

Laboratory Report of Analysis

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

Report Number: **1203764**

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: **1203764**

Project Name/Site: **Wasilla WWTP**

Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

1209530006MS (1572647) MS

4500P-B,E - Total Phosphorus - MS recovery is outside of QC criteria. Refer to LCS for accuracy requirements.

1209530006MSD (1572648) MSD

4500P-B,E - Total Phosphorus - MS/MSD RPD was outside of QC criteria. Refer to LCS/LCSD for precision requirement.

*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: 08/13/2020 9:33:19AM

Laboratory Qualifiers

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

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

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

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

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
B	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
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	1203764001	07/29/2020	07/29/2020	Water (Surface, Eff., Ground)
SW2	1203764002	07/29/2020	07/29/2020	Water (Surface, Eff., Ground)
SW3	1203764003	07/29/2020	07/29/2020	Water (Surface, Eff., Ground)
SW4	1203764004	07/29/2020	07/29/2020	Water (Surface, Eff., Ground)
SW5	1203764005	07/29/2020	07/29/2020	Water (Surface, Eff., Ground)
SW6	1203764006	07/29/2020	07/29/2020	Water (Surface, Eff., Ground)
SW7	1203764007	07/29/2020	07/29/2020	Water (Surface, Eff., Ground)
EFF	1203764008	07/29/2020	07/29/2020	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: 1203764001
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	4.80	mg/L
Total Coliform	816	MPN/100mL
Ammonia-N	0.857	mg/L
Total Kjeldahl Nitrogen	1.59	mg/L
Total Phosphorus	0.108	mg/L

Client Sample ID: **SW2**
 Lab Sample ID: 1203764002
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	3.72	mg/L
E. Coli	20	MPN/100mL
Fecal Coliform	1270	col/100mL
Total Coliform	GT2420	MPN/100mL
Ammonia-N	5.68	mg/L
Nitrate-N	0.166J	mg/L
Total Kjeldahl Nitrogen	6.51	mg/L
Total Nitrate/Nitrite-N	0.210	mg/L
Total Phosphorus	0.939	mg/L

Client Sample ID: **SW3**
 Lab Sample ID: 1203764003
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	5.66	mg/L
Fecal Coliform	6.7	col/100mL
Total Coliform	2140	MPN/100mL
Ammonia-N	3.24	mg/L
Total Kjeldahl Nitrogen	3.90	mg/L
Total Phosphorus	4.06	mg/L

Client Sample ID: **SW4**
 Lab Sample ID: 1203764004
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	10	MPN/100mL
Fecal Coliform	1.7	col/100mL
Total Coliform	3080	MPN/100mL
Ammonia-N	0.117	mg/L
Nitrate-N	3.54	mg/L
Nitrite-N	0.0890J	mg/L
Total Kjeldahl Nitrogen	0.756J	mg/L
Total Nitrate/Nitrite-N	3.62	mg/L
Total Phosphorus	2.25	mg/L

Detectable Results Summary

Client Sample ID: **SW5**
 Lab Sample ID: 1203764005
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	3.70	mg/L
E. Coli	910	MPN/100mL
Fecal Coliform	550	col/100mL
Total Coliform	GT2420	MPN/100mL
Ammonia-N	0.202	mg/L
Nitrate-N	1.64	mg/L
Total Kjeldahl Nitrogen	1.22	mg/L
Total Nitrate/Nitrite-N	1.68	mg/L
Total Phosphorus	2.03	mg/L

Waters Department

Client Sample ID: **SW6**
 Lab Sample ID: 1203764006
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	10	MPN/100mL
Fecal Coliform	22	col/100mL
Total Coliform	3080	MPN/100mL
Ammonia-N	0.281	mg/L
Nitrate-N	0.114J	mg/L
Total Kjeldahl Nitrogen	1.46	mg/L
Total Nitrate/Nitrite-N	0.138J	mg/L
Total Phosphorus	0.798	mg/L

Waters Department

Client Sample ID: **SW7**
 Lab Sample ID: 1203764007
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	3.78	mg/L
E. Coli	60	MPN/100mL
Fecal Coliform	180	col/100mL
Total Coliform	GT2420	MPN/100mL
Ammonia-N	0.0751J	mg/L
Total Kjeldahl Nitrogen	1.02	mg/L
Total Nitrate/Nitrite-N	0.0520J	mg/L
Total Phosphorus	0.0803	mg/L

Waters Department

Client Sample ID: **EFF**
 Lab Sample ID: 1203764008
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	19.6	mg/L
E. Coli	260	MPN/100mL
Fecal Coliform	210	col/100mL
Total Coliform	GT2420	MPN/100mL
Ammonia-N	0.797	mg/L
Nitrate-N	23.4	mg/L
Nitrite-N	1.04	mg/L
Total Kjeldahl Nitrogen	2.36	mg/L
Total Nitrate/Nitrite-N	24.5	mg/L
Total Phosphorus	3.55	mg/L

Waters Department



Results of SW1

Client Sample ID: **SW1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203764001
Lab Project ID: 1203764

Collection Date: 07/29/20 11:05
Received Date: 07/29/20 16:55
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	4.80	2.00	2.00	mg/L	1		07/30/20 13:56

Batch Information

Analytical Batch: BOD6674
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/30/20 13:56
Container ID: 1203764001-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	1.67 U	1.67	1.67	col/100mL	1		07/29/20 19:00

Batch Information

Analytical Batch: BTF18288
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/29/20 19:00
Container ID: 1203764001-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	1 U	1	1	MPN/100r	1		07/30/20 15:20
Total Coliform	816	1	1	MPN/100r	1		07/30/20 15:20

Batch Information

Analytical Batch: BTF18289
Analytical Method: SM21 9223B
Analyst: A.L
Analytical Date/Time: 07/30/20 15:20
Container ID: 1203764001-B



Results of SW1

Client Sample ID: **SW1**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1203764001
 Lab Project ID: 1203764

Collection Date: 07/29/20 11:05
 Received Date: 07/29/20 16:55
 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		07/29/20 19:11
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		07/29/20 19:11
Total Nitrate/Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		07/29/20 19:11

Batch Information

Analytical Batch: WIC6065
 Analytical Method: EPA 300.0
 Analyst: EWW
 Analytical Date/Time: 07/29/20 19:11
 Container ID: 1203764001-C

Prep Batch: WXX13372
 Prep Method: METHOD
 Prep Date/Time: 07/29/20 15:00
 Prep Initial Wt./Vol.: 10 mL
 Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.857	0.100	0.0310	mg/L	1		08/06/20 17:10

Batch Information

Analytical Batch: WDA4827
 Analytical Method: SM21 4500-NH3 G
 Analyst: A.A
 Analytical Date/Time: 08/06/20 17:10
 Container ID: 1203764001-D

Prep Batch: WXX13386
 Prep Method: METHOD
 Prep Date/Time: 08/06/20 16:00
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.108	0.0400	0.0120	mg/L	1		08/04/20 14:23

Batch Information

Analytical Batch: WDA4825
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 08/04/20 14:23
 Container ID: 1203764001-D

Prep Batch: WXX13380
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 08/04/20 11:36
 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		08/12/20 11:45

Results of SW1

Client Sample ID: **SW1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203764001
Lab Project ID: 1203764

Collection Date: 07/29/20 11:05
Received Date: 07/29/20 16:55
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4831
Analytical Method: SM23 4500-N D
Analyst: EWW
Analytical Date/Time: 08/12/20 11:45
Container ID: 1203764001-D

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 08/11/20 11:16
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: 1203764002
Lab Project ID: 1203764

Collection Date: 07/29/20 11:37
Received Date: 07/29/20 16:55
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	3.72	2.00	2.00	mg/L	1		07/30/20 13:56

Batch Information

Analytical Batch: BOD6674
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/30/20 13:56
Container ID: 1203764002-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	1270	10.0	10.0	col/100mL	1		07/29/20 19:00

Batch Information

Analytical Batch: BTF18288
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/29/20 19:00
Container ID: 1203764002-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	20	10	10	MPN/100r	10		07/30/20 15:20
Total Coliform	>2420	10	10	MPN/100r	10		07/30/20 15:20

Batch Information

Analytical Batch: BTF18289
Analytical Method: SM21 9223B
Analyst: A.L
Analytical Date/Time: 07/30/20 15:20
Container ID: 1203764002-B



Results of SW2

Client Sample ID: SW2
Client Project ID: Wasilla WWTP
Lab Sample ID: 1203764002
Lab Project ID: 1203764

Collection Date: 07/29/20 11:37
Received Date: 07/29/20 16:55
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: WIC6065
Analytical Method: EPA 300.0
Analyst: EWW
Analytical Date/Time: 07/29/20 19:30
Container ID: 1203764002-C
Prep Batch: WXX13372
Prep Method: METHOD
Prep Date/Time: 07/29/20 15:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

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

Batch Information

Analytical Batch: WDA4827
Analytical Method: SM21 4500-NH3 G
Analyst: A.A
Analytical Date/Time: 08/06/20 18:13
Container ID: 1203764002-D
Prep Batch: WXX13386
Prep Method: METHOD
Prep Date/Time: 08/06/20 16:00
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: WDA4825
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 08/04/20 18:19
Container ID: 1203764002-D
Prep Batch: WXX13382
Prep Method: SM21 4500P-B,E
Prep Date/Time: 08/04/20 16:50
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 SW2

Client Sample ID: **SW2**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203764002
Lab Project ID: 1203764

Collection Date: 07/29/20 11:37
Received Date: 07/29/20 16:55
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4831
Analytical Method: SM23 4500-N D
Analyst: EWW
Analytical Date/Time: 08/12/20 11:49
Container ID: 1203764002-D

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 08/11/20 11:16
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: 1203764003
Lab Project ID: 1203764

Collection Date: 07/29/20 12:21
Received Date: 07/29/20 16:55
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	5.66	2.00	2.00	mg/L	1		07/30/20 13:56

Batch Information

Analytical Batch: BOD6674
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/30/20 13:56
Container ID: 1203764003-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	6.7	1.67	1.67	col/100mL	1		07/29/20 19:00

Batch Information

Analytical Batch: BTF18288
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/29/20 19:00
Container ID: 1203764003-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	10 U	10	10	MPN/100r	10		07/30/20 15:20
Total Coliform	2140	10	10	MPN/100r	10		07/30/20 15:20

Batch Information

Analytical Batch: BTF18289
Analytical Method: SM21 9223B
Analyst: A.L
Analytical Date/Time: 07/30/20 15:20
Container ID: 1203764003-B



Results of SW3

Client Sample ID: SW3
Client Project ID: Wasilla WWTP
Lab Sample ID: 1203764003
Lab Project ID: 1203764

Collection Date: 07/29/20 12:21
Received Date: 07/29/20 16:55
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: WIC6065
Analytical Method: EPA 300.0
Analyst: EWW
Analytical Date/Time: 07/29/20 19:49
Container ID: 1203764003-C
Prep Batch: WXX13372
Prep Method: METHOD
Prep Date/Time: 07/29/20 15:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

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

Batch Information

Analytical Batch: WDA4827
Analytical Method: SM21 4500-NH3 G
Analyst: A.A
Analytical Date/Time: 08/06/20 17:13
Container ID: 1203764003-D
Prep Batch: WXX13386
Prep Method: METHOD
Prep Date/Time: 08/06/20 16:00
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: WDA4825
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 08/04/20 14:26
Container ID: 1203764003-D
Prep Batch: WXX13380
Prep Method: SM21 4500P-B,E
Prep Date/Time: 08/04/20 11:36
Prep Initial Wt./Vol.: 1.25 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 SW3

Client Sample ID: **SW3**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203764003
Lab Project ID: 1203764

Collection Date: 07/29/20 12:21
Received Date: 07/29/20 16:55
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4831
Analytical Method: SM23 4500-N D
Analyst: EWW
Analytical Date/Time: 08/12/20 11:53
Container ID: 1203764003-D

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 08/11/20 11:16
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: 1203764004
Lab Project ID: 1203764

Collection Date: 07/29/20 14:33
Received Date: 07/29/20 16:55
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		07/30/20 13:56

Batch Information

Analytical Batch: BOD6674
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/30/20 13:56
Container ID: 1203764004-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	1.7	1.67	1.67	col/100mL	1		07/29/20 19:00

Batch Information

Analytical Batch: BTF18288
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/29/20 19:00
Container ID: 1203764004-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	10	10	10	MPN/100r	10		07/30/20 15:20
Total Coliform	3080	10	10	MPN/100r	10		07/30/20 15:20

Batch Information

Analytical Batch: BTF18289
Analytical Method: SM21 9223B
Analyst: A.L
Analytical Date/Time: 07/30/20 15:20
Container ID: 1203764004-B



Results of SW4

Client Sample ID: SW4
Client Project ID: Wasilla WWTP
Lab Sample ID: 1203764004
Lab Project ID: 1203764

Collection Date: 07/29/20 14:33
Received Date: 07/29/20 16:55
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: WIC6065
Analytical Method: EPA 300.0
Analyst: EWW
Analytical Date/Time: 07/29/20 20:46
Container ID: 1203764004-C
Prep Batch: WXX13372
Prep Method: METHOD
Prep Date/Time: 07/29/20 15:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

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

Batch Information

Analytical Batch: WDA4827
Analytical Method: SM21 4500-NH3 G
Analyst: A.A
Analytical Date/Time: 08/06/20 17:15
Container ID: 1203764004-D
Prep Batch: WXX13386
Prep Method: METHOD
Prep Date/Time: 08/06/20 16:00
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: WDA4825
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 08/04/20 18:21
Container ID: 1203764004-D
Prep Batch: WXX13382
Prep Method: SM21 4500P-B,E
Prep Date/Time: 08/04/20 16:50
Prep Initial Wt./Vol.: 1.25 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 SW4

Client Sample ID: **SW4**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203764004
Lab Project ID: 1203764

Collection Date: 07/29/20 14:33
Received Date: 07/29/20 16:55
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4831
Analytical Method: SM23 4500-N D
Analyst: EWW
Analytical Date/Time: 08/12/20 11:54
Container ID: 1203764004-D

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 08/11/20 11:16
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: 1203764005
Lab Project ID: 1203764

Collection Date: 07/29/20 14:50
Received Date: 07/29/20 16:55
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	3.70	2.00	2.00	mg/L	1		07/30/20 13:56

Batch Information

Analytical Batch: BOD6674
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/30/20 13:56
Container ID: 1203764005-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	550	10.0	10.0	col/100mL	1		07/29/20 19:00

Batch Information

Analytical Batch: BTF18288
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/29/20 19:00
Container ID: 1203764005-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	910	10	10	MPN/100r	10		07/30/20 15:20
Total Coliform	>2420	10	10	MPN/100r	10		07/30/20 15:20

Batch Information

Analytical Batch: BTF18289
Analytical Method: SM21 9223B
Analyst: A.L
Analytical Date/Time: 07/30/20 15:20
Container ID: 1203764005-B



Results of SW5

Client Sample ID: SW5
Client Project ID: Wasilla WWTP
Lab Sample ID: 1203764005
Lab Project ID: 1203764

Collection Date: 07/29/20 14:50
Received Date: 07/29/20 16:55
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: WIC6065
Analytical Method: EPA 300.0
Analyst: EWW
Analytical Date/Time: 07/29/20 21:05
Container ID: 1203764005-C
Prep Batch: WXX13372
Prep Method: METHOD
Prep Date/Time: 07/29/20 15:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

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

Batch Information

Analytical Batch: WDA4827
Analytical Method: SM21 4500-NH3 G
Analyst: A.A
Analytical Date/Time: 08/06/20 17:17
Container ID: 1203764005-D
Prep Batch: WXX13386
Prep Method: METHOD
Prep Date/Time: 08/06/20 16:00
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: WDA4825
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 08/04/20 18:22
Container ID: 1203764005-D
Prep Batch: WXX13382
Prep Method: SM21 4500P-B,E
Prep Date/Time: 08/04/20 16:50
Prep Initial Wt./Vol.: 1.25 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 SW5

Client Sample ID: **SW5**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203764005
Lab Project ID: 1203764

Collection Date: 07/29/20 14:50
Received Date: 07/29/20 16:55
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4831
Analytical Method: SM23 4500-N D
Analyst: EWW
Analytical Date/Time: 08/12/20 11:56
Container ID: 1203764005-D

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 08/11/20 11:16
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: 1203764006
Lab Project ID: 1203764

Collection Date: 07/29/20 13:15
Received Date: 07/29/20 16:55
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		07/30/20 13:56

Batch Information

Analytical Batch: BOD6674
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/30/20 13:56
Container ID: 1203764006-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	22	1.67	1.67	col/100mL	1		07/29/20 19:00

Batch Information

Analytical Batch: BTF18288
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/29/20 19:00
Container ID: 1203764006-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	10	10	10	MPN/100r	10		07/30/20 15:20
Total Coliform	3080	10	10	MPN/100r	10		07/30/20 15:20

Batch Information

Analytical Batch: BTF18289
Analytical Method: SM21 9223B
Analyst: A.L
Analytical Date/Time: 07/30/20 15:20
Container ID: 1203764006-B



