

Laboratory Report of Analysis

To: Stantec Consulting Services Inc.
725 East Fireweed Lane Suite 200
Anchorage, AK 99503
(907)248-8883

Report Number: **1191950**

Client Project: **Wasilla WWTP**

Dear John Marshall,

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.

Justin Nelson
Project Manager
Justin.Nelson@sgs.com

Date

Case Narrative

SGS Client: **Stantec Consulting Services Inc.**

SGS Project: **1191950**

Project Name/Site: **Wasilla WWTP**

Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

1199217001DUP (1505193) DUP

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

1191950001MS (1505121) MS

4500NH3-G - Ammonia - MS recovery is outside of QC criteria. Refer to LCS for accuracy requirements.

1191950003MS (1505668) MS

4500N-D - Total Kjeldahl Nitrogen - MS recovery is outside of QC criteria. Refer to LCS for accuracy requirements.

1191950001MSD (1505122) MSD

4500NH3-G - Ammonia - MS/MSD RPD was outside of QC criteria. Refer to the LCS/LCSD RPD for precision requirement.

1191950003MSD (1505669) MSD

4500N-D - Total Kjeldahl Nitrogen - MSD recovery is outside of QC criteria. Refer to LCSD for accuracy requirements.

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

Print Date: 05/06/2019 12:31:58PM

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, 6020A, 7470A, 7471B, 8015C, 8021B, 8082A, 8260C, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). 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
U	Indicates the analyte was analyzed for but not detected.

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

Sample Summary

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Collected</u>	<u>Received</u>	<u>Matrix</u>
SW-1	1191950001	04/29/2019	04/29/2019	Water (Surface, Eff., Ground)
SW-2	1191950002	04/29/2019	04/29/2019	Water (Surface, Eff., Ground)
SW-3	1191950003	04/29/2019	04/29/2019	Water (Surface, Eff., Ground)
SW-4	1191950004	04/29/2019	04/29/2019	Water (Surface, Eff., Ground)
SW-5	1191950005	04/29/2019	04/29/2019	Water (Surface, Eff., Ground)
SW-6	1191950006	04/29/2019	04/29/2019	Water (Surface, Eff., Ground)
SW-7	1191950007	04/29/2019	04/29/2019	Water (Surface, Eff., Ground)
SW-8	1191950008	04/29/2019	04/29/2019	Water (Surface, Eff., Ground)
SW-9	1191950009	04/29/2019	04/29/2019	Water (Surface, Eff., Ground)
SW-10	1191950010	04/29/2019	04/29/2019	Water (Surface, Eff., Ground)
Shaw	1191950011	04/29/2019	04/29/2019	Water (Surface, Eff., Ground)
D1	1191950012	04/29/2019	04/29/2019	Water (Surface, Eff., Ground)

Method

SM21 4500-NH3 G
 SM21 5210B
 SM21 9222D
 EPA 300.0
 SM21 4500-N D
 SM21 9223B
 SM21 4500P-B,E
 SM21 2540D

Method Description

Ammonia-N (W) SM21 4500-NH3 G
 Biochemical Oxygen Demand SM21 5210B
 Fecal Coliform (MF)
 Ion Chromatographic Analysis
 TKN by Phenate (W)
 Total Coliform P/A Quant Tray
 Total Phosphorus (W)
 Total Suspended Solids SM20 2540D

Detectable Results Summary

Client Sample ID: **SW-1**
 Lab Sample ID: 1191950001
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	10.1	mg/L
Total Coliform	4110	MPN/100mL
Ammonia-N	0.155	mg/L
Total Kjeldahl Nitrogen	0.920J	mg/L
Total Phosphorus	0.275	mg/L
Total Suspended Solids	16.0	mg/L

Client Sample ID: **SW-2**
 Lab Sample ID: 1191950002
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	3.35	mg/L
Total Coliform	54	MPN/100mL
Ammonia-N	0.0625J	mg/L
Total Kjeldahl Nitrogen	0.853J	mg/L
Total Phosphorus	0.0502	mg/L
Total Suspended Solids	3.37	mg/L

Client Sample ID: **SW-3**
 Lab Sample ID: 1191950003
Microbiology Laboratory
Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Coliform	71	MPN/100mL
Ammonia-N	0.0555J	mg/L
Total Suspended Solids	1.35	mg/L

Client Sample ID: **SW-4**
 Lab Sample ID: 1191950004
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	4.08	mg/L
Total Coliform	16	MPN/100mL
Ammonia-N	0.106	mg/L
Total Suspended Solids	2.24	mg/L

Client Sample ID: **SW-5**
 Lab Sample ID: 1191950005
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Fecal Coliform	1.0	col/100mL
Total Coliform	517	MPN/100mL
Ammonia-N	0.0653J	mg/L
Total Phosphorus	0.0190J	mg/L
Total Suspended Solids	3.09	mg/L

Client Sample ID: **SW-6**
 Lab Sample ID: 1191950006
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	1	MPN/100mL
Total Coliform	261	MPN/100mL
Ammonia-N	0.0459J	mg/L
Total Suspended Solids	1.44	mg/L

Detectable Results Summary

Client Sample ID: **SW-7**
 Lab Sample ID: 1191950007
Microbiology Laboratory
Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Coliform	345	MPN/100mL
Ammonia-N	0.0508J	mg/L
Total Phosphorus	0.00560J	mg/L
Total Suspended Solids	1.43	mg/L

Client Sample ID: **SW-8**
 Lab Sample ID: 1191950008
Microbiology Laboratory
Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	3.29	mg/L
E. Coli	1	MPN/100mL
Total Coliform	179	MPN/100mL
Ammonia-N	0.0372J	mg/L
Total Kjeldahl Nitrogen	1.17	mg/L
Total Phosphorus	0.114	mg/L
Total Suspended Solids	6.94	mg/L

Client Sample ID: **SW-9**
 Lab Sample ID: 1191950009
Microbiology Laboratory
Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	2	MPN/100mL
Fecal Coliform	1.0	col/100mL
Total Coliform	248	MPN/100mL
Ammonia-N	0.0451J	mg/L
Total Suspended Solids	1.22	mg/L

Client Sample ID: **SW-10**
 Lab Sample ID: 1191950010
Microbiology Laboratory
Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	2.06	mg/L
Total Coliform	345	MPN/100mL
Ammonia-N	0.0409J	mg/L
Total Phosphorus	0.0377	mg/L
Total Suspended Solids	3.61	mg/L

Client Sample ID: **Shaw**
 Lab Sample ID: 1191950011
Microbiology Laboratory
Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	2	MPN/100mL
Total Coliform	10	MPN/100mL
Ammonia-N	0.0571J	mg/L
Total Suspended Solids	0.521J	mg/L

Client Sample ID: **D1**
 Lab Sample ID: 1191950012
Microbiology Laboratory
Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	1	MPN/100mL
Fecal Coliform	1.0	col/100mL
Total Coliform	308	MPN/100mL
Ammonia-N	0.0556J	mg/L
Total Suspended Solids	1.22	mg/L



Results of SW-1

Client Sample ID: **SW-1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191950001
Lab Project ID: 1191950

Collection Date: 04/29/19 10:14
Received Date: 04/29/19 16:15
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

<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>
Biochemical Oxygen Demand	10.1	2.00	2.00	mg/L	1		04/30/19 15:00

Batch Information

Analytical Batch: BOD6296
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 04/30/19 15:00
Container ID: 1191950001-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>
Fecal Coliform	1.00 U	1.00	1.00	col/100mL	1		04/29/19 17:46

Batch Information

Analytical Batch: BTF17294
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 04/29/19 17:46
Container ID: 1191950001-E

<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>
E. Coli	10 U	10	10	MPN/100r	10		04/29/19 17:52
Total Coliform	4110	10	10	MPN/100r	10		04/29/19 17:52

Batch Information

Analytical Batch: BTF17298
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 04/29/19 17:52
Container ID: 1191950001-F



Results of SW-1

Client Sample ID: **SW-1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191950001
Lab Project ID: 1191950

Collection Date: 04/29/19 10:14
Received Date: 04/29/19 16:15
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>
Nitrate-N	0.100 U	0.200	0.0500	mg/L	1		04/29/19 18:22
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		04/29/19 18:22

Batch Information

Analytical Batch: WIC5898
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 04/29/19 18:22
Container ID: 1191950001-C

Prep Batch: WXX12797
Prep Method: METHOD
Prep Date/Time: 04/29/19 17:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	16.0	1.06	0.330	mg/L	1		05/01/19 14:58

Batch Information

Analytical Batch: STS6253
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/01/19 14:58
Container ID: 1191950001-B

<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 Kjeldahl Nitrogen	0.920 J	1.00	0.310	mg/L	1		05/02/19 14:15

Batch Information

Analytical Batch: WDA4548
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/02/19 14:15
Container ID: 1191950001-D

Prep Batch: WXX12800
Prep Method: METHOD
Prep Date/Time: 04/30/19 15:40
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.155	0.100	0.0310	mg/L	1		04/29/19 17:26

Print Date: 05/06/2019 12:32:01PM

J flagging is activated

Results of SW-1

Client Sample ID: **SW-1**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1191950001
 Lab Project ID: 1191950

Collection Date: 04/29/19 10:14
 Received Date: 04/29/19 16:15
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4545
 Analytical Method: SM21 4500-NH3 G
 Analyst: DMM
 Analytical Date/Time: 04/29/19 17:26
 Container ID: 1191950001-D

Prep Batch: WXX12796
 Prep Method: METHOD
 Prep Date/Time: 04/29/19 17:10
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.275	0.0200	0.00500	mg/L	1		05/01/19 14:10

Batch Information

Analytical Batch: WDA4546
 Analytical Method: SM21 4500P-B,E
 Analyst: DMM
 Analytical Date/Time: 05/01/19 14:10
 Container ID: 1191950001-D

Prep Batch: WXX12798
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 04/30/19 15:55
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL



Results of **SW-2**

Client Sample ID: **SW-2**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191950002
Lab Project ID: 1191950

Collection Date: 04/29/19 10:21
Received Date: 04/29/19 16:15
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

<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>
Biochemical Oxygen Demand	3.35	2.00	2.00	mg/L	1		04/30/19 15:00

Batch Information

Analytical Batch: BOD6296
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 04/30/19 15:00
Container ID: 1191950002-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>
Fecal Coliform	1.00 U	1.00	1.00	col/100mL	1		04/29/19 17:46

Batch Information

Analytical Batch: BTF17294
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 04/29/19 17:46
Container ID: 1191950002-E

<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>
E. Coli	1 U	1	1	MPN/100r	1		04/29/19 17:52
Total Coliform	54	1	1	MPN/100r	1		04/29/19 17:52

Batch Information

Analytical Batch: BTF17298
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 04/29/19 17:52
Container ID: 1191950002-F



Results of **SW-2**

Client Sample ID: **SW-2**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191950002
Lab Project ID: 1191950

Collection Date: 04/29/19 10:21
Received Date: 04/29/19 16:15
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>
Nitrate-N	0.100 U	0.200	0.0500	mg/L	1		04/29/19 19:19
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		04/29/19 19:19

Batch Information

Analytical Batch: WIC5898
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 04/29/19 19:19
Container ID: 1191950002-C

Prep Batch: WXX12797
Prep Method: METHOD
Prep Date/Time: 04/29/19 17:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	3.37	1.05	0.326	mg/L	1		05/01/19 14:58

Batch Information

Analytical Batch: STS6253
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/01/19 14:58
Container ID: 1191950002-B

<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 Kjeldahl Nitrogen	0.853 J	1.00	0.310	mg/L	1		05/02/19 14:16

Batch Information

Analytical Batch: WDA4548
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/02/19 14:16
Container ID: 1191950002-D

Prep Batch: WXX12800
Prep Method: METHOD
Prep Date/Time: 04/30/19 15:40
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0625 J	0.100	0.0310	mg/L	1		04/29/19 17:31

Results of SW-2

Client Sample ID: **SW-2**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1191950002
 Lab Project ID: 1191950

Collection Date: 04/29/19 10:21
 Received Date: 04/29/19 16:15
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4545
 Analytical Method: SM21 4500-NH3 G
 Analyst: DMM
 Analytical Date/Time: 04/29/19 17:31
 Container ID: 1191950002-D

Prep Batch: WXX12796
 Prep Method: METHOD
 Prep Date/Time: 04/29/19 17:10
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0502	0.0200	0.00500	mg/L	1		05/01/19 14:11

Batch Information

Analytical Batch: WDA4546
 Analytical Method: SM21 4500P-B,E
 Analyst: DMM
 Analytical Date/Time: 05/01/19 14:11
 Container ID: 1191950002-D

Prep Batch: WXX12798
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 04/30/19 15:55
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL



Results of **SW-3**

Client Sample ID: **SW-3**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191950003
Lab Project ID: 1191950

Collection Date: 04/29/19 11:00
Received Date: 04/29/19 16:15
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

<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>
Biochemical Oxygen Demand	2.00 U	2.00	2.00	mg/L	1		04/30/19 15:00

Batch Information

Analytical Batch: BOD6296
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 04/30/19 15:00
Container ID: 1191950003-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>
Fecal Coliform	1.00 U	1.00	1.00	col/100mL	1		04/29/19 17:46

Batch Information

Analytical Batch: BTF17294
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 04/29/19 17:46
Container ID: 1191950003-E

<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>
E. Coli	1 U	1	1	MPN/100r	1		04/29/19 17:52
Total Coliform	71	1	1	MPN/100r	1		04/29/19 17:52

Batch Information

Analytical Batch: BTF17298
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 04/29/19 17:52
Container ID: 1191950003-F



Results of **SW-3**

Client Sample ID: **SW-3**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191950003
Lab Project ID: 1191950

Collection Date: 04/29/19 11:00
Received Date: 04/29/19 16:15
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>
Nitrate-N	0.100 U	0.200	0.0500	mg/L	1		04/29/19 19:38
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		04/29/19 19:38

Batch Information

Analytical Batch: WIC5898
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 04/29/19 19:38
Container ID: 1191950003-C

Prep Batch: WXX12797
Prep Method: METHOD
Prep Date/Time: 04/29/19 17:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	1.35	1.04	0.323	mg/L	1		05/01/19 14:58

Batch Information

Analytical Batch: STS6253
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/01/19 14:58
Container ID: 1191950003-B

<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 Kjeldahl Nitrogen	0.500 U	1.00	0.310	mg/L	1		05/02/19 14:17

Batch Information

Analytical Batch: WDA4548
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/02/19 14:17
Container ID: 1191950003-D

Prep Batch: WXX12800
Prep Method: METHOD
Prep Date/Time: 04/30/19 15:40
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0555 J	0.100	0.0310	mg/L	1		04/29/19 17:33



Results of **SW-3**

Client Sample ID: **SW-3**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191950003
Lab Project ID: 1191950

Collection Date: 04/29/19 11:00
Received Date: 04/29/19 16:15
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4545
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 04/29/19 17:33
Container ID: 1191950003-D

Prep Batch: WXX12796
Prep Method: METHOD
Prep Date/Time: 04/29/19 17:10
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0100 U	0.0200	0.00500	mg/L	1		05/01/19 14:16

Batch Information

Analytical Batch: WDA4546
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 05/01/19 14:16
Container ID: 1191950003-D

