Laboratory Report of Analysis

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

Report Number: **1181726**

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

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

Case Narrative

SGS Client: **Stantec Consulting Services Inc.**
SGS Project: **1181726**
Project Name/Site: **Wasilla WWTP**
Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

1181706002DUP (1443255) DUP

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

MB for HBN 1778834 [BOD/6024] (1443055) MB

5210B – BOD - MB (0.64mg/L) is greater than the recommended limit of 0.2 mg/L. Samples >10X the MB are not significantly affected. Samples <10X the MB results may be biased high.

*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. 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). 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.

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

Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
SW1	1181726001	04/24/2018	04/24/2018	Water (Surface, Eff., Ground)
SW2	1181726002	04/24/2018	04/24/2018	Water (Surface, Eff., Ground)
SW5	1181726003	04/24/2018	04/24/2018	Water (Surface, Eff., Ground)
SW17	1181726004	04/24/2018	04/24/2018	Water (Surface, Eff., Ground)
SW18	1181726005	04/24/2018	04/24/2018	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: **SW1**
Lab Sample ID: 1181726001

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	21.2	mg/L
	E. Coli	4	MPN/100mL
	Total Coliform	110	MPN/100mL
Waters Department	Ammonia-N	0.125	mg/L
	Nitrate-N	0.0304J	mg/L
	Total Kjeldahl Nitrogen	1.57	mg/L
	Total Phosphorus	0.183	mg/L
	Total Suspended Solids	11.2	mg/L

Client Sample ID: **SW2**
Lab Sample ID: 1181726002

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	7.05	mg/L
	E. Coli	1	MPN/100mL
	Fecal Coliform	2.0	col/100mL
	Total Coliform	411	MPN/100mL
Waters Department	Ammonia-N	0.0320J	mg/L
	Nitrate-N	0.0474J	mg/L
	Total Kjeldahl Nitrogen	1.31	mg/L
	Total Phosphorus	0.0796	mg/L
	Total Suspended Solids	8.40	mg/L

Client Sample ID: **SW5**
Lab Sample ID: 1181726003

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	2.65	mg/L
	E. Coli	12	MPN/100mL
	Fecal Coliform	5.0	col/100mL
	Total Coliform	228	MPN/100mL
Waters Department	Ammonia-N	0.0791J	mg/L
	Nitrate-N	0.0372J	mg/L
	Total Kjeldahl Nitrogen	0.698J	mg/L
	Total Phosphorus	0.0392	mg/L
	Total Suspended Solids	3.94	mg/L

Client Sample ID: **SW17**
Lab Sample ID: 1181726004

	Parameter	Result	Units
Microbiology Laboratory	E. Coli	5	MPN/100mL
	Fecal Coliform	11	col/100mL
	Total Coliform	154	MPN/100mL
Waters Department	Ammonia-N	0.144	mg/L
	Nitrate-N	1.07	mg/L
	Total Kjeldahl Nitrogen	0.907J	mg/L
	Total Phosphorus	0.209	mg/L
	Total Suspended Solids	3.75	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: **SW18**
Lab Sample ID: 1181726005

Microbiology Laboratory

Waters Department

Parameter	Result	Units
Biochemical Oxygen Demand	2.31	mg/L
E. Coli	5	MPN/100mL
Fecal Coliform	4.0	col/100mL
Total Coliform	127	MPN/100mL
Ammonia-N	0.788	mg/L
Nitrate-N	1.74	mg/L
Nitrite-N	0.0274J	mg/L
Total Kjeldahl Nitrogen	2.13	mg/L
Total Phosphorus	1.46	mg/L
Total Suspended Solids	5.05	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: 1181726001
Lab Project ID: 1181726

Collection Date: 04/24/18 11:32
Received Date: 04/24/18 17:11
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	21.2		2.00	2.00	mg/L	1		04/25/18 16:39

Batch Information

Analytical Batch: BOD6024
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 04/25/18 16:39
Container ID: 1181726001-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	1.00 U		1.00	1.00	col/100mL	1		04/24/18 18:01

Batch Information

Analytical Batch: BTF16499
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 04/24/18 18:01
Container ID: 1181726001-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	4		1	1	MPN/100m	1		04/24/18 18:12
Total Coliform	110		10	10	MPN/100m	10		04/24/18 18:12

Batch Information

Analytical Batch: BTF16497
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 04/24/18 18:12
Container ID: 1181726001-D

Results of **SW1**

Client Sample ID: **SW1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181726001
Lab Project ID: 1181726

Collection Date: 04/24/18 11:32
Received Date: 04/24/18 17:11
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	11.2		4.00	1.24	mg/L	1		04/26/18 18:32

Batch Information

Analytical Batch: STS5857
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 04/26/18 18:32
Container ID: 1181726001-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	1.57		1.00	0.310	mg/L	1		05/03/18 10:12

Batch Information

Analytical Batch: WDA4262
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/03/18 10:12
Container ID: 1181726001-F

Prep Batch: WXX12300
Prep Method: METHOD
Prep Date/Time: 05/02/18 11:26
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	0.125		0.100	0.0310	mg/L	1		04/26/18 16:16

Batch Information

Analytical Batch: WDA4251
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 04/26/18 16:16
Container ID: 1181726001-F

Prep Batch: WXX12286
Prep Method: METHOD
Prep Date/Time: 04/26/18 14:05
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	0.0304	J	0.100	0.0250	mg/L	2		04/24/18 18:26
Nitrite-N	0.0500	U	0.100	0.0250	mg/L	2		04/24/18 18:26

Print Date: 05/04/2018 3:18:31PM

J flagging is activated

Results of **SW1**

Client Sample ID: **SW1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181726001
Lab Project ID: 1181726

Collection Date: 04/24/18 11:32
Received Date: 04/24/18 17:11
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2675
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 04/24/18 18:26
Container ID: 1181726001-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.183		0.0200	0.00500	mg/L	1		04/30/18 16:13

Batch Information

Analytical Batch: WDA4254
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/30/18 16:13
Container ID: 1181726001-F

Prep Batch: WXX12291
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/30/18 13:10
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 **SW2**

Client Sample ID: **SW2**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181726002
Lab Project ID: 1181726

Collection Date: 04/24/18 10:42
Received Date: 04/24/18 17:11
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	7.05		2.00	2.00	mg/L	1		04/25/18 16:39

Batch Information

Analytical Batch: BOD6024
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 04/25/18 16:39
Container ID: 1181726002-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	2.0		1.00	1.00	col/100mL	1		04/24/18 18:01

Batch Information

Analytical Batch: BTF16499
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 04/24/18 18:01
Container ID: 1181726002-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	1		1	1	MPN/100m	1		04/24/18 18:12
Total Coliform	411		1	1	MPN/100m	1		04/24/18 18:12

Batch Information

Analytical Batch: BTF16497
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 04/24/18 18:12
Container ID: 1181726002-D

Results of **SW2**

Client Sample ID: **SW2**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181726002
Lab Project ID: 1181726

Collection Date: 04/24/18 10:42
Received Date: 04/24/18 17:11
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	8.40		2.00	0.620	mg/L	1		04/26/18 18:32

Batch Information

Analytical Batch: STS5857
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 04/26/18 18:32
Container ID: 1181726002-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	1.31		1.00	0.310	mg/L	1		05/03/18 10:16

Batch Information

Analytical Batch: WDA4262
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/03/18 10:16
Container ID: 1181726002-F

Prep Batch: WXX12300
Prep Method: METHOD
Prep Date/Time: 05/02/18 11:26
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	0.0320	J	0.100	0.0310	mg/L	1		04/26/18 16:18

Batch Information

Analytical Batch: WDA4251
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 04/26/18 16:18
Container ID: 1181726002-F

Prep Batch: WXX12286
Prep Method: METHOD
Prep Date/Time: 04/26/18 14:05
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	0.0474	J	0.100	0.0250	mg/L	2		04/24/18 18:28
Nitrite-N	0.0500	U	0.100	0.0250	mg/L	2		04/24/18 18:28

Print Date: 05/04/2018 3:18:31PM

J flagging is activated

Results of **SW2**

Client Sample ID: **SW2**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181726002
Lab Project ID: 1181726

Collection Date: 04/24/18 10:42
Received Date: 04/24/18 17:11
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2675
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 04/24/18 18:28
Container ID: 1181726002-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0796		0.0200	0.00500	mg/L	1		04/30/18 16:14

Batch Information

Analytical Batch: WDA4254
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/30/18 16:14
Container ID: 1181726002-F

Prep Batch: WXX12291
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/30/18 13:10
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/04/2018 3:18:31PM

J flagging is activated

Results of **SW5**

Client Sample ID: **SW5**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181726003
Lab Project ID: 1181726

Collection Date: 04/24/18 10:14
Received Date: 04/24/18 17:11
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	2.65		2.00	2.00	mg/L	1		04/25/18 16:39

Batch Information

Analytical Batch: BOD6024
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 04/25/18 16:39
Container ID: 1181726003-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	5.0		1.00	1.00	col/100mL	1		04/24/18 18:01

Batch Information

Analytical Batch: BTF16499
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 04/24/18 18:01
Container ID: 1181726003-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	12		1	1	MPN/100m	1		04/24/18 18:12
Total Coliform	228		1	1	MPN/100m	1		04/24/18 18:12

Batch Information

Analytical Batch: BTF16497
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 04/24/18 18:12
Container ID: 1181726003-D

Results of **SW5**

Client Sample ID: **SW5**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181726003
Lab Project ID: 1181726

Collection Date: 04/24/18 10:14
Received Date: 04/24/18 17:11
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	3.94		1.06	0.330	mg/L	1		04/26/18 18:32

Batch Information

Analytical Batch: STS5857
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 04/26/18 18:32
Container ID: 1181726003-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.698 J		1.00	0.310	mg/L	1		05/03/18 10:17

Batch Information

Analytical Batch: WDA4262
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/03/18 10:17
Container ID: 1181726003-F

Prep Batch: WXX12300
Prep Method: METHOD
Prep Date/Time: 05/02/18 11:26
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	0.0791 J		0.100	0.0310	mg/L	1		04/26/18 16:20

Batch Information

Analytical Batch: WDA4251
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 04/26/18 16:20
Container ID: 1181726003-F

Prep Batch: WXX12286
Prep Method: METHOD
Prep Date/Time: 04/26/18 14:05
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	0.0372 J		0.100	0.0250	mg/L	2		04/24/18 18:29
Nitrite-N	0.0500 U		0.100	0.0250	mg/L	2		04/24/18 18:29

Print Date: 05/04/2018 3:18:31PM

J flagging is activated

Results of **SW5**

Client Sample ID: **SW5**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181726003
Lab Project ID: 1181726

Collection Date: 04/24/18 10:14
Received Date: 04/24/18 17:11
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2675
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 04/24/18 18:29
Container ID: 1181726003-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0392		0.0200	0.00500	mg/L	1		04/30/18 17:17

Batch Information

Analytical Batch: WDA4255
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/30/18 17:17
Container ID: 1181726003-F

Prep Batch: WXX12292
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/30/18 14:17
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: 1181726004
Lab Project ID: 1181726

Collection Date: 04/24/18 15:33
Received Date: 04/24/18 17:11
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		04/25/18 16:39

Batch Information

Analytical Batch: BOD6024
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 04/25/18 16:39
Container ID: 1181726004-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	11		1.00	1.00	col/100mL	1		04/24/18 18:01

Batch Information

Analytical Batch: BTF16499
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 04/24/18 18:01
Container ID: 1181726004-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	5		1	1	MPN/100m	1		04/24/18 18:12
Total Coliform	154		1	1	MPN/100m	1		04/24/18 18:12

Batch Information

Analytical Batch: BTF16497
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 04/24/18 18:12
Container ID: 1181726004-D

Print Date: 05/04/2018 3:18:31PM

J flagging is activated

Results of **SW17**

Client Sample ID: **SW17**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181726004
Lab Project ID: 1181726

Collection Date: 04/24/18 15:33
Received Date: 04/24/18 17:11
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	3.75		1.04	0.323	mg/L	1		04/26/18 18:32

Batch Information

Analytical Batch: STS5857
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 04/26/18 18:32
Container ID: 1181726004-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.907	J	1.00	0.310	mg/L	1		05/03/18 10:19

Batch Information

Analytical Batch: WDA4262
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/03/18 10:19
Container ID: 1181726004-F

Prep Batch: WXX12300
Prep Method: METHOD
Prep Date/Time: 05/02/18 11:26
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	0.144		0.100	0.0310	mg/L	1		04/26/18 16:21

Batch Information

Analytical Batch: WDA4251
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 04/26/18 16:21
Container ID: 1181726004-F

