



Laboratory Report of Analysis

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

Report Number: **1201507**

Client Project: **Wasilla WWTP**

Dear John Marshall,

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

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

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

Sincerely,
SGS North America Inc.

Justin Nelson
Project Manager
Justin.Nelson@sgs.com

Date

Case Narrative

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

SGS Project: **1201507**

Project Name/Site: **Wasilla WWTP**

Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

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

Print Date: 05/06/2020 11:23:09AM

Laboratory Qualifiers

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

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

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

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

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
B	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
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	1201507001	04/21/2020	04/21/2020	Water (Surface, Eff., Ground)
SW2	1201507002	04/21/2020	04/21/2020	Water (Surface, Eff., Ground)
SW3	1201507003	04/21/2020	04/21/2020	Water (Surface, Eff., Ground)
SW4	1201507004	04/21/2020	04/21/2020	Water (Surface, Eff., Ground)
SW5	1201507005	04/21/2020	04/21/2020	Water (Surface, Eff., Ground)
SW6	1201507006	04/21/2020	04/21/2020	Water (Surface, Eff., Ground)
SW7	1201507007	04/21/2020	04/21/2020	Water (Surface, Eff., Ground)
SW8	1201507008	04/21/2020	04/21/2020	Water (Surface, Eff., Ground)
SW9	1201507009	04/21/2020	04/21/2020	Water (Surface, Eff., Ground)
SW10	1201507010	04/21/2020	04/21/2020	Water (Surface, Eff., Ground)
DUP1	1201507011	04/21/2020	04/21/2020	Water (Surface, Eff., Ground)

<u>Method</u>	<u>Method Description</u>
SM21 4500-NH3 G	Ammonia-N (W) SM21 4500-NH3 G
SM21 5210B	Biochemical Oxygen Demand SM21 5210B
SM21 9222D	Fecal Coliform (MF)
EPA 300.0	Ion Chromatographic Analysis
SM23 4500-N D	TKN by Phenate (W)
SM21 9223B	Total Coliform P/A Quant Tray
SM21 4500P-B,E	Total Phosphorus (W)

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Detectable Results Summary

Client Sample ID: **SW1**
 Lab Sample ID: 1201507001
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	19.8	mg/L
E. Coli	1	MPN/100mL
Fecal Coliform	3.0	col/100mL
Total Coliform	1986	MPN/100mL
Ammonia-N	6.78	mg/L
Total Kjeldahl Nitrogen	10.5	mg/L
Total Phosphorus	1.97	mg/L

Waters Department

Client Sample ID: **SW2**
 Lab Sample ID: 1201507002
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	26.4	mg/L
E. Coli	3	MPN/100mL
Fecal Coliform	1.0	col/100mL
Total Coliform	326	MPN/100mL
Ammonia-N	3.90	mg/L
Total Kjeldahl Nitrogen	7.66	mg/L
Total Phosphorus	1.97	mg/L

Waters Department

Client Sample ID: **SW3**
 Lab Sample ID: 1201507003
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	16.7	mg/L
E. Coli	1	MPN/100mL
Fecal Coliform	4.0	col/100mL
Total Coliform	205	MPN/100mL
Ammonia-N	3.67	mg/L
Total Kjeldahl Nitrogen	5.71	mg/L
Total Phosphorus	1.90	mg/L

Waters Department

Client Sample ID: **SW4**
 Lab Sample ID: 1201507004
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	9.33	mg/L
E. Coli	930	MPN/100mL
Fecal Coliform	710	col/100mL
Total Coliform	1450	MPN/100mL
Total Kjeldahl Nitrogen	0.958J	mg/L
Total Phosphorus	0.0850	mg/L

Waters Department

Client Sample ID: **SW5**
 Lab Sample ID: 1201507005
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	15.4	mg/L
E. Coli	184	MPN/100mL
Fecal Coliform	298	col/100mL
Total Coliform	770	MPN/100mL
Ammonia-N	0.166	mg/L
Total Kjeldahl Nitrogen	1.17	mg/L
Total Phosphorus	0.124	mg/L

Waters Department

Detectable Results Summary

Client Sample ID: **SW6**
 Lab Sample ID: 1201507006
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	8.40	mg/L
E. Coli	530	MPN/100mL
Fecal Coliform	1370	col/100mL
Total Coliform	1986	MPN/100mL

Waters Department

Ammonia-N	0.317	mg/L
Total Kjeldahl Nitrogen	1.64	mg/L
Total Phosphorus	0.246	mg/L

Client Sample ID: **SW7**
 Lab Sample ID: 1201507007
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	9.24	mg/L
E. Coli	4	MPN/100mL
Fecal Coliform	19	col/100mL
Total Coliform	321	MPN/100mL

Waters Department

Ammonia-N	0.820	mg/L
Total Kjeldahl Nitrogen	1.83	mg/L
Total Phosphorus	0.310	mg/L

Client Sample ID: **SW8**
 Lab Sample ID: 1201507008
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	8.40	mg/L
E. Coli	320	MPN/100mL
Fecal Coliform	276	col/100mL
Total Coliform	640	MPN/100mL

Waters Department

Ammonia-N	0.0533J	mg/L
Total Kjeldahl Nitrogen	1.06	mg/L
Total Phosphorus	0.294	mg/L

Client Sample ID: **SW9**
 Lab Sample ID: 1201507009
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	13.0	mg/L
E. Coli	153	MPN/100mL
Fecal Coliform	2520	col/100mL
Total Coliform	649	MPN/100mL

Waters Department

Ammonia-N	1.92	mg/L
Total Kjeldahl Nitrogen	3.14	mg/L
Total Phosphorus	0.370	mg/L

Detectable Results Summary

Client Sample ID: **SW10**
 Lab Sample ID: 1201507010
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	12.1	mg/L
E. Coli	8	MPN/100mL
Fecal Coliform	378	col/100mL
Total Coliform	24	MPN/100mL
Ammonia-N	0.485	mg/L
Total Kjeldahl Nitrogen	2.35	mg/L
Total Phosphorus	0.420	mg/L

Waters Department

Client Sample ID: **DUP1**
 Lab Sample ID: 1201507011
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	15.3	mg/L
E. Coli	4980	MPN/100mL
Fecal Coliform	1130	col/100mL
Total Coliform	6160	MPN/100mL
Ammonia-N	1.83	mg/L
Total Kjeldahl Nitrogen	3.11	mg/L
Total Phosphorus	0.374	mg/L

Waters Department



Results of SW1

Client Sample ID: **SW1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1201507001
Lab Project ID: 1201507

Collection Date: 04/21/20 10:42
Received Date: 04/21/20 16:32
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	19.8	2.00	2.00	mg/L	1		04/22/20 16:00

Batch Information

Analytical Batch: BOD6582
Analytical Method: SM21 5210B
Analyst: VAB
Analytical Date/Time: 04/22/20 16:00
Container ID: 1201507001-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>
Fecal Coliform	3.0	1.00	1.00	col/100mL	1		04/21/20 18:28

Batch Information

Analytical Batch: BTF18046
Analytical Method: SM21 9222D
Analyst: VAB
Analytical Date/Time: 04/21/20 18:28
Container ID: 1201507001-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	1	1	MPN/100r	1		04/22/20 11:59
Total Coliform	1986	1	1	MPN/100r	1		04/22/20 11:59

Batch Information

Analytical Batch: BTF18042
Analytical Method: SM21 9223B
Analyst: VAB
Analytical Date/Time: 04/22/20 11:59
Container ID: 1201507001-B



Results of SW1

Client Sample ID: SW1
Client Project ID: Wasilla WWTP
Lab Sample ID: 1201507001
Lab Project ID: 1201507

Collection Date: 04/21/20 10:42
Received Date: 04/21/20 16:32
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

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

Batch Information

Analytical Batch: WIC6035
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 04/22/20 18:21
Container ID: 1201507001-C
Prep Batch: WXX13257
Prep Method: METHOD
Prep Date/Time: 04/22/20 16:15
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

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

Batch Information

Analytical Batch: WDA4779
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/04/20 12:32
Container ID: 1201507001-D
Prep Batch: WXX13268
Prep Method: METHOD
Prep Date/Time: 05/04/20 08:30
Prep Initial Wt./Vol.: 3 mL
Prep Extract Vol: 6 mL

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

Batch Information

Analytical Batch: WDA4776
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/29/20 11:06
Container ID: 1201507001-D
Prep Batch: WXX13262
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/29/20 06:50
Prep Initial Wt./Vol.: 2.5 mL
Prep Extract Vol: 25 mL

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



Results of SW1

Client Sample ID: **SW1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1201507001
Lab Project ID: 1201507

Collection Date: 04/21/20 10:42
Received Date: 04/21/20 16:32
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4773
Analytical Method: SM23 4500-N D
Analyst: DMM
Analytical Date/Time: 04/22/20 15:57
Container ID: 1201507001-D

Prep Batch: WXX13258
Prep Method: METHOD
Prep Date/Time: 04/22/20 10:04
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: 1201507002
Lab Project ID: 1201507

Collection Date: 04/21/20 11:05
Received Date: 04/21/20 16:32
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	26.4	2.00	2.00	mg/L	1		04/22/20 16:00

Batch Information

Analytical Batch: BOD6582
Analytical Method: SM21 5210B
Analyst: VAB
Analytical Date/Time: 04/22/20 16:00
Container ID: 1201507002-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>
Fecal Coliform	1.0	1.00	1.00	col/100mL	1		04/21/20 18:28

Batch Information

Analytical Batch: BTF18046
Analytical Method: SM21 9222D
Analyst: VAB
Analytical Date/Time: 04/21/20 18:28
Container ID: 1201507002-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/100r	1		04/22/20 11:59
Total Coliform	326	1	1	MPN/100r	1		04/22/20 11:59

Batch Information

Analytical Batch: BTF18042
Analytical Method: SM21 9223B
Analyst: VAB
Analytical Date/Time: 04/22/20 11:59
Container ID: 1201507002-B



Results of SW2

Client Sample ID: SW2
Client Project ID: Wasilla WWTP
Lab Sample ID: 1201507002
Lab Project ID: 1201507

Collection Date: 04/21/20 11:05
Received Date: 04/21/20 16:32
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

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

Batch Information

Analytical Batch: WIC6035
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 04/22/20 18:40
Container ID: 1201507002-C
Prep Batch: WXX13257
Prep Method: METHOD
Prep Date/Time: 04/22/20 16:15
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

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

Batch Information

Analytical Batch: WDA4779
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/04/20 12:34
Container ID: 1201507002-D
Prep Batch: WXX13268
Prep Method: METHOD
Prep Date/Time: 05/04/20 08:30
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. Row includes Total Phosphorus.

Batch Information

Analytical Batch: WDA4776
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/29/20 11:07
Container ID: 1201507002-D
Prep Batch: WXX13262
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/29/20 06:50
Prep Initial Wt./Vol.: 2.5 mL
Prep Extract Vol: 25 mL

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

Results of SW2

Client Sample ID: **SW2**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1201507002
Lab Project ID: 1201507

Collection Date: 04/21/20 11:05
Received Date: 04/21/20 16:32
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4773
Analytical Method: SM23 4500-N D
Analyst: DMM
Analytical Date/Time: 04/22/20 15:58
Container ID: 1201507002-D

Prep Batch: WXX13258
Prep Method: METHOD
Prep Date/Time: 04/22/20 10:04
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: 1201507003
Lab Project ID: 1201507

Collection Date: 04/21/20 11:30
Received Date: 04/21/20 16:32
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	16.7	2.00	2.00	mg/L	1		04/22/20 16:00

Batch Information

Analytical Batch: BOD6582
Analytical Method: SM21 5210B
Analyst: VAB
Analytical Date/Time: 04/22/20 16:00
Container ID: 1201507003-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>
Fecal Coliform	4.0	1.00	1.00	col/100mL	1		04/21/20 18:28

Batch Information

Analytical Batch: BTF18046
Analytical Method: SM21 9222D
Analyst: VAB
Analytical Date/Time: 04/21/20 18:28
Container ID: 1201507003-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	1	1	MPN/100r	1		04/22/20 11:59
Total Coliform	205	1	1	MPN/100r	1		04/22/20 11:59

Batch Information

Analytical Batch: BTF18042
Analytical Method: SM21 9223B
Analyst: VAB
Analytical Date/Time: 04/22/20 11:59
Container ID: 1201507003-B



Results of SW3

Client Sample ID: SW3
Client Project ID: Wasilla WWTP
Lab Sample ID: 1201507003
Lab Project ID: 1201507

Collection Date: 04/21/20 11:30
Received Date: 04/21/20 16:32
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

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

Batch Information

Analytical Batch: WIC6035
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 04/22/20 18:59
Container ID: 1201507003-C
Prep Batch: WXX13257
Prep Method: METHOD
Prep Date/Time: 04/22/20 16:15
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

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

Batch Information

Analytical Batch: WDA4779
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/04/20 12:36
Container ID: 1201507003-D
Prep Batch: WXX13268
Prep Method: METHOD
Prep Date/Time: 05/04/20 08:30
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. Row includes Total Phosphorus.

