Laboratory Report of Analysis

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

Report Number: **1181005**

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: **1181005**
Project Name/Site: **Wasilla WWTP**
Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

MW15 (1181005002) PS

6020A - The metals LOQs for silver, cadmium, and arsenic were elevated due to matrix interference.

1181005004MS (1437516) MS

4500NH3-G - Ammonia - MS recovery is outside of QC criteria. Refer to LCS for accuracy requirements.

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

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Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. 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.

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Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
MW10	1181005001	03/14/2018	03/14/2018	Water (Surface, Eff., Ground)
MW15	1181005002	03/14/2018	03/14/2018	Water (Surface, Eff., Ground)
MW2B	1181005003	03/14/2018	03/14/2018	Water (Surface, Eff., Ground)
B4	1181005004	03/14/2018	03/14/2018	Water (Surface, Eff., Ground)

Method	Method Description
SM21 4500-NH3 G	Ammonia-N (W) SM21 4500-NH3 G
SM21 9222D	Fecal Coliform (MF)
SM21 4500NO3-F	Flow Injection Analysis
SW6020A	Metals by ICP-MS
SM21 4500-N D	TKN by Phenate (W)

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Detectable Results Summary

Client Sample ID: **MW10**
Lab Sample ID: 1181005001

	Parameter	Result	Units
Metals by ICP/MS	Arsenic	8.68	ug/L
	Barium	199	ug/L
	Chromium	39.1	ug/L
	Copper	49.8	ug/L
	Lead	7.59	ug/L
	Mercury	0.0961J	ug/L
	Zinc	64.0	ug/L
Waters Department	Ammonia-N	0.0719J	mg/L
	Nitrate-N	0.162	mg/L
	Nitrite-N	0.0256J	mg/L
	Total Kjeldahl Nitrogen	0.794J	mg/L

Client Sample ID: **MW15**
Lab Sample ID: 1181005002

	Parameter	Result	Units
Metals by ICP/MS	Arsenic	297	ug/L
	Barium	3240	ug/L
	Cadmium	3.19J	ug/L
	Chromium	1090	ug/L
	Copper	1640	ug/L
	Lead	201	ug/L
	Mercury	3.79	ug/L
	Zinc	1820	ug/L
Waters Department	Ammonia-N	0.224	mg/L
	Nitrate-N	0.0914J	mg/L
	Nitrite-N	0.0538J	mg/L
	Total Kjeldahl Nitrogen	1.14	mg/L

Client Sample ID: **MW2B**
Lab Sample ID: 1181005003

	Parameter	Result	Units
Metals by ICP/MS	Arsenic	114	ug/L
	Barium	218	ug/L
	Chromium	15.4	ug/L
	Copper	43.1	ug/L
	Lead	6.95	ug/L
	Zinc	54.1	ug/L
Waters Department	Ammonia-N	0.0813J	mg/L
	Nitrate-N	0.110	mg/L
	Total Kjeldahl Nitrogen	1.66	mg/L

Client Sample ID: **B4**
Lab Sample ID: 1181005004

	Parameter	Result	Units
Metals by ICP/MS	Barium	17.5	ug/L
	Copper	3.94J	ug/L
	Lead	0.713J	ug/L
Waters Department	Nitrate-N	1.43	mg/L

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Results of **MW10**

Client Sample ID: **MW10**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181005001
Lab Project ID: 1181005

Collection Date: 03/14/18 10:26
Received Date: 03/14/18 16:46
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Arsenic	8.68		5.00	1.50	ug/L	5		03/15/18 13:25
Barium	199		3.00	0.940	ug/L	5		03/15/18 13:25
Cadmium	1.00 U		2.00	0.620	ug/L	5		03/15/18 13:25
Chromium	39.1		4.00	1.30	ug/L	5		03/15/18 13:25
Copper	49.8		6.00	1.80	ug/L	5		03/15/18 13:25
Lead	7.59		1.00	0.310	ug/L	5		03/15/18 13:25
Mercury	0.0961 J		0.200	0.0620	ug/L	5		03/15/18 13:25
Selenium	10.0 U		20.0	6.20	ug/L	5		03/15/18 13:25
Silver	1.00 U		2.00	0.620	ug/L	5		03/15/18 13:25
Zinc	64.0		25.0	7.80	ug/L	5		03/15/18 13:25

Batch Information

Analytical Batch: MMS10094
Analytical Method: SW6020A
Analyst: VDL
Analytical Date/Time: 03/15/18 13:25
Container ID: 1181005001-D

Prep Batch: MXX31421
Prep Method: SW3010A
Prep Date/Time: 03/15/18 07:30
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

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Results of **MW10**

Client Sample ID: **MW10**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181005001
Lab Project ID: 1181005

Collection Date: 03/14/18 10:26
Received Date: 03/14/18 16:46
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	1.64	U	1.64	1.64	col/100mL	1		03/14/18 17:33

Batch Information

Analytical Batch: BTF16392
Analytical Method: SM21 9222D
Analyst: ACF
Analytical Date/Time: 03/14/18 17:33
Container ID: 1181005001-A

Results of **MW10**

Client Sample ID: **MW10**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181005001
Lab Project ID: 1181005

Collection Date: 03/14/18 10:26
Received Date: 03/14/18 16:46
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.794	J	1.00	0.310	mg/L	1		03/15/18 12:00

Batch Information

Analytical Batch: WDA4214
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 03/15/18 12:00
Container ID: 1181005001-C

Prep Batch: WXX12230
Prep Method: METHOD
Prep Date/Time: 03/14/18 20:00
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	0.0719	J	0.100	0.0310	mg/L	1		03/15/18 15:38

Batch Information

Analytical Batch: WDA4215
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 03/15/18 15:38
Container ID: 1181005001-C

Prep Batch: WXX12231
Prep Method: METHOD
Prep Date/Time: 03/15/18 14:35
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	0.162		0.100	0.0250	mg/L	2		03/14/18 18:14
Nitrite-N	0.0256	J	0.100	0.0250	mg/L	2		03/14/18 18:14

Batch Information

Analytical Batch: WFI2654
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 03/14/18 18:14
Container ID: 1181005001-B

Results of **MW15**

Client Sample ID: **MW15**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181005002
Lab Project ID: 1181005

Collection Date: 03/14/18 13:41
Received Date: 03/14/18 16:46
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Arsenic	297		25.0	7.50	ug/L	5		03/15/18 14:43
Barium	3240		15.0	4.70	ug/L	5		03/15/18 14:43
Cadmium	3.19	J	10.0	3.10	ug/L	5		03/15/18 14:43
Chromium	1090		20.0	6.50	ug/L	5		03/15/18 14:43
Copper	1640		30.0	9.00	ug/L	5		03/15/18 14:43
Lead	201		5.00	1.55	ug/L	5		03/15/18 14:43
Mercury	3.79		1.00	0.310	ug/L	5		03/15/18 14:43
Selenium	50.0	U	100	31.0	ug/L	5		03/15/18 14:43
Silver	5.00	U	10.0	3.10	ug/L	5		03/15/18 14:43
Zinc	1820		125	39.0	ug/L	5		03/15/18 14:43

Batch Information

Analytical Batch: MMS10094
Analytical Method: SW6020A
Analyst: VDL
Analytical Date/Time: 03/15/18 14:43
Container ID: 1181005002-D

Prep Batch: MXX31421
Prep Method: SW3010A
Prep Date/Time: 03/15/18 07:30
Prep Initial Wt./Vol.: 5 mL
Prep Extract Vol: 25 mL

Results of **MW15**

Client Sample ID: **MW15**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181005002
Lab Project ID: 1181005

Collection Date: 03/14/18 13:41
Received Date: 03/14/18 16:46
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	9.09	U	9.09	9.09	col/100mL	1		03/14/18 17:33

Batch Information

Analytical Batch: BTF16392
Analytical Method: SM21 9222D
Analyst: ACF
Analytical Date/Time: 03/14/18 17:33
Container ID: 1181005002-A

Results of **MW15**

Client Sample ID: **MW15**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181005002
Lab Project ID: 1181005

Collection Date: 03/14/18 13:41
Received Date: 03/14/18 16:46
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	1.14		1.00	0.310	mg/L	1		03/16/18 12:04

Batch Information

Analytical Batch: WDA4216
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 03/16/18 12:04
Container ID: 1181005002-C

Prep Batch: WXX12233
Prep Method: METHOD
Prep Date/Time: 03/15/18 18:20
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	0.224		0.100	0.0310	mg/L	1		03/15/18 15:36

Batch Information

Analytical Batch: WDA4215
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 03/15/18 15:36
Container ID: 1181005002-C

Prep Batch: WXX12231
Prep Method: METHOD
Prep Date/Time: 03/15/18 14:35
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	0.0914	J	0.100	0.0250	mg/L	2		03/14/18 18:16
Nitrite-N	0.0538	J	0.100	0.0250	mg/L	2		03/14/18 18:16

Batch Information

Analytical Batch: WFI2654
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 03/14/18 18:16
Container ID: 1181005002-B

Results of **MW2B**

Client Sample ID: **MW2B**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181005003
Lab Project ID: 1181005

Collection Date: 03/14/18 12:30
Received Date: 03/14/18 16:46
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Arsenic	114		5.00	1.50	ug/L	5		03/15/18 13:44
Barium	218		3.00	0.940	ug/L	5		03/15/18 13:44
Cadmium	1.00 U		2.00	0.620	ug/L	5		03/15/18 13:44
Chromium	15.4		4.00	1.30	ug/L	5		03/15/18 13:44
Copper	43.1		6.00	1.80	ug/L	5		03/15/18 13:44
Lead	6.95		1.00	0.310	ug/L	5		03/15/18 13:44
Mercury	0.100 U		0.200	0.0620	ug/L	5		03/15/18 13:44
Selenium	10.0 U		20.0	6.20	ug/L	5		03/15/18 13:44
Silver	1.00 U		2.00	0.620	ug/L	5		03/15/18 13:44
Zinc	54.1		25.0	7.80	ug/L	5		03/15/18 13:44

Batch Information

Analytical Batch: MMS10094
Analytical Method: SW6020A
Analyst: VDL
Analytical Date/Time: 03/15/18 13:44
Container ID: 1181005003-D

Prep Batch: MXX31421
Prep Method: SW3010A
Prep Date/Time: 03/15/18 07:30
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **MW2B**

Client Sample ID: **MW2B**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181005003
Lab Project ID: 1181005

Collection Date: 03/14/18 12:30
Received Date: 03/14/18 16:46
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	6.25	U	6.25	6.25	col/100mL	1		03/14/18 17:33

Batch Information

Analytical Batch: BTF16392
Analytical Method: SM21 9222D
Analyst: ACF
Analytical Date/Time: 03/14/18 17:33
Container ID: 1181005003-A

Results of **MW2B**

Client Sample ID: **MW2B**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181005003
Lab Project ID: 1181005

Collection Date: 03/14/18 12:30
Received Date: 03/14/18 16:46
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	1.66		1.00	0.310	mg/L	1		03/15/18 12:02

