



Laboratory Report of Analysis

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

Report Number: **1182343**

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

Print Date: 05/31/2018 8:24:25AM

Case Narrative

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

SGS Project: **1182343**

Project Name/Site: **Wasilla WWTP**

Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

1182343005DUP (1447996) DUP

2540D - Total Suspended Solids - Sample duplicate RPD was outside of acceptance limits. Both sample and duplicate concentrations are less than the LOQ.

MB for HBN 1779992 [BOD/6048] (1448157) MB

5210B-BOD- MB (0.45 mg/L) is greater than the recommended limit of 0.2 mg/L. Samples >10X the MB are not significantly affected. Samples <10X the MB results may be biased high.

1182379001MSD (1448687) MSD

4500NH3-G - Ammonia - 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: 05/31/2018 8:24:26AM

Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. 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>
SW1	1182343001	05/22/2018	05/22/2018	Water (Surface, Eff., Ground)
SW2	1182343002	05/22/2018	05/22/2018	Water (Surface, Eff., Ground)
SW3	1182343003	05/22/2018	05/22/2018	Water (Surface, Eff., Ground)
SW4	1182343004	05/22/2018	05/22/2018	Water (Surface, Eff., Ground)
SW5	1182343005	05/22/2018	05/22/2018	Water (Surface, Eff., Ground)
SW6	1182343006	05/22/2018	05/22/2018	Water (Surface, Eff., Ground)
SW7	1182343007	05/22/2018	05/22/2018	Water (Surface, Eff., Ground)
SW8	1182343008	05/22/2018	05/22/2018	Water (Surface, Eff., Ground)
SW9	1182343009	05/22/2018	05/22/2018	Water (Surface, Eff., Ground)
SW10	1182343010	05/22/2018	05/22/2018	Water (Surface, Eff., Ground)
DUP	1182343011	05/22/2018	05/22/2018	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)
SM21 4500NO3-F	Flow Injection 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: 05/31/2018 8:24:28AM

Detectable Results Summary

Client Sample ID: **SW1**
 Lab Sample ID: 1182343001
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	12.6	mg/L
E. Coli	4	MPN/100mL
Fecal Coliform	7.0	col/100mL
Total Coliform	159	MPN/100mL

Waters Department

Ammonia-N	0.146	mg/L
Nitrate-N	0.0840J	mg/L
Total Phosphorus	0.0919	mg/L
Total Suspended Solids	7.00	mg/L

Client Sample ID: **SW2**
 Lab Sample ID: 1182343002
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	21.5	mg/L
E. Coli	4	MPN/100mL
Fecal Coliform	1.0	col/100mL
Total Coliform	1650	MPN/100mL

Waters Department

Total Phosphorus	0.0834	mg/L
Total Suspended Solids	4.80	mg/L

Client Sample ID: **SW3**
 Lab Sample ID: 1182343003
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	18.9	mg/L
Total Coliform	1986	MPN/100mL

Waters Department

Nitrate-N	0.0626J	mg/L
Total Phosphorus	0.0150J	mg/L
Total Suspended Solids	2.04	mg/L

Client Sample ID: **SW4**
 Lab Sample ID: 1182343004
Microbiology Laboratory
Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Coliform	2420	MPN/100mL
Nitrate-N	0.0504J	mg/L
Total Phosphorus	0.0114J	mg/L

Client Sample ID: **SW5**
 Lab Sample ID: 1182343005
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	7.95	mg/L
E. Coli	2	MPN/100mL
Total Coliform	411	MPN/100mL

Waters Department

Total Phosphorus	0.0162J	mg/L
Total Suspended Solids	1.04J	mg/L

Client Sample ID: **SW6**
 Lab Sample ID: 1182343006
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	2.77	mg/L
Total Coliform	980	MPN/100mL

Waters Department

Total Phosphorus	0.0100J	mg/L
Total Suspended Solids	1.33	mg/L

Detectable Results Summary

Client Sample ID: **SW7**
 Lab Sample ID: 1182343007
Microbiology Laboratory
Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	3.17	mg/L
Total Coliform	5790	MPN/100mL
Total Phosphorus	0.0549	mg/L
Total Suspended Solids	7.20	mg/L

Client Sample ID: **SW8**
 Lab Sample ID: 1182343008
Microbiology Laboratory
Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	17.4	mg/L
E. Coli	3	MPN/100mL
Total Coliform	45	MPN/100mL
Total Phosphorus	0.0676	mg/L
Total Suspended Solids	1.15	mg/L

Client Sample ID: **SW9**
 Lab Sample ID: 1182343009
Microbiology Laboratory
Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	32.5	mg/L
E. Coli	1	MPN/100mL
Total Coliform	1733	MPN/100mL
Total Phosphorus	0.0161J	mg/L
Total Suspended Solids	1.28	mg/L

Client Sample ID: **SW10**
 Lab Sample ID: 1182343010
Microbiology Laboratory
Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	6.86	mg/L
Total Coliform	435	MPN/100mL
Total Phosphorus	0.0233	mg/L
Total Suspended Solids	2.92	mg/L

Client Sample ID: **DUP**
 Lab Sample ID: 1182343011
Microbiology Laboratory
Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	19.4	mg/L
E. Coli	1	MPN/100mL
Fecal Coliform	1.0	col/100mL
Total Coliform	3080	MPN/100mL
Total Phosphorus	0.0136J	mg/L
Total Suspended Solids	2.29	mg/L



Results of SW1

Client Sample ID: SW1
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182343001
Lab Project ID: 1182343

Collection Date: 05/22/18 10:00
Received Date: 05/22/18 16:45
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Biochemical Oxygen Demand, 12.6, 2.00, 2.00, mg/L, 1, 05/23/18 16:41

Batch Information

Analytical Batch: BOD6048
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 05/23/18 16:41
Container ID: 1182343001-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Fecal Coliform, 7.0, 1.00, 1.00, col/100mL, 1, 05/22/18 17:33

Batch Information

Analytical Batch: BTF16568
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 05/22/18 17:33
Container ID: 1182343001-A

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: E. Coli, 4, 1, 1, MPN/100n, 1, 05/23/18 12:11. Row 2: Total Coliform, 159, 1, 1, MPN/100n, 1, 05/23/18 12:11

Batch Information

Analytical Batch: BTF16571
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 05/23/18 12:11
Container ID: 1182343001-D



Results of SW1

Client Sample ID: SW1
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182343001
Lab Project ID: 1182343

Collection Date: 05/22/18 10:00
Received Date: 05/22/18 16:45
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. Row 1: Total Suspended Solids, 7.00, 3.33, 1.03, mg/L, 1, 05/23/18 15:19

Batch Information

Analytical Batch: STS5885
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/23/18 15:19
Container ID: 1182343001-C

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.500 U, 1.00, 0.310, mg/L, 1, 05/24/18 15:43

Batch Information

Analytical Batch: WDA4289
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/24/18 15:43
Container ID: 1182343001-E
Prep Batch: WXX12339
Prep Method: METHOD
Prep Date/Time: 05/23/18 17:45
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 1: Ammonia-N, 0.146, 0.100, 0.0310, mg/L, 1, 05/25/18 13:05

Batch Information

Analytical Batch: WDA4290
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/25/18 13:05
Container ID: 1182343001-E
Prep Batch: WXX12340
Prep Method: METHOD
Prep Date/Time: 05/25/18 11:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows: Nitrate-N (0.0840 J), Nitrite-N (0.0500 U)

Results of SW1

Client Sample ID: **SW1**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1182343001
 Lab Project ID: 1182343

Collection Date: 05/22/18 10:00
 Received Date: 05/22/18 16:45
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WFI2689
 Analytical Method: SM21 4500NO3-F
 Analyst: AYC
 Analytical Date/Time: 05/22/18 19:01
 Container ID: 1182343001-F

<u>Parameter</u>	<u>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	0.0919	0.0200	0.00500	mg/L	1		05/30/18 13:46

Batch Information

Analytical Batch: WDA4293
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/30/18 13:46
 Container ID: 1182343001-E

Prep Batch: WXX12344
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/30/18 11:22
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL



Results of SW2

Client Sample ID: SW2
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182343002
Lab Project ID: 1182343

Collection Date: 05/22/18 10:26
Received Date: 05/22/18 16:45
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Biochemical Oxygen Demand, 21.5, 2.00, 2.00, mg/L, 1, 05/23/18 16:41

Batch Information

Analytical Batch: BOD6048
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 05/23/18 16:41
Container ID: 1182343002-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Fecal Coliform, 1.0, 1.00, 1.00, col/100mL, 1, 05/22/18 17:33

Batch Information

Analytical Batch: BTF16568
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 05/22/18 17:33
Container ID: 1182343002-A

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: E. Coli, 4, 1, 1, MPN/100n, 1, 05/23/18 12:11. Row 2: Total Coliform, 1650, 10, 10, MPN/100n, 10, 05/23/18 12:11

Batch Information

Analytical Batch: BTF16571
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 05/23/18 12:11
Container ID: 1182343002-D



Results of SW2

Client Sample ID: SW2
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182343002
Lab Project ID: 1182343

Collection Date: 05/22/18 10:26
Received Date: 05/22/18 16:45
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. Row 1: Total Suspended Solids, 4.80, 2.00, 0.620, mg/L, 1, 05/23/18 15:19

Batch Information

Analytical Batch: STS5885
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/23/18 15:19
Container ID: 1182343002-C

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.500 U, 1.00, 0.310, mg/L, 1, 05/24/18 15:44

Batch Information

Analytical Batch: WDA4289
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/24/18 15:44
Container ID: 1182343002-E
Prep Batch: WXX12339
Prep Method: METHOD
Prep Date/Time: 05/23/18 17:45
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 1: Ammonia-N, 0.0500 U, 0.100, 0.0310, mg/L, 1, 05/25/18 13:06

Batch Information

Analytical Batch: WDA4290
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/25/18 13:06
Container ID: 1182343002-E
Prep Batch: WXX12340
Prep Method: METHOD
Prep Date/Time: 05/25/18 11:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows: Nitrate-N (0.0500 U, 0.100, 0.0250, mg/L, 2, 05/22/18 19:02), Nitrite-N (0.0500 U, 0.100, 0.0250, mg/L, 2, 05/22/18 19:02)

Print Date: 05/31/2018 8:24:30AM

J flagging is activated



Results of SW2

Client Sample ID: **SW2**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1182343002
Lab Project ID: 1182343

Collection Date: 05/22/18 10:26
Received Date: 05/22/18 16:45
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WFI2689
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 05/22/18 19:02
Container ID: 1182343002-F

<u>Parameter</u>	<u>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	0.0834	0.0200	0.00500	mg/L	1		05/30/18 13:49

Batch Information

Analytical Batch: WDA4293
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 05/30/18 13:49
Container ID: 1182343002-E

Prep Batch: WXX12344
Prep Method: SM21 4500P-B,E
Prep Date/Time: 05/30/18 11:22
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL



Results of SW3

Client Sample ID: **SW3**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1182343003
Lab Project ID: 1182343

Collection Date: 05/22/18 10:50
Received Date: 05/22/18 16:45
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	18.9	2.00	2.00	mg/L	1		05/23/18 16:41

Batch Information

Analytical Batch: BOD6048
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 05/23/18 16:41
Container ID: 1182343003-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>
Fecal Coliform	1.00 U	1.00	1.00	col/100mL	1		05/22/18 17:33

Batch Information

Analytical Batch: BTF16568
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 05/22/18 17:33
Container ID: 1182343003-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>
E. Coli	1 U	1	1	MPN/100n	1		05/23/18 12:11
Total Coliform	1986	1	1	MPN/100n	1		05/23/18 12:11

Batch Information

Analytical Batch: BTF16571
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 05/23/18 12:11
Container ID: 1182343003-D



Results of SW3

Client Sample ID: SW3
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182343003
Lab Project ID: 1182343

Collection Date: 05/22/18 10:50
Received Date: 05/22/18 16:45
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. Row 1: Total Suspended Solids, 2.04, 1.02, 0.316, mg/L, 1, 05/23/18 15:19

Batch Information

Analytical Batch: STS5885
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/23/18 15:19
Container ID: 1182343003-C

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.500 U, 1.00, 0.310, mg/L, 1, 05/24/18 15:46

Batch Information

Analytical Batch: WDA4289
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/24/18 15:46
Container ID: 1182343003-E
Prep Batch: WXX12339
Prep Method: METHOD
Prep Date/Time: 05/23/18 17:45
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 1: Ammonia-N, 0.0500 U, 0.100, 0.0310, mg/L, 1, 05/25/18 13:08

Batch Information

Analytical Batch: WDA4290
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/25/18 13:08
Container ID: 1182343003-E
Prep Batch: WXX12340
Prep Method: METHOD
Prep Date/Time: 05/25/18 11:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows: Nitrate-N (0.0626 J, 0.100, 0.0250, mg/L, 2, 05/22/18 19:04), Nitrite-N (0.0500 U, 0.100, 0.0250, mg/L, 2, 05/22/18 19:04)

Results of SW3

Client Sample ID: **SW3**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1182343003
 Lab Project ID: 1182343

Collection Date: 05/22/18 10:50
 Received Date: 05/22/18 16:45
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WFI2689
 Analytical Method: SM21 4500NO3-F
 Analyst: AYC
 Analytical Date/Time: 05/22/18 19:04
 Container ID: 1182343003-F

<u>Parameter</u>	<u>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	0.0150 J	0.0200	0.00500	mg/L	1		05/30/18 13:50

Batch Information

Analytical Batch: WDA4293
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/30/18 13:50
 Container ID: 1182343003-E

Prep Batch: WXX12344
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/30/18 11:22
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL



Results of SW4

Client Sample ID: SW4
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182343004
Lab Project ID: 1182343

Collection Date: 05/22/18 12:12
Received Date: 05/22/18 16:45
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Biochemical Oxygen Demand, 2.00 U, 2.00, 2.00, mg/L, 1, 05/23/18 16:41

Batch Information

Analytical Batch: BOD6048
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 05/23/18 16:41
Container ID: 1182343004-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Fecal Coliform, 1.00 U, 1.00, 1.00, col/100mL, 1, 05/22/18 18:23

Batch Information

Analytical Batch: BTF16568
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 05/22/18 18:23
Container ID: 1182343004-A

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: E. Coli, 1 U, 1, 1, MPN/100n, 1, 05/23/18 12:11. Row 2: Total Coliform, 2420, 1, 1, MPN/100n, 1, 05/23/18 12:11

Batch Information

Analytical Batch: BTF16571
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 05/23/18 12:11
Container ID: 1182343004-D



