name:** RM 70-Jim's Landing  
**Lab Code:** K2405043-021  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**Extracted/Digested By**  
ABOYER

**Analyzed By**  
RMOORE

**Sample Name:** RM 74-Russian River  
**Lab Code:** K2405043-022  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**Extracted/Digested By**  
ABOYER

**Analyzed By**  
RMOORE

**Sample Name:** RM 82-Kenai Lake Bridge  
**Lab Code:** K2405043-023  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**Extracted/Digested By**  
ABOYER

**Analyzed By**  
RMOORE

**Sample Name:** RM 79.5-Juneau Creek  
**Lab Code:** K2405043-024  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**Extracted/Digested By**  
ABOYER

**Analyzed By**  
RMOORE

**Sample Name:** RM 6.5-Cunningham Park-FB  
**Lab Code:** K2405043-025  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**Extracted/Digested By**  
ABOYER

**Analyzed By**  
RMOORE

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**dba ALS Environmental**

Analyst Summary report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017/

**Service Request:** K2405043

**Sample Name:** RM 30-Funny River-FB  
**Lab Code:** K2405043-026  
**Sample Matrix:** Water

**Date Collected:** 05/8/24  
**Date Received:** 05/15/24

**Analysis Method**  
200.8

**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](http://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](http://www.alsglobal.com)



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Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 0-No Name Creek  
**Lab Code:** K2405043-001

**Service Request:** K2405043  
**Date Collected:** 05/08/24 10:10  
**Date Received:** 05/15/24 10:20  
**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	6560	ug/L	20	6	1	05/29/24 10:35	05/20/24	
Copper	200.8	0.96	ug/L	0.10	0.05	1	05/29/24 10:35	05/20/24	
Iron	200.8	4850	ug/L	2.0	0.3	1	05/29/24 10:35	05/20/24	
Magnesium	200.8	5210	ug/L	10	2	1	05/29/24 10:35	05/20/24	
Zinc	200.8	4.3	ug/L	2.0	0.5	1	05/29/24 10:35	05/20/24	

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Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 0-No Name Creek-DUP  
**Lab Code:** K2405043-002

**Service Request:** K2405043  
**Date Collected:** 05/08/24 10:05  
**Date Received:** 05/15/24 10:20  
**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	6490	ug/L	20	6	1	05/29/24 10:43	05/20/24	
Copper	200.8	1.04	ug/L	0.10	0.05	1	05/29/24 10:43	05/20/24	
Iron	200.8	5270	ug/L	2.0	0.3	1	05/29/24 10:43	05/20/24	
Magnesium	200.8	5290	ug/L	10	2	1	05/29/24 10:43	05/20/24	
Zinc	200.8	4.8	ug/L	2.0	0.5	1	05/29/24 10:43	05/20/24	

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Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 1.5-Kenai City Dock  
**Lab Code:** K2405043-003

**Service Request:** K2405043  
**Date Collected:** 05/08/24 09:25  
**Date Received:** 05/15/24 10:20  
**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	62800	ug/L	20	6	1	05/29/24 11:07	05/20/24	
Copper	200.8	17.4	ug/L	0.10	0.05	1	05/29/24 11:07	05/20/24	
Iron	200.8	13500	ug/L	2.0	0.3	1	05/29/24 11:07	05/20/24	
Magnesium	200.8	156000	ug/L	10	2	1	05/29/24 11:07	05/20/24	
Zinc	200.8	40.9	ug/L	2.0	0.5	1	05/29/24 11:07	05/20/24	

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Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 6.5-Cunningham Park  
**Lab Code:** K2405043-004

**Service Request:** K2405043  
**Date Collected:** 05/08/24 09:11  
**Date Received:** 05/15/24 10:20

**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	15200	ug/L	20	6	1	05/29/24 11:10	05/20/24	
Copper	200.8	28.2	ug/L	0.10	0.05	1	05/29/24 11:10	05/20/24	
Iron	200.8	19700	ug/L	2.0	0.3	1	05/29/24 11:10	05/20/24	
Magnesium	200.8	8790	ug/L	10	2	1	05/29/24 11:10	05/20/24	
Zinc	200.8	63.1	ug/L	2.0	0.5	1	05/29/24 11:10	05/20/24	

