Laboratory Report of Analysis

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

Report Number: **1195564**

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 Date
Project Manager
Justin.Nelson@sgs.com

Case Narrative

SGS Client: **Stantec Consulting Services Inc.**
SGS Project: **1195564**
Project Name/Site: **Wasilla WWTP**
Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

SW1 (1195564001) PS

5210B – BOD -LCS recovery is biased high (116%). The maximum allowable limit for the LCS is 228.5 mg/L.

SW2 (1195564005) PS

5210B – BOD -LCS recovery is biased high (116%). The maximum allowable limit for the LCS is 228.5 mg/L.

SW3 (1195564006) PS

5210B – BOD -LCS recovery is biased high (116%). The maximum allowable limit for the LCS is 228.5 mg/L.

LCSS for HBN 1799715 [BOD/6432 (1533151) LCSS

5210B – BOD -LCS recovery is biased high (116%). The maximum allowable limit for the LCS is 228.5 mg/L.

1195346002MSD (1535142) MSD

4500N-D - Total Kjeldahl Nitrogen - MSD recovery 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, indenmification 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, 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.

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Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
SW1	1195564001	09/19/2019	09/19/2019	Water (Surface, Eff., Ground)
MW2B	1195564002	09/19/2019	09/19/2019	Water (Surface, Eff., Ground)
B1	1195564003	09/19/2019	09/19/2019	Water (Surface, Eff., Ground)
MW10	1195564004	09/19/2019	09/19/2019	Water (Surface, Eff., Ground)
SW2	1195564005	09/19/2019	09/19/2019	Water (Surface, Eff., Ground)
SW3	1195564006	09/19/2019	09/19/2019	Water (Surface, Eff., Ground)
MW15	1195564007	09/19/2019	09/19/2019	Water (Surface, Eff., Ground)
B4	1195564008	09/19/2019	09/19/2019	Water (Surface, Eff., Ground)

Method	Method Description
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: **SW1**
Lab Sample ID: 1195564001

	Parameter	Result	Units
Microbiology Laboratory	E. Coli	2	MPN/100mL
	Fecal Coliform	8.3	col/100mL
	Total Coliform	435	MPN/100mL
Waters Department	Ammonia-N	0.119	mg/L
	Total Kjeldahl Nitrogen	0.556J	mg/L
	Total Phosphorus	0.0207	mg/L
	Total Suspended Solids	1.61	mg/L

Client Sample ID: **MW2B**
Lab Sample ID: 1195564002

	Parameter	Result	Units
Waters Department	Ammonia-N	0.152	mg/L

Client Sample ID: **B1**
Lab Sample ID: 1195564003

	Parameter	Result	Units
Waters Department	Ammonia-N	0.126	mg/L

Client Sample ID: **MW10**
Lab Sample ID: 1195564004

	Parameter	Result	Units
Waters Department	Ammonia-N	0.0694J	mg/L
	Nitrate-N	0.0650J	mg/L
	Total Nitrate/Nitrite-N	0.0820J	mg/L

Client Sample ID: **SW2**
Lab Sample ID: 1195564005

	Parameter	Result	Units
Microbiology Laboratory	E. Coli	18	MPN/100mL
	Fecal Coliform	46	col/100mL
	Total Coliform	727	MPN/100mL
Waters Department	Ammonia-N	0.0938J	mg/L
	Nitrate-N	2.36	mg/L
	Total Kjeldahl Nitrogen	0.689J	mg/L
	Total Nitrate/Nitrite-N	2.38	mg/L
	Total Suspended Solids	1.13	mg/L

Client Sample ID: **SW3**
Lab Sample ID: 1195564006

	Parameter	Result	Units
Microbiology Laboratory	E. Coli	GT2420	MPN/100mL
	Fecal Coliform	TNTC	col/100mL
	Total Coliform	GT2420	MPN/100mL
Waters Department	Ammonia-N	0.143	mg/L
	Nitrate-N	13.3	mg/L
	Total Kjeldahl Nitrogen	1.18	mg/L
	Total Nitrate/Nitrite-N	13.3	mg/L
	Total Phosphorus	2.57	mg/L
	Total Suspended Solids	12.5	mg/L

Client Sample ID: **MW15**
Lab Sample ID: 1195564007

	Parameter	Result	Units
Waters Department	Ammonia-N	0.350	mg/L

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Detectable Results Summary

Client Sample ID: **B4**
Lab Sample ID: 1195564008
Waters Department

Parameter	Result	Units
Ammonia-N	0.0595J	mg/L
Nitrate-N	1.41	mg/L
Total Nitrate/Nitrite-N	1.41	mg/L

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Results of **SW1**

Client Sample ID: **SW1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195564001
Lab Project ID: 1195564

Collection Date: 09/19/19 10:46
Received Date: 09/19/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.00	U	2.00	2.00	mg/L	1		09/19/19 19:10

Batch Information

Analytical Batch: BOD6432
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 09/19/19 19:10
Container ID: 1195564001-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	8.3		1.67	1.67	col/100mL	1		09/19/19 17:06

Batch Information

Analytical Batch: BTF17657
Analytical Method: SM21 9222D
Analyst: ACF
Analytical Date/Time: 09/19/19 17:06
Container ID: 1195564001-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	2		1	1	MPN/100m	1		09/19/19 17:37
Total Coliform	435		1	1	MPN/100m	1		09/19/19 17:37

Batch Information

Analytical Batch: BTF17656
Analytical Method: SM21 9223B
Analyst: ACF
Analytical Date/Time: 09/19/19 17:37
Container ID: 1195564001-C

Print Date: 10/08/2019 4:24:16PM

J flagging is activated

Results of **SW1**

Client Sample ID: **SW1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195564001
Lab Project ID: 1195564

Collection Date: 09/19/19 10:46
Received Date: 09/19/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100	U	0.200	0.0500	mg/L	1		09/19/19 21:34
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/19/19 21:34
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/19/19 21:34

Batch Information

Analytical Batch: WIC5967
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/19/19 21:34
Container ID: 1195564001-B

Prep Batch: WXX13019
Prep Method: METHOD
Prep Date/Time: 09/19/19 11:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	1.61		1.08	0.333	mg/L	1		09/23/19 18:27

Batch Information

Analytical Batch: STS6493
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 09/23/19 18:27
Container ID: 1195564001-F

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.556	J	1.00	0.310	mg/L	1		09/29/19 15:26

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 15:26
Container ID: 1195564001-D

Prep Batch: WXX13039
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.119		0.100	0.0310	mg/L	1		09/28/19 14:10

Print Date: 10/08/2019 4:24:16PM

J flagging is activated

Results of **SW1**

Client Sample ID: **SW1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195564001
Lab Project ID: 1195564

Collection Date: 09/19/19 10:46
Received Date: 09/19/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4653
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 09/28/19 14:10
Container ID: 1195564001-D

Prep Batch: WXX13038
Prep Method: METHOD
Prep Date/Time: 09/28/19 11:10
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0207		0.0200	0.00500	mg/L	1		09/29/19 20:18

Batch Information

Analytical Batch: WDA4655
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 09/29/19 20:18
Container ID: 1195564001-D

Prep Batch: WXX13043
Prep Method: SM21 4500P-B,E
Prep Date/Time: 09/29/19 16:54
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 10/08/2019 4:24:16PM

J flagging is activated

Results of **MW2B**

Client Sample ID: **MW2B**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195564002
Lab Project ID: 1195564

Collection Date: 09/19/19 11:15
Received Date: 09/19/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	1.00	U	1.00	1.00	col/100mL	1		09/19/19 17:06

Batch Information

Analytical Batch: BTF17657
Analytical Method: SM21 9222D
Analyst: ACF
Analytical Date/Time: 09/19/19 17:06
Container ID: 1195564002-A

Results of **MW2B**

Client Sample ID: **MW2B**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195564002
Lab Project ID: 1195564

Collection Date: 09/19/19 11:15
Received Date: 09/19/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100 U		0.200	0.0500	mg/L	1		09/19/19 22:12
Nitrite-N	0.100 U		0.200	0.0500	mg/L	1		09/19/19 22:12
Total Nitrate/Nitrite-N	0.100 U		0.200	0.0500	mg/L	1		09/19/19 22:12

Batch Information

Analytical Batch: WIC5967
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/19/19 22:12
Container ID: 1195564002-B

Prep Batch: WXX13019
Prep Method: METHOD
Prep Date/Time: 09/19/19 11:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.500 U		1.00	0.310	mg/L	1		09/29/19 15:27

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 15:27
Container ID: 1195564002-C

Prep Batch: WXX13039
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.152		0.100	0.0310	mg/L	1		09/28/19 14:12

Batch Information

Analytical Batch: WDA4653
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 09/28/19 14:12
Container ID: 1195564002-C

Prep Batch: WXX13038
Prep Method: METHOD
Prep Date/Time: 09/28/19 11:10
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Results of **B1**

Client Sample ID: **B1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195564003
Lab Project ID: 1195564

Collection Date: 09/19/19 11:30
Received Date: 09/19/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	1.67	U	1.67	1.67	col/100mL	1		09/19/19 17:06

Batch Information

Analytical Batch: BTF17657
Analytical Method: SM21 9222D
Analyst: ACF
Analytical Date/Time: 09/19/19 17:06
Container ID: 1195564003-A

Results of **B1**

Client Sample ID: **B1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195564003
Lab Project ID: 1195564

Collection Date: 09/19/19 11:30
Received Date: 09/19/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100 U		0.200	0.0500	mg/L	1		09/19/19 22:31
Nitrite-N	0.100 U		0.200	0.0500	mg/L	1		09/19/19 22:31
Total Nitrate/Nitrite-N	0.100 U		0.200	0.0500	mg/L	1		09/19/19 22:31

Batch Information

Analytical Batch: WIC5967
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/19/19 22:31
Container ID: 1195564003-B

Prep Batch: WXX13019
Prep Method: METHOD
Prep Date/Time: 09/19/19 11:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.500 U		1.00	0.310	mg/L	1		09/29/19 15:29

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 15:29
Container ID: 1195564003-C

Prep Batch: WXX13039
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.126		0.100	0.0310	mg/L	1		09/28/19 14:32

Batch Information

Analytical Batch: WDA4653
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 09/28/19 14:32
Container ID: 1195564003-C

Prep Batch: WXX13038
Prep Method: METHOD
Prep Date/Time: 09/28/19 11:10
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Results of **MW10**

Client Sample ID: **MW10**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195564004
Lab Project ID: 1195564

Collection Date: 09/19/19 11:58
Received Date: 09/19/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	1.00	U	1.00	1.00	col/100mL	1		09/19/19 17:06

Batch Information

Analytical Batch: BTF17657
Analytical Method: SM21 9222D
Analyst: ACF
Analytical Date/Time: 09/19/19 17:06
Container ID: 1195564004-A

Print Date: 10/08/2019 4:24:16PM

J flagging is activated

Results of **MW10**

Client Sample ID: **MW10**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195564004
Lab Project ID: 1195564

Collection Date: 09/19/19 11:58
Received Date: 09/19/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.0650	J	0.200	0.0500	mg/L	1		09/19/19 22:50
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/19/19 22:50
Total Nitrate/Nitrite-N	0.0820	J	0.200	0.0500	mg/L	1		09/19/19 22:50

Batch Information

Analytical Batch: WIC5967
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/19/19 22:50
Container ID: 1195564004-B

Prep Batch: WXX13019
Prep Method: METHOD
Prep Date/Time: 09/19/19 11:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.500	U	1.00	0.310	mg/L	1		09/29/19 15:30

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 15:30
Container ID: 1195564004-C

Prep Batch: WXX13039
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.0694	J	0.100	0.0310	mg/L	1		09/28/19 14:33

Batch Information

Analytical Batch: WDA4653
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 09/28/19 14:33
Container ID: 1195564004-C

Prep Batch: WXX13038
Prep Method: METHOD
Prep Date/Time: 09/28/19 11:10
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Results of **SW2**

Client Sample ID: **SW2**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195564005
Lab Project ID: 1195564

Collection Date: 09/19/19 12:40
Received Date: 09/19/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.00	U	2.00	2.00	mg/L	1		09/19/19 19:10

Batch Information

Analytical Batch: BOD6432
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 09/19/19 19:10
Container ID: 1195564005-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	46		2.00	2.00	col/100mL	1		09/19/19 17:06

Batch Information

Analytical Batch: BTF17657
Analytical Method: SM21 9222D
Analyst: ACF
Analytical Date/Time: 09/19/19 17:06
Container ID: 1195564005-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	18		1	1	MPN/100m	1		09/19/19 17:37
Total Coliform	727		1	1	MPN/100m	1		09/19/19 17:37

Batch Information

Analytical Batch: BTF17656
Analytical Method: SM21 9223B
Analyst: ACF
Analytical Date/Time: 09/19/19 17:37
Container ID: 1195564005-C

Results of **SW2**

Client Sample ID: **SW2**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195564005
Lab Project ID: 1195564

Collection Date: 09/19/19 12:40
Received Date: 09/19/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	2.36		0.200	0.0500	mg/L	1		09/19/19 23:47
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/19/19 23:47
Total Nitrate/Nitrite-N	2.38		0.200	0.0500	mg/L	1		09/19/19 23:47

Batch Information

Analytical Batch: WIC5967
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/19/19 23:47
Container ID: 1195564005-B

Prep Batch: WXX13019
Prep Method: METHOD
Prep Date/Time: 09/19/19 11:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	1.13		1.03	0.320	mg/L	1		09/23/19 18:27

Batch Information

Analytical Batch: STS6493
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 09/23/19 18:27
Container ID: 1195564005-F

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.689	J	1.00	0.310	mg/L	1		09/29/19 15:31

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 15:31
Container ID: 1195564005-D

Prep Batch: WXX13039
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.0938	J	0.100	0.0310	mg/L	1		09/28/19 14:38

Print Date: 10/08/2019 4:24:16PM

J flagging is activated

Results of **SW2**

Client Sample ID: **SW2**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195564005
Lab Project ID: 1195564

Collection Date: 09/19/19 12:40
Received Date: 09/19/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4653
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 09/28/19 14:38
Container ID: 1195564005-D

Prep Batch: WXX13038
Prep Method: METHOD
Prep Date/Time: 09/28/19 11:10
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0100	U	0.0200	0.00500	mg/L	1		09/29/19 20:21

Batch Information

Analytical Batch: WDA4655
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 09/29/19 20:21
Container ID: 1195564005-D

Prep Batch: WXX13043
Prep Method: SM21 4500P-B,E
Prep Date/Time: 09/29/19 16:54
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: 1195564006
Lab Project ID: 1195564

Collection Date: 09/19/19 12:58
Received Date: 09/19/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.00	U	2.00	2.00	mg/L	1		09/19/19 19:10

Batch Information

Analytical Batch: BOD6432
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 09/19/19 19:10
Container ID: 1195564006-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	TNTC		10.0	10.0	col/100mL	1		09/19/19 17:06

Batch Information

Analytical Batch: BTF17657
Analytical Method: SM21 9222D
Analyst: ACF
Analytical Date/Time: 09/19/19 17:06
Container ID: 1195564006-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	>2420		10	10	MPN/100m	10		09/19/19 17:37
Total Coliform	>2420		10	10	MPN/100m	10		09/19/19 17:37

Batch Information

Analytical Batch: BTF17656
Analytical Method: SM21 9223B
Analyst: ACF
Analytical Date/Time: 09/19/19 17:37
Container ID: 1195564006-C

Print Date: 10/08/2019 4:24:16PM

J flagging is activated

Results of **SW3**

Client Sample ID: **SW3**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195564006
Lab Project ID: 1195564

Collection Date: 09/19/19 12:58
Received Date: 09/19/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	13.3		0.200	0.0500	mg/L	1		09/20/19 00:06
Nitrite-N	0.100 U		0.200	0.0500	mg/L	1		09/20/19 00:06
Total Nitrate/Nitrite-N	13.3		0.200	0.0500	mg/L	1		09/20/19 00:06

Batch Information

Analytical Batch: WIC5967
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/20/19 00:06
Container ID: 1195564006-B

Prep Batch: WXX13019
Prep Method: METHOD
Prep Date/Time: 09/19/19 11:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	12.5		1.03	0.320	mg/L	1		09/23/19 18:27

Batch Information

Analytical Batch: STS6493
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 09/23/19 18:27
Container ID: 1195564006-F

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	1.18		1.00	0.310	mg/L	1		09/29/19 15:33

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 15:33
Container ID: 1195564006-D

Prep Batch: WXX13039
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.143		0.100	0.0310	mg/L	1		09/28/19 14:40

Print Date: 10/08/2019 4:24:16PM

J flagging is activated

Results of **SW3**

Client Sample ID: **SW3**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195564006
Lab Project ID: 1195564

Collection Date: 09/19/19 12:58
Received Date: 09/19/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4653
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 09/28/19 14:40
Container ID: 1195564006-D

Prep Batch: WXX13038
Prep Method: METHOD
Prep Date/Time: 09/28/19 11:10
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	2.57		0.200	0.0500	mg/L	1		10/07/19 16:01

Batch Information

Analytical Batch: WDA4662
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 10/07/19 16:01
Container ID: 1195564006-D

Prep Batch: WXX13059
Prep Method: SM21 4500P-B,E
Prep Date/Time: 10/07/19 14:06
Prep Initial Wt./Vol.: 2.5 mL
Prep Extract Vol: 25 mL

Print Date: 10/08/2019 4:24:16PM

J flagging is activated

Results of **MW15**

Client Sample ID: **MW15**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195564007
Lab Project ID: 1195564

Collection Date: 09/19/19 13:35
Received Date: 09/19/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	1.00	U	1.00	1.00	col/100mL	1		09/19/19 17:06

Batch Information

Analytical Batch: BTF17657
Analytical Method: SM21 9222D
Analyst: ACF
Analytical Date/Time: 09/19/19 17:06
Container ID: 1195564007-A

Print Date: 10/08/2019 4:24:16PM

J flagging is activated

Results of **MW15**

Client Sample ID: **MW15**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195564007
Lab Project ID: 1195564

Collection Date: 09/19/19 13:35
Received Date: 09/19/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100 U		0.200	0.0500	mg/L	1		09/20/19 00:25
Nitrite-N	0.100 U		0.200	0.0500	mg/L	1		09/20/19 00:25
Total Nitrate/Nitrite-N	0.100 U		0.200	0.0500	mg/L	1		09/20/19 00:25

Batch Information

Analytical Batch: WIC5967
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/20/19 00:25
Container ID: 1195564007-B

Prep Batch: WXX13019
Prep Method: METHOD
Prep Date/Time: 09/19/19 11:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.500 U		1.00	0.310	mg/L	1		09/29/19 15:36

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 15:36
Container ID: 1195564007-C

Prep Batch: WXX13039
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.350		0.100	0.0310	mg/L	1		09/28/19 14:42

Batch Information

Analytical Batch: WDA4653
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 09/28/19 14:42
Container ID: 1195564007-C

Prep Batch: WXX13038
Prep Method: METHOD
Prep Date/Time: 09/28/19 11:10
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Results of **B4**

Client Sample ID: **B4**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195564008
Lab Project ID: 1195564

Collection Date: 09/19/19 13:48
Received Date: 09/19/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	1.00	U	1.00	1.00	col/100mL	1		09/19/19 17:06

Batch Information

Analytical Batch: BTF17657
Analytical Method: SM21 9222D
Analyst: ACF
Analytical Date/Time: 09/19/19 17:06
Container ID: 1195564008-A

Print Date: 10/08/2019 4:24:16PM

J flagging is activated

Results of **B4**

Client Sample ID: **B4**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195564008
Lab Project ID: 1195564

Collection Date: 09/19/19 13:48
Received Date: 09/19/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	1.41		0.200	0.0500	mg/L	1		09/20/19 00:44
Nitrite-N	0.100 U		0.200	0.0500	mg/L	1		09/20/19 00:44
Total Nitrate/Nitrite-N	1.41		0.200	0.0500	mg/L	1		09/20/19 00:44

Batch Information

Analytical Batch: WIC5967
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/20/19 00:44
Container ID: 1195564008-B

Prep Batch: WXX13019
Prep Method: METHOD
Prep Date/Time: 09/19/19 11:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.500 U		1.00	0.310	mg/L	1		09/29/19 15:38

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 15:38
Container ID: 1195564008-C

Prep Batch: WXX13039
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.0595 J		0.100	0.0310	mg/L	1		09/28/19 14:43

Batch Information

Analytical Batch: WDA4653
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 09/28/19 14:43
Container ID: 1195564008-C

Prep Batch: WXX13038
Prep Method: METHOD
Prep Date/Time: 09/28/19 11:10
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Method Blank

Blank ID: MB for HBN 1799715 [BOD/6432]
Blank Lab ID: 1533150

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195564001, 1195564005, 1195564006

Results by **SM21 5210B**

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

Batch Information

Analytical Batch: BOD6432
Analytical Method: SM21 5210B
Instrument:
Analyst: ACF
Analytical Date/Time: 9/19/2019 12:27:14PM

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1195564 [BOD6432]
Blank Spike Lab ID: 1533151
Date Analyzed: 09/19/2019 12:27

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195564001, 1195564005, 1195564006

Results by **SM21 5210B**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)		CL
Biochemical Oxygen Demand	198	229	116	*	(84.6-115.4

Batch Information

Analytical Batch: **BOD6432**
Analytical Method: **SM21 5210B**
Instrument:
Analyst: **ACF**

Print Date: 10/08/2019 4:24:24PM

Method Blank

Blank ID: MB for HBN 1799739 [BTF/17656]
Blank Lab ID: 1533248

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195564001, 1195564005, 1195564006

Results by **SM21 9223B**

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

Batch Information

Analytical Batch: BTF17656
Analytical Method: SM21 9223B
Instrument:
Analyst: ACF
Analytical Date/Time: 9/19/2019 1:25:40PM

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Method Blank

Blank ID: MB for HBN 1799740 [BTF/17657]
Blank Lab ID: 1533250

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195564001, 1195564002, 1195564003, 1195564004, 1195564005, 1195564006, 1195564007, 1195564008

Results by **SM21 9222D**

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

Batch Information

Analytical Batch: BTF17657
Analytical Method: SM21 9222D
Instrument:
Analyst: ACF
Analytical Date/Time: 9/19/2019 5:06:11PM

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Method Blank

Blank ID: MB for HBN 1799878 [STS/6493]
Blank Lab ID: 1533855

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195564001, 1195564005, 1195564006

Results by **SM21 2540D**

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

Batch Information

Analytical Batch: STS6493
Analytical Method: SM21 2540D
Instrument:
Analyst: EWW
Analytical Date/Time: 9/23/2019 6:27:25PM

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Duplicate Sample Summary

Original Sample ID: 1195597002
Duplicate Sample ID: 1533858
QC for Samples:
1195564001, 1195564005, 1195564006

Analysis Date: 09/23/2019 18:27
Matrix: Water (Surface, Eff., Ground)

Results by **SM21 2540D**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Suspended Solids	1870	1920	mg/L	2.60	(< 5)

Batch Information

Analytical Batch: STS6493
Analytical Method: SM21 2540D
Instrument:
Analyst: EWW

Print Date: 10/08/2019 4:24:42PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1195564 [STS6493]
Blank Spike Lab ID: 1533856
Date Analyzed: 09/23/2019 18:27

Spike Duplicate ID: LCSD for HBN 1195564 [STS6493]
Spike Duplicate Lab ID: 1533857
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195564001, 1195564005, 1195564006

Results by **SM21 2540D**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Suspended Solids	25	24.6	98	25	24.7	99	(75-125)	0.41	(< 5)