Batch Information

Analytical Batch: WDA4214
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 03/15/18 12:02
Container ID: 1181005003-C

Prep Batch: WXX12230
Prep Method: METHOD
Prep Date/Time: 03/14/18 20:00
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	0.0813	J	0.100	0.0310	mg/L	1		03/15/18 15:34

Batch Information

Analytical Batch: WDA4215
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 03/15/18 15:34
Container ID: 1181005003-C

Prep Batch: WXX12231
Prep Method: METHOD
Prep Date/Time: 03/15/18 14:35
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	0.110		0.100	0.0250	mg/L	2		03/14/18 18:17
Nitrite-N	0.0500	U	0.100	0.0250	mg/L	2		03/14/18 18:17

Batch Information

Analytical Batch: WFI2654
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 03/14/18 18:17
Container ID: 1181005003-B

Results of **B4**

Client Sample ID: **B4**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181005004
Lab Project ID: 1181005

Collection Date: 03/14/18 14:51
Received Date: 03/14/18 16:46
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Arsenic	2.50	U	5.00	1.50	ug/L	5		03/15/18 13:39
Barium	17.5		3.00	0.940	ug/L	5		03/15/18 13:39
Cadmium	1.00	U	2.00	0.620	ug/L	5		03/15/18 13:39
Chromium	2.00	U	4.00	1.30	ug/L	5		03/15/18 13:39
Copper	3.94	J	6.00	1.80	ug/L	5		03/15/18 13:39
Lead	0.713	J	1.00	0.310	ug/L	5		03/15/18 13:39
Mercury	0.100	U	0.200	0.0620	ug/L	5		03/15/18 13:39
Selenium	10.0	U	20.0	6.20	ug/L	5		03/15/18 13:39
Silver	1.00	U	2.00	0.620	ug/L	5		03/15/18 13:39
Zinc	12.5	U	25.0	7.80	ug/L	5		03/15/18 13:39

Batch Information

Analytical Batch: MMS10094
Analytical Method: SW6020A
Analyst: VDL
Analytical Date/Time: 03/15/18 13:39
Container ID: 1181005004-D

Prep Batch: MXX31421
Prep Method: SW3010A
Prep Date/Time: 03/15/18 07:30
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **B4**

Client Sample ID: **B4**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181005004
Lab Project ID: 1181005

Collection Date: 03/14/18 14:51
Received Date: 03/14/18 16:46
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	1.00	U	1.00	1.00	col/100mL	1		03/14/18 17:33

Batch Information

Analytical Batch: BTF16392
Analytical Method: SM21 9222D
Analyst: ACF
Analytical Date/Time: 03/14/18 17:33
Container ID: 1181005004-A

Print Date: 03/16/2018 3:26:35PM

J flagging is activated

Results of **B4**

Client Sample ID: **B4**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181005004
Lab Project ID: 1181005

Collection Date: 03/14/18 14:51
Received Date: 03/14/18 16:46
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.500 U		1.00	0.310	mg/L	1		03/15/18 12:04

Batch Information

Analytical Batch: WDA4214
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 03/15/18 12:04
Container ID: 1181005004-C

Prep Batch: WXX12230
Prep Method: METHOD
Prep Date/Time: 03/14/18 20:00
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		03/15/18 15:29

Batch Information

Analytical Batch: WDA4215
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 03/15/18 15:29
Container ID: 1181005004-C

Prep Batch: WXX12231
Prep Method: METHOD
Prep Date/Time: 03/15/18 14:35
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	1.43		0.100	0.0250	mg/L	2		03/14/18 18:19
Nitrite-N	0.0500 U		0.100	0.0250	mg/L	2		03/14/18 18:19

Batch Information

Analytical Batch: WFI2654
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 03/14/18 18:19
Container ID: 1181005004-B

Method Blank

Blank ID: MB for HBN 1777392 [BTF/16392]
Blank Lab ID: 1437305

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181005001, 1181005002, 1181005003, 1181005004

Results by **SM21 9222D**

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

Batch Information

Analytical Batch: BTF16392
Analytical Method: SM21 9222D
Instrument:
Analyst: ACF
Analytical Date/Time: 3/14/2018 5:33:00PM

Print Date: 03/16/2018 3:26:37PM

Method Blank

Blank ID: MB for HBN 1777397 [MXX/31421]
Blank Lab ID: 1437317

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181005001, 1181005002, 1181005003, 1181005004

Results by **SW6020A**

Parameter	Results	LOQ/CL	DL	Units
Arsenic	2.50U	5.00	1.50	ug/L
Barium	1.50U	3.00	0.940	ug/L
Cadmium	1.00U	2.00	0.620	ug/L
Chromium	1.80J	4.00	1.30	ug/L
Copper	3.00U	6.00	1.80	ug/L
Lead	0.500U	1.00	0.310	ug/L
Mercury	0.100U	0.200	0.0620	ug/L
Selenium	10.0U	20.0	6.20	ug/L
Silver	1.00U	2.00	0.620	ug/L
Zinc	12.5U	25.0	7.80	ug/L

Batch Information

Analytical Batch: MMS10094
Analytical Method: SW6020A
Instrument: Perkin Elmer Nexlon P5
Analyst: VDL
Analytical Date/Time: 3/15/2018 12:11:21PM

Prep Batch: MXX31421
Prep Method: SW3010A
Prep Date/Time: 3/15/2018 7:30:59AM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1181005 [MXX31421]
Blank Spike Lab ID: 1437318
Date Analyzed: 03/15/2018 12:15

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181005001, 1181005002, 1181005003, 1181005004

Results by **SW6020A**

Blank Spike (ug/L)

Parameter	Spike	Result	Rec (%)	CL
Arsenic	1000	999	100	(84-116)
Barium	1000	1030	103	(86-114)
Cadmium	100	100	100	(87-115)
Chromium	400	400	100	(85-116)
Copper	1000	1030	103	(85-118)
Lead	1000	1070	107	(88-115)
Mercury	10	10.5	105	(70-124)
Selenium	1000	969	97	(80-120)
Silver	100	108	108	(85-116)
Zinc	1000	997	100	(83-119)

Batch Information

Analytical Batch: **MMS10094**
Analytical Method: **SW6020A**
Instrument: **Perkin Elmer Nexion P5**
Analyst: **VDL**

Prep Batch: **MXX31421**
Prep Method: **SW3010A**
Prep Date/Time: **03/15/2018 07:30**
Spike Init Wt./Vol.: 1000 ug/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: Extract Vol:

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Matrix Spike Summary

Original Sample ID: 1437319
MS Sample ID: 1437321 MS
MSD Sample ID: 1437322 MSD

Analysis Date: 03/15/2018 12:20
Analysis Date: 03/15/2018 12:24
Analysis Date: 03/15/2018 12:29
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181005001, 1181005002, 1181005003, 1181005004

Results by **SW6020A**

		Matrix Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Arsenic	16.6	1000	1050	103	1000	998	98	84-116	4.79	(< 20)
Barium	69.8	1000	1070	100	1000	1080	101	86-114	0.44	(< 20)
Cadmium	1.00U	100	98.5	99	100	97.5	98	87-115	0.99	(< 20)
Chromium	2.30J	400	415	103	400	393	98	85-116	5.49	(< 20)
Copper	3.00U	1000	1040	104	1000	992	99	85-118	4.49	(< 20)
Lead	0.500U	1000	1090	109	1000	1050	105	88-115	3.39	(< 20)
Mercury	0.100U	10.0	10.5	105	10.0	10.3	103	70-124	1.29	(< 20)
Selenium	10.0U	1000	993	99	1000	949	95	80-120	4.60	(< 20)
Silver	1.00U	100	106	106	100	106	106	85-116	0.28	(< 20)
Zinc	12.5U	1000	1010	101	1000	977	98	83-119	3.66	(< 20)

Batch Information

Analytical Batch: MMS10094
Analytical Method: SW6020A
Instrument: Perkin Elmer Nexlon P5
Analyst: VDL
Analytical Date/Time: 3/15/2018 12:24:51PM

Prep Batch: MXX31421
Prep Method: 3010 H20 Digest for Metals ICP-MS
Prep Date/Time: 3/15/2018 7:30:59AM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 03/16/2018 3:26:41PM

Method Blank

Blank ID: MB for HBN 1777411 (WFI/2654)
Blank Lab ID: 1437391

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181005001, 1181005002, 1181005003, 1181005004

Results by **SM21 4500NO3-F**

Parameter	Results	LOQ/CL	DL	Units
Nitrate-N	0.0434J	0.100	0.0250	mg/L
Nitrite-N	0.0500U	0.100	0.0250	mg/L
Total Nitrate/Nitrite-N	0.0434J	0.100	0.0250	mg/L

Batch Information

Analytical Batch: WFI2654
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: AYC
Analytical Date/Time: 3/14/2018 6:09:07PM

Print Date: 03/16/2018 3:26:42PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1181005 [WFI2654]
Blank Spike Lab ID: 1437381
Date Analyzed: 03/14/2018 18:07

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181005001, 1181005002, 1181005003, 1181005004

Results by **SM21 4500NO3-F**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Nitrate-N	2.5	2.55	102	(70-130)
Nitrite-N	2.5	2.52	101	(90-110)
Total Nitrate/Nitrite-N	5	5.07	101	(90-110)

Batch Information

Analytical Batch: **WFI2654**
Analytical Method: **SM21 4500NO3-F**
Instrument: **Astoria segmented flow**
Analyst: **AYC**

Print Date: 03/16/2018 3:26:43PM

Matrix Spike Summary

Original Sample ID: 1181005004
MS Sample ID: 1437379 MS
MSD Sample ID: 1437380 MSD

Analysis Date: 03/14/2018 18:19
Analysis Date: 03/14/2018 18:21
Analysis Date: 03/14/2018 18:23
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181005001, 1181005002, 1181005003, 1181005004

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	1.43	2.50	3.61	87	2.50	4.03	104	70-130	11.00	(< 25)
Nitrite-N	0.0500U	2.50	2.54	102	2.50	2.50	100	90-110	1.90	(< 25)

Batch Information

Analytical Batch: WFI2654
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: AYC
Analytical Date/Time: 3/14/2018 6:21:22PM

Print Date: 03/16/2018 3:26:44PM

Method Blank

Blank ID: MB for HBN 1777423 [WXX/12230]
Blank Lab ID: 1437436

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181005001, 1181005003, 1181005004

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: WDA4214
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 3/15/2018 11:56:19AM

Prep Batch: WXX12230
Prep Method: METHOD
Prep Date/Time: 3/14/2018 5:00:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1181005 [WXX12230]
Blank Spike Lab ID: 1437437
Date Analyzed: 03/15/2018 11:57

Spike Duplicate ID: LCSD for HBN 1181005 [WXX12230]
Spike Duplicate Lab ID: 1437452
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181005001, 1181005003, 1181005004

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	3.89	97	4	3.83	96	(75-125)	1.70	(< 25)