Prep Batch: WXX12798
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/30/19 15:55
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL



Results of SW-4

Client Sample ID: **SW-4**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191950004
Lab Project ID: 1191950

Collection Date: 04/29/19 12:10
Received Date: 04/29/19 16:15
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

<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>
Biochemical Oxygen Demand	4.08	2.00	2.00	mg/L	1		04/30/19 15:00

Batch Information

Analytical Batch: BOD6296
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 04/30/19 15:00
Container ID: 1191950004-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>
Fecal Coliform	1.00 U	1.00	1.00	col/100mL	1		04/29/19 17:46

Batch Information

Analytical Batch: BTF17294
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 04/29/19 17:46
Container ID: 1191950004-E

<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>
E. Coli	1 U	1	1	MPN/100r	1		04/29/19 17:52
Total Coliform	16	1	1	MPN/100r	1		04/29/19 17:52

Batch Information

Analytical Batch: BTF17298
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 04/29/19 17:52
Container ID: 1191950004-F



Results of SW-4

Client Sample ID: **SW-4**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1191950004
 Lab Project ID: 1191950

Collection Date: 04/29/19 12:10
 Received Date: 04/29/19 16:15
 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>
Nitrate-N	0.100 U	0.200	0.0500	mg/L	1		04/29/19 19:57
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		04/29/19 19:57

Batch Information

Analytical Batch: WIC5898
 Analytical Method: EPA 300.0
 Analyst: DMM
 Analytical Date/Time: 04/29/19 19:57
 Container ID: 1191950004-C

Prep Batch: WXX12797
 Prep Method: METHOD
 Prep Date/Time: 04/29/19 17:00
 Prep Initial Wt./Vol.: 10 mL
 Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	2.24	1.02	0.316	mg/L	1		05/01/19 14:58

Batch Information

Analytical Batch: STS6253
 Analytical Method: SM21 2540D
 Analyst: EWW
 Analytical Date/Time: 05/01/19 14:58
 Container ID: 1191950004-B

<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 Kjeldahl Nitrogen	0.500 U	1.00	0.310	mg/L	1		05/02/19 14:24

Batch Information

Analytical Batch: WDA4548
 Analytical Method: SM21 4500-N D
 Analyst: DMM
 Analytical Date/Time: 05/02/19 14:24
 Container ID: 1191950004-D

Prep Batch: WXX12800
 Prep Method: METHOD
 Prep Date/Time: 04/30/19 15:40
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.106	0.100	0.0310	mg/L	1		04/29/19 17:35

Print Date: 05/06/2019 12:32:01PM

J flagging is activated

Results of SW-4

Client Sample ID: **SW-4**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1191950004
 Lab Project ID: 1191950

Collection Date: 04/29/19 12:10
 Received Date: 04/29/19 16:15
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4545
 Analytical Method: SM21 4500-NH3 G
 Analyst: DMM
 Analytical Date/Time: 04/29/19 17:35
 Container ID: 1191950004-D

Prep Batch: WXX12796
 Prep Method: METHOD
 Prep Date/Time: 04/29/19 17:10
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0100 U	0.0200	0.00500	mg/L	1		05/01/19 14:17

Batch Information

Analytical Batch: WDA4546
 Analytical Method: SM21 4500P-B,E
 Analyst: DMM
 Analytical Date/Time: 05/01/19 14:17
 Container ID: 1191950004-D

Prep Batch: WXX12798
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 04/30/19 15:55
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL



Results of SW-5

Client Sample ID: **SW-5**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191950005
Lab Project ID: 1191950

Collection Date: 04/29/19 12:33
Received Date: 04/29/19 16:15
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

<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>
Biochemical Oxygen Demand	2.00 U	2.00	2.00	mg/L	1		04/30/19 15:00

Batch Information

Analytical Batch: BOD6296
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 04/30/19 15:00
Container ID: 1191950005-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>
Fecal Coliform	1.0	1.00	1.00	col/100mL	1		04/29/19 17:46

Batch Information

Analytical Batch: BTF17294
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 04/29/19 17:46
Container ID: 1191950005-E

<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>
E. Coli	1 U	1	1	MPN/100r	1		04/29/19 17:52
Total Coliform	517	1	1	MPN/100r	1		04/29/19 17:52

Batch Information

Analytical Batch: BTF17298
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 04/29/19 17:52
Container ID: 1191950005-F



Results of **SW-5**

Client Sample ID: **SW-5**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191950005
Lab Project ID: 1191950

Collection Date: 04/29/19 12:33
Received Date: 04/29/19 16:15
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>
Nitrate-N	0.100 U	0.200	0.0500	mg/L	1		04/29/19 20:16
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		04/29/19 20:16

Batch Information

Analytical Batch: WIC5898
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 04/29/19 20:16
Container ID: 1191950005-C

Prep Batch: WXX12797
Prep Method: METHOD
Prep Date/Time: 04/29/19 17:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	3.09	1.06	0.330	mg/L	1		05/01/19 14:58

Batch Information

Analytical Batch: STS6253
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/01/19 14:58
Container ID: 1191950005-B

<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 Kjeldahl Nitrogen	0.500 U	1.00	0.310	mg/L	1		05/02/19 14:25

Batch Information

Analytical Batch: WDA4548
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/02/19 14:25
Container ID: 1191950005-D

Prep Batch: WXX12800
Prep Method: METHOD
Prep Date/Time: 04/30/19 15:40
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0653 J	0.100	0.0310	mg/L	1		04/29/19 17:36



Results of **SW-5**

Client Sample ID: **SW-5**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191950005
Lab Project ID: 1191950

Collection Date: 04/29/19 12:33
Received Date: 04/29/19 16:15
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4545
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 04/29/19 17:36
Container ID: 1191950005-D

Prep Batch: WXX12796
Prep Method: METHOD
Prep Date/Time: 04/29/19 17:10
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0190 J	0.0200	0.00500	mg/L	1		05/01/19 14:18

Batch Information

Analytical Batch: WDA4546
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 05/01/19 14:18
Container ID: 1191950005-D

Prep Batch: WXX12798
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/30/19 15:55
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL



Results of SW-6

Client Sample ID: **SW-6**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191950006
Lab Project ID: 1191950

Collection Date: 04/29/19 11:56
Received Date: 04/29/19 16:15
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

<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>
Biochemical Oxygen Demand	2.00 U	2.00	2.00	mg/L	1		04/30/19 15:00

Batch Information

Analytical Batch: BOD6296
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 04/30/19 15:00
Container ID: 1191950006-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>
Fecal Coliform	1.00 U	1.00	1.00	col/100mL	1		04/29/19 17:46

Batch Information

Analytical Batch: BTF17294
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 04/29/19 17:46
Container ID: 1191950006-E

<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>
E. Coli	1	1	1	MPN/100r	1		04/29/19 17:52
Total Coliform	261	1	1	MPN/100r	1		04/29/19 17:52

Batch Information

Analytical Batch: BTF17298
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 04/29/19 17:52
Container ID: 1191950006-F



Results of SW-6

Client Sample ID: SW-6
Client Project ID: Wasilla WWTP
Lab Sample ID: 1191950006
Lab Project ID: 1191950

Collection Date: 04/29/19 11:56
Received Date: 04/29/19 16:15
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows include Nitrate-N and Nitrite-N.

Batch Information

Analytical Batch: WIC5898
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 04/29/19 21:13
Container ID: 1191950006-C
Prep Batch: WXX12797
Prep Method: METHOD
Prep Date/Time: 04/29/19 17:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Total Suspended Solids.

Batch Information

Analytical Batch: STS6253
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/01/19 14:58
Container ID: 1191950006-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Total Kjeldahl Nitrogen.

Batch Information

Analytical Batch: WDA4548
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/02/19 14:26
Container ID: 1191950006-D
Prep Batch: WXX12800
Prep Method: METHOD
Prep Date/Time: 04/30/19 15:40
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Ammonia-N.



Results of **SW-6**

Client Sample ID: **SW-6**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191950006
Lab Project ID: 1191950

Collection Date: 04/29/19 11:56
Received Date: 04/29/19 16:15
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4545
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 04/29/19 17:41
Container ID: 1191950006-D

Prep Batch: WXX12796
Prep Method: METHOD
Prep Date/Time: 04/29/19 17:10
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0100 U	0.0200	0.00500	mg/L	1		05/01/19 14:19

Batch Information

Analytical Batch: WDA4546
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 05/01/19 14:19
Container ID: 1191950006-D

Prep Batch: WXX12798
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/30/19 15:55
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL



Results of SW-7

Client Sample ID: **SW-7**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191950007
Lab Project ID: 1191950

Collection Date: 04/29/19 11:38
Received Date: 04/29/19 16:15
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

<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>
Biochemical Oxygen Demand	2.00 U	2.00	2.00	mg/L	1		04/30/19 15:00

Batch Information

Analytical Batch: BOD6296
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 04/30/19 15:00
Container ID: 1191950007-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>
Fecal Coliform	1.00 U	1.00	1.00	col/100mL	1		04/29/19 17:46

Batch Information

Analytical Batch: BTF17294
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 04/29/19 17:46
Container ID: 1191950007-E

<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>
E. Coli	1 U	1	1	MPN/100r	1		04/29/19 17:52
Total Coliform	345	1	1	MPN/100r	1		04/29/19 17:52

Batch Information

Analytical Batch: BTF17298
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 04/29/19 17:52
Container ID: 1191950007-F



Results of **SW-7**

Client Sample ID: **SW-7**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191950007
Lab Project ID: 1191950

Collection Date: 04/29/19 11:38
Received Date: 04/29/19 16:15
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>
Nitrate-N	0.100 U	0.200	0.0500	mg/L	1		04/29/19 21:32
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		04/29/19 21:32

Batch Information

Analytical Batch: WIC5898
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 04/29/19 21:32
Container ID: 1191950007-C

Prep Batch: WXX12797
Prep Method: METHOD
Prep Date/Time: 04/29/19 17:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	1.43	1.02	0.316	mg/L	1		05/01/19 14:58

Batch Information

Analytical Batch: STS6253
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/01/19 14:58
Container ID: 1191950007-B

<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 Kjeldahl Nitrogen	0.500 U	1.00	0.310	mg/L	1		05/02/19 14:28

Batch Information

Analytical Batch: WDA4548
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/02/19 14:28
Container ID: 1191950007-D

Prep Batch: WXX12800
Prep Method: METHOD
Prep Date/Time: 04/30/19 15:40
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0508 J	0.100	0.0310	mg/L	1		04/29/19 17:43

Results of SW-7

Client Sample ID: **SW-7**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1191950007
 Lab Project ID: 1191950

Collection Date: 04/29/19 11:38
 Received Date: 04/29/19 16:15
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4545
 Analytical Method: SM21 4500-NH3 G
 Analyst: DMM
 Analytical Date/Time: 04/29/19 17:43
 Container ID: 1191950007-D

Prep Batch: WXX12796
 Prep Method: METHOD
 Prep Date/Time: 04/29/19 17:10
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.00560 J	0.0200	0.00500	mg/L	1		05/01/19 14:20

Batch Information

Analytical Batch: WDA4546
 Analytical Method: SM21 4500P-B,E
 Analyst: DMM
 Analytical Date/Time: 05/01/19 14:20
 Container ID: 1191950007-D

Prep Batch: WXX12798
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 04/30/19 15:55
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL



Results of SW-8

Client Sample ID: **SW-8**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191950008
Lab Project ID: 1191950

Collection Date: 04/29/19 14:20
Received Date: 04/29/19 16:15
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

<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>
Biochemical Oxygen Demand	3.29	2.00	2.00	mg/L	1		04/30/19 15:00

Batch Information

Analytical Batch: BOD6296
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 04/30/19 15:00
Container ID: 1191950008-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>
Fecal Coliform	1.00 U	1.00	1.00	col/100mL	1		04/29/19 17:46

Batch Information

Analytical Batch: BTF17294
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 04/29/19 17:46
Container ID: 1191950008-E

<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>
E. Coli	1	1	1	MPN/100r	1		04/29/19 17:52
Total Coliform	179	1	1	MPN/100r	1		04/29/19 17:52

Batch Information

Analytical Batch: BTF17298
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 04/29/19 17:52
Container ID: 1191950008-F



Results of SW-8

Client Sample ID: **SW-8**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191950008
Lab Project ID: 1191950

Collection Date: 04/29/19 14:20
Received Date: 04/29/19 16:15
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>
Nitrate-N	0.100 U	0.200	0.0500	mg/L	1		04/29/19 21:51
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		04/29/19 21:51

Batch Information

Analytical Batch: WIC5898
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 04/29/19 21:51
Container ID: 1191950008-C

Prep Batch: WXX12797
Prep Method: METHOD
Prep Date/Time: 04/29/19 17:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	6.94	1.02	0.316	mg/L	1		05/01/19 14:58

Batch Information

Analytical Batch: STS6253
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/01/19 14:58
Container ID: 1191950008-B

<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 Kjeldahl Nitrogen	1.17	1.00	0.310	mg/L	1		05/02/19 14:29

Batch Information

Analytical Batch: WDA4548
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/02/19 14:29
Container ID: 1191950008-D

Prep Batch: WXX12800
Prep Method: METHOD
Prep Date/Time: 04/30/19 15:40
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0372 J	0.100	0.0310	mg/L	1		04/29/19 17:45

Results of SW-8

Client Sample ID: **SW-8**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1191950008
 Lab Project ID: 1191950

Collection Date: 04/29/19 14:20
 Received Date: 04/29/19 16:15
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4545
 Analytical Method: SM21 4500-NH3 G
 Analyst: DMM
 Analytical Date/Time: 04/29/19 17:45
 Container ID: 1191950008-D

Prep Batch: WXX12796
 Prep Method: METHOD
 Prep Date/Time: 04/29/19 17:10
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.114	0.0200	0.00500	mg/L	1		05/01/19 14:21

Batch Information

Analytical Batch: WDA4546
 Analytical Method: SM21 4500P-B,E
 Analyst: DMM
 Analytical Date/Time: 05/01/19 14:21
 Container ID: 1191950008-D

Prep Batch: WXX12798
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 04/30/19 15:55
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL



Results of SW-9

Client Sample ID: **SW-9**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191950009
Lab Project ID: 1191950

Collection Date: 04/29/19 14:00
Received Date: 04/29/19 16:15
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

<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>
Biochemical Oxygen Demand	2.00 U	2.00	2.00	mg/L	1		04/30/19 15:00

Batch Information

Analytical Batch: BOD6296
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 04/30/19 15:00
Container ID: 1191950009-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>
Fecal Coliform	1.0	1.00	1.00	col/100mL	1		04/29/19 18:08

Batch Information

Analytical Batch: BTF17294
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 04/29/19 18:08
Container ID: 1191950009-E

<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>
E. Coli	2	1	1	MPN/100r	1		04/29/19 17:52
Total Coliform	248	1	1	MPN/100r	1		04/29/19 17:52

Batch Information

Analytical Batch: BTF17298
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 04/29/19 17:52
Container ID: 1191950009-F



Results of **SW-9**

Client Sample ID: **SW-9**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191950009
Lab Project ID: 1191950

