



## Laboratory Report of Analysis

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

Report Number: 1224307

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 Justin 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.

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Justin Nelson  
Project Manager  
Justin.Nelson@sq.com

Date \_\_\_\_\_

Print Date: 10/18/2022 4:02:22PM

Results via Engage

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## Case Narrative

SGS Client: **Kenai Watershed Forum**  
SGS Project: **1224307**  
Project Name/Site: **Kenai River Baseline Water**  
Project Contact: **Benjamin Meyer**

Refer to sample receipt form for information on sample condition.

### **RM 6.5 - Cunningham Park (1224307004) PS**

8260D - Surrogate recovery for 4-Bromofluorobenzene does not meet QC criteria. All associated analytes are not being reported.

### **RM 6.5 - Cunningham Park (1224307028) PS**

Corrected Report: Metals list correct per project requirement.

200.8 - Metals - Sample concentration corrected for Zinc due to dilution error.

### **Trip Blank 2 (1224307039) TB**

8260D - Surrogate recovery for 1,2-Dichloroethane-D4 does not meet QC criteria. All associated analytes are not being reported above the LOQ.

### **MB for HBN 1840725 [MXX/35311] (1677227) MB**

200.8 - Metals analyte Aluminum is detected in the MB above the LOQ. The associated sample concentrations are less than the LOQ.

### **LCS for HBN 1840725 [MXX/35311 (1677228) LCS**

200.8 – Metals - LCS recovery for Calcium does not meet QC criteria. Sample results for this analyte are estimated.

### **1224355001(1677226MS) (1677231) MS**

200.8 – Metals - MS recovery for Calcium does not meet QC criteria. Sample result for this analyte is estimated.

200.8 - Metals - MS recovery for Zinc is outside of QC criteria. Sample concentration is 4 times greater than the spike level.

200.8 - Metals - Sample concentration corrected for Zinc due to dilution error.

### **LCS for HBN 1840786 [VXX/38957 (1677405) LCS**

8260D - LCS recovery for Naphthalene does not meet QC criteria. This analyte is not being reported in the associated samples.

### **LCSD for HBN 1840786 [VXX/3895 (1677406) LCSD**

8260D - LCS/LCSD RPD for several analytes does not meet QC criteria. These analytes are not being reported in the associated samples.

### **1224355001MSD (1678985) MSD**

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

### **1224370001MS (1678986) MS**

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

### **1224307003MS (1680851) MS**

4500P-B,E - Total Phosphorus - MS/MSD reported over calibration range due to lab error. Refer to LCS for accuracy requirements.

### **1224307003MSD (1680852) MSD**

4500P-B,E - Total Phosphorus - MS/MSD reported over calibration range due to lab error. Refer to LCS for accuracy requirements.

200.7 - Calcium, Iron, and Magnesium were analyzed by ALS of Kelso, WA.

## Case Narrative

SGS Client: **Kenai Watershed Forum**

SGS Project: **1224307**

Project Name/Site: **Kenai River Baseline Water**

Project Contact: **Benjamin Meyer**

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

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## Laboratory Qualifiers

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

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

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

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

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

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

**Sample Summary**

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
RM 0 - No Name Creek	1224307001	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 1.5 - Kenai City Dock - DUP	1224307002	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 1.5 - Kenai City Dock	1224307003	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 6.5 - Cunningham Park	1224307004	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 10 - Beaver Creek	1224307005	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 10.1 - Kenai River	1224307006	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 12.5 - Pillars	1224307007	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 18 - Poacher's Cove	1224307008	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 19 - Slikok Creek	1224307009	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 21 - Soldotna Bridge	1224307010	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 22 - Soldotna Creek	1224307011	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 23 - Swiftwater Park	1224307012	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 30 - Funny River	1224307013	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 31 - Morgan's Landing	1224307014	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 36 - Moose River	1224307015	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 36 - Moose River - DUP	1224307016	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 40 - Bing's Landing	1224307017	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 43 - Upstream of Dow Island	1224307018	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 44 - Mouth of Kiley River	1224307019	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 50 - Skilak Lake Outflow	1224307020	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 70 - Jim's Landing	1224307021	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 74 - Russian River	1224307022	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 82 - Kenai Lake Bridge	1224307023	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 79.5 - Juneau Creek	1224307024	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 0 - No Name Creek	1224307025	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 1.5 - Kenai City Dock - DUP	1224307026	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 1.5 - Kenai City Dock	1224307027	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 6.5 - Cunningham Park	1224307028	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 10 - Beaver Creek	1224307029	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 10.1 - Kenai River	1224307030	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 12.5 - Pillars	1224307031	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 18 - Poacher's Cove	1224307032	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 19 - Slikok Creek	1224307033	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 21 - Soldotna Bridge	1224307034	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 22 - Soldotna Creek	1224307035	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 23 - Swiftwater Park	1224307036	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
RM 30 - Funny River	1224307037	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
Trip Blank 1	1224307038	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)
Trip Blank 2	1224307039	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)

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**Sample Summary**

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Collected</u>	<u>Received</u>	<u>Matrix</u>
Trip Blank 3	1224307040	07/26/2022	07/26/2022	Water (Surface, Eff., Ground)

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

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**Detectable Results Summary****Client Sample ID: RM 0 - No Name Creek**

Lab Sample ID: 1224307001

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Phosphorus	0.0123J	mg/L

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

Lab Sample ID: 1224307002

**Volatile GC/MS**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Benzene	0.200J	ug/L
Toluene	0.825J	ug/L

**Waters Department**

Total Nitrate/Nitrite-N	0.145J	mg/L
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**Client Sample ID: RM 1.5 - Kenai City Dock**

Lab Sample ID: 1224307003

**Volatile GC/MS****Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Benzene	0.234J	ug/L
Toluene	0.892J	ug/L
Total Nitrate/Nitrite-N	0.179J	mg/L
Total Phosphorus	0.390	mg/L

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

Lab Sample ID: 1224307004

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.177J	mg/L
Total Phosphorus	0.0153J	mg/L

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

Lab Sample ID: 1224307005

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Phosphorus	0.0516	mg/L

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

Lab Sample ID: 1224307006

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.171J	mg/L
Total Phosphorus	0.0121J	mg/L

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

Lab Sample ID: 1224307007

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.178J	mg/L
Total Phosphorus	0.0144J	mg/L

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

Lab Sample ID: 1224307008

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.175J	mg/L
Total Phosphorus	0.0150J	mg/L

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

Lab Sample ID: 1224307009

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.0886J	mg/L
Total Phosphorus	0.0163J	mg/L

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

Lab Sample ID: 1224307010

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.158J	mg/L
Total Phosphorus	0.0134J	mg/L

**Detectable Results Summary****Client Sample ID: RM 22 - Soldotna Creek**

Lab Sample ID: 1224307011

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Phosphorus	0.0778	mg/L

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

Lab Sample ID: 1224307012

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.178J	mg/L
Total Phosphorus	0.0157J	mg/L

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

Lab Sample ID: 1224307013

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Phosphorus	0.0305J	mg/L

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

Lab Sample ID: 1224307014

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.165J	mg/L
Total Phosphorus	0.0172J	mg/L

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

Lab Sample ID: 1224307015

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Phosphorus	0.0234J	mg/L

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

Lab Sample ID: 1224307016

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.113J	mg/L
Total Phosphorus	0.0247J	mg/L

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

Lab Sample ID: 1224307017

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.293	mg/L

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

Lab Sample ID: 1224307018

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.149J	mg/L
Total Phosphorus	0.0221J	mg/L

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

Lab Sample ID: 1224307019

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Phosphorus	0.0976	mg/L

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

Lab Sample ID: 1224307020

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.174J	mg/L

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

Lab Sample ID: 1224307021

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.210	mg/L

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

Lab Sample ID: 1224307022

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Nitrate/Nitrite-N	0.312	mg/L

**Detectable Results Summary****Client Sample ID: RM 82 - Kenai Lake Bridge**

Lab Sample ID: 1224307023

	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
<b>Waters Department</b>	Total Nitrate/Nitrite-N	0.214	mg/L

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

Lab Sample ID: 1224307024

	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
<b>Waters Department</b>	Total Nitrate/Nitrite-N	0.0614J	mg/L

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

Lab Sample ID: 1224307025

	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
<b>Dissolved Metals by ICP/MS</b>	Arsenic	1.60J	ug/L
	Copper	1.09J	ug/L
	Zinc	33.9	ug/L

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

Lab Sample ID: 1224307026

	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
<b>Dissolved Metals by ICP/MS</b>	Copper	1.54J	ug/L
	Zinc	4.84J	ug/L

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

Lab Sample ID: 1224307027

	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
<b>Dissolved Metals by ICP/MS</b>	Arsenic	1.77J	ug/L
	Copper	1.80J	ug/L
	Zinc	3.61J	ug/L

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

Lab Sample ID: 1224307028

	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
<b>Dissolved Metals by ICP/MS</b>	Copper	26.9	ug/L
	Lead	1.74J	ug/L
	Zinc	674	ug/L

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

Lab Sample ID: 1224307029

	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
<b>Dissolved Metals by ICP/MS</b>	Arsenic	5.20	ug/L
	Zinc	41.2	ug/L

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

Lab Sample ID: 1224307030

	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
<b>Dissolved Metals by ICP/MS</b>	Zinc	80.7	ug/L

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

Lab Sample ID: 1224307031

	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
<b>Dissolved Metals by ICP/MS</b>	Zinc	56.4	ug/L

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

Lab Sample ID: 1224307032

	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
<b>Dissolved Metals by ICP/MS</b>	Zinc	41.0	ug/L

**Detectable Results Summary****Client Sample ID: RM 19 - Slikok Creek**

Lab Sample ID: 1224307033

**Dissolved Metals by ICP/MS**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Arsenic	2.35J	ug/L
Zinc	28.3	ug/L

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

Lab Sample ID: 1224307034

**Dissolved Metals by ICP/MS**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Zinc	33.4	ug/L

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

Lab Sample ID: 1224307035

**Dissolved Metals by ICP/MS**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Arsenic	7.17	ug/L
Zinc	50.5	ug/L

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

Lab Sample ID: 1224307036

**Dissolved Metals by ICP/MS**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Zinc	64.7	ug/L

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

Lab Sample ID: 1224307037

**Dissolved Metals by ICP/MS**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Arsenic	2.53J	ug/L
Zinc	4.45J	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: 1224307001  
Lab Project ID: 1224307

Collection Date: 07/26/22 09:17  
Received Date: 07/26/22 16:25  
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>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	2		08/12/22 10:40

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Analyst: EBH  
Analytical Date/Time: 08/12/22 10:40  
Container ID: 1224307001-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0123	J	0.0400	0.0120	mg/L	1		08/22/22 19:59

**Batch Information**

Analytical Batch: WDA5282  
Analytical Method: SM21 4500P-B,E  
Analyst: MEB  
Analytical Date/Time: 08/22/22 19:59  
Container ID: 1224307001-A

Prep Batch: WXX14366  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 08/22/22 12:44  
Prep Initial Wt./Vol.: 25 mL  
Prep Extract Vol: 25 mL

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

Client Sample ID: **RM 1.5 - Kenai City Dock - DUP**  
Client Project ID: **Kenai River Baseline Water**  
Lab Sample ID: 1224307002  
Lab Project ID: 1224307

Collection Date: 07/26/22 08:50  
Received Date: 07/26/22 16:25  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Volatile GC/MS**

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Benzene	0.200	J	0.400	0.120	ug/L	1		08/03/22 19:44
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/03/22 19:44
o-Xylene	0.500	U	1.00	0.310	ug/L	1		08/03/22 19:44
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		08/03/22 19:44
Toluene	0.825	J	1.00	0.310	ug/L	1		08/03/22 19:44
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		08/03/22 19:44

**Surrogates**

1,2-Dichloroethane-D4 (surr)	105	81-118	%	1	08/03/22 19:44
4-Bromofluorobenzene (surr)	98	85-114	%	1	08/03/22 19:44
Toluene-d8 (surr)	101	89-112	%	1	08/03/22 19:44

**Batch Information**

Analytical Batch: VMS21841  
Analytical Method: SW8260D  
Analyst: S.S  
Analytical Date/Time: 08/03/22 19:44  
Container ID: 1224307002-C

Prep Batch: VXX38957  
Prep Method: SW5030B  
Prep Date/Time: 08/03/22 06:00  
Prep Initial Wt./Vol.: 5 mL  
Prep Extract Vol: 5 mL

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

Client Sample ID: **RM 1.5 - Kenai City Dock - DUP**  
Client Project ID: **Kenai River Baseline Water**  
Lab Sample ID: 1224307002  
Lab Project ID: 1224307

Collection Date: 07/26/22 08:50  
Received Date: 07/26/22 16:25  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.145	J	0.200	0.0500	mg/L	2		08/12/22 10:42

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Analyst: EBH  
Analytical Date/Time: 08/12/22 10:42  
Container ID: 1224307002-A

Print Date: 10/18/2022 4:02:30PM

J flagging is activated

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

Client Sample ID: **RM 1.5 - Kenai City Dock**  
Client Project ID: **Kenai River Baseline Water**  
Lab Sample ID: 1224307003  
Lab Project ID: 1224307

Collection Date: 07/26/22 08:46  
Received Date: 07/26/22 16:25  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Volatile GC/MS**

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Benzene	0.234	J	0.400	0.120	ug/L	1		08/03/22 19:59
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/03/22 19:59
o-Xylene	0.500	U	1.00	0.310	ug/L	1		08/03/22 19:59
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		08/03/22 19:59
Toluene	0.892	J	1.00	0.310	ug/L	1		08/03/22 19:59
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		08/03/22 19:59

**Surrogates**

1,2-Dichloroethane-D4 (surr)	108	81-118	%	1	08/03/22 19:59
4-Bromofluorobenzene (surr)	99.3	85-114	%	1	08/03/22 19:59
Toluene-d8 (surr)	102	89-112	%	1	08/03/22 19:59

**Batch Information**

Analytical Batch: VMS21841  
Analytical Method: SW8260D  
Analyst: S.S  
Analytical Date/Time: 08/03/22 19:59  
Container ID: 1224307003-C

Prep Batch: VXX38957  
Prep Method: SW5030B  
Prep Date/Time: 08/03/22 06:00  
Prep Initial Wt./Vol.: 5 mL  
Prep Extract Vol: 5 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: 1224307003  
Lab Project ID: 1224307

Collection Date: 07/26/22 08:46  
Received Date: 07/26/22 16:25  
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>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.179 J		0.200	0.0500	mg/L	2		08/12/22 10:44

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Analyst: EBH  
Analytical Date/Time: 08/12/22 10:44  
Container ID: 1224307003-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.390		0.0400	0.0120	mg/L	1		08/22/22 20:01

**Batch Information**

Analytical Batch: WDA5282  
Analytical Method: SM21 4500P-B,E  
Analyst: MEB  
Analytical Date/Time: 08/22/22 20:01  
Container ID: 1224307003-A

Prep Batch: WXX14366  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 08/22/22 12:44  
Prep Initial Wt./Vol.: 25 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: 1224307004  
Lab Project ID: 1224307

Collection Date: 07/26/22 09:10  
Received Date: 07/26/22 16:25  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Volatile GC/MS**

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Benzene	0.200	U	0.400	0.120	ug/L	1		08/03/22 20:14
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/03/22 20:14
o-Xylene	0.500	U	1.00	0.310	ug/L	1		08/03/22 20:14
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		08/03/22 20:14
Toluene	0.500	U	1.00	0.310	ug/L	1		08/03/22 20:14
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		08/03/22 20:14

**Surrogates**

1,2-Dichloroethane-D4 (surr)	110		81-118	%	1	08/03/22 20:14
4-Bromofluorobenzene (surr)	115	*	85-114	%	1	08/03/22 20:14
Toluene-d8 (surr)	101		89-112	%	1	08/03/22 20:14

**Batch Information**

Analytical Batch: VMS21841  
Analytical Method: SW8260D  
Analyst: S.S  
Analytical Date/Time: 08/03/22 20:14  
Container ID: 1224307004-C

Prep Batch: VXX38957  
Prep Method: SW5030B  
Prep Date/Time: 08/03/22 06:00  
Prep Initial Wt./Vol.: 5 mL  
Prep Extract Vol: 5 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: 1224307004  
Lab Project ID: 1224307

Collection Date: 07/26/22 09:10  
Received Date: 07/26/22 16:25  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Waters Department**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.177 J	0.200	0.0500	mg/L	2		08/12/22 10:46

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Analyst: EBH  
Analytical Date/Time: 08/12/22 10:46  
Container ID: 1224307004-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0153 J	0.0400	0.0120	mg/L	1		08/22/22 20:04

**Batch Information**

Analytical Batch: WDA5282  
Analytical Method: SM21 4500P-B,E  
Analyst: MEB  
Analytical Date/Time: 08/22/22 20:04  
Container ID: 1224307004-A

Prep Batch: WXX14366  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 08/22/22 12:44  
Prep Initial Wt./Vol.: 25 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: 1224307005  
Lab Project ID: 1224307

Collection Date: 07/26/22 09:55  
Received Date: 07/26/22 16:25  
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>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	2		08/12/22 10:47

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Analyst: EBH  
Analytical Date/Time: 08/12/22 10:47  
Container ID: 1224307005-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0516		0.0400	0.0120	mg/L	1		08/22/22 20:05

**Batch Information**

Analytical Batch: WDA5282  
Analytical Method: SM21 4500P-B,E  
Analyst: MEB  
Analytical Date/Time: 08/22/22 20:05  
Container ID: 1224307005-A

Prep Batch: WXX14366  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 08/22/22 12:44  
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: 1224307006  
Lab Project ID: 1224307

Collection Date: 07/26/22 10:25  
Received Date: 07/26/22 16:25  
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>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.171 J		0.200	0.0500	mg/L	2		08/12/22 10:49

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Analyst: EBH  
Analytical Date/Time: 08/12/22 10:49  
Container ID: 1224307006-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0121 J		0.0400	0.0120	mg/L	1		08/22/22 20:08

**Batch Information**

Analytical Batch: WDA5282  
Analytical Method: SM21 4500P-B,E  
Analyst: MEB  
Analytical Date/Time: 08/22/22 20:08  
Container ID: 1224307006-A

Prep Batch: WXX14366  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 08/22/22 12:44  
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: 1224307007  
Lab Project ID: 1224307

Collection Date: 07/26/22 10:37  
Received Date: 07/26/22 16:25  
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>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.178 J		0.200	0.0500	mg/L	2		08/12/22 10:51

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Analyst: EBH  
Analytical Date/Time: 08/12/22 10:51  
Container ID: 1224307007-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0144 J		0.0400	0.0120	mg/L	1		08/22/22 20:09

**Batch Information**

Analytical Batch: WDA5282  
Analytical Method: SM21 4500P-B,E  
Analyst: MEB  
Analytical Date/Time: 08/22/22 20:09  
Container ID: 1224307007-A

Prep Batch: WXX14366  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 08/22/22 12:44  
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: 1224307008  
Lab Project ID: 1224307

Collection Date: 07/26/22 11:00  
Received Date: 07/26/22 16:25  
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>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.175 J		0.200	0.0500	mg/L	2		08/12/22 10:53

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Analyst: EBH  
Analytical Date/Time: 08/12/22 10:53  
Container ID: 1224307008-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0150 J		0.0400	0.0120	mg/L	1		08/22/22 20:10