Results of SW4

Client Sample ID: SW4
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182343004
Lab Project ID: 1182343

Collection Date: 05/22/18 12:12
Received Date: 05/22/18 16:45
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. Row 1: Total Suspended Solids, 1.02 U, 2.04, 0.633, mg/L, 1, 05/23/18 15:19

Batch Information

Analytical Batch: STS5885
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/23/18 15:19
Container ID: 1182343004-C

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.500 U, 1.00, 0.310, mg/L, 1, 05/24/18 15:47

Batch Information

Analytical Batch: WDA4289
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/24/18 15:47
Container ID: 1182343004-E
Prep Batch: WXX12339
Prep Method: METHOD
Prep Date/Time: 05/23/18 17:45
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 1: Ammonia-N, 0.0500 U, 0.100, 0.0310, mg/L, 1, 05/25/18 12:56

Batch Information

Analytical Batch: WDA4290
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/25/18 12:56
Container ID: 1182343004-E
Prep Batch: WXX12340
Prep Method: METHOD
Prep Date/Time: 05/25/18 11:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows: Nitrate-N (0.0504 J, 0.100, 0.0250, mg/L, 2, 05/22/18 19:06), Nitrite-N (0.0500 U, 0.100, 0.0250, mg/L, 2, 05/22/18 19:06)



Results of **SW4**

Client Sample ID: **SW4**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1182343004
Lab Project ID: 1182343

Collection Date: 05/22/18 12:12
Received Date: 05/22/18 16:45
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2689
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 05/22/18 19:06
Container ID: 1182343004-F

<u>Parameter</u>	<u>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	0.0114 J	0.0200	0.00500	mg/L	1		05/30/18 13:51

Batch Information

Analytical Batch: WDA4293
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 05/30/18 13:51
Container ID: 1182343004-E

Prep Batch: WXX12344
Prep Method: SM21 4500P-B,E
Prep Date/Time: 05/30/18 11:22
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL



Results of SW5

Client Sample ID: SW5
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182343005
Lab Project ID: 1182343

Collection Date: 05/22/18 12:36
Received Date: 05/22/18 16:45
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Biochemical Oxygen Demand, 7.95, 2.00, 2.00, mg/L, 1, 05/23/18 16:41

Batch Information

Analytical Batch: BOD6048
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 05/23/18 16:41
Container ID: 1182343005-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Fecal Coliform, 1.00 U, 1.00, 1.00, col/100mL, 1, 05/22/18 18:23

Batch Information

Analytical Batch: BTF16568
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 05/22/18 18:23
Container ID: 1182343005-A

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: E. Coli, 2, 1, 1, MPN/100n, 1, 05/23/18 12:11. Row 2: Total Coliform, 411, 1, 1, MPN/100n, 1, 05/23/18 12:11

Batch Information

Analytical Batch: BTF16571
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 05/23/18 12:11
Container ID: 1182343005-D



Results of SW5

Client Sample ID: SW5
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182343005
Lab Project ID: 1182343

Collection Date: 05/22/18 12:36
Received Date: 05/22/18 16:45
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. Row 1: Total Suspended Solids, 1.04 J, 2.08, 0.646, mg/L, 1, 05/23/18 15:19

Batch Information

Analytical Batch: STS5885
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/23/18 15:19
Container ID: 1182343005-C

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.500 U, 1.00, 0.310, mg/L, 1, 05/24/18 15:51

Batch Information

Analytical Batch: WDA4289
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/24/18 15:51
Container ID: 1182343005-E
Prep Batch: WXX12339
Prep Method: METHOD
Prep Date/Time: 05/23/18 17:45
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 1: Ammonia-N, 0.0500 U, 0.100, 0.0310, mg/L, 1, 05/25/18 13:10

Batch Information

Analytical Batch: WDA4290
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/25/18 13:10
Container ID: 1182343005-E
Prep Batch: WXX12340
Prep Method: METHOD
Prep Date/Time: 05/25/18 11:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows: Nitrate-N (0.0500 U, 0.100, 0.0250, mg/L, 2, 05/22/18 19:08), Nitrite-N (0.0500 U, 0.100, 0.0250, mg/L, 2, 05/22/18 19:08)

Results of SW5

Client Sample ID: **SW5**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1182343005
 Lab Project ID: 1182343

Collection Date: 05/22/18 12:36
 Received Date: 05/22/18 16:45
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WFI2689
 Analytical Method: SM21 4500NO3-F
 Analyst: AYC
 Analytical Date/Time: 05/22/18 19:08
 Container ID: 1182343005-F

<u>Parameter</u>	<u>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	0.0162 J	0.0200	0.00500	mg/L	1		05/30/18 13:52

Batch Information

Analytical Batch: WDA4293
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/30/18 13:52
 Container ID: 1182343005-E

Prep Batch: WXX12344
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/30/18 11:22
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL



Results of SW6

Client Sample ID: SW6
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182343006
Lab Project ID: 1182343

Collection Date: 05/22/18 12:02
Received Date: 05/22/18 16:45
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Biochemical Oxygen Demand, 2.77, 2.00, 2.00, mg/L, 1, 05/23/18 16:41

Batch Information

Analytical Batch: BOD6048
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 05/23/18 16:41
Container ID: 1182343006-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Fecal Coliform, 1.00 U, 1.00, 1.00, col/100mL, 1, 05/22/18 18:23

Batch Information

Analytical Batch: BTF16568
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 05/22/18 18:23
Container ID: 1182343006-A

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: E. Coli, 1 U, 1, 1, MPN/100n, 1, 05/23/18 12:11. Row 2: Total Coliform, 980, 1, 1, MPN/100n, 1, 05/23/18 12:11

Batch Information

Analytical Batch: BTF16571
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 05/23/18 12:11
Container ID: 1182343006-D



Results of SW6

Client Sample ID: SW6
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182343006
Lab Project ID: 1182343

Collection Date: 05/22/18 12:02
Received Date: 05/22/18 16:45
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. Row 1: Total Suspended Solids, 1.33, 1.02, 0.316, mg/L, 1, 05/23/18 15:19

Batch Information

Analytical Batch: STS5885
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/23/18 15:19
Container ID: 1182343006-C

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.500 U, 1.00, 0.310, mg/L, 1, 05/24/18 15:52

Batch Information

Analytical Batch: WDA4289
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/24/18 15:52
Container ID: 1182343006-E
Prep Batch: WXX12339
Prep Method: METHOD
Prep Date/Time: 05/23/18 17:45
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 1: Ammonia-N, 0.0500 U, 0.100, 0.0310, mg/L, 1, 05/25/18 13:11

Batch Information

Analytical Batch: WDA4290
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/25/18 13:11
Container ID: 1182343006-E
Prep Batch: WXX12340
Prep Method: METHOD
Prep Date/Time: 05/25/18 11:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows: Nitrate-N (0.0500 U, 0.100, 0.0250, mg/L, 2, 05/22/18 19:09), Nitrite-N (0.0500 U, 0.100, 0.0250, mg/L, 2, 05/22/18 19:09)

Results of SW6

Client Sample ID: **SW6**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1182343006
 Lab Project ID: 1182343

Collection Date: 05/22/18 12:02
 Received Date: 05/22/18 16:45
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WFI2689
 Analytical Method: SM21 4500NO3-F
 Analyst: AYC
 Analytical Date/Time: 05/22/18 19:09
 Container ID: 1182343006-F

<u>Parameter</u>	<u>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 J	0.0200	0.00500	mg/L	1		05/30/18 13:55

Batch Information

Analytical Batch: WDA4293
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/30/18 13:55
 Container ID: 1182343006-E

Prep Batch: WXX12344
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/30/18 11:22
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Results of SW7

Client Sample ID: **SW7**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1182343007
 Lab Project ID: 1182343

Collection Date: 05/22/18 11:36
 Received Date: 05/22/18 16:45
 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	3.17	2.00	2.00	mg/L	1		05/23/18 16:41

Batch Information

Analytical Batch: BOD6048
 Analytical Method: SM21 5210B
 Analyst: A.L
 Analytical Date/Time: 05/23/18 16:41
 Container ID: 1182343007-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>
Fecal Coliform	1.00 U	1.00	1.00	col/100mL	1		05/22/18 18:23

Batch Information

Analytical Batch: BTF16568
 Analytical Method: SM21 9222D
 Analyst: K.W
 Analytical Date/Time: 05/22/18 18:23
 Container ID: 1182343007-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>
E. Coli	1 U	1	1	MPN/100n	1		05/23/18 12:11
Total Coliform	5790	10	10	MPN/100n	10		05/23/18 12:11

Batch Information

Analytical Batch: BTF16571
 Analytical Method: SM21 9223B
 Analyst: K.W
 Analytical Date/Time: 05/23/18 12:11
 Container ID: 1182343007-D



Results of SW7

Client Sample ID: SW7
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182343007
Lab Project ID: 1182343

Collection Date: 05/22/18 11:36
Received Date: 05/22/18 16:45
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. Row 1: Total Suspended Solids, 7.20, 2.00, 0.620, mg/L, 1, 05/23/18 15:19

Batch Information

Analytical Batch: STS5885
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/23/18 15:19
Container ID: 1182343007-C

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.500 U, 1.00, 0.310, mg/L, 1, 05/24/18 15:54

Batch Information

Analytical Batch: WDA4289
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/24/18 15:54
Container ID: 1182343007-E
Prep Batch: WXX12339
Prep Method: METHOD
Prep Date/Time: 05/23/18 17:45
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 1: Ammonia-N, 0.0500 U, 0.100, 0.0310, mg/L, 1, 05/25/18 13:13

Batch Information

Analytical Batch: WDA4290
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/25/18 13:13
Container ID: 1182343007-E
Prep Batch: WXX12340
Prep Method: METHOD
Prep Date/Time: 05/25/18 11:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows: Nitrate-N (0.0500 U, 0.100, 0.0250, mg/L, 2, 05/22/18 19:11), Nitrite-N (0.0500 U, 0.100, 0.0250, mg/L, 2, 05/22/18 19:11)

Results of SW7

Client Sample ID: **SW7**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1182343007
 Lab Project ID: 1182343

Collection Date: 05/22/18 11:36
 Received Date: 05/22/18 16:45
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WFI2689
 Analytical Method: SM21 4500NO3-F
 Analyst: AYC
 Analytical Date/Time: 05/22/18 19:11
 Container ID: 1182343007-F

<u>Parameter</u>	<u>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	0.0549	0.0200	0.00500	mg/L	1		05/30/18 13:56

Batch Information

Analytical Batch: WDA4293
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/30/18 13:56
 Container ID: 1182343007-E

Prep Batch: WXX12344
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/30/18 11:22
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL



Results of SW8

Client Sample ID: **SW8**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1182343008
Lab Project ID: 1182343

Collection Date: 05/22/18 14:22
Received Date: 05/22/18 16:45
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	17.4	2.00	2.00	mg/L	1		05/23/18 16:41

Batch Information

Analytical Batch: BOD6048
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 05/23/18 16:41
Container ID: 1182343008-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>
Fecal Coliform	1.00 U	1.00	1.00	col/100mL	1		05/22/18 18:23

Batch Information

Analytical Batch: BTF16568
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 05/22/18 18:23
Container ID: 1182343008-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>
E. Coli	3	1	1	MPN/100n	1		05/23/18 12:11
Total Coliform	45	1	1	MPN/100n	1		05/23/18 12:11

Batch Information

Analytical Batch: BTF16571
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 05/23/18 12:11
Container ID: 1182343008-D



Results of SW8

Client Sample ID: SW8
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182343008
Lab Project ID: 1182343

Collection Date: 05/22/18 14:22
Received Date: 05/22/18 16:45
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. Row 1: Total Suspended Solids, 1.15, 1.04, 0.323, mg/L, 1, 05/23/18 15:19

Batch Information

Analytical Batch: STS5885
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/23/18 15:19
Container ID: 1182343008-C

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.500 U, 1.00, 0.310, mg/L, 1, 05/24/18 15:55

Batch Information

Analytical Batch: WDA4289
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/24/18 15:55
Container ID: 1182343008-E
Prep Batch: WXX12339
Prep Method: METHOD
Prep Date/Time: 05/23/18 17:45
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 1: Ammonia-N, 0.0500 U, 0.100, 0.0310, mg/L, 1, 05/25/18 13:15

Batch Information

Analytical Batch: WDA4290
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/25/18 13:15
Container ID: 1182343008-E
Prep Batch: WXX12340
Prep Method: METHOD
Prep Date/Time: 05/25/18 11:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

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

Print Date: 05/31/2018 8:24:30AM

J flagging is activated

Results of SW8

Client Sample ID: **SW8**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1182343008
 Lab Project ID: 1182343

Collection Date: 05/22/18 14:22
 Received Date: 05/22/18 16:45
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WFI2689
 Analytical Method: SM21 4500NO3-F
 Analyst: AYC
 Analytical Date/Time: 05/22/18 19:13
 Container ID: 1182343008-F

<u>Parameter</u>	<u>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	0.0676	0.0200	0.00500	mg/L	1		05/30/18 13:57

Batch Information

Analytical Batch: WDA4293
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/30/18 13:57
 Container ID: 1182343008-E

Prep Batch: WXX12344
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/30/18 11:22
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL



Results of SW9

Client Sample ID: SW9
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182343009
Lab Project ID: 1182343

Collection Date: 05/22/18 14:04
Received Date: 05/22/18 16:45
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Biochemical Oxygen Demand, 32.5, 2.00, 2.00, mg/L, 1, 05/23/18 16:41

Batch Information

Analytical Batch: BOD6048
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 05/23/18 16:41
Container ID: 1182343009-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Fecal Coliform, 1.00 U, 1.00, 1.00, col/100mL, 1, 05/22/18 18:23

Batch Information

Analytical Batch: BTF16568
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 05/22/18 18:23
Container ID: 1182343009-A

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: E. Coli, 1, 1, 1, MPN/100n, 1, 05/23/18 12:11. Row 2: Total Coliform, 1733, 1, 1, MPN/100n, 1, 05/23/18 12:11

Batch Information

Analytical Batch: BTF16571
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 05/23/18 12:11
Container ID: 1182343009-D



Results of SW9

Client Sample ID: SW9
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182343009
Lab Project ID: 1182343

Collection Date: 05/22/18 14:04
Received Date: 05/22/18 16:45
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. Row 1: Total Suspended Solids, 1.28, 1.06, 0.330, mg/L, 1, 05/23/18 15:19

Batch Information

Analytical Batch: STS5885
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/23/18 15:19
Container ID: 1182343009-C

