Laboratory Report of Analysis

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

Report Number: **1194035**

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: **1194035**
Project Name/Site: **Wasilla WWTP**
Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

SW2 (1194035002) PS

9223 -Quant Tray- Sample was also analysed undiluted and showed 4 colonies of E. coli present.

SW8 (1194035008) PS

9223 -Quant Tray- Sample was also analysed undiluted and showed 1 colony of E. coli present

1194065001DUP (1520799) DUP

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

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

SGS North America Inc.
200 West Potter Drive, Anchorage, AK 99518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

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
SW1	1194035001	07/23/2019	07/23/2019	Water (Surface, Eff., Ground)
SW2	1194035002	07/23/2019	07/23/2019	Water (Surface, Eff., Ground)
SW3	1194035003	07/23/2019	07/23/2019	Water (Surface, Eff., Ground)
SW4	1194035004	07/23/2019	07/23/2019	Water (Surface, Eff., Ground)
SW5	1194035005	07/23/2019	07/23/2019	Water (Surface, Eff., Ground)
SW6	1194035006	07/23/2019	07/23/2019	Water (Surface, Eff., Ground)
SW7	1194035007	07/23/2019	07/23/2019	Water (Surface, Eff., Ground)
SW8	1194035008	07/23/2019	07/23/2019	Water (Surface, Eff., Ground)
SW9	1194035009	07/23/2019	07/23/2019	Water (Surface, Eff., Ground)
SW10	1194035010	07/23/2019	07/23/2019	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

SGS North America Inc.
200 West Potter Drive, Anchorage, AK 99518
t 907.562.2343 f 907.561.5301 www.us.sgs.com

Detectable Results Summary

Client Sample ID: **SW1**
Lab Sample ID: 1194035001

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	11.3	mg/L
	E. Coli	20	MPN/100mL
	Total Coliform	6160	MPN/100mL
Waters Department	Ammonia-N	0.178	mg/L
	Total Kjeldahl Nitrogen	3.56	mg/L
	Total Phosphorus	0.468	mg/L
	Total Suspended Solids	184	mg/L

Client Sample ID: **SW2**
Lab Sample ID: 1194035002

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	4.47	mg/L
	Fecal Coliform	6.6	col/100mL
	Total Coliform	9220	MPN/100mL
Waters Department	Ammonia-N	0.0424J	mg/L
	Total Kjeldahl Nitrogen	0.557J	mg/L
	Total Phosphorus	0.0297	mg/L
	Total Suspended Solids	24.8	mg/L

Client Sample ID: **SW3**
Lab Sample ID: 1194035003

	Parameter	Result	Units
Microbiology Laboratory	E. Coli	28	MPN/100mL
	Fecal Coliform	16	col/100mL
	Total Coliform	GT2420	MPN/100mL
Waters Department	Nitrate-N	4.35	mg/L
	Total Kjeldahl Nitrogen	0.841J	mg/L
	Total Nitrate/Nitrite-N	4.39	mg/L
	Total Phosphorus	0.0243	mg/L
	Total Suspended Solids	25.1	mg/L

Client Sample ID: **SW4**
Lab Sample ID: 1194035004

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	3.50	mg/L
	E. Coli	60	MPN/100mL
	Fecal Coliform	94	col/100mL
	Total Coliform	34660	MPN/100mL
Waters Department	Ammonia-N	0.0410J	mg/L
	Total Kjeldahl Nitrogen	0.869J	mg/L
	Total Phosphorus	0.0238	mg/L
	Total Suspended Solids	158	mg/L

SGS North America Inc.
200 West Potter Drive, Anchorage, AK 99518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Detectable Results Summary

Client Sample ID: **SW5**
Lab Sample ID: 1194035005

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	4.45	mg/L
	E. Coli	40	MPN/100mL
	Fecal Coliform	21	col/100mL
	Total Coliform	2840	MPN/100mL
Waters Department	Ammonia-N	0.0509J	mg/L
	Total Kjeldahl Nitrogen	0.593J	mg/L
	Total Phosphorus	0.0746	mg/L
	Total Suspended Solids	119	mg/L

Client Sample ID: **SW6**
Lab Sample ID: 1194035006

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	2.39	mg/L
	E. Coli	74	MPN/100mL
	Fecal Coliform	78	col/100mL
	Total Coliform	GT2420	MPN/100mL
Waters Department	Ammonia-N	0.0457J	mg/L
	Total Kjeldahl Nitrogen	0.770J	mg/L
	Total Phosphorus	0.0581	mg/L
	Total Suspended Solids	39.5	mg/L

Client Sample ID: **SW7**
Lab Sample ID: 1194035007

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	3.31	mg/L
	E. Coli	20	MPN/100mL
	Fecal Coliform	40	col/100mL
	Total Coliform	4500	MPN/100mL
Waters Department	Ammonia-N	0.0536J	mg/L
	Total Kjeldahl Nitrogen	0.568J	mg/L
	Total Phosphorus	0.0627	mg/L
	Total Suspended Solids	71.9	mg/L

Client Sample ID: **SW8**
Lab Sample ID: 1194035008

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	2.18	mg/L
	Fecal Coliform	4.9	col/100mL
	Total Coliform	1140	MPN/100mL
Waters Department	Ammonia-N	0.0413J	mg/L
	Total Kjeldahl Nitrogen	0.417J	mg/L
	Total Phosphorus	0.0351	mg/L
	Total Suspended Solids	109	mg/L

Detectable Results Summary

Client Sample ID: **SW9**
Lab Sample ID: 1194035009

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	3.86	mg/L
	E. Coli	160	MPN/100mL
	Fecal Coliform	64	col/100mL
	Total Coliform	15400	MPN/100mL
Waters Department	Ammonia-N	0.110	mg/L
	Total Kjeldahl Nitrogen	4.27	mg/L
	Total Phosphorus	0.527	mg/L
	Total Suspended Solids	349	mg/L

Client Sample ID: **SW10**
Lab Sample ID: 1194035010

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	3.15	mg/L
	E. Coli	7	MPN/100mL
	Fecal Coliform	3.3	col/100mL
	Total Coliform	387	MPN/100mL
Waters Department	Ammonia-N	0.0518J	mg/L
	Total Kjeldahl Nitrogen	0.759J	mg/L
	Total Phosphorus	0.0657	mg/L
	Total Suspended Solids	130	mg/L

SGS North America Inc.
200 West Potter Drive, Anchorage, AK 99518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Results of **SW1**

Client Sample ID: **SW1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035001
Lab Project ID: 1194035

Collection Date: 07/23/19 09:53
Received Date: 07/23/19 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	11.3		2.00	2.00	mg/L	1		07/24/19 12:41

Batch Information

Analytical Batch: BOD6377
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/24/19 12:41
Container ID: 1194035001-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	1.64 U		1.64	1.64	col/100mL	1		07/23/19 17:13

Batch Information

Analytical Batch: BTF17512
Analytical Method: SM21 9222D
Analyst: VDL
Analytical Date/Time: 07/23/19 17:13
Container ID: 1194035001-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	20		20	20	MPN/100m	20		07/23/19 17:34
Total Coliform	6160		20	20	MPN/100m	20		07/23/19 17:34

Batch Information

Analytical Batch: BTF17509
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 07/23/19 17:34
Container ID: 1194035001-B

Results of **SW1**

Client Sample ID: **SW1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035001
Lab Project ID: 1194035

Collection Date: 07/23/19 09:53
Received Date: 07/23/19 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		07/24/19 12:25
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		07/24/19 12:25
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		07/24/19 12:25

Batch Information

Analytical Batch: WIC5940
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 07/24/19 12:25
Container ID: 1194035001-C

Prep Batch: WXX12935
Prep Method: METHOD
Prep Date/Time: 07/24/19 09:30
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	184		3.33	1.03	mg/L	1		07/24/19 15:22

Batch Information

Analytical Batch: STS6393
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 07/24/19 15:22
Container ID: 1194035001-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	3.56		1.00	0.310	mg/L	1		08/06/19 09:52

Batch Information

Analytical Batch: WDA4619
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/06/19 09:52
Container ID: 1194035001-F

Prep Batch: WXX12954
Prep Method: METHOD
Prep Date/Time: 08/05/19 08:33
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	0.178		0.100	0.0310	mg/L	1		07/31/19 14:28

Print Date: 08/07/2019 9:55:14AM

J flagging is activated

Results of **SW1**

Client Sample ID: **SW1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035001
Lab Project ID: 1194035

Collection Date: 07/23/19 09:53
Received Date: 07/23/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4616
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 07/31/19 14:28
Container ID: 1194035001-F

Prep Batch: WXX12946
Prep Method: METHOD
Prep Date/Time: 07/31/19 13:15
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	0.468		0.100	0.0250	mg/L	1		07/26/19 16:00

Batch Information

Analytical Batch: WDA4612
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 07/26/19 16:00
Container ID: 1194035001-F

Prep Batch: WXX12938
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/26/19 15:15
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 25 mL

Results of **SW2**

Client Sample ID: **SW2**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035002
Lab Project ID: 1194035

Collection Date: 07/23/19 10:05
Received Date: 07/23/19 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	4.47		2.00	2.00	mg/L	1		07/24/19 12:41

Batch Information

Analytical Batch: BOD6377
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/24/19 12:41
Container ID: 1194035002-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	6.6		1.64	1.64	col/100mL	1		07/23/19 17:13

Batch Information

Analytical Batch: BTF17512
Analytical Method: SM21 9222D
Analyst: VDL
Analytical Date/Time: 07/23/19 17:13
Container ID: 1194035002-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	20	U	20	20	MPN/100m	20		07/23/19 17:34
Total Coliform	9220		20	20	MPN/100m	20		07/23/19 17:34

Batch Information

Analytical Batch: BTF17509
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 07/23/19 17:34
Container ID: 1194035002-B

Results of **SW2**

Client Sample ID: **SW2**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035002
Lab Project ID: 1194035

Collection Date: 07/23/19 10:05
Received Date: 07/23/19 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		07/24/19 13:22
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		07/24/19 13:22
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		07/24/19 13:22

Batch Information

Analytical Batch: WIC5940
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 07/24/19 13:22
Container ID: 1194035002-C

Prep Batch: WXX12935
Prep Method: METHOD
Prep Date/Time: 07/24/19 09:30
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	24.8		1.02	0.316	mg/L	1		07/24/19 15:22

Batch Information

Analytical Batch: STS6393
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 07/24/19 15:22
Container ID: 1194035002-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.557	J	1.00	0.310	mg/L	1		08/06/19 09:53

Batch Information

Analytical Batch: WDA4619
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/06/19 09:53
Container ID: 1194035002-F

Prep Batch: WXX12954
Prep Method: METHOD
Prep Date/Time: 08/05/19 08:33
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	0.0424	J	0.100	0.0310	mg/L	1		07/31/19 14:30

Print Date: 08/07/2019 9:55:14AM

J flagging is activated

Results of **SW2**

Client Sample ID: **SW2**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035002
Lab Project ID: 1194035

Collection Date: 07/23/19 10:05
Received Date: 07/23/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4616
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 07/31/19 14:30
Container ID: 1194035002-F

Prep Batch: WXX12946
Prep Method: METHOD
Prep Date/Time: 07/31/19 13:15
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	0.0297		0.0200	0.00500	mg/L	1		07/26/19 16:22

Batch Information

Analytical Batch: WDA4612
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 07/26/19 16:22
Container ID: 1194035002-F

Prep Batch: WXX12938
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/26/19 11:19
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: 1194035003
Lab Project ID: 1194035

Collection Date: 07/23/19 10:19
Received Date: 07/23/19 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		07/24/19 12:41

Batch Information

Analytical Batch: BOD6377
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/24/19 12:41
Container ID: 1194035003-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	16		1.64	1.64	col/100mL	1		07/23/19 17:13

Batch Information

Analytical Batch: BTF17512
Analytical Method: SM21 9222D
Analyst: VDL
Analytical Date/Time: 07/23/19 17:13
Container ID: 1194035003-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	28		1	1	MPN/100m	1		07/23/19 17:34
Total Coliform	>2420		1	1	MPN/100m	1		07/23/19 17:34

Batch Information

Analytical Batch: BTF17509
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 07/23/19 17:34
Container ID: 1194035003-B

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Results of **SW3**

Client Sample ID: **SW3**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035003
Lab Project ID: 1194035

Collection Date: 07/23/19 10:19
Received Date: 07/23/19 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	4.35		0.200	0.0500	mg/L	1		07/24/19 13:41
Nitrite-N	0.100 U		0.200	0.0500	mg/L	1		07/24/19 13:41
Total Nitrate/Nitrite-N	4.39		0.200	0.0500	mg/L	1		07/24/19 13:41

Batch Information

Analytical Batch: WIC5940
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 07/24/19 13:41
Container ID: 1194035003-C

Prep Batch: WXX12935
Prep Method: METHOD
Prep Date/Time: 07/24/19 09:30
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	25.1		1.00	0.310	mg/L	1		07/24/19 15:22

Batch Information

Analytical Batch: STS6393
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 07/24/19 15:22
Container ID: 1194035003-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.841 J		1.00	0.310	mg/L	1		08/06/19 09:55

Batch Information

Analytical Batch: WDA4619
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/06/19 09:55
Container ID: 1194035003-F

Prep Batch: WXX12954
Prep Method: METHOD
Prep Date/Time: 08/05/19 08:33
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		07/31/19 14:32

Print Date: 08/07/2019 9:55:14AM

J flagging is activated

Results of **SW3**

Client Sample ID: **SW3**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035003
Lab Project ID: 1194035