**Batch Information**

Analytical Batch: WDA5282  
Analytical Method: SM21 4500P-B,E  
Analyst: MEB  
Analytical Date/Time: 08/22/22 20:10  
Container ID: 1224307008-A

Prep Batch: WXX14366  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 08/22/22 12:44  
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: 1224307009  
Lab Project ID: 1224307

Collection Date: 07/26/22 11:00  
Received Date: 07/26/22 16:25  
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>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.0886 J		0.200	0.0500	mg/L	2		08/12/22 11:07

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Analyst: EBH  
Analytical Date/Time: 08/12/22 11:07  
Container ID: 1224307009-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0163 J		0.0400	0.0120	mg/L	1		08/22/22 20:11

**Batch Information**

Analytical Batch: WDA5282  
Analytical Method: SM21 4500P-B,E  
Analyst: MEB  
Analytical Date/Time: 08/22/22 20:11  
Container ID: 1224307009-A

Prep Batch: WXX14366  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 08/22/22 12:44  
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: 1224307010  
Lab Project ID: 1224307

Collection Date: 07/26/22 10:33  
Received Date: 07/26/22 16:25  
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>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.158 J		0.200	0.0500	mg/L	2		08/12/22 11:08

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Analyst: EBH  
Analytical Date/Time: 08/12/22 11:08  
Container ID: 1224307010-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0134 J		0.0400	0.0120	mg/L	1		08/22/22 20:12

**Batch Information**

Analytical Batch: WDA5282  
Analytical Method: SM21 4500P-B,E  
Analyst: MEB  
Analytical Date/Time: 08/22/22 20:12  
Container ID: 1224307010-A

Prep Batch: WXX14366  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 08/22/22 12:44  
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: 1224307011  
Lab Project ID: 1224307

Collection Date: 07/26/22 09:15  
Received Date: 07/26/22 16:25  
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>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	2		08/12/22 11:10

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Analyst: EBH  
Analytical Date/Time: 08/12/22 11:10  
Container ID: 1224307011-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0778		0.0400	0.0120	mg/L	1		08/22/22 20:13

**Batch Information**

Analytical Batch: WDA5282  
Analytical Method: SM21 4500P-B,E  
Analyst: MEB  
Analytical Date/Time: 08/22/22 20:13  
Container ID: 1224307011-A

Prep Batch: WXX14366  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 08/22/22 12:44  
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: 1224307012  
Lab Project ID: 1224307

Collection Date: 07/26/22 10:00  
Received Date: 07/26/22 16:25  
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>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.178 J		0.200	0.0500	mg/L	2		08/12/22 11:12

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Analyst: EBH  
Analytical Date/Time: 08/12/22 11:12  
Container ID: 1224307012-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0157 J		0.0400	0.0120	mg/L	1		08/22/22 20:14

**Batch Information**

Analytical Batch: WDA5282  
Analytical Method: SM21 4500P-B,E  
Analyst: MEB  
Analytical Date/Time: 08/22/22 20:14  
Container ID: 1224307012-A

Prep Batch: WXX14366  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 08/22/22 12:44  
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: 1224307013  
Lab Project ID: 1224307

Collection Date: 07/26/22 09:07  
Received Date: 07/26/22 16:25  
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>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	2		08/12/22 11:14

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Analyst: EBH  
Analytical Date/Time: 08/12/22 11:14  
Container ID: 1224307013-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0305	J	0.0400	0.0120	mg/L	1		08/22/22 20:15

**Batch Information**

Analytical Batch: WDA5282  
Analytical Method: SM21 4500P-B,E  
Analyst: MEB  
Analytical Date/Time: 08/22/22 20:15  
Container ID: 1224307013-A

Prep Batch: WXX14366  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 08/22/22 12:44  
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: 1224307014  
Lab Project ID: 1224307

Collection Date: 07/26/22 10:13  
Received Date: 07/26/22 16:25  
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>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.165 J		0.200	0.0500	mg/L	2		08/12/22 11:15

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Analyst: EBH  
Analytical Date/Time: 08/12/22 11:15  
Container ID: 1224307014-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0172 J		0.0400	0.0120	mg/L	1		08/22/22 20:16

**Batch Information**

Analytical Batch: WDA5282  
Analytical Method: SM21 4500P-B,E  
Analyst: MEB  
Analytical Date/Time: 08/22/22 20:16  
Container ID: 1224307014-A

Prep Batch: WXX14366  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 08/22/22 12:44  
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: 1224307015  
Lab Project ID: 1224307

Collection Date: 07/26/22 10:42  
Received Date: 07/26/22 16:25  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Waters Department**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.100 U	0.200	0.0500	mg/L	2		08/12/22 11:22

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Analyst: EBH  
Analytical Date/Time: 08/12/22 11:22  
Container ID: 1224307015-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0234 J	0.0400	0.0120	mg/L	1		08/22/22 20:17

**Batch Information**

Analytical Batch: WDA5282  
Analytical Method: SM21 4500P-B,E  
Analyst: MEB  
Analytical Date/Time: 08/22/22 20:17  
Container ID: 1224307015-A

Prep Batch: WXX14366  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 08/22/22 12:44  
Prep Initial Wt./Vol.: 25 mL  
Prep Extract Vol: 25 mL

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

Client Sample ID: **RM 36 - Moose River - DUP**  
Client Project ID: **Kenai River Baseline Water**  
Lab Sample ID: 1224307016  
Lab Project ID: 1224307

Collection Date: 07/26/22 10:48  
Received Date: 07/26/22 16:25  
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>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.113 J		0.200	0.0500	mg/L	2		08/12/22 11:24

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Analyst: EBH  
Analytical Date/Time: 08/12/22 11:24  
Container ID: 1224307016-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0247 J		0.0400	0.0120	mg/L	1		08/22/22 20:20

**Batch Information**

Analytical Batch: WDA5282  
Analytical Method: SM21 4500P-B,E  
Analyst: MEB  
Analytical Date/Time: 08/22/22 20:20  
Container ID: 1224307016-A

Prep Batch: WXX14366  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 08/22/22 12:44  
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: 1224307017  
Lab Project ID: 1224307

Collection Date: 07/26/22 09:53  
Received Date: 07/26/22 16:25  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Volatile GC/MS**

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Benzene	0.200	U	0.400	0.120	ug/L	1		08/03/22 20:29
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/03/22 20:29
o-Xylene	0.500	U	1.00	0.310	ug/L	1		08/03/22 20:29
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		08/03/22 20:29
Toluene	0.500	U	1.00	0.310	ug/L	1		08/03/22 20:29
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		08/03/22 20:29

**Surrogates**

1,2-Dichloroethane-D4 (surr)	110	81-118	%	1	08/03/22 20:29
4-Bromofluorobenzene (surr)	98.1	85-114	%	1	08/03/22 20:29
Toluene-d8 (surr)	102	89-112	%	1	08/03/22 20:29

**Batch Information**

Analytical Batch: VMS21841  
Analytical Method: SW8260D  
Analyst: S.S  
Analytical Date/Time: 08/03/22 20:29  
Container ID: 1224307017-C

Prep Batch: VXX38957  
Prep Method: SW5030B  
Prep Date/Time: 08/03/22 06:00  
Prep Initial Wt./Vol.: 5 mL  
Prep Extract Vol: 5 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: 1224307017  
Lab Project ID: 1224307

Collection Date: 07/26/22 09:53  
Received Date: 07/26/22 16:25  
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>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.293		0.200	0.0500	mg/L	2		08/12/22 11:26

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Analyst: EBH  
Analytical Date/Time: 08/12/22 11:26  
Container ID: 1224307017-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0200 U		0.0400	0.0120	mg/L	1		08/22/22 20:21

**Batch Information**

Analytical Batch: WDA5282  
Analytical Method: SM21 4500P-B,E  
Analyst: MEB  
Analytical Date/Time: 08/22/22 20:21  
Container ID: 1224307017-A

Prep Batch: WXX14366  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 08/22/22 12:44  
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: 1224307018  
Lab Project ID: 1224307

Collection Date: 07/26/22 08:10  
Received Date: 07/26/22 16:25  
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>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.149 J		0.200	0.0500	mg/L	2		08/12/22 11:28

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Analyst: EBH  
Analytical Date/Time: 08/12/22 11:28  
Container ID: 1224307018-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0221 J		0.0400	0.0120	mg/L	1		08/22/22 20:22

**Batch Information**

Analytical Batch: WDA5282  
Analytical Method: SM21 4500P-B,E  
Analyst: MEB  
Analytical Date/Time: 08/22/22 20:22  
Container ID: 1224307018-A

Prep Batch: WXX14366  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 08/22/22 12:44  
Prep Initial Wt./Vol.: 25 mL  
Prep Extract Vol: 25 mL

**Results of RM 44 - Mouth of Kiley River**

Client Sample ID: **RM 44 - Mouth of Kiley River**  
Client Project ID: **Kenai River Baseline Water**  
Lab Sample ID: 1224307019  
Lab Project ID: 1224307

Collection Date: 07/26/22 08:30  
Received Date: 07/26/22 16:25  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Waters Department**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.100 U	0.200	0.0500	mg/L	2		08/12/22 11:29

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Analyst: EBH  
Analytical Date/Time: 08/12/22 11:29  
Container ID: 1224307019-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0976	0.0400	0.0120	mg/L	1		08/22/22 20:22

**Batch Information**

Analytical Batch: WDA5282  
Analytical Method: SM21 4500P-B,E  
Analyst: MEB  
Analytical Date/Time: 08/22/22 20:22  
Container ID: 1224307019-A

Prep Batch: WXX14366  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 08/22/22 12:44  
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: 1224307020  
Lab Project ID: 1224307

Collection Date: 07/26/22 09:06  
Received Date: 07/26/22 16:25  
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>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.174	J	0.200	0.0500	mg/L	2		08/12/22 11:31

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Analyst: EBH  
Analytical Date/Time: 08/12/22 11:31  
Container ID: 1224307020-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0200	U	0.0400	0.0120	mg/L	1		08/22/22 20:23

**Batch Information**

Analytical Batch: WDA5282  
Analytical Method: SM21 4500P-B,E  
Analyst: MEB  
Analytical Date/Time: 08/22/22 20:23  
Container ID: 1224307020-A

Prep Batch: WXX14366  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 08/22/22 12:44  
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: 1224307021  
Lab Project ID: 1224307

Collection Date: 07/26/22 08:00  
Received Date: 07/26/22 16:25  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.210		0.200	0.0500	mg/L	2		08/12/22 11:33

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Analyst: EBH  
Analytical Date/Time: 08/12/22 11:33  
Container ID: 1224307021-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0200	U	0.0400	0.0120	mg/L	1		08/22/22 20:27

**Batch Information**

Analytical Batch: WDA5283  
Analytical Method: SM21 4500P-B,E  
Analyst: MEB  
Analytical Date/Time: 08/22/22 20:27  
Container ID: 1224307021-A

Prep Batch: WXX14367  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 08/22/22 12:44  
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: 1224307022  
Lab Project ID: 1224307

Collection Date: 07/26/22 08:44  
Received Date: 07/26/22 16:25  
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>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.312		0.200	0.0500	mg/L	2		08/12/22 11:35

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Analyst: EBH  
Analytical Date/Time: 08/12/22 11:35  
Container ID: 1224307022-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0200 U		0.0400	0.0120	mg/L	1		08/22/22 20:28

**Batch Information**

Analytical Batch: WDA5283  
Analytical Method: SM21 4500P-B,E  
Analyst: MEB  
Analytical Date/Time: 08/22/22 20:28  
Container ID: 1224307022-A

Prep Batch: WXX14367  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 08/22/22 12:44  
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: 1224307023  
Lab Project ID: 1224307

Collection Date: 07/26/22 09:35  
Received Date: 07/26/22 16:25  
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>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.214		0.200	0.0500	mg/L	2		08/12/22 11:36

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Analyst: EBH  
Analytical Date/Time: 08/12/22 11:36  
Container ID: 1224307023-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0200 U		0.0400	0.0120	mg/L	1		08/22/22 20:31

**Batch Information**

Analytical Batch: WDA5283  
Analytical Method: SM21 4500P-B,E  
Analyst: MEB  
Analytical Date/Time: 08/22/22 20:31  
Container ID: 1224307023-A

Prep Batch: WXX14367  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 08/22/22 12:44  
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: 1224307024  
Lab Project ID: 1224307

Collection Date: 07/26/22 10:25  
Received Date: 07/26/22 16:25  
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>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.0614	J	0.200	0.0500	mg/L	2		08/12/22 11:38

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Analyst: EBH  
Analytical Date/Time: 08/12/22 11:38  
Container ID: 1224307024-A

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0200	U	0.0400	0.0120	mg/L	1		08/22/22 20:32

**Batch Information**

Analytical Batch: WDA5283  
Analytical Method: SM21 4500P-B,E  
Analyst: MEB  
Analytical Date/Time: 08/22/22 20:32  
Container ID: 1224307024-A

Prep Batch: WXX14367  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 08/22/22 12:44  
Prep Initial Wt./Vol.: 25 mL  
Prep Extract Vol: 25 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: 1224307025  
Lab Project ID: 1224307

Collection Date: 07/26/22 09:17  
Received Date: 07/26/22 16:25  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

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

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Arsenic	1.60	J	5.00	1.50	ug/L	1		08/14/22 15:28
Cadmium	0.250	U	0.500	0.150	ug/L	1		08/14/22 15:28
Chromium	2.50	U	5.00	2.50	ug/L	1		08/14/22 15:28
Copper	1.09	J	3.00	1.00	ug/L	1		08/14/22 15:28
Lead	1.00	U	2.00	0.500	ug/L	1		08/14/22 15:28
Zinc	33.9		10.0	3.10	ug/L	1		08/14/22 15:28

**Batch Information**

Analytical Batch: MMS11635  
Analytical Method: EP200.8  
Analyst: HGS  
Analytical Date/Time: 08/14/22 15:28  
Container ID: 1224307025-A

Prep Batch: MXX35311  
Prep Method: E200.2  
Prep Date/Time: 08/03/22 10:57  
Prep Initial Wt./Vol.: 20 mL  
Prep Extract Vol: 50 mL

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

Client Sample ID: **RM 1.5 - Kenai City Dock - DUP**  
Client Project ID: **Kenai River Baseline Water**  
Lab Sample ID: 1224307026  
Lab Project ID: 1224307

Collection Date: 07/26/22 08:50  
Received Date: 07/26/22 16:25  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

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

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Arsenic	2.50	U	5.00	1.50	ug/L	1		08/14/22 15:31
Cadmium	0.250	U	0.500	0.150	ug/L	1		08/14/22 15:31
Chromium	2.50	U	5.00	2.50	ug/L	1		08/14/22 15:31
Copper	1.54	J	3.00	1.00	ug/L	1		08/14/22 15:31
Lead	1.00	U	2.00	0.500	ug/L	1		08/14/22 15:31
Zinc	4.84	J	10.0	3.10	ug/L	1		08/14/22 15:31

**Batch Information**

Analytical Batch: MMS11635  
Analytical Method: EP200.8  
Analyst: HGS  
Analytical Date/Time: 08/14/22 15:31  
Container ID: 1224307026-A

Prep Batch: MXX35311  
Prep Method: E200.2  
Prep Date/Time: 08/03/22 10:57  
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: 1224307027  
Lab Project ID: 1224307

Collection Date: 07/26/22 08:46  
Received Date: 07/26/22 16:25  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

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

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Arsenic	1.77	J	5.00	1.50	ug/L	1		08/14/22 15:33
Cadmium	0.250	U	0.500	0.150	ug/L	1		08/14/22 15:33
Chromium	2.50	U	5.00	2.50	ug/L	1		08/14/22 15:33
Copper	1.80	J	3.00	1.00	ug/L	1		08/14/22 15:33
Lead	1.00	U	2.00	0.500	ug/L	1		08/14/22 15:33
Zinc	3.61	J	10.0	3.10	ug/L	1		08/14/22 15:33

**Batch Information**

Analytical Batch: MMS11635  
Analytical Method: EP200.8  
Analyst: HGS  
Analytical Date/Time: 08/14/22 15:33  
Container ID: 1224307027-A

Prep Batch: MXX35311  
Prep Method: E200.2  
Prep Date/Time: 08/03/22 10:57  
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: 1224307028  
Lab Project ID: 1224307

Collection Date: 07/26/22 09:10  
Received Date: 07/26/22 16:25  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

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

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Arsenic	2.50	U	5.00	1.50	ug/L	1		08/14/22 15:23
Cadmium	0.250	U	0.500	0.150	ug/L	1		08/14/22 15:23
Chromium	2.50	U	5.00	2.50	ug/L	1		08/14/22 15:23
Copper	26.9		3.00	1.00	ug/L	1		08/14/22 15:23
Lead	1.74	J	2.00	0.500	ug/L	1		08/14/22 15:23
Zinc	674		50.0	15.5	ug/L	5		08/18/22 20:53

**Batch Information**

Analytical Batch: MMS11635  
Analytical Method: EP200.8  
Analyst: HGS  
Analytical Date/Time: 08/14/22 15:23  
Container ID: 1224307028-A

Prep Batch: MXX35311  
Prep Method: E200.2  
Prep Date/Time: 08/03/22 10:57  
Prep Initial Wt./Vol.: 20 mL  
Prep Extract Vol: 50 mL

Analytical Batch: MMS11639  
Analytical Method: EP200.8  
Analyst: HGS  
Analytical Date/Time: 08/18/22 20:53  
Container ID: 1224307028-A

Prep Batch: MXX35311  
Prep Method: E200.2  
Prep Date/Time: 08/03/22 10:57  
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: 1224307029  
Lab Project ID: 1224307

Collection Date: 07/26/22 09:55  
Received Date: 07/26/22 16:25  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

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

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Arsenic	5.20		5.00	1.50	ug/L	1		08/14/22 15:42
Cadmium	0.250	U	0.500	0.150	ug/L	1		08/14/22 15:42
Chromium	2.50	U	5.00	2.50	ug/L	1		08/14/22 15:42
Copper	1.50	U	3.00	1.00	ug/L	1		08/14/22 15:42
Lead	1.00	U	2.00	0.500	ug/L	1		08/14/22 15:42
Zinc	41.2		10.0	3.10	ug/L	1		08/14/22 15:42

**Batch Information**

Analytical Batch: MMS11635  
Analytical Method: EP200.8  
Analyst: HGS  
Analytical Date/Time: 08/14/22 15:42  
Container ID: 1224307029-A

Prep Batch: MXX35311  
Prep Method: E200.2  
Prep Date/Time: 08/03/22 10:57  
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: 1224307030  
Lab Project ID: 1224307

Collection Date: 07/26/22 10:25  
Received Date: 07/26/22 16:25  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

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

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Arsenic	2.50	U	5.00	1.50	ug/L	1		08/14/22 15:44
Cadmium	0.250	U	0.500	0.150	ug/L	1		08/14/22 15:44
Chromium	2.50	U	5.00	2.50	ug/L	1		08/14/22 15:44
Copper	1.50	U	3.00	1.00	ug/L	1		08/14/22 15:44
Lead	1.00	U	2.00	0.500	ug/L	1		08/14/22 15:44
Zinc	80.7		10.0	3.10	ug/L	1		08/14/22 15:44

**Batch Information**

Analytical Batch: MMS11635  
Analytical Method: EP200.8  
Analyst: HGS  
Analytical Date/Time: 08/14/22 15:44  
Container ID: 1224307030-A

