

Laboratory Report of Analysis

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

Report Number: **1200299**

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: **1200299**

Project Name/Site: **Wasilla WWTP**

Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

1200289001DUP (1549874) DUP

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

*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: 02/04/2020 8:39:53AM

Laboratory Qualifiers

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

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

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

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

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

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

Sample Summary

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Collected</u>	<u>Received</u>	<u>Matrix</u>
SW17	1200299001	01/22/2020	01/22/2020	Water (Surface, Eff., Ground)
SW18	1200299002	01/22/2020	01/22/2020	Water (Surface, Eff., Ground)
Effluent	1200299003	01/22/2020	01/22/2020	Water (Surface, Eff., Ground)
MW10	1200299004	01/22/2020	01/22/2020	Water (Surface, Eff., Ground)
MW15	1200299005	01/22/2020	01/22/2020	Water (Surface, Eff., Ground)
B5	1200299006	01/22/2020	01/22/2020	Water (Surface, Eff., Ground)
A8	1200299007	01/22/2020	01/22/2020	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 4500-N D	TKN by Phenate (W)
SM21 9223B	Total Coliform P/A Quant Tray
SM21 4500P-B,E	Total Phosphorus (W)
SM21 2540D	Total Suspended Solids SM20 2540D

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Detectable Results Summary

Client Sample ID: **SW17**
 Lab Sample ID: 1200299001
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	2.05	mg/L
E. Coli	1	MPN/100mL
Fecal Coliform	1.7	col/100mL
Total Coliform	56	MPN/100mL
Ammonia-N	0.557	mg/L
Nitrate-N	3.62	mg/L
Total Kjeldahl Nitrogen	0.921J	mg/L
Total Nitrate/Nitrite-N	3.62	mg/L
Total Phosphorus	0.119	mg/L
Total Suspended Solids	1.41	mg/L

Waters Department

Client Sample ID: **SW18**
 Lab Sample ID: 1200299002
Microbiology Laboratory

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	3.11	mg/L
Total Coliform	161	MPN/100mL
Ammonia-N	0.437	mg/L
Nitrate-N	4.46	mg/L
Total Kjeldahl Nitrogen	1.06	mg/L
Total Nitrate/Nitrite-N	4.50	mg/L
Total Phosphorus	0.226	mg/L
Total Suspended Solids	1.53	mg/L

Waters Department

Client Sample ID: **Effluent**
 Lab Sample ID: 1200299003
Microbiology Laboratory
Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Fecal Coliform	1270	col/100mL
Ammonia-N	36.8	mg/L
Nitrate-N	0.118J	mg/L
Nitrite-N	0.0750J	mg/L
Total Kjeldahl Nitrogen	66.3	mg/L
Total Nitrate/Nitrite-N	0.193J	mg/L

Client Sample ID: **MW10**
 Lab Sample ID: 1200299004
Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Ammonia-N	0.0349J	mg/L

Client Sample ID: **MW15**
 Lab Sample ID: 1200299005
Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Ammonia-N	0.0438J	mg/L

Client Sample ID: **B5**
 Lab Sample ID: 1200299006
Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Ammonia-N	6.05	mg/L
Total Kjeldahl Nitrogen	8.34	mg/L

Client Sample ID: **A8**
 Lab Sample ID: 1200299007
Waters Department

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Ammonia-N	9.49	mg/L
Total Kjeldahl Nitrogen	12.1	mg/L



Results of SW17

Client Sample ID: **SW17**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1200299001
Lab Project ID: 1200299

Collection Date: 01/22/20 10:30
Received Date: 01/22/20 14:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Biochemical Oxygen Demand	2.05	2.00	2.00	mg/L	1		01/22/20 17:04

Batch Information

Analytical Batch: BOD6517
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 01/22/20 17:04
Container ID: 1200299001-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		01/22/20 15:59

Batch Information

Analytical Batch: BTF17883
Analytical Method: SM21 9222D
Analyst: A.A
Analytical Date/Time: 01/22/20 15:59
Container ID: 1200299001-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	1	1	1	MPN/100r	1		01/23/20 10:33
Total Coliform	56	1	1	MPN/100r	1		01/23/20 10:33