Batch Information

Analytical Batch: **STS6493**
Analytical Method: **SM21 2540D**
Instrument:
Analyst: **EWW**

Print Date: 10/08/2019 4:24:44PM

Method Blank

Blank ID: MB for HBN 1799847 [WXX/13019]
Blank Lab ID: 1533708

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195564001, 1195564002, 1195564003, 1195564004, 1195564005, 1195564006, 1195564007, 1195564008

Results by **EPA 300.0**

Parameter	Results	LOQ/CL	DL	Units
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: WIC5967
Analytical Method: EPA 300.0
Instrument: 930 Metrohm compact IC flex
Analyst: DMM
Analytical Date/Time: 9/19/2019 12:47:18PM

Prep Batch: WXX13019
Prep Method: METHOD
Prep Date/Time: 9/19/2019 11:00:00AM
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1195564 [WXX13019]
Blank Spike Lab ID: 1533709
Date Analyzed: 09/19/2019 13:06

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195564001, 1195564002, 1195564003, 1195564004, 1195564005, 1195564006, 1195564007, 1195564008

Results by **EPA 300.0**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Nitrate-N	5	4.77	95	(90-110)
Nitrite-N	5	4.89	98	(90-110)
Total Nitrate/Nitrite-N	10	9.66	97	(90-110)

Batch Information

Analytical Batch: **WIC5967**
Analytical Method: **EPA 300.0**
Instrument: **930 Metrohm compact IC flex**
Analyst: **DMM**

Prep Batch: **WXX13019**
Prep Method: **METHOD**
Prep Date/Time: **09/19/2019 11:00**
Spike Init Wt./Vol.: 5 mg/L Extract Vol: 10 mL
Dupe Init Wt./Vol.: Extract Vol:

Print Date: 10/08/2019 4:24:51PM

Matrix Spike Summary

Original Sample ID: 1533710
MS Sample ID: 1533711 MS
MSD Sample ID:

Analysis Date: 09/19/2019 21:34
Analysis Date: 09/19/2019 21:53
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195564001, 1195564002, 1195564003, 1195564004, 1195564005, 1195564006, 1195564007, 1195564008

Results by **EPA 300.0**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Nitrate-N	0.100U	5.00	4.59	92				90-110		
Nitrite-N	0.100U	5.00	4.93	99				90-110		

Batch Information

Analytical Batch: WIC5967
Analytical Method: EPA 300.0
Instrument: 930 Metrohm compact IC flex
Analyst: DMM
Analytical Date/Time: 9/19/2019 9:53:38PM

Prep Batch: WXX13019
Prep Method: EPA 300.0 Extraction Waters/Liquids
Prep Date/Time: 9/19/2019 11:00:00AM
Prep Initial Wt./Vol.: 10.00mL
Prep Extract Vol: 10.00mL

Print Date: 10/08/2019 4:24:53PM

Matrix Spike Summary

Original Sample ID: 1533712
MS Sample ID: 1533713 MS
MSD Sample ID:

Analysis Date: 09/20/2019 0:44
Analysis Date: 09/20/2019 1:03
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195564001, 1195564002, 1195564003, 1195564004, 1195564005, 1195564006, 1195564007, 1195564008

Results by **EPA 300.0**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Nitrate-N	1.41	5.00	6.04	93				90-110		
Nitrite-N	0.100U	5.00	4.94	99				90-110		

Batch Information

Analytical Batch: WIC5967
Analytical Method: EPA 300.0
Instrument: 930 Metrohm compact IC flex
Analyst: DMM
Analytical Date/Time: 9/20/2019 1:03:37AM

Prep Batch: WXX13019
Prep Method: EPA 300.0 Extraction Waters/Liquids
Prep Date/Time: 9/19/2019 11:00:00AM
Prep Initial Wt./Vol.: 10.00mL
Prep Extract Vol: 10.00mL

Print Date: 10/08/2019 4:24:53PM

Method Blank

Blank ID: MB for HBN 1800143 [WXX/13038]
Blank Lab ID: 1535112

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195564001, 1195564002, 1195564003, 1195564004, 1195564005, 1195564006, 1195564007, 1195564008

Results by **SM21 4500-NH3 G**

Parameter	Results	LOQ/CL	DL	Units
Ammonia-N	0.0517J	0.100	0.0310	mg/L

Batch Information

Analytical Batch: WDA4653
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 9/28/2019 12:37:41PM

Prep Batch: WXX13038
Prep Method: METHOD
Prep Date/Time: 9/28/2019 11:10:00AM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1195564 [WXX13038]
Blank Spike Lab ID: 1535113
Date Analyzed: 09/28/2019 12:39

Spike Duplicate ID: LCSD for HBN 1195564 [WXX13038]
Spike Duplicate Lab ID: 1535114
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195564001, 1195564002, 1195564003, 1195564004, 1195564005, 1195564006, 1195564007, 1195564008

Results by **SM21 4500-NH3 G**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	1	1.13	113	1	1.03	103	(75-125)	9.30	(< 25)

Batch Information

Analytical Batch: **WDA4653**
Analytical Method: **SM21 4500-NH3 G**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX13038**
Prep Method: **METHOD**
Prep Date/Time: **09/28/2019 11:10**
Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

Print Date: 10/08/2019 4:24:59PM

Matrix Spike Summary

Original Sample ID: 1195477001
MS Sample ID: 1535115 MS
MSD Sample ID: 1535116 MSD

Analysis Date: 09/28/2019 12:42
Analysis Date: 09/28/2019 15:00
Analysis Date: 09/28/2019 15:02
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195564001, 1195564002, 1195564003, 1195564004, 1195564005, 1195564006, 1195564007, 1195564008

Results by **SM21 4500-NH3 G**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	0.134	1.00	1.26	112	1.00	1.29	116	75-125	2.90	(< 25)

Batch Information

Analytical Batch: WDA4653
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 9/28/2019 3:00:28PM

Prep Batch: WXX13038
Prep Method: Ammonia by SM21 4500F prep (W)
Prep Date/Time: 9/28/2019 11:10:00AM
Prep Initial Wt./Vol.: 6.00mL
Prep Extract Vol: 6.00mL

Print Date: 10/08/2019 4:25:01PM

Method Blank

Blank ID: MB for HBN 1800145 [WXX/13039]
Blank Lab ID: 1535138

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195564001, 1195564002, 1195564003, 1195564004, 1195564005, 1195564006, 1195564007, 1195564008

Results by **SM21 4500-N D**

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

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 9/29/2019 3:05:41PM

Prep Batch: WXX13039
Prep Method: METHOD
Prep Date/Time: 9/28/2019 12:08:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1195564 [WXX13039]
Blank Spike Lab ID: 1535139
Date Analyzed: 09/29/2019 15:06

Spike Duplicate ID: LCSD for HBN 1195564 [WXX13039]
Spike Duplicate Lab ID: 1535140
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195564001, 1195564002, 1195564003, 1195564004, 1195564005, 1195564006, 1195564007, 1195564008

Results by **SM21 4500-N D**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Kjeldahl Nitrogen	4	4.44	111	4	4.20	105	(75-125)	5.60	(< 25)

Batch Information

Analytical Batch: **WDA4654**
Analytical Method: **SM21 4500-N D**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX13039**
Prep Method: **METHOD**
Prep Date/Time: **09/28/2019 12:08**
Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

Print Date: 10/08/2019 4:25:06PM

Matrix Spike Summary

Original Sample ID: 1195346002
MS Sample ID: 1535141 MS
MSD Sample ID: 1535142 MSD

Analysis Date: 09/29/2019 15:10
Analysis Date: 09/29/2019 15:12
Analysis Date: 09/29/2019 15:13
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195564001, 1195564002, 1195564003, 1195564004, 1195564005, 1195564006, 1195564007, 1195564008

Results by **SM21 4500-N D**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Kjeldahl Nitrogen	1.66	4.00	6.26	115	4.00	6.69	126 *	75-125	6.70	(< 25)

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 9/29/2019 3:12:13PM

Prep Batch: WXX13039
Prep Method: Distillation TKN by Phenate (W)
Prep Date/Time: 9/28/2019 12:08:00PM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 10/08/2019 4:25:08PM

Method Blank

Blank ID: MB for HBN 1800163 [WXX/13043]
Blank Lab ID: 1535270

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195564001, 1195564005

Results by **SM21 4500P-B,E**

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

Batch Information

Analytical Batch: WDA4655
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 9/29/2019 8:03:22PM

Prep Batch: WXX13043
Prep Method: SM21 4500P-B,E
Prep Date/Time: 9/29/2019 4:54:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1195564 [WXX13043]
Blank Spike Lab ID: 1535271
Date Analyzed: 09/29/2019 20:04

Spike Duplicate ID: LCSD for HBN 1195564 [WXX13043]
Spike Duplicate Lab ID: 1535272
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195564001, 1195564005

Results by **SM21 4500P-B,E**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Phosphorus	0.2	0.191	96	0.2	0.187	94	(75-125)	2.10	(< 25)

Batch Information

Analytical Batch: **WDA4655**
Analytical Method: **SM21 4500P-B,E**
Instrument: **Discrete Analyzer 2**
Analyst: **EWW**

Prep Batch: **WXX13043**
Prep Method: **SM21 4500P-B,E**
Prep Date/Time: **09/29/2019 16:54**
Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

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Matrix Spike Summary

Original Sample ID: 1195480002
MS Sample ID: 1535273 MS
MSD Sample ID: 1535274 MSD

Analysis Date: 09/29/2019 20:09
Analysis Date: 09/29/2019 20:10
Analysis Date: 09/29/2019 20:11
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195564001, 1195564005

Results by **SM21 4500P-B,E**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Phosphorus	0.0200U	0.200	.212	106	0.200	0.213	107	75-125	0.85	(< 25)

Batch Information

Analytical Batch: WDA4655
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 9/29/2019 8:10:13PM

Prep Batch: WXX13043
Prep Method: Total Phosphorus (W) Ext.
Prep Date/Time: 9/29/2019 4:54:00PM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 10/08/2019 4:25:17PM

Method Blank

Blank ID: MB for HBN 1800508 [WXX/13059]
Blank Lab ID: 1536869

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195564006

Results by **SM21 4500P-B,E**

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

Batch Information

Analytical Batch: WDA4662
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 10/7/2019 3:58:51PM

Prep Batch: WXX13059
Prep Method: SM21 4500P-B,E
Prep Date/Time: 10/7/2019 2:06:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1195564 [WXX13059]
Blank Spike Lab ID: 1536870
Date Analyzed: 10/07/2019 15:59

Spike Duplicate ID: LCSD for HBN 1195564 [WXX13059]
Spike Duplicate Lab ID: 1536871
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195564006

Results by **SM21 4500P-B,E**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Phosphorus	0.2	0.199	99	0.2	0.195	98	(75-125)	1.70	(< 25)

Batch Information

Analytical Batch: **WDA4662**
Analytical Method: **SM21 4500P-B,E**
Instrument: **Discrete Analyzer 2**
Analyst: **EWW**

Prep Batch: **WXX13059**
Prep Method: **SM21 4500P-B,E**
Prep Date/Time: **10/07/2019 14:06**
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: 10/08/2019 4:25:22PM

Matrix Spike Summary

Original Sample ID: 1195771001
MS Sample ID: 1536872 MS
MSD Sample ID: 1536873 MSD

QC for Samples: 1195564006

Analysis Date: 10/07/2019 16:03
Analysis Date: 10/07/2019 16:04
Analysis Date: 10/07/2019 16:05
Matrix: Water (Surface, Eff., Ground)

Results by **SM21 4500P-B,E**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Phosphorus	0.0380	0.200	.244	103	0.200	0.238	100	75-125	2.60	(< 25)

Batch Information

Analytical Batch: WDA4662
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 10/7/2019 4:04:44PM

Prep Batch: WXX13059
Prep Method: Total Phosphorus (W) Ext.
Prep Date/Time: 10/7/2019 2:06:00PM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 10/08/2019 4:25:24PM

SGS **1195564**

SGS North America Inc.
CHAIN OF CUSTODY RECORD

Locations Nationwide

Alaska	Maryland
New Jersey	New York
North Carolina	Indiana
West Virgina	Kentucky

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

Page 1 of 1

Section 1

CLIENT: Stantec

CONTACT: Jake Alward PHONE NO: 343-5202

PROJECT NAME: Wasilla MW7P PROJECT/ PWSID/ PERMIT#:

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

INVOICE TO: QUOTE #:

P.O. #: 204700415

Section 2

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	Section 3 # CONTAINERS	Type C = COMP G = GRAB MI = Multi Incremental Soils	Preservative: 1	1	—	$Na_2S_2O_3$	$NaOH$	H_2SO_4	H_2SO_4				REMARKS/ LOC ID
							BOD	TSS	Nitrate/Nitrite	FC	TC (Quanti Tray)	TKN/Ammonia/TP	TKN/Ammonia				
1 AF	SW1	9/18/19	1046	Water	6	G	1	1	1	1	1	1					
2 AC	MW2B		1115		3				1	1			1				
3 AC	B1		1130		3				1	1			1				
4 AC	MW10		1158		3				1	1			1				
5 AF	SW2		1240		6		1	1	1	1	1	1					
6 AF	SW3		1258		6		1	1	1	1	1	1					
7 AC	MW15		1335		3				1	1			1				
8 AC	B4		1348		3				1	1			1				

Section 5

	Date	Time	
Relinquished By: (1)	9/19/19	1533	Received By:
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	9.19.19	15:27	Received For Laboratory By:

Section 4

DOD Project? Yes No

Cooler ID:

Data Deliverable Requirements:

Requested Turnaround Time and/or Special Instructions:

Temp Blank °C: 5.0 C D S8

or Ambient [ ]

(See attached Sample Receipt Form)

Chain of Custody Seal: (Circle)

INTACT BROKEN ABSENT

(See attached Sample Receipt Form)

HD

e-Sample Receipt Form

SGS Workorder #: 1195564

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	HD
COC accompanied samples?	Yes	
DOD: Were samples received in COC corresponding coolers?		
**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 @ 5.0 °C Therm. ID: D58
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?	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)?	No	**COC indicate 09/18 as date of collection in opposition to Container that State 09/19, loggin per container.**
**Note: If times differ <1hr, record details & login per COC.		
***Note: If sample information on containers differs from COC, SGS will default to COC informatic		
Were analytical requests clear? (i.e., method is specified for analyses with multiple option for analysis (Ex: BTEX, Metals)	Yes	
		***Exemption permitted for metals (e.g,200.8/6020A).
Were proper containers (type/mass/volume/preservative***)used?	Yes	
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

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition
1195564001-A	Na2S2O3 for Chlorine Redu	OK			
1195564001-B	No Preservative Required	OK			
1195564001-C	Na2S2O3 for Chlorine Redu	OK			
1195564001-D	H2SO4 to pH < 2	OK			
1195564001-E	No Preservative Required	OK			
1195564001-F	No Preservative Required	OK			
1195564002-A	Na2S2O3 for Chlorine Redu	OK			
1195564002-B	No Preservative Required	OK			
1195564002-C	H2SO4 to pH < 2	OK			
1195564003-A	Na2S2O3 for Chlorine Redu	OK			
1195564003-B	No Preservative Required	OK			
1195564003-C	H2SO4 to pH < 2	OK			
1195564004-A	Na2S2O3 for Chlorine Redu	OK			
1195564004-B	No Preservative Required	OK			
1195564004-C	H2SO4 to pH < 2	OK			
1195564005-A	Na2S2O3 for Chlorine Redu	OK			
1195564005-B	No Preservative Required	OK			
1195564005-C	Na2S2O3 for Chlorine Redu	OK			
1195564005-D	H2SO4 to pH < 2	OK			
1195564005-E	No Preservative Required	OK			
1195564005-F	No Preservative Required	OK			
1195564006-A	Na2S2O3 for Chlorine Redu	OK			
1195564006-B	No Preservative Required	OK			
1195564006-C	Na2S2O3 for Chlorine Redu	OK			
1195564006-D	H2SO4 to pH < 2	OK			
1195564006-E	No Preservative Required	OK			
1195564006-F	No Preservative Required	OK			
1195564007-A	Na2S2O3 for Chlorine Redu	OK			
1195564007-B	No Preservative Required	OK			
1195564007-C	H2SO4 to pH < 2	OK			
1195564008-A	Na2S2O3 for Chlorine Redu	OK			
1195564008-B	No Preservative Required	OK			
1195564008-C	H2SO4 to pH < 2	OK			

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition

Container Condition Glossary

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

Laboratory Report of Analysis

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

Report Number: **1195592**

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 Date
Project Manager
Justin.Nelson@sgs.com

Case Narrative

SGS Client: **Stantec Consulting Services Inc.**
SGS Project: **1195592**
Project Name/Site: **Wasilla WWTP**
Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

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

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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, indenmification 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, 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.

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Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
B3	1195592001	09/20/2019	09/20/2019	Water (Surface, Eff., Ground)
MW6	1195592002	09/20/2019	09/20/2019	Water (Surface, Eff., Ground)
SW7	1195592003	09/20/2019	09/20/2019	Water (Surface, Eff., Ground)
SW6	1195592004	09/20/2019	09/20/2019	Water (Surface, Eff., Ground)
SW4	1195592005	09/20/2019	09/20/2019	Water (Surface, Eff., Ground)
SW5	1195592006	09/20/2019	09/20/2019	Water (Surface, Eff., Ground)

Method	Method Description
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: **B3**
Lab Sample ID: 1195592001

	Parameter	Result	Units
Waters Department	Ammonia-N	0.117	mg/L

Client Sample ID: **MW6**
Lab Sample ID: 1195592002

	Parameter	Result	Units
Waters Department	Ammonia-N	0.128	mg/L

Client Sample ID: **SW7**
Lab Sample ID: 1195592003

	Parameter	Result	Units
Microbiology Laboratory	E. Coli	420	MPN/100mL
	Fecal Coliform	560	col/100mL
	Total Coliform	9800	MPN/100mL
Waters Department	Ammonia-N	0.0391J	mg/L
	Total Kjeldahl Nitrogen	0.525J	mg/L
	Total Phosphorus	0.0349	mg/L
	Total Suspended Solids	4.06	mg/L

Client Sample ID: **SW6**
Lab Sample ID: 1195592004

	Parameter	Result	Units
Microbiology Laboratory	E. Coli	10	MPN/100mL
	Fecal Coliform	10	col/100mL
	Total Coliform	1500	MPN/100mL
Waters Department	Ammonia-N	0.0371J	mg/L
	Nitrate-N	0.0800J	mg/L
	Total Kjeldahl Nitrogen	0.441J	mg/L
	Total Nitrate/Nitrite-N	0.0900J	mg/L
	Total Suspended Solids	0.619J	mg/L

Client Sample ID: **SW4**
Lab Sample ID: 1195592005

	Parameter	Result	Units
Microbiology Laboratory	E. Coli	60	MPN/100mL
	Fecal Coliform	20	col/100mL
	Total Coliform	4610	MPN/100mL
Waters Department	Total Kjeldahl Nitrogen	0.437J	mg/L
	Total Suspended Solids	3.60	mg/L

Client Sample ID: **SW5**
Lab Sample ID: 1195592006

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	4.59	mg/L
	Fecal Coliform	20	col/100mL
	Total Coliform	9800	MPN/100mL
Waters Department	Ammonia-N	0.0820J	mg/L
	Total Kjeldahl Nitrogen	0.663J	mg/L
	Total Phosphorus	0.0365	mg/L
	Total Suspended Solids	36.5	mg/L

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Results of **B3**

Client Sample ID: **B3**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195592001
Lab Project ID: 1195592

Collection Date: 09/20/19 10:24
Received Date: 09/20/19 14:05
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	9.09	U	9.09	9.09	col/100mL	1		09/20/19 16:00

Batch Information

Analytical Batch: BTF17658
Analytical Method: SM21 9222D
Analyst: ACF
Analytical Date/Time: 09/20/19 16:00
Container ID: 1195592001-A

Print Date: 10/08/2019 4:26:53PM

J flagging is activated

Results of **B3**

Client Sample ID: **B3**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195592001
Lab Project ID: 1195592

Collection Date: 09/20/19 10:24
Received Date: 09/20/19 14:05
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100 U		0.200	0.0500	mg/L	1		09/20/19 19:55
Nitrite-N	0.100 U		0.200	0.0500	mg/L	1		09/20/19 19:55
Total Nitrate/Nitrite-N	0.100 U		0.200	0.0500	mg/L	1		09/20/19 19:55

Batch Information

Analytical Batch: WIC5968
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/20/19 19:55
Container ID: 1195592001-B

Prep Batch: WXX13033
Prep Method: METHOD
Prep Date/Time: 09/20/19 16:20
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.500 U		1.00	0.310	mg/L	1		09/29/19 16:33

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 16:33
Container ID: 1195592001-C

Prep Batch: WXX13040
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.117		0.100	0.0310	mg/L	1		10/06/19 23:13

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/06/19 23:13
Container ID: 1195592001-C

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Results of **MW6**

Client Sample ID: **MW6**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195592002
Lab Project ID: 1195592

Collection Date: 09/20/19 10:35
Received Date: 09/20/19 14:05
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	1.67	U	1.67	1.67	col/100mL	1		09/20/19 16:00

Batch Information

Analytical Batch: BTF17658
Analytical Method: SM21 9222D
Analyst: ACF
Analytical Date/Time: 09/20/19 16:00
Container ID: 1195592002-A

Results of **MW6**

Client Sample ID: **MW6**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195592002
Lab Project ID: 1195592

Collection Date: 09/20/19 10:35
Received Date: 09/20/19 14:05
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100 U		0.200	0.0500	mg/L	1		09/20/19 20:15
Nitrite-N	0.100 U		0.200	0.0500	mg/L	1		09/20/19 20:15
Total Nitrate/Nitrite-N	0.100 U		0.200	0.0500	mg/L	1		09/20/19 20:15

Batch Information

Analytical Batch: WIC5968
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/20/19 20:15
Container ID: 1195592002-B

Prep Batch: WXX13033
Prep Method: METHOD
Prep Date/Time: 09/20/19 16:20
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.500 U		1.00	0.310	mg/L	1		09/29/19 16:34

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 16:34
Container ID: 1195592002-C

Prep Batch: WXX13040
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.128		0.100	0.0310	mg/L	1		10/06/19 23:18

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/06/19 23:18
Container ID: 1195592002-C

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Results of **SW7**

Client Sample ID: **SW7**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195592003
Lab Project ID: 1195592

Collection Date: 09/20/19 11:00
Received Date: 09/20/19 14:05
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.00	U	2.00	2.00	mg/L	1		09/20/19 20:00

Batch Information

Analytical Batch: BOD6433
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 09/20/19 20:00
Container ID: 1195592003-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	560		10.0	10.0	col/100mL	1		09/20/19 16:00

Batch Information

Analytical Batch: BTF17658
Analytical Method: SM21 9222D
Analyst: ACF
Analytical Date/Time: 09/20/19 16:00
Container ID: 1195592003-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	420		10	10	MPN/100m	10		09/20/19 16:06
Total Coliform	9800		10	10	MPN/100m	10		09/20/19 16:06

Batch Information

Analytical Batch: BTF17661
Analytical Method: SM21 9223B
Analyst: NRO
Analytical Date/Time: 09/20/19 16:06
Container ID: 1195592003-D

Results of **SW7**

Client Sample ID: **SW7**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195592003
Lab Project ID: 1195592

Collection Date: 09/20/19 11:00
Received Date: 09/20/19 14:05
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100	U	0.200	0.0500	mg/L	1		09/20/19 20:33
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/20/19 20:33
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/20/19 20:33