Batch Information

Analytical Batch: **WDA4214**
Analytical Method: **SM21 4500-N D**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX12230**
Prep Method: **METHOD**
Prep Date/Time: **03/14/2018 17:00**
Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

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Matrix Spike Summary

Original Sample ID: 1181005004
MS Sample ID: 1437453 MS
MSD Sample ID: 1437454 MSD

Analysis Date: 03/15/2018 12:04
Analysis Date: 03/15/2018 12:05
Analysis Date: 03/15/2018 12:06
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181005001, 1181005003, 1181005004

Results by **SM21 4500-N D**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Kjeldahl Nitrogen	0.500U	4.00	3.7	93	4.00	3.62	91	75-125	2.10	(< 25)

Batch Information

Analytical Batch: WDA4214
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 3/15/2018 12:05:29PM

Prep Batch: WXX12230
Prep Method: Distillation TKN by Phenate (W)
Prep Date/Time: 3/14/2018 8:00:00PM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 03/16/2018 3:26:47PM

Method Blank

Blank ID: MB for HBN 1777436 [WXX/12231]
Blank Lab ID: 1437513

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181005001, 1181005002, 1181005003, 1181005004

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: WDA4215
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 3/15/2018 3:24:00PM

Prep Batch: WXX12231
Prep Method: METHOD
Prep Date/Time: 3/15/2018 2:35:00PM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1181005 [WXX12231]
Blank Spike Lab ID: 1437514
Date Analyzed: 03/15/2018 15:26

Spike Duplicate ID: LCSD for HBN 1181005 [WXX12231]
Spike Duplicate Lab ID: 1437515
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181005001, 1181005002, 1181005003, 1181005004

Results by **SM21 4500-NH3 G**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	1	1.07	107	1	1.06	106	(75-125)	0.73	(< 25)

Batch Information

Analytical Batch: **WDA4215**
Analytical Method: **SM21 4500-NH3 G**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX12231**
Prep Method: **METHOD**
Prep Date/Time: **03/15/2018 14:35**
Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

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Matrix Spike Summary

Original Sample ID: 1181005004
MS Sample ID: 1437516 MS
MSD Sample ID: 1437517 MSD

Analysis Date: 03/15/2018 15:29
Analysis Date: 03/15/2018 15:31
Analysis Date: 03/15/2018 15:32
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181005001, 1181005002, 1181005003, 1181005004

Results by **SM21 4500-NH3 G**

		Matrix Spike (mg/L)				Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)		Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	0.0500U	1.00	.729	73	*	1.00	0.799	80	75-125	9.10	(< 25)

Batch Information

Analytical Batch: WDA4215
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 3/15/2018 3:31:00PM

Prep Batch: WXX12231
Prep Method: Ammonia by SM21 4500F prep (W)
Prep Date/Time: 3/15/2018 2:35:00PM
Prep Initial Wt./Vol.: 6.00mL
Prep Extract Vol: 6.00mL

Print Date: 03/16/2018 3:26:50PM

Method Blank

Blank ID: MB for HBN 1777469 [WXX/12233]
Blank Lab ID: 1437648

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181005002

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: WDA4216
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 3/16/2018 11:56:29AM

Prep Batch: WXX12233
Prep Method: METHOD
Prep Date/Time: 3/15/2018 6:20:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1181005 [WXX12233]
Blank Spike Lab ID: 1437649
Date Analyzed: 03/16/2018 11:57

Spike Duplicate ID: LCSD for HBN 1181005 [WXX12233]
Spike Duplicate Lab ID: 1437650
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181005002

Results by **SM21 4500-N D**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Kjeldahl Nitrogen	4	4.10	103	4	4.07	102	(75-125)	0.81	(< 25)

Batch Information

Analytical Batch: **WDA4216**
Analytical Method: **SM21 4500-N D**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX12233**
Prep Method: **METHOD**
Prep Date/Time: **03/15/2018 18:20**
Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

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Matrix Spike Summary

Original Sample ID: 1181025001
MS Sample ID: 1437651 MS
MSD Sample ID: 1437652 MSD

QC for Samples: 1181005002

Analysis Date: 03/16/2018 12:00
Analysis Date: 03/16/2018 12:01
Analysis Date: 03/16/2018 12:02
Matrix: Water (Surface, Eff., Ground)

Results by **SM21 4500-N D**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Kjeldahl Nitrogen	0.500U	4.00	4.55	114	4.00	4.26	106	75-125	6.70	(< 25)

Batch Information

Analytical Batch: WDA4216
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 3/16/2018 12:01:36PM

Prep Batch: WXX12233
Prep Method: Distillation TKN by Phenate (W)
Prep Date/Time: 3/15/2018 6:20:00PM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 03/16/2018 3:26:53PM

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CHAIN OF CUSTODY RECORD

1181005

Locations Nationwide
Alaska Maryland
New Jersey New York
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Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.

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Section 1

CLIENT: Stantec

CONTACT: Jake Alward PHONE #: 343-5202

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

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

INVOICE TO: Stantec QUOTE #: P.O. #: 2047200415

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)	Fecal Coliform (Na2SO4)	BOD (None)	TSS (None)	Nitrate, Nitrite (None)	TKN, Ammonia (H2SO4)	RCRA Metals + Cu, Zn (HNO3)	REMARKS/ LOC ID
(1) A-D	MW10	3/14/18	1026		4	G	1			1	1	1	
(2) A-D	MW15	3/14/18	1341		4	G	1			1	1	1	
(3) A-D	MW2B	3/14/18	1230		4	G	1			1	1	1	
(4) A-D	B4	3/14/18	1451		4	G	1			1	1	1	

Section 3 — Preservative

Section 4 — DOD Project? Yes No

Cooler ID:

Data Deliverable Requirements:

Requested Turnaround Time and/or Special Instructions:

Section 5

	Date	Time	
Relinquished By: (1)	3/14/18	16:46	Received By:
Relinquished By: (2)			Received By:
Relinquished By: (3)			Received By:
Relinquished By: (4)	3/14/18	16:46	Received For Laboratory By: NLW

Temp Blank °C: 1.7 #041 or Ambient [ ]

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Delivery Method: (Check) Hand Delivered [ ] Commerical Delivered [X]

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

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

e-Sample Receipt Form

SGS Workorder #: **1181005**

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 @ 1.7 °C Therm. ID: D41
	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
1181005001-A	Na2S2O3 for Chlorine Redu	OK			
1181005001-B	No Preservative Required	OK			
1181005001-C	H2SO4 to pH < 2	OK			
1181005001-D	HNO3 to pH < 2	OK			
1181005002-A	Na2S2O3 for Chlorine Redu	OK			
1181005002-B	No Preservative Required	OK			
1181005002-C	H2SO4 to pH < 2	OK			
1181005002-D	HNO3 to pH < 2	OK			
1181005003-A	Na2S2O3 for Chlorine Redu	OK			
1181005003-B	No Preservative Required	OK			
1181005003-C	H2SO4 to pH < 2	OK			
1181005003-D	HNO3 to pH < 2	OK			
1181005004-A	Na2S2O3 for Chlorine Redu	OK			
1181005004-B	No Preservative Required	OK			
1181005004-C	H2SO4 to pH < 2	OK			
1181005004-D	HNO3 to pH < 2	OK			

Container Condition Glossary

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

OK - The container was received at an acceptable pH for the analysis requested.
BU - The container was received with headspace greater than 6mm.
DM - The container was received damaged.
FR - The container was received frozen and not usable for Bacteria or BOD analyses.
IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.
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: **1181025**

Client Project: **Wasilla WWTP**

Dear John Marshall,

Enclosed are the results of the analytical services performed under the referenced project for the received samples and associated QC as applicable. The samples are certified to meet the requirements of the National Environmental Laboratory Accreditation Conference Standards. Copies of this report and supporting data will be retained in our files for a period of ten years in the event they are required for future reference. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. Any samples submitted to our laboratory will be retained for a maximum of fourteen (14) days from the date of this report unless other archiving requirements were included in the quote.

If there are any questions about the report or services performed during this project, please call Justin at (907) 562-2343. We will be happy to answer any questions or concerns which you may have.

Thank you for using SGS North America Inc. for your analytical services. We look forward to working with you again on any additional analytical needs.

Sincerely,
SGS North America Inc.

Justin Nelson Date
Project Manager
Justin.Nelson@sgs.com

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Case Narrative

SGS Client: **Stantec Consulting Services Inc.**
SGS Project: **1181025**
Project Name/Site: **Wasilla WWTP**
Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

1181005004MS (1437516) MS

4500NH3-G - Ammonia - MS recovery is outside of QC criteria. Refer to LCS for accuracy requirements.

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

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Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. 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.

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Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
B11	1181025001	03/15/2018	03/15/2018	Water (Surface, Eff., Ground)

Method	Method Description
SM21 4500-NH3 G	Ammonia-N (W) SM21 4500-NH3 G
SM21 9222D	Fecal Coliform (MF)
SM21 4500NO3-F	Flow Injection Analysis
SW6020A	Metals by ICP-MS
SM21 4500-N D	TKN by Phenate (W)

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Detectable Results Summary

Client Sample ID: **B11**
Lab Sample ID: 1181025001

	Parameter	Result	Units
Metals by ICP/MS	Arsenic	4.24J	ug/L
	Barium	48.5	ug/L
	Copper	6.63	ug/L
	Lead	0.782J	ug/L
	Mercury	0.106J	ug/L
Waters Department	Ammonia-N	0.160	mg/L
	Nitrate-N	0.0858J	mg/L

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Results of **B11**

Client Sample ID: **B11**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181025001
Lab Project ID: 1181025

Collection Date: 03/15/18 11:36
Received Date: 03/15/18 14:37
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Metals by ICP/MS**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Arsenic	4.24	J	5.00	1.50	ug/L	5		03/16/18 15:36
Barium	48.5		3.00	0.940	ug/L	5		03/16/18 15:36
Cadmium	1.00	U	2.00	0.620	ug/L	5		03/16/18 15:36
Chromium	2.00	U	4.00	1.30	ug/L	5		03/16/18 15:36
Copper	6.63		6.00	1.80	ug/L	5		03/16/18 15:36
Lead	0.782	J	1.00	0.310	ug/L	5		03/16/18 15:36
Mercury	0.106	J	0.200	0.0620	ug/L	5		03/16/18 15:36
Selenium	10.0	U	20.0	6.20	ug/L	5		03/16/18 15:36
Silver	1.00	U	2.00	0.620	ug/L	5		03/16/18 15:36
Zinc	12.5	U	25.0	7.80	ug/L	5		03/16/18 15:36

Batch Information

Analytical Batch: MMS10096
Analytical Method: SW6020A
Analyst: VDL
Analytical Date/Time: 03/16/18 15:36
Container ID: 1181025001-D

Prep Batch: MXX31426
Prep Method: SW3010A
Prep Date/Time: 03/16/18 07:34
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **B11**

Client Sample ID: **B11**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181025001
Lab Project ID: 1181025