Batch Information

Analytical Batch: BTF17886
Analytical Method: SM21 9223B
Analyst: A.A
Analytical Date/Time: 01/23/20 10:33
Container ID: 1200299001-A



Results of SW17

Client Sample ID: SW17
Client Project ID: Wasilla WWTP
Lab Sample ID: 1200299001
Lab Project ID: 1200299

Collection Date: 01/22/20 10:30
Received Date: 01/22/20 14:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

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

Batch Information

Analytical Batch: WIC6014
Analytical Method: EPA 300.0
Analyst: EWW
Analytical Date/Time: 01/22/20 17:44
Container ID: 1200299001-F
Prep Batch: WXX13182
Prep Method: METHOD
Prep Date/Time: 01/22/20 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 Total Suspended Solids.

Batch Information

Analytical Batch: STS6596
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 01/24/20 11:26
Container ID: 1200299001-D

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

Batch Information

Analytical Batch: WDA4730
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 01/31/20 15:19
Container ID: 1200299001-C
Prep Batch: WXX13187
Prep Method: METHOD
Prep Date/Time: 01/30/20 11:05
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

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



Results of **SW17**

Client Sample ID: **SW17**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1200299001
Lab Project ID: 1200299

Collection Date: 01/22/20 10:30
Received Date: 01/22/20 14:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4729
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 01/29/20 15:38
Container ID: 1200299001-C

Prep Batch: WXX13186
Prep Method: METHOD
Prep Date/Time: 01/29/20 15:00
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	0.119	0.0400	0.0120	mg/L	1		02/03/20 13:37

Batch Information

Analytical Batch: WDA4731
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 02/03/20 13:37
Container ID: 1200299001-C

Prep Batch: WXX13189
Prep Method: SM21 4500P-B,E
Prep Date/Time: 02/03/20 11:00
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: 1200299002
Lab Project ID: 1200299

Collection Date: 01/22/20 11:10
Received Date: 01/22/20 14:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Biochemical Oxygen Demand	3.11	2.00	2.00	mg/L	1		01/22/20 17:04

Batch Information

Analytical Batch: BOD6517
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 01/22/20 17:04
Container ID: 1200299002-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		01/22/20 15:59

Batch Information

Analytical Batch: BTF17883
Analytical Method: SM21 9222D
Analyst: A.A
Analytical Date/Time: 01/22/20 15:59
Container ID: 1200299002-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	1 U	1	1	MPN/100r	1		01/23/20 10:33
Total Coliform	161	1	1	MPN/100r	1		01/23/20 10:33

Batch Information

Analytical Batch: BTF17886
Analytical Method: SM21 9223B
Analyst: A.A
Analytical Date/Time: 01/23/20 10:33
Container ID: 1200299002-A



Results of SW18

Client Sample ID: SW18
Client Project ID: Wasilla WWTP
Lab Sample ID: 1200299002
Lab Project ID: 1200299

Collection Date: 01/22/20 11:10
Received Date: 01/22/20 14:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

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

Batch Information

Analytical Batch: WIC6014
Analytical Method: EPA 300.0
Analyst: EWW
Analytical Date/Time: 01/22/20 18:02
Container ID: 1200299002-F
Prep Batch: WXX13182
Prep Method: METHOD
Prep Date/Time: 01/22/20 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 Total Suspended Solids.

Batch Information

Analytical Batch: STS6596
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 01/24/20 11:26
Container ID: 1200299002-D

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

Batch Information

Analytical Batch: WDA4730
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 01/31/20 15:23
Container ID: 1200299002-C
Prep Batch: WXX13187
Prep Method: METHOD
Prep Date/Time: 01/30/20 11:05
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

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



Results of **SW18**

Client Sample ID: **SW18**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1200299002
Lab Project ID: 1200299

Collection Date: 01/22/20 11:10
Received Date: 01/22/20 14:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4729
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 01/29/20 15:43
Container ID: 1200299002-C

Prep Batch: WXX13186
Prep Method: METHOD
Prep Date/Time: 01/29/20 15:00
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	0.226	0.0400	0.0120	mg/L	1		02/03/20 13:38

Batch Information

Analytical Batch: WDA4731
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 02/03/20 13:38
Container ID: 1200299002-C