Batch Information

Analytical Batch: WIC5968
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/20/19 20:33
Container ID: 1195592003-B

Prep Batch: WXX13033
Prep Method: METHOD
Prep Date/Time: 09/20/19 16:20
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	4.06		1.04	0.323	mg/L	1		09/23/19 18:27

Batch Information

Analytical Batch: STS6493
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 09/23/19 18:27
Container ID: 1195592003-F

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.525	J	1.00	0.310	mg/L	1		09/29/19 16:36

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 16:36
Container ID: 1195592003-C

Prep Batch: WXX13040
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.0391	J	0.100	0.0310	mg/L	1		10/06/19 23:20

Print Date: 10/08/2019 4:26:53PM

J flagging is activated

Results of **SW7**

Client Sample ID: **SW7**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195592003
Lab Project ID: 1195592

Collection Date: 09/20/19 11:00
Received Date: 09/20/19 14:05
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/06/19 23:20
Container ID: 1195592003-C

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0349		0.0200	0.00500	mg/L	1		09/29/19 20:22

Batch Information

Analytical Batch: WDA4655
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 09/29/19 20:22
Container ID: 1195592003-C

Prep Batch: WXX13043
Prep Method: SM21 4500P-B,E
Prep Date/Time: 09/29/19 16:54
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 10/08/2019 4:26:53PM

J flagging is activated

Results of **SW6**

Client Sample ID: **SW6**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195592004
Lab Project ID: 1195592

Collection Date: 09/20/19 11:30
Received Date: 09/20/19 14:05
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.00	U	2.00	2.00	mg/L	1		09/20/19 20:00

Batch Information

Analytical Batch: BOD6433
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 09/20/19 20:00
Container ID: 1195592004-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	10		10.0	10.0	col/100mL	1		09/20/19 16:00

Batch Information

Analytical Batch: BTF17658
Analytical Method: SM21 9222D
Analyst: ACF
Analytical Date/Time: 09/20/19 16:00
Container ID: 1195592004-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	10		10	10	MPN/100m	10		09/20/19 16:06
Total Coliform	1500		10	10	MPN/100m	10		09/20/19 16:06

Batch Information

Analytical Batch: BTF17661
Analytical Method: SM21 9223B
Analyst: NRO
Analytical Date/Time: 09/20/19 16:06
Container ID: 1195592004-D

Results of **SW6**

Client Sample ID: **SW6**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195592004
Lab Project ID: 1195592

Collection Date: 09/20/19 11:30
Received Date: 09/20/19 14:05
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.0800	J	0.200	0.0500	mg/L	1		09/20/19 20:52
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/20/19 20:52
Total Nitrate/Nitrite-N	0.0900	J	0.200	0.0500	mg/L	1		09/20/19 20:52

Batch Information

Analytical Batch: WIC5968
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/20/19 20:52
Container ID: 1195592004-B

Prep Batch: WXX13033
Prep Method: METHOD
Prep Date/Time: 09/20/19 16:20
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	0.619	J	1.03	0.320	mg/L	1		09/23/19 18:27

Batch Information

Analytical Batch: STS6493
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 09/23/19 18:27
Container ID: 1195592004-F

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.441	J	1.00	0.310	mg/L	1		09/29/19 16:39

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 16:39
Container ID: 1195592004-C

Prep Batch: WXX13040
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.0371	J	0.100	0.0310	mg/L	1		10/06/19 23:21

Print Date: 10/08/2019 4:26:53PM

J flagging is activated

Results of **SW6**

Client Sample ID: **SW6**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195592004
Lab Project ID: 1195592

Collection Date: 09/20/19 11:30
Received Date: 09/20/19 14:05
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/06/19 23:21
Container ID: 1195592004-C

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0100	U	0.0200	0.00500	mg/L	1		09/29/19 20:23

Batch Information

Analytical Batch: WDA4655
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 09/29/19 20:23
Container ID: 1195592004-C

Prep Batch: WXX13043
Prep Method: SM21 4500P-B,E
Prep Date/Time: 09/29/19 16:54
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 10/08/2019 4:26:53PM

J flagging is activated

Results of **SW4**

Client Sample ID: **SW4**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195592005
Lab Project ID: 1195592

Collection Date: 09/20/19 12:00
Received Date: 09/20/19 14:05
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.00	U	2.00	2.00	mg/L	1		09/20/19 20:00

Batch Information

Analytical Batch: BOD6433
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 09/20/19 20:00
Container ID: 1195592005-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	20		10.0	10.0	col/100mL	1		09/20/19 16:00

Batch Information

Analytical Batch: BTF17658
Analytical Method: SM21 9222D
Analyst: ACF
Analytical Date/Time: 09/20/19 16:00
Container ID: 1195592005-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	60		10	10	MPN/100m	10		09/20/19 16:06
Total Coliform	4610		10	10	MPN/100m	10		09/20/19 16:06

Batch Information

Analytical Batch: BTF17661
Analytical Method: SM21 9223B
Analyst: NRO
Analytical Date/Time: 09/20/19 16:06
Container ID: 1195592005-D

Results of **SW4**

Client Sample ID: **SW4**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195592005
Lab Project ID: 1195592

Collection Date: 09/20/19 12:00
Received Date: 09/20/19 14:05
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100	U	0.200	0.0500	mg/L	1		09/20/19 21:50
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/20/19 21:50
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/20/19 21:50

Batch Information

Analytical Batch: WIC5968
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/20/19 21:50
Container ID: 1195592005-B

Prep Batch: WXX13033
Prep Method: METHOD
Prep Date/Time: 09/20/19 16:20
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	3.60		1.00	0.310	mg/L	1		09/23/19 18:27

Batch Information

Analytical Batch: STS6493
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 09/23/19 18:27
Container ID: 1195592005-F

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.437	J	1.00	0.310	mg/L	1		09/29/19 16:41

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 16:41
Container ID: 1195592005-C

Prep Batch: WXX13040
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.0500	U	0.100	0.0310	mg/L	1		10/06/19 23:23

Print Date: 10/08/2019 4:26:53PM

J flagging is activated

Results of **SW4**

Client Sample ID: **SW4**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195592005
Lab Project ID: 1195592

Collection Date: 09/20/19 12:00
Received Date: 09/20/19 14:05
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/06/19 23:23
Container ID: 1195592005-C

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0100	U	0.0200	0.00500	mg/L	1		09/29/19 20:24

Batch Information

Analytical Batch: WDA4655
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 09/29/19 20:24
Container ID: 1195592005-C

Prep Batch: WXX13043
Prep Method: SM21 4500P-B,E
Prep Date/Time: 09/29/19 16:54
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 10/08/2019 4:26:53PM

J flagging is activated

Results of **SW5**

Client Sample ID: **SW5**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195592006
Lab Project ID: 1195592

Collection Date: 09/20/19 12:40
Received Date: 09/20/19 14:05
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	4.59		2.00	2.00	mg/L	1		09/20/19 20:00

Batch Information

Analytical Batch: BOD6433
Analytical Method: SM21 5210B
Analyst: ACF
Analytical Date/Time: 09/20/19 20:00
Container ID: 1195592006-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	20		10.0	10.0	col/100mL	1		09/20/19 16:00

Batch Information

Analytical Batch: BTF17658
Analytical Method: SM21 9222D
Analyst: ACF
Analytical Date/Time: 09/20/19 16:00
Container ID: 1195592006-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	10	U	10	10	MPN/100m	10		09/20/19 16:06
Total Coliform	9800		10	10	MPN/100m	10		09/20/19 16:06

Batch Information

Analytical Batch: BTF17661
Analytical Method: SM21 9223B
Analyst: NRO
Analytical Date/Time: 09/20/19 16:06
Container ID: 1195592006-D

Results of **SW5**

Client Sample ID: **SW5**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195592006
Lab Project ID: 1195592

Collection Date: 09/20/19 12:40
Received Date: 09/20/19 14:05
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100	U	0.200	0.0500	mg/L	1		09/20/19 22:09
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/20/19 22:09
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/20/19 22:09

Batch Information

Analytical Batch: WIC5968
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/20/19 22:09
Container ID: 1195592006-B

Prep Batch: WXX13033
Prep Method: METHOD
Prep Date/Time: 09/20/19 16:20
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	36.5		1.01	0.313	mg/L	1		09/23/19 18:27

Batch Information

Analytical Batch: STS6493
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 09/23/19 18:27
Container ID: 1195592006-F

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.663	J	1.00	0.310	mg/L	1		09/29/19 16:42

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 16:42
Container ID: 1195592006-C

Prep Batch: WXX13040
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.0820	J	0.100	0.0310	mg/L	1		10/06/19 23:28

Print Date: 10/08/2019 4:26:53PM

J flagging is activated

Results of **SW5**

Client Sample ID: **SW5**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195592006
Lab Project ID: 1195592

Collection Date: 09/20/19 12:40
Received Date: 09/20/19 14:05
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/06/19 23:28
Container ID: 1195592006-C

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0365		0.0200	0.00500	mg/L	1		09/29/19 20:25

Batch Information

Analytical Batch: WDA4655
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 09/29/19 20:25
Container ID: 1195592006-C

Prep Batch: WXX13043
Prep Method: SM21 4500P-B,E
Prep Date/Time: 09/29/19 16:54
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 10/08/2019 4:26:53PM

J flagging is activated

Method Blank

Blank ID: MB for HBN 1799802 [BOD/6433]
Blank Lab ID: 1533489

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195592003, 1195592004, 1195592005, 1195592006

Results by **SM21 5210B**

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

Batch Information

Analytical Batch: BOD6433
Analytical Method: SM21 5210B
Instrument:
Analyst: ACF
Analytical Date/Time: 9/20/2019 8:00:25PM

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1195592 [BOD6433]
Blank Spike Lab ID: 1533490
Date Analyzed: 09/20/2019 20:00

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195592003, 1195592004, 1195592005, 1195592006

Results by **SM21 5210B**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Biochemical Oxygen Demand	198	210	106	(84.6-115.4

Batch Information

Analytical Batch: **BOD6433**
Analytical Method: **SM21 5210B**
Instrument:
Analyst: **ACF**

Print Date: 10/08/2019 4:27:00PM

Method Blank

Blank ID: MB for HBN 1799797 [BTF/17658]
Blank Lab ID: 1533479

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195592001, 1195592002, 1195592003, 1195592004, 1195592005, 1195592006

Results by **SM21 9222D**

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

Batch Information

Analytical Batch: BTF17658
Analytical Method: SM21 9222D
Instrument:
Analyst: ACF
Analytical Date/Time: 9/20/2019 4:00:39PM

Method Blank

Blank ID: MB for HBN 1799797 [BTF/17658]
Blank Lab ID: 1534689

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195592001, 1195592002, 1195592003, 1195592004, 1195592005, 1195592006

Results by **SM21 9222D**

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

Batch Information

Analytical Batch: BTF17658
Analytical Method: SM21 9222D
Instrument:
Analyst: ACF
Analytical Date/Time: 9/20/2019 5:46:44PM

Method Blank

Blank ID: MB for HBN 1799800 [BTF/17661]
Blank Lab ID: 1533485

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195592003, 1195592004, 1195592005, 1195592006

Results by **SM21 9223B**

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

Batch Information

Analytical Batch: BTF17661
Analytical Method: SM21 9223B
Instrument:
Analyst: NRO
Analytical Date/Time: 9/20/2019 4:06:09PM

Print Date: 10/08/2019 4:27:10PM

Method Blank

Blank ID: MB for HBN 1799878 [STS/6493]
Blank Lab ID: 1533855

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195592003, 1195592004, 1195592005, 1195592006

Results by **SM21 2540D**

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

Batch Information

Analytical Batch: STS6493
Analytical Method: SM21 2540D
Instrument:
Analyst: EWW
Analytical Date/Time: 9/23/2019 6:27:25PM

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Duplicate Sample Summary

Original Sample ID: 1195597002
Duplicate Sample ID: 1533858
QC for Samples:
1195592003, 1195592004, 1195592005, 1195592006

Analysis Date: 09/23/2019 18:27
Matrix: Water (Surface, Eff., Ground)

Results by **SM21 2540D**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Suspended Solids	1870	1920	mg/L	2.60	(< 5)

Batch Information

Analytical Batch: STS6493
Analytical Method: SM21 2540D
Instrument:
Analyst: EWW

Print Date: 10/08/2019 4:27:18PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1195592 [STS6493]
Blank Spike Lab ID: 1533856
Date Analyzed: 09/23/2019 18:27

Spike Duplicate ID: LCSD for HBN 1195592 [STS6493]
Spike Duplicate Lab ID: 1533857
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195592003, 1195592004, 1195592005, 1195592006

Results by **SM21 2540D**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Suspended Solids	25	24.6	98	25	24.7	99	(75-125)	0.41	(< 5)

Batch Information

Analytical Batch: **STS6493**
Analytical Method: **SM21 2540D**
Instrument:
Analyst: **EWW**

Print Date: 10/08/2019 4:27:20PM

Method Blank

Blank ID: MB for HBN 1800121 [WXX/13033]
Blank Lab ID: 1534935

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195592001, 1195592002, 1195592003, 1195592004, 1195592005, 1195592006

Results by **EPA 300.0**

Parameter	Results	LOQ/CL	DL	Units
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: WIC5968
Analytical Method: EPA 300.0
Instrument: 930 Metrohm compact IC flex
Analyst: DMM
Analytical Date/Time: 9/20/2019 2:32:44PM

Prep Batch: WXX13033
Prep Method: METHOD
Prep Date/Time: 9/20/2019 1:30:00PM
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1195592 [WXX13033]
Blank Spike Lab ID: 1534936
Date Analyzed: 09/20/2019 14:51

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195592001, 1195592002, 1195592003, 1195592004, 1195592005, 1195592006

Results by **EPA 300.0**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Nitrate-N	5	4.76	95	(90-110)
Nitrite-N	5	5.08	102	(90-110)
Total Nitrate/Nitrite-N	10	9.85	99	(90-110)

Batch Information

Analytical Batch: **WIC5968**
Analytical Method: **EPA 300.0**
Instrument: **930 Metrohm compact IC flex**
Analyst: **DMM**

Prep Batch: **WXX13033**
Prep Method: **METHOD**
Prep Date/Time: **09/20/2019 13:30**
Spike Init Wt./Vol.: 5 mg/L Extract Vol: 10 mL
Dupe Init Wt./Vol.: Extract Vol:

Print Date: 10/08/2019 4:27:27PM

Matrix Spike Summary

Original Sample ID: 1534937
MS Sample ID: 1534938 MS
MSD Sample ID:

Analysis Date: 09/20/2019 16:45
Analysis Date: 09/20/2019 17:04
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195592001, 1195592002, 1195592003, 1195592004, 1195592005, 1195592006

Results by **EPA 300.0**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Nitrate-N	0.482	10.0	9.75	93				90-110		
Nitrite-N	0.200U	10.0	9.93	99				90-110		

Batch Information

Analytical Batch: WIC5968
Analytical Method: EPA 300.0
Instrument: 930 Metrohm compact IC flex
Analyst: DMM
Analytical Date/Time: 9/20/2019 5:04:47PM

Prep Batch: WXX13033
Prep Method: EPA 300.0 Extraction Waters/Liquids
Prep Date/Time: 9/20/2019 1:30:00PM
Prep Initial Wt./Vol.: 10.00mL
Prep Extract Vol: 10.00mL

Print Date: 10/08/2019 4:27:29PM

Matrix Spike Summary

Original Sample ID: 1534939
MS Sample ID: 1534940 MS
MSD Sample ID:

Analysis Date: 09/20/2019 19:18
Analysis Date: 09/20/2019 19:36
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195592001, 1195592002, 1195592003, 1195592004, 1195592005, 1195592006

Results by **EPA 300.0**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Nitrate-N	0.100U	5.00	4.7	94				90-110		
Nitrite-N	0.100U	5.00	5.36	107				90-110		

Batch Information

Analytical Batch: WIC5968
Analytical Method: EPA 300.0
Instrument: 930 Metrohm compact IC flex
Analyst: DMM
Analytical Date/Time: 9/20/2019 7:36:59PM

Prep Batch: WXX13033
Prep Method: EPA 300.0 Extraction Waters/Liquids
Prep Date/Time: 9/20/2019 1:30:00PM
Prep Initial Wt./Vol.: 10.00mL
Prep Extract Vol: 10.00mL

Print Date: 10/08/2019 4:27:29PM

Method Blank

Blank ID: MB for HBN 1800146 [WXX/13040]
Blank Lab ID: 1535143

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195592001, 1195592002, 1195592003, 1195592004, 1195592005, 1195592006

Results by **SM21 4500-N D**

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

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 9/29/2019 4:08:55PM

Prep Batch: WXX13040
Prep Method: METHOD
Prep Date/Time: 9/28/2019 12:08:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1195592 [WXX13040]
Blank Spike Lab ID: 1535144
Date Analyzed: 09/29/2019 16:10

Spike Duplicate ID: LCSD for HBN 1195592 [WXX13040]
Spike Duplicate Lab ID: 1535145
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195592001, 1195592002, 1195592003, 1195592004, 1195592005, 1195592006

Results by **SM21 4500-N D**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Kjeldahl Nitrogen	4	4.25	106	4	4.42	110	(75-125)	3.90	(< 25)

Batch Information

Analytical Batch: **WDA4654**
Analytical Method: **SM21 4500-N D**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX13040**
Prep Method: **METHOD**
Prep Date/Time: **09/28/2019 12:08**
Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

Print Date: 10/08/2019 4:27:35PM

Matrix Spike Summary

Original Sample ID: 1195735001
MS Sample ID: 1535146 MS
MSD Sample ID: 1535147 MSD

Analysis Date: 09/29/2019 16:12
Analysis Date: 09/29/2019 16:14
Analysis Date: 09/29/2019 16:15
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195592001, 1195592002, 1195592003, 1195592004, 1195592005, 1195592006

Results by **SM21 4500-N D**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Kjeldahl Nitrogen	0.500U	4.00	4.42	110	4.00	3.92	98	75-125	12.00	(< 25)

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 9/29/2019 4:14:09PM

Prep Batch: WXX13040
Prep Method: Distillation TKN by Phenate (W)
Prep Date/Time: 9/28/2019 12:08:00PM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 10/08/2019 4:27:37PM

Method Blank

Blank ID: MB for HBN 1800163 [WXX/13043]
Blank Lab ID: 1535270

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195592003, 1195592004, 1195592005, 1195592006

Results by **SM21 4500P-B,E**

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

Batch Information

Analytical Batch: WDA4655
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 9/29/2019 8:03:22PM

Prep Batch: WXX13043
Prep Method: SM21 4500P-B,E
Prep Date/Time: 9/29/2019 4:54:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1195592 [WXX13043]
Blank Spike Lab ID: 1535271
Date Analyzed: 09/29/2019 20:04

Spike Duplicate ID: LCSD for HBN 1195592 [WXX13043]
Spike Duplicate Lab ID: 1535272
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195592003, 1195592004, 1195592005, 1195592006

Results by **SM21 4500P-B,E**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Phosphorus	0.2	0.191	96	0.2	0.187	94	(75-125)	2.10	(< 25)

Batch Information

Analytical Batch: **WDA4655**
Analytical Method: **SM21 4500P-B,E**
Instrument: **Discrete Analyzer 2**
Analyst: **EWW**

Prep Batch: **WXX13043**
Prep Method: **SM21 4500P-B,E**
Prep Date/Time: **09/29/2019 16:54**
Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

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Matrix Spike Summary

Original Sample ID: 1195480002
MS Sample ID: 1535273 MS
MSD Sample ID: 1535274 MSD

Analysis Date: 09/29/2019 20:09
Analysis Date: 09/29/2019 20:10
Analysis Date: 09/29/2019 20:11
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195592003, 1195592004, 1195592005, 1195592006

Results by **SM21 4500P-B,E**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Phosphorus	0.0200U	0.200	.212	106	0.200	0.213	107	75-125	0.85	(< 25)

Batch Information

Analytical Batch: WDA4655
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 9/29/2019 8:10:13PM

Prep Batch: WXX13043
Prep Method: Total Phosphorus (W) Ext.
Prep Date/Time: 9/29/2019 4:54:00PM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 10/08/2019 4:27:44PM

Method Blank

Blank ID: MB for HBN 1800523 [WXX/13060]
Blank Lab ID: 1536931

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195592001, 1195592002, 1195592003, 1195592004, 1195592005, 1195592006

Results by **SM21 4500-NH3 G**

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

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 10/6/2019 11:08:27PM

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/6/2019 6:00:00PM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

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Method Blank

Blank ID: MB for HBN 1800523 [WXX/13060]
Blank Lab ID: 1536936

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195592001, 1195592002, 1195592003, 1195592004, 1195592005, 1195592006

Results by **SM21 4500-NH3 G**

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

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 10/6/2019 11:55:11PM

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/6/2019 6:00:00PM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1195592 [WXX13060]
Blank Spike Lab ID: 1536932
Date Analyzed: 10/06/2019 23:10

Spike Duplicate ID: LCSD for HBN 1195592 [WXX13060]
Spike Duplicate Lab ID: 1536933
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195592001, 1195592002, 1195592003, 1195592004, 1195592005, 1195592006

Results by **SM21 4500-NH3 G**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	1	1.12	112	1	1.17	117	(75-125)	4.80	(< 25)

Batch Information

Analytical Batch: **WDA4663**
Analytical Method: **SM21 4500-NH3 G**
Instrument: **Discrete Analyzer 2**
Analyst: **EWW**

Prep Batch: **WXX13060**
Prep Method: **METHOD**
Prep Date/Time: **10/06/2019 18:00**
Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1195592 [WXX13060]
Blank Spike Lab ID: 1536937
Date Analyzed: 10/06/2019 23:56

Spike Duplicate ID: LCSD for HBN 1195592 [WXX13060]
Spike Duplicate Lab ID: 1536938
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195592001, 1195592002, 1195592003, 1195592004, 1195592005, 1195592006

Results by **SM21 4500-NH3 G**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	1	1.11	111	1	1.24	124	(75-125)	10.80	(< 25)

Batch Information

Analytical Batch: **WDA4663**
Analytical Method: **SM21 4500-NH3 G**
Instrument: **Discrete Analyzer 2**
Analyst: **EWW**

Prep Batch: **WXX13060**
Prep Method: **METHOD**
Prep Date/Time: **10/06/2019 18:00**
Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

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Matrix Spike Summary

Original Sample ID: 1195592001
MS Sample ID: 1536934 MS
MSD Sample ID: 1536935 MSD

Analysis Date: 10/06/2019 23:13
Analysis Date: 10/06/2019 23:15
Analysis Date: 10/06/2019 23:16
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195592001, 1195592002, 1195592003, 1195592004, 1195592005, 1195592006

Results by **SM21 4500-NH3 G**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	0.117	1.00	1.16	104	1.00	1.10	98	75-125	5.30	(< 25)

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 10/6/2019 11:15:10PM

Prep Batch: WXX13060
Prep Method: Ammonia by SM21 4500F prep (W)
Prep Date/Time: 10/6/2019 6:00:00PM
Prep Initial Wt./Vol.: 6.00mL
Prep Extract Vol: 6.00mL

Print Date: 10/08/2019 4:27:51PM

Matrix Spike Summary

Original Sample ID: 1195735001
MS Sample ID: 1536939 MS
MSD Sample ID: 1536940 MSD

Analysis Date: 10/07/2019 0:00
Analysis Date: 10/07/2019 0:01
Analysis Date: 10/07/2019 0:03
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195592001, 1195592002, 1195592003, 1195592004, 1195592005, 1195592006