Prep Batch: MXX35311  
Prep Method: E200.2  
Prep Date/Time: 08/03/22 10:57  
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: 1224307031  
Lab Project ID: 1224307

Collection Date: 07/26/22 10:37  
Received Date: 07/26/22 16:25  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

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

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Arsenic	2.50	U	5.00	1.50	ug/L	1		08/14/22 15:47
Cadmium	0.250	U	0.500	0.150	ug/L	1		08/14/22 15:47
Chromium	2.50	U	5.00	2.50	ug/L	1		08/14/22 15:47
Copper	1.50	U	3.00	1.00	ug/L	1		08/14/22 15:47
Lead	1.00	U	2.00	0.500	ug/L	1		08/14/22 15:47
Zinc	56.4		10.0	3.10	ug/L	1		08/14/22 15:47

**Batch Information**

Analytical Batch: MMS11635  
Analytical Method: EP200.8  
Analyst: HGS  
Analytical Date/Time: 08/14/22 15:47  
Container ID: 1224307031-A

Prep Batch: MXX35311  
Prep Method: E200.2  
Prep Date/Time: 08/03/22 10:57  
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: 1224307032  
Lab Project ID: 1224307

Collection Date: 07/26/22 11:00  
Received Date: 07/26/22 16:25  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

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

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Arsenic	2.50	U	5.00	1.50	ug/L	1		08/14/22 15:50
Cadmium	0.250	U	0.500	0.150	ug/L	1		08/14/22 15:50
Chromium	2.50	U	5.00	2.50	ug/L	1		08/14/22 15:50
Copper	1.50	U	3.00	1.00	ug/L	1		08/14/22 15:50
Lead	1.00	U	2.00	0.500	ug/L	1		08/14/22 15:50
Zinc	41.0		10.0	3.10	ug/L	1		08/14/22 15:50

**Batch Information**

Analytical Batch: MMS11635  
Analytical Method: EP200.8  
Analyst: HGS  
Analytical Date/Time: 08/14/22 15:50  
Container ID: 1224307032-A

Prep Batch: MXX35311  
Prep Method: E200.2  
Prep Date/Time: 08/03/22 10:57  
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: 1224307033  
Lab Project ID: 1224307

Collection Date: 07/26/22 11:00  
Received Date: 07/26/22 16:25  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

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

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Arsenic	2.35	J	5.00	1.50	ug/L	1		08/14/22 15:52
Cadmium	0.250	U	0.500	0.150	ug/L	1		08/14/22 15:52
Chromium	2.50	U	5.00	2.50	ug/L	1		08/14/22 15:52
Copper	1.50	U	3.00	1.00	ug/L	1		08/14/22 15:52
Lead	1.00	U	2.00	0.500	ug/L	1		08/14/22 15:52
Zinc	28.3		10.0	3.10	ug/L	1		08/14/22 15:52

**Batch Information**

Analytical Batch: MMS11635  
Analytical Method: EP200.8  
Analyst: HGS  
Analytical Date/Time: 08/14/22 15:52  
Container ID: 1224307033-A

Prep Batch: MXX35311  
Prep Method: E200.2  
Prep Date/Time: 08/03/22 10:57  
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: 1224307034  
Lab Project ID: 1224307

Collection Date: 07/26/22 10:33  
Received Date: 07/26/22 16:25  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

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

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Arsenic	2.50	U	5.00	1.50	ug/L	1		08/14/22 15:55
Cadmium	0.250	U	0.500	0.150	ug/L	1		08/14/22 15:55
Chromium	2.50	U	5.00	2.50	ug/L	1		08/14/22 15:55
Copper	1.50	U	3.00	1.00	ug/L	1		08/14/22 15:55
Lead	1.00	U	2.00	0.500	ug/L	1		08/14/22 15:55
Zinc	33.4		10.0	3.10	ug/L	1		08/14/22 15:55

**Batch Information**

Analytical Batch: MMS11635  
Analytical Method: EP200.8  
Analyst: HGS  
Analytical Date/Time: 08/14/22 15:55  
Container ID: 1224307034-A

Prep Batch: MXX35311  
Prep Method: E200.2  
Prep Date/Time: 08/03/22 10:57  
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: 1224307035  
Lab Project ID: 1224307

Collection Date: 07/26/22 09:15  
Received Date: 07/26/22 16:25  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

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

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Arsenic	7.17		5.00	1.50	ug/L	1		08/14/22 15:58
Cadmium	0.250	U	0.500	0.150	ug/L	1		08/14/22 15:58
Chromium	2.50	U	5.00	2.50	ug/L	1		08/14/22 15:58
Copper	1.50	U	3.00	1.00	ug/L	1		08/14/22 15:58
Lead	1.00	U	2.00	0.500	ug/L	1		08/14/22 15:58
Zinc	50.5		10.0	3.10	ug/L	1		08/14/22 15:58

**Batch Information**

Analytical Batch: MMS11635  
Analytical Method: EP200.8  
Analyst: HGS  
Analytical Date/Time: 08/14/22 15:58  
Container ID: 1224307035-A

Prep Batch: MXX35311  
Prep Method: E200.2  
Prep Date/Time: 08/03/22 10:57  
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: 1224307036  
Lab Project ID: 1224307

Collection Date: 07/26/22 10:00  
Received Date: 07/26/22 16:25  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

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

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Arsenic	2.50	U	5.00	1.50	ug/L	1		08/14/22 16:00
Cadmium	0.250	U	0.500	0.150	ug/L	1		08/14/22 16:00
Chromium	2.50	U	5.00	2.50	ug/L	1		08/14/22 16:00
Copper	1.50	U	3.00	1.00	ug/L	1		08/14/22 16:00
Lead	1.00	U	2.00	0.500	ug/L	1		08/14/22 16:00
Zinc	64.7		10.0	3.10	ug/L	1		08/14/22 16:00

**Batch Information**

Analytical Batch: MMS11635  
Analytical Method: EP200.8  
Analyst: HGS  
Analytical Date/Time: 08/14/22 16:00  
Container ID: 1224307036-A

Prep Batch: MXX35311  
Prep Method: E200.2  
Prep Date/Time: 08/03/22 10:57  
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: 1224307037  
Lab Project ID: 1224307

Collection Date: 07/26/22 09:07  
Received Date: 07/26/22 16:25  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

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

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Arsenic	2.53	J	5.00	1.50	ug/L	1		08/14/22 16:03
Cadmium	0.250	U	0.500	0.150	ug/L	1		08/14/22 16:03
Chromium	2.50	U	5.00	2.50	ug/L	1		08/14/22 16:03
Copper	1.50	U	3.00	1.00	ug/L	1		08/14/22 16:03
Lead	1.00	U	2.00	0.500	ug/L	1		08/14/22 16:03
Zinc	4.45	J	10.0	3.10	ug/L	1		08/14/22 16:03

**Batch Information**

Analytical Batch: MMS11635  
Analytical Method: EP200.8  
Analyst: HGS  
Analytical Date/Time: 08/14/22 16:03  
Container ID: 1224307037-A

Prep Batch: MXX35311  
Prep Method: E200.2  
Prep Date/Time: 08/03/22 10:57  
Prep Initial Wt./Vol.: 20 mL  
Prep Extract Vol: 50 mL

**Results of Trip Blank 1**

Client Sample ID: **Trip Blank 1**  
Client Project ID: **Kenai River Baseline Water**  
Lab Sample ID: 1224307038  
Lab Project ID: 1224307

Collection Date: 07/26/22 12:00  
Received Date: 07/26/22 16:25  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Volatile GC/MS**

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Benzene	0.200	U	0.400	0.120	ug/L	1		08/03/22 16:27
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/03/22 16:27
o-Xylene	0.500	U	1.00	0.310	ug/L	1		08/03/22 16:27
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		08/03/22 16:27
Toluene	0.500	U	1.00	0.310	ug/L	1		08/03/22 16:27
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		08/03/22 16:27

**Surrogates**

1,2-Dichloroethane-D4 (surr)	106	81-118	%	1	08/03/22 16:27
4-Bromofluorobenzene (surr)	98.2	85-114	%	1	08/03/22 16:27
Toluene-d8 (surr)	102	89-112	%	1	08/03/22 16:27

**Batch Information**

Analytical Batch: VMS21841  
Analytical Method: SW8260D  
Analyst: S.S  
Analytical Date/Time: 08/03/22 16:27  
Container ID: 1224307038-A

Prep Batch: VXX38957  
Prep Method: SW5030B  
Prep Date/Time: 08/03/22 06:00  
Prep Initial Wt./Vol.: 5 mL  
Prep Extract Vol: 5 mL

**Results of Trip Blank 2**

Client Sample ID: **Trip Blank 2**  
Client Project ID: **Kenai River Baseline Water**  
Lab Sample ID: 1224307039  
Lab Project ID: 1224307

Collection Date: 07/26/22 12:00  
Received Date: 07/26/22 16:25  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Volatile GC/MS**

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Benzene	0.200	U	0.400	0.120	ug/L	1		08/03/22 16:42
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/03/22 16:42
o-Xylene	0.500	U	1.00	0.310	ug/L	1		08/03/22 16:42
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		08/03/22 16:42
Toluene	0.500	U	1.00	0.310	ug/L	1		08/03/22 16:42
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		08/03/22 16:42

**Surrogates**

1,2-Dichloroethane-D4 (surr)	121	*	81-118	%	1	08/03/22 16:42
4-Bromofluorobenzene (surr)	98.3		85-114	%	1	08/03/22 16:42
Toluene-d8 (surr)	102		89-112	%	1	08/03/22 16:42

**Batch Information**

Analytical Batch: VMS21841  
Analytical Method: SW8260D  
Analyst: S.S  
Analytical Date/Time: 08/03/22 16:42  
Container ID: 1224307039-A

Prep Batch: VXX38957  
Prep Method: SW5030B  
Prep Date/Time: 08/03/22 06:00  
Prep Initial Wt./Vol.: 5 mL  
Prep Extract Vol: 5 mL

**Results of Trip Blank 3**

Client Sample ID: **Trip Blank 3**  
Client Project ID: **Kenai River Baseline Water**  
Lab Sample ID: 1224307040  
Lab Project ID: 1224307

Collection Date: 07/26/22 12:00  
Received Date: 07/26/22 16:25  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Volatile GC/MS**

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Benzene	0.200	U	0.400	0.120	ug/L	1		08/03/22 16:58
Ethylbenzene	0.500	U	1.00	0.310	ug/L	1		08/03/22 16:58
o-Xylene	0.500	U	1.00	0.310	ug/L	1		08/03/22 16:58
P & M -Xylene	1.00	U	2.00	0.620	ug/L	1		08/03/22 16:58
Toluene	0.500	U	1.00	0.310	ug/L	1		08/03/22 16:58
Xylenes (total)	1.50	U	3.00	1.00	ug/L	1		08/03/22 16:58

**Surrogates**

1,2-Dichloroethane-D4 (surr)	103	81-118	%	1	08/03/22 16:58
4-Bromofluorobenzene (surr)	101	85-114	%	1	08/03/22 16:58
Toluene-d8 (surr)	100	89-112	%	1	08/03/22 16:58

**Batch Information**

Analytical Batch: VMS21841  
Analytical Method: SW8260D  
Analyst: S.S  
Analytical Date/Time: 08/03/22 16:58  
Container ID: 1224307040-A

Prep Batch: VXX38957  
Prep Method: SW5030B  
Prep Date/Time: 08/03/22 06:00  
Prep Initial Wt./Vol.: 5 mL  
Prep Extract Vol: 5 mL

**Method Blank**

Blank ID: MB for HBN 1840725 [MXX/35311]

Blank Lab ID: 1677227

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1224307025, 1224307026, 1224307027, 1224307028, 1224307029, 1224307030, 1224307031, 1224307032, 1224307033,  
1224307034, 1224307035, 1224307036, 1224307037**Results by EP200.8**

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Arsenic	2.50U	5.00	1.50	ug/L
Cadmium	0.250U	0.500	0.150	ug/L
Chromium	2.50U	5.00	2.50	ug/L
Copper	1.50U	3.00	1.00	ug/L
Lead	1.00U	2.00	0.500	ug/L
Zinc	3.26J	10.0	3.10	ug/L

**Batch Information**

Analytical Batch: MMS11635

Analytical Method: EP200.8

Instrument: P7 Agilent 7800

Analyst: HGS

Analytical Date/Time: 8/14/2022 3:09:42PM

Prep Batch: MXX35311

Prep Method: E200.2

Prep Date/Time: 8/3/2022 10:57:10AM

Prep Initial Wt./Vol.: 20 mL

Prep Extract Vol: 50 mL

Print Date: 10/18/2022 4:02:34PM

**Blank Spike Summary**

Blank Spike ID: LCS for HBN 1224307 [MXX35311]

Blank Spike Lab ID: 1677228

Date Analyzed: 08/14/2022 15:12

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1224307025, 1224307026, 1224307027, 1224307028, 1224307029, 1224307030, 1224307031, 1224307032, 1224307033, 1224307034, 1224307035, 1224307036, 1224307037

**Results by EP200.8**

## Blank Spike (ug/L)

<u>Parameter</u>	<u>Spike</u>	<u>Result</u>	<u>Rec (%)</u>	<u>CL</u>
Arsenic	1000	969	97	( 85-115 )
Cadmium	100	95.1	95	( 85-115 )
Chromium	400	396	99	( 85-115 )
Copper	1000	1000	100	( 85-115 )
Lead	1000	984	98	( 85-115 )
Zinc	1000	990	99	( 85-115 )

**Batch Information**

Analytical Batch: MMS11635

Analytical Method: EP200.8

Instrument: P7 Agilent 7800

Analyst: HGS

Prep Batch: MXX35311

Prep Method: E200.2

Prep Date/Time: 08/03/2022 10:57

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

Dupe Init Wt./Vol.: Extract Vol:

Print Date: 10/18/2022 4:02:37PM

**Matrix Spike Summary**

Original Sample ID: 1677225  
MS Sample ID: 1677230 MS  
MSD Sample ID:

QC for Samples: 1224307028

Analysis Date: 08/14/2022 15:17  
Analysis Date: 08/14/2022 15:20  
Analysis Date:  
Matrix: Water (Surface, Eff., Ground)

**Results by EP200.8**

<u>Parameter</u>	<u>Sample</u>	Matrix Spike (ug/L)			Spike Duplicate (ug/L)			<u>CL</u>	<u>RPD (%)</u>	<u>RPD CL</u>
		<u>Spike</u>	<u>Result</u>	<u>Rec (%)</u>	<u>Spike</u>	<u>Result</u>	<u>Rec (%)</u>			
Arsenic	2.50U	1000	966	97				70-130		
Cadmium	0.250U	100	95.6	96				70-130		
Chromium	2.50U	400	394	99				70-130		
Copper	1.50U	1000	995	100				70-130		
Lead	1.00U	1000	987	99				70-130		
Zinc	21.9	1000	1010	99				70-130		

**Batch Information**

Analytical Batch: MMS11635  
Analytical Method: EP200.8  
Instrument: P7 Agilent 7800  
Analyst: HGS  
Analytical Date/Time: 8/14/2022 3:20:29PM

Prep Batch: MX35311  
Prep Method: DW Digest for Metals on ICP-MS  
Prep Date/Time: 8/3/2022 10:57:10AM  
Prep Initial Wt./Vol.: 20.00mL  
Prep Extract Vol: 50.00mL

Print Date: 10/18/2022 4:02:38PM

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**Matrix Spike Summary**

Original Sample ID: 1677226  
MS Sample ID: 1677231 MS  
MSD Sample ID:

Analysis Date: 08/14/2022 15:23  
Analysis Date: 08/14/2022 15:25  
Analysis Date:  
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1224307025, 1224307026, 1224307027, 1224307028, 1224307029, 1224307030, 1224307031, 1224307032, 1224307033, 1224307034, 1224307035, 1224307036, 1224307037

**Results by EP200.8**

Parameter	Sample	Matrix Spike (ug/L)			Spike Duplicate (ug/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Arsenic	2.50U	1000	975	98				70-130		
Cadmium	0.250U	100	96	96				70-130		
Chromium	2.50U	400	391	98				70-130		
Copper	26.9	1000	996	97				70-130		
Lead	1.74J	1000	992	99				70-130		
Zinc	674	1000	1740	106				70-130		

**Batch Information**

Analytical Batch: MMS11635  
Analytical Method: EP200.8  
Instrument: P7 Agilent 7800  
Analyst: HGS  
Analytical Date/Time: 8/14/2022 3:25:00PM

Prep Batch: MXX35311  
Prep Method: DW Digest for Metals on ICP-MS  
Prep Date/Time: 8/3/2022 10:57:10AM  
Prep Initial Wt./Vol.: 20.00mL  
Prep Extract Vol: 50.00mL

Analytical Batch: MMS11639  
Analytical Method: EP200.8  
Instrument: P7 Agilent 7800  
Analyst: HGS  
Analytical Date/Time: 8/18/2022 8:56:00PM

Prep Batch: MXX35311  
Prep Method: DW Digest for Metals on ICP-MS  
Prep Date/Time: 8/3/2022 10:57:10AM  
Prep Initial Wt./Vol.: 20.00mL  
Prep Extract Vol: 50.00mL

Print Date: 10/18/2022 4:02:38PM

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**Method Blank**

Blank ID: MB for HBN 1840786 [VXX/38957]  
Blank Lab ID: 1677404

Matrix: Water (Surface, Eff., Ground)

QC for Samples:  
1224307002, 1224307003, 1224307004, 1224307017, 1224307038, 1224307039, 1224307040

**Results by SW8260D**

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Benzene	0.200U	0.400	0.120	ug/L
Ethylbenzene	0.500U	1.00	0.310	ug/L
o-Xylene	0.500U	1.00	0.310	ug/L
P & M -Xylene	1.00U	2.00	0.620	ug/L
Toluene	0.500U	1.00	0.310	ug/L
Xylenes (total)	1.50U	3.00	1.00	ug/L

**Surrogates**

1,2-Dichloroethane-D4 (surr)	107	81-118	%
4-Bromofluorobenzene (surr)	98.1	85-114	%
Toluene-d8 (surr)	102	89-112	%

**Batch Information**

Analytical Batch: VMS21841  
Analytical Method: SW8260D  
Instrument: Agilent 7890-75MS  
Analyst: S.S  
Analytical Date/Time: 8/3/2022 12:49:00PM

Prep Batch: VXX38957  
Prep Method: SW5030B  
Prep Date/Time: 8/3/2022 6:00:00AM  
Prep Initial Wt./Vol.: 5 mL  
Prep Extract Vol: 5 mL

Print Date: 10/18/2022 4:02:39PM

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**Blank Spike Summary**

Blank Spike ID: LCS for HBN 1224307 [VXX38957]  
Blank Spike Lab ID: 1677405  
Date Analyzed: 08/03/2022 13:04

Spike Duplicate ID: LCSD for HBN 1224307  
[VXX38957]  
Spike Duplicate Lab ID: 1677406  
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1224307002, 1224307003, 1224307004, 1224307017, 1224307038, 1224307039, 1224307040