Prep Batch: WXX13189
Prep Method: SM21 4500P-B,E
Prep Date/Time: 02/03/20 11:00
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of Effluent

Client Sample ID: **Effluent**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1200299003
 Lab Project ID: 1200299

Collection Date: 01/22/20 13:00
 Received Date: 01/22/20 14:57
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Microbiology Laboratory

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	1270	90.9	90.9	col/100mL	1		01/22/20 15:59

Batch Information

Analytical Batch: BTF17883
 Analytical Method: SM21 9222D
 Analyst: A.A
 Analytical Date/Time: 01/22/20 15:59
 Container ID: 1200299003-A



Results of Effluent

Client Sample ID: **Effluent**
 Client Project ID: **Wasilla WWTP**
 Lab Sample ID: 1200299003
 Lab Project ID: 1200299

Collection Date: 01/22/20 13:00
 Received Date: 01/22/20 14:57
 Matrix: Water (Surface, Eff., Ground)
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Nitrate-N	0.118 J	0.200	0.0500	mg/L	1		01/22/20 18:21
Nitrite-N	0.0750 J	0.200	0.0500	mg/L	1		01/22/20 18:21
Total Nitrate/Nitrite-N	0.193 J	0.200	0.0500	mg/L	1		01/22/20 18:21

Batch Information

Analytical Batch: WIC6014
 Analytical Method: EPA 300.0
 Analyst: EWW
 Analytical Date/Time: 01/22/20 18:21
 Container ID: 1200299003-C

Prep Batch: WXX13182
 Prep Method: METHOD
 Prep Date/Time: 01/22/20 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>
Total Kjeldahl Nitrogen	66.3	20.0	6.20	mg/L	20		01/31/20 15:24

Batch Information

Analytical Batch: WDA4730
 Analytical Method: SM21 4500-N D
 Analyst: DMM
 Analytical Date/Time: 01/31/20 15:24
 Container ID: 1200299003-B

Prep Batch: WXX13187
 Prep Method: METHOD
 Prep Date/Time: 01/30/20 11:05
 Prep Initial Wt./Vol.: 25 mL
 Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	36.8	1.00	0.310	mg/L	1		01/29/20 15:45

Batch Information

Analytical Batch: WDA4729
 Analytical Method: SM21 4500-NH3 G
 Analyst: EWW
 Analytical Date/Time: 01/29/20 15:45
 Container ID: 1200299003-B

Prep Batch: WXX13186
 Prep Method: METHOD
 Prep Date/Time: 01/29/20 15:00
 Prep Initial Wt./Vol.: 0.6 mL
 Prep Extract Vol: 6 mL



Results of MW10

Client Sample ID: MW10
Client Project ID: Wasilla WWTP
Lab Sample ID: 1200299004
Lab Project ID: 1200299

Collection Date: 01/22/20 13:20
Received Date: 01/22/20 14:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.500 U, 1.00, 0.310, mg/L, 1, 01/31/20 15:25

Batch Information

Analytical Batch: WDA4730
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 01/31/20 15:25
Container ID: 1200299004-A
Prep Batch: WXX13187
Prep Method: METHOD
Prep Date/Time: 01/30/20 11:05
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Ammonia-N, 0.0349 J, 0.100, 0.0310, mg/L, 1, 01/29/20 15:47

Batch Information

Analytical Batch: WDA4729
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 01/29/20 15:47
Container ID: 1200299004-A
Prep Batch: WXX13186
Prep Method: METHOD
Prep Date/Time: 01/29/20 15:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL



Results of MW15

Client Sample ID: **MW15**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1200299005
Lab Project ID: 1200299

Collection Date: 01/22/20 13:30
Received Date: 01/22/20 14:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Kjeldahl Nitrogen	0.500 U	1.00	0.310	mg/L	1		01/31/20 15:26

Batch Information

Analytical Batch: WDA4730
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 01/31/20 15:26
Container ID: 1200299005-A

Prep Batch: WXX13187
Prep Method: METHOD
Prep Date/Time: 01/30/20 11:05
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0438 J	0.100	0.0310	mg/L	1		01/29/20 15:48