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Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 10-Beaver Creek  
**Lab Code:** K2405043-005

**Service Request:** K2405043  
**Date Collected:** 05/08/24 10:00  
**Date Received:** 05/15/24 10:20  
**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	9310	ug/L	20	6	1	05/29/24 11:12	05/20/24	
Copper	200.8	3.47	ug/L	0.10	0.05	1	05/29/24 11:12	05/20/24	
Iron	200.8	5260	ug/L	2.0	0.3	1	05/29/24 11:12	05/20/24	
Magnesium	200.8	2970	ug/L	10	2	1	05/29/24 11:12	05/20/24	
Zinc	200.8	9.2	ug/L	2.0	0.5	1	05/29/24 11:12	05/20/24	

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Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 10.1-Kenai River  
**Lab Code:** K2405043-006

**Service Request:** K2405043  
**Date Collected:** 05/08/24 10:24  
**Date Received:** 05/15/24 10:20  
**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	11500	ug/L	20	6	1	05/29/24 11:15	05/20/24	
Copper	200.8	1.24	ug/L	0.10	0.05	1	05/29/24 11:15	05/20/24	
Iron	200.8	729	ug/L	2.0	0.3	1	05/29/24 11:15	05/20/24	
Magnesium	200.8	1600	ug/L	10	2	1	05/29/24 11:15	05/20/24	
Zinc	200.8	2.1	ug/L	2.0	0.5	1	05/29/24 11:15	05/20/24	

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dba ALS Environmental

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 12.5-Pillars  
**Lab Code:** K2405043-007

**Service Request:** K2405043  
**Date Collected:** 05/08/24 10:45  
**Date Received:** 05/15/24 10:20  
**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	11600	ug/L	20	6	1	05/29/24 11:17	05/20/24	
Copper	200.8	0.82	ug/L	0.10	0.05	1	05/29/24 11:17	05/20/24	
Iron	200.8	456	ug/L	2.0	0.3	1	05/29/24 11:17	05/20/24	
Magnesium	200.8	1440	ug/L	10	2	1	05/29/24 11:17	05/20/24	
Zinc	200.8	1.1 J	ug/L	2.0	0.5	1	05/29/24 11:17	05/20/24	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 18-Poacher's Cove  
**Lab Code:** K2405043-008

**Service Request:** K2405043  
**Date Collected:** 05/08/24 11:16  
**Date Received:** 05/15/24 10:20  
**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	11600	ug/L	20	6	1	05/29/24 11:20	05/20/24	
Copper	200.8	0.80	ug/L	0.10	0.05	1	05/29/24 11:20	05/20/24	
Iron	200.8	447	ug/L	2.0	0.3	1	05/29/24 11:20	05/20/24	
Magnesium	200.8	1440	ug/L	10	2	1	05/29/24 11:20	05/20/24	
Zinc	200.8	1.5 J	ug/L	2.0	0.5	1	05/29/24 11:20	05/20/24	



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dba ALS Environmental

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 19-Slikok Creek  
**Lab Code:** K2405043-009

**Service Request:** K2405043  
**Date Collected:** 05/08/24 08:45  
**Date Received:** 05/15/24 10:20  
**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	7580	ug/L	20	6	1	05/29/24 11:22	05/20/24	
Copper	200.8	0.30	ug/L	0.10	0.05	1	05/29/24 11:22	05/20/24	
Iron	200.8	983	ug/L	2.0	0.3	1	05/29/24 11:22	05/20/24	
Magnesium	200.8	2330	ug/L	10	2	1	05/29/24 11:22	05/20/24	
Zinc	200.8	0.9 J	ug/L	2.0	0.5	1	05/29/24 11:22	05/20/24	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 19-Slikok Creek-DUP  
**Lab Code:** K2405043-010