Collection Date: 07/23/19 10:19
Received Date: 07/23/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4616
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 07/31/19 14:32
Container ID: 1194035003-F

Prep Batch: WXX12946
Prep Method: METHOD
Prep Date/Time: 07/31/19 13:15
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	0.0243		0.0200	0.00500	mg/L	1		07/26/19 14:45

Batch Information

Analytical Batch: WDA4612
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 07/26/19 14:45
Container ID: 1194035003-F

Prep Batch: WXX12938
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/26/19 11:19
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **SW4**

Client Sample ID: **SW4**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035004
Lab Project ID: 1194035

Collection Date: 07/23/19 11:38
Received Date: 07/23/19 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	3.50		2.00	2.00	mg/L	1		07/24/19 12:41

Batch Information

Analytical Batch: BOD6377
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/24/19 12:41
Container ID: 1194035004-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	94		2.00	2.00	col/100mL	1		07/23/19 17:13

Batch Information

Analytical Batch: BTF17512
Analytical Method: SM21 9222D
Analyst: VDL
Analytical Date/Time: 07/23/19 17:13
Container ID: 1194035004-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	60		20	20	MPN/100m	20		07/23/19 17:34
Total Coliform	34660		20	20	MPN/100m	20		07/23/19 17:34

Batch Information

Analytical Batch: BTF17509
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 07/23/19 17:34
Container ID: 1194035004-B

Print Date: 08/07/2019 9:55:14AM

J flagging is activated

Results of **SW4**

Client Sample ID: **SW4**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035004
Lab Project ID: 1194035

Collection Date: 07/23/19 11:38
Received Date: 07/23/19 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		07/24/19 14:00
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		07/24/19 14:00
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		07/24/19 14:00

Batch Information

Analytical Batch: WIC5940
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 07/24/19 14:00
Container ID: 1194035004-C

Prep Batch: WXX12935
Prep Method: METHOD
Prep Date/Time: 07/24/19 09:30
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	158		2.00	0.620	mg/L	1		07/24/19 15:22

Batch Information

Analytical Batch: STS6393
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 07/24/19 15:22
Container ID: 1194035004-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.869	J	1.00	0.310	mg/L	1		08/06/19 09:59

Batch Information

Analytical Batch: WDA4619
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/06/19 09:59
Container ID: 1194035004-F

Prep Batch: WXX12954
Prep Method: METHOD
Prep Date/Time: 08/05/19 08:33
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	0.0410	J	0.100	0.0310	mg/L	1		07/31/19 14:37

Print Date: 08/07/2019 9:55:14AM

J flagging is activated

Results of **SW4**

Client Sample ID: **SW4**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035004
Lab Project ID: 1194035

Collection Date: 07/23/19 11:38
Received Date: 07/23/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4616
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 07/31/19 14:37
Container ID: 1194035004-F

Prep Batch: WXX12946
Prep Method: METHOD
Prep Date/Time: 07/31/19 13:15
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	0.0238		0.0200	0.00500	mg/L	1		07/26/19 14:46

Batch Information

Analytical Batch: WDA4612
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 07/26/19 14:46
Container ID: 1194035004-F

Prep Batch: WXX12938
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/26/19 11:19
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **SW5**

Client Sample ID: **SW5**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035005
Lab Project ID: 1194035

Collection Date: 07/23/19 11:48
Received Date: 07/23/19 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	4.45		2.00	2.00	mg/L	1		07/24/19 12:41

Batch Information

Analytical Batch: BOD6377
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/24/19 12:41
Container ID: 1194035005-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	21		1.64	1.64	col/100mL	1		07/23/19 17:13

Batch Information

Analytical Batch: BTF17512
Analytical Method: SM21 9222D
Analyst: VDL
Analytical Date/Time: 07/23/19 17:13
Container ID: 1194035005-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	40		20	20	MPN/100m	20		07/23/19 17:34
Total Coliform	2840		20	20	MPN/100m	20		07/23/19 17:34

Batch Information

Analytical Batch: BTF17509
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 07/23/19 17:34
Container ID: 1194035005-B

Print Date: 08/07/2019 9:55:14AM

J flagging is activated

Results of **SW5**

Client Sample ID: **SW5**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035005
Lab Project ID: 1194035

Collection Date: 07/23/19 11:48
Received Date: 07/23/19 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		07/24/19 14:19
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		07/24/19 14:19
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		07/24/19 14:19

Batch Information

Analytical Batch: WIC5940
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 07/24/19 14:19
Container ID: 1194035005-C

Prep Batch: WXX12935
Prep Method: METHOD
Prep Date/Time: 07/24/19 09:30
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	119		1.00	0.310	mg/L	1		07/24/19 15:22

Batch Information

Analytical Batch: STS6393
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 07/24/19 15:22
Container ID: 1194035005-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.593	J	1.00	0.310	mg/L	1		08/06/19 10:00

Batch Information

Analytical Batch: WDA4619
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/06/19 10:00
Container ID: 1194035005-F

Prep Batch: WXX12954
Prep Method: METHOD
Prep Date/Time: 08/05/19 08:33
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	0.0509	J	0.100	0.0310	mg/L	1		07/31/19 14:38

Print Date: 08/07/2019 9:55:14AM

J flagging is activated

Results of **SW5**

Client Sample ID: **SW5**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035005
Lab Project ID: 1194035

Collection Date: 07/23/19 11:48
Received Date: 07/23/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4616
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 07/31/19 14:38
Container ID: 1194035005-F

Prep Batch: WXX12946
Prep Method: METHOD
Prep Date/Time: 07/31/19 13:15
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	0.0746		0.0200	0.00500	mg/L	1		07/26/19 14:47

Batch Information

Analytical Batch: WDA4612
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 07/26/19 14:47
Container ID: 1194035005-F

Prep Batch: WXX12938
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/26/19 11:19
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **SW6**

Client Sample ID: **SW6**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035006
Lab Project ID: 1194035

Collection Date: 07/23/19 11:24
Received Date: 07/23/19 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	2.39		2.00	2.00	mg/L	1		07/24/19 12:41

Batch Information

Analytical Batch: BOD6377
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/24/19 12:41
Container ID: 1194035006-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	78		2.00	2.00	col/100mL	1		07/23/19 17:13

Batch Information

Analytical Batch: BTF17512
Analytical Method: SM21 9222D
Analyst: VDL
Analytical Date/Time: 07/23/19 17:13
Container ID: 1194035006-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	74		1	1	MPN/100m	1		07/23/19 17:34
Total Coliform	>2420		1	1	MPN/100m	1		07/23/19 17:34

Batch Information

Analytical Batch: BTF17509
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 07/23/19 17:34
Container ID: 1194035006-B

Print Date: 08/07/2019 9:55:14AM

J flagging is activated

Results of **SW6**

Client Sample ID: **SW6**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035006
Lab Project ID: 1194035

Collection Date: 07/23/19 11:24
Received Date: 07/23/19 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		07/24/19 15:16
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		07/24/19 15:16
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		07/24/19 15:16

Batch Information

Analytical Batch: WIC5940
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 07/24/19 15:16
Container ID: 1194035006-C

Prep Batch: WXX12935
Prep Method: METHOD
Prep Date/Time: 07/24/19 09:30
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	39.5		1.01	0.313	mg/L	1		07/24/19 15:22

Batch Information

Analytical Batch: STS6393
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 07/24/19 15:22
Container ID: 1194035006-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.770	J	1.00	0.310	mg/L	1		08/06/19 10:04

Batch Information

Analytical Batch: WDA4619
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/06/19 10:04
Container ID: 1194035006-F

Prep Batch: WXX12954
Prep Method: METHOD
Prep Date/Time: 08/05/19 08:33
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	0.0457	J	0.100	0.0310	mg/L	1		07/31/19 14:43

Print Date: 08/07/2019 9:55:14AM

J flagging is activated

Results of **SW6**

Client Sample ID: **SW6**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035006
Lab Project ID: 1194035

Collection Date: 07/23/19 11:24
Received Date: 07/23/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4616
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 07/31/19 14:43
Container ID: 1194035006-F

Prep Batch: WXX12946
Prep Method: METHOD
Prep Date/Time: 07/31/19 13:15
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	0.0581		0.0200	0.00500	mg/L	1		07/26/19 14:48

Batch Information

Analytical Batch: WDA4612
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 07/26/19 14:48
Container ID: 1194035006-F

Prep Batch: WXX12938
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/26/19 11:19
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **SW7**

Client Sample ID: **SW7**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035007
Lab Project ID: 1194035

Collection Date: 07/23/19 11:15
Received Date: 07/23/19 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	3.31		2.00	2.00	mg/L	1		07/24/19 12:41

Batch Information

Analytical Batch: BOD6377
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/24/19 12:41
Container ID: 1194035007-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	40		2.00	2.00	col/100mL	1		07/23/19 17:13

Batch Information

Analytical Batch: BTF17512
Analytical Method: SM21 9222D
Analyst: VDL
Analytical Date/Time: 07/23/19 17:13
Container ID: 1194035007-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	20		20	20	MPN/100m	20		07/23/19 17:34
Total Coliform	4500		20	20	MPN/100m	20		07/23/19 17:34

Batch Information

Analytical Batch: BTF17509
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 07/23/19 17:34
Container ID: 1194035007-B

Results of **SW7**

Client Sample ID: **SW7**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035007
Lab Project ID: 1194035

Collection Date: 07/23/19 11:15
Received Date: 07/23/19 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		07/24/19 15:35
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		07/24/19 15:35
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		07/24/19 15:35

Batch Information

Analytical Batch: WIC5940
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 07/24/19 15:35
Container ID: 1194035007-C

Prep Batch: WXX12935
Prep Method: METHOD
Prep Date/Time: 07/24/19 09:30
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	71.9		0.980	0.304	mg/L	1		07/24/19 15:22

Batch Information

Analytical Batch: STS6393
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 07/24/19 15:22
Container ID: 1194035007-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.568	J	1.00	0.310	mg/L	1		08/06/19 10:05

Batch Information

Analytical Batch: WDA4619
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/06/19 10:05
Container ID: 1194035007-F

Prep Batch: WXX12954
Prep Method: METHOD
Prep Date/Time: 08/05/19 08:33
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	0.0536	J	0.100	0.0310	mg/L	1		07/31/19 14:45

Print Date: 08/07/2019 9:55:14AM

J flagging is activated

Results of **SW7**

Client Sample ID: **SW7**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035007
Lab Project ID: 1194035

Collection Date: 07/23/19 11:15
Received Date: 07/23/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4616
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 07/31/19 14:45
Container ID: 1194035007-F

Prep Batch: WXX12946
Prep Method: METHOD
Prep Date/Time: 07/31/19 13:15
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	0.0627		0.0200	0.00500	mg/L	1		07/26/19 14:49

Batch Information

Analytical Batch: WDA4612
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 07/26/19 14:49
Container ID: 1194035007-F

Prep Batch: WXX12938
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/26/19 11:19
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **SW8**

Client Sample ID: **SW8**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035008
Lab Project ID: 1194035

Collection Date: 07/23/19 13:18
Received Date: 07/23/19 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	2.18		2.00	2.00	mg/L	1		07/24/19 12:41

Batch Information

Analytical Batch: BOD6377
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/24/19 12:41
Container ID: 1194035008-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	4.9		1.64	1.64	col/100mL	1		07/23/19 17:13

Batch Information

Analytical Batch: BTF17512
Analytical Method: SM21 9222D
Analyst: VDL
Analytical Date/Time: 07/23/19 17:13
Container ID: 1194035008-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	20	U	20	20	MPN/100m	20		07/23/19 17:34
Total Coliform	1140		20	20	MPN/100m	20		07/23/19 17:34

Batch Information

Analytical Batch: BTF17509
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 07/23/19 17:34
Container ID: 1194035008-B

Results of **SW8**

Client Sample ID: **SW8**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035008
Lab Project ID: 1194035

Collection Date: 07/23/19 13:18
Received Date: 07/23/19 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		07/24/19 15:54
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		07/24/19 15:54
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		07/24/19 15:54

Batch Information

Analytical Batch: WIC5940
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 07/24/19 15:54
Container ID: 1194035008-C

Prep Batch: WXX12935
Prep Method: METHOD
Prep Date/Time: 07/24/19 09:30
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	109		1.06	0.330	mg/L	1		07/24/19 15:22

Batch Information

Analytical Batch: STS6393
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 07/24/19 15:22
Container ID: 1194035008-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.417	J	1.00	0.310	mg/L	1		08/06/19 10:07

Batch Information

Analytical Batch: WDA4619
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/06/19 10:07
Container ID: 1194035008-F

Prep Batch: WXX12954
Prep Method: METHOD
Prep Date/Time: 08/05/19 08:33
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	0.0413	J	0.100	0.0310	mg/L	1		07/31/19 14:47

Print Date: 08/07/2019 9:55:14AM

J flagging is activated

Results of **SW8**

Client Sample ID: **SW8**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035008
Lab Project ID: 1194035

Collection Date: 07/23/19 13:18
Received Date: 07/23/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4616
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 07/31/19 14:47
Container ID: 1194035008-F

Prep Batch: WXX12946
Prep Method: METHOD
Prep Date/Time: 07/31/19 13:15
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	0.0351		0.0200	0.00500	mg/L	1		07/26/19 14:50

Batch Information

Analytical Batch: WDA4612
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 07/26/19 14:50
Container ID: 1194035008-F

Prep Batch: WXX12938
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/26/19 11:19
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **SW9**