**Results by SW8260D**

<u>Parameter</u>	Blank Spike (ug/L)			Spike Duplicate (ug/L)			<u>CL</u>	<u>RPD (%)</u>	<u>RPD CL</u>
	<u>Spike</u>	<u>Result</u>	<u>Rec (%)</u>	<u>Spike</u>	<u>Result</u>	<u>Rec (%)</u>			
Benzene	30	28.6	95	30	27.7	92	( 79-120 )	3.20	(< 20 )
Ethylbenzene	30	28.5	95	30	29.0	97	( 79-121 )	1.40	(< 20 )
o-Xylene	30	29.4	98	30	29.7	99	( 78-122 )	0.85	(< 20 )
P & M -Xylene	60	58.8	98	60	59.9	100	( 80-121 )	1.80	(< 20 )
Toluene	30	28.3	94	30	28.5	95	( 80-121 )	0.79	(< 20 )
Xylenes (total)	90	88.2	98	90	89.5	100	( 79-121 )	1.50	(< 20 )

**Surrogates**

1,2-Dichloroethane-D4 (surr)	30	98	30	93	( 81-118 )	5.00
4-Bromofluorobenzene (surr)	30	96	30	102	( 85-114 )	5.70
Toluene-d8 (surr)	30	102	30	100	( 89-112 )	1.40

**Batch Information**

Analytical Batch: VMS21841  
Analytical Method: SW8260D  
Instrument: Agilent 7890-75MS  
Analyst: S.S

Prep Batch: VXX38957  
Prep Method: SW5030B  
Prep Date/Time: 08/03/2022 06:00  
Spike Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL  
Dupe Init Wt./Vol.: 30 ug/L Extract Vol: 5 mL

Print Date: 10/18/2022 4:02:41PM

**Method Blank**

Blank ID: MB for HBN 1841339 (WFI/2999)

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1678995

QC for Samples:

1224307009, 1224307010, 1224307011, 1224307012, 1224307013, 1224307014, 1224307015, 1224307016, 1224307017,  
1224307018, 1224307019, 1224307020, 1224307021, 1224307022, 1224307023, 1224307024**Results by SM21 4500NO3-F**

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

**Batch Information**

Analytical Batch: WFI2999

Analytical Method: SM21 4500NO3-F

Instrument: Astoria segmented flow

Analyst: EBH

Analytical Date/Time: 8/12/2022 11:42:07AM

Print Date: 10/18/2022 4:02:44PM

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**Method Blank**

Blank ID: MB for HBN 1841339 (WFI/2999)

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1679001

QC for Samples:

1224307001, 1224307002, 1224307003, 1224307004, 1224307005, 1224307006, 1224307007, 1224307008, 1224307009,  
1224307010, 1224307011, 1224307012, 1224307013, 1224307014, 1224307015, 1224307016, 1224307017, 1224307018,  
1224307019, 1224307020, 1224307021, 1224307022, 1224307023, 1224307024

**Results by SM21 4500NO3-F**

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

**Batch Information**

Analytical Batch: WFI2999

Analytical Method: SM21 4500NO3-F

Instrument: Astoria segmented flow

Analyst: EBH

Analytical Date/Time: 8/12/2022 10:56:37AM

Print Date: 10/18/2022 4:02:44PM

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**Method Blank**

Blank ID: MB for HBN 1841339 (WFI/2999)

Blank Lab ID: 1679007

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1224307001, 1224307002, 1224307003, 1224307004, 1224307005, 1224307006, 1224307007, 1224307008

**Results by SM21 4500NO3-F**

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

**Batch Information**

Analytical Batch: WFI2999

Analytical Method: SM21 4500NO3-F

Instrument: Astoria segmented flow

Analyst: EBH

Analytical Date/Time: 8/12/2022 10:11:07AM

Print Date: 10/18/2022 4:02:44PM

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**Blank Spike Summary**

Blank Spike ID: LCS for HBN 1224307 [WFI2999]

Blank Spike Lab ID: 1678997

Date Analyzed: 08/12/2022 11:40

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1224307009, 1224307010, 1224307011, 1224307012, 1224307013, 1224307014, 1224307015,  
1224307016, 1224307017, 1224307018, 1224307019, 1224307020, 1224307021, 1224307022,  
1224307023, 1224307024

**Results by SM21 4500NO3-F**

## Blank Spike (mg/L)

<u>Parameter</u>	<u>Spike</u>	<u>Result</u>	<u>Rec (%)</u>	<u>CL</u>
Nitrate-N	2.5	2.04	82	( 70-130 )
Nitrite-N	2.5	2.54	102	( 90-110 )
Total Nitrate/Nitrite-N	5	4.58	92	( 90-110 )

**Batch Information**

Analytical Batch: WFI2999

Analytical Method: SM21 4500NO3-F

Instrument: Astoria segmented flow

Analyst: EBH

Print Date: 10/18/2022 4:02:46PM

**Blank Spike Summary**

Blank Spike ID: LCS for HBN 1224307 [WFI2999]

Blank Spike Lab ID: 1679003

Date Analyzed: 08/12/2022 10:54

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1224307001, 1224307002, 1224307003, 1224307004, 1224307005, 1224307006, 1224307007, 1224307008, 1224307009, 1224307010, 1224307011, 1224307012, 1224307013, 1224307014, 1224307015, 1224307016, 1224307017, 1224307018, 1224307019, 1224307020, 1224307021,

**Results by SM21 4500NO3-F**

Blank Spike (mg/L)

<u>Parameter</u>	<u>Spike</u>	<u>Result</u>	<u>Rec (%)</u>	<u>CL</u>
Nitrate-N	2.5	2.30	92	( 70-130 )
Nitrite-N	2.5	2.47	99	( 90-110 )
Total Nitrate/Nitrite-N	5	4.77	95	( 90-110 )

**Batch Information**

Analytical Batch: WFI2999

Analytical Method: SM21 4500NO3-F

Instrument: Astoria segmented flow

Analyst: EBH

Print Date: 10/18/2022 4:02:46PM

**Blank Spike Summary**

Blank Spike ID: LCS for HBN 1224307 [WFI2999]

Blank Spike Lab ID: 1679009

Date Analyzed: 08/12/2022 10:09

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1224307001, 1224307002, 1224307003, 1224307004, 1224307005, 1224307006, 1224307007, 1224307008

**Results by SM21 4500NO3-F**

Blank Spike (mg/L)

<u>Parameter</u>	<u>Spike</u>	<u>Result</u>	<u>Rec (%)</u>	<u>CL</u>
Nitrate-N	2.5	2.44	98	( 70-130 )
Nitrite-N	2.5	2.47	99	( 90-110 )
Total Nitrate/Nitrite-N	5	4.91	98	( 90-110 )

**Batch Information**

Analytical Batch: WFI2999

Analytical Method: SM21 4500NO3-F

Instrument: Astoria segmented flow

Analyst: EBH

Print Date: 10/18/2022 4:02:46PM

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**Matrix Spike Summary**

Original Sample ID: 1224315001  
MS Sample ID: 1678982 MS  
MSD Sample ID: 1678983 MSD

Analysis Date: 08/12/2022 10:14  
Analysis Date: 08/12/2022 10:16  
Analysis Date: 08/12/2022 10:18  
Matrix: Drinking Water

QC for Samples: 1224307001, 1224307002, 1224307003, 1224307004, 1224307005, 1224307006, 1224307007, 1224307008

**Results by SM21 4500NO3-F**

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Nitrate/Nitrite-N	0.100U	5.00	5.39	108	5.00	5.51	110	90-110	2.10	(< 25 )

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Instrument: Astoria segmented flow  
Analyst: EBH  
Analytical Date/Time: 8/12/2022 10:16:00AM

Print Date: 10/18/2022 4:02:47PM

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**Matrix Spike Summary**

Original Sample ID: 1224355001  
MS Sample ID: 1678984 MS  
MSD Sample ID: 1678985 MSD

Analysis Date: 08/12/2022 11:00  
Analysis Date: 08/12/2022 11:01  
Analysis Date: 08/12/2022 11:03  
Matrix: Drinking Water

QC for Samples: 1224307001, 1224307002, 1224307003, 1224307004, 1224307005, 1224307006, 1224307007, 1224307008, 1224307009, 1224307010, 1224307011, 1224307012, 1224307013, 1224307014, 1224307015, 1224307016, 1224307017, 1224307018, 1224307019, 1224307020, 1224307021.

**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	3.36	5.00	7.86	90	5.00	7.60	85	*	90-110	3.30 (< 25 )

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Instrument: Astoria segmented flow  
Analyst: EBH  
Analytical Date/Time: 8/12/2022 11:01:00AM

Print Date: 10/18/2022 4:02:47PM

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**Matrix Spike Summary**

Original Sample ID: 1224370001  
MS Sample ID: 1678986 MS  
MSD Sample ID: 1678987 MSD

Analysis Date: 08/12/2022 11:45  
Analysis Date: 08/12/2022 11:47  
Analysis Date: 08/12/2022 11:49  
Matrix: Drinking Water

QC for Samples: 1224307009, 1224307010, 1224307011, 1224307012, 1224307013, 1224307014, 1224307015, 1224307016, 1224307017, 1224307018, 1224307019, 1224307020, 1224307021, 1224307022, 1224307023, 1224307024

**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	3.36	5.00	7.56	84 *	5.00	7.97	92	90-110	5.30	(< 25 )

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Instrument: Astoria segmented flow  
Analyst: EBH  
Analytical Date/Time: 8/12/2022 11:47:00AM

Print Date: 10/18/2022 4:02:47PM

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**Matrix Spike Summary**

Original Sample ID: 1224220001  
MS Sample ID: 1678988 MS  
MSD Sample ID: 1678989 MSD

Analysis Date: 08/12/2022 9:29  
Analysis Date: 08/12/2022 9:30  
Analysis Date: 08/12/2022 9:32  
Matrix: Drinking Water

QC for Samples:

**Results by SM21 4500NO3-F**

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Nitrate/Nitrite-N	0.617	5.00	5.9	106	5.00	6.02	108	90-110	2.00	(< 25 )

**Batch Information**

Analytical Batch: WFI2999  
Analytical Method: SM21 4500NO3-F  
Instrument: Astoria segmented flow  
Analyst: EBH  
Analytical Date/Time: 8/12/2022 9:30:00AM

Print Date: 10/18/2022 4:02:47PM

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**Method Blank**

Blank ID: MB for HBN 1841933 [WXX/14366]  
Blank Lab ID: 1680848

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1224307001, 1224307003, 1224307004, 1224307005, 1224307006, 1224307007, 1224307008, 1224307009, 1224307010, 1224307011, 1224307012, 1224307013, 1224307014, 1224307015, 1224307016, 1224307017, 1224307018, 1224307019, 1224307020

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

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

**Batch Information**

Analytical Batch: WDA5282  
Analytical Method: SM21 4500P-B,E  
Instrument: Discrete Analyzer 2  
Analyst: MEB  
Analytical Date/Time: 8/22/2022 7:56:34PM

Prep Batch: WXX14366  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 8/22/2022 12:44:00PM  
Prep Initial Wt./Vol.: 25 mL  
Prep Extract Vol: 25 mL

Print Date: 10/18/2022 4:02:49PM

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**Blank Spike Summary**

Blank Spike ID: LCS for HBN 1224307 [WXX14366]

Blank Spike Lab ID: 1680849

Date Analyzed: 08/22/2022 19:57

Spike Duplicate ID: LCSD for HBN 1224307

[WXX14366]

Spike Duplicate Lab ID: 1680850

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1224307001, 1224307003, 1224307004, 1224307005, 1224307006, 1224307007, 1224307008, 1224307009, 1224307010, 1224307011, 1224307012, 1224307013, 1224307014, 1224307015, 1224307016, 1224307017, 1224307018, 1224307019, 1224307020

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

<u>Parameter</u>	Blank Spike (mg/L)			Spike Duplicate (mg/L)			<u>CL</u>	<u>RPD (%)</u>	<u>RPD CL</u>
	<u>Spike</u>	<u>Result</u>	<u>Rec (%)</u>	<u>Spike</u>	<u>Result</u>	<u>Rec (%)</u>			
Total Phosphorus	0.2	0.194	97	0.2	0.188	94	( 75-125 )	3.10	(< 25 )

**Batch Information**

Analytical Batch: WDA5282

Analytical Method: SM21 4500P-B,E

Instrument: Discrete Analyzer 2

Analyst: MEB

Prep Batch: WXX14366

Prep Method: SM21 4500P-B,E

Prep Date/Time: 08/22/2022 12:44

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: 10/18/2022 4:02:51PM

**Matrix Spike Summary**

Original Sample ID: 1224307003  
MS Sample ID: 1680851 MS  
MSD Sample ID: 1680852 MSD

Analysis Date: 08/22/2022 20:01  
Analysis Date: 08/22/2022 20:02  
Analysis Date: 08/22/2022 20:03  
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1224307001, 1224307003, 1224307004, 1224307005, 1224307006, 1224307007, 1224307008, 1224307009, 1224307010, 1224307011, 1224307012, 1224307013, 1224307014, 1224307015, 1224307016, 1224307017, 1224307018, 1224307019, 1224307020

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

Parameter	Matrix Spike (mg/L)				Spike Duplicate (mg/L)				CL	RPD (%)	RPD CL
	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL			
Total Phosphorus	0.390	0.200	.59	100	0.200	0.587	99	75-125	0.44	(< 25 )	

**Batch Information**

Analytical Batch: WDA5282  
Analytical Method: SM21 4500P-B,E  
Instrument: Discrete Analyzer 2  
Analyst: MEB  
Analytical Date/Time: 8/22/2022 8:02:28PM

Prep Batch: WXX14366  
Prep Method: Total Phosphorus (W) Ext.  
Prep Date/Time: 8/22/2022 12:44:00PM  
Prep Initial Wt./Vol.: 25.00mL  
Prep Extract Vol: 25.00mL

Print Date: 10/18/2022 4:02:52PM

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**Method Blank**

Blank ID: MB for HBN 1841948 [WXX/14367]

Blank Lab ID: 1680919

QC for Samples:

1224307021, 1224307022, 1224307023, 1224307024

Matrix: Water (Surface, Eff., Ground)

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

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

**Batch Information**

Analytical Batch: WDA5283

Analytical Method: SM21 4500P-B,E

Instrument: Discrete Analyzer 2

Analyst: MEB

Analytical Date/Time: 8/22/2022 8:24:54PM

Prep Batch: WXX14367

Prep Method: SM21 4500P-B,E

Prep Date/Time: 8/22/2022 12:44:00PM

Prep Initial Wt./Vol.: 25 mL

Prep Extract Vol: 25 mL

Print Date: 10/18/2022 4:02:54PM

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**Blank Spike Summary**

Blank Spike ID: LCS for HBN 1224307 [WXX14367]  
Blank Spike Lab ID: 1680920  
Date Analyzed: 08/22/2022 20:25

Spike Duplicate ID: LCSD for HBN 1224307  
[WXX14367]  
Spike Duplicate Lab ID: 1680921  
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1224307021, 1224307022, 1224307023, 1224307024

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

<u>Parameter</u>	Blank Spike (mg/L)			Spike Duplicate (mg/L)			<u>CL</u>	<u>RPD (%)</u>	<u>RPD CL</u>
	<u>Spike</u>	<u>Result</u>	<u>Rec (%)</u>	<u>Spike</u>	<u>Result</u>	<u>Rec (%)</u>			
Total Phosphorus	0.2	0.196	98	0.2	0.195	98	( 75-125 )	0.20	(< 25 )

**Batch Information**

Analytical Batch: WDA5283  
Analytical Method: SM21 4500P-B,E  
Instrument: Discrete Analyzer 2  
Analyst: MEB

Prep Batch: WXX14367  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 08/22/2022 12:44  
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: 10/18/2022 4:02:56PM

**Matrix Spike Summary**

Original Sample ID: 1224307024  
MS Sample ID: 1680922 MS  
MSD Sample ID: 1680923 MSD

Analysis Date: 08/22/2022 20:32  
Analysis Date: 08/22/2022 20:33  
Analysis Date: 08/22/2022 20:34  
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1224307021, 1224307022, 1224307023, 1224307024

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

Parameter	Matrix Spike (mg/L)				Spike Duplicate (mg/L)				CL	RPD (%)	RPD CL
	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL			
Total Phosphorus	0.0200U	0.200	.201	100	0.200	0.202	101	75-125	0.74	(< 25 )	

**Batch Information**

Analytical Batch: WDA5283  
Analytical Method: SM21 4500P-B,E  
Instrument: Discrete Analyzer 2  
Analyst: MEB  
Analytical Date/Time: 8/22/2022 8:33:42PM

Prep Batch: WXX14367  
Prep Method: Total Phosphorus (W) Ext.  
Prep Date/Time: 8/22/2022 12:44:00PM  
Prep Initial Wt./Vol.: 25.00mL  
Prep Extract Vol: 25.00mL

Print Date: 10/18/2022 4:02:57PM

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P# 383466 CPM

CLIENT: Kenai Watershed Forum					Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.																	
CONTACT: Benjamin Meyer PHONE #: 907-232-0280					Section 3		Preservative															
PROJECT NAME: Kenai River Baseline Water Quality Monitoring PROJECT/ PWSID/ PERMIT#:					# C O N T A I N E R S	Comp Grab MI (Multi-incremental)	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl	Analysis*												
REPORTS TO: Benjamin Meyer E-MAIL: ben@kenaiwatershed.org Profile #:					Total NO <sub>3</sub> (SM21 4500NC3-F), Total P(SM4500)	Total Metals (200.7)	Dissolved Metals (200.8)	BTEX (8260C)														
INVOICE TO: Kenai Watershed Forum QUOTE #: P.O. #:					NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS																	
					REMARKS/LOC ID																	
					Please include site name on Trip Blank results																	
					Please include site name on Trip Blank results																	
					Please include site name on Trip Blank results																	
Section 2					SAMPLE IDENTIFICATION		DATE mm/dd/yy	TIME HH:MM	MATRIX/MATRIX CODE	# C O N T A I N E R S	Comp Grab MI (Multi-incremental)	Total NO <sub>3</sub> (SM21 4500NC3-F), Total P(SM4500)	Total Metals (200.7)	Dissolved Metals (200.8)	BTEX (8260C)							
1AB 25AB RM 0 - No Name Creek 7/26/2022 water 3					x	x	x															
2AE 26AB RM 1.5 - Kenai City Dock - DUP 7/26/2022 water 16					x	x	x	x														
3AE 27AB RM 1.5 - Kenai City Dock 7/26/2022 water 19					x	x	x	x														
4AE 28AB RM 6.5 - Cunningham Park 7/26/2022 water 19					x	x	x	x														
5AB 29AB RM 10 - Beaver Creek 7/26/2022 water 3					x	x	x															
6AB 30AB RM 10.1 - Kenai River 7/26/2022 water 3					x	x	x															
7AB 31AB RM 12.5 - Pillars 7/26/2022 water 3					x	x	x															
8AB 32AB RM 18 - Poacher's Cove 7/26/2022 water 3					x	x	x															
9AB 33AB RM 19 - Slikok Creek 7/26/2022 water 3					x	x	x															
10AB 34AB RM 21 - Soldotna Bridge 7/26/2022 water 3					x	x	x															
Section 5					Relinquished By: (1) <i>Benjamin Meyer</i>		Date 7/26/2022	Time 12:55	Received By:	Section 4		DOD Project? Yes <input checked="" type="checkbox"/>		Data Deliverable Requirements: Please include Electronic Data Delivery files.								
					Relinquished By: (2)		Date	Time	Received By:	Requested Turnaround Time and/or Special Instructions: Filter Dissolved metals samples at SGS. Please provide all Electronic Data Delivery (EDD) files on SGS Engage when available.												
					Relinquished By: (3)		Date	Time	Received By:													
					Relinquished By: (4)		Date 7/26/22	Time 16:25	Received For Laboratory By: <i>L.S. COS</i>	Temp Blank °C: 12.3 DOF		Chain of Custody Seal: (Circle) <i>LF</i>										
							or Ambient [ ]		INTACT BROKEN ABSENT													
							Delivery Method: Hand Delivery [ ] Commerical Delivery [ ]															