Batch Information

Analytical Batch: WDA4776
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/29/20 11:08
Container ID: 1201507003-D
Prep Batch: WXX13262
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/29/20 06:50
Prep Initial Wt./Vol.: 2.5 mL
Prep Extract Vol: 25 mL

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

Results of SW3

Client Sample ID: **SW3**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1201507003
Lab Project ID: 1201507

Collection Date: 04/21/20 11:30
Received Date: 04/21/20 16:32
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4773
Analytical Method: SM23 4500-N D
Analyst: DMM
Analytical Date/Time: 04/22/20 16:00
Container ID: 1201507003-D

Prep Batch: WXX13258
Prep Method: METHOD
Prep Date/Time: 04/22/20 10:04
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: 1201507004
Lab Project ID: 1201507

Collection Date: 04/21/20 12:14
Received Date: 04/21/20 16:32
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	9.33	2.00	2.00	mg/L	1		04/22/20 16:00

Batch Information

Analytical Batch: BOD6582
Analytical Method: SM21 5210B
Analyst: VAB
Analytical Date/Time: 04/22/20 16:00
Container ID: 1201507004-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>
Fecal Coliform	710	1.00	1.00	col/100mL	1		04/21/20 18:28

Batch Information

Analytical Batch: BTF18046
Analytical Method: SM21 9222D
Analyst: VAB
Analytical Date/Time: 04/21/20 18:28
Container ID: 1201507004-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	930	10	10	MPN/100r	10		04/22/20 11:59
Total Coliform	1450	10	10	MPN/100r	10		04/22/20 11:59

Batch Information

Analytical Batch: BTF18042
Analytical Method: SM21 9223B
Analyst: VAB
Analytical Date/Time: 04/22/20 11:59
Container ID: 1201507004-B



Results of SW4

Client Sample ID: **SW4**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1201507004
Lab Project ID: 1201507

Collection Date: 04/21/20 12:14
Received Date: 04/21/20 16:32
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Nitrate-N	0.100 U	0.200	0.0500	mg/L	1		04/22/20 19:18
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		04/22/20 19:18
Total Nitrate/Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		04/22/20 19:18

Batch Information

Analytical Batch: WIC6035
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 04/22/20 19:18
Container ID: 1201507004-C

Prep Batch: WXX13257
Prep Method: METHOD
Prep Date/Time: 04/22/20 16:15
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0500 U	0.100	0.0310	mg/L	1		05/04/20 12:41

Batch Information

Analytical Batch: WDA4779
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/04/20 12:41
Container ID: 1201507004-D

Prep Batch: WXX13268
Prep Method: METHOD
Prep Date/Time: 05/04/20 08:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0850	0.0400	0.0120	mg/L	1		04/29/20 12:26

Batch Information

Analytical Batch: WDA4775
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/29/20 12:26
Container ID: 1201507004-D

Prep Batch: WXX13260
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/27/20 15:01
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Kjeldahl Nitrogen	0.958 J	1.00	0.310	mg/L	1		04/22/20 16:01

Results of SW4

Client Sample ID: **SW4**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1201507004
Lab Project ID: 1201507

Collection Date: 04/21/20 12:14
Received Date: 04/21/20 16:32
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4773
Analytical Method: SM23 4500-N D
Analyst: DMM
Analytical Date/Time: 04/22/20 16:01
Container ID: 1201507004-D

Prep Batch: WXX13258
Prep Method: METHOD
Prep Date/Time: 04/22/20 10:04
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: 1201507005
Lab Project ID: 1201507

Collection Date: 04/21/20 12:27
Received Date: 04/21/20 16:32
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	15.4	2.00	2.00	mg/L	1		04/22/20 16:00

Batch Information

Analytical Batch: BOD6582
Analytical Method: SM21 5210B
Analyst: VAB
Analytical Date/Time: 04/22/20 16:00
Container ID: 1201507005-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>
Fecal Coliform	298	2.00	2.00	col/100mL	1		04/21/20 18:28

Batch Information

Analytical Batch: BTF18046
Analytical Method: SM21 9222D
Analyst: VAB
Analytical Date/Time: 04/21/20 18:28
Container ID: 1201507005-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	184	1	1	MPN/100r	1		04/22/20 11:59
Total Coliform	770	1	1	MPN/100r	1		04/22/20 11:59

Batch Information

Analytical Batch: BTF18042
Analytical Method: SM21 9223B
Analyst: VAB
Analytical Date/Time: 04/22/20 11:59
Container ID: 1201507005-B



Results of SW5

Client Sample ID: **SW5**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1201507005
 Lab Project ID: 1201507

Collection Date: 04/21/20 12:27
 Received Date: 04/21/20 16:32
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Nitrate-N	0.100 U	0.200	0.0500	mg/L	1		04/22/20 19:37
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		04/22/20 19:37
Total Nitrate/Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		04/22/20 19:37

Batch Information

Analytical Batch: WIC6035
 Analytical Method: EPA 300.0
 Analyst: DMM
 Analytical Date/Time: 04/22/20 19:37
 Container ID: 1201507005-C

Prep Batch: WXX13257
 Prep Method: METHOD
 Prep Date/Time: 04/22/20 16:15
 Prep Initial Wt./Vol.: 10 mL
 Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.166	0.100	0.0310	mg/L	1		05/04/20 12:42

Batch Information

Analytical Batch: WDA4779
 Analytical Method: SM21 4500-NH3 G
 Analyst: DMM
 Analytical Date/Time: 05/04/20 12:42
 Container ID: 1201507005-D

Prep Batch: WXX13268
 Prep Method: METHOD
 Prep Date/Time: 05/04/20 08:30
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.124	0.0400	0.0120	mg/L	1		04/29/20 12:27

Batch Information

Analytical Batch: WDA4775
 Analytical Method: SM21 4500P-B,E
 Analyst: DMM
 Analytical Date/Time: 04/29/20 12:27
 Container ID: 1201507005-D

Prep Batch: WXX13260
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 04/27/20 15:01
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Kjeldahl Nitrogen	1.17	1.00	0.310	mg/L	1		04/22/20 16:05

Results of SW5

Client Sample ID: **SW5**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1201507005
Lab Project ID: 1201507

Collection Date: 04/21/20 12:27
Received Date: 04/21/20 16:32
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4773
Analytical Method: SM23 4500-N D
Analyst: DMM
Analytical Date/Time: 04/22/20 16:05
Container ID: 1201507005-D

Prep Batch: WXX13258
Prep Method: METHOD
Prep Date/Time: 04/22/20 10:04
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: 1201507006
Lab Project ID: 1201507

Collection Date: 04/21/20 12:00
Received Date: 04/21/20 16:32
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	8.40	2.00	2.00	mg/L	1		04/22/20 16:00

Batch Information

Analytical Batch: BOD6582
Analytical Method: SM21 5210B
Analyst: VAB
Analytical Date/Time: 04/22/20 16:00
Container ID: 1201507006-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>
Fecal Coliform	1370	2.00	2.00	col/100mL	1		04/21/20 18:28

Batch Information

Analytical Batch: BTF18046
Analytical Method: SM21 9222D
Analyst: VAB
Analytical Date/Time: 04/21/20 18:28
Container ID: 1201507006-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	530	1	1	MPN/100r	1		04/22/20 15:50
Total Coliform	1986	1	1	MPN/100r	1		04/22/20 15:50

Batch Information

Analytical Batch: BTF18042
Analytical Method: SM21 9223B
Analyst: VAB
Analytical Date/Time: 04/22/20 15:50
Container ID: 1201507006-B



Results of SW6

Client Sample ID: SW6
Client Project ID: Wasilla WWTP
Lab Sample ID: 1201507006
Lab Project ID: 1201507

Collection Date: 04/21/20 12:00
Received Date: 04/21/20 16:32
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

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

Batch Information

Analytical Batch: WIC6035
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 04/22/20 19:56
Container ID: 1201507006-C
Prep Batch: WXX13257
Prep Method: METHOD
Prep Date/Time: 04/22/20 16:15
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

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

Batch Information

Analytical Batch: WDA4779
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/04/20 12:25
Container ID: 1201507006-D
Prep Batch: WXX13268
Prep Method: METHOD
Prep Date/Time: 05/04/20 08:30
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. Row includes Total Phosphorus.

Batch Information

Analytical Batch: WDA4775
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/29/20 12:27
Container ID: 1201507006-D
Prep Batch: WXX13260
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/27/20 15:01
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

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

Results of SW6

Client Sample ID: **SW6**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1201507006
Lab Project ID: 1201507

Collection Date: 04/21/20 12:00
Received Date: 04/21/20 16:32
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4773
Analytical Method: SM23 4500-N D
Analyst: DMM
Analytical Date/Time: 04/22/20 16:06
Container ID: 1201507006-D

Prep Batch: WXX13258
Prep Method: METHOD
Prep Date/Time: 04/22/20 10:04
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: 1201507007
Lab Project ID: 1201507

Collection Date: 04/21/20 11:48
Received Date: 04/21/20 16:32
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	9.24	2.00	2.00	mg/L	1		04/22/20 16:00

Batch Information

Analytical Batch: BOD6582
Analytical Method: SM21 5210B
Analyst: VAB
Analytical Date/Time: 04/22/20 16:00
Container ID: 1201507007-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>
Fecal Coliform	19	1.00	1.00	col/100mL	1		04/21/20 18:28

Batch Information

Analytical Batch: BTF18046
Analytical Method: SM21 9222D
Analyst: VAB
Analytical Date/Time: 04/21/20 18:28
Container ID: 1201507007-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	4	1	1	MPN/100r	1		04/22/20 15:50
Total Coliform	321	1	1	MPN/100r	1		04/22/20 15:50

Batch Information

Analytical Batch: BTF18042
Analytical Method: SM21 9223B
Analyst: VAB
Analytical Date/Time: 04/22/20 15:50
Container ID: 1201507007-B



Results of SW7

Client Sample ID: **SW7**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1201507007
 Lab Project ID: 1201507

Collection Date: 04/21/20 11:48
 Received Date: 04/21/20 16:32
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Nitrate-N	0.100 U	0.200	0.0500	mg/L	1		04/22/20 20:15
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		04/22/20 20:15
Total Nitrate/Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		04/22/20 20:15

Batch Information

Analytical Batch: WIC6035
 Analytical Method: EPA 300.0
 Analyst: DMM
 Analytical Date/Time: 04/22/20 20:15
 Container ID: 1201507007-C

Prep Batch: WXX13257
 Prep Method: METHOD
 Prep Date/Time: 04/22/20 16:15
 Prep Initial Wt./Vol.: 10 mL
 Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.820	0.100	0.0310	mg/L	1		05/04/20 12:44

Batch Information

Analytical Batch: WDA4779
 Analytical Method: SM21 4500-NH3 G
 Analyst: DMM
 Analytical Date/Time: 05/04/20 12:44
 Container ID: 1201507007-D

Prep Batch: WXX13268
 Prep Method: METHOD
 Prep Date/Time: 05/04/20 08:30
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.310	0.0400	0.0120	mg/L	1		04/29/20 12:28

Batch Information

Analytical Batch: WDA4775
 Analytical Method: SM21 4500P-B,E
 Analyst: DMM
 Analytical Date/Time: 04/29/20 12:28
 Container ID: 1201507007-D

Prep Batch: WXX13260
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 04/27/20 15:01
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Kjeldahl Nitrogen	1.83	1.00	0.310	mg/L	1		04/22/20 16:07

Results of SW7

Client Sample ID: **SW7**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1201507007
Lab Project ID: 1201507

Collection Date: 04/21/20 11:48
Received Date: 04/21/20 16:32
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4773
Analytical Method: SM23 4500-N D
Analyst: DMM
Analytical Date/Time: 04/22/20 16:07
Container ID: 1201507007-D

Prep Batch: WXX13258
Prep Method: METHOD
Prep Date/Time: 04/22/20 10:04
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: 1201507008
Lab Project ID: 1201507

Collection Date: 04/21/20 14:30
Received Date: 04/21/20 16:32
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	8.40	2.00	2.00	mg/L	1		04/22/20 16:00

Batch Information

Analytical Batch: BOD6582
Analytical Method: SM21 5210B
Analyst: VAB
Analytical Date/Time: 04/22/20 16:00
Container ID: 1201507008-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>
Fecal Coliform	276	2.00	2.00	col/100mL	1		04/21/20 18:28

Batch Information

Analytical Batch: BTF18046
Analytical Method: SM21 9222D
Analyst: VAB
Analytical Date/Time: 04/21/20 18:28
Container ID: 1201507008-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	320	20	20	MPN/100r	20		04/22/20 15:50
Total Coliform	640	20	20	MPN/100r	20		04/22/20 15:50

Batch Information

Analytical Batch: BTF18042
Analytical Method: SM21 9223B
Analyst: VAB
Analytical Date/Time: 04/22/20 15:50
Container ID: 1201507008-B



Results of SW8

Client Sample ID: **SW8**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1201507008
 Lab Project ID: 1201507

Collection Date: 04/21/20 14:30
 Received Date: 04/21/20 16:32
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Nitrate-N	0.100 U	0.200	0.0500	mg/L	1		04/22/20 21:31
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		04/22/20 21:31
Total Nitrate/Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		04/22/20 21:31

Batch Information

Analytical Batch: WIC6035
 Analytical Method: EPA 300.0
 Analyst: DMM
 Analytical Date/Time: 04/22/20 21:31
 Container ID: 1201507008-C

Prep Batch: WXX13257
 Prep Method: METHOD
 Prep Date/Time: 04/22/20 16:15
 Prep Initial Wt./Vol.: 10 mL
 Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0533 J	0.100	0.0310	mg/L	1		05/04/20 12:46

Batch Information

Analytical Batch: WDA4779
 Analytical Method: SM21 4500-NH3 G
 Analyst: DMM
 Analytical Date/Time: 05/04/20 12:46
 Container ID: 1201507008-D

Prep Batch: WXX13268
 Prep Method: METHOD
 Prep Date/Time: 05/04/20 08:30
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.294	0.0400	0.0120	mg/L	1		04/29/20 12:31

Batch Information

Analytical Batch: WDA4775
 Analytical Method: SM21 4500P-B,E
 Analyst: DMM
 Analytical Date/Time: 04/29/20 12:31
 Container ID: 1201507008-D