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.500 U, 1.00, 0.310, mg/L, 1, 05/24/18 15:56

Batch Information

Analytical Batch: WDA4289
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/24/18 15:56
Container ID: 1182343009-E
Prep Batch: WXX12339
Prep Method: METHOD
Prep Date/Time: 05/23/18 17:45
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 1: Ammonia-N, 0.0500 U, 0.100, 0.0310, mg/L, 1, 05/25/18 13:16

Batch Information

Analytical Batch: WDA4290
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/25/18 13:16
Container ID: 1182343009-E
Prep Batch: WXX12340
Prep Method: METHOD
Prep Date/Time: 05/25/18 11:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows: Nitrate-N (0.0500 U, 0.100, 0.0250, mg/L, 2, 05/22/18 19:23), Nitrite-N (0.0500 U, 0.100, 0.0250, mg/L, 2, 05/22/18 19:23)

Results of SW9

Client Sample ID: **SW9**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1182343009
 Lab Project ID: 1182343

Collection Date: 05/22/18 14:04
 Received Date: 05/22/18 16:45
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WFI2689
 Analytical Method: SM21 4500NO3-F
 Analyst: AYC
 Analytical Date/Time: 05/22/18 19:23
 Container ID: 1182343009-F

<u>Parameter</u>	<u>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	0.0161 J	0.0200	0.00500	mg/L	1		05/30/18 13:58

Batch Information

Analytical Batch: WDA4293
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/30/18 13:58
 Container ID: 1182343009-E

Prep Batch: WXX12344
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/30/18 11:22
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL



Results of SW10

Client Sample ID: SW10
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182343010
Lab Project ID: 1182343

Collection Date: 05/22/18 13:33
Received Date: 05/22/18 16:45
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row: Biochemical Oxygen Demand, 6.86, 2.00, 2.00, mg/L, 1, 05/23/18 16:41

Batch Information

Analytical Batch: BOD6048
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 05/23/18 16:41
Container ID: 1182343010-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row: Fecal Coliform, 1.00 U, 1.00, 1.00, col/100mL, 1, 05/22/18 18:23

Batch Information

Analytical Batch: BTF16568
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 05/22/18 18:23
Container ID: 1182343010-A

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows: E. Coli, Total Coliform

Batch Information

Analytical Batch: BTF16571
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 05/23/18 12:11
Container ID: 1182343010-D



Results of SW10

Client Sample ID: SW10
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182343010
Lab Project ID: 1182343

Collection Date: 05/22/18 13:33
Received Date: 05/22/18 16:45
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. Row 1: Total Suspended Solids, 2.92, 1.04, 0.323, mg/L, 1, 05/23/18 15:19

Batch Information

Analytical Batch: STS5885
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/23/18 15:19
Container ID: 1182343010-C

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.500 U, 1.00, 0.310, mg/L, 1, 05/24/18 15:58

Batch Information

Analytical Batch: WDA4289
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/24/18 15:58
Container ID: 1182343010-E
Prep Batch: WXX12339
Prep Method: METHOD
Prep Date/Time: 05/23/18 17:45
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 1: Ammonia-N, 0.0500 U, 0.100, 0.0310, mg/L, 1, 05/25/18 13:18

Batch Information

Analytical Batch: WDA4290
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/25/18 13:18
Container ID: 1182343010-E
Prep Batch: WXX12340
Prep Method: METHOD
Prep Date/Time: 05/25/18 11:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows: Nitrate-N (0.0500 U, 0.100, 0.0250, mg/L, 2, 05/22/18 19:25), Nitrite-N (0.0500 U, 0.100, 0.0250, mg/L, 2, 05/22/18 19:25)

Print Date: 05/31/2018 8:24:30AM

J flagging is activated

Results of SW10

Client Sample ID: **SW10**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1182343010
 Lab Project ID: 1182343

Collection Date: 05/22/18 13:33
 Received Date: 05/22/18 16:45
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WFI2689
 Analytical Method: SM21 4500NO3-F
 Analyst: AYC
 Analytical Date/Time: 05/22/18 19:25
 Container ID: 1182343010-F

<u>Parameter</u>	<u>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	0.0233	0.0200	0.00500	mg/L	1		05/30/18 13:59

Batch Information

Analytical Batch: WDA4293
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/30/18 13:59
 Container ID: 1182343010-E

Prep Batch: WXX12344
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/30/18 11:22
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL



Results of DUP

Client Sample ID: DUP
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182343011
Lab Project ID: 1182343

Collection Date: 05/22/18 14:04
Received Date: 05/22/18 16:45
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Biochemical Oxygen Demand, 19.4, 2.00, 2.00, mg/L, 1, 05/23/18 16:41

Batch Information

Analytical Batch: BOD6048
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 05/23/18 16:41
Container ID: 1182343011-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Fecal Coliform, 1.0, 1.00, 1.00, col/100mL, 1, 05/22/18 18:23

Batch Information

Analytical Batch: BTF16568
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 05/22/18 18:23
Container ID: 1182343011-A

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: E. Coli, 1, 1, 1, MPN/100n, 1, 05/23/18 12:11. Row 2: Total Coliform, 3080, 10, 10, MPN/100n, 10, 05/23/18 12:11

Batch Information

Analytical Batch: BTF16571
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 05/23/18 12:11
Container ID: 1182343011-D



Results of DUP

Client Sample ID: DUP
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182343011
Lab Project ID: 1182343

Collection Date: 05/22/18 14:04
Received Date: 05/22/18 16:45
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. Row 1: Total Suspended Solids, 2.29, 1.04, 0.323, mg/L, 1, 05/23/18 15:19

Batch Information

Analytical Batch: STS5885
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/23/18 15:19
Container ID: 1182343011-C

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.500 U, 1.00, 0.310, mg/L, 1, 05/24/18 15:39

Batch Information

Analytical Batch: WDA4289
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/24/18 15:39
Container ID: 1182343011-E
Prep Batch: WXX12339
Prep Method: METHOD
Prep Date/Time: 05/23/18 17:45
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 1: Ammonia-N, 0.0500 U, 0.100, 0.0310, mg/L, 1, 05/25/18 13:20

Batch Information

Analytical Batch: WDA4290
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/25/18 13:20
Container ID: 1182343011-E
Prep Batch: WXX12340
Prep Method: METHOD
Prep Date/Time: 05/25/18 11:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows: Nitrate-N, 0.0500 U, 0.100, 0.0250, mg/L, 2, 05/22/18 19:27; Nitrite-N, 0.0500 U, 0.100, 0.0250, mg/L, 2, 05/22/18 19:27



Results of DUP

Client Sample ID: DUP
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182343011
Lab Project ID: 1182343

Collection Date: 05/22/18 14:04
Received Date: 05/22/18 16:45
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WFI2689
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 05/22/18 19:27
Container ID: 1182343011-F

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Phosphorus, 0.0136 J, 0.0200, 0.00500, mg/L, 1, 05/30/18 14:00

Batch Information

Analytical Batch: WDA4293
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 05/30/18 14:00
Container ID: 1182343011-E
Prep Batch: WXX12344
Prep Method: SM21 4500P-B,E
Prep Date/Time: 05/30/18 11:22
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL



Method Blank

Blank ID: MB for HBN 1779992 [BOD/6048]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1448157

QC for Samples:

1182343001, 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007, 1182343008, 1182343009, 1182343010, 1182343011

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: BOD6048

Analytical Method: SM21 5210B

Instrument:

Analyst: A.L

Analytical Date/Time: 5/23/2018 4:41:18PM

Print Date: 05/31/2018 8:24:33AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1182343 [BOD6048]

Blank Spike Lab ID: 1448158

Date Analyzed: 05/23/2018 16:41

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182343001, 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007, 1182343008, 1182343009, 1182343010, 1182343011

Results by SM21 5210B

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Biochemical Oxygen Demand	198	219	111	(84.6-115.4

Batch Information

Analytical Batch: **BOD6048**

Analytical Method: **SM21 5210B**

Instrument:

Analyst: **A.L**

Print Date: 05/31/2018 8:24:34AM

Method Blank

Blank ID: MB for HBN 1779962 [BTF/16568]

Blank Lab ID: 1448034

QC for Samples:

1182343001, 1182343002, 1182343003

Matrix: Water (Surface, Eff., Ground)

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: BTF16568

Analytical Method: SM21 9222D

Instrument:

Analyst: K.W

Analytical Date/Time: 5/22/2018 5:33:00PM

Print Date: 05/31/2018 8:24:37AM

Method Blank

Blank ID: MB for HBN 1779962 [BTF/16568]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1448233

QC for Samples:

1182343001, 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007, 1182343008, 1182343009, 1182343010, 1182343011

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: BTF16568

Analytical Method: SM21 9222D

Instrument:

Analyst: K.W

Analytical Date/Time: 5/22/2018 6:23:00PM

Print Date: 05/31/2018 8:24:37AM



Method Blank

Blank ID: MB for HBN 1779965 [BTF/16571]
Blank Lab ID: 1448042

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1182343001, 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007, 1182343008, 1182343009, 1182343010, 1182343011

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: BTF16571
Analytical Method: SM21 9223B
Instrument:
Analyst: K.W
Analytical Date/Time: 5/23/2018 12:11:00PM

Print Date: 05/31/2018 8:24:39AM

Method Blank

Blank ID: MB for HBN 1779951 [STS/5885]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1447992

QC for Samples:

1182343001, 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007, 1182343008, 1182343009, 1182343010, 1182343011

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: STS5885

Analytical Method: SM21 2540D

Instrument:

Analyst: EWW

Analytical Date/Time: 5/23/2018 3:19:52PM

Print Date: 05/31/2018 8:24:41AM

Duplicate Sample Summary

Original Sample ID: 1182343004

Duplicate Sample ID: 1447995

QC for Samples:

1182343001, 1182343002, 1182343003, 1182343004, 1182343005

Analysis Date: 05/23/2018 15:19

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	ND	1.02U	mg/L	0.00	(< 5)

Batch Information

Analytical Batch: STS5885

Analytical Method: SM21 2540D

Instrument:

Analyst: EWW

Print Date: 05/31/2018 8:24:43AM

Duplicate Sample Summary

Original Sample ID: 1182343005

Duplicate Sample ID: 1447996

QC for Samples:

1182343005, 1182343006, 1182343007, 1182343008, 1182343009, 1182343010, 1182343011

Analysis Date: 05/23/2018 15:19

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	1.04J	1.25J	mg/L	18.20*	(< 5)

Batch Information

Analytical Batch: STS5885

Analytical Method: SM21 2540D

Instrument:

Analyst: EWW

Print Date: 05/31/2018 8:24:43AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1182343 [STS5885]
 Blank Spike Lab ID: 1447993
 Date Analyzed: 05/23/2018 15:19

Spike Duplicate ID: LCSD for HBN 1182343 [STS5885]
 Spike Duplicate Lab ID: 1447994
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182343001, 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007, 1182343008, 1182343009, 1182343010, 1182343011

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	50	48.5	97	50	49.7	99	(75-125)	2.40	(< 5)

Batch Information

Analytical Batch: STS5885
 Analytical Method: SM21 2540D
 Instrument:
 Analyst: EWW

Method Blank

Blank ID: MB for HBN 1779977 (WFI/2689)
 Blank Lab ID: 1448102

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1182343001, 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007, 1182343008, 1182343009, 1182343010, 1182343011

Results by SM21 4500NO3-F

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Nitrate-N	0.0500U	0.100	0.0250	mg/L
Nitrite-N	0.0500U	0.100	0.0250	mg/L
Total Nitrate/Nitrite-N	0.0500U	0.100	0.0250	mg/L

Batch Information

Analytical Batch: WFI2689
 Analytical Method: SM21 4500NO3-F
 Instrument: Astoria segmented flow
 Analyst: AYC
 Analytical Date/Time: 5/22/2018 6:55:48PM

Print Date: 05/31/2018 8:24:45AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1182343 [WFI2689]

Blank Spike Lab ID: 1448092

Date Analyzed: 05/22/2018 18:54

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182343001, 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007, 1182343008, 1182343009, 1182343010, 1182343011

Results by SM21 4500NO3-F

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Nitrate-N	2.5	2.57	103	(70-130)
Nitrite-N	2.5	2.48	99	(90-110)
Total Nitrate/Nitrite-N	5	5.05	101	(90-110)

Batch Information

Analytical Batch: **WFI2689**

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

Instrument: **Astoria segmented flow**

Analyst: **AYC**

Print Date: 05/31/2018 8:24:46AM

Matrix Spike Summary

Original Sample ID: 1182343008
 MS Sample ID: 1448090 MS
 MSD Sample ID: 1448091 MSD

Analysis Date: 05/22/2018 19:13
 Analysis Date: 05/22/2018 19:15
 Analysis Date: 05/22/2018 19:16
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182343001, 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007,
 1182343008, 1182343009, 1182343010, 1182343011

Results by SM21 4500NO3-F

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Nitrate-N	0.0500U	2.50	2.53	101	2.50	2.16	86	70-130	16.10	(< 25)
Nitrite-N	0.0500U	2.50	2.6	104	2.50	2.52	101	90-110	3.10	(< 25)

Batch Information

Analytical Batch: WFI2689
 Analytical Method: SM21 4500NO3-F
 Instrument: Astoria segmented flow
 Analyst: AYC
 Analytical Date/Time: 5/22/2018 7:15:03PM

Method Blank

Blank ID: MB for HBN 1780039 [WXX/12339]
Blank Lab ID: 1448374

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1182343001, 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007, 1182343008, 1182343009, 1182343010, 1182343011

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: WDA4289
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 5/24/2018 3:35:45PM

Prep Batch: WXX12339
Prep Method: METHOD
Prep Date/Time: 5/23/2018 5:45:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/31/2018 8:24:48AM

Method Blank

Blank ID: MB for HBN 1780039 [WXX/12339]
Blank Lab ID: 1448379

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1182343001, 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007, 1182343008, 1182343009, 1182343010, 1182343011

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: WDA4289
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 5/24/2018 3:59:19PM

Prep Batch: WXX12339
Prep Method: METHOD
Prep Date/Time: 5/23/2018 5:45:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/31/2018 8:24:48AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1182343 [WXX12339]
 Blank Spike Lab ID: 1448375
 Date Analyzed: 05/24/2018 15:37

Spike Duplicate ID: LCSD for HBN 1182343 [WXX12339]
 Spike Duplicate Lab ID: 1448376
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182343001, 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007, 1182343008, 1182343009, 1182343010, 1182343011

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	4.44	111	4	4.61	115	(75-125)	3.80	(< 25)