Collection Date: 04/29/19 14:00
Received Date: 04/29/19 16:15
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>
Nitrate-N	0.100 U	0.200	0.0500	mg/L	1		04/29/19 22:10
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		04/29/19 22:10

Batch Information

Analytical Batch: WIC5898
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 04/29/19 22:10
Container ID: 1191950009-C

Prep Batch: WXX12797
Prep Method: METHOD
Prep Date/Time: 04/29/19 17:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	1.22	1.02	0.316	mg/L	1		05/01/19 14:58

Batch Information

Analytical Batch: STS6253
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/01/19 14:58
Container ID: 1191950009-B

<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 Kjeldahl Nitrogen	0.500 U	1.00	0.310	mg/L	1		05/02/19 14:30

Batch Information

Analytical Batch: WDA4548
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/02/19 14:30
Container ID: 1191950009-D

Prep Batch: WXX12800
Prep Method: METHOD
Prep Date/Time: 04/30/19 15:40
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0451 J	0.100	0.0310	mg/L	1		04/29/19 17:46

Results of SW-9

Client Sample ID: **SW-9**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1191950009
 Lab Project ID: 1191950

Collection Date: 04/29/19 14:00
 Received Date: 04/29/19 16:15
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4545
 Analytical Method: SM21 4500-NH3 G
 Analyst: DMM
 Analytical Date/Time: 04/29/19 17:46
 Container ID: 1191950009-D

Prep Batch: WXX12796
 Prep Method: METHOD
 Prep Date/Time: 04/29/19 17:10
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0100 U	0.0200	0.00500	mg/L	1		05/01/19 14:22

Batch Information

Analytical Batch: WDA4546
 Analytical Method: SM21 4500P-B,E
 Analyst: DMM
 Analytical Date/Time: 05/01/19 14:22
 Container ID: 1191950009-D

Prep Batch: WXX12798
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 04/30/19 15:55
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL



Results of **SW-10**

Client Sample ID: **SW-10**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191950010
Lab Project ID: 1191950

Collection Date: 04/29/19 13:45
Received Date: 04/29/19 16:15
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

<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>
Biochemical Oxygen Demand	2.06	2.00	2.00	mg/L	1		04/30/19 15:00

Batch Information

Analytical Batch: BOD6296
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 04/30/19 15:00
Container ID: 1191950010-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>
Fecal Coliform	1.00 U	1.00	1.00	col/100mL	1		04/29/19 18:08

Batch Information

Analytical Batch: BTF17294
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 04/29/19 18:08
Container ID: 1191950010-E

<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>
E. Coli	1 U	1	1	MPN/100r	1		04/29/19 17:52
Total Coliform	345	1	1	MPN/100r	1		04/29/19 17:52

Batch Information

Analytical Batch: BTF17298
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 04/29/19 17:52
Container ID: 1191950010-F



Results of SW-10

Client Sample ID: SW-10
Client Project ID: Wasilla WWTP
Lab Sample ID: 1191950010
Lab Project ID: 1191950

Collection Date: 04/29/19 13:45
Received Date: 04/29/19 16:15
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows include Nitrate-N and Nitrite-N.

Batch Information

Analytical Batch: WIC5898
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 04/29/19 22:29
Container ID: 1191950010-C
Prep Batch: WXX12797
Prep Method: METHOD
Prep Date/Time: 04/29/19 17:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Total Suspended Solids.

Batch Information

Analytical Batch: STS6253
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/01/19 14:58
Container ID: 1191950010-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Total Kjeldahl Nitrogen.

Batch Information

Analytical Batch: WDA4548
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/02/19 14:31
Container ID: 1191950010-D
Prep Batch: WXX12800
Prep Method: METHOD
Prep Date/Time: 04/30/19 15:40
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Ammonia-N.



Results of **SW-10**

Client Sample ID: **SW-10**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191950010
Lab Project ID: 1191950

Collection Date: 04/29/19 13:45
Received Date: 04/29/19 16:15
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4545
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 04/29/19 17:48
Container ID: 1191950010-D

Prep Batch: WXX12796
Prep Method: METHOD
Prep Date/Time: 04/29/19 17:10
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0377	0.0200	0.00500	mg/L	1		05/01/19 14:23

Batch Information

Analytical Batch: WDA4546
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 05/01/19 14:23
Container ID: 1191950010-D

Prep Batch: WXX12798
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/30/19 15:55
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL



Results of Shaw

Client Sample ID: **Shaw**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191950011
Lab Project ID: 1191950

Collection Date: 04/29/19 13:02
Received Date: 04/29/19 16:15
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

<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>
Biochemical Oxygen Demand	2.00 U	2.00	2.00	mg/L	1		04/30/19 15:00

Batch Information

Analytical Batch: BOD6296
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 04/30/19 15:00
Container ID: 1191950011-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>
Fecal Coliform	1.00 U	1.00	1.00	col/100mL	1		04/29/19 18:08

Batch Information

Analytical Batch: BTF17294
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 04/29/19 18:08
Container ID: 1191950011-E

<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>
E. Coli	2	1	1	MPN/100r	1		04/29/19 17:52
Total Coliform	10	1	1	MPN/100r	1		04/29/19 17:52

Batch Information

Analytical Batch: BTF17298
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 04/29/19 17:52
Container ID: 1191950011-F



Results of Shaw

Client Sample ID: **Shaw**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191950011
Lab Project ID: 1191950

Collection Date: 04/29/19 13:02
Received Date: 04/29/19 16:15
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>
Nitrate-N	0.100 U	0.200	0.0500	mg/L	1		04/29/19 22:48
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		04/29/19 22:48

Batch Information

Analytical Batch: WIC5898
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 04/29/19 22:48
Container ID: 1191950011-C

Prep Batch: WXX12797
Prep Method: METHOD
Prep Date/Time: 04/29/19 17:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	0.521 J	1.04	0.323	mg/L	1		05/01/19 14:58

Batch Information

Analytical Batch: STS6253
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/01/19 14:58
Container ID: 1191950011-B

<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 Kjeldahl Nitrogen	0.500 U	1.00	0.310	mg/L	1		05/02/19 14:33

Batch Information

Analytical Batch: WDA4548
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/02/19 14:33
Container ID: 1191950011-D

Prep Batch: WXX12800
Prep Method: METHOD
Prep Date/Time: 04/30/19 15:40
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0571 J	0.100	0.0310	mg/L	1		04/29/19 17:50

Print Date: 05/06/2019 12:32:01PM

J flagging is activated

Results of Shaw

Client Sample ID: **Shaw**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1191950011
 Lab Project ID: 1191950

Collection Date: 04/29/19 13:02
 Received Date: 04/29/19 16:15
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4545
 Analytical Method: SM21 4500-NH3 G
 Analyst: DMM
 Analytical Date/Time: 04/29/19 17:50
 Container ID: 1191950011-D

Prep Batch: WXX12796
 Prep Method: METHOD
 Prep Date/Time: 04/29/19 17:10
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0100 U	0.0200	0.00500	mg/L	1		05/01/19 14:24

Batch Information

Analytical Batch: WDA4546
 Analytical Method: SM21 4500P-B,E
 Analyst: DMM
 Analytical Date/Time: 05/01/19 14:24
 Container ID: 1191950011-D

Prep Batch: WXX12798
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 04/30/19 15:55
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL



Results of D1

Client Sample ID: **D1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191950012
Lab Project ID: 1191950

Collection Date: 04/29/19 14:00
Received Date: 04/29/19 16:15
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

<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>
Biochemical Oxygen Demand	2.00 U	2.00	2.00	mg/L	1		04/30/19 15:00

Batch Information

Analytical Batch: BOD6296
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 04/30/19 15:00
Container ID: 1191950012-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>
Fecal Coliform	1.0	1.00	1.00	col/100mL	1		04/29/19 18:08

Batch Information

Analytical Batch: BTF17294
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 04/29/19 18:08
Container ID: 1191950012-E

<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>
E. Coli	1	1	1	MPN/100r	1		04/29/19 17:52
Total Coliform	308	1	1	MPN/100r	1		04/29/19 17:52

Batch Information

Analytical Batch: BTF17298
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 04/29/19 17:52
Container ID: 1191950012-F



Results of D1

Client Sample ID: **D1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191950012
Lab Project ID: 1191950

Collection Date: 04/29/19 14:00
Received Date: 04/29/19 16:15
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>
Nitrate-N	0.100 U	0.200	0.0500	mg/L	1		04/29/19 23:07
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		04/29/19 23:07

Batch Information

Analytical Batch: WIC5898
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 04/29/19 23:07
Container ID: 1191950012-C

Prep Batch: WXX12797
Prep Method: METHOD
Prep Date/Time: 04/29/19 17:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	1.22	1.02	0.316	mg/L	1		05/01/19 14:58

Batch Information

Analytical Batch: STS6253
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/01/19 14:58
Container ID: 1191950012-B

<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 Kjeldahl Nitrogen	0.500 U	1.00	0.310	mg/L	1		05/02/19 14:34

Batch Information

Analytical Batch: WDA4548
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/02/19 14:34
Container ID: 1191950012-D

Prep Batch: WXX12800
Prep Method: METHOD
Prep Date/Time: 04/30/19 15:40
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0556 J	0.100	0.0310	mg/L	1		04/29/19 17:51

Print Date: 05/06/2019 12:32:01PM

J flagging is activated

Results of D1

Client Sample ID: **D1**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1191950012
 Lab Project ID: 1191950

Collection Date: 04/29/19 14:00
 Received Date: 04/29/19 16:15
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4545
 Analytical Method: SM21 4500-NH3 G
 Analyst: DMM
 Analytical Date/Time: 04/29/19 17:51
 Container ID: 1191950012-D

Prep Batch: WXX12796
 Prep Method: METHOD
 Prep Date/Time: 04/29/19 17:10
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0100 U	0.0200	0.00500	mg/L	1		05/01/19 14:27

Batch Information

Analytical Batch: WDA4546
 Analytical Method: SM21 4500P-B,E
 Analyst: DMM
 Analytical Date/Time: 05/01/19 14:27
 Container ID: 1191950012-D

Prep Batch: WXX12798
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 04/30/19 15:55
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Method Blank

Blank ID: MB for HBN 1793118 [BOD/6296]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1505104

QC for Samples:

1191950001, 1191950002, 1191950003, 1191950004, 1191950005, 1191950006, 1191950007, 1191950008, 1191950009, 1191950010, 1191950011, 1191950012

Results by SM21 5210B

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Biochemical Oxygen Demand	2.00U	2.00	2.00	mg/L

Batch Information

Analytical Batch: BOD6296

Analytical Method: SM21 5210B

Instrument:

Analyst: ACF

Analytical Date/Time: 4/30/2019 3:00:00PM

Print Date: 05/06/2019 12:32:06PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1191950 [BOD6296]

Blank Spike Lab ID: 1505105

Date Analyzed: 04/30/2019 15:00

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1191950001, 1191950002, 1191950003, 1191950004, 1191950005, 1191950006, 1191950007, 1191950008, 1191950009, 1191950010, 1191950011, 1191950012

Results by SM21 5210B

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Biochemical Oxygen Demand	198	214	108	(84.6-115.4

Batch Information

Analytical Batch: BOD6296

Analytical Method: SM21 5210B

Instrument:

Analyst: ACF

Print Date: 05/06/2019 12:32:08PM



Method Blank

Blank ID: MB for HBN 1793095 [BTF/17294]
Blank Lab ID: 1505057

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1191950001, 1191950002, 1191950003, 1191950004, 1191950005, 1191950006, 1191950007, 1191950008

Results by SM21 9222D

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Fecal Coliform	1.00U	1.00	1.00	col/100mL

Batch Information

Analytical Batch: BTF17294
Analytical Method: SM21 9222D
Instrument:
Analyst: A.L
Analytical Date/Time: 4/29/2019 5:46:05PM

Print Date: 05/06/2019 12:32:09PM

Method Blank

Blank ID: MB for HBN 1793095 [BTF/17294]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1505058

QC for Samples:

1191950001, 1191950002, 1191950003, 1191950004, 1191950005, 1191950006, 1191950007, 1191950008, 1191950009, 1191950010, 1191950011, 1191950012

Results by SM21 9222D

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Fecal Coliform	1.00U	1.00	1.00	col/100mL

Batch Information

Analytical Batch: BTF17294

Analytical Method: SM21 9222D

Instrument:

Analyst: A.L

Analytical Date/Time: 4/29/2019 6:08:05PM

Print Date: 05/06/2019 12:32:09PM

Method Blank

Blank ID: MB for HBN 1793105 [BTF/17298]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1505055

QC for Samples:

1191950001, 1191950002, 1191950003, 1191950004, 1191950005, 1191950006, 1191950007, 1191950008, 1191950009, 1191950010, 1191950011, 1191950012

Results by SM21 9223B

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Total Coliform	1U	1	1	MPN/100m
E. Coli	1U	1	1	MPN/100m

Batch Information

Analytical Batch: BTF17298

Analytical Method: SM21 9223B

Instrument:

Analyst: ACF

Analytical Date/Time: 4/29/2019 2:19:00PM

Print Date: 05/06/2019 12:32:11PM

Method Blank

Blank ID: MB for HBN 1793133 [STS/6253]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1505189

QC for Samples:

1191950001, 1191950002, 1191950003, 1191950004, 1191950005, 1191950006, 1191950007, 1191950008, 1191950009, 1191950010, 1191950011, 1191950012

Results by SM21 2540D

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Total Suspended Solids	0.500U	1.00	0.310	mg/L

Batch Information

Analytical Batch: STS6253

Analytical Method: SM21 2540D

Instrument:

Analyst: EWW

Analytical Date/Time: 5/1/2019 2:58:15PM

Print Date: 05/06/2019 12:32:13PM

Duplicate Sample Summary

Original Sample ID: 1191949002

Duplicate Sample ID: 1505192

QC for Samples:

1191950001, 1191950002, 1191950003, 1191950004, 1191950005, 1191950006, 1191950007, 1191950008, 1191950009, 1191950010, 1191950011, 1191950012

Analysis Date: 05/01/2019 14:58

Matrix: Water (Surface, Eff., Ground)

Results by SM21 2540D

<u>NAME</u>	<u>Original</u>	<u>Duplicate</u>	<u>Units</u>	<u>RPD (%)</u>	<u>RPD CL</u>
Total Suspended Solids	113	109	mg/L	3.60	(< 5)

Batch Information

Analytical Batch: STS6253

Analytical Method: SM21 2540D

Instrument:

Analyst: EWW

Print Date: 05/06/2019 12:32:13PM

Duplicate Sample Summary

Original Sample ID: 1199217001

Analysis Date: 05/01/2019 14:58

Duplicate Sample ID: 1505193

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1191950001, 1191950002, 1191950003, 1191950004, 1191950005, 1191950006, 1191950007, 1191950008, 1191950009, 1191950010, 1191950011, 1191950012

Results by SM21 2540D

<u>NAME</u>	<u>Original</u>	<u>Duplicate</u>	<u>Units</u>	<u>RPD (%)</u>	<u>RPD CL</u>
Total Suspended Solids	9.00	11.2	mg/L	21.80*	(< 5)

Batch Information

Analytical Batch: STS6253

Analytical Method: SM21 2540D

Instrument:

Analyst: EWW

Print Date: 05/06/2019 12:32:13PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1191950 [STS6253]
 Blank Spike Lab ID: 1505190
 Date Analyzed: 05/01/2019 14:58

Spike Duplicate ID: LCSD for HBN 1191950 [STS6253]
 Spike Duplicate Lab ID: 1505191
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1191950001, 1191950002, 1191950003, 1191950004, 1191950005, 1191950006, 1191950007, 1191950008, 1191950009, 1191950010, 1191950011, 1191950012

Results by SM21 2540D

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Suspended Solids	25	23.2	93	25	24.2	97	(75-125)	4.20	(< 5)

Batch Information

Analytical Batch: **STS6253**
 Analytical Method: **SM21 2540D**
 Instrument:
 Analyst: **EWV**

Print Date: 05/06/2019 12:32:15PM

Method Blank

Blank ID: MB for HBN 1793122 [WXX/12796]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1505118

QC for Samples:

1191950001, 1191950002, 1191950003, 1191950004, 1191950005, 1191950006, 1191950007, 1191950008, 1191950009, 1191950010, 1191950011, 1191950012

Results by SM21 4500-NH3 G

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Ammonia-N	0.0453J	0.100	0.0310	mg/L

Batch Information

Analytical Batch: WDA4545
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 4/29/2019 5:21:44PM

Prep Batch: WXX12796
Prep Method: METHOD
Prep Date/Time: 4/29/2019 5:10:00PM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Print Date: 05/06/2019 12:32:16PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1191950 [WXX12796]
 Blank Spike Lab ID: 1505119
 Date Analyzed: 04/29/2019 17:23

Spike Duplicate ID: LCSD for HBN 1191950 [WXX12796]
 Spike Duplicate Lab ID: 1505120
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1191950001, 1191950002, 1191950003, 1191950004, 1191950005, 1191950006, 1191950007, 1191950008, 1191950009, 1191950010, 1191950011, 1191950012

Results by SM21 4500-NH3 G

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Ammonia-N	1	0.998	100	1	0.965	97	(75-125)	3.40	(< 25)

Batch Information

Analytical Batch: **WDA4545**
 Analytical Method: **SM21 4500-NH3 G**
 Instrument: **Discrete Analyzer 2**
 Analyst: **DMM**

Prep Batch: **WXX12796**
 Prep Method: **METHOD**
 Prep Date/Time: **04/29/2019 17:10**
 Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
 Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

Matrix Spike Summary

Original Sample ID: 1191950001
 MS Sample ID: 1505121 MS
 MSD Sample ID: 1505122 MSD

Analysis Date: 04/29/2019 17:26
 Analysis Date: 04/29/2019 17:28
 Analysis Date: 04/29/2019 17:30
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1191950001, 1191950002, 1191950003, 1191950004, 1191950005, 1191950006, 1191950007, 1191950008, 1191950009, 1191950010, 1191950011, 1191950012

Results by SM21 4500-NH3 G

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Ammonia-N	0.155	1.00	.801	65 *	1.00	1.05	90	75-125	27.10	* (< 25)

Batch Information

Analytical Batch: WDA4545
 Analytical Method: SM21 4500-NH3 G
 Instrument: Discrete Analyzer 2
 Analyst: DMM
 Analytical Date/Time: 4/29/2019 5:28:28PM

Prep Batch: WXX12796
 Prep Method: Ammonia by SM21 4500F prep (W)
 Prep Date/Time: 4/29/2019 5:10:00PM
 Prep Initial Wt./Vol.: 6.00mL
 Prep Extract Vol: 6.00mL

Method Blank

Blank ID: MB for HBN 1793124 [WXX/12797]
 Blank Lab ID: 1505136

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1191950001, 1191950002, 1191950003, 1191950004, 1191950005, 1191950006, 1191950007, 1191950008, 1191950009, 1191950010, 1191950011, 1191950012

Results by EPA 300.0

<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: WIC5898
 Analytical Method: EPA 300.0
 Instrument: 930 Metrohm compact IC flex
 Analyst: DMM
 Analytical Date/Time: 4/29/2019 5:44:54PM

Prep Batch: WXX12797
 Prep Method: METHOD
 Prep Date/Time: 4/29/2019 5:00:00PM
 Prep Initial Wt./Vol.: 10 mL
 Prep Extract Vol: 10 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1191950 [WXX12797]
 Blank Spike Lab ID: 1505137
 Date Analyzed: 04/29/2019 18:03

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1191950001, 1191950002, 1191950003, 1191950004, 1191950005, 1191950006, 1191950007,
 1191950008, 1191950009, 1191950010, 1191950011, 1191950012

Results by EPA 300.0

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Nitrate-N	5	4.79	96	(90-110)
Nitrite-N	5	4.89	98	(90-110)
Total Nitrate/Nitrite-N	10	9.68	97	(90-110)

Batch Information

Analytical Batch: **WIC5898**
 Analytical Method: **EPA 300.0**
 Instrument: **930 Metrohm compact IC flex**
 Analyst: **DMM**

Prep Batch: **WXX12797**
 Prep Method: **METHOD**
 Prep Date/Time: **04/29/2019 17:00**
 Spike Init Wt./Vol.: 5 mg/L Extract Vol: 10 mL
 Dupe Init Wt./Vol.: Extract Vol:

Matrix Spike Summary

Original Sample ID: 1191950001
 MS Sample ID: 1505138 MS
 MSD Sample ID: 1505139 MSD

Analysis Date: 04/29/2019 18:22
 Analysis Date: 04/29/2019 18:41
 Analysis Date: 04/29/2019 19:00
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1191950001, 1191950002, 1191950003, 1191950004, 1191950005, 1191950006, 1191950007, 1191950008, 1191950009, 1191950010, 1191950011, 1191950012

Results by EPA 300.0

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Nitrate-N	0.100U	5.00	4.9	98	5.00	4.93	99	90-110	0.61	(< 15)
Nitrite-N	0.100U	5.00	4.79	96	5.00	4.89	98	90-110	2.00	(< 15)

Batch Information

Analytical Batch: WIC5898
 Analytical Method: EPA 300.0
 Instrument: 930 Metrohm compact IC flex
 Analyst: DMM
 Analytical Date/Time: 4/29/2019 6:41:57PM

Prep Batch: WXX12797
 Prep Method: EPA 300.0 Extraction Waters/Liquids
 Prep Date/Time: 4/29/2019 5:00:00PM
 Prep Initial Wt./Vol.: 10.00mL
 Prep Extract Vol: 10.00mL

Method Blank

Blank ID: MB for HBN 1793171 [WXX/12798]
Blank Lab ID: 1505375

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1191950001, 1191950002, 1191950003, 1191950004, 1191950005, 1191950006, 1191950007, 1191950008, 1191950009, 1191950010, 1191950011, 1191950012

Results by SM21 4500P-B,E

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Total Phosphorus	0.0100U	0.0200	0.00500	mg/L

Batch Information

Analytical Batch: WDA4546
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 5/1/2019 2:03:52PM

Prep Batch: WXX12798
Prep Method: SM21 4500P-B,E
Prep Date/Time: 4/30/2019 3:55:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/06/2019 12:32:22PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1191950 [WXX12798]
 Blank Spike Lab ID: 1505376
 Date Analyzed: 05/01/2019 14:04

Spike Duplicate ID: LCSD for HBN 1191950 [WXX12798]
 Spike Duplicate Lab ID: 1505377
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1191950001, 1191950002, 1191950003, 1191950004, 1191950005, 1191950006, 1191950007, 1191950008, 1191950009, 1191950010, 1191950011, 1191950012

Results by SM21 4500P-B,E

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Phosphorus	0.2	0.203	101	0.2	0.209	104	(75-125)	2.70	(< 25)

Batch Information

Analytical Batch: **WDA4546**
 Analytical Method: **SM21 4500P-B,E**
 Instrument: **Discrete Analyzer 2**
 Analyst: **DMM**

Prep Batch: **WXX12798**
 Prep Method: **SM21 4500P-B,E**
 Prep Date/Time: **04/30/2019 15:55**
 Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL
 Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

Matrix Spike Summary

Original Sample ID: 1191950002
 MS Sample ID: 1505378 MS
 MSD Sample ID: 1505379 MSD

Analysis Date: 05/01/2019 14:11
 Analysis Date: 05/01/2019 14:12
 Analysis Date: 05/01/2019 14:15
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1191950001, 1191950002, 1191950003, 1191950004, 1191950005, 1191950006, 1191950007, 1191950008, 1191950009, 1191950010, 1191950011, 1191950012

Results by SM21 4500P-B,E

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Phosphorus	0.0502	0.200	.255	103	0.200	0.260	105	75-125	2.00	(< 25)

Batch Information

Analytical Batch: WDA4546
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: DMM
 Analytical Date/Time: 5/1/2019 2:12:40PM

Prep Batch: WXX12798
 Prep Method: Total Phosphorus (W) Ext.
 Prep Date/Time: 4/30/2019 3:55:00PM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL

Method Blank

Blank ID: MB for HBN 1793253 [WXX/12800]
 Blank Lab ID: 1505666

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1191950001, 1191950002, 1191950003, 1191950004, 1191950005, 1191950006, 1191950007, 1191950008, 1191950009, 1191950010, 1191950011, 1191950012

Results by SM21 4500-N D

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Total Kjeldahl Nitrogen	0.500U	1.00	0.310	mg/L

Batch Information

Analytical Batch: WDA4548
 Analytical Method: SM21 4500-N D
 Instrument: Discrete Analyzer 2
 Analyst: DMM
 Analytical Date/Time: 5/2/2019 2:08:33PM

Prep Batch: WXX12800
 Prep Method: METHOD
 Prep Date/Time: 4/30/2019 3:40:00PM
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Print Date: 05/06/2019 12:32:25PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1191950 [WXX12800]
 Blank Spike Lab ID: 1505667
 Date Analyzed: 05/02/2019 14:09

Spike Duplicate ID: LCSD for HBN 1191950 [WXX12800]
 Spike Duplicate Lab ID: 1505670
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1191950001, 1191950002, 1191950003, 1191950004, 1191950005, 1191950006, 1191950007, 1191950008, 1191950009, 1191950010, 1191950011, 1191950012

Results by SM21 4500-N D

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Kjeldahl Nitrogen	4	3.69	92	4	3.66	91	(75-125)	0.93	(< 25)

Batch Information

Analytical Batch: **WDA4548**
 Analytical Method: **SM21 4500-N D**
 Instrument: **Discrete Analyzer 2**
 Analyst: **DMM**

Prep Batch: **WXX12800**
 Prep Method: **METHOD**
 Prep Date/Time: **04/30/2019 15:40**
 Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL
 Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

Matrix Spike Summary

Original Sample ID: 1191950003
 MS Sample ID: 1505668 MS
 MSD Sample ID: 1505669 MSD

Analysis Date: 05/02/2019 14:17
 Analysis Date: 05/02/2019 14:18
 Analysis Date: 05/02/2019 14:20
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1191950001, 1191950002, 1191950003, 1191950004, 1191950005, 1191950006, 1191950007, 1191950008, 1191950009, 1191950010, 1191950011, 1191950012

Results by SM21 4500-N D

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Kjeldahl Nitrogen	0.500U	4.00	2.79	70 *	4.00	2.55	64 *	75-125	8.80	(< 25)

Batch Information

Analytical Batch: WDA4548
 Analytical Method: SM21 4500-N D
 Instrument: Discrete Analyzer 2
 Analyst: DMM
 Analytical Date/Time: 5/2/2019 2:18:58PM

Prep Batch: WXX12800
 Prep Method: Distillation TKN by Phenate (W)
 Prep Date/Time: 4/30/2019 3:40:00PM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL

Print Date: 05/06/2019 12:32:27PM



SGS North America Inc.
CHAIN OF CUSTODY RECORD

1191950



www.us.sgs.com

CLIENT: Stantec		Instructions: _____ d out. Omissions may delay the onset of analysis.				Page <u>1</u> of <u>2</u>										
CONTACT: Jake Alward		PHONE #: 343-5202		Section 3		Preservative										
PROJECT NAME: Wasilla WWTP		PROJECT/PWSID/PERMIT#:		# C O N T A I N E R S	Comp Grab MI (Multi-incremental)	Analysis*						NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS				
REPORTS TO:		E-MAIL:				None	None	None	H2SO4	Na2SO4	Na2SO4					
INVOICE TO: Stantec		QUOTE #:				BOD	TSS	Nitrate/Nitrite	Ammonia/TKN/Tphos	Fecal Coliform	TC Quantitray (1X/10X)					
P.O. #: 20470415		Profile #: 348183														
RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/MATRIX CODE							REMARKS/LOC ID					
	① A-F SW-1	4/29/19	10:14	Water	6	G										
	② A-F SW2		10:21													
	③ A-F SW3		11:00													
	④ A-F SW4		12:10													
	⑤ A-F SW5		12:33													
	⑥ A-F SW6		11:56													
	⑦ A-F SW7		11:38													
	⑧ A-F SW8		14:20													
	⑨ A-F SW9		14:00													
	⑩ A-F SW10		13:45													
Relinquished By: (1)		Date: 4/29/19		Time: 16:15		Received By:		Section 4		DOD Project? Yes No		Data Deliverable Requirements:				
		Relinquished By: (2)		Date:		Time:		Received By:		Cooler ID:						
				Date:		Time:		Received By:		Requested Turnaround Time and/or Special Instructions:						
				Date:		Time:		Received By:		Temp Blank °C: ① 3.2/052 ② 3.0/045 ③ 3.2/045 or Ambient []		Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT				
Relinquished By: (4)		Date: 4/29/19		Time: 16:15		Received For Laboratory By:		Delivery Method: Hand Delivery [] Commerical Delivery []								

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



e-Sample Receipt Form

SGS Workorder #:

1191950



1 1 9 1 9 5 0

Review Criteria		Condition (Yes, No, N/A)	Exceptions Noted below	
Chain of Custody / Temperature Requirements			Yes	Exemption permitted if sampler hand carries/delivers.
Were Custody Seals intact? Note # & location	N/A	Absent		
COC accompanied samples?	N/A			
DOD: Were samples received in COC corresponding coolers?	N/A			
Yes Temperature blank compliant* (i.e., 0-6 °C after CF)?	Yes	**Exemption permitted if chilled & collected <8 hours ago, or for samples where chilling is not required		
If samples received without a temperature blank, the "cooler temperature" will be documented instead & "COOLER TEMP" will be noted to the right. "ambient" or "chilled" will be noted if neither is available.	Yes	Cooler ID:	1	@ 3.0 °C Therm. ID: D52
	Yes	Cooler ID:	2	@ 3.0 °C Therm. ID: D45
	Yes	Cooler ID:	3	@ 3.2 °C Therm. ID: D45
	N/A	Cooler ID:		@ °C Therm. ID:
	N/A			
*If >6°C, were samples collected <8 hours ago?	N/A			
If <0°C, were sample containers ice free?	N/A			
Note: Identify containers received at non-compliant temperature . Use form FS-0029 if more space is needed.				
Holding Time / Documentation / Sample Condition Requirements		Note: Refer to form F-083 "Sample Guide" for specific holding times.		
Were samples received within holding time?	Yes			
Do samples match COC** (i.e., sample IDs, dates/times collected)?	No	Sample 1 container labels time "10:06" does not match COC time "10:14" Logged samples in per COC.		
Note: If times differ <1hr, record details & login per COC. *Note: If sample information on containers differs from COC, SGS will default to COC information				
Were analytical requests clear? (i.e., method is specified for analyses with multiple option for analysis (Ex: BTEX, Metals)	Yes			
Were proper containers (type/mass/volume/preservative***) used?	Yes	N/A	***Exemption permitted for metals (e.g, 200.8/6020A).	
Volatile / LL-Hg Requirements				
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samples?	N/A			
Were all water VOA vials free of headspace (i.e., bubbles ≤ 6mm)?	N/A			
Were all soil VOAs field extracted with MeOH+BFB?	N/A			
Note to Client: Any "No", answer above indicates non-compliance with standard procedures and may impact data quality.				
Additional notes (if applicable):				



Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>	<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>
1191950001-A	No Preservative Required	OK	1191950009-C	No Preservative Required	OK
1191950001-B	No Preservative Required	OK	1191950009-D	H2SO4 to pH < 2	OK
1191950001-C	No Preservative Required	OK	1191950009-E	Na2S2O3 for Chlorine Redu	OK
1191950001-D	H2SO4 to pH < 2	OK	1191950009-F	Na2S2O3 for Chlorine Redu	OK
1191950001-E	Na2S2O3 for Chlorine Redu	OK	1191950010-A	No Preservative Required	OK
1191950001-F	Na2S2O3 for Chlorine Redu	OK	1191950010-B	No Preservative Required	OK
1191950002-A	No Preservative Required	OK	1191950010-C	No Preservative Required	OK
1191950002-B	No Preservative Required	OK	1191950010-D	H2SO4 to pH < 2	OK
1191950002-C	No Preservative Required	OK	1191950010-E	Na2S2O3 for Chlorine Redu	OK
1191950002-D	H2SO4 to pH < 2	OK	1191950010-F	Na2S2O3 for Chlorine Redu	OK
1191950002-E	Na2S2O3 for Chlorine Redu	OK	1191950011-A	No Preservative Required	OK
1191950002-F	Na2S2O3 for Chlorine Redu	OK	1191950011-B	No Preservative Required	OK
1191950003-A	No Preservative Required	OK	1191950011-C	No Preservative Required	OK
1191950003-B	No Preservative Required	OK	1191950011-D	H2SO4 to pH < 2	OK
1191950003-C	No Preservative Required	OK	1191950011-E	Na2S2O3 for Chlorine Redu	OK
1191950003-D	H2SO4 to pH < 2	OK	1191950011-F	Na2S2O3 for Chlorine Redu	OK
1191950003-E	Na2S2O3 for Chlorine Redu	OK	1191950012-A	No Preservative Required	OK
1191950003-F	Na2S2O3 for Chlorine Redu	OK	1191950012-B	No Preservative Required	OK
1191950004-A	No Preservative Required	OK	1191950012-C	No Preservative Required	OK
1191950004-B	No Preservative Required	OK	1191950012-D	H2SO4 to pH < 2	OK
1191950004-C	No Preservative Required	OK	1191950012-E	Na2S2O3 for Chlorine Redu	OK
1191950004-D	H2SO4 to pH < 2	OK	1191950012-F	Na2S2O3 for Chlorine Redu	OK
1191950004-E	Na2S2O3 for Chlorine Redu	OK			
1191950004-F	Na2S2O3 for Chlorine Redu	OK			
1191950005-A	No Preservative Required	OK			
1191950005-B	No Preservative Required	OK			
1191950005-C	No Preservative Required	OK			
1191950005-D	H2SO4 to pH < 2	OK			
1191950005-E	Na2S2O3 for Chlorine Redu	OK			
1191950005-F	Na2S2O3 for Chlorine Redu	OK			
1191950006-A	No Preservative Required	OK			
1191950006-B	No Preservative Required	OK			
1191950006-C	No Preservative Required	OK			
1191950006-D	H2SO4 to pH < 2	OK			
1191950006-E	Na2S2O3 for Chlorine Redu	OK			
1191950006-F	Na2S2O3 for Chlorine Redu	OK			
1191950007-A	No Preservative Required	OK			
1191950007-B	No Preservative Required	OK			
1191950007-C	No Preservative Required	OK			
1191950007-D	H2SO4 to pH < 2	OK			
1191950007-E	Na2S2O3 for Chlorine Redu	OK			
1191950007-F	Na2S2O3 for Chlorine Redu	OK			
1191950008-A	No Preservative Required	OK			
1191950008-B	No Preservative Required	OK			
1191950008-C	No Preservative Required	OK			
1191950008-D	H2SO4 to pH < 2	OK			
1191950008-E	Na2S2O3 for Chlorine Redu	OK			
1191950008-F	Na2S2O3 for Chlorine Redu	OK			
1191950009-A	No Preservative Required	OK			
1191950009-B	No Preservative Required	OK			

Container Id

Preservative

Container
Condition

Container Id

Preservative

Container
Condition

Container Condition Glossary

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

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

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

DM - The container was received damaged.

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

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

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.



Laboratory Report of Analysis

To: Stantec Consulting Services Inc.
725 East Fireweed Lane Suite 200
Anchorage, AK 99503
(907)248-8883

Report Number: **1191980**

Client Project: **Wasilla WWTP**

Dear John Marshall,

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.

Justin Nelson
Project Manager
Justin.Nelson@sgs.com

Date

Case Narrative

SGS Client: **Stantec Consulting Services Inc.**

SGS Project: **1191980**

Project Name/Site: **Wasilla WWTP**

Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

1191980001DUP (1505343) DUP

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

1191980001MS (1505674) MS

4500N-D - Total Kjeldahl Nitrogen - MS recovery is outside of QC criteria. Refer to LCS for accuracy requirements.

1191980001MSD (1505675) MSD

4500N-D - Total Kjeldahl Nitrogen - MSD recovery is outside of QC criteria. Refer to LCSD for accuracy requirements.

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

Print Date: 05/14/2019 10:27:42AM

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, 6020A, 7470A, 7471B, 8015C, 8021B, 8082A, 8260C, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). 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
U	Indicates the analyte was analyzed for but not detected.

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

Sample Summary

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Collected</u>	<u>Received</u>	<u>Matrix</u>
SW11	1191980001	04/30/2019	04/30/2019	Water (Surface, Eff., Ground)
SW12	1191980002	04/30/2019	04/30/2019	Water (Surface, Eff., Ground)
SW13	1191980003	04/30/2019	04/30/2019	Water (Surface, Eff., Ground)
SW14	1191980004	04/30/2019	04/30/2019	Water (Surface, Eff., Ground)
SW15	1191980005	04/30/2019	04/30/2019	Water (Surface, Eff., Ground)
SW16	1191980006	04/30/2019	04/30/2019	Water (Surface, Eff., Ground)
SW17	1191980007	04/30/2019	04/30/2019	Water (Surface, Eff., Ground)
SW18	1191980008	04/30/2019	04/30/2019	Water (Surface, Eff., Ground)
D2	1191980009	04/30/2019	04/30/2019	Water (Surface, Eff., Ground)

<u>Method</u>	<u>Method Description</u>
SM21 4500-NH3 G	Ammonia-N (W) SM21 4500-NH3 G
SM21 5210B	Biochemical Oxygen Demand SM21 5210B
SM21 9222D	Fecal Coliform (MF)
EPA 300.0	Ion Chromatographic Analysis
SM21 4500-N D	TKN by Phenate (W)
SM21 9223B	Total Coliform P/A Quant Tray
SM21 4500P-B,E	Total Phosphorus (W)
SM21 2540D	Total Suspended Solids SM20 2540D

Print Date: 05/14/2019 10:27:45AM

Detectable Results Summary

Client Sample ID: **SW11**
 Lab Sample ID: 1191980001
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	14.0	mg/L
Total Coliform	49	MPN/100mL
Total Phosphorus	0.0184J	mg/L
Total Suspended Solids	66.0	mg/L

Client Sample ID: **SW12**
 Lab Sample ID: 1191980002
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	2.19	mg/L
Total Coliform	26	MPN/100mL
Ammonia-N	0.124	mg/L
Total Phosphorus	0.0485	mg/L
Total Suspended Solids	3.20	mg/L

Client Sample ID: **SW13**
 Lab Sample ID: 1191980003
Microbiology Laboratory
Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Coliform	33	MPN/100mL
Ammonia-N	0.0538J	mg/L

Client Sample ID: **SW14**
 Lab Sample ID: 1191980004
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	3.93	mg/L
Total Coliform	36	MPN/100mL
Ammonia-N	0.435	mg/L
Total Kjeldahl Nitrogen	0.314J	mg/L
Total Phosphorus	0.280	mg/L
Total Suspended Solids	5.87	mg/L

Client Sample ID: **SW15**
 Lab Sample ID: 1191980005
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	2	MPN/100mL
Fecal Coliform	1.0	col/100mL
Total Coliform	172	MPN/100mL
Ammonia-N	0.0574J	mg/L
Total Suspended Solids	1.21	mg/L

Client Sample ID: **SW16**
 Lab Sample ID: 1191980006
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	3.25	mg/L
Fecal Coliform	1.0	col/100mL
Total Coliform	579	MPN/100mL
Ammonia-N	0.0537J	mg/L
Total Phosphorus	0.0367	mg/L
Total Suspended Solids	19.1	mg/L

Detectable Results Summary

Client Sample ID: **SW17**
 Lab Sample ID: 1191980007
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	1	MPN/100mL
Total Coliform	58	MPN/100mL
Ammonia-N	0.0577J	mg/L
Nitrate-N	1.44	mg/L
Total Nitrate/Nitrite-N	1.44	mg/L
Total Phosphorus	0.0881	mg/L
Total Suspended Solids	5.25	mg/L

Client Sample ID: **SW18**
 Lab Sample ID: 1191980008
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	4.17	mg/L
E. Coli	12	MPN/100mL
Fecal Coliform	2.0	col/100mL
Total Coliform	91	MPN/100mL
Ammonia-N	3.68	mg/L
Nitrate-N	2.44	mg/L
Total Kjeldahl Nitrogen	3.14	mg/L
Total Nitrate/Nitrite-N	2.47	mg/L
Total Phosphorus	2.85	mg/L
Total Suspended Solids	192	mg/L

Client Sample ID: **D2**
 Lab Sample ID: 1191980009
Microbiology Laboratory
Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Coliform	83	MPN/100mL
Ammonia-N	0.0704J	mg/L
Nitrate-N	1.44	mg/L
Total Nitrate/Nitrite-N	1.44	mg/L
Total Phosphorus	0.110	mg/L
Total Suspended Solids	3.44	mg/L



Results of SW11

Client Sample ID: **SW11**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191980001
Lab Project ID: 1191980

Collection Date: 04/30/19 09:45
Received Date: 04/30/19 13:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

<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>
Biochemical Oxygen Demand	14.0	2.00	2.00	mg/L	1		05/01/19 11:00

Batch Information

Analytical Batch: BOD6298
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 05/01/19 11:00
Container ID: 1191980001-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>
Fecal Coliform	1.00 U	1.00	1.00	col/100mL	1		04/30/19 16:09

Batch Information

Analytical Batch: BTF17299
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 04/30/19 16:09
Container ID: 1191980001-E

<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>
E. Coli	1 U	1	1	MPN/100r	1		04/30/19 16:35
Total Coliform	49	1	1	MPN/100r	1		04/30/19 16:35

Batch Information

Analytical Batch: BTF17301
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 04/30/19 16:35
Container ID: 1191980001-D



Results of SW11

Client Sample ID: SW11
Client Project ID: Wasilla WWTP
Lab Sample ID: 1191980001
Lab Project ID: 1191980

Collection Date: 04/30/19 09:45
Received Date: 04/30/19 13:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows include Nitrate-N, Nitrite-N, and Total Nitrate/Nitrite-N.

Batch Information

Analytical Batch: WIC5899
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 05/01/19 15:49
Container ID: 1191980001-C
Prep Batch: WXX12803
Prep Method: METHOD
Prep Date/Time: 05/01/19 11:30
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Total Suspended Solids.

Batch Information

Analytical Batch: STS6254
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/01/19 14:46
Container ID: 1191980001-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Total Kjeldahl Nitrogen.

Batch Information

Analytical Batch: WDA4548
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/02/19 14:43
Container ID: 1191980001-F
Prep Batch: WXX12801
Prep Method: METHOD
Prep Date/Time: 04/30/19 15:40
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Ammonia-N.

Results of SW11

Client Sample ID: **SW11**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1191980001
 Lab Project ID: 1191980

Collection Date: 04/30/19 09:45
 Received Date: 04/30/19 13:57
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4554
 Analytical Method: SM21 4500-NH3 G
 Analyst: DMM
 Analytical Date/Time: 05/13/19 15:29
 Container ID: 1191980001-F

Prep Batch: WXX12818
 Prep Method: METHOD
 Prep Date/Time: 05/13/19 14:00
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0184 J	0.0200	0.00500	mg/L	1		05/10/19 16:24

Batch Information

Analytical Batch: WDA4553
 Analytical Method: SM21 4500P-B,E
 Analyst: DMM
 Analytical Date/Time: 05/10/19 16:24
 Container ID: 1191980001-F

Prep Batch: WXX12814
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/10/19 14:20
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL



Results of SW12

Client Sample ID: **SW12**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191980002
Lab Project ID: 1191980

Collection Date: 04/30/19 09:54
Received Date: 04/30/19 13:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

<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>
Biochemical Oxygen Demand	2.19	2.00	2.00	mg/L	1		05/01/19 11:00

Batch Information

Analytical Batch: BOD6298
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 05/01/19 11:00
Container ID: 1191980002-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>
Fecal Coliform	1.00 U	1.00	1.00	col/100mL	1		04/30/19 16:09

Batch Information

Analytical Batch: BTF17299
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 04/30/19 16:09
Container ID: 1191980002-E

<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>
E. Coli	1 U	1	1	MPN/100r	1		04/30/19 16:35
Total Coliform	26	1	1	MPN/100r	1		04/30/19 16:35

Batch Information

Analytical Batch: BTF17301
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 04/30/19 16:35
Container ID: 1191980002-D



Results of SW12

Client Sample ID: SW12
Client Project ID: Wasilla WWTP
Lab Sample ID: 1191980002
Lab Project ID: 1191980

Collection Date: 04/30/19 09:54
Received Date: 04/30/19 13:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows include Nitrate-N, Nitrite-N, and Total Nitrate/Nitrite-N.

Batch Information

Analytical Batch: WIC5899
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 05/01/19 16:08
Container ID: 1191980002-C
Prep Batch: WXX12803
Prep Method: METHOD
Prep Date/Time: 05/01/19 11:30
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Total Suspended Solids.

Batch Information

Analytical Batch: STS6254
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/01/19 14:46
Container ID: 1191980002-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Total Kjeldahl Nitrogen.

Batch Information

Analytical Batch: WDA4548
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/02/19 14:47
Container ID: 1191980002-F
Prep Batch: WXX12801
Prep Method: METHOD
Prep Date/Time: 04/30/19 15:40
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Ammonia-N.