Batch Information

Analytical Batch: WDA4729
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 01/29/20 15:48
Container ID: 1200299005-A

Prep Batch: WXX13186
Prep Method: METHOD
Prep Date/Time: 01/29/20 15:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL



Results of B5

Client Sample ID: **B5**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1200299006
Lab Project ID: 1200299

Collection Date: 01/22/20 13:12
Received Date: 01/22/20 14:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Kjeldahl Nitrogen	8.34	2.00	0.620	mg/L	2		01/31/20 15:30

Batch Information

Analytical Batch: WDA4730
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 01/31/20 15:30
Container ID: 1200299006-A

Prep Batch: WXX13187
Prep Method: METHOD
Prep Date/Time: 01/30/20 11:05
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	6.05	1.00	0.310	mg/L	1		01/29/20 16:43

Batch Information

Analytical Batch: WDA4729
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 01/29/20 16:43
Container ID: 1200299006-A

Prep Batch: WXX13186
Prep Method: METHOD
Prep Date/Time: 01/29/20 15:00
Prep Initial Wt./Vol.: 0.6 mL
Prep Extract Vol: 6 mL



Results of A8

Client Sample ID: **A8**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1200299007
Lab Project ID: 1200299

Collection Date: 01/22/20 12:30
Received Date: 01/22/20 14:57
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Kjeldahl Nitrogen	12.1	2.00	0.620	mg/L	2		01/31/20 15:31

Batch Information

Analytical Batch: WDA4730
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 01/31/20 15:31
Container ID: 1200299007-A

Prep Batch: WXX13187
Prep Method: METHOD
Prep Date/Time: 01/30/20 11:05
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	9.49	1.00	0.310	mg/L	1		01/29/20 16:44

Batch Information

Analytical Batch: WDA4729
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 01/29/20 16:44
Container ID: 1200299007-A

Prep Batch: WXX13186
Prep Method: METHOD
Prep Date/Time: 01/29/20 15:00
Prep Initial Wt./Vol.: 0.6 mL
Prep Extract Vol: 6 mL

Method Blank

Blank ID: MB for HBN 1803950 [BOD/6517]

Blank Lab ID: 1549812

QC for Samples:

1200299001, 1200299002

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: BOD6517

Analytical Method: SM21 5210B

Instrument:

Analyst: A.L

Analytical Date/Time: 1/22/2020 3:38:27PM

Print Date: 02/04/2020 8:40:02AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1200299 [BOD6517]
Blank Spike Lab ID: 1549813
Date Analyzed: 01/22/2020 15:38

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1200299001, 1200299002

Results by SM21 5210B

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Biochemical Oxygen Demand	198	199	101	(84.6-115.4

Batch Information

Analytical Batch: **BOD6517**
Analytical Method: **SM21 5210B**
Instrument:
Analyst: **A.L**

Print Date: 02/04/2020 8:40:04AM



Method Blank

Blank ID: MB for HBN 1803944 [BTF/17883]

Blank Lab ID: 1549819

QC for Samples:

1200299001, 1200299002, 1200299003

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: BTF17883

Analytical Method: SM21 9222D

Instrument:

Analyst: A.A

Analytical Date/Time: 1/22/2020 3:59:17PM

Print Date: 02/04/2020 8:40:07AM



Method Blank

Blank ID: MB for HBN 1803944 [BTF/17883]

Blank Lab ID: 1549820

QC for Samples:

1200299001, 1200299002, 1200299003

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: BTF17883

Analytical Method: SM21 9222D

Instrument:

Analyst: A.A

Analytical Date/Time: 1/22/2020 4:58:17PM

Print Date: 02/04/2020 8:40:07AM



Method Blank

Blank ID: MB for HBN 1803962 [BTF/17886]
Blank Lab ID: 1549846

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1200299001, 1200299002

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: BTF17886
Analytical Method: SM21 9223B
Instrument:
Analyst: A.A
Analytical Date/Time: 1/23/2020 10:33:02AM

Print Date: 02/04/2020 8:40:11AM



Method Blank

Blank ID: MB for HBN 1803975 [STS/6596]

Blank Lab ID: 1549870

QC for Samples:

