

## Laboratory Report of Analysis

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

Report Number: **1184812**

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.

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Justin Nelson  
Project Manager  
Justin.Nelson@sgs.com

Date

## Case Narrative

SGS Client: **Stantec Consulting Services Inc.**

SGS Project: **1184812**

Project Name/Site: **Wasilla WWTP**

Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

### **1184815001DUP (1471090) 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.

\*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, indemnification and jurisdiction issues defined therein.

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

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 (DW Chemistry & Microbiology) & 17-021 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020A, 7470A, 7471B, 8015C, 8021B, 8082A, 8260C, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

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

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

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

### Sample Summary

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Collected</u>	<u>Received</u>	<u>Matrix</u>
SW1	1184812001	08/28/2018	08/28/2018	Water (Surface, Eff., Ground)
SW2	1184812002	08/28/2018	08/28/2018	Water (Surface, Eff., Ground)
SW3	1184812003	08/28/2018	08/28/2018	Water (Surface, Eff., Ground)
SW4	1184812004	08/28/2018	08/28/2018	Water (Surface, Eff., Ground)
SW5	1184812005	08/28/2018	08/28/2018	Water (Surface, Eff., Ground)
SW6	1184812006	08/28/2018	08/28/2018	Water (Surface, Eff., Ground)
SW7	1184812007	08/28/2018	08/28/2018	Water (Surface, Eff., Ground)
SW8	1184812008	08/28/2018	08/28/2018	Water (Surface, Eff., Ground)
SW9	1184812009	08/28/2018	08/28/2018	Water (Surface, Eff., Ground)
SW10	1184812010	08/28/2018	08/28/2018	Water (Surface, Eff., Ground)

<u>Method</u>	<u>Method Description</u>
SM21 4500-NH3 G	Ammonia-N (W) SM21 4500-NH3 G
SM21 5210B	Biochemical Oxygen Demand SM21 5210B
SM21 9222D	Fecal Coliform (MF)
SM21 4500NO3-F	Flow Injection Analysis
SM21 4500-N D	TKN by Phenate (W)
SM21 9223B	Total Coliform P/A Quant Tray
SM21 4500P-B,E	Total Phosphorus (W)
SM21 2540D	Total Suspended Solids SM20 2540D

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### Detectable Results Summary

Client Sample ID: **SW1**  
 Lab Sample ID: 1184812001  
**Microbiology Laboratory**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	24.7	mg/L
E. Coli	42	MPN/100mL
Fecal Coliform	39	col/100mL
Total Coliform	1553	MPN/100mL
Ammonia-N	0.106	mg/L
Total Kjeldahl Nitrogen	0.782J	mg/L
Total Phosphorus	0.0674	mg/L
Total Suspended Solids	3.00	mg/L

**Waters Department**

Client Sample ID: **SW2**  
 Lab Sample ID: 1184812002  
**Microbiology Laboratory**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	2.07	mg/L
E. Coli	8	MPN/100mL
Fecal Coliform	6.0	col/100mL
Total Coliform	649	MPN/100mL
Ammonia-N	0.0753J	mg/L
Total Kjeldahl Nitrogen	0.854J	mg/L
Total Phosphorus	0.0259	mg/L
Total Suspended Solids	2.14	mg/L

**Waters Department**

Client Sample ID: **SW3**  
 Lab Sample ID: 1184812003  
**Microbiology Laboratory**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	20	MPN/100mL
Fecal Coliform	13	col/100mL
Total Coliform	15530	MPN/100mL
Ammonia-N	0.0746J	mg/L
Total Kjeldahl Nitrogen	0.369J	mg/L
Total Phosphorus	0.0126J	mg/L

**Waters Department**

Client Sample ID: **SW4**  
 Lab Sample ID: 1184812004  
**Microbiology Laboratory**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	31	MPN/100mL
Fecal Coliform	20	col/100mL
Total Coliform	12030	MPN/100mL
Ammonia-N	0.0582J	mg/L
Total Phosphorus	0.0385	mg/L
Total Suspended Solids	3.94	mg/L

**Waters Department**

### Detectable Results Summary

Client Sample ID: **SW5**  
 Lab Sample ID: 1184812005  
**Microbiology Laboratory**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	2.74	mg/L
E. Coli	61	MPN/100mL
Fecal Coliform	38	col/100mL
Total Coliform	17330	MPN/100mL
Ammonia-N	0.0690J	mg/L
Total Kjeldahl Nitrogen	0.505J	mg/L
Total Phosphorus	0.0300	mg/L
Total Suspended Solids	4.20	mg/L

**Waters Department**

Client Sample ID: **SW6**  
 Lab Sample ID: 1184812006  
**Microbiology Laboratory**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	57	MPN/100mL
Fecal Coliform	21	col/100mL
Total Coliform	770	MPN/100mL
Ammonia-N	0.0793J	mg/L
Total Kjeldahl Nitrogen	0.364J	mg/L

**Waters Department**

Client Sample ID: **SW7**  
 Lab Sample ID: 1184812007  
**Microbiology Laboratory**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	52	MPN/100mL
Fecal Coliform	14	col/100mL
Total Coliform	2280	MPN/100mL
Ammonia-N	0.0655J	mg/L
Total Phosphorus	0.00850J	mg/L
Total Suspended Solids	0.500J	mg/L

**Waters Department**

Client Sample ID: **SW8**  
 Lab Sample ID: 1184812008  
**Microbiology Laboratory**  
**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Coliform	5790	MPN/100mL
Ammonia-N	0.0702J	mg/L
Total Kjeldahl Nitrogen	0.671J	mg/L
Total Phosphorus	0.0546	mg/L
Total Suspended Solids	2.40	mg/L

Client Sample ID: **SW9**  
 Lab Sample ID: 1184812009  
**Microbiology Laboratory**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	3	MPN/100mL
Fecal Coliform	2.0	col/100mL
Total Coliform	6130	MPN/100mL
Ammonia-N	0.0683J	mg/L
Total Phosphorus	0.00970J	mg/L
Total Suspended Solids	1.67	mg/L

**Waters Department**

## Detectable Results Summary

Client Sample ID: **SW10**  
 Lab Sample ID: 1184812010  
**Microbiology Laboratory**

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	411	MPN/100mL
Fecal Coliform	390	col/100mL
Total Coliform	1553	MPN/100mL
Ammonia-N	0.0833J	mg/L
Total Kjeldahl Nitrogen	0.424J	mg/L
Total Phosphorus	0.0308	mg/L
Total Suspended Solids	1.92	mg/L

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**Results of SW1**

Client Sample ID: **SW1**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184812001  
Lab Project ID: 1184812

Collection Date: 08/28/18 10:01  
Received Date: 08/28/18 16:03  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Microbiology Laboratory**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Biochemical Oxygen Demand	24.7	2.00	2.00	mg/L	1		08/29/18 13:38

**Batch Information**

Analytical Batch: BOD6128  
Analytical Method: SM21 5210B  
Analyst: A.L  
Analytical Date/Time: 08/29/18 13:38  
Container ID: 1184812001-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	39	1.00	1.00	col/100mL	1		08/28/18 17:06

**Batch Information**

Analytical Batch: BTF16832  
Analytical Method: SM21 9222D  
Analyst: K.W  
Analytical Date/Time: 08/28/18 17:06  
Container ID: 1184812001-E

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	42	1	1	MPN/100r	1		08/29/18 10:19
Total Coliform	1553	1	1	MPN/100r	1		08/29/18 10:19

**Batch Information**

Analytical Batch: BTF16835  
Analytical Method: SM21 9223B  
Analyst: K.W  
Analytical Date/Time: 08/29/18 10:19  
Container ID: 1184812001-F





**Results of SW1**

Client Sample ID: **SW1**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184812001  
Lab Project ID: 1184812

Collection Date: 08/28/18 10:01  
Received Date: 08/28/18 16:03  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Waters Department**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	3.00	1.43	0.443	mg/L	1		08/29/18 15:39

**Batch Information**

Analytical Batch: STS5997  
Analytical Method: SM21 2540D  
Analyst: EWW  
Analytical Date/Time: 08/29/18 15:39  
Container ID: 1184812001-B

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Kjeldahl Nitrogen	0.782 J	1.00	0.310	mg/L	1		08/30/18 17:54

**Batch Information**

Analytical Batch: WDA4387	Prep Batch: WXX12509
Analytical Method: SM21 4500-N D	Prep Method: METHOD
Analyst: DMM	Prep Date/Time: 08/29/18 16:19
Analytical Date/Time: 08/30/18 17:54	Prep Initial Wt./Vol.: 25 mL
Container ID: 1184812001-D	Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.106	0.100	0.0310	mg/L	1		08/29/18 12:05

**Batch Information**

Analytical Batch: WDA4385	Prep Batch: WXX12507
Analytical Method: SM21 4500-NH3 G	Prep Method: METHOD
Analyst: DMM	Prep Date/Time: 08/29/18 11:30
Analytical Date/Time: 08/29/18 12:05	Prep Initial Wt./Vol.: 6 mL
Container ID: 1184812001-D	Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Nitrate-N	0.0500 U	0.100	0.0250	mg/L	2		08/28/18 17:51
Nitrite-N	0.0500 U	0.100	0.0250	mg/L	2		08/28/18 17:51



Results of **SW1**

Client Sample ID: **SW1**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184812001  
Lab Project ID: 1184812

Collection Date: 08/28/18 10:01  
Received Date: 08/28/18 16:03  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

Results by **Waters Department**

**Batch Information**

Analytical Batch: WFI2746  
Analytical Method: SM21 4500NO3-F  
Analyst: AYC  
Analytical Date/Time: 08/28/18 17:51  
Container ID: 1184812001-C

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0674	0.0200	0.00500	mg/L	1		09/05/18 11:05

**Batch Information**

Analytical Batch: WDA4392  
Analytical Method: SM21 4500P-B,E  
Analyst: DMM  
Analytical Date/Time: 09/05/18 11:05  
Container ID: 1184812001-D

Prep Batch: WXX12521  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 09/04/18 13:34  
Prep Initial Wt./Vol.: 25 mL  
Prep Extract Vol: 25 mL



**Results of SW2**

Client Sample ID: **SW2**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184812002  
Lab Project ID: 1184812

Collection Date: 08/28/18 10:27  
Received Date: 08/28/18 16:03  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Microbiology Laboratory**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Biochemical Oxygen Demand	2.07	2.00	2.00	mg/L	1		08/29/18 13:38

**Batch Information**

Analytical Batch: BOD6128  
Analytical Method: SM21 5210B  
Analyst: A.L  
Analytical Date/Time: 08/29/18 13:38  
Container ID: 1184812002-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	6.0	1.00	1.00	col/100mL	1		08/28/18 17:06

**Batch Information**

Analytical Batch: BTF16832  
Analytical Method: SM21 9222D  
Analyst: K.W  
Analytical Date/Time: 08/28/18 17:06  
Container ID: 1184812002-E

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	8	1	1	MPN/100r	1		08/29/18 10:19
Total Coliform	649	1	1	MPN/100r	1		08/29/18 10:19

**Batch Information**

Analytical Batch: BTF16835  
Analytical Method: SM21 9223B  
Analyst: K.W  
Analytical Date/Time: 08/29/18 10:19  
Container ID: 1184812002-F



**Results of SW2**

Client Sample ID: **SW2**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184812002  
Lab Project ID: 1184812

Collection Date: 08/28/18 10:27  
Received Date: 08/28/18 16:03  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Waters Department**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	2.14	1.43	0.443	mg/L	1		08/29/18 15:39

**Batch Information**

Analytical Batch: STS5997  
Analytical Method: SM21 2540D  
Analyst: EWW  
Analytical Date/Time: 08/29/18 15:39  
Container ID: 1184812002-B

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Kjeldahl Nitrogen	0.854 J	1.00	0.310	mg/L	1		08/30/18 17:58

**Batch Information**

Analytical Batch: WDA4387	Prep Batch: WXX12509
Analytical Method: SM21 4500-N D	Prep Method: METHOD
Analyst: DMM	Prep Date/Time: 08/29/18 16:19
Analytical Date/Time: 08/30/18 17:58	Prep Initial Wt./Vol.: 25 mL
Container ID: 1184812002-D	Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0753 J	0.100	0.0310	mg/L	1		08/29/18 12:07