**Service Request:** K2405043  
**Date Collected:** 05/08/24 08:33  
**Date Received:** 05/15/24 10:20  
**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	7750	ug/L	20	6	1	05/29/24 11:25	05/20/24	
Copper	200.8	0.39	ug/L	0.10	0.05	1	05/29/24 11:25	05/20/24	
Iron	200.8	981	ug/L	2.0	0.3	1	05/29/24 11:25	05/20/24	
Magnesium	200.8	2330	ug/L	10	2	1	05/29/24 11:25	05/20/24	
Zinc	200.8	3.1	ug/L	2.0	0.5	1	05/29/24 11:25	05/20/24	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 21-Soldotna Bridge  
**Lab Code:** K2405043-011

**Service Request:** K2405043  
**Date Collected:** 05/08/24 09:15  
**Date Received:** 05/15/24 10:20  
**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	<b>11000</b>	ug/L	20	6	1	05/29/24 11:28	05/20/24	
Copper	200.8	<b>0.78</b>	ug/L	0.10	0.05	1	05/29/24 11:28	05/20/24	
Iron	200.8	<b>463</b>	ug/L	2.0	0.3	1	05/29/24 11:28	05/20/24	
Magnesium	200.8	<b>1430</b>	ug/L	10	2	1	05/29/24 11:28	05/20/24	
Zinc	200.8	<b>1.0 J</b>	ug/L	2.0	0.5	1	05/29/24 11:28	05/20/24	

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dba ALS Environmental

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 22-Soldonta Creek  
**Lab Code:** K2405043-012

**Service Request:** K2405043  
**Date Collected:** 05/08/24 07:18  
**Date Received:** 05/15/24 10:20  
**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	13700	ug/L	20	6	1	05/29/24 11:30	05/20/24	
Copper	200.8	0.28	ug/L	0.10	0.05	1	05/29/24 11:30	05/20/24	
Iron	200.8	1090	ug/L	2.0	0.3	1	05/29/24 11:30	05/20/24	
Magnesium	200.8	4270	ug/L	10	2	1	05/29/24 11:30	05/20/24	
Zinc	200.8	1.3 J	ug/L	2.0	0.5	1	05/29/24 11:30	05/20/24	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 23-Swiftwater Park  
**Lab Code:** K2405043-013

**Service Request:** K2405043  
**Date Collected:** 05/08/24 07:58  
**Date Received:** 05/15/24 10:20  
**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	12100	ug/L	20	6	1	05/29/24 11:38	05/20/24	
Copper	200.8	0.73	ug/L	0.10	0.05	1	05/29/24 11:38	05/20/24	
Iron	200.8	401	ug/L	2.0	0.3	1	05/29/24 11:38	05/20/24	
Magnesium	200.8	1560	ug/L	10	2	1	05/29/24 11:38	05/20/24	
Zinc	200.8	1.4 J	ug/L	2.0	0.5	1	05/29/24 11:38	05/20/24	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 30-Funny River  
**Lab Code:** K2405043-014

**Service Request:** K2405043  
**Date Collected:** 05/08/24 11:17  
**Date Received:** 05/15/24 10:20  
**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	5670	ug/L	20	6	1	05/29/24 11:41	05/20/24	
Copper	200.8	2.06	ug/L	0.10	0.05	1	05/29/24 11:41	05/20/24	
Iron	200.8	945	ug/L	2.0	0.3	1	05/29/24 11:41	05/20/24	
Magnesium	200.8	2220	ug/L	10	2	1	05/29/24 11:41	05/20/24	
Zinc	200.8	1.8 J	ug/L	2.0	0.5	1	05/29/24 11:41	05/20/24	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 31-Morgan's Landing  
**Lab Code:** K2405043-015