1200299001, 1200299002

Matrix: Water (Surface, Eff., Ground)

Results by SM21 2540D

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

Batch Information

Analytical Batch: STS6596

Analytical Method: SM21 2540D

Instrument:

Analyst: EWW

Analytical Date/Time: 1/24/2020 11:26:51AM

Print Date: 02/04/2020 8:40:15AM

Duplicate Sample Summary

Original Sample ID: 1200254001

Duplicate Sample ID: 1549873

QC for Samples:

Analysis Date: 01/24/2020 11:26

Matrix: Water (Surface, Eff., Ground)

Results by SM21 2540D

<u>NAME</u>	<u>Original</u>	<u>Duplicate</u>	<u>Units</u>	<u>RPD (%)</u>	<u>RPD CL</u>
Total Suspended Solids	2470	2450	mg/L	0.81	(< 5)

Batch Information

Analytical Batch: STS6596

Analytical Method: SM21 2540D

Instrument:

Analyst: EWW

Print Date: 02/04/2020 8:40:17AM

Duplicate Sample Summary

Original Sample ID: 1200289001

Duplicate Sample ID: 1549874

QC for Samples:

1200299001, 1200299002

Analysis Date: 01/24/2020 11:26

Matrix: Water (Surface, Eff., Ground)

Results by SM21 2540D

<u>NAME</u>	<u>Original</u>	<u>Duplicate</u>	<u>Units</u>	<u>RPD (%)</u>	<u>RPD CL</u>
Total Suspended Solids	476	520	mg/L	8.80*	(< 5)

Batch Information

Analytical Batch: STS6596

Analytical Method: SM21 2540D

Instrument:

Analyst: EWW

Print Date: 02/04/2020 8:40:17AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1200299 [STS6596]
 Blank Spike Lab ID: 1549871
 Date Analyzed: 01/24/2020 11:26

Spike Duplicate ID: LCSD for HBN 1200299 [STS6596]
 Spike Duplicate Lab ID: 1549872
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1200299001, 1200299002

Results by SM21 2540D

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Suspended Solids	25	25.5	102	25	25.6	102	(75-125)	0.39	(< 5)

Batch Information

Analytical Batch: **STS6596**
 Analytical Method: **SM21 2540D**
 Instrument:
 Analyst: **EWV**

Print Date: 02/04/2020 8:40:18AM

Method Blank

Blank ID: MB for HBN 1803967 [WXX/13182]
 Blank Lab ID: 1549853

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
 1200299001, 1200299002, 1200299003

Results by EPA 300.0

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Nitrate-N	0.0530J	0.200	0.0500	mg/L
Nitrite-N	0.0540J	0.200	0.0500	mg/L
Total Nitrate/Nitrite-N	0.107J	0.200	0.0500	mg/L

Batch Information

Analytical Batch: WIC6014
 Analytical Method: EPA 300.0
 Instrument: 930 Metrohm compact IC flex
 Analyst: EWW
 Analytical Date/Time: 1/22/2020 3:28:57PM

Prep Batch: WXX13182
 Prep Method: METHOD
 Prep Date/Time: 1/22/2020 3:00:00PM
 Prep Initial Wt./Vol.: 10 mL
 Prep Extract Vol: 10 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1200299 [WXX13182]
 Blank Spike Lab ID: 1549854
 Date Analyzed: 01/22/2020 15:49

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1200299001, 1200299002, 1200299003

Results by EPA 300.0

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Nitrate-N	5	4.81	96	(90-110)
Nitrite-N	5	4.97	99	(90-110)
Total Nitrate/Nitrite-N	10	9.78	98	(90-110)

Batch Information

Analytical Batch: **WIC6014**
 Analytical Method: **EPA 300.0**
 Instrument: **930 Metrohm compact IC flex**
 Analyst: **EWV**

Prep Batch: **WXX13182**
 Prep Method: **METHOD**
 Prep Date/Time: **01/22/2020 15:00**
 Spike Init Wt./Vol.: 5 mg/L Extract Vol: 10 mL
 Dupe Init Wt./Vol.: Extract Vol:

Print Date: 02/04/2020 8:40:23AM

Method Blank

Blank ID: MB for HBN 1804066 [WXX/13186]
 Blank Lab ID: 1550167

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1200299001, 1200299002, 1200299003, 1200299004, 1200299005, 1200299006, 1200299007

Results by SM21 4500-NH3 G

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

Batch Information

Analytical Batch: WDA4729
 Analytical Method: SM21 4500-NH3 G
 Instrument: Discrete Analyzer 2
 Analyst: EWW
 Analytical Date/Time: 1/29/2020 3:33:54PM

Prep Batch: WXX13186
 Prep Method: METHOD
 Prep Date/Time: 1/29/2020 3:00:00PM
 Prep Initial Wt./Vol.: 6 mL
 Prep Extract Vol: 6 mL

Print Date: 02/04/2020 8:40:25AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1200299 [WXX13186]
 Blank Spike Lab ID: 1550168
 Date Analyzed: 01/29/2020 15:35

Spike Duplicate ID: LCSD for HBN 1200299 [WXX13186]
 Spike Duplicate Lab ID: 1550169
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1200299001, 1200299002, 1200299003, 1200299004, 1200299005, 1200299006, 1200299007

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	1.09	109	1	0.914	91	(75-125)	17.70	(< 25)

Batch Information

Analytical Batch: **WDA4729**
 Analytical Method: **SM21 4500-NH3 G**
 Instrument: **Discrete Analyzer 2**
 Analyst: **EWV**

Prep Batch: **WXX13186**
 Prep Method: **METHOD**
 Prep Date/Time: **01/29/2020 15:00**
 Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
 Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

Print Date: 02/04/2020 8:40:27AM

Matrix Spike Summary

Original Sample ID: 1200299001
 MS Sample ID: 1550170 MS
 MSD Sample ID: 1550171 MSD

Analysis Date: 01/29/2020 15:38
 Analysis Date: 01/29/2020 15:40
 Analysis Date: 01/29/2020 15:42
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1200299001, 1200299002, 1200299003, 1200299004, 1200299005, 1200299006, 1200299007

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	0.557	1.00	1.45	90	1.00	1.60	104	75-125	9.60	(< 25)

Batch Information

Analytical Batch: WDA4729
 Analytical Method: SM21 4500-NH3 G
 Instrument: Discrete Analyzer 2
 Analyst: EWW
 Analytical Date/Time: 1/29/2020 3:40:38PM

Prep Batch: WXX13186
 Prep Method: Ammonia by SM21 4500F prep (W)
 Prep Date/Time: 1/29/2020 3:00:00PM
 Prep Initial Wt./Vol.: 6.00mL
 Prep Extract Vol: 6.00mL

Method Blank

Blank ID: MB for HBN 1804156 [WXX/13187]

Blank Lab ID: 1550320

QC for Samples:

1200299001, 1200299002, 1200299003, 1200299004, 1200299005, 1200299006, 1200299007

Matrix: Water (Surface, Eff., Ground)

Results by SM21 4500-N D

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

Batch Information

Analytical Batch: WDA4730

Analytical Method: SM21 4500-N D

Instrument: Discrete Analyzer 2

Analyst: DMM

Analytical Date/Time: 1/31/2020 3:15:13PM

Prep Batch: WXX13187

Prep Method: METHOD

Prep Date/Time: 1/30/2020 11:05:00AM

Prep Initial Wt./Vol.: 25 mL

Prep Extract Vol: 25 mL

Print Date: 02/04/2020 8:40:30AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1200299 [WXX13187]
 Blank Spike Lab ID: 1550321
 Date Analyzed: 01/31/2020 15:16

Spike Duplicate ID: LCSD for HBN 1200299 [WXX13187]
 Spike Duplicate Lab ID: 1550322
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1200299001, 1200299002, 1200299003, 1200299004, 1200299005, 1200299006, 1200299007

Results by SM21 4500-N D

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Kjeldahl Nitrogen	4	4.15	104	4	4.30	107	(75-125)	3.60	(< 25)

Batch Information

Analytical Batch: **WDA4730**
 Analytical Method: **SM21 4500-N D**
 Instrument: **Discrete Analyzer 2**
 Analyst: **DMM**