Collection Date: 03/15/18 11:36
Received Date: 03/15/18 14:37
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	1.00	U	1.00	1.00	col/100mL	1		03/15/18 15:28

Batch Information

Analytical Batch: BTF16399
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 03/15/18 15:28
Container ID: 1181025001-A

Print Date: 03/20/2018 8:21:08AM

J flagging is activated

Results of **B11**

Client Sample ID: **B11**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181025001
Lab Project ID: 1181025

Collection Date: 03/15/18 11:36
Received Date: 03/15/18 14:37
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.500	U	1.00	0.310	mg/L	1		03/16/18 12:00

Batch Information

Analytical Batch: WDA4216
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 03/16/18 12:00
Container ID: 1181025001-C

Prep Batch: WXX12233
Prep Method: METHOD
Prep Date/Time: 03/15/18 18:20
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	0.160		0.100	0.0310	mg/L	1		03/15/18 15:44

Batch Information

Analytical Batch: WDA4215
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 03/15/18 15:44
Container ID: 1181025001-C

Prep Batch: WXX12231
Prep Method: METHOD
Prep Date/Time: 03/15/18 14:35
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	0.0858	J	0.100	0.0250	mg/L	2		03/15/18 19:53
Nitrite-N	0.0500	U	0.100	0.0250	mg/L	2		03/15/18 19:53

Batch Information

Analytical Batch: WFI2655
Analytical Method: SM21 4500NO3-F
Analyst: EWW
Analytical Date/Time: 03/15/18 19:53
Container ID: 1181025001-B

Method Blank

Blank ID: MB for HBN 1777446 [BTF/16399]
Blank Lab ID: 1437551

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181025001

Results by **SM21 9222D**

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

Batch Information

Analytical Batch: BTF16399
Analytical Method: SM21 9222D
Instrument:
Analyst: K.W
Analytical Date/Time: 3/15/2018 3:28:00PM

Print Date: 03/20/2018 8:21:09AM

Method Blank

Blank ID: MB for HBN 1777446 [BTF/16399]
Blank Lab ID: 1437552

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181025001

Results by **SM21 9222D**

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

Batch Information

Analytical Batch: BTF16399
Analytical Method: SM21 9222D
Instrument:
Analyst: K.W
Analytical Date/Time: 3/15/2018 4:54:00PM

Print Date: 03/20/2018 8:21:09AM

Method Blank

Blank ID: MB for HBN 1777448 [MXX/31426]
Blank Lab ID: 1437553

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181025001

Results by **SW6020A**

Parameter	Results	LOQ/CL	DL	Units
Arsenic	2.50U	5.00	1.50	ug/L
Barium	1.50U	3.00	0.940	ug/L
Cadmium	1.00U	2.00	0.620	ug/L
Chromium	2.00U	4.00	1.30	ug/L
Copper	3.00U	6.00	1.80	ug/L
Lead	0.500U	1.00	0.310	ug/L
Mercury	0.100U	0.200	0.0620	ug/L
Selenium	10.0U	20.0	6.20	ug/L
Silver	1.00U	2.00	0.620	ug/L
Zinc	12.5U	25.0	7.80	ug/L

Batch Information

Analytical Batch: MMS10096
Analytical Method: SW6020A
Instrument: Perkin Elmer Nexlon P5
Analyst: VDL
Analytical Date/Time: 3/16/2018 3:09:16PM

Prep Batch: MXX31426
Prep Method: SW3010A
Prep Date/Time: 3/16/2018 7:34:54AM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1181025 [MXX31426]
Blank Spike Lab ID: 1437554
Date Analyzed: 03/16/2018 15:13

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181025001

Results by **SW6020A**

Blank Spike (ug/L)

Parameter	Spike	Result	Rec (%)	CL
Arsenic	1000	1030	103	(84-116)
Barium	1000	986	99	(86-114)
Cadmium	100	100	100	(87-115)
Chromium	400	414	103	(85-116)
Copper	1000	1060	106	(85-118)
Lead	1000	1040	104	(88-115)
Mercury	10	9.69	97	(70-124)
Selenium	1000	1030	103	(80-120)
Silver	100	98.2	98	(85-116)
Zinc	1000	1040	104	(83-119)

Batch Information

Analytical Batch: **MMS10096**
Analytical Method: **SW6020A**
Instrument: **Perkin Elmer Nexion P5**
Analyst: **VDL**

Prep Batch: **MXX31426**
Prep Method: **SW3010A**
Prep Date/Time: **03/16/2018 07:34**
Spike Init Wt./Vol.: 1000 ug/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: Extract Vol:

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Matrix Spike Summary

Original Sample ID: 1437555
MS Sample ID: 1437557 MS
MSD Sample ID: 1437558 MSD

QC for Samples: 1181025001

Analysis Date: 03/16/2018 15:36
Analysis Date: 03/16/2018 15:41
Analysis Date: 03/16/2018 15:45
Matrix: Water (Surface, Eff., Ground)

Results by **SW6020A**

		Matrix Spike (ug/L)			Spike Duplicate (ug/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Arsenic	4.24J	1000	1010	101	1000	1010	101	84-116	0.16	(< 20)
Barium	48.5	1000	1060	101	1000	1050	100	86-114	1.15	(< 20)
Cadmium	1.00U	100	101	101	100	99.8	100	87-115	1.39	(< 20)
Chromium	2.00U	400	390	98	400	392	98	85-116	0.47	(< 20)
Copper	6.63	1000	977	97	1000	1000	99	85-118	2.35	(< 20)
Lead	0.782J	1000	1050	105	1000	1040	104	88-115	0.12	(< 20)
Mercury	0.106J	10.0	10.1	100	10.0	10.1	100	70-124	0.07	(< 20)
Selenium	10.0U	1000	979	98	1000	1000	100	80-120	2.11	(< 20)
Silver	1.00U	100	103	103	100	103	103	85-116	0.05	(< 20)
Zinc	12.5U	1000	1020	102	1000	1010	101	83-119	0.92	(< 20)

Batch Information

Analytical Batch: MMS10096
Analytical Method: SW6020A
Instrument: Perkin Elmer Nexlon P5
Analyst: VDL
Analytical Date/Time: 3/16/2018 3:41:21PM

Prep Batch: MXX31426
Prep Method: 3010 H20 Digest for Metals ICP-MS
Prep Date/Time: 3/16/2018 7:34:54AM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 03/20/2018 8:21:14AM

Method Blank

Blank ID: MB for HBN 1777468 (WFI/2655)
Blank Lab ID: 1437662

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181025001

Results by **SM21 4500NO3-F**

Parameter	Results	LOQ/CL	DL	Units
Nitrate-N	0.0294J	0.100	0.0250	mg/L
Nitrite-N	0.0500U	0.100	0.0250	mg/L
Total Nitrate/Nitrite-N	0.0294J	0.100	0.0250	mg/L

Batch Information

Analytical Batch: WFI2655
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: EWW
Analytical Date/Time: 3/15/2018 7:48:41PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1181025 [WFI2655]
Blank Spike Lab ID: 1437653
Date Analyzed: 03/15/2018 19:46

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181025001

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	2.52	101	(90-110)
Total Nitrate/Nitrite-N	5	5.07	101	(90-110)

Batch Information

Analytical Batch: **WFI2655**
Analytical Method: **SM21 4500NO3-F**
Instrument: **Astoria segmented flow**
Analyst: **EWW**

Print Date: 03/20/2018 8:21:17AM

Matrix Spike Summary

Original Sample ID: 1437663
MS Sample ID: 1437642 MS
MSD Sample ID: 1437643 MSD

QC for Samples: 1181025001

Analysis Date: 03/15/2018 19:55
Analysis Date: 03/15/2018 19:57
Analysis Date: 03/15/2018 19:59
Matrix: Drinking Water

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	0.242	2.50	3.1	114	2.50	3.25	120	70-130	4.70	(< 25)
Nitrite-N	0.0500U	2.50	2.33	93	2.50	2.39	96	90-110	2.80	(< 25)

Batch Information

Analytical Batch: WFI2655
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: EWW
Analytical Date/Time: 3/15/2018 7:57:27PM

Print Date: 03/20/2018 8:21:18AM

Method Blank

Blank ID: MB for HBN 1777436 [WXX/12231]
Blank Lab ID: 1437513

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181025001

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: WDA4215
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 3/15/2018 3:24:00PM

Prep Batch: WXX12231
Prep Method: METHOD
Prep Date/Time: 3/15/2018 2:35:00PM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Print Date: 03/20/2018 8:21:19AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1181025 [WXX12231]
Blank Spike Lab ID: 1437514
Date Analyzed: 03/15/2018 15:26

Spike Duplicate ID: LCSD for HBN 1181025 [WXX12231]
Spike Duplicate Lab ID: 1437515
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181025001

Results by **SM21 4500-NH3 G**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	1	1.07	107	1	1.06	106	(75-125)	0.73	(< 25)

Batch Information

Analytical Batch: **WDA4215**
Analytical Method: **SM21 4500-NH3 G**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX12231**
Prep Method: **METHOD**
Prep Date/Time: **03/15/2018 14:35**
Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

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Matrix Spike Summary

Original Sample ID: 1181005004
MS Sample ID: 1437516 MS
MSD Sample ID: 1437517 MSD

QC for Samples: 1181025001

Analysis Date: 03/15/2018 15:29
Analysis Date: 03/15/2018 15:31
Analysis Date: 03/15/2018 15:32
Matrix: Water (Surface, Eff., Ground)

Results by **SM21 4500-NH3 G**

		Matrix Spike (mg/L)				Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)		Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	0.0500U	1.00	.729	73	*	1.00	0.799	80	75-125	9.10	(< 25)

Batch Information

Analytical Batch: WDA4215
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 3/15/2018 3:31:00PM

Prep Batch: WXX12231
Prep Method: Ammonia by SM21 4500F prep (W)
Prep Date/Time: 3/15/2018 2:35:00PM
Prep Initial Wt./Vol.: 6.00mL
Prep Extract Vol: 6.00mL

Print Date: 03/20/2018 8:21:22AM

Method Blank

Blank ID: MB for HBN 1777469 [WXX/12233]
Blank Lab ID: 1437648

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181025001

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: WDA4216
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 3/16/2018 11:56:29AM

Prep Batch: WXX12233
Prep Method: METHOD
Prep Date/Time: 3/15/2018 6:20:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1181025 [WXX12233]
Blank Spike Lab ID: 1437649
Date Analyzed: 03/16/2018 11:57

Spike Duplicate ID: LCSD for HBN 1181025 [WXX12233]
Spike Duplicate Lab ID: 1437650
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181025001

Results by **SM21 4500-N D**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Kjeldahl Nitrogen	4	4.10	103	4	4.07	102	(75-125)	0.81	(< 25)

Batch Information

Analytical Batch: **WDA4216**
Analytical Method: **SM21 4500-N D**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX12233**
Prep Method: **METHOD**
Prep Date/Time: **03/15/2018 18:20**
Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