Prep Batch: WXX12286
Prep Method: METHOD
Prep Date/Time: 04/26/18 14:05
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	1.07		0.100	0.0250	mg/L	2		04/24/18 18:31
Nitrite-N	0.0500	U	0.100	0.0250	mg/L	2		04/24/18 18:31

Results of **SW17**

Client Sample ID: **SW17**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181726004
Lab Project ID: 1181726

Collection Date: 04/24/18 15:33
Received Date: 04/24/18 17:11
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2675
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 04/24/18 18:31
Container ID: 1181726004-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.209		0.0200	0.00500	mg/L	1		04/30/18 17:18

Batch Information

Analytical Batch: WDA4255
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/30/18 17:18
Container ID: 1181726004-F

Prep Batch: WXX12292
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/30/18 14:17
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/04/2018 3:18:31PM

J flagging is activated

Results of **SW18**

Client Sample ID: **SW18**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181726005
Lab Project ID: 1181726

Collection Date: 04/24/18 15:07
Received Date: 04/24/18 17:11
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	2.31		2.00	2.00	mg/L	1		04/25/18 16:39

Batch Information

Analytical Batch: BOD6024
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 04/25/18 16:39
Container ID: 1181726005-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	4.0		2.00	2.00	col/100mL	1		04/24/18 18:01

Batch Information

Analytical Batch: BTF16499
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 04/24/18 18:01
Container ID: 1181726005-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	5		1	1	MPN/100m	1		04/24/18 18:12
Total Coliform	127		1	1	MPN/100m	1		04/24/18 18:12

Batch Information

Analytical Batch: BTF16497
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 04/24/18 18:12
Container ID: 1181726005-D

Print Date: 05/04/2018 3:18:31PM

J flagging is activated

Results of **SW18**

Client Sample ID: **SW18**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181726005
Lab Project ID: 1181726

Collection Date: 04/24/18 15:07
Received Date: 04/24/18 17:11
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	5.05		1.03	0.320	mg/L	1		04/26/18 18:32

Batch Information

Analytical Batch: STS5857
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 04/26/18 18:32
Container ID: 1181726005-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	2.13		1.00	0.310	mg/L	1		05/03/18 10:20

Batch Information

Analytical Batch: WDA4262
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/03/18 10:20
Container ID: 1181726005-F

Prep Batch: WXX12300
Prep Method: METHOD
Prep Date/Time: 05/02/18 11:26
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	0.788		0.100	0.0310	mg/L	1		04/26/18 16:01

Batch Information

Analytical Batch: WDA4251
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 04/26/18 16:01
Container ID: 1181726005-F

Prep Batch: WXX12286
Prep Method: METHOD
Prep Date/Time: 04/26/18 14:05
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	1.74		0.100	0.0250	mg/L	2		04/24/18 18:33
Nitrite-N	0.0274	J	0.100	0.0250	mg/L	2		04/24/18 18:33

Print Date: 05/04/2018 3:18:31PM

J flagging is activated

Results of **SW18**

Client Sample ID: **SW18**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181726005
Lab Project ID: 1181726

Collection Date: 04/24/18 15:07
Received Date: 04/24/18 17:11
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2675
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 04/24/18 18:33
Container ID: 1181726005-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	1.46		0.500	0.125	mg/L	1		04/30/18 16:09

Batch Information

Analytical Batch: WDA4254
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/30/18 16:09
Container ID: 1181726005-F

Prep Batch: WXX12291
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/30/18 13:10
Prep Initial Wt./Vol.: 1 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 1778834 [BOD/6024]
Blank Lab ID: 1443055

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181726001, 1181726002, 1181726003, 1181726004, 1181726005

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: BOD6024
Analytical Method: SM21 5210B
Instrument:
Analyst: A.L
Analytical Date/Time: 4/25/2018 4:39:28PM

Print Date: 05/04/2018 3:18:33PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1181726 [BOD6024]
Blank Spike Lab ID: 1443056
Date Analyzed: 04/25/2018 16:39

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181726001, 1181726002, 1181726003, 1181726004, 1181726005

Results by **SM21 5210B**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Biochemical Oxygen Demand	198	221	112	(84.6-115.4

Batch Information

Analytical Batch: **BOD6024**
Analytical Method: **SM21 5210B**
Instrument:
Analyst: **A.L**

Print Date: 05/04/2018 3:18:35PM

Method Blank

Blank ID: MB for HBN 1778780 [BTF/16497]
Blank Lab ID: 1442856

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181726001, 1181726002, 1181726003, 1181726004, 1181726005

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: BTF16497
Analytical Method: SM21 9223B
Instrument:
Analyst: K.W
Analytical Date/Time: 4/24/2018 2:09:00PM

Print Date: 05/04/2018 3:18:37PM

Method Blank

Blank ID: MB for HBN 1778782 [BTF/16499]
Blank Lab ID: 1442868

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181726001, 1181726002, 1181726003, 1181726004, 1181726005

Results by **SM21 9222D**

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

Batch Information

Analytical Batch: BTF16499
Analytical Method: SM21 9222D
Instrument:
Analyst: K.W
Analytical Date/Time: 4/24/2018 6:01:00PM

Print Date: 05/04/2018 3:18:38PM

Method Blank

Blank ID: MB for HBN 1778888 [STS/5857]
Blank Lab ID: 1443252

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181726001, 1181726002, 1181726003, 1181726004, 1181726005

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: STS5857
Analytical Method: SM21 2540D
Instrument:
Analyst: EWW
Analytical Date/Time: 4/26/2018 6:32:22PM

Print Date: 05/04/2018 3:18:41PM

Duplicate Sample Summary

Original Sample ID: 1181706002
Duplicate Sample ID: 1443255
QC for Samples:

Analysis Date: 04/26/2018 18:32
Matrix: Water (Surface, Eff., Ground)

Results by **SM21 2540D**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Suspended Solids	3.60	3.00	mg/L	18.20*	(< 5)

Batch Information

Analytical Batch: STS5857
Analytical Method: SM21 2540D
Instrument:
Analyst: EWW

Print Date: 05/04/2018 3:18:42PM

Duplicate Sample Summary

Original Sample ID: 1181706003
Duplicate Sample ID: 1443256
Analysis Date: 04/26/2018 18:32
Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1181726001, 1181726002, 1181726003, 1181726004, 1181726005

Results by **SM21 2540D**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Suspended Solids	4.69	4.69	mg/L	0.00	(< 5)

Batch Information

Analytical Batch: STS5857
Analytical Method: SM21 2540D
Instrument:
Analyst: EWW

Print Date: 05/04/2018 3:18:42PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1181726 [STS5857]
Blank Spike Lab ID: 1443253
Date Analyzed: 04/26/2018 18:32

Spike Duplicate ID: LCSD for HBN 1181726 [STS5857]
Spike Duplicate Lab ID: 1443254
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181726001, 1181726002, 1181726003, 1181726004, 1181726005

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	50	46.9	94	50	47.5	95	(75-125)	1.30	(< 5)

Batch Information

Analytical Batch: **STS5857**
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 1778847 (WFI/2675)
Blank Lab ID: 1443111

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181726001, 1181726002, 1181726003, 1181726004, 1181726005

Results by **SM21 4500NO3-F**

Parameter	Results	LOQ/CL	DL	Units
Nitrate-N	0.0498J	0.100	0.0250	mg/L
Nitrite-N	0.0500U	0.100	0.0250	mg/L
Total Nitrate/Nitrite-N	0.0528J	0.100	0.0250	mg/L

Batch Information

Analytical Batch: WFI2675
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: AYC
Analytical Date/Time: 4/24/2018 6:21:13PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1181726 [WFI2675]
Blank Spike Lab ID: 1443105
Date Analyzed: 04/24/2018 18:19

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181726001, 1181726002, 1181726003, 1181726004, 1181726005

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	2.50	100	(90-110)
Total Nitrate/Nitrite-N	5	5.11	102	(90-110)

Batch Information

Analytical Batch: **WFI2675**
Analytical Method: **SM21 4500NO3-F**
Instrument: **Astoria segmented flow**
Analyst: **AYC**

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: 1181726005
MS Sample ID: 1443103 MS
MSD Sample ID: 1443104 MSD

Analysis Date: 04/24/2018 18:33
Analysis Date: 04/24/2018 18:35
Analysis Date: 04/24/2018 18:36
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181726001, 1181726002, 1181726003, 1181726004, 1181726005

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	1.74	2.50	4.42	107	2.50	4.47	109	70-130	1.10	(< 25)
Nitrite-N	0.0274J	2.50	2.6	103	2.50	2.62	104	90-110	0.66	(< 25)

Batch Information

Analytical Batch: WFI2675
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: AYC
Analytical Date/Time: 4/24/2018 6:35:13PM

Print Date: 05/04/2018 3:18:46PM

Method Blank

Blank ID: MB for HBN 1778895 [WXX/12286]
Blank Lab ID: 1443277

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181726001, 1181726002, 1181726003, 1181726004, 1181726005

Results by **SM21 4500-NH3 G**

Parameter	Results	LOQ/CL	DL	Units
Ammonia-N	0.0366J	0.100	0.0310	mg/L

Batch Information

Analytical Batch: WDA4251
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 4/26/2018 3:56:38PM

Prep Batch: WXX12286
Prep Method: METHOD
Prep Date/Time: 4/26/2018 2:05:00PM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1181726 [WXX12286]
Blank Spike Lab ID: 1443278
Date Analyzed: 04/26/2018 15:58

Spike Duplicate ID: LCSD for HBN 1181726 [WXX12286]
Spike Duplicate Lab ID: 1443279
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181726001, 1181726002, 1181726003, 1181726004, 1181726005

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	0.891	89	1	1.00	100	(75-125)	12.00	(< 25)

Batch Information

Analytical Batch: **WDA4251**
Analytical Method: **SM21 4500-NH3 G**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX12286**
Prep Method: **METHOD**
Prep Date/Time: **04/26/2018 14:05**
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: 1181726005
MS Sample ID: 1443280 MS
MSD Sample ID: 1443281 MSD

Analysis Date: 04/26/2018 16:01
Analysis Date: 04/26/2018 16:03
Analysis Date: 04/26/2018 16:05
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181726001, 1181726002, 1181726003, 1181726004, 1181726005

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	0.788	1.00	1.86	107	1.00	1.70	91	75-125	8.80	(< 25)

Batch Information

Analytical Batch: WDA4251
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 4/26/2018 4:03:22PM

Prep Batch: WXX12286
Prep Method: Ammonia by SM21 4500F prep (W)
Prep Date/Time: 4/26/2018 2:05:00PM
Prep Initial Wt./Vol.: 6.00mL
Prep Extract Vol: 6.00mL

Print Date: 05/04/2018 3:18:49PM

Method Blank

Blank ID: MB for HBN 1779026 [WXX/12291]
Blank Lab ID: 1443854

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181726001, 1181726002, 1181726005

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: WDA4254
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 4/30/2018 4:06:50PM

Prep Batch: WXX12291
Prep Method: SM21 4500P-B,E
Prep Date/Time: 4/30/2018 1:10:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1181726 [WXX12291]
Blank Spike Lab ID: 1443855
Date Analyzed: 04/30/2018 16:07

Spike Duplicate ID: LCSD for HBN 1181726 [WXX12291]
Spike Duplicate Lab ID: 1443856
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181726001, 1181726002, 1181726005

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	0.207	103	0.2	0.207	103	(85-115)	0.05	(< 25)

Batch Information

Analytical Batch: **WDA4254**
Analytical Method: **SM21 4500P-B,E**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX12291**
Prep Method: **SM21 4500P-B,E**
Prep Date/Time: **04/30/2018 13:10**
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: 1181726005
MS Sample ID: 1443857 MS
MSD Sample ID: 1443858 MSD

Analysis Date: 04/30/2018 16:09
Analysis Date: 04/30/2018 16:10
Analysis Date: 04/30/2018 16:11
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181726001, 1181726002, 1181726005

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	1.46	5.00	6.93	110	5.00	6.87	108	75-125	0.91	(< 25)

Batch Information

Analytical Batch: WDA4254
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 4/30/2018 4:10:46PM

Prep Batch: WXX12291
Prep Method: Total Phosphorus (W) Ext.
Prep Date/Time: 4/30/2018 1:10:00PM
Prep Initial Wt./Vol.: 1.00mL
Prep Extract Vol: 25.00mL

Print Date: 05/04/2018 3:18:52PM

Method Blank

Blank ID: MB for HBN 1779030 [WXX/12292]
Blank Lab ID: 1443873

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181726003, 1181726004

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: WDA4255
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 4/30/2018 5:10:19PM