Results of SW6

Client Sample ID: **SW6**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1203764006
 Lab Project ID: 1203764

Collection Date: 07/29/20 13:15
 Received Date: 07/29/20 16:55
 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	0.114 J	0.200	0.0500	mg/L	1		07/29/20 21:24
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		07/29/20 21:24
Total Nitrate/Nitrite-N	0.138 J	0.200	0.0500	mg/L	1		07/29/20 21:24

Batch Information

Analytical Batch: WIC6065
 Analytical Method: EPA 300.0
 Analyst: EWW
 Analytical Date/Time: 07/29/20 21:24
 Container ID: 1203764006-C

Prep Batch: WXX13372
 Prep Method: METHOD
 Prep Date/Time: 07/29/20 15:00
 Prep Initial Wt./Vol.: 10 mL
 Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.281	0.100	0.0310	mg/L	1		08/06/20 17:18

Batch Information

Analytical Batch: WDA4827
 Analytical Method: SM21 4500-NH3 G
 Analyst: A.A
 Analytical Date/Time: 08/06/20 17:18
 Container ID: 1203764006-D

Prep Batch: WXX13386
 Prep Method: METHOD
 Prep Date/Time: 08/06/20 16:00
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.798	0.200	0.0600	mg/L	1		08/04/20 15:36

Batch Information

Analytical Batch: WDA4825
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 08/04/20 15:36
 Container ID: 1203764006-D

Prep Batch: WXX13380
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 08/04/20 12:42
 Prep Initial Wt./Vol.: 5 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	1.46	1.00	0.310	mg/L	1		08/12/20 11:57

Results of SW6

Client Sample ID: **SW6**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203764006
Lab Project ID: 1203764

Collection Date: 07/29/20 13:15
Received Date: 07/29/20 16:55
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4831
Analytical Method: SM23 4500-N D
Analyst: EWW
Analytical Date/Time: 08/12/20 11:57
Container ID: 1203764006-D

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 08/11/20 11:16
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: 1203764007
Lab Project ID: 1203764

Collection Date: 07/29/20 12:56
Received Date: 07/29/20 16:55
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	3.78	2.00	2.00	mg/L	1		07/30/20 13:56

Batch Information

Analytical Batch: BOD6674
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/30/20 13:56
Container ID: 1203764007-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	180	10.0	10.0	col/100mL	1		07/29/20 19:00

Batch Information

Analytical Batch: BTF18288
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/29/20 19:00
Container ID: 1203764007-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	60	10	10	MPN/100r	10		07/30/20 15:20
Total Coliform	>2420	10	10	MPN/100r	10		07/30/20 15:20

Batch Information

Analytical Batch: BTF18289
Analytical Method: SM21 9223B
Analyst: A.L
Analytical Date/Time: 07/30/20 15:20
Container ID: 1203764007-B



Results of SW7

Client Sample ID: **SW7**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1203764007
 Lab Project ID: 1203764

Collection Date: 07/29/20 12:56
 Received Date: 07/29/20 16:55
 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		07/29/20 21:43
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		07/29/20 21:43
Total Nitrate/Nitrite-N	0.0520 J	0.200	0.0500	mg/L	1		07/29/20 21:43

Batch Information

Analytical Batch: WIC6065
 Analytical Method: EPA 300.0
 Analyst: EWW
 Analytical Date/Time: 07/29/20 21:43
 Container ID: 1203764007-C

Prep Batch: WXX13372
 Prep Method: METHOD
 Prep Date/Time: 07/29/20 15:00
 Prep Initial Wt./Vol.: 10 mL
 Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0751 J	0.100	0.0310	mg/L	1		08/06/20 17:23

Batch Information

Analytical Batch: WDA4827
 Analytical Method: SM21 4500-NH3 G
 Analyst: A.A
 Analytical Date/Time: 08/06/20 17:23
 Container ID: 1203764007-D

Prep Batch: WXX13386
 Prep Method: METHOD
 Prep Date/Time: 08/06/20 16:00
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0803	0.0400	0.0120	mg/L	1		08/04/20 15:37

Batch Information

Analytical Batch: WDA4825
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 08/04/20 15:37
 Container ID: 1203764007-D

Prep Batch: WXX13380
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 08/04/20 12:42
 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	1.02	1.00	0.310	mg/L	1		08/12/20 11:58

Results of SW7

Client Sample ID: **SW7**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203764007
Lab Project ID: 1203764

Collection Date: 07/29/20 12:56
Received Date: 07/29/20 16:55
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4831
Analytical Method: SM23 4500-N D
Analyst: EWW
Analytical Date/Time: 08/12/20 11:58
Container ID: 1203764007-D

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 08/11/20 11:16
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL



Results of EFF

Client Sample ID: **EFF**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203764008
Lab Project ID: 1203764

Collection Date: 07/29/20 15:15
Received Date: 07/29/20 16:55
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	19.6	2.00	2.00	mg/L	1		07/30/20 13:56

Batch Information

Analytical Batch: BOD6674
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/30/20 13:56
Container ID: 1203764008-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	210	10.0	10.0	col/100mL	1		07/29/20 19:00

Batch Information

Analytical Batch: BTF18288
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/29/20 19:00
Container ID: 1203764008-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	260	10	10	MPN/100r	10		07/30/20 15:20
Total Coliform	>2420	10	10	MPN/100r	10		07/30/20 15:20

Batch Information

Analytical Batch: BTF18289
Analytical Method: SM21 9223B
Analyst: A.L
Analytical Date/Time: 07/30/20 15:20
Container ID: 1203764008-B



Results of EFF

Client Sample ID: **EFF**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1203764008
 Lab Project ID: 1203764

Collection Date: 07/29/20 15:15
 Received Date: 07/29/20 16:55
 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	23.4	1.00	0.250	mg/L	5		07/30/20 08:14
Nitrite-N	1.04	1.00	0.250	mg/L	5		07/30/20 08:14
Total Nitrate/Nitrite-N	24.5	1.00	0.250	mg/L	5		07/30/20 08:14

Batch Information

Analytical Batch: WIC6065
 Analytical Method: EPA 300.0
 Analyst: EWW
 Analytical Date/Time: 07/30/20 08:14
 Container ID: 1203764008-C

Prep Batch: WXX13372
 Prep Method: METHOD
 Prep Date/Time: 07/29/20 15:00
 Prep Initial Wt./Vol.: 10 mL
 Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.797	0.100	0.0310	mg/L	1		08/06/20 18:11

Batch Information

Analytical Batch: WDA4827
 Analytical Method: SM21 4500-NH3 G
 Analyst: A.A
 Analytical Date/Time: 08/06/20 18:11
 Container ID: 1203764008-D

Prep Batch: WXX13386
 Prep Method: METHOD
 Prep Date/Time: 08/06/20 16:00
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	3.55	0.800	0.240	mg/L	1		08/04/20 16:22

Batch Information

Analytical Batch: WDA4825
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 08/04/20 16:22
 Container ID: 1203764008-D

Prep Batch: WXX13381
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 08/04/20 12:42
 Prep Initial Wt./Vol.: 1.25 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	2.36	1.00	0.310	mg/L	1		08/12/20 12:00

Results of EFF

Client Sample ID: **EFF**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203764008
Lab Project ID: 1203764

Collection Date: 07/29/20 15:15
Received Date: 07/29/20 16:55
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4831
Analytical Method: SM23 4500-N D
Analyst: EWW
Analytical Date/Time: 08/12/20 12:00
Container ID: 1203764008-D

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 08/11/20 11:16
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Method Blank

Blank ID: MB for HBN 1809564 [BOD/6674]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1571654

QC for Samples:

1203764001, 1203764002, 1203764003, 1203764004, 1203764005, 1203764006, 1203764007, 1203764008

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: BOD6674

Analytical Method: SM21 5210B

Instrument:

Analyst: A.L

Analytical Date/Time: 7/30/2020 1:56:38PM

Print Date: 08/13/2020 9:33:29AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203764 [BOD6674]

Blank Spike Lab ID: 1571655

Date Analyzed: 07/30/2020 13:56

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203764001, 1203764002, 1203764003, 1203764004, 1203764005, 1203764006, 1203764007, 1203764008

Results by SM21 5210B

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Biochemical Oxygen Demand	198	200	101	(84.6-115.4

Batch Information

Analytical Batch: **BOD6674**

Analytical Method: **SM21 5210B**

Instrument:

Analyst: **A.L**

Print Date: 08/13/2020 9:33:31AM



Method Blank

Blank ID: MB for HBN 1809474 [BTF/18288]
Blank Lab ID: 1571511

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1203764001, 1203764002, 1203764003, 1203764004, 1203764005, 1203764006, 1203764007, 1203764008

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: BTF18288
Analytical Method: SM21 9222D
Instrument:
Analyst: A.L
Analytical Date/Time: 7/29/2020 7:00:29PM

Print Date: 08/13/2020 9:33:34AM

Method Blank

Blank ID: MB for HBN 1809574 [BTF/18289]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1571688

QC for Samples:

1203764001, 1203764002, 1203764003, 1203764004, 1203764005, 1203764006, 1203764007, 1203764008

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: BTF18289

Analytical Method: SM21 9223B

Instrument:

Analyst: A.L

Analytical Date/Time: 7/30/2020 3:20:00PM

Print Date: 08/13/2020 9:33:38AM

Method Blank

Blank ID: MB for HBN 1809623 [WXX/13372]
Blank Lab ID: 1571873

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1203764001, 1203764002, 1203764003, 1203764004, 1203764005, 1203764006, 1203764007, 1203764008

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: WIC6065
Analytical Method: EPA 300.0
Instrument: 930 Metrohm compact IC flex
Analyst: EWW
Analytical Date/Time: 7/29/2020 5:17:15PM

Prep Batch: WXX13372
Prep Method: METHOD
Prep Date/Time: 7/29/2020 3:00:00PM
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Print Date: 08/13/2020 9:33:41AM

Method Blank

Blank ID: MB for HBN 1809623 [WXX/13372]
 Blank Lab ID: 1571877

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1203764001, 1203764002, 1203764003, 1203764004, 1203764005, 1203764006, 1203764007, 1203764008

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: WIC6065
 Analytical Method: EPA 300.0
 Instrument: 930 Metrohm compact IC flex
 Analyst: EWW
 Analytical Date/Time: 7/30/2020 1:51:12AM

Prep Batch: WXX13372
 Prep Method: METHOD
 Prep Date/Time: 7/29/2020 3:00:00PM
 Prep Initial Wt./Vol.: 10 mL
 Prep Extract Vol: 10 mL

Print Date: 08/13/2020 9:33:41AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203764 [WXX13372]
 Blank Spike Lab ID: 1571874
 Date Analyzed: 07/29/2020 17:36

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203764001, 1203764002, 1203764003, 1203764004, 1203764005, 1203764006, 1203764007, 1203764008

Results by EPA 300.0

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Nitrate-N	5	4.97	100	(90-110)
Nitrite-N	5	4.89	98	(90-110)
Total Nitrate/Nitrite-N	10	9.87	99	(90-110)

Batch Information

Analytical Batch: **WIC6065**
 Analytical Method: **EPA 300.0**
 Instrument: **930 Metrohm compact IC flex**
 Analyst: **EWV**

Prep Batch: **WXX13372**
 Prep Method: **METHOD**
 Prep Date/Time: **07/29/2020 15:00**
 Spike Init Wt./Vol.: 5 mg/L Extract Vol: 10 mL
 Dupe Init Wt./Vol.: Extract Vol:

Print Date: 08/13/2020 9:33:44AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203764 [WXX13372]
 Blank Spike Lab ID: 1571878
 Date Analyzed: 07/30/2020 02:10

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203764001, 1203764002, 1203764003, 1203764004, 1203764005, 1203764006, 1203764007, 1203764008

Results by EPA 300.0

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Nitrate-N	5	4.89	98	(90-110)
Nitrite-N	5	4.81	96	(90-110)
Total Nitrate/Nitrite-N	10	9.70	97	(90-110)

Batch Information

Analytical Batch: **WIC6065**
 Analytical Method: **EPA 300.0**
 Instrument: **930 Metrohm compact IC flex**
 Analyst: **EWV**

Prep Batch: **WXX13372**
 Prep Method: **METHOD**
 Prep Date/Time: **07/29/2020 15:00**
 Spike Init Wt./Vol.: 5 mg/L Extract Vol: 10 mL
 Dupe Init Wt./Vol.: Extract Vol:

Print Date: 08/13/2020 9:33:44AM

Matrix Spike Summary

Original Sample ID: 1571879
 MS Sample ID: 1571880 MS
 MSD Sample ID:

Analysis Date: 07/29/2020 18:33
 Analysis Date: 07/29/2020 18:52
 Analysis Date:
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203764001, 1203764002, 1203764003, 1203764004, 1203764005, 1203764006, 1203764007, 1203764008

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	0.500U	25.0	24.8	99				90-110		
Nitrite-N	0.500U	25.0	24.3	97				90-110		

Batch Information

Analytical Batch: WIC6065
 Analytical Method: EPA 300.0
 Instrument: 930 Metrohm compact IC flex
 Analyst: EWW
 Analytical Date/Time: 7/29/2020 6:52:23PM

Prep Batch: WXX13372
 Prep Method: EPA 300.0 Extraction Waters/Liquids
 Prep Date/Time: 7/29/2020 3:00:00PM
 Prep Initial Wt./Vol.: 10.00mL
 Prep Extract Vol: 10.00mL

Print Date: 08/13/2020 9:33:45AM



Matrix Spike Summary

Original Sample ID: 1571881
MS Sample ID: 1571882 MS
MSD Sample ID:

Analysis Date: 07/30/2020 5:01
Analysis Date: 07/30/2020 5:20
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203764001, 1203764002, 1203764003, 1203764004, 1203764005, 1203764006, 1203764007, 1203764008

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	0.191J	5.00	5.13	99				90-110		
Nitrite-N	0.100U	5.00	4.83	97				90-110		

Batch Information

Analytical Batch: WIC6065
Analytical Method: EPA 300.0
Instrument: 930 Metrohm compact IC flex
Analyst: EWW
Analytical Date/Time: 7/30/2020 5:20:45AM

Prep Batch: WXX13372
Prep Method: EPA 300.0 Extraction Waters/Liquids
Prep Date/Time: 7/29/2020 3:00:00PM
Prep Initial Wt./Vol.: 10.00mL
Prep Extract Vol: 10.00mL

Print Date: 08/13/2020 9:33:45AM

Method Blank

Blank ID: MB for HBN 1809805 [WXX/13380]
Blank Lab ID: 1572639

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1203764001, 1203764003, 1203764006, 1203764007

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: WDA4825
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 8/4/2020 2:13:05PM

Prep Batch: WXX13380
Prep Method: SM21 4500P-B,E
Prep Date/Time: 8/4/2020 11:36:00AM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 08/13/2020 9:33:47AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203764 [WXX13380]
 Blank Spike Lab ID: 1572640
 Date Analyzed: 08/04/2020 14:14

Spike Duplicate ID: LCSD for HBN 1203764 [WXX13380]
 Spike Duplicate Lab ID: 1572641
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203764001, 1203764003, 1203764006, 1203764007

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	0.208	104	0.2	0.206	103	(75-125)	1.10	(< 25)

Batch Information

Analytical Batch: **WDA4825**
 Analytical Method: **SM21 4500P-B,E**
 Instrument: **Discrete Analyzer 2**
 Analyst: **EWV**

Prep Batch: **WXX13380**
 Prep Method: **SM21 4500P-B,E**
 Prep Date/Time: **08/04/2020 11:36**
 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: 1203564004
 MS Sample ID: 1572642 MS
 MSD Sample ID: 1572643 MSD

Analysis Date: 08/04/2020 14:15
 Analysis Date: 08/04/2020 14:16
 Analysis Date: 08/04/2020 14:19
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203764001, 1203764003, 1203764006, 1203764007

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	0.0200U	0.200	.203	101	0.200	0.202	101	75-125	0.40	(< 25)

Batch Information

Analytical Batch: WDA4825
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: EWW
 Analytical Date/Time: 8/4/2020 2:16:57PM

Prep Batch: WXX13380
 Prep Method: Total Phosphorus (W) Ext.
 Prep Date/Time: 8/4/2020 11:36:00AM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL

Print Date: 08/13/2020 9:33:51AM



Method Blank

Blank ID: MB for HBN 1809806 [WXX/13381]
Blank Lab ID: 1572644

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1203764008

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: WDA4825
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 8/4/2020 3:50:11PM

Prep Batch: WXX13381
Prep Method: SM21 4500P-B,E
Prep Date/Time: 8/4/2020 12:42:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 08/13/2020 9:33:52AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203764 [WXX13381]
 Blank Spike Lab ID: 1572645
 Date Analyzed: 08/04/2020 15:51

Spike Duplicate ID: LCSD for HBN 1203764 [WXX13381]
 Spike Duplicate Lab ID: 1572646
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203764008

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	0.194	97	0.2	0.195	98	(75-125)	0.93	(< 25)

Batch Information

Analytical Batch: WDA4825
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: EWW

Prep Batch: WXX13381
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 08/04/2020 12:42
 Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL
 Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