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Matrix Spike Summary

Original Sample ID: 1181025001
MS Sample ID: 1437651 MS
MSD Sample ID: 1437652 MSD

QC for Samples: 1181025001

Analysis Date: 03/16/2018 12:00
Analysis Date: 03/16/2018 12:01
Analysis Date: 03/16/2018 12:02
Matrix: Water (Surface, Eff., Ground)

Results by **SM21 4500-N D**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Kjeldahl Nitrogen	0.500U	4.00	4.55	114	4.00	4.26	106	75-125	6.70	(< 25)

Batch Information

Analytical Batch: WDA4216
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 3/16/2018 12:01:36PM

Prep Batch: WXX12233
Prep Method: Distillation TKN by Phenate (W)
Prep Date/Time: 3/15/2018 6:20:00PM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 03/20/2018 8:21:25AM

SGS

CH 1181025

Locations Nationwide
Alaska Maryland
New Jersey New York
North Carolina

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

Page 1 of 1

Section 1

CLIENT: Stantec

CONTACT: Jake Alward PHONE #: ~~315~~ 343-5202

PROJECT NAME: Project/ PWSID/ PERMIT#:

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

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

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)	Fecal Coliform (Na2SO4)	BOD (None)	TSS (None)	Nitrate, Nitrite (None)	TKN, Ammonia (H2SO4)	RCRA Metals + Cu, Zn (HNO3)					REMARKS/ LOC ID
1 DA-D	B11	3/15/18	11:36		4	G	1			1	1	1					

Section 5

	Date	Time	
Relinquished By: (1)	3/15/18	14:37	Received By:
Relinquished By: (2)			Received By:
Relinquished By: (3)			Received By:
Relinquished By: (4)	3/15/18	1437	Received For Laboratory By: NSW

Section 4 DOD Project? Yes No

Cooler ID:

Data Deliverable Requirements:

Requested Turnaround Time and/or Special Instructions:

Temp Blank °C: 1.5 D41 or Ambient [ ]

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Delivery Method: (Check) Hand Delivered [X] Commerical Delivered [ ]

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

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

e-Sample Receipt Form

SGS Workorder #: **1181025**

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 @ 1.5 °C Therm. ID: D41
	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
1181025001-A	Na2S2O3 for Chlorine Redu	OK			
1181025001-B	No Preservative Required	OK			
1181025001-C	H2SO4 to pH < 2	OK			
1181025001-D	HNO3 to pH < 2	OK			

Container Condition Glossary

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

OK - The container was received at an acceptable pH for the analysis requested.
BU - The container was received with headspace greater than 6mm.
DM - The container was received damaged.
FR - The container was received frozen and not usable for Bacteria or BOD analyses.
IC - The container provided for microbiology analysis was not a laboratory-supplied, pre-sterilized container and therefore was not suitable for analysis.
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: **1181196**

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: **1181196**
Project Name/Site: **Wasilla WWTP**
Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

L2A (1181196003) PS

5210B-BOD- Dissolved oxygen over depleted (0.22) the max depletion requirement of 1mg/L. Sample reported with an estimated greater than value.

1181196008DUP (1438992) 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 1778172 [BOD/6010] (1440414) MB

5210B – BOD - MB depletion (0.22mg/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.

1181196010MSD (1439053) MSD

4500NH3-G - Ammonia - MSD recovery is outside of QC criteria. Refer to LCSD for accuracy requirements.

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

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Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. 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.

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Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
L1A	1181196001	03/27/2018	03/27/2018	Water (Surface, Eff., Ground)
L1B	1181196002	03/27/2018	03/27/2018	Water (Surface, Eff., Ground)
L2A	1181196003	03/27/2018	03/27/2018	Water (Surface, Eff., Ground)
L2B	1181196004	03/27/2018	03/27/2018	Water (Surface, Eff., Ground)
L3A	1181196005	03/27/2018	03/27/2018	Water (Surface, Eff., Ground)
L3B	1181196006	03/27/2018	03/27/2018	Water (Surface, Eff., Ground)
L4A	1181196007	03/27/2018	03/27/2018	Water (Surface, Eff., Ground)
L4B	1181196008	03/27/2018	03/27/2018	Water (Surface, Eff., Ground)
SW17	1181196009	03/27/2018	03/27/2018	Water (Surface, Eff., Ground)
SW18	1181196010	03/27/2018	03/27/2018	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 2540D	Total Suspended Solids SM20 2540D

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Detectable Results Summary

Client Sample ID: **L1A**
Lab Sample ID: 1181196001
Microbiology Laboratory
Waters Department

Parameter	Result	Units
Biochemical Oxygen Demand	85.5	mg/L
Ammonia-N	28.3	mg/L
Nitrate-N	0.0694J	mg/L
Nitrite-N	0.0566J	mg/L
Total Kjeldahl Nitrogen	50.8	mg/L
Total Suspended Solids	156	mg/L

Client Sample ID: **L1B**
Lab Sample ID: 1181196002
Microbiology Laboratory
Waters Department

Parameter	Result	Units
Biochemical Oxygen Demand	128	mg/L
Ammonia-N	30.6	mg/L
Nitrate-N	0.0534J	mg/L
Nitrite-N	0.0584J	mg/L
Total Kjeldahl Nitrogen	59.1	mg/L
Total Suspended Solids	158	mg/L

Client Sample ID: **L2A**
Lab Sample ID: 1181196003
Microbiology Laboratory
Waters Department

Parameter	Result	Units
Biochemical Oxygen Demand	GT228	mg/L
Ammonia-N	30.4	mg/L
Nitrate-N	0.0628J	mg/L
Nitrite-N	0.0658J	mg/L
Total Kjeldahl Nitrogen	57.0	mg/L
Total Suspended Solids	124	mg/L

Client Sample ID: **L2B**
Lab Sample ID: 1181196004
Microbiology Laboratory
Waters Department

Parameter	Result	Units
Biochemical Oxygen Demand	72.9	mg/L
Ammonia-N	31.2	mg/L
Nitrate-N	0.0484J	mg/L
Nitrite-N	0.0714J	mg/L
Total Kjeldahl Nitrogen	55.4	mg/L
Total Suspended Solids	525	mg/L

Client Sample ID: **L3A**
Lab Sample ID: 1181196005
Microbiology Laboratory
Waters Department

Parameter	Result	Units
Biochemical Oxygen Demand	58.4	mg/L
Ammonia-N	31.1	mg/L
Nitrate-N	0.0480J	mg/L
Nitrite-N	0.0552J	mg/L
Total Kjeldahl Nitrogen	51.8	mg/L
Total Suspended Solids	80.0	mg/L

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Detectable Results Summary

Client Sample ID: **L3B**
Lab Sample ID: 1181196006
Microbiology Laboratory
Waters Department

Parameter	Result	Units
Biochemical Oxygen Demand	56.6	mg/L
Ammonia-N	39.8	mg/L
Nitrate-N	0.0908J	mg/L
Nitrite-N	0.0862J	mg/L
Total Kjeldahl Nitrogen	87.6	mg/L
Total Suspended Solids	890	mg/L

Client Sample ID: **L4A**
Lab Sample ID: 1181196007
Microbiology Laboratory
Waters Department

Parameter	Result	Units
Biochemical Oxygen Demand	53.6	mg/L
Ammonia-N	34.0	mg/L
Nitrate-N	0.0574J	mg/L
Nitrite-N	0.0524J	mg/L
Total Kjeldahl Nitrogen	50.4	mg/L
Total Suspended Solids	68.0	mg/L

Client Sample ID: **L4B**
Lab Sample ID: 1181196008
Microbiology Laboratory
Waters Department

Parameter	Result	Units
Biochemical Oxygen Demand	50.4	mg/L
Ammonia-N	34.8	mg/L
Nitrate-N	0.0524J	mg/L
Nitrite-N	0.0504J	mg/L
Total Kjeldahl Nitrogen	49.5	mg/L
Total Suspended Solids	67.1	mg/L

Client Sample ID: **SW17**
Lab Sample ID: 1181196009
Microbiology Laboratory
Waters Department

Parameter	Result	Units
Total Coliform	46	MPN/100mL
Ammonia-N	0.423	mg/L
Nitrate-N	2.40	mg/L
Nitrite-N	0.0504J	mg/L
Total Kjeldahl Nitrogen	0.782J	mg/L
Total Suspended Solids	46.8	mg/L

Client Sample ID: **SW18**
Lab Sample ID: 1181196010
Microbiology Laboratory
Waters Department

Parameter	Result	Units
Total Coliform	37	MPN/100mL
Ammonia-N	0.766	mg/L
Nitrate-N	1.51	mg/L
Nitrite-N	0.0271J	mg/L
Total Kjeldahl Nitrogen	1.25	mg/L
Total Suspended Solids	0.421J	mg/L

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Results of **L1A**

Client Sample ID: **L1A**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196001
Lab Project ID: 1181196

Collection Date: 03/27/18 09:30
Received Date: 03/27/18 16:28
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	85.5		2.00	2.00	mg/L	1		03/28/18 17:52

Batch Information

Analytical Batch: BOD6010
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 03/28/18 17:52
Container ID: 1181196001-A

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Results of **L1A**

Client Sample ID: **L1A**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196001
Lab Project ID: 1181196

Collection Date: 03/27/18 09:30
Received Date: 03/27/18 16:28
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	156		20.0	6.20	mg/L	1		03/28/18 09:20

Batch Information

Analytical Batch: STS5826
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 03/28/18 09:20
Container ID: 1181196001-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	50.8		10.0	3.10	mg/L	10		03/29/18 12:15

Batch Information

Analytical Batch: WDA4227
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 03/29/18 12:15
Container ID: 1181196001-D

Prep Batch: WXX12249
Prep Method: METHOD
Prep Date/Time: 03/28/18 10:47
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	28.3		1.00	0.310	mg/L	10		03/28/18 11:30

Batch Information

Analytical Batch: WDA4225
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 03/28/18 11:30
Container ID: 1181196001-D

Prep Batch: WXX12247
Prep Method: METHOD
Prep Date/Time: 03/28/18 09:55
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	0.0694	J	0.100	0.0250	mg/L	2		03/28/18 12:48
Nitrite-N	0.0566	J	0.100	0.0250	mg/L	2		03/28/18 12:48

Print Date: 04/06/2018 3:23:12PM

J flagging is activated

Results of **L1A**

Client Sample ID: **L1A**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196001
Lab Project ID: 1181196

Collection Date: 03/27/18 09:30
Received Date: 03/27/18 16:28
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2662
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 03/28/18 12:48
Container ID: 1181196001-C

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Results of **L1B**

Client Sample ID: **L1B**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196002
Lab Project ID: 1181196

Collection Date: 03/27/18 09:50
Received Date: 03/27/18 16:28
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	128		2.00	2.00	mg/L	1		03/28/18 17:52

Batch Information

Analytical Batch: BOD6010
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 03/28/18 17:52
Container ID: 1181196002-A

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Results of **L1B**

Client Sample ID: **L1B**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196002
Lab Project ID: 1181196