**Service Request:** K2405043  
**Date Collected:** 05/08/24 09:54  
**Date Received:** 05/15/24 10:20  
**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	12300	ug/L	20	6	1	05/29/24 11:43	05/20/24	
Copper	200.8	0.69	ug/L	0.10	0.05	1	05/29/24 11:43	05/20/24	
Iron	200.8	392	ug/L	2.0	0.3	1	05/29/24 11:43	05/20/24	
Magnesium	200.8	1490	ug/L	10	2	1	05/29/24 11:43	05/20/24	
Zinc	200.8	1.6 J	ug/L	2.0	0.5	1	05/29/24 11:43	05/20/24	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 36-Moose River  
**Lab Code:** K2405043-016

**Service Request:** K2405043  
**Date Collected:** 05/08/24 09:11  
**Date Received:** 05/15/24 10:20  
**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	13900	ug/L	20	6	1	05/29/24 11:46	05/20/24	
Copper	200.8	0.32	ug/L	0.10	0.05	1	05/29/24 11:46	05/20/24	
Iron	200.8	706	ug/L	2.0	0.3	1	05/29/24 11:46	05/20/24	
Magnesium	200.8	2510	ug/L	10	2	1	05/29/24 11:46	05/20/24	
Zinc	200.8	1.6 J	ug/L	2.0	0.5	1	05/29/24 11:46	05/20/24	



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Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 40-Bing's Landing  
**Lab Code:** K2405043-017

**Service Request:** K2405043  
**Date Collected:** 05/08/24 10:55  
**Date Received:** 05/15/24 10:20  
**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	11400	ug/L	20	6	1	05/29/24 11:48	05/20/24	
Copper	200.8	0.79	ug/L	0.10	0.05	1	05/29/24 11:48	05/20/24	
Iron	200.8	253	ug/L	2.0	0.3	1	05/29/24 11:48	05/20/24	
Magnesium	200.8	1100	ug/L	10	2	1	05/29/24 11:48	05/20/24	
Zinc	200.8	0.9 J	ug/L	2.0	0.5	1	05/29/24 11:48	05/20/24	

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Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 43-Upstream of Dow Island  
**Lab Code:** K2405043-018

**Service Request:** K2405043  
**Date Collected:** 05/08/24 10:15  
**Date Received:** 05/15/24 10:20  
**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	11500	ug/L	20	6	1	05/29/24 11:51	05/20/24	
Copper	200.8	0.73	ug/L	0.10	0.05	1	05/29/24 11:51	05/20/24	
Iron	200.8	270	ug/L	2.0	0.3	1	05/29/24 11:51	05/20/24	
Magnesium	200.8	1100	ug/L	10	2	1	05/29/24 11:51	05/20/24	
Zinc	200.8	0.9 J	ug/L	2.0	0.5	1	05/29/24 11:51	05/20/24	

ALS Group USA, Corp.  
dba ALS Environmental

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 44-Mouth of Killey River  
**Lab Code:** K2405043-019

**Service Request:** K2405043  
**Date Collected:** 05/08/24 09:45  
**Date Received:** 05/15/24 10:20  
**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	9420	ug/L	20	6	1	05/29/24 11:54	05/20/24	
Copper	200.8	0.76	ug/L	0.10	0.05	1	05/29/24 11:54	05/20/24	
Iron	200.8	454	ug/L	2.0	0.3	1	05/29/24 11:54	05/20/24	
Magnesium	200.8	1610	ug/L	10	2	1	05/29/24 11:54	05/20/24	
Zinc	200.8	0.5 J	ug/L	2.0	0.5	1	05/29/24 11:54	05/20/24	

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dba ALS Environmental

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 50-Skilak Lake Outflow  
**Lab Code:** K2405043-020