Prep Batch: WXX13260
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 04/27/20 15:01
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Kjeldahl Nitrogen	1.06	1.00	0.310	mg/L	1		04/22/20 16:09



Results of SW8

Client Sample ID: **SW8**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1201507008
Lab Project ID: 1201507

Collection Date: 04/21/20 14:30
Received Date: 04/21/20 16:32
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4773
Analytical Method: SM23 4500-N D
Analyst: DMM
Analytical Date/Time: 04/22/20 16:09
Container ID: 1201507008-D

Prep Batch: WXX13258
Prep Method: METHOD
Prep Date/Time: 04/22/20 10:04
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: 1201507009
Lab Project ID: 1201507

Collection Date: 04/21/20 14:01
Received Date: 04/21/20 16:32
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	13.0	2.00	2.00	mg/L	1		04/22/20 16:00

Batch Information

Analytical Batch: BOD6582
Analytical Method: SM21 5210B
Analyst: VAB
Analytical Date/Time: 04/22/20 16:00
Container ID: 1201507009-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>
Fecal Coliform	2520	2.00	2.00	col/100mL	1		04/21/20 18:28

Batch Information

Analytical Batch: BTF18046
Analytical Method: SM21 9222D
Analyst: VAB
Analytical Date/Time: 04/21/20 18:28
Container ID: 1201507009-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	153	1	1	MPN/100r	1		04/22/20 15:50
Total Coliform	649	1	1	MPN/100r	1		04/22/20 15:50

Batch Information

Analytical Batch: BTF18042
Analytical Method: SM21 9223B
Analyst: VAB
Analytical Date/Time: 04/22/20 15:50
Container ID: 1201507009-B



Results of SW9

Client Sample ID: SW9
Client Project ID: Wasilla WWTP
Lab Sample ID: 1201507009
Lab Project ID: 1201507

Collection Date: 04/21/20 14:01
Received Date: 04/21/20 16:32
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

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

Batch Information

Analytical Batch: WIC6035
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 04/22/20 21:50
Container ID: 1201507009-C
Prep Batch: WXX13257
Prep Method: METHOD
Prep Date/Time: 04/22/20 16:15
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

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

Batch Information

Analytical Batch: WDA4779
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/04/20 12:47
Container ID: 1201507009-D
Prep Batch: WXX13268
Prep Method: METHOD
Prep Date/Time: 05/04/20 08:30
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. Row includes Total Phosphorus.

Batch Information

Analytical Batch: WDA4775
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/29/20 12:34
Container ID: 1201507009-D
Prep Batch: WXX13260
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/27/20 15:01
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

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

Results of SW9

Client Sample ID: **SW9**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1201507009
Lab Project ID: 1201507

Collection Date: 04/21/20 14:01
Received Date: 04/21/20 16:32
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4773
Analytical Method: SM23 4500-N D
Analyst: DMM
Analytical Date/Time: 04/22/20 16:10
Container ID: 1201507009-D

Prep Batch: WXX13258
Prep Method: METHOD
Prep Date/Time: 04/22/20 10:04
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: 1201507010
Lab Project ID: 1201507

Collection Date: 04/21/20 13:45
Received Date: 04/21/20 16:32
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	12.1	2.00	2.00	mg/L	1		04/22/20 16:00

Batch Information

Analytical Batch: BOD6582
Analytical Method: SM21 5210B
Analyst: VAB
Analytical Date/Time: 04/22/20 16:00
Container ID: 1201507010-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>
Fecal Coliform	378	2.00	2.00	col/100mL	1		04/21/20 18:28

Batch Information

Analytical Batch: BTF18046
Analytical Method: SM21 9222D
Analyst: VAB
Analytical Date/Time: 04/21/20 18:28
Container ID: 1201507010-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	8	1	1	MPN/100r	1		04/22/20 15:50
Total Coliform	24	1	1	MPN/100r	1		04/22/20 15:50

Batch Information

Analytical Batch: BTF18042
Analytical Method: SM21 9223B
Analyst: VAB
Analytical Date/Time: 04/22/20 15:50
Container ID: 1201507010-B



Results of SW10

Client Sample ID: **SW10**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1201507010
 Lab Project ID: 1201507

Collection Date: 04/21/20 13:45
 Received Date: 04/21/20 16:32
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Nitrate-N	0.100 U	0.200	0.0500	mg/L	1		04/22/20 22:28
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		04/22/20 22:28
Total Nitrate/Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		04/22/20 22:28

Batch Information

Analytical Batch: WIC6035
 Analytical Method: EPA 300.0
 Analyst: DMM
 Analytical Date/Time: 04/22/20 22:28
 Container ID: 1201507010-C

Prep Batch: WXX13257
 Prep Method: METHOD
 Prep Date/Time: 04/22/20 16:15
 Prep Initial Wt./Vol.: 10 mL
 Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.485	0.100	0.0310	mg/L	1		05/04/20 12:49

Batch Information

Analytical Batch: WDA4779
 Analytical Method: SM21 4500-NH3 G
 Analyst: DMM
 Analytical Date/Time: 05/04/20 12:49
 Container ID: 1201507010-D

Prep Batch: WXX13268
 Prep Method: METHOD
 Prep Date/Time: 05/04/20 08:30
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.420	0.0400	0.0120	mg/L	1		04/29/20 12:35

Batch Information

Analytical Batch: WDA4775
 Analytical Method: SM21 4500P-B,E
 Analyst: DMM
 Analytical Date/Time: 04/29/20 12:35
 Container ID: 1201507010-D

Prep Batch: WXX13260
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 04/27/20 15:01
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Kjeldahl Nitrogen	2.35	1.00	0.310	mg/L	1		04/22/20 16:11

Results of SW10

Client Sample ID: **SW10**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1201507010
Lab Project ID: 1201507

Collection Date: 04/21/20 13:45
Received Date: 04/21/20 16:32
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4773
Analytical Method: SM23 4500-N D
Analyst: DMM
Analytical Date/Time: 04/22/20 16:11
Container ID: 1201507010-D

Prep Batch: WXX13258
Prep Method: METHOD
Prep Date/Time: 04/22/20 10:04
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL



Results of DUP1

Client Sample ID: **DUP1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1201507011
Lab Project ID: 1201507

Collection Date: 04/21/20 14:01
Received Date: 04/21/20 16:32
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	15.3	2.00	2.00	mg/L	1		04/22/20 16:00

Batch Information

Analytical Batch: BOD6582
Analytical Method: SM21 5210B
Analyst: VAB
Analytical Date/Time: 04/22/20 16:00
Container ID: 1201507011-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>
Fecal Coliform	1130	1.00	1.00	col/100mL	1		04/21/20 18:28

Batch Information

Analytical Batch: BTF18046
Analytical Method: SM21 9222D
Analyst: VAB
Analytical Date/Time: 04/21/20 18:28
Container ID: 1201507011-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	4980	20	20	MPN/100r	20		04/22/20 15:50
Total Coliform	6160	20	20	MPN/100r	20		04/22/20 15:50

Batch Information

Analytical Batch: BTF18042
Analytical Method: SM21 9223B
Analyst: VAB
Analytical Date/Time: 04/22/20 15:50
Container ID: 1201507011-B



Results of DUP1

Client Sample ID: **DUP1**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1201507011
 Lab Project ID: 1201507

Collection Date: 04/21/20 14:01
 Received Date: 04/21/20 16:32
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Nitrate-N	0.100 U	0.200	0.0500	mg/L	1		04/22/20 22:47
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		04/22/20 22:47
Total Nitrate/Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		04/22/20 22:47

Batch Information

Analytical Batch: WIC6035
 Analytical Method: EPA 300.0
 Analyst: DMM
 Analytical Date/Time: 04/22/20 22:47
 Container ID: 1201507011-C

Prep Batch: WXX13257
 Prep Method: METHOD
 Prep Date/Time: 04/22/20 16:15
 Prep Initial Wt./Vol.: 10 mL
 Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	1.83	0.100	0.0310	mg/L	1		05/04/20 12:51

Batch Information

Analytical Batch: WDA4779
 Analytical Method: SM21 4500-NH3 G
 Analyst: DMM
 Analytical Date/Time: 05/04/20 12:51
 Container ID: 1201507011-D

Prep Batch: WXX13268
 Prep Method: METHOD
 Prep Date/Time: 05/04/20 08:30
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.374	0.0400	0.0120	mg/L	1		04/29/20 12:36

Batch Information

Analytical Batch: WDA4775
 Analytical Method: SM21 4500P-B,E
 Analyst: DMM
 Analytical Date/Time: 04/29/20 12:36
 Container ID: 1201507011-D

Prep Batch: WXX13260
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 04/27/20 15:01
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Kjeldahl Nitrogen	3.11	1.00	0.310	mg/L	1		04/22/20 16:12

Results of DUP1

Client Sample ID: **DUP1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1201507011
Lab Project ID: 1201507

Collection Date: 04/21/20 14:01
Received Date: 04/21/20 16:32
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4773
Analytical Method: SM23 4500-N D
Analyst: DMM
Analytical Date/Time: 04/22/20 16:12
Container ID: 1201507011-D

Prep Batch: WXX13258
Prep Method: METHOD
Prep Date/Time: 04/22/20 10:04
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Method Blank

Blank ID: MB for HBN 1805973 [BOD/6582]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1557042

QC for Samples:

1201507001, 1201507002, 1201507003, 1201507004, 1201507005, 1201507006, 1201507007, 1201507008, 1201507009, 1201507010, 1201507011

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: BOD6582

Analytical Method: SM21 5210B

Instrument:

Analyst: VAB

Analytical Date/Time: 4/22/2020 4:00:54PM

Print Date: 05/06/2020 11:23:21AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1201507 [BOD6582]

Blank Spike Lab ID: 1557043

Date Analyzed: 04/22/2020 16:00

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201507001, 1201507002, 1201507003, 1201507004, 1201507005, 1201507006, 1201507007, 1201507008, 1201507009, 1201507010, 1201507011

Results by SM21 5210B

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

Batch Information

Analytical Batch: **BOD6582**

Analytical Method: **SM21 5210B**

Instrument:

Analyst: **VAB**

Print Date: 05/06/2020 11:23:23AM



Method Blank

Blank ID: MB for HBN 1805931 [BTF/18042]
Blank Lab ID: 1556895

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1201507001, 1201507002, 1201507003, 1201507004, 1201507005, 1201507006, 1201507007, 1201507008, 1201507009, 1201507010, 1201507011

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: BTF18042
Analytical Method: SM21 9223B
Instrument:
Analyst: VAB
Analytical Date/Time: 4/22/2020 11:59:00AM

Print Date: 05/06/2020 11:23:26AM



Method Blank

Blank ID: MB for HBN 1805936 [BTF/18046]
Blank Lab ID: 1557016

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1201507001, 1201507002, 1201507003, 1201507004, 1201507005, 1201507006, 1201507007, 1201507008, 1201507009, 1201507010, 1201507011

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: BTF18046
Analytical Method: SM21 9222D
Instrument:
Analyst: VAB
Analytical Date/Time: 4/21/2020 6:28:00PM

Print Date: 05/06/2020 11:23:30AM

Method Blank

Blank ID: MB for HBN 1805949 [WXX/13257]
 Blank Lab ID: 1556939

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1201507001, 1201507002, 1201507003, 1201507004, 1201507005, 1201507006, 1201507007, 1201507008, 1201507009, 1201507010, 1201507011

Results by EPA 300.0

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

Batch Information

Analytical Batch: WIC6035
 Analytical Method: EPA 300.0
 Instrument: 930 Metrohm compact IC flex
 Analyst: DMM
 Analytical Date/Time: 4/22/2020 5:43:13PM

Prep Batch: WXX13257
 Prep Method: METHOD
 Prep Date/Time: 4/22/2020 4:15:00PM
 Prep Initial Wt./Vol.: 10 mL
 Prep Extract Vol: 10 mL

Print Date: 05/06/2020 11:23:35AM

Method Blank

Blank ID: MB for HBN 1805949 [WXX/13257]
Blank Lab ID: 1556943

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1201507001, 1201507002, 1201507003, 1201507004, 1201507005, 1201507006, 1201507007, 1201507008, 1201507009, 1201507010, 1201507011

Results by EPA 300.0

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

Batch Information

Analytical Batch: WIC6035
Analytical Method: EPA 300.0
Instrument: 930 Metrohm compact IC flex
Analyst: DMM
Analytical Date/Time: 4/23/2020 2:16:34AM

Prep Batch: WXX13257
Prep Method: METHOD
Prep Date/Time: 4/22/2020 4:15:00PM
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Print Date: 05/06/2020 11:23:35AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1201507 [WXX13257]
 Blank Spike Lab ID: 1556940
 Date Analyzed: 04/22/2020 18:02

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201507001, 1201507002, 1201507003, 1201507004, 1201507005, 1201507006, 1201507007,
 1201507008, 1201507009, 1201507010, 1201507011

Results by EPA 300.0

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Nitrate-N	5	4.88	98	(90-110)
Nitrite-N	5	4.88	98	(90-110)
Total Nitrate/Nitrite-N	10	9.76	98	(90-110)

Batch Information

Analytical Batch: **WIC6035**
 Analytical Method: **EPA 300.0**
 Instrument: **930 Metrohm compact IC flex**
 Analyst: **DMM**

Prep Batch: **WXX13257**
 Prep Method: **METHOD**
 Prep Date/Time: **04/22/2020 16:15**
 Spike Init Wt./Vol.: 5 mg/L Extract Vol: 10 mL
 Dupe Init Wt./Vol.: Extract Vol:

Print Date: 05/06/2020 11:23:37AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1201507 [WXX13257]
 Blank Spike Lab ID: 1556944
 Date Analyzed: 04/23/2020 02:35