Batch Information

Analytical Batch: **WDA4289**
 Analytical Method: **SM21 4500-N D**
 Instrument: **Discrete Analyzer 2**
 Analyst: **DMM**

Prep Batch: **WXX12339**
 Prep Method: **METHOD**
 Prep Date/Time: **05/23/2018 17:45**
 Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL
 Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1182343 [WXX12339]
 Blank Spike Lab ID: 1448380
 Date Analyzed: 05/24/2018 16:00

Spike Duplicate ID: LCSD for HBN 1182343 [WXX12339]
 Spike Duplicate Lab ID: 1448381
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182343001, 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007, 1182343008, 1182343009, 1182343010, 1182343011

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	4.89	122	4	4.51	113	(75-125)	8.00	(< 25)

Batch Information

Analytical Batch: **WDA4289**
 Analytical Method: **SM21 4500-N D**
 Instrument: **Discrete Analyzer 2**
 Analyst: **DMM**

Prep Batch: **WXX12339**
 Prep Method: **METHOD**
 Prep Date/Time: **05/23/2018 17:45**
 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: 1182343011
 MS Sample ID: 1448377 MS
 MSD Sample ID: 1448378 MSD

Analysis Date: 05/24/2018 15:39
 Analysis Date: 05/24/2018 15:41
 Analysis Date: 05/24/2018 15:42
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182343001, 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007, 1182343008, 1182343009, 1182343010, 1182343011

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	3.98	99	4.00	4.24	106	75-125	6.50	(< 25)

Batch Information

Analytical Batch: WDA4289
 Analytical Method: SM21 4500-N D
 Instrument: Discrete Analyzer 2
 Analyst: DMM
 Analytical Date/Time: 5/24/2018 3:41:00PM

Prep Batch: WXX12339
 Prep Method: Distillation TKN by Phenate (W)
 Prep Date/Time: 5/23/2018 5:45:00PM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL

Method Blank

Blank ID: MB for HBN 1780100 [WXX/12340]
 Blank Lab ID: 1448678

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1182343001, 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007, 1182343008, 1182343009, 1182343010, 1182343011

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: WDA4290
 Analytical Method: SM21 4500-NH3 G
 Instrument: Discrete Analyzer 2
 Analyst: DMM
 Analytical Date/Time: 5/25/2018 12:24:56PM

Prep Batch: WXX12340
 Prep Method: METHOD
 Prep Date/Time: 5/25/2018 11:30:00AM
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

Print Date: 05/31/2018 8:24:52AM



Method Blank

Blank ID: MB for HBN 1780100 [WXX/12340]
Blank Lab ID: 1448681

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1182343001, 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007, 1182343008, 1182343009, 1182343010, 1182343011

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: WDA4290
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 5/25/2018 12:51:40PM

Prep Batch: WXX12340
Prep Method: METHOD
Prep Date/Time: 5/25/2018 11:30:00AM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Print Date: 05/31/2018 8:24:52AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1182343 [WXX12340]
 Blank Spike Lab ID: 1448679
 Date Analyzed: 05/25/2018 12:26

Spike Duplicate ID: LCSD for HBN 1182343 [WXX12340]
 Spike Duplicate Lab ID: 1448680
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182343001, 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007, 1182343008, 1182343009, 1182343010, 1182343011

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	0.943	94	1	0.961	96	(75-125)	1.90	(< 25)

Batch Information

Analytical Batch: **WDA4290**
 Analytical Method: **SM21 4500-NH3 G**
 Instrument: **Discrete Analyzer 2**
 Analyst: **DMM**

Prep Batch: **WXX12340**
 Prep Method: **METHOD**
 Prep Date/Time: **05/25/2018 11:30**
 Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
 Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1182343 [WXX12340]
 Blank Spike Lab ID: 1448682
 Date Analyzed: 05/25/2018 12:53

Spike Duplicate ID: LCSD for HBN 1182343 [WXX12340]
 Spike Duplicate Lab ID: 1448683
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182343001, 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007, 1182343008, 1182343009, 1182343010, 1182343011

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	0.997	100	1	1.03	103	(75-125)	3.50	(< 25)

Batch Information

Analytical Batch: **WDA4290**
 Analytical Method: **SM21 4500-NH3 G**
 Instrument: **Discrete Analyzer 2**
 Analyst: **DMM**

Prep Batch: **WXX12340**
 Prep Method: **METHOD**
 Prep Date/Time: **05/25/2018 11:30**
 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: 1182343004
 MS Sample ID: 1448684 MS
 MSD Sample ID: 1448685 MSD

Analysis Date: 05/25/2018 12:56
 Analysis Date: 05/25/2018 12:58
 Analysis Date: 05/25/2018 13:00
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182343001, 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007,
 1182343008, 1182343009, 1182343010, 1182343011

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	1.06	106	1.00	0.961	96	75-125	9.60	(< 25)

Batch Information

Analytical Batch: WDA4290
 Analytical Method: SM21 4500-NH3 G
 Instrument: Discrete Analyzer 2
 Analyst: DMM
 Analytical Date/Time: 5/25/2018 12:58:21PM

Prep Batch: WXX12340
 Prep Method: Ammonia by SM21 4500F prep (W)
 Prep Date/Time: 5/25/2018 11:30:00AM
 Prep Initial Wt./Vol.: 6.00mL
 Prep Extract Vol: 6.00mL

Matrix Spike Summary

Original Sample ID: 1182379001
 MS Sample ID: 1448686 MS
 MSD Sample ID: 1448687 MSD

Analysis Date: 05/25/2018 12:29
 Analysis Date: 05/25/2018 12:31
 Analysis Date: 05/25/2018 12:33
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182343001, 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007,
 1182343008, 1182343009, 1182343010, 1182343011

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	.797	80	1.00	0.679	68 *	75-125	16.00	(< 25)

Batch Information

Analytical Batch: WDA4290
 Analytical Method: SM21 4500-NH3 G
 Instrument: Discrete Analyzer 2
 Analyst: DMM
 Analytical Date/Time: 5/25/2018 12:31:39PM

Prep Batch: WXX12340
 Prep Method: Ammonia by SM21 4500F prep (W)
 Prep Date/Time: 5/25/2018 11:30:00AM
 Prep Initial Wt./Vol.: 6.00mL
 Prep Extract Vol: 6.00mL



Method Blank

Blank ID: MB for HBN 1780220 [WXX/12344]
Blank Lab ID: 1449148

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1182343001, 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007, 1182343008, 1182343009, 1182343010, 1182343011

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: WDA4293
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 5/30/2018 1:43:44PM

Prep Batch: WXX12344
Prep Method: SM21 4500P-B,E
Prep Date/Time: 5/30/2018 11:22:00AM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/31/2018 8:24:55AM



Method Blank

Blank ID: MB for HBN 1780220 [WXX/12344]
Blank Lab ID: 1449172

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1182343001, 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007, 1182343008, 1182343009, 1182343010, 1182343011

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: WDA4293
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 5/30/2018 2:01:22PM

Prep Batch: WXX12344
Prep Method: SM21 4500P-B,E
Prep Date/Time: 5/30/2018 11:22:00AM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/31/2018 8:24:55AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1182343 [WXX12344]
 Blank Spike Lab ID: 1449149
 Date Analyzed: 05/30/2018 13:44

Spike Duplicate ID: LCSD for HBN 1182343 [WXX12344]
 Spike Duplicate Lab ID: 1449150
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182343001, 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007, 1182343008, 1182343009, 1182343010, 1182343011

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	0.191	95	0.2	0.189	95	(85-115)	0.84	(< 25)

Batch Information

Analytical Batch: WDA4293
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: EWW

Prep Batch: WXX12344
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/30/2018 11:22
 Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL
 Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1182343 [WXX12344]
 Blank Spike Lab ID: 1449173
 Date Analyzed: 05/30/2018 14:02

Spike Duplicate ID: LCSD for HBN 1182343 [WXX12344]
 Spike Duplicate Lab ID: 1449174
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182343001, 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007, 1182343008, 1182343009, 1182343010, 1182343011

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	0.189	94	0.2	0.190	95	(85-115)	0.58	(< 25)

Batch Information

Analytical Batch: WDA4293
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: EWW

Prep Batch: WXX12344
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/30/2018 11:22
 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: 1182343001
 MS Sample ID: 1449151 MS
 MSD Sample ID: 1449152 MSD

Analysis Date: 05/30/2018 13:46
 Analysis Date: 05/30/2018 13:47
 Analysis Date: 05/30/2018 13:48
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182343001, 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007,
 1182343008, 1182343009, 1182343010, 1182343011

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	0.0919	0.200	.294	101	0.200	0.289	98	75-125	1.90	(< 25)

Batch Information

Analytical Batch: WDA4293
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: EWW
 Analytical Date/Time: 5/30/2018 1:47:39PM

Prep Batch: WXX12344
 Prep Method: Total Phosphorus (W) Ext.
 Prep Date/Time: 5/30/2018 11:22:00AM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL

Matrix Spike Summary

Original Sample ID: 1182379001
 MS Sample ID: 1449153 MS
 MSD Sample ID: 1449154 MSD

Analysis Date: 05/30/2018 14:04
 Analysis Date: 05/30/2018 14:07
 Analysis Date: 05/30/2018 14:08
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182343002, 1182343003, 1182343004, 1182343005, 1182343006, 1182343007, 1182343008, 1182343009, 1182343010, 1182343011

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	0.0465	0.200	.244	99	0.200	0.244	99	75-125	0.08	(< 25)

Batch Information

Analytical Batch: WDA4293
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: EWW
 Analytical Date/Time: 5/30/2018 2:07:13PM

Prep Batch: WXX12344
 Prep Method: Total Phosphorus (W) Ext.
 Prep Date/Time: 5/30/2018 11:22:00AM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL

Print Date: 05/31/2018 8:24:58AM



SGS North America Inc.
CHAIN OF CUSTODY RECORD

1182343



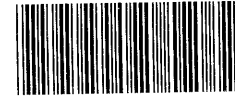
CLIENT: Stantec				Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.					Page <u>1</u> of <u>2</u>					
CONTACT: Jake Alward PHONE #: 343-5202				Section 3		Preservative								
PROJECT NAME: Wasilla WWTP PROJECT/PWSID/PERMIT#: REPORTS TO: E-MAIL: INVOICE TO: Stantec QUOTE #: 204700415 P.O. #: 204700415				# C O N T A I N E R S	Pres: Type:	<div style="display: flex; justify-content: space-around;"> Na₂SO₄ Na₂SO₄ H₂SO₄ </div>					REMARKS/LOC ID			
						Comp	Grab	MI (Multi-incremental)	5210 - BOD	2540 - TSS		9222 - Fecal Coliform	9223 - Total Coliform Quantitray (1x, 10x)	4500 - TKN, Ammonia, T-Phos
RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/MATRIX CODE										
① A-F	SW1	5/22/18	10:00		6	←	/	/	/	/	/	/	/	
② A-F	SW2	5/22/18	10:26		6		/	/	/	/	/	/	/	
③ A-F	SW3	↓	10:50				/	/	/	/	/	/	/	
④ A-F	SW4		12:12				/	/	/	/	/	/	/	
⑤ A-F	SW5		12:36				/	/	/	/	/	/	/	
⑥ A-F	SW6		12:02				/	/	/	/	/	/	/	
⑦ A-F	SW7		11:36				/	/	/	/	/	/	/	
⑧ A-F	SW8		14:22				/	/	/	/	/	/	/	
⑨ A-F	SW9		14:04				/	/	/	/	/	/	/	
⑩ A-F	SW10		13:33				/	/	/	/	/	/	/	
Relinquished By: (1)				Date	Time	Received By:		Section 4 DOD Project? Yes No		Data Deliverable Requirements:				
Relinquished By: (2)				Date	Time	Received By:		Cooler ID: _____						
Relinquished By: (3)				Date	Time	Received By:		Requested Turnaround Time and/or Special Instructions:						
Relinquished By: (4)				Date	Time	Received For Laboratory By:		Temp Blank °C: Cooler 2: 3.7 D40 Cooler 1: 3.4 D24 or Ambient []		Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT				
Delivery Method: Hand Delivery [] Commerical Delivery []														

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



SGS North America Inc. CHAIN OF CUSTODY RECORD

1182343



www.us.sgs.com

CLIENT: Stantec		Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.						Page 2 of 2										
CONTACT: PHONE #:		Section 3		Preservative														
Section 1	PROJECT NAME: Wasilla WWTP	PROJECT/ PWSID/ PERMIT#:	# CONTAINERS	Pres: Type:	<div style="display: flex; justify-content: space-between;"> 1182343 1182343 </div> <table border="1"> <tr> <td>5210 - BOD</td> <td>2540 - TSS</td> <td>9222 - Fecal Coliform</td> <td>9223 - Total Coliform Quantitray (1x, 10x)</td> <td>4500 - TKN, Ammonia, T-Phos</td> <td>4500 - Nitrate/Nitrite</td> <td></td> <td></td> </tr> </table>						5210 - BOD	2540 - TSS	9222 - Fecal Coliform	9223 - Total Coliform Quantitray (1x, 10x)	4500 - TKN, Ammonia, T-Phos	4500 - Nitrate/Nitrite		
	5210 - BOD	2540 - TSS									9222 - Fecal Coliform	9223 - Total Coliform Quantitray (1x, 10x)	4500 - TKN, Ammonia, T-Phos	4500 - Nitrate/Nitrite				
	REPORTS TO:	E-MAIL:									Comp							
	INVOICE TO: Stantec	QUOTE #: P.O. #:									Grab							
		MI (Multi-incremental)																
Section 2	RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE								REMARKS/LOC ID					
	(11) A-F	DUP	5/22/18	14:04		6	6	1	1	1	1	1						
Section 5	Relinquished By: (1)	Date	Time	Received By:	Section 4		DOD Project? Yes No		Data Deliverable Requirements:									
	Relinquished By: (2)	Date	Time	Received By:	Cooler ID:		Requested Turnaround Time and/or Special Instructions:											
	Relinquished By: (3)	Date	Time	Received By:	Temp Blank °C:		Chain of Custody Seal: (Circle)											
	Relinquished By: (4)	Date	Time	Received For Laboratory By:	or Ambient []		INTACT BROKEN ABSENT											
										Delivery Method: Hand Delivery [] Commerical Delivery []								

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



e-Sample Receipt Form

SGS Workorder #:

1182343



1 1 8 2 3 4 3

Review Criteria	Condition (Yes, No, N/A)	Exceptions Noted below
Chain of Custody / Temperature Requirements		
Were Custody Seals intact? Note # & location	n/a	Exemption permitted if sampler hand carries/delivers.
COC accompanied samples?	yes	hand delivered
n/a **Exemption permitted if chilled & collected <8 hours ago, or for samples where chilling is not required		
Temperature blank compliant* (i.e., 0-6 °C after CF)?	yes	Cooler ID: 1 @ 3.4 °C Therm. ID: D24
	yes	Cooler ID: 2 @ 3.7 °C Therm. ID: D40
		Cooler ID: @ °C Therm. ID:
		Cooler ID: @ °C Therm. ID:
		Cooler ID: @ °C Therm. ID:
*If >6°C, were samples collected <8 hours ago?	n/a	
If <0°C, were sample containers ice free?	n/a	
If samples received <u>without</u> a temperature blank, the "cooler temperature" will be documented in lieu of the temperature blank & "COOLER TEMP" will be noted to the right. In cases where neither a temp blank nor cooler temp can be obtained, note "ambient" or "chilled".		
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.		
Were analyses requested unambiguous? (i.e., method is specified for analyses with >1 option for analysis)	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>
1182343001-A	Na2S2O3 for Chlorine Redu	OK	1182343008-A	Na2S2O3 for Chlorine Redu	OK
1182343001-B	No Preservative Required	OK	1182343008-B	No Preservative Required	OK
1182343001-C	No Preservative Required	OK	1182343008-C	No Preservative Required	OK
1182343001-D	Na2S2O3 for Chlorine Redu	OK	1182343008-D	Na2S2O3 for Chlorine Redu	OK
1182343001-E	H2SO4 to pH < 2	OK	1182343008-E	H2SO4 to pH < 2	OK
1182343001-F	No Preservative Required	OK	1182343008-F	No Preservative Required	OK
1182343002-A	Na2S2O3 for Chlorine Redu	OK	1182343009-A	Na2S2O3 for Chlorine Redu	OK
1182343002-B	No Preservative Required	OK	1182343009-B	No Preservative Required	OK
1182343002-C	No Preservative Required	OK	1182343009-C	No Preservative Required	OK
1182343002-D	Na2S2O3 for Chlorine Redu	OK	1182343009-D	Na2S2O3 for Chlorine Redu	OK
1182343002-E	H2SO4 to pH < 2	OK	1182343009-E	H2SO4 to pH < 2	OK
1182343002-F	No Preservative Required	OK	1182343009-F	No Preservative Required	OK
1182343003-A	Na2S2O3 for Chlorine Redu	OK	1182343010-A	Na2S2O3 for Chlorine Redu	OK
1182343003-B	No Preservative Required	OK	1182343010-B	No Preservative Required	OK
1182343003-C	No Preservative Required	OK	1182343010-C	No Preservative Required	OK
1182343003-D	Na2S2O3 for Chlorine Redu	OK	1182343010-D	Na2S2O3 for Chlorine Redu	OK
1182343003-E	H2SO4 to pH < 2	OK	1182343010-E	H2SO4 to pH < 2	OK
1182343003-F	No Preservative Required	OK	1182343010-F	No Preservative Required	OK
1182343004-A	Na2S2O3 for Chlorine Redu	OK	1182343011-A	Na2S2O3 for Chlorine Redu	OK
1182343004-B	No Preservative Required	OK	1182343011-B	No Preservative Required	OK
1182343004-C	No Preservative Required	OK	1182343011-C	No Preservative Required	OK
1182343004-D	Na2S2O3 for Chlorine Redu	OK	1182343011-D	Na2S2O3 for Chlorine Redu	OK
1182343004-E	H2SO4 to pH < 2	OK	1182343011-E	H2SO4 to pH < 2	OK
1182343004-F	No Preservative Required	OK	1182343011-F	No Preservative Required	OK
1182343005-A	Na2S2O3 for Chlorine Redu	OK			
1182343005-B	No Preservative Required	OK			
1182343005-C	No Preservative Required	OK			
1182343005-D	Na2S2O3 for Chlorine Redu	OK			
1182343005-E	H2SO4 to pH < 2	OK			
1182343005-F	No Preservative Required	OK			
1182343006-A	Na2S2O3 for Chlorine Redu	OK			
1182343006-B	No Preservative Required	OK			
1182343006-C	No Preservative Required	OK			
1182343006-D	Na2S2O3 for Chlorine Redu	OK			
1182343006-E	H2SO4 to pH < 2	OK			
1182343006-F	No Preservative Required	OK			
1182343007-A	Na2S2O3 for Chlorine Redu	OK			
1182343007-B	No Preservative Required	OK			
1182343007-C	No Preservative Required	OK			
1182343007-D	Na2S2O3 for Chlorine Redu	OK			
1182343007-E	H2SO4 to pH < 2	OK			
1182343007-F	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 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.



Laboratory Report of Analysis

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

Report Number: **1182379**

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

Print Date: 05/31/2018 8:27:40AM

Case Narrative

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

SGS Project: **1182379**

Project Name/Site: **Wasilla WWTP**

Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

MB for HBN 1780041 [BOD/6049] (1448401) MB

5210B-BOD- MB (0.42 mg/L) is greater than the recommended limit of 0.2 mg/L. Samples >10X the MB are not significantly affected. Samples <10X the MB results may be biased high.

1182379001MSD (1448687) MSD

4500NH3-G - Ammonia - 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: 05/31/2018 8:27:42AM

Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. 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	1182379001	05/23/2018	05/23/2018	Water (Surface, Eff., Ground)
SW12	1182379002	05/23/2018	05/23/2018	Water (Surface, Eff., Ground)
SW13	1182379003	05/23/2018	05/23/2018	Water (Surface, Eff., Ground)
SW14	1182379004	05/23/2018	05/23/2018	Water (Surface, Eff., Ground)
SW15	1182379005	05/23/2018	05/23/2018	Water (Surface, Eff., Ground)
SW16	1182379006	05/23/2018	05/23/2018	Water (Surface, Eff., Ground)
SW17	1182379007	05/23/2018	05/23/2018	Water (Surface, Eff., Ground)
SW18	1182379008	05/23/2018	05/23/2018	Water (Surface, Eff., Ground)
DUP2	1182379009	05/23/2018	05/23/2018	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)
SM21 4500NO3-F	Flow Injection 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: 05/31/2018 8:27:44AM

Detectable Results Summary

Client Sample ID: **SW11**
 Lab Sample ID: 1182379001
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	4.26	mg/L
Total Coliform	125	MPN/100mL
Nitrate-N	0.0620J	mg/L
Total Kjeldahl Nitrogen	0.371J	mg/L
Total Phosphorus	0.0465	mg/L
Total Suspended Solids	10.9	mg/L

Client Sample ID: **SW12**
 Lab Sample ID: 1182379002
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	54.1	mg/L
Fecal Coliform	3.0	col/100mL
Total Coliform	1733	MPN/100mL
Total Kjeldahl Nitrogen	0.447J	mg/L
Total Phosphorus	0.0322	mg/L
Total Suspended Solids	4.59	mg/L

Client Sample ID: **SW13**
 Lab Sample ID: 1182379003
Microbiology Laboratory
Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Coliform	21	MPN/100mL
Total Kjeldahl Nitrogen	0.461J	mg/L
Total Suspended Solids	1.70	mg/L

Client Sample ID: **SW14**
 Lab Sample ID: 1182379004
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	4.72	mg/L
Fecal Coliform	1.0	col/100mL
Total Coliform	5	MPN/100mL
Ammonia-N	0.0822J	mg/L
Nitrate-N	0.629	mg/L
Total Phosphorus	0.0372	mg/L
Total Suspended Solids	6.60	mg/L

Client Sample ID: **SW15**
 Lab Sample ID: 1182379005
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	10.4	mg/L
Total Coliform	19	MPN/100mL
Total Kjeldahl Nitrogen	0.636J	mg/L
Total Phosphorus	0.0176J	mg/L
Total Suspended Solids	5.16	mg/L

Client Sample ID: **SW16**
 Lab Sample ID: 1182379006
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	4.28	mg/L
Total Coliform	4	MPN/100mL
Total Kjeldahl Nitrogen	0.789J	mg/L
Total Phosphorus	0.0340	mg/L
Total Suspended Solids	2.53	mg/L

Detectable Results Summary

Client Sample ID: **SW17**
 Lab Sample ID: 1182379007
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	2.84	mg/L
E. Coli	2	MPN/100mL
Total Coliform	119	MPN/100mL
Ammonia-N	0.0422J	mg/L
Nitrate-N	1.16	mg/L
Total Phosphorus	0.153	mg/L
Total Suspended Solids	2.47	mg/L

Client Sample ID: **SW18**
 Lab Sample ID: 1182379008
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	128	mg/L
E. Coli	4	MPN/100mL
Fecal Coliform	2.0	col/100mL
Total Coliform	77	MPN/100mL
Ammonia-N	1.14	mg/L
Nitrate-N	2.54	mg/L
Total Phosphorus	1.31	mg/L
Total Suspended Solids	1.25	mg/L

Client Sample ID: **DUP2**
 Lab Sample ID: 1182379009
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	71.0	mg/L
Total Coliform	111	MPN/100mL
Ammonia-N	1.16	mg/L
Nitrate-N	2.38	mg/L
Total Phosphorus	1.25	mg/L
Total Suspended Solids	1.41	mg/L



Results of SW11

Client Sample ID: SW11
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182379001
Lab Project ID: 1182379

Collection Date: 05/23/18 09:45
Received Date: 05/23/18 14:36
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Biochemical Oxygen Demand, 4.26, 2.00, 2.00, mg/L, 1, 05/24/18 16:57

Batch Information

Analytical Batch: BOD6049
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 05/24/18 16:57
Container ID: 1182379001-A

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Fecal Coliform, 1.00 U, 1.00, 1.00, col/100mL, 1, 05/23/18 16:40

Batch Information

Analytical Batch: BTF16572
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 05/23/18 16:40
Container ID: 1182379001-C

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: E. Coli, 1 U, 1, 1, MPN/100n, 1, 05/23/18 16:49. Row 2: Total Coliform, 125, 1, 1, MPN/100n, 1, 05/23/18 16:49

Batch Information

Analytical Batch: BTF16571
Analytical Method: SM21 9223B
Analyst: NRO
Analytical Date/Time: 05/23/18 16:49
Container ID: 1182379001-D



Results of SW11

Client Sample ID: SW11
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182379001
Lab Project ID: 1182379

Collection Date: 05/23/18 09:45
Received Date: 05/23/18 14:36
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. Row 1: Total Suspended Solids, 10.9, 1.06, 0.330, mg/L, 1, 05/25/18 16:17

Batch Information

Analytical Batch: STS5887
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/25/18 16:17
Container ID: 1182379001-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.371 J, 1.00, 0.310, mg/L, 1, 05/24/18 16:09

Batch Information

Analytical Batch: WDA4289
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/24/18 16:09
Container ID: 1182379001-F
Prep Batch: WXX12339
Prep Method: METHOD
Prep Date/Time: 05/23/18 17:45
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 1: Ammonia-N, 0.0500 U, 0.100, 0.0310, mg/L, 1, 05/25/18 12:29

Batch Information

Analytical Batch: WDA4290
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/25/18 12:29
Container ID: 1182379001-F
Prep Batch: WXX12340
Prep Method: METHOD
Prep Date/Time: 05/25/18 11:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows: Nitrate-N (0.0620 J), Nitrite-N (0.0500 U)

Results of SW11

Client Sample ID: **SW11**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1182379001
 Lab Project ID: 1182379

Collection Date: 05/23/18 09:45
 Received Date: 05/23/18 14:36
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WFI2691
 Analytical Method: SM21 4500NO3-F
 Analyst: AYC
 Analytical Date/Time: 05/23/18 17:37
 Container ID: 1182379001-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>
Total Phosphorus	0.0465	0.0200	0.00500	mg/L	1		05/30/18 14:04

Batch Information

Analytical Batch: WDA4293
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/30/18 14:04
 Container ID: 1182379001-F

Prep Batch: WXX12344
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/30/18 11:22
 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: 1182379002
Lab Project ID: 1182379

Collection Date: 05/23/18 10:04
Received Date: 05/23/18 14:36
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Biochemical Oxygen Demand, 54.1, 2.00, 2.00, mg/L, 1, 05/24/18 16:57

Batch Information

Analytical Batch: BOD6049
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 05/24/18 16:57
Container ID: 1182379002-A

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Fecal Coliform, 3.0, 1.00, 1.00, col/100mL, 1, 05/23/18 16:40

Batch Information

Analytical Batch: BTF16572
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 05/23/18 16:40
Container ID: 1182379002-C

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: E. Coli, 1 U, 1, 1, MPN/100n, 1, 05/23/18 16:49. Row 2: Total Coliform, 1733, 1, 1, MPN/100n, 1, 05/23/18 16:49

Batch Information

Analytical Batch: BTF16571
Analytical Method: SM21 9223B
Analyst: NRO
Analytical Date/Time: 05/23/18 16:49
Container ID: 1182379002-D



Results of SW12

Client Sample ID: SW12
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182379002
Lab Project ID: 1182379

Collection Date: 05/23/18 10:04
Received Date: 05/23/18 14:36
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. Row 1: Total Suspended Solids, 4.59, 1.02, 0.316, mg/L, 1, 05/25/18 16:17

Batch Information

Analytical Batch: STS5887
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/25/18 16:17
Container ID: 1182379002-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.447 J, 1.00, 0.310, mg/L, 1, 05/24/18 16:11

Batch Information

Analytical Batch: WDA4289
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/24/18 16:11
Container ID: 1182379002-F
Prep Batch: WXX12339
Prep Method: METHOD
Prep Date/Time: 05/23/18 17:45
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 1: Ammonia-N, 0.0500 U, 0.100, 0.0310, mg/L, 1, 05/25/18 12:34

Batch Information

Analytical Batch: WDA4290
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/25/18 12:34
Container ID: 1182379002-F
Prep Batch: WXX12340
Prep Method: METHOD
Prep Date/Time: 05/25/18 11:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows: Nitrate-N (0.0500 U, 0.100, 0.0250, mg/L, 2, 05/23/18 17:39), Nitrite-N (0.0500 U, 0.100, 0.0250, mg/L, 2, 05/23/18 17:39)



Results of **SW12**

Client Sample ID: **SW12**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1182379002
Lab Project ID: 1182379

Collection Date: 05/23/18 10:04
Received Date: 05/23/18 14:36
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2691
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 05/23/18 17:39
Container ID: 1182379002-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>
Total Phosphorus	0.0322	0.0200	0.00500	mg/L	1		05/30/18 14:09