Results of **SW12**

Client Sample ID: **SW12**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191980002
Lab Project ID: 1191980

Collection Date: 04/30/19 09:54
Received Date: 04/30/19 13:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4554
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/13/19 15:34
Container ID: 1191980002-F

Prep Batch: WXX12818
Prep Method: METHOD
Prep Date/Time: 05/13/19 14:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0485	0.0200	0.00500	mg/L	1		05/10/19 16:27

Batch Information

Analytical Batch: WDA4553
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 05/10/19 16:27
Container ID: 1191980002-F

Prep Batch: WXX12814
Prep Method: SM21 4500P-B,E
Prep Date/Time: 05/10/19 14:20
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL



Results of SW13

Client Sample ID: **SW13**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191980003
Lab Project ID: 1191980

Collection Date: 04/30/19 10:16
Received Date: 04/30/19 13:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

<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>
Biochemical Oxygen Demand	2.00 U	2.00	2.00	mg/L	1		05/01/19 11:00

Batch Information

Analytical Batch: BOD6298
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 05/01/19 11:00
Container ID: 1191980003-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>
Fecal Coliform	1.00 U	1.00	1.00	col/100mL	1		04/30/19 16:09

Batch Information

Analytical Batch: BTF17299
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 04/30/19 16:09
Container ID: 1191980003-E

<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>
E. Coli	1 U	1	1	MPN/100r	1		04/30/19 16:35
Total Coliform	33	1	1	MPN/100r	1		04/30/19 16:35

Batch Information

Analytical Batch: BTF17301
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 04/30/19 16:35
Container ID: 1191980003-D



Results of SW13

Client Sample ID: **SW13**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1191980003
 Lab Project ID: 1191980

Collection Date: 04/30/19 10:16
 Received Date: 04/30/19 13:57
 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>
Nitrate-N	0.100 U	0.200	0.0500	mg/L	1		05/01/19 17:19
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		05/01/19 17:19
Total Nitrate/Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		05/01/19 17:19

Batch Information

Analytical Batch: WIC5899
 Analytical Method: EPA 300.0
 Analyst: DMM
 Analytical Date/Time: 05/01/19 17:19
 Container ID: 1191980003-C

Prep Batch: WXX12803
 Prep Method: METHOD
 Prep Date/Time: 05/01/19 11:30
 Prep Initial Wt./Vol.: 10 mL
 Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	0.500 U	1.00	0.310	mg/L	1		05/01/19 14:46

Batch Information

Analytical Batch: STS6254
 Analytical Method: SM21 2540D
 Analyst: EWW
 Analytical Date/Time: 05/01/19 14:46
 Container ID: 1191980003-B

<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 Kjeldahl Nitrogen	0.500 U	1.00	0.310	mg/L	1		05/02/19 14:48

Batch Information

Analytical Batch: WDA4548
 Analytical Method: SM21 4500-N D
 Analyst: DMM
 Analytical Date/Time: 05/02/19 14:48
 Container ID: 1191980003-F

Prep Batch: WXX12801
 Prep Method: METHOD
 Prep Date/Time: 04/30/19 15:40
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0538 J	0.100	0.0310	mg/L	1		05/13/19 15:35

Results of SW13

Client Sample ID: **SW13**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1191980003
 Lab Project ID: 1191980

Collection Date: 04/30/19 10:16
 Received Date: 04/30/19 13:57
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4554
 Analytical Method: SM21 4500-NH3 G
 Analyst: DMM
 Analytical Date/Time: 05/13/19 15:35
 Container ID: 1191980003-F

Prep Batch: WXX12818
 Prep Method: METHOD
 Prep Date/Time: 05/13/19 14:00
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0100 U	0.0200	0.00500	mg/L	1		05/10/19 16:28

Batch Information

Analytical Batch: WDA4553
 Analytical Method: SM21 4500P-B,E
 Analyst: DMM
 Analytical Date/Time: 05/10/19 16:28
 Container ID: 1191980003-F

Prep Batch: WXX12814
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/10/19 14:20
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL



Results of SW14

Client Sample ID: **SW14**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191980004
Lab Project ID: 1191980

Collection Date: 04/30/19 11:05
Received Date: 04/30/19 13:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

<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>
Biochemical Oxygen Demand	3.93	2.00	2.00	mg/L	1		05/01/19 11:00

Batch Information

Analytical Batch: BOD6298
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 05/01/19 11:00
Container ID: 1191980004-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>
Fecal Coliform	1.00 U	1.00	1.00	col/100mL	1		04/30/19 16:09

Batch Information

Analytical Batch: BTF17299
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 04/30/19 16:09
Container ID: 1191980004-E

<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>
E. Coli	1 U	1	1	MPN/100r	1		04/30/19 16:35
Total Coliform	36	1	1	MPN/100r	1		04/30/19 16:35

Batch Information

Analytical Batch: BTF17301
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 04/30/19 16:35
Container ID: 1191980004-D



Results of SW14

Client Sample ID: SW14
Client Project ID: Wasilla WWTP
Lab Sample ID: 1191980004
Lab Project ID: 1191980

Collection Date: 04/30/19 11:05
Received Date: 04/30/19 13:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows include Nitrate-N, Nitrite-N, and Total Nitrate/Nitrite-N.

Batch Information

Analytical Batch: WIC5899
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 05/01/19 18:54
Container ID: 1191980004-C
Prep Batch: WXX12803
Prep Method: METHOD
Prep Date/Time: 05/01/19 11:30
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Total Suspended Solids.

Batch Information

Analytical Batch: STS6254
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/01/19 14:46
Container ID: 1191980004-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Total Kjeldahl Nitrogen.

Batch Information

Analytical Batch: WDA4548
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/02/19 14:50
Container ID: 1191980004-F
Prep Batch: WXX12801
Prep Method: METHOD
Prep Date/Time: 04/30/19 15:40
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Ammonia-N.

Results of SW14

Client Sample ID: **SW14**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1191980004
 Lab Project ID: 1191980

Collection Date: 04/30/19 11:05
 Received Date: 04/30/19 13:57
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4554
 Analytical Method: SM21 4500-NH3 G
 Analyst: DMM
 Analytical Date/Time: 05/13/19 15:40
 Container ID: 1191980004-F

Prep Batch: WXX12818
 Prep Method: METHOD
 Prep Date/Time: 05/13/19 14:00
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.280	0.0200	0.00500	mg/L	1		05/10/19 16:29

Batch Information

Analytical Batch: WDA4553
 Analytical Method: SM21 4500P-B,E
 Analyst: DMM
 Analytical Date/Time: 05/10/19 16:29
 Container ID: 1191980004-F

Prep Batch: WXX12814
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/10/19 14:20
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL



Results of **SW15**

Client Sample ID: **SW15**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191980005
Lab Project ID: 1191980

Collection Date: 04/30/19 10:58
Received Date: 04/30/19 13:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

<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>
Biochemical Oxygen Demand	2.00 U	2.00	2.00	mg/L	1		05/01/19 11:00

Batch Information

Analytical Batch: BOD6298
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 05/01/19 11:00
Container ID: 1191980005-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>
Fecal Coliform	1.0	1.00	1.00	col/100mL	1		04/30/19 16:09

Batch Information

Analytical Batch: BTF17299
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 04/30/19 16:09
Container ID: 1191980005-E

<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>
E. Coli	2	1	1	MPN/100r	1		04/30/19 16:35
Total Coliform	172	1	1	MPN/100r	1		04/30/19 16:35

Batch Information

Analytical Batch: BTF17301
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 04/30/19 16:35
Container ID: 1191980005-D



Results of SW15

Client Sample ID: SW15
Client Project ID: Wasilla WWTP
Lab Sample ID: 1191980005
Lab Project ID: 1191980

Collection Date: 04/30/19 10:58
Received Date: 04/30/19 13:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows include Nitrate-N, Nitrite-N, and Total Nitrate/Nitrite-N.

Batch Information

Analytical Batch: WIC5899
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 05/01/19 19:14
Container ID: 1191980005-C
Prep Batch: WXX12803
Prep Method: METHOD
Prep Date/Time: 05/01/19 11:30
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Total Suspended Solids.

Batch Information

Analytical Batch: STS6254
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/01/19 14:46
Container ID: 1191980005-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Total Kjeldahl Nitrogen.

Batch Information

Analytical Batch: WDA4548
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/02/19 14:51
Container ID: 1191980005-F
Prep Batch: WXX12801
Prep Method: METHOD
Prep Date/Time: 04/30/19 15:40
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Ammonia-N.

Results of SW15

Client Sample ID: **SW15**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1191980005
 Lab Project ID: 1191980

Collection Date: 04/30/19 10:58
 Received Date: 04/30/19 13:57
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4554
 Analytical Method: SM21 4500-NH3 G
 Analyst: DMM
 Analytical Date/Time: 05/13/19 15:42
 Container ID: 1191980005-F

Prep Batch: WXX12818
 Prep Method: METHOD
 Prep Date/Time: 05/13/19 14:00
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0100 U	0.0200	0.00500	mg/L	1		05/10/19 16:30

Batch Information

Analytical Batch: WDA4553
 Analytical Method: SM21 4500P-B,E
 Analyst: DMM
 Analytical Date/Time: 05/10/19 16:30
 Container ID: 1191980005-F

Prep Batch: WXX12814
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/10/19 14:20
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL



Results of SW16

Client Sample ID: **SW16**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191980006
Lab Project ID: 1191980

Collection Date: 04/30/19 10:33
Received Date: 04/30/19 13:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

<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>
Biochemical Oxygen Demand	3.25	2.00	2.00	mg/L	1		05/01/19 11:00

Batch Information

Analytical Batch: BOD6298
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 05/01/19 11:00
Container ID: 1191980006-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>
Fecal Coliform	1.0	1.00	1.00	col/100mL	1		04/30/19 16:09

Batch Information

Analytical Batch: BTF17299
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 04/30/19 16:09
Container ID: 1191980006-E

<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>
E. Coli	1 U	1	1	MPN/100r	1		04/30/19 16:35
Total Coliform	579	1	1	MPN/100r	1		04/30/19 16:35

Batch Information

Analytical Batch: BTF17301
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 04/30/19 16:35
Container ID: 1191980006-D



Results of SW16

Client Sample ID: SW16
Client Project ID: Wasilla WWTP
Lab Sample ID: 1191980006
Lab Project ID: 1191980

Collection Date: 04/30/19 10:33
Received Date: 04/30/19 13:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows include Nitrate-N, Nitrite-N, and Total Nitrate/Nitrite-N.

Batch Information

Analytical Batch: WIC5899
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 05/01/19 19:32
Container ID: 1191980006-C
Prep Batch: WXX12803
Prep Method: METHOD
Prep Date/Time: 05/01/19 11:30
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Total Suspended Solids.

Batch Information

Analytical Batch: STS6254
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/01/19 14:46
Container ID: 1191980006-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Total Kjeldahl Nitrogen.

Batch Information

Analytical Batch: WDA4548
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/02/19 14:55
Container ID: 1191980006-F
Prep Batch: WXX12801
Prep Method: METHOD
Prep Date/Time: 04/30/19 15:40
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Ammonia-N.



Results of **SW16**

Client Sample ID: **SW16**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191980006
Lab Project ID: 1191980

Collection Date: 04/30/19 10:33
Received Date: 04/30/19 13:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4554
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/13/19 15:43
Container ID: 1191980006-F

Prep Batch: WXX12818
Prep Method: METHOD
Prep Date/Time: 05/13/19 14:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0367	0.0200	0.00500	mg/L	1		05/10/19 16:31

Batch Information

Analytical Batch: WDA4553
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 05/10/19 16:31
Container ID: 1191980006-F

Prep Batch: WXX12814
Prep Method: SM21 4500P-B,E
Prep Date/Time: 05/10/19 14:20
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL



Results of SW17

Client Sample ID: **SW17**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191980007
Lab Project ID: 1191980

Collection Date: 04/30/19 11:48
Received Date: 04/30/19 13:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

<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>
Biochemical Oxygen Demand	2.00 U	2.00	2.00	mg/L	1		05/01/19 11:00

Batch Information

Analytical Batch: BOD6298
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 05/01/19 11:00
Container ID: 1191980007-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>
Fecal Coliform	1.00 U	1.00	1.00	col/100mL	1		04/30/19 16:09

Batch Information

Analytical Batch: BTF17299
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 04/30/19 16:09
Container ID: 1191980007-E

<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>
E. Coli	1	1	1	MPN/100r	1		04/30/19 16:35
Total Coliform	58	1	1	MPN/100r	1		04/30/19 16:35

Batch Information

Analytical Batch: BTF17301
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 04/30/19 16:35
Container ID: 1191980007-D



Results of SW17

Client Sample ID: SW17
Client Project ID: Wasilla WWTP
Lab Sample ID: 1191980007
Lab Project ID: 1191980

Collection Date: 04/30/19 11:48
Received Date: 04/30/19 13:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows include Nitrate-N, Nitrite-N, and Total Nitrate/Nitrite-N.

Batch Information

Analytical Batch: WIC5899
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 05/01/19 19:51
Container ID: 1191980007-C
Prep Batch: WXX12803
Prep Method: METHOD
Prep Date/Time: 05/01/19 11:30
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Total Suspended Solids.

Batch Information

Analytical Batch: STS6254
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/01/19 14:46
Container ID: 1191980007-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Total Kjeldahl Nitrogen.

Batch Information

Analytical Batch: WDA4548
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/02/19 14:56
Container ID: 1191980007-F
Prep Batch: WXX12801
Prep Method: METHOD
Prep Date/Time: 04/30/19 15:40
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Ammonia-N.

Results of SW17

Client Sample ID: **SW17**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1191980007
 Lab Project ID: 1191980

Collection Date: 04/30/19 11:48
 Received Date: 04/30/19 13:57
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4554
 Analytical Method: SM21 4500-NH3 G
 Analyst: DMM
 Analytical Date/Time: 05/13/19 15:45
 Container ID: 1191980007-F

Prep Batch: WXX12818
 Prep Method: METHOD
 Prep Date/Time: 05/13/19 14:00
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0881	0.0200	0.00500	mg/L	1		05/10/19 16:32

Batch Information

Analytical Batch: WDA4553
 Analytical Method: SM21 4500P-B,E
 Analyst: DMM
 Analytical Date/Time: 05/10/19 16:32
 Container ID: 1191980007-F

Prep Batch: WXX12814
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/10/19 14:20
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL



Results of SW18

Client Sample ID: **SW18**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191980008
Lab Project ID: 1191980

Collection Date: 04/30/19 12:17
Received Date: 04/30/19 13:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

<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>
Biochemical Oxygen Demand	4.17	2.00	2.00	mg/L	1		05/01/19 11:00

Batch Information

Analytical Batch: BOD6298
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 05/01/19 11:00
Container ID: 1191980008-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>
Fecal Coliform	2.0	1.00	1.00	col/100mL	1		04/30/19 16:09

Batch Information

Analytical Batch: BTF17299
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 04/30/19 16:09
Container ID: 1191980008-E

<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>
E. Coli	12	1	1	MPN/100r	1		04/30/19 16:35
Total Coliform	91	1	1	MPN/100r	1		04/30/19 16:35

Batch Information

Analytical Batch: BTF17301
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 04/30/19 16:35
Container ID: 1191980008-D



Results of SW18

Client Sample ID: SW18
Client Project ID: Wasilla WWTP
Lab Sample ID: 1191980008
Lab Project ID: 1191980

Collection Date: 04/30/19 12:17
Received Date: 04/30/19 13:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows include Nitrate-N, Nitrite-N, and Total Nitrate/Nitrite-N.