**Batch Information**

Analytical Batch: WDA4385	Prep Batch: WXX12507
Analytical Method: SM21 4500-NH3 G	Prep Method: METHOD
Analyst: DMM	Prep Date/Time: 08/29/18 11:30
Analytical Date/Time: 08/29/18 12:07	Prep Initial Wt./Vol.: 6 mL
Container ID: 1184812002-D	Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Nitrate-N	0.0500 U	0.100	0.0250	mg/L	2		08/28/18 17:53
Nitrite-N	0.0500 U	0.100	0.0250	mg/L	2		08/28/18 17:53

## Results of SW2

Client Sample ID: **SW2**  
 Client Project ID: **Wasilla WWTP**  
 Lab Sample ID: 1184812002  
 Lab Project ID: 1184812

Collection Date: 08/28/18 10:27  
 Received Date: 08/28/18 16:03  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

### Batch Information

Analytical Batch: WFI2746  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AYC  
 Analytical Date/Time: 08/28/18 17:53  
 Container ID: 1184812002-C

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0259	0.0200	0.00500	mg/L	1		09/05/18 11:06

### Batch Information

Analytical Batch: WDA4392  
 Analytical Method: SM21 4500P-B,E  
 Analyst: DMM  
 Analytical Date/Time: 09/05/18 11:06  
 Container ID: 1184812002-D

Prep Batch: WXX12521  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 09/04/18 13:34  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL



**Results of SW3**

Client Sample ID: **SW3**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184812003  
Lab Project ID: 1184812

Collection Date: 08/28/18 10:44  
Received Date: 08/28/18 16:03  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Microbiology Laboratory**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Biochemical Oxygen Demand	2.00 U	2.00	2.00	mg/L	1		08/29/18 13:38

**Batch Information**

Analytical Batch: BOD6128  
Analytical Method: SM21 5210B  
Analyst: A.L  
Analytical Date/Time: 08/29/18 13:38  
Container ID: 1184812003-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	13	1.00	1.00	col/100mL	1		08/28/18 17:06

**Batch Information**

Analytical Batch: BTF16832  
Analytical Method: SM21 9222D  
Analyst: K.W  
Analytical Date/Time: 08/28/18 17:06  
Container ID: 1184812003-E

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	20	1	1	MPN/100r	1		08/29/18 10:19
Total Coliform	15530	10	10	MPN/100r	10		08/29/18 10:19

**Batch Information**

Analytical Batch: BTF16835  
Analytical Method: SM21 9223B  
Analyst: K.W  
Analytical Date/Time: 08/29/18 10:19  
Container ID: 1184812003-F



Results of SW3

Client Sample ID: SW3
Client Project ID: Wasilla WWTP
Lab Sample ID: 1184812003
Lab Project ID: 1184812

Collection Date: 08/28/18 10:44
Received Date: 08/28/18 16:03
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Suspended Solids, 0.500 U, 1.00, 0.310, mg/L, 1, 08/29/18 15:39

Batch Information

Analytical Batch: STS5997
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 08/29/18 15:39
Container ID: 1184812003-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.369 J, 1.00, 0.310, mg/L, 1, 08/30/18 17:59

Batch Information

Analytical Batch: WDA4387
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/30/18 17:59
Container ID: 1184812003-D
Prep Batch: WXX12509
Prep Method: METHOD
Prep Date/Time: 08/29/18 16:19
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Ammonia-N, 0.0746 J, 0.100, 0.0310, mg/L, 1, 08/29/18 12:08

Batch Information

Analytical Batch: WDA4385
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 08/29/18 12:08
Container ID: 1184812003-D
Prep Batch: WXX12507
Prep Method: METHOD
Prep Date/Time: 08/29/18 11:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows: Nitrate-N (0.0500 U), Nitrite-N (0.0500 U)



Results of **SW3**

Client Sample ID: **SW3**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184812003  
Lab Project ID: 1184812

Collection Date: 08/28/18 10:44  
Received Date: 08/28/18 16:03  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

Results by **Waters Department**

**Batch Information**

Analytical Batch: WFI2746  
Analytical Method: SM21 4500NO3-F  
Analyst: AYC  
Analytical Date/Time: 08/28/18 17:55  
Container ID: 1184812003-C

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0126 J	0.0200	0.00500	mg/L	1		09/05/18 11:09

**Batch Information**

Analytical Batch: WDA4392  
Analytical Method: SM21 4500P-B,E  
Analyst: DMM  
Analytical Date/Time: 09/05/18 11:09  
Container ID: 1184812003-D

Prep Batch: WXX12521  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 09/04/18 13:34  
Prep Initial Wt./Vol.: 25 mL  
Prep Extract Vol: 25 mL





**Results of SW4**

Client Sample ID: **SW4**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184812004  
Lab Project ID: 1184812

Collection Date: 08/28/18 12:19  
Received Date: 08/28/18 16:03  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Microbiology Laboratory**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Biochemical Oxygen Demand	2.00 U	2.00	2.00	mg/L	1		08/29/18 13:38

**Batch Information**

Analytical Batch: BOD6128  
Analytical Method: SM21 5210B  
Analyst: A.L  
Analytical Date/Time: 08/29/18 13:38  
Container ID: 1184812004-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	20	1.00	1.00	col/100mL	1		08/28/18 17:06

**Batch Information**

Analytical Batch: BTF16832  
Analytical Method: SM21 9222D  
Analyst: K.W  
Analytical Date/Time: 08/28/18 17:06  
Container ID: 1184812004-E

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	31	1	1	MPN/100r	1		08/29/18 10:19
Total Coliform	12030	10	10	MPN/100r	10		08/29/18 10:19

**Batch Information**

Analytical Batch: BTF16835  
Analytical Method: SM21 9223B  
Analyst: K.W  
Analytical Date/Time: 08/29/18 10:19  
Container ID: 1184812004-F



### Results of SW4

Client Sample ID: **SW4**  
 Client Project ID: **Wasilla WWTP**  
 Lab Sample ID: 1184812004  
 Lab Project ID: 1184812

Collection Date: 08/28/18 12:19  
 Received Date: 08/28/18 16:03  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

### Results by Waters Department

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	3.94	1.01	0.313	mg/L	1		08/29/18 15:39

### Batch Information

Analytical Batch: STS5997  
 Analytical Method: SM21 2540D  
 Analyst: EWW  
 Analytical Date/Time: 08/29/18 15:39  
 Container ID: 1184812004-B

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Kjeldahl Nitrogen	0.500 U	1.00	0.310	mg/L	1		08/30/18 18:00

### Batch Information

Analytical Batch: WDA4387  
 Analytical Method: SM21 4500-N D  
 Analyst: DMM  
 Analytical Date/Time: 08/30/18 18:00  
 Container ID: 1184812004-D

Prep Batch: WXX12509  
 Prep Method: METHOD  
 Prep Date/Time: 08/29/18 16:19  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0582 J	0.100	0.0310	mg/L	1		08/29/18 12:10

### Batch Information

Analytical Batch: WDA4385  
 Analytical Method: SM21 4500-NH3 G  
 Analyst: DMM  
 Analytical Date/Time: 08/29/18 12:10  
 Container ID: 1184812004-D

Prep Batch: WXX12507  
 Prep Method: METHOD  
 Prep Date/Time: 08/29/18 11:30  
 Prep Initial Wt./Vol.: 6 mL  
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Nitrate-N	0.0500 U	0.100	0.0250	mg/L	2		08/28/18 17:57
Nitrite-N	0.0500 U	0.100	0.0250	mg/L	2		08/28/18 17:57

## Results of SW4

Client Sample ID: **SW4**  
 Client Project ID: **Wasilla WWTP**  
 Lab Sample ID: 1184812004  
 Lab Project ID: 1184812

Collection Date: 08/28/18 12:19  
 Received Date: 08/28/18 16:03  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

### Batch Information

Analytical Batch: WFI2746  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AYC  
 Analytical Date/Time: 08/28/18 17:57  
 Container ID: 1184812004-C

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0385	0.0200	0.00500	mg/L	1		09/05/18 11:10

### Batch Information

Analytical Batch: WDA4392  
 Analytical Method: SM21 4500P-B,E  
 Analyst: DMM  
 Analytical Date/Time: 09/05/18 11:10  
 Container ID: 1184812004-D

Prep Batch: WXX12521  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 09/04/18 13:34  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL



**Results of SW5**

Client Sample ID: **SW5**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184812005  
Lab Project ID: 1184812

Collection Date: 08/28/18 12:38  
Received Date: 08/28/18 16:03  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Microbiology Laboratory**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Biochemical Oxygen Demand	2.74	2.00	2.00	mg/L	1		08/29/18 13:38

**Batch Information**

Analytical Batch: BOD6128  
Analytical Method: SM21 5210B  
Analyst: A.L  
Analytical Date/Time: 08/29/18 13:38  
Container ID: 1184812005-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	38	1.00	1.00	col/100mL	1		08/28/18 17:06

**Batch Information**

Analytical Batch: BTF16832  
Analytical Method: SM21 9222D  
Analyst: K.W  
Analytical Date/Time: 08/28/18 17:06  
Container ID: 1184812005-E

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	61	1	1	MPN/100r	1		08/29/18 10:19
Total Coliform	17330	10	10	MPN/100r	10		08/29/18 10:19

**Batch Information**

Analytical Batch: BTF16835  
Analytical Method: SM21 9223B  
Analyst: K.W  
Analytical Date/Time: 08/29/18 10:19  
Container ID: 1184812005-F



**Results of SW5**

Client Sample ID: **SW5**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184812005  
Lab Project ID: 1184812

Collection Date: 08/28/18 12:38  
Received Date: 08/28/18 16:03  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Waters Department**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	4.20	1.00	0.310	mg/L	1		08/29/18 15:39

**Batch Information**

Analytical Batch: STS5997  
Analytical Method: SM21 2540D  
Analyst: EWW  
Analytical Date/Time: 08/29/18 15:39  
Container ID: 1184812005-B

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Kjeldahl Nitrogen	0.505 J	1.00	0.310	mg/L	1		08/30/18 18:02

**Batch Information**

Analytical Batch: WDA4387	Prep Batch: WXX12509
Analytical Method: SM21 4500-N D	Prep Method: METHOD
Analyst: DMM	Prep Date/Time: 08/29/18 16:19
Analytical Date/Time: 08/30/18 18:02	Prep Initial Wt./Vol.: 25 mL
Container ID: 1184812005-D	Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0690 J	0.100	0.0310	mg/L	1		08/29/18 12:15

**Batch Information**

Analytical Batch: WDA4385	Prep Batch: WXX12507
Analytical Method: SM21 4500-NH3 G	Prep Method: METHOD
Analyst: DMM	Prep Date/Time: 08/29/18 11:30
Analytical Date/Time: 08/29/18 12:15	Prep Initial Wt./Vol.: 6 mL
Container ID: 1184812005-D	Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Nitrate-N	0.0500 U	0.100	0.0250	mg/L	2		08/28/18 17:58
Nitrite-N	0.0500 U	0.100	0.0250	mg/L	2		08/28/18 17:58

## Results of SW5

Client Sample ID: **SW5**  
 Client Project ID: **Wasilla WWTP**  
 Lab Sample ID: 1184812005  
 Lab Project ID: 1184812

Collection Date: 08/28/18 12:38  
 Received Date: 08/28/18 16:03  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

### Batch Information

Analytical Batch: WFI2746  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AYC  
 Analytical Date/Time: 08/28/18 17:58  
 Container ID: 1184812005-C

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0300	0.0200	0.00500	mg/L	1		09/05/18 11:11

### Batch Information

Analytical Batch: WDA4392  
 Analytical Method: SM21 4500P-B,E  
 Analyst: DMM  
 Analytical Date/Time: 09/05/18 11:11  
 Container ID: 1184812005-D

Prep Batch: WXX12521  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 09/04/18 13:34  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL



**Results of SW6**

Client Sample ID: **SW6**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184812006  
Lab Project ID: 1184812

Collection Date: 08/28/18 12:00  
Received Date: 08/28/18 16:03  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Microbiology Laboratory**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Biochemical Oxygen Demand	2.00 U	2.00	2.00	mg/L	1		08/29/18 13:38

**Batch Information**

Analytical Batch: BOD6128  
Analytical Method: SM21 5210B  
Analyst: A.L  
Analytical Date/Time: 08/29/18 13:38  
Container ID: 1184812006-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	21	1.00	1.00	col/100mL	1		08/28/18 17:06