Collection Date: 03/27/18 09:50
Received Date: 03/27/18 16:28
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	158		20.0	6.20	mg/L	1		03/28/18 09:20

Batch Information

Analytical Batch: STS5826
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 03/28/18 09:20
Container ID: 1181196002-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	59.1		10.0	3.10	mg/L	10		03/29/18 12:14

Batch Information

Analytical Batch: WDA4227
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 03/29/18 12:14
Container ID: 1181196002-D

Prep Batch: WXX12249
Prep Method: METHOD
Prep Date/Time: 03/28/18 10:47
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	30.6		1.00	0.310	mg/L	10		03/28/18 11:32

Batch Information

Analytical Batch: WDA4225
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 03/28/18 11:32
Container ID: 1181196002-D

Prep Batch: WXX12247
Prep Method: METHOD
Prep Date/Time: 03/28/18 09:55
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	0.0534	J	0.100	0.0250	mg/L	2		03/28/18 12:50
Nitrite-N	0.0584	J	0.100	0.0250	mg/L	2		03/28/18 12:50

Print Date: 04/06/2018 3:23:12PM

J flagging is activated

Results of **L1B**

Client Sample ID: **L1B**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196002
Lab Project ID: 1181196

Collection Date: 03/27/18 09:50
Received Date: 03/27/18 16:28
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2662
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 03/28/18 12:50
Container ID: 1181196002-C

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Results of **L2A**

Client Sample ID: **L2A**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196003
Lab Project ID: 1181196

Collection Date: 03/27/18 10:53
Received Date: 03/27/18 16:28
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	>228		2.00	2.00	mg/L	1		03/28/18 17:52

Batch Information

Analytical Batch: BOD6010
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 03/28/18 17:52
Container ID: 1181196003-A

Print Date: 04/06/2018 3:23:12PM

J flagging is activated

Results of **L2A**

Client Sample ID: **L2A**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196003
Lab Project ID: 1181196

Collection Date: 03/27/18 10:53
Received Date: 03/27/18 16:28
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	124		20.0	6.20	mg/L	1		03/28/18 09:20

Batch Information

Analytical Batch: STS5826
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 03/28/18 09:20
Container ID: 1181196003-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	57.0		10.0	3.10	mg/L	10		03/29/18 12:13

Batch Information

Analytical Batch: WDA4227
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 03/29/18 12:13
Container ID: 1181196003-D

Prep Batch: WXX12249
Prep Method: METHOD
Prep Date/Time: 03/28/18 10:47
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	30.4		1.00	0.310	mg/L	10		03/28/18 11:33

Batch Information

Analytical Batch: WDA4225
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 03/28/18 11:33
Container ID: 1181196003-D

Prep Batch: WXX12247
Prep Method: METHOD
Prep Date/Time: 03/28/18 09:55
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	0.0628	J	0.100	0.0250	mg/L	2		03/28/18 12:52
Nitrite-N	0.0658	J	0.100	0.0250	mg/L	2		03/28/18 12:52

Print Date: 04/06/2018 3:23:12PM

J flagging is activated

Results of **L2A**

Client Sample ID: **L2A**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196003
Lab Project ID: 1181196

Collection Date: 03/27/18 10:53
Received Date: 03/27/18 16:28
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2662
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 03/28/18 12:52
Container ID: 1181196003-C

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Results of **L2B**

Client Sample ID: **L2B**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196004
Lab Project ID: 1181196

Collection Date: 03/27/18 11:06
Received Date: 03/27/18 16:28
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	72.9		2.00	2.00	mg/L	1		03/28/18 17:52

Batch Information

Analytical Batch: BOD6010
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 03/28/18 17:52
Container ID: 1181196004-A

Print Date: 04/06/2018 3:23:12PM

J flagging is activated

Results of **L2B**

Client Sample ID: **L2B**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196004
Lab Project ID: 1181196

Collection Date: 03/27/18 11:06
Received Date: 03/27/18 16:28
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	525		50.0	15.5	mg/L	1		03/28/18 09:20

Batch Information

Analytical Batch: STS5826
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 03/28/18 09:20
Container ID: 1181196004-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	55.4		10.0	3.10	mg/L	10		03/29/18 12:11

Batch Information

Analytical Batch: WDA4227
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 03/29/18 12:11
Container ID: 1181196004-D

Prep Batch: WXX12249
Prep Method: METHOD
Prep Date/Time: 03/28/18 10:47
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	31.2		1.00	0.310	mg/L	10		03/28/18 11:35

Batch Information

Analytical Batch: WDA4225
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 03/28/18 11:35
Container ID: 1181196004-D

Prep Batch: WXX12247
Prep Method: METHOD
Prep Date/Time: 03/28/18 09:55
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	0.0484	J	0.100	0.0250	mg/L	2		03/28/18 12:54
Nitrite-N	0.0714	J	0.100	0.0250	mg/L	2		03/28/18 12:54

Print Date: 04/06/2018 3:23:12PM

J flagging is activated

Results of **L2B**

Client Sample ID: **L2B**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196004
Lab Project ID: 1181196

Collection Date: 03/27/18 11:06
Received Date: 03/27/18 16:28
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2662
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 03/28/18 12:54
Container ID: 1181196004-C

Results of **L3A**

Client Sample ID: **L3A**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196005
Lab Project ID: 1181196

Collection Date: 03/27/18 10:20
Received Date: 03/27/18 16:28
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	58.4		2.00	2.00	mg/L	1		03/28/18 17:52

Batch Information

Analytical Batch: BOD6010
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 03/28/18 17:52
Container ID: 1181196005-A

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Results of **L3A**

Client Sample ID: **L3A**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196005
Lab Project ID: 1181196

Collection Date: 03/27/18 10:20
Received Date: 03/27/18 16:28
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	80.0		14.3	4.43	mg/L	1		03/28/18 09:20

Batch Information

Analytical Batch: STS5826
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 03/28/18 09:20
Container ID: 1181196005-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	51.8		10.0	3.10	mg/L	10		03/29/18 12:10

Batch Information

Analytical Batch: WDA4227
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 03/29/18 12:10
Container ID: 1181196005-D

Prep Batch: WXX12249
Prep Method: METHOD
Prep Date/Time: 03/28/18 10:47
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	31.1		1.00	0.310	mg/L	10		03/28/18 11:37

Batch Information

Analytical Batch: WDA4225
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 03/28/18 11:37
Container ID: 1181196005-D

Prep Batch: WXX12247
Prep Method: METHOD
Prep Date/Time: 03/28/18 09:55
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	0.0480	J	0.100	0.0250	mg/L	2		03/28/18 12:55
Nitrite-N	0.0552	J	0.100	0.0250	mg/L	2		03/28/18 12:55

Print Date: 04/06/2018 3:23:12PM

J flagging is activated

Results of **L3A**

Client Sample ID: **L3A**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196005
Lab Project ID: 1181196

Collection Date: 03/27/18 10:20
Received Date: 03/27/18 16:28
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2662
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 03/28/18 12:55
Container ID: 1181196005-C

Results of **L3B**

Client Sample ID: **L3B**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196006
Lab Project ID: 1181196

Collection Date: 03/27/18 10:30
Received Date: 03/27/18 16:28
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	56.6		2.00	2.00	mg/L	1		03/28/18 17:52

Batch Information

Analytical Batch: BOD6010
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 03/28/18 17:52
Container ID: 1181196006-A

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Results of **L3B**

Client Sample ID: **L3B**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196006
Lab Project ID: 1181196

Collection Date: 03/27/18 10:30
Received Date: 03/27/18 16:28
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	890		100	31.0	mg/L	1		03/28/18 09:20

Batch Information

Analytical Batch: STS5826
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 03/28/18 09:20
Container ID: 1181196006-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	87.6		10.0	3.10	mg/L	10		03/29/18 12:06

Batch Information

Analytical Batch: WDA4227
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 03/29/18 12:06
Container ID: 1181196006-D

Prep Batch: WXX12249
Prep Method: METHOD
Prep Date/Time: 03/28/18 10:47
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	39.8		1.00	0.310	mg/L	10		03/28/18 11:38

Batch Information

Analytical Batch: WDA4225
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 03/28/18 11:38
Container ID: 1181196006-D

Prep Batch: WXX12247
Prep Method: METHOD
Prep Date/Time: 03/28/18 09:55
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	0.0908	J	0.100	0.0250	mg/L	2		03/28/18 13:06
Nitrite-N	0.0862	J	0.100	0.0250	mg/L	2		03/28/18 13:06

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Results of **L3B**

Client Sample ID: **L3B**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196006
Lab Project ID: 1181196

Collection Date: 03/27/18 10:30
Received Date: 03/27/18 16:28
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2662
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 03/28/18 13:06
Container ID: 1181196006-C

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Results of **L4A**

Client Sample ID: **L4A**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196007
Lab Project ID: 1181196

Collection Date: 03/27/18 11:32
Received Date: 03/27/18 16:28
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	53.6		2.00	2.00	mg/L	1		03/28/18 17:52

Batch Information

Analytical Batch: BOD6010
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 03/28/18 17:52
Container ID: 1181196007-A

Print Date: 04/06/2018 3:23:12PM

J flagging is activated

Results of **L4A**

Client Sample ID: **L4A**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196007
Lab Project ID: 1181196

Collection Date: 03/27/18 11:32
Received Date: 03/27/18 16:28
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	68.0		10.0	3.10	mg/L	1		03/28/18 09:20

Batch Information

Analytical Batch: STS5826
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 03/28/18 09:20
Container ID: 1181196007-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	50.4		10.0	3.10	mg/L	10		03/29/18 12:05

Batch Information

Analytical Batch: WDA4227
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 03/29/18 12:05
Container ID: 1181196007-D

Prep Batch: WXX12249
Prep Method: METHOD
Prep Date/Time: 03/28/18 10:47
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	34.0		1.00	0.310	mg/L	10		03/28/18 11:40

Batch Information

Analytical Batch: WDA4225
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 03/28/18 11:40
Container ID: 1181196007-D

Prep Batch: WXX12247
Prep Method: METHOD
Prep Date/Time: 03/28/18 09:55
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	0.0574	J	0.100	0.0250	mg/L	2		03/28/18 13:08
Nitrite-N	0.0524	J	0.100	0.0250	mg/L	2		03/28/18 13:08

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Results of **L4A**

Client Sample ID: **L4A**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196007
Lab Project ID: 1181196

Collection Date: 03/27/18 11:32
Received Date: 03/27/18 16:28
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2662
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 03/28/18 13:08
Container ID: 1181196007-C

Results of **L4B**

Client Sample ID: **L4B**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196008
Lab Project ID: 1181196

Collection Date: 03/27/18 11:45
Received Date: 03/27/18 16:28
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	50.4		2.00	2.00	mg/L	1		03/28/18 17:52

Batch Information

Analytical Batch: BOD6010
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 03/28/18 17:52
Container ID: 1181196008-A

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Results of **L4B**

Client Sample ID: **L4B**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196008
Lab Project ID: 1181196