Prep Batch: WXX12292
Prep Method: SM21 4500P-B,E
Prep Date/Time: 4/30/2018 2:17:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1181726 [WXX12292]
Blank Spike Lab ID: 1443874
Date Analyzed: 04/30/2018 17:11

Spike Duplicate ID: LCSD for HBN 1181726 [WXX12292]
Spike Duplicate Lab ID: 1443875
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181726003, 1181726004

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	0.208	104	0.2	0.210	105	(85-115)	0.91	(< 25)

Batch Information

Analytical Batch: **WDA4255**
Analytical Method: **SM21 4500P-B,E**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX12292**
Prep Method: **SM21 4500P-B,E**
Prep Date/Time: **04/30/2018 14:17**
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: 1181780001
MS Sample ID: 1443876 MS
MSD Sample ID: 1443877 MSD

Analysis Date: 04/30/2018 17:13
Analysis Date: 04/30/2018 17:14
Analysis Date: 04/30/2018 17:15
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181726003, 1181726004

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	0.0165J	0.200	.228	106	0.200	0.223	103	75-125	2.10	(< 25)

Batch Information

Analytical Batch: WDA4255
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 4/30/2018 5:14:13PM

Prep Batch: WXX12292
Prep Method: Total Phosphorus (W) Ext.
Prep Date/Time: 4/30/2018 2:17:00PM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 05/04/2018 3:18:55PM

Method Blank

Blank ID: MB for HBN 1779164 [WXX/12300]
Blank Lab ID: 1444508

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181726001, 1181726002, 1181726003, 1181726004, 1181726005

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: WDA4262
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 5/3/2018 10:00:59AM

Prep Batch: WXX12300
Prep Method: METHOD
Prep Date/Time: 5/2/2018 11:26:00AM
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 1181726 [WXX12300]
Blank Spike Lab ID: 1444509
Date Analyzed: 05/03/2018 10:02

Spike Duplicate ID: LCSD for HBN 1181726 [WXX12300]
Spike Duplicate Lab ID: 1444510
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181726001, 1181726002, 1181726003, 1181726004, 1181726005

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	3.51	88	4	3.64	91	(75-125)	3.60	(< 25)

Batch Information

Analytical Batch: **WDA4262**
Analytical Method: **SM21 4500-N D**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX12300**
Prep Method: **METHOD**
Prep Date/Time: **05/02/2018 11:26**
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: 1188801005
MS Sample ID: 1444511 MS
MSD Sample ID: 1444512 MSD

Analysis Date: 05/03/2018 10:07
Analysis Date: 05/03/2018 10:08
Analysis Date: 05/03/2018 10:10
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181726001, 1181726002, 1181726003, 1181726004, 1181726005

Results by **SM21 4500-N D**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Kjeldahl Nitrogen	1.00U	4.00	3.84	96	4.00	3.14	78	75-125	20.20	(< 25)

Batch Information

Analytical Batch: WDA4262
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 5/3/2018 10:08:50AM

Prep Batch: WXX12300
Prep Method: Distillation TKN by Phenate (W)
Prep Date/Time: 5/2/2018 11:26:00AM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

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

SGS

SGS North America Inc.
CHAIN OF CUSTODY RECORD

1181726

.ocations Nationwide

a	Maryland
lersey	New York
Carolina	Florida

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 #: 343 5202

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

REPORTS TO: — E-MAIL: Jake.Alward@stantec.com

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

Section 2

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	# CONTAINERS	Pres: Type: Comp Grab MI (Multi-incremental)	BOD	TSS	Fecal Coliform	Total Coliform - Quantitray	Nitrate/Nitrite	Ammonia/TKN/T-Phos					REMARKS/LOC ID
													Na2S2O3	Na2S2O3	H2SO4		
① A-F	SW1	4/24/18	1132		6	G	1	1	1	1	1	1					
② A-F	SW2	4/24/18	1042		6	G	1	1	1	1	1	1					
③ A-F	SW5	4/24/18	1014		6	G	1	1	1	1	1	1					
④ A-F	SW17	4/24/18	1533		6	G	1	1	1	1	1	1					
⑤ A-F	SW18	4/24/18	1507		6	G	1	1	1	1	1	1					

Section 5

	Date	Time	
Relinquished By: (1)	4/24/18	17:11	Received By:
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	4/24/18	17:11	Received For Laboratory By:

Section 4

DOD Project? Yes No

Data Deliverable Requirements:

Cooler ID:

Requested Turnaround Time and/or Special Instructions:

Temp Blank °C: 4.9 #030

or Ambient [ ]

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Delivery Method: Hand Delivery [X] Commerical Delivery [ ]

NCW

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

e-Sample Receipt Form

SGS Workorder #: **1181726**

Review Criteria	Condition (Yes, No, N/A)	Exceptions Noted below
Chain of Custody / Temperature Requirements		yes Exemption permitted if sampler hand carries/delivers.
Were Custody Seals intact? Note # & location	n/a	ABSENT
COC accompanied samples?	yes	
n/a **Exemption permitted if chilled & collected <8 hours ago, or for samples where chilling is not required		
Temperature blank compliant* (i.e., 0-6 °C after CF)?	yes	Cooler ID: 1 @ 4.9 °C Therm. ID: D30
	n/a	Cooler ID: @ °C Therm. ID:
	n/a	Cooler ID: @ °C Therm. ID:
	n/a	Cooler ID: @ °C Therm. ID:
	n/a	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	
If samples received without a temperature blank, the "cooler temperature" will be documented in lieu of the temperature blank & "**COOLER TEMP**" will be noted to the right. In cases where neither a temp blank nor cooler temp can be obtained, note "ambient" or "chilled".		
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.		
Were analyses requested unambiguous? (i.e., method is specified for analyses with >1 option for analysis)	yes	
	n/a	***Exemption permitted for metals (e.g,200.8/6020A).
Were proper containers (type/mass/volume/preservative***)used?	yes	
Volatile / LL-Hg Requirements		
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samples?	n/a	
Were all water VOA vials free of headspace (i.e., bubbles ≤ 6mm)?	n/a	
Were all soil VOAs field extracted with MeOH+BFB?	n/a	

Note to Client: Any "No", answer above indicates non-compliance with standard procedures and may impact data quality.

Additional notes (if applicable):

Sample Containers and Preservatives

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition
1181726001-A	No Preservative Required	OK			
1181726001-B	No Preservative Required	OK			
1181726001-C	Na2S2O3 for Chlorine Redu	OK			
1181726001-D	Na2S2O3 for Chlorine Redu	OK			
1181726001-E	No Preservative Required	OK			
1181726001-F	H2SO4 to pH < 2	OK			
1181726002-A	No Preservative Required	OK			
1181726002-B	No Preservative Required	OK			
1181726002-C	Na2S2O3 for Chlorine Redu	OK			
1181726002-D	Na2S2O3 for Chlorine Redu	OK			
1181726002-E	No Preservative Required	OK			
1181726002-F	H2SO4 to pH < 2	OK			
1181726003-A	No Preservative Required	OK			
1181726003-B	No Preservative Required	OK			
1181726003-C	Na2S2O3 for Chlorine Redu	OK			
1181726003-D	Na2S2O3 for Chlorine Redu	OK			
1181726003-E	No Preservative Required	OK			
1181726003-F	H2SO4 to pH < 2	OK			
1181726004-A	No Preservative Required	OK			
1181726004-B	No Preservative Required	OK			
1181726004-C	Na2S2O3 for Chlorine Redu	OK			
1181726004-D	Na2S2O3 for Chlorine Redu	OK			
1181726004-E	No Preservative Required	OK			
1181726004-F	H2SO4 to pH < 2	OK			
1181726005-A	No Preservative Required	OK			
1181726005-B	No Preservative Required	OK			
1181726005-C	Na2S2O3 for Chlorine Redu	OK			
1181726005-D	Na2S2O3 for Chlorine Redu	OK			
1181726005-E	No Preservative Required	OK			
1181726005-F	H2SO4 to pH < 2	OK			

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition

Container Condition Glossary

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

OK - The container was received at an acceptable pH for the analysis requested.
BU - The container was received with headspace greater than 6mm.
DM - The container was received damaged.
FR - The container was received frozen and not usable for Bacteria or BOD analyses.
IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.
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: **1181780**

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

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

Case Narrative

SGS Client: **Stantec Consulting Services Inc.**
SGS Project: **1181780**
Project Name/Site: **Wasilla WWTP**
Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

SW4 (1181780001) PS

9222D - Fecal coliform sample received with insufficient holding time remaining for analysis. ADEC allows 8 hours from the time of collection to analysis.

SW6 (1181780002) PS

9222D - Fecal coliform sample received with insufficient holding time remaining for analysis. ADEC allows 8 hours from the time of collection to analysis.

SW8 (1181780005) PS

Corrected Report - This report has been reissued to report Total Coliform / E. coli results from the 10x dilution only.

SW13 (1181780007) PS

9222D - Fecal coliform sample received and analyzed 59 minutes past MB2. Sample results are less than 20-60 CFU and thus not significantly affected.

SW16 (1181780008) PS

9222D - Fecal coliform sample received and analyzed 59 minutes past MB2. Sample results are less than 20-60 CFU and thus not significantly affected.

SW15 (1181780009) PS

9222D - Fecal coliform sample received and analyzed 59 minutes past MB2. Sample is non detect and thus not significantly affected.

TS1 (1181780010) PS

9222D - Fecal coliform sample received and analyzed 59 minutes past MB2. Sample is non detect and thus not significantly affected.

TS2 (1181780011) PS

9222D - Fecal coliform sample received and analyzed 59 minutes past MB2. Preceeding samples were non detect.

TS3 (1181780012) PS

9222D - Fecal coliform sample received and analyzed 59 minutes past MB2. Preceeding samples were non detect.

1181780001DUP (1444175) DUP

2540D - Total Suspended Solids - Sample duplicate RPD was outside of acceptance limits. Both sample and duplicate concentrations are less than the LOQ.

1181780010DUP (1444176) DUP

2540D - Total Suspended Solids - Sample duplicate RPD was outside of acceptance limits. Both sample and duplicate concentrations are less than the LOQ.

MB for HBN 1778967 [BOD/6026] (1443574) MB

5210B – BOD - MB depletion (0.61 mg/L) is greater than the recommended limit of 0.2 mg/L. Samples >10X the MB are not significantly affected; Samples <10X the MB results may be biased high.

*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. 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). 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.

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

Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
SW4	1181780001	04/26/2018	04/26/2018	Water (Surface, Eff., Ground)
SW6	1181780002	04/26/2018	04/26/2018	Water (Surface, Eff., Ground)
SW10	1181780003	04/26/2018	04/26/2018	Water (Surface, Eff., Ground)
SW9	1181780004	04/26/2018	04/26/2018	Water (Surface, Eff., Ground)
SW8	1181780005	04/26/2018	04/26/2018	Water (Surface, Eff., Ground)
SW12	1181780006	04/26/2018	04/26/2018	Water (Surface, Eff., Ground)
SW13	1181780007	04/26/2018	04/26/2018	Water (Surface, Eff., Ground)
SW16	1181780008	04/26/2018	04/26/2018	Water (Surface, Eff., Ground)
SW15	1181780009	04/26/2018	04/26/2018	Water (Surface, Eff., Ground)
TS1	1181780010	04/26/2018	04/26/2018	Water (Surface, Eff., Ground)
TS2	1181780011	04/26/2018	04/26/2018	Water (Surface, Eff., Ground)
TS3	1181780012	04/26/2018	04/26/2018	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: **SW4**
Lab Sample ID: 1181780001

	Parameter	Result	Units
Microbiology Laboratory	E. Coli	14	MPN/100mL
	Fecal Coliform	7.0	col/100mL
	Total Coliform	109	MPN/100mL
Waters Department	Ammonia-N	0.0363J	mg/L
	Nitrate-N	0.0426J	mg/L
	Total Kjeldahl Nitrogen	0.524J	mg/L
	Total Phosphorus	0.0165J	mg/L

Client Sample ID: **SW6**
Lab Sample ID: 1181780002

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	2.24	mg/L
	E. Coli	1	MPN/100mL
	Fecal Coliform	6.0	col/100mL
	Total Coliform	51	MPN/100mL
Waters Department	Ammonia-N	0.0942J	mg/L
	Nitrate-N	0.0506J	mg/L
	Total Kjeldahl Nitrogen	0.557J	mg/L
	Total Phosphorus	0.0161J	mg/L
	Total Suspended Solids	1.02	mg/L