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Revised Report - Revision 2

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CLIENT: Kenai Watershed Forum					Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.														
CONTACT: Benjamin Meyer PHONE #: 907-232-0280					Section 3		Preservative												
PROJECT NAME: Kenai River Baseline Water Quality Monitoring PROJECT/PWSID/PERMIT#:					# C O N T A I N E R S	Comp Grab MI (Multi-incre- mental)	H <sub>2</sub> S <sub>04</sub>		HN <sub>03</sub>										
REPORTS TO: E-MAIL: ben@kenaiwatershed.org Benjamin Meyer Profile #:											Analysis*								
INVOICE TO: QUOTE #: Kenai Watershed Forum P.O. #:					NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS														
RESERVED for lab use		SAMPLE IDENTIFICATION		DATE mm/dd/yy	TIME HH:MM	MATRIX/MATRIX CODE	Total NO <sub>2</sub> /NO <sub>3</sub> (SM214500)NO <sub>3</sub> F, Total P(SM4500)	Total Metals (200.7)	Dissolved Metals (200.8)	BTEX (8260C)							REMARKS/LOC ID		
11AB 35AB		RM 22 - Soldotna Creek		7/26/2022		water	3	x	x	x									
12AB 36AB		RM 23 - Swiftwater Park		7/26/2022		water	3	x	x	x									
13AB 37AB		RM 30 - Funny River		7/26/2022		water	3	x	x	x									
14AB		RM 31 - Morgan's Landing		7/26/2022		water	2	x	x										
15AB		RM 36 - Moose River		7/26/2022		water	2	x	x										
16AB		RM 36 - Moose River-DUP		7/26/2022		water	2	x	x										
17AE		RM 40 - Bing's Landing		7/26/2022		water	2	x	x										
18AB		RM 43 - Upstream of Dow Island		7/26/2022		water	18	x	x	x									
19AB		RM 44 - Mouth of Kiley River		7/26/2022		water	2	x	x										
20AB		RM 50 - Skilak Lake Outflow		7/26/2022		water	2	x	x										
Relinquished By: (1) <i>Benjamin Meyer</i>					Date 7/26/2022	Time 12:55	Received By:			Section 4 DOD Project? Yes <input checked="" type="checkbox"/> No		Data Deliverable Requirements: Please include site name on Trip Blank sample name results							
Relinquished By: (2)					Date	Time	Received By:			Cooler ID:									
Relinquished By: (3)					Date	Time	Received By:			Requested Turnaround Time and/or Special Instructions: Filter Dissolved metals samples at SGS. Please provide all Electronic Data Delivery (EDD) files on SGS Engage when available.									
Relinquished By: (4)					Date 7/26/22	Time 16:25	Received For Laboratory By: <i>CJS CJS CJS</i>			Temp Blank °C: 12.3 D55		Chain of Custody Seal: (Circle) <i>1F</i> <input checked="" type="checkbox"/> INTACT <input type="checkbox"/> BROKEN <input type="checkbox"/> ABSENT							
Delivery Method: Hand Delivery <input type="checkbox"/> Commerical Delivery <input type="checkbox"/>																			

<b>CLIENT:</b> Kenai Watershed Forum					<b>Instructions: Sections 1 - 5 must be filled out.</b> <b>Omissions may delay the onset of analysis.</b>														
<b>Section 1</b>	<b>CONTACT:</b> Benjamin Meyer      PHONE #: 907-232-0280					<b>Section 3</b>		<b>Preservative</b>											
	<b>PROJECT NAME:</b> Kenai River Baseline Water Quality Monitoring <b>PROJECT/PWSID/PERMIT#:</b>					# C O N T A I N E R S	Comp Grab MI (Multi-incremental)	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>										
<b>Section 2</b>	<b>REPORTS TO:</b> Benjamin Meyer      E-MAIL: ben@kenaiwatershed.org  <b>INVOICE TO:</b> Kenai Watershed Forum      QUOTE #: P.O. #:					<b>Analysis*</b>										<b>NOTE:</b> *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS			
	RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/MATRIX CODE	Total NO <sub>3</sub> /NO <sub>2</sub> (SM21 4500N03-F, Total P(SM4500))	Total Metals (200.7)												
21AB	RM 70 - Jim's Landing	7/26/2022		water	2	x	x												
22AB	RM 74 - Russian River	7/26/2022		water	2	x	x												
23AB	RM 82 - Kenai Lake Bridge	7/26/2022		water	2	x	x												
24AB	RM 79.5 - Juneau Creek	7/26/2022		water	2	x	x												
3BAC																			
39AC																			
40AC																			
<b>Section 5</b>	<b>Relinquished By: (1)</b> <i>Benjamin Meyer</i>		Date 7/26/2022	Time 12:55	<b>Received By:</b>			<b>Section 4</b>		<b>DOD Project? Yes <input checked="" type="checkbox"/></b>		<b>Data Deliverable Requirements:</b> <i>Please include Electronic Data Delivery files.</i>							
	<b>Relinquished By: (2)</b>		Date	Time	<b>Received By:</b>			<b>Cooler ID:</b>		<b>Requested Turnaround Time and/or Special Instructions:</b> <i>Please provide all Electronic Data Delivery (EDD) files on SGS Engage when available.</i>									
	<b>Relinquished By: (3)</b>		Date	Time	<b>Received By:</b>					<b>Temp Blank °C:</b> <i>18.3 059</i>		<b>Chain of Custody Seal: (Circle)</b> <i>IF</i> <input checked="" type="checkbox"/> INTACT <input type="checkbox"/> BROKEN <input type="checkbox"/> ABSENT							
	<b>Relinquished By: (4)</b>		Date 7/26/22	Time 16:25	<b>Received For Laboratory By:</b> <i>CJS</i>					<b>Delivery Method:</b> Hand Delivery <input type="checkbox"/> Commercial Delivery <input checked="" type="checkbox"/>									

## Murphy, Cameron (Anchorage)

---

**From:** Benjamin Meyer <ben@kenaiwatershed.org>  
**Sent:** Tuesday, July 26, 2022 6:02 PM  
**To:** Murphy, Cameron (Anchorage)  
**Cc:** Burke Haywood  
**Subject:** [EXTERNAL] Re: No Collection Times.  
**Attachments:** KWF\_CoC\_20220726.pdf

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

\*\*\*

---

Hi Cameron,

Attached is the CoC with collection times filled in for all samples. I'm sending just pages 1-3 of the document you sent me, because the two CoCs I sent you were just replicated copies, they are both identical.

Thanks for catching this. All the best --

Ben

On Tue, Jul 26, 2022 at 5:37 PM Benjamin Meyer <ben@kenaiwatershed.org> wrote:

Hi Cameron,

My apologies for the oversight, we have that data recorded here as well thankfully. I will send the updated PDFs to you momentarily this evening.

Thanks! - Ben

On Tue, Jul 26, 2022 at 5:17 PM Murphy, Cameron (Anchorage) <Cameron.Murphy@sgs.com> wrote:

Hi there,

The Chain of Custody does not list the collection times for any of the samples. Would you mind providing these to me when available? The COC is attached.

Thanks.

Cameron Murphy

Industries & Environment

Project Manager, Alaska

**SGS North America Inc.**

200 West Potter Drive

99518 – Anchorage

Phone: + 01 907 562 2343

E-mail: [Cameron.Murphy@sgs.com](mailto:Cameron.Murphy@sgs.com)

---

**From:** Burke Haywood <[bhaywood@kenaiwatershed.org](mailto:bhaywood@kenaiwatershed.org)>  
**Sent:** Tuesday, July 26, 2022 2:42 PM  
**To:** Murphy, Cameron (Anchorage) <[Cameron.Murphy@sgs.com](mailto:Cameron.Murphy@sgs.com)>  
**Cc:** Benjamin Meyer <[ben@kenaiwatershed.org](mailto:ben@kenaiwatershed.org)>  
**Subject:** [EXTERNAL] KWF Booking Confirmation

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

---

Hi Cameron,

Attached is the booking confirmation for the water samples we've just shipped to Anchorage!

Best,

Burke

Information in this email and any attachments is confidential and intended solely for the use of the individual(s) to whom it is addressed or otherwise directed. Please note that any views or opinions presented in this email are solely those of the author and do not necessarily represent those of the Company. Finally, the recipient should check this email and any attachments for the presence of viruses. The Company accepts no liability for any damage caused by any virus transmitted by this email. All SGS services are rendered in accordance with the applicable SGS conditions of service available on request and accessible at <https://www.sgs.com/en/terms-and-conditions>



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CLIENT: Kenai Watershed Forum					<b>Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.</b>																
CONTACT: Benjamin Meyer      PHONE #: 907-232-0280					Page <u>1</u> of <u>3</u>																
PROJECT NAME: Kenai River Baseline Water Quality Monitoring PERMIT#:					Section 3      Preservative																
REPORTS TO: E-MAIL: ben@kenaiwatershed.org Benjamin Meyer      Profile #:					# C O N T A I N E R S	Comp Grab MI (Multi-Incre- mental)	Analysis*								NOTE: *The following analyses re _____ specific method Inorganic compound list: Hg, EX, Metals, PFAS						
INVOICE TO: QUOTE #: Kenai Watershed Forum      P.O. #:							HSO4	MNO3	HCl	Total Metals (200.7)	Dissolved Metals (200.8)	BTEX (8220C)									
Section 1 RESERVED for lab use					SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/MATRIX CODE										REMARKS/LOC ID			
Section 2					(1) ABC(A) RM 0 - No Name Creek	7/26/2022	9:57	water	3	x	x	x						Please include site name on Trip Blank results			
Section 2					(2) AEF(B) RM 1.5 - Kenai City Dock - DUP	7/26/2022	8:50	water	16	x	x	x	x					Please include site name on Trip Blank results			
Section 2					(3) AEF(B) RM 1.5 - Kenai City Dock	7/26/2022	8:46	water	19	x	x	x	x					Please include site name on Trip Blank results			
Section 2					(4) AEF(B) RM 6.5 - Cunningham Park	7/26/2022	9:10	water	19	x	x	x	x					Please include site name on Trip Blank results			
Section 2					(5) ABD(A) RM 10 - Beaver Creek	7/26/2022	9:55	water	3	x	x	x						Please include site name on Trip Blank results			
Section 2					(6) ABD(A) RM 10.1 - Kenai River	7/26/2022	10:25	water	3	x	x	x						Please include site name on Trip Blank results			
Section 2					(7) ABD(A) RM 12.5 - Pillars	7/26/2022	10:37	water	3	x	x	x						Please include site name on Trip Blank results			
Section 2					(8) ABD(A) RM 18 - Poacher's Cove	7/26/2022	11:00	water	3	x	x	x						Please include site name on Trip Blank results			
Section 2					(9) ABD(A) RM 19 - Slikok Creek	7/26/2022	11:00	water	3	x	x	x						Please include site name on Trip Blank results			
Section 2					(10) ABD(A) RM 21 - Seldovia Bridge	7/26/2022	10:33	water	3	x	x	x						Please include site name on Trip Blank results			
Section 5					Relinquished By: (1) <i>Benjamin Meyer</i>					Date 7/26/2022	Time 12:55	Received By:					Section 4 DOD Project? Yes <input checked="" type="checkbox"/>		Data Deliverable Requirements: Please include Electronic Data Delivery files.		
Section 5					Relinquished By: (2)					Date	Time	Received By:					Requested Turnaround Time and/or Special Instructions: Filter Dissolved metals samples at SGS. Please provide all Electronic Data Delivery (EDD) files on SGS Engage when available.				
Section 5					Relinquished By: (3)					Date	Time	Received By:					Temp Blank °C: <u>12.3</u> <u>055</u> or Ambient <input type="checkbox"/>				
Section 5					Relinquished By: (4)					Date <u>7/26/2022</u>	Time <u>16:25</u>	Received For Laboratory By: <u>Benjamin Meyer</u> COS					Chain of Custody Seal: (Circle) <input checked="" type="checkbox"/> INTACT <input type="checkbox"/> BROKEN <input type="checkbox"/> ABSENT Delivery Method: Hand Delivery <input type="checkbox"/> Commercial Delivery <input checked="" type="checkbox"/>				

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

F083-Blank\_COC\_20181228



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CLIENT: Kenai Watershed Forum					<b>Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.</b>										Page <u>2</u> of <u>3</u>								
Section 1	CONTACT: Benjamin Meyer PHONE #: 907-232-0280					Section 3		Preservative															
	PROJECT NAME: Kenai River Baseline Water Quality Monitoring					#		<b>Comp</b> <b>Grab</b> <b>M</b> <b>C</b> <b>O</b> <b>N</b> <b>T</b> <b>A</b> <b>I</b> <b>N</b> <b>E</b> <b>R</b> <b>S</b>  <b>MI</b> (Multi-incremental)		H2SO4		HNO3		Analysis*						<b>NOTE:</b> *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS			
	PROJECT/PWSID/PERMIT#:					Total (NO3/NH4+/HS21)				Total P(SMASD)		Total Metals (200.7)		Dissolved Metals (200.8)		BTEX (S260C)							
	REPORTS TO: E-MAIL: ben@kenaiwatershed.org																						
	Benjamin Meyer Profile #:																						
	INVOICE TO: QUOTE #:																						
	Kenai Watershed Forum P.O. #:																						
	RESERVED for lab use		SAMPLE IDENTIFICATION		DATE mm/dd/yy	TIME HH:MM	MATRIX/MATRIX CODE																
	(1) AB		RM 22 - Soldotna Creek		7/26/2022	9:15	water			3		x		x		x							
	(2) AB		RM 23 - Swiftwater Park		7/26/2022	10:00	water			3		x		x		x							
(3) AB		RM 30 - Funny River		7/26/2022	9:07	water	3			x		x		x									
(4) AB		RM 31 - Morgan's Landing		7/26/2022	10:13	water	2		x		x												
(5) AB		RM 36 - Moose River		7/26/2022	10:42	water	2		x		x												
(6) AB		RM 36 - Moose River-DUP		7/26/2022	10:48	water	2		x		x												
(7) AB		RM 40 - Bing's Landing		7/26/2022	9:53	water	2		x		x												
(8) AB		RM 43 - Upstream of Dow Island		7/26/2022	8:10	water	18		x		x		x				Please include site name on Trip Blank sample name results						
(9) AB		RM 44 - Mouth of Kiley River		7/26/2022	8:30	water	2		x		x												
(10) AB		RM 50 - Skilak Lake Outflow		7/26/2022	9:06	water	2		x		x												
Section 2	Relinquished By: (1) <i>Benjamin Meyer</i>					Date 7/26/2022		Time 12:55		Received By: <i>[Signature]</i>				Section 4 DOD Project? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Data Deliverable Requirements: Please include Electronic Data Delivery files.							
	Relinquished By: (2)													Cooler ID:		Requested Turnaround Time and/or Special Instructions:							
	Relinquished By: (3)															Filter Dissolved metals samples at SGS. Please provide all Electronic Data Delivery (EDD) files on SGS Engage when available.							
	Relinquished By: (4)					Date 7/26/22		Time 16:25		Received For Laboratory By: <i>[Signature] CJS</i>				Temp Blank °C: 12.3 D55		Chain of Custody Seal: (Circle) <i>15</i> <input checked="" type="checkbox"/> INTACT <input type="checkbox"/> BROKEN <input type="checkbox"/> ABSENT							
Delivery Method: Hand Delivery <input type="checkbox"/> Commercial Delivery <input checked="" type="checkbox"/>																							

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



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

[www.us-sos.com](http://www.us-sos.com)

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

**GEN**   
Standard Service



Revised Report - Revision 2

**PRI**  
Priority Service

**ACEPAK**   
Small Package Service

Airport of  
Departure

**3246513**

AIR CARGO

**3246513**

SHIPPER'S NAME AND ADDRESS		SHIPPER'S ACCOUNT NUMBER		NOT NEGOTIABLE <b>AIR WAYBILL</b> (AIR CONSIGNMENT NOTE)		<b>ACE Air Cargo</b> 5901 LOCKHEED AVE. ANCHORAGE, ALASKA 99502					
CONSIGNEE'S NAME AND ADDRESS		CONSIGNEE'S ACCOUNT NUMBER		Copies 1, 2, 3 and 4 of this Air Waybill are originals and have the same validity.							
ISSUING CARRIER'S AGENT NAME AND CITY				It is agreed that the goods described herein are accepted in apparent good order and condition (except as noted) for carriage SUBJECT TO THE CONDITIONS OF CONTRACT ON THE REVERSE HEREOF. THE SHIPPER'S ATTENTION IS DRAWN OF THE NOTICE CONCERNING CARRIERS' LIMITATION OF LIABILITY. Shipper may increase such limitation of liability by declaring a higher value for carriage and paying a supplemental charge if required. Shipper or his agent agrees to release carrier of any payment dispute between himself and the consignee by remitting unpaid freight charges within 48 hours of billing by carrier.							
AGENT'S IATA CODE		ACCOUNT NO.		Received in Good Condition <i>SJH</i>		Place _____ Date _____					
AIRPORT OF DEPARTURE (ADDR OF FIRST CARRIER) AND REQUESTED ROUTING		TO EXPEDITE MOVEMENT, SHIPMENT MAY BE DIVERTED TO MOTOR OR OTHER CARRIER AS PER TARIFF RULE UNLESS SHIPPER GIVES OTHER INSTRUCTIONS HEREON.									
ROUTING AND DESTINATION		TO	BY	TO	BY	CURRENCY	CHGS CODE	WT/VAL	OTHER	DECLARED VALUE FOR CARRIAGE	DECLARED VALUE FOR CUSTOMS
TO BY FIRST CARRIER		TO	BY	TO	BY	PPD	COLL	PPD	COLL		
AIRPORT OF DESTINATION		FOR CARRIER USE ONLY				AMOUNT OF INSURANCE				INSURANCE - If shipper requests insurance in accordance with conditions on reverse hereof, indicate amount to be insured in figures in box marked amount of insurance.	
FLIGHT/DATE FLIGHT/DATE											
HANDLING INFORMATION These commodities licensed by US for ultimate destination. Diversion contrary to US law is prohibited.											
NO. OF PIECES RCP	GROSS WEIGHT	kg lb	RATE CLASS COMMODITY ITEM NO.	CHARGEABLE WEIGHT	RATE CHARGE	TOTAL	NATURE AND QUANTITY OF GOODS (INCL. DIMENSIONS OR VOLUME)				
PREPAID		WEIGHT CHARGE		COLLECT	P.U.P. ZONE	PICKUP CHARGES	ORIGIN ADVANCE CHARGES		DESCRIPTION OF ORIGIN ADVANCE		
A.					B.		K.				
D.		VALUATION CHARGE		DEL. ZONE	DELIVERY CHARGES	DEST. ADVANCE CHARGES		DESCRIPTION OF DEST. ADVANCE			
I.		TAX		F.	OTHER CHARGES AND DESCRIPTION				HAZMAT YES / NO	ITEMS PREPAID	ITEMS COLLECT
G.		TOTAL OTHER CHARGES DUE AGENT		Shipper certifies that the particulars on the face hereof are correct and that insofar as any part of the consignment contains restricted articles, such part is properly described by name and is in proper condition for carriage by air according to applicable national government regulations, and for international shipments, the current International Air Transport Association's Dangerous Goods Regulations.							
TOTAL OTHER CHARGES DUE CARRIER											
CURRENCY COD		(AMOUNT TO BE ENTERED BY SHIPPER)		SIGNATURE OF SHIPPER OR HIS AGENT							
TOTAL PREPAID		TOTAL COLLECT									
CURRENCY CONVERSION RATES		TOTAL COLLECTION IN DESTINATION CURRENCY		SIGNATURE OF ISSUING CARRIER OR ITS AGENT							
FOR CARRIERS USE ONLY AT DESTINATION		CHARGES AT DESTINATION		Notified on- Notified on- Notified on-							
(ALL COLLECT CHARGES IN DESTINATION CURRENCY)											