**Batch Information**

Analytical Batch: BTF16832  
Analytical Method: SM21 9222D  
Analyst: K.W  
Analytical Date/Time: 08/28/18 17:06  
Container ID: 1184812006-E

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	57	1	1	MPN/100r	1		08/29/18 10:19
Total Coliform	770	1	1	MPN/100r	1		08/29/18 10:19

**Batch Information**

Analytical Batch: BTF16835  
Analytical Method: SM21 9223B  
Analyst: K.W  
Analytical Date/Time: 08/29/18 10:19  
Container ID: 1184812006-F



Results of SW6

Client Sample ID: SW6
Client Project ID: Wasilla WWTP
Lab Sample ID: 1184812006
Lab Project ID: 1184812

Collection Date: 08/28/18 12:00
Received Date: 08/28/18 16:03
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Suspended Solids, 0.490 U, 0.980, 0.304, mg/L, 1, 08/29/18 15:39

Batch Information

Analytical Batch: STS5997
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 08/29/18 15:39
Container ID: 1184812006-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.364 J, 1.00, 0.310, mg/L, 1, 08/30/18 18:06

Batch Information

Analytical Batch: WDA4387
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/30/18 18:06
Container ID: 1184812006-D
Prep Batch: WXX12509
Prep Method: METHOD
Prep Date/Time: 08/29/18 16:19
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Ammonia-N, 0.0793 J, 0.100, 0.0310, mg/L, 1, 08/29/18 12:00

Batch Information

Analytical Batch: WDA4385
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 08/29/18 12:00
Container ID: 1184812006-D
Prep Batch: WXX12507
Prep Method: METHOD
Prep Date/Time: 08/29/18 11:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows: Nitrate-N (0.0500 U), Nitrite-N (0.0500 U)





Results of **SW6**

Client Sample ID: **SW6**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184812006  
Lab Project ID: 1184812

Collection Date: 08/28/18 12:00  
Received Date: 08/28/18 16:03  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

Results by **Waters Department**

**Batch Information**

Analytical Batch: WFI2746  
Analytical Method: SM21 4500NO3-F  
Analyst: AYC  
Analytical Date/Time: 08/28/18 18:09  
Container ID: 1184812006-C

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0100 U	0.0200	0.00500	mg/L	1		09/05/18 11:14

**Batch Information**

Analytical Batch: WDA4392  
Analytical Method: SM21 4500P-B,E  
Analyst: DMM  
Analytical Date/Time: 09/05/18 11:14  
Container ID: 1184812006-D

Prep Batch: WXX12521  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 09/04/18 13:34  
Prep Initial Wt./Vol.: 25 mL  
Prep Extract Vol: 25 mL



**Results of SW7**

Client Sample ID: **SW7**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184812007  
Lab Project ID: 1184812

Collection Date: 08/28/18 11:43  
Received Date: 08/28/18 16:03  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Microbiology Laboratory**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Biochemical Oxygen Demand	2.00 U	2.00	2.00	mg/L	1		08/29/18 13:38

**Batch Information**

Analytical Batch: BOD6128  
Analytical Method: SM21 5210B  
Analyst: A.L  
Analytical Date/Time: 08/29/18 13:38  
Container ID: 1184812007-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	14	1.00	1.00	col/100mL	1		08/28/18 17:06

**Batch Information**

Analytical Batch: BTF16832  
Analytical Method: SM21 9222D  
Analyst: K.W  
Analytical Date/Time: 08/28/18 17:06  
Container ID: 1184812007-E

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	52	1	1	MPN/100r	1		08/29/18 10:19
Total Coliform	2280	10	10	MPN/100r	10		08/29/18 10:19

**Batch Information**

Analytical Batch: BTF16835  
Analytical Method: SM21 9223B  
Analyst: K.W  
Analytical Date/Time: 08/29/18 10:19  
Container ID: 1184812007-F



**Results of SW7**

Client Sample ID: **SW7**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184812007  
Lab Project ID: 1184812

Collection Date: 08/28/18 11:43  
Received Date: 08/28/18 16:03  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Waters Department**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	0.500 J	1.00	0.310	mg/L	1		08/29/18 15:39

**Batch Information**

Analytical Batch: STS5997  
Analytical Method: SM21 2540D  
Analyst: EWW  
Analytical Date/Time: 08/29/18 15:39  
Container ID: 1184812007-B

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Kjeldahl Nitrogen	0.500 U	1.00	0.310	mg/L	1		08/30/18 18:07

**Batch Information**

Analytical Batch: WDA4387	Prep Batch: WXX12509
Analytical Method: SM21 4500-N D	Prep Method: METHOD
Analyst: DMM	Prep Date/Time: 08/29/18 16:19
Analytical Date/Time: 08/30/18 18:07	Prep Initial Wt./Vol.: 25 mL
Container ID: 1184812007-D	Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0655 J	0.100	0.0310	mg/L	1		08/29/18 12:17

**Batch Information**

Analytical Batch: WDA4385	Prep Batch: WXX12507
Analytical Method: SM21 4500-NH3 G	Prep Method: METHOD
Analyst: DMM	Prep Date/Time: 08/29/18 11:30
Analytical Date/Time: 08/29/18 12:17	Prep Initial Wt./Vol.: 6 mL
Container ID: 1184812007-D	Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Nitrate-N	0.0500 U	0.100	0.0250	mg/L	2		08/28/18 18:11
Nitrite-N	0.0500 U	0.100	0.0250	mg/L	2		08/28/18 18:11

## Results of SW7

Client Sample ID: **SW7**  
 Client Project ID: **Wasilla WWTP**  
 Lab Sample ID: 1184812007  
 Lab Project ID: 1184812

Collection Date: 08/28/18 11:43  
 Received Date: 08/28/18 16:03  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

### Batch Information

Analytical Batch: WFI2746  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AYC  
 Analytical Date/Time: 08/28/18 18:11  
 Container ID: 1184812007-C

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.00850 J	0.0200	0.00500	mg/L	1		09/05/18 11:15

### Batch Information

Analytical Batch: WDA4392  
 Analytical Method: SM21 4500P-B,E  
 Analyst: DMM  
 Analytical Date/Time: 09/05/18 11:15  
 Container ID: 1184812007-D

Prep Batch: WXX12521  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 09/04/18 13:34  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL



**Results of SW8**

Client Sample ID: **SW8**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184812008  
Lab Project ID: 1184812

Collection Date: 08/28/18 14:28  
Received Date: 08/28/18 16:03  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Microbiology Laboratory**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Biochemical Oxygen Demand	2.00 U	2.00	2.00	mg/L	1		08/29/18 13:38

**Batch Information**

Analytical Batch: BOD6128  
Analytical Method: SM21 5210B  
Analyst: A.L  
Analytical Date/Time: 08/29/18 13:38  
Container ID: 1184812008-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	1.00 U	1.00	1.00	col/100mL	1		08/28/18 17:06

**Batch Information**

Analytical Batch: BTF16832  
Analytical Method: SM21 9222D  
Analyst: K.W  
Analytical Date/Time: 08/28/18 17:06  
Container ID: 1184812008-E

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	1 U	1	1	MPN/100r	1		08/29/18 10:19
Total Coliform	5790	10	10	MPN/100r	10		08/29/18 10:19

**Batch Information**

Analytical Batch: BTF16835  
Analytical Method: SM21 9223B  
Analyst: K.W  
Analytical Date/Time: 08/29/18 10:19  
Container ID: 1184812008-F



Results of SW8

Client Sample ID: SW8
Client Project ID: Wasilla WWTP
Lab Sample ID: 1184812008
Lab Project ID: 1184812

Collection Date: 08/28/18 14:28
Received Date: 08/28/18 16:03
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Suspended Solids, 2.40, 1.00, 0.310, mg/L, 1, 08/29/18 15:39

Batch Information

Analytical Batch: STS5997
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 08/29/18 15:39
Container ID: 1184812008-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.671 J, 1.00, 0.310, mg/L, 1, 08/30/18 18:08

Batch Information

Analytical Batch: WDA4387
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/30/18 18:08
Container ID: 1184812008-D
Prep Batch: WXX12509
Prep Method: METHOD
Prep Date/Time: 08/29/18 16:19
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Ammonia-N, 0.0702 J, 0.100, 0.0310, mg/L, 1, 08/29/18 12:18

Batch Information

Analytical Batch: WDA4385
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 08/29/18 12:18
Container ID: 1184812008-D
Prep Batch: WXX12507
Prep Method: METHOD
Prep Date/Time: 08/29/18 11:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Nitrate-N, 0.0500 U, 0.100, 0.0250, mg/L, 2, 08/28/18 18:12. Row 2: Nitrite-N, 0.0500 U, 0.100, 0.0250, mg/L, 2, 08/28/18 18:12

## Results of SW8

Client Sample ID: **SW8**  
 Client Project ID: **Wasilla WWTP**  
 Lab Sample ID: 1184812008  
 Lab Project ID: 1184812

Collection Date: 08/28/18 14:28  
 Received Date: 08/28/18 16:03  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

### Batch Information

Analytical Batch: WFI2746  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AYC  
 Analytical Date/Time: 08/28/18 18:12  
 Container ID: 1184812008-C

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0546	0.0200	0.00500	mg/L	1		09/05/18 11:16

### Batch Information

Analytical Batch: WDA4392  
 Analytical Method: SM21 4500P-B,E  
 Analyst: DMM  
 Analytical Date/Time: 09/05/18 11:16  
 Container ID: 1184812008-D

Prep Batch: WXX12521  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 09/04/18 13:34  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL



**Results of SW9**

Client Sample ID: **SW9**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184812009  
Lab Project ID: 1184812

Collection Date: 08/28/18 14:05  
Received Date: 08/28/18 16:03  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Microbiology Laboratory**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Biochemical Oxygen Demand	2.00 U	2.00	2.00	mg/L	1		08/29/18 13:38

**Batch Information**

Analytical Batch: BOD6128  
Analytical Method: SM21 5210B  
Analyst: A.L  
Analytical Date/Time: 08/29/18 13:38  
Container ID: 1184812009-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	2.0	1.00	1.00	col/100mL	1		08/28/18 17:06

**Batch Information**

Analytical Batch: BTF16832  
Analytical Method: SM21 9222D  
Analyst: K.W  
Analytical Date/Time: 08/28/18 17:06  
Container ID: 1184812009-E

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	3	1	1	MPN/100r	1		08/29/18 10:19
Total Coliform	6130	10	10	MPN/100r	10		08/29/18 10:19

**Batch Information**

Analytical Batch: BTF16835  
Analytical Method: SM21 9223B  
Analyst: K.W  
Analytical Date/Time: 08/29/18 10:19  
Container ID: 1184812009-F





Results of SW9

Client Sample ID: SW9
Client Project ID: Wasilla WWTP
Lab Sample ID: 1184812009
Lab Project ID: 1184812

Collection Date: 08/28/18 14:05
Received Date: 08/28/18 16:03
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Suspended Solids, 1.67, 0.980, 0.304, mg/L, 1, 08/29/18 15:39

Batch Information

Analytical Batch: STS5997
Analytical Method: SM21 2540D
Analyst: EWW
Analytical Date/Time: 08/29/18 15:39
Container ID: 1184812009-B

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.500 U, 1.00, 0.310, mg/L, 1, 08/30/18 18:09

Batch Information

Analytical Batch: WDA4387
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/30/18 18:09
Container ID: 1184812009-D
Prep Batch: WXX12509
Prep Method: METHOD
Prep Date/Time: 08/29/18 16:19
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Ammonia-N, 0.0683 J, 0.100, 0.0310, mg/L, 1, 08/29/18 12:20

Batch Information

Analytical Batch: WDA4385
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 08/29/18 12:20
Container ID: 1184812009-D
Prep Batch: WXX12507
Prep Method: METHOD
Prep Date/Time: 08/29/18 11:30
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows: Nitrate-N (0.0500 U), Nitrite-N (0.0500 U)

## Results of SW9

Client Sample ID: **SW9**  
 Client Project ID: **Wasilla WWTP**  
 Lab Sample ID: 1184812009  
 Lab Project ID: 1184812

Collection Date: 08/28/18 14:05  
 Received Date: 08/28/18 16:03  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

### Batch Information

Analytical Batch: WFI2746  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AYC  
 Analytical Date/Time: 08/28/18 18:14  
 Container ID: 1184812009-C

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.00970 J	0.0200	0.00500	mg/L	1		09/05/18 11:17