Batch Information

Analytical Batch: WIC5899
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 05/01/19 20:10
Container ID: 1191980008-C
Prep Batch: WXX12803
Prep Method: METHOD
Prep Date/Time: 05/01/19 11:30
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Total Suspended Solids.

Batch Information

Analytical Batch: STS6254
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/01/19 14:46
Container ID: 1191980008-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Total Kjeldahl Nitrogen.

Batch Information

Analytical Batch: WDA4548
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/02/19 14:57
Container ID: 1191980008-F
Prep Batch: WXX12801
Prep Method: METHOD
Prep Date/Time: 04/30/19 15:40
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row includes Ammonia-N.



Results of **SW18**

Client Sample ID: **SW18**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191980008
Lab Project ID: 1191980

Collection Date: 04/30/19 12:17
Received Date: 04/30/19 13:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4554
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/13/19 15:47
Container ID: 1191980008-F

Prep Batch: WXX12818
Prep Method: METHOD
Prep Date/Time: 05/13/19 14:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	2.85	0.400	0.100	mg/L	1		05/10/19 17:07

Batch Information

Analytical Batch: WDA4553
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 05/10/19 17:07
Container ID: 1191980008-F

Prep Batch: WXX12815
Prep Method: SM21 4500P-B,E
Prep Date/Time: 05/10/19 15:20
Prep Initial Wt./Vol.: 1.25 mL
Prep Extract Vol: 25 mL



Results of D2

Client Sample ID: **D2**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1191980009
Lab Project ID: 1191980

Collection Date: 04/30/19 11:48
Received Date: 04/30/19 13:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

<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>
Biochemical Oxygen Demand	2.00 U	2.00	2.00	mg/L	1		05/01/19 11:00

Batch Information

Analytical Batch: BOD6298
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 05/01/19 11:00
Container ID: 1191980009-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>
Fecal Coliform	1.00 U	1.00	1.00	col/100mL	1		04/30/19 16:09

Batch Information

Analytical Batch: BTF17299
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 04/30/19 16:09
Container ID: 1191980009-E

<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>
E. Coli	1 U	1	1	MPN/100r	1		04/30/19 16:35
Total Coliform	83	1	1	MPN/100r	1		04/30/19 16:35

Batch Information

Analytical Batch: BTF17301
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 04/30/19 16:35
Container ID: 1191980009-D



Results of D2

Client Sample ID: **D2**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1191980009
 Lab Project ID: 1191980

Collection Date: 04/30/19 11:48
 Received Date: 04/30/19 13:57
 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>
Nitrate-N	1.44	0.200	0.0500	mg/L	1		05/01/19 20:29
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		05/01/19 20:29
Total Nitrate/Nitrite-N	1.44	0.200	0.0500	mg/L	1		05/01/19 20:29

Batch Information

Analytical Batch: WIC5899
 Analytical Method: EPA 300.0
 Analyst: DMM
 Analytical Date/Time: 05/01/19 20:29
 Container ID: 1191980009-C

Prep Batch: WXX12803
 Prep Method: METHOD
 Prep Date/Time: 05/01/19 11:30
 Prep Initial Wt./Vol.: 10 mL
 Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	3.44	1.08	0.333	mg/L	1		05/01/19 14:46

Batch Information

Analytical Batch: STS6254
 Analytical Method: SM21 2540D
 Analyst: EWW
 Analytical Date/Time: 05/01/19 14:46
 Container ID: 1191980009-B

<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 Kjeldahl Nitrogen	0.500 U	1.00	0.310	mg/L	1		05/02/19 14:59

Batch Information

Analytical Batch: WDA4548
 Analytical Method: SM21 4500-N D
 Analyst: DMM
 Analytical Date/Time: 05/02/19 14:59
 Container ID: 1191980009-F

Prep Batch: WXX12801
 Prep Method: METHOD
 Prep Date/Time: 04/30/19 15:40
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0704 J	0.100	0.0310	mg/L	1		05/13/19 15:49

Results of D2

Client Sample ID: **D2**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1191980009
 Lab Project ID: 1191980

Collection Date: 04/30/19 11:48
 Received Date: 04/30/19 13:57
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4554
 Analytical Method: SM21 4500-NH3 G
 Analyst: DMM
 Analytical Date/Time: 05/13/19 15:49
 Container ID: 1191980009-F

Prep Batch: WXX12818
 Prep Method: METHOD
 Prep Date/Time: 05/13/19 14:00
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.110	0.0200	0.00500	mg/L	1		05/10/19 16:34

Batch Information

Analytical Batch: WDA4553
 Analytical Method: SM21 4500P-B,E
 Analyst: DMM
 Analytical Date/Time: 05/10/19 16:34
 Container ID: 1191980009-F

Prep Batch: WXX12814
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/10/19 14:20
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Method Blank

Blank ID: MB for HBN 1793218 [BOD/6298]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1505530

QC for Samples:

1191980001, 1191980002, 1191980003, 1191980004, 1191980005, 1191980006, 1191980007, 1191980008, 1191980009

Results by SM21 5210B

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Biochemical Oxygen Demand	2.00U	2.00	2.00	mg/L

Batch Information

Analytical Batch: BOD6298

Analytical Method: SM21 5210B

Instrument:

Analyst: ACF

Analytical Date/Time: 5/1/2019 11:00:00AM

Print Date: 05/14/2019 10:27:50AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1191980 [BOD6298]

Blank Spike Lab ID: 1505531

Date Analyzed: 05/01/2019 11:00

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1191980001, 1191980002, 1191980003, 1191980004, 1191980005, 1191980006, 1191980007, 1191980008, 1191980009

Results by SM21 5210B

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Biochemical Oxygen Demand	198	208	105	(84.6-115.4

Batch Information

Analytical Batch: BOD6298

Analytical Method: SM21 5210B

Instrument:

Analyst: ACF

Print Date: 05/14/2019 10:27:51AM



Method Blank

Blank ID: MB for HBN 1793136 [BTF/17299]
Blank Lab ID: 1505206

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1191980001, 1191980002, 1191980003, 1191980004, 1191980005, 1191980006, 1191980007, 1191980008, 1191980009

Results by SM21 9222D

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Fecal Coliform	1.00U	1.00	1.00	col/100mL

Batch Information

Analytical Batch: BTF17299
Analytical Method: SM21 9222D
Instrument:
Analyst: A.L
Analytical Date/Time: 4/30/2019 4:09:25PM

Print Date: 05/14/2019 10:27:52AM



Method Blank

Blank ID: MB for HBN 1793138 [BTF/17301]
Blank Lab ID: 1505210

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1191980001, 1191980002, 1191980003, 1191980004, 1191980005, 1191980006, 1191980007, 1191980008, 1191980009

Results by SM21 9223B

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Total Coliform	1U	1	1	MPN/100m
E. Coli	1U	1	1	MPN/100m

Batch Information

Analytical Batch: BTF17301
Analytical Method: SM21 9223B
Instrument:
Analyst: DSH
Analytical Date/Time: 4/30/2019 4:35:00PM

Print Date: 05/14/2019 10:27:54AM



Method Blank

Blank ID: MB for HBN 1793168 [STS/6254]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1505340

QC for Samples:

1191980001, 1191980002, 1191980003, 1191980004, 1191980005, 1191980006, 1191980007, 1191980008, 1191980009

Results by SM21 2540D

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Total Suspended Solids	0.500U	1.00	0.310	mg/L

Batch Information

Analytical Batch: STS6254

Analytical Method: SM21 2540D

Instrument:

Analyst: EWW

Analytical Date/Time: 5/1/2019 2:46:03PM

Print Date: 05/14/2019 10:27:56AM

Duplicate Sample Summary

Original Sample ID: 1191980001

Duplicate Sample ID: 1505343

QC for Samples:

1191980001, 1191980002, 1191980003, 1191980004, 1191980005, 1191980006, 1191980007, 1191980008, 1191980009

Analysis Date: 05/01/2019 14:46

Matrix: Water (Surface, Eff., Ground)

Results by SM21 2540D

<u>NAME</u>	<u>Original</u>	<u>Duplicate</u>	<u>Units</u>	<u>RPD (%)</u>	<u>RPD CL</u>
Total Suspended Solids	66.0	59.3	mg/L	10.60*	(< 5)

Batch Information

Analytical Batch: STS6254

Analytical Method: SM21 2540D

Instrument:

Analyst: EWW

Print Date: 05/14/2019 10:27:56AM

Duplicate Sample Summary

Original Sample ID: 1191982007

Duplicate Sample ID: 1505344

QC for Samples:

1191980002, 1191980003, 1191980004, 1191980005, 1191980006, 1191980007, 1191980008, 1191980009

Analysis Date: 05/01/2019 14:46

Matrix: Water (Surface, Eff., Ground)

Results by SM21 2540D

<u>NAME</u>	<u>Original</u>	<u>Duplicate</u>	<u>Units</u>	<u>RPD (%)</u>	<u>RPD CL</u>
Total Suspended Solids	3500	3490	mg/L	0.29	(< 5)

Batch Information

Analytical Batch: STS6254

Analytical Method: SM21 2540D

Instrument:

Analyst: EWW

Print Date: 05/14/2019 10:27:56AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1191980 [STS6254]
 Blank Spike Lab ID: 1505341
 Date Analyzed: 05/01/2019 14:46

Spike Duplicate ID: LCSD for HBN 1191980 [STS6254]
 Spike Duplicate Lab ID: 1505342
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1191980001, 1191980002, 1191980003, 1191980004, 1191980005, 1191980006, 1191980007, 1191980008, 1191980009

Results by SM21 2540D

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Suspended Solids	25	24.9	100	25	24.3	97	(75-125)	2.40	(< 5)

Batch Information

Analytical Batch: **STS6254**
 Analytical Method: **SM21 2540D**
 Instrument:
 Analyst: **EWV**



Method Blank

Blank ID: MB for HBN 1793254 [WXX/12801]
Blank Lab ID: 1505671

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1191980001, 1191980002, 1191980003, 1191980004, 1191980005, 1191980006, 1191980007, 1191980008, 1191980009

Results by SM21 4500-N D

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Total Kjeldahl Nitrogen	0.500U	1.00	0.310	mg/L

Batch Information

Analytical Batch: WDA4548
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 5/2/2019 2:39:47PM

Prep Batch: WXX12801
Prep Method: METHOD
Prep Date/Time: 4/30/2019 3:40:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/14/2019 10:27:59AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1191980 [WXX12801]
 Blank Spike Lab ID: 1505672
 Date Analyzed: 05/02/2019 14:41

Spike Duplicate ID: LCSD for HBN 1191980 [WXX12801]
 Spike Duplicate Lab ID: 1505673
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1191980001, 1191980002, 1191980003, 1191980004, 1191980005, 1191980006, 1191980007, 1191980008, 1191980009

Results by SM21 4500-N D

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Kjeldahl Nitrogen	4	3.74	93	4	3.75	94	(75-125)	0.35	(< 25)

Batch Information

Analytical Batch: **WDA4548**
 Analytical Method: **SM21 4500-N D**
 Instrument: **Discrete Analyzer 2**
 Analyst: **DMM**

Prep Batch: **WXX12801**
 Prep Method: **METHOD**
 Prep Date/Time: **04/30/2019 15:40**
 Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL
 Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

Print Date: 05/14/2019 10:28:00AM

Matrix Spike Summary

Original Sample ID: 1191980001
 MS Sample ID: 1505674 MS
 MSD Sample ID: 1505675 MSD

Analysis Date: 05/02/2019 14:43
 Analysis Date: 05/02/2019 14:45
 Analysis Date: 05/02/2019 14:46
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1191980001, 1191980002, 1191980003, 1191980004, 1191980005, 1191980006, 1191980007, 1191980008, 1191980009

Results by SM21 4500-N D

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Kjeldahl Nitrogen	0.500U	4.00	2.84	71 *	4.00	2.39	60 *	75-125	17.20	(< 25)

Batch Information

Analytical Batch: WDA4548
 Analytical Method: SM21 4500-N D
 Instrument: Discrete Analyzer 2
 Analyst: DMM
 Analytical Date/Time: 5/2/2019 2:45:02PM

Prep Batch: WXX12801
 Prep Method: Distillation TKN by Phenate (W)
 Prep Date/Time: 4/30/2019 3:40:00PM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL

Print Date: 05/14/2019 10:28:00AM

Method Blank

Blank ID: MB for HBN 1793292 [WXX/12803]
 Blank Lab ID: 1505883

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1191980001, 1191980002, 1191980003, 1191980004, 1191980005, 1191980006, 1191980007, 1191980008, 1191980009

Results by EPA 300.0

<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: WIC5899
 Analytical Method: EPA 300.0
 Instrument: 930 Metrohm compact IC flex
 Analyst: DMM
 Analytical Date/Time: 5/1/2019 1:54:46PM

Prep Batch: WXX12803
 Prep Method: METHOD
 Prep Date/Time: 5/1/2019 11:30:00AM
 Prep Initial Wt./Vol.: 10 mL
 Prep Extract Vol: 10 mL

Print Date: 05/14/2019 10:28:02AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1191980 [WXX12803]
 Blank Spike Lab ID: 1505884
 Date Analyzed: 05/01/2019 14:13

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1191980001, 1191980002, 1191980003, 1191980004, 1191980005, 1191980006, 1191980007,
 1191980008, 1191980009

Results by EPA 300.0

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Nitrate-N	5	5.16	103	(90-110)
Nitrite-N	5	5.08	102	(90-110)
Total Nitrate/Nitrite-N	10	10.2	102	(90-110)

Batch Information

Analytical Batch: **WIC5899**
 Analytical Method: **EPA 300.0**
 Instrument: **930 Metrohm compact IC flex**
 Analyst: **DMM**

Prep Batch: **WXX12803**
 Prep Method: **METHOD**
 Prep Date/Time: **05/01/2019 11:30**
 Spike Init Wt./Vol.: 5 mg/L Extract Vol: 10 mL
 Dupe Init Wt./Vol.: Extract Vol:

Matrix Spike Summary

Original Sample ID: 1505882
 MS Sample ID: 1505886 MS
 MSD Sample ID: 1505887 MSD

Analysis Date: 05/01/2019 14:52
 Analysis Date: 05/01/2019 15:11
 Analysis Date: 05/01/2019 15:30
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1191980001, 1191980002, 1191980003, 1191980004, 1191980005, 1191980006, 1191980007, 1191980008, 1191980009

Results by EPA 300.0

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Nitrate-N	0.100U	5.00	5.29	106	5.00	5.37	107	90-110	1.50	(< 15)
Nitrite-N	0.100U	5.00	5.29	106	5.00	5.34	107	90-110	0.96	(< 15)