**Service Request:** K2405043  
**Date Collected:** 05/08/24 08:50  
**Date Received:** 05/15/24 10:20  
**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	<b>11800</b>	ug/L	20	6	1	05/29/24 11:56	05/20/24	
Copper	200.8	<b>0.68</b>	ug/L	0.10	0.05	1	05/29/24 11:56	05/20/24	
Iron	200.8	<b>201</b>	ug/L	2.0	0.3	1	05/29/24 11:56	05/20/24	
Magnesium	200.8	<b>996</b>	ug/L	10	2	1	05/29/24 11:56	05/20/24	
Zinc	200.8	<b>0.8 J</b>	ug/L	2.0	0.5	1	05/29/24 11:56	05/20/24	

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dba ALS Environmental

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 70-Jim's Landing  
**Lab Code:** K2405043-021

**Service Request:** K2405043  
**Date Collected:** 05/08/24 10:05  
**Date Received:** 05/15/24 10:20  
**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	15400	ug/L	20	6	1	05/30/24 20:42	05/20/24	
Copper	200.8	0.85	ug/L	0.10	0.05	1	05/30/24 20:42	05/20/24	
Iron	200.8	151	ug/L	2.0	0.3	1	05/30/24 20:42	05/20/24	
Magnesium	200.8	1270	ug/L	10	2	1	05/30/24 20:42	05/20/24	
Zinc	200.8	1.2 J	ug/L	2.0	0.5	1	05/30/24 20:42	05/20/24	

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Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 74-Russian River  
**Lab Code:** K2405043-022

**Service Request:** K2405043  
**Date Collected:** 05/08/24 09:24  
**Date Received:** 05/15/24 10:20  
**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	15500	ug/L	20	6	1	05/30/24 20:45	05/20/24	
Copper	200.8	0.45	ug/L	0.10	0.05	1	05/30/24 20:45	05/20/24	
Iron	200.8	55.6	ug/L	2.0	0.3	1	05/30/24 20:45	05/20/24	
Magnesium	200.8	1040	ug/L	10	2	1	05/30/24 20:45	05/20/24	
Zinc	200.8	ND U	ug/L	2.0	0.5	1	05/30/24 20:45	05/20/24	

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Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 82-Kenai Lake Bridge  
**Lab Code:** K2405043-023

**Service Request:** K2405043  
**Date Collected:** 05/08/24 07:50  
**Date Received:** 05/15/24 10:20  
**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	15800	ug/L	20	6	1	05/30/24 20:47	05/20/24	
Copper	200.8	0.77	ug/L	0.10	0.05	1	05/30/24 20:47	05/20/24	
Iron	200.8	163	ug/L	2.0	0.3	1	05/30/24 20:47	05/20/24	
Magnesium	200.8	1290	ug/L	10	2	1	05/30/24 20:47	05/20/24	
Zinc	200.8	0.9 J	ug/L	2.0	0.5	1	05/30/24 20:47	05/20/24	

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Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 79.5-Juneau Creek  
**Lab Code:** K2405043-024

**Service Request:** K2405043  
**Date Collected:** 05/08/24 08:37  
**Date Received:** 05/15/24 10:20  
**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	14900	ug/L	20	6	1	05/30/24 20:50	05/20/24	
Copper	200.8	0.76	ug/L	0.10	0.05	1	05/30/24 20:50	05/20/24	
Iron	200.8	114	ug/L	2.0	0.3	1	05/30/24 20:50	05/20/24	
Magnesium	200.8	1220	ug/L	10	2	1	05/30/24 20:50	05/20/24	
Zinc	200.8	ND U	ug/L	2.0	0.5	1	05/30/24 20:50	05/20/24	



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Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 6.5-Cunningham Park-FB  
**Lab Code:** K2405043-025

**Service Request:** K2405043  
**Date Collected:** 05/08/24 09:22  
**Date Received:** 05/15/24 10:20  
**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	ND U	ug/L	20	6	1	05/30/24 20:52	05/20/24	
Copper	200.8	0.08 J	ug/L	0.10	0.05	1	05/30/24 20:52	05/20/24	
Iron	200.8	1.7 J	ug/L	2.0	0.3	1	05/30/24 20:52	05/20/24	
Magnesium	200.8	ND U	ug/L	10	2	1	05/30/24 20:52	05/20/24	
Zinc	200.8	ND U	ug/L	2.0	0.5	1	05/30/24 20:52	05/20/24	