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201507001, 1201507002, 1201507003, 1201507004, 1201507005, 1201507006, 1201507007,
 1201507008, 1201507009, 1201507010, 1201507011

Results by EPA 300.0

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Nitrate-N	5	5.02	100	(90-110)
Nitrite-N	5	5.01	100	(90-110)
Total Nitrate/Nitrite-N	10	10.0	100	(90-110)

Batch Information

Analytical Batch: **WIC6035**
 Analytical Method: **EPA 300.0**
 Instrument: **930 Metrohm compact IC flex**
 Analyst: **DMM**

Prep Batch: **WXX13257**
 Prep Method: **METHOD**
 Prep Date/Time: **04/22/2020 16:15**
 Spike Init Wt./Vol.: 5 mg/L Extract Vol: 10 mL
 Dupe Init Wt./Vol.: Extract Vol:

Matrix Spike Summary

Original Sample ID: 1201507007
 MS Sample ID: 1556941 MS
 MSD Sample ID:

Analysis Date: 04/22/2020 20:15
 Analysis Date: 04/22/2020 21:12
 Analysis Date:
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201507001, 1201507002, 1201507003, 1201507004, 1201507005, 1201507006, 1201507007, 1201507008, 1201507009, 1201507010, 1201507011

Results by EPA 300.0

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Nitrate-N	0.100U	5.00	5.15	103				90-110		
Nitrite-N	0.100U	5.00	5.02	100				90-110		
Total Nitrate/Nitrite-N	0.100U	10.0	10.2	102				90-110		

Batch Information

Analytical Batch: WIC6035
 Analytical Method: EPA 300.0
 Instrument: 930 Metrohm compact IC flex
 Analyst: DMM
 Analytical Date/Time: 4/22/2020 9:12:21PM

Prep Batch: WXX13257
 Prep Method: EPA 300.0 Extraction Waters/Liquids
 Prep Date/Time: 4/22/2020 4:15:00PM
 Prep Initial Wt./Vol.: 10.00mL
 Prep Extract Vol: 10.00mL

Print Date: 05/06/2020 11:23:38AM

Matrix Spike Summary

Original Sample ID: 1201507009
 MS Sample ID: 1556942 MS
 MSD Sample ID:

Analysis Date: 04/22/2020 21:50
 Analysis Date: 04/22/2020 22:09
 Analysis Date:
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201507001, 1201507002, 1201507003, 1201507004, 1201507005, 1201507006, 1201507007,
 1201507008, 1201507009, 1201507010, 1201507011

Results by EPA 300.0

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Nitrate-N	0.100U	5.00	5.09	102				90-110		
Nitrite-N	0.100U	5.00	5.06	101				90-110		
Total Nitrate/Nitrite-N	0.100U	10.0	10.1	101				90-110		

Batch Information

Analytical Batch: WIC6035
 Analytical Method: EPA 300.0
 Instrument: 930 Metrohm compact IC flex
 Analyst: DMM
 Analytical Date/Time: 4/22/2020 10:09:27PM

Prep Batch: WXX13257
 Prep Method: EPA 300.0 Extraction Waters/Liquids
 Prep Date/Time: 4/22/2020 4:15:00PM
 Prep Initial Wt./Vol.: 10.00mL
 Prep Extract Vol: 10.00mL

Print Date: 05/06/2020 11:23:38AM

Matrix Spike Summary

Original Sample ID: 1556945
 MS Sample ID: 1556946 MS
 MSD Sample ID:

Analysis Date: 04/23/2020 2:54
 Analysis Date: 04/23/2020 3:13
 Analysis Date:
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201507001, 1201507002, 1201507003, 1201507004, 1201507005, 1201507006, 1201507007,
 1201507008, 1201507009, 1201507010, 1201507011

Results by EPA 300.0

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Nitrate-N	3.30	5.00	8.35	101				90-110		
Nitrite-N	0.100U	5.00	4.98	100				90-110		

Batch Information

Analytical Batch: WIC6035
 Analytical Method: EPA 300.0
 Instrument: 930 Metrohm compact IC flex
 Analyst: DMM
 Analytical Date/Time: 4/23/2020 3:13:32AM

Prep Batch: WXX13257
 Prep Method: EPA 300.0 Extraction Waters/Liquids
 Prep Date/Time: 4/22/2020 4:15:00PM
 Prep Initial Wt./Vol.: 10.00mL
 Prep Extract Vol: 10.00mL

Print Date: 05/06/2020 11:23:38AM



Method Blank

Blank ID: MB for HBN 1805953 [WXX/13258]
Blank Lab ID: 1556958

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1201507001, 1201507002, 1201507003, 1201507004, 1201507005, 1201507006, 1201507007, 1201507008, 1201507009, 1201507010, 1201507011

Results by SM23 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: WDA4773
Analytical Method: SM23 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 4/22/2020 3:49:35PM

Prep Batch: WXX13258
Prep Method: METHOD
Prep Date/Time: 4/22/2020 10:04:00AM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/06/2020 11:23:40AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1201507 [WXX13258]
 Blank Spike Lab ID: 1556959
 Date Analyzed: 04/22/2020 15:50

Spike Duplicate ID: LCSD for HBN 1201507 [WXX13258]
 Spike Duplicate Lab ID: 1556960
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201507001, 1201507002, 1201507003, 1201507004, 1201507005, 1201507006, 1201507007, 1201507008, 1201507009, 1201507010, 1201507011

Results by SM23 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	4.01	100	4	3.78	95	(75-125)	5.90	(< 25)

Batch Information

Analytical Batch: **WDA4773**
 Analytical Method: **SM23 4500-N D**
 Instrument: **Discrete Analyzer 2**
 Analyst: **DMM**

Prep Batch: **WXX13258**
 Prep Method: **METHOD**
 Prep Date/Time: **04/22/2020 10:04**
 Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL
 Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

Print Date: 05/06/2020 11:23:42AM

Matrix Spike Summary

Original Sample ID: 1201343001
 MS Sample ID: 1556961 MS
 MSD Sample ID: 1556962 MSD

Analysis Date: 04/22/2020 15:53
 Analysis Date: 04/22/2020 15:54
 Analysis Date: 04/22/2020 15:56
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201507001, 1201507002, 1201507003, 1201507004, 1201507005, 1201507006, 1201507007, 1201507008, 1201507009, 1201507010, 1201507011

Results by SM23 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	2.37	4.00	6.48	103	4.00	6.73	109	75-125	3.90	(< 25)

Batch Information

Analytical Batch: WDA4773
 Analytical Method: SM23 4500-N D
 Instrument: Discrete Analyzer 2
 Analyst: DMM
 Analytical Date/Time: 4/22/2020 3:54:50PM

Prep Batch: WXX13258
 Prep Method: Distillation TKN by Phenate (W)
 Prep Date/Time: 4/22/2020 10:04:00AM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL



Method Blank

Blank ID: MB for HBN 1806067 [WXX/13260]
Blank Lab ID: 1557398

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1201507004, 1201507005, 1201507006, 1201507007, 1201507008, 1201507009, 1201507010, 1201507011

Results by SM21 4500P-B,E

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

Batch Information

Analytical Batch: WDA4775
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 4/29/2020 12:23:09PM

Prep Batch: WXX13260
Prep Method: SM21 4500P-B,E
Prep Date/Time: 4/27/2020 3:01:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/06/2020 11:23:45AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1201507 [WXX13260]
 Blank Spike Lab ID: 1557399
 Date Analyzed: 04/29/2020 12:24

Spike Duplicate ID: LCSD for HBN 1201507 [WXX13260]
 Spike Duplicate Lab ID: 1557400
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201507004, 1201507005, 1201507006, 1201507007, 1201507008, 1201507009, 1201507010, 1201507011

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	0.216	108	0.2	0.210	105	(75-125)	2.90	(< 25)

Batch Information

Analytical Batch: WDA4775
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: DMM

Prep Batch: WXX13260
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 04/27/2020 15:01
 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: 1201507007
 MS Sample ID: 1557401 MS
 MSD Sample ID: 1557402 MSD

Analysis Date: 04/29/2020 12:28
 Analysis Date: 04/29/2020 12:29
 Analysis Date: 04/29/2020 12:30
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201507004, 1201507005, 1201507006, 1201507007, 1201507008, 1201507009, 1201507010, 1201507011

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	0.310	0.200	.484	87	0.200	0.497	94	75-125	2.60	(< 25)

Batch Information

Analytical Batch: WDA4775
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: DMM
 Analytical Date/Time: 4/29/2020 12:29:56PM

Prep Batch: WXX13260
 Prep Method: Total Phosphorus (W) Ext.
 Prep Date/Time: 4/27/2020 3:01:00PM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL

Method Blank

Blank ID: MB for HBN 1806116 [WXX/13262]

Blank Lab ID: 1557578

QC for Samples:

1201507001, 1201507002, 1201507003

Matrix: Water (Surface, Eff., Ground)

Results by SM21 4500P-B,E

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

Batch Information

Analytical Batch: WDA4776

Analytical Method: SM21 4500P-B,E

Instrument: Discrete Analyzer 2

Analyst: DMM

Analytical Date/Time: 4/29/2020 11:01:25AM

Prep Batch: WXX13262

Prep Method: SM21 4500P-B,E

Prep Date/Time: 4/29/2020 6:50:00AM

Prep Initial Wt./Vol.: 25 mL

Prep Extract Vol: 25 mL

Print Date: 05/06/2020 11:23:50AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1201507 [WXX13262]
 Blank Spike Lab ID: 1557579
 Date Analyzed: 04/29/2020 11:02

Spike Duplicate ID: LCSD for HBN 1201507 [WXX13262]
 Spike Duplicate Lab ID: 1557580
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201507001, 1201507002, 1201507003

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	0.211	106	0.2	0.199	99	(75-125)	6.10	(< 25)

Batch Information

Analytical Batch: **WDA4776**
 Analytical Method: **SM21 4500P-B,E**
 Instrument: **Discrete Analyzer 2**
 Analyst: **DMM**

Prep Batch: **WXX13262**
 Prep Method: **SM21 4500P-B,E**
 Prep Date/Time: **04/29/2020 06:50**
 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: 1201525008
MS Sample ID: 1557581 MS
MSD Sample ID: 1557582 MSD

Analysis Date: 04/29/2020 11:04
Analysis Date: 04/29/2020 11:04
Analysis Date: 04/29/2020 11:05
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201507001, 1201507002, 1201507003

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	0.468	1.00	1.5	103	1.00	1.46	99	75-125	2.90	(< 25)

Batch Information

Analytical Batch: WDA4776
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 4/29/2020 11:04:57AM

Prep Batch: WXX13262
Prep Method: Total Phosphorus (W) Ext.
Prep Date/Time: 4/29/2020 6:50:00AM
Prep Initial Wt./Vol.: 5.00mL
Prep Extract Vol: 25.00mL

Print Date: 05/06/2020 11:23:54AM



Method Blank

Blank ID: MB for HBN 1806224 [WXX/13268]
Blank Lab ID: 1557998

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1201507001, 1201507002, 1201507003, 1201507004, 1201507005, 1201507006, 1201507007, 1201507008, 1201507009, 1201507010, 1201507011

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: WDA4779
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 5/4/2020 12:20:00PM

Prep Batch: WXX13268
Prep Method: METHOD
Prep Date/Time: 5/4/2020 8:30:00AM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Print Date: 05/06/2020 11:23:55AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1201507 [WXX13268]
 Blank Spike Lab ID: 1557999
 Date Analyzed: 05/04/2020 12:22

Spike Duplicate ID: LCSD for HBN 1201507 [WXX13268]
 Spike Duplicate Lab ID: 1558000
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201507001, 1201507002, 1201507003, 1201507004, 1201507005, 1201507006, 1201507007, 1201507008, 1201507009, 1201507010, 1201507011

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	1.03	103	1	0.970	97	(75-125)	5.90	(< 25)

Batch Information

Analytical Batch: **WDA4779**
 Analytical Method: **SM21 4500-NH3 G**
 Instrument: **Discrete Analyzer 2**
 Analyst: **DMM**

Prep Batch: **WXX13268**
 Prep Method: **METHOD**
 Prep Date/Time: **05/04/2020 08:30**
 Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
 Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

Print Date: 05/06/2020 11:23:58AM

Matrix Spike Summary

Original Sample ID: 1201507006
 MS Sample ID: 1558001 MS
 MSD Sample ID: 1558002 MSD

Analysis Date: 05/04/2020 12:25
 Analysis Date: 05/04/2020 12:27
 Analysis Date: 05/04/2020 12:29
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201507001, 1201507002, 1201507003, 1201507004, 1201507005, 1201507006, 1201507007, 1201507008, 1201507009, 1201507010, 1201507011

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	0.317	1.00	1.16	84	1.00	1.29	98	75-125	11.20	(< 25)

Batch Information

Analytical Batch: WDA4779
 Analytical Method: SM21 4500-NH3 G
 Instrument: Discrete Analyzer 2
 Analyst: DMM
 Analytical Date/Time: 5/4/2020 12:27:00PM

Prep Batch: WXX13268
 Prep Method: Ammonia by SM21 4500F prep (W)
 Prep Date/Time: 5/4/2020 8:30:00AM
 Prep Initial Wt./Vol.: 6.00mL
 Prep Extract Vol: 6.00mL