### Batch Information

Analytical Batch: WDA4392  
 Analytical Method: SM21 4500P-B,E  
 Analyst: DMM  
 Analytical Date/Time: 09/05/18 11:17  
 Container ID: 1184812009-D

Prep Batch: WXX12521  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 09/04/18 13:34  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL



**Results of SW10**

Client Sample ID: **SW10**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184812010  
Lab Project ID: 1184812

Collection Date: 08/28/18 13:46  
Received Date: 08/28/18 16:03  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Microbiology Laboratory**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Biochemical Oxygen Demand	2.00 U	2.00	2.00	mg/L	1		08/29/18 13:38

**Batch Information**

Analytical Batch: BOD6128  
Analytical Method: SM21 5210B  
Analyst: A.L  
Analytical Date/Time: 08/29/18 13:38  
Container ID: 1184812010-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	390	10.0	10.0	col/100mL	1		08/28/18 17:06

**Batch Information**

Analytical Batch: BTF16832  
Analytical Method: SM21 9222D  
Analyst: K.W  
Analytical Date/Time: 08/28/18 17:06  
Container ID: 1184812010-E

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	411	1	1	MPN/100r	1		08/29/18 10:19
Total Coliform	1553	1	1	MPN/100r	1		08/29/18 10:19

**Batch Information**

Analytical Batch: BTF16835  
Analytical Method: SM21 9223B  
Analyst: K.W  
Analytical Date/Time: 08/29/18 10:19  
Container ID: 1184812010-F



**Results of SW10**

Client Sample ID: **SW10**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184812010  
Lab Project ID: 1184812

Collection Date: 08/28/18 13:46  
Received Date: 08/28/18 16:03  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Waters Department**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	1.92	1.01	0.313	mg/L	1		08/29/18 15:39

**Batch Information**

Analytical Batch: STS5997  
Analytical Method: SM21 2540D  
Analyst: EWW  
Analytical Date/Time: 08/29/18 15:39  
Container ID: 1184812010-B

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Kjeldahl Nitrogen	0.424 J	1.00	0.310	mg/L	1		08/30/18 18:11

**Batch Information**

Analytical Batch: WDA4387	Prep Batch: WXX12509
Analytical Method: SM21 4500-N D	Prep Method: METHOD
Analyst: DMM	Prep Date/Time: 08/29/18 16:19
Analytical Date/Time: 08/30/18 18:11	Prep Initial Wt./Vol.: 25 mL
Container ID: 1184812010-D	Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0833 J	0.100	0.0310	mg/L	1		08/29/18 12:21

**Batch Information**

Analytical Batch: WDA4385	Prep Batch: WXX12507
Analytical Method: SM21 4500-NH3 G	Prep Method: METHOD
Analyst: DMM	Prep Date/Time: 08/29/18 11:30
Analytical Date/Time: 08/29/18 12:21	Prep Initial Wt./Vol.: 6 mL
Container ID: 1184812010-D	Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Nitrate-N	0.0500 U	0.100	0.0250	mg/L	2		08/28/18 18:16
Nitrite-N	0.0500 U	0.100	0.0250	mg/L	2		08/28/18 18:16



Results of **SW10**

Client Sample ID: **SW10**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184812010  
Lab Project ID: 1184812

Collection Date: 08/28/18 13:46  
Received Date: 08/28/18 16:03  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

Results by **Waters Department**

**Batch Information**

Analytical Batch: WFI2746  
Analytical Method: SM21 4500NO3-F  
Analyst: AYC  
Analytical Date/Time: 08/28/18 18:16  
Container ID: 1184812010-C

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0308	0.0200	0.00500	mg/L	1		09/05/18 11:18

**Batch Information**

Analytical Batch: WDA4392  
Analytical Method: SM21 4500P-B,E  
Analyst: DMM  
Analytical Date/Time: 09/05/18 11:18  
Container ID: 1184812010-D

Prep Batch: WXX12521  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 09/04/18 13:34  
Prep Initial Wt./Vol.: 25 mL  
Prep Extract Vol: 25 mL

## Method Blank

Blank ID: MB for HBN 1785141 [BOD/6128]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1471230

QC for Samples:

1184812001, 1184812002, 1184812003, 1184812004, 1184812005, 1184812006, 1184812007, 1184812008, 1184812009, 1184812010

## Results by SM21 5210B

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

## Batch Information

Analytical Batch: BOD6128

Analytical Method: SM21 5210B

Instrument:

Analyst: A.L

Analytical Date/Time: 8/29/2018 1:38:00PM

Print Date: 09/05/2018 3:56:54PM

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1184812 [BOD6128]

Blank Spike Lab ID: 1471231

Date Analyzed: 08/29/2018 13:38

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1184812001, 1184812002, 1184812003, 1184812004, 1184812005, 1184812006, 1184812007, 1184812008, 1184812009, 1184812010

## Results by SM21 5210B

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

## Batch Information

Analytical Batch: BOD6128

Analytical Method: SM21 5210B

Instrument:

Analyst: A.L

Print Date: 09/05/2018 3:56:56PM



### Method Blank

Blank ID: MB for HBN 1785067 [BTF/16832]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1470965

QC for Samples:

1184812001, 1184812002, 1184812003, 1184812004, 1184812005, 1184812006, 1184812007, 1184812008, 1184812009, 1184812010

### Results by SM21 9222D

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

### Batch Information

Analytical Batch: BTF16832

Analytical Method: SM21 9222D

Instrument:

Analyst: K.W

Analytical Date/Time: 8/28/2018 5:06:00PM

Print Date: 09/05/2018 3:56:57PM



## Method Blank

Blank ID: MB for HBN 1785120 [BTF/16835]  
Blank Lab ID: 1471135

Matrix: Water (Surface, Eff., Ground)

### QC for Samples:

1184812001, 1184812002, 1184812003, 1184812004, 1184812005, 1184812006, 1184812007, 1184812008, 1184812009, 1184812010

## Results by SM21 9223B

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

## Batch Information

Analytical Batch: BTF16835  
Analytical Method: SM21 9223B  
Instrument:  
Analyst: K.W  
Analytical Date/Time: 8/29/2018 10:19:00AM

Print Date: 09/05/2018 3:56:59PM

## Method Blank

Blank ID: MB for HBN 1785109 [STS/5997]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1471086

QC for Samples:

1184812001, 1184812002, 1184812003, 1184812004, 1184812005, 1184812006, 1184812007, 1184812008, 1184812009, 1184812010

## Results by SM21 2540D

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

## Batch Information

Analytical Batch: STS5997

Analytical Method: SM21 2540D

Instrument:

Analyst: EWW

Analytical Date/Time: 8/29/2018 3:39:21PM

Print Date: 09/05/2018 3:57:01PM

## Duplicate Sample Summary

Original Sample ID: 1184811001

Duplicate Sample ID: 1471089

QC for Samples:

1184812001, 1184812002, 1184812003, 1184812004, 1184812005, 1184812006, 1184812007, 1184812008, 1184812009, 1184812010

Analysis Date: 08/29/2018 15:39

Matrix: Water (Surface, Eff., Ground)

## Results by SM21 2540D

<u>NAME</u>	<u>Original</u>	<u>Duplicate</u>	<u>Units</u>	<u>RPD (%)</u>	<u>RPD CL</u>
Total Suspended Solids	428	408	mg/L	4.80	(< 5 )

## Batch Information

Analytical Batch: STS5997

Analytical Method: SM21 2540D

Instrument:

Analyst: EWW

Print Date: 09/05/2018 3:57:02PM

## Duplicate Sample Summary

Original Sample ID: 1184815001

Analysis Date: 08/29/2018 15:39

Duplicate Sample ID: 1471090

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1184812001, 1184812002, 1184812003, 1184812004, 1184812005, 1184812006, 1184812007, 1184812008, 1184812009, 1184812010

## Results by SM21 2540D

<u>NAME</u>	<u>Original</u>	<u>Duplicate</u>	<u>Units</u>	<u>RPD (%)</u>	<u>RPD CL</u>
Total Suspended Solids	660	700	mg/L	5.90*	(< 5 )

## Batch Information

Analytical Batch: STS5997

Analytical Method: SM21 2540D

Instrument:

Analyst: EWW

Print Date: 09/05/2018 3:57:02PM

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1184812 [STS5997]  
 Blank Spike Lab ID: 1471087  
 Date Analyzed: 08/29/2018 15:39

Spike Duplicate ID: LCSD for HBN 1184812 [STS5997]  
 Spike Duplicate Lab ID: 1471088  
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1184812001, 1184812002, 1184812003, 1184812004, 1184812005, 1184812006, 1184812007, 1184812008, 1184812009, 1184812010

## Results by SM21 2540D

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Suspended Solids	25	24.6	98	25	24.9	100	( 75-125 )	1.20	(< 5 )

## Batch Information

Analytical Batch: STS5997  
 Analytical Method: SM21 2540D  
 Instrument:  
 Analyst: EWW

## Method Blank

Blank ID: MB for HBN 1785103 (WFI/2746)

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1471061

QC for Samples:

1184812001, 1184812002, 1184812003, 1184812004, 1184812005, 1184812006, 1184812007, 1184812008, 1184812009, 1184812010

## Results by SM21 4500NO3-F

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Nitrate-N	0.0500U	0.100	0.0250	mg/L
Nitrite-N	0.0500U	0.100	0.0250	mg/L
Total Nitrate/Nitrite-N	0.0500U	0.100	0.0250	mg/L

## Batch Information

Analytical Batch: WFI2746

Analytical Method: SM21 4500NO3-F

Instrument: Astoria segmented flow

Analyst: AYC

Analytical Date/Time: 8/28/2018 5:46:31PM

Print Date: 09/05/2018 3:57:05PM

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1184812 [WFI2746]

Blank Spike Lab ID: 1471046

Date Analyzed: 08/28/2018 17:44

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1184812001, 1184812002, 1184812003, 1184812004, 1184812005, 1184812006, 1184812007, 1184812008, 1184812009, 1184812010

## Results by SM21 4500NO3-F

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Nitrate-N	2.5	2.69	107	( 70-130 )
Nitrite-N	2.5	2.58	103	( 90-110 )
Total Nitrate/Nitrite-N	5	5.26	105	( 90-110 )

## Batch Information

Analytical Batch: **WFI2746**

Analytical Method: **SM21 4500NO3-F**

Instrument: **Astoria segmented flow**

Analyst: **AYC**

Print Date: 09/05/2018 3:57:06PM

## Matrix Spike Summary

Original Sample ID: 1184812005  
 MS Sample ID: 1471044 MS  
 MSD Sample ID: 1471045 MSD

Analysis Date: 08/28/2018 17:58  
 Analysis Date: 08/28/2018 18:00  
 Analysis Date: 08/28/2018 18:02  
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1184812001, 1184812002, 1184812003, 1184812004, 1184812005, 1184812006, 1184812007, 1184812008, 1184812009, 1184812010

## Results by SM21 4500NO3-F

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Nitrate-N	0.0500U	2.50	2.75	110	2.50	2.74	110	70-130	0.28	(< 25 )
Nitrite-N	0.0500U	2.50	2.56	102	2.50	2.58	103	90-110	0.97	(< 25 )

## Batch Information

Analytical Batch: WFI2746  
 Analytical Method: SM21 4500NO3-F  
 Instrument: Astoria segmented flow  
 Analyst: AYC  
 Analytical Date/Time: 8/28/2018 6:00:32PM

Print Date: 09/05/2018 3:57:07PM



## Method Blank

Blank ID: MB for HBN 1785142 [WXX/12507]  
Blank Lab ID: 1471237

Matrix: Water (Surface, Eff., Ground)

### QC for Samples:

1184812001, 1184812002, 1184812003, 1184812004, 1184812005, 1184812006, 1184812007, 1184812008, 1184812009, 1184812010

## Results by SM21 4500-NH3 G

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

## Batch Information

Analytical Batch: WDA4385  
Analytical Method: SM21 4500-NH3 G  
Instrument: Discrete Analyzer 2  
Analyst: DMM  
Analytical Date/Time: 8/29/2018 11:55:22AM

Prep Batch: WXX12507  
Prep Method: METHOD  
Prep Date/Time: 8/29/2018 11:30:00AM  
Prep Initial Wt./Vol.: 6 mL  
Prep Extract Vol: 6 mL

Print Date: 09/05/2018 3:57:09PM

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1184812 [WXX12507]  
 Blank Spike Lab ID: 1471238  
 Date Analyzed: 08/29/2018 11:57