Results by **SM21 4500-NH3 G**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	0.0722J	1.00	1.2	112	1.00	1.17	110	75-125	2.20	(< 25)

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 10/7/2019 12:01:51AM

Prep Batch: WXX13060
Prep Method: Ammonia by SM21 4500F prep (W)
Prep Date/Time: 10/6/2019 6:00:00PM
Prep Initial Wt./Vol.: 6.00mL
Prep Extract Vol: 6.00mL

Print Date: 10/08/2019 4:27:51PM

SGS **1195592**

SGS North America Inc.
CHAIN OF CUSTODY RECORD

Locations Nationwide
Alaska Maryland
New Jersey New York
North Carolina Indiana
West Virgina Kentucky
www.us.sgs.com

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

Page 1 of 1

Section 1

CLIENT: Stantec

CONTACT: Jake PHONE NO: 343-5202

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

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

INVOICE TO: QUOTE #:

P.O. #: 2047004115

Section 2

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	Section 3 # CONTAINERS	Type C = COMP G = GRAB MI = Multi Incremental Soils	Preservative 1	1	1	Na2SO4	H2SO4	H2SO4	Na2SO4			REMARKS/ LOC ID
							BOD	TSS	Nitrate/Nitrite	FC	TKN/Ammonia	TKN/Ammonia	TC (Quanti-Tray)			
1	AC MW3	9/20/19	1024	Water	3	G			1	1	1					
2	AC MW6		1035		3				1	1	1					
3	A&F SW7		1100		6		1	1	1	1		1	1			
4	A F SW6		1130		6		1	1	1	1		1	1			
5	A F SW4		1200		6		1	1	1	1		1	1			
6	A F SW5		1240		6		1	1	1	1		1	1			

Section 5

	Date	Time	
Relinquished By: (1)	9/20/19	1405	Received By:
Relinquished By: (2)			Received By:
Relinquished By: (3)			Received By:
Relinquished By: (4)	9/20/19	16:05	Received For Laboratory By:

Section 4

DOD Project? Yes No

Cooler ID:

Data Deliverable Requirements:

Requested Turnaround Time and/or Special Instructions:

Profile 348183

Temp Blank °C: 4.3 CD10

or Ambient [ ]

(See attached Sample Receipt Form)

Chain of Custody Seal: (Circle)

INTACT BROKEN ABSENT

(See attached Sample Receipt Form)

[ ] 200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301
[ ] 5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557

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

HO

F083-Kit_Request_and_COC_Templates-Blank
Revised 2013-03-24

e-Sample Receipt Form

SGS Workorder #: **1195592**

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	HD
COC accompanied samples?	Yes	
DOD: Were samples received in COC corresponding coolers?		
**Exemption permitted if chilled & collected <8 hours ago, or for samples where chilling is not required		
Temperature blank compliant* (i.e., 0-6 °C after CF)?	Yes	Cooler ID: 1 @ 4.3 °C Therm. ID: D30
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?	N/A	
If <0°C, were sample containers ice free?	N/A	
Note: Identify containers received at non-compliant temperature . Use form FS-0029 if more space is needed.		
Holding Time / Documentation / Sample Condition Requirements		Note: Refer to form F-083 "Sample Guide" for specific holding times.
Were samples received within holding time?	Yes	
Do samples **match COC**** (i.e.,sample IDs,dates/times collected)?	Yes	
**Note: If times differ <1hr, record details & login per COC.		
***Note: If sample information on containers differs from COC, SGS will default to COC informatic		
Were analytical requests clear? (i.e., method is specified for analyses with multiple option for analysis (Ex: BTEX, Metals)	Yes	
		***Exemption permitted for metals (e.g,200.8/6020A).
Were proper containers (type/mass/volume/preservative***)used?	Yes	
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

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition
1195592001-A	Na2S2O3 for Chlorine Redu	OK			
1195592001-B	No Preservative Required	OK			
1195592001-C	H2SO4 to pH < 2	OK			
1195592002-A	Na2S2O3 for Chlorine Redu	OK			
1195592002-B	No Preservative Required	OK			
1195592002-C	H2SO4 to pH < 2	OK			
1195592003-A	Na2S2O3 for Chlorine Redu	OK			
1195592003-B	No Preservative Required	OK			
1195592003-C	H2SO4 to pH < 2	OK			
1195592003-D	Na2S2O3 for Chlorine Redu	OK			
1195592003-E	No Preservative Required	OK			
1195592003-F	No Preservative Required	OK			
1195592004-A	Na2S2O3 for Chlorine Redu	OK			
1195592004-B	No Preservative Required	OK			
1195592004-C	H2SO4 to pH < 2	OK			
1195592004-D	Na2S2O3 for Chlorine Redu	OK			
1195592004-E	No Preservative Required	OK			
1195592004-F	No Preservative Required	OK			
1195592005-A	Na2S2O3 for Chlorine Redu	OK			
1195592005-B	No Preservative Required	OK			
1195592005-C	H2SO4 to pH < 2	OK			
1195592005-D	Na2S2O3 for Chlorine Redu	OK			
1195592005-E	No Preservative Required	OK			
1195592005-F	No Preservative Required	OK			
1195592006-A	Na2S2O3 for Chlorine Redu	OK			
1195592006-B	No Preservative Required	OK			
1195592006-C	H2SO4 to pH < 2	OK			
1195592006-D	Na2S2O3 for Chlorine Redu	OK			
1195592006-E	No Preservative Required	OK			
1195592006-F	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 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.

Laboratory Report of Analysis

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

Report Number: **1195735**

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 Date
Project Manager
Justin.Nelson@sgs.com

Case Narrative

SGS Client: **Stantec Consulting Services Inc.**
SGS Project: **1195735**
Project Name/Site: **Wasilla WWTP**
Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

SW8 (1195735002) PS

5210B – BOD -LCS recovery is biased high (116%). The maximum allowable limit for the LCS is 228.5 mg/L.

SW9 (1195735003) PS

5210B – BOD -LCS recovery is biased high (116%). The maximum allowable limit for the LCS is 228.5 mg/L.

SW10 (1195735004) PS

5210B – BOD -LCS recovery is biased high (116%). The maximum allowable limit for the LCS is 228.5 mg/L.

SW12 (1195735007) PS

5210B – BOD -LCS recovery is biased high (116%). The maximum allowable limit for the LCS is 228.5 mg/L.

SW11 (1195735008) PS

5210B – BOD -LCS recovery is biased high (116%). The maximum allowable limit for the LCS is 228.5 mg/L.

1195743002DUP (1535480) DUP

2540D - Total Suspended Solids - Sample duplicate RPD was outside of acceptance limits. The difference between sample and duplicate results is less than the LOQ.

LCSS for HBN 1800018 [BOD/6437 (1534474) LCSS

5210B – BOD -LCS recovery is biased high (116%). The maximum allowable limit for the LCS is 228.5 mg/L.

*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, indenmification 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, 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.

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Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
MW8	1195735001	09/25/2019	09/25/2019	Water (Surface, Eff., Ground)
SW8	1195735002	09/25/2019	09/25/2019	Water (Surface, Eff., Ground)
SW9	1195735003	09/25/2019	09/25/2019	Water (Surface, Eff., Ground)
SW10	1195735004	09/25/2019	09/25/2019	Water (Surface, Eff., Ground)
MW17	1195735005	09/25/2019	09/25/2019	Water (Surface, Eff., Ground)
MW16	1195735006	09/25/2019	09/25/2019	Water (Surface, Eff., Ground)
SW12	1195735007	09/25/2019	09/25/2019	Water (Surface, Eff., Ground)
SW11	1195735008	09/25/2019	09/25/2019	Water (Surface, Eff., Ground)
B11	1195735009	09/25/2019	09/25/2019	Water (Surface, Eff., Ground)
DUP	1195735010	09/25/2019	09/25/2019	Water (Surface, Eff., Ground)

Method	Method Description
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: **MW8**
Lab Sample ID: 1195735001
Waters Department

Parameter	Result	Units
Ammonia-N	0.0722J	mg/L
Nitrate-N	0.0920J	mg/L
Total Nitrate/Nitrite-N	0.0920J	mg/L

Client Sample ID: **SW8**
Lab Sample ID: 1195735002
Microbiology Laboratory
Waters Department

Parameter	Result	Units
Fecal Coliform	10	col/100mL
Total Coliform	2610	MPN/100mL
Ammonia-N	0.0760J	mg/L
Total Kjeldahl Nitrogen	0.460J	mg/L
Total Phosphorus	0.0363	mg/L
Total Suspended Solids	6.26	mg/L

Client Sample ID: **SW9**
Lab Sample ID: 1195735003
Microbiology Laboratory
Waters Department

Parameter	Result	Units
Biochemical Oxygen Demand	2.68	mg/L
E. Coli	10	MPN/100mL
Fecal Coliform	2.0	col/100mL
Total Coliform	1986	MPN/100mL
Ammonia-N	0.0482J	mg/L
Total Kjeldahl Nitrogen	0.567J	mg/L
Total Phosphorus	0.0613	mg/L
Total Suspended Solids	8.20	mg/L

Client Sample ID: **SW10**
Lab Sample ID: 1195735004
Microbiology Laboratory
Waters Department

Parameter	Result	Units
Total Coliform	411	MPN/100mL
Ammonia-N	0.0975J	mg/L
Total Kjeldahl Nitrogen	0.337J	mg/L
Total Phosphorus	0.00650J	mg/L
Total Suspended Solids	1.35	mg/L

Client Sample ID: **MW17**
Lab Sample ID: 1195735005
Microbiology Laboratory
Waters Department

Parameter	Result	Units
Fecal Coliform	240	col/100mL
Ammonia-N	2.39	mg/L
Total Kjeldahl Nitrogen	3.04	mg/L

Client Sample ID: **MW16**
Lab Sample ID: 1195735006
Waters Department

Parameter	Result	Units
Ammonia-N	0.208	mg/L

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Detectable Results Summary

Client Sample ID: **SW12**
Lab Sample ID: 1195735007

	Parameter	Result	Units
Microbiology Laboratory	E. Coli	17	MPN/100mL
	Fecal Coliform	10	col/100mL
	Total Coliform	1986	MPN/100mL
Waters Department	Ammonia-N	0.0696J	mg/L
	Total Suspended Solids	2.86	mg/L

Client Sample ID: **SW11**
Lab Sample ID: 1195735008

	Parameter	Result	Units
Microbiology Laboratory	E. Coli	6	MPN/100mL
	Fecal Coliform	4.0	col/100mL
	Total Coliform	689	MPN/100mL
Waters Department	Ammonia-N	0.0582J	mg/L
	Total Phosphorus	0.0280	mg/L
	Total Suspended Solids	0.808J	mg/L

Client Sample ID: **B11**
Lab Sample ID: 1195735009

	Parameter	Result	Units
Waters Department	Ammonia-N	0.269	mg/L

Client Sample ID: **DUP**
Lab Sample ID: 1195735010

	Parameter	Result	Units
Waters Department	Ammonia-N	0.295	mg/L

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Results of **MW8**

Client Sample ID: **MW8**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195735001
Lab Project ID: 1195735

Collection Date: 09/25/19 10:20
Received Date: 09/25/19 16:39
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	1.67	U	1.67	1.67	col/100mL	1		09/25/19 18:15

Batch Information

Analytical Batch: BTF17673
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 09/25/19 18:15
Container ID: 1195735001-B

Print Date: 10/08/2019 4:38:41PM

J flagging is activated

Results of **MW8**

Client Sample ID: **MW8**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195735001
Lab Project ID: 1195735

Collection Date: 09/25/19 10:20
Received Date: 09/25/19 16:39
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.0920	J	0.200	0.0500	mg/L	1		09/26/19 23:14
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/26/19 23:14
Total Nitrate/Nitrite-N	0.0920	J	0.200	0.0500	mg/L	1		09/26/19 23:14

Batch Information

Analytical Batch: WIC5969
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/26/19 23:14
Container ID: 1195735001-A

Prep Batch: WXX13035
Prep Method: METHOD
Prep Date/Time: 09/26/19 16:30
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.500	U	1.00	0.310	mg/L	1		09/29/19 16:12

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 16:12
Container ID: 1195735001-C

Prep Batch: WXX13040
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.0722	J	0.100	0.0310	mg/L	1		10/07/19 00:00

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/07/19 00:00
Container ID: 1195735001-C

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Print Date: 10/08/2019 4:38:41PM

J flagging is activated

Results of **SW8**

Client Sample ID: **SW8**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195735002
Lab Project ID: 1195735

Collection Date: 09/25/19 10:51
Received Date: 09/25/19 16:39
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.00	U	2.00	2.00	mg/L	1		09/26/19 12:35

Batch Information

Analytical Batch: BOD6437
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 09/26/19 12:35
Container ID: 1195735002-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	10		10.0	10.0	col/100mL	1		09/25/19 18:15

Batch Information

Analytical Batch: BTF17673
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 09/25/19 18:15
Container ID: 1195735002-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	10	U	10	10	MPN/100m	10		09/25/19 18:19
Total Coliform	2610		10	10	MPN/100m	10		09/25/19 18:19

Batch Information

Analytical Batch: BTF17671
Analytical Method: SM21 9223B
Analyst: ACF
Analytical Date/Time: 09/25/19 18:19
Container ID: 1195735002-C

Print Date: 10/08/2019 4:38:41PM

J flagging is activated

Results of **SW8**

Client Sample ID: **SW8**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195735002
Lab Project ID: 1195735

Collection Date: 09/25/19 10:51
Received Date: 09/25/19 16:39
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100	U	0.200	0.0500	mg/L	1		09/26/19 23:33
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/26/19 23:33
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/26/19 23:33

Batch Information

Analytical Batch: WIC5969
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/26/19 23:33
Container ID: 1195735002-A

Prep Batch: WXX13035
Prep Method: METHOD
Prep Date/Time: 09/26/19 16:30
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	6.26		1.01	0.313	mg/L	1		09/30/19 17:35

Batch Information

Analytical Batch: STS6505
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 09/30/19 17:35
Container ID: 1195735002-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.460	J	1.00	0.310	mg/L	1		09/29/19 16:16

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 16:16
Container ID: 1195735002-F

Prep Batch: WXX13040
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.0760	J	0.100	0.0310	mg/L	1		10/07/19 00:08

Print Date: 10/08/2019 4:38:41PM

J flagging is activated

Results of **SW8**

Client Sample ID: **SW8**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195735002
Lab Project ID: 1195735

Collection Date: 09/25/19 10:51
Received Date: 09/25/19 16:39
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/07/19 00:08
Container ID: 1195735002-F

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0363		0.0200	0.00500	mg/L	1		09/29/19 20:26

Batch Information

Analytical Batch: WDA4655
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 09/29/19 20:26
Container ID: 1195735002-F

Prep Batch: WXX13043
Prep Method: SM21 4500P-B,E
Prep Date/Time: 09/29/19 16:54
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 10/08/2019 4:38:41PM

J flagging is activated

Results of **SW9**

Client Sample ID: **SW9**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195735003
Lab Project ID: 1195735

Collection Date: 09/25/19 11:13
Received Date: 09/25/19 16:39
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.68		2.00	2.00	mg/L	1		09/26/19 12:35

Batch Information

Analytical Batch: BOD6437
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 09/26/19 12:35
Container ID: 1195735003-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	2.0		2.00	2.00	col/100mL	1		09/25/19 18:15

Batch Information

Analytical Batch: BTF17673
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 09/25/19 18:15
Container ID: 1195735003-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	10		1	1	MPN/100m	1		09/25/19 18:19
Total Coliform	1986		1	1	MPN/100m	1		09/25/19 18:19

Batch Information

Analytical Batch: BTF17671
Analytical Method: SM21 9223B
Analyst: ACF
Analytical Date/Time: 09/25/19 18:19
Container ID: 1195735003-C

Print Date: 10/08/2019 4:38:41PM

J flagging is activated

Results of **SW9**

Client Sample ID: **SW9**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195735003
Lab Project ID: 1195735

Collection Date: 09/25/19 11:13
Received Date: 09/25/19 16:39
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100	U	0.200	0.0500	mg/L	1		09/26/19 23:52
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/26/19 23:52
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/26/19 23:52

Batch Information

Analytical Batch: WIC5969
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/26/19 23:52
Container ID: 1195735003-A

Prep Batch: WXX13035
Prep Method: METHOD
Prep Date/Time: 09/26/19 16:30
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	8.20		1.00	0.310	mg/L	1		09/30/19 17:35

Batch Information

Analytical Batch: STS6505
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 09/30/19 17:35
Container ID: 1195735003-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.567	J	1.00	0.310	mg/L	1		09/29/19 16:18

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 16:18
Container ID: 1195735003-F

Prep Batch: WXX13040
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.0482	J	0.100	0.0310	mg/L	1		10/07/19 00:10

Print Date: 10/08/2019 4:38:41PM

J flagging is activated

Results of **SW9**

Client Sample ID: **SW9**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195735003
Lab Project ID: 1195735

Collection Date: 09/25/19 11:13
Received Date: 09/25/19 16:39
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/07/19 00:10
Container ID: 1195735003-F

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0613		0.0200	0.00500	mg/L	1		09/29/19 20:27

Batch Information

Analytical Batch: WDA4655
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 09/29/19 20:27
Container ID: 1195735003-F

Prep Batch: WXX13043
Prep Method: SM21 4500P-B,E
Prep Date/Time: 09/29/19 16:54
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 10/08/2019 4:38:41PM

J flagging is activated

Results of **SW10**

Client Sample ID: **SW10**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195735004
Lab Project ID: 1195735

Collection Date: 09/25/19 11:43
Received Date: 09/25/19 16:39
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.00 U		2.00	2.00	mg/L	1		09/26/19 12:35

Batch Information

Analytical Batch: BOD6437
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 09/26/19 12:35
Container ID: 1195735004-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	1.67 U		1.67	1.67	col/100mL	1		09/25/19 18:15

Batch Information

Analytical Batch: BTF17673
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 09/25/19 18:15
Container ID: 1195735004-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	1 U		1	1	MPN/100m	1		09/25/19 18:19
Total Coliform	411		1	1	MPN/100m	1		09/25/19 18:19

Batch Information

Analytical Batch: BTF17671
Analytical Method: SM21 9223B
Analyst: ACF
Analytical Date/Time: 09/25/19 18:19
Container ID: 1195735004-C

Print Date: 10/08/2019 4:38:41PM

J flagging is activated

Results of **SW10**

Client Sample ID: **SW10**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195735004
Lab Project ID: 1195735

Collection Date: 09/25/19 11:43
Received Date: 09/25/19 16:39
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 00:11
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 00:11
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 00:11

Batch Information

Analytical Batch: WIC5969
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/27/19 00:11
Container ID: 1195735004-A

Prep Batch: WXX13035
Prep Method: METHOD
Prep Date/Time: 09/26/19 16:30
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	1.35		0.962	0.298	mg/L	1		09/30/19 17:35

Batch Information

Analytical Batch: STS6505
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 09/30/19 17:35
Container ID: 1195735004-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.337	J	1.00	0.310	mg/L	1		09/29/19 16:19

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 16:19
Container ID: 1195735004-F

Prep Batch: WXX13040
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.0975	J	0.100	0.0310	mg/L	1		10/07/19 00:11

Print Date: 10/08/2019 4:38:41PM

J flagging is activated

Results of **SW10**

Client Sample ID: **SW10**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195735004
Lab Project ID: 1195735

Collection Date: 09/25/19 11:43
Received Date: 09/25/19 16:39
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/07/19 00:11
Container ID: 1195735004-F

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.00650	J	0.0200	0.00500	mg/L	1		09/29/19 20:28

Batch Information

Analytical Batch: WDA4655
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 09/29/19 20:28
Container ID: 1195735004-F

Prep Batch: WXX13043
Prep Method: SM21 4500P-B,E
Prep Date/Time: 09/29/19 16:54
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 10/08/2019 4:38:41PM

J flagging is activated

Results of **MW17**

Client Sample ID: **MW17**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195735005
Lab Project ID: 1195735

Collection Date: 09/25/19 12:10
Received Date: 09/25/19 16:39
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	240		20.0	20.0	col/100mL	1		09/25/19 18:15

Batch Information

Analytical Batch: BTF17673
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 09/25/19 18:15
Container ID: 1195735005-B

Print Date: 10/08/2019 4:38:41PM

J flagging is activated

Results of **MW17**

Client Sample ID: **MW17**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195735005
Lab Project ID: 1195735

Collection Date: 09/25/19 12:10
Received Date: 09/25/19 16:39
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 00:30
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 00:30
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 00:30

Batch Information

Analytical Batch: WIC5969
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/27/19 00:30
Container ID: 1195735005-A

Prep Batch: WXX13035
Prep Method: METHOD
Prep Date/Time: 09/26/19 16:30
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	3.04		1.00	0.310	mg/L	1		09/29/19 16:20

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 16:20
Container ID: 1195735005-C

Prep Batch: WXX13040
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	2.39		0.100	0.0310	mg/L	1		10/07/19 00:41

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/07/19 00:41
Container ID: 1195735005-C

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Results of **MW16**

Client Sample ID: **MW16**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195735006
Lab Project ID: 1195735

Collection Date: 09/25/19 13:28
Received Date: 09/25/19 16:39
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	9.09	U	9.09	9.09	col/100mL	1		09/25/19 18:15

Batch Information

Analytical Batch: BTF17673
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 09/25/19 18:15
Container ID: 1195735006-B

Print Date: 10/08/2019 4:38:41PM

J flagging is activated

Results of **MW16**

Client Sample ID: **MW16**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195735006
Lab Project ID: 1195735

Collection Date: 09/25/19 13:28
Received Date: 09/25/19 16:39
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100 U		0.200	0.0500	mg/L	1		09/27/19 01:27
Nitrite-N	0.100 U		0.200	0.0500	mg/L	1		09/27/19 01:27
Total Nitrate/Nitrite-N	0.100 U		0.200	0.0500	mg/L	1		09/27/19 01:27

Batch Information

Analytical Batch: WIC5969
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/27/19 01:27
Container ID: 1195735006-A

Prep Batch: WXX13035
Prep Method: METHOD
Prep Date/Time: 09/26/19 16:30
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.500 U		1.00	0.310	mg/L	1		09/29/19 16:24

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 16:24
Container ID: 1195735006-C

Prep Batch: WXX13040
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.208		0.100	0.0310	mg/L	1		10/07/19 00:13

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/07/19 00:13
Container ID: 1195735006-C

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Results of **SW12**

Client Sample ID: **SW12**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195735007
Lab Project ID: 1195735

Collection Date: 09/25/19 13:56
Received Date: 09/25/19 16:39
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.00	U	2.00	2.00	mg/L	1		09/26/19 12:35

Batch Information

Analytical Batch: BOD6437
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 09/26/19 12:35
Container ID: 1195735007-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	10		1.67	1.67	col/100mL	1		09/25/19 18:15

Batch Information

Analytical Batch: BTF17673
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 09/25/19 18:15
Container ID: 1195735007-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	17		1	1	MPN/100m	1		09/25/19 18:19
Total Coliform	1986		1	1	MPN/100m	1		09/25/19 18:19

Batch Information

Analytical Batch: BTF17671
Analytical Method: SM21 9223B
Analyst: ACF
Analytical Date/Time: 09/25/19 18:19
Container ID: 1195735007-C

Print Date: 10/08/2019 4:38:41PM

J flagging is activated

Results of **SW12**

Client Sample ID: **SW12**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195735007
Lab Project ID: 1195735

Collection Date: 09/25/19 13:56
Received Date: 09/25/19 16:39
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 01:46
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 01:46
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 01:46