Client Sample ID: **SW9**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035009
Lab Project ID: 1194035

Collection Date: 07/23/19 13:05
Received Date: 07/23/19 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	3.86		2.00	2.00	mg/L	1		07/24/19 12:41

Batch Information

Analytical Batch: BOD6377
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/24/19 12:41
Container ID: 1194035009-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	64		9.09	9.09	col/100mL	1		07/23/19 17:13

Batch Information

Analytical Batch: BTF17512
Analytical Method: SM21 9222D
Analyst: VDL
Analytical Date/Time: 07/23/19 17:13
Container ID: 1194035009-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	160		20	20	MPN/100m	20		07/23/19 17:34
Total Coliform	15400		20	20	MPN/100m	20		07/23/19 17:34

Batch Information

Analytical Batch: BTF17509
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 07/23/19 17:34
Container ID: 1194035009-B

Print Date: 08/07/2019 9:55:14AM

J flagging is activated

Results of **SW9**

Client Sample ID: **SW9**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035009
Lab Project ID: 1194035

Collection Date: 07/23/19 13:05
Received Date: 07/23/19 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		07/24/19 16:13
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		07/24/19 16:13
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		07/24/19 16:13

Batch Information

Analytical Batch: WIC5940
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 07/24/19 16:13
Container ID: 1194035009-C

Prep Batch: WXX12935
Prep Method: METHOD
Prep Date/Time: 07/24/19 09:30
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	349		2.00	0.620	mg/L	1		07/24/19 15:22

Batch Information

Analytical Batch: STS6393
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 07/24/19 15:22
Container ID: 1194035009-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	4.27		1.00	0.310	mg/L	1		08/06/19 10:08

Batch Information

Analytical Batch: WDA4619
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/06/19 10:08
Container ID: 1194035009-F

Prep Batch: WXX12954
Prep Method: METHOD
Prep Date/Time: 08/05/19 08:33
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	0.110		0.100	0.0310	mg/L	1		07/31/19 14:48

Print Date: 08/07/2019 9:55:14AM

J flagging is activated

Results of **SW9**

Client Sample ID: **SW9**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035009
Lab Project ID: 1194035

Collection Date: 07/23/19 13:05
Received Date: 07/23/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4616
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 07/31/19 14:48
Container ID: 1194035009-F

Prep Batch: WXX12946
Prep Method: METHOD
Prep Date/Time: 07/31/19 13:15
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	0.527		0.100	0.0250	mg/L	1		07/26/19 16:03

Batch Information

Analytical Batch: WDA4612
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 07/26/19 16:03
Container ID: 1194035009-F

Prep Batch: WXX12938
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/26/19 15:15
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 25 mL

Results of **SW10**

Client Sample ID: **SW10**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035010
Lab Project ID: 1194035

Collection Date: 07/23/19 12:50
Received Date: 07/23/19 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	3.15		2.00	2.00	mg/L	1		07/24/19 12:41

Batch Information

Analytical Batch: BOD6377
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/24/19 12:41
Container ID: 1194035010-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	3.3		1.64	1.64	col/100mL	1		07/23/19 17:13

Batch Information

Analytical Batch: BTF17512
Analytical Method: SM21 9222D
Analyst: VDL
Analytical Date/Time: 07/23/19 17:13
Container ID: 1194035010-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	7		1	1	MPN/100m	1		07/23/19 17:34
Total Coliform	387		1	1	MPN/100m	1		07/23/19 17:34

Batch Information

Analytical Batch: BTF17509
Analytical Method: SM21 9223B
Analyst: DSH
Analytical Date/Time: 07/23/19 17:34
Container ID: 1194035010-B

Print Date: 08/07/2019 9:55:14AM

J flagging is activated

Results of **SW10**

Client Sample ID: **SW10**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035010
Lab Project ID: 1194035

Collection Date: 07/23/19 12:50
Received Date: 07/23/19 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		07/24/19 16:32
Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		07/24/19 16:32
Total Nitrate/Nitrite-N	0.100	U	0.200	0.0500	mg/L	1		07/24/19 16:32

Batch Information

Analytical Batch: WIC5940
Analytical Method: EPA 300.0
Analyst: DMM
Analytical Date/Time: 07/24/19 16:32
Container ID: 1194035010-C

Prep Batch: WXX12935
Prep Method: METHOD
Prep Date/Time: 07/24/19 09:30
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	130		1.32	0.408	mg/L	1		07/24/19 15:22

Batch Information

Analytical Batch: STS6393
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 07/24/19 15:22
Container ID: 1194035010-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.759	J	1.00	0.310	mg/L	1		08/06/19 10:09

Batch Information

Analytical Batch: WDA4619
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/06/19 10:09
Container ID: 1194035010-F

Prep Batch: WXX12954
Prep Method: METHOD
Prep Date/Time: 08/05/19 08:33
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	0.0518	J	0.100	0.0310	mg/L	1		07/31/19 14:50

Print Date: 08/07/2019 9:55:14AM

J flagging is activated

Results of **SW10**

Client Sample ID: **SW10**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194035010
Lab Project ID: 1194035

Collection Date: 07/23/19 12:50
Received Date: 07/23/19 15:27
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4616
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 07/31/19 14:50
Container ID: 1194035010-F

Prep Batch: WXX12946
Prep Method: METHOD
Prep Date/Time: 07/31/19 13:15
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	0.0657		0.0200	0.00500	mg/L	1		07/26/19 14:52

Batch Information

Analytical Batch: WDA4612
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 07/26/19 14:52
Container ID: 1194035010-F

Prep Batch: WXX12938
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/26/19 11:19
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Method Blank

Blank ID: MB for HBN 1796822 [BOD/6377]
Blank Lab ID: 1520813

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1194035001, 1194035002, 1194035003, 1194035004, 1194035005, 1194035006, 1194035007, 1194035008, 1194035009, 1194035010

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: BOD6377
Analytical Method: SM21 5210B
Instrument:
Analyst: A.L
Analytical Date/Time: 7/24/2019 12:41:53PM

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Blank Spike Summary

Blank Spike ID: LCS for HBN 1194035 [BOD6377]
Blank Spike Lab ID: 1520814
Date Analyzed: 07/24/2019 12:41

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1194035001, 1194035002, 1194035003, 1194035004, 1194035005, 1194035006, 1194035007, 1194035008, 1194035009, 1194035010

Results by **SM21 5210B**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Biochemical Oxygen Demand	198	205	104	(84.6-115.4

Batch Information

Analytical Batch: **BOD6377**
Analytical Method: **SM21 5210B**
Instrument:
Analyst: **A.L**

Print Date: 08/07/2019 9:55:20AM

Method Blank

Blank ID: MB for HBN 1796776 [BTF/17509]
Blank Lab ID: 1520668

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1194035001, 1194035002, 1194035003, 1194035004, 1194035005, 1194035006, 1194035007, 1194035008, 1194035009, 1194035010

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: BTF17509
Analytical Method: SM21 9223B
Instrument:
Analyst: VDL
Analytical Date/Time: 7/23/2019 12:16:27PM

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Method Blank

Blank ID: MB for HBN 1796779 [BTF/17512]
Blank Lab ID: 1520674

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1194035001, 1194035002, 1194035003, 1194035004, 1194035005, 1194035006, 1194035007, 1194035008, 1194035009, 1194035010

Results by **SM21 9222D**

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

Batch Information

Analytical Batch: BTF17512
Analytical Method: SM21 9222D
Instrument:
Analyst: VDL
Analytical Date/Time: 7/23/2019 4:08:00PM

Print Date: 08/07/2019 9:55:23AM

Method Blank

Blank ID: MB for HBN 1796811 [STS/6391]
Blank Lab ID: 1520798

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1194035001, 1194035002, 1194035003, 1194035004, 1194035005, 1194035006, 1194035007, 1194035008, 1194035009, 1194035010

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: STS6393
Analytical Method: SM21 2540D
Instrument:
Analyst: EWW
Analytical Date/Time: 7/24/2019 3:22:58PM

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Duplicate Sample Summary

Original Sample ID: 1194065001
Duplicate Sample ID: 1520799

Analysis Date: 07/24/2019 15:22
Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1194035001, 1194035002, 1194035003, 1194035004, 1194035005, 1194035006, 1194035007, 1194035008, 1194035009, 1194035010

Results by **SM21 2540D**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Suspended Solids	1110	995	mg/L	10.90*	(< 5)

Batch Information

Analytical Batch: STS6393
Analytical Method: SM21 2540D
Instrument:
Analyst: EWW

Print Date: 08/07/2019 9:55:26AM

Duplicate Sample Summary

Original Sample ID: 1194036001
Duplicate Sample ID: 1520805

Analysis Date: 07/24/2019 15:22
Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1194035001, 1194035002, 1194035003, 1194035004, 1194035005, 1194035006, 1194035007, 1194035008, 1194035009, 1194035010

Results by **SM21 2540D**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Suspended Solids	211	211	mg/L	0.00	(< 5)

Batch Information

Analytical Batch: STS6393
Analytical Method: SM21 2540D
Instrument:
Analyst: EWW

Print Date: 08/07/2019 9:55:26AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1194035 [STS6393]
Blank Spike Lab ID: 1520800
Date Analyzed: 07/24/2019 15:22

Spike Duplicate ID: LCSD for HBN 1194035 [STS6393]
Spike Duplicate Lab ID: 1520801
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1194035001, 1194035002, 1194035003, 1194035004, 1194035005, 1194035006, 1194035007, 1194035008, 1194035009, 1194035010

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	24.3	97	25	23.8	95	(75-125)	2.10	(< 5)

Batch Information

Analytical Batch: **STS6393**
Analytical Method: **SM21 2540D**
Instrument:
Analyst: **EWW**

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Method Blank

Blank ID: MB for HBN 1796859 [WXX/12935]
Blank Lab ID: 1520969

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1194035001, 1194035002, 1194035003, 1194035004, 1194035005, 1194035006, 1194035007, 1194035008, 1194035009, 1194035010

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: WIC5940
Analytical Method: EPA 300.0
Instrument: 930 Metrohm compact IC flex
Analyst: DMM
Analytical Date/Time: 7/24/2019 11:47:10AM

Prep Batch: WXX12935
Prep Method: METHOD
Prep Date/Time: 7/24/2019 9:30:00AM
Prep Initial Wt./Vol.: 10 mL
Prep Extract Vol: 10 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Blank Spike Summary

Blank Spike ID: LCS for HBN 1194035 [WXX12935]
Blank Spike Lab ID: 1520970
Date Analyzed: 07/24/2019 12:06

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1194035001, 1194035002, 1194035003, 1194035004, 1194035005, 1194035006, 1194035007, 1194035008, 1194035009, 1194035010

Results by **EPA 300.0**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Nitrate-N	5	4.94	99	(90-110)
Nitrite-N	5	5.13	103	(90-110)
Total Nitrate/Nitrite-N	10	10.1	101	(90-110)

Batch Information

Analytical Batch: **WIC5940**
Analytical Method: **EPA 300.0**
Instrument: **930 Metrohm compact IC flex**
Analyst: **DMM**

Prep Batch: **WXX12935**
Prep Method: **METHOD**
Prep Date/Time: **07/24/2019 09:30**
Spike Init Wt./Vol.: 5 mg/L Extract Vol: 10 mL
Dupe Init Wt./Vol.: Extract Vol:

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 f 907.561.5301 www.us.sgs.com

Matrix Spike Summary

Original Sample ID: 1194035001
MS Sample ID: 1520971 MS
MSD Sample ID: 1520972 MSD

Analysis Date: 07/24/2019 12:25
Analysis Date: 07/24/2019 12:44
Analysis Date: 07/24/2019 13:03
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1194035001, 1194035002, 1194035003, 1194035004, 1194035005, 1194035006, 1194035007, 1194035008, 1194035009, 1194035010

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	4.89	98	5.00	4.89	98	90-110	0.18	(< 15)
Nitrite-N	0.100U	5.00	5.09	102	5.00	5.10	102	90-110	0.16	(< 15)
Total Nitrate/Nitrite-N	0.100U	10.0	9.98	100	10.0	9.99	100	90-110	0.17	(< 15)

Batch Information

Analytical Batch: WIC5940
Analytical Method: EPA 300.0
Instrument: 930 Metrohm compact IC flex
Analyst: DMM
Analytical Date/Time: 7/24/2019 12:44:10PM

Prep Batch: WXX12935
Prep Method: EPA 300.0 Extraction Waters/Liquids
Prep Date/Time: 7/24/2019 9:30:00AM
Prep Initial Wt./Vol.: 10.00mL
Prep Extract Vol: 10.00mL

Print Date: 08/07/2019 9:55:31AM

Method Blank

Blank ID: MB for HBN 1797033 [WXX/12938]
Blank Lab ID: 1521683

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1194035001, 1194035002, 1194035003, 1194035004, 1194035005, 1194035006, 1194035007, 1194035008, 1194035009, 1194035010

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: WDA4612
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 7/26/2019 2:32:39PM

Prep Batch: WXX12938
Prep Method: SM21 4500P-B,E
Prep Date/Time: 7/26/2019 11:19:00AM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 f 907.561.5301 www.us.sgs.com

Blank Spike Summary

Blank Spike ID: LCS for HBN 1194035 [WXX12938]
Blank Spike Lab ID: 1521684
Date Analyzed: 07/26/2019 14:33

Spike Duplicate ID: LCSD for HBN 1194035 [WXX12938]
Spike Duplicate Lab ID: 1521685
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1194035001, 1194035002, 1194035003, 1194035004, 1194035005, 1194035006, 1194035007, 1194035008, 1194035009, 1194035010