Batch Information

Analytical Batch: WDA4293
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 05/30/18 14:09
Container ID: 1182379002-F

Prep Batch: WXX12344
Prep Method: SM21 4500P-B,E
Prep Date/Time: 05/30/18 11:22
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: 1182379003
Lab Project ID: 1182379

Collection Date: 05/23/18 10:19
Received Date: 05/23/18 14:36
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		05/24/18 16:57

Batch Information

Analytical Batch: BOD6049
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 05/24/18 16:57
Container ID: 1182379003-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		05/23/18 16:40

Batch Information

Analytical Batch: BTF16572
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 05/23/18 16:40
Container ID: 1182379003-C

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	1 U	1	1	MPN/100n	1		05/23/18 16:49
Total Coliform	21	1	1	MPN/100n	1		05/23/18 16:49

Batch Information

Analytical Batch: BTF16571
Analytical Method: SM21 9223B
Analyst: NRO
Analytical Date/Time: 05/23/18 16:49
Container ID: 1182379003-D



Results of SW13

Client Sample ID: SW13
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182379003
Lab Project ID: 1182379

Collection Date: 05/23/18 10:19
Received Date: 05/23/18 14:36
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. Row 1: Total Suspended Solids, 1.70, 1.06, 0.330, mg/L, 1, 05/25/18 16:17

Batch Information

Analytical Batch: STS5887
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/25/18 16:17
Container ID: 1182379003-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.461 J, 1.00, 0.310, mg/L, 1, 05/24/18 16:12

Batch Information

Analytical Batch: WDA4289
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/24/18 16:12
Container ID: 1182379003-F
Prep Batch: WXX12339
Prep Method: METHOD
Prep Date/Time: 05/23/18 17:45
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 1: Ammonia-N, 0.0500 U, 0.100, 0.0310, mg/L, 1, 05/25/18 12:36

Batch Information

Analytical Batch: WDA4290
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/25/18 12:36
Container ID: 1182379003-F
Prep Batch: WXX12340
Prep Method: METHOD
Prep Date/Time: 05/25/18 11:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

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



Results of **SW13**

Client Sample ID: **SW13**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1182379003
Lab Project ID: 1182379

Collection Date: 05/23/18 10:19
Received Date: 05/23/18 14:36
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2691
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 05/23/18 17:40
Container ID: 1182379003-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>
Total Phosphorus	0.0100 U	0.0200	0.00500	mg/L	1		05/30/18 14:10

Batch Information

Analytical Batch: WDA4293
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 05/30/18 14:10
Container ID: 1182379003-F

Prep Batch: WXX12344
Prep Method: SM21 4500P-B,E
Prep Date/Time: 05/30/18 11:22
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: 1182379004
Lab Project ID: 1182379

Collection Date: 05/23/18 11:28
Received Date: 05/23/18 14:36
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Biochemical Oxygen Demand, 4.72, 2.00, 2.00, mg/L, 1, 05/24/18 16:57

Batch Information

Analytical Batch: BOD6049
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 05/24/18 16:57
Container ID: 1182379004-A

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Fecal Coliform, 1.0, 1.00, 1.00, col/100mL, 1, 05/23/18 16:40

Batch Information

Analytical Batch: BTF16572
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 05/23/18 16:40
Container ID: 1182379004-C

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: E. Coli, 1 U, 1, 1, MPN/100n, 1, 05/23/18 16:49. Row 2: Total Coliform, 5, 1, 1, MPN/100n, 1, 05/23/18 16:49

Batch Information

Analytical Batch: BTF16571
Analytical Method: SM21 9223B
Analyst: NRO
Analytical Date/Time: 05/23/18 16:49
Container ID: 1182379004-D



Results of SW14

Client Sample ID: SW14
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182379004
Lab Project ID: 1182379

Collection Date: 05/23/18 11:28
Received Date: 05/23/18 14:36
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. Row 1: Total Suspended Solids, 6.60, 1.06, 0.330, mg/L, 1, 05/25/18 16:17

Batch Information

Analytical Batch: STS5887
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/25/18 16:17
Container ID: 1182379004-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.500 U, 1.00, 0.310, mg/L, 1, 05/24/18 16:13

Batch Information

Analytical Batch: WDA4289
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/24/18 16:13
Container ID: 1182379004-F
Prep Batch: WXX12339
Prep Method: METHOD
Prep Date/Time: 05/23/18 17:45
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 1: Ammonia-N, 0.0822 J, 0.100, 0.0310, mg/L, 1, 05/25/18 12:38

Batch Information

Analytical Batch: WDA4290
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/25/18 12:38
Container ID: 1182379004-F
Prep Batch: WXX12340
Prep Method: METHOD
Prep Date/Time: 05/25/18 11:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows: Nitrate-N (0.629), Nitrite-N (0.0500 U)

Results of SW14

Client Sample ID: **SW14**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1182379004
 Lab Project ID: 1182379

Collection Date: 05/23/18 11:28
 Received Date: 05/23/18 14:36
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WFI2691
 Analytical Method: SM21 4500NO3-F
 Analyst: AYC
 Analytical Date/Time: 05/23/18 17:42
 Container ID: 1182379004-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>
Total Phosphorus	0.0372	0.0200	0.00500	mg/L	1		05/30/18 14:11

Batch Information

Analytical Batch: WDA4293
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/30/18 14:11
 Container ID: 1182379004-F

Prep Batch: WXX12344
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/30/18 11:22
 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: 1182379005
Lab Project ID: 1182379

Collection Date: 05/23/18 11:02
Received Date: 05/23/18 14:36
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Biochemical Oxygen Demand, 10.4, 2.00, 2.00, mg/L, 1, 05/24/18 16:57

Batch Information

Analytical Batch: BOD6049
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 05/24/18 16:57
Container ID: 1182379005-A

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Fecal Coliform, 1.00 U, 1.00, 1.00, col/100mL, 1, 05/23/18 16:40

Batch Information

Analytical Batch: BTF16572
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 05/23/18 16:40
Container ID: 1182379005-C

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: E. Coli, 1 U, 1, 1, MPN/100n, 1, 05/23/18 16:49. Row 2: Total Coliform, 19, 1, 1, MPN/100n, 1, 05/23/18 16:49

Batch Information

Analytical Batch: BTF16571
Analytical Method: SM21 9223B
Analyst: NRO
Analytical Date/Time: 05/23/18 16:49
Container ID: 1182379005-D



Results of SW15

Client Sample ID: SW15
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182379005
Lab Project ID: 1182379

Collection Date: 05/23/18 11:02
Received Date: 05/23/18 14:36
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. Row 1: Total Suspended Solids, 5.16, 1.10, 0.341, mg/L, 1, 05/25/18 16:17

Batch Information

Analytical Batch: STS5887
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/25/18 16:17
Container ID: 1182379005-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.636 J, 1.00, 0.310, mg/L, 1, 05/24/18 16:14

Batch Information

Analytical Batch: WDA4289
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/24/18 16:14
Container ID: 1182379005-F
Prep Batch: WXX12339
Prep Method: METHOD
Prep Date/Time: 05/23/18 17:45
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 1: Ammonia-N, 0.0500 U, 0.100, 0.0310, mg/L, 1, 05/25/18 12:39

Batch Information

Analytical Batch: WDA4290
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/25/18 12:39
Container ID: 1182379005-F
Prep Batch: WXX12340
Prep Method: METHOD
Prep Date/Time: 05/25/18 11:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows: Nitrate-N (0.0500 U, 0.100, 0.0250, mg/L, 2, 05/23/18 18:01), Nitrite-N (0.0500 U, 0.100, 0.0250, mg/L, 2, 05/23/18 18:01)



Results of **SW15**

Client Sample ID: **SW15**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1182379005
Lab Project ID: 1182379

Collection Date: 05/23/18 11:02
Received Date: 05/23/18 14:36
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2691
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 05/23/18 18:01
Container ID: 1182379005-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>
Total Phosphorus	0.0176 J	0.0200	0.00500	mg/L	1		05/30/18 14:11

Batch Information

Analytical Batch: WDA4293
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 05/30/18 14:11
Container ID: 1182379005-F

Prep Batch: WXX12344
Prep Method: SM21 4500P-B,E
Prep Date/Time: 05/30/18 11:22
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: 1182379006
Lab Project ID: 1182379

Collection Date: 05/23/18 10:49
Received Date: 05/23/18 14:36
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Biochemical Oxygen Demand, 4.28, 2.00, 2.00, mg/L, 1, 05/24/18 16:57

Batch Information

Analytical Batch: BOD6049
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 05/24/18 16:57
Container ID: 1182379006-A

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Fecal Coliform, 1.00 U, 1.00, 1.00, col/100mL, 1, 05/23/18 16:40

Batch Information

Analytical Batch: BTF16572
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 05/23/18 16:40
Container ID: 1182379006-C

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: E. Coli, 1 U, 1, 1, MPN/100n, 1, 05/23/18 16:49. Row 2: Total Coliform, 4, 1, 1, MPN/100n, 1, 05/23/18 16:49

Batch Information

Analytical Batch: BTF16571
Analytical Method: SM21 9223B
Analyst: NRO
Analytical Date/Time: 05/23/18 16:49
Container ID: 1182379006-D



Results of SW16

Client Sample ID: SW16
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182379006
Lab Project ID: 1182379

Collection Date: 05/23/18 10:49
Received Date: 05/23/18 14:36
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. Row 1: Total Suspended Solids, 2.53, 1.05, 0.326, mg/L, 1, 05/25/18 16:17

Batch Information

Analytical Batch: STS5887
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/25/18 16:17
Container ID: 1182379006-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.789 J, 1.00, 0.310, mg/L, 1, 05/24/18 16:16

Batch Information

Analytical Batch: WDA4289
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/24/18 16:16
Container ID: 1182379006-F
Prep Batch: WXX12339
Prep Method: METHOD
Prep Date/Time: 05/23/18 17:45
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 1: Ammonia-N, 0.0500 U, 0.100, 0.0310, mg/L, 1, 05/25/18 12:44

Batch Information

Analytical Batch: WDA4290
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/25/18 12:44
Container ID: 1182379006-F
Prep Batch: WXX12340
Prep Method: METHOD
Prep Date/Time: 05/25/18 11:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows: Nitrate-N (0.0500 U, 0.100, 0.0250, mg/L, 2, 05/23/18 17:54), Nitrite-N (0.0500 U, 0.100, 0.0250, mg/L, 2, 05/23/18 17:54)

Results of SW16

Client Sample ID: **SW16**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1182379006
 Lab Project ID: 1182379

Collection Date: 05/23/18 10:49
 Received Date: 05/23/18 14:36
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WFI2691
 Analytical Method: SM21 4500NO3-F
 Analyst: AYC
 Analytical Date/Time: 05/23/18 17:54
 Container ID: 1182379006-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>
Total Phosphorus	0.0340	0.0200	0.00500	mg/L	1		05/30/18 14:12

Batch Information

Analytical Batch: WDA4293
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/30/18 14:12
 Container ID: 1182379006-F

Prep Batch: WXX12344
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/30/18 11:22
 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: 1182379007
Lab Project ID: 1182379

Collection Date: 05/23/18 12:37
Received Date: 05/23/18 14:36
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Biochemical Oxygen Demand, 2.84, 2.00, 2.00, mg/L, 1, 05/24/18 16:57

Batch Information

Analytical Batch: BOD6049
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 05/24/18 16:57
Container ID: 1182379007-A

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Fecal Coliform, 1.00 U, 1.00, 1.00, col/100mL, 1, 05/23/18 16:40

Batch Information

Analytical Batch: BTF16572
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 05/23/18 16:40
Container ID: 1182379007-C

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: E. Coli, 2, 1, 1, MPN/100n, 1, 05/23/18 16:49. Row 2: Total Coliform, 119, 1, 1, MPN/100n, 1, 05/23/18 16:49

Batch Information

Analytical Batch: BTF16571
Analytical Method: SM21 9223B
Analyst: NRO
Analytical Date/Time: 05/23/18 16:49
Container ID: 1182379007-D



Results of SW17

Client Sample ID: SW17
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182379007
Lab Project ID: 1182379

Collection Date: 05/23/18 12:37
Received Date: 05/23/18 14:36
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. Row 1: Total Suspended Solids, 2.47, 1.08, 0.333, mg/L, 1, 05/25/18 16:17

Batch Information

Analytical Batch: STS5887
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/25/18 16:17
Container ID: 1182379007-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.500 U, 1.00, 0.310, mg/L, 1, 05/24/18 16:17

Batch Information

Analytical Batch: WDA4289
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/24/18 16:17
Container ID: 1182379007-F
Prep Batch: WXX12339
Prep Method: METHOD
Prep Date/Time: 05/23/18 17:45
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 1: Ammonia-N, 0.0422 J, 0.100, 0.0310, mg/L, 1, 05/25/18 12:46

Batch Information

Analytical Batch: WDA4290
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/25/18 12:46
Container ID: 1182379007-F
Prep Batch: WXX12340
Prep Method: METHOD
Prep Date/Time: 05/25/18 11:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows: Nitrate-N (1.16, 0.100, 0.0250, mg/L, 2, 05/23/18 17:56), Nitrite-N (0.0500 U, 0.100, 0.0250, mg/L, 2, 05/23/18 17:56)

Results of SW17

Client Sample ID: **SW17**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1182379007
 Lab Project ID: 1182379

Collection Date: 05/23/18 12:37
 Received Date: 05/23/18 14:36
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

Batch Information

Analytical Batch: WFI2691
 Analytical Method: SM21 4500NO3-F
 Analyst: AYC
 Analytical Date/Time: 05/23/18 17:56
 Container ID: 1182379007-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>
Total Phosphorus	0.153	0.0200	0.00500	mg/L	1		05/30/18 14:13

Batch Information

Analytical Batch: WDA4293
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 05/30/18 14:13
 Container ID: 1182379007-F

Prep Batch: WXX12344
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/30/18 11:22
 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: 1182379008
Lab Project ID: 1182379

Collection Date: 05/23/18 13:06
Received Date: 05/23/18 14:36
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Biochemical Oxygen Demand, 128, 2.00, 2.00, mg/L, 1, 05/24/18 16:57

Batch Information

Analytical Batch: BOD6049
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 05/24/18 16:57
Container ID: 1182379008-A

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Fecal Coliform, 2.0, 1.00, 1.00, col/100mL, 1, 05/23/18 16:40

Batch Information

Analytical Batch: BTF16572
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 05/23/18 16:40
Container ID: 1182379008-C