Batch Information

Analytical Batch: WIC5969
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/27/19 01:46
Container ID: 1195735007-A

Prep Batch: WXX13035
Prep Method: METHOD
Prep Date/Time: 09/26/19 16:30
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	2.86		1.02	0.316	mg/L	1		09/30/19 17:35

Batch Information

Analytical Batch: STS6505
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 09/30/19 17:35
Container ID: 1195735007-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.500	U	1.00	0.310	mg/L	1		09/29/19 16:25

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 16:25
Container ID: 1195735007-F

Prep Batch: WXX13040
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.0696	J	0.100	0.0310	mg/L	1		10/07/19 00:15

Print Date: 10/08/2019 4:38:41PM

J flagging is activated

Results of **SW12**

Client Sample ID: **SW12**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195735007
Lab Project ID: 1195735

Collection Date: 09/25/19 13:56
Received Date: 09/25/19 16:39
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/07/19 00:15
Container ID: 1195735007-F

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0100	U	0.0200	0.00500	mg/L	1		09/29/19 20:28

Batch Information

Analytical Batch: WDA4655
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 09/29/19 20:28
Container ID: 1195735007-F

Prep Batch: WXX13043
Prep Method: SM21 4500P-B,E
Prep Date/Time: 09/29/19 16:54
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 10/08/2019 4:38:41PM

J flagging is activated

Results of **SW11**

Client Sample ID: **SW11**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195735008
Lab Project ID: 1195735

Collection Date: 09/25/19 14:15
Received Date: 09/25/19 16:39
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.00	U	2.00	2.00	mg/L	1		09/26/19 12:35

Batch Information

Analytical Batch: BOD6437
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 09/26/19 12:35
Container ID: 1195735008-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	4.0		2.00	2.00	col/100mL	1		09/25/19 18:15

Batch Information

Analytical Batch: BTF17673
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 09/25/19 18:15
Container ID: 1195735008-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	6		1	1	MPN/100m	1		09/25/19 18:19
Total Coliform	689		1	1	MPN/100m	1		09/25/19 18:19

Batch Information

Analytical Batch: BTF17671
Analytical Method: SM21 9223B
Analyst: ACF
Analytical Date/Time: 09/25/19 18:19
Container ID: 1195735008-C

Print Date: 10/08/2019 4:38:41PM

J flagging is activated

Results of **SW11**

Client Sample ID: **SW11**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195735008
Lab Project ID: 1195735

Collection Date: 09/25/19 14:15
Received Date: 09/25/19 16:39
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100 U		0.200	0.0500	mg/L	1		09/27/19 02:05
Nitrite-N	0.100 U		0.200	0.0500	mg/L	1		09/27/19 02:05
Total Nitrate/Nitrite-N	0.100 U		0.200	0.0500	mg/L	1		09/27/19 02:05

Batch Information

Analytical Batch: WIC5969
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/27/19 02:05
Container ID: 1195735008-A

Prep Batch: WXX13035
Prep Method: METHOD
Prep Date/Time: 09/26/19 16:30
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	0.808 J		1.01	0.313	mg/L	1		09/30/19 17:35

Batch Information

Analytical Batch: STS6505
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 09/30/19 17:35
Container ID: 1195735008-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.500 U		1.00	0.310	mg/L	1		09/29/19 16:27

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 16:27
Container ID: 1195735008-F

Prep Batch: WXX13040
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.0582 J		0.100	0.0310	mg/L	1		10/07/19 00:16

Print Date: 10/08/2019 4:38:41PM

J flagging is activated

Results of **SW11**

Client Sample ID: **SW11**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195735008
Lab Project ID: 1195735

Collection Date: 09/25/19 14:15
Received Date: 09/25/19 16:39
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/07/19 00:16
Container ID: 1195735008-F

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0280		0.0200	0.00500	mg/L	1		09/29/19 20:31

Batch Information

Analytical Batch: WDA4655
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 09/29/19 20:31
Container ID: 1195735008-F

Prep Batch: WXX13043
Prep Method: SM21 4500P-B,E
Prep Date/Time: 09/29/19 16:54
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 10/08/2019 4:38:41PM

J flagging is activated

Results of **B11**

Client Sample ID: **B11**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195735009
Lab Project ID: 1195735

Collection Date: 09/25/19 14:30
Received Date: 09/25/19 16:39
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	9.09	U	9.09	9.09	col/100mL	1		09/25/19 18:15

Batch Information

Analytical Batch: BTF17673
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 09/25/19 18:15
Container ID: 1195735009-B

Print Date: 10/08/2019 4:38:41PM

J flagging is activated

Results of **B11**

Client Sample ID: **B11**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195735009
Lab Project ID: 1195735

Collection Date: 09/25/19 14:30
Received Date: 09/25/19 16:39
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100 U		0.200	0.0500	mg/L	1		09/27/19 02:24
Nitrite-N	0.100 U		0.200	0.0500	mg/L	1		09/27/19 02:24
Total Nitrate/Nitrite-N	0.100 U		0.200	0.0500	mg/L	1		09/27/19 02:24

Batch Information

Analytical Batch: WIC5969
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/27/19 02:24
Container ID: 1195735009-A

Prep Batch: WXX13035
Prep Method: METHOD
Prep Date/Time: 09/26/19 16:30
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.500 U		1.00	0.310	mg/L	1		09/29/19 16:28

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 16:28
Container ID: 1195735009-C

Prep Batch: WXX13040
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.269		0.100	0.0310	mg/L	1		10/07/19 00:18

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/07/19 00:18
Container ID: 1195735009-C

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Results of **DUP**

Client Sample ID: **DUP**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195735010
Lab Project ID: 1195735

Collection Date: 09/25/19 14:30
Received Date: 09/25/19 16:39
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	9.09	U	9.09	9.09	col/100mL	1		09/25/19 18:15

Batch Information

Analytical Batch: BTF17673
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 09/25/19 18:15
Container ID: 1195735010-B

Print Date: 10/08/2019 4:38:41PM

J flagging is activated

Results of **DUP**

Client Sample ID: **DUP**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195735010
Lab Project ID: 1195735

Collection Date: 09/25/19 14:30
Received Date: 09/25/19 16:39
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100 U		0.200	0.0500	mg/L	1		09/27/19 02:43
Nitrite-N	0.100 U		0.200	0.0500	mg/L	1		09/27/19 02:43
Total Nitrate/Nitrite-N	0.100 U		0.200	0.0500	mg/L	1		09/27/19 02:43

Batch Information

Analytical Batch: WIC5969
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/27/19 02:43
Container ID: 1195735010-A

Prep Batch: WXX13035
Prep Method: METHOD
Prep Date/Time: 09/26/19 16:30
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.500 U		1.00	0.310	mg/L	1		09/29/19 16:29

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 16:29
Container ID: 1195735010-C

Prep Batch: WXX13040
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.295		0.100	0.0310	mg/L	1		10/07/19 00:20

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/07/19 00:20
Container ID: 1195735010-C

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Method Blank

Blank ID: MB for HBN 1800018 [BOD/6437]
Blank Lab ID: 1534473

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195735002, 1195735003, 1195735004, 1195735007, 1195735008

Results by **SM21 5210B**

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

Batch Information

Analytical Batch: BOD6437
Analytical Method: SM21 5210B
Instrument:
Analyst: A.L
Analytical Date/Time: 9/26/2019 12:35:30PM

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1195735 [BOD6437]
Blank Spike Lab ID: 1534474
Date Analyzed: 09/26/2019 12:35

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195735002, 1195735003, 1195735004, 1195735007, 1195735008

Results by **SM21 5210B**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)		CL
Biochemical Oxygen Demand	198	229	116	*	(84.6-115.4

Batch Information

Analytical Batch: **BOD6437**
Analytical Method: **SM21 5210B**
Instrument:
Analyst: **A.L**

Print Date: 10/08/2019 4:38:51PM

Method Blank

Blank ID: MB for HBN 1799984 [BTF/17671]
Blank Lab ID: 1534368

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195735002, 1195735003, 1195735004, 1195735007, 1195735008

Results by **SM21 9223B**

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

Batch Information

Analytical Batch: BTF17671
Analytical Method: SM21 9223B
Instrument:
Analyst: ACF
Analytical Date/Time: 9/25/2019 6:19:42PM

Print Date: 10/08/2019 4:38:55PM

Method Blank

Blank ID: MB for HBN 1799986 [BTF/17673]
Blank Lab ID: 1534967

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195735001, 1195735002, 1195735003, 1195735004, 1195735005, 1195735006, 1195735007, 1195735008, 1195735009, 1195735010

Results by **SM21 9222D**

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

Batch Information

Analytical Batch: BTF17673
Analytical Method: SM21 9222D
Instrument:
Analyst: A.L
Analytical Date/Time: 9/25/2019 6:15:52PM

Print Date: 10/08/2019 4:39:02PM

Method Blank

Blank ID: MB for HBN 1800204 [STS/6505]
Blank Lab ID: 1535476

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195735002, 1195735003, 1195735004, 1195735007, 1195735008

Results by **SM21 2540D**

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

Batch Information

Analytical Batch: STS6505
Analytical Method: SM21 2540D
Instrument:
Analyst: EWW
Analytical Date/Time: 9/30/2019 5:35:02PM

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Duplicate Sample Summary

Original Sample ID: 1195734001
Duplicate Sample ID: 1535479
Analysis Date: 09/30/2019 17:35
Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1195735002, 1195735003, 1195735004, 1195735007, 1195735008

Results by **SM21 2540D**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Suspended Solids	61.3	62.0	mg/L	1.20	(< 5)

Batch Information

Analytical Batch: STS6505
Analytical Method: SM21 2540D
Instrument:
Analyst: EWW

Print Date: 10/08/2019 4:39:11PM

Duplicate Sample Summary

Original Sample ID: 1195743002
Duplicate Sample ID: 1535480
Analysis Date: 09/30/2019 17:35
Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1195735002, 1195735003, 1195735004, 1195735007, 1195735008

Results by **SM21 2540D**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Suspended Solids	71.0	66.5	mg/L	6.50*	(< 5)

Batch Information

Analytical Batch: STS6505
Analytical Method: SM21 2540D
Instrument:
Analyst: EWW

Print Date: 10/08/2019 4:39:11PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1195735 [STS6505]
Blank Spike Lab ID: 1535477
Date Analyzed: 09/30/2019 17:35

Spike Duplicate ID: LCSD for HBN 1195735 [STS6505]
Spike Duplicate Lab ID: 1535478
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195735002, 1195735003, 1195735004, 1195735007, 1195735008

Results by **SM21 2540D**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Suspended Solids	25	25.1	100	25	24.7	99	(75-125)	1.60	(< 5)

Batch Information

Analytical Batch: **STS6505**
Analytical Method: **SM21 2540D**
Instrument:
Analyst: **EWW**

Print Date: 10/08/2019 4:39:14PM

Method Blank

Blank ID: MB for HBN 1800126 [WXX/13035]
Blank Lab ID: 1535010

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195735001, 1195735002, 1195735003, 1195735004, 1195735005, 1195735006, 1195735007, 1195735008, 1195735009, 1195735010

Results by **EPA 300.0**

Parameter	Results	LOQ/CL	DL	Units
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: WIC5969
Analytical Method: EPA 300.0
Instrument: 930 Metrohm compact IC flex
Analyst: DMM
Analytical Date/Time: 9/26/2019 5:51:39PM

Prep Batch: WXX13035
Prep Method: METHOD
Prep Date/Time: 9/26/2019 4:30:00PM
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1195735 [WXX13035]
Blank Spike Lab ID: 1535011
Date Analyzed: 09/26/2019 18:10

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195735001, 1195735002, 1195735003, 1195735004, 1195735005, 1195735006, 1195735007, 1195735008, 1195735009, 1195735010

Results by **EPA 300.0**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Nitrate-N	5	4.71	94	(90-110)
Nitrite-N	5	4.88	98	(90-110)
Total Nitrate/Nitrite-N	10	9.58	96	(90-110)

Batch Information

Analytical Batch: **WIC5969**
Analytical Method: **EPA 300.0**
Instrument: **930 Metrohm compact IC flex**
Analyst: **DMM**

Prep Batch: **WXX13035**
Prep Method: **METHOD**
Prep Date/Time: **09/26/2019 16:30**
Spike Init Wt./Vol.: 5 mg/L Extract Vol: 10 mL
Dupe Init Wt./Vol.: Extract Vol:

Print Date: 10/08/2019 4:39:20PM

Matrix Spike Summary

Original Sample ID: 1535014
MS Sample ID: 1535016 MS
MSD Sample ID:

Analysis Date: 09/26/2019 22:36
Analysis Date: 09/26/2019 22:55
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195735001, 1195735002, 1195735003, 1195735004, 1195735005, 1195735006, 1195735007, 1195735008, 1195735009, 1195735010

Results by **EPA 300.0**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Nitrate-N	3.31	5.00	8.04	94				90-110		
Nitrite-N	0.100U	5.00	5.26	105				90-110		

Batch Information

Analytical Batch: WIC5969
Analytical Method: EPA 300.0
Instrument: 930 Metrohm compact IC flex
Analyst: DMM
Analytical Date/Time: 9/26/2019 10:55:38PM

Prep Batch: WXX13035
Prep Method: EPA 300.0 Extraction Waters/Liquids
Prep Date/Time: 9/26/2019 4:30:00PM
Prep Initial Wt./Vol.: 10.00mL
Prep Extract Vol: 10.00mL

Print Date: 10/08/2019 4:39:22PM

Method Blank

Blank ID: MB for HBN 1800146 [WXX/13040]
Blank Lab ID: 1535143

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195735001, 1195735002, 1195735003, 1195735004, 1195735005, 1195735006, 1195735007, 1195735008, 1195735009, 1195735010

Results by **SM21 4500-N D**

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

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 9/29/2019 4:08:55PM

Prep Batch: WXX13040
Prep Method: METHOD
Prep Date/Time: 9/28/2019 12:08:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1195735 [WXX13040]
Blank Spike Lab ID: 1535144
Date Analyzed: 09/29/2019 16:10

Spike Duplicate ID: LCSD for HBN 1195735 [WXX13040]
Spike Duplicate Lab ID: 1535145
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195735001, 1195735002, 1195735003, 1195735004, 1195735005, 1195735006, 1195735007, 1195735008, 1195735009, 1195735010

Results by **SM21 4500-N D**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Kjeldahl Nitrogen	4	4.25	106	4	4.42	110	(75-125)	3.90	(< 25)

Batch Information

Analytical Batch: **WDA4654**
Analytical Method: **SM21 4500-N D**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX13040**
Prep Method: **METHOD**
Prep Date/Time: **09/28/2019 12:08**
Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

Print Date: 10/08/2019 4:39:33PM

Matrix Spike Summary

Original Sample ID: 1195735001
MS Sample ID: 1535146 MS
MSD Sample ID: 1535147 MSD

Analysis Date: 09/29/2019 16:12
Analysis Date: 09/29/2019 16:14
Analysis Date: 09/29/2019 16:15
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195735001, 1195735002, 1195735003, 1195735004, 1195735005, 1195735006, 1195735007, 1195735008, 1195735009, 1195735010

Results by **SM21 4500-N D**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Kjeldahl Nitrogen	0.500U	4.00	4.42	110	4.00	3.92	98	75-125	12.00	(< 25)

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 9/29/2019 4:14:09PM

Prep Batch: WXX13040
Prep Method: Distillation TKN by Phenate (W)
Prep Date/Time: 9/28/2019 12:08:00PM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 10/08/2019 4:39:35PM

Method Blank

Blank ID: MB for HBN 1800163 [WXX/13043]
Blank Lab ID: 1535270

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195735002, 1195735003, 1195735004, 1195735007, 1195735008

Results by **SM21 4500P-B,E**

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

Batch Information

Analytical Batch: WDA4655
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 9/29/2019 8:03:22PM

Prep Batch: WXX13043
Prep Method: SM21 4500P-B,E
Prep Date/Time: 9/29/2019 4:54:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 10/08/2019 4:39:37PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1195735 [WXX13043]
Blank Spike Lab ID: 1535271
Date Analyzed: 09/29/2019 20:04

Spike Duplicate ID: LCSD for HBN 1195735 [WXX13043]
Spike Duplicate Lab ID: 1535272
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195735002, 1195735003, 1195735004, 1195735007, 1195735008

Results by **SM21 4500P-B,E**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Phosphorus	0.2	0.191	96	0.2	0.187	94	(75-125)	2.10	(< 25)

Batch Information

Analytical Batch: **WDA4655**
Analytical Method: **SM21 4500P-B,E**
Instrument: **Discrete Analyzer 2**
Analyst: **EWW**

Prep Batch: **WXX13043**
Prep Method: **SM21 4500P-B,E**
Prep Date/Time: **09/29/2019 16:54**
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: 10/08/2019 4:39:41PM

Matrix Spike Summary

Original Sample ID: 1195480002
MS Sample ID: 1535273 MS
MSD Sample ID: 1535274 MSD

Analysis Date: 09/29/2019 20:09
Analysis Date: 09/29/2019 20:10
Analysis Date: 09/29/2019 20:11
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195735002, 1195735003, 1195735004, 1195735007, 1195735008

Results by **SM21 4500P-B,E**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Phosphorus	0.0200U	0.200	.212	106	0.200	0.213	107	75-125	0.85	(< 25)

Batch Information

Analytical Batch: WDA4655
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 9/29/2019 8:10:13PM

Prep Batch: WXX13043
Prep Method: Total Phosphorus (W) Ext.
Prep Date/Time: 9/29/2019 4:54:00PM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 10/08/2019 4:39:43PM

Method Blank

Blank ID: MB for HBN 1800523 [WXX/13060]
Blank Lab ID: 1536931

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195735001, 1195735002, 1195735003, 1195735004, 1195735005, 1195735006, 1195735007, 1195735008, 1195735009, 1195735010

Results by **SM21 4500-NH3 G**

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

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 10/6/2019 11:08:27PM

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/6/2019 6:00:00PM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

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Method Blank

Blank ID: MB for HBN 1800523 [WXX/13060]
Blank Lab ID: 1536936

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195735001, 1195735002, 1195735003, 1195735004, 1195735005, 1195735006, 1195735007, 1195735008, 1195735009, 1195735010

Results by **SM21 4500-NH3 G**

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

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 10/6/2019 11:55:11PM

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/6/2019 6:00:00PM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1195735 [WXX13060]
Blank Spike Lab ID: 1536932
Date Analyzed: 10/06/2019 23:10

Spike Duplicate ID: LCSD for HBN 1195735 [WXX13060]
Spike Duplicate Lab ID: 1536933
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195735001, 1195735002, 1195735003, 1195735004, 1195735005, 1195735006, 1195735007, 1195735008, 1195735009, 1195735010

Results by **SM21 4500-NH3 G**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	1	1.12	112	1	1.17	117	(75-125)	4.80	(< 25)

Batch Information

Analytical Batch: **WDA4663**
Analytical Method: **SM21 4500-NH3 G**
Instrument: **Discrete Analyzer 2**
Analyst: **EWW**

Prep Batch: **WXX13060**
Prep Method: **METHOD**
Prep Date/Time: **10/06/2019 18:00**
Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

Print Date: 10/08/2019 4:39:48PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1195735 [WXX13060]
Blank Spike Lab ID: 1536937
Date Analyzed: 10/06/2019 23:56

Spike Duplicate ID: LCSD for HBN 1195735 [WXX13060]
Spike Duplicate Lab ID: 1536938
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195735001, 1195735002, 1195735003, 1195735004, 1195735005, 1195735006, 1195735007, 1195735008, 1195735009, 1195735010

Results by **SM21 4500-NH3 G**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	1	1.11	111	1	1.24	124	(75-125)	10.80	(< 25)

Batch Information

Analytical Batch: **WDA4663**
Analytical Method: **SM21 4500-NH3 G**
Instrument: **Discrete Analyzer 2**
Analyst: **EWW**

Prep Batch: **WXX13060**
Prep Method: **METHOD**
Prep Date/Time: **10/06/2019 18:00**
Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

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Matrix Spike Summary

Original Sample ID: 1195592001
MS Sample ID: 1536934 MS
MSD Sample ID: 1536935 MSD

Analysis Date: 10/06/2019 23:13
Analysis Date: 10/06/2019 23:15
Analysis Date: 10/06/2019 23:16
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195735001, 1195735002, 1195735003, 1195735004, 1195735005, 1195735006, 1195735007, 1195735008, 1195735009, 1195735010

Results by **SM21 4500-NH3 G**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	0.117	1.00	1.16	104	1.00	1.10	98	75-125	5.30	(< 25)

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 10/6/2019 11:15:10PM

Prep Batch: WXX13060
Prep Method: Ammonia by SM21 4500F prep (W)
Prep Date/Time: 10/6/2019 6:00:00PM
Prep Initial Wt./Vol.: 6.00mL
Prep Extract Vol: 6.00mL

Print Date: 10/08/2019 4:39:50PM

Matrix Spike Summary

Original Sample ID: 1195735001
MS Sample ID: 1536939 MS
MSD Sample ID: 1536940 MSD

Analysis Date: 10/07/2019 0:00
Analysis Date: 10/07/2019 0:01
Analysis Date: 10/07/2019 0:03
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195735001, 1195735002, 1195735003, 1195735004, 1195735005, 1195735006, 1195735007, 1195735008, 1195735009, 1195735010

Results by **SM21 4500-NH3 G**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	0.0722J	1.00	1.2	112	1.00	1.17	110	75-125	2.20	(< 25)

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 10/7/2019 12:01:51AM

Prep Batch: WXX13060
Prep Method: Ammonia by SM21 4500F prep (W)
Prep Date/Time: 10/6/2019 6:00:00PM
Prep Initial Wt./Vol.: 6.00mL
Prep Extract Vol: 6.00mL

Print Date: 10/08/2019 4:39:50PM

SGS

C 1195735 RD

Locations Nationwide
Alaska Maryland
New Jersey New York
North Carolina Indiana
West Virgina Kentucky
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Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.