Print Date: 08/13/2020 9:33:54AM

Matrix Spike Summary

Original Sample ID: 1209530006
 MS Sample ID: 1572647 MS
 MSD Sample ID: 1572648 MSD

Analysis Date: 08/04/2020 16:12
 Analysis Date: 08/04/2020 16:13
 Analysis Date: 08/04/2020 16:14
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203764008

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	0.0200U	0.200	.27	135 *	0.200	0.204	102	75-125	27.90	* (< 25)

Batch Information

Analytical Batch: WDA4825
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: EWW
 Analytical Date/Time: 8/4/2020 4:13:41PM

Prep Batch: WXX13381
 Prep Method: Total Phosphorus (W) Ext.
 Prep Date/Time: 8/4/2020 12:42:00PM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL

Print Date: 08/13/2020 9:33:56AM



Method Blank

Blank ID: MB for HBN 1809807 [WXX/13382]
Blank Lab ID: 1572649

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1203764002, 1203764004, 1203764005

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: WDA4825
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 8/4/2020 6:16:28PM

Prep Batch: WXX13382
Prep Method: SM21 4500P-B,E
Prep Date/Time: 8/4/2020 4:50:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 08/13/2020 9:33:57AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203764 [WXX13382]
 Blank Spike Lab ID: 1572650
 Date Analyzed: 08/04/2020 18:17

Spike Duplicate ID: LCSD for HBN 1203764 [WXX13382]
 Spike Duplicate Lab ID: 1572651
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203764002, 1203764004, 1203764005

Results by SM21 4500P-B,E

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Phosphorus	0.2	0.195	98	0.2	0.193	96	(75-125)	1.40	(< 25)

Batch Information

Analytical Batch: **WDA4825**
 Analytical Method: **SM21 4500P-B,E**
 Instrument: **Discrete Analyzer 2**
 Analyst: **EWV**

Prep Batch: **WXX13382**
 Prep Method: **SM21 4500P-B,E**
 Prep Date/Time: **08/04/2020 16:50**
 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: 1203764002
MS Sample ID: 1572652 MS
MSD Sample ID: 1572653 MSD

Analysis Date: 08/04/2020 18:19
Analysis Date: 08/04/2020 18:20
Analysis Date: 08/04/2020 18:21
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203764002, 1203764004, 1203764005

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	0.939	1.00	1.88	94	1.00	1.89	95	75-125	0.45	(< 25)

Batch Information

Analytical Batch: WDA4825
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 8/4/2020 6:20:22PM

Prep Batch: WXX13382
Prep Method: Total Phosphorus (W) Ext.
Prep Date/Time: 8/4/2020 4:50:00PM
Prep Initial Wt./Vol.: 5.00mL
Prep Extract Vol: 25.00mL

Print Date: 08/13/2020 9:34:01AM

Method Blank

Blank ID: MB for HBN 1809949 [WXX/13386]
 Blank Lab ID: 1573227

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1203764001, 1203764002, 1203764003, 1203764004, 1203764005, 1203764006, 1203764007, 1203764008

Results by SM21 4500-NH3 G

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Ammonia-N	0.0368J	0.100	0.0310	mg/L

Batch Information

Analytical Batch: WDA4827
 Analytical Method: SM21 4500-NH3 G
 Instrument: Discrete Analyzer 2
 Analyst: A.A
 Analytical Date/Time: 8/6/2020 4:43:39PM

Prep Batch: WXX13386
 Prep Method: METHOD
 Prep Date/Time: 8/6/2020 4:00:00PM
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

Print Date: 08/13/2020 9:34:02AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203764 [WXX13386]
 Blank Spike Lab ID: 1573228
 Date Analyzed: 08/06/2020 16:45

Spike Duplicate ID: LCSD for HBN 1203764 [WXX13386]
 Spike Duplicate Lab ID: 1573229
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203764001, 1203764002, 1203764003, 1203764004, 1203764005, 1203764006, 1203764007, 1203764008

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	1.06	106	1	1.06	106	(75-125)	0.21	(< 25)

Batch Information

Analytical Batch: **WDA4827**
 Analytical Method: **SM21 4500-NH3 G**
 Instrument: **Discrete Analyzer 2**
 Analyst: **A.A**

Prep Batch: **WXX13386**
 Prep Method: **METHOD**
 Prep Date/Time: **08/06/2020 16:00**
 Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
 Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL



Matrix Spike Summary

Original Sample ID: 1203755001
MS Sample ID: 1573230 MS
MSD Sample ID: 1573231 MSD

Analysis Date: 08/06/2020 17:05
Analysis Date: 08/06/2020 17:07
Analysis Date: 08/06/2020 17:08
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203764001, 1203764002, 1203764003, 1203764004, 1203764005, 1203764006, 1203764007, 1203764008

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	0.100U	1.00	1	100	1.00	1.01	101	75-125	0.76	(< 25)

Batch Information

Analytical Batch: WDA4827
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: A.A
Analytical Date/Time: 8/6/2020 5:07:05PM

Prep Batch: WXX13386
Prep Method: Ammonia by SM21 4500F prep (W)
Prep Date/Time: 8/6/2020 4:00:00PM
Prep Initial Wt./Vol.: 6.00mL
Prep Extract Vol: 6.00mL

Print Date: 08/13/2020 9:34:06AM

Method Blank

Blank ID: MB for HBN 1810185 [WXX/13397]

Blank Lab ID: 1574195

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1203764001, 1203764002, 1203764003, 1203764004, 1203764005, 1203764006, 1203764007, 1203764008

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: WDA4831

Analytical Method: SM23 4500-N D

Instrument: Discrete Analyzer 2

Analyst: EWW

Analytical Date/Time: 8/12/2020 11:37:48AM

Prep Batch: WXX13397

Prep Method: METHOD

Prep Date/Time: 8/11/2020 11:16:00AM

Prep Initial Wt./Vol.: 25 mL

Prep Extract Vol: 25 mL

Print Date: 08/13/2020 9:34:07AM

Method Blank

Blank ID: MB for HBN 1810185 [WXX/13397]
Blank Lab ID: 1574200

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1203764001, 1203764002, 1203764003, 1203764004, 1203764005, 1203764006, 1203764007, 1203764008

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: WDA4831
Analytical Method: SM23 4500-N D
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 8/12/2020 12:18:16PM

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 8/11/2020 11:16:00AM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 08/13/2020 9:34:07AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203764 [WXX13397]
 Blank Spike Lab ID: 1574196
 Date Analyzed: 08/12/2020 11:39

Spike Duplicate ID: LCSD for HBN 1203764 [WXX13397]
 Spike Duplicate Lab ID: 1574197
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203764001, 1203764002, 1203764003, 1203764004, 1203764005, 1203764006, 1203764007, 1203764008

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	3.72	93	4	3.77	94	(75-125)	1.30	(< 25)

Batch Information

Analytical Batch: **WDA4831**
 Analytical Method: **SM23 4500-N D**
 Instrument: **Discrete Analyzer 2**
 Analyst: **EWW**

Prep Batch: **WXX13397**
 Prep Method: **METHOD**
 Prep Date/Time: **08/11/2020 11:16**
 Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL
 Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

Print Date: 08/13/2020 9:34:10AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203764 [WXX13397]
 Blank Spike Lab ID: 1574201
 Date Analyzed: 08/12/2020 12:19

Spike Duplicate ID: LCSD for HBN 1203764 [WXX13397]
 Spike Duplicate Lab ID: 1574202
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203764001, 1203764002, 1203764003, 1203764004, 1203764005, 1203764006, 1203764007, 1203764008

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	3.59	90	4	3.66	91	(75-125)	1.70	(< 25)

Batch Information

Analytical Batch: **WDA4831**
 Analytical Method: **SM23 4500-N D**
 Instrument: **Discrete Analyzer 2**
 Analyst: **EWV**

Prep Batch: **WXX13397**
 Prep Method: **METHOD**
 Prep Date/Time: **08/11/2020 11:16**
 Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL
 Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

Print Date: 08/13/2020 9:34:10AM



Matrix Spike Summary

Original Sample ID: 1203764001
MS Sample ID: 1574198 MS
MSD Sample ID: 1574199 MSD

Analysis Date: 08/12/2020 11:45
Analysis Date: 08/12/2020 11:46
Analysis Date: 08/12/2020 11:48
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203764001, 1203764002, 1203764003, 1203764004, 1203764005, 1203764006, 1203764007, 1203764008

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	1.59	4.00	4.83	81	4.00	5.52	98	75-125	13.30	(< 25)

Batch Information

Analytical Batch: WDA4831
Analytical Method: SM23 4500-N D
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 8/12/2020 11:46:59AM

Prep Batch: WXX13397
Prep Method: Distillation TKN by Phenate (W)
Prep Date/Time: 8/11/2020 11:16:00AM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 08/13/2020 9:34:12AM

Matrix Spike Summary

Original Sample ID: 1203814003
 MS Sample ID: 1574203 MS
 MSD Sample ID: 1574204 MSD

Analysis Date: 08/12/2020 13:48
 Analysis Date: 08/12/2020 13:49
 Analysis Date: 08/12/2020 13:50
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203764002, 1203764003, 1203764004, 1203764005, 1203764006, 1203764007, 1203764008

Results by SM23 4500-N D

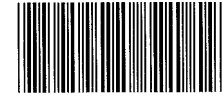
Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Kjeldahl Nitrogen	0.653J	4.00	4.41	94	4.00	4.18	88	75-125	5.40	(< 25)

Batch Information

Analytical Batch: WDA4831
 Analytical Method: SM23 4500-N D
 Instrument: Discrete Analyzer 2
 Analyst: EWW
 Analytical Date/Time: 8/12/2020 1:49:40PM

Prep Batch: WXX13397
 Prep Method: Distillation TKN by Phenate (W)
 Prep Date/Time: 8/11/2020 11:16:00AM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL

Print Date: 08/13/2020 9:34:12AM



CLIENT: <i>Stantec</i>		Instructions: Section 3 out. Omissions may delay the onset of analysis.			Page ___ of ___				
CONTACT: <i>Mike Alward</i>		PHONE #: <i>343-5202</i>		Section 3	Preservative				
PROJECT NAME: <i>Wasilla WWTTP</i>		PROJECT/ PWSID/ PERMIT#:	#	CONTAINER	Analysis*		NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS		
REPORTS TO:		E-MAIL:	Comp	Grab	MI				
INVOICE TO:		QUOTE #: <i># 348183 AD</i>	(Multi-incremental)	NITRATE / NITRIT	BOD	FC			
P.O. #: <i>204700415</i>		Profile #:	TC x10x	(SAND)	TEV (Ammonia)	TP			
RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	#	G	REMARKS/LOC ID		
1AE	SW1	7/29/20	1105	water	5	6			
2AE	SW2	↓	1137	↓	↓	↓			
3AE	SW3	↓	1221	↓	↓	↓			
4AE	SW4	↓	1433	↓	↓	↓			
5AE	SW5	↓	1450	↓	↓	↓			
6AE	SW6	↓	1315	↓	↓	↓			
7AE	SW7	↓	1256	↓	↓	↓			
8AE	RPP	↓	1515	↓	↓	↓			
Relinquished By: (1)		Date	Time	Received By:			Section 4	DOD Project? Yes No	Data Deliverable Requirements:
Relinquished By: (2)		Date	Time	Received By:			Cooler ID:	Requested Turnaround Time and/or Special Instructions:	
Relinquished By: (3)		Date	Time	Received By:			Temp Blank °C: <i>10.4 D57</i>	Chain of Custody Seal: (Circle)	
Relinquished By: (4)		Date	Time	Received For Laboratory By:			or Ambient []	INTACT BROKEN <u>ABSENT</u>	
		7-29-20	1655	<i>Mulla</i>			Delivery Method: Hand Delivery []	Commercial Delivery []	



CLIENT: <u>Stantec</u>					Instructions: Section 1 must be filled out. Omissions may delay the onset of analysis.					Page ___ of ___							
CONTACT: <u>Mike Alward</u>					PHONE #: <u>343-5202</u>					Section 3							
PROJECT NAME: <u>Wasilla WWTP</u>					PROJECT/ PWSID/ PERMIT#:					Preservative							
REPORTS TO:					E-MAIL:					Analysis*							
INVOICE TO:					Profile #: <u># 348183 AD</u>					NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS							
QUOTE #:					P.O. #: <u>204700415</u>												
RESERVED for lab use		SAMPLE IDENTIFICATION		DATE mm/dd/yy		TIME HH:MM		MATRIX/MATRIX CODE		# CONTAINERS		Comp Grab MI (Multi-incremental)		Analysis*		REMARKS/LOC ID	
(1AE) SW1		SW1		7/29/20		1105		Water		5 6		- - - - -		- - - - -		- - - - -	
(2AE) SW2		SW2		↓		1137		↓		↓		- - - - -		- - - - -		- - - - -	
(3AE) SW3		SW3		↓		1221		↓		↓		- - - - -		- - - - -		- - - - -	
(4AE) SW4		SW4		↓		1433		↓		↓		- - - - -		- - - - -		- - - - -	
(5AE) SW5		SW5		↓		1450		↓		↓		- - - - -		- - - - -		- - - - -	
(6AE) SW6		SW6		↓		1315		↓		↓		- - - - -		- - - - -		- - - - -	
(7AE) SW7		SW7		↓		1256		↓		↓		- - - - -		- - - - -		- - - - -	
(8AE) EPP		EPP		↓		1515		↓		↓		- - - - -		- - - - -		- - - - -	
Relinquished By: (1)			Date <u>7/29/20</u>		Time		Received By:			Section 4 DOD Project? Yes No		Data Deliverable Requirements:					
Relinquished By: (2)			Date		Time		Received By:			Cooler ID:							
Relinquished By: (3)			Date		Time		Received By:			Requested Turnaround Time and/or Special Instructions:							
Relinquished By: (4)			Date <u>7-29-20</u>		Time <u>1655</u>		Received For Laboratory By:			Temp Blank °C: <u>10.4 D57</u>		Chain of Custody Seal: (Circle)					
or Ambient []										INTACT BROKEN <u>ABSENT</u>							
Delivery Method: Hand Delivery []										Commercial Delivery []							



e-Sample Receipt Form

SGS Workorder #:

1203764



1 2 0 3 7 6 4

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)?	No	Cooler ID: 1 @ 10.4 °C Therm. ID: D57
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.		Cooler ID: @ °C Therm. ID:
		Cooler ID: @ °C Therm. ID:
		Cooler ID: @ °C Therm. ID:
		Cooler ID: @ °C Therm. ID:
		Cooler ID: @ °C Therm. ID:
*If >6°C, were samples collected <8 hours ago?	Yes	
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?	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>
1203764001-A	Na2S2O3 for Chlorine Redu	OK			
1203764001-B	Na2S2O3 for Chlorine Redu	OK			
1203764001-C	No Preservative Required	OK			
1203764001-D	H2SO4 to pH < 2	OK			
1203764001-E	No Preservative Required	OK			
1203764002-A	Na2S2O3 for Chlorine Redu	OK			
1203764002-B	Na2S2O3 for Chlorine Redu	OK			
1203764002-C	No Preservative Required	OK			
1203764002-D	H2SO4 to pH < 2	OK			
1203764002-E	No Preservative Required	OK			
1203764003-A	Na2S2O3 for Chlorine Redu	OK			
1203764003-B	Na2S2O3 for Chlorine Redu	OK			
1203764003-C	No Preservative Required	OK			
1203764003-D	H2SO4 to pH < 2	OK			
1203764003-E	No Preservative Required	OK			
1203764004-A	Na2S2O3 for Chlorine Redu	OK			
1203764004-B	Na2S2O3 for Chlorine Redu	OK			
1203764004-C	No Preservative Required	OK			
1203764004-D	H2SO4 to pH < 2	OK			
1203764004-E	No Preservative Required	OK			
1203764005-A	Na2S2O3 for Chlorine Redu	OK			
1203764005-B	Na2S2O3 for Chlorine Redu	OK			
1203764005-C	No Preservative Required	OK			
1203764005-D	H2SO4 to pH < 2	OK			
1203764005-E	No Preservative Required	OK			
1203764006-A	Na2S2O3 for Chlorine Redu	OK			
1203764006-B	Na2S2O3 for Chlorine Redu	OK			
1203764006-C	No Preservative Required	OK			
1203764006-D	H2SO4 to pH < 2	OK			
1203764006-E	No Preservative Required	OK			
1203764007-A	Na2S2O3 for Chlorine Redu	OK			
1203764007-B	Na2S2O3 for Chlorine Redu	OK			
1203764007-C	No Preservative Required	OK			
1203764007-D	H2SO4 to pH < 2	OK			
1203764007-E	No Preservative Required	OK			
1203764008-A	Na2S2O3 for Chlorine Redu	OK			
1203764008-B	Na2S2O3 for Chlorine Redu	OK			
1203764008-C	No Preservative Required	OK			
1203764008-D	H2SO4 to pH < 2	OK			
1203764008-E	No Preservative Required	OK			

Container Condition Glossary

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

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

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

DM - The container was received damaged.