348183 NSW 4/21/2020

CLIENT: <u>Stantec</u>		Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.				Page <u>1</u> of <u>2</u>			
CONTACT: <u>Jake Alward</u>		PHONE #: <u>343-5202</u>		Section 3		Preservative			
PROJECT NAME: <u>Nasika WWTP</u>		PROJECT/ PWSID/ PERMIT#:		# C O N T A I N E R S	Analysis*		NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS		
REPORTS TO:		E-MAIL: <u>jakealward@stantec.com</u>			Comp	Grab			
INVOICE TO:		QUOTE #:			MI	(Multi-incremental)			
P.O. #: <u>204700415</u>		Profile #:							
RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/MATRIX CODE					
(1AE)	SW1	4/21/20	10:42	Water	5	G	BDD		
(2AE)	SW2		11:05				FC		
(3AE)	SW3		11:30				1x10x TC (quant)		
(4AE)	SW4		12:14				Nitrate/Nitrite		
(5AE)	SW5		12:37				Ammonia/TP/TAB		
(6AE)	SW6		12:00						
(7AE)	SW7		11:48						
(8AE)	SW8		14:30						
(9AE)	SW9		14:01						
(10AE)	SW10		12:45						
Relinquished By: (1) Relinquished By: (2) Relinquished By: (3) Relinquished By: (4)		Date	Time	Received By:		Section 4	DOD Project? Yes No	Data Deliverable Requirements:	
								Cooler ID:	Requested Turnaround Time and/or Special Instructions:
				Date	Time	Received For Laboratory By:		Temp Blank °C: <u>1) 0.0 D23</u> <u>2) 3.0 D23</u> or Ambient []	
						Chain of Custody Seal: (Circle) INTACT BROKEN <u>ABSENT</u>			
						Delivery Method: Hand Delivery [] Commercial Delivery []			



e-Sample Receipt Form

SGS Workorder #:

1201507



1 2 0 1 5 0 7

Review Criteria	Condition (Yes, No, N/A)	Exceptions Noted below
Chain of Custody / Temperature Requirements	Yes	Exemption permitted if sampler hand carries/delivers.
Were Custody Seals intact? Note # & location	N/A	Absent
COC accompanied samples?	Yes	
DOD: Were samples received in COC corresponding coolers?	N/A	
N/A **Exemption permitted if chilled & collected <8 hours ago, or for samples where chilling is not required		
Temperature blank compliant* (i.e., 0-6 °C after CF)?	Yes	Cooler ID: 1 @ 0.0 °C Therm. ID: D23
	Yes	Cooler ID: 2 @ 3.0 °C Therm. ID: D23
		Cooler ID: @ °C Therm. ID:
		Cooler ID: @ °C Therm. ID:
		Cooler ID: @ °C Therm. ID:
If samples received without a temperature blank, the "cooler temperature" will be documented instead & "COOLER TEMP" will be noted to the right. "ambient" or "chilled" will be noted if neither is available.		
*If >6°C, were samples collected <8 hours ago?	N/A	
If <0°C, were sample containers ice free?	N/A	
Note: Identify containers received at non-compliant temperature . Use form FS-0029 if more space is needed.		
Holding Time / Documentation / Sample Condition Requirements		Note: Refer to form F-083 "Sample Guide" for specific holding times.
Were samples received within holding time?	Yes	
Do samples match COC** (i.e., sample IDs, dates/times collected)?	Yes	
**Note: If times differ <1hr, record details & login per COC.		
***Note: If sample information on containers differs from COC, SGS will default to COC information		
Were analytical requests clear? (i.e., method is specified for analyses with multiple option for analysis (Ex: BTEX, Metals)	Yes	
Were proper containers (type/mass/volume/preservative***) used?	Yes	N/A ***Exemption permitted for metals (e.g, 200.8/6020A).
Volatile / LL-Hg Requirements		
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samples?	N/A	
Were all water VOA vials free of headspace (i.e., bubbles ≤ 6mm)?	N/A	
Were all soil VOAs field extracted with MeOH+BFB?	N/A	
Note to Client: Any "No", answer above indicates non-compliance with standard procedures and may impact data quality.		
Additional notes (if applicable):		



Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>	<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>
1201507001-A	Na2S2O3 for Chlorine Redu	OK	1201507011-A	Na2S2O3 for Chlorine Redu	OK
1201507001-B	Na2S2O3 for Chlorine Redu	OK	1201507011-B	Na2S2O3 for Chlorine Redu	OK
1201507001-C	No Preservative Required	OK	1201507011-C	No Preservative Required	OK
1201507001-D	H2SO4 to pH < 2	OK	1201507011-D	H2SO4 to pH < 2	OK
1201507001-E	No Preservative Required	OK	1201507011-E	No Preservative Required	OK
1201507002-A	Na2S2O3 for Chlorine Redu	OK			
1201507002-B	Na2S2O3 for Chlorine Redu	OK			
1201507002-C	No Preservative Required	OK			
1201507002-D	H2SO4 to pH < 2	OK			
1201507002-E	No Preservative Required	OK			
1201507003-A	Na2S2O3 for Chlorine Redu	OK			
1201507003-B	Na2S2O3 for Chlorine Redu	OK			
1201507003-C	No Preservative Required	OK			
1201507003-D	H2SO4 to pH < 2	OK			
1201507003-E	No Preservative Required	OK			
1201507004-A	Na2S2O3 for Chlorine Redu	OK			
1201507004-B	Na2S2O3 for Chlorine Redu	OK			
1201507004-C	No Preservative Required	OK			
1201507004-D	H2SO4 to pH < 2	OK			
1201507004-E	No Preservative Required	OK			
1201507005-A	Na2S2O3 for Chlorine Redu	OK			
1201507005-B	Na2S2O3 for Chlorine Redu	OK			
1201507005-C	No Preservative Required	OK			
1201507005-D	H2SO4 to pH < 2	OK			
1201507005-E	No Preservative Required	OK			
1201507006-A	Na2S2O3 for Chlorine Redu	OK			
1201507006-B	Na2S2O3 for Chlorine Redu	OK			
1201507006-C	No Preservative Required	OK			
1201507006-D	H2SO4 to pH < 2	OK			
1201507006-E	No Preservative Required	OK			
1201507007-A	Na2S2O3 for Chlorine Redu	OK			
1201507007-B	Na2S2O3 for Chlorine Redu	OK			
1201507007-C	No Preservative Required	OK			
1201507007-D	H2SO4 to pH < 2	OK			
1201507007-E	No Preservative Required	OK			
1201507008-A	Na2S2O3 for Chlorine Redu	OK			
1201507008-B	Na2S2O3 for Chlorine Redu	OK			
1201507008-C	No Preservative Required	OK			
1201507008-D	H2SO4 to pH < 2	OK			
1201507008-E	No Preservative Required	OK			
1201507009-A	Na2S2O3 for Chlorine Redu	OK			
1201507009-B	Na2S2O3 for Chlorine Redu	OK			
1201507009-C	No Preservative Required	OK			
1201507009-D	H2SO4 to pH < 2	OK			
1201507009-E	No Preservative Required	OK			
1201507010-A	Na2S2O3 for Chlorine Redu	OK			
1201507010-B	Na2S2O3 for Chlorine Redu	OK			
1201507010-C	No Preservative Required	OK			
1201507010-D	H2SO4 to pH < 2	OK			
1201507010-E	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.

NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.

PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

QN - Insufficient sample quantity provided.



Laboratory Report of Analysis

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

Report Number: **1201525**

Client Project: **Wasilla WWTP**

Dear John Marshall,

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

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

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

Sincerely,
SGS North America Inc.

Justin Nelson
Project Manager
Justin.Nelson@sgs.com

Date

Case Narrative

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

SGS Project: **1201525**

Project Name/Site: **Wasilla WWTP**

Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

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

Print Date: 05/06/2020 11:20:09AM

Laboratory Qualifiers

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

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

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

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

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
B	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
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	1201525001	04/22/2020	04/22/2020	Water (Surface, Eff., Ground)
SW12	1201525002	04/22/2020	04/22/2020	Water (Surface, Eff., Ground)
SW13	1201525003	04/22/2020	04/22/2020	Water (Surface, Eff., Ground)
SW14	1201525004	04/22/2020	04/22/2020	Water (Surface, Eff., Ground)
SW15	1201525005	04/22/2020	04/22/2020	Water (Surface, Eff., Ground)
SW16	1201525006	04/22/2020	04/22/2020	Water (Surface, Eff., Ground)
SW17	1201525007	04/22/2020	04/22/2020	Water (Surface, Eff., Ground)
SW18	1201525008	04/22/2020	04/22/2020	Water (Surface, Eff., Ground)

Method

SM21 4500-NH3 G
 SM21 5210B
 SM21 9222D
 EPA 300.0
 SM23 4500-N D
 SM21 9223B
 SM21 4500P-B,E

Method Description

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

Detectable Results Summary

Client Sample ID: **SW11**
 Lab Sample ID: 1201525001
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	5.49	mg/L
E. Coli	50	MPN/100mL
Total Coliform	219	MPN/100mL
Ammonia-N	0.148	mg/L
Total Kjeldahl Nitrogen	0.507J	mg/L
Total Phosphorus	0.126	mg/L

Client Sample ID: **SW12**
 Lab Sample ID: 1201525002
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	4.33	mg/L
E. Coli	411	MPN/100mL
Fecal Coliform	440	col/100mL
Total Coliform	816	MPN/100mL
Ammonia-N	0.109	mg/L
Total Kjeldahl Nitrogen	0.709J	mg/L
Total Nitrate/Nitrite-N	0.0500J	mg/L
Total Phosphorus	0.124	mg/L

Client Sample ID: **SW13**
 Lab Sample ID: 1201525003
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	5.98	mg/L
E. Coli	659	MPN/100mL
Fecal Coliform	900	col/100mL
Total Coliform	1414	MPN/100mL
Ammonia-N	0.200	mg/L
Total Kjeldahl Nitrogen	1.12	mg/L
Total Phosphorus	0.138	mg/L

Client Sample ID: **SW14**
 Lab Sample ID: 1201525004
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	18.7	mg/L
E. Coli	20	MPN/100mL
Total Coliform	1200	MPN/100mL
Ammonia-N	0.0980J	mg/L
Total Kjeldahl Nitrogen	1.59	mg/L
Total Phosphorus	0.421	mg/L

Client Sample ID: **SW15**
 Lab Sample ID: 1201525005
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	3.44	mg/L
E. Coli	291	MPN/100mL
Fecal Coliform	444	col/100mL
Total Coliform	461	MPN/100mL
Total Kjeldahl Nitrogen	0.665J	mg/L
Total Phosphorus	0.0882	mg/L

Detectable Results Summary

Client Sample ID: **SW16**
 Lab Sample ID: 1201525006
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	7.71	mg/L
E. Coli	13	MPN/100mL
Fecal Coliform	4.0	col/100mL
Total Coliform	236	MPN/100mL
Ammonia-N	0.458	mg/L
Total Kjeldahl Nitrogen	1.22	mg/L
Total Phosphorus	0.0626	mg/L

Waters Department

Client Sample ID: **SW17**
 Lab Sample ID: 1201525007
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	67	MPN/100mL
Fecal Coliform	104	col/100mL
Total Coliform	138	MPN/100mL
Ammonia-N	0.304	mg/L
Nitrate-N	1.06	mg/L
Total Kjeldahl Nitrogen	0.788J	mg/L
Total Nitrate/Nitrite-N	1.09	mg/L
Total Phosphorus	0.0958	mg/L

Waters Department

Client Sample ID: **SW18**
 Lab Sample ID: 1201525008
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	3.14	mg/L
E. Coli	44	MPN/100mL
Fecal Coliform	14	col/100mL
Total Coliform	179	MPN/100mL
Ammonia-N	0.528	mg/L
Nitrate-N	1.84	mg/L
Total Kjeldahl Nitrogen	1.32	mg/L
Total Nitrate/Nitrite-N	1.87	mg/L
Total Phosphorus	0.468	mg/L

Waters Department



Results of SW11

Client Sample ID: **SW11**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1201525001
Lab Project ID: 1201525

Collection Date: 04/22/20 10:16
Received Date: 04/22/20 15:03
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	5.49	2.00	2.00	mg/L	1		04/23/20 15:30

Batch Information

Analytical Batch: BOD6583
Analytical Method: SM21 5210B
Analyst: VAB
Analytical Date/Time: 04/23/20 15:30
Container ID: 1201525001-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	7.14 U	7.14	7.14	col/100mL	1		04/22/20 17:42

Batch Information

Analytical Batch: BTF18047
Analytical Method: SM21 9222D
Analyst: VAB
Analytical Date/Time: 04/22/20 17:42
Container ID: 1201525001-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	50	1	1	MPN/100r	1		04/22/20 18:08
Total Coliform	219	1	1	MPN/100r	1		04/22/20 18:08

Batch Information

Analytical Batch: BTF18042
Analytical Method: SM21 9223B
Analyst: VAB
Analytical Date/Time: 04/22/20 18:08
Container ID: 1201525001-D



Results of SW11

Client Sample ID: SW11
Client Project ID: Wasilla WWTP
Lab Sample ID: 1201525001
Lab Project ID: 1201525

Collection Date: 04/22/20 10:16
Received Date: 04/22/20 15:03
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

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

Batch Information

Analytical Batch: WIC6035
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 04/22/20 23:06
Container ID: 1201525001-B
Prep Batch: WXX13257
Prep Method: METHOD
Prep Date/Time: 04/22/20 16:15
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

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

Batch Information

Analytical Batch: WDA4779
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/04/20 12:52
Container ID: 1201525001-E
Prep Batch: WXX13268
Prep Method: METHOD
Prep Date/Time: 05/04/20 08:30
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. Row includes Total Phosphorus.