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	0.185	93	0.2	0.183	91	(75-125)	1.30	(< 25)

Batch Information

Analytical Batch: **WDA4612**
Analytical Method: **SM21 4500P-B,E**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX12938**
Prep Method: **SM21 4500P-B,E**
Prep Date/Time: **07/26/2019 11:19**
Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 f 907.561.5301 www.us.sgs.com

Matrix Spike Summary

Original Sample ID: 1194035001
MS Sample ID: 1521686 MS
MSD Sample ID: 1521687 MSD

Analysis Date: 07/26/2019 16:00
Analysis Date: 07/26/2019 16:01
Analysis Date: 07/26/2019 16:01
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1194035001, 1194035002, 1194035003, 1194035004, 1194035005, 1194035006, 1194035007, 1194035008, 1194035009, 1194035010

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	0.468	1.00	1.38	91	1.00	1.36	90	75-125	0.88	(< 25)

Batch Information

Analytical Batch: WDA4612
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 7/26/2019 4:01:07PM

Prep Batch: WXX12938
Prep Method: Total Phosphorus (W) Ext.
Prep Date/Time: 7/26/2019 3:15:00PM
Prep Initial Wt./Vol.: 5.00mL
Prep Extract Vol: 25.00mL

Print Date: 08/07/2019 9:55:37AM

Method Blank

Blank ID: MB for HBN 1797295 [WXX/12946]
Blank Lab ID: 1522813

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1194035001, 1194035002, 1194035003, 1194035004, 1194035005, 1194035006, 1194035007, 1194035008, 1194035009, 1194035010

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: WDA4616
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 7/31/2019 2:23:48PM

Prep Batch: WXX12946
Prep Method: METHOD
Prep Date/Time: 7/31/2019 1:15:00PM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Blank Spike Summary

Blank Spike ID: LCS for HBN 1194035 [WXX12946]
Blank Spike Lab ID: 1522814
Date Analyzed: 07/31/2019 14:25

Spike Duplicate ID: LCSD for HBN 1194035 [WXX12946]
Spike Duplicate Lab ID: 1522815
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1194035001, 1194035002, 1194035003, 1194035004, 1194035005, 1194035006, 1194035007, 1194035008, 1194035009, 1194035010

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	1.01	101	1	1.02	102	(75-125)	0.70	(< 25)

Batch Information

Analytical Batch: **WDA4616**
Analytical Method: **SM21 4500-NH3 G**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX12946**
Prep Method: **METHOD**
Prep Date/Time: **07/31/2019 13:15**
Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 f 907.561.5301 www.us.sgs.com

Matrix Spike Summary

Original Sample ID: 1194035001
MS Sample ID: 1522816 MS
MSD Sample ID: 1522817 MSD

Analysis Date: 07/31/2019 14:28
Analysis Date: 07/31/2019 14:33
Analysis Date: 07/31/2019 14:35
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1194035001, 1194035002, 1194035003, 1194035004, 1194035005, 1194035006, 1194035007, 1194035008, 1194035009, 1194035010

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	0.178	1.00	1.01	83	1.00	1.30	112	75-125	24.80	(< 25)

Batch Information

Analytical Batch: WDA4616
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 7/31/2019 2:33:51PM

Prep Batch: WXX12946
Prep Method: Ammonia by SM21 4500F prep (W)
Prep Date/Time: 7/31/2019 1:15:00PM
Prep Initial Wt./Vol.: 6.00mL
Prep Extract Vol: 6.00mL

Print Date: 08/07/2019 9:55:42AM

Method Blank

Blank ID: MB for HBN 1797500 [WXX/12954]
Blank Lab ID: 1523708

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1194035001, 1194035002, 1194035003, 1194035004, 1194035005, 1194035006, 1194035007, 1194035008, 1194035009, 1194035010

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: WDA4619
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 8/6/2019 9:48:40AM

Prep Batch: WXX12954
Prep Method: METHOD
Prep Date/Time: 8/5/2019 8:33:00AM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Blank Spike Summary

Blank Spike ID: LCS for HBN 1194035 [WXX12954]
Blank Spike Lab ID: 1523709
Date Analyzed: 08/06/2019 09:49

Spike Duplicate ID: LCSD for HBN 1194035 [WXX12954]
Spike Duplicate Lab ID: 1523710
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1194035001, 1194035002, 1194035003, 1194035004, 1194035005, 1194035006, 1194035007, 1194035008, 1194035009, 1194035010

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	3.90	97	4	4.13	103	(75-125)	5.80	(< 25)

Batch Information

Analytical Batch: **WDA4619**
Analytical Method: **SM21 4500-N D**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX12954**
Prep Method: **METHOD**
Prep Date/Time: **08/05/2019 08:33**
Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 f 907.561.5301 www.us.sgs.com

Matrix Spike Summary

Original Sample ID: 1194035003
MS Sample ID: 1523711 MS
MSD Sample ID: 1523712 MSD

Analysis Date: 08/06/2019 9:55
Analysis Date: 08/06/2019 9:56
Analysis Date: 08/06/2019 9:57
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1194035001, 1194035002, 1194035003, 1194035004, 1194035005, 1194035006, 1194035007, 1194035008, 1194035009, 1194035010

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	0.841J	4.00	5	104	4.00	4.61	94	75-125	8.20	(< 25)

Batch Information

Analytical Batch: WDA4619
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 8/6/2019 9:56:32AM

Prep Batch: WXX12954
Prep Method: Distillation TKN by Phenate (W)
Prep Date/Time: 8/5/2019 8:33:00AM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 08/07/2019 9:55:47AM

SGS 1194035

SGS North America Inc.
HAIN 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 Alward PHONE NO: 343-5202

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

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

INVOICE TO: QUOTE #: P.O. #: 204700415

Section 2 / Section 3

Preservative: (blank), (blank), (blank), H_2SO_4, $Na_2S_2O_3$, H_2SO_4

Type: C = COMP, G = GRAB, MI = Multi Incremental Soils

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	# CONTAINERS	Type	Nitrate/Nitrite	BOD	TSS	FC	TC (Fecal)/100	TAN/Ammonia-N					REMARKS/ LOC ID
1 AF	SW1	7/23/19	9:53	Water	6	G	1	1	1	1	1	1					
2 AF	SW2	↓	10:05	↓	↓	↓	1	1	1	1	1	1					
3 AF	SW3	↓	10:19	↓	↓	↓	1	1	1	1	1	1					
4 AF	SW4	↓	11:38	↓	↓	↓	1	1	1	1	1	1					
5 AF	SW5	↓	1148	↓	↓	↓	1	1	1	1	1	1					
6 AF	SW6	↓	1124	↓	↓	↓	1	1	1	1	1	1					
7 AF	SW7	↓	1115	↓	↓	↓	1	1	1	1	1	1					
8 AF	SW8	↓	1318	↓	↓	↓	1	1	1	1	1	1					
9 AF	SW9	↓	1305	↓	↓	↓	1	1	1	1	1	1					
10 AF	SW10	↓	1250	↓	↓	↓	1	1	1	1	1	1					

Section 5

Relinquished By	Date	Time	Received By
Relinquished By: (1) [signature]	7/23/19	1527	Received By:
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	7.23.19	15:27	Received For Laboratory By: [signature]

Section 4 DOD Project? Yes No

Cooler ID: ______

Data Deliverable Requirements:

Requested Turnaround Time and/or Special Instructions:

Temp Blank °C: 4.0 C D57

or Ambient [ ]

(See attached Sample Receipt Form)

Chain of Custody Seal: (Circle)

INTACT BROKEN ABSENT (circled)

(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

HD

TR: 6.0 C D57

F083-Kit_Request_and_COC_Templates-Blank
Revised 2013-03-24

e-Sample Receipt Form

SGS Workorder #: **1194035**

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 @ 4.0 °C Therm. ID: D57
	Yes	Cooler ID: 2 @ 6.0 °C Therm. ID: D57
If samples received without a temperature blank, the "cooler temperature" will be documented instead & "COOLER TEMP" will be noted to the right. "ambient" or "chilled" will be noted if neither is available.		Cooler ID: @ °C Therm. ID:
		Cooler ID: @ °C Therm. ID:
		Cooler ID: @ °C Therm. ID:
*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
1194035001-A	Na2S2O3 for Chlorine Redu	OK			
1194035001-B	Na2S2O3 for Chlorine Redu	OK			
1194035001-C	No Preservative Required	OK			
1194035001-D	No Preservative Required	OK			
1194035001-E	No Preservative Required	OK			
1194035001-F	H2SO4 to pH < 2	OK			
1194035002-A	Na2S2O3 for Chlorine Redu	OK			
1194035002-B	Na2S2O3 for Chlorine Redu	OK			
1194035002-C	No Preservative Required	OK			
1194035002-D	No Preservative Required	OK			
1194035002-E	No Preservative Required	OK			
1194035002-F	H2SO4 to pH < 2	OK			
1194035003-A	Na2S2O3 for Chlorine Redu	OK			
1194035003-B	Na2S2O3 for Chlorine Redu	OK			
1194035003-C	No Preservative Required	OK			
1194035003-D	No Preservative Required	OK			
1194035003-E	No Preservative Required	OK			
1194035003-F	H2SO4 to pH < 2	OK			
1194035004-A	Na2S2O3 for Chlorine Redu	OK			
1194035004-B	Na2S2O3 for Chlorine Redu	OK			
1194035004-C	No Preservative Required	OK			
1194035004-D	No Preservative Required	OK			
1194035004-E	No Preservative Required	OK			
1194035004-F	H2SO4 to pH < 2	OK			
1194035005-A	Na2S2O3 for Chlorine Redu	OK			
1194035005-B	Na2S2O3 for Chlorine Redu	OK			
1194035005-C	No Preservative Required	OK			
1194035005-D	No Preservative Required	OK			
1194035005-E	No Preservative Required	OK			
1194035005-F	H2SO4 to pH < 2	OK			
1194035006-A	Na2S2O3 for Chlorine Redu	OK			
1194035006-B	Na2S2O3 for Chlorine Redu	OK			
1194035006-C	No Preservative Required	OK			
1194035006-D	No Preservative Required	OK			
1194035006-E	No Preservative Required	OK			
1194035006-F	H2SO4 to pH < 2	OK			
1194035007-A	Na2S2O3 for Chlorine Redu	OK			
1194035007-B	Na2S2O3 for Chlorine Redu	OK			
1194035007-C	No Preservative Required	OK			
1194035007-D	No Preservative Required	OK			
1194035007-E	No Preservative Required	OK			
1194035007-F	H2SO4 to pH < 2	OK			
1194035008-A	Na2S2O3 for Chlorine Redu	OK			
1194035008-B	Na2S2O3 for Chlorine Redu	OK			
1194035008-C	No Preservative Required	OK			
1194035008-D	No Preservative Required	OK			
1194035008-E	No Preservative Required	OK			
1194035008-F	H2SO4 to pH < 2	OK			

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition
1194035009-A	Na2S2O3 for Chlorine Redu	OK			
1194035009-B	Na2S2O3 for Chlorine Redu	OK			
1194035009-C	No Preservative Required	OK			
1194035009-D	No Preservative Required	OK			
1194035009-E	No Preservative Required	OK			
1194035009-F	H2SO4 to pH < 2	OK			
1194035010-A	Na2S2O3 for Chlorine Redu	OK			
1194035010-B	Na2S2O3 for Chlorine Redu	OK			
1194035010-C	No Preservative Required	OK			
1194035010-D	No Preservative Required	OK			
1194035010-E	No Preservative Required	OK			
1194035010-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.

Laboratory Report of Analysis

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

Report Number: **1194084**

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: **1194084**
Project Name/Site: **Wasilla WWTP**
Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

1194141005DUP (1521438) DUP

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

1193920001MS (1521177) MS

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

1194084001MSD (1521175) MSD

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

1193920001MSD (1521178) MSD

4500NO3-F - Nitrate/Nitrite - MSD recovery for Total Nitrate/Nitrite 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.