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

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

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: **1203795**

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: **1203795**

Project Name/Site: **Wasilla WWTP**

Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

1209530006MS (1572647) MS

4500P-B,E - Total Phosphorus - MS recovery is outside of QC criteria. Refer to LCS for accuracy requirements.

1209530006MSD (1572648) MSD

4500P-B,E - Total Phosphorus - MS/MSD RPD was outside of QC criteria. Refer to LCS/LCSD for precision requirement.

*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: 08/13/2020 9:35:00AM

Laboratory Qualifiers

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

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

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

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

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
B	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
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>
SW8	1203795001	07/30/2020	07/30/2020	Water (Surface, Eff., Ground)
SW9	1203795002	07/30/2020	07/30/2020	Water (Surface, Eff., Ground)
SW10	1203795003	07/30/2020	07/30/2020	Water (Surface, Eff., Ground)
SW11	1203795004	07/30/2020	07/30/2020	Water (Surface, Eff., Ground)
SW12	1203795005	07/30/2020	07/30/2020	Water (Surface, Eff., Ground)
SW13	1203795006	07/30/2020	07/30/2020	Water (Surface, Eff., Ground)
SW14	1203795007	07/30/2020	07/30/2020	Water (Surface, Eff., Ground)
SW15	1203795008	07/30/2020	07/30/2020	Water (Surface, Eff., Ground)
SW16	1203795009	07/30/2020	07/30/2020	Water (Surface, Eff., Ground)
Shaw	1203795010	07/30/2020	07/30/2020	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)

Print Date: 08/13/2020 9:35:04AM

Detectable Results Summary

Client Sample ID: **SW8**
 Lab Sample ID: 1203795001
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	1	MPN/100mL
Fecal Coliform	1.7	col/100mL
Total Coliform	1203	MPN/100mL
Ammonia-N	0.0830J	mg/L
Total Kjeldahl Nitrogen	0.571J	mg/L
Total Phosphorus	0.124	mg/L

Client Sample ID: **SW9**
 Lab Sample ID: 1203795002
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	22	MPN/100mL
Fecal Coliform	48	col/100mL
Total Coliform	770	MPN/100mL
Ammonia-N	0.491	mg/L
Total Kjeldahl Nitrogen	0.995J	mg/L
Total Phosphorus	0.224	mg/L

Client Sample ID: **SW10**
 Lab Sample ID: 1203795003
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Fecal Coliform	5.0	col/100mL
Total Coliform	548	MPN/100mL
Ammonia-N	0.851	mg/L
Total Kjeldahl Nitrogen	1.16	mg/L
Total Phosphorus	0.0257J	mg/L

Client Sample ID: **SW11**
 Lab Sample ID: 1203795004
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	18	MPN/100mL
Fecal Coliform	1.7	col/100mL
Total Coliform	613	MPN/100mL
Ammonia-N	0.0750J	mg/L
Total Phosphorus	0.185	mg/L

Client Sample ID: **SW12**
 Lab Sample ID: 1203795005
Microbiology Laboratory

Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	1280	MPN/100mL
Fecal Coliform	540	col/100mL
Total Coliform	9760	MPN/100mL
Ammonia-N	0.0773J	mg/L
Total Kjeldahl Nitrogen	0.391J	mg/L
Total Phosphorus	0.0662	mg/L

Detectable Results Summary

Client Sample ID: **SW13**
 Lab Sample ID: 1203795006
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	1080	MPN/100mL
Fecal Coliform	770	col/100mL
Total Coliform	14140	MPN/100mL
Ammonia-N	0.0584J	mg/L
Total Kjeldahl Nitrogen	0.429J	mg/L

Waters Department

Client Sample ID: **SW14**
 Lab Sample ID: 1203795007
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	93	MPN/100mL
Fecal Coliform	6.7	col/100mL
Total Coliform	1986	MPN/100mL
Ammonia-N	0.0766J	mg/L
Total Phosphorus	0.0424	mg/L

Waters Department

Client Sample ID: **SW15**
 Lab Sample ID: 1203795008
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Fecal Coliform	8.3	col/100mL
Total Coliform	9220	MPN/100mL
Ammonia-N	0.0749J	mg/L
Total Phosphorus	0.0265J	mg/L

Waters Department

Client Sample ID: **SW16**
 Lab Sample ID: 1203795009
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	2.66	mg/L
E. Coli	17330	MPN/100mL
Fecal Coliform	5700	col/100mL
Total Coliform	24200	MPN/100mL
Ammonia-N	0.102	mg/L
Total Kjeldahl Nitrogen	0.740J	mg/L
Total Phosphorus	0.100	mg/L

Waters Department

Client Sample ID: **Shaw**
 Lab Sample ID: 1203795010
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	122	MPN/100mL
Fecal Coliform	112	col/100mL
Total Coliform	580	MPN/100mL
Ammonia-N	0.0906J	mg/L

Waters Department



Results of SW8

Client Sample ID: **SW8**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203795001
Lab Project ID: 1203795

Collection Date: 07/30/20 14:28
Received Date: 07/30/20 16:59
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		07/31/20 13:37

Batch Information

Analytical Batch: BOD6675
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/31/20 13:37
Container ID: 1203795001-B

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	1.7	1.67	1.67	col/100mL	1		07/30/20 18:27

Batch Information

Analytical Batch: BTF18291
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/30/20 18:27
Container ID: 1203795001-D

<u>Parameter</u>	<u>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		07/30/20 19:18
Total Coliform	1203	1	1	MPN/100r	1		07/30/20 19:18

Batch Information

Analytical Batch: BTF18289
Analytical Method: SM21 9223B
Analyst: A.L
Analytical Date/Time: 07/30/20 19:18
Container ID: 1203795001-E



Results of SW8

Client Sample ID: **SW8**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1203795001
 Lab Project ID: 1203795

Collection Date: 07/30/20 14:28
 Received Date: 07/30/20 16:59
 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		07/31/20 11:58
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		07/31/20 11:58
Total Nitrate/Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		07/31/20 11:58

Batch Information

Analytical Batch: WIC6066
 Analytical Method: EPA 300.0
 Analyst: EWW
 Analytical Date/Time: 07/31/20 11:58
 Container ID: 1203795001-A

Prep Batch: WXX13374
 Prep Method: METHOD
 Prep Date/Time: 07/31/20 09:00
 Prep Initial Wt./Vol.: 10 mL
 Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0830 J	0.100	0.0310	mg/L	1		08/06/20 18:19

Batch Information

Analytical Batch: WDA4827
 Analytical Method: SM21 4500-NH3 G
 Analyst: A.A
 Analytical Date/Time: 08/06/20 18:19
 Container ID: 1203795001-C

Prep Batch: WXX13387
 Prep Method: METHOD
 Prep Date/Time: 08/06/20 16:00
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.124	0.0400	0.0120	mg/L	1		08/04/20 15:39

Batch Information

Analytical Batch: WDA4825
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 08/04/20 15:39
 Container ID: 1203795001-C

Prep Batch: WXX13380
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 08/04/20 12:42
 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	0.571 J	1.00	0.310	mg/L	1		08/12/20 12:01

Print Date: 08/13/2020 9:35:07AM

J flagging is activated

Results of SW8

Client Sample ID: **SW8**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203795001
Lab Project ID: 1203795

Collection Date: 07/30/20 14:28
Received Date: 07/30/20 16:59
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4831
Analytical Method: SM23 4500-N D
Analyst: EWW
Analytical Date/Time: 08/12/20 12:01
Container ID: 1203795001-C

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 08/11/20 11:16
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: 1203795002
Lab Project ID: 1203795

Collection Date: 07/30/20 14:45
Received Date: 07/30/20 16:59
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		07/31/20 13:37

Batch Information

Analytical Batch: BOD6675
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/31/20 13:37
Container ID: 1203795002-B

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	48	2.00	2.00	col/100mL	1		07/30/20 18:27

Batch Information

Analytical Batch: BTF18291
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/30/20 18:27
Container ID: 1203795002-D

<u>Parameter</u>	<u>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	22	1	1	MPN/100r	1		07/30/20 19:18
Total Coliform	770	1	1	MPN/100r	1		07/30/20 19:18

Batch Information

Analytical Batch: BTF18289
Analytical Method: SM21 9223B
Analyst: A.L
Analytical Date/Time: 07/30/20 19:18
Container ID: 1203795002-E



Results of SW9

Client Sample ID: **SW9**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203795002
Lab Project ID: 1203795

Collection Date: 07/30/20 14:45
Received Date: 07/30/20 16:59
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		07/31/20 12:17
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		07/31/20 12:17
Total Nitrate/Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		07/31/20 12:17

Batch Information

Analytical Batch: WIC6066
Analytical Method: EPA 300.0
Analyst: EWW
Analytical Date/Time: 07/31/20 12:17
Container ID: 1203795002-A

Prep Batch: WXX13374
Prep Method: METHOD
Prep Date/Time: 07/31/20 09:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.491	0.100	0.0310	mg/L	1		08/06/20 18:21

Batch Information

Analytical Batch: WDA4827
Analytical Method: SM21 4500-NH3 G
Analyst: A.A
Analytical Date/Time: 08/06/20 18:21
Container ID: 1203795002-C

Prep Batch: WXX13387
Prep Method: METHOD
Prep Date/Time: 08/06/20 16:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.224	0.0400	0.0120	mg/L	1		08/04/20 15:40

Batch Information

Analytical Batch: WDA4825
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 08/04/20 15:40
Container ID: 1203795002-C

Prep Batch: WXX13380
Prep Method: SM21 4500P-B,E
Prep Date/Time: 08/04/20 12:42
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	0.995 J	1.00	0.310	mg/L	1		08/12/20 12:02

Results of SW9

Client Sample ID: **SW9**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203795002
Lab Project ID: 1203795

Collection Date: 07/30/20 14:45
Received Date: 07/30/20 16:59
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4831
Analytical Method: SM23 4500-N D
Analyst: EWW
Analytical Date/Time: 08/12/20 12:02
Container ID: 1203795002-C

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 08/11/20 11:16
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: 1203795003
Lab Project ID: 1203795

Collection Date: 07/30/20 15:04
Received Date: 07/30/20 16:59
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		07/31/20 13:37

Batch Information

Analytical Batch: BOD6675
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/31/20 13:37
Container ID: 1203795003-B

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	5.0	1.67	1.67	col/100mL	1		07/30/20 18:27

Batch Information

Analytical Batch: BTF18291
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/30/20 18:27
Container ID: 1203795003-D

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	1 U	1	1	MPN/100r	1		07/30/20 19:18
Total Coliform	548	1	1	MPN/100r	1		07/30/20 19:18

Batch Information

Analytical Batch: BTF18289
Analytical Method: SM21 9223B
Analyst: A.L
Analytical Date/Time: 07/30/20 19:18
Container ID: 1203795003-E



Results of SW10

Client Sample ID: **SW10**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203795003
Lab Project ID: 1203795

Collection Date: 07/30/20 15:04
Received Date: 07/30/20 16:59
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		07/31/20 12:36
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		07/31/20 12:36
Total Nitrate/Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		07/31/20 12:36

Batch Information

Analytical Batch: WIC6066	Prep Batch: WXX13374
Analytical Method: EPA 300.0	Prep Method: METHOD
Analyst: EWW	Prep Date/Time: 07/31/20 09:00
Analytical Date/Time: 07/31/20 12:36	Prep Initial Wt./Vol.: 10 mL
Container ID: 1203795003-A	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	0.851	0.100	0.0310	mg/L	1		08/06/20 18:23

Batch Information

Analytical Batch: WDA4827	Prep Batch: WXX13387
Analytical Method: SM21 4500-NH3 G	Prep Method: METHOD
Analyst: A.A	Prep Date/Time: 08/06/20 16:00
Analytical Date/Time: 08/06/20 18:23	Prep Initial Wt./Vol.: 6 mL
Container ID: 1203795003-C	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	0.0257 J	0.0400	0.0120	mg/L	1		08/04/20 15:42

Batch Information

Analytical Batch: WDA4825	Prep Batch: WXX13380
Analytical Method: SM21 4500P-B,E	Prep Method: SM21 4500P-B,E
Analyst: EWW	Prep Date/Time: 08/04/20 12:42
Analytical Date/Time: 08/04/20 15:42	Prep Initial Wt./Vol.: 25 mL
Container ID: 1203795003-C	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	1.16	1.00	0.310	mg/L	1		08/12/20 12:03

Results of SW10

Client Sample ID: **SW10**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203795003
Lab Project ID: 1203795

Collection Date: 07/30/20 15:04
Received Date: 07/30/20 16:59
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4831
Analytical Method: SM23 4500-N D
Analyst: EWW
Analytical Date/Time: 08/12/20 12:03
Container ID: 1203795003-C

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 08/11/20 11:16
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL



Results of SW11

Client Sample ID: **SW11**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203795004
Lab Project ID: 1203795

Collection Date: 07/30/20 10:25
Received Date: 07/30/20 16:59
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		07/31/20 13:37

Batch Information

Analytical Batch: BOD6675
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/31/20 13:37
Container ID: 1203795004-B

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	1.7	1.67	1.67	col/100mL	1		07/30/20 18:15

Batch Information

Analytical Batch: BTF18291
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/30/20 18:15
Container ID: 1203795004-D

<u>Parameter</u>	<u>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	18	1	1	MPN/100r	1		07/30/20 19:18
Total Coliform	613	1	1	MPN/100r	1		07/30/20 19:18

Batch Information

Analytical Batch: BTF18289
Analytical Method: SM21 9223B
Analyst: A.L
Analytical Date/Time: 07/30/20 19:18
Container ID: 1203795004-E



Results of SW11

Client Sample ID: SW11
Client Project ID: Wasilla WWTP
Lab Sample ID: 1203795004
Lab Project ID: 1203795

Collection Date: 07/30/20 10:25
Received Date: 07/30/20 16:59
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: WIC6066
Analytical Method: EPA 300.0
Analyst: EWW
Analytical Date/Time: 07/31/20 12:55
Container ID: 1203795004-A
Prep Batch: WXX13374
Prep Method: METHOD
Prep Date/Time: 07/31/20 09:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

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

Batch Information

Analytical Batch: WDA4827
Analytical Method: SM21 4500-NH3 G
Analyst: A.A
Analytical Date/Time: 08/06/20 18:24
Container ID: 1203795004-C
Prep Batch: WXX13387
Prep Method: METHOD
Prep Date/Time: 08/06/20 16:00
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: WDA4825
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 08/04/20 15:45
Container ID: 1203795004-C
Prep Batch: WXX13380
Prep Method: SM21 4500P-B,E
Prep Date/Time: 08/04/20 12:42
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: 1203795004
Lab Project ID: 1203795

Collection Date: 07/30/20 10:25
Received Date: 07/30/20 16:59
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4831
Analytical Method: SM23 4500-N D
Analyst: EWW
Analytical Date/Time: 08/12/20 12:05
Container ID: 1203795004-C

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 08/11/20 11:16
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: 1203795005
Lab Project ID: 1203795

Collection Date: 07/30/20 10:55
Received Date: 07/30/20 16:59
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		07/31/20 13:37

Batch Information

Analytical Batch: BOD6675
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/31/20 13:37
Container ID: 1203795005-B

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	540	10.0	10.0	col/100mL	1		07/30/20 18:15

Batch Information

Analytical Batch: BTF18291
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/30/20 18:15
Container ID: 1203795005-D

<u>Parameter</u>	<u>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	1280	20	20	MPN/100r	20		07/30/20 19:18
Total Coliform	9760	20	20	MPN/100r	20		07/30/20 19:18

Batch Information

Analytical Batch: BTF18289
Analytical Method: SM21 9223B
Analyst: A.L
Analytical Date/Time: 07/30/20 19:18
Container ID: 1203795005-E



Results of SW12

Client Sample ID: SW12
Client Project ID: Wasilla WWTP
Lab Sample ID: 1203795005
Lab Project ID: 1203795

Collection Date: 07/30/20 10:55
Received Date: 07/30/20 16:59
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: WIC6066
Analytical Method: EPA 300.0
Analyst: EWW
Analytical Date/Time: 07/31/20 13:33
Container ID: 1203795005-A
Prep Batch: WXX13374
Prep Method: METHOD
Prep Date/Time: 07/31/20 09:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

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

Batch Information

Analytical Batch: WDA4827
Analytical Method: SM21 4500-NH3 G
Analyst: A.A
Analytical Date/Time: 08/06/20 18:26
Container ID: 1203795005-C
Prep Batch: WXX13387
Prep Method: METHOD
Prep Date/Time: 08/06/20 16:00
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: WDA4825
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 08/04/20 15:46
Container ID: 1203795005-C
Prep Batch: WXX13380
Prep Method: SM21 4500P-B,E
Prep Date/Time: 08/04/20 12:42
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: 1203795005
Lab Project ID: 1203795

Collection Date: 07/30/20 10:55
Received Date: 07/30/20 16:59
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4831
Analytical Method: SM23 4500-N D
Analyst: EWW
Analytical Date/Time: 08/12/20 12:09
Container ID: 1203795005-C

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 08/11/20 11:16
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: 1203795006
Lab Project ID: 1203795