Batch Information

Analytical Batch: WDA4775
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/29/20 12:37
Container ID: 1201525001-E
Prep Batch: WXX13260
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/27/20 15:01
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

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

Results of SW11

Client Sample ID: **SW11**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1201525001
Lab Project ID: 1201525

Collection Date: 04/22/20 10:16
Received Date: 04/22/20 15:03
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4777
Analytical Method: SM23 4500-N D
Analyst: DMM
Analytical Date/Time: 05/01/20 16:38
Container ID: 1201525001-E

Prep Batch: WXX13266
Prep Method: METHOD
Prep Date/Time: 05/01/20 09:29
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: 1201525002
Lab Project ID: 1201525

Collection Date: 04/22/20 10:32
Received Date: 04/22/20 15:03
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Biochemical Oxygen Demand	4.33	2.00	2.00	mg/L	1		04/23/20 15:30

Batch Information

Analytical Batch: BOD6583
Analytical Method: SM21 5210B
Analyst: VAB
Analytical Date/Time: 04/23/20 15:30
Container ID: 1201525002-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	440	10.0	10.0	col/100mL	1		04/22/20 17:42

Batch Information

Analytical Batch: BTF18047
Analytical Method: SM21 9222D
Analyst: VAB
Analytical Date/Time: 04/22/20 17:42
Container ID: 1201525002-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	411	1	1	MPN/100r	1		04/22/20 18:08
Total Coliform	816	1	1	MPN/100r	1		04/22/20 18:08

Batch Information

Analytical Batch: BTF18042
Analytical Method: SM21 9223B
Analyst: VAB
Analytical Date/Time: 04/22/20 18:08
Container ID: 1201525002-D



Results of SW12

Client Sample ID: SW12
Client Project ID: Wasilla WWTP
Lab Sample ID: 1201525002
Lab Project ID: 1201525

Collection Date: 04/22/20 10:32
Received Date: 04/22/20 15:03
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

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

Batch Information

Analytical Batch: WIC6035
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 04/22/20 23:25
Container ID: 1201525002-B
Prep Batch: WXX13257
Prep Method: METHOD
Prep Date/Time: 04/22/20 16:15
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

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

Batch Information

Analytical Batch: WDA4779
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/04/20 12:54
Container ID: 1201525002-E
Prep Batch: WXX13268
Prep Method: METHOD
Prep Date/Time: 05/04/20 08:30
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. Row includes Total Phosphorus.

Batch Information

Analytical Batch: WDA4775
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/29/20 12:38
Container ID: 1201525002-E
Prep Batch: WXX13260
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/27/20 15:01
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

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

Results of SW12

Client Sample ID: **SW12**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1201525002
Lab Project ID: 1201525

Collection Date: 04/22/20 10:32
Received Date: 04/22/20 15:03
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4777
Analytical Method: SM23 4500-N D
Analyst: DMM
Analytical Date/Time: 05/01/20 16:39
Container ID: 1201525002-E

Prep Batch: WXX13266
Prep Method: METHOD
Prep Date/Time: 05/01/20 09:29
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: 1201525003
Lab Project ID: 1201525

Collection Date: 04/22/20 10:50
Received Date: 04/22/20 15:03
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	5.98	2.00	2.00	mg/L	1		04/23/20 15:30

Batch Information

Analytical Batch: BOD6583
Analytical Method: SM21 5210B
Analyst: VAB
Analytical Date/Time: 04/23/20 15:30
Container ID: 1201525003-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	900	33.3	33.3	col/100mL	1		04/22/20 17:42

Batch Information

Analytical Batch: BTF18047
Analytical Method: SM21 9222D
Analyst: VAB
Analytical Date/Time: 04/22/20 17:42
Container ID: 1201525003-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	659	1	1	MPN/100r	1		04/22/20 18:08
Total Coliform	1414	1	1	MPN/100r	1		04/22/20 18:08

Batch Information

Analytical Batch: BTF18042
Analytical Method: SM21 9223B
Analyst: VAB
Analytical Date/Time: 04/22/20 18:08
Container ID: 1201525003-D



Results of SW13

Client Sample ID: SW13
Client Project ID: Wasilla WWTP
Lab Sample ID: 1201525003
Lab Project ID: 1201525

Collection Date: 04/22/20 10:50
Received Date: 04/22/20 15:03
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

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

Batch Information

Analytical Batch: WIC6035
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 04/22/20 23:44
Container ID: 1201525003-B
Prep Batch: WXX13257
Prep Method: METHOD
Prep Date/Time: 04/22/20 16:15
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

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

Batch Information

Analytical Batch: WDA4779
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/04/20 12:56
Container ID: 1201525003-E
Prep Batch: WXX13268
Prep Method: METHOD
Prep Date/Time: 05/04/20 08:30
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. Row includes Total Phosphorus.

Batch Information

Analytical Batch: WDA4775
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/29/20 12:38
Container ID: 1201525003-E
Prep Batch: WXX13260
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/27/20 15:01
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

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

Results of SW13

Client Sample ID: **SW13**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1201525003
Lab Project ID: 1201525

Collection Date: 04/22/20 10:50
Received Date: 04/22/20 15:03
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4777
Analytical Method: SM23 4500-N D
Analyst: DMM
Analytical Date/Time: 05/01/20 16:41
Container ID: 1201525003-E

Prep Batch: WXX13266
Prep Method: METHOD
Prep Date/Time: 05/01/20 09:29
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: 1201525004
Lab Project ID: 1201525

Collection Date: 04/22/20 11:52
Received Date: 04/22/20 15:03
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	18.7	2.00	2.00	mg/L	1		04/23/20 15:30

Batch Information

Analytical Batch: BOD6583
Analytical Method: SM21 5210B
Analyst: VAB
Analytical Date/Time: 04/23/20 15:30
Container ID: 1201525004-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	7.14 U	7.14	7.14	col/100mL	1		04/22/20 17:42

Batch Information

Analytical Batch: BTF18047
Analytical Method: SM21 9222D
Analyst: VAB
Analytical Date/Time: 04/22/20 17:42
Container ID: 1201525004-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	20	20	20	MPN/100r	20		04/22/20 18:08
Total Coliform	1200	20	20	MPN/100r	20		04/22/20 18:08

Batch Information

Analytical Batch: BTF18042
Analytical Method: SM21 9223B
Analyst: VAB
Analytical Date/Time: 04/22/20 18:08
Container ID: 1201525004-D



Results of SW14

Client Sample ID: **SW14**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1201525004
 Lab Project ID: 1201525

Collection Date: 04/22/20 11:52
 Received Date: 04/22/20 15:03
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Nitrate-N	0.100 U	0.200	0.0500	mg/L	1		04/23/20 00:03
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		04/23/20 00:03
Total Nitrate/Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		04/23/20 00:03

Batch Information

Analytical Batch: WIC6035
 Analytical Method: EPA 300.0
 Analyst: DMM
 Analytical Date/Time: 04/23/20 00:03
 Container ID: 1201525004-B

Prep Batch: WXX13257
 Prep Method: METHOD
 Prep Date/Time: 04/22/20 16:15
 Prep Initial Wt./Vol.: 10 mL
 Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0980 J	0.100	0.0310	mg/L	1		05/04/20 13:01

Batch Information

Analytical Batch: WDA4779
 Analytical Method: SM21 4500-NH3 G
 Analyst: DMM
 Analytical Date/Time: 05/04/20 13:01
 Container ID: 1201525004-E

Prep Batch: WXX13268
 Prep Method: METHOD
 Prep Date/Time: 05/04/20 08:30
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.421	0.0400	0.0120	mg/L	1		04/29/20 12:39

Batch Information

Analytical Batch: WDA4775
 Analytical Method: SM21 4500P-B,E
 Analyst: DMM
 Analytical Date/Time: 04/29/20 12:39
 Container ID: 1201525004-E

Prep Batch: WXX13260
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 04/27/20 15:01
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Kjeldahl Nitrogen	1.59	1.00	0.310	mg/L	1		05/01/20 16:44

Results of SW14

Client Sample ID: **SW14**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1201525004
Lab Project ID: 1201525

Collection Date: 04/22/20 11:52
Received Date: 04/22/20 15:03
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4777
Analytical Method: SM23 4500-N D
Analyst: DMM
Analytical Date/Time: 05/01/20 16:44
Container ID: 1201525004-E

Prep Batch: WXX13266
Prep Method: METHOD
Prep Date/Time: 05/01/20 09:29
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: 1201525005
Lab Project ID: 1201525

Collection Date: 04/22/20 11:40
Received Date: 04/22/20 15:03
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	3.44	2.00	2.00	mg/L	1		04/23/20 15:30

Batch Information

Analytical Batch: BOD6583
Analytical Method: SM21 5210B
Analyst: VAB
Analytical Date/Time: 04/23/20 15:30
Container ID: 1201525005-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	444	2.00	2.00	col/100mL	1		04/22/20 17:42

Batch Information

Analytical Batch: BTF18047
Analytical Method: SM21 9222D
Analyst: VAB
Analytical Date/Time: 04/22/20 17:42
Container ID: 1201525005-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	291	1	1	MPN/100r	1		04/22/20 18:08
Total Coliform	461	1	1	MPN/100r	1		04/22/20 18:08

Batch Information

Analytical Batch: BTF18042
Analytical Method: SM21 9223B
Analyst: VAB
Analytical Date/Time: 04/22/20 18:08
Container ID: 1201525005-D



Results of SW15

Client Sample ID: SW15
Client Project ID: Wasilla WWTP
Lab Sample ID: 1201525005
Lab Project ID: 1201525

Collection Date: 04/22/20 11:40
Received Date: 04/22/20 15:03
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

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

Batch Information

Analytical Batch: WIC6035
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 04/23/20 01:00
Container ID: 1201525005-B
Prep Batch: WXX13257
Prep Method: METHOD
Prep Date/Time: 04/22/20 16:15
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

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

Batch Information

Analytical Batch: WDA4779
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/04/20 13:02
Container ID: 1201525005-E
Prep Batch: WXX13268
Prep Method: METHOD
Prep Date/Time: 05/04/20 08:30
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. Row includes Total Phosphorus.

Batch Information

Analytical Batch: WDA4775
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/29/20 12:40
Container ID: 1201525005-E
Prep Batch: WXX13260
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/27/20 15:01
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

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

Results of SW15

Client Sample ID: **SW15**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1201525005
Lab Project ID: 1201525

Collection Date: 04/22/20 11:40
Received Date: 04/22/20 15:03
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4777
Analytical Method: SM23 4500-N D
Analyst: DMM
Analytical Date/Time: 05/01/20 16:46
Container ID: 1201525005-E

Prep Batch: WXX13266
Prep Method: METHOD
Prep Date/Time: 05/01/20 09:29
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: 1201525006
Lab Project ID: 1201525

Collection Date: 04/22/20 11:20
Received Date: 04/22/20 15:03
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	7.71	2.00	2.00	mg/L	1		04/23/20 15:30

Batch Information

Analytical Batch: BOD6583
Analytical Method: SM21 5210B
Analyst: VAB
Analytical Date/Time: 04/23/20 15:30
Container ID: 1201525006-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	4.0	2.00	2.00	col/100mL	1		04/22/20 17:42

Batch Information

Analytical Batch: BTF18047
Analytical Method: SM21 9222D
Analyst: VAB
Analytical Date/Time: 04/22/20 17:42
Container ID: 1201525006-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	13	1	1	MPN/100r	1		04/22/20 18:08
Total Coliform	236	1	1	MPN/100r	1		04/22/20 18:08

Batch Information

Analytical Batch: BTF18042
Analytical Method: SM21 9223B
Analyst: VAB
Analytical Date/Time: 04/22/20 18:08
Container ID: 1201525006-D



Results of SW16

Client Sample ID: SW16
Client Project ID: Wasilla WWTP
Lab Sample ID: 1201525006
Lab Project ID: 1201525

Collection Date: 04/22/20 11:20
Received Date: 04/22/20 15:03
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

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

Batch Information

Analytical Batch: WIC6035
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 04/23/20 01:19
Container ID: 1201525006-B
Prep Batch: WXX13257
Prep Method: METHOD
Prep Date/Time: 04/22/20 16:15
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

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

Batch Information

Analytical Batch: WDA4779
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/04/20 13:04
Container ID: 1201525006-E
Prep Batch: WXX13268
Prep Method: METHOD
Prep Date/Time: 05/04/20 08:30
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. Row includes Total Phosphorus.

Batch Information

Analytical Batch: WDA4775
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/29/20 12:41
Container ID: 1201525006-E
Prep Batch: WXX13260
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/27/20 15:01
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

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

Results of SW16

Client Sample ID: **SW16**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1201525006
Lab Project ID: 1201525

Collection Date: 04/22/20 11:20
Received Date: 04/22/20 15:03
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4777
Analytical Method: SM23 4500-N D
Analyst: DMM
Analytical Date/Time: 05/01/20 16:47
Container ID: 1201525006-E

Prep Batch: WXX13266
Prep Method: METHOD
Prep Date/Time: 05/01/20 09:29
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: 1201525007
Lab Project ID: 1201525

Collection Date: 04/22/20 12:53
Received Date: 04/22/20 15:03
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Biochemical Oxygen Demand	2.00 U	2.00	2.00	mg/L	1		04/23/20 15:30

Batch Information

Analytical Batch: BOD6583
Analytical Method: SM21 5210B
Analyst: VAB
Analytical Date/Time: 04/23/20 15:30
Container ID: 1201525007-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	104	2.00	2.00	col/100mL	1		04/22/20 17:42

Batch Information

Analytical Batch: BTF18047
Analytical Method: SM21 9222D
Analyst: VAB
Analytical Date/Time: 04/22/20 17:42
Container ID: 1201525007-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	67	1	1	MPN/100r	1		04/22/20 18:08
Total Coliform	138	1	1	MPN/100r	1		04/22/20 18:08

Batch Information

Analytical Batch: BTF18042
Analytical Method: SM21 9223B
Analyst: VAB
Analytical Date/Time: 04/22/20 18:08
Container ID: 1201525007-D

Print Date: 05/06/2020 11:20:16AM

J flagging is activated



Results of SW17

Client Sample ID: SW17
Client Project ID: Wasilla WWTP
Lab Sample ID: 1201525007
Lab Project ID: 1201525

Collection Date: 04/22/20 12:53
Received Date: 04/22/20 15:03
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

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

Batch Information

Analytical Batch: WIC6035
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 04/23/20 01:38
Container ID: 1201525007-B
Prep Batch: WXX13257
Prep Method: METHOD
Prep Date/Time: 04/22/20 16:15
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

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

Batch Information

Analytical Batch: WDA4779
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/04/20 13:06
Container ID: 1201525007-E
Prep Batch: WXX13268
Prep Method: METHOD
Prep Date/Time: 05/04/20 08:30
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. Row includes Total Phosphorus.