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
SW11	1194084001	07/24/2019	07/24/2019	Water (Surface, Eff., Ground)
SW12	1194084002	07/24/2019	07/24/2019	Water (Surface, Eff., Ground)
SW13	1194084003	07/24/2019	07/24/2019	Water (Surface, Eff., Ground)
SW14	1194084004	07/24/2019	07/24/2019	Water (Surface, Eff., Ground)
SW15	1194084005	07/24/2019	07/24/2019	Water (Surface, Eff., Ground)
SW16	1194084006	07/24/2019	07/24/2019	Water (Surface, Eff., Ground)
SW17	1194084007	07/24/2019	07/24/2019	Water (Surface, Eff., Ground)
SW18	1194084008	07/24/2019	07/24/2019	Water (Surface, Eff., Ground)
Shaw	1194084009	07/24/2019	07/24/2019	Water (Surface, Eff., Ground)
Dup 1	1194084010	07/24/2019	07/24/2019	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)
SM21 4500NO3-F	Flow Injection Analysis
SM21 4500-N D	TKN by Phenate (W)
SM21 9223B	Total Coliform P/A Quant Tray
SM21 4500P-B,E	Total Phosphorus (W)
SM21 2540D	Total Suspended Solids SM20 2540D

SGS North America Inc.
200 West Potter Drive, Anchorage, AK 99518
t 907.562.2343 f 907.561.5301 www.us.sgs.com

Detectable Results Summary

Client Sample ID: **SW11**
Lab Sample ID: 1194084001

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	2.56	mg/L
	E. Coli	680	MPN/100mL
	Fecal Coliform	290	col/100mL
	Total Coliform	1860	MPN/100mL
Waters Department	Ammonia-N	0.0645J	mg/L
	Total Kjeldahl Nitrogen	0.370J	mg/L
	Total Phosphorus	0.570	mg/L
	Total Suspended Solids	85.1	mg/L

Client Sample ID: **SW12**
Lab Sample ID: 1194084002

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	2.01	mg/L
	E. Coli	20	MPN/100mL
	Fecal Coliform	27	col/100mL
	Total Coliform	19600	MPN/100mL
Waters Department	Ammonia-N	0.0428J	mg/L
	Total Kjeldahl Nitrogen	1.34	mg/L
	Total Phosphorus	0.286	mg/L
	Total Suspended Solids	155	mg/L

Client Sample ID: **SW13**
Lab Sample ID: 1194084003

	Parameter	Result	Units
Microbiology Laboratory	E. Coli	320	MPN/100mL
	Fecal Coliform	310	col/100mL
	Total Coliform	2700	MPN/100mL
Waters Department	Ammonia-N	0.0463J	mg/L
	Total Kjeldahl Nitrogen	0.341J	mg/L
	Total Phosphorus	0.00750J	mg/L
	Total Suspended Solids	19.3	mg/L

Client Sample ID: **SW14**
Lab Sample ID: 1194084004

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	4.29	mg/L
	E. Coli	160	MPN/100mL
	Fecal Coliform	210	col/100mL
	Total Coliform	3320	MPN/100mL
Waters Department	Ammonia-N	0.0771J	mg/L
	Total Phosphorus	0.182	mg/L
	Total Suspended Solids	110	mg/L

SGS North America Inc.
200 West Potter Drive, Anchorage, AK 99518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Detectable Results Summary

Client Sample ID: **SW15**
Lab Sample ID: 1194084005

	Parameter	Result	Units
Microbiology Laboratory	E. Coli	1140	MPN/100mL
	Fecal Coliform	727	col/100mL
	Total Coliform	15400	MPN/100mL
Waters Department	Ammonia-N	0.0698J	mg/L
	Total Phosphorus	0.0434	mg/L
	Total Suspended Solids	16.1	mg/L

Client Sample ID: **SW16**
Lab Sample ID: 1194084006

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	5.50	mg/L
	E. Coli	20	MPN/100mL
	Fecal Coliform	55	col/100mL
	Total Coliform	26000	MPN/100mL
Waters Department	Ammonia-N	0.0391J	mg/L
	Total Kjeldahl Nitrogen	0.712J	mg/L
	Total Phosphorus	0.143	mg/L
	Total Suspended Solids	162	mg/L

Client Sample ID: **SW17**
Lab Sample ID: 1194084007

	Parameter	Result	Units
Microbiology Laboratory	E. Coli	690	MPN/100mL
	Fecal Coliform	1540	col/100mL
	Total Coliform	2850	MPN/100mL
Waters Department	Ammonia-N	0.0395J	mg/L
	Nitrate-N	2.25	mg/L
	Total Kjeldahl Nitrogen	0.725J	mg/L
	Total Phosphorus	0.380	mg/L
	Total Suspended Solids	38.0	mg/L

Client Sample ID: **SW18**
Lab Sample ID: 1194084008

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	3.16	mg/L
	E. Coli	1080	MPN/100mL
	Fecal Coliform	1020	col/100mL
	Total Coliform	6490	MPN/100mL
Waters Department	Ammonia-N	0.153	mg/L
	Nitrate-N	3.54	mg/L
	Total Kjeldahl Nitrogen	0.712J	mg/L
	Total Phosphorus	0.480	mg/L
	Total Suspended Solids	15.1	mg/L

SGS North America Inc.
200 West Potter Drive, Anchorage, AK 99518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Detectable Results Summary

Client Sample ID: **Shaw**
Lab Sample ID: 1194084009

	Parameter	Result	Units
Microbiology Laboratory	E. Coli	272	MPN/100mL
	Fecal Coliform	156	col/100mL
	Total Coliform	2420	MPN/100mL
Waters Department	Ammonia-N	0.0378J	mg/L
	Total Kjeldahl Nitrogen	0.322J	mg/L
	Total Phosphorus	0.0343	mg/L
	Total Suspended Solids	3.84	mg/L

Client Sample ID: **Dup 1**
Lab Sample ID: 1194084010

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	3.42	mg/L
	E. Coli	2050	MPN/100mL
	Fecal Coliform	1030	col/100mL
	Total Coliform	8160	MPN/100mL
Waters Department	Ammonia-N	0.149	mg/L
	Nitrate-N	3.47	mg/L
	Total Kjeldahl Nitrogen	0.792J	mg/L
	Total Phosphorus	0.490	mg/L
	Total Suspended Solids	14.1	mg/L

SGS North America Inc.
200 West Potter Drive, Anchorage, AK 99518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Results of **SW11**

Client Sample ID: **SW11**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084001
Lab Project ID: 1194084

Collection Date: 07/24/19 09:48
Received Date: 07/24/19 15:11
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	2.56		2.00	2.00	mg/L	1		07/25/19 12:25

Batch Information

Analytical Batch: BOD6378
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/25/19 12:25
Container ID: 1194084001-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	290		10.0	10.0	col/100mL	1		07/24/19 17:41

Batch Information

Analytical Batch: BTF17514
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/24/19 17:41
Container ID: 1194084001-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	680		20	20	MPN/100m	20		07/25/19 09:34
Total Coliform	1860		20	20	MPN/100m	20		07/25/19 09:34

Batch Information

Analytical Batch: BTF17518
Analytical Method: SM21 9223B
Analyst: VDL
Analytical Date/Time: 07/25/19 09:34
Container ID: 1194084001-B

Results of **SW11**

Client Sample ID: **SW11**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084001
Lab Project ID: 1194084

Collection Date: 07/24/19 09:48
Received Date: 07/24/19 15:11
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	85.1		1.05	0.326	mg/L	1		07/26/19 14:49

Batch Information

Analytical Batch: STS6397
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 07/26/19 14:49
Container ID: 1194084001-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.370 J		1.00	0.310	mg/L	1		08/06/19 10:10

Batch Information

Analytical Batch: WDA4619
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/06/19 10:10
Container ID: 1194084001-F

Prep Batch: WXX12954
Prep Method: METHOD
Prep Date/Time: 08/05/19 08:33
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	0.0645 J		0.100	0.0310	mg/L	1		07/31/19 14:52

Batch Information

Analytical Batch: WDA4616
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 07/31/19 14:52
Container ID: 1194084001-F

Prep Batch: WXX12946
Prep Method: METHOD
Prep Date/Time: 07/31/19 13:15
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100 U		0.200	0.0500	mg/L	2		07/25/19 11:40
Nitrite-N	0.100 U		0.200	0.0500	mg/L	2		07/25/19 11:40

Results of **SW11**

Client Sample ID: **SW11**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084001
Lab Project ID: 1194084

Collection Date: 07/24/19 09:48
Received Date: 07/24/19 15:11
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2829
Analytical Method: SM21 4500NO3-F
Analyst: DMM
Analytical Date/Time: 07/25/19 11:40
Container ID: 1194084001-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.570		0.200	0.0500	mg/L	1		07/26/19 15:03

Batch Information

Analytical Batch: WDA4612
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 07/26/19 15:03
Container ID: 1194084001-F

Prep Batch: WXX12939
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/26/19 12:41
Prep Initial Wt./Vol.: 2.5 mL
Prep Extract Vol: 25 mL

Results of **SW12**

Client Sample ID: **SW12**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084002
Lab Project ID: 1194084

Collection Date: 07/24/19 10:15
Received Date: 07/24/19 15:11
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	2.01		2.00	2.00	mg/L	1		07/25/19 12:25

Batch Information

Analytical Batch: BOD6378
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/25/19 12:25
Container ID: 1194084002-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	27		9.09	9.09	col/100mL	1		07/24/19 17:41

Batch Information

Analytical Batch: BTF17514
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/24/19 17:41
Container ID: 1194084002-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	20		20	20	MPN/100m	20		07/25/19 09:34
Total Coliform	19600		20	20	MPN/100m	20		07/25/19 09:34

Batch Information

Analytical Batch: BTF17518
Analytical Method: SM21 9223B
Analyst: VDL
Analytical Date/Time: 07/25/19 09:34
Container ID: 1194084002-B

Results of **SW12**

Client Sample ID: **SW12**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084002
Lab Project ID: 1194084

Collection Date: 07/24/19 10:15
Received Date: 07/24/19 15:11
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	155		2.00	0.620	mg/L	1		07/26/19 14:49

Batch Information

Analytical Batch: STS6397
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 07/26/19 14:49
Container ID: 1194084002-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	1.34		1.00	0.310	mg/L	1		08/06/19 10:12

Batch Information

Analytical Batch: WDA4619
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/06/19 10:12
Container ID: 1194084002-F

Prep Batch: WXX12954
Prep Method: METHOD
Prep Date/Time: 08/05/19 08:33
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	0.0428	J	0.100	0.0310	mg/L	1		07/31/19 14:53

Batch Information

Analytical Batch: WDA4616
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 07/31/19 14:53
Container ID: 1194084002-F

Prep Batch: WXX12946
Prep Method: METHOD
Prep Date/Time: 07/31/19 13:15
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100	U	0.200	0.0500	mg/L	2		07/25/19 11:45
Nitrite-N	0.100	U	0.200	0.0500	mg/L	2		07/25/19 11:45

Print Date: 08/08/2019 12:23:58PM

J flagging is activated

Results of **SW12**

Client Sample ID: **SW12**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084002
Lab Project ID: 1194084

Collection Date: 07/24/19 10:15
Received Date: 07/24/19 15:11
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2829
Analytical Method: SM21 4500NO3-F
Analyst: DMM
Analytical Date/Time: 07/25/19 11:45
Container ID: 1194084002-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.286		0.0200	0.00500	mg/L	1		07/26/19 15:04

Batch Information

Analytical Batch: WDA4612
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 07/26/19 15:04
Container ID: 1194084002-F

Prep Batch: WXX12939
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/26/19 11:19
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **SW13**

Client Sample ID: **SW13**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084003
Lab Project ID: 1194084

Collection Date: 07/24/19 10:25
Received Date: 07/24/19 15:11
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		07/25/19 12:25

Batch Information

Analytical Batch: BOD6378
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/25/19 12:25
Container ID: 1194084003-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	310		10.0	10.0	col/100mL	1		07/24/19 17:41

Batch Information

Analytical Batch: BTF17514
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/24/19 17:41
Container ID: 1194084003-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	320		20	20	MPN/100m	20		07/25/19 09:34
Total Coliform	2700		20	20	MPN/100m	20		07/25/19 09:34

Batch Information

Analytical Batch: BTF17518
Analytical Method: SM21 9223B
Analyst: VDL
Analytical Date/Time: 07/25/19 09:34
Container ID: 1194084003-B

Results of **SW13**

Client Sample ID: **SW13**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084003
Lab Project ID: 1194084

Collection Date: 07/24/19 10:25
Received Date: 07/24/19 15:11
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	19.3		1.00	0.310	mg/L	1		07/26/19 14:49

Batch Information

Analytical Batch: STS6397
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 07/26/19 14:49
Container ID: 1194084003-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.341 J		1.00	0.310	mg/L	1		08/06/19 10:13

Batch Information

Analytical Batch: WDA4619
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/06/19 10:13
Container ID: 1194084003-F

Prep Batch: WXX12954
Prep Method: METHOD
Prep Date/Time: 08/05/19 08:33
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	0.0463 J		0.100	0.0310	mg/L	1		07/31/19 14:55

Batch Information

Analytical Batch: WDA4616
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 07/31/19 14:55
Container ID: 1194084003-F

Prep Batch: WXX12946
Prep Method: METHOD
Prep Date/Time: 07/31/19 13:15
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100 U		0.200	0.0500	mg/L	2		07/25/19 11:47
Nitrite-N	0.100 U		0.200	0.0500	mg/L	2		07/25/19 11:47

Results of **SW13**

Client Sample ID: **SW13**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084003
Lab Project ID: 1194084

Collection Date: 07/24/19 10:25
Received Date: 07/24/19 15:11
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2829
Analytical Method: SM21 4500NO3-F
Analyst: DMM
Analytical Date/Time: 07/25/19 11:47
Container ID: 1194084003-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.00750	J	0.0200	0.00500	mg/L	1		07/26/19 15:09

Batch Information

Analytical Batch: WDA4612
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 07/26/19 15:09
Container ID: 1194084003-F

Prep Batch: WXX12939
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/26/19 11:19
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **SW14**

Client Sample ID: **SW14**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084004
Lab Project ID: 1194084

Collection Date: 07/24/19 11:20
Received Date: 07/24/19 15:11
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	4.29		2.00	2.00	mg/L	1		07/25/19 12:25

Batch Information

Analytical Batch: BOD6378
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/25/19 12:25
Container ID: 1194084004-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	210		10.0	10.0	col/100mL	1		07/24/19 17:41

Batch Information

Analytical Batch: BTF17514
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/24/19 17:41
Container ID: 1194084004-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	160		20	20	MPN/100m	20		07/25/19 09:34
Total Coliform	3320		20	20	MPN/100m	20		07/25/19 09:34

Batch Information

Analytical Batch: BTF17518
Analytical Method: SM21 9223B
Analyst: VDL
Analytical Date/Time: 07/25/19 09:34
Container ID: 1194084004-B