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: E. Coli, 4, 1, 1, MPN/100n, 1, 05/23/18 16:49. Row 2: Total Coliform, 77, 1, 1, MPN/100n, 1, 05/23/18 16:49

Batch Information

Analytical Batch: BTF16571
Analytical Method: SM21 9223B
Analyst: NRO
Analytical Date/Time: 05/23/18 16:49
Container ID: 1182379008-D



Results of **SW18**

Client Sample ID: **SW18**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1182379008
Lab Project ID: 1182379

Collection Date: 05/23/18 13:06
Received Date: 05/23/18 14:36
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	1.25	1.04	0.323	mg/L	1		05/25/18 16:17

Batch Information

Analytical Batch: STS5887
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/25/18 16:17
Container ID: 1182379008-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		05/24/18 16:03

Batch Information

Analytical Batch: WDA4289	Prep Batch: WXX12339
Analytical Method: SM21 4500-N D	Prep Method: METHOD
Analyst: DMM	Prep Date/Time: 05/23/18 17:45
Analytical Date/Time: 05/24/18 16:03	Prep Initial Wt./Vol.: 25 mL
Container ID: 1182379008-F	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	1.14	0.100	0.0310	mg/L	1		05/25/18 12:48

Batch Information

Analytical Batch: WDA4290	Prep Batch: WXX12340
Analytical Method: SM21 4500-NH3 G	Prep Method: METHOD
Analyst: DMM	Prep Date/Time: 05/25/18 11:30
Analytical Date/Time: 05/25/18 12:48	Prep Initial Wt./Vol.: 6 mL
Container ID: 1182379008-F	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>
Nitrate-N	2.54	0.100	0.0250	mg/L	2		05/23/18 17:58
Nitrite-N	0.0500 U	0.100	0.0250	mg/L	2		05/23/18 17:58

Print Date: 05/31/2018 8:27:46AM

J flagging is activated



Results of **SW18**

Client Sample ID: **SW18**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1182379008
Lab Project ID: 1182379

Collection Date: 05/23/18 13:06
Received Date: 05/23/18 14:36
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2691
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 05/23/18 17:58
Container ID: 1182379008-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>
Total Phosphorus	1.31	0.200	0.0500	mg/L	1		05/30/18 15:46

Batch Information

Analytical Batch: WDA4293
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 05/30/18 15:46
Container ID: 1182379008-F

Prep Batch: WXX12344
Prep Method: SM21 4500P-B,E
Prep Date/Time: 05/30/18 14:41
Prep Initial Wt./Vol.: 2.5 mL
Prep Extract Vol: 25 mL



Results of DUP2

Client Sample ID: **DUP2**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1182379009
 Lab Project ID: 1182379

Collection Date: 05/23/18 13:06
 Received Date: 05/23/18 14:36
 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	71.0	2.00	2.00	mg/L	1		05/24/18 16:57

Batch Information

Analytical Batch: BOD6049
 Analytical Method: SM21 5210B
 Analyst: A.L
 Analytical Date/Time: 05/24/18 16:57
 Container ID: 1182379009-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		05/23/18 16:40

Batch Information

Analytical Batch: BTF16572
 Analytical Method: SM21 9222D
 Analyst: K.W
 Analytical Date/Time: 05/23/18 16:40
 Container ID: 1182379009-C

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	1 U	1	1	MPN/100n	1		05/23/18 16:49
Total Coliform	111	1	1	MPN/100n	1		05/23/18 16:49

Batch Information

Analytical Batch: BTF16571
 Analytical Method: SM21 9223B
 Analyst: NRO
 Analytical Date/Time: 05/23/18 16:49
 Container ID: 1182379009-D



Results of DUP2

Client Sample ID: DUP2
Client Project ID: Wasilla WWTP
Lab Sample ID: 1182379009
Lab Project ID: 1182379

Collection Date: 05/23/18 13:06
Received Date: 05/23/18 14:36
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. Row 1: Total Suspended Solids, 1.41, 1.09, 0.337, mg/L, 1, 05/25/18 16:17

Batch Information

Analytical Batch: STS5887
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/25/18 16:17
Container ID: 1182379009-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.500 U, 1.00, 0.310, mg/L, 1, 05/24/18 16:18

Batch Information

Analytical Batch: WDA4289
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/24/18 16:18
Container ID: 1182379009-F
Prep Batch: WXX12339
Prep Method: METHOD
Prep Date/Time: 05/23/18 17:45
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 1: Ammonia-N, 1.16, 0.100, 0.0310, mg/L, 1, 05/25/18 12:49

Batch Information

Analytical Batch: WDA4290
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/25/18 12:49
Container ID: 1182379009-F
Prep Batch: WXX12340
Prep Method: METHOD
Prep Date/Time: 05/25/18 11:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows: Nitrate-N (2.38), Nitrite-N (0.0500 U)



Results of **DUP2**

Client Sample ID: **DUP2**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1182379009
Lab Project ID: 1182379

Collection Date: 05/23/18 13:06
Received Date: 05/23/18 14:36
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2691
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 05/23/18 18:00
Container ID: 1182379009-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>
Total Phosphorus	1.25	0.200	0.0500	mg/L	1		05/30/18 15:47

Batch Information

Analytical Batch: WDA4293
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 05/30/18 15:47
Container ID: 1182379009-F

Prep Batch: WXX12344
Prep Method: SM21 4500P-B,E
Prep Date/Time: 05/30/18 14:41
Prep Initial Wt./Vol.: 2.5 mL
Prep Extract Vol: 25 mL

Method Blank

Blank ID: MB for HBN 1780041 [BOD/6049]
Blank Lab ID: 1448401

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1182379001, 1182379002, 1182379003, 1182379004, 1182379005, 1182379006, 1182379007, 1182379008, 1182379009

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: BOD6049
Analytical Method: SM21 5210B
Instrument:
Analyst: A.L
Analytical Date/Time: 5/24/2018 4:57:37PM

Print Date: 05/31/2018 8:27:49AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1182379 [BOD6049]
Blank Spike Lab ID: 1448402
Date Analyzed: 05/24/2018 16:57

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182379001, 1182379002, 1182379003, 1182379004, 1182379005, 1182379006, 1182379007,
1182379008, 1182379009

Results by SM21 5210B

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Biochemical Oxygen Demand	198	218	110	(84.6-115.4

Batch Information

Analytical Batch: **BOD6049**
Analytical Method: **SM21 5210B**
Instrument:
Analyst: **A.L**

Print Date: 05/31/2018 8:27:51AM

Method Blank

Blank ID: MB for HBN 1779965 [BTF/16571]
Blank Lab ID: 1448042

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1182379001, 1182379002, 1182379003, 1182379004, 1182379005, 1182379006, 1182379007, 1182379008, 1182379009

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: BTF16571
Analytical Method: SM21 9223B
Instrument:
Analyst: K.W
Analytical Date/Time: 5/23/2018 12:11:00PM

Print Date: 05/31/2018 8:27:52AM



Method Blank

Blank ID: MB for HBN 1779989 [BTF/16572]
Blank Lab ID: 1448150

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1182379001, 1182379002, 1182379003, 1182379004, 1182379005, 1182379006, 1182379007, 1182379008, 1182379009

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: BTF16572
Analytical Method: SM21 9222D
Instrument:
Analyst: K.W
Analytical Date/Time: 5/23/2018 4:40:00PM

Print Date: 05/31/2018 8:27:54AM

Method Blank

Blank ID: MB for HBN 1780076 [STS/5887]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1448538

QC for Samples:

1182379001, 1182379002, 1182379003, 1182379004, 1182379005, 1182379006, 1182379007, 1182379008, 1182379009

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: STS5887

Analytical Method: SM21 2540D

Instrument:

Analyst: EWW

Analytical Date/Time: 5/25/2018 4:17:10PM

Print Date: 05/31/2018 8:27:56AM

Method Blank

Blank ID: MB for HBN 1780076 [STS/5887]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1448608

QC for Samples:

1182379001, 1182379002, 1182379003, 1182379004, 1182379005, 1182379006, 1182379007, 1182379008, 1182379009

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: STS5887

Analytical Method: SM21 2540D

Instrument:

Analyst: EWW

Analytical Date/Time: 5/25/2018 4:17:10PM

Print Date: 05/31/2018 8:27:56AM

Duplicate Sample Summary

Original Sample ID: 1182406002

Analysis Date: 05/25/2018 16:17

Duplicate Sample ID: 1448541

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1182379001, 1182379002, 1182379003, 1182379004, 1182379005, 1182379006, 1182379007, 1182379008, 1182379009

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	ND	1.09U	mg/L	0.00	(< 5)

Batch Information

Analytical Batch: STS5887

Analytical Method: SM21 2540D

Instrument:

Analyst: EWW

Print Date: 05/31/2018 8:27:57AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1182379 [STS5887]
 Blank Spike Lab ID: 1448539
 Date Analyzed: 05/25/2018 16:17

Spike Duplicate ID: LCSD for HBN 1182379 [STS5887]
 Spike Duplicate Lab ID: 1448540
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182379001, 1182379002, 1182379003, 1182379004, 1182379005, 1182379006, 1182379007, 1182379008, 1182379009

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	50	48.4	97	50	49.2	98	(75-125)	1.60	(< 5)

Batch Information

Analytical Batch: STS5887
 Analytical Method: SM21 2540D
 Instrument:
 Analyst: EWW

Print Date: 05/31/2018 8:27:59AM

Method Blank

Blank ID: MB for HBN 1779994 (WFI/2691)
 Blank Lab ID: 1448188

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1182379001, 1182379002, 1182379003, 1182379004, 1182379005, 1182379006, 1182379007, 1182379008, 1182379009

Results by SM21 4500NO3-F

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Nitrate-N	0.0500U	0.100	0.0250	mg/L
Nitrite-N	0.0500U	0.100	0.0250	mg/L
Total Nitrate/Nitrite-N	0.0500U	0.100	0.0250	mg/L

Batch Information

Analytical Batch: WFI2691
 Analytical Method: SM21 4500NO3-F
 Instrument: Astoria segmented flow
 Analyst: AYC
 Analytical Date/Time: 5/23/2018 5:32:05PM

Print Date: 05/31/2018 8:28:00AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1182379 [WFI2691]

Blank Spike Lab ID: 1448180

Date Analyzed: 05/23/2018 17:30

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182379001, 1182379002, 1182379003, 1182379004, 1182379005, 1182379006, 1182379007, 1182379008, 1182379009

Results by SM21 4500NO3-F

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Nitrate-N	2.5	2.79	112	(70-130)
Nitrite-N	2.5	2.46	98	(90-110)
Total Nitrate/Nitrite-N	5	5.25	105	(90-110)

Batch Information

Analytical Batch: **WFI2691**

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

Instrument: **Astoria segmented flow**

Analyst: **AYC**

Print Date: 05/31/2018 8:28:03AM

Matrix Spike Summary

Original Sample ID: 1182379005
 MS Sample ID: 1448178 MS
 MSD Sample ID: 1448179 MSD

Analysis Date: 05/23/2018 18:01
 Analysis Date: 05/23/2018 18:03
 Analysis Date: 05/23/2018 18:05
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182379001, 1182379002, 1182379003, 1182379004, 1182379005, 1182379006, 1182379007, 1182379008, 1182379009

Results by SM21 4500NO3-F

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Nitrate-N	0.0500U	2.50	2.15	86	2.50	2.51	100	70-130	15.60	(< 25)
Nitrite-N	0.0500U	2.50	2.57	103	2.50	2.41	97	90-110	6.20	(< 25)

Batch Information

Analytical Batch: WFI2691
 Analytical Method: SM21 4500NO3-F
 Instrument: Astoria segmented flow
 Analyst: AYC
 Analytical Date/Time: 5/23/2018 6:03:34PM

Print Date: 05/31/2018 8:28:04AM



Method Blank

Blank ID: MB for HBN 1780039 [WXX/12339]
Blank Lab ID: 1448379

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1182379001, 1182379002, 1182379003, 1182379004, 1182379005, 1182379006, 1182379007, 1182379008, 1182379009

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: WDA4289
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 5/24/2018 3:59:19PM

Prep Batch: WXX12339
Prep Method: METHOD
Prep Date/Time: 5/23/2018 5:45:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/31/2018 8:28:05AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1182379 [WXX12339]
 Blank Spike Lab ID: 1448380
 Date Analyzed: 05/24/2018 16:00

Spike Duplicate ID: LCSD for HBN 1182379 [WXX12339]
 Spike Duplicate Lab ID: 1448381
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182379001, 1182379002, 1182379003, 1182379004, 1182379005, 1182379006, 1182379007, 1182379008, 1182379009

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	4.89	122	4	4.51	113	(75-125)	8.00	(< 25)

Batch Information

Analytical Batch: **WDA4289**
 Analytical Method: **SM21 4500-N D**
 Instrument: **Discrete Analyzer 2**
 Analyst: **DMM**

Prep Batch: **WXX12339**
 Prep Method: **METHOD**
 Prep Date/Time: **05/23/2018 17:45**
 Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL
 Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

Print Date: 05/31/2018 8:28:07AM

Matrix Spike Summary

Original Sample ID: 1182343011
 MS Sample ID: 1448377 MS
 MSD Sample ID: 1448378 MSD

Analysis Date: 05/24/2018 15:39
 Analysis Date: 05/24/2018 15:41
 Analysis Date: 05/24/2018 15:42
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182379001, 1182379002, 1182379003, 1182379004, 1182379005, 1182379006, 1182379007, 1182379008

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	3.98	99	4.00	4.24	106	75-125	6.50	(< 25)

Batch Information

Analytical Batch: WDA4289
 Analytical Method: SM21 4500-N D
 Instrument: Discrete Analyzer 2
 Analyst: DMM
 Analytical Date/Time: 5/24/2018 3:41:00PM

Prep Batch: WXX12339
 Prep Method: Distillation TKN by Phenate (W)
 Prep Date/Time: 5/23/2018 5:45:00PM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL

Print Date: 05/31/2018 8:28:08AM

Matrix Spike Summary

Original Sample ID: 1182379008
 MS Sample ID: 1448382 MS
 MSD Sample ID: 1448383 MSD

Analysis Date: 05/24/2018 16:03
 Analysis Date: 05/24/2018 16:42
 Analysis Date: 05/24/2018 16:44
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182379001, 1182379002, 1182379003, 1182379004, 1182379005, 1182379006, 1182379007, 1182379008, 1182379009

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	3.87	97	4.00	4.31	108	75-125	10.80	(< 25)

Batch Information

Analytical Batch: WDA4289
 Analytical Method: SM21 4500-N D
 Instrument: Discrete Analyzer 2
 Analyst: DMM
 Analytical Date/Time: 5/24/2018 4:42:50PM