Batch Information

Analytical Batch: WIC5899
 Analytical Method: EPA 300.0
 Instrument: 930 Metrohm compact IC flex
 Analyst: DMM
 Analytical Date/Time: 5/1/2019 3:11:27PM

Prep Batch: WXX12803
 Prep Method: EPA 300.0 Extraction Waters/Liquids
 Prep Date/Time: 5/1/2019 11:30:00AM
 Prep Initial Wt./Vol.: 10.00mL
 Prep Extract Vol: 10.00mL

Print Date: 05/14/2019 10:28:04AM

Method Blank

Blank ID: MB for HBN 1793565 [WXX/12814]
Blank Lab ID: 1507045

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1191980001, 1191980002, 1191980003, 1191980004, 1191980005, 1191980006, 1191980007, 1191980009

Results by SM21 4500P-B,E

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Total Phosphorus	0.0100U	0.0200	0.00500	mg/L

Batch Information

Analytical Batch: WDA4553
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 5/10/2019 4:15:56PM

Prep Batch: WXX12814
Prep Method: SM21 4500P-B,E
Prep Date/Time: 5/10/2019 2:20:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/14/2019 10:28:06AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1191980 [WXX12814]
 Blank Spike Lab ID: 1507046
 Date Analyzed: 05/10/2019 16:16

Spike Duplicate ID: LCSD for HBN 1191980 [WXX12814]
 Spike Duplicate Lab ID: 1507047
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1191980001, 1191980002, 1191980003, 1191980004, 1191980005, 1191980006, 1191980007, 1191980009

Results by SM21 4500P-B,E

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Phosphorus	0.2	0.195	98	0.2	0.187	94	(75-125)	4.10	(< 25)

Batch Information

Analytical Batch: **WDA4553**
 Analytical Method: **SM21 4500P-B,E**
 Instrument: **Discrete Analyzer 2**
 Analyst: **DMM**

Prep Batch: **WXX12814**
 Prep Method: **SM21 4500P-B,E**
 Prep Date/Time: **05/10/2019 14:20**
 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: 05/14/2019 10:28:07AM

Matrix Spike Summary

Original Sample ID: 1191958001
 MS Sample ID: 1507048 MS
 MSD Sample ID: 1507049 MSD

Analysis Date: 05/10/2019 16:18
 Analysis Date: 05/10/2019 16:19
 Analysis Date: 05/10/2019 16:20
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1191980001, 1191980002, 1191980003, 1191980004, 1191980005, 1191980006, 1191980007, 1191980009

Results by SM21 4500P-B,E

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Phosphorus	5.08	10.0	14.6	95	10.0	14.7	96	75-125	0.72	(< 25)

Batch Information

Analytical Batch: WDA4553
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: DMM
 Analytical Date/Time: 5/10/2019 4:19:51PM

Prep Batch: WXX12814
 Prep Method: Total Phosphorus (W) Ext.
 Prep Date/Time: 5/10/2019 2:20:00PM
 Prep Initial Wt./Vol.: 0.50mL
 Prep Extract Vol: 25.00mL

Print Date: 05/14/2019 10:28:08AM

Method Blank

Blank ID: MB for HBN 1793566 [WXX/12815]
Blank Lab ID: 1507050

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1191980008

Results by SM21 4500P-B,E

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Total Phosphorus	0.0100U	0.0200	0.00500	mg/L

Batch Information

Analytical Batch: WDA4553
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 5/10/2019 5:04:47PM

Prep Batch: WXX12815
Prep Method: SM21 4500P-B,E
Prep Date/Time: 5/10/2019 3:20:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/14/2019 10:28:10AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1191980 [WXX12815]
 Blank Spike Lab ID: 1507051
 Date Analyzed: 05/10/2019 17:05

Spike Duplicate ID: LCSD for HBN 1191980 [WXX12815]
 Spike Duplicate Lab ID: 1507052
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1191980008

Results by SM21 4500P-B,E

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Phosphorus	0.2	0.190	95	0.2	0.181	90	(75-125)	4.80	(< 25)

Batch Information

Analytical Batch: **WDA4553**
 Analytical Method: **SM21 4500P-B,E**
 Instrument: **Discrete Analyzer 2**
 Analyst: **DMM**

Prep Batch: **WXX12815**
 Prep Method: **SM21 4500P-B,E**
 Prep Date/Time: **05/10/2019 15:20**
 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: 05/14/2019 10:28:11AM

Matrix Spike Summary

Original Sample ID: 1191988001
 MS Sample ID: 1507053 MS
 MSD Sample ID: 1507054 MSD

Analysis Date: 05/10/2019 17:08
 Analysis Date: 05/10/2019 17:09
 Analysis Date: 05/10/2019 17:10
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1191980008

Results by SM21 4500P-B,E

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Phosphorus	0.0210	0.200	.221	100	0.200	0.219	99	75-125	0.68	(< 25)

Batch Information

Analytical Batch: WDA4553
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: DMM
 Analytical Date/Time: 5/10/2019 5:09:39PM

Prep Batch: WXX12815
 Prep Method: Total Phosphorus (W) Ext.
 Prep Date/Time: 5/10/2019 3:20:00PM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL

Print Date: 05/14/2019 10:28:12AM

Method Blank

Blank ID: MB for HBN 1793640 [WXX/12818]

Blank Lab ID: 1507378

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1191980001, 1191980002, 1191980003, 1191980004, 1191980005, 1191980006, 1191980007, 1191980008, 1191980009

Results by SM21 4500-NH3 G

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Ammonia-N	0.0500U	0.100	0.0310	mg/L

Batch Information

Analytical Batch: WDA4554
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 5/13/2019 3:20:39PM

Prep Batch: WXX12818
Prep Method: METHOD
Prep Date/Time: 5/13/2019 2:00:00PM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Print Date: 05/14/2019 10:28:12AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1191980 [WXX12818]
 Blank Spike Lab ID: 1507379
 Date Analyzed: 05/13/2019 15:22

Spike Duplicate ID: LCSD for HBN 1191980 [WXX12818]
 Spike Duplicate Lab ID: 1507380
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1191980001, 1191980002, 1191980003, 1191980004, 1191980005, 1191980006, 1191980007, 1191980008, 1191980009

Results by SM21 4500-NH3 G

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Ammonia-N	1	0.945	95	1	0.987	99	(75-125)	4.40	(< 25)

Batch Information

Analytical Batch: **WDA4554**
 Analytical Method: **SM21 4500-NH3 G**
 Instrument: **Discrete Analyzer 2**
 Analyst: **DMM**

Prep Batch: **WXX12818**
 Prep Method: **METHOD**
 Prep Date/Time: **05/13/2019 14:00**
 Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
 Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

Print Date: 05/14/2019 10:28:14AM

Matrix Spike Summary

Original Sample ID: 1191980001
 MS Sample ID: 1507381 MS
 MSD Sample ID: 1507382 MSD

Analysis Date: 05/13/2019 15:29
 Analysis Date: 05/13/2019 15:30
 Analysis Date: 05/13/2019 15:32
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1191980001, 1191980002, 1191980003, 1191980004, 1191980005, 1191980006, 1191980007, 1191980008, 1191980009

Results by SM21 4500-NH3 G

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Ammonia-N	0.0500U	1.00	.909	91	1.00	0.930	93	75-125	2.30	(< 25)

Batch Information

Analytical Batch: WDA4554
 Analytical Method: SM21 4500-NH3 G
 Instrument: Discrete Analyzer 2
 Analyst: DMM
 Analytical Date/Time: 5/13/2019 3:30:41PM

Prep Batch: WXX12818
 Prep Method: Ammonia by SM21 4500F prep (W)
 Prep Date/Time: 5/13/2019 2:00:00PM
 Prep Initial Wt./Vol.: 6.00mL
 Prep Extract Vol: 6.00mL



1191980



SGS North America Inc. HAIN OF CUSTODY RECORD

Locations Nationwide

- Alaska
- New Jersey
- North Carolina
- West Virginia
- Maryland
- New York
- Indiana
- Kentucky

www.us.sgs.com

CLIENT: Stantec

CONTACT: Jake Allward **PHONE NO:** 313-5202

PROJECT NAME: Wasila WWTP **PROJECT PWSID/ PERMIT#:**

REPORTS TO: **E-MAIL:** jake.allward@stantec.com

INVOICE TO: **QUOTE #:** **P.O. #:** 204700415

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

Page 1 of 1

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	#	C O N T A I N E R S	Type C = COMP G = GRAB MI = Multi Incre- mental Soils	Preservative						REMARKS/ LOC ID	
								BOD	TSS	Nitrate/Nitrite	TC Quant	FC	TKN Ammonia		H ₂ S ₄
	① A-F SW 11	4/20/19	9:45	Water	6	G	-	-	-	-	-	-	-	-	
	② A-F SW 12	4/20/19	9:54				-	-	-	-	-	-	-	-	
	③ A-F SW 13		10:16				-	-	-	-	-	-	-	-	
	④ A-F SW 14		11:05				-	-	-	-	-	-	-	-	
	⑤ A-F SW 15		10:58				-	-	-	-	-	-	-	-	
	⑥ A-F SW 16		10:33				-	-	-	-	-	-	-	-	
	⑦ A-F SW 17		11:48				-	-	-	-	-	-	-	-	
	⑧ A-F SW 18		12:17				-	-	-	-	-	-	-	-	
	⑨ A-F D2		11:48				-	-	-	-	-	-	-	-	

Section 4 DOD Project? Yes No **Data Deliverable Requirements:**

Section 5 Relinquished By: (1) [Signature] Date 4/30 Time 12:57 Received By: [Signature]

Relinquished By: (2) Date Time Received By:

Relinquished By: (3) Date Time Received By:

Relinquished By: (4) Date 4-30-19 Time 13:57 Received For Laboratory By: [Signature] E.M

Cooler ID: Requested Turnaround Time and/or Special Instructions:

Temp Blank °C: 4.00 DSS Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

(See attached Sample Receipt Form) (See attached Sample Receipt Form)

2,12 DSS



e-Sample Receipt Form

SGS Workorder #:

1191980



1 1 9 1 9 8 0

Review Criteria	Condition (Yes, No, N/A)	Exceptions Noted below
Chain of Custody / Temperature Requirements		
Were Custody Seals intact? Note # & location	Yes	N/A Exemption permitted if sampler hand carries/delivers.
COC accompanied samples?	Yes	
DOD: Were samples received in COC corresponding coolers?	N/A	
<input type="checkbox"/> **Exemption permitted if chilled & collected <8 hours ago, or for samples where chilling is not required		
Temperature blank compliant* (i.e., 0-6 °C after CF)?	Yes	Cooler ID: 1 @ 4.0 °C Therm. ID: D55
	Yes	Cooler ID: 1 @ 2.1 °C Therm. ID: D55
		Cooler ID: @ °C Therm. ID:
		Cooler ID: @ °C Therm. ID:
*If >6°C, were samples collected <8 hours ago?	N/A	
If <0°C, were sample containers ice free?	N/A	
Note: Identify containers received at non-compliant temperature . Use form FS-0029 if more space is needed.		
Holding Time / Documentation / Sample Condition Requirements		
Note: Refer to form F-083 "Sample Guide" for specific holding times.		
Were samples received within holding time?	Yes	
Do samples match COC** (i.e., sample IDs, dates/times collected)?	Yes	
**Note: If times differ <1hr, record details & login per COC.		
***Note: If sample information on containers differs from COC, SGS will default to COC information		
Were analytical requests clear? (i.e., method is specified for analyses with multiple option for analysis (Ex: BTEX, Metals))	Yes	
Were proper containers (type/mass/volume/preservative***) used?	Yes	***Exemption permitted for metals (e.g. 200.8/6020A).
Volatile / LL-Hg Requirements		
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samples?	N/A	
Were all water VOA vials free of headspace (i.e., bubbles ≤ 6mm)?	N/A	
Were all soil VOAs field extracted with MeOH+BFB?	N/A	
Note to Client: Any "No", answer above indicates non-compliance with standard procedures and may impact data quality.		
Additional notes (if applicable):		



Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>	<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>
1191980001-A	No Preservative Required	OK			
1191980001-B	No Preservative Required	OK			
1191980001-C	No Preservative Required	OK			
1191980001-D	Na2S2O3 for Chlorine Redu	OK			
1191980001-E	Na2S2O3 for Chlorine Redu	OK			
1191980001-F	H2SO4 to pH < 2	OK			
1191980002-A	No Preservative Required	OK			
1191980002-B	No Preservative Required	OK			
1191980002-C	No Preservative Required	OK			
1191980002-D	Na2S2O3 for Chlorine Redu	OK			
1191980002-E	Na2S2O3 for Chlorine Redu	OK			
1191980002-F	H2SO4 to pH < 2	OK			
1191980003-A	No Preservative Required	OK			
1191980003-B	No Preservative Required	OK			
1191980003-C	No Preservative Required	OK			
1191980003-D	Na2S2O3 for Chlorine Redu	OK			
1191980003-E	Na2S2O3 for Chlorine Redu	OK			
1191980003-F	H2SO4 to pH < 2	OK			
1191980004-A	No Preservative Required	OK			
1191980004-B	No Preservative Required	OK			
1191980004-C	No Preservative Required	OK			
1191980004-D	Na2S2O3 for Chlorine Redu	OK			
1191980004-E	Na2S2O3 for Chlorine Redu	OK			
1191980004-F	H2SO4 to pH < 2	OK			
1191980005-A	No Preservative Required	OK			
1191980005-B	No Preservative Required	OK			
1191980005-C	No Preservative Required	OK			
1191980005-D	Na2S2O3 for Chlorine Redu	OK			
1191980005-E	Na2S2O3 for Chlorine Redu	OK			
1191980005-F	H2SO4 to pH < 2	OK			
1191980006-A	No Preservative Required	OK			
1191980006-B	No Preservative Required	OK			
1191980006-C	No Preservative Required	OK			
1191980006-D	Na2S2O3 for Chlorine Redu	OK			
1191980006-E	Na2S2O3 for Chlorine Redu	OK			
1191980006-F	H2SO4 to pH < 2	OK			
1191980007-A	No Preservative Required	OK			
1191980007-B	No Preservative Required	OK			
1191980007-C	No Preservative Required	OK			
1191980007-D	Na2S2O3 for Chlorine Redu	OK			
1191980007-E	Na2S2O3 for Chlorine Redu	OK			
1191980007-F	H2SO4 to pH < 2	OK			
1191980008-A	No Preservative Required	OK			
1191980008-B	No Preservative Required	OK			
1191980008-C	No Preservative Required	OK			
1191980008-D	Na2S2O3 for Chlorine Redu	OK			
1191980008-E	Na2S2O3 for Chlorine Redu	OK			
1191980008-F	H2SO4 to pH < 2	OK			

<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>	<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>
1191980009-A	No Preservative Required	OK			
1191980009-B	No Preservative Required	OK			
1191980009-C	No Preservative Required	OK			
1191980009-D	Na2S2O3 for Chlorine Redu	OK			
1191980009-E	Na2S2O3 for Chlorine Redu	OK			
1191980009-F	H2SO4 to pH < 2	OK			

Container Condition Glossary

Containers for bacteriological, low level mercury and VOA vials are not opened prior to analysis and will be assigned condition code OK unless evidence indicates that 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.

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.