Spike Duplicate ID: LCSD for HBN 1184812 [WXX12507]  
 Spike Duplicate Lab ID: 1471239  
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1184812001, 1184812002, 1184812003, 1184812004, 1184812005, 1184812006, 1184812007, 1184812008, 1184812009, 1184812010

## Results by SM21 4500-NH3 G

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Ammonia-N	1	0.946	95	1	0.967	97	( 75-125 )	2.20	(< 25 )

## Batch Information

Analytical Batch: WDA4385  
 Analytical Method: SM21 4500-NH3 G  
 Instrument: Discrete Analyzer 2  
 Analyst: DMM

Prep Batch: WXX12507  
 Prep Method: METHOD  
 Prep Date/Time: 08/29/2018 11:30  
 Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL  
 Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

## Matrix Spike Summary

Original Sample ID: 1184812006  
 MS Sample ID: 1471240 MS  
 MSD Sample ID: 1471241 MSD

Analysis Date: 08/29/2018 12:00  
 Analysis Date: 08/29/2018 12:02  
 Analysis Date: 08/29/2018 12:03  
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1184812001, 1184812002, 1184812003, 1184812004, 1184812005, 1184812006, 1184812007, 1184812008, 1184812009, 1184812010

## Results by SM21 4500-NH3 G

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Ammonia-N	0.0793J	1.00	.991	91	1.00	0.964	89	75-125	2.70	(< 25 )

## Batch Information

Analytical Batch: WDA4385  
 Analytical Method: SM21 4500-NH3 G  
 Instrument: Discrete Analyzer 2  
 Analyst: DMM  
 Analytical Date/Time: 8/29/2018 12:02:05PM

Prep Batch: WXX12507  
 Prep Method: Ammonia by SM21 4500F prep (W)  
 Prep Date/Time: 8/29/2018 11:30:00AM  
 Prep Initial Wt./Vol.: 6.00mL  
 Prep Extract Vol: 6.00mL

## Method Blank

Blank ID: MB for HBN 1785240 [WXX/12509]  
Blank Lab ID: 1471661

Matrix: Water (Surface, Eff., Ground)

### QC for Samples:

1184812001, 1184812002, 1184812003, 1184812004, 1184812005, 1184812006, 1184812007, 1184812008, 1184812009, 1184812010

## Results by SM21 4500-N D

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

## Batch Information

Analytical Batch: WDA4387  
Analytical Method: SM21 4500-N D  
Instrument: Discrete Analyzer 2  
Analyst: DMM  
Analytical Date/Time: 8/30/2018 5:50:20PM

Prep Batch: WXX12509  
Prep Method: METHOD  
Prep Date/Time: 8/29/2018 4:19:00PM  
Prep Initial Wt./Vol.: 25 mL  
Prep Extract Vol: 25 mL

Print Date: 09/05/2018 3:57:13PM

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1184812 [WXX12509]  
 Blank Spike Lab ID: 1471662  
 Date Analyzed: 08/30/2018 17:51

Spike Duplicate ID: LCSD for HBN 1184812 [WXX12509]  
 Spike Duplicate Lab ID: 1471663  
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1184812001, 1184812002, 1184812003, 1184812004, 1184812005, 1184812006, 1184812007, 1184812008, 1184812009, 1184812010

## Results by SM21 4500-N D

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Kjeldahl Nitrogen	4	3.86	97	4	4.02	101	( 75-125 )	4.00	(< 25 )

## Batch Information

Analytical Batch: **WDA4387**  
 Analytical Method: **SM21 4500-N D**  
 Instrument: **Discrete Analyzer 2**  
 Analyst: **DMM**

Prep Batch: **WXX12509**  
 Prep Method: **METHOD**  
 Prep Date/Time: **08/29/2018 16:19**  
 Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL  
 Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

## Matrix Spike Summary

Original Sample ID: 1184812001  
 MS Sample ID: 1471664 MS  
 MSD Sample ID: 1471665 MSD

Analysis Date: 08/30/2018 17:54  
 Analysis Date: 08/30/2018 17:55  
 Analysis Date: 08/30/2018 17:56  
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1184812001, 1184812002, 1184812003, 1184812004, 1184812005, 1184812006, 1184812007, 1184812008, 1184812009, 1184812010

## Results by SM21 4500-N D

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Kjeldahl Nitrogen	0.782J	4.00	4.6	95	4.00	4.46	92	75-125	3.00	(< 25 )

## Batch Information

Analytical Batch: WDA4387  
 Analytical Method: SM21 4500-N D  
 Instrument: Discrete Analyzer 2  
 Analyst: DMM  
 Analytical Date/Time: 8/30/2018 5:55:35PM

Prep Batch: WXX12509  
 Prep Method: Distillation TKN by Phenate (W)  
 Prep Date/Time: 8/29/2018 4:19:00PM  
 Prep Initial Wt./Vol.: 25.00mL  
 Prep Extract Vol: 25.00mL

Print Date: 09/05/2018 3:57:17PM

## Method Blank

Blank ID: MB for HBN 1785478 [WXX/12521]  
Blank Lab ID: 1472799

Matrix: Water (Surface, Eff., Ground)

### QC for Samples:

1184812001, 1184812002, 1184812003, 1184812004, 1184812005, 1184812006, 1184812007, 1184812008, 1184812009, 1184812010

## Results by SM21 4500P-B,E

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

## Batch Information

Analytical Batch: WDA4392  
Analytical Method: SM21 4500P-B,E  
Instrument: Discrete Analyzer 2  
Analyst: DMM  
Analytical Date/Time: 9/5/2018 11:02:17AM

Prep Batch: WXX12521  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 9/4/2018 1:34:00PM  
Prep Initial Wt./Vol.: 25 mL  
Prep Extract Vol: 25 mL

Print Date: 09/05/2018 3:57:17PM

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1184812 [WXX12521]  
 Blank Spike Lab ID: 1472800  
 Date Analyzed: 09/05/2018 11:03

Spike Duplicate ID: LCSD for HBN 1184812 [WXX12521]  
 Spike Duplicate Lab ID: 1472801  
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1184812001, 1184812002, 1184812003, 1184812004, 1184812005, 1184812006, 1184812007, 1184812008, 1184812009, 1184812010

## Results by SM21 4500P-B,E

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Phosphorus	0.2	0.201	101	0.2	0.198	99	( 75-125 )	1.50	(< 25 )

## Batch Information

Analytical Batch: WDA4392  
 Analytical Method: SM21 4500P-B,E  
 Instrument: Discrete Analyzer 2  
 Analyst: DMM

Prep Batch: WXX12521  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 09/04/2018 13:34  
 Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL  
 Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL





### Matrix Spike Summary

Original Sample ID: 1184812002  
MS Sample ID: 1472802 MS  
MSD Sample ID: 1472803 MSD

Analysis Date: 09/05/2018 11:06  
Analysis Date: 09/05/2018 11:07  
Analysis Date: 09/05/2018 11:08  
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1184812001, 1184812002, 1184812003, 1184812004, 1184812005, 1184812006, 1184812007, 1184812008, 1184812009, 1184812010

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

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Phosphorus	0.0259	0.200	.229	102	0.200	0.229	102	75-125	0.09	(< 25 )

### Batch Information

Analytical Batch: WDA4392  
Analytical Method: SM21 4500P-B,E  
Instrument: Discrete Analyzer 2  
Analyst: DMM  
Analytical Date/Time: 9/5/2018 11:07:12AM

Prep Batch: WXX12521  
Prep Method: Total Phosphorus (W) Ext.  
Prep Date/Time: 9/4/2018 1:34:00PM  
Prep Initial Wt./Vol.: 25.00mL  
Prep Extract Vol: 25.00mL

Print Date: 09/05/2018 3:57:20PM



SGS North America Inc. CHAIN OF CUSTODY RECORD

1184812



Locations Nationwide

- Alaska, Maryland, New Jersey, New York, North Carolina, Indiana, West Virginia, Kentucky

www.us.sgs.com

REMOVED KEY

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

Page 1 of 1

CLIENT: Stantec
CONTACT: Jake Alward
PHONE NO: 343-5202
PROJECT NAME: Wasilla WWTP
E-MAIL: jake.alward@stantec.com
QUOTE #:
P.O. #: 20470415

Section 3

Preservative

Table with columns: RESERVED for lab use, SAMPLE IDENTIFICATION, DATE mm/dd/yy, TIME HH:MM, MATRIX/MATRIX CODE, CONTAINER, Type (BOD, TSS, Nitrate/Nitrite, etc.), and REMARKS/LOC ID.

Relinquished By: (1) [Signature] Date 8/28/18 Time 16:03 Received By: [Signature]
Relinquished By: (2) [Signature]
Relinquished By: (3) [Signature]
Relinquished By: (4) [Signature] Date 8/28/18 Time 16:03 Received For Laboratory By: [Signature] RET

Section 4 DOD Project? Yes No Data Deliverable Requirements:
Cooler ID:
Requested Turnaround Time and/or Special Instructions:
Temp Blank °C: Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT
(See attached Sample Receipt Form) (See attached Sample Receipt Form)

Cooler 1: 1.8 D45
Cooler 2: 2.0 D36



e-Sample Receipt Form

SGS Workorder #:

1184812



1 1 8 4 8 1 2

Review Criteria	Condition (Yes, No, N/A)	Exceptions Noted below
<b>Chain of Custody / Temperature Requirements</b>		<b>YES</b> Exemption permitted if sampler hand carries/delivers.
Were Custody Seals intact? Note # & location	N/A	ABSENT
COC accompanied samples?	YES	
<input type="checkbox"/> 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 @ 1.8 °C Therm. ID: D45
	YES	Cooler ID: 2 @ 2.0 °C Therm. ID: D36
	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	
<p>If samples received <u>without</u> a temperature blank, the "cooler temperature" will be documented in lieu of the temperature blank &amp; "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".</p> <p>Note: Identify containers received at non-compliant temperature . Use form FS-0029 if more space is needed.</p>		
<b>Holding Time / Documentation / Sample Condition Requirements</b>		Note: Refer to form F-083 "Sample Guide" for specific holding times.
Were samples received within holding time?	YES	
Do samples <b>match COC</b> ** (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	
Were proper containers (type/mass/volume/preservative***) used?	YES	<input type="checkbox"/> N/A ***Exemption permitted for metals (e.g.200.8/6020A).
<b>Volatile / LL-Hg Requirements</b>		
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	
<b>Note to Client:</b> Any "No", answer above indicates non-compliance with standard procedures and may impact data quality.		
Additional notes (if applicable):		



### Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>	<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>
1184812001-A	No Preservative Required	OK	1184812009-C	No Preservative Required	OK
1184812001-B	No Preservative Required	OK	1184812009-D	H2SO4 to pH < 2	OK
1184812001-C	No Preservative Required	OK	1184812009-E	Na2S2O3 for Chlorine Redu	OK
1184812001-D	H2SO4 to pH < 2	OK	1184812009-F	Na2S2O3 for Chlorine Redu	OK
1184812001-E	Na2S2O3 for Chlorine Redu	OK	1184812010-A	No Preservative Required	OK
1184812001-F	Na2S2O3 for Chlorine Redu	OK	1184812010-B	No Preservative Required	OK
1184812002-A	No Preservative Required	OK	1184812010-C	No Preservative Required	OK
1184812002-B	No Preservative Required	OK	1184812010-D	H2SO4 to pH < 2	OK
1184812002-C	No Preservative Required	OK	1184812010-E	Na2S2O3 for Chlorine Redu	OK
1184812002-D	H2SO4 to pH < 2	OK	1184812010-F	Na2S2O3 for Chlorine Redu	OK
1184812002-E	Na2S2O3 for Chlorine Redu	OK			
1184812002-F	Na2S2O3 for Chlorine Redu	OK			
1184812003-A	No Preservative Required	OK			
1184812003-B	No Preservative Required	OK			
1184812003-C	No Preservative Required	OK			
1184812003-D	H2SO4 to pH < 2	OK			
1184812003-E	Na2S2O3 for Chlorine Redu	OK			
1184812003-F	Na2S2O3 for Chlorine Redu	OK			
1184812004-A	No Preservative Required	OK			
1184812004-B	No Preservative Required	OK			
1184812004-C	No Preservative Required	OK			
1184812004-D	H2SO4 to pH < 2	OK			
1184812004-E	Na2S2O3 for Chlorine Redu	OK			
1184812004-F	Na2S2O3 for Chlorine Redu	OK			
1184812005-A	No Preservative Required	OK			
1184812005-B	No Preservative Required	OK			
1184812005-C	No Preservative Required	OK			
1184812005-D	H2SO4 to pH < 2	OK			
1184812005-E	Na2S2O3 for Chlorine Redu	OK			
1184812005-F	Na2S2O3 for Chlorine Redu	OK			
1184812006-A	No Preservative Required	OK			
1184812006-B	No Preservative Required	OK			
1184812006-C	No Preservative Required	OK			
1184812006-D	H2SO4 to pH < 2	OK			
1184812006-E	Na2S2O3 for Chlorine Redu	OK			
1184812006-F	Na2S2O3 for Chlorine Redu	OK			
1184812007-A	No Preservative Required	OK			
1184812007-B	No Preservative Required	OK			
1184812007-C	No Preservative Required	OK			
1184812007-D	H2SO4 to pH < 2	OK			
1184812007-E	Na2S2O3 for Chlorine Redu	OK			
1184812007-F	Na2S2O3 for Chlorine Redu	OK			
1184812008-A	No Preservative Required	OK			
1184812008-B	No Preservative Required	OK			
1184812008-C	No Preservative Required	OK			
1184812008-D	H2SO4 to pH < 2	OK			
1184812008-E	Na2S2O3 for Chlorine Redu	OK			
1184812008-F	Na2S2O3 for Chlorine Redu	OK			
1184812009-A	No Preservative Required	OK			
1184812009-B	No Preservative Required	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 that 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: **1184853**

Client Project: **Wasilla WWTP**

Dear John Marshall,

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

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

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

Sincerely,  
SGS North America Inc.