Collection Date: 07/30/20 11:15
Received Date: 07/30/20 16:59
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		07/31/20 13:37

Batch Information

Analytical Batch: BOD6675
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/31/20 13:37
Container ID: 1203795006-B

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	770	10.0	10.0	col/100mL	1		07/30/20 18:15

Batch Information

Analytical Batch: BTF18291
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/30/20 18:15
Container ID: 1203795006-D

<u>Parameter</u>	<u>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	1080	10	10	MPN/100r	10		07/30/20 19:18
Total Coliform	14140	10	10	MPN/100r	10		07/30/20 19:18

Batch Information

Analytical Batch: BTF18289
Analytical Method: SM21 9223B
Analyst: A.L
Analytical Date/Time: 07/30/20 19:18
Container ID: 1203795006-E



Results of SW13

Client Sample ID: **SW13**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203795006
Lab Project ID: 1203795

Collection Date: 07/30/20 11:15
Received Date: 07/30/20 16:59
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		07/31/20 13:52
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		07/31/20 13:52
Total Nitrate/Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		07/31/20 13:52

Batch Information

Analytical Batch: WIC6066	Prep Batch: WXX13374
Analytical Method: EPA 300.0	Prep Method: METHOD
Analyst: EWW	Prep Date/Time: 07/31/20 09:00
Analytical Date/Time: 07/31/20 13:52	Prep Initial Wt./Vol.: 10 mL
Container ID: 1203795006-A	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	0.0584 J	0.100	0.0310	mg/L	1		08/06/20 18:31

Batch Information

Analytical Batch: WDA4827	Prep Batch: WXX13387
Analytical Method: SM21 4500-NH3 G	Prep Method: METHOD
Analyst: A.A	Prep Date/Time: 08/06/20 16:00
Analytical Date/Time: 08/06/20 18:31	Prep Initial Wt./Vol.: 6 mL
Container ID: 1203795006-C	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	0.0200 U	0.0400	0.0120	mg/L	1		08/04/20 15:47

Batch Information

Analytical Batch: WDA4825	Prep Batch: WXX13380
Analytical Method: SM21 4500P-B,E	Prep Method: SM21 4500P-B,E
Analyst: EWW	Prep Date/Time: 08/04/20 12:42
Analytical Date/Time: 08/04/20 15:47	Prep Initial Wt./Vol.: 25 mL
Container ID: 1203795006-C	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	0.429 J	1.00	0.310	mg/L	1		08/12/20 12:10

Results of SW13

Client Sample ID: **SW13**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203795006
Lab Project ID: 1203795

Collection Date: 07/30/20 11:15
Received Date: 07/30/20 16:59
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4831
Analytical Method: SM23 4500-N D
Analyst: EWW
Analytical Date/Time: 08/12/20 12:10
Container ID: 1203795006-C

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 08/11/20 11:16
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: 1203795007
Lab Project ID: 1203795

Collection Date: 07/30/20 12:23
Received Date: 07/30/20 16:59
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		07/31/20 13:37

Batch Information

Analytical Batch: BOD6675
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/31/20 13:37
Container ID: 1203795007-B

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	6.7	1.67	1.67	col/100mL	1		07/30/20 18:15

Batch Information

Analytical Batch: BTF18291
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/30/20 18:15
Container ID: 1203795007-D

<u>Parameter</u>	<u>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	93	1	1	MPN/100r	1		07/30/20 19:18
Total Coliform	1986	1	1	MPN/100r	1		07/30/20 19:18

Batch Information

Analytical Batch: BTF18289
Analytical Method: SM21 9223B
Analyst: A.L
Analytical Date/Time: 07/30/20 19:18
Container ID: 1203795007-E

Print Date: 08/13/2020 9:35:07AM

J flagging is activated



Results of SW14

Client Sample ID: SW14
Client Project ID: Wasilla WWTP
Lab Sample ID: 1203795007
Lab Project ID: 1203795

Collection Date: 07/30/20 12:23
Received Date: 07/30/20 16:59
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: WIC6066
Analytical Method: EPA 300.0
Analyst: EWW
Analytical Date/Time: 07/31/20 14:49
Container ID: 1203795007-A
Prep Batch: WXX13374
Prep Method: METHOD
Prep Date/Time: 07/31/20 09:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

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

Batch Information

Analytical Batch: WDA4827
Analytical Method: SM21 4500-NH3 G
Analyst: A.A
Analytical Date/Time: 08/06/20 18:33
Container ID: 1203795007-C
Prep Batch: WXX13387
Prep Method: METHOD
Prep Date/Time: 08/06/20 16:00
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: WDA4825
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 08/04/20 15:48
Container ID: 1203795007-C
Prep Batch: WXX13380
Prep Method: SM21 4500P-B,E
Prep Date/Time: 08/04/20 12:42
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 SW14

Client Sample ID: **SW14**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203795007
Lab Project ID: 1203795

Collection Date: 07/30/20 12:23
Received Date: 07/30/20 16:59
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4831
Analytical Method: SM23 4500-N D
Analyst: EWW
Analytical Date/Time: 08/12/20 12:11
Container ID: 1203795007-C

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 08/11/20 11:16
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: 1203795008
Lab Project ID: 1203795

Collection Date: 07/30/20 12:03
Received Date: 07/30/20 16:59
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		07/31/20 13:37

Batch Information

Analytical Batch: BOD6675
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/31/20 13:37
Container ID: 1203795008-B

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	8.3	1.67	1.67	col/100mL	1		07/30/20 18:15

Batch Information

Analytical Batch: BTF18291
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/30/20 18:15
Container ID: 1203795008-D

<u>Parameter</u>	<u>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 U	20	20	MPN/100r	20		07/30/20 19:18
Total Coliform	9220	20	20	MPN/100r	20		07/30/20 19:18

Batch Information

Analytical Batch: BTF18289
Analytical Method: SM21 9223B
Analyst: A.L
Analytical Date/Time: 07/30/20 19:18
Container ID: 1203795008-E



Results of SW15

Client Sample ID: SW15
Client Project ID: Wasilla WWTP
Lab Sample ID: 1203795008
Lab Project ID: 1203795

Collection Date: 07/30/20 12:03
Received Date: 07/30/20 16:59
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: WIC6066
Analytical Method: EPA 300.0
Analyst: EWW
Analytical Date/Time: 07/31/20 15:08
Container ID: 1203795008-A
Prep Batch: WXX13374
Prep Method: METHOD
Prep Date/Time: 07/31/20 09:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

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

Batch Information

Analytical Batch: WDA4827
Analytical Method: SM21 4500-NH3 G
Analyst: A.A
Analytical Date/Time: 08/06/20 18:34
Container ID: 1203795008-C
Prep Batch: WXX13387
Prep Method: METHOD
Prep Date/Time: 08/06/20 16:00
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: WDA4825
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 08/04/20 15:49
Container ID: 1203795008-C
Prep Batch: WXX13380
Prep Method: SM21 4500P-B,E
Prep Date/Time: 08/04/20 12:42
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: 1203795008
Lab Project ID: 1203795

Collection Date: 07/30/20 12:03
Received Date: 07/30/20 16:59
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4831
Analytical Method: SM23 4500-N D
Analyst: EWW
Analytical Date/Time: 08/12/20 12:13
Container ID: 1203795008-C

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 08/11/20 11:16
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: 1203795009
Lab Project ID: 1203795

Collection Date: 07/30/20 11:37
Received Date: 07/30/20 16:59
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	2.66	2.00	2.00	mg/L	1		07/31/20 13:37

Batch Information

Analytical Batch: BOD6675
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/31/20 13:37
Container ID: 1203795009-B

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	5700	10.0	10.0	col/100mL	1		07/30/20 18:15

Batch Information

Analytical Batch: BTF18291
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/30/20 18:15
Container ID: 1203795009-D

<u>Parameter</u>	<u>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	17330	10	10	MPN/100r	10		07/30/20 19:18
Total Coliform	24200	10	10	MPN/100r	10		07/30/20 19:18

Batch Information

Analytical Batch: BTF18289
Analytical Method: SM21 9223B
Analyst: A.L
Analytical Date/Time: 07/30/20 19:18
Container ID: 1203795009-E



Results of SW16

Client Sample ID: **SW16**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1203795009
 Lab Project ID: 1203795

Collection Date: 07/30/20 11:37
 Received Date: 07/30/20 16:59
 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		07/31/20 15:27
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		07/31/20 15:27
Total Nitrate/Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		07/31/20 15:27

Batch Information

Analytical Batch: WIC6066
 Analytical Method: EPA 300.0
 Analyst: EWW
 Analytical Date/Time: 07/31/20 15:27
 Container ID: 1203795009-A

Prep Batch: WXX13374
 Prep Method: METHOD
 Prep Date/Time: 07/31/20 09:00
 Prep Initial Wt./Vol.: 10 mL
 Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.102	0.100	0.0310	mg/L	1		08/06/20 18:36

Batch Information

Analytical Batch: WDA4827
 Analytical Method: SM21 4500-NH3 G
 Analyst: A.A
 Analytical Date/Time: 08/06/20 18:36
 Container ID: 1203795009-C

Prep Batch: WXX13387
 Prep Method: METHOD
 Prep Date/Time: 08/06/20 16:00
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.100	0.0400	0.0120	mg/L	1		08/04/20 15:57

Batch Information

Analytical Batch: WDA4825
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 08/04/20 15:57
 Container ID: 1203795009-C

Prep Batch: WXX13381
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 08/04/20 12:42
 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	0.740 J	1.00	0.310	mg/L	1		08/12/20 12:14

Results of SW16

Client Sample ID: **SW16**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203795009
Lab Project ID: 1203795

Collection Date: 07/30/20 11:37
Received Date: 07/30/20 16:59
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4831
Analytical Method: SM23 4500-N D
Analyst: EWW
Analytical Date/Time: 08/12/20 12:14
Container ID: 1203795009-C

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 08/11/20 11:16
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL



Results of Shaw

Client Sample ID: **Shaw**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203795010
Lab Project ID: 1203795

Collection Date: 07/30/20 13:10
Received Date: 07/30/20 16:59
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		07/31/20 13:37

Batch Information

Analytical Batch: BOD6675
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/31/20 13:37
Container ID: 1203795010-B

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	112	1.67	1.67	col/100mL	1		07/30/20 18:15

Batch Information

Analytical Batch: BTF18291
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/30/20 18:15
Container ID: 1203795010-D

<u>Parameter</u>	<u>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	122	1	1	MPN/100r	1		07/30/20 19:18
Total Coliform	580	1	1	MPN/100r	1		07/30/20 19:18

Batch Information

Analytical Batch: BTF18289
Analytical Method: SM21 9223B
Analyst: A.L
Analytical Date/Time: 07/30/20 19:18
Container ID: 1203795010-E



Results of Shaw

Client Sample ID: **Shaw**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1203795010
 Lab Project ID: 1203795

Collection Date: 07/30/20 13:10
 Received Date: 07/30/20 16:59
 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		07/31/20 15:46
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		07/31/20 15:46
Total Nitrate/Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		07/31/20 15:46

Batch Information

Analytical Batch: WIC6066
 Analytical Method: EPA 300.0
 Analyst: EWW
 Analytical Date/Time: 07/31/20 15:46
 Container ID: 1203795010-A

Prep Batch: WXX13374
 Prep Method: METHOD
 Prep Date/Time: 07/31/20 09:00
 Prep Initial Wt./Vol.: 10 mL
 Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0906 J	0.100	0.0310	mg/L	1		08/06/20 18:38

Batch Information

Analytical Batch: WDA4827
 Analytical Method: SM21 4500-NH3 G
 Analyst: A.A
 Analytical Date/Time: 08/06/20 18:38
 Container ID: 1203795010-C

Prep Batch: WXX13387
 Prep Method: METHOD
 Prep Date/Time: 08/06/20 16:00
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0200 U	0.0400	0.0120	mg/L	1		08/04/20 15:58

Batch Information

Analytical Batch: WDA4825
 Analytical Method: SM21 4500P-B,E
 Analyst: EWW
 Analytical Date/Time: 08/04/20 15:58
 Container ID: 1203795010-C

Prep Batch: WXX13381
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 08/04/20 12:42
 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	0.500 U	1.00	0.310	mg/L	1		08/12/20 12:15

Print Date: 08/13/2020 9:35:07AM

J flagging is activated

Results of **Shaw**

Client Sample ID: **Shaw**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203795010
Lab Project ID: 1203795

Collection Date: 07/30/20 13:10
Received Date: 07/30/20 16:59
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4831
Analytical Method: SM23 4500-N D
Analyst: EWW
Analytical Date/Time: 08/12/20 12:15
Container ID: 1203795010-C

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 08/11/20 11:16
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Method Blank

Blank ID: MB for HBN 1809632 [BOD/6675]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1571941

QC for Samples:

1203795001, 1203795002, 1203795003, 1203795004, 1203795005, 1203795006, 1203795007, 1203795008, 1203795009, 1203795010

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: BOD6675

Analytical Method: SM21 5210B

Instrument:

Analyst: A.L

Analytical Date/Time: 7/31/2020 1:37:17PM

Print Date: 08/13/2020 9:35:11AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203795 [BOD6675]

Blank Spike Lab ID: 1571942

Date Analyzed: 07/31/2020 13:37

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203795001, 1203795002, 1203795003, 1203795004, 1203795005, 1203795006, 1203795007, 1203795008, 1203795009, 1203795010

Results by SM21 5210B

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Biochemical Oxygen Demand	198	192	97	(84.6-115.4

Batch Information

Analytical Batch: **BOD6675**

Analytical Method: **SM21 5210B**

Instrument:

Analyst: **A.L**

Print Date: 08/13/2020 9:35:14AM



Method Blank

Blank ID: MB for HBN 1809574 [BTF/18289]
Blank Lab ID: 1571688

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1203795001, 1203795002, 1203795003, 1203795004, 1203795005, 1203795006, 1203795007, 1203795008, 1203795009, 1203795010

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: BTF18289
Analytical Method: SM21 9223B
Instrument:
Analyst: A.L
Analytical Date/Time: 7/30/2020 3:20:00PM

Print Date: 08/13/2020 9:35:16AM



Method Blank

Blank ID: MB for HBN 1809595 [BTF/18291]
Blank Lab ID: 1571774

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1203795001, 1203795002, 1203795003, 1203795004, 1203795005, 1203795006, 1203795007, 1203795008, 1203795009, 1203795010

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: BTF18291
Analytical Method: SM21 9222D
Instrument:
Analyst: A.L
Analytical Date/Time: 7/30/2020 6:27:09PM

Print Date: 08/13/2020 9:35:20AM

Method Blank

Blank ID: MB for HBN 1809658 [WXX/13374]
 Blank Lab ID: 1572039

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1203795001, 1203795002, 1203795003, 1203795004, 1203795005, 1203795006, 1203795007, 1203795008, 1203795009, 1203795010

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: WIC6066
 Analytical Method: EPA 300.0
 Instrument: 930 Metrohm compact IC flex
 Analyst: EWW
 Analytical Date/Time: 7/31/2020 11:20:30AM

Prep Batch: WXX13374
 Prep Method: METHOD
 Prep Date/Time: 7/31/2020 9:00:00AM
 Prep Initial Wt./Vol.: 10 mL
 Prep Extract Vol: 10 mL

Print Date: 08/13/2020 9:35:24AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203795 [WXX13374]
 Blank Spike Lab ID: 1572040
 Date Analyzed: 07/31/2020 11:39

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203795001, 1203795002, 1203795003, 1203795004, 1203795005, 1203795006, 1203795007,
 1203795008, 1203795009, 1203795010

Results by EPA 300.0

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Nitrate-N	5	4.91	98	(90-110)
Nitrite-N	5	5.12	102	(90-110)
Total Nitrate/Nitrite-N	10	10.0	100	(90-110)

Batch Information

Analytical Batch: **WIC6066**
 Analytical Method: **EPA 300.0**
 Instrument: **930 Metrohm compact IC flex**
 Analyst: **EWV**

Prep Batch: **WXX13374**
 Prep Method: **METHOD**
 Prep Date/Time: **07/31/2020 09:00**
 Spike Init Wt./Vol.: 5 mg/L Extract Vol: 10 mL
 Dupe Init Wt./Vol.: Extract Vol:

Print Date: 08/13/2020 9:35:27AM

Matrix Spike Summary

Original Sample ID: 1572041
 MS Sample ID: 1572042 MS
 MSD Sample ID:

Analysis Date: 07/31/2020 12:55
 Analysis Date: 07/31/2020 13:14
 Analysis Date:
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203795001, 1203795002, 1203795003, 1203795004, 1203795005, 1203795006, 1203795007, 1203795008, 1203795009, 1203795010

Results by EPA 300.0

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Nitrate-N	0.100U	5.00	4.88	98				90-110		
Nitrite-N	0.100U	5.00	4.71	94				90-110		

Batch Information

Analytical Batch: WIC6066
 Analytical Method: EPA 300.0
 Instrument: 930 Metrohm compact IC flex
 Analyst: EWW
 Analytical Date/Time: 7/31/2020 1:14:31PM