Prep Batch: **WXX13187**
 Prep Method: **METHOD**
 Prep Date/Time: **01/30/2020 11:05**
 Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL
 Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

Print Date: 02/04/2020 8:40:32AM

Matrix Spike Summary

Original Sample ID: 1200299001
 MS Sample ID: 1550323 MS
 MSD Sample ID: 1550324 MSD

Analysis Date: 01/31/2020 15:19
 Analysis Date: 01/31/2020 15:20
 Analysis Date: 01/31/2020 15:21
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1200299001, 1200299002, 1200299003, 1200299004, 1200299005, 1200299006, 1200299007

Results by SM21 4500-N D

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Kjeldahl Nitrogen	0.921J	4.00	5.26	108	4.00	5.17	106	75-125	1.70	(< 25)

Batch Information

Analytical Batch: WDA4730
 Analytical Method: SM21 4500-N D
 Instrument: Discrete Analyzer 2
 Analyst: DMM
 Analytical Date/Time: 1/31/2020 3:20:29PM

Prep Batch: WXX13187
 Prep Method: Distillation TKN by Phenate (W)
 Prep Date/Time: 1/30/2020 11:05:00AM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL

Print Date: 02/04/2020 8:40:32AM

Method Blank

Blank ID: MB for HBN 1804181 [WXX/13189]

Blank Lab ID: 1550390

QC for Samples:

1200299001, 1200299002

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: WDA4731

Analytical Method: SM21 4500P-B,E

Instrument: Discrete Analyzer 2

Analyst: DMM

Analytical Date/Time: 2/3/2020 1:35:17PM

Prep Batch: WXX13189

Prep Method: SM21 4500P-B,E

Prep Date/Time: 2/3/2020 11:00:00AM

Prep Initial Wt./Vol.: 25 mL

Prep Extract Vol: 25 mL

Print Date: 02/04/2020 8:40:34AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1200299 [WXX13189]
 Blank Spike Lab ID: 1550391
 Date Analyzed: 02/03/2020 13:36

Spike Duplicate ID: LCSD for HBN 1200299 [WXX13189]
 Spike Duplicate Lab ID: 1550392
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1200299001, 1200299002

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	0.194	97	(75-125)	0.77	(< 25)

Batch Information

Analytical Batch: **WDA4731**
 Analytical Method: **SM21 4500P-B,E**
 Instrument: **Discrete Analyzer 2**
 Analyst: **DMM**

Prep Batch: **WXX13189**
 Prep Method: **SM21 4500P-B,E**
 Prep Date/Time: **02/03/2020 11:00**
 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: 02/04/2020 8:40:36AM

Matrix Spike Summary

Original Sample ID: 1200299002
 MS Sample ID: 1550393 MS
 MSD Sample ID: 1550394 MSD

Analysis Date: 02/03/2020 13:38
 Analysis Date: 02/03/2020 13:39
 Analysis Date: 02/03/2020 13:40
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1200299001, 1200299002

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	0.226	0.200	.427	101	0.200	0.444	109	75-125	4.00	(< 25)

Batch Information

Analytical Batch: WDA4731
 Analytical Method: SM21 4500P-B,E
 Instrument: Discrete Analyzer 2
 Analyst: DMM
 Analytical Date/Time: 2/3/2020 1:39:33PM

Prep Batch: WXX13189
 Prep Method: Total Phosphorus (W) Ext.
 Prep Date/Time: 2/3/2020 11:00:00AM
 Prep Initial Wt./Vol.: 25.00mL
 Prep Extract Vol: 25.00mL

Print Date: 02/04/2020 8:40:38AM



1200299



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- West Virginia
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- New York
- Indiana
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CLIENT: *Starter*

CONTACT: *Jake Alward* PHONE NO: *343-5202*

PROJECT NAME: *Waciba WWTP* PROJECT/PWSID/PERMIT#:

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

INVOICE TO: QUOTE #: *201700415* P.O. #:

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

Page *1* of *1*

Section 1

Section 3

Preservative

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/MATRIX CODE	#	Type	PRESERVATIVE						REMARKS/LOC ID	
	<i>1AF</i>	<i>1/22/20</i>	<i>1030</i>	<i>WATER</i>	<i>6</i>	<i>G</i>	<i>DOD</i>	<i>TSS</i>	<i>Nitrate/Nitrite</i>	<i>FC</i>	<i>TC (Quant)</i>	<i>TKN/Ammonia TP</i>	<i>TKN/Ammonia</i>	
	<i>2AF</i>		<i>11:10</i>		<i>6</i>									
	<i>3AC</i>		<i>13:00</i>		<i>2</i>									
	<i>4A</i>		<i>13:20</i>		<i>1</i>									
	<i>5A</i>		<i>13:30</i>		<i>1</i>									
	<i>6A</i>		<i>13:12</i>		<i>1</i>									
	<i>7A</i>		<i>1230</i>		<i>1</i>									

Section 2

Relinquished By: (1)	Date	Time	Received By:
<i>[Signature]</i>	<i>1/22/20</i>	<i>1457</i>	<i>[Signature]</i>
Relinquished By: (2)	Date	Time	Received By:
<i>[Signature]</i>			
Relinquished By: (3)	Date	Time	Received By:
<i>[Signature]</i>			
Relinquished By: (4)	Date	Time	Received For Laboratory By:
<i>[Signature]</i>	<i>20 1/22/20</i>	<i>1457</i>	<i>Muelle Greer NAA</i>

Section 4	DOD Project? Yes No	Data Deliverable Requirements:
Cooler ID:	Requested Turnaround Time and/or Special Instructions:	
	<i>Profile # 348183 gm</i>	
Temp Blank °C:	Chain of Custody Seal: (Circle)	
<i>0.9 D59</i>	INTACT <input type="checkbox"/> BROKEN <input checked="" type="checkbox"/> ABSENT <input checked="" type="checkbox"/>	
(See attached Sample Receipt Form)	(See attached Sample Receipt Form)	



e-Sample Receipt Form

SGS Workorder #:

1200299



1 2 0 0 2 9 9

Review Criteria	Condition (Yes, No, N/A)	Exceptions Noted below
Chain of Custody / Temperature Requirements	Yes	Exemption permitted if sampler hand carries/delivers.
Were Custody Seals intact? Note # & location	N/A	Absent
COC accompanied samples?	Yes	
DOD: Were samples received in COC corresponding coolers?	N/A	
N/A **Exemption permitted if chilled & collected <8 hours ago, or for samples where chilling is not required		
Temperature blank compliant* (i.e., 0-6 °C after CF)?	Yes	Cooler ID: 1 @ 0.9 °C Therm. ID: D59
		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?	N/A	
If <0°C, were sample containers ice free?	N/A	
Note: Identify containers received at non-compliant temperature . Use form FS-0029 if more space is needed.		
Holding Time / Documentation / Sample Condition Requirements		Note: Refer to form F-083 "Sample Guide" for specific holding times.
Were samples received within holding time?	Yes	
Do samples match COC** (i.e., sample IDs, dates/times collected)?	No	Sample 3 had an extra container for Nitrate/Nitrite IC analysis. Proceeded with scheduling analysis.
**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>
1200299001-A	Na2S2O3 for Chlorine Redu	OK			
1200299001-B	Na2S2O3 for Chlorine Redu	OK			
1200299001-C	H2SO4 to pH < 2	OK			
1200299001-D	No Preservative Required	OK			
1200299001-E	No Preservative Required	OK			
1200299001-F	No Preservative Required	OK			
1200299002-A	Na2S2O3 for Chlorine Redu	OK			
1200299002-B	Na2S2O3 for Chlorine Redu	OK			
1200299002-C	H2SO4 to pH < 2	OK			
1200299002-D	No Preservative Required	OK			
1200299002-E	No Preservative Required	OK			
1200299002-F	No Preservative Required	OK			
1200299003-A	Na2S2O3 for Chlorine Redu	OK			
1200299003-B	H2SO4 to pH < 2	OK			
1200299003-C	No Preservative Required	OK			
1200299004-A	H2SO4 to pH < 2	OK			
1200299005-A	H2SO4 to pH < 2	OK			
1200299006-A	H2SO4 to pH < 2	OK			
1200299007-A	H2SO4 to pH < 2	OK			

Container Condition Glossary

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