SIGNATURE

RELEASING AGENT

RELEASE TIME  
PAID BY (CIRCLE ONE) CASH CC CHECK #

RELEASE DATE  
TOTAL AMOUNT

**3246513**  
COPY 5

**AIRPORT OF DESTINATION**

***Alert Expeditors Inc.***

#421103

Revised Report - Revision 2

Citywide Delivery • 440-3351

8421 Flamingo Drive • Anchorage, Alaska 99502

Date

7/26/02

From

3

To

S&amp;S

Collect Prepay Advance Charges 

Job #

3

PO#

ACC 3246513

Shipped Signature

FLX

Total Charge

Received By:

86 of 147



SGS Workorder #:

1224307

1224307

Review Criteria	Condition (Yes, No, N/A)	Exceptions Noted below
<b>Chain of Custody / Temperature Requirements</b> Note: Temperature and COC seal information is found on the chain of custody form		
DOD only: Did all sample coolers have a corresponding COC?	N/A	
If <0°C, were sample containers ice free?	N/A	
Note containers received with ice:		
Identify any containers received at non-compliant temperature: <i>(Use form FS-0029 if more space is needed)</i>		
<b>Holding Time / Documentation / Sample Condition Requirement</b> Note: Refer to form F-083 "Sample Guide" for specific holding times and sample containers.		
Were samples received within analytical holding time?	Yes	
Do sample labels match COC? Record discrepancies.	No	VOA Vials received for "Bings Landing" not "Upstream of Dow Island".
<b>Note:</b> If information on containers differs from COC, default to COC information for login. If times differ <1hr, record details & login per COC.		
Were analytical requests clear? <i>(i.e. method is specified for analyses with multiple option for method (Eg, BTEX 8021 vs 8260, Metals 6020 vs 200.8)</i>	Yes	
Were proper containers (type/mass/volume/preservative) used? <i>Note: Exemption for metals analysis by 200.8/6020 in water.</i>	Yes	
<b>Volatile Analysis Requirements (VOC, GRO, LL-Hg, etc.)</b>		
Were all soil VOAs received with a corresponding % solids container?	N/A	
Were Trip Blanks (e.g., VOAs, LL-Hg) in cooler with samples?	Yes	
Were all water VOA vials free of headspace (e.g., bubbles ≤ 6mm)?	Yes	
Were all soil VOAs field extracted with Methanol+BFB?	N/A	
<b>Note to Client:</b> Any "No", answer above indicates non-compliance with standard procedures and may impact data quality.		
<b>Additional notes (if applicable):</b>		

## 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>
1224307001-A	H <sub>2</sub> SO <sub>4</sub> to pH < 2	OK	1224307019-B	HNO <sub>3</sub> to pH < 2	OK
1224307001-B	HNO <sub>3</sub> to pH < 2	OK	1224307020-A	H <sub>2</sub> SO <sub>4</sub> to pH < 2	OK
1224307002-A	H <sub>2</sub> SO <sub>4</sub> to pH < 2	OK	1224307020-B	HNO <sub>3</sub> to pH < 2	OK
1224307002-B	HNO <sub>3</sub> to pH < 2	OK	1224307021-A	H <sub>2</sub> SO <sub>4</sub> to pH < 2	OK
1224307002-C	HCL to pH < 2	OK	1224307021-B	HNO <sub>3</sub> to pH < 2	OK
1224307002-D	HCL to pH < 2	OK	1224307022-A	H <sub>2</sub> SO <sub>4</sub> to pH < 2	OK
1224307002-E	HCL to pH < 2	OK	1224307022-B	HNO <sub>3</sub> to pH < 2	OK
1224307003-A	H <sub>2</sub> SO <sub>4</sub> to pH < 2	OK	1224307023-A	H <sub>2</sub> SO <sub>4</sub> to pH < 2	OK
1224307003-B	HNO <sub>3</sub> to pH < 2	OK	1224307023-B	HNO <sub>3</sub> to pH < 2	OK
1224307003-C	HCL to pH < 2	OK	1224307024-A	H <sub>2</sub> SO <sub>4</sub> to pH < 2	OK
1224307003-D	HCL to pH < 2	OK	1224307024-B	HNO <sub>3</sub> to pH < 2	OK
1224307003-E	HCL to pH < 2	OK	1224307025-A	No Preservative Required	OK
1224307004-A	H <sub>2</sub> SO <sub>4</sub> to pH < 2	OK	1224307025-B	HNO <sub>3</sub> to pH < 2	OK
1224307004-B	HNO <sub>3</sub> to pH < 2	OK	1224307026-A	No Preservative Required	OK
1224307004-C	HCL to pH < 2	OK	1224307026-B	HNO <sub>3</sub> to pH < 2	OK
1224307004-D	HCL to pH < 2	OK	1224307027-A	No Preservative Required	OK
1224307004-E	HCL to pH < 2	OK	1224307027-B	HNO <sub>3</sub> to pH < 2	OK
1224307005-A	H <sub>2</sub> SO <sub>4</sub> to pH < 2	OK	1224307028-A	No Preservative Required	OK
1224307005-B	HNO <sub>3</sub> to pH < 2	OK	1224307028-B	HNO <sub>3</sub> to pH < 2	OK
1224307006-A	H <sub>2</sub> SO <sub>4</sub> to pH < 2	OK	1224307029-A	No Preservative Required	OK
1224307006-B	HNO <sub>3</sub> to pH < 2	OK	1224307029-B	HNO <sub>3</sub> to pH < 2	OK
1224307007-A	H <sub>2</sub> SO <sub>4</sub> to pH < 2	OK	1224307030-A	No Preservative Required	OK
1224307007-B	HNO <sub>3</sub> to pH < 2	OK	1224307030-B	HNO <sub>3</sub> to pH < 2	OK
1224307008-A	H <sub>2</sub> SO <sub>4</sub> to pH < 2	OK	1224307031-A	No Preservative Required	OK
1224307008-B	HNO <sub>3</sub> to pH < 2	OK	1224307031-B	HNO <sub>3</sub> to pH < 2	OK
1224307009-A	H <sub>2</sub> SO <sub>4</sub> to pH < 2	OK	1224307032-A	No Preservative Required	OK
1224307009-B	HNO <sub>3</sub> to pH < 2	OK	1224307032-B	HNO <sub>3</sub> to pH < 2	OK
1224307010-A	H <sub>2</sub> SO <sub>4</sub> to pH < 2	OK	1224307033-A	No Preservative Required	OK
1224307010-B	HNO <sub>3</sub> to pH < 2	OK	1224307033-B	HNO <sub>3</sub> to pH < 2	OK
1224307011-A	H <sub>2</sub> SO <sub>4</sub> to pH < 2	OK	1224307034-A	No Preservative Required	OK
1224307011-B	HNO <sub>3</sub> to pH < 2	OK	1224307034-B	HNO <sub>3</sub> to pH < 2	OK
1224307012-A	H <sub>2</sub> SO <sub>4</sub> to pH < 2	OK	1224307035-A	No Preservative Required	OK
1224307012-B	HNO <sub>3</sub> to pH < 2	OK	1224307035-B	HNO <sub>3</sub> to pH < 2	OK
1224307013-A	H <sub>2</sub> SO <sub>4</sub> to pH < 2	OK	1224307036-A	No Preservative Required	OK
1224307013-B	HNO <sub>3</sub> to pH < 2	OK	1224307036-B	HNO <sub>3</sub> to pH < 2	OK
1224307014-A	H <sub>2</sub> SO <sub>4</sub> to pH < 2	OK	1224307037-A	No Preservative Required	OK
1224307014-B	HNO <sub>3</sub> to pH < 2	OK	1224307037-B	HNO <sub>3</sub> to pH < 2	OK
1224307015-A	H <sub>2</sub> SO <sub>4</sub> to pH < 2	OK	1224307038-A	HCL to pH < 2	OK
1224307015-B	HNO <sub>3</sub> to pH < 2	OK	1224307038-B	HCL to pH < 2	OK
1224307016-A	H <sub>2</sub> SO <sub>4</sub> to pH < 2	OK	1224307038-C	HCL to pH < 2	OK
1224307016-B	HNO <sub>3</sub> to pH < 2	OK	1224307039-A	HCL to pH < 2	OK
1224307017-A	H <sub>2</sub> SO <sub>4</sub> to pH < 2	OK	1224307039-B	HCL to pH < 2	OK
1224307017-B	HNO <sub>3</sub> to pH < 2	OK	1224307039-C	HCL to pH < 2	OK
1224307017-C	HCL to pH < 2	OK	1224307040-A	HCL to pH < 2	OK
1224307017-D	HCL to pH < 2	OK	1224307040-B	HCL to pH < 2	OK
1224307017-E	HCL to pH < 2	OK	1224307040-C	HCL to pH < 2	OK
1224307018-A	H <sub>2</sub> SO <sub>4</sub> to pH < 2	OK			
1224307018-B	HNO <sub>3</sub> to pH < 2	OK			
1224307019-A	H <sub>2</sub> SO <sub>4</sub> 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.



August 08, 2022

Service Request No:K2208806

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

**Laboratory Results for: 1224307**

Dear Julie,

Enclosed are the results of the sample(s) submitted to our laboratory August 03, 2022  
For your reference, these analyses have been assigned our service request number **K2208806**.

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 3364. You may also contact me via email at [howard.holmes@alsglobal.com](mailto:howard.holmes@alsglobal.com).

Respectfully submitted,

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

A handwritten signature in black ink that reads "Howard Holmes".

Howard Holmes  
Project Manager



## 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:** 1224307  
**Sample Matrix:** Water

**Service Request:** K2208806  
**Date Received:** 08/03/2022

#### 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 four water samples were received for analysis at ALS Environmental on 08/03/2022. 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

A handwritten signature in black ink, appearing to read "Howard Johnson".

Date 08/08/2022

### 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.

CLIENT ID: RM 0-No Name Creek		Lab ID: K2208806-001				
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	12.5		0.003	0.021	mg/L	200.7
Iron	2.96		0.008	0.021	mg/L	200.7
Magnesium	3.96		0.0004	0.0053	mg/L	200.7

  

CLIENT ID: RM 1.5-Kenai City Dock-DUP		Lab ID: K2208806-002				
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	16.0		0.003	0.021	mg/L	200.7
Iron	21.5		0.008	0.021	mg/L	200.7
Magnesium	11.2		0.0004	0.0053	mg/L	200.7

  

CLIENT ID: RM 1.5-Kenai City Dock		Lab ID: K2208806-003				
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	16.9		0.003	0.021	mg/L	200.7
Iron	24.9		0.008	0.021	mg/L	200.7
Magnesium	11.9		0.0004	0.0053	mg/L	200.7

  

CLIENT ID: RM 6.5-Cunningham Park		Lab ID: K2208806-004				
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	11.9		0.003	0.021	mg/L	200.7
Iron	1.17		0.008	0.021	mg/L	200.7
Magnesium	1.33		0.0004	0.0053	mg/L	200.7

  

CLIENT ID: RM 10-Beaver Creek		Lab ID: K2208806-005				
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	15.5		0.003	0.021	mg/L	200.7
Iron	2.28		0.008	0.021	mg/L	200.7
Magnesium	3.58		0.0004	0.0053	mg/L	200.7

  

CLIENT ID: RM 10.1-Kenai River		Lab ID: K2208806-006				
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	11.6		0.003	0.021	mg/L	200.7
Iron	1.00		0.008	0.021	mg/L	200.7
Magnesium	1.26		0.0004	0.0053	mg/L	200.7

  

CLIENT ID: RM 12.5-Pillars		Lab ID: K2208806-007				
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	11.6		0.003	0.021	mg/L	200.7
Iron	1.00		0.008	0.021	mg/L	200.7
Magnesium	1.26		0.0004	0.0053	mg/L	200.7

  

CLIENT ID: RM 18-Poacher's Cove		Lab ID: K2208806-008				
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	11.5		0.003	0.021	mg/L	200.7
Iron	0.978		0.008	0.021	mg/L	200.7

### 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.

CLIENT ID: RM 18-Poacher's Cove		Lab ID: K2208806-008				
Analyte	Results	Flag	MDL	MRL	Units	Method
Magnesium	1.23		0.0004	0.0053	mg/L	200.7
CLIENT ID: RM 19-Slikok Creek		Lab ID: K2208806-009				
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	14.8		0.003	0.021	mg/L	200.7
Iron	1.12		0.008	0.021	mg/L	200.7
Magnesium	4.06		0.0004	0.0053	mg/L	200.7
CLIENT ID: RM 21-Soldotna Bridge		Lab ID: K2208806-010				
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	11.8		0.003	0.021	mg/L	200.7
Iron	1.05		0.008	0.021	mg/L	200.7
Magnesium	1.29		0.0004	0.0053	mg/L	200.7
CLIENT ID: RM 22-Soldotna Creek		Lab ID: K2208806-011				
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	19.0		0.003	0.021	mg/L	200.7
Iron	0.748		0.008	0.021	mg/L	200.7
Magnesium	4.95		0.0004	0.0053	mg/L	200.7
CLIENT ID: RM 23-Swiftwater Park		Lab ID: K2208806-012				
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	11.7		0.003	0.021	mg/L	200.7
Iron	0.950		0.008	0.021	mg/L	200.7
Magnesium	1.24		0.0004	0.0053	mg/L	200.7
CLIENT ID: RM 30-Funny River		Lab ID: K2208806-013				
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	10.3		0.003	0.021	mg/L	200.7
Iron	0.823		0.008	0.021	mg/L	200.7
Magnesium	3.18		0.0004	0.0053	mg/L	200.7
CLIENT ID: RM 31-Morgan's Landing		Lab ID: K2208806-014				
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	11.7		0.003	0.021	mg/L	200.7
Iron	1.18		0.008	0.021	mg/L	200.7
Magnesium	1.31		0.0004	0.0053	mg/L	200.7
CLIENT ID: RM 36-Moose River		Lab ID: K2208806-015				
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	22.0		0.003	0.021	mg/L	200.7
Iron	0.572		0.008	0.021	mg/L	200.7
Magnesium	3.29		0.0004	0.0053	mg/L	200.7

### 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.

CLIENT ID: RM 36-Moose River-DUP		Lab ID: K2208806-016				
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	21.9		0.003	0.021	mg/L	200.7
Iron	0.565		0.008	0.021	mg/L	200.7
Magnesium	3.28		0.0004	0.0053	mg/L	200.7

  

CLIENT ID: RM 40-Bing's Landing		Lab ID: K2208806-017				
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	11.4		0.003	0.021	mg/L	200.7
Iron	1.02		0.008	0.021	mg/L	200.7
Magnesium	1.20		0.0004	0.0053	mg/L	200.7

  

CLIENT ID: RM 43-Upstream of Dow Island		Lab ID: K2208806-018				
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	11.3		0.003	0.021	mg/L	200.7
Iron	1.48		0.008	0.021	mg/L	200.7
Magnesium	1.34		0.0004	0.0053	mg/L	200.7

  

CLIENT ID: RM 44-Mouth of Kiley River		Lab ID: K2208806-019				
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	4.52		0.003	0.021	mg/L	200.7
Iron	4.84		0.008	0.021	mg/L	200.7
Magnesium	2.18		0.0004	0.0053	mg/L	200.7

  

CLIENT ID: RM 50-Skilak Lake Outflow		Lab ID: K2208806-020				
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	12.2		0.003	0.021	mg/L	200.7
Iron	0.373		0.008	0.021	mg/L	200.7
Magnesium	1.03		0.0004	0.0053	mg/L	200.7

  

CLIENT ID: RM 70-Jim's Landing		Lab ID: K2208806-021				
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	14.9		0.003	0.021	mg/L	200.7
Iron	0.055		0.008	0.021	mg/L	200.7
Magnesium	1.15		0.0004	0.0053	mg/L	200.7

  

CLIENT ID: RM-Russian River		Lab ID: K2208806-022				
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	17.0		0.003	0.021	mg/L	200.7
Iron	0.036		0.008	0.021	mg/L	200.7
Magnesium	1.09		0.0004	0.0053	mg/L	200.7

  

CLIENT ID: RM 82-Kenai Lake Bridge		Lab ID: K2208806-023				
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	14.8		0.003	0.021	mg/L	200.7
Iron	0.049		0.008	0.021	mg/L	200.7

### 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.

CLIENT ID: RM 82-Kenai Lake Bridge		Lab ID: K2208806-023				
Analyte	Results	Flag	MDL	MRL	Units	Method
Magnesium	1.14		0.0004	0.0053	mg/L	200.7

  

CLIENT ID: RM 79.5-Juneau Creek		Lab ID: K2208806-024				
Analyte	Results	Flag	MDL	MRL	Units	Method
Calcium	14.9		0.003	0.021	mg/L	200.7
Iron	0.052		0.008	0.021	mg/L	200.7
Magnesium	1.10		0.0004	0.0053	mg/L	200.7



## Sample Receipt Information

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

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307

Revised Report - Revision 2  
**Service Request:**K2208806

#### SAMPLE CROSS-REFERENCE

<u>SAMPLE #</u>	<u>CLIENT SAMPLE ID</u>	<u>DATE</u>	<u>TIME</u>
K2208806-001	RM 0-No Name Creek	7/26/2022	0917
K2208806-002	RM 1.5-Kenai City Dock-DUP	7/26/2022	0850
K2208806-003	RM 1.5-Kenai City Dock	7/26/2022	0846
K2208806-004	RM 6.5-Cunningham Park	7/26/2022	0910
K2208806-005	RM 10-Beaver Creek	7/26/2022	0955
K2208806-006	RM 10.1-Kenai River	7/26/2022	1025
K2208806-007	RM 12.5-Pillars	7/26/2022	1037
K2208806-008	RM 18-Poacher's Cove	7/26/2022	1100
K2208806-009	RM 19-Slikok Creek	7/26/2022	1100
K2208806-010	RM 21-Soldotna Bridge	7/26/2022	1033
K2208806-011	RM 22-Soldotna Creek	7/26/2022	0915
K2208806-012	RM 23-Swiftwater Park	7/26/2022	1000
K2208806-013	RM 30-Funny River	7/26/2022	0907
K2208806-014	RM 31-Morgan's Landing	7/26/2022	1013
K2208806-015	RM 36-Moose River	7/26/2022	1042
K2208806-016	RM 36-Moose River-DUP	7/26/2022	1048
K2208806-017	RM 40-Bing's Landing	7/26/2022	0953
K2208806-018	RM 43-Upstream of Dow Island	7/26/2022	0810
K2208806-019	RM 44-Mouth of Kiley River	7/26/2022	0830
K2208806-020	RM 50-Skilak Lake Outflow	7/26/2022	0906
K2208806-021	RM 70-Jim's Landing	7/26/2022	0800
K2208806-022	RM-Russian River	7/26/2022	0844
K2208806-023	RM 82-Kenai Lake Bridge	7/26/2022	0935
K2208806-024	RM 79.5-Juneau Creek	7/26/2022	1025