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Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water  
**Sample Name:** RM 30-Funny River-FB  
**Lab Code:** K2405043-026

**Service Request:** K2405043  
**Date Collected:** 05/08/24 11:17  
**Date Received:** 05/15/24 10:20  
**Basis:** NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	ND U	ug/L	20	6	1	05/30/24 20:55	05/20/24	
Copper	200.8	0.15	ug/L	0.10	0.05	1	05/30/24 20:55	05/20/24	
Iron	200.8	0.7 J	ug/L	2.0	0.3	1	05/30/24 20:55	05/20/24	
Magnesium	200.8	ND U	ug/L	10	2	1	05/30/24 20:55	05/20/24	
Zinc	200.8	0.6 J	ug/L	2.0	0.5	1	05/30/24 20:55	05/20/24	



## QC Summary Forms

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

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Analytical Report

Client:

Project:

Sample Matrix:

Sample Name:

Lab Code:

SGS North America - AK (SGS Environmental)

1242017

Water

Method Blank

KQ2407452-01

Service Request:

Date Collected:

Date Received:

Basis:

K2405043

NA

NA

NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	ND U	ug/L	20	6	1	05/30/24 19:34	05/20/24	
Copper	200.8	ND U	ug/L	0.10	0.05	1	05/30/24 19:34	05/20/24	
Iron	200.8	ND U	ug/L	2.0	0.3	1	05/30/24 19:34	05/20/24	
Magnesium	200.8	ND U	ug/L	10	2	1	05/30/24 19:34	05/20/24	
Zinc	200.8	ND U	ug/L	2.0	0.5	1	05/30/24 19:34	05/20/24	

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Analytical Report

Client:

Project:

Sample Matrix:

Sample Name:

Lab Code:

SGS North America - AK (SGS Environmental)

1242017

Water

Method Blank

KQ2407453-01

Service Request:

Date Collected:

Date Received:

Basis:

K2405043

NA

NA

NA

Total Metals

Analyte Name	Analysis Method	Result	Units	MRL	MDL	Dil.	Date Analyzed	Date Extracted	Q
Calcium	200.8	ND U	ug/L	20	6	1	05/29/24 10:30	05/20/24	
Copper	200.8	ND U	ug/L	0.10	0.05	1	05/29/24 10:30	05/20/24	
Iron	200.8	ND U	ug/L	2.0	0.3	1	05/29/24 10:30	05/20/24	
Magnesium	200.8	ND U	ug/L	10	2	1	05/29/24 10:30	05/20/24	
Zinc	200.8	ND U	ug/L	2.0	0.5	1	05/29/24 10:30	05/20/24	

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QA/QC Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water

**Service Request:** K2405043  
**Date Collected:** 05/08/24  
**Date Received:** 05/15/24  
**Date Analyzed:** 05/29/24  
**Date Extracted:** 05/20/24

**Matrix Spike Summary**  
**Total Metals**

**Sample Name:** RM 0-No Name Creek  
**Lab Code:** K2405043-001  
**Analysis Method:** 200.8  
**Prep Method:** EPA CLP ILM04.0

**Units:** ug/L  
**Basis:** NA

**Matrix Spike**  
KQ2407453-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Calcium	6560	16600	10300	98	70-130
Copper	0.96	13.8	12.5	103	70-130
Iron	4850	4840	50.0	-25 #	70-130
Magnesium	5210	15700	10300	102	70-130
Zinc	4.3	29.6	25.0	101	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 - AK (SGS Environmental)  
**Project:** 1242017  
**Sample Matrix:** Water

**Service Request:** K2405043  
**Date Collected:** 05/08/24  
**Date Received:** 05/15/24  
**Date Analyzed:** 05/29/24  
**Date Extracted:** 05/20/24