---

Justin Nelson  
Project Manager  
Justin.Nelson@sgs.com

Date

## Case Narrative

SGS Client: **Stantec Consulting Services Inc.**

SGS Project: **1184853**

Project Name/Site: **Wasilla WWTP**

Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

**1184850001DUP (1471493) 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.

**1184850003DUP (1471494) 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.

**1184853001MSD (1471855) MSD**

4500NH3-G - Ammonia - MS/MSD RPD was outside of QC criteria. Refer to LCS/LCSD RPD for precision.

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.

Print Date: 09/07/2018 3:02:48PM

## 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, indemnification and jurisdiction issues defined therein.

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

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

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



### Sample Summary

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Collected</u>	<u>Received</u>	<u>Matrix</u>
SW18	1184853001	08/29/2018	08/29/2018	Water (Surface, Eff., Ground)
DUP1	1184853002	08/29/2018	08/29/2018	Water (Surface, Eff., Ground)
Shaw	1184853003	08/29/2018	08/29/2018	Water (Surface, Eff., Ground)
SW11	1184853004	08/29/2018	08/29/2018	Water (Surface, Eff., Ground)
SW12	1184853005	08/29/2018	08/29/2018	Water (Surface, Eff., Ground)
SW13	1184853006	08/29/2018	08/29/2018	Water (Surface, Eff., Ground)
SW14	1184853007	08/29/2018	08/29/2018	Water (Surface, Eff., Ground)
SW15	1184853008	08/29/2018	08/29/2018	Water (Surface, Eff., Ground)
SW16	1184853009	08/29/2018	08/29/2018	Water (Surface, Eff., Ground)
SW17	1184853010	08/29/2018	08/29/2018	Water (Surface, Eff., Ground)

<u>Method</u>	<u>Method Description</u>
SM21 4500-NH3 G	Ammonia-N (W) SM21 4500-NH3 G
SM21 5210B	Biochemical Oxygen Demand SM21 5210B
SM21 9222D	Fecal Coliform (MF)
SM21 4500NO3-F	Flow Injection Analysis
SM21 4500-N D	TKN by Phenate (W)
SM21 9223B	Total Coliform P/A Quant Tray
SM21 4500P-B,E	Total Phosphorus (W)
SM21 2540D	Total Suspended Solids SM20 2540D

Print Date: 09/07/2018 3:02:50PM

### Detectable Results Summary

Client Sample ID: **SW18**  
 Lab Sample ID: 1184853001  
**Microbiology Laboratory**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	2.59	mg/L
E. Coli	29	MPN/100mL
Fecal Coliform	10	col/100mL
Total Coliform	3450	MPN/100mL

**Waters Department**

Ammonia-N	0.115	mg/L
Nitrate-N	5.62	mg/L
Nitrite-N	0.0554J	mg/L
Total Kjeldahl Nitrogen	0.738J	mg/L
Total Phosphorus	0.684	mg/L
Total Suspended Solids	5.19	mg/L

Client Sample ID: **DUP1**  
 Lab Sample ID: 1184853002  
**Microbiology Laboratory**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	2.49	mg/L
E. Coli	22	MPN/100mL
Fecal Coliform	21	col/100mL
Total Coliform	2420	MPN/100mL

**Waters Department**

Ammonia-N	0.105	mg/L
Nitrate-N	5.09	mg/L
Nitrite-N	0.0514J	mg/L
Total Kjeldahl Nitrogen	0.834J	mg/L
Total Phosphorus	0.691	mg/L
Total Suspended Solids	6.80	mg/L

Client Sample ID: **Shaw**  
 Lab Sample ID: 1184853003  
**Microbiology Laboratory**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	62	MPN/100mL
Fecal Coliform	72	col/100mL
Total Coliform	613	MPN/100mL

**Waters Department**

Total Kjeldahl Nitrogen	0.382J	mg/L
Total Suspended Solids	4.23	mg/L

Client Sample ID: **SW11**  
 Lab Sample ID: 1184853004  
**Microbiology Laboratory**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	17.9	mg/L
Fecal Coliform	1.0	col/100mL
Total Coliform	548	MPN/100mL

**Waters Department**

Total Phosphorus	0.0215	mg/L
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### Detectable Results Summary

Client Sample ID: **SW12**  
 Lab Sample ID: 1184853005  
**Microbiology Laboratory**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	2.11	mg/L
E. Coli	22	MPN/100mL
Fecal Coliform	27	col/100mL
Total Coliform	11200	MPN/100mL

**Waters Department**

Total Kjeldahl Nitrogen	0.489J	mg/L
Total Phosphorus	0.0918	mg/L
Total Suspended Solids	12.4	mg/L

Client Sample ID: **SW13**  
 Lab Sample ID: 1184853006  
**Microbiology Laboratory**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	3	MPN/100mL
Fecal Coliform	2.0	col/100mL
Total Coliform	3870	MPN/100mL

**Waters Department**

Total Kjeldahl Nitrogen	0.408J	mg/L
Total Phosphorus	0.00500J	mg/L

Client Sample ID: **SW14**  
 Lab Sample ID: 1184853007  
**Microbiology Laboratory**  
**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Total Coliform	1046	MPN/100mL
Total Phosphorus	0.0716	mg/L
Total Suspended Solids	4.56	mg/L

Client Sample ID: **SW15**  
 Lab Sample ID: 1184853008  
**Microbiology Laboratory**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	43	MPN/100mL
Fecal Coliform	42	col/100mL
Total Coliform	4610	MPN/100mL

**Waters Department**

Ammonia-N	0.0400J	mg/L
Total Kjeldahl Nitrogen	0.356J	mg/L
Total Phosphorus	0.0443	mg/L
Total Suspended Solids	1.41	mg/L

Client Sample ID: **SW16**  
 Lab Sample ID: 1184853009  
**Microbiology Laboratory**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Biochemical Oxygen Demand	3.88	mg/L
E. Coli	23	MPN/100mL
Fecal Coliform	20	col/100mL
Total Coliform	GT2420	MPN/100mL

**Waters Department**

Total Kjeldahl Nitrogen	0.962J	mg/L
Total Phosphorus	0.0875	mg/L
Total Suspended Solids	22.3	mg/L

## Detectable Results Summary

Client Sample ID: **SW17**  
 Lab Sample ID: 1184853010  
**Microbiology Laboratory**

**Waters Department**

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
E. Coli	20	MPN/100mL
Fecal Coliform	12	col/100mL
Total Coliform	1300	MPN/100mL
Ammonia-N	0.0847J	mg/L
Nitrate-N	1.49	mg/L
Total Kjeldahl Nitrogen	2.36	mg/L
Total Phosphorus	0.129	mg/L
Total Suspended Solids	1.92	mg/L

Print Date: 09/07/2018 3:02:52PM



**Results of SW18**

Client Sample ID: **SW18**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184853001  
Lab Project ID: 1184853

Collection Date: 08/29/18 12:25  
Received Date: 08/29/18 16:55  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Microbiology Laboratory**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Biochemical Oxygen Demand	2.59	2.00	2.00	mg/L	1		08/30/18 18:22

**Batch Information**

Analytical Batch: BOD6131  
Analytical Method: SM21 5210B  
Analyst: A.L  
Analytical Date/Time: 08/30/18 18:22  
Container ID: 1184853001-E

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	10	1.00	1.00	col/100mL	1		08/29/18 17:38

**Batch Information**

Analytical Batch: BTF16841  
Analytical Method: SM21 9222D  
Analyst: K.W  
Analytical Date/Time: 08/29/18 17:38  
Container ID: 1184853001-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	29	1	1	MPN/100r	1		08/30/18 10:29
Total Coliform	3450	10	10	MPN/100r	10		08/30/18 10:29

**Batch Information**

Analytical Batch: BTF16840  
Analytical Method: SM21 9223B  
Analyst: K.W  
Analytical Date/Time: 08/30/18 10:29  
Container ID: 1184853001-B



**Results of SW18**

Client Sample ID: **SW18**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184853001  
Lab Project ID: 1184853

Collection Date: 08/29/18 12:25  
Received Date: 08/29/18 16:55  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Waters Department**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	5.19	1.04	0.322	mg/L	1		08/30/18 16:24

**Batch Information**

Analytical Batch: STS6000  
Analytical Method: SM21 2540D  
Analyst: DMM  
Analytical Date/Time: 08/30/18 16:24  
Container ID: 1184853001-F

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Kjeldahl Nitrogen	0.738 J	1.00	0.310	mg/L	1		08/30/18 18:21

**Batch Information**

Analytical Batch: WDA4387	Prep Batch: WXX12510
Analytical Method: SM21 4500-N D	Prep Method: METHOD
Analyst: DMM	Prep Date/Time: 08/30/18 10:01
Analytical Date/Time: 08/30/18 18:21	Prep Initial Wt./Vol.: 25 mL
Container ID: 1184853001-C	Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.115	0.100	0.0310	mg/L	1		08/31/18 11:48

**Batch Information**

Analytical Batch: WDA4388	Prep Batch: WXX12513
Analytical Method: SM21 4500-NH3 G	Prep Method: METHOD
Analyst: DMM	Prep Date/Time: 08/31/18 11:00
Analytical Date/Time: 08/31/18 11:48	Prep Initial Wt./Vol.: 6 mL
Container ID: 1184853001-C	Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Nitrate-N	5.62	0.100	0.0250	mg/L	2		08/29/18 18:29
Nitrite-N	0.0554 J	0.100	0.0250	mg/L	2		08/29/18 18:29



Results of **SW18**

Client Sample ID: **SW18**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184853001  
Lab Project ID: 1184853

Collection Date: 08/29/18 12:25  
Received Date: 08/29/18 16:55  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

Results by **Waters Department**

**Batch Information**

Analytical Batch: WFI2747  
Analytical Method: SM21 4500NO3-F  
Analyst: AYC  
Analytical Date/Time: 08/29/18 18:29  
Container ID: 1184853001-D

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.684	0.200	0.0500	mg/L	1		09/07/18 11:24

**Batch Information**

Analytical Batch: WDA4394  
Analytical Method: SM21 4500P-B,E  
Analyst: DMM  
Analytical Date/Time: 09/07/18 11:24  
Container ID: 1184853001-C

Prep Batch: WXX12530  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 09/06/18 17:00  
Prep Initial Wt./Vol.: 2.5 mL  
Prep Extract Vol: 25 mL

## Results of DUP1

Client Sample ID: **DUP1**  
 Client Project ID: **Wasilla WWTP**  
 Lab Sample ID: 1184853002  
 Lab Project ID: 1184853

Collection Date: 08/29/18 12:25  
 Received Date: 08/29/18 16:55  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Microbiology Laboratory

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Biochemical Oxygen Demand	2.49	2.00	2.00	mg/L	1		08/30/18 18:22