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W208806

CLIENT: SGS North America Inc. - Alaska Division					SGS Reference: <b>ALS Kelso, WA</b>								Page 1 of 3		
CONTACT: Julie Shumway PHONE NO: (907) 562-2343					Additional Comments: All soils report out in dry weight unless										
PROJECT NAME: 1224307		PWSID#: <b>NPDL#:</b>			#	Preserv-ative Used:	HNO <sub>3</sub>	HNO <sub>3</sub>	HNO <sub>3</sub>						
REPORTS TO: Julie Shumway		E-MAIL: Julie.Shumway@sgs.com Env.Alaska.RefLabTeam@sgs.com			C	TYPE C = COMP G = GRAB MI = Multi Incremental Soils	Calcium by 200.7 <Ref Lab>	Iron by 200.7 <Ref Lab>	Magnesium by 200.7 <Ref Lab>						
INVOICE TO: SGS - Alaska		QUOTE #: env.alaska.accounting@sgs.com			O					MS	MSD	SGS lab #	Location ID		
RESERVED for lab use		SAMPLE IDENTIFICATION		DATE mm/dd/yy	TIME HHMM	N	T	A	I	E	R	S			
		RM 0 - No Name Creek		07/26/2022	09:17:00	Water	1	X	X	X				1224307001	
		RM 1.5 - Kenai City Dock - DUP		07/26/2022	08:50:00	Water	1	X	X	X				1224307002	
		RM 1.5 - Kenai City Dock		07/26/2022	08:46:00	Water	1	X	X	X				1224307003	
		RM 6.5 - Cunningham Park		07/26/2022	09:10:00	Water	1	X	X	X				1224307004	
		RM 10 - Beaver Creek		07/26/2022	09:55:00	Water	1	X	X	X				1224307005	
		RM 10.1 - Kenai River		07/26/2022	10:25:00	Water	1	X	X	X				1224307006	
		RM 12.5 - Pillars		07/26/2022	10:37:00	Water	1	X	X	X				1224307007	
		RM 18 - Poacher's Cove		07/26/2022	11:00:00	Water	1	X	X	X				1224307008	
		RM 19 - Slikok Creek		07/26/2022	11:00:00	Water	1	X	X	X				1224307009	
		RM 21 - Soldotna Bridge		07/26/2022	10:33:00	Water	1	X	X	X				1224307010	
Relinquished By: (1)		Date 8/1/22	Time 1014	Received By: <i>Julie Shumway</i> 1000			DOD Project? NO				Data Deliverable Requirements:  Report to DL (J Flags)? YES If J- Report as DL/LOD/LOQ.				
											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		
<input checked="" type="checkbox"/> 200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301 <input type="checkbox"/> 5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557															
<a href="http://www.sgs.com/terms_and_conditions.htm">http://www.sgs.com/terms_and_conditions.htm</a>															

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K1208806

CLIENT: SGS North America Inc. - Alaska Division					SGS Reference: <b>ALS Kelso, WA</b>								Page 2 of 3																
CONTACT: Julie Shumway PHONE NO: (907) 562-2343					Additional Comments: All soils report out in dry weight unless																								
PROJECT NAME: <b>1224307</b>		PWSID#: <b>NPDL#:</b>			<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>#</td> <td>Preserv- ative Used:</td> <td>HNO<sub>3</sub></td> <td>HNO<sub>3</sub></td> <td>HNO<sub>3</sub></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>C O N T A I N E R S</td> <td>TYPE C = COMP G = GRAB MI = Multi Incre- menta- l Soils</td> <td>Calcium by 200.7 &lt;Ref Lab&gt;</td> <td>Iron by 200.7 &lt;Ref Lab&gt;</td> <td>Magnesium by 200.7 &lt;Ref Lab&gt;</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	#	Preserv- ative Used:	HNO <sub>3</sub>	HNO <sub>3</sub>	HNO <sub>3</sub>								C O N T A I N E R S	TYPE C = COMP G = GRAB MI = Multi Incre- menta- l Soils	Calcium by 200.7 <Ref Lab>	Iron by 200.7 <Ref Lab>	Magnesium by 200.7 <Ref Lab>							
#	Preserv- ative Used:	HNO <sub>3</sub>	HNO <sub>3</sub>	HNO <sub>3</sub>																									
C O N T A I N E R S	TYPE C = COMP G = GRAB MI = Multi Incre- menta- l Soils	Calcium by 200.7 <Ref Lab>	Iron by 200.7 <Ref Lab>	Magnesium by 200.7 <Ref Lab>																									
REPORTS TO: Julie Shumway		E-MAIL: <a href="mailto:Julie.Shumway@sgs.com">Julie.Shumway@sgs.com</a> <a href="mailto:Env.Alaska.RefLabTeam@sgs.com">Env.Alaska.RefLabTeam@sgs.com</a>																											
INVOICE TO: SGS - Alaska		QUOTE #: <b>1224307</b>																											
env.alaska.accounting@sgs.com		P.O. #: <b>1224307</b>																											
RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HHMM	MATRIX/ MATRIX CODE						MS	MSD	SGS lab #	Location ID																
	RM 22 - Soldotna Creek	07/26/2022	09:15:00	Water		1	X	X	X			1224307011																	
	RM 23 - Swiftwater Park	07/26/2022	10:00:00	Water		1	X	X	X			1224307012																	
	RM 30 - Funny River	07/26/2022	09:07:00	Water		1	X	X	X			1224307013																	
	RM 31 - Morgan's Landing	07/26/2022	10:13:00	Water	1	X	X	X			1224307014																		
	RM 36 - Moose River	07/26/2022	10:42:00	Water	1	X	X	X			1224307015																		
	RM 36 - Moose River - DUP	07/26/2022	10:48:00	Water	1	X	X	X			1224307016																		
	RM 40 - Bing's Landing	07/26/2022	09:53:00	Water	1	X	X	X			1224307017																		
	RM 43 - Upstream of Dow Island	07/26/2022	08:10:00	Water	1	X	X	X			1224307018																		
	RM 44 - Mouth of Kiley River	07/26/2022	08:30:00	Water	1	X	X	X			1224307019																		
	RM 50 - Skilak Lake Outflow	07/26/2022	09:06:00	Water	1	X	X	X			1224307020																		
Relinquished By: (1)		Date <b>8/1/22</b>	Time <b>1014</b>	Received By: <i>Julie Shumway</i>	<i>8/1/22 1000</i>	DOD Project? NO			Data Deliverable Requirements:  Report to DL (J Flags)? YES If J- Report as DL/LOD/LOQ.																				
									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

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K7208806

CLIENT: SGS North America Inc. - Alaska Division					SGS Reference: <b>ALS Kelso, WA</b>										Page 3 of 3		
CONTACT: Julie Shumway PHONE NO: (907) 562-2343					Additional Comments: All soils report out in dry weight unless												
PROJECT NAME: 1224307		PWSID#: <b>NPDL#:</b>			#	Preserv-ative Used:	HNO <sub>3</sub>	HNO <sub>3</sub>	HNO <sub>3</sub>								
REPORTS TO: Julie Shumway		E-MAIL: Julie.Shumway@sgs.com Env.Alaska.RefLabTeam@sgs.com			C	TYPE C = COMP G = GRAB MI = Multi Incremental Soils	Calcium by 200.7 <Ref Lab>	Iron by 200.7 <Ref Lab>	Magnesium by 200.7 <Ref Lab>								
INVOICE TO: SGS - Alaska env.alaska.accounting@sgs.com		QUOTE #: P.O. #: <b>1224307</b>			O												
RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HHMM	MATRIX/MATRIX CODE	N												Location ID
	RM 70 - Jim's Landing	07/26/2022	08:00:00	Water	T		X	X	X							1224307021	
	RM 74 - Russian River	07/26/2022	08:44:00	Water	1		X	X	X							1224307022	
	RM 82 - Kenai Lake Bridge	07/26/2022	09:35:00	Water	1		X	X	X							1224307023	
	RM 79.5 - Juneau Creek	07/26/2022	10:25:00	Water	1		X	X	X							1224307024	
Relinquished By: (1)		Date	Time	Received By:	<i>Julie Shumway</i> 8/1/22				DOD Project?	NO				Data Deliverable Requirements:			
									Report to DL (J Flags)?	YES				Level 2 + SGS EDD			
Relinquished By: (2)		Date	Time	Received By:	Cooler ID: <b>Requested Turnaround Time and/or Special Instructions:</b>												
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  
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## Cooler Receipt and Preservation Form

Client SGS

Service Request K22

BS802Received: 8/3/22Opened: 8/3/22By: KMUnloaded: 8/3/22By: KM1. Samples were received via? USPS FedEx UPS DHL PDX Courier Hand Delivered2. Samples were received in: (circle) Cooler Box Envelope Other NA3. Were custody seals on coolers? NA Y N If yes, how many and where?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
2.0	IR01					H834802573C		

4. Was a Temperature Blank present in cooler? NA Y N If yes, note the temperature in the appropriate column above:

If no, take the temperature of a representative sample bottle contained within the cooler; note in the column "Sample Temp":

5. Were samples received within the method specified temperature ranges?

If no, were they received on ice and same day as collected? If not, note the cooler # below and notify the PM. NA Y NIf applicable, tissue samples were received: Frozen Partially Thawed Thawed6. Packing material: Inserts Baggies Bubble Wrap Gel Packs Wet Ice Dry Ice Sleeves7. Were custody papers properly filled out (ink, signed, etc.)? NA Y N8. Were samples received in good condition (unbroken) NA Y N9. Were all sample labels complete (ie, analysis, preservation, etc.)? NA Y N10. Did all sample labels and tags agree with custody papers? NA Y N11. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N12. Were the pH-preserved bottles (see SMO GEN SOP) received at the appropriate pH? Indicate in the table below NA Y N13. Were VOA vials received without headspace? Indicate in the table below. NA Y N14. Was C12/Res negative? NA Y N15. Were 100ml sterile microbiology bottles filled exactly to the 100ml mark? NA Y N Under filled Overfilled

Sample ID on Bottle	Sample ID on COC	Identified by:
RM 22-Soldotna Creek	RM 22-Soldotna Bridge	Time
RM 23-Swiftwater Park	RM 23-Soldotna Bridge	Time

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

Notes, Discrepancies, Resolutions:



## Miscellaneous Forms

**ALS Environmental—Kelso Laboratory**  
1317 South 13th Avenue, Kelso, WA 98626  
Phone (360) 577-7222 Fax (360) 425-9096  
[www.alsglobal.com](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.
- J The result is an estimated value.
- N The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
- P The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
- U The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.  
*DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
- i The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
- X See case narrative.
- Q See case narrative. One or more quality control criteria was outside the limits.

### Additional Petroleum Hydrocarbon Specific Qualifiers

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

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

Agency	Web Site	Number
Alaska DEH	<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.cdpb.ca.gov/certlic/labs/Pages/ELAP.aspx">http://www.cdpb.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.pjlabs.com/">http://www.pjlabs.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/bsdw/labservice.htm">http://ndep.nv.gov/bsdw/labservice.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.

**Client:** SGS North America - AK (SGS Environmental) **Service Request:** K2208806  
**Project:** 1224307/

**Sample Name:** RM 0-No Name Creek **Date Collected:** 07/26/22  
**Lab Code:** K2208806-001 **Date Received:** 08/3/22  
**Sample Matrix:** Water

**Analysis Method** **Extracted/Digested By** **Analyzed By**  
200.7 ABOYER RMOORE

**Sample Name:** RM 1.5-Kenai City Dock-DUP **Date Collected:** 07/26/22  
**Lab Code:** K2208806-002 **Date Received:** 08/3/22  
**Sample Matrix:** Water

**Analysis Method** **Extracted/Digested By** **Analyzed By**  
200.7 ABOYER RMOORE

**Sample Name:** RM 1.5-Kenai City Dock **Date Collected:** 07/26/22  
**Lab Code:** K2208806-003 **Date Received:** 08/3/22  
**Sample Matrix:** Water

**Analysis Method** **Extracted/Digested By** **Analyzed By**  
200.7 ABOYER RMOORE

**Sample Name:** RM 6.5-Cunningham Park **Date Collected:** 07/26/22  
**Lab Code:** K2208806-004 **Date Received:** 08/3/22  
**Sample Matrix:** Water

**Analysis Method** **Extracted/Digested By** **Analyzed By**  
200.7 ABOYER RMOORE

**Sample Name:** RM 10-Beaver Creek **Date Collected:** 07/26/22  
**Lab Code:** K2208806-005 **Date Received:** 08/3/22  
**Sample Matrix:** Water

**Analysis Method** **Extracted/Digested By** **Analyzed By**  
200.7 ABOYER RMOORE

**Client:** SGS North America - AK (SGS Environmental) **Service Request:** K2208806  
**Project:** 1224307/

**Sample Name:** RM 10.1-Kenai River **Date Collected:** 07/26/22  
**Lab Code:** K2208806-006 **Date Received:** 08/3/22  
**Sample Matrix:** Water

**Analysis Method** **Extracted/Digested By** **Analyzed By**  
200.7 ABOYER RMOORE

**Sample Name:** RM 12.5-Pillars **Date Collected:** 07/26/22  
**Lab Code:** K2208806-007 **Date Received:** 08/3/22  
**Sample Matrix:** Water

**Analysis Method** **Extracted/Digested By** **Analyzed By**  
200.7 ABOYER RMOORE

**Sample Name:** RM 18-Poacher's Cove **Date Collected:** 07/26/22  
**Lab Code:** K2208806-008 **Date Received:** 08/3/22  
**Sample Matrix:** Water

**Analysis Method** **Extracted/Digested By** **Analyzed By**  
200.7 ABOYER RMOORE

**Sample Name:** RM 19-Slikok Creek **Date Collected:** 07/26/22  
**Lab Code:** K2208806-009 **Date Received:** 08/3/22  
**Sample Matrix:** Water

**Analysis Method** **Extracted/Digested By** **Analyzed By**  
200.7 ABOYER RMOORE

**Sample Name:** RM 21-Soldotna Bridge **Date Collected:** 07/26/22  
**Lab Code:** K2208806-010 **Date Received:** 08/3/22  
**Sample Matrix:** Water

**Analysis Method** **Extracted/Digested By** **Analyzed By**  
200.7 ABOYER RMOORE

**Client:** SGS North America - AK (SGS Environmental) **Service Request:** K2208806  
**Project:** 1224307/

**Sample Name:** RM 22-Soldotna Creek **Date Collected:** 07/26/22  
**Lab Code:** K2208806-011 **Date Received:** 08/3/22  
**Sample Matrix:** Water

**Analysis Method** **Extracted/Digested By** **Analyzed By**  
200.7 ABOYER RMOORE

**Sample Name:** RM 23-Swiftwater Park **Date Collected:** 07/26/22  
**Lab Code:** K2208806-012 **Date Received:** 08/3/22  
**Sample Matrix:** Water

**Analysis Method** **Extracted/Digested By** **Analyzed By**  
200.7 ABOYER RMOORE

**Sample Name:** RM 30-Funny River **Date Collected:** 07/26/22  
**Lab Code:** K2208806-013 **Date Received:** 08/3/22  
**Sample Matrix:** Water

**Analysis Method** **Extracted/Digested By** **Analyzed By**  
200.7 ABOYER RMOORE

**Sample Name:** RM 31-Morgan's Landing **Date Collected:** 07/26/22  
**Lab Code:** K2208806-014 **Date Received:** 08/3/22  
**Sample Matrix:** Water

**Analysis Method** **Extracted/Digested By** **Analyzed By**  
200.7 ABOYER RMOORE

**Sample Name:** RM 36-Moose River **Date Collected:** 07/26/22  
**Lab Code:** K2208806-015 **Date Received:** 08/3/22  
**Sample Matrix:** Water

**Analysis Method** **Extracted/Digested By** **Analyzed By**  
200.7 ABOYER RMOORE

**Client:** SGS North America - AK (SGS Environmental) **Service Request:** K2208806  
**Project:** 1224307/

**Sample Name:** RM 36-Moose River-DUP **Date Collected:** 07/26/22  
**Lab Code:** K2208806-016 **Date Received:** 08/3/22  
**Sample Matrix:** Water

**Analysis Method** **Extracted/Digested By** **Analyzed By**  
200.7 ABOYER RMOORE

**Sample Name:** RM 40-Bing's Landing **Date Collected:** 07/26/22  
**Lab Code:** K2208806-017 **Date Received:** 08/3/22  
**Sample Matrix:** Water

**Analysis Method** **Extracted/Digested By** **Analyzed By**  
200.7 ABOYER RMOORE

**Sample Name:** RM 43-Upstream of Dow Island **Date Collected:** 07/26/22  
**Lab Code:** K2208806-018 **Date Received:** 08/3/22  
**Sample Matrix:** Water

**Analysis Method** **Extracted/Digested By** **Analyzed By**  
200.7 ABOYER RMOORE

**Sample Name:** RM 44-Mouth of Kiley River **Date Collected:** 07/26/22  
**Lab Code:** K2208806-019 **Date Received:** 08/3/22  
**Sample Matrix:** Water

**Analysis Method** **Extracted/Digested By** **Analyzed By**  
200.7 ABOYER RMOORE

**Sample Name:** RM 50-Skilak Lake Outflow **Date Collected:** 07/26/22  
**Lab Code:** K2208806-020 **Date Received:** 08/3/22  
**Sample Matrix:** Water

**Analysis Method** **Extracted/Digested By** **Analyzed By**  
200.7 ABOYER RMOORE

**Client:** SGS North America - AK (SGS Environmental) **Service Request:** K2208806  
**Project:** 1224307/

**Sample Name:** RM 70-Jim's Landing **Date Collected:** 07/26/22  
**Lab Code:** K2208806-021 **Date Received:** 08/3/22  
**Sample Matrix:** Water

**Analysis Method** **Extracted/Digested By** **Analyzed By**  
200.7 ABOYER RMOORE

**Sample Name:** RM-Russian River **Date Collected:** 07/26/22  
**Lab Code:** K2208806-022 **Date Received:** 08/3/22  
**Sample Matrix:** Water

**Analysis Method** **Extracted/Digested By** **Analyzed By**  
200.7 ABOYER RMOORE

**Sample Name:** RM 82-Kenai Lake Bridge **Date Collected:** 07/26/22  
**Lab Code:** K2208806-023 **Date Received:** 08/3/22  
**Sample Matrix:** Water

**Analysis Method** **Extracted/Digested By** **Analyzed By**  
200.7 ABOYER RMOORE

**Sample Name:** RM 79.5-Juneau Creek **Date Collected:** 07/26/22  
**Lab Code:** K2208806-024 **Date Received:** 08/3/22  
**Sample Matrix:** Water

**Analysis Method** **Extracted/Digested By** **Analyzed By**  
200.7 ABOYER 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)

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
  
**Sample Name:** RM 0-No Name Creek  
**Lab Code:** K2208806-001

**Service Request:** K2208806  
**Date Collected:** 07/26/22 09:17  
**Date Received:** 08/03/22 10:00

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	<b>12.5</b>	mg/L	0.021	0.003	1	08/05/22 17:20	08/04/22	
Iron	200.7	<b>2.96</b>	mg/L	0.021	0.008	1	08/05/22 17:20	08/04/22	
Magnesium	200.7	<b>3.96</b>	mg/L	0.0053	0.0004	1	08/05/22 17:20	08/04/22	