Results of **SW14**

Client Sample ID: **SW14**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084004
Lab Project ID: 1194084

Collection Date: 07/24/19 11:20
Received Date: 07/24/19 15:11
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	110		1.05	0.326	mg/L	1		07/26/19 14:49

Batch Information

Analytical Batch: STS6397
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 07/26/19 14:49
Container ID: 1194084004-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		08/06/19 10:14

Batch Information

Analytical Batch: WDA4619
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/06/19 10:14
Container ID: 1194084004-F

Prep Batch: WXX12954
Prep Method: METHOD
Prep Date/Time: 08/05/19 08:33
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	0.0771 J		0.100	0.0310	mg/L	1		07/31/19 14:57

Batch Information

Analytical Batch: WDA4616
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 07/31/19 14:57
Container ID: 1194084004-F

Prep Batch: WXX12946
Prep Method: METHOD
Prep Date/Time: 07/31/19 13:15
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100 U		0.200	0.0500	mg/L	2		07/25/19 11:49
Nitrite-N	0.100 U		0.200	0.0500	mg/L	2		07/25/19 11:49

Results of **SW14**

Client Sample ID: **SW14**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084004
Lab Project ID: 1194084

Collection Date: 07/24/19 11:20
Received Date: 07/24/19 15:11
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2829
Analytical Method: SM21 4500NO3-F
Analyst: DMM
Analytical Date/Time: 07/25/19 11:49
Container ID: 1194084004-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.182		0.0200	0.00500	mg/L	1		07/26/19 15:10

Batch Information

Analytical Batch: WDA4612
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 07/26/19 15:10
Container ID: 1194084004-F

Prep Batch: WXX12939
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/26/19 11:19
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 08/08/2019 12:23:58PM

J flagging is activated

Results of **SW15**

Client Sample ID: **SW15**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084005
Lab Project ID: 1194084

Collection Date: 07/24/19 11:02
Received Date: 07/24/19 15:11
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		07/25/19 12:25

Batch Information

Analytical Batch: BOD6378
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/25/19 12:25
Container ID: 1194084005-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	727		9.09	9.09	col/100mL	1		07/24/19 17:41

Batch Information

Analytical Batch: BTF17514
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/24/19 17:41
Container ID: 1194084005-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	1140		20	20	MPN/100m	20		07/25/19 09:34
Total Coliform	15400		20	20	MPN/100m	20		07/25/19 09:34

Batch Information

Analytical Batch: BTF17518
Analytical Method: SM21 9223B
Analyst: VDL
Analytical Date/Time: 07/25/19 09:34
Container ID: 1194084005-B

Results of **SW15**

Client Sample ID: **SW15**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084005
Lab Project ID: 1194084

Collection Date: 07/24/19 11:02
Received Date: 07/24/19 15:11
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	16.1		1.01	0.313	mg/L	1		07/26/19 14:49

Batch Information

Analytical Batch: STS6397
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 07/26/19 14:49
Container ID: 1194084005-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		08/06/19 10:16

Batch Information

Analytical Batch: WDA4619
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/06/19 10:16
Container ID: 1194084005-F

Prep Batch: WXX12954
Prep Method: METHOD
Prep Date/Time: 08/05/19 08:33
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	0.0698 J		0.100	0.0310	mg/L	1		07/31/19 14:58

Batch Information

Analytical Batch: WDA4616
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 07/31/19 14:58
Container ID: 1194084005-F

Prep Batch: WXX12946
Prep Method: METHOD
Prep Date/Time: 07/31/19 13:15
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100 U		0.200	0.0500	mg/L	2		07/25/19 11:51
Nitrite-N	0.100 U		0.200	0.0500	mg/L	2		07/25/19 11:51

Results of **SW15**

Client Sample ID: **SW15**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084005
Lab Project ID: 1194084

Collection Date: 07/24/19 11:02
Received Date: 07/24/19 15:11
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2829
Analytical Method: SM21 4500NO3-F
Analyst: DMM
Analytical Date/Time: 07/25/19 11:51
Container ID: 1194084005-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0434		0.0200	0.00500	mg/L	1		07/26/19 15:11

Batch Information

Analytical Batch: WDA4612
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 07/26/19 15:11
Container ID: 1194084005-F

Prep Batch: WXX12939
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/26/19 11:19
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Results of **SW16**

Client Sample ID: **SW16**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084006
Lab Project ID: 1194084

Collection Date: 07/24/19 10:43
Received Date: 07/24/19 15:11
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	5.50		2.00	2.00	mg/L	1		07/25/19 12:25

Batch Information

Analytical Batch: BOD6378
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/25/19 12:25
Container ID: 1194084006-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	55		9.09	9.09	col/100mL	1		07/24/19 17:41

Batch Information

Analytical Batch: BTF17514
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/24/19 17:41
Container ID: 1194084006-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	20		20	20	MPN/100m	20		07/25/19 09:34
Total Coliform	26000		20	20	MPN/100m	20		07/25/19 09:34

Batch Information

Analytical Batch: BTF17518
Analytical Method: SM21 9223B
Analyst: VDL
Analytical Date/Time: 07/25/19 09:34
Container ID: 1194084006-B

Results of **SW16**

Client Sample ID: **SW16**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084006
Lab Project ID: 1194084

Collection Date: 07/24/19 10:43
Received Date: 07/24/19 15:11
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	162		2.00	0.620	mg/L	1		07/26/19 14:49

Batch Information

Analytical Batch: STS6397
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 07/26/19 14:49
Container ID: 1194084006-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.712 J		1.00	0.310	mg/L	1		08/06/19 11:12

Batch Information

Analytical Batch: WDA4619
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/06/19 11:12
Container ID: 1194084006-F

Prep Batch: WXX12954
Prep Method: METHOD
Prep Date/Time: 08/05/19 08:33
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		08/06/19 18:15

Batch Information

Analytical Batch: WDA4622
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 08/06/19 18:15
Container ID: 1194084006-F

Prep Batch: WXX12959
Prep Method: METHOD
Prep Date/Time: 08/06/19 16:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100 U		0.200	0.0500	mg/L	2		07/25/19 11:52
Nitrite-N	0.100 U		0.200	0.0500	mg/L	2		07/25/19 11:52

Print Date: 08/08/2019 12:23:58PM

J flagging is activated

Results of **SW16**

Client Sample ID: **SW16**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084006
Lab Project ID: 1194084

Collection Date: 07/24/19 10:43
Received Date: 07/24/19 15:11
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2829
Analytical Method: SM21 4500NO3-F
Analyst: DMM
Analytical Date/Time: 07/25/19 11:52
Container ID: 1194084006-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.143		0.0200	0.00500	mg/L	1		07/26/19 15:11

Batch Information

Analytical Batch: WDA4612
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 07/26/19 15:11
Container ID: 1194084006-F

Prep Batch: WXX12939
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/26/19 11:19
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Results of **SW17**

Client Sample ID: **SW17**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084007
Lab Project ID: 1194084

Collection Date: 07/24/19 12:04
Received Date: 07/24/19 15:11
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		07/25/19 12:25

Batch Information

Analytical Batch: BOD6378
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/25/19 12:25
Container ID: 1194084007-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	1540		9.09	9.09	col/100mL	1		07/24/19 17:41

Batch Information

Analytical Batch: BTF17514
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/24/19 17:41
Container ID: 1194084007-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	690		10	10	MPN/100m	10		07/25/19 09:34
Total Coliform	2850		10	10	MPN/100m	10		07/25/19 09:34

Batch Information

Analytical Batch: BTF17518
Analytical Method: SM21 9223B
Analyst: VDL
Analytical Date/Time: 07/25/19 09:34
Container ID: 1194084007-B

Results of **SW17**

Client Sample ID: **SW17**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084007
Lab Project ID: 1194084

Collection Date: 07/24/19 12:04
Received Date: 07/24/19 15:11
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	38.0		1.02	0.316	mg/L	1		07/26/19 14:49

Batch Information

Analytical Batch: STS6397
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 07/26/19 14:49
Container ID: 1194084007-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.725 J		1.00	0.310	mg/L	1		08/06/19 11:14

Batch Information

Analytical Batch: WDA4619
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/06/19 11:14
Container ID: 1194084007-F

Prep Batch: WXX12954
Prep Method: METHOD
Prep Date/Time: 08/05/19 08:33
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	0.0395 J		0.100	0.0310	mg/L	1		08/06/19 18:16

Batch Information

Analytical Batch: WDA4622
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 08/06/19 18:16
Container ID: 1194084007-F

Prep Batch: WXX12959
Prep Method: METHOD
Prep Date/Time: 08/06/19 16:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	2.25		0.200	0.0500	mg/L	2		07/25/19 11:54
Nitrite-N	0.100 U		0.200	0.0500	mg/L	2		07/25/19 11:54

Print Date: 08/08/2019 12:23:58PM

J flagging is activated

Results of **SW17**

Client Sample ID: **SW17**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084007
Lab Project ID: 1194084

Collection Date: 07/24/19 12:04
Received Date: 07/24/19 15:11
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2829
Analytical Method: SM21 4500NO3-F
Analyst: DMM
Analytical Date/Time: 07/25/19 11:54
Container ID: 1194084007-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.380		0.0200	0.00500	mg/L	1		07/26/19 15:12

Batch Information

Analytical Batch: WDA4612
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 07/26/19 15:12
Container ID: 1194084007-F

Prep Batch: WXX12939
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/26/19 11:19
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Results of **SW18**

Client Sample ID: **SW18**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084008
Lab Project ID: 1194084

Collection Date: 07/24/19 12:22
Received Date: 07/24/19 15:11
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	3.16		2.00	2.00	mg/L	1		07/25/19 12:25

Batch Information

Analytical Batch: BOD6378
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/25/19 12:25
Container ID: 1194084008-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	1020		9.09	9.09	col/100mL	1		07/24/19 17:41

Batch Information

Analytical Batch: BTF17514
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/24/19 17:41
Container ID: 1194084008-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	1080		10	10	MPN/100m	10		07/25/19 09:34
Total Coliform	6490		10	10	MPN/100m	10		07/25/19 09:34

Batch Information

Analytical Batch: BTF17518
Analytical Method: SM21 9223B
Analyst: VDL
Analytical Date/Time: 07/25/19 09:34
Container ID: 1194084008-B

Results of **SW18**

Client Sample ID: **SW18**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084008
Lab Project ID: 1194084

Collection Date: 07/24/19 12:22
Received Date: 07/24/19 15:11
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	15.1		1.02	0.316	mg/L	1		07/26/19 14:49

Batch Information

Analytical Batch: STS6397
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 07/26/19 14:49
Container ID: 1194084008-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.712 J		1.00	0.310	mg/L	1		08/06/19 11:15

Batch Information

Analytical Batch: WDA4619
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/06/19 11:15
Container ID: 1194084008-F

Prep Batch: WXX12954
Prep Method: METHOD
Prep Date/Time: 08/05/19 08:33
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	0.153		0.100	0.0310	mg/L	1		08/06/19 18:18

Batch Information

Analytical Batch: WDA4622
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 08/06/19 18:18
Container ID: 1194084008-F

Prep Batch: WXX12959
Prep Method: METHOD
Prep Date/Time: 08/06/19 16:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	3.54		0.200	0.0500	mg/L	2		07/25/19 12:01
Nitrite-N	0.100 U		0.200	0.0500	mg/L	2		07/25/19 12:01

Print Date: 08/08/2019 12:23:58PM

J flagging is activated

Results of **SW18**

Client Sample ID: **SW18**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084008
Lab Project ID: 1194084

Collection Date: 07/24/19 12:22
Received Date: 07/24/19 15:11
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2829
Analytical Method: SM21 4500NO3-F
Analyst: DMM
Analytical Date/Time: 07/25/19 12:01
Container ID: 1194084008-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.480		0.0200	0.00500	mg/L	1		07/26/19 15:13

Batch Information

Analytical Batch: WDA4612
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 07/26/19 15:13
Container ID: 1194084008-F

Prep Batch: WXX12939
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/26/19 11:19
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Results of **Shaw**

Client Sample ID: **Shaw**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084009
Lab Project ID: 1194084

Collection Date: 07/24/19 13:01
Received Date: 07/24/19 15:11
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		07/25/19 12:25

Batch Information

Analytical Batch: BOD6378
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/25/19 12:25
Container ID: 1194084009-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	156		1.64	1.64	col/100mL	1		07/24/19 17:41

Batch Information

Analytical Batch: BTF17514
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/24/19 17:41
Container ID: 1194084009-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	272		1	1	MPN/100m	1		07/25/19 09:34
Total Coliform	2420		1	1	MPN/100m	1		07/25/19 09:34

Batch Information

Analytical Batch: BTF17518
Analytical Method: SM21 9223B
Analyst: VDL
Analytical Date/Time: 07/25/19 09:34
Container ID: 1194084009-B

Results of **Shaw**

Client Sample ID: **Shaw**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084009
Lab Project ID: 1194084

Collection Date: 07/24/19 13:01
Received Date: 07/24/19 15:11
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	3.84		1.01	0.313	mg/L	1		07/26/19 14:49

Batch Information

Analytical Batch: STS6397
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 07/26/19 14:49
Container ID: 1194084009-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.322 J		1.00	0.310	mg/L	1		08/06/19 11:16

Batch Information

Analytical Batch: WDA4619
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/06/19 11:16
Container ID: 1194084009-F

Prep Batch: WXX12954
Prep Method: METHOD
Prep Date/Time: 08/05/19 08:33
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	0.0378 J		0.100	0.0310	mg/L	1		08/06/19 18:20