### Batch Information

Analytical Batch: BOD6131  
 Analytical Method: SM21 5210B  
 Analyst: A.L  
 Analytical Date/Time: 08/30/18 18:22  
 Container ID: 1184853002-E

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	21	1.00	1.00	col/100mL	1		08/29/18 17:38

### Batch Information

Analytical Batch: BTF16841  
 Analytical Method: SM21 9222D  
 Analyst: K.W  
 Analytical Date/Time: 08/29/18 17:38  
 Container ID: 1184853002-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	22	1	1	MPN/100r	1		08/30/18 10:29
Total Coliform	2420	1	1	MPN/100r	1		08/30/18 10:29

### Batch Information

Analytical Batch: BTF16840  
 Analytical Method: SM21 9223B  
 Analyst: K.W  
 Analytical Date/Time: 08/30/18 10:29  
 Container ID: 1184853002-B





Results of DUP1

Client Sample ID: DUP1
Client Project ID: Wasilla WWTP
Lab Sample ID: 1184853002
Lab Project ID: 1184853

Collection Date: 08/29/18 12:25
Received Date: 08/29/18 16:55
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Suspended Solids, 6.80, 1.00, 0.310, mg/L, 1, 08/30/18 16:24

Batch Information

Analytical Batch: STS6000
Analytical Method: SM21 2540D
Analyst: DMM
Analytical Date/Time: 08/30/18 16:24
Container ID: 1184853002-F

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.834 J, 1.00, 0.310, mg/L, 1, 08/30/18 18:25

Batch Information

Analytical Batch: WDA4387
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/30/18 18:25
Container ID: 1184853002-C
Prep Batch: WXX12510
Prep Method: METHOD
Prep Date/Time: 08/30/18 10:01
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Ammonia-N, 0.105, 0.100, 0.0310, mg/L, 1, 08/31/18 11:53

Batch Information

Analytical Batch: WDA4388
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 08/31/18 11:53
Container ID: 1184853002-C
Prep Batch: WXX12513
Prep Method: METHOD
Prep Date/Time: 08/31/18 11:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows: Nitrate-N (5.09), Nitrite-N (0.0514 J)

## Results of DUP1

Client Sample ID: **DUP1**  
 Client Project ID: **Wasilla WWTP**  
 Lab Sample ID: 1184853002  
 Lab Project ID: 1184853

Collection Date: 08/29/18 12:25  
 Received Date: 08/29/18 16:55  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

### Batch Information

Analytical Batch: WFI2747  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AYC  
 Analytical Date/Time: 08/29/18 18:31  
 Container ID: 1184853002-D

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.691	0.200	0.0500	mg/L	1		09/07/18 11:27

### Batch Information

Analytical Batch: WDA4394  
 Analytical Method: SM21 4500P-B,E  
 Analyst: DMM  
 Analytical Date/Time: 09/07/18 11:27  
 Container ID: 1184853002-C

Prep Batch: WXX12530  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 09/06/18 17:00  
 Prep Initial Wt./Vol.: 2.5 mL  
 Prep Extract Vol: 25 mL



**Results of Shaw**

Client Sample ID: **Shaw**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184853003  
Lab Project ID: 1184853

Collection Date: 08/29/18 13:01  
Received Date: 08/29/18 16:55  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Microbiology Laboratory**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Biochemical Oxygen Demand	2.00 U	2.00	2.00	mg/L	1		08/30/18 18:22

**Batch Information**

Analytical Batch: BOD6131  
Analytical Method: SM21 5210B  
Analyst: A.L  
Analytical Date/Time: 08/30/18 18:22  
Container ID: 1184853003-E

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	72	1.00	1.00	col/100mL	1		08/29/18 17:38

**Batch Information**

Analytical Batch: BTF16841  
Analytical Method: SM21 9222D  
Analyst: K.W  
Analytical Date/Time: 08/29/18 17:38  
Container ID: 1184853003-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	62	1	1	MPN/100r	1		08/30/18 10:29
Total Coliform	613	1	1	MPN/100r	1		08/30/18 10:29

**Batch Information**

Analytical Batch: BTF16840  
Analytical Method: SM21 9223B  
Analyst: K.W  
Analytical Date/Time: 08/30/18 10:29  
Container ID: 1184853003-B



**Results of Shaw**

Client Sample ID: **Shaw**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184853003  
Lab Project ID: 1184853

Collection Date: 08/29/18 13:01  
Received Date: 08/29/18 16:55  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Waters Department**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	4.23	1.03	0.320	mg/L	1		08/30/18 16:24

**Batch Information**

Analytical Batch: STS6000  
Analytical Method: SM21 2540D  
Analyst: DMM  
Analytical Date/Time: 08/30/18 16:24  
Container ID: 1184853003-F

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Kjeldahl Nitrogen	0.382 J	1.00	0.310	mg/L	1		08/30/18 18:27

**Batch Information**

Analytical Batch: WDA4387	Prep Batch: WXX12510
Analytical Method: SM21 4500-N D	Prep Method: METHOD
Analyst: DMM	Prep Date/Time: 08/30/18 10:01
Analytical Date/Time: 08/30/18 18:27	Prep Initial Wt./Vol.: 25 mL
Container ID: 1184853003-C	Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0500 U	0.100	0.0310	mg/L	1		08/31/18 11:55

**Batch Information**

Analytical Batch: WDA4388	Prep Batch: WXX12513
Analytical Method: SM21 4500-NH3 G	Prep Method: METHOD
Analyst: DMM	Prep Date/Time: 08/31/18 11:00
Analytical Date/Time: 08/31/18 11:55	Prep Initial Wt./Vol.: 6 mL
Container ID: 1184853003-C	Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Nitrate-N	0.0500 U	0.100	0.0250	mg/L	2		08/29/18 18:32
Nitrite-N	0.0500 U	0.100	0.0250	mg/L	2		08/29/18 18:32

## Results of Shaw

Client Sample ID: **Shaw**  
 Client Project ID: **Wasilla WWTP**  
 Lab Sample ID: 1184853003  
 Lab Project ID: 1184853

Collection Date: 08/29/18 13:01  
 Received Date: 08/29/18 16:55  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

### Batch Information

Analytical Batch: WFI2747  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AYC  
 Analytical Date/Time: 08/29/18 18:32  
 Container ID: 1184853003-D

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0100 U	0.0200	0.00500	mg/L	1		09/05/18 11:20

### Batch Information

Analytical Batch: WDA4392  
 Analytical Method: SM21 4500P-B,E  
 Analyst: DMM  
 Analytical Date/Time: 09/05/18 11:20  
 Container ID: 1184853003-C

Prep Batch: WXX12521  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 09/04/18 13:34  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL



**Results of SW11**

Client Sample ID: **SW11**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184853004  
Lab Project ID: 1184853

Collection Date: 08/29/18 09:30  
Received Date: 08/29/18 16:55  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Microbiology Laboratory**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Biochemical Oxygen Demand	17.9	2.00	2.00	mg/L	1		08/30/18 18:22

**Batch Information**

Analytical Batch: BOD6131  
Analytical Method: SM21 5210B  
Analyst: A.L  
Analytical Date/Time: 08/30/18 18:22  
Container ID: 1184853004-E

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	1.0	1.00	1.00	col/100mL	1		08/29/18 17:18

**Batch Information**

Analytical Batch: BTF16841  
Analytical Method: SM21 9222D  
Analyst: K.W  
Analytical Date/Time: 08/29/18 17:18  
Container ID: 1184853004-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	1 U	1	1	MPN/100r	1		08/30/18 10:29
Total Coliform	548	1	1	MPN/100r	1		08/30/18 10:29

**Batch Information**

Analytical Batch: BTF16840  
Analytical Method: SM21 9223B  
Analyst: K.W  
Analytical Date/Time: 08/30/18 10:29  
Container ID: 1184853004-B



Results of SW11

Client Sample ID: SW11
Client Project ID: Wasilla WWTP
Lab Sample ID: 1184853004
Lab Project ID: 1184853

Collection Date: 08/29/18 09:30
Received Date: 08/29/18 16:55
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Suspended Solids, 0.471 U, 0.943, 0.292, mg/L, 1, 08/30/18 16:24

Batch Information

Analytical Batch: STS6000
Analytical Method: SM21 2540D
Analyst: DMM
Analytical Date/Time: 08/30/18 16:24
Container ID: 1184853004-F

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.500 U, 1.00, 0.310, mg/L, 1, 08/30/18 18:28

Batch Information

Analytical Batch: WDA4387
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/30/18 18:28
Container ID: 1184853004-C
Prep Batch: WXX12510
Prep Method: METHOD
Prep Date/Time: 08/30/18 10:01
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Ammonia-N, 0.0500 U, 0.100, 0.0310, mg/L, 1, 08/31/18 11:56

Batch Information

Analytical Batch: WDA4388
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 08/31/18 11:56
Container ID: 1184853004-C
Prep Batch: WXX12513
Prep Method: METHOD
Prep Date/Time: 08/31/18 11:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Nitrate-N, 0.0500 U, 0.100, 0.0250, mg/L, 2, 08/29/18 18:34. Row 2: Nitrite-N, 0.0500 U, 0.100, 0.0250, mg/L, 2, 08/29/18 18:34

## Results of SW11

Client Sample ID: **SW11**  
 Client Project ID: **Wasilla WWTP**  
 Lab Sample ID: 1184853004  
 Lab Project ID: 1184853

Collection Date: 08/29/18 09:30  
 Received Date: 08/29/18 16:55  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

### Batch Information

Analytical Batch: WFI2747  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AYC  
 Analytical Date/Time: 08/29/18 18:34  
 Container ID: 1184853004-D

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0215	0.0200	0.00500	mg/L	1		09/05/18 11:21

### Batch Information

Analytical Batch: WDA4392  
 Analytical Method: SM21 4500P-B,E  
 Analyst: DMM  
 Analytical Date/Time: 09/05/18 11:21  
 Container ID: 1184853004-C

Prep Batch: WXX12521  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 09/04/18 13:34  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL





**Results of SW12**

Client Sample ID: **SW12**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184853005  
Lab Project ID: 1184853

Collection Date: 08/29/18 09:50  
Received Date: 08/29/18 16:55  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Microbiology Laboratory**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Biochemical Oxygen Demand	2.11	2.00	2.00	mg/L	1		08/30/18 18:22

**Batch Information**

Analytical Batch: BOD6131  
Analytical Method: SM21 5210B  
Analyst: A.L  
Analytical Date/Time: 08/30/18 18:22  
Container ID: 1184853005-E

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	27	1.00	1.00	col/100mL	1		08/29/18 17:18

**Batch Information**

Analytical Batch: BTF16841  
Analytical Method: SM21 9222D  
Analyst: K.W  
Analytical Date/Time: 08/29/18 17:18  
Container ID: 1184853005-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	22	1	1	MPN/100r	1		08/30/18 10:29
Total Coliform	11200	10	10	MPN/100r	10		08/30/18 10:29

**Batch Information**

Analytical Batch: BTF16840  
Analytical Method: SM21 9223B  
Analyst: K.W  
Analytical Date/Time: 08/30/18 10:29  
Container ID: 1184853005-B



Results of **SW12**

Client Sample ID: **SW12**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184853005  
Lab Project ID: 1184853

Collection Date: 08/29/18 09:50  
Received Date: 08/29/18 16:55  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

Results by **Waters Department**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	12.4	2.00	0.620	mg/L	1		08/30/18 16:24

**Batch Information**

Analytical Batch: STS6000  
Analytical Method: SM21 2540D  
Analyst: DMM  
Analytical Date/Time: 08/30/18 16:24  
Container ID: 1184853005-F

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Kjeldahl Nitrogen	0.489 J	1.00	0.310	mg/L	1		08/30/18 18:29

**Batch Information**

Analytical Batch: WDA4387	Prep Batch: WXX12510
Analytical Method: SM21 4500-N D	Prep Method: METHOD
Analyst: DMM	Prep Date/Time: 08/30/18 10:01
Analytical Date/Time: 08/30/18 18:29	Prep Initial Wt./Vol.: 25 mL
Container ID: 1184853005-C	Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0500 U	0.100	0.0310	mg/L	1		08/31/18 11:58