Collection Date: 03/27/18 11:45
Received Date: 03/27/18 16:28
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	67.1		14.3	4.43	mg/L	1		03/28/18 09:20

Batch Information

Analytical Batch: STS5826
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 03/28/18 09:20
Container ID: 1181196008-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	49.5		10.0	3.10	mg/L	10		03/29/18 12:04

Batch Information

Analytical Batch: WDA4227
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 03/29/18 12:04
Container ID: 1181196008-D

Prep Batch: WXX12249
Prep Method: METHOD
Prep Date/Time: 03/28/18 10:47
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	34.8		1.00	0.310	mg/L	10		03/28/18 11:42

Batch Information

Analytical Batch: WDA4225
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 03/28/18 11:42
Container ID: 1181196008-D

Prep Batch: WXX12247
Prep Method: METHOD
Prep Date/Time: 03/28/18 09:55
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	0.0524	J	0.100	0.0250	mg/L	2		03/28/18 13:09
Nitrite-N	0.0504	J	0.100	0.0250	mg/L	2		03/28/18 13:09

Print Date: 04/06/2018 3:23:12PM

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Results of **L4B**

Client Sample ID: **L4B**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196008
Lab Project ID: 1181196

Collection Date: 03/27/18 11:45
Received Date: 03/27/18 16:28
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2662
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 03/28/18 13:09
Container ID: 1181196008-C

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Results of **SW17**

Client Sample ID: **SW17**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196009
Lab Project ID: 1181196

Collection Date: 03/27/18 13:00
Received Date: 03/27/18 16:28
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		03/28/18 17:52

Batch Information

Analytical Batch: BOD6010
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 03/28/18 17:52
Container ID: 1181196009-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		03/27/18 17:34

Batch Information

Analytical Batch: BTF16423
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 03/27/18 17:34
Container ID: 1181196009-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	1 U		1	1	MPN/100m	1		03/27/18 17:43
Total Coliform	46		1	1	MPN/100m	1		03/27/18 17:43

Batch Information

Analytical Batch: BTF16421
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 03/27/18 17:43
Container ID: 1181196009-F

Print Date: 04/06/2018 3:23:12PM

J flagging is activated

Results of **SW17**

Client Sample ID: **SW17**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196009
Lab Project ID: 1181196

Collection Date: 03/27/18 13:00
Received Date: 03/27/18 16:28
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	46.8		1.25	0.388	mg/L	1		03/28/18 09:20

Batch Information

Analytical Batch: STS5826
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 03/28/18 09:20
Container ID: 1181196009-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	0.782	J	1.00	0.310	mg/L	1		03/29/18 12:02

Batch Information

Analytical Batch: WDA4227
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 03/29/18 12:02
Container ID: 1181196009-D

Prep Batch: WXX12249
Prep Method: METHOD
Prep Date/Time: 03/28/18 10:47
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	0.423		0.100	0.0310	mg/L	1		03/28/18 10:50

Batch Information

Analytical Batch: WDA4225
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 03/28/18 10:50
Container ID: 1181196009-D

Prep Batch: WXX12247
Prep Method: METHOD
Prep Date/Time: 03/28/18 09:55
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	2.40		0.100	0.0250	mg/L	2		03/28/18 13:11
Nitrite-N	0.0504	J	0.100	0.0250	mg/L	2		03/28/18 13:11

Print Date: 04/06/2018 3:23:12PM

J flagging is activated

Results of **SW17**

Client Sample ID: **SW17**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196009
Lab Project ID: 1181196

Collection Date: 03/27/18 13:00
Received Date: 03/27/18 16:28
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2662
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 03/28/18 13:11
Container ID: 1181196009-C

Results of **SW18**

Client Sample ID: **SW18**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196010
Lab Project ID: 1181196

Collection Date: 03/27/18 13:30
Received Date: 03/27/18 16:28
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		03/28/18 17:52

Batch Information

Analytical Batch: BOD6010
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 03/28/18 17:52
Container ID: 1181196010-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		03/27/18 17:34

Batch Information

Analytical Batch: BTF16423
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 03/27/18 17:34
Container ID: 1181196010-E

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	1 U		1	1	MPN/100m	1		03/27/18 17:43
Total Coliform	37		1	1	MPN/100m	1		03/27/18 17:43

Batch Information

Analytical Batch: BTF16421
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 03/27/18 17:43
Container ID: 1181196010-F

Print Date: 04/06/2018 3:23:12PM

J flagging is activated

Results of **SW18**

Client Sample ID: **SW18**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196010
Lab Project ID: 1181196

Collection Date: 03/27/18 13:30
Received Date: 03/27/18 16:28
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	0.421	J	1.05	0.326	mg/L	1		03/28/18 09:20

Batch Information

Analytical Batch: STS5826
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 03/28/18 09:20
Container ID: 1181196010-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Kjeldahl Nitrogen	1.25		1.00	0.310	mg/L	1		03/29/18 11:58

Batch Information

Analytical Batch: WDA4227
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 03/29/18 11:58
Container ID: 1181196010-D

Prep Batch: WXX12249
Prep Method: METHOD
Prep Date/Time: 03/28/18 10:47
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	0.766		0.100	0.0310	mg/L	1		03/28/18 10:45

Batch Information

Analytical Batch: WDA4225
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 03/28/18 10:45
Container ID: 1181196010-D

Prep Batch: WXX12247
Prep Method: METHOD
Prep Date/Time: 03/28/18 09:55
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	1.51		0.0500	0.0125	mg/L	1		03/28/18 13:13
Nitrite-N	0.0271	J	0.0500	0.0125	mg/L	1		03/28/18 13:13

Print Date: 04/06/2018 3:23:12PM

J flagging is activated

Results of **SW18**

Client Sample ID: **SW18**
Client Project ID: **Wasilla WWTP**
Lab Sample ID: 1181196010
Lab Project ID: 1181196

Collection Date: 03/27/18 13:30
Received Date: 03/27/18 16:28
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WFI2662
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 03/28/18 13:13
Container ID: 1181196010-C

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Method Blank

Blank ID: MB for HBN 1778172 [BOD/6010]
Blank Lab ID: 1440414

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181196001, 1181196002, 1181196003, 1181196004, 1181196005, 1181196006, 1181196007, 1181196008, 1181196009, 1181196010

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: BOD6010
Analytical Method: SM21 5210B
Instrument:
Analyst: A.L
Analytical Date/Time: 3/28/2018 5:52:31PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1181196 [BOD6010]
Blank Spike Lab ID: 1440415
Date Analyzed: 03/28/2018 17:52

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181196001, 1181196002, 1181196003, 1181196004, 1181196005, 1181196006, 1181196007, 1181196008, 1181196009, 1181196010

Results by **SM21 5210B**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Biochemical Oxygen Demand	198	212	107	(84.6-115.4

Batch Information

Analytical Batch: **BOD6010**
Analytical Method: **SM21 5210B**
Instrument:
Analyst: **A.L**

Print Date: 04/06/2018 3:23:17PM

Method Blank

Blank ID: MB for HBN 1777808 [BTF/16421]
Blank Lab ID: 1438961

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181196009, 1181196010

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: BTF16421
Analytical Method: SM21 9223B
Instrument:
Analyst: K.W
Analytical Date/Time: 3/27/2018 12:47:00PM

Print Date: 04/06/2018 3:23:20PM

Method Blank

Blank ID: MB for HBN 1777810 [BTF/16423]
Blank Lab ID: 1438967

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181196009, 1181196010

Results by **SM21 9222D**

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

Batch Information

Analytical Batch: BTF16423
Analytical Method: SM21 9222D
Instrument:
Analyst: K.W
Analytical Date/Time: 3/27/2018 5:34:00PM

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Method Blank

Blank ID: MB for HBN 1777815 [STS/5826]
Blank Lab ID: 1438989

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181196001, 1181196002, 1181196003, 1181196004, 1181196005, 1181196006, 1181196007, 1181196008, 1181196009, 1181196010

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: STS5826
Analytical Method: SM21 2540D
Instrument:
Analyst: EWW
Analytical Date/Time: 3/28/2018 9:20:46AM

Print Date: 04/06/2018 3:23:27PM

Duplicate Sample Summary

Original Sample ID: 1181196008
Duplicate Sample ID: 1438992

Analysis Date: 03/28/2018 09:20
Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1181196001, 1181196002, 1181196003, 1181196004, 1181196005, 1181196006, 1181196007, 1181196008, 1181196009, 1181196010

Results by **SM21 2540D**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Suspended Solids	67.1	61.4	mg/L	8.90*	(< 5)

Batch Information

Analytical Batch: STS5826
Analytical Method: SM21 2540D
Instrument:
Analyst: EWW

Print Date: 04/06/2018 3:23:27PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1181196 [STS5826]
Blank Spike Lab ID: 1438990
Date Analyzed: 03/28/2018 09:20

Spike Duplicate ID: LCSD for HBN 1181196 [STS5826]
Spike Duplicate Lab ID: 1438991
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181196001, 1181196002, 1181196003, 1181196004, 1181196005, 1181196006, 1181196007, 1181196008, 1181196009, 1181196010

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	48.7	97	50	48.3	97	(75-125)	0.82	(< 5)

Batch Information

Analytical Batch: **STS5826**
Analytical Method: **SM21 2540D**
Instrument:
Analyst: **EWW**

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Method Blank

Blank ID: ICB for HBN 1777837 (WFI/2662) Matrix: Water (Surface, Eff., Ground)
Blank Lab ID: 1439124

QC for Samples:
1181196001, 1181196002, 1181196003, 1181196004, 1181196005, 1181196006, 1181196007, 1181196008, 1181196009, 1181196010

Results by **SM21 4500NO3-F**

Parameter	Results	LOQ/CL	DL	Units
Nitrate-N	0.0474J	0.100	0.0250	mg/L
Nitrite-N	0.0500U	0.100	0.0250	mg/L
Total Nitrate/Nitrite-N	0.0506J	0.100	0.0250	mg/L

Batch Information

Analytical Batch: WFI2662
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: AYC
Analytical Date/Time: 3/28/2018 12:43:35PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1181196 [WFI2662]
Blank Spike Lab ID: 1439114
Date Analyzed: 03/28/2018 12:41

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181196001, 1181196002, 1181196003, 1181196004, 1181196005, 1181196006, 1181196007, 1181196008, 1181196009, 1181196010

Results by **SM21 4500NO3-F**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Nitrate-N	2.5	2.56	103	(70-130)
Nitrite-N	2.5	2.51	100	(90-110)
Total Nitrate/Nitrite-N	5	5.07	101	(90-110)

Batch Information

Analytical Batch: **WFI2662**
Analytical Method: **SM21 4500NO3-F**
Instrument: **Astoria segmented flow**
Analyst: **AYC**

Print Date: 04/06/2018 3:23:31PM

Matrix Spike Summary

Original Sample ID: 1181196005
MS Sample ID: 1439066 MS
MSD Sample ID: 1439067 MSD