Page 1 of 1

Section 1

CLIENT: Stantec

CONTACT: Jake Alvarez PHONE NO:

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

REPORTS TO: E-MAIL: jake.alvarez@stantec.com

INVOICE TO: QUOTE #:

P.O. #: 2470045

Section 2

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	# CONTAINERS	Type C = COMP G = GRAB MI = Multi Incremental Soils	Preservative: BOD	TSS	TC (Alkalinity)	Nitrate/Nitrite	FC	TKN/Ammonia	TKN/Ammonia/TP				REMARKS/ LOC ID
1 A-C	MW8	9/25/19	1020	Water	3	G				1	1	1					
2 A-F	SW8		1051		6		1	1	1	1	1		1				
3 A-F	SW9		1113		6		1	1	1	1	1		1				
4 A-F	SW10		1143		6		1	1	1	1	1		1				
5 A-C	MW17		1210		3		#			1	1	1					
6 A-C	MW16		1328		3					1	1	1					
7 A-F	SW12		1356		6		1	1	1	1	1		1				
8 A-F	SW11		1415		6		1	1	1	1	1		1				
9 A-C	B11		1430		3					1	1	1					
10 A-C	DUP		1430		3					1	1	1					

Section 5

	Date	Time	
Relinquished By: (1)	9/25/19	1639	Received By:
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	09/25/19	16:39	Received For Laboratory By: AMG

Section 4

DOD Project? Yes No

Cooler ID:

Data Deliverable Requirements:

Requested Turnaround Time and/or Special Instructions:

Profile #348183

Temp Blank °C: 2.6° DS2 or Ambient [ ]

(See attached Sample Receipt Form)

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

(See attached Sample Receipt Form)

e-Sample Receipt Form

SGS Workorder #: **1195735**

1 1 9 5 7 3 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	
	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 @ 2.6 °C Therm. ID: D52
		Cooler ID: @ °C Therm. ID:
If samples received without a temperature blank, the "cooler temperature" will be documented instead & "COOLER TEMP" will be noted to the right. "ambient" or "chilled" will be noted if neither is available.		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 2 time is labeled as being "10:20." Proceeding per CoC.
**Note: If times differ <1hr, record details & login per COC.		
***Note: If sample information on containers differs from COC, SGS will default to COC information		
Were analytical requests clear? (i.e., method is specified for analyses with multiple option for analysis (Ex: BTEX, Metals)	Yes	
	N/A	***Exemption permitted for metals (e.g,200.8/6020A).
Were proper containers (type/mass/volume/preservative***)used?	Yes	
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

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition
1195735001-A	No Preservative Required	OK			
1195735001-B	Na2S2O3 for Chlorine Redu	OK			
1195735001-C	H2SO4 to pH < 2	OK			
1195735002-A	No Preservative Required	OK			
1195735002-B	No Preservative Required	OK			
1195735002-C	Na2S2O3 for Chlorine Redu	OK			
1195735002-D	No Preservative Required	OK			
1195735002-E	Na2S2O3 for Chlorine Redu	OK			
1195735002-F	H2SO4 to pH < 2	OK			
1195735003-A	No Preservative Required	OK			
1195735003-B	No Preservative Required	OK			
1195735003-C	Na2S2O3 for Chlorine Redu	OK			
1195735003-D	No Preservative Required	OK			
1195735003-E	Na2S2O3 for Chlorine Redu	OK			
1195735003-F	H2SO4 to pH < 2	OK			
1195735004-A	No Preservative Required	OK			
1195735004-B	No Preservative Required	OK			
1195735004-C	Na2S2O3 for Chlorine Redu	OK			
1195735004-D	No Preservative Required	OK			
1195735004-E	Na2S2O3 for Chlorine Redu	OK			
1195735004-F	H2SO4 to pH < 2	OK			
1195735005-A	No Preservative Required	OK			
1195735005-B	Na2S2O3 for Chlorine Redu	OK			
1195735005-C	H2SO4 to pH < 2	OK			
1195735006-A	No Preservative Required	OK			
1195735006-B	Na2S2O3 for Chlorine Redu	OK			
1195735006-C	H2SO4 to pH < 2	OK			
1195735007-A	No Preservative Required	OK			
1195735007-B	No Preservative Required	OK			
1195735007-C	Na2S2O3 for Chlorine Redu	OK			
1195735007-D	No Preservative Required	OK			
1195735007-E	Na2S2O3 for Chlorine Redu	OK			
1195735007-F	H2SO4 to pH < 2	OK			
1195735008-A	No Preservative Required	OK			
1195735008-B	No Preservative Required	OK			
1195735008-C	Na2S2O3 for Chlorine Redu	OK			
1195735008-D	No Preservative Required	OK			
1195735008-E	Na2S2O3 for Chlorine Redu	OK			
1195735008-F	H2SO4 to pH < 2	OK			
1195735009-A	No Preservative Required	OK			
1195735009-B	Na2S2O3 for Chlorine Redu	OK			
1195735009-C	H2SO4 to pH < 2	OK			
1195735010-A	No Preservative Required	OK			
1195735010-B	Na2S2O3 for Chlorine Redu	OK			
1195735010-C	H2SO4 to pH < 2	OK			

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition

Container Condition Glossary

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

Laboratory Report of Analysis

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

Report Number: **1195771**

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 Date
Project Manager
Justin.Nelson@sgs.com

Case Narrative

SGS Client: **Stantec Consulting Services Inc.**
SGS Project: **1195771**
Project Name/Site: **Wasilla WWTP**
Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

SW16 (1195771003) PS

9223 – Quanti-Tray - Sample was also analyzed undiluted and showed 10 colonies of E.coli present.

1195743002DUP (1535480) DUP

2540D - Total Suspended Solids - Sample duplicate RPD was outside of acceptance limits. The difference between sample and duplicate results is less than the LOQ.

1198801010MS (1538290) MS

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

1198801010MSD (1538291) MSD

4500N-D - Total Kjeldahl Nitrogen - MS/MSD RPD was outside of QC criteria. Refer to the LCS/LCSD RPD 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.

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, indenmification 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, 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

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
SW13	1195771001	09/26/2019	09/26/2019	Water (Surface, Eff., Ground)
MW12	1195771002	09/26/2019	09/26/2019	Water (Surface, Eff., Ground)
SW16	1195771003	09/26/2019	09/26/2019	Water (Surface, Eff., Ground)
SW15	1195771004	09/26/2019	09/26/2019	Water (Surface, Eff., Ground)
SW14	1195771005	09/26/2019	09/26/2019	Water (Surface, Eff., Ground)
MW13	1195771006	09/26/2019	09/26/2019	Water (Surface, Eff., Ground)
SHAW	1195771007	09/26/2019	09/26/2019	Water (Surface, Eff., Ground)
SW17	1195771008	09/26/2019	09/26/2019	Water (Surface, Eff., Ground)
SW18	1195771009	09/26/2019	09/26/2019	Water (Surface, Eff., Ground)
DUP 2	1195771010	09/26/2019	09/26/2019	Water (Surface, Eff., Ground)

Method	Method Description
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: **SW13**
Lab Sample ID: 1195771001

	Parameter	Result	Units
Microbiology Laboratory	E. Coli	9	MPN/100mL
	Fecal Coliform	6.0	col/100mL
	Total Coliform	866	MPN/100mL
Waters Department	Ammonia-N	0.0925J	mg/L
	Total Phosphorus	0.0380	mg/L
	Total Suspended Solids	12.6	mg/L

Client Sample ID: **MW12**
Lab Sample ID: 1195771002

	Parameter	Result	Units
Waters Department	Ammonia-N	0.0577J	mg/L

Client Sample ID: **SW16**
Lab Sample ID: 1195771003

	Parameter	Result	Units
Microbiology Laboratory	Total Coliform	2360	MPN/100mL
Waters Department	Ammonia-N	0.0964J	mg/L
	Total Kjeldahl Nitrogen	0.405J	mg/L
	Total Phosphorus	0.151	mg/L
	Total Suspended Solids	146	mg/L

Client Sample ID: **SW15**
Lab Sample ID: 1195771004

	Parameter	Result	Units
Microbiology Laboratory	E. Coli	8	MPN/100mL
	Fecal Coliform	2.0	col/100mL
	Total Coliform	517	MPN/100mL
Waters Department	Ammonia-N	0.107	mg/L
	Total Phosphorus	0.00850J	mg/L
	Total Suspended Solids	12.4	mg/L

Client Sample ID: **SW14**
Lab Sample ID: 1195771005

	Parameter	Result	Units
Microbiology Laboratory	E. Coli	8	MPN/100mL
	Fecal Coliform	10	col/100mL
	Total Coliform	435	MPN/100mL
Waters Department	Ammonia-N	0.0707J	mg/L
	Total Phosphorus	0.0333	mg/L
	Total Suspended Solids	16.3	mg/L

Client Sample ID: **MW13**
Lab Sample ID: 1195771006

	Parameter	Result	Units
Waters Department	Ammonia-N	0.262	mg/L

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Detectable Results Summary

Client Sample ID: **SHAW**
Lab Sample ID: 1195771007

	Parameter	Result	Units
Microbiology Laboratory	E. Coli	5	MPN/100mL
	Fecal Coliform	4.0	col/100mL
	Total Coliform	488	MPN/100mL
Waters Department	Ammonia-N	0.101	mg/L
	Total Phosphorus	0.0265	mg/L
	Total Suspended Solids	2.19	mg/L

Client Sample ID: **SW17**
Lab Sample ID: 1195771008

	Parameter	Result	Units
Microbiology Laboratory	E. Coli	88	MPN/100mL
	Fecal Coliform	70	col/100mL
	Total Coliform	921	MPN/100mL
Waters Department	Ammonia-N	0.112	mg/L
	Nitrate-N	2.43	mg/L
	Total Nitrate/Nitrite-N	2.43	mg/L
	Total Phosphorus	0.0670	mg/L
	Total Suspended Solids	1.02	mg/L

Client Sample ID: **SW18**
Lab Sample ID: 1195771009

	Parameter	Result	Units
Microbiology Laboratory	E. Coli	20	MPN/100mL
	Fecal Coliform	10	col/100mL
	Total Coliform	1414	MPN/100mL
Waters Department	Ammonia-N	0.167	mg/L
	Nitrate-N	3.25	mg/L
	Total Nitrate/Nitrite-N	3.26	mg/L
	Total Phosphorus	0.266	mg/L
	Total Suspended Solids	1.41	mg/L

Client Sample ID: **DUP 2**
Lab Sample ID: 1195771010

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	2.77	mg/L
	E. Coli	8	MPN/100mL
	Fecal Coliform	6.0	col/100mL
	Total Coliform	613	MPN/100mL
Waters Department	Ammonia-N	0.0927J	mg/L
	Total Phosphorus	0.00720J	mg/L
	Total Suspended Solids	56.6	mg/L

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Results of **SW13**

Client Sample ID: **SW13**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771001
Lab Project ID: 1195771

Collection Date: 09/26/19 10:30
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.00 U		2.00	2.00	mg/L	1		09/27/19 20:15

Batch Information

Analytical Batch: BOD6438
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 09/27/19 20:15
Container ID: 1195771001-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	6.0		2.00	2.00	col/100mL	1		09/26/19 17:27

Batch Information

Analytical Batch: BTF17676
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 09/26/19 17:27
Container ID: 1195771001-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	9		1	1	MPN/100m	1		09/26/19 17:43
Total Coliform	866		1	1	MPN/100m	1		09/26/19 17:43

Batch Information

Analytical Batch: BTF17674
Analytical Method: SM21 9223B
Analyst: ACF
Analytical Date/Time: 09/26/19 17:43
Container ID: 1195771001-C

Print Date: 10/15/2019 1:13:46PM

J flagging is activated

Results of **SW13**

Client Sample ID: **SW13**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771001
Lab Project ID: 1195771

Collection Date: 09/26/19 10:30
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 16:05
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 16:05
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 16:05

Batch Information

Analytical Batch: WIC5970
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/27/19 16:05
Container ID: 1195771001-B

Prep Batch: WXX13036
Prep Method: METHOD
Prep Date/Time: 09/27/19 13:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	12.6		1.04	0.323	mg/L	1		09/30/19 17:35

Batch Information

Analytical Batch: STS6505
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 09/30/19 17:35
Container ID: 1195771001-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.500	U	1.00	0.310	mg/L	1		10/12/19 16:51

Batch Information

Analytical Batch: WDA4665
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 10/12/19 16:51
Container ID: 1195771001-F

Prep Batch: WXX13067
Prep Method: METHOD
Prep Date/Time: 10/11/19 11:30
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.0925	J	0.100	0.0310	mg/L	1		10/07/19 00:21

Print Date: 10/15/2019 1:13:46PM

J flagging is activated

Results of **SW13**

Client Sample ID: **SW13**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771001
Lab Project ID: 1195771

Collection Date: 09/26/19 10:30
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/07/19 00:21
Container ID: 1195771001-F

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0380		0.0200	0.00500	mg/L	1		10/07/19 16:03

Batch Information

Analytical Batch: WDA4662
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 10/07/19 16:03
Container ID: 1195771001-F

Prep Batch: WXX13059
Prep Method: SM21 4500P-B,E
Prep Date/Time: 10/07/19 14:06
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **MW12**

Client Sample ID: **MW12**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771002
Lab Project ID: 1195771

Collection Date: 09/26/19 11:00
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	1.67	U	1.67	1.67	col/100mL	1		09/26/19 17:27

Batch Information

Analytical Batch: BTF17676
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 09/26/19 17:27
Container ID: 1195771002-A

Results of **MW12**

Client Sample ID: **MW12**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771002
Lab Project ID: 1195771

Collection Date: 09/26/19 11:00
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 16:43
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 16:43
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 16:43

Batch Information

Analytical Batch: WIC5970
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/27/19 16:43
Container ID: 1195771002-B

Prep Batch: WXX13036
Prep Method: METHOD
Prep Date/Time: 09/27/19 13:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.500	U	1.00	0.310	mg/L	1		10/12/19 16:52

Batch Information

Analytical Batch: WDA4665
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 10/12/19 16:52
Container ID: 1195771002-C

Prep Batch: WXX13067
Prep Method: METHOD
Prep Date/Time: 10/11/19 11:30
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.0577	J	0.100	0.0310	mg/L	1		10/07/19 00:23

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/07/19 00:23
Container ID: 1195771002-C

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Results of **SW16**

Client Sample ID: **SW16**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771003
Lab Project ID: 1195771

Collection Date: 09/26/19 11:30
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.00	U	2.00	2.00	mg/L	1		09/27/19 20:15

Batch Information

Analytical Batch: BOD6438
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 09/27/19 20:15
Container ID: 1195771003-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	1.67	U	1.67	1.67	col/100mL	1		09/26/19 17:27

Batch Information

Analytical Batch: BTF17676
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 09/26/19 17:27
Container ID: 1195771003-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	10	U	10	10	MPN/100m	10		09/26/19 17:43
Total Coliform	2360		10	10	MPN/100m	10		09/26/19 17:43

Batch Information

Analytical Batch: BTF17674
Analytical Method: SM21 9223B
Analyst: ACF
Analytical Date/Time: 09/26/19 17:43
Container ID: 1195771003-C

Results of **SW16**

Client Sample ID: **SW16**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771003
Lab Project ID: 1195771

Collection Date: 09/26/19 11:30
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 17:02
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 17:02
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 17:02

Batch Information

Analytical Batch: WIC5970
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/27/19 17:02
Container ID: 1195771003-B

Prep Batch: WXX13036
Prep Method: METHOD
Prep Date/Time: 09/27/19 13:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	146		2.00	0.620	mg/L	1		09/30/19 17:35

Batch Information

Analytical Batch: STS6505
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 09/30/19 17:35
Container ID: 1195771003-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.405	J	1.00	0.310	mg/L	1		10/12/19 16:53

Batch Information

Analytical Batch: WDA4665
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 10/12/19 16:53
Container ID: 1195771003-F

Prep Batch: WXX13067
Prep Method: METHOD
Prep Date/Time: 10/11/19 11:30
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.0964	J	0.100	0.0310	mg/L	1		10/07/19 00:28

Print Date: 10/15/2019 1:13:46PM

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Results of **SW16**

Client Sample ID: **SW16**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771003
Lab Project ID: 1195771

Collection Date: 09/26/19 11:30
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/07/19 00:28
Container ID: 1195771003-F

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.151		0.0200	0.00500	mg/L	1		10/07/19 16:06

Batch Information

Analytical Batch: WDA4662
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 10/07/19 16:06
Container ID: 1195771003-F

Prep Batch: WXX13059
Prep Method: SM21 4500P-B,E
Prep Date/Time: 10/07/19 14:06
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: 1195771004
Lab Project ID: 1195771

Collection Date: 09/26/19 11:40
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.00 U		2.00	2.00	mg/L	1		09/27/19 20:15

Batch Information

Analytical Batch: BOD6438
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 09/27/19 20:15
Container ID: 1195771004-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	2.0		2.00	2.00	col/100mL	1		09/26/19 17:27

Batch Information

Analytical Batch: BTF17676
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 09/26/19 17:27
Container ID: 1195771004-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	8		1	1	MPN/100m	1		09/26/19 17:43
Total Coliform	517		1	1	MPN/100m	1		09/26/19 17:43

Batch Information

Analytical Batch: BTF17674
Analytical Method: SM21 9223B
Analyst: ACF
Analytical Date/Time: 09/26/19 17:43
Container ID: 1195771004-C

Results of **SW15**

Client Sample ID: **SW15**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771004
Lab Project ID: 1195771

Collection Date: 09/26/19 11:40
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 17:21
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 17:21
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 17:21

Batch Information

Analytical Batch: WIC5970
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/27/19 17:21
Container ID: 1195771004-B

Prep Batch: WXX13036
Prep Method: METHOD
Prep Date/Time: 09/27/19 13:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	12.4		1.05	0.326	mg/L	1		09/30/19 17:35

Batch Information

Analytical Batch: STS6505
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 09/30/19 17:35
Container ID: 1195771004-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.500	U	1.00	0.310	mg/L	1		10/12/19 16:54

Batch Information

Analytical Batch: WDA4665
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 10/12/19 16:54
Container ID: 1195771004-F

Prep Batch: WXX13067
Prep Method: METHOD
Prep Date/Time: 10/11/19 11:30
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.107		0.100	0.0310	mg/L	1		10/07/19 00:30

Print Date: 10/15/2019 1:13:46PM

J flagging is activated

Results of **SW15**

Client Sample ID: **SW15**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771004
Lab Project ID: 1195771

Collection Date: 09/26/19 11:40
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/07/19 00:30
Container ID: 1195771004-F

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.00850	J	0.0200	0.00500	mg/L	1		10/07/19 16:07

Batch Information

Analytical Batch: WDA4662
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 10/07/19 16:07
Container ID: 1195771004-F

Prep Batch: WXX13059
Prep Method: SM21 4500P-B,E
Prep Date/Time: 10/07/19 14:06
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 10/15/2019 1:13:46PM

J flagging is activated

Results of **SW14**

Client Sample ID: **SW14**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771005
Lab Project ID: 1195771

Collection Date: 09/26/19 12:00
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.00 U		2.00	2.00	mg/L	1		09/27/19 20:15

Batch Information

Analytical Batch: BOD6438
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 09/27/19 20:15
Container ID: 1195771005-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	10		1.67	1.67	col/100mL	1		09/26/19 17:27

Batch Information

Analytical Batch: BTF17676
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 09/26/19 17:27
Container ID: 1195771005-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	8		1	1	MPN/100m	1		09/26/19 17:43
Total Coliform	435		1	1	MPN/100m	1		09/26/19 17:43

Batch Information

Analytical Batch: BTF17674
Analytical Method: SM21 9223B
Analyst: ACF
Analytical Date/Time: 09/26/19 17:43
Container ID: 1195771005-C

Results of **SW14**

Client Sample ID: **SW14**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771005
Lab Project ID: 1195771

Collection Date: 09/26/19 12:00
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 17:40
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 17:40
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 17:40

Batch Information

Analytical Batch: WIC5970
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/27/19 17:40
Container ID: 1195771005-B

Prep Batch: WXX13036
Prep Method: METHOD
Prep Date/Time: 09/27/19 13:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	16.3		1.04	0.323	mg/L	1		09/30/19 17:35

Batch Information

Analytical Batch: STS6505
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 09/30/19 17:35
Container ID: 1195771005-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.500	U	1.00	0.310	mg/L	1		10/12/19 16:58

Batch Information

Analytical Batch: WDA4665
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 10/12/19 16:58
Container ID: 1195771005-F

Prep Batch: WXX13067
Prep Method: METHOD
Prep Date/Time: 10/11/19 11:30
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.0707	J	0.100	0.0310	mg/L	1		10/07/19 00:31

Print Date: 10/15/2019 1:13:46PM

J flagging is activated

Results of **SW14**

Client Sample ID: **SW14**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771005
Lab Project ID: 1195771

Collection Date: 09/26/19 12:00
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/07/19 00:31
Container ID: 1195771005-F

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0333		0.0200	0.00500	mg/L	1		10/07/19 16:10

Batch Information

Analytical Batch: WDA4662
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 10/07/19 16:10
Container ID: 1195771005-F

Prep Batch: WXX13059
Prep Method: SM21 4500P-B,E
Prep Date/Time: 10/07/19 14:06
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 10/15/2019 1:13:46PM

J flagging is activated

Results of **MW13**

Client Sample ID: **MW13**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771006
Lab Project ID: 1195771

Collection Date: 09/26/19 12:10
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	1.67	U	1.67	1.67	col/100mL	1		09/26/19 17:27

Batch Information

Analytical Batch: BTF17676
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 09/26/19 17:27
Container ID: 1195771006-A

Results of **MW13**

Client Sample ID: **MW13**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771006
Lab Project ID: 1195771

Collection Date: 09/26/19 12:10
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 18:37
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 18:37
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 18:37

Batch Information

Analytical Batch: WIC5970
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/27/19 18:37
Container ID: 1195771006-B

Prep Batch: WXX13036
Prep Method: METHOD
Prep Date/Time: 09/27/19 13:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.500	U	1.00	0.310	mg/L	1		10/12/19 17:00

Batch Information

Analytical Batch: WDA4665
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 10/12/19 17:00
Container ID: 1195771006-C

Prep Batch: WXX13067
Prep Method: METHOD
Prep Date/Time: 10/11/19 11:30
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.262		0.100	0.0310	mg/L	1		10/07/19 00:33

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/07/19 00:33
Container ID: 1195771006-C

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Results of **SHAW**

Client Sample ID: **SHAW**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771007
Lab Project ID: 1195771

Collection Date: 09/26/19 12:51
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.00 U		2.00	2.00	mg/L	1		09/27/19 20:15

Batch Information

Analytical Batch: BOD6438
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 09/27/19 20:15
Container ID: 1195771007-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	4.0		2.00	2.00	col/100mL	1		09/26/19 17:27

Batch Information

Analytical Batch: BTF17676
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 09/26/19 17:27
Container ID: 1195771007-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	5		1	1	MPN/100m	1		09/26/19 17:43
Total Coliform	488		1	1	MPN/100m	1		09/26/19 17:43

Batch Information

Analytical Batch: BTF17674
Analytical Method: SM21 9223B
Analyst: ACF
Analytical Date/Time: 09/26/19 17:43
Container ID: 1195771007-C

Print Date: 10/15/2019 1:13:46PM

J flagging is activated

Results of **SHAW**

Client Sample ID: **SHAW**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771007
Lab Project ID: 1195771

Collection Date: 09/26/19 12:51
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 18:56
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 18:56
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 18:56

Batch Information

Analytical Batch: WIC5970
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/27/19 18:56
Container ID: 1195771007-B

Prep Batch: WXX13036
Prep Method: METHOD
Prep Date/Time: 09/27/19 13:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	2.19		1.04	0.323	mg/L	1		09/30/19 17:35

Batch Information

Analytical Batch: STS6505
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 09/30/19 17:35
Container ID: 1195771007-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.500	U	1.00	0.310	mg/L	1		10/12/19 17:01

Batch Information

Analytical Batch: WDA4665
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 10/12/19 17:01
Container ID: 1195771007-F

Prep Batch: WXX13067
Prep Method: METHOD
Prep Date/Time: 10/11/19 11:30
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.101		0.100	0.0310	mg/L	1		10/07/19 00:35

Print Date: 10/15/2019 1:13:46PM

J flagging is activated

Results of **SHAW**

Client Sample ID: **SHAW**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771007
Lab Project ID: 1195771

Collection Date: 09/26/19 12:51
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/07/19 00:35
Container ID: 1195771007-F

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0265		0.0200	0.00500	mg/L	1		10/07/19 16:11

Batch Information

Analytical Batch: WDA4662
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 10/07/19 16:11
Container ID: 1195771007-F

Prep Batch: WXX13059
Prep Method: SM21 4500P-B,E
Prep Date/Time: 10/07/19 14:06
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **SW17**

Client Sample ID: **SW17**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771008
Lab Project ID: 1195771

Collection Date: 09/26/19 13:45
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.00 U		2.00	2.00	mg/L	1		09/27/19 20:15

Batch Information

Analytical Batch: BOD6438
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 09/27/19 20:15
Container ID: 1195771008-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	70		2.00	2.00	col/100mL	1		09/26/19 17:27