Prep Batch: WXX13374
 Prep Method: EPA 300.0 Extraction Waters/Liquids
 Prep Date/Time: 7/31/2020 9:00:00AM
 Prep Initial Wt./Vol.: 10.00mL
 Prep Extract Vol: 10.00mL

Print Date: 08/13/2020 9:35:28AM

Matrix Spike Summary

Original Sample ID: 1572043
 MS Sample ID: 1572044 MS
 MSD Sample ID:

Analysis Date: 07/31/2020 16:05
 Analysis Date: 07/31/2020 16:24
 Analysis Date:
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203795001, 1203795002, 1203795003, 1203795004, 1203795005, 1203795006, 1203795007, 1203795008, 1203795009, 1203795010

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	0.647	5.00	5.55	98				90-110		
Nitrite-N	0.100U	5.00	4.74	95				90-110		

Batch Information

Analytical Batch: WIC6066
 Analytical Method: EPA 300.0
 Instrument: 930 Metrohm compact IC flex
 Analyst: EWW
 Analytical Date/Time: 7/31/2020 4:24:49PM

Prep Batch: WXX13374
 Prep Method: EPA 300.0 Extraction Waters/Liquids
 Prep Date/Time: 7/31/2020 9:00:00AM
 Prep Initial Wt./Vol.: 10.00mL
 Prep Extract Vol: 10.00mL

Print Date: 08/13/2020 9:35:28AM



Method Blank

Blank ID: MB for HBN 1809805 [WXX/13380]
Blank Lab ID: 1572639

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1203795001, 1203795002, 1203795003, 1203795004, 1203795005, 1203795006, 1203795007, 1203795008

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: WDA4825
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 8/4/2020 2:13:05PM

Prep Batch: WXX13380
Prep Method: SM21 4500P-B,E
Prep Date/Time: 8/4/2020 11:36:00AM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 08/13/2020 9:35:30AM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1203795 [WXX13380]
 Blank Spike Lab ID: 1572640
 Date Analyzed: 08/04/2020 14:14

Spike Duplicate ID: LCSD for HBN 1203795 [WXX13380]
 Spike Duplicate Lab ID: 1572641
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203795001, 1203795002, 1203795003, 1203795004, 1203795005, 1203795006, 1203795007, 1203795008

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	0.208	104	0.2	0.206	103	(75-125)	1.10	(< 25)

Batch Information

Analytical Batch: WDA4825
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: EWW

Prep Batch: WXX13380
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 08/04/2020 11:36
 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: 08/13/2020 9:35:32AM

Matrix Spike Summary

Original Sample ID: 1203564004
 MS Sample ID: 1572642 MS
 MSD Sample ID: 1572643 MSD

Analysis Date: 08/04/2020 14:15
 Analysis Date: 08/04/2020 14:16
 Analysis Date: 08/04/2020 14:19
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203795001, 1203795002, 1203795003, 1203795004, 1203795005, 1203795006, 1203795007, 1203795008

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	0.0200U	0.200	.203	101	0.200	0.202	101	75-125	0.40	(< 25)

Batch Information

Analytical Batch: WDA4825
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: EWW
 Analytical Date/Time: 8/4/2020 2:16:57PM

Prep Batch: WXX13380
 Prep Method: Total Phosphorus (W) Ext.
 Prep Date/Time: 8/4/2020 11:36:00AM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL

Method Blank

Blank ID: MB for HBN 1809806 [WXX/13381]

Blank Lab ID: 1572644

QC for Samples:

1203795009, 1203795010

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: WDA4825

Analytical Method: SM21 4500P-B,E

Instrument: Discrete Analyzer 2

Analyst: EWW

Analytical Date/Time: 8/4/2020 3:50:11PM

Prep Batch: WXX13381

Prep Method: SM21 4500P-B,E

Prep Date/Time: 8/4/2020 12:42:00PM

Prep Initial Wt./Vol.: 25 mL

Prep Extract Vol: 25 mL

Print Date: 08/13/2020 9:35:36AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203795 [WXX13381]
 Blank Spike Lab ID: 1572645
 Date Analyzed: 08/04/2020 15:51

Spike Duplicate ID: LCSD for HBN 1203795
 [WXX13381]
 Spike Duplicate Lab ID: 1572646
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203795009, 1203795010

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	0.194	97	0.2	0.195	98	(75-125)	0.93	(< 25)

Batch Information

Analytical Batch: **WDA4825**
 Analytical Method: **SM21 4500P-B,E**
 Instrument: **Discrete Analyzer 2**
 Analyst: **EWV**

Prep Batch: **WXX13381**
 Prep Method: **SM21 4500P-B,E**
 Prep Date/Time: **08/04/2020 12:42**
 Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL
 Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

Print Date: 08/13/2020 9:35:38AM

Matrix Spike Summary

Original Sample ID: 1209530006
 MS Sample ID: 1572647 MS
 MSD Sample ID: 1572648 MSD

Analysis Date: 08/04/2020 16:12
 Analysis Date: 08/04/2020 16:13
 Analysis Date: 08/04/2020 16:14
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203795009, 1203795010

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	0.0200U	0.200	.27	135 *	0.200	0.204	102	75-125	27.90	* (< 25)

Batch Information

Analytical Batch: WDA4825
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: EWW
 Analytical Date/Time: 8/4/2020 4:13:41PM

Prep Batch: WXX13381
 Prep Method: Total Phosphorus (W) Ext.
 Prep Date/Time: 8/4/2020 12:42:00PM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL

Method Blank

Blank ID: MB for HBN 1809951 [WXX/13387]
Blank Lab ID: 1573234

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1203795001, 1203795002, 1203795003, 1203795004, 1203795005, 1203795006, 1203795007, 1203795008, 1203795009, 1203795010

Results by SM21 4500-NH3 G

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Ammonia-N	0.0571J	0.100	0.0310	mg/L

Batch Information

Analytical Batch: WDA4827
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: A.A
Analytical Date/Time: 8/6/2020 6:14:47PM

Prep Batch: WXX13387
Prep Method: METHOD
Prep Date/Time: 8/6/2020 4:00:00PM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Print Date: 08/13/2020 9:35:41AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203795 [WXX13387]
 Blank Spike Lab ID: 1573235
 Date Analyzed: 08/06/2020 18:16

Spike Duplicate ID: LCSD for HBN 1203795 [WXX13387]
 Spike Duplicate Lab ID: 1573236
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203795001, 1203795002, 1203795003, 1203795004, 1203795005, 1203795006, 1203795007, 1203795008, 1203795009, 1203795010

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	1.24	124	1	1.15	115	(75-125)	7.60	(< 25)

Batch Information

Analytical Batch: **WDA4827**
 Analytical Method: **SM21 4500-NH3 G**
 Instrument: **Discrete Analyzer 2**
 Analyst: **A.A**

Prep Batch: **WXX13387**
 Prep Method: **METHOD**
 Prep Date/Time: **08/06/2020 16:00**
 Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
 Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

Matrix Spike Summary

Original Sample ID: 1203839007
 MS Sample ID: 1573237 MS
 MSD Sample ID: 1573238 MSD

Analysis Date: 08/06/2020 18:39
 Analysis Date: 08/06/2020 18:41
 Analysis Date: 08/06/2020 18:43
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203795001, 1203795002, 1203795003, 1203795004, 1203795005, 1203795006, 1203795007, 1203795008, 1203795009, 1203795010

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	0.103	1.00	1.01	91	1.00	1.04	94	75-125	3.00	(< 25)

Batch Information

Analytical Batch: WDA4827
 Analytical Method: SM21 4500-NH3 G
 Instrument: Discrete Analyzer 2
 Analyst: A.A
 Analytical Date/Time: 8/6/2020 6:41:30PM

Prep Batch: WXX13387
 Prep Method: Ammonia by SM21 4500F prep (W)
 Prep Date/Time: 8/6/2020 4:00:00PM
 Prep Initial Wt./Vol.: 6.00mL
 Prep Extract Vol: 6.00mL

Method Blank

Blank ID: MB for HBN 1810185 [WXX/13397]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1574195

QC for Samples:

1203795001, 1203795002, 1203795003, 1203795004, 1203795005, 1203795006, 1203795007, 1203795008, 1203795009, 1203795010

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: WDA4831
Analytical Method: SM23 4500-N D
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 8/12/2020 11:37:48AM

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 8/11/2020 11:16:00AM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 08/13/2020 9:35:46AM

Method Blank

Blank ID: MB for HBN 1810185 [WXX/13397]
Blank Lab ID: 1574200

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1203795001, 1203795002, 1203795003, 1203795004, 1203795005, 1203795006, 1203795007, 1203795008, 1203795009, 1203795010

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: WDA4831
Analytical Method: SM23 4500-N D
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 8/12/2020 12:18:16PM

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 8/11/2020 11:16:00AM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 08/13/2020 9:35:46AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203795 [WXX13397]
 Blank Spike Lab ID: 1574196
 Date Analyzed: 08/12/2020 11:39

Spike Duplicate ID: LCSD for HBN 1203795 [WXX13397]
 Spike Duplicate Lab ID: 1574197
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203795001, 1203795002, 1203795003, 1203795004, 1203795005, 1203795006, 1203795007, 1203795008, 1203795009, 1203795010

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	3.72	93	4	3.77	94	(75-125)	1.30	(< 25)

Batch Information

Analytical Batch: **WDA4831**
 Analytical Method: **SM23 4500-N D**
 Instrument: **Discrete Analyzer 2**
 Analyst: **EWV**

Prep Batch: **WXX13397**
 Prep Method: **METHOD**
 Prep Date/Time: **08/11/2020 11:16**
 Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL
 Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

Print Date: 08/13/2020 9:35:48AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203795 [WXX13397]
 Blank Spike Lab ID: 1574201
 Date Analyzed: 08/12/2020 12:19

Spike Duplicate ID: LCSD for HBN 1203795
 [WXX13397]
 Spike Duplicate Lab ID: 1574202
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203795001, 1203795002, 1203795003, 1203795004, 1203795005, 1203795006, 1203795007,
 1203795008, 1203795009, 1203795010

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	3.59	90	4	3.66	91	(75-125)	1.70	(< 25)

Batch Information

Analytical Batch: **WDA4831**
 Analytical Method: **SM23 4500-N D**
 Instrument: **Discrete Analyzer 2**
 Analyst: **EWV**

Prep Batch: **WXX13397**
 Prep Method: **METHOD**
 Prep Date/Time: **08/11/2020 11:16**
 Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL
 Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

Print Date: 08/13/2020 9:35:48AM

Matrix Spike Summary

Original Sample ID: 1203764001
 MS Sample ID: 1574198 MS
 MSD Sample ID: 1574199 MSD

Analysis Date: 08/12/2020 11:45
 Analysis Date: 08/12/2020 11:46
 Analysis Date: 08/12/2020 11:48
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203795001, 1203795002, 1203795003, 1203795004, 1203795005, 1203795006, 1203795007, 1203795008, 1203795009, 1203795010

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	1.59	4.00	4.83	81	4.00	5.52	98	75-125	13.30	(< 25)

Batch Information

Analytical Batch: WDA4831
 Analytical Method: SM23 4500-N D
 Instrument: Discrete Analyzer 2
 Analyst: EWW
 Analytical Date/Time: 8/12/2020 11:46:59AM

Prep Batch: WXX13397
 Prep Method: Distillation TKN by Phenate (W)
 Prep Date/Time: 8/11/2020 11:16:00AM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL

Print Date: 08/13/2020 9:35:49AM

Matrix Spike Summary

Original Sample ID: 1203814003
 MS Sample ID: 1574203 MS
 MSD Sample ID: 1574204 MSD

Analysis Date: 08/12/2020 13:48
 Analysis Date: 08/12/2020 13:49
 Analysis Date: 08/12/2020 13:50
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203795001, 1203795002, 1203795003, 1203795004, 1203795005, 1203795006, 1203795007, 1203795008, 1203795009, 1203795010

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	0.653J	4.00	4.41	94	4.00	4.18	88	75-125	5.40	(< 25)

Batch Information

Analytical Batch: WDA4831
 Analytical Method: SM23 4500-N D
 Instrument: Discrete Analyzer 2
 Analyst: EWW
 Analytical Date/Time: 8/12/2020 1:49:40PM

Prep Batch: WXX13397
 Prep Method: Distillation TKN by Phenate (W)
 Prep Date/Time: 8/11/2020 11:16:00AM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL

Print Date: 08/13/2020 9:35:49AM



CLIENT: <i>Stantec</i>					Instructions: Sectic Omissions may delay the onset of analysis.					Page <u>1</u> of <u>1</u>																																																																																																																																				
CONTACT: <i>John Marshall</i>			PHONE #: <i>907-266-1108</i>			Section 3		Preservative																																																																																																																																						
PROJECT NAME: <i>Wesley WWP</i>			PROJECT/PWSID/PERMIT#: <i>204708415</i>			# C O N T A I N E R S	<div style="display: flex; justify-content: space-between;"> <i>ASG</i> <i>Aug 20</i> <i>Aug 20</i> </div>																																																																																																																																							
REPORTS TO: <i>John Marshall</i>			E-MAIL: <i>John.Marshall@stantec.com</i>				Analysis*																																																																																																																																							
INVOICE TO:			QUOTE #:				NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS																																																																																																																																							
P.O. #:			QUOTE #:				REMARKS/LOC ID																																																																																																																																							
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Relinquished By: (1)					Date		Time		Received By:		Section 4 DOD Project? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																																																																																																																																			
Relinquished By: (2)					Date		Time		Received By:		Data Deliverable Requirements: <i>Standard</i>																																																																																																																																			
Relinquished By: (3)					Date		Time		Received By:		Requested Turnaround Time and/or Special Instructions:																																																																																																																																			
Relinquished By: (4)					Date		Time		Received For Laboratory By:		Temp Blank °C: <i>7.0</i> <i>D57</i>																																																																																																																																			
<i>Melle Olsen</i>										Chain of Custody Seal: (Circle) INTACT <input type="checkbox"/> BROKEN <input type="checkbox"/> <u>ABSENT</u> <input checked="" type="checkbox"/>																																																																																																																																				
Delivery Method: Hand Delivery <input checked="" type="checkbox"/> Commercial Delivery <input type="checkbox"/>																																																																																																																																														



e-Sample Receipt Form

SGS Workorder #:

1203795



1 2 0 3 7 9 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		
Temperature blank compliant* (i.e., 0-6 °C after CF)?		Yes	**Exemption permitted if chilled & collected <8 hours ago, or for samples where chilling is not required	
If samples received without a temperature blank, the "cooler temperature" will be documented instead & "COOLER TEMP" will be noted to the right. "ambient" or "chilled" will be noted if neither is available.	No	Cooler ID:	1	@ 7.0 °C Therm. ID: D57
		Cooler ID:		@ °C Therm. ID:
		Cooler ID:		@ °C Therm. ID:
		Cooler ID:		@ °C Therm. ID:
		Cooler ID:		@ °C Therm. ID:
*If >6°C, were samples collected <8 hours ago?		Yes		
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>
1203795001-A	No Preservative Required	OK			
1203795001-B	No Preservative Required	OK			
1203795001-C	H2SO4 to pH < 2	OK			
1203795001-D	Na2S2O3 for Chlorine Redu	OK			
1203795001-E	Na2S2O3 for Chlorine Redu	OK			
1203795002-A	No Preservative Required	OK			
1203795002-B	No Preservative Required	OK			
1203795002-C	H2SO4 to pH < 2	OK			
1203795002-D	Na2S2O3 for Chlorine Redu	OK			
1203795002-E	Na2S2O3 for Chlorine Redu	OK			
1203795003-A	No Preservative Required	OK			
1203795003-B	No Preservative Required	OK			
1203795003-C	H2SO4 to pH < 2	OK			
1203795003-D	Na2S2O3 for Chlorine Redu	OK			
1203795003-E	Na2S2O3 for Chlorine Redu	OK			
1203795004-A	No Preservative Required	OK			
1203795004-B	No Preservative Required	OK			
1203795004-C	H2SO4 to pH < 2	OK			
1203795004-D	Na2S2O3 for Chlorine Redu	OK			
1203795004-E	Na2S2O3 for Chlorine Redu	OK			
1203795005-A	No Preservative Required	OK			
1203795005-B	No Preservative Required	OK			
1203795005-C	H2SO4 to pH < 2	OK			
1203795005-D	Na2S2O3 for Chlorine Redu	OK			
1203795005-E	Na2S2O3 for Chlorine Redu	OK			
1203795006-A	No Preservative Required	OK			
1203795006-B	No Preservative Required	OK			
1203795006-C	H2SO4 to pH < 2	OK			
1203795006-D	Na2S2O3 for Chlorine Redu	OK			
1203795006-E	Na2S2O3 for Chlorine Redu	OK			
1203795007-A	No Preservative Required	OK			
1203795007-B	No Preservative Required	OK			
1203795007-C	H2SO4 to pH < 2	OK			
1203795007-D	Na2S2O3 for Chlorine Redu	OK			
1203795007-E	Na2S2O3 for Chlorine Redu	OK			
1203795008-A	No Preservative Required	OK			
1203795008-B	No Preservative Required	OK			
1203795008-C	H2SO4 to pH < 2	OK			
1203795008-D	Na2S2O3 for Chlorine Redu	OK			
1203795008-E	Na2S2O3 for Chlorine Redu	OK			
1203795009-A	No Preservative Required	OK			
1203795009-B	No Preservative Required	OK			
1203795009-C	H2SO4 to pH < 2	OK			
1203795009-D	Na2S2O3 for Chlorine Redu	OK			
1203795009-E	Na2S2O3 for Chlorine Redu	OK			
1203795010-A	No Preservative Required	OK			
1203795010-B	No Preservative Required	OK			
1203795010-C	H2SO4 to pH < 2	OK			
1203795010-D	Na2S2O3 for Chlorine Redu	OK			
1203795010-E	Na2S2O3 for Chlorine Redu	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: **1203814**

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: **1203814**

Project Name/Site: **Wasilla WWTP**

Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

1209530006MS (1572647) MS

4500P-B,E - Total Phosphorus - MS recovery is outside of QC criteria. Refer to LCS for accuracy requirements.