Client Sample ID: **SW10**
Lab Sample ID: 1181780003

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	3.10	mg/L
	E. Coli	2	MPN/100mL
	Total Coliform	46	MPN/100mL
Waters Department	Ammonia-N	0.191	mg/L
	Nitrate-N	0.0466J	mg/L
	Total Kjeldahl Nitrogen	0.743J	mg/L
	Total Phosphorus	0.0379	mg/L
	Total Suspended Solids	9.00	mg/L

Client Sample ID: **SW9**
Lab Sample ID: 1181780004

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	6.07	mg/L
	E. Coli	118	MPN/100mL
	Fecal Coliform	92	col/100mL
	Total Coliform	157	MPN/100mL
Waters Department	Ammonia-N	0.107	mg/L
	Nitrate-N	0.0388J	mg/L
	Total Kjeldahl Nitrogen	0.603J	mg/L
	Total Phosphorus	0.0279	mg/L
	Total Suspended Solids	14.4	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: **SW8**
Lab Sample ID: 1181780005

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	7.89	mg/L
	E. Coli	10	MPN/100mL
	Fecal Coliform	10	col/100mL
	Total Coliform	560	MPN/100mL
Waters Department	Ammonia-N	0.0647J	mg/L
	Nitrate-N	0.0374J	mg/L
	Total Kjeldahl Nitrogen	1.64	mg/L
	Total Phosphorus	0.208	mg/L
	Total Suspended Solids	5.74	mg/L

Client Sample ID: **SW12**
Lab Sample ID: 1181780006

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	2.73	mg/L
	E. Coli	18	MPN/100mL
	Fecal Coliform	13	col/100mL
	Total Coliform	727	MPN/100mL
Waters Department	Ammonia-N	0.0584J	mg/L
	Nitrate-N	0.0406J	mg/L
	Total Kjeldahl Nitrogen	1.08	mg/L
	Total Phosphorus	0.123	mg/L
	Total Suspended Solids	17.8	mg/L

Client Sample ID: **SW13**
Lab Sample ID: 1181780007

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	4.37	mg/L
	E. Coli	2	MPN/100mL
	Fecal Coliform	1.0	col/100mL
	Total Coliform	126	MPN/100mL
Waters Department	Ammonia-N	0.0794J	mg/L
	Nitrate-N	0.0418J	mg/L
	Total Kjeldahl Nitrogen	0.795J	mg/L
	Total Phosphorus	0.0479	mg/L
	Total Suspended Solids	3.00	mg/L

Client Sample ID: **SW16**
Lab Sample ID: 1181780008

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	3.73	mg/L
	E. Coli	26	MPN/100mL
	Fecal Coliform	11	col/100mL
	Total Coliform	488	MPN/100mL
Waters Department	Nitrate-N	0.0396J	mg/L
	Total Kjeldahl Nitrogen	1.37	mg/L
	Total Phosphorus	0.0989	mg/L
	Total Suspended Solids	2.60	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: 1181780009

	Parameter	Result	Units
Microbiology Laboratory	E. Coli	12	MPN/100mL
	Fecal Coliform	6.0	col/100mL
	Total Coliform	83	MPN/100mL
Waters Department	Ammonia-N	0.0399J	mg/L
	Nitrate-N	0.0470J	mg/L
	Total Kjeldahl Nitrogen	0.491J	mg/L
	Total Phosphorus	0.0627	mg/L
	Total Suspended Solids	1.16	mg/L

Client Sample ID: **TS1**
Lab Sample ID: 1181780010

	Parameter	Result	Units
Microbiology Laboratory	Total Coliform	26	MPN/100mL
Waters Department	Ammonia-N	0.187	mg/L
	Nitrate-N	4.49	mg/L
	Total Kjeldahl Nitrogen	0.684J	mg/L
	Total Phosphorus	0.360	mg/L

Client Sample ID: **TS2**
Lab Sample ID: 1181780011

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	6.14	mg/L
	Total Coliform	117	MPN/100mL
Waters Department	Ammonia-N	19.1	mg/L
	Nitrate-N	3.17	mg/L
	Nitrite-N	0.0404J	mg/L
	Total Kjeldahl Nitrogen	30.4	mg/L
	Total Phosphorus	11.2	mg/L
	Total Suspended Solids	12.5	mg/L

Client Sample ID: **TS3**
Lab Sample ID: 1181780012

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	37.6	mg/L
	E. Coli	9210	MPN/100mL
	Fecal Coliform	3350	col/100mL
	Total Coliform	GT2420	MPN/100mL
Waters Department	Ammonia-N	31.3	mg/L
	Nitrate-N	0.125	mg/L
	Nitrite-N	0.0606J	mg/L
	Total Kjeldahl Nitrogen	69.4	mg/L
	Total Phosphorus	6.31	mg/L
	Total Suspended Solids	46.0	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 **SW4**

Client Sample ID: **SW4**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780001
Lab Project ID: 1181780

Collection Date: 04/26/18 08:45
Received Date: 04/26/18 16:34
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		04/27/18 16:11

Batch Information

Analytical Batch: BOD6026
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 04/27/18 16:11
Container ID: 1181780001-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	7.0		1.00	1.00	col/100mL	1		04/26/18 17:26

Batch Information

Analytical Batch: BTF16505
Analytical Method: SM21 9222D
Analyst: DSH
Analytical Date/Time: 04/26/18 17:26
Container ID: 1181780001-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	14		1	1	MPN/100m	1		04/26/18 19:15
Total Coliform	109		1	1	MPN/100m	1		04/26/18 19:15

Batch Information

Analytical Batch: BTF16507
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 04/26/18 19:15
Container ID: 1181780001-D

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **SW4**

Client Sample ID: **SW4**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780001
Lab Project ID: 1181780

Collection Date: 04/26/18 08:45
Received Date: 04/26/18 16:34
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	1.04	U	2.08	0.646	mg/L	1		05/02/18 13:50

Batch Information

Analytical Batch: STS5861
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/02/18 13:50
Container ID: 1181780001-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.524	J	1.00	0.310	mg/L	1		05/03/18 10:21

Batch Information

Analytical Batch: WDA4262
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/03/18 10:21
Container ID: 1181780001-F

Prep Batch: WXX12300
Prep Method: METHOD
Prep Date/Time: 05/02/18 11:26
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	0.0363	J	0.100	0.0310	mg/L	1		04/27/18 10:51

Batch Information

Analytical Batch: WDA4252
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 04/27/18 10:51
Container ID: 1181780001-F

Prep Batch: WXX12288
Prep Method: METHOD
Prep Date/Time: 04/27/18 10:00
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	0.0426	J	0.100	0.0250	mg/L	2		04/27/18 18:52
Nitrite-N	0.0500	U	0.100	0.0250	mg/L	2		04/27/18 18:52

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **SW4**

Client Sample ID: **SW4**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780001
Lab Project ID: 1181780

Collection Date: 04/26/18 08:45
Received Date: 04/26/18 16:34
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2676
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 04/27/18 18:52
Container ID: 1181780001-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0165	J	0.0200	0.00500	mg/L	1		04/30/18 17:13

Batch Information

Analytical Batch: WDA4255
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/30/18 17:13
Container ID: 1181780001-F

Prep Batch: WXX12292
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/30/18 14:17
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **SW6**

Client Sample ID: **SW6**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780002
Lab Project ID: 1181780

Collection Date: 04/26/18 08:55
Received Date: 04/26/18 16:34
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	2.24		2.00	2.00	mg/L	1		04/27/18 16:11

Batch Information

Analytical Batch: BOD6026
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 04/27/18 16:11
Container ID: 1181780002-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	6.0		1.00	1.00	col/100mL	1		04/26/18 17:26

Batch Information

Analytical Batch: BTF16505
Analytical Method: SM21 9222D
Analyst: DSH
Analytical Date/Time: 04/26/18 17:26
Container ID: 1181780002-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	1		1	1	MPN/100m	1		04/26/18 19:15
Total Coliform	51		1	1	MPN/100m	1		04/26/18 19:15

Batch Information

Analytical Batch: BTF16507
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 04/26/18 19:15
Container ID: 1181780002-D

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **SW6**

Client Sample ID: **SW6**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780002
Lab Project ID: 1181780

Collection Date: 04/26/18 08:55
Received Date: 04/26/18 16:34
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	1.02		1.02	0.316	mg/L	1		05/02/18 13:50

Batch Information

Analytical Batch: STS5861
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/02/18 13:50
Container ID: 1181780002-B

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		05/03/18 10:23

Batch Information

Analytical Batch: WDA4262
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/03/18 10:23
Container ID: 1181780002-F

Prep Batch: WXX12300
Prep Method: METHOD
Prep Date/Time: 05/02/18 11:26
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	0.0942 J		0.100	0.0310	mg/L	1		04/27/18 11:18

Batch Information

Analytical Batch: WDA4252
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 04/27/18 11:18
Container ID: 1181780002-F

Prep Batch: WXX12288
Prep Method: METHOD
Prep Date/Time: 04/27/18 10:00
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	0.0506 J		0.100	0.0250	mg/L	2		04/27/18 18:53
Nitrite-N	0.0500 U		0.100	0.0250	mg/L	2		04/27/18 18:53

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **SW6**

Client Sample ID: **SW6**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780002
Lab Project ID: 1181780

Collection Date: 04/26/18 08:55
Received Date: 04/26/18 16:34
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2676
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 04/27/18 18:53
Container ID: 1181780002-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0161	J	0.0200	0.00500	mg/L	1		04/30/18 17:19

Batch Information

Analytical Batch: WDA4255
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/30/18 17:19
Container ID: 1181780002-F

Prep Batch: WXX12292
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/30/18 14:17
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **SW10**

Client Sample ID: **SW10**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780003
Lab Project ID: 1181780

Collection Date: 04/26/18 09:30
Received Date: 04/26/18 16:34
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	3.10		2.00	2.00	mg/L	1		04/27/18 16:11

Batch Information

Analytical Batch: BOD6026
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 04/27/18 16:11
Container ID: 1181780003-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	1.00 U		1.00	1.00	col/100mL	1		04/26/18 17:26

Batch Information

Analytical Batch: BTF16505
Analytical Method: SM21 9222D
Analyst: DSH
Analytical Date/Time: 04/26/18 17:26
Container ID: 1181780003-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	2		1	1	MPN/100m	1		04/26/18 19:15
Total Coliform	46		1	1	MPN/100m	1		04/26/18 19:15

Batch Information

Analytical Batch: BTF16507
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 04/26/18 19:15
Container ID: 1181780003-D

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **SW10**

Client Sample ID: **SW10**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780003
Lab Project ID: 1181780

Collection Date: 04/26/18 09:30
Received Date: 04/26/18 16:34
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	9.00		2.00	0.620	mg/L	1		05/02/18 13:50

Batch Information

Analytical Batch: STS5861
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/02/18 13:50
Container ID: 1181780003-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.743 J		1.00	0.310	mg/L	1		05/03/18 10:24

Batch Information

Analytical Batch: WDA4262
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/03/18 10:24
Container ID: 1181780003-F

Prep Batch: WXX12300
Prep Method: METHOD
Prep Date/Time: 05/02/18 11:26
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	0.191		0.100	0.0310	mg/L	1		04/27/18 11:19

Batch Information

Analytical Batch: WDA4252
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 04/27/18 11:19
Container ID: 1181780003-F

Prep Batch: WXX12288
Prep Method: METHOD
Prep Date/Time: 04/27/18 10:00
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	0.0466 J		0.100	0.0250	mg/L	2		04/27/18 18:55
Nitrite-N	0.0500 U		0.100	0.0250	mg/L	2		04/27/18 18:55

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **SW10**

Client Sample ID: **SW10**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780003
Lab Project ID: 1181780

Collection Date: 04/26/18 09:30
Received Date: 04/26/18 16:34
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2676
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 04/27/18 18:55
Container ID: 1181780003-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0379		0.0200	0.00500	mg/L	1		04/30/18 17:22

Batch Information

Analytical Batch: WDA4255
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/30/18 17:22
Container ID: 1181780003-F

Prep Batch: WXX12292
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/30/18 14:17
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **SW9**

Client Sample ID: **SW9**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780004
Lab Project ID: 1181780

Collection Date: 04/26/18 09:47
Received Date: 04/26/18 16:34
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	6.07		2.00	2.00	mg/L	1		04/27/18 16:11

Batch Information

Analytical Batch: BOD6026
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 04/27/18 16:11
Container ID: 1181780004-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	92		1.00	1.00	col/100mL	1		04/26/18 17:43

Batch Information

Analytical Batch: BTF16505
Analytical Method: SM21 9222D
Analyst: DSH
Analytical Date/Time: 04/26/18 17:43
Container ID: 1181780004-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	118		1	1	MPN/100m	1		04/26/18 19:15
Total Coliform	157		1	1	MPN/100m	1		04/26/18 19:15