Batch Information

Analytical Batch: BTF17676
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 09/26/19 17:27
Container ID: 1195771008-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	88		1	1	MPN/100m	1		09/26/19 17:43
Total Coliform	921		1	1	MPN/100m	1		09/26/19 17:43

Batch Information

Analytical Batch: BTF17674
Analytical Method: SM21 9223B
Analyst: ACF
Analytical Date/Time: 09/26/19 17:43
Container ID: 1195771008-C

Results of **SW17**

Client Sample ID: **SW17**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771008
Lab Project ID: 1195771

Collection Date: 09/26/19 13:45
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	2.43		0.200	0.0500	mg/L	1		09/27/19 19:15
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 19:15
Total Nitrate/Nitrite-N	2.43		0.200	0.0500	mg/L	1		09/27/19 19:15

Batch Information

Analytical Batch: WIC5970
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/27/19 19:15
Container ID: 1195771008-B

Prep Batch: WXX13036
Prep Method: METHOD
Prep Date/Time: 09/27/19 13:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	1.02		1.02	0.316	mg/L	1		09/30/19 17:35

Batch Information

Analytical Batch: STS6505
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 09/30/19 17:35
Container ID: 1195771008-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.500	U	1.00	0.310	mg/L	1		10/12/19 17:02

Batch Information

Analytical Batch: WDA4665
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 10/12/19 17:02
Container ID: 1195771008-F

Prep Batch: WXX13067
Prep Method: METHOD
Prep Date/Time: 10/11/19 11:30
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.112		0.100	0.0310	mg/L	1		10/07/19 00:36

Print Date: 10/15/2019 1:13:46PM

J flagging is activated

Results of **SW17**

Client Sample ID: **SW17**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771008
Lab Project ID: 1195771

Collection Date: 09/26/19 13:45
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/07/19 00:36
Container ID: 1195771008-F

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0670		0.0200	0.00500	mg/L	1		10/07/19 16:12

Batch Information

Analytical Batch: WDA4662
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 10/07/19 16:12
Container ID: 1195771008-F

Prep Batch: WXX13059
Prep Method: SM21 4500P-B,E
Prep Date/Time: 10/07/19 14:06
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: 1195771009
Lab Project ID: 1195771

Collection Date: 09/26/19 14:15
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.00 U		2.00	2.00	mg/L	1		09/27/19 20:15

Batch Information

Analytical Batch: BOD6438
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 09/27/19 20:15
Container ID: 1195771009-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	10		1.67	1.67	col/100mL	1		09/26/19 17:27

Batch Information

Analytical Batch: BTF17676
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 09/26/19 17:27
Container ID: 1195771009-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	20		1	1	MPN/100m	1		09/26/19 17:43
Total Coliform	1414		1	1	MPN/100m	1		09/26/19 17:43

Batch Information

Analytical Batch: BTF17674
Analytical Method: SM21 9223B
Analyst: ACF
Analytical Date/Time: 09/26/19 17:43
Container ID: 1195771009-C

Results of **SW18**

Client Sample ID: **SW18**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771009
Lab Project ID: 1195771

Collection Date: 09/26/19 14:15
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	3.25		0.200	0.0500	mg/L	1		09/27/19 19:34
Nitrite-N	0.100 U		0.200	0.0500	mg/L	1		09/27/19 19:34
Total Nitrate/Nitrite-N	3.26		0.200	0.0500	mg/L	1		09/27/19 19:34

Batch Information

Analytical Batch: WIC5970
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/27/19 19:34
Container ID: 1195771009-B

Prep Batch: WXX13036
Prep Method: METHOD
Prep Date/Time: 09/27/19 13:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	1.41		1.01	0.313	mg/L	1		09/30/19 17:35

Batch Information

Analytical Batch: STS6505
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 09/30/19 17:35
Container ID: 1195771009-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.500 U		1.00	0.310	mg/L	1		10/12/19 17:03

Batch Information

Analytical Batch: WDA4665
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 10/12/19 17:03
Container ID: 1195771009-F

Prep Batch: WXX13067
Prep Method: METHOD
Prep Date/Time: 10/11/19 11:30
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.167		0.100	0.0310	mg/L	1		10/07/19 00:38

Print Date: 10/15/2019 1:13:46PM

J flagging is activated

Results of **SW18**

Client Sample ID: **SW18**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771009
Lab Project ID: 1195771

Collection Date: 09/26/19 14:15
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/07/19 00:38
Container ID: 1195771009-F

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.266		0.0200	0.00500	mg/L	1		10/07/19 16:13

Batch Information

Analytical Batch: WDA4662
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 10/07/19 16:13
Container ID: 1195771009-F

Prep Batch: WXX13059
Prep Method: SM21 4500P-B,E
Prep Date/Time: 10/07/19 14:06
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **DUP 2**

Client Sample ID: **DUP 2**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771010
Lab Project ID: 1195771

Collection Date: 09/26/19 11:42
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.77		2.00	2.00	mg/L	1		09/27/19 20:15

Batch Information

Analytical Batch: BOD6438
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 09/27/19 20:15
Container ID: 1195771010-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	6.0		2.00	2.00	col/100mL	1		09/26/19 17:27

Batch Information

Analytical Batch: BTF17676
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 09/26/19 17:27
Container ID: 1195771010-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	8		1	1	MPN/100m	1		09/26/19 17:43
Total Coliform	613		1	1	MPN/100m	1		09/26/19 17:43

Batch Information

Analytical Batch: BTF17674
Analytical Method: SM21 9223B
Analyst: ACF
Analytical Date/Time: 09/26/19 17:43
Container ID: 1195771010-C

Results of **DUP 2**

Client Sample ID: **DUP 2**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771010
Lab Project ID: 1195771

Collection Date: 09/26/19 11:42
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 19:53
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 19:53
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 19:53

Batch Information

Analytical Batch: WIC5970
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/27/19 19:53
Container ID: 1195771010-B

Prep Batch: WXX13036
Prep Method: METHOD
Prep Date/Time: 09/27/19 13:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	56.6		1.06	0.330	mg/L	1		09/30/19 17:35

Batch Information

Analytical Batch: STS6505
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 09/30/19 17:35
Container ID: 1195771010-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.500	U	1.00	0.310	mg/L	1		10/12/19 17:05

Batch Information

Analytical Batch: WDA4665
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 10/12/19 17:05
Container ID: 1195771010-F

Prep Batch: WXX13067
Prep Method: METHOD
Prep Date/Time: 10/11/19 11:30
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.0927	J	0.100	0.0310	mg/L	1		10/07/19 00:40

Print Date: 10/15/2019 1:13:46PM

J flagging is activated

Results of **DUP 2**

Client Sample ID: **DUP 2**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195771010
Lab Project ID: 1195771

Collection Date: 09/26/19 11:42
Received Date: 09/26/19 16:00
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/07/19 00:40
Container ID: 1195771010-F

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/06/19 18:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.00720	J	0.0200	0.00500	mg/L	1		10/07/19 16:13

Batch Information

Analytical Batch: WDA4662
Analytical Method: SM21 4500P-B,E
Analyst: EWW
Analytical Date/Time: 10/07/19 16:13
Container ID: 1195771010-F

Prep Batch: WXX13059
Prep Method: SM21 4500P-B,E
Prep Date/Time: 10/07/19 14:06
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Method Blank

Blank ID: MB for HBN 1800108 [BOD/6438]
Blank Lab ID: 1534885

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195771001, 1195771003, 1195771004, 1195771005, 1195771007, 1195771008, 1195771009, 1195771010

Results by **SM21 5210B**

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

Batch Information

Analytical Batch: BOD6438
Analytical Method: SM21 5210B
Instrument:
Analyst: A.L
Analytical Date/Time: 9/27/2019 8:15:01PM

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Member of SGS Group

Blank Spike Summary

Blank Spike ID: LCS for HBN 1195771 [BOD6438]
Blank Spike Lab ID: 1534886
Date Analyzed: 09/27/2019 20:15

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195771001, 1195771003, 1195771004, 1195771005, 1195771007, 1195771008, 1195771009, 1195771010

Results by **SM21 5210B**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Biochemical Oxygen Demand	198	227	115	(84.6-115.4

Batch Information

Analytical Batch: **BOD6438**
Analytical Method: **SM21 5210B**
Instrument:
Analyst: **A.L**

Print Date: 10/15/2019 1:13:52PM

Method Blank

Blank ID: MB for HBN 1800047 [BTF/17674]
Blank Lab ID: 1534589

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195771001, 1195771003, 1195771004, 1195771005, 1195771007, 1195771008, 1195771009, 1195771010

Results by **SM21 9223B**

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

Batch Information

Analytical Batch: BTF17674
Analytical Method: SM21 9223B
Instrument:
Analyst: ACF
Analytical Date/Time: 9/26/2019 5:43:23PM

Method Blank

Blank ID: MB for HBN 1800051 [BTF/17676]
Blank Lab ID: 1534599

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195771001, 1195771002, 1195771003, 1195771004, 1195771005, 1195771006, 1195771007, 1195771008, 1195771009, 1195771010

Results by **SM21 9222D**

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

Batch Information

Analytical Batch: BTF17676
Analytical Method: SM21 9222D
Instrument:
Analyst: A.L
Analytical Date/Time: 9/26/2019 5:27:47PM

Print Date: 10/15/2019 1:13:54PM

Method Blank

Blank ID: MB for HBN 1800204 [STS/6505]
Blank Lab ID: 1535476

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195771001, 1195771003, 1195771004, 1195771005, 1195771007, 1195771008, 1195771009, 1195771010

Results by **SM21 2540D**

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

Batch Information

Analytical Batch: STS6505
Analytical Method: SM21 2540D
Instrument:
Analyst: EWW
Analytical Date/Time: 9/30/2019 5:35:02PM

Print Date: 10/15/2019 1:13:56PM

Duplicate Sample Summary

Original Sample ID: 1195734001
Duplicate Sample ID: 1535479
QC for Samples:

Analysis Date: 09/30/2019 17:35
Matrix: Water (Surface, Eff., Ground)

Results by **SM21 2540D**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Suspended Solids	61.3	62.0	mg/L	1.20	(< 5)

Batch Information

Analytical Batch: STS6505
Analytical Method: SM21 2540D
Instrument:
Analyst: EWW

Print Date: 10/15/2019 1:13:57PM

Duplicate Sample Summary

Original Sample ID: 1195743002
Duplicate Sample ID: 1535480

Analysis Date: 09/30/2019 17:35
Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1195771001, 1195771003, 1195771004, 1195771005, 1195771007, 1195771008, 1195771009, 1195771010

Results by **SM21 2540D**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Suspended Solids	71.0	66.5	mg/L	6.50*	(< 5)

Batch Information

Analytical Batch: STS6505
Analytical Method: SM21 2540D
Instrument:
Analyst: EWW

Print Date: 10/15/2019 1:13:57PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1195771 [STS6505]
Blank Spike Lab ID: 1535477
Date Analyzed: 09/30/2019 17:35

Spike Duplicate ID: LCSD for HBN 1195771 [STS6505]
Spike Duplicate Lab ID: 1535478
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195771001, 1195771003, 1195771004, 1195771005, 1195771007, 1195771008, 1195771009, 1195771010

Results by **SM21 2540D**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Suspended Solids	25	25.1	100	25	24.7	99	(75-125)	1.60	(< 5)

Batch Information

Analytical Batch: **STS6505**
Analytical Method: **SM21 2540D**
Instrument:
Analyst: **EWW**

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Method Blank

Blank ID: MB for HBN 1800133 [WXX/13036]
Blank Lab ID: 1535061

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195771001, 1195771002, 1195771003, 1195771004, 1195771005, 1195771006, 1195771007, 1195771008, 1195771009, 1195771010

Results by **EPA 300.0**

Parameter	Results	LOQ/CL	DL	Units
Nitrate-N	0.100U	0.200	0.0500	mg/L
Nitrite-N	0.0560J	0.200	0.0500	mg/L
Total Nitrate/Nitrite-N	0.0710J	0.200	0.0500	mg/L

Batch Information

Analytical Batch: WIC5970
Analytical Method: EPA 300.0
Instrument: 930 Metrohm compact IC flex
Analyst: DMM
Analytical Date/Time: 9/27/2019 3:08:44PM

Prep Batch: WXX13036
Prep Method: METHOD
Prep Date/Time: 9/27/2019 1:00:00PM
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1195771 [WXX13036]
Blank Spike Lab ID: 1535062
Date Analyzed: 09/27/2019 15:27

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195771001, 1195771002, 1195771003, 1195771004, 1195771005, 1195771006, 1195771007, 1195771008, 1195771009, 1195771010

Results by **EPA 300.0**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Nitrate-N	5	4.74	95	(90-110)
Nitrite-N	5	4.99	100	(90-110)
Total Nitrate/Nitrite-N	10	9.73	97	(90-110)

Batch Information

Analytical Batch: **WIC5970**
Analytical Method: **EPA 300.0**
Instrument: **930 Metrohm compact IC flex**
Analyst: **DMM**

Prep Batch: **WXX13036**
Prep Method: **METHOD**
Prep Date/Time: **09/27/2019 13:00**
Spike Init Wt./Vol.: 5 mg/L Extract Vol: 10 mL
Dupe Init Wt./Vol.: Extract Vol:

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Matrix Spike Summary

Original Sample ID: 1535059
MS Sample ID: 1535064 MS
MSD Sample ID:

Analysis Date: 09/27/2019 16:05
Analysis Date: 09/27/2019 16:24
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195771001, 1195771002, 1195771003, 1195771004, 1195771005, 1195771006, 1195771007, 1195771008, 1195771009, 1195771010

Results by **EPA 300.0**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Nitrate-N	0.100U	5.00	4.88	98				90-110		
Nitrite-N	0.100U	5.00	5.15	103				90-110		

Batch Information

Analytical Batch: WIC5970
Analytical Method: EPA 300.0
Instrument: 930 Metrohm compact IC flex
Analyst: DMM
Analytical Date/Time: 9/27/2019 4:24:41PM

Prep Batch: WXX13036
Prep Method: EPA 300.0 Extraction Waters/Liquids
Prep Date/Time: 9/27/2019 1:00:00PM
Prep Initial Wt./Vol.: 10.00mL
Prep Extract Vol: 10.00mL

Print Date: 10/15/2019 1:14:01PM

Matrix Spike Summary

Original Sample ID: 1535060
MS Sample ID: 1535065 MS
MSD Sample ID:

Analysis Date: 09/27/2019 21:28
Analysis Date: 09/27/2019 22:25
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195771001, 1195771002, 1195771003, 1195771004, 1195771005, 1195771006, 1195771007, 1195771008, 1195771009, 1195771010

Results by **EPA 300.0**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Nitrate-N	0.112J	5.00	4.96	97				90-110		
Nitrite-N	0.100U	5.00	5.01	100				90-110		

Batch Information

Analytical Batch: WIC5970
Analytical Method: EPA 300.0
Instrument: 930 Metrohm compact IC flex
Analyst: DMM
Analytical Date/Time: 9/27/2019 10:25:36PM

Prep Batch: WXX13036
Prep Method: EPA 300.0 Extraction Waters/Liquids
Prep Date/Time: 9/27/2019 1:00:00PM
Prep Initial Wt./Vol.: 10.00mL
Prep Extract Vol: 10.00mL

Print Date: 10/15/2019 1:14:01PM

Method Blank

Blank ID: MB for HBN 1800508 [WXX/13059]
Blank Lab ID: 1536869

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195771001, 1195771003, 1195771004, 1195771005, 1195771007, 1195771008, 1195771009, 1195771010

Results by **SM21 4500P-B,E**

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

Batch Information

Analytical Batch: WDA4662
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 10/7/2019 3:58:51PM

Prep Batch: WXX13059
Prep Method: SM21 4500P-B,E
Prep Date/Time: 10/7/2019 2:06:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1195771 [WXX13059]
Blank Spike Lab ID: 1536870
Date Analyzed: 10/07/2019 15:59

Spike Duplicate ID: LCSD for HBN 1195771 [WXX13059]
Spike Duplicate Lab ID: 1536871
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195771001, 1195771003, 1195771004, 1195771005, 1195771007, 1195771008, 1195771009, 1195771010

Results by **SM21 4500P-B,E**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Phosphorus	0.2	0.199	99	0.2	0.195	98	(75-125)	1.70	(< 25)

Batch Information

Analytical Batch: **WDA4662**
Analytical Method: **SM21 4500P-B,E**
Instrument: **Discrete Analyzer 2**
Analyst: **EWW**

Prep Batch: **WXX13059**
Prep Method: **SM21 4500P-B,E**
Prep Date/Time: **10/07/2019 14:06**
Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

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Matrix Spike Summary

Original Sample ID: 1195771001
MS Sample ID: 1536872 MS
MSD Sample ID: 1536873 MSD

Analysis Date: 10/07/2019 16:03
Analysis Date: 10/07/2019 16:04
Analysis Date: 10/07/2019 16:05
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195771001, 1195771003, 1195771004, 1195771005, 1195771007, 1195771008, 1195771009, 1195771010

Results by **SM21 4500P-B,E**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Phosphorus	0.0380	0.200	.244	103	0.200	0.238	100	75-125	2.60	(< 25)

Batch Information

Analytical Batch: WDA4662
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 10/7/2019 4:04:44PM

Prep Batch: WXX13059
Prep Method: Total Phosphorus (W) Ext.
Prep Date/Time: 10/7/2019 2:06:00PM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 10/15/2019 1:14:04PM

Method Blank

Blank ID: MB for HBN 1800523 [WXX/13060]
Blank Lab ID: 1536931

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195771001, 1195771002, 1195771003, 1195771004, 1195771005, 1195771006, 1195771007, 1195771008, 1195771009, 1195771010

Results by **SM21 4500-NH3 G**

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

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 10/6/2019 11:08:27PM

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/6/2019 6:00:00PM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

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Method Blank

Blank ID: MB for HBN 1800523 [WXX/13060]
Blank Lab ID: 1536936

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195771001, 1195771002, 1195771003, 1195771004, 1195771005, 1195771006, 1195771007, 1195771008, 1195771009, 1195771010

Results by **SM21 4500-NH3 G**

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

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 10/6/2019 11:55:11PM

Prep Batch: WXX13060
Prep Method: METHOD
Prep Date/Time: 10/6/2019 6:00:00PM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1195771 [WXX13060]
Blank Spike Lab ID: 1536932
Date Analyzed: 10/06/2019 23:10

Spike Duplicate ID: LCSD for HBN 1195771 [WXX13060]
Spike Duplicate Lab ID: 1536933
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195771001, 1195771002, 1195771003, 1195771004, 1195771005, 1195771006, 1195771007, 1195771008, 1195771009, 1195771010

Results by **SM21 4500-NH3 G**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	1	1.12	112	1	1.17	117	(75-125)	4.80	(< 25)

Batch Information

Analytical Batch: **WDA4663**
Analytical Method: **SM21 4500-NH3 G**
Instrument: **Discrete Analyzer 2**
Analyst: **EWW**

Prep Batch: **WXX13060**
Prep Method: **METHOD**
Prep Date/Time: **10/06/2019 18:00**
Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1195771 [WXX13060]
Blank Spike Lab ID: 1536937
Date Analyzed: 10/06/2019 23:56

Spike Duplicate ID: LCSD for HBN 1195771 [WXX13060]
Spike Duplicate Lab ID: 1536938
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195771001, 1195771002, 1195771003, 1195771004, 1195771005, 1195771006, 1195771007, 1195771008, 1195771009, 1195771010

Results by **SM21 4500-NH3 G**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	1	1.11	111	1	1.24	124	(75-125)	10.80	(< 25)

Batch Information

Analytical Batch: **WDA4663**
Analytical Method: **SM21 4500-NH3 G**
Instrument: **Discrete Analyzer 2**
Analyst: **EWW**

Prep Batch: **WXX13060**
Prep Method: **METHOD**
Prep Date/Time: **10/06/2019 18:00**
Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

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Matrix Spike Summary

Original Sample ID: 1195592001
MS Sample ID: 1536934 MS
MSD Sample ID: 1536935 MSD

Analysis Date: 10/06/2019 23:13
Analysis Date: 10/06/2019 23:15
Analysis Date: 10/06/2019 23:16
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195771001, 1195771002, 1195771003, 1195771004, 1195771005, 1195771006, 1195771007, 1195771008, 1195771009, 1195771010

Results by **SM21 4500-NH3 G**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	0.117	1.00	1.16	104	1.00	1.10	98	75-125	5.30	(< 25)

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 10/6/2019 11:15:10PM

Prep Batch: WXX13060
Prep Method: Ammonia by SM21 4500F prep (W)
Prep Date/Time: 10/6/2019 6:00:00PM
Prep Initial Wt./Vol.: 6.00mL
Prep Extract Vol: 6.00mL

Print Date: 10/15/2019 1:14:07PM

Matrix Spike Summary

Original Sample ID: 1195735001
MS Sample ID: 1536939 MS
MSD Sample ID: 1536940 MSD

Analysis Date: 10/07/2019 0:00
Analysis Date: 10/07/2019 0:01
Analysis Date: 10/07/2019 0:03
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195771001, 1195771002, 1195771003, 1195771004, 1195771005, 1195771006, 1195771007, 1195771008, 1195771009, 1195771010

Results by **SM21 4500-NH3 G**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	0.0722J	1.00	1.2	112	1.00	1.17	110	75-125	2.20	(< 25)

Batch Information

Analytical Batch: WDA4663
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 10/7/2019 12:01:51AM

Prep Batch: WXX13060
Prep Method: Ammonia by SM21 4500F prep (W)
Prep Date/Time: 10/6/2019 6:00:00PM
Prep Initial Wt./Vol.: 6.00mL
Prep Extract Vol: 6.00mL

Print Date: 10/15/2019 1:14:07PM

Method Blank

Blank ID: MB for HBN 1800906 [WXX/13067]
Blank Lab ID: 1538287

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195771001, 1195771002, 1195771003, 1195771004, 1195771005, 1195771006, 1195771007, 1195771008, 1195771009, 1195771010

Results by **SM21 4500-N D**

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

Batch Information

Analytical Batch: WDA4665
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 10/12/2019 4:43:14PM

Prep Batch: WXX13067
Prep Method: METHOD
Prep Date/Time: 10/11/2019 11:30:00AM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1195771 [WXX13067]
Blank Spike Lab ID: 1538288
Date Analyzed: 10/12/2019 16:44

Spike Duplicate ID: LCSD for HBN 1195771 [WXX13067]
Spike Duplicate Lab ID: 1538289
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195771001, 1195771002, 1195771003, 1195771004, 1195771005, 1195771006, 1195771007, 1195771008, 1195771009, 1195771010

Results by **SM21 4500-N D**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Kjeldahl Nitrogen	4	4.01	100	4	3.60	90	(75-125)	10.70	(< 25)

Batch Information

Analytical Batch: **WDA4665**
Analytical Method: **SM21 4500-N D**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX13067**
Prep Method: **METHOD**
Prep Date/Time: **10/11/2019 11:30**
Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

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Matrix Spike Summary

Original Sample ID: 1198801010
MS Sample ID: 1538290 MS
MSD Sample ID: 1538291 MSD

Analysis Date: 10/12/2019 16:47
Analysis Date: 10/12/2019 16:48
Analysis Date: 10/12/2019 16:49
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195771001, 1195771002, 1195771003, 1195771004, 1195771005, 1195771006, 1195771007, 1195771008, 1195771009, 1195771010

Results by **SM21 4500-N D**

		Matrix Spike (mg/L)				Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)		Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Kjeldahl Nitrogen	1.00U	4.00	1.6	40	*	4.00	3.64	91	75-125	78.10 *	(< 25)