1209543001(1572712MS) (1572713) MS

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

1209530006MSD (1572648) MSD

4500P-B,E - Total Phosphorus - MS/MSD RPD was outside of QC criteria. Refer to LCS/LCSD for precision requirement.

1209543001(1572712MSD) (1572714) MSD

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

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

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Laboratory Qualifiers

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

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

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

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

*	The analyte has exceeded allowable regulatory or control limits.
!	Surrogate out of control limits.
B	Indicates the analyte is found in a blank associated with the sample.
CCV/CVA/CVB	Continuing Calibration Verification
CCCV/CVC/CVCA/CVCB	Closing Continuing Calibration Verification
CL	Control Limit
DF	Analytical Dilution Factor
DL	Detection Limit (i.e., maximum method detection limit)
E	The analyte result is above the calibrated range.
GT	Greater Than
IB	Instrument Blank
ICV	Initial Calibration Verification
J	The quantitation is an estimation.
LCS(D)	Laboratory Control Spike (Duplicate)
LLQC/LLIQC	Low Level Quantitation Check
LOD	Limit of Detection (i.e., 1/2 of the LOQ)
LOQ	Limit of Quantitation (i.e., reporting or practical quantitation limit)
LT	Less Than
MB	Method Blank
MS(D)	Matrix Spike (Duplicate)
ND	Indicates the analyte is not detected.
RPD	Relative Percent Difference
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>
SW17	1203814001	07/31/2020	07/31/2020	Water (Surface, Eff., Ground)
SW18	1203814002	07/31/2020	07/31/2020	Water (Surface, Eff., Ground)
Dup1	1203814003	07/31/2020	07/31/2020	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
SM21 4500NO3-F	Nitrate/Nitrite Flow injection Pres.
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: **SW17**
 Lab Sample ID: 1203814001
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	20	MPN/100mL
Fecal Coliform	17	col/100mL
Total Coliform	1553	MPN/100mL

Waters Department

Ammonia-N	0.103	mg/L
Total Nitrate/Nitrite-N	0.947	mg/L
Total Phosphorus	0.126	mg/L

Client Sample ID: **SW18**
 Lab Sample ID: 1203814002
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	2.41	mg/L
E. Coli	11	MPN/100mL
Total Coliform	517	MPN/100mL

Waters Department

Ammonia-N	0.116	mg/L
Nitrate-N	0.647	mg/L
Total Kjeldahl Nitrogen	0.710J	mg/L
Total Nitrate/Nitrite-N	0.672	mg/L
Total Phosphorus	0.194	mg/L

Client Sample ID: **Dup1**
 Lab Sample ID: 1203814003
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	18	MPN/100mL
Fecal Coliform	6.7	col/100mL
Total Coliform	1986	MPN/100mL

Waters Department

Ammonia-N	0.103	mg/L
Nitrate-N	0.605	mg/L
Total Kjeldahl Nitrogen	0.653J	mg/L
Total Nitrate/Nitrite-N	0.605	mg/L
Total Phosphorus	0.128	mg/L



Results of SW17

Client Sample ID: **SW17**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203814001
Lab Project ID: 1203814

Collection Date: 07/31/20 10:22
Received Date: 07/31/20 13:47
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		07/31/20 19:50

Batch Information

Analytical Batch: BOD6675
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/31/20 19:50
Container ID: 1203814001-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	17	1.67	1.67	col/100mL	1		07/31/20 16:27

Batch Information

Analytical Batch: BTF18295
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/31/20 16:27
Container ID: 1203814001-B

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	20	1	1	MPN/100r	1		07/31/20 18:28
Total Coliform	1553	1	1	MPN/100r	1		07/31/20 18:28

Batch Information

Analytical Batch: BTF18294
Analytical Method: SM21 9223B
Analyst: A.L
Analytical Date/Time: 07/31/20 18:28
Container ID: 1203814001-E



Results of SW17

Client Sample ID: SW17
Client Project ID: Wasilla WWTP
Lab Sample ID: 1203814001
Lab Project ID: 1203814

Collection Date: 07/31/20 10:22
Received Date: 07/31/20 13:47
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Ammonia-N, 0.103, 0.100, 0.0310, mg/L, 1, 08/06/20 17:27

Batch Information

Analytical Batch: WDA4827
Analytical Method: SM21 4500-NH3 G
Analyst: A.A
Analytical Date/Time: 08/06/20 17:27
Container ID: 1203814001-D
Prep Batch: WXX13386
Prep Method: METHOD
Prep Date/Time: 08/06/20 16:00
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 1: Total Nitrate/Nitrite-N, 0.947, 0.200, 0.0500, mg/L, 2, 08/04/20 19:21

Batch Information

Analytical Batch: WFI2884
Analytical Method: SM21 4500NO3-F
Analyst: EWW
Analytical Date/Time: 08/04/20 19:21
Container ID: 1203814001-C

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Phosphorus, 0.126, 0.0400, 0.0120, mg/L, 1, 08/04/20 16:01

Batch Information

Analytical Batch: WDA4825
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 08/04/20 16:01
Container ID: 1203814001-D
Prep Batch: WXX13381
Prep Method: SM21 4500P-B,E
Prep Date/Time: 08/04/20 12:42
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.500 U, 1.00, 0.310, mg/L, 1, 08/12/20 12:16

Results of SW17

Client Sample ID: **SW17**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203814001
Lab Project ID: 1203814

Collection Date: 07/31/20 10:22
Received Date: 07/31/20 13:47
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4831
Analytical Method: SM23 4500-N D
Analyst: EWW
Analytical Date/Time: 08/12/20 12:16
Container ID: 1203814001-D

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 08/11/20 11:16
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: 1203814002
Lab Project ID: 1203814

Collection Date: 07/31/20 10:47
Received Date: 07/31/20 13:47
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	2.41	2.00	2.00	mg/L	1		07/31/20 19:50

Batch Information

Analytical Batch: BOD6675
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/31/20 19:50
Container ID: 1203814002-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	10.0 U	10.0	10.0	col/100mL	1		07/31/20 16:27

Batch Information

Analytical Batch: BTF18295
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/31/20 16:27
Container ID: 1203814002-B

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	11	1	1	MPN/100r	1		07/31/20 18:28
Total Coliform	517	1	1	MPN/100r	1		07/31/20 18:28

Batch Information

Analytical Batch: BTF18294
Analytical Method: SM21 9223B
Analyst: A.L
Analytical Date/Time: 07/31/20 18:28
Container ID: 1203814002-F



Results of SW18

Client Sample ID: SW18
Client Project ID: Wasilla WWTP
Lab Sample ID: 1203814002
Lab Project ID: 1203814

Collection Date: 07/31/20 10:47
Received Date: 07/31/20 13:47
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: WIC6066
Analytical Method: EPA 300.0
Analyst: EWW
Analytical Date/Time: 07/31/20 16:05
Container ID: 1203814002-C
Prep Batch: WXX13374
Prep Method: METHOD
Prep Date/Time: 07/31/20 09:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

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

Batch Information

Analytical Batch: WDA4827
Analytical Method: SM21 4500-NH3 G
Analyst: A.A
Analytical Date/Time: 08/06/20 17:28
Container ID: 1203814002-D
Prep Batch: WXX13386
Prep Method: METHOD
Prep Date/Time: 08/06/20 16:00
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: WDA4825
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 08/04/20 16:01
Container ID: 1203814002-D
Prep Batch: WXX13381
Prep Method: SM21 4500P-B,E
Prep Date/Time: 08/04/20 12:42
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 SW18

Client Sample ID: **SW18**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203814002
Lab Project ID: 1203814

Collection Date: 07/31/20 10:47
Received Date: 07/31/20 13:47
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4831
Analytical Method: SM23 4500-N D
Analyst: EWW
Analytical Date/Time: 08/12/20 13:47
Container ID: 1203814002-D

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 08/11/20 11:16
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: 1203814003
Lab Project ID: 1203814

Collection Date: 07/31/20 10:30
Received Date: 07/31/20 13:47
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		07/31/20 19:50

Batch Information

Analytical Batch: BOD6675
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/31/20 19:50
Container ID: 1203814003-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	6.7	1.67	1.67	col/100mL	1		07/31/20 16:27

Batch Information

Analytical Batch: BTF18295
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/31/20 16:27
Container ID: 1203814003-B

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	18	1	1	MPN/100r	1		07/31/20 18:28
Total Coliform	1986	1	1	MPN/100r	1		07/31/20 18:28

Batch Information

Analytical Batch: BTF18294
Analytical Method: SM21 9223B
Analyst: A.L
Analytical Date/Time: 07/31/20 18:28
Container ID: 1203814003-E



Results of Dup1

Client Sample ID: **Dup1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203814003
Lab Project ID: 1203814

Collection Date: 07/31/20 10:30
Received Date: 07/31/20 13:47
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	0.605	0.200	0.0500	mg/L	1		07/31/20 16:43
Nitrite-N	0.100 U	0.200	0.0500	mg/L	1		07/31/20 16:43
Total Nitrate/Nitrite-N	0.605	0.200	0.0500	mg/L	1		07/31/20 16:43

Batch Information

Analytical Batch: WIC6066
Analytical Method: EPA 300.0
Analyst: EWW
Analytical Date/Time: 07/31/20 16:43
Container ID: 1203814003-C

Prep Batch: WXX13374
Prep Method: METHOD
Prep Date/Time: 07/31/20 09:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.103	0.100	0.0310	mg/L	1		08/06/20 17:30

Batch Information

Analytical Batch: WDA4827
Analytical Method: SM21 4500-NH3 G
Analyst: A.A
Analytical Date/Time: 08/06/20 17:30
Container ID: 1203814003-D

Prep Batch: WXX13386
Prep Method: METHOD
Prep Date/Time: 08/06/20 16:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.128	0.0400	0.0120	mg/L	1		08/04/20 16:02

Batch Information

Analytical Batch: WDA4825
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 08/04/20 16:02
Container ID: 1203814003-D

Prep Batch: WXX13381
Prep Method: SM21 4500P-B,E
Prep Date/Time: 08/04/20 12:42
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	0.653 J	1.00	0.310	mg/L	1		08/12/20 13:48

Results of Dup1

Client Sample ID: **Dup1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1203814003
Lab Project ID: 1203814

Collection Date: 07/31/20 10:30
Received Date: 07/31/20 13:47
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Batch Information

Analytical Batch: WDA4831
Analytical Method: SM23 4500-N D
Analyst: EWW
Analytical Date/Time: 08/12/20 13:48
Container ID: 1203814003-D

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 08/11/20 11:16
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Method Blank

Blank ID: MB for HBN 1809632 [BOD/6675]

Blank Lab ID: 1571941

QC for Samples:

1203814001, 1203814002, 1203814003

Matrix: Water (Surface, Eff., Ground)

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: BOD6675

Analytical Method: SM21 5210B

Instrument:

Analyst: A.L

Analytical Date/Time: 7/31/2020 1:37:17PM

Print Date: 08/13/2020 9:36:46AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203814 [BOD6675]

Blank Spike Lab ID: 1571942

Date Analyzed: 07/31/2020 13:37

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203814001, 1203814002, 1203814003

Results by SM21 5210B

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Biochemical Oxygen Demand	198	192	97	(84.6-115.4

Batch Information

Analytical Batch: **BOD6675**

Analytical Method: **SM21 5210B**

Instrument:

Analyst: **A.L**

Print Date: 08/13/2020 9:36:49AM

Method Blank

Blank ID: MB for HBN 1809645 [BTF/18294]
Blank Lab ID: 1571990

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1203814001, 1203814002, 1203814003

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: BTF18294
Analytical Method: SM21 9223B
Instrument:
Analyst: A.L
Analytical Date/Time: 7/31/2020 6:28:00PM

Print Date: 08/13/2020 9:36:51AM

Method Blank

Blank ID: MB for HBN 1809648 [BTF/18295]

Blank Lab ID: 1572002

QC for Samples:

1203814001, 1203814002, 1203814003

Matrix: Water (Surface, Eff., Ground)

Results by SM21 9222D

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

Batch Information

Analytical Batch: BTF18295

Analytical Method: SM21 9222D

Instrument:

Analyst: A.L

Analytical Date/Time: 7/31/2020 4:27:27PM

Print Date: 08/13/2020 9:36:54AM



Method Blank

Blank ID: MB for HBN 1809648 [BTF/18295]
Blank Lab ID: 1572004

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1203814001, 1203814002, 1203814003

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: BTF18295
Analytical Method: SM21 9222D
Instrument:
Analyst: A.L
Analytical Date/Time: 7/31/2020 7:21:27PM

Print Date: 08/13/2020 9:36:54AM

Method Blank

Blank ID: MB for HBN 1809815 (WFI/2884)

Blank Lab ID: 1572736

QC for Samples:
1203814001

Matrix: Water (Surface, Eff., Ground)

Results by SM21 4500NO3-F

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Nitrate-N	0.100U	0.200	0.0500	mg/L
Nitrite-N	0.0746J	0.200	0.0500	mg/L
Total Nitrate/Nitrite-N	0.100U	0.200	0.0500	mg/L

Batch Information

Analytical Batch: WFI2884

Analytical Method: SM21 4500NO3-F

Instrument: Astoria segmented flow

Analyst: EWW

Analytical Date/Time: 8/4/2020 6:37:24PM

Print Date: 08/13/2020 9:36:59AM

Method Blank

Blank ID: MB for HBN 1809815 (WFI/2884)

Blank Lab ID: 1572738

QC for Samples:
1203814001

Matrix: Water (Surface, Eff., Ground)

Results by SM21 4500NO3-F

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Nitrate-N	0.100U	0.200	0.0500	mg/L
Nitrite-N	0.0800J	0.200	0.0500	mg/L
Total Nitrate/Nitrite-N	0.100U	0.200	0.0500	mg/L

Batch Information

Analytical Batch: WFI2884

Analytical Method: SM21 4500NO3-F

Instrument: Astoria segmented flow

Analyst: EWW

Analytical Date/Time: 8/4/2020 7:24:39PM

Print Date: 08/13/2020 9:36:59AM

Method Blank

Blank ID: MB for HBN 1809815 (WFI/2884)

Blank Lab ID: 1572740

QC for Samples:

Matrix: Water (Surface, Eff., Ground)

Results by SM21 4500NO3-F

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

Batch Information

Analytical Batch: WFI2884

Analytical Method: SM21 4500NO3-F

Instrument: Astoria segmented flow

Analyst: EWW

Analytical Date/Time: 8/4/2020 8:10:09PM

Print Date: 08/13/2020 9:36:59AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203814 [WFI2884]
 Blank Spike Lab ID: 1572735
 Date Analyzed: 08/04/2020 18:35

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203814001

Results by SM21 4500NO3-F

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Nitrate-N	2.5	2.63	105	(70-130)
Nitrite-N	2.5	2.63	105	(90-110)
Total Nitrate/Nitrite-N	5	5.26	105	(90-110)

Batch Information

Analytical Batch: **WFI2884**
 Analytical Method: **SM21 4500NO3-F**
 Instrument: **Astoria segmented flow**
 Analyst: **EWV**

Print Date: 08/13/2020 9:37:01AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203814 [WFI2884]
 Blank Spike Lab ID: 1572737
 Date Analyzed: 08/04/2020 19:22

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203814001

Results by SM21 4500NO3-F

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Nitrate-N	2.5	2.76	111	(70-130)
Nitrite-N	2.5	2.75	110	(90-110)
Total Nitrate/Nitrite-N	5	5.51	110	(90-110)

Batch Information

Analytical Batch: **WFI2884**
 Analytical Method: **SM21 4500NO3-F**
 Instrument: **Astoria segmented flow**
 Analyst: **EWV**

Print Date: 08/13/2020 9:37:01AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203814 [WFI2884]
 Blank Spike Lab ID: 1572739
 Date Analyzed: 08/04/2020 20:08

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

Results by SM21 4500NO3-F

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Nitrate-N	2.5	2.77	111	(70-130)
Nitrite-N	2.5	2.60	104	(90-110)
Total Nitrate/Nitrite-N	5	5.37	107	(90-110)