Batch Information

Analytical Batch: BTF16507
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 04/26/18 19:15
Container ID: 1181780004-D

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **SW9**

Client Sample ID: **SW9**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780004
Lab Project ID: 1181780

Collection Date: 04/26/18 09:47
Received Date: 04/26/18 16:34
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	14.4		2.00	0.620	mg/L	1		05/02/18 13:50

Batch Information

Analytical Batch: STS5861
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/02/18 13:50
Container ID: 1181780004-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.603 J		1.00	0.310	mg/L	1		05/03/18 10:25

Batch Information

Analytical Batch: WDA4262
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/03/18 10:25
Container ID: 1181780004-F

Prep Batch: WXX12300
Prep Method: METHOD
Prep Date/Time: 05/02/18 11:26
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.107		0.100	0.0310	mg/L	1		04/27/18 11:21

Batch Information

Analytical Batch: WDA4252
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 04/27/18 11:21
Container ID: 1181780004-F

Prep Batch: WXX12288
Prep Method: METHOD
Prep Date/Time: 04/27/18 10:00
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	0.0388 J		0.100	0.0250	mg/L	2		04/27/18 18:57
Nitrite-N	0.0500 U		0.100	0.0250	mg/L	2		04/27/18 18:57

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **SW9**

Client Sample ID: **SW9**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780004
Lab Project ID: 1181780

Collection Date: 04/26/18 09:47
Received Date: 04/26/18 16:34
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2676
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 04/27/18 18:57
Container ID: 1181780004-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0279		0.0200	0.00500	mg/L	1		04/30/18 17:23

Batch Information

Analytical Batch: WDA4255
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/30/18 17:23
Container ID: 1181780004-F

Prep Batch: WXX12292
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/30/18 14:17
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 **SW8**

Client Sample ID: **SW8**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780005
Lab Project ID: 1181780

Collection Date: 04/26/18 10:11
Received Date: 04/26/18 16:34
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	7.89		2.00	2.00	mg/L	1		04/27/18 16:11

Batch Information

Analytical Batch: BOD6026
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 04/27/18 16:11
Container ID: 1181780005-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	10		1.00	1.00	col/100mL	1		04/26/18 17:43

Batch Information

Analytical Batch: BTF16505
Analytical Method: SM21 9222D
Analyst: DSH
Analytical Date/Time: 04/26/18 17:43
Container ID: 1181780005-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	10		10	10	MPN/100m	10		04/26/18 19:15
Total Coliform	560		10	10	MPN/100m	10		04/26/18 19:15

Batch Information

Analytical Batch: BTF16507
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 04/26/18 19:15
Container ID: 1181780005-D

Results of **SW8**

Client Sample ID: **SW8**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780005
Lab Project ID: 1181780

Collection Date: 04/26/18 10:11
Received Date: 04/26/18 16:34
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	5.74		1.06	0.330	mg/L	1		05/02/18 13:50

Batch Information

Analytical Batch: STS5861
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/02/18 13:50
Container ID: 1181780005-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	1.64		1.00	0.310	mg/L	1		05/03/18 10:27

Batch Information

Analytical Batch: WDA4262
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/03/18 10:27
Container ID: 1181780005-F

Prep Batch: WXX12300
Prep Method: METHOD
Prep Date/Time: 05/02/18 11:26
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	0.0647	J	0.100	0.0310	mg/L	1		04/27/18 12:02

Batch Information

Analytical Batch: WDA4253
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 04/27/18 12:02
Container ID: 1181780005-F

Prep Batch: WXX12289
Prep Method: METHOD
Prep Date/Time: 04/27/18 11:10
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.0374	J	0.100	0.0250	mg/L	2		04/27/18 18:59
Nitrite-N	0.0500	U	0.100	0.0250	mg/L	2		04/27/18 18:59

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **SW8**

Client Sample ID: **SW8**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780005
Lab Project ID: 1181780

Collection Date: 04/26/18 10:11
Received Date: 04/26/18 16:34
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2676
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 04/27/18 18:59
Container ID: 1181780005-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.208		0.0200	0.00500	mg/L	1		04/30/18 16:25

Batch Information

Analytical Batch: WDA4254
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/30/18 16:25
Container ID: 1181780005-F

Prep Batch: WXX12291
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/30/18 13:10
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **SW12**

Client Sample ID: **SW12**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780006
Lab Project ID: 1181780

Collection Date: 04/26/18 11:21
Received Date: 04/26/18 16:34
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	2.73		2.00	2.00	mg/L	1		04/27/18 16:11

Batch Information

Analytical Batch: BOD6026
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 04/27/18 16:11
Container ID: 1181780006-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	13		1.00	1.00	col/100mL	1		04/26/18 17:43

Batch Information

Analytical Batch: BTF16505
Analytical Method: SM21 9222D
Analyst: DSH
Analytical Date/Time: 04/26/18 17:43
Container ID: 1181780006-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	18		1	1	MPN/100m	1		04/26/18 19:15
Total Coliform	727		1	1	MPN/100m	1		04/26/18 19:15

Batch Information

Analytical Batch: BTF16507
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 04/26/18 19:15
Container ID: 1181780006-D

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **SW12**

Client Sample ID: **SW12**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780006
Lab Project ID: 1181780

Collection Date: 04/26/18 11:21
Received Date: 04/26/18 16:34
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	17.8		2.00	0.620	mg/L	1		05/02/18 13:50

Batch Information

Analytical Batch: STS5861
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/02/18 13:50
Container ID: 1181780006-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	1.08		1.00	0.310	mg/L	1		05/03/18 10:28

Batch Information

Analytical Batch: WDA4262
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/03/18 10:28
Container ID: 1181780006-F

Prep Batch: WXX12300
Prep Method: METHOD
Prep Date/Time: 05/02/18 11:26
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	0.0584	J	0.100	0.0310	mg/L	1		04/27/18 12:09

Batch Information

Analytical Batch: WDA4253
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 04/27/18 12:09
Container ID: 1181780006-F

Prep Batch: WXX12289
Prep Method: METHOD
Prep Date/Time: 04/27/18 11:10
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.0406	J	0.100	0.0250	mg/L	2		04/27/18 19:00
Nitrite-N	0.0500	U	0.100	0.0250	mg/L	2		04/27/18 19:00

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **SW12**

Client Sample ID: **SW12**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780006
Lab Project ID: 1181780

Collection Date: 04/26/18 11:21
Received Date: 04/26/18 16:34
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2676
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 04/27/18 19:00
Container ID: 1181780006-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.123		0.0200	0.00500	mg/L	1		04/30/18 17:24

Batch Information

Analytical Batch: WDA4255
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/30/18 17:24
Container ID: 1181780006-F

Prep Batch: WXX12292
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/30/18 14:17
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **SW13**

Client Sample ID: **SW13**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780007
Lab Project ID: 1181780

Collection Date: 04/26/18 11:42
Received Date: 04/26/18 16:34
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	4.37		2.00	2.00	mg/L	1		04/27/18 16:11

Batch Information

Analytical Batch: BOD6026
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 04/27/18 16:11
Container ID: 1181780007-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	1.0		1.00	1.00	col/100mL	1		04/26/18 18:25

Batch Information

Analytical Batch: BTF16505
Analytical Method: SM21 9222D
Analyst: DSH
Analytical Date/Time: 04/26/18 18:25
Container ID: 1181780007-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	2		1	1	MPN/100m	1		04/26/18 19:15
Total Coliform	126		1	1	MPN/100m	1		04/26/18 19:15

Batch Information

Analytical Batch: BTF16507
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 04/26/18 19:15
Container ID: 1181780007-D

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **SW13**

Client Sample ID: **SW13**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780007
Lab Project ID: 1181780

Collection Date: 04/26/18 11:42
Received Date: 04/26/18 16:34
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	3.00		2.00	0.620	mg/L	1		05/02/18 13:50

Batch Information

Analytical Batch: STS5861
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/02/18 13:50
Container ID: 1181780007-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.795 J		1.00	0.310	mg/L	1		05/03/18 11:14

Batch Information

Analytical Batch: WDA4262
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/03/18 11:14
Container ID: 1181780007-F

Prep Batch: WXX12300
Prep Method: METHOD
Prep Date/Time: 05/02/18 11:26
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	0.0794 J		0.100	0.0310	mg/L	1		04/27/18 12:10

Batch Information

Analytical Batch: WDA4253
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 04/27/18 12:10
Container ID: 1181780007-F

Prep Batch: WXX12289
Prep Method: METHOD
Prep Date/Time: 04/27/18 11:10
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.0418 J		0.100	0.0250	mg/L	2		04/27/18 19:02
Nitrite-N	0.0500 U		0.100	0.0250	mg/L	2		04/27/18 19:02

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **SW13**

Client Sample ID: **SW13**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780007
Lab Project ID: 1181780

Collection Date: 04/26/18 11:42
Received Date: 04/26/18 16:34
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2676
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 04/27/18 19:02
Container ID: 1181780007-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0479		0.0200	0.00500	mg/L	1		04/30/18 17:25

Batch Information

Analytical Batch: WDA4255
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/30/18 17:25
Container ID: 1181780007-F

Prep Batch: WXX12292
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/30/18 14:17
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **SW16**

Client Sample ID: **SW16**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780008
Lab Project ID: 1181780

Collection Date: 04/26/18 12:00
Received Date: 04/26/18 16:34
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	3.73		2.00	2.00	mg/L	1		04/27/18 16:11

Batch Information

Analytical Batch: BOD6026
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 04/27/18 16:11
Container ID: 1181780008-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	11		1.00	1.00	col/100mL	1		04/26/18 18:25

Batch Information

Analytical Batch: BTF16505
Analytical Method: SM21 9222D
Analyst: DSH
Analytical Date/Time: 04/26/18 18:25
Container ID: 1181780008-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	26		1	1	MPN/100m	1		04/26/18 19:15
Total Coliform	488		1	1	MPN/100m	1		04/26/18 19:15

Batch Information

Analytical Batch: BTF16507
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 04/26/18 19:15
Container ID: 1181780008-D

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **SW16**

Client Sample ID: **SW16**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780008
Lab Project ID: 1181780

Collection Date: 04/26/18 12:00
Received Date: 04/26/18 16:34
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	2.60		2.00	0.620	mg/L	1		05/02/18 13:50

Batch Information

Analytical Batch: STS5861
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/02/18 13:50
Container ID: 1181780008-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	1.37		1.00	0.310	mg/L	1		05/03/18 11:16

Batch Information

Analytical Batch: WDA4262
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/03/18 11:16
Container ID: 1181780008-F

Prep Batch: WXX12300
Prep Method: METHOD
Prep Date/Time: 05/02/18 11:26
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		04/27/18 12:12

Batch Information

Analytical Batch: WDA4253
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 04/27/18 12:12
Container ID: 1181780008-F

Prep Batch: WXX12289
Prep Method: METHOD
Prep Date/Time: 04/27/18 11:10
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.0396 J		0.100	0.0250	mg/L	2		04/27/18 19:04
Nitrite-N	0.0500 U		0.100	0.0250	mg/L	2		04/27/18 19:04

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **SW16**

Client Sample ID: **SW16**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780008
Lab Project ID: 1181780

Collection Date: 04/26/18 12:00
Received Date: 04/26/18 16:34
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2676
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 04/27/18 19:04
Container ID: 1181780008-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0989		0.0200	0.00500	mg/L	1		04/30/18 16:26

Batch Information

Analytical Batch: WDA4254
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/30/18 16:26
Container ID: 1181780008-F

Prep Batch: WXX12291
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/30/18 13:10
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 **SW15**

Client Sample ID: **SW15**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780009
Lab Project ID: 1181780

Collection Date: 04/26/18 13:07
Received Date: 04/26/18 16:34
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		04/27/18 16:11

Batch Information

Analytical Batch: BOD6026
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 04/27/18 16:11
Container ID: 1181780009-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	6.0		1.00	1.00	col/100mL	1		04/26/18 18:25

Batch Information

Analytical Batch: BTF16505
Analytical Method: SM21 9222D
Analyst: DSH
Analytical Date/Time: 04/26/18 18:25
Container ID: 1181780009-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	12		1	1	MPN/100m	1		04/26/18 19:15
Total Coliform	83		1	1	MPN/100m	1		04/26/18 19:15

Batch Information

Analytical Batch: BTF16507
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 04/26/18 19:15
Container ID: 1181780009-D

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **SW15**

Client Sample ID: **SW15**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780009
Lab Project ID: 1181780