Batch Information

Analytical Batch: WDA4665
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 10/12/2019 4:48:29PM

Prep Batch: WXX13067
Prep Method: Distillation TKN by Phenate (W)
Prep Date/Time: 10/11/2019 11:30:00AM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 10/15/2019 1:14:10PM

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1195771

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

Page 1 of 1

Section 1

CLIENT: Stantec

CONTACT: Jake Almond PHONE NO:

PROJECT NAME: PROJECT/ PWSID/ PERMIT#:

REPORTS TO: E-MAIL: Jake.almond@stantec.com

INVOICE TO: QUOTE #:

P.O. #: 204700415

Section 2

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	# CONTAINERS	Type C = COMP G = GRAB MI = Multi Incremental Soils	Preservative: 1	1	NaOH	H2SO4	H2SO4	1				REMARKS/ LOC ID
							BOD	TSS	FC	TC (Quanti-Tray) 1x/10x	TKN/Ammonia	TKN/Ammonia/TP	Nitrate/Nitrite			
1	AF	SW13	9/26/19	1030	Water	6	G	1	1	1	1		1	1		
2	AC	MW12		1100		3				1		1		1		
3	AF	SW16		1130		6		1	1	1	1		1	1		
4	AF	SW15		1140		6		1	1	1	1		1	1		
5	AF	SW14		1200		6		1	1	1	1		1	1		
6	AC	MW13		1210		3				1		1		1		
7	AF	Shaw		1251		6		1	1	1	1		1	1		
8	AF	SW17		1345		6		1	1	1	1		1	1		
9	AF	SW18		1415		6		1	1	1	1		1	1		
10	AF	DUP 2		1142		6		1	1	1	1		1	1		

Section 5

	Date	Time	
Relinquished By: (1)	9/26/19	1600	Received By:
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	9/26/19	16:00	Received For Laboratory By: JOHN

Section 4

DOD Project? Yes No

Cooler ID:

Data Deliverable Requirements:

Requested Turnaround Time and/or Special Instructions:

Temp Blank °C: 4.5°C D57 / 6.0°C D21

or Ambient [ ]

(See attached Sample Receipt Form)

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

(See attached Sample Receipt Form)

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[ ] 5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557

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F083-Kit_Request_and_COC_Templates-Blank
Revised 2013-03-24

e-Sample Receipt Form

SGS Workorder #: **1195771**

1 1 9 5 7 7 1

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	HD
COC accompanied samples?	Yes	
DOD: Were samples received in COC corresponding coolers?		
**Exemption permitted if chilled & collected <8 hours ago, or for samples where chilling is not required		
Temperature blank compliant* (i.e., 0-6 °C after CF)?	Yes	Cooler ID: 1 @ 4.5 °C Therm. ID: D57
	Yes	Cooler ID: 2 @ 6.0 °C Therm. ID: D21
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:
*If >6°C, were samples collected <8 hours ago?	N/A	
If <0°C, were sample containers ice free?	N/A	
Note: Identify containers received at non-compliant temperature . Use form FS-0029 if more space is needed.		
Holding Time / Documentation / Sample Condition Requirements		Note: Refer to form F-083 "Sample Guide" for specific holding times.
Were samples received within holding time?	Yes	
Do samples **match COC**** (i.e.,sample IDs,dates/times collected)?	Yes	
**Note: If times differ <1hr, record details & login per COC.		
***Note: If sample information on containers differs from COC, SGS will default to COC information		
Were analytical requests clear? (i.e., method is specified for analyses with multiple option for analysis (Ex: BTEX, Metals)	Yes	
		***Exemption permitted for metals (e.g,200.8/6020A).
Were proper containers (type/mass/volume/preservative***)used?	Yes	
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

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition
1195771001-A	Na2S2O3 for Chlorine Redu	OK			
1195771001-B	No Preservative Required	OK			
1195771001-C	Na2S2O3 for Chlorine Redu	OK			
1195771001-D	No Preservative Required	OK			
1195771001-E	No Preservative Required	OK			
1195771001-F	H2SO4 to pH < 2	OK			
1195771002-A	Na2S2O3 for Chlorine Redu	OK			
1195771002-B	No Preservative Required	OK			
1195771002-C	H2SO4 to pH < 2	OK			
1195771003-A	Na2S2O3 for Chlorine Redu	OK			
1195771003-B	No Preservative Required	OK			
1195771003-C	Na2S2O3 for Chlorine Redu	OK			
1195771003-D	No Preservative Required	OK			
1195771003-E	No Preservative Required	OK			
1195771003-F	H2SO4 to pH < 2	OK			
1195771004-A	Na2S2O3 for Chlorine Redu	OK			
1195771004-B	No Preservative Required	OK			
1195771004-C	Na2S2O3 for Chlorine Redu	OK			
1195771004-D	No Preservative Required	OK			
1195771004-E	No Preservative Required	OK			
1195771004-F	H2SO4 to pH < 2	OK			
1195771005-A	Na2S2O3 for Chlorine Redu	OK			
1195771005-B	No Preservative Required	OK			
1195771005-C	Na2S2O3 for Chlorine Redu	OK			
1195771005-D	No Preservative Required	OK			
1195771005-E	No Preservative Required	OK			
1195771005-F	H2SO4 to pH < 2	OK			
1195771006-A	Na2S2O3 for Chlorine Redu	OK			
1195771006-B	No Preservative Required	OK			
1195771006-C	H2SO4 to pH < 2	OK			
1195771007-A	Na2S2O3 for Chlorine Redu	OK			
1195771007-B	No Preservative Required	OK			
1195771007-C	Na2S2O3 for Chlorine Redu	OK			
1195771007-D	No Preservative Required	OK			
1195771007-E	No Preservative Required	OK			
1195771007-F	H2SO4 to pH < 2	OK			
1195771008-A	Na2S2O3 for Chlorine Redu	OK			
1195771008-B	No Preservative Required	OK			
1195771008-C	Na2S2O3 for Chlorine Redu	OK			
1195771008-D	No Preservative Required	OK			
1195771008-E	No Preservative Required	OK			
1195771008-F	H2SO4 to pH < 2	OK			
1195771009-A	Na2S2O3 for Chlorine Redu	OK			
1195771009-B	No Preservative Required	OK			
1195771009-C	Na2S2O3 for Chlorine Redu	OK			
1195771009-D	No Preservative Required	OK			
1195771009-E	No Preservative Required	OK			
1195771009-F	H2SO4 to pH < 2	OK			

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition
1195771010-A	Na2S2O3 for Chlorine Redu	OK			
1195771010-B	No Preservative Required	OK			
1195771010-C	Na2S2O3 for Chlorine Redu	OK			
1195771010-D	No Preservative Required	OK			
1195771010-E	No Preservative Required	OK			
1195771010-F	H2SO4 to pH < 2	OK			

Container Condition Glossary

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

Laboratory Report of Analysis

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

Report Number: **1195809**

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 Date
Project Manager
Justin.Nelson@sgs.com

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t 907.562.2343 f 907.561.5301 www.us.sgs.com

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Case Narrative

SGS Client: **Stantec Consulting Services Inc.**
SGS Project: **1195809**
Project Name/Site: **Wasilla WWTP**
Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

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

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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, indenmification 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, 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.

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Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
MW20	1195809001	09/27/2019	09/27/2019	Water (Surface, Eff., Ground)
MW14A	1195809002	09/27/2019	09/27/2019	Water (Surface, Eff., Ground)

Method	Method Description
SM21 4500-NH3 G	Ammonia-N (W) SM21 4500-NH3 G
SM21 9222D	Fecal Coliform (MF)
EPA 300.0	Ion Chromatographic Analysis
SM21 4500-N D	TKN by Phenate (W)

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Detectable Results Summary

Client Sample ID: **MW20**
Lab Sample ID: 1195809001
Waters Department

Parameter	Result	Units
Ammonia-N	0.0665J	mg/L
Nitrate-N	0.247	mg/L
Total Nitrate/Nitrite-N	0.247	mg/L

Client Sample ID: **MW14A**
Lab Sample ID: 1195809002
Microbiology Laboratory
Waters Department

Parameter	Result	Units
Fecal Coliform	4.0	col/100mL
Ammonia-N	0.0546J	mg/L
Nitrate-N	0.0500J	mg/L
Total Kjeldahl Nitrogen	0.403J	mg/L
Total Nitrate/Nitrite-N	0.0500J	mg/L

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Results of **MW20**

Client Sample ID: **MW20**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195809001
Lab Project ID: 1195809

Collection Date: 09/27/19 10:38
Received Date: 09/27/19 15:20
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	9.09	U	9.09	9.09	col/100mL	1		09/27/19 16:06

Batch Information

Analytical Batch: BTF17677
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 09/27/19 16:06
Container ID: 1195809001-A

Print Date: 10/14/2019 9:06:18AM

J flagging is activated

Results of **MW20**

Client Sample ID: **MW20**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195809001
Lab Project ID: 1195809

Collection Date: 09/27/19 10:38
Received Date: 09/27/19 15:20
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.247		0.200	0.0500	mg/L	1		09/27/19 20:12
Nitrite-N	0.100 U		0.200	0.0500	mg/L	1		09/27/19 20:12
Total Nitrate/Nitrite-N	0.247		0.200	0.0500	mg/L	1		09/27/19 20:12

Batch Information

Analytical Batch: WIC5970
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/27/19 20:12
Container ID: 1195809001-B

Prep Batch: WXX13036
Prep Method: METHOD
Prep Date/Time: 09/27/19 13:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.500 U		1.00	0.310	mg/L	1		09/29/19 16:31

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 16:31
Container ID: 1195809001-C

Prep Batch: WXX13040
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.0665 J		0.100	0.0310	mg/L	1		10/09/19 15:36

Batch Information

Analytical Batch: WDA4664
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/09/19 15:36
Container ID: 1195809001-C

Prep Batch: WXX13062
Prep Method: METHOD
Prep Date/Time: 10/09/19 15:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Results of **MW14A**

Client Sample ID: **MW14A**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195809002
Lab Project ID: 1195809

Collection Date: 09/27/19 11:10
Received Date: 09/27/19 15:20
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	4.0		2.00	2.00	col/100mL	1		09/27/19 16:06

Batch Information

Analytical Batch: BTF17677
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 09/27/19 16:06
Container ID: 1195809002-A

Print Date: 10/14/2019 9:06:18AM

J flagging is activated

Results of **MW14A**

Client Sample ID: **MW14A**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1195809002
Lab Project ID: 1195809

Collection Date: 09/27/19 11:10
Received Date: 09/27/19 15:20
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.0500	J	0.200	0.0500	mg/L	1		09/27/19 20:31
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		09/27/19 20:31
Total Nitrate/Nitrite-N	0.0500	J	0.200	0.0500	mg/L	1		09/27/19 20:31

Batch Information

Analytical Batch: WIC5970
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 09/27/19 20:31
Container ID: 1195809002-B

Prep Batch: WXX13036
Prep Method: METHOD
Prep Date/Time: 09/27/19 13:00
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.403	J	1.00	0.310	mg/L	1		09/29/19 16:32

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 09/29/19 16:32
Container ID: 1195809002-C

Prep Batch: WXX13040
Prep Method: METHOD
Prep Date/Time: 09/28/19 12:08
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.0546	J	0.100	0.0310	mg/L	1		10/09/19 15:38

Batch Information

Analytical Batch: WDA4664
Analytical Method: SM21 4500-NH3 G
Analyst: EWW
Analytical Date/Time: 10/09/19 15:38
Container ID: 1195809002-C

Prep Batch: WXX13062
Prep Method: METHOD
Prep Date/Time: 10/09/19 15:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Method Blank

Blank ID: MB for HBN 1800111 [BTF/17677]
Blank Lab ID: 1534903

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195809001, 1195809002

Results by **SM21 9222D**

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

Batch Information

Analytical Batch: BTF17677
Analytical Method: SM21 9222D
Instrument:
Analyst: A.L
Analytical Date/Time: 9/27/2019 3:54:14PM

Print Date: 10/14/2019 9:06:20AM

Method Blank

Blank ID: MB for HBN 1800133 [WXX/13036]
Blank Lab ID: 1535061

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195809001, 1195809002

Results by **EPA 300.0**

Parameter	Results	LOQ/CL	DL	Units
Nitrate-N	0.100U	0.200	0.0500	mg/L
Nitrite-N	0.0560J	0.200	0.0500	mg/L
Total Nitrate/Nitrite-N	0.0710J	0.200	0.0500	mg/L

Batch Information

Analytical Batch: WIC5970
Analytical Method: EPA 300.0
Instrument: 930 Metrohm compact IC flex
Analyst: DMM
Analytical Date/Time: 9/27/2019 3:08:44PM

Prep Batch: WXX13036
Prep Method: METHOD
Prep Date/Time: 9/27/2019 1:00:00PM
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1195809 [WXX13036]
Blank Spike Lab ID: 1535062
Date Analyzed: 09/27/2019 15:27

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195809001, 1195809002

Results by **EPA 300.0**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Nitrate-N	5	4.74	95	(90-110)
Nitrite-N	5	4.99	100	(90-110)
Total Nitrate/Nitrite-N	10	9.73	97	(90-110)

Batch Information

Analytical Batch: **WIC5970**
Analytical Method: **EPA 300.0**
Instrument: **930 Metrohm compact IC flex**
Analyst: **DMM**

Prep Batch: **WXX13036**
Prep Method: **METHOD**
Prep Date/Time: **09/27/2019 13:00**
Spike Init Wt./Vol.: 5 mg/L Extract Vol: 10 mL
Dupe Init Wt./Vol.: Extract Vol:

Print Date: 10/14/2019 9:06:26AM

Matrix Spike Summary

Original Sample ID: 1535059
MS Sample ID: 1535064 MS
MSD Sample ID:

Analysis Date: 09/27/2019 16:05
Analysis Date: 09/27/2019 16:24
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195809001, 1195809002

Results by **EPA 300.0**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Nitrate-N	0.100U	5.00	4.88	98				90-110		
Nitrite-N	0.100U	5.00	5.15	103				90-110		

Batch Information

Analytical Batch: WIC5970
Analytical Method: EPA 300.0
Instrument: 930 Metrohm compact IC flex
Analyst: DMM
Analytical Date/Time: 9/27/2019 4:24:41PM

Prep Batch: WXX13036
Prep Method: EPA 300.0 Extraction Waters/Liquids
Prep Date/Time: 9/27/2019 1:00:00PM
Prep Initial Wt./Vol.: 10.00mL
Prep Extract Vol: 10.00mL

Print Date: 10/14/2019 9:06:27AM

Matrix Spike Summary

Original Sample ID: 1535060
MS Sample ID: 1535065 MS
MSD Sample ID:

Analysis Date: 09/27/2019 21:28
Analysis Date: 09/27/2019 22:25
Analysis Date:
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195809001, 1195809002

Results by **EPA 300.0**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Nitrate-N	0.112J	5.00	4.96	97				90-110		
Nitrite-N	0.100U	5.00	5.01	100				90-110		

Batch Information

Analytical Batch: WIC5970
Analytical Method: EPA 300.0
Instrument: 930 Metrohm compact IC flex
Analyst: DMM
Analytical Date/Time: 9/27/2019 10:25:36PM

Prep Batch: WXX13036
Prep Method: EPA 300.0 Extraction Waters/Liquids
Prep Date/Time: 9/27/2019 1:00:00PM
Prep Initial Wt./Vol.: 10.00mL
Prep Extract Vol: 10.00mL

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Method Blank

Blank ID: MB for HBN 1800146 [WXX/13040]
Blank Lab ID: 1535143

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195809001, 1195809002

Results by **SM21 4500-N D**

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

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 9/29/2019 4:08:55PM

Prep Batch: WXX13040
Prep Method: METHOD
Prep Date/Time: 9/28/2019 12:08:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1195809 [WXX13040]
Blank Spike Lab ID: 1535144
Date Analyzed: 09/29/2019 16:10

Spike Duplicate ID: LCSD for HBN 1195809 [WXX13040]
Spike Duplicate Lab ID: 1535145
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195809001, 1195809002

Results by **SM21 4500-N D**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Kjeldahl Nitrogen	4	4.25	106	4	4.42	110	(75-125)	3.90	(< 25)

Batch Information

Analytical Batch: **WDA4654**
Analytical Method: **SM21 4500-N D**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX13040**
Prep Method: **METHOD**
Prep Date/Time: **09/28/2019 12:08**
Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

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Matrix Spike Summary

Original Sample ID: 1195735001
MS Sample ID: 1535146 MS
MSD Sample ID: 1535147 MSD

Analysis Date: 09/29/2019 16:12
Analysis Date: 09/29/2019 16:14
Analysis Date: 09/29/2019 16:15
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195809001, 1195809002

Results by **SM21 4500-N D**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Kjeldahl Nitrogen	0.500U	4.00	4.42	110	4.00	3.92	98	75-125	12.00	(< 25)

Batch Information

Analytical Batch: WDA4654
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 9/29/2019 4:14:09PM

Prep Batch: WXX13040
Prep Method: Distillation TKN by Phenate (W)
Prep Date/Time: 9/28/2019 12:08:00PM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

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Method Blank

Blank ID: MB for HBN 1800706 [WXX/13062]
Blank Lab ID: 1537582

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195809001, 1195809002

Results by **SM21 4500-NH3 G**

Parameter	Results	LOQ/CL	DL	Units
Ammonia-N	0.0314J	0.100	0.0310	mg/L

Batch Information

Analytical Batch: WDA4664
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 10/9/2019 3:28:23PM

Prep Batch: WXX13062
Prep Method: METHOD
Prep Date/Time: 10/9/2019 3:00:00PM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

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Method Blank

Blank ID: MB for HBN 1800706 [WXX/13062]
Blank Lab ID: 1537587

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1195809001, 1195809002

Results by **SM21 4500-NH3 G**

Parameter	Results	LOQ/CL	DL	Units
Ammonia-N	0.0375J	0.100	0.0310	mg/L

Batch Information

Analytical Batch: WDA4664
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 10/9/2019 5:33:05PM

Prep Batch: WXX13062
Prep Method: METHOD
Prep Date/Time: 10/9/2019 3:00:00PM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1195809 [WXX13062]
Blank Spike Lab ID: 1537583
Date Analyzed: 10/09/2019 15:30

Spike Duplicate ID: LCSD for HBN 1195809 [WXX13062]
Spike Duplicate Lab ID: 1537584
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195809001, 1195809002

Results by **SM21 4500-NH3 G**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	1	0.984	98	1	1.08	108	(75-125)	9.50	(< 25)

Batch Information

Analytical Batch: **WDA4664**
Analytical Method: **SM21 4500-NH3 G**
Instrument: **Discrete Analyzer 2**
Analyst: **EWW**

Prep Batch: **WXX13062**
Prep Method: **METHOD**
Prep Date/Time: **10/09/2019 15:00**
Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1195809 [WXX13062]
Blank Spike Lab ID: 1537588
Date Analyzed: 10/09/2019 17:34

Spike Duplicate ID: LCSD for HBN 1195809 [WXX13062]
Spike Duplicate Lab ID: 1537589
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195809001, 1195809002

Results by **SM21 4500-NH3 G**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	1	1.08	108	1	1.03	103	(75-125)	4.30	(< 25)

Batch Information

Analytical Batch: **WDA4664**
Analytical Method: **SM21 4500-NH3 G**
Instrument: **Discrete Analyzer 2**
Analyst: **EWW**

Prep Batch: **WXX13062**
Prep Method: **METHOD**
Prep Date/Time: **10/09/2019 15:00**
Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

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Matrix Spike Summary

Original Sample ID: 1195945001
MS Sample ID: 1537585 MS
MSD Sample ID: 1537586 MSD

Analysis Date: 10/09/2019 15:55
Analysis Date: 10/09/2019 15:56
Analysis Date: 10/09/2019 15:58
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195809001, 1195809002

Results by **SM21 4500-NH3 G**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	0.349	1.00	1.15	80	1.00	1.18	83	75-125	2.70	(< 25)

Batch Information

Analytical Batch: WDA4664
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 10/9/2019 3:56:48PM

Prep Batch: WXX13062
Prep Method: Ammonia by SM21 4500F prep (W)
Prep Date/Time: 10/9/2019 3:00:00PM
Prep Initial Wt./Vol.: 6.00mL
Prep Extract Vol: 6.00mL

Print Date: 10/14/2019 9:06:36AM

Matrix Spike Summary

Original Sample ID: 1195972001
MS Sample ID: 1537590 MS
MSD Sample ID: 1537591 MSD

Analysis Date: 10/09/2019 17:38
Analysis Date: 10/09/2019 17:39
Analysis Date: 10/09/2019 17:41
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1195809001, 1195809002

Results by **SM21 4500-NH3 G**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	0.0584J	1.00	1.11	106	1.00	1.18	112	75-125	5.40	(< 25)

Batch Information

Analytical Batch: WDA4664
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: EWW
Analytical Date/Time: 10/9/2019 5:39:47PM

Prep Batch: WXX13062
Prep Method: Ammonia by SM21 4500F prep (W)
Prep Date/Time: 10/9/2019 3:00:00PM
Prep Initial Wt./Vol.: 6.00mL
Prep Extract Vol: 6.00mL

Print Date: 10/14/2019 9:06:36AM

SGS 1195809

SGS North America Inc.
CHAIN OF CUSTODY RECORD

Locations Nationwide

Alaska | Maryland
New Jersey | New York
North Carolina | Indiana
West Virgina | Kentucky

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

Page 1 of 1

Section 1

CLIENT: Stantec

CONTACT: Jake Alward | PHONE NO:

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

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

INVOICE TO: | QUOTE #: | P.O. #: 264700415

Section 3 — Preservative: Na_2SO_4 | / | H_2SO_4

Section 2

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	# CONTAINERS	Type C = COMP G = GRAB MI = Multi Incre-mental Soils	FC	Nitrate/Nitrite	TKN/Ammonia							REMARKS/ LOC ID
(1)A-C	MW20	9/27/19	10:38	Water	3	G	1	1	1							
(2)A-C	MW4A	9/27/19	11:10	↓	3	↓	1	1	1							

Section 5

Relinquished By	Date	Time	Received By
Relinquished By: (1) [signature]	9/27/19	1520	Received By:
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	9.27.19	15:20	Received For Laboratory By: [signature]

Section 4 DOD Project? Yes No

Cooler ID: ______

Data Deliverable Requirements:

Requested Turnaround Time and/or Special Instructions: Profile #348183 JM

Temp Blank °C: 2.6c D59

or Ambient [ ]

(See attached Sample Receipt Form)

Chain of Custody Seal: (Circle)

INTACT BROKEN (ABSENT)

(See attached Sample Receipt Form)

HO

e-Sample Receipt Form

SGS Workorder #: **1195809**

1 1 9 5 8 0 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 @ 2.6 °C Therm. ID: D59
		Cooler ID: @ °C Therm. ID:
If samples received without a temperature blank, the "cooler temperature" will be documented instead & "COOLER TEMP" will be noted to the right. "ambient" or "chilled" will be noted if neither is available.		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)?	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	
	N/A	***Exemption permitted for metals (e.g,200.8/6020A).
Were proper containers (type/mass/volume/preservative***)used?	Yes	
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

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition
1195809001-A	Na2S2O3 for Chlorine Redu	OK			
1195809001-B	No Preservative Required	OK			
1195809001-C	H2SO4 to pH < 2	OK			
1195809002-A	Na2S2O3 for Chlorine Redu	OK			
1195809002-B	No Preservative Required	OK			
1195809002-C	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.