Batch Information

Analytical Batch: WDA4622
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 08/06/19 18:20
Container ID: 1194084009-F

Prep Batch: WXX12959
Prep Method: METHOD
Prep Date/Time: 08/06/19 16:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100 U		0.200	0.0500	mg/L	2		07/25/19 12:03
Nitrite-N	0.100 U		0.200	0.0500	mg/L	2		07/25/19 12:03

Print Date: 08/08/2019 12:23:58PM

J flagging is activated

Results of **Shaw**

Client Sample ID: **Shaw**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084009
Lab Project ID: 1194084

Collection Date: 07/24/19 13:01
Received Date: 07/24/19 15:11
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2829
Analytical Method: SM21 4500NO3-F
Analyst: DMM
Analytical Date/Time: 07/25/19 12:03
Container ID: 1194084009-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0343		0.0200	0.00500	mg/L	1		07/26/19 15:14

Batch Information

Analytical Batch: WDA4612
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 07/26/19 15:14
Container ID: 1194084009-F

Prep Batch: WXX12939
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/26/19 11:19
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 08/08/2019 12:23:58PM

J flagging is activated

Results of **Dup 1**

Client Sample ID: **Dup 1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084010
Lab Project ID: 1194084

Collection Date: 07/24/19 12:22
Received Date: 07/24/19 15:11
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	3.42		2.00	2.00	mg/L	1		07/25/19 12:25

Batch Information

Analytical Batch: BOD6378
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 07/25/19 12:25
Container ID: 1194084010-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	1030		9.09	9.09	col/100mL	1		07/24/19 17:41

Batch Information

Analytical Batch: BTF17514
Analytical Method: SM21 9222D
Analyst: A.L
Analytical Date/Time: 07/24/19 17:41
Container ID: 1194084010-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	2050		10	10	MPN/100m	10		07/25/19 09:34
Total Coliform	8160		10	10	MPN/100m	10		07/25/19 09:34

Batch Information

Analytical Batch: BTF17518
Analytical Method: SM21 9223B
Analyst: VDL
Analytical Date/Time: 07/25/19 09:34
Container ID: 1194084010-B

Results of **Dup 1**

Client Sample ID: **Dup 1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084010
Lab Project ID: 1194084

Collection Date: 07/24/19 12:22
Received Date: 07/24/19 15:11
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	14.1		1.03	0.320	mg/L	1		07/26/19 14:49

Batch Information

Analytical Batch: STS6397
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 07/26/19 14:49
Container ID: 1194084010-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.792 J		1.00	0.310	mg/L	1		08/06/19 11:17

Batch Information

Analytical Batch: WDA4619
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/06/19 11:17
Container ID: 1194084010-F

Prep Batch: WXX12954
Prep Method: METHOD
Prep Date/Time: 08/05/19 08:33
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	0.149		0.100	0.0310	mg/L	1		08/06/19 18:25

Batch Information

Analytical Batch: WDA4622
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 08/06/19 18:25
Container ID: 1194084010-F

Prep Batch: WXX12959
Prep Method: METHOD
Prep Date/Time: 08/06/19 16:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	3.47		0.200	0.0500	mg/L	2		07/25/19 12:05
Nitrite-N	0.100 U		0.200	0.0500	mg/L	2		07/25/19 12:05

Print Date: 08/08/2019 12:23:58PM

J flagging is activated

Results of **Dup 1**

Client Sample ID: **Dup 1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1194084010
Lab Project ID: 1194084

Collection Date: 07/24/19 12:22
Received Date: 07/24/19 15:11
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2829
Analytical Method: SM21 4500NO3-F
Analyst: DMM
Analytical Date/Time: 07/25/19 12:05
Container ID: 1194084010-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.490		0.0200	0.00500	mg/L	1		07/26/19 15:15

Batch Information

Analytical Batch: WDA4612
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 07/26/19 15:15
Container ID: 1194084010-F

Prep Batch: WXX12939
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/26/19 11:19
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Method Blank

Blank ID: MB for HBN 1796896 [BOD/6378]
Blank Lab ID: 1521124

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1194084001, 1194084002, 1194084003, 1194084004, 1194084005, 1194084006, 1194084007, 1194084008, 1194084009, 1194084010

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: BOD6378
Analytical Method: SM21 5210B
Instrument:
Analyst: A.L
Analytical Date/Time: 7/25/2019 12:25:27PM

Print Date: 08/08/2019 12:24:00PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1194084 [BOD6378]
Blank Spike Lab ID: 1521125
Date Analyzed: 07/25/2019 12:25

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1194084001, 1194084002, 1194084003, 1194084004, 1194084005, 1194084006, 1194084007, 1194084008, 1194084009, 1194084010

Results by **SM21 5210B**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Biochemical Oxygen Demand	198	201	102	(84.6-115.4

Batch Information

Analytical Batch: **BOD6378**
Analytical Method: **SM21 5210B**
Instrument:
Analyst: **A.L**

Print Date: 08/08/2019 12:24:01PM

Method Blank

Blank ID: MB for HBN 1796844 [BTF/17514]
Blank Lab ID: 1520913

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1194084001, 1194084002, 1194084003, 1194084004, 1194084005, 1194084006, 1194084007, 1194084008, 1194084009, 1194084010

Results by **SM21 9222D**

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

Batch Information

Analytical Batch: BTF17514
Analytical Method: SM21 9222D
Instrument:
Analyst: A.L
Analytical Date/Time: 7/24/2019 5:41:00PM

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Method Blank

Blank ID: MB for HBN 1796844 [BTF/17514]
Blank Lab ID: 1520915

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1194084001, 1194084002, 1194084003, 1194084004, 1194084005, 1194084006, 1194084007, 1194084008, 1194084009, 1194084010

Results by **SM21 9222D**

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

Batch Information

Analytical Batch: BTF17514
Analytical Method: SM21 9222D
Instrument:
Analyst: A.L
Analytical Date/Time: 7/24/2019 6:32:00PM

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Method Blank

Blank ID: MB for HBN 1796897 [BTF/17518]
Blank Lab ID: 1521126

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1194084001, 1194084002, 1194084003, 1194084004, 1194084005, 1194084006, 1194084007, 1194084008, 1194084009, 1194084010

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: BTF17518
Analytical Method: SM21 9223B
Instrument:
Analyst: VDL
Analytical Date/Time: 7/25/2019 9:34:37AM

Method Blank

Blank ID: MB for HBN 1796959 [STS/6395]
Blank Lab ID: 1521437

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1194084001, 1194084002, 1194084003, 1194084004, 1194084005, 1194084006, 1194084007, 1194084008, 1194084009, 1194084010

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: STS6397
Analytical Method: SM21 2540D
Instrument:
Analyst: EWW
Analytical Date/Time: 7/26/2019 2:49:22PM

Duplicate Sample Summary

Original Sample ID: 1194141005
Duplicate Sample ID: 1521438
QC for Samples:

Analysis Date: 07/26/2019 14:49
Matrix: Water (Surface, Eff., Ground)

Results by **SM21 2540D**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Suspended Solids	225	244	mg/L	8.00*	(< 5)

Batch Information

Analytical Batch: STS6397
Analytical Method: SM21 2540D
Instrument:
Analyst: EWW

Print Date: 08/08/2019 12:24:06PM

Duplicate Sample Summary

Original Sample ID: 1194082001
Duplicate Sample ID: 1521441

Analysis Date: 07/26/2019 14:49
Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1194084001, 1194084002, 1194084003, 1194084004, 1194084005, 1194084006, 1194084007, 1194084008, 1194084009, 1194084010

Results by **SM21 2540D**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Suspended Solids	65.3	68.3	mg/L	4.50	(< 5)

Batch Information

Analytical Batch: STS6397
Analytical Method: SM21 2540D
Instrument:
Analyst: EWW

Print Date: 08/08/2019 12:24:06PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1194084 [STS6397]
Blank Spike Lab ID: 1521439
Date Analyzed: 07/26/2019 14:49

Spike Duplicate ID: LCSD for HBN 1194084 [STS6397]
Spike Duplicate Lab ID: 1521440
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1194084001, 1194084002, 1194084003, 1194084004, 1194084005, 1194084006, 1194084007, 1194084008, 1194084009, 1194084010

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	23.7	95	25	23.6	94	(75-125)	0.42	(< 5)

Batch Information

Analytical Batch: **STS6397**
Analytical Method: **SM21 2540D**
Instrument:
Analyst: **EWW**

Print Date: 08/08/2019 12:24:07PM

Method Blank

Blank ID: MB for HBN 1796913 (WFI/2829)
Blank Lab ID: 1521215

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1194084001, 1194084002, 1194084003, 1194084004, 1194084005, 1194084006, 1194084007, 1194084008, 1194084009, 1194084010

Results by **SM21 4500NO3-F**

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: WFI2829
Analytical Method: SM21 4500NO3-F
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 7/25/2019 11:35:28AM

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Method Blank

Blank ID: MB for HBN 1796913 (WFI/2829) Matrix: Water (Surface, Eff., Ground)
Blank Lab ID: 1521217

QC for Samples:
1194084001, 1194084002, 1194084003, 1194084004, 1194084005, 1194084006, 1194084007, 1194084008, 1194084009, 1194084010

Results by **SM21 4500NO3-F**

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: WFI2829
Analytical Method: SM21 4500NO3-F
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 7/25/2019 12:20:59PM

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Method Blank

Blank ID: MB for HBN 1796913 (WFI/2829)
Blank Lab ID: 1521219

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

Results by **SM21 4500NO3-F**

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: WFI2829
Analytical Method: SM21 4500NO3-F
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 7/25/2019 1:59:55PM

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Blank Spike Summary

Blank Spike ID: LCS for HBN 1194084 [WFI2829]
Blank Spike Lab ID: 1521214
Date Analyzed: 07/25/2019 11:33

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1194084001, 1194084002, 1194084003, 1194084004, 1194084005, 1194084006, 1194084007, 1194084008, 1194084009, 1194084010

Results by **SM21 4500NO3-F**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Nitrate-N	2.5	2.58	103	(70-130)
Nitrite-N	2.5	2.54	102	(90-110)
Total Nitrate/Nitrite-N	5	5.12	102	(90-110)

Batch Information

Analytical Batch: **WFI2829**
Analytical Method: **SM21 4500NO3-F**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Print Date: 08/08/2019 12:24:12PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1194084 [WFI2829]
Blank Spike Lab ID: 1521216
Date Analyzed: 07/25/2019 12:19

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1194084001, 1194084002, 1194084003, 1194084004, 1194084005, 1194084006, 1194084007, 1194084008, 1194084009, 1194084010

Results by **SM21 4500NO3-F**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Nitrate-N	2.5	2.78	111	(70-130)
Nitrite-N	2.5	2.56	102	(90-110)
Total Nitrate/Nitrite-N	5	5.34	107	(90-110)

Batch Information

Analytical Batch: **WFI2829**
Analytical Method: **SM21 4500NO3-F**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Blank Spike Summary

Blank Spike ID: LCS for HBN 1194084 [WFI2829]
Blank Spike Lab ID: 1521218
Date Analyzed: 07/25/2019 13:58

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

Results by **SM21 4500NO3-F**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Nitrate-N	2.5	2.60	104	(70-130)
Nitrite-N	2.5	2.51	100	(90-110)
Total Nitrate/Nitrite-N	5	5.11	102	(90-110)

Batch Information

Analytical Batch: **WFI2829**
Analytical Method: **SM21 4500NO3-F**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Matrix Spike Summary

Original Sample ID: 1194084001
MS Sample ID: 1521174 MS
MSD Sample ID: 1521175 MSD

Analysis Date: 07/25/2019 11:40
Analysis Date: 07/25/2019 11:42
Analysis Date: 07/25/2019 11:44
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1194084001, 1194084002, 1194084003, 1194084004, 1194084005, 1194084006, 1194084007, 1194084008, 1194084009, 1194084010

Results by **SM21 4500NO3-F**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)						
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)		CL	RPD (%)	RPD CL
Nitrate-N	0.100U	2.50	2.39	96	2.50	2.27	91		70-130	5.20	(< 25)
Nitrite-N	0.100U	2.50	2.44	98	2.50	2.23	89	*	90-110	9.00	(< 25)

Batch Information

Analytical Batch: WFI2829
Analytical Method: SM21 4500NO3-F
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 7/25/2019 11:42:29AM

Print Date: 08/08/2019 12:24:12PM

Matrix Spike Summary

Original Sample ID: 1193920001
MS Sample ID: 1521177 MS
MSD Sample ID: 1521178 MSD

Analysis Date: 07/25/2019 13:17
Analysis Date: 07/25/2019 13:19
Analysis Date: 07/25/2019 13:21
Matrix: Drinking Water

QC for Samples: 1194084002, 1194084003, 1194084004, 1194084005, 1194084006, 1194084007, 1194084008, 1194084009, 1194084010

Results by **SM21 4500NO3-F**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Nitrate/Nitrite-N	0.200U	5.00	7.26	145 *	5.00	6.30	126 *	90-110	14.30	(< 25)

Batch Information

Analytical Batch: WFI2829
Analytical Method: SM21 4500NO3-F
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 7/25/2019 1:19:39PM

Print Date: 08/08/2019 12:24:12PM

Method Blank

Blank ID: MB for HBN 1797034 [WXX/12939]
Blank Lab ID: 1521688

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1194084001, 1194084002, 1194084003, 1194084004, 1194084005, 1194084006, 1194084007, 1194084008, 1194084009, 1194084010