Collection Date: 04/26/18 13:07
Received Date: 04/26/18 16:34
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	1.16		1.05	0.326	mg/L	1		05/02/18 13:50

Batch Information

Analytical Batch: STS5861
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/02/18 13:50
Container ID: 1181780009-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.491 J		1.00	0.310	mg/L	1		05/03/18 11:17

Batch Information

Analytical Batch: WDA4262
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/03/18 11:17
Container ID: 1181780009-F

Prep Batch: WXX12300
Prep Method: METHOD
Prep Date/Time: 05/02/18 11:26
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	0.0399 J		0.100	0.0310	mg/L	1		04/27/18 12:17

Batch Information

Analytical Batch: WDA4253
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 04/27/18 12:17
Container ID: 1181780009-F

Prep Batch: WXX12289
Prep Method: METHOD
Prep Date/Time: 04/27/18 11:10
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.0470 J		0.100	0.0250	mg/L	2		04/27/18 19:14
Nitrite-N	0.0500 U		0.100	0.0250	mg/L	2		04/27/18 19:14

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **SW15**

Client Sample ID: **SW15**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780009
Lab Project ID: 1181780

Collection Date: 04/26/18 13:07
Received Date: 04/26/18 16:34
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2676
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 04/27/18 19:14
Container ID: 1181780009-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0627		0.0200	0.00500	mg/L	1		04/30/18 16:26

Batch Information

Analytical Batch: WDA4254
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/30/18 16:26
Container ID: 1181780009-F

Prep Batch: WXX12291
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/30/18 13:10
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **TS1**

Client Sample ID: **TS1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780010
Lab Project ID: 1181780

Collection Date: 04/26/18 13:27
Received Date: 04/26/18 16:34
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		04/27/18 16:11

Batch Information

Analytical Batch: BOD6026
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 04/27/18 16:11
Container ID: 1181780010-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	1.00 U		1.00	1.00	col/100mL	1		04/26/18 18:25

Batch Information

Analytical Batch: BTF16505
Analytical Method: SM21 9222D
Analyst: DSH
Analytical Date/Time: 04/26/18 18:25
Container ID: 1181780010-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	1 U		1	1	MPN/100m	1		04/26/18 19:15
Total Coliform	26		1	1	MPN/100m	1		04/26/18 19:15

Batch Information

Analytical Batch: BTF16507
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 04/26/18 19:15
Container ID: 1181780010-D

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **TS1**

Client Sample ID: **TS1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780010
Lab Project ID: 1181780

Collection Date: 04/26/18 13:27
Received Date: 04/26/18 16:34
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	1.09	U	2.17	0.674	mg/L	1		05/02/18 13:50

Batch Information

Analytical Batch: STS5861
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/02/18 13:50
Container ID: 1181780010-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.684	J	1.00	0.310	mg/L	1		05/03/18 11:18

Batch Information

Analytical Batch: WDA4262
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/03/18 11:18
Container ID: 1181780010-F

Prep Batch: WXX12300
Prep Method: METHOD
Prep Date/Time: 05/02/18 11:26
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	0.187		0.100	0.0310	mg/L	1		04/27/18 12:04

Batch Information

Analytical Batch: WDA4253
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 04/27/18 12:04
Container ID: 1181780010-F

Prep Batch: WXX12289
Prep Method: METHOD
Prep Date/Time: 04/27/18 11:10
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	4.49		0.100	0.0250	mg/L	2		04/27/18 19:16
Nitrite-N	0.0500	U	0.100	0.0250	mg/L	2		04/27/18 19:16

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **TS1**

Client Sample ID: **TS1**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780010
Lab Project ID: 1181780

Collection Date: 04/26/18 13:27
Received Date: 04/26/18 16:34
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2676
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 04/27/18 19:16
Container ID: 1181780010-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.360		0.0200	0.00500	mg/L	1		04/30/18 16:29

Batch Information

Analytical Batch: WDA4254
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/30/18 16:29
Container ID: 1181780010-F

Prep Batch: WXX12291
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/30/18 13:10
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **TS2**

Client Sample ID: **TS2**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780011
Lab Project ID: 1181780

Collection Date: 04/26/18 13:51
Received Date: 04/26/18 16:34
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	6.14		2.00	2.00	mg/L	1		04/27/18 16:11

Batch Information

Analytical Batch: BOD6026
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 04/27/18 16:11
Container ID: 1181780011-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	1.00	U	1.00	1.00	col/100mL	1		04/26/18 18:25

Batch Information

Analytical Batch: BTF16505
Analytical Method: SM21 9222D
Analyst: DSH
Analytical Date/Time: 04/26/18 18:25
Container ID: 1181780011-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	1	U	1	1	MPN/100m	1		04/26/18 19:15
Total Coliform	117		1	1	MPN/100m	1		04/26/18 19:15

Batch Information

Analytical Batch: BTF16507
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 04/26/18 19:15
Container ID: 1181780011-D

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **TS2**

Client Sample ID: **TS2**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780011
Lab Project ID: 1181780

Collection Date: 04/26/18 13:51
Received Date: 04/26/18 16:34
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	12.5		1.08	0.333	mg/L	1		05/02/18 13:50

Batch Information

Analytical Batch: STS5861
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/02/18 13:50
Container ID: 1181780011-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	30.4		10.0	3.10	mg/L	10		05/03/18 11:19

Batch Information

Analytical Batch: WDA4262
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/03/18 11:19
Container ID: 1181780011-F

Prep Batch: WXX12300
Prep Method: METHOD
Prep Date/Time: 05/02/18 11:26
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	19.1		2.00	0.620	mg/L	1		04/27/18 13:00

Batch Information

Analytical Batch: WDA4253
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 04/27/18 13:00
Container ID: 1181780011-F

Prep Batch: WXX12289
Prep Method: METHOD
Prep Date/Time: 04/27/18 11:10
Prep Initial Wt./Vol.: 0.3 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	3.17		0.100	0.0250	mg/L	2		04/27/18 19:18
Nitrite-N	0.0404	J	0.100	0.0250	mg/L	2		04/27/18 19:18

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **TS2**

Client Sample ID: **TS2**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780011
Lab Project ID: 1181780

Collection Date: 04/26/18 13:51
Received Date: 04/26/18 16:34
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2676
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 04/27/18 19:18
Container ID: 1181780011-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	11.2		2.00	0.500	mg/L	1		04/30/18 16:32

Batch Information

Analytical Batch: WDA4254
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/30/18 16:32
Container ID: 1181780011-F

Prep Batch: WXX12291
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/30/18 13:10
Prep Initial Wt./Vol.: 0.25 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 **TS3**

Client Sample ID: **TS3**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780012
Lab Project ID: 1181780

Collection Date: 04/26/18 14:30
Received Date: 04/26/18 16:34
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	37.6		2.00	2.00	mg/L	1		04/27/18 16:11

Batch Information

Analytical Batch: BOD6026
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 04/27/18 16:11
Container ID: 1181780012-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	3350		10.0	10.0	col/100mL	1		04/26/18 18:25

Batch Information

Analytical Batch: BTF16505
Analytical Method: SM21 9222D
Analyst: DSH
Analytical Date/Time: 04/26/18 18:25
Container ID: 1181780012-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	9210		10	10	MPN/100m	10		04/26/18 19:15
Total Coliform	>2420		10	10	MPN/100m	10		04/26/18 19:15

Batch Information

Analytical Batch: BTF16507
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 04/26/18 19:15
Container ID: 1181780012-D

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **TS3**

Client Sample ID: **TS3**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780012
Lab Project ID: 1181780

Collection Date: 04/26/18 14:30
Received Date: 04/26/18 16:34
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	46.0		10.0	3.10	mg/L	1		05/02/18 13:50

Batch Information

Analytical Batch: STS5861
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 05/02/18 13:50
Container ID: 1181780012-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	69.4		10.0	3.10	mg/L	10		05/03/18 11:21

Batch Information

Analytical Batch: WDA4262
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 05/03/18 11:21
Container ID: 1181780012-F

Prep Batch: WXX12300
Prep Method: METHOD
Prep Date/Time: 05/02/18 11:26
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	31.3		2.00	0.620	mg/L	1		04/27/18 13:02

Batch Information

Analytical Batch: WDA4253
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 04/27/18 13:02
Container ID: 1181780012-F

Prep Batch: WXX12289
Prep Method: METHOD
Prep Date/Time: 04/27/18 11:10
Prep Initial Wt./Vol.: 0.3 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.125		0.100	0.0250	mg/L	2		04/27/18 19:20
Nitrite-N	0.0606	J	0.100	0.0250	mg/L	2		04/27/18 19:20

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Results of **TS3**

Client Sample ID: **TS3**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181780012
Lab Project ID: 1181780

Collection Date: 04/26/18 14:30
Received Date: 04/26/18 16:34
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2676
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 04/27/18 19:20
Container ID: 1181780012-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	6.31		2.00	0.500	mg/L	1		04/30/18 16:32

Batch Information

Analytical Batch: WDA4254
Analytical Method: SM21 4500P-B,E
Analyst: DMM
Analytical Date/Time: 04/30/18 16:32
Container ID: 1181780012-F

Prep Batch: WXX12291
Prep Method: SM21 4500P-B,E
Prep Date/Time: 04/30/18 13:10
Prep Initial Wt./Vol.: 0.25 mL
Prep Extract Vol: 25 mL

Print Date: 05/15/2018 2:23:25PM

J flagging is activated

Method Blank

Blank ID: MB for HBN 1778967 [BOD/6026]
Blank Lab ID: 1443574

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181780001, 1181780002, 1181780003, 1181780004, 1181780005, 1181780006, 1181780007, 1181780008, 1181780009, 1181780010, 1181780011, 1181780012

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: BOD6026
Analytical Method: SM21 5210B
Instrument:
Analyst: A.L
Analytical Date/Time: 4/27/2018 4:11:00PM

Print Date: 05/15/2018 2:23:33PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1181780 [BOD6026]
Blank Spike Lab ID: 1443575
Date Analyzed: 04/27/2018 16:11

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181780001, 1181780002, 1181780003, 1181780004, 1181780005, 1181780006, 1181780007, 1181780008, 1181780009, 1181780010, 1181780011, 1181780012

Results by **SM21 5210B**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Biochemical Oxygen Demand	198	213	108	(84.6-115.4

Batch Information

Analytical Batch: **BOD6026**
Analytical Method: **SM21 5210B**
Instrument:
Analyst: **A.L**

Print Date: 05/15/2018 2:23:35PM

Method Blank

Blank ID: MB for HBN 1778900 [BTF/16505]
Blank Lab ID: 1443322

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181780001, 1181780002, 1181780003, 1181780004, 1181780005, 1181780006, 1181780007, 1181780008, 1181780009, 1181780010, 1181780011, 1181780012

Results by **SM21 9222D**

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

Batch Information

Analytical Batch: BTF16505
Analytical Method: SM21 9222D
Instrument:
Analyst: DSH
Analytical Date/Time: 4/26/2018 5:26:00PM

Print Date: 05/15/2018 2:23:37PM

Method Blank

Blank ID: MB for HBN 1778902 [BTF/16507]
Blank Lab ID: 1443325

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181780001, 1181780002, 1181780003, 1181780004, 1181780005, 1181780006, 1181780007, 1181780008, 1181780009, 1181780010, 1181780011, 1181780012

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: BTF16507
Analytical Method: SM21 9223B
Instrument:
Analyst: K.W
Analytical Date/Time: 4/26/2018 7:15:00PM

Print Date: 05/15/2018 2:23:39PM

Method Blank

Blank ID: MB for HBN 1779093 [STS/5861]
Blank Lab ID: 1444172

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181780001, 1181780002, 1181780003, 1181780004, 1181780005, 1181780006, 1181780007, 1181780008, 1181780009, 1181780010, 1181780011, 1181780012

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: STS5861
Analytical Method: SM21 2540D
Instrument:
Analyst: EWW
Analytical Date/Time: 5/2/2018 1:50:42PM

Print Date: 05/15/2018 2:23:42PM

Duplicate Sample Summary

Original Sample ID: 1181780001
Duplicate Sample ID: 1444175

Analysis Date: 05/02/2018 13:50
Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1181780001, 1181780002, 1181780003, 1181780004, 1181780005, 1181780006, 1181780007, 1181780008, 1181780009, 1181780010

Results by **SM21 2540D**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Suspended Solids	ND	1.04J	mg/L	0.00	(< 5)

Batch Information

Analytical Batch: STS5861
Analytical Method: SM21 2540D
Instrument:
Analyst: EWW

Print Date: 05/15/2018 2:23:43PM

Duplicate Sample Summary

Original Sample ID: 1181780010
Duplicate Sample ID: 1444176

Analysis Date: 05/02/2018 13:50
Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1181780002, 1181780003, 1181780004, 1181780005, 1181780006, 1181780007, 1181780008, 1181780009, 1181780010, 1181780011, 1181780012