Prep Batch: WXX12339
 Prep Method: Distillation TKN by Phenate (W)
 Prep Date/Time: 5/23/2018 5:45:00PM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL

Print Date: 05/31/2018 8:28:08AM

Method Blank

Blank ID: MB for HBN 1780100 [WXX/12340]
Blank Lab ID: 1448678

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1182379001, 1182379002, 1182379003, 1182379004, 1182379005, 1182379006, 1182379007, 1182379008, 1182379009

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: WDA4290
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 5/25/2018 12:24:56PM

Prep Batch: WXX12340
Prep Method: METHOD
Prep Date/Time: 5/25/2018 11:30:00AM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Print Date: 05/31/2018 8:28:09AM

Method Blank

Blank ID: MB for HBN 1780100 [WXX/12340]
Blank Lab ID: 1448681

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1182379001, 1182379002, 1182379003, 1182379004, 1182379005, 1182379006, 1182379007, 1182379008, 1182379009

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: WDA4290
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 5/25/2018 12:51:40PM

Prep Batch: WXX12340
Prep Method: METHOD
Prep Date/Time: 5/25/2018 11:30:00AM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Print Date: 05/31/2018 8:28:09AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1182379 [WXX12340]
 Blank Spike Lab ID: 1448679
 Date Analyzed: 05/25/2018 12:26

Spike Duplicate ID: LCSD for HBN 1182379 [WXX12340]
 Spike Duplicate Lab ID: 1448680
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182379001, 1182379002, 1182379003, 1182379004, 1182379005, 1182379006, 1182379007, 1182379008, 1182379009

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	0.943	94	1	0.961	96	(75-125)	1.90	(< 25)

Batch Information

Analytical Batch: **WDA4290**
 Analytical Method: **SM21 4500-NH3 G**
 Instrument: **Discrete Analyzer 2**
 Analyst: **DMM**

Prep Batch: **WXX12340**
 Prep Method: **METHOD**
 Prep Date/Time: **05/25/2018 11:30**
 Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
 Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1182379 [WXX12340]
 Blank Spike Lab ID: 1448682
 Date Analyzed: 05/25/2018 12:53

Spike Duplicate ID: LCSD for HBN 1182379 [WXX12340]
 Spike Duplicate Lab ID: 1448683
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182379001, 1182379002, 1182379003, 1182379004, 1182379005, 1182379006, 1182379007, 1182379008, 1182379009

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	0.997	100	1	1.03	103	(75-125)	3.50	(< 25)

Batch Information

Analytical Batch: **WDA4290**
 Analytical Method: **SM21 4500-NH3 G**
 Instrument: **Discrete Analyzer 2**
 Analyst: **DMM**

Prep Batch: **WXX12340**
 Prep Method: **METHOD**
 Prep Date/Time: **05/25/2018 11:30**
 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: 1182343004
 MS Sample ID: 1448684 MS
 MSD Sample ID: 1448685 MSD

Analysis Date: 05/25/2018 12:56
 Analysis Date: 05/25/2018 12:58
 Analysis Date: 05/25/2018 13:00
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182379001, 1182379002, 1182379003, 1182379004, 1182379005, 1182379006, 1182379007, 1182379008, 1182379009

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	1.06	106	1.00	0.961	96	75-125	9.60	(< 25)

Batch Information

Analytical Batch: WDA4290
 Analytical Method: SM21 4500-NH3 G
 Instrument: Discrete Analyzer 2
 Analyst: DMM
 Analytical Date/Time: 5/25/2018 12:58:21PM

Prep Batch: WXX12340
 Prep Method: Ammonia by SM21 4500F prep (W)
 Prep Date/Time: 5/25/2018 11:30:00AM
 Prep Initial Wt./Vol.: 6.00mL
 Prep Extract Vol: 6.00mL

Matrix Spike Summary

Original Sample ID: 1182379001
 MS Sample ID: 1448686 MS
 MSD Sample ID: 1448687 MSD

Analysis Date: 05/25/2018 12:29
 Analysis Date: 05/25/2018 12:31
 Analysis Date: 05/25/2018 12:33
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182379001, 1182379002, 1182379003, 1182379004, 1182379005, 1182379006, 1182379007, 1182379008, 1182379009

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	.797	80	1.00	0.679	68 *	75-125	16.00	(< 25)

Batch Information

Analytical Batch: WDA4290
 Analytical Method: SM21 4500-NH3 G
 Instrument: Discrete Analyzer 2
 Analyst: DMM
 Analytical Date/Time: 5/25/2018 12:31:39PM

Prep Batch: WXX12340
 Prep Method: Ammonia by SM21 4500F prep (W)
 Prep Date/Time: 5/25/2018 11:30:00AM
 Prep Initial Wt./Vol.: 6.00mL
 Prep Extract Vol: 6.00mL

Method Blank

Blank ID: MB for HBN 1780220 [WXX/12344]
 Blank Lab ID: 1449172

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1182379001, 1182379002, 1182379003, 1182379004, 1182379005, 1182379006, 1182379007, 1182379008, 1182379009

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: WDA4293
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: EWW
 Analytical Date/Time: 5/30/2018 2:01:22PM

Prep Batch: WXX12344
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 5/30/2018 11:22:00AM
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

Print Date: 05/31/2018 8:28:12AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1182379 [WXX12344]
 Blank Spike Lab ID: 1449173
 Date Analyzed: 05/30/2018 14:02

Spike Duplicate ID: LCSD for HBN 1182379 [WXX12344]
 Spike Duplicate Lab ID: 1449174
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182379001, 1182379002, 1182379003, 1182379004, 1182379005, 1182379006, 1182379007, 1182379008, 1182379009

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	0.189	94	0.2	0.190	95	(85-115)	0.58	(< 25)

Batch Information

Analytical Batch: WDA4293
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: EWW

Prep Batch: WXX12344
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 05/30/2018 11:22
 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: 1182343001
 MS Sample ID: 1449151 MS
 MSD Sample ID: 1449152 MSD

Analysis Date: 05/30/2018 13:46
 Analysis Date: 05/30/2018 13:47
 Analysis Date: 05/30/2018 13:48
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182379001

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	0.0919	0.200	.294	101	0.200	0.289	98	75-125	1.90	(< 25)

Batch Information

Analytical Batch: WDA4293
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: EWW
 Analytical Date/Time: 5/30/2018 1:47:39PM

Prep Batch: WXX12344
 Prep Method: Total Phosphorus (W) Ext.
 Prep Date/Time: 5/30/2018 11:22:00AM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL

Print Date: 05/31/2018 8:28:15AM

Matrix Spike Summary

Original Sample ID: 1182379001
 MS Sample ID: 1449153 MS
 MSD Sample ID: 1449154 MSD

Analysis Date: 05/30/2018 14:04
 Analysis Date: 05/30/2018 14:07
 Analysis Date: 05/30/2018 14:08
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1182379001, 1182379002, 1182379003, 1182379004, 1182379005, 1182379006, 1182379007, 1182379008, 1182379009

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	0.0465	0.200	.244	99	0.200	0.244	99	75-125	0.08	(< 25)

Batch Information

Analytical Batch: WDA4293
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: EWW
 Analytical Date/Time: 5/30/2018 2:07:13PM

Prep Batch: WXX12344
 Prep Method: Total Phosphorus (W) Ext.
 Prep Date/Time: 5/30/2018 11:22:00AM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL

Print Date: 05/31/2018 8:28:15AM



1182379



SGS North America Inc. CHAIN OF CUSTODY RECORD

Locations Nationwide: Alaska, Maryland, New Jersey, New York, North Carolina, Florida

www.us.sgs.com

CLIENT: Stantec

CONTACT: Jake Alward | **PHONE #:** 343-5202

PROJECT NAME: Wasilla WWTP | **PROJECT/PWSID/PERMIT#:**

REPORTS TO: | **E-MAIL:** jake.alward@stantec.com

INVOICE TO: Stantec | **QUOTE #:** 204700415 | **P.O. #:**

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

Page 1 of 1

Section 3: Preservative

#	CONTAINER	Pres: Type:	Preservative						REMARKS/LOC ID											
			BOD	TSS	Fecal Coliform	Total Coliform - Quantitray	Nitrate/Nitrite	Ammonia/TKNT-Phos												
1	A-F	SW11	5/23/19	9:45	k	G														
2	A-F	SW12		10:04																
3	A-F	SW13		10:19																
4	A-F	SW14		11:28																
5	A-F	SW15		11:02																
6	A-F	SW16		10:49																
7	A-F	SW17		12:37																
8	A-F	SW18		13:06																
9	A-F	DUP 2		13:06																

Section 4: DOD Project? Yes No | **Data Deliverable Requirements:**

Section 5: Relinquished By (1-4)

Relinquished By: (1) [Signature] | Date: 5/23/19 | Time: 14:38 | Received By: [Signature]

Relinquished By: (2) [Signature] | Date: | Time: | Received By: [Signature]

Relinquished By: (3) [Signature] | Date: | Time: | Received By: [Signature]

Relinquished By: (4) | Date: 5/23/19 | Time: 14:36 | Received For Laboratory By: Amanda Taber

Temp Blank °C: 2.9 D40 or Ambient [] P40

Chain of Custody Seal: (Circle) INTACT BROKEN **ABSENT**

Delivery Method: Hand Delivery [X] Commercial Delivery []

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



e-Sample Receipt Form

SGS Workorder #:

1182379



1 1 8 2 3 7 9

Review Criteria	Condition (Yes, No, N/A)	Exceptions Noted below
Chain of Custody / Temperature Requirements	<input checked="" type="checkbox"/>	Exemption permitted if sampler hand carries/delivers.
Were Custody Seals intact? Note # & location	<input type="checkbox"/> N/A	
COC accompanied samples?	<input checked="" type="checkbox"/> Yes	
<input type="checkbox"/> N/A **Exemption permitted if chilled & collected <8 hours ago, or for samples where chilling is not required		
Temperature blank compliant* (i.e., 0-6 °C after CF)?	<input checked="" type="checkbox"/> Yes	Cooler ID: 1 @ 2.9 °C Therm. ID: D40
	<input checked="" type="checkbox"/> Yes	Cooler ID: 2 @ 3.5 °C Therm. ID: D40
	<input type="checkbox"/>	Cooler ID: @ °C Therm. ID:
	<input type="checkbox"/>	Cooler ID: @ °C Therm. ID:
	<input type="checkbox"/>	Cooler ID: @ °C Therm. ID:
*If >6°C, were samples collected <8 hours ago?	<input type="checkbox"/> N/A	
If <0°C, were sample containers ice free?	<input type="checkbox"/> N/A	
If samples received <u>without</u> a temperature blank, the "cooler temperature" will be documented in lieu of the temperature blank & "COOLER TEMP" will be noted to the right. In cases where neither a temp blank nor cooler temp can be obtained, note "ambient" or "chilled".		
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?	<input checked="" type="checkbox"/> Yes	
Do samples match COC** (i.e., sample IDs, dates/times collected)?	<input checked="" type="checkbox"/> Yes	
**Note: If times differ <1hr, record details & login per COC.		
Were analyses requested unambiguous? (i.e., method is specified for analyses with >1 option for analysis)	<input checked="" type="checkbox"/> Yes	
Were proper containers (type/mass/volume/preservative***) used?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> 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?	<input type="checkbox"/> N/A	
Were all water VOA vials free of headspace (i.e., bubbles ≤ 6mm)?	<input type="checkbox"/> N/A	
Were all soil VOAs field extracted with MeOH+BFB?	<input type="checkbox"/> 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>
1182379001-A	No Preservative Required	OK	1182379008-A	No Preservative Required	OK
1182379001-B	No Preservative Required	OK	1182379008-B	No Preservative Required	OK
1182379001-C	Na2S2O3 for Chlorine Redu	OK	1182379008-C	Na2S2O3 for Chlorine Redu	OK
1182379001-D	Na2S2O3 for Chlorine Redu	OK	1182379008-D	Na2S2O3 for Chlorine Redu	OK
1182379001-E	No Preservative Required	OK	1182379008-E	No Preservative Required	OK
1182379001-F	H2SO4 to pH < 2	OK	1182379008-F	H2SO4 to pH < 2	OK
1182379002-A	No Preservative Required	OK	1182379009-A	No Preservative Required	OK
1182379002-B	No Preservative Required	OK	1182379009-B	No Preservative Required	OK
1182379002-C	Na2S2O3 for Chlorine Redu	OK	1182379009-C	Na2S2O3 for Chlorine Redu	OK
1182379002-D	Na2S2O3 for Chlorine Redu	OK	1182379009-D	Na2S2O3 for Chlorine Redu	OK
1182379002-E	No Preservative Required	OK	1182379009-E	No Preservative Required	OK
1182379002-F	H2SO4 to pH < 2	OK	1182379009-F	H2SO4 to pH < 2	OK
1182379003-A	No Preservative Required	OK			
1182379003-B	No Preservative Required	OK			
1182379003-C	Na2S2O3 for Chlorine Redu	OK			
1182379003-D	Na2S2O3 for Chlorine Redu	OK			
1182379003-E	No Preservative Required	OK			
1182379003-F	H2SO4 to pH < 2	OK			
1182379004-A	No Preservative Required	OK			
1182379004-B	No Preservative Required	OK			
1182379004-C	Na2S2O3 for Chlorine Redu	OK			
1182379004-D	Na2S2O3 for Chlorine Redu	OK			
1182379004-E	No Preservative Required	OK			
1182379004-F	H2SO4 to pH < 2	OK			
1182379005-A	No Preservative Required	OK			
1182379005-B	No Preservative Required	OK			
1182379005-C	Na2S2O3 for Chlorine Redu	OK			
1182379005-D	Na2S2O3 for Chlorine Redu	OK			
1182379005-E	No Preservative Required	OK			
1182379005-F	H2SO4 to pH < 2	OK			
1182379006-A	No Preservative Required	OK			
1182379006-B	No Preservative Required	OK			
1182379006-C	Na2S2O3 for Chlorine Redu	OK			
1182379006-D	Na2S2O3 for Chlorine Redu	OK			
1182379006-E	No Preservative Required	OK			
1182379006-F	H2SO4 to pH < 2	OK			
1182379007-A	No Preservative Required	OK			
1182379007-B	No Preservative Required	OK			
1182379007-C	Na2S2O3 for Chlorine Redu	OK			
1182379007-D	Na2S2O3 for Chlorine Redu	OK			
1182379007-E	No Preservative Required	OK			
1182379007-F	H2SO4 to pH < 2	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 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.