Batch Information

Analytical Batch: **WFI2884**
 Analytical Method: **SM21 4500NO3-F**
 Instrument: **Astoria segmented flow**
 Analyst: **EWV**

Print Date: 08/13/2020 9:37:01AM

Matrix Spike Summary

Original Sample ID: 1572712
 MS Sample ID: 1572713 MS
 MSD Sample ID: 1572714 MSD

Analysis Date: 08/04/2020 18:42
 Analysis Date: 08/04/2020 18:44
 Analysis Date: 08/04/2020 18:46
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203814001

Results by SM21 4500NO3-F

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Nitrate/Nitrite-N	0.113J	5.00	6.13	120 *	5.00	6.07	119 *	90-110	1.00	(< 25)

Batch Information

Analytical Batch: WFI2884
 Analytical Method: SM21 4500NO3-F
 Instrument: Astoria segmented flow
 Analyst: EWW
 Analytical Date/Time: 8/4/2020 6:44:24PM

Print Date: 08/13/2020 9:37:03AM

Matrix Spike Summary

Original Sample ID: 1203818001
 MS Sample ID: 1572715 MS
 MSD Sample ID: 1572716 MSD

Analysis Date: 08/04/2020 19:28
 Analysis Date: 08/04/2020 19:29
 Analysis Date: 08/04/2020 19:31
 Matrix: Drinking Water

QC for Samples: 1203814001

Results by SM21 4500NO3-F

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Nitrate/Nitrite-N	1.28	5.00	5.77	90 *	5.00	6.00	95	90-110	3.90	(< 25)

Batch Information

Analytical Batch: WFI2884
 Analytical Method: SM21 4500NO3-F
 Instrument: Astoria segmented flow
 Analyst: EWW
 Analytical Date/Time: 8/4/2020 7:29:53PM

Print Date: 08/13/2020 9:37:03AM

Method Blank

Blank ID: MB for HBN 1809658 [WXX/13374]
 Blank Lab ID: 1572039

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
 1203814002, 1203814003

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: WIC6066
 Analytical Method: EPA 300.0
 Instrument: 930 Metrohm compact IC flex
 Analyst: EWW
 Analytical Date/Time: 7/31/2020 11:20:30AM

Prep Batch: WXX13374
 Prep Method: METHOD
 Prep Date/Time: 7/31/2020 9:00:00AM
 Prep Initial Wt./Vol.: 10 mL
 Prep Extract Vol: 10 mL

Print Date: 08/13/2020 9:37:04AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203814 [WXX13374]
 Blank Spike Lab ID: 1572040
 Date Analyzed: 07/31/2020 11:39

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203814002, 1203814003

Results by EPA 300.0

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Nitrate-N	5	4.91	98	(90-110)
Nitrite-N	5	5.12	102	(90-110)
Total Nitrate/Nitrite-N	10	10.0	100	(90-110)

Batch Information

Analytical Batch: **WIC6066**
 Analytical Method: **EPA 300.0**
 Instrument: **930 Metrohm compact IC flex**
 Analyst: **EWV**

Prep Batch: **WXX13374**
 Prep Method: **METHOD**
 Prep Date/Time: **07/31/2020 09:00**
 Spike Init Wt./Vol.: 5 mg/L Extract Vol: 10 mL
 Dupe Init Wt./Vol.: Extract Vol:

Print Date: 08/13/2020 9:37:07AM

Matrix Spike Summary

Original Sample ID: 1572041
 MS Sample ID: 1572042 MS
 MSD Sample ID:

Analysis Date: 07/31/2020 12:55
 Analysis Date: 07/31/2020 13:14
 Analysis Date:
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203814002, 1203814003

Results by EPA 300.0

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Nitrate-N	0.100U	5.00	4.88	98				90-110		
Nitrite-N	0.100U	5.00	4.71	94				90-110		

Batch Information

Analytical Batch: WIC6066
 Analytical Method: EPA 300.0
 Instrument: 930 Metrohm compact IC flex
 Analyst: EWW
 Analytical Date/Time: 7/31/2020 1:14:31PM

Prep Batch: WXX13374
 Prep Method: EPA 300.0 Extraction Waters/Liquids
 Prep Date/Time: 7/31/2020 9:00:00AM
 Prep Initial Wt./Vol.: 10.00mL
 Prep Extract Vol: 10.00mL

Print Date: 08/13/2020 9:37:08AM

Matrix Spike Summary

Original Sample ID: 1572043
 MS Sample ID: 1572044 MS
 MSD Sample ID:

Analysis Date: 07/31/2020 16:05
 Analysis Date: 07/31/2020 16:24
 Analysis Date:
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203814002, 1203814003

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	0.647	5.00	5.55	98				90-110		
Nitrite-N	0.100U	5.00	4.74	95				90-110		

Batch Information

Analytical Batch: WIC6066
 Analytical Method: EPA 300.0
 Instrument: 930 Metrohm compact IC flex
 Analyst: EWW
 Analytical Date/Time: 7/31/2020 4:24:49PM

Prep Batch: WXX13374
 Prep Method: EPA 300.0 Extraction Waters/Liquids
 Prep Date/Time: 7/31/2020 9:00:00AM
 Prep Initial Wt./Vol.: 10.00mL
 Prep Extract Vol: 10.00mL

Print Date: 08/13/2020 9:37:08AM

Method Blank

Blank ID: MB for HBN 1809806 [WXX/13381]
Blank Lab ID: 1572644

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1203814001, 1203814002, 1203814003

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: WDA4825
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 8/4/2020 3:50:11PM

Prep Batch: WXX13381
Prep Method: SM21 4500P-B,E
Prep Date/Time: 8/4/2020 12:42:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 08/13/2020 9:37:10AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203814 [WXX13381]
 Blank Spike Lab ID: 1572645
 Date Analyzed: 08/04/2020 15:51

Spike Duplicate ID: LCSD for HBN 1203814 [WXX13381]
 Spike Duplicate Lab ID: 1572646
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203814001, 1203814002, 1203814003

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	0.194	97	0.2	0.195	98	(75-125)	0.93	(< 25)

Batch Information

Analytical Batch: WDA4825
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: EWW

Prep Batch: WXX13381
 Prep Method: SM21 4500P-B,E
 Prep Date/Time: 08/04/2020 12:42
 Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL
 Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

Matrix Spike Summary

Original Sample ID: 1209530006
 MS Sample ID: 1572647 MS
 MSD Sample ID: 1572648 MSD

Analysis Date: 08/04/2020 16:12
 Analysis Date: 08/04/2020 16:13
 Analysis Date: 08/04/2020 16:14
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203814001, 1203814002, 1203814003

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	0.0200U	0.200	.27	135 *	0.200	0.204	102	75-125	27.90	* (< 25)

Batch Information

Analytical Batch: WDA4825
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: EWW
 Analytical Date/Time: 8/4/2020 4:13:41PM

Prep Batch: WXX13381
 Prep Method: Total Phosphorus (W) Ext.
 Prep Date/Time: 8/4/2020 12:42:00PM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL

Print Date: 08/13/2020 9:37:15AM

Method Blank

Blank ID: MB for HBN 1809949 [WXX/13386]
Blank Lab ID: 1573227

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1203814001, 1203814002, 1203814003

Results by SM21 4500-NH3 G

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Ammonia-N	0.0368J	0.100	0.0310	mg/L

Batch Information

Analytical Batch: WDA4827
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: A.A
Analytical Date/Time: 8/6/2020 4:43:39PM

Prep Batch: WXX13386
Prep Method: METHOD
Prep Date/Time: 8/6/2020 4:00:00PM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Print Date: 08/13/2020 9:37:16AM



Blank Spike Summary

Blank Spike ID: LCS for HBN 1203814 [WXX13386]
Blank Spike Lab ID: 1573228
Date Analyzed: 08/06/2020 16:45

Spike Duplicate ID: LCSD for HBN 1203814 [WXX13386]
Spike Duplicate Lab ID: 1573229
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203814001, 1203814002, 1203814003

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	1.06	106	1	1.06	106	(75-125)	0.21	(< 25)

Batch Information

Analytical Batch: WDA4827
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: A.A

Prep Batch: WXX13386
Prep Method: METHOD
Prep Date/Time: 08/06/2020 16:00
Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

Print Date: 08/13/2020 9:37:18AM

Matrix Spike Summary

Original Sample ID: 1203755001
 MS Sample ID: 1573230 MS
 MSD Sample ID: 1573231 MSD

Analysis Date: 08/06/2020 17:05
 Analysis Date: 08/06/2020 17:07
 Analysis Date: 08/06/2020 17:08
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203814001, 1203814002, 1203814003

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	0.100U	1.00	1	100	1.00	1.01	101	75-125	0.76	(< 25)

Batch Information

Analytical Batch: WDA4827
 Analytical Method: SM21 4500-NH3 G
 Instrument: Discrete Analyzer 2
 Analyst: A.A
 Analytical Date/Time: 8/6/2020 5:07:05PM

Prep Batch: WXX13386
 Prep Method: Ammonia by SM21 4500F prep (W)
 Prep Date/Time: 8/6/2020 4:00:00PM
 Prep Initial Wt./Vol.: 6.00mL
 Prep Extract Vol: 6.00mL

Method Blank

Blank ID: MB for HBN 1810185 [WXX/13397]

Blank Lab ID: 1574195

QC for Samples:
1203814001

Matrix: Water (Surface, Eff., Ground)

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: WDA4831
Analytical Method: SM23 4500-N D
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 8/12/2020 11:37:48AM

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 8/11/2020 11:16:00AM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 08/13/2020 9:37:21AM

Method Blank

Blank ID: MB for HBN 1810185 [WXX/13397]
Blank Lab ID: 1574200

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1203814001, 1203814002, 1203814003

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: WDA4831
Analytical Method: SM23 4500-N D
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 8/12/2020 12:18:16PM

Prep Batch: WXX13397
Prep Method: METHOD
Prep Date/Time: 8/11/2020 11:16:00AM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 08/13/2020 9:37:21AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203814 [WXX13397]
 Blank Spike Lab ID: 1574196
 Date Analyzed: 08/12/2020 11:39

Spike Duplicate ID: LCSD for HBN 1203814 [WXX13397]
 Spike Duplicate Lab ID: 1574197
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203814001

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	3.72	93	4	3.77	94	(75-125)	1.30	(< 25)

Batch Information

Analytical Batch: WDA4831
 Analytical Method: SM23 4500-N D
 Instrument: Discrete Analyzer 2
 Analyst: EWW

Prep Batch: WXX13397
 Prep Method: METHOD
 Prep Date/Time: 08/11/2020 11:16
 Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL
 Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

Print Date: 08/13/2020 9:37:23AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1203814 [WXX13397]
 Blank Spike Lab ID: 1574201
 Date Analyzed: 08/12/2020 12:19

Spike Duplicate ID: LCSD for HBN 1203814 [WXX13397]
 Spike Duplicate Lab ID: 1574202
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203814001, 1203814002, 1203814003

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	3.59	90	4	3.66	91	(75-125)	1.70	(< 25)

Batch Information

Analytical Batch: **WDA4831**
 Analytical Method: **SM23 4500-N D**
 Instrument: **Discrete Analyzer 2**
 Analyst: **EWV**

Prep Batch: **WXX13397**
 Prep Method: **METHOD**
 Prep Date/Time: **08/11/2020 11:16**
 Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL
 Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

Print Date: 08/13/2020 9:37:23AM



Matrix Spike Summary

Original Sample ID: 1203764001
MS Sample ID: 1574198 MS
MSD Sample ID: 1574199 MSD

Analysis Date: 08/12/2020 11:45
Analysis Date: 08/12/2020 11:46
Analysis Date: 08/12/2020 11:48
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203814001, 1203814002, 1203814003

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	1.59	4.00	4.83	81	4.00	5.52	98	75-125	13.30	(< 25)

Batch Information

Analytical Batch: WDA4831
Analytical Method: SM23 4500-N D
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 8/12/2020 11:46:59AM

Prep Batch: WXX13397
Prep Method: Distillation TKN by Phenate (W)
Prep Date/Time: 8/11/2020 11:16:00AM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 08/13/2020 9:37:25AM

Matrix Spike Summary

Original Sample ID: 1203814003
 MS Sample ID: 1574203 MS
 MSD Sample ID: 1574204 MSD

Analysis Date: 08/12/2020 13:48
 Analysis Date: 08/12/2020 13:49
 Analysis Date: 08/12/2020 13:50
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1203814001, 1203814002, 1203814003

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	0.653J	4.00	4.41	94	4.00	4.18	88	75-125	5.40	(< 25)

Batch Information

Analytical Batch: WDA4831
 Analytical Method: SM23 4500-N D
 Instrument: Discrete Analyzer 2
 Analyst: EWW
 Analytical Date/Time: 8/12/2020 1:49:40PM

Prep Batch: WXX13397
 Prep Method: Distillation TKN by Phenate (W)
 Prep Date/Time: 8/11/2020 11:16:00AM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL

Print Date: 08/13/2020 9:37:25AM



CLIENT: <i>Startec</i>				Instructions: Sections Omissions may delay				Section 3				Preservative					
CONTACT: <i>Jake Alward</i>				PHONE #: <i>243-5202</i>				# CONTAINER S Analysis* SDD FC Nitrate/Nitrite Nitrate/Nitrite TP/Ammonia/TP TP/Ammonia/TP TP (CONC) 1x10X NOTE: *The following analyses require specific method and/or compound list: BTEX, Metals, PFAS				REMARKS/LOC ID					
PROJECT NAME: <i>Wasilla WWTP</i>				PROJECT/PWSID/PERMIT#:													
REPORTS TO:				E-MAIL:													
INVOICE TO:				QUOTE #: <i>#348183 S40</i> P.O. #: <i>204700415</i>													
RESERVED for lab use		SAMPLE IDENTIFICATION		DATE mm/dd/yy		TIME HH:MM		MATRIX/MATRIX CODE		SDD FC Nitrate/Nitrite Nitrate/Nitrite TP/Ammonia/TP TP/Ammonia/TP TP (CONC) 1x10X		REMARKS/LOC ID					
<i>(1AE)</i>		<i>SW17</i>		<i>7/31/20</i>		<i>1022</i>		<i>WATER</i>		5 6		1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1			
<i>(2AE)</i>		<i>SW18</i>		↓		<i>1047</i>		↓		6		↓		1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1	
<i>(3AE)</i>		<i>DUP1</i>		↓		<i>1030</i>		↓		5		↓		1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1	
Relinquished By: (1) <i>[Signature]</i>				Date <i>7/31/20</i>		Time <i>1347</i>		Received By: <i>[Signature]</i>				Section 4 DOD Project? Yes No		Data Deliverable Requirements:			
Relinquished By: (2)				Date		Time		Received By:				Cooler ID:					
Relinquished By: (3)				Date		Time		Received By:				Requested Turnaround Time and/or Special Instructions:					
Relinquished By: (4) <i>[Signature]</i>				Date <i>7/31/20</i>		Time <i>1347</i>		Received For Laboratory By: <i>[Signature]</i>				Temp Blank °C: <i>8.1° #D59</i> Cooler Temp or Ambient []		Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT			
Delivery Method: Hand Delivery [] Commercial Delivery []																	



e-Sample Receipt Form

SGS Workorder #:

1203814

1203814

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				
COC accompanied samples?		Yes				
DOD: Were samples received in COC corresponding coolers?		N/A				
<input checked="" type="checkbox"/> 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)?		No	Cooler ID:	Cooler Temp	@	8.1 °C Therm. ID: D59
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.			Cooler ID:		@	°C Therm. ID:
			Cooler ID:		@	°C Therm. ID:
			Cooler ID:		@	°C Therm. ID:
			Cooler ID:		@	°C Therm. ID:
*If >6°C, were samples collected <8 hours ago?						
If <0°C, were sample containers ice free?						
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?						
Do samples match COC** (i.e., sample IDs, dates/times collected)? **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)						
Were proper containers (type/mass/volume/preservative***) used?			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>
1203814001-A	No Preservative Required	OK			
1203814001-B	Na ₂ S ₂ O ₃ for Chlorine Redu	OK			
1203814001-C	H ₂ SO ₄ to pH < 2	OK			
1203814001-D	H ₂ SO ₄ to pH < 2	OK			
1203814001-E	Na ₂ S ₂ O ₃ for Chlorine Redu	OK			
1203814002-A	No Preservative Required	OK			
1203814002-B	Na ₂ S ₂ O ₃ for Chlorine Redu	OK			
1203814002-C	No Preservative Required	OK			
1203814002-D	H ₂ SO ₄ to pH < 2	OK			
1203814002-E	No Preservative Required	OK			
1203814002-F	Na ₂ S ₂ O ₃ for Chlorine Redu	OK			
1203814003-A	No Preservative Required	OK			
1203814003-B	Na ₂ S ₂ O ₃ for Chlorine Redu	OK			
1203814003-C	No Preservative Required	OK			
1203814003-D	H ₂ SO ₄ to pH < 2	OK			
1203814003-E	Na ₂ S ₂ O ₃ for Chlorine Redu	OK			

Container Condition Glossary

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

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

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

DM - The container was received damaged.

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

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

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

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

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

QN - Insufficient sample quantity provided.