Results by **SM21 2540D**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Suspended Solids	ND	1.09U	mg/L	0.00	(< 5)

Batch Information

Analytical Batch: STS5861
Analytical Method: SM21 2540D
Instrument:
Analyst: EWW

Print Date: 05/15/2018 2:23:43PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1181780 [STS5861]
Blank Spike Lab ID: 1444173
Date Analyzed: 05/02/2018 13:50

Spike Duplicate ID: LCSD for HBN 1181780 [STS5861]
Spike Duplicate Lab ID: 1444174
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181780001, 1181780002, 1181780003, 1181780004, 1181780005, 1181780006, 1181780007, 1181780008, 1181780009, 1181780010, 1181780011, 1181780012

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	50	47.9	96	50	47.7	95	(75-125)	0.42	(< 5)

Batch Information

Analytical Batch: **STS5861**
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 1779015 (WFI/2676) Matrix: Water (Surface, Eff., Ground)
Blank Lab ID: 1443820

QC for Samples:
1181780001, 1181780002, 1181780003, 1181780004, 1181780005, 1181780006, 1181780007, 1181780008, 1181780009, 1181780010, 1181780011, 1181780012

Results by **SM21 4500NO3-F**

Parameter	Results	LOQ/CL	DL	Units
Nitrate-N	0.0544J	0.100	0.0250	mg/L
Nitrite-N	0.0500U	0.100	0.0250	mg/L
Total Nitrate/Nitrite-N	0.0544J	0.100	0.0250	mg/L

Batch Information

Analytical Batch: WFI2676
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: AYC
Analytical Date/Time: 4/27/2018 6:46:51PM

Print Date: 05/15/2018 2:23:45PM

Method Blank

Blank ID: MB for HBN 1779015 (WFI/2676) Matrix: Water (Surface, Eff., Ground)
Blank Lab ID: 1443822

QC for Samples:
1181780001, 1181780002, 1181780003, 1181780004, 1181780005, 1181780006, 1181780007, 1181780008, 1181780009, 1181780010, 1181780011, 1181780012

Results by **SM21 4500NO3-F**

Parameter	Results	LOQ/CL	DL	Units
Nitrate-N	0.0534J	0.100	0.0250	mg/L
Nitrite-N	0.0500U	0.100	0.0250	mg/L
Total Nitrate/Nitrite-N	0.0534J	0.100	0.0250	mg/L

Batch Information

Analytical Batch: WFI2676
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: AYC
Analytical Date/Time: 4/27/2018 7:23:36PM

Print Date: 05/15/2018 2:23:45PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1181780 [WFI2676]
Blank Spike Lab ID: 1443806
Date Analyzed: 04/27/2018 18:45

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181780001, 1181780002, 1181780003, 1181780004, 1181780005, 1181780006, 1181780007, 1181780008, 1181780009, 1181780010, 1181780011, 1181780012

Results by **SM21 4500NO3-F**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Nitrate-N	2.5	2.54	102	(70-130)
Nitrite-N	2.5	2.49	100	(90-110)
Total Nitrate/Nitrite-N	5	5.03	101	(90-110)

Batch Information

Analytical Batch: **WFI2676**
Analytical Method: **SM21 4500NO3-F**
Instrument: **Astoria segmented flow**
Analyst: **AYC**

Print Date: 05/15/2018 2:23:47PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1181780 [WFI2676]
Blank Spike Lab ID: 1443821
Date Analyzed: 04/27/2018 19:21

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181780001, 1181780002, 1181780003, 1181780004, 1181780005, 1181780006, 1181780007, 1181780008, 1181780009, 1181780010, 1181780011, 1181780012

Results by **SM21 4500NO3-F**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Nitrate-N	2.5	2.68	107	(70-130)
Nitrite-N	2.5	2.57	103	(90-110)
Total Nitrate/Nitrite-N	5	5.26	105	(90-110)

Batch Information

Analytical Batch: **WFI2676**
Analytical Method: **SM21 4500NO3-F**
Instrument: **Astoria segmented flow**
Analyst: **AYC**

Print Date: 05/15/2018 2:23:47PM

Matrix Spike Summary

Original Sample ID: 1181768002
MS Sample ID: 1443802 MS
MSD Sample ID: 1443803 MSD

Analysis Date: 04/27/2018 19:39
Analysis Date: 04/27/2018 19:41
Analysis Date: 04/27/2018 19:42
Matrix: Drinking Water

QC for Samples: 1181780009, 1181780010, 1181780011, 1181780012

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	0.100U	5.00	4.48	90	*	5.00	4.63	93	90-110	3.30	(< 25)

Batch Information

Analytical Batch: WFI2676
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: AYC
Analytical Date/Time: 4/27/2018 7:41:06PM

Print Date: 05/15/2018 2:23:48PM

Matrix Spike Summary

Original Sample ID: 1181780008
MS Sample ID: 1443804 MS
MSD Sample ID: 1443805 MSD

Analysis Date: 04/27/2018 19:04
Analysis Date: 04/27/2018 19:06
Analysis Date: 04/27/2018 19:07
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181780001, 1181780002, 1181780003, 1181780004, 1181780005, 1181780006, 1181780007, 1181780008, 1181780009, 1181780010, 1181780011, 1181780012

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	0.0396J	2.50	2.64	104	2.50	2.64	104	70-130	0.02	(< 25)
Nitrite-N	0.0500U	2.50	2.58	103	2.50	2.64	106	90-110	2.10	(< 25)

Batch Information

Analytical Batch: WFI2676
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: AYC
Analytical Date/Time: 4/27/2018 7:06:06PM

Print Date: 05/15/2018 2:23:48PM

Method Blank

Blank ID: MB for HBN 1778937 [WXX/12288]
Blank Lab ID: 1443455

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181780001, 1181780002, 1181780003, 1181780004

Results by **SM21 4500-NH3 G**

Parameter	Results	LOQ/CL	DL	Units
Ammonia-N	0.0351J	0.100	0.0310	mg/L

Batch Information

Analytical Batch: WDA4252
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 4/27/2018 10:46:20AM

Prep Batch: WXX12288
Prep Method: METHOD
Prep Date/Time: 4/27/2018 10:00:00AM
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 1181780 [WXX12288]
Blank Spike Lab ID: 1443456
Date Analyzed: 04/27/2018 10:48

Spike Duplicate ID: LCSD for HBN 1181780 [WXX12288]
Spike Duplicate Lab ID: 1443457
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181780001, 1181780002, 1181780003, 1181780004

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	0.905	91	1	0.954	95	(75-125)	5.30	(< 25)

Batch Information

Analytical Batch: **WDA4252**
Analytical Method: **SM21 4500-NH3 G**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX12288**
Prep Method: **METHOD**
Prep Date/Time: **04/27/2018 10:00**
Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

Print Date: 05/15/2018 2:23:51PM

Matrix Spike Summary

Original Sample ID: 1181780001
MS Sample ID: 1443458 MS
MSD Sample ID: 1443459 MSD

Analysis Date: 04/27/2018 10:51
Analysis Date: 04/27/2018 10:53
Analysis Date: 04/27/2018 10:54
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181780001, 1181780002, 1181780003, 1181780004

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	0.0363J	1.00	.872	84	1.00	0.787	75	75-125	10.20	(< 25)

Batch Information

Analytical Batch: WDA4252
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 4/27/2018 10:53:04AM

Prep Batch: WXX12288
Prep Method: Ammonia by SM21 4500F prep (W)
Prep Date/Time: 4/27/2018 10:00:00AM
Prep Initial Wt./Vol.: 6.00mL
Prep Extract Vol: 6.00mL

Print Date: 05/15/2018 2:23:52PM

Method Blank

Blank ID: MB for HBN 1778946 [WXX/12289]
Blank Lab ID: 1443487

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181780005, 1181780006, 1181780007, 1181780008, 1181780009, 1181780010, 1181780011, 1181780012

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: WDA4253
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 4/27/2018 11:57:36AM

Prep Batch: WXX12289
Prep Method: METHOD
Prep Date/Time: 4/27/2018 11:10:00AM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Print Date: 05/15/2018 2:23:53PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1181780 [WXX12289]
Blank Spike Lab ID: 1443488
Date Analyzed: 04/27/2018 11:59

Spike Duplicate ID: LCSD for HBN 1181780 [WXX12289]
Spike Duplicate Lab ID: 1443489
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181780005, 1181780006, 1181780007, 1181780008, 1181780009, 1181780010, 1181780011, 1181780012

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	0.982	98	1	0.957	96	(75-125)	2.60	(< 25)

Batch Information

Analytical Batch: **WDA4253**
Analytical Method: **SM21 4500-NH3 G**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX12289**
Prep Method: **METHOD**
Prep Date/Time: **04/27/2018 11:10**
Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

Print Date: 05/15/2018 2:23:55PM

Matrix Spike Summary

Original Sample ID: 1181780010
MS Sample ID: 1443490 MS
MSD Sample ID: 1443491 MSD

Analysis Date: 04/27/2018 12:04
Analysis Date: 04/27/2018 12:05
Analysis Date: 04/27/2018 12:07
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181780005, 1181780006, 1181780007, 1181780008, 1181780009, 1181780010, 1181780011, 1181780012

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	0.187	1.00	1.06	88	1.00	1.02	84	75-125	3.80	(< 25)

Batch Information

Analytical Batch: WDA4253
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 4/27/2018 12:05:59PM

Prep Batch: WXX12289
Prep Method: Ammonia by SM21 4500F prep (W)
Prep Date/Time: 4/27/2018 11:10:00AM
Prep Initial Wt./Vol.: 6.00mL
Prep Extract Vol: 6.00mL

Print Date: 05/15/2018 2:23:56PM

Method Blank

Blank ID: MB for HBN 1779026 [WXX/12291]
Blank Lab ID: 1443854

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181780005, 1181780008, 1181780009, 1181780010, 1181780011, 1181780012

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: WDA4254
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 4/30/2018 4:06:50PM

Prep Batch: WXX12291
Prep Method: SM21 4500P-B,E
Prep Date/Time: 4/30/2018 1:10:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/15/2018 2:23:57PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1181780 [WXX12291]
Blank Spike Lab ID: 1443855
Date Analyzed: 04/30/2018 16:07

Spike Duplicate ID: LCSD for HBN 1181780 [WXX12291]
Spike Duplicate Lab ID: 1443856
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181780005, 1181780008, 1181780009, 1181780010, 1181780011, 1181780012

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	0.207	103	0.2	0.207	103	(85-115)	0.05	(< 25)

Batch Information

Analytical Batch: **WDA4254**
Analytical Method: **SM21 4500P-B,E**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX12291**
Prep Method: **SM21 4500P-B,E**
Prep Date/Time: **04/30/2018 13:10**
Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

Print Date: 05/15/2018 2:23:59PM

Matrix Spike Summary

Original Sample ID: 1181726005
MS Sample ID: 1443857 MS
MSD Sample ID: 1443858 MSD

Analysis Date: 04/30/2018 16:09
Analysis Date: 04/30/2018 16:10
Analysis Date: 04/30/2018 16:11
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181780005, 1181780008, 1181780009, 1181780010, 1181780011, 1181780012

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	1.46	5.00	6.93	110	5.00	6.87	108	75-125	0.91	(< 25)

Batch Information

Analytical Batch: WDA4254
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 4/30/2018 4:10:46PM

Prep Batch: WXX12291
Prep Method: Total Phosphorus (W) Ext.
Prep Date/Time: 4/30/2018 1:10:00PM
Prep Initial Wt./Vol.: 1.00mL
Prep Extract Vol: 25.00mL

Print Date: 05/15/2018 2:24:00PM

Method Blank

Blank ID: MB for HBN 1779030 [WXX/12292]
Blank Lab ID: 1443873

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181780001, 1181780002, 1181780003, 1181780004, 1181780006, 1181780007

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: WDA4255
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 4/30/2018 5:10:19PM

Prep Batch: WXX12292
Prep Method: SM21 4500P-B,E
Prep Date/Time: 4/30/2018 2:17:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/15/2018 2:24:02PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1181780 [WXX12292]
Blank Spike Lab ID: 1443874
Date Analyzed: 04/30/2018 17:11

Spike Duplicate ID: LCSD for HBN 1181780 [WXX12292]
Spike Duplicate Lab ID: 1443875
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181780001, 1181780002, 1181780003, 1181780004, 1181780006, 1181780007