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
  
**Sample Name:** RM 1.5-Kenai City Dock-DUP  
**Lab Code:** K2208806-002

**Service Request:** K2208806  
**Date Collected:** 07/26/22 08:50  
**Date Received:** 08/03/22 10:00

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	<b>16.0</b>	mg/L	0.021	0.003	1	08/05/22 17:36	08/04/22	
Iron	200.7	<b>21.5</b>	mg/L	0.021	0.008	1	08/05/22 17:36	08/04/22	
Magnesium	200.7	<b>11.2</b>	mg/L	0.0053	0.0004	1	08/05/22 17:36	08/04/22	

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
  
**Sample Name:** RM 1.5-Kenai City Dock  
**Lab Code:** K2208806-003

**Service Request:** K2208806  
**Date Collected:** 07/26/22 08:46  
**Date Received:** 08/03/22 10:00

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	<b>16.9</b>	mg/L	0.021	0.003	1	08/05/22 17:44	08/04/22	
Iron	200.7	<b>24.9</b>	mg/L	0.021	0.008	1	08/05/22 17:44	08/04/22	
Magnesium	200.7	<b>11.9</b>	mg/L	0.0053	0.0004	1	08/05/22 17:44	08/04/22	

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
  
**Sample Name:** RM 6.5-Cunningham Park  
**Lab Code:** K2208806-004

**Service Request:** K2208806  
**Date Collected:** 07/26/22 09:10  
**Date Received:** 08/03/22 10:00

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	<b>11.9</b>	mg/L	0.021	0.003	1	08/05/22 17:46	08/04/22	
Iron	200.7	<b>1.17</b>	mg/L	0.021	0.008	1	08/05/22 17:46	08/04/22	
Magnesium	200.7	<b>1.33</b>	mg/L	0.0053	0.0004	1	08/05/22 17:46	08/04/22	

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
  
**Sample Name:** RM 10-Beaver Creek  
**Lab Code:** K2208806-005

**Service Request:** K2208806  
**Date Collected:** 07/26/22 09:55  
**Date Received:** 08/03/22 10:00

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	<b>15.5</b>	mg/L	0.021	0.003	1	08/05/22 17:49	08/04/22	
Iron	200.7	<b>2.28</b>	mg/L	0.021	0.008	1	08/05/22 17:49	08/04/22	
Magnesium	200.7	<b>3.58</b>	mg/L	0.0053	0.0004	1	08/05/22 17:49	08/04/22	

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
  
**Sample Name:** RM 10.1-Kenai River  
**Lab Code:** K2208806-006

**Service Request:** K2208806  
**Date Collected:** 07/26/22 10:25  
**Date Received:** 08/03/22 10:00

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	<b>11.6</b>	mg/L	0.021	0.003	1	08/05/22 17:52	08/04/22	
Iron	200.7	<b>1.00</b>	mg/L	0.021	0.008	1	08/05/22 17:52	08/04/22	
Magnesium	200.7	<b>1.26</b>	mg/L	0.0053	0.0004	1	08/05/22 17:52	08/04/22	

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
  
**Sample Name:** RM 12.5-Pillars  
**Lab Code:** K2208806-007

**Service Request:** K2208806  
**Date Collected:** 07/26/22 10:37  
**Date Received:** 08/03/22 10:00

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	<b>11.6</b>	mg/L	0.021	0.003	1	08/05/22 17:54	08/04/22	
Iron	200.7	<b>1.00</b>	mg/L	0.021	0.008	1	08/05/22 17:54	08/04/22	
Magnesium	200.7	<b>1.26</b>	mg/L	0.0053	0.0004	1	08/05/22 17:54	08/04/22	

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
**Sample Name:** RM 18-Poacher's Cove  
**Lab Code:** K2208806-008

**Service Request:** K2208806  
**Date Collected:** 07/26/22 11:00  
**Date Received:** 08/03/22 10:00

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	<b>11.5</b>	mg/L	0.021	0.003	1	08/05/22 17:57	08/04/22	
Iron	200.7	<b>0.978</b>	mg/L	0.021	0.008	1	08/05/22 17:57	08/04/22	
Magnesium	200.7	<b>1.23</b>	mg/L	0.0053	0.0004	1	08/05/22 17:57	08/04/22	

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
  
**Sample Name:** RM 19-Slikok Creek  
**Lab Code:** K2208806-009

**Service Request:** K2208806  
**Date Collected:** 07/26/22 11:00  
**Date Received:** 08/03/22 10:00

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	<b>14.8</b>	mg/L	0.021	0.003	1	08/05/22 18:07	08/04/22	
Iron	200.7	<b>1.12</b>	mg/L	0.021	0.008	1	08/05/22 18:07	08/04/22	
Magnesium	200.7	<b>4.06</b>	mg/L	0.0053	0.0004	1	08/05/22 18:07	08/04/22	

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
  
**Sample Name:** RM 21-Soldotna Bridge  
**Lab Code:** K2208806-010

**Service Request:** K2208806  
**Date Collected:** 07/26/22 10:33  
**Date Received:** 08/03/22 10:00

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	<b>11.8</b>	mg/L	0.021	0.003	1	08/05/22 18:10	08/04/22	
Iron	200.7	<b>1.05</b>	mg/L	0.021	0.008	1	08/05/22 18:10	08/04/22	
Magnesium	200.7	<b>1.29</b>	mg/L	0.0053	0.0004	1	08/05/22 18:10	08/04/22	

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
  
**Sample Name:** RM 22-Soldotna Creek  
**Lab Code:** K2208806-011

**Service Request:** K2208806  
**Date Collected:** 07/26/22 09:15  
**Date Received:** 08/03/22 10:00

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	<b>19.0</b>	mg/L	0.021	0.003	1	08/05/22 18:12	08/04/22	
Iron	200.7	<b>0.748</b>	mg/L	0.021	0.008	1	08/05/22 18:12	08/04/22	
Magnesium	200.7	<b>4.95</b>	mg/L	0.0053	0.0004	1	08/05/22 18:12	08/04/22	

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
  
**Sample Name:** RM 23-Swiftwater Park  
**Lab Code:** K2208806-012

**Service Request:** K2208806  
**Date Collected:** 07/26/22 10:00  
**Date Received:** 08/03/22 10:00

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	<b>11.7</b>	mg/L	0.021	0.003	1	08/05/22 18:15	08/04/22	
Iron	200.7	<b>0.950</b>	mg/L	0.021	0.008	1	08/05/22 18:15	08/04/22	
Magnesium	200.7	<b>1.24</b>	mg/L	0.0053	0.0004	1	08/05/22 18:15	08/04/22	

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
  
**Sample Name:** RM 30-Funny River  
**Lab Code:** K2208806-013

**Service Request:** K2208806  
**Date Collected:** 07/26/22 09:07  
**Date Received:** 08/03/22 10:00

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	<b>10.3</b>	mg/L	0.021	0.003	1	08/05/22 18:18	08/04/22	
Iron	200.7	<b>0.823</b>	mg/L	0.021	0.008	1	08/05/22 18:18	08/04/22	
Magnesium	200.7	<b>3.18</b>	mg/L	0.0053	0.0004	1	08/05/22 18:18	08/04/22	

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
  
**Sample Name:** RM 31-Morgan's Landing  
**Lab Code:** K2208806-014

**Service Request:** K2208806  
**Date Collected:** 07/26/22 10:13  
**Date Received:** 08/03/22 10:00

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	<b>11.7</b>	mg/L	0.021	0.003	1	08/05/22 18:20	08/04/22	
Iron	200.7	<b>1.18</b>	mg/L	0.021	0.008	1	08/05/22 18:20	08/04/22	
Magnesium	200.7	<b>1.31</b>	mg/L	0.0053	0.0004	1	08/05/22 18:20	08/04/22	

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
  
**Sample Name:** RM 36-Moose River  
**Lab Code:** K2208806-015

**Service Request:** K2208806  
**Date Collected:** 07/26/22 10:42  
**Date Received:** 08/03/22 10:00

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	<b>22.0</b>	mg/L	0.021	0.003	1	08/05/22 18:23	08/04/22	
Iron	200.7	<b>0.572</b>	mg/L	0.021	0.008	1	08/05/22 18:23	08/04/22	
Magnesium	200.7	<b>3.29</b>	mg/L	0.0053	0.0004	1	08/05/22 18:23	08/04/22	

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
  
**Sample Name:** RM 36-Moose River-DUP  
**Lab Code:** K2208806-016

**Service Request:** K2208806  
**Date Collected:** 07/26/22 10:48  
**Date Received:** 08/03/22 10:00

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	<b>21.9</b>	mg/L	0.021	0.003	1	08/05/22 18:26	08/04/22	
Iron	200.7	<b>0.565</b>	mg/L	0.021	0.008	1	08/05/22 18:26	08/04/22	
Magnesium	200.7	<b>3.28</b>	mg/L	0.0053	0.0004	1	08/05/22 18:26	08/04/22	

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
  
**Sample Name:** RM 40-Bing's Landing  
**Lab Code:** K2208806-017

**Service Request:** K2208806  
**Date Collected:** 07/26/22 09:53  
**Date Received:** 08/03/22 10:00

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	<b>11.4</b>	mg/L	0.021	0.003	1	08/05/22 18:28	08/04/22	
Iron	200.7	<b>1.02</b>	mg/L	0.021	0.008	1	08/05/22 18:28	08/04/22	
Magnesium	200.7	<b>1.20</b>	mg/L	0.0053	0.0004	1	08/05/22 18:28	08/04/22	

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
  
**Sample Name:** RM 43-Upstream of Dow Island  
**Lab Code:** K2208806-018

**Service Request:** K2208806  
**Date Collected:** 07/26/22 08:10  
**Date Received:** 08/03/22 10:00

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	<b>11.3</b>	mg/L	0.021	0.003	1	08/05/22 18:31	08/04/22	
Iron	200.7	<b>1.48</b>	mg/L	0.021	0.008	1	08/05/22 18:31	08/04/22	
Magnesium	200.7	<b>1.34</b>	mg/L	0.0053	0.0004	1	08/05/22 18:31	08/04/22	

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
  
**Sample Name:** RM 44-Mouth of Kiley River  
**Lab Code:** K2208806-019

**Service Request:** K2208806  
**Date Collected:** 07/26/22 08:30  
**Date Received:** 08/03/22 10:00

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	<b>4.52</b>	mg/L	0.021	0.003	1	08/05/22 18:41	08/04/22	
Iron	200.7	<b>4.84</b>	mg/L	0.021	0.008	1	08/05/22 18:41	08/04/22	
Magnesium	200.7	<b>2.18</b>	mg/L	0.0053	0.0004	1	08/05/22 18:41	08/04/22	

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
  
**Sample Name:** RM 50-Skilak Lake Outflow  
**Lab Code:** K2208806-020

**Service Request:** K2208806  
**Date Collected:** 07/26/22 09:06  
**Date Received:** 08/03/22 10:00

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	<b>12.2</b>	mg/L	0.021	0.003	1	08/05/22 18:44	08/04/22	
Iron	200.7	<b>0.373</b>	mg/L	0.021	0.008	1	08/05/22 18:44	08/04/22	
Magnesium	200.7	<b>1.03</b>	mg/L	0.0053	0.0004	1	08/05/22 18:44	08/04/22	

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
  
**Sample Name:** RM 70-Jim's Landing  
**Lab Code:** K2208806-021

**Service Request:** K2208806  
**Date Collected:** 07/26/22 08:00  
**Date Received:** 08/03/22 10:00

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	<b>14.9</b>	mg/L	0.021	0.003	1	08/05/22 17:05	08/04/22	
Iron	200.7	<b>0.055</b>	mg/L	0.021	0.008	1	08/05/22 17:05	08/04/22	
Magnesium	200.7	<b>1.15</b>	mg/L	0.0053	0.0004	1	08/05/22 17:05	08/04/22	

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
  
**Sample Name:** RM-Russian River  
**Lab Code:** K2208806-022

**Service Request:** K2208806  
**Date Collected:** 07/26/22 08:44  
**Date Received:** 08/03/22 10:00

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	<b>17.0</b>	mg/L	0.021	0.003	1	08/05/22 17:07	08/04/22	
Iron	200.7	<b>0.036</b>	mg/L	0.021	0.008	1	08/05/22 17:07	08/04/22	
Magnesium	200.7	<b>1.09</b>	mg/L	0.0053	0.0004	1	08/05/22 17:07	08/04/22	

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
  
**Sample Name:** RM 82-Kenai Lake Bridge  
**Lab Code:** K2208806-023

**Service Request:** K2208806  
**Date Collected:** 07/26/22 09:35  
**Date Received:** 08/03/22 10:00

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	<b>14.8</b>	mg/L	0.021	0.003	1	08/05/22 17:10	08/04/22	
Iron	200.7	<b>0.049</b>	mg/L	0.021	0.008	1	08/05/22 17:10	08/04/22	
Magnesium	200.7	<b>1.14</b>	mg/L	0.0053	0.0004	1	08/05/22 17:10	08/04/22	

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
  
**Sample Name:** RM 79.5-Juneau Creek  
**Lab Code:** K2208806-024

**Service Request:** K2208806  
**Date Collected:** 07/26/22 10:25  
**Date Received:** 08/03/22 10:00

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	<b>14.9</b>	mg/L	0.021	0.003	1	08/05/22 17:13	08/04/22	
Iron	200.7	<b>0.052</b>	mg/L	0.021	0.008	1	08/05/22 17:13	08/04/22	
Magnesium	200.7	<b>1.10</b>	mg/L	0.0053	0.0004	1	08/05/22 17:13	08/04/22	



## 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

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1317 South 13th Avenue, Kelso, WA 98626  
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[www.alsglobal.com](http://www.alsglobal.com)

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
**Sample Name:** Method Blank  
**Lab Code:** KQ2212609-01

**Service Request:** K2208806  
**Date Collected:** NA  
**Date Received:** NA

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	<b>0.006 J</b>	mg/L	0.021	0.003	1	08/05/22 16:05	08/04/22	
Iron	200.7	<b>0.013 J</b>	mg/L	0.021	0.008	1	08/05/22 16:05	08/04/22	
Magnesium	200.7	<b>0.0047 J</b>	mg/L	0.0053	0.0004	1	08/05/22 16:05	08/04/22	

Analytical Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water  
**Sample Name:** Method Blank  
**Lab Code:** KQ2212815-01

**Service Request:** K2208806  
**Date Collected:** NA  
**Date Received:** NA

**Basis:** NA

**Total Metals**

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>Result</b>	<b>Units</b>	<b>MRL</b>	<b>MDL</b>	<b>Dil.</b>	<b>Date Analyzed</b>	<b>Date Extracted</b>	<b>Q</b>
Calcium	200.7	ND U	mg/L	0.021	0.003	1	08/05/22 17:15	08/04/22	
Iron	200.7	ND U	mg/L	0.021	0.008	1	08/05/22 17:15	08/04/22	
Magnesium	200.7	<b>0.0046 J</b>	mg/L	0.0053	0.0004	1	08/05/22 17:15	08/04/22	

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water

**Service Request:** K2208806  
**Date Collected:** 07/26/22  
**Date Received:** 08/03/22  
**Date Analyzed:** 08/5/22  
**Date Extracted:** 08/4/22

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

**Sample Name:** RM 0-No Name Creek      **Units:** mg/L  
**Lab Code:** K2208806-001      **Basis:** NA  
**Analysis Method:** 200.7  
**Prep Method:** EPA CLP ILM04.0

**Matrix Spike**  
KQ2212815-04

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Calcium	12.5	22.7	10.0	102	70-130
Iron	2.96	3.95	1.00	99	70-130
Magnesium	3.96	13.7	10.0	98	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.

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water

**Service Request:** K2208806  
**Date Collected:** 07/26/22  
**Date Received:** 08/03/22  
**Date Analyzed:** 08/5/22  
**Date Extracted:** 08/4/22

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

**Sample Name:** RM 1.5-Kenai City Dock-DUP

**Units:** mg/L

**Lab Code:** K2208806-002

**Basis:** NA

**Analysis Method:** 200.7

**Prep Method:** EPA CLP ILM04.0

**Matrix Spike**  
KQ2212815-06

Analyte Name	Sample Result	Result	Spike Amount	% Rec	% Rec Limits
Calcium	16.0	25.6	10.0	96	70-130
Iron	21.5	22.0	1.00	59 #	70-130
Magnesium	11.2	20.7	10.0	95	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.

QA/QC Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project** 1224307  
**Sample Matrix:** Water

**Service Request:** K2208806  
**Date Collected:** 07/26/22  
**Date Received:** 08/03/22  
**Date Analyzed:** 08/05/22

**Replicate Sample Summary**

**Total Metals**

**Sample Name:** RM 0-No Name Creek **Units:** mg/L  
**Lab Code:** K2208806-001 **Basis:** NA

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Sample Result</b>	<b>Duplicate Sample</b>	<b>KQ2212815-03</b>	<b>Average</b>	<b>RPD</b>	<b>RPD Limit</b>
					<b>Result</b>				
Calcium	200.7	0.021	0.003	12.5	12.4	12.5	<1	20	
Iron	200.7	0.021	0.008	2.96	2.91	2.94	2	20	
Magnesium	200.7	0.0053	0.0004	3.96	3.93	3.95	<1	20	

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

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

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

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

Revised Report - Revision 2

QA/QC Report

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water

**Service Request:** K2208806  
**Date Collected:** 07/26/22  
**Date Received:** 08/03/22  
**Date Analyzed:** 08/05/22

**Replicate Sample Summary**

**Total Metals**

**Sample Name:** RM 1.5-Kenai City Dock-DUP      **Units:** mg/L  
**Lab Code:** K2208806-002      **Basis:** NA

<b>Analyte Name</b>	<b>Analysis Method</b>	<b>MRL</b>	<b>MDL</b>	<b>Sample Result</b>	<b>Duplicate Sample Result</b>	<b>Average</b>	<b>RPD</b>	<b>RPD Limit</b>
				KQ2212815-05				
Calcium	200.7	0.021	0.003	16.0	16.2	16.1	1	20
Iron	200.7	0.021	0.008	21.5	21.7	21.6	<1	20
Magnesium	200.7	0.0053	0.0004	11.2	11.3	11.3	<1	20

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

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

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

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water

**Service Request:** K2208806  
**Date Analyzed:** 08/05/22

**Lab Control Sample Summary**  
**Total Metals**

**Units:**mg/L  
**Basis:**NA

**Lab Control Sample**  
KQ2212609-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Calcium	200.7	12.1	12.5	97	85-115
Iron	200.7	2.45	2.50	98	85-115
Magnesium	200.7	11.9	12.5	95	85-115

**Client:** SGS North America - AK (SGS Environmental)  
**Project:** 1224307  
**Sample Matrix:** Water

**Service Request:** K2208806  
**Date Analyzed:** 08/05/22

**Lab Control Sample Summary**  
**Total Metals**

**Units:**mg/L  
**Basis:**NA

**Lab Control Sample**  
KQ2212815-02

Analyte Name	Analytical Method	Result	Spike Amount	% Rec	% Rec Limits
Calcium	200.7	12.2	12.5	98	85-115
Iron	200.7	2.46	2.50	99	85-115
Magnesium	200.7	11.9	12.5	95	85-115