Batch Information

Analytical Batch: WDA4775
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/29/20 12:42
Container ID: 1201525007-E
Prep Batch: WXX13260
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/27/20 15:01
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

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



Results of SW17

Client Sample ID: **SW17**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1201525007
Lab Project ID: 1201525

Collection Date: 04/22/20 12:53
Received Date: 04/22/20 15:03
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4777
Analytical Method: SM23 4500-N D
Analyst: DMM
Analytical Date/Time: 05/01/20 16:48
Container ID: 1201525007-E

Prep Batch: WXX13266
Prep Method: METHOD
Prep Date/Time: 05/01/20 09:29
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: 1201525008
Lab Project ID: 1201525

Collection Date: 04/22/20 13:10
Received Date: 04/22/20 15:03
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	3.14	2.00	2.00	mg/L	1		04/23/20 15:30

Batch Information

Analytical Batch: BOD6583
Analytical Method: SM21 5210B
Analyst: VAB
Analytical Date/Time: 04/23/20 15:30
Container ID: 1201525008-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	14	7.14	7.14	col/100mL	1		04/22/20 17:42

Batch Information

Analytical Batch: BTF18047
Analytical Method: SM21 9222D
Analyst: VAB
Analytical Date/Time: 04/22/20 17:42
Container ID: 1201525008-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	44	1	1	MPN/100r	1		04/22/20 18:08
Total Coliform	179	1	1	MPN/100r	1		04/22/20 18:08

Batch Information

Analytical Batch: BTF18042
Analytical Method: SM21 9223B
Analyst: VAB
Analytical Date/Time: 04/22/20 18:08
Container ID: 1201525008-D



Results of SW18

Client Sample ID: SW18
Client Project ID: Wasilla WWTP
Lab Sample ID: 1201525008
Lab Project ID: 1201525

Collection Date: 04/22/20 13:10
Received Date: 04/22/20 15:03
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

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

Batch Information

Analytical Batch: WIC6035
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 04/23/20 01:57
Container ID: 1201525008-B
Prep Batch: WXX13257
Prep Method: METHOD
Prep Date/Time: 04/22/20 16:15
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

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

Batch Information

Analytical Batch: WDA4779
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 05/04/20 13:07
Container ID: 1201525008-E
Prep Batch: WXX13268
Prep Method: METHOD
Prep Date/Time: 05/04/20 08:30
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. Row includes Total Phosphorus.

Batch Information

Analytical Batch: WDA4776
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/29/20 11:04
Container ID: 1201525008-E
Prep Batch: WXX13262
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/29/20 06:50
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 25 mL

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

Results of SW18

Client Sample ID: **SW18**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1201525008
Lab Project ID: 1201525

Collection Date: 04/22/20 13:10
Received Date: 04/22/20 15:03
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4777
Analytical Method: SM23 4500-N D
Analyst: DMM
Analytical Date/Time: 05/01/20 16:49
Container ID: 1201525008-E

Prep Batch: WXX13266
Prep Method: METHOD
Prep Date/Time: 05/01/20 09:29
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL



Method Blank

Blank ID: MB for HBN 1805974 [BOD/6583]
Blank Lab ID: 1557044

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1201525001, 1201525002, 1201525003, 1201525004, 1201525005, 1201525006, 1201525007, 1201525008

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: BOD6583
Analytical Method: SM21 5210B
Instrument:
Analyst: VAB
Analytical Date/Time: 4/23/2020 3:30:23PM

Print Date: 05/06/2020 11:20:19AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1201525 [BOD6583]

Blank Spike Lab ID: 1557045

Date Analyzed: 04/23/2020 15:30

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201525001, 1201525002, 1201525003, 1201525004, 1201525005, 1201525006, 1201525007, 1201525008

Results by SM21 5210B

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Biochemical Oxygen Demand	198	224	113	(84.6-115.4

Batch Information

Analytical Batch: **BOD6583**

Analytical Method: **SM21 5210B**

Instrument:

Analyst: **VAB**

Print Date: 05/06/2020 11:20:22AM

Method Blank

Blank ID: MB for HBN 1805931 [BTF/18042]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1556895

QC for Samples:

1201525001, 1201525002, 1201525003, 1201525004, 1201525005, 1201525006, 1201525007, 1201525008

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: BTF18042

Analytical Method: SM21 9223B

Instrument:

Analyst: VAB

Analytical Date/Time: 4/22/2020 11:59:00AM

Print Date: 05/06/2020 11:20:25AM



Method Blank

Blank ID: MB for HBN 1805937 [BTF/18047]
Blank Lab ID: 1557022

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1201525001, 1201525002, 1201525003, 1201525004, 1201525005, 1201525006, 1201525007, 1201525008

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: BTF18047
Analytical Method: SM21 9222D
Instrument:
Analyst: VAB
Analytical Date/Time: 4/22/2020 5:42:00PM

Print Date: 05/06/2020 11:20:30AM

Method Blank

Blank ID: MB for HBN 1805949 [WXX/13257]
 Blank Lab ID: 1556939

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1201525001, 1201525002, 1201525003, 1201525004, 1201525005, 1201525006, 1201525007, 1201525008

Results by EPA 300.0

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

Batch Information

Analytical Batch: WIC6035
 Analytical Method: EPA 300.0
 Instrument: 930 Metrohm compact IC flex
 Analyst: DMM
 Analytical Date/Time: 4/22/2020 5:43:13PM

Prep Batch: WXX13257
 Prep Method: METHOD
 Prep Date/Time: 4/22/2020 4:15:00PM
 Prep Initial Wt./Vol.: 10 mL
 Prep Extract Vol: 10 mL

Print Date: 05/06/2020 11:20:35AM

Method Blank

Blank ID: MB for HBN 1805949 [WXX/13257]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1556943

QC for Samples:

1201525001, 1201525002, 1201525003, 1201525004, 1201525005, 1201525006, 1201525007, 1201525008

Results by EPA 300.0

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

Batch Information

Analytical Batch: WIC6035

Prep Batch: WXX13257

Analytical Method: EPA 300.0

Prep Method: METHOD

Instrument: 930 Metrohm compact IC flex

Prep Date/Time: 4/22/2020 4:15:00PM

Analyst: DMM

Prep Initial Wt./Vol.: 10 mL

Analytical Date/Time: 4/23/2020 2:16:34AM

Prep Extract Vol: 10 mL

Print Date: 05/06/2020 11:20:35AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1201525 [WXX13257]
 Blank Spike Lab ID: 1556940
 Date Analyzed: 04/22/2020 18:02

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201525001, 1201525002, 1201525003, 1201525004, 1201525005, 1201525006, 1201525007,
 1201525008

Results by EPA 300.0

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Nitrate-N	5	4.88	98	(90-110)
Nitrite-N	5	4.88	98	(90-110)
Total Nitrate/Nitrite-N	10	9.76	98	(90-110)

Batch Information

Analytical Batch: **WIC6035**
 Analytical Method: **EPA 300.0**
 Instrument: **930 Metrohm compact IC flex**
 Analyst: **DMM**

Prep Batch: **WXX13257**
 Prep Method: **METHOD**
 Prep Date/Time: **04/22/2020 16:15**
 Spike Init Wt./Vol.: 5 mg/L Extract Vol: 10 mL
 Dupe Init Wt./Vol.: Extract Vol:

Blank Spike Summary

Blank Spike ID: LCS for HBN 1201525 [WXX13257]
 Blank Spike Lab ID: 1556944
 Date Analyzed: 04/23/2020 02:35

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201525001, 1201525002, 1201525003, 1201525004, 1201525005, 1201525006, 1201525007, 1201525008

Results by EPA 300.0

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Nitrate-N	5	5.02	100	(90-110)
Nitrite-N	5	5.01	100	(90-110)
Total Nitrate/Nitrite-N	10	10.0	100	(90-110)

Batch Information

Analytical Batch: **WIC6035**
 Analytical Method: **EPA 300.0**
 Instrument: **930 Metrohm compact IC flex**
 Analyst: **DMM**

Prep Batch: **WXX13257**
 Prep Method: **METHOD**
 Prep Date/Time: **04/22/2020 16:15**
 Spike Init Wt./Vol.: 5 mg/L Extract Vol: 10 mL
 Dupe Init Wt./Vol.: Extract Vol:

Matrix Spike Summary

Original Sample ID: 1201507007
 MS Sample ID: 1556941 MS
 MSD Sample ID:

Analysis Date: 04/22/2020 20:15
 Analysis Date: 04/22/2020 21:12
 Analysis Date:
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201525001, 1201525002, 1201525003, 1201525004, 1201525005, 1201525006, 1201525007, 1201525008

Results by EPA 300.0

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Nitrate-N	0.100U	5.00	5.15	103				90-110		
Nitrite-N	0.100U	5.00	5.02	100				90-110		
Total Nitrate/Nitrite-N	0.100U	10.0	10.2	102				90-110		

Batch Information

Analytical Batch: WIC6035
 Analytical Method: EPA 300.0
 Instrument: 930 Metrohm compact IC flex
 Analyst: DMM
 Analytical Date/Time: 4/22/2020 9:12:21PM

Prep Batch: WXX13257
 Prep Method: EPA 300.0 Extraction Waters/Liquids
 Prep Date/Time: 4/22/2020 4:15:00PM
 Prep Initial Wt./Vol.: 10.00mL
 Prep Extract Vol: 10.00mL

Matrix Spike Summary

Original Sample ID: 1201507009
 MS Sample ID: 1556942 MS
 MSD Sample ID:

Analysis Date: 04/22/2020 21:50
 Analysis Date: 04/22/2020 22:09
 Analysis Date:
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201525001, 1201525002, 1201525003, 1201525004, 1201525005, 1201525006, 1201525007, 1201525008

Results by EPA 300.0

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Nitrate-N	0.100U	5.00	5.09	102				90-110		
Nitrite-N	0.100U	5.00	5.06	101				90-110		
Total Nitrate/Nitrite-N	0.100U	10.0	10.1	101				90-110		

Batch Information

Analytical Batch: WIC6035
 Analytical Method: EPA 300.0
 Instrument: 930 Metrohm compact IC flex
 Analyst: DMM
 Analytical Date/Time: 4/22/2020 10:09:27PM

Prep Batch: WXX13257
 Prep Method: EPA 300.0 Extraction Waters/Liquids
 Prep Date/Time: 4/22/2020 4:15:00PM
 Prep Initial Wt./Vol.: 10.00mL
 Prep Extract Vol: 10.00mL

Print Date: 05/06/2020 11:20:39AM



Matrix Spike Summary

Original Sample ID: 1556945
MS Sample ID: 1556946 MS
MSD Sample ID:

Analysis Date: 04/23/2020 2:54
Analysis Date: 04/23/2020 3:13
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201525001, 1201525002, 1201525003, 1201525004, 1201525005, 1201525006, 1201525007, 1201525008

Results by EPA 300.0

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Nitrate-N	3.30	5.00	8.35	101				90-110		
Nitrite-N	0.100U	5.00	4.98	100				90-110		

Batch Information

Analytical Batch: WIC6035
Analytical Method: EPA 300.0
Instrument: 930 Metrohm compact IC flex
Analyst: DMM
Analytical Date/Time: 4/23/2020 3:13:32AM

Prep Batch: WXX13257
Prep Method: EPA 300.0 Extraction Waters/Liquids
Prep Date/Time: 4/22/2020 4:15:00PM
Prep Initial Wt./Vol.: 10.00mL
Prep Extract Vol: 10.00mL

Print Date: 05/06/2020 11:20:39AM



Method Blank

Blank ID: MB for HBN 1806067 [WXX/13260]
Blank Lab ID: 1557398

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1201525001, 1201525002, 1201525003, 1201525004, 1201525005, 1201525006, 1201525007

Results by SM21 4500P-B,E

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

Batch Information

Analytical Batch: WDA4775
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 4/29/2020 12:23:09PM

Prep Batch: WXX13260
Prep Method: SM21 4500P-B,E
Prep Date/Time: 4/27/2020 3:01:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/06/2020 11:20:41AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1201525 [WXX13260]
 Blank Spike Lab ID: 1557399
 Date Analyzed: 04/29/2020 12:24

Spike Duplicate ID: LCSD for HBN 1201525 [WXX13260]
 Spike Duplicate Lab ID: 1557400
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201525001, 1201525002, 1201525003, 1201525004, 1201525005, 1201525006, 1201525007

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	0.216	108	0.2	0.210	105	(75-125)	2.90	(< 25)

Batch Information

Analytical Batch: **WDA4775**
 Analytical Method: **SM21 4500P-B,E**
 Instrument: **Discrete Analyzer 2**
 Analyst: **DMM**