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	0.208	104	0.2	0.210	105	(85-115)	0.91	(< 25)

Batch Information

Analytical Batch: **WDA4255**
Analytical Method: **SM21 4500P-B,E**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX12292**
Prep Method: **SM21 4500P-B,E**
Prep Date/Time: **04/30/2018 14:17**
Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

Print Date: 05/15/2018 2:24:04PM

Matrix Spike Summary

Original Sample ID: 1181780001
MS Sample ID: 1443876 MS
MSD Sample ID: 1443877 MSD

Analysis Date: 04/30/2018 17:13
Analysis Date: 04/30/2018 17:14
Analysis Date: 04/30/2018 17:15
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181780001, 1181780002, 1181780003, 1181780004, 1181780006, 1181780007

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	0.0165J	0.200	.228	106	0.200	0.223	103	75-125	2.10	(< 25)

Batch Information

Analytical Batch: WDA4255
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 4/30/2018 5:14:13PM

Prep Batch: WXX12292
Prep Method: Total Phosphorus (W) Ext.
Prep Date/Time: 4/30/2018 2:17:00PM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 05/15/2018 2:24:05PM

Method Blank

Blank ID: MB for HBN 1779164 [WXX/12300]
Blank Lab ID: 1444508

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181780001, 1181780002, 1181780003, 1181780004, 1181780005, 1181780006, 1181780007, 1181780008, 1181780009, 1181780010, 1181780011, 1181780012

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: WDA4262
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 5/3/2018 10:00:59AM

Prep Batch: WXX12300
Prep Method: METHOD
Prep Date/Time: 5/2/2018 11:26:00AM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Print Date: 05/15/2018 2:24:06PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1181780 [WXX12300]
Blank Spike Lab ID: 1444509
Date Analyzed: 05/03/2018 10:02

Spike Duplicate ID: LCSD for HBN 1181780 [WXX12300]
Spike Duplicate Lab ID: 1444510
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181780001, 1181780002, 1181780003, 1181780004, 1181780005, 1181780006, 1181780007, 1181780008, 1181780009, 1181780010, 1181780011, 1181780012

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	3.51	88	4	3.64	91	(75-125)	3.60	(< 25)

Batch Information

Analytical Batch: **WDA4262**
Analytical Method: **SM21 4500-N D**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX12300**
Prep Method: **METHOD**
Prep Date/Time: **05/02/2018 11:26**
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: 1188801005
MS Sample ID: 1444511 MS
MSD Sample ID: 1444512 MSD

Analysis Date: 05/03/2018 10:07
Analysis Date: 05/03/2018 10:08
Analysis Date: 05/03/2018 10:10
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181780001, 1181780002, 1181780003, 1181780004, 1181780005, 1181780006, 1181780007, 1181780008, 1181780009, 1181780010, 1181780011, 1181780012

Results by **SM21 4500-N D**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Kjeldahl Nitrogen	1.00U	4.00	3.84	96	4.00	3.14	78	75-125	20.20	(< 25)

Batch Information

Analytical Batch: WDA4262
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 5/3/2018 10:08:50AM

Prep Batch: WXX12300
Prep Method: Distillation TKN by Phenate (W)
Prep Date/Time: 5/2/2018 11:26:00AM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 05/15/2018 2:24:08PM

SGS

SGS North America Inc.
CHAIN OF CUSTODY RECORD

1181780 Corrected Report - Revision 1

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

Section 1

CLIENT: Stantec

CONTACT: Jake Alward PHONE #: 343-5202

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

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

INVOICE TO: Stantec QUOTE #: P.O. #: 2047900415

Section 2

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	# CONTAINERS	Pres: Type: Comp Grab MI (Multi-incremental)	BOD	TSS	Fecal Coliform	Total Coliform - Quantitray	Nitrate/Nitrite	Ammonia/TKN/T-Phos					REMARKS/LOC ID
							/	/	H_2SO_4	H_2SO_4	/	H_2SO_4					
①A-F	SW4	4/26/18	845		6	G	1	1	1	1	1	1					
②A-F	SW6		855		6		1	1	1	1	1	1					
③A-F	SW10		930		6		1	1	1	1	1	1					
④A-F	SW9		947		6		1	1	1	1	1	1					
⑤A-F	SW8		1011		6		1	1	1	1	1	1					
⑥A-F	SW12		1121		6		1	1	1	1	1	1					
⑦A-F	SW13		1142		6		1	1	1	1	1	1					
⑧A-F	SW16		1200		6		1	1	1	1	1	1					
⑨A-F	SW15		1307		6		1	1	1	1	1	1					

Section 5

	Date	Time	
Relinquished By: (1)	4/26/18	16:34	Received By:
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	04/26/18	16:34	Received For Laboratory By: SD

Section 4

DOD Project? Yes No

Data Deliverable Requirements:

Cooler ID:

Requested Turnaround Time and/or Special Instructions:

Temp Blank °C: 1: 4.9 D42 2: 3.5 D40 3: 2.8 D24 or Ambient [ ]

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Delivery Method: Hand Delivery [X] Commerical Delivery [ ]

SGS

SGS North America Inc.
CHAIN OF CUSTODY RECORD

1181780 Corrected Report - Revision 1

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

Section 1

CLIENT: Stantec

CONTACT: Jake — PHONE #: 343-5202

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

REPORTS TO: — E-MAIL:

INVOICE TO: Stantec — QUOTE #: — P.O. #:

Section 3 — Preservative

Section 2

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	# CONTAINERS	Pres: Type: Comp Grab MI (Multi-incremental)	BOD	TSS	Fecal Coliform	Total Coliform - Quantitray	Nitrate/Nitrite	Ammonia/TKN/T-Phos					REMARKS/LOC ID
									$NaHSO_4$	$NaHSO_4$		H_2SO_4					
(10) A-F	TS1	4/26/18	1327		6	G	1	1	1	1	1	1					
(11) A-F	TS2	↓	1351		6	G	1	1	1	1	1	1					
(10) A-F	TS3	↓	1430		6	G	1	1	1	1	1	1					

Section 5

	Date	Time	
Relinquished By: (1)	4/26/18	16:34	Received By:
Relinquished By: (2)			Received By:
Relinquished By: (3)			Received By:
Relinquished By: (4)	04/26/18	16:34	Received For Laboratory By: SD

Section 4

DOD Project? Yes No

Data Deliverable Requirements:

Cooler ID: _____

Requested Turnaround Time and/or Special Instructions:

Temp Blank °C: _____ or Ambient [ ]

Chain of Custody Seal: (Circle) INTACT BROKEN (ABSENT)

Delivery Method: Hand Delivery [X] Commerical Delivery [ ]

e-Sample Receipt Form

Corrected Report - Revision 1

SGS Workorder #: **1181780**

1181780

Review Criteria	Condition (Yes, No, N/A)	Exceptions Noted below
Chain of Custody / Temperature Requirements		yes — Exemption permitted if sampler hand carries/delivers.
Were Custody Seals intact? Note # & location	n/a	ABSENT
COC accompanied samples?	yes	
n/a **Exemption permitted if chilled & collected <8 hours ago, or for samples where chilling is not required		
Temperature blank compliant* (i.e., 0-6 °C after CF)?	yes	Cooler ID: 1 @ 4.9 °C Therm. ID: D42
	yes	Cooler ID: 2 @ 3.5 °C Therm. ID: D40
	yes	Cooler ID: 3 @ 2.8 °C Therm. ID: D24
	n/a	Cooler ID: @ °C Therm. ID:
	n/a	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	
If samples received without a temperature blank, the "cooler temperature" will be documented in lieu of the temperature blank & "**COOLER TEMP**" will be noted to the right. In cases where neither a temp blank nor cooler temp can be obtained, note "ambient" or "chilled".		
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.		
Were analyses requested unambiguous? (i.e., method is specified for analyses with >1 option for analysis)	yes	
	n/a	***Exemption permitted for metals (e.g,200.8/6020A).
Were proper containers (type/mass/volume/preservative***)used?	yes	
Volatile / LL-Hg Requirements		
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samples?	n/a	
Were all water VOA vials free of headspace (i.e., bubbles ≤ 6mm)?	n/a	
Were all soil VOAs field extracted with MeOH+BFB?	n/a	

Note to Client: Any "No", answer above indicates non-compliance with standard procedures and may impact data quality.

Additional notes (if applicable):

Samples 1 and 2 Fecal Coli samples passed their hold times at the lab prior to being analyzed. We will proceed with the samples for now.

Sample Containers and Preservatives

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition
1181780001-A	No Preservative Required	OK	1181780008-A	No Preservative Required	OK
1181780001-B	No Preservative Required	OK	1181780008-B	No Preservative Required	OK
1181780001-C	Na2S2O3 for Chlorine Redu	OK	1181780008-C	Na2S2O3 for Chlorine Redu	OK
1181780001-D	Na2S2O3 for Chlorine Redu	OK	1181780008-D	Na2S2O3 for Chlorine Redu	OK
1181780001-E	No Preservative Required	OK	1181780008-E	No Preservative Required	OK
1181780001-F	H2SO4 to pH < 2	OK	1181780008-F	H2SO4 to pH < 2	OK
1181780002-A	No Preservative Required	OK	1181780009-A	No Preservative Required	OK
1181780002-B	No Preservative Required	OK	1181780009-B	No Preservative Required	OK
1181780002-C	Na2S2O3 for Chlorine Redu	OK	1181780009-C	Na2S2O3 for Chlorine Redu	OK
1181780002-D	Na2S2O3 for Chlorine Redu	OK	1181780009-D	Na2S2O3 for Chlorine Redu	OK
1181780002-E	No Preservative Required	OK	1181780009-E	No Preservative Required	OK
1181780002-F	H2SO4 to pH < 2	OK	1181780009-F	H2SO4 to pH < 2	OK
1181780003-A	No Preservative Required	OK	1181780010-A	No Preservative Required	OK
1181780003-B	No Preservative Required	OK	1181780010-B	No Preservative Required	OK
1181780003-C	Na2S2O3 for Chlorine Redu	OK	1181780010-C	Na2S2O3 for Chlorine Redu	OK
1181780003-D	Na2S2O3 for Chlorine Redu	OK	1181780010-D	Na2S2O3 for Chlorine Redu	OK
1181780003-E	No Preservative Required	OK	1181780010-E	No Preservative Required	OK
1181780003-F	H2SO4 to pH < 2	OK	1181780010-F	H2SO4 to pH < 2	OK
1181780004-A	No Preservative Required	OK	1181780011-A	No Preservative Required	OK
1181780004-B	No Preservative Required	OK	1181780011-B	No Preservative Required	OK
1181780004-C	Na2S2O3 for Chlorine Redu	OK	1181780011-C	Na2S2O3 for Chlorine Redu	OK
1181780004-D	Na2S2O3 for Chlorine Redu	OK	1181780011-D	Na2S2O3 for Chlorine Redu	OK
1181780004-E	No Preservative Required	OK	1181780011-E	No Preservative Required	OK
1181780004-F	H2SO4 to pH < 2	OK	1181780011-F	H2SO4 to pH < 2	OK
1181780005-A	No Preservative Required	OK	1181780012-A	No Preservative Required	OK
1181780005-B	No Preservative Required	OK	1181780012-B	No Preservative Required	OK
1181780005-C	Na2S2O3 for Chlorine Redu	OK	1181780012-C	Na2S2O3 for Chlorine Redu	OK
1181780005-D	Na2S2O3 for Chlorine Redu	OK	1181780012-D	Na2S2O3 for Chlorine Redu	OK
1181780005-E	No Preservative Required	OK	1181780012-E	No Preservative Required	OK
1181780005-F	H2SO4 to pH < 2	OK	1181780012-F	H2SO4 to pH < 2	OK
1181780006-A	No Preservative Required	OK			
1181780006-B	No Preservative Required	OK			
1181780006-C	Na2S2O3 for Chlorine Redu	OK			
1181780006-D	Na2S2O3 for Chlorine Redu	OK			
1181780006-E	No Preservative Required	OK			
1181780006-F	H2SO4 to pH < 2	OK			
1181780007-A	No Preservative Required	OK			
1181780007-B	No Preservative Required	OK			
1181780007-C	Na2S2O3 for Chlorine Redu	OK			
1181780007-D	Na2S2O3 for Chlorine Redu	OK			
1181780007-E	No Preservative Required	OK			
1181780007-F	H2SO4 to pH < 2	OK			

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition

Container Condition Glossary

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

OK - The container was received at an acceptable pH for the analysis requested.
BU - The container was received with headspace greater than 6mm.
DM - The container was received damaged.
FR - The container was received frozen and not usable for Bacteria or BOD analyses.
IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.
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.