Analysis Date: 03/28/2018 12:55
Analysis Date: 03/28/2018 12:57
Analysis Date: 03/28/2018 12:59
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181196001, 1181196002, 1181196003, 1181196004, 1181196005, 1181196006, 1181196007, 1181196008, 1181196009, 1181196010

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	0.0480J	2.50	2.87	113	2.50	2.83	111	70-130	1.40	(< 25)
Nitrite-N	0.0552J	2.50	2.55	100	2.50	2.60	102	90-110	1.80	(< 25)

Batch Information

Analytical Batch: WFI2662
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: AYC
Analytical Date/Time: 3/28/2018 12:57:36PM

Print Date: 04/06/2018 3:23:32PM

Method Blank

Blank ID: MB for HBN 1777834 [WXX/12247]
Blank Lab ID: 1439049

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181196001, 1181196002, 1181196003, 1181196004, 1181196005, 1181196006, 1181196007, 1181196008, 1181196009, 1181196010

Results by **SM21 4500-NH3 G**

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

Batch Information

Analytical Batch: WDA4225
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 3/28/2018 10:40:37AM

Prep Batch: WXX12247
Prep Method: METHOD
Prep Date/Time: 3/28/2018 9:55:00AM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Print Date: 04/06/2018 3:23:33PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1181196 [WXX12247]
Blank Spike Lab ID: 1439050
Date Analyzed: 03/28/2018 10:42

Spike Duplicate ID: LCSD for HBN 1181196 [WXX12247]
Spike Duplicate Lab ID: 1439051
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181196001, 1181196002, 1181196003, 1181196004, 1181196005, 1181196006, 1181196007, 1181196008, 1181196009, 1181196010

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	0.992	99	1	0.938	94	(75-125)	5.60	(< 25)

Batch Information

Analytical Batch: **WDA4225**
Analytical Method: **SM21 4500-NH3 G**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX12247**
Prep Method: **METHOD**
Prep Date/Time: **03/28/2018 09:55**
Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

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Matrix Spike Summary

Original Sample ID: 1181196010
MS Sample ID: 1439052 MS
MSD Sample ID: 1439053 MSD

Analysis Date: 03/28/2018 10:45
Analysis Date: 03/28/2018 10:47
Analysis Date: 03/28/2018 10:49
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181196001, 1181196002, 1181196003, 1181196004, 1181196005, 1181196006, 1181196007, 1181196008, 1181196009, 1181196010

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	0.766	1.00	1.61	85	1.00	1.48	72 *	75-125	8.40	(< 25)

Batch Information

Analytical Batch: WDA4225
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 3/28/2018 10:47:20AM

Prep Batch: WXX12247
Prep Method: Ammonia by SM21 4500F prep (W)
Prep Date/Time: 3/28/2018 9:55:00AM
Prep Initial Wt./Vol.: 6.00mL
Prep Extract Vol: 6.00mL

Print Date: 04/06/2018 3:23:35PM

Method Blank

Blank ID: MB for HBN 1777880 [WXX/12249]
Blank Lab ID: 1439271

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1181196001, 1181196002, 1181196003, 1181196004, 1181196005, 1181196006, 1181196007, 1181196008, 1181196009, 1181196010

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: WDA4227
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 3/29/2018 11:54:41AM

Prep Batch: WXX12249
Prep Method: METHOD
Prep Date/Time: 3/28/2018 10:47:00AM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1181196 [WXX12249]
Blank Spike Lab ID: 1439272
Date Analyzed: 03/29/2018 11:56

Spike Duplicate ID: LCSD for HBN 1181196 [WXX12249]
Spike Duplicate Lab ID: 1439275
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181196001, 1181196002, 1181196003, 1181196004, 1181196005, 1181196006, 1181196007, 1181196008, 1181196009, 1181196010

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	3.53	88	4	3.62	91	(75-125)	2.70	(< 25)

Batch Information

Analytical Batch: **WDA4227**
Analytical Method: **SM21 4500-N D**
Instrument: **Discrete Analyzer 2**
Analyst: **DMM**

Prep Batch: **WXX12249**
Prep Method: **METHOD**
Prep Date/Time: **03/28/2018 10:47**
Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

Print Date: 04/06/2018 3:23:37PM

Matrix Spike Summary

Original Sample ID: 1181196010
MS Sample ID: 1439273 MS
MSD Sample ID: 1439274 MSD

Analysis Date: 03/29/2018 11:58
Analysis Date: 03/29/2018 12:00
Analysis Date: 03/29/2018 12:01
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1181196001, 1181196002, 1181196003, 1181196004, 1181196005, 1181196006, 1181196007, 1181196008, 1181196009, 1181196010

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	1.25	4.00	4.9	91	4.00	4.68	86	75-125	4.60	(< 25)

Batch Information

Analytical Batch: WDA4227
Analytical Method: SM21 4500-N D
Instrument: Discrete Analyzer 2
Analyst: DMM
Analytical Date/Time: 3/29/2018 12:00:03PM

Prep Batch: WXX12249
Prep Method: Distillation TKN by Phenate (W)
Prep Date/Time: 3/28/2018 10:47:00AM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 04/06/2018 3:23:37PM

SGS

CH 1181196

Locations Nationwide
Alaska Maryland
New Jersey New York
North Carolina

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

INVOICE TO: Stantec — QUOTE #: — P.O. #: 2470041S

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)	Fecal Coliform (Na2SO4)	BOD (None)	TSS (None)	Nitrate, Nitrite (None)	TKN, Ammonia (H2SO4)	RCRA Metals + Cu, Zn (HNO3)	REMARKS/ LOC ID
1 A-D	L1A	3/27/18	930		4	G		1	1	1	1		
2 A-D	L1B	3/27/18	950		4	G		1	1	1	1		
3 A-D	L2A	3/27/18	1053		4	G		1	1	1	1		
4 A-D	L2B	3/27/18	1106		4	G		1	1	1	1		
5 A-D	L3A	3/27/18	1020		4	G		1	1	1	1		
6 A-D	L3B	3/27/18	1030		4	G		1	1	1	1		
7 A-D	L4A	3/27/18	1132		4	G		1	1	1	1		
8 A-D	L4B	3/27/18	1145		4	G		1	1	1	1		
9 A-D								~~1~~	~~1~~	~~1~~	1		
10 A-D								~~1~~	~~1~~				

NSW

Section 5

	Date	Time	
Relinquished By: (1)	3/27/18	1628	Received By:
Relinquished By: (2)			Received By:
Relinquished By: (3)			Received By:
Relinquished By: (4)	3/27/18	1628	Received For Laboratory By: NSW

Section 3 — Preservative

Section 4

DOD Project? Yes No

Data Deliverable Requirements:

Cooler ID:

Requested Turnaround Time and/or Special Instructions:

Temp Blank °C: -0.7(041), 0.1(041) or Ambient [ ]

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

Delivery Method: (Check) Hand Delivered [ ] Commerical Delivered [ ]

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

SGS

C 1181196 ID

Locations Nationwide
Alaska Maryland
New Jersey New York
North Carolina

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

Page 2 of 2

Section 1

CLIENT: Stantec

CONTACT: Jake Alward PHONE #: ~~343-8~~ 343-5202

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

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

INVOICE TO: Stantec QUOTE #: P.O. #: 20470415

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)	Fecal Coliform (Na2SO4)	BOD (None)	TSS (None)	Nitrate, Nitrite (None)	TKN, Ammonia (H2SO4)	RCRA Metals + Cu, Zn (HNO3)	Total Coliform (Quanti-Tray) (Na2S2O3)	REMARKS/ LOC ID
9 (11) A-F	SW17	~~3/27/18~~	1300		6	G	1	1	1	1	1		1	
10 (12) A-F	SW18	~~3/27/18~~	1330		6	G	1	1	1	1	1		1	

Section 3 Preservative

Section 4 DOD Project? Yes No

Data Deliverable Requirements:

Cooler ID:

Requested Turnaround Time and/or Special Instructions:

Section 5

	Date	Time	
Relinquished By: (1)	3/27/18	1628	Received By:
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	3/27/18	1628	Received For Laboratory By: NSW

Temp Blank °C: -0.7(041) 0.1(041) or Ambient [ ]

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Delivery Method: (Check) Hand Delivered [ ] Commerical Delivered [ ]

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

e-Sample Receipt Form

SGS Workorder #: **1181196**

Review Criteria	Condition (Yes, No, N/A)	Exceptions Noted below
Chain of Custody / Temperature Requirements		yes Exemption permitted if sampler hand carries/delivers.
Were Custody Seals intact? Note # & location	n/a	
COC accompanied samples?	yes	
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)?	no	Cooler ID: 1 @ -0.7 °C Therm. ID: D41
	yes	Cooler ID: 2 @ 0.1 °C Therm. ID: D41
	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?	yes	
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
1181196001-A	No Preservative Required	OK	1181196010-E	Na2S2O3 for Chlorine Redu	OK
1181196001-B	No Preservative Required	OK	1181196010-F	Na2S2O3 for Chlorine Redu	OK
1181196001-C	No Preservative Required	OK			
1181196001-D	H2SO4 to pH < 2	OK			
1181196002-A	No Preservative Required	OK			
1181196002-B	No Preservative Required	OK			
1181196002-C	No Preservative Required	OK			
1181196002-D	H2SO4 to pH < 2	OK			
1181196003-A	No Preservative Required	OK			
1181196003-B	No Preservative Required	OK			
1181196003-C	No Preservative Required	OK			
1181196003-D	H2SO4 to pH < 2	OK			
1181196004-A	No Preservative Required	OK			
1181196004-B	No Preservative Required	OK			
1181196004-C	No Preservative Required	OK			
1181196004-D	H2SO4 to pH < 2	OK			
1181196005-A	No Preservative Required	OK			
1181196005-B	No Preservative Required	OK			
1181196005-C	No Preservative Required	OK			
1181196005-D	H2SO4 to pH < 2	OK			
1181196006-A	No Preservative Required	OK			
1181196006-B	No Preservative Required	OK			
1181196006-C	No Preservative Required	OK			
1181196006-D	H2SO4 to pH < 2	OK			
1181196007-A	No Preservative Required	OK			
1181196007-B	No Preservative Required	OK			
1181196007-C	No Preservative Required	OK			
1181196007-D	H2SO4 to pH < 2	OK			
1181196008-A	No Preservative Required	OK			
1181196008-B	No Preservative Required	OK			
1181196008-C	No Preservative Required	OK			
1181196008-D	H2SO4 to pH < 2	OK			
1181196009-A	No Preservative Required	OK			
1181196009-B	No Preservative Required	OK			
1181196009-C	No Preservative Required	OK			
1181196009-D	H2SO4 to pH < 2	OK			
1181196009-E	Na2S2O3 for Chlorine Redu	OK			
1181196009-F	Na2S2O3 for Chlorine Redu	OK			
1181196010-A	No Preservative Required	OK			
1181196010-B	No Preservative Required	OK			
1181196010-C	No Preservative Required	OK			
1181196010-D	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.