Prep Batch: **WXX13260**
 Prep Method: **SM21 4500P-B,E**
 Prep Date/Time: **04/27/2020 15:01**
 Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL
 Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

Print Date: 05/06/2020 11:20:43AM

Matrix Spike Summary

Original Sample ID: 1201507007
 MS Sample ID: 1557401 MS
 MSD Sample ID: 1557402 MSD

Analysis Date: 04/29/2020 12:28
 Analysis Date: 04/29/2020 12:29
 Analysis Date: 04/29/2020 12:30
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201525001, 1201525002, 1201525003, 1201525004, 1201525005, 1201525006, 1201525007

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	0.310	0.200	.484	87	0.200	0.497	94	75-125	2.60	(< 25)

Batch Information

Analytical Batch: WDA4775
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: DMM
 Analytical Date/Time: 4/29/2020 12:29:56PM

Prep Batch: WXX13260
 Prep Method: Total Phosphorus (W) Ext.
 Prep Date/Time: 4/27/2020 3:01:00PM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL

Method Blank

Blank ID: MB for HBN 1806116 [WXX/13262]

Blank Lab ID: 1557578

QC for Samples:

1201525008

Matrix: Water (Surface, Eff., Ground)

Results by SM21 4500P-B,E

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

Batch Information

Analytical Batch: WDA4776

Analytical Method: SM21 4500P-B,E

Instrument: Discrete Analyzer 2

Analyst: DMM

Analytical Date/Time: 4/29/2020 11:01:25AM

Prep Batch: WXX13262

Prep Method: SM21 4500P-B,E

Prep Date/Time: 4/29/2020 6:50:00AM

Prep Initial Wt./Vol.: 25 mL

Prep Extract Vol: 25 mL

Print Date: 05/06/2020 11:20:46AM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1201525 [WXX13262]
Blank Spike Lab ID: 1557579
Date Analyzed: 04/29/2020 11:02

Spike Duplicate ID: LCSD for HBN 1201525 [WXX13262]
Spike Duplicate Lab ID: 1557580
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201525008

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	0.211	106	0.2	0.199	99	(75-125)	6.10	(< 25)

Batch Information

Analytical Batch: WDA4776
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: DMM

Prep Batch: WXX13262
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/29/2020 06:50
Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

Print Date: 05/06/2020 11:20:49AM

Matrix Spike Summary

Original Sample ID: 1201525008
 MS Sample ID: 1557581 MS
 MSD Sample ID: 1557582 MSD

Analysis Date: 04/29/2020 11:04
 Analysis Date: 04/29/2020 11:04
 Analysis Date: 04/29/2020 11:05
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201525008

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	0.468	1.00	1.5	103	1.00	1.46	99	75-125	2.90	(< 25)

Batch Information

Analytical Batch: WDA4776
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: DMM
 Analytical Date/Time: 4/29/2020 11:04:57AM

Prep Batch: WXX13262
 Prep Method: Total Phosphorus (W) Ext.
 Prep Date/Time: 4/29/2020 6:50:00AM
 Prep Initial Wt./Vol.: 5.00mL
 Prep Extract Vol: 25.00mL

Method Blank

Blank ID: MB for HBN 1806187 [WXX/13266]
Blank Lab ID: 1557831

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1201525001, 1201525002, 1201525003, 1201525004, 1201525005, 1201525006, 1201525007, 1201525008

Results by SM23 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: WDA4777
Analytical Method: SM23 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 5/1/2020 4:29:12PM

Prep Batch: WXX13266
Prep Method: METHOD
Prep Date/Time: 5/1/2020 9:29:00AM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/06/2020 11:20:52AM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1201525 [WXX13266]
 Blank Spike Lab ID: 1557832
 Date Analyzed: 05/01/2020 16:30

Spike Duplicate ID: LCSD for HBN 1201525 [WXX13266]
 Spike Duplicate Lab ID: 1557833
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201525001, 1201525002, 1201525003, 1201525004, 1201525005, 1201525006, 1201525007, 1201525008

Results by SM23 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	4.22	105	4	4.17	104	(75-125)	1.20	(< 25)

Batch Information

Analytical Batch: WDA4777
 Analytical Method: SM23 4500-N D
 Instrument: Discrete Analyzer 2
 Analyst: DMM

Prep Batch: WXX13266
 Prep Method: METHOD
 Prep Date/Time: 05/01/2020 09:29
 Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL
 Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

Print Date: 05/06/2020 11:20:54AM

Matrix Spike Summary

Original Sample ID: 1200005005
 MS Sample ID: 1557834 MS
 MSD Sample ID: 1557835 MSD

Analysis Date: 05/01/2020 16:33
 Analysis Date: 05/01/2020 16:34
 Analysis Date: 05/01/2020 16:35
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201525001, 1201525002, 1201525003, 1201525004, 1201525005, 1201525006, 1201525007, 1201525008

Results by SM23 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	1.00U	4.00	4.24	106	4.00	4.27	107	75-125	0.66	(< 25)

Batch Information

Analytical Batch: WDA4777
 Analytical Method: SM23 4500-N D
 Instrument: Discrete Analyzer 2
 Analyst: DMM
 Analytical Date/Time: 5/1/2020 4:34:26PM

Prep Batch: WXX13266
 Prep Method: Distillation TKN by Phenate (W)
 Prep Date/Time: 5/1/2020 9:29:00AM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL

Method Blank

Blank ID: MB for HBN 1806224 [WXX/13268]

Blank Lab ID: 1557998

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1201525001, 1201525002, 1201525003, 1201525004, 1201525005, 1201525006, 1201525007, 1201525008

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: WDA4779

Analytical Method: SM21 4500-NH3 G

Instrument: Discrete Analyzer 2

Analyst: DMM

Analytical Date/Time: 5/4/2020 12:20:00PM

Prep Batch: WXX13268

Prep Method: METHOD

Prep Date/Time: 5/4/2020 8:30:00AM

Prep Initial Wt./Vol.: 6 mL

Prep Extract Vol: 6 mL

Print Date: 05/06/2020 11:20:57AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1201525 [WXX13268]
 Blank Spike Lab ID: 1557999
 Date Analyzed: 05/04/2020 12:22

Spike Duplicate ID: LCSD for HBN 1201525 [WXX13268]
 Spike Duplicate Lab ID: 1558000
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201525001, 1201525002, 1201525003, 1201525004, 1201525005, 1201525006, 1201525007, 1201525008

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	1.03	103	1	0.970	97	(75-125)	5.90	(< 25)

Batch Information

Analytical Batch: **WDA4779**
 Analytical Method: **SM21 4500-NH3 G**
 Instrument: **Discrete Analyzer 2**
 Analyst: **DMM**

Prep Batch: **WXX13268**
 Prep Method: **METHOD**
 Prep Date/Time: **05/04/2020 08:30**
 Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
 Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

Print Date: 05/06/2020 11:20:59AM

Matrix Spike Summary

Original Sample ID: 1201507006
 MS Sample ID: 1558001 MS
 MSD Sample ID: 1558002 MSD

Analysis Date: 05/04/2020 12:25
 Analysis Date: 05/04/2020 12:27
 Analysis Date: 05/04/2020 12:29
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1201525001, 1201525002, 1201525003, 1201525004, 1201525005, 1201525006, 1201525007, 1201525008

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	0.317	1.00	1.16	84	1.00	1.29	98	75-125	11.20	(< 25)

Batch Information

Analytical Batch: WDA4779
 Analytical Method: SM21 4500-NH3 G
 Instrument: Discrete Analyzer 2
 Analyst: DMM
 Analytical Date/Time: 5/4/2020 12:27:00PM

Prep Batch: WXX13268
 Prep Method: Ammonia by SM21 4500F prep (W)
 Prep Date/Time: 5/4/2020 8:30:00AM
 Prep Initial Wt./Vol.: 6.00mL
 Prep Extract Vol: 6.00mL

Print Date: 05/06/2020 11:21:01AM



SGS North America Inc. CHAIN OF CUSTODY RECORD

1201525



Locations Nationwide

- Alaska, Maryland, New Jersey, New York, North Carolina, Indiana, West Virginia, Kentucky

www.us.sgs.com

348183 NSW 4/22/2020

Form with sections 1-5. Section 1: CLIENT: Stantec, CONTACT: Jake Alward, PROJECT NAME: Wastwa WWTP. Section 2: Table with columns for SAMPLE IDENTIFICATION, DATE, TIME, MATRIX/MATRIX CODE, CONTAINERS, Type, and REMARKS/LOC ID. Section 3: Section 3 header. Section 4: Relinquished By, Date, Time, Received By, Section 4, DOD Project?, Data Deliverable Requirements. Section 5: Relinquished By, Date, Time, Received For Laboratory By, Temp Blank, Chain of Custody Seal.



e-Sample Receipt Form

SGS Workorder #:

1201525



1 2 0 1 5 2 5

Review Criteria	Condition (Yes, No, N/A)	Exceptions Noted below
Chain of Custody / Temperature Requirements		Yes Exemption permitted if sampler hand carries/delivers.
Were Custody Seals intact? Note # & location	N/A	Absent
COC accompanied samples?	Yes	
DOD: Were samples received in COC corresponding coolers?	N/A	
Yes **Exemption permitted if chilled & collected <8 hours ago, or for samples where chilling is not required		
Temperature blank compliant* (i.e., 0-6 °C after CF)?	Yes	Cooler ID: 1 @ 1.1 °C Therm. ID: D23
	Yes	Cooler ID: 2 @ 2.7 °C Therm. ID: D44
		Cooler ID: @ °C Therm. ID:
		Cooler ID: @ °C Therm. ID:
		Cooler ID: @ °C Therm. ID:
If samples received without a temperature blank, the "cooler temperature" will be documented instead & "COOLER TEMP" will be noted to the right. "ambient" or "chilled" will be noted if neither is available.		
*If >6°C, were samples collected <8 hours ago?	N/A	
If <0°C, were sample containers ice free?	N/A	
Note: Identify containers received at non-compliant temperature . Use form FS-0029 if more space is needed.		
Holding Time / Documentation / Sample Condition Requirements		Note: Refer to form F-083 "Sample Guide" for specific holding times.
Were samples received within holding time?	Yes	
Do samples match COC** (i.e., sample IDs, dates/times collected)?	Yes	
**Note: If times differ <1hr, record details & login per COC.		
***Note: If sample information on containers differs from COC, SGS will default to COC information		
Were analytical requests clear? (i.e., method is specified for analyses with multiple option for analysis (Ex: BTEX, Metals)	Yes	
Were proper containers (type/mass/volume/preservative***) used?	Yes	N/A ***Exemption permitted for metals (e.g,200.8/6020A).
Volatile / LL-Hg Requirements		
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samples?	N/A	
Were all water VOA vials free of headspace (i.e., bubbles ≤ 6mm)?	N/A	
Were all soil VOAs field extracted with MeOH+BFB?	N/A	
Note to Client: Any "No", answer above indicates non-compliance with standard procedures and may impact data quality.		
Additional notes (if applicable):		



Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>	<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>
1201525001-A	No Preservative Required	OK			
1201525001-B	No Preservative Required	OK			
1201525001-C	Na2S2O3 for Chlorine Redu	OK			
1201525001-D	Na2S2O3 for Chlorine Redu	OK			
1201525001-E	H2SO4 to pH < 2	OK			
1201525002-A	No Preservative Required	OK			
1201525002-B	No Preservative Required	OK			
1201525002-C	Na2S2O3 for Chlorine Redu	OK			
1201525002-D	Na2S2O3 for Chlorine Redu	OK			
1201525002-E	H2SO4 to pH < 2	OK			
1201525003-A	No Preservative Required	OK			
1201525003-B	No Preservative Required	OK			
1201525003-C	Na2S2O3 for Chlorine Redu	OK			
1201525003-D	Na2S2O3 for Chlorine Redu	OK			
1201525003-E	H2SO4 to pH < 2	OK			
1201525004-A	No Preservative Required	OK			
1201525004-B	No Preservative Required	OK			
1201525004-C	Na2S2O3 for Chlorine Redu	OK			
1201525004-D	Na2S2O3 for Chlorine Redu	OK			
1201525004-E	H2SO4 to pH < 2	OK			
1201525005-A	No Preservative Required	OK			
1201525005-B	No Preservative Required	OK			
1201525005-C	Na2S2O3 for Chlorine Redu	OK			
1201525005-D	Na2S2O3 for Chlorine Redu	OK			
1201525005-E	H2SO4 to pH < 2	OK			
1201525006-A	No Preservative Required	OK			
1201525006-B	No Preservative Required	OK			
1201525006-C	Na2S2O3 for Chlorine Redu	OK			
1201525006-D	Na2S2O3 for Chlorine Redu	OK			
1201525006-E	H2SO4 to pH < 2	OK			
1201525007-A	No Preservative Required	OK			
1201525007-B	No Preservative Required	OK			
1201525007-C	Na2S2O3 for Chlorine Redu	OK			
1201525007-D	Na2S2O3 for Chlorine Redu	OK			
1201525007-E	H2SO4 to pH < 2	OK			
1201525008-A	No Preservative Required	OK			
1201525008-B	No Preservative Required	OK			
1201525008-C	Na2S2O3 for Chlorine Redu	OK			
1201525008-D	Na2S2O3 for Chlorine Redu	OK			
1201525008-E	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.

NC- The container provided was not preserved or was under-preserved. The method does not allow for additional preservative added after collection.

PA - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt and the container is now at the correct pH. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

PH - The container was received outside of the acceptable pH for the analysis requested. Preservative was added upon receipt, but was insufficient to bring the container to the correct pH for the analysis requested. See the Sample Receipt Form for details on the amount and lot # of the preservative added.

QN - Insufficient sample quantity provided.