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: WDA4612
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 7/26/2019 3:00:57PM

Prep Batch: WXX12939
Prep Method: SM21 4500P-B,E
Prep Date/Time: 7/26/2019 11:19:00AM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1194084 [WXX12939]
Blank Spike Lab ID: 1521689
Date Analyzed: 07/26/2019 15:01

Spike Duplicate ID: LCSD for HBN 1194084 [WXX12939]
Spike Duplicate Lab ID: 1521690
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1194084001, 1194084002, 1194084003, 1194084004, 1194084005, 1194084006, 1194084007, 1194084008, 1194084009, 1194084010

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	0.178	89	0.2	0.184	92	(75-125)	3.30	(< 25)

Batch Information

Analytical Batch: **WDA4612**
Analytical Method: **SM21 4500P-B,E**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX12939**
Prep Method: **SM21 4500P-B,E**
Prep Date/Time: **07/26/2019 11:19**
Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 f 907.561.5301 www.us.sgs.com

Matrix Spike Summary

Original Sample ID: 1194084002
MS Sample ID: 1521691 MS
MSD Sample ID: 1521692 MSD

Analysis Date: 07/26/2019 15:04
Analysis Date: 07/26/2019 15:07
Analysis Date: 07/26/2019 15:08
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1194084001, 1194084002, 1194084003, 1194084004, 1194084005, 1194084006, 1194084007, 1194084008, 1194084009, 1194084010

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	0.286	0.200	.48	97	0.200	0.436	75	*	75-125	9.50	(< 25)

Batch Information

Analytical Batch: WDA4612
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 7/26/2019 3:07:51PM

Prep Batch: WXX12939
Prep Method: Total Phosphorus (W) Ext.
Prep Date/Time: 7/26/2019 11:19:00AM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 08/08/2019 12:24:16PM

Method Blank

Blank ID: MB for HBN 1797295 [WXX/12946]
Blank Lab ID: 1522813

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1194084001, 1194084002, 1194084003, 1194084004, 1194084005

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: WDA4616
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 7/31/2019 2:23:48PM

Prep Batch: WXX12946
Prep Method: METHOD
Prep Date/Time: 7/31/2019 1:15:00PM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Blank Spike Summary

Blank Spike ID: LCS for HBN 1194084 [WXX12946]
Blank Spike Lab ID: 1522814
Date Analyzed: 07/31/2019 14:25

Spike Duplicate ID: LCSD for HBN 1194084 [WXX12946]
Spike Duplicate Lab ID: 1522815
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1194084001, 1194084002, 1194084003, 1194084004, 1194084005

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	1.01	101	1	1.02	102	(75-125)	0.70	(< 25)

Batch Information

Analytical Batch: **WDA4616**
Analytical Method: **SM21 4500-NH3 G**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX12946**
Prep Method: **METHOD**
Prep Date/Time: **07/31/2019 13:15**
Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 f 907.561.5301 www.us.sgs.com

Matrix Spike Summary

Original Sample ID: 1194035001
MS Sample ID: 1522816 MS
MSD Sample ID: 1522817 MSD

Analysis Date: 07/31/2019 14:28
Analysis Date: 07/31/2019 14:33
Analysis Date: 07/31/2019 14:35
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1194084001, 1194084002, 1194084003, 1194084004, 1194084005

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	0.178	1.00	1.01	83	1.00	1.30	112	75-125	24.80	(< 25)

Batch Information

Analytical Batch: WDA4616
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 7/31/2019 2:33:51PM

Prep Batch: WXX12946
Prep Method: Ammonia by SM21 4500F prep (W)
Prep Date/Time: 7/31/2019 1:15:00PM
Prep Initial Wt./Vol.: 6.00mL
Prep Extract Vol: 6.00mL

Print Date: 08/08/2019 12:24:20PM

Method Blank

Blank ID: MB for HBN 1797500 [WXX/12954]
Blank Lab ID: 1523708

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1194084001, 1194084002, 1194084003, 1194084004, 1194084005, 1194084006, 1194084007, 1194084008, 1194084009, 1194084010

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: WDA4619
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 8/6/2019 9:48:40AM

Prep Batch: WXX12954
Prep Method: METHOD
Prep Date/Time: 8/5/2019 8:33:00AM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Blank Spike Summary

Blank Spike ID: LCS for HBN 1194084 [WXX12954]
Blank Spike Lab ID: 1523709
Date Analyzed: 08/06/2019 09:49

Spike Duplicate ID: LCSD for HBN 1194084 [WXX12954]
Spike Duplicate Lab ID: 1523710
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1194084001, 1194084002, 1194084003, 1194084004, 1194084005, 1194084006, 1194084007, 1194084008, 1194084009, 1194084010

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	3.90	97	4	4.13	103	(75-125)	5.80	(< 25)

Batch Information

Analytical Batch: **WDA4619**
Analytical Method: **SM21 4500-N D**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX12954**
Prep Method: **METHOD**
Prep Date/Time: **08/05/2019 08:33**
Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 f 907.561.5301 www.us.sgs.com

Matrix Spike Summary

Original Sample ID: 1194035003
MS Sample ID: 1523711 MS
MSD Sample ID: 1523712 MSD

Analysis Date: 08/06/2019 9:55
Analysis Date: 08/06/2019 9:56
Analysis Date: 08/06/2019 9:57
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1194084001, 1194084002, 1194084003, 1194084004, 1194084005, 1194084006, 1194084007, 1194084008, 1194084009, 1194084010

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	0.841J	4.00	5	104	4.00	4.61	94	75-125	8.20	(< 25)

Batch Information

Analytical Batch: WDA4619
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 8/6/2019 9:56:32AM

Prep Batch: WXX12954
Prep Method: Distillation TKN by Phenate (W)
Prep Date/Time: 8/5/2019 8:33:00AM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 08/08/2019 12:24:24PM

Method Blank

Blank ID: MB for HBN 1797573 [WXX/12959]
Blank Lab ID: 1524031

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1194084006, 1194084007, 1194084008, 1194084009, 1194084010

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: WDA4622
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 8/6/2019 6:05:10PM

Prep Batch: WXX12959
Prep Method: METHOD
Prep Date/Time: 8/6/2019 4:30:00PM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 **f** 907.561.5301 www.us.sgs.com

Blank Spike Summary

Blank Spike ID: LCS for HBN 1194084 [WXX12959]
Blank Spike Lab ID: 1524032
Date Analyzed: 08/06/2019 18:06

Spike Duplicate ID: LCSD for HBN 1194084 [WXX12959]
Spike Duplicate Lab ID: 1524033
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1194084006, 1194084007, 1194084008, 1194084009, 1194084010

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	0.972	97	1	0.996	100	(75-125)	2.50	(< 25)

Batch Information

Analytical Batch: **WDA4622**
Analytical Method: **SM21 4500-NH3 G**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX12959**
Prep Method: **METHOD**
Prep Date/Time: **08/06/2019 16:30**
Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

SGS North America Inc.
200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 f 907.561.5301 www.us.sgs.com

Matrix Spike Summary

Original Sample ID: 1194281009
MS Sample ID: 1524034 MS
MSD Sample ID: 1524035 MSD

Analysis Date: 08/06/2019 18:10
Analysis Date: 08/06/2019 18:11
Analysis Date: 08/06/2019 18:13
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1194084006, 1194084007, 1194084008, 1194084009, 1194084010

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	0.0500U	1.00	.986	99	1.00	1.01	101	75-125	2.70	(< 25)

Batch Information

Analytical Batch: WDA4622
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 8/6/2019 6:11:54PM

Prep Batch: WXX12959
Prep Method: Ammonia by SM21 4500F prep (W)
Prep Date/Time: 8/6/2019 4:30:00PM
Prep Initial Wt./Vol.: 6.00mL
Prep Extract Vol: 6.00mL

Print Date: 08/08/2019 12:24:28PM

SGS

1194084

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 Alward PHONE NO: 343-5202

PROJECT NAME: Wasilla WWTP 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	# CONTAINERS	Type C = COMP G = GRAB MI = Multi Incre-mental Soils	Preservative: 1	1	1	Na2SO4	Na2SO4				REMARKS/ LOC ID
							BOD	TSS	Nitrate/Nitrite	FC 1x10	TC (Quanti)	TKN/Ammonia			
1	AF SW11	7/24/19	948	water	6	G	1	1	1	1	1	1			
2	AF SW12		1015				1	1	1	1	1	1			
3	AF SW13		1025				1	1	1	1	1	1			
4	AF SW14		1120				1	1	1	1	1	1			
5	AF SW15		1102				1	1	1	1	1	1			
6	AF SW16		1043				1	1	1	1	1	1			
7	AF SW17		1204				1	1	1	1	1	1			
8	AF SW18		1222				1	1	1	1	1	1			
9	AF Shaw		1301				1	1	1	1	1	1			
10	AF Dup 1		1222				1	1	1	1	1	1			

Section 5

	Date	Time	
Relinquished By: (1)	7/24/19	1510	Received By:
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date 7.24.19	Time 1511	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: 5.2 c D50

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

11.2 c D50

e-Sample Receipt Form

SGS Workorder #: **1194084**

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?		
Yes **Exemption permitted if chilled & collected <8 hours ago, or for samples where chilling is not required		
Temperature blank compliant* (i.e., 0-6 °C after CF)?	Yes	Cooler ID: 1 @ 5.2 °C Therm. ID: D50
	N/A	Cooler ID: 2 @ 11.2 °C Therm. ID: D50
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?	Yes	
If <0°C, were sample containers ice free?	N/A	
Note: Identify containers received at non-compliant temperature . Use form FS-0029 if more space is needed.		
Holding Time / Documentation / Sample Condition Requirements		Note: Refer to form F-083 "Sample Guide" for specific holding times.
Were samples received within holding time?	Yes	
Do samples **match COC**** (i.e.,sample IDs,dates/times collected)?	Yes	
**Note: If times differ <1hr, record details & login per COC.		
***Note: If sample information on containers differs from COC, SGS will default to COC information		
Were analytical requests clear? (i.e., method is specified for analyses with multiple option for analysis (Ex: BTEX, Metals)	Yes	
		***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
1194084001-A	Na2S2O3 for Chlorine Redu	OK			
1194084001-B	Na2S2O3 for Chlorine Redu	OK			
1194084001-C	No Preservative Required	OK			
1194084001-D	No Preservative Required	OK			
1194084001-E	No Preservative Required	OK			
1194084001-F	H2SO4 to pH < 2	OK			
1194084002-A	Na2S2O3 for Chlorine Redu	OK			
1194084002-B	Na2S2O3 for Chlorine Redu	OK			
1194084002-C	No Preservative Required	OK			
1194084002-D	No Preservative Required	OK			
1194084002-E	No Preservative Required	OK			
1194084002-F	H2SO4 to pH < 2	OK			
1194084003-A	Na2S2O3 for Chlorine Redu	OK			
1194084003-B	Na2S2O3 for Chlorine Redu	OK			
1194084003-C	No Preservative Required	OK			
1194084003-D	No Preservative Required	OK			
1194084003-E	No Preservative Required	OK			
1194084003-F	H2SO4 to pH < 2	OK			
1194084004-A	Na2S2O3 for Chlorine Redu	OK			
1194084004-B	Na2S2O3 for Chlorine Redu	OK			
1194084004-C	No Preservative Required	OK			
1194084004-D	No Preservative Required	OK			
1194084004-E	No Preservative Required	OK			
1194084004-F	H2SO4 to pH < 2	OK			
1194084005-A	Na2S2O3 for Chlorine Redu	OK			
1194084005-B	Na2S2O3 for Chlorine Redu	OK			
1194084005-C	No Preservative Required	OK			
1194084005-D	No Preservative Required	OK			
1194084005-E	No Preservative Required	OK			
1194084005-F	H2SO4 to pH < 2	OK			
1194084006-A	Na2S2O3 for Chlorine Redu	OK			
1194084006-B	Na2S2O3 for Chlorine Redu	OK			
1194084006-C	No Preservative Required	OK			
1194084006-D	No Preservative Required	OK			
1194084006-E	No Preservative Required	OK			
1194084006-F	H2SO4 to pH < 2	OK			
1194084007-A	Na2S2O3 for Chlorine Redu	OK			
1194084007-B	Na2S2O3 for Chlorine Redu	OK			
1194084007-C	No Preservative Required	OK			
1194084007-D	No Preservative Required	OK			
1194084007-E	No Preservative Required	OK			
1194084007-F	H2SO4 to pH < 2	OK			
1194084008-A	Na2S2O3 for Chlorine Redu	OK			
1194084008-B	Na2S2O3 for Chlorine Redu	OK			
1194084008-C	No Preservative Required	OK			
1194084008-D	No Preservative Required	OK			
1194084008-E	No Preservative Required	OK			
1194084008-F	H2SO4 to pH < 2	OK			

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition
1194084009-A	Na2S2O3 for Chlorine Redu	OK			
1194084009-B	Na2S2O3 for Chlorine Redu	OK			
1194084009-C	No Preservative Required	OK			
1194084009-D	No Preservative Required	OK			
1194084009-E	No Preservative Required	OK			
1194084009-F	H2SO4 to pH < 2	OK			
1194084010-A	Na2S2O3 for Chlorine Redu	OK			
1194084010-B	Na2S2O3 for Chlorine Redu	OK			
1194084010-C	No Preservative Required	OK			
1194084010-D	No Preservative Required	OK			
1194084010-E	No Preservative Required	OK			
1194084010-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.