**Matrix Spike Summary**  
**Total Metals**

**Sample Name:** RM 0-No Name Creek-DUP  
**Lab Code:** K2405043-002  
**Analysis Method:** 200.8  
**Prep Method:** EPA CLP ILM04.0

**Units:** ug/L  
**Basis:** NA

**Matrix Spike**  
KQ2407453-06

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Calcium	6490	17100	10300	103	70-130
Copper	1.04	14.1	12.5	104	70-130
Iron	5270	5310	50.0	73 #	70-130
Magnesium	5290	16100	10300	106	70-130
Zinc	4.8	30.3	25.0	102	70-130

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

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

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

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



**ALS Group USA, Corp.**

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QA/QC Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project** 1242017  
**Sample Matrix:** Water

**Service Request:** K2405043  
**Date Collected:** 05/08/24  
**Date Received:** 05/15/24  
**Date Analyzed:** 05/29/24

**Replicate Sample Summary****Total Metals**

**Sample Name:** RM 0-No Name Creek  
**Lab Code:** K2405043-001

**Units:** ug/L  
**Basis:** NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample	Average	RPD	RPD Limit
					KQ2407453-03 Result			
Calcium	200.8	20	6	6560	6580	6570	<1	20
Copper	200.8	0.10	0.05	0.96	0.95	0.96	1	20
Iron	200.8	2.0	0.3	4850	4880	4870	<1	20
Magnesium	200.8	10	2	5210	5160	5190	<1	20
Zinc	200.8	2.0	0.5	4.3	4.2	4.3	2	20

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

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

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

**ALS Group USA, Corp.**

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QA/QC Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project** 1242017  
**Sample Matrix:** Water

**Service Request:** K2405043  
**Date Collected:** 05/08/24  
**Date Received:** 05/15/24  
**Date Analyzed:** 05/29/24

**Replicate Sample Summary****Total Metals**

**Sample Name:** RM 0-No Name Creek-DUP  
**Lab Code:** K2405043-002

**Units:** ug/L  
**Basis:** NA

Analyte Name	Analysis Method	MRL	MDL	Sample Result	Duplicate Sample	Average	RPD	RPD Limit
					KQ2407453-05 Result			
Calcium	200.8	20	6	6490	6550	6520	<1	20
Copper	200.8	0.10	0.05	1.04	1.02	1.03	2	20
Iron	200.8	2.0	0.3	5270	5280	5280	<1	20
Magnesium	200.8	10	2	5290	5240	5270	<1	20
Zinc	200.8	2.0	0.5	4.8	5.0	4.9	4	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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QA/QC Report

**Client:**  
**Project:**  
**Sample Matrix:**

SGS North America - AK (SGS Environmental)  
1242017  
Water

**Service Request:** K2405043  
**Date Analyzed:** 05/30/24

Lab Control Sample Summary  
Total Metals

Units:ug/L  
Basis:NA

Lab Control Sample  
KQ2407452-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Calcium	200.8	10000	10300	98	85-115
Copper	200.8	12.6	12.5	101	85-115
Iron	200.8	47.3	50.0	95	85-115
Magnesium	200.8	10200	10300	100	85-115
Zinc	200.8	24.8	25.0	99	85-115

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QA/QC Report

**Client:**  
**Project:**  
**Sample Matrix:**

SGS North America - AK (SGS Environmental)  
1242017  
Water

**Service Request:** K2405043  
**Date Analyzed:** 05/29/24

Lab Control Sample Summary  
Total Metals

Units:ug/L  
Basis:NA

Lab Control Sample  
KQ2407453-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Calcium	200.8	10700	10300	104	85-115
Copper	200.8	13.3	12.5	106	85-115
Iron	200.8	49.8	50.0	100	85-115
Magnesium	200.8	11000	10300	107	85-115
Zinc	200.8	26.3	25.0	105	85-115