**Batch Information**

Analytical Batch: WDA4388	Prep Batch: WXX12513
Analytical Method: SM21 4500-NH3 G	Prep Method: METHOD
Analyst: DMM	Prep Date/Time: 08/31/18 11:00
Analytical Date/Time: 08/31/18 11:58	Prep Initial Wt./Vol.: 6 mL
Container ID: 1184853005-C	Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Nitrate-N	0.0500 U	0.100	0.0250	mg/L	2		08/29/18 18:36
Nitrite-N	0.0500 U	0.100	0.0250	mg/L	2		08/29/18 18:36

## Results of SW12

Client Sample ID: **SW12**  
 Client Project ID: **Wasilla WWTP**  
 Lab Sample ID: 1184853005  
 Lab Project ID: 1184853

Collection Date: 08/29/18 09:50  
 Received Date: 08/29/18 16:55  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

### Batch Information

Analytical Batch: WFI2747  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AYC  
 Analytical Date/Time: 08/29/18 18:36  
 Container ID: 1184853005-D

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0918	0.0200	0.00500	mg/L	1		09/05/18 11:22

### Batch Information

Analytical Batch: WDA4392  
 Analytical Method: SM21 4500P-B,E  
 Analyst: DMM  
 Analytical Date/Time: 09/05/18 11:22  
 Container ID: 1184853005-C

Prep Batch: WXX12521  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 09/04/18 13:34  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL



**Results of SW13**

Client Sample ID: **SW13**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184853006  
Lab Project ID: 1184853

Collection Date: 08/29/18 10:12  
Received Date: 08/29/18 16:55  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Microbiology Laboratory**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Biochemical Oxygen Demand	2.00 U	2.00	2.00	mg/L	1		08/30/18 18:22

**Batch Information**

Analytical Batch: BOD6131  
Analytical Method: SM21 5210B  
Analyst: A.L  
Analytical Date/Time: 08/30/18 18:22  
Container ID: 1184853006-E

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	2.0	1.00	1.00	col/100mL	1		08/29/18 17:18

**Batch Information**

Analytical Batch: BTF16841  
Analytical Method: SM21 9222D  
Analyst: K.W  
Analytical Date/Time: 08/29/18 17:18  
Container ID: 1184853006-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	3	1	1	MPN/100r	1		08/30/18 10:29
Total Coliform	3870	10	10	MPN/100r	10		08/30/18 10:29

**Batch Information**

Analytical Batch: BTF16840  
Analytical Method: SM21 9223B  
Analyst: K.W  
Analytical Date/Time: 08/30/18 10:29  
Container ID: 1184853006-B



**Results of SW13**

Client Sample ID: **SW13**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184853006  
Lab Project ID: 1184853

Collection Date: 08/29/18 10:12  
Received Date: 08/29/18 16:55  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Waters Department**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	0.510 U	1.02	0.316	mg/L	1		08/30/18 16:24

**Batch Information**

Analytical Batch: STS6000  
Analytical Method: SM21 2540D  
Analyst: DMM  
Analytical Date/Time: 08/30/18 16:24  
Container ID: 1184853006-F

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Kjeldahl Nitrogen	0.408 J	1.00	0.310	mg/L	1		08/30/18 18:33

**Batch Information**

Analytical Batch: WDA4387	Prep Batch: WXX12510
Analytical Method: SM21 4500-N D	Prep Method: METHOD
Analyst: DMM	Prep Date/Time: 08/30/18 10:01
Analytical Date/Time: 08/30/18 18:33	Prep Initial Wt./Vol.: 25 mL
Container ID: 1184853006-C	Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0500 U	0.100	0.0310	mg/L	1		08/31/18 12:03

**Batch Information**

Analytical Batch: WDA4388	Prep Batch: WXX12513
Analytical Method: SM21 4500-NH3 G	Prep Method: METHOD
Analyst: DMM	Prep Date/Time: 08/31/18 11:00
Analytical Date/Time: 08/31/18 12:03	Prep Initial Wt./Vol.: 6 mL
Container ID: 1184853006-C	Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Nitrate-N	0.0500 U	0.100	0.0250	mg/L	2		08/29/18 18:46
Nitrite-N	0.0500 U	0.100	0.0250	mg/L	2		08/29/18 18:46

## Results of SW13

Client Sample ID: **SW13**  
 Client Project ID: **Wasilla WWTP**  
 Lab Sample ID: 1184853006  
 Lab Project ID: 1184853

Collection Date: 08/29/18 10:12  
 Received Date: 08/29/18 16:55  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

### Batch Information

Analytical Batch: WFI2747  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AYC  
 Analytical Date/Time: 08/29/18 18:46  
 Container ID: 1184853006-D

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.00500 J	0.0200	0.00500	mg/L	1		09/05/18 11:25

### Batch Information

Analytical Batch: WDA4392  
 Analytical Method: SM21 4500P-B,E  
 Analyst: DMM  
 Analytical Date/Time: 09/05/18 11:25  
 Container ID: 1184853006-C

Prep Batch: WXX12521  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 09/04/18 13:34  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL



Results of SW14

Client Sample ID: SW14
Client Project ID: Wasilla WWTP
Lab Sample ID: 1184853007
Lab Project ID: 1184853

Collection Date: 08/29/18 11:13
Received Date: 08/29/18 16:55
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Microbiology Laboratory

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Biochemical Oxygen Demand, 2.00 U, 2.00, 2.00, mg/L, 1, 08/30/18 18:22

Batch Information

Analytical Batch: BOD6131
Analytical Method: SM21 5210B
Analyst: A.L
Analytical Date/Time: 08/30/18 18:22
Container ID: 1184853007-E

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Fecal Coliform, 1.00 U, 1.00, 1.00, col/100mL, 1, 08/29/18 17:38

Batch Information

Analytical Batch: BTF16841
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 08/29/18 17:38
Container ID: 1184853007-A

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: E. Coli, 1 U, 1, 1, MPN/100r, 1, 08/30/18 10:29. Row 2: Total Coliform, 1046, 1, 1, MPN/100r, 1, 08/30/18 10:29

Batch Information

Analytical Batch: BTF16840
Analytical Method: SM21 9223B
Analyst: K.W
Analytical Date/Time: 08/30/18 10:29
Container ID: 1184853007-B



Results of SW14

Client Sample ID: SW14
Client Project ID: Wasilla WWTP
Lab Sample ID: 1184853007
Lab Project ID: 1184853

Collection Date: 08/29/18 11:13
Received Date: 08/29/18 16:55
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Suspended Solids, 4.56, 0.971, 0.301, mg/L, 1, 08/30/18 16:24

Batch Information

Analytical Batch: STS6000
Analytical Method: SM21 2540D
Analyst: DMM
Analytical Date/Time: 08/30/18 16:24
Container ID: 1184853007-F

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.500 U, 1.00, 0.310, mg/L, 1, 08/30/18 18:34

Batch Information

Analytical Batch: WDA4387
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/30/18 18:34
Container ID: 1184853007-C
Prep Batch: WXX12510
Prep Method: METHOD
Prep Date/Time: 08/30/18 10:01
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Ammonia-N, 0.0500 U, 0.100, 0.0310, mg/L, 1, 08/31/18 12:05

Batch Information

Analytical Batch: WDA4388
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 08/31/18 12:05
Container ID: 1184853007-C
Prep Batch: WXX12513
Prep Method: METHOD
Prep Date/Time: 08/31/18 11:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows: Nitrate-N (0.0500 U, 0.100, 0.0250, mg/L, 2, 08/29/18 18:48), Nitrite-N (0.0500 U, 0.100, 0.0250, mg/L, 2, 08/29/18 18:48)



## Results of SW14

Client Sample ID: **SW14**  
 Client Project ID: **Wasilla WWTP**  
 Lab Sample ID: 1184853007  
 Lab Project ID: 1184853

Collection Date: 08/29/18 11:13  
 Received Date: 08/29/18 16:55  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

### Batch Information

Analytical Batch: WFI2747  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AYC  
 Analytical Date/Time: 08/29/18 18:48  
 Container ID: 1184853007-D

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0716	0.0200	0.00500	mg/L	1		09/05/18 11:26

### Batch Information

Analytical Batch: WDA4392  
 Analytical Method: SM21 4500P-B,E  
 Analyst: DMM  
 Analytical Date/Time: 09/05/18 11:26  
 Container ID: 1184853007-C

Prep Batch: WXX12521  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 09/04/18 13:34  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL



**Results of SW15**

Client Sample ID: **SW15**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184853008  
Lab Project ID: 1184853

Collection Date: 08/29/18 10:52  
Received Date: 08/29/18 16:55  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Microbiology Laboratory**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Biochemical Oxygen Demand	2.00 U	2.00	2.00	mg/L	1		08/30/18 18:22

**Batch Information**

Analytical Batch: BOD6131  
Analytical Method: SM21 5210B  
Analyst: A.L  
Analytical Date/Time: 08/30/18 18:22  
Container ID: 1184853008-E

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	42	1.00	1.00	col/100mL	1		08/29/18 17:38

**Batch Information**

Analytical Batch: BTF16841  
Analytical Method: SM21 9222D  
Analyst: K.W  
Analytical Date/Time: 08/29/18 17:38  
Container ID: 1184853008-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	43	1	1	MPN/100r	1		08/30/18 10:29
Total Coliform	4610	10	10	MPN/100r	10		08/30/18 10:29

**Batch Information**

Analytical Batch: BTF16840  
Analytical Method: SM21 9223B  
Analyst: K.W  
Analytical Date/Time: 08/30/18 10:29  
Container ID: 1184853008-B



Results of SW15

Client Sample ID: SW15
Client Project ID: Wasilla WWTP
Lab Sample ID: 1184853008
Lab Project ID: 1184853

Collection Date: 08/29/18 10:52
Received Date: 08/29/18 16:55
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by Waters Department

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Suspended Solids, 1.41, 1.01, 0.313, mg/L, 1, 08/30/18 16:24

Batch Information

Analytical Batch: STS6000
Analytical Method: SM21 2540D
Analyst: DMM
Analytical Date/Time: 08/30/18 16:24
Container ID: 1184853008-F

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Total Kjeldahl Nitrogen, 0.356 J, 1.00, 0.310, mg/L, 1, 08/30/18 18:35

Batch Information

Analytical Batch: WDA4387
Analytical Method: SM21 4500-N D
Analyst: DMM
Analytical Date/Time: 08/30/18 18:35
Container ID: 1184853008-C
Prep Batch: WXX12510
Prep Method: METHOD
Prep Date/Time: 08/30/18 10:01
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Row 1: Ammonia-N, 0.0400 J, 0.100, 0.0310, mg/L, 1, 08/31/18 12:06

Batch Information

Analytical Batch: WDA4388
Analytical Method: SM21 4500-NH3 G
Analyst: DMM
Analytical Date/Time: 08/31/18 12:06
Container ID: 1184853008-C
Prep Batch: WXX12513
Prep Method: METHOD
Prep Date/Time: 08/31/18 11:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Table with 8 columns: Parameter, Result Qual, LOQ/CL, DL, Units, DF, Allowable Limits, Date Analyzed. Rows: Nitrate-N (0.0500 U), Nitrite-N (0.0500 U)

## Results of SW15

Client Sample ID: **SW15**  
 Client Project ID: **Wasilla WWTP**  
 Lab Sample ID: 1184853008  
 Lab Project ID: 1184853

Collection Date: 08/29/18 10:52  
 Received Date: 08/29/18 16:55  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

### Batch Information

Analytical Batch: WFI2747  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AYC  
 Analytical Date/Time: 08/29/18 18:50  
 Container ID: 1184853008-D

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0443	0.0200	0.00500	mg/L	1		09/05/18 11:28

### Batch Information

Analytical Batch: WDA4392  
 Analytical Method: SM21 4500P-B,E  
 Analyst: DMM  
 Analytical Date/Time: 09/05/18 11:28  
 Container ID: 1184853008-C

Prep Batch: WXX12521  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 09/04/18 13:34  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL



**Results of SW16**

Client Sample ID: **SW16**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184853009  
Lab Project ID: 1184853

Collection Date: 08/29/18 10:32  
Received Date: 08/29/18 16:55  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Microbiology Laboratory**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Biochemical Oxygen Demand	3.88	2.00	2.00	mg/L	1		08/30/18 18:22

**Batch Information**

Analytical Batch: BOD6131  
Analytical Method: SM21 5210B  
Analyst: A.L  
Analytical Date/Time: 08/30/18 18:22  
Container ID: 1184853009-E

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	20	1.00	1.00	col/100mL	1		08/29/18 17:38

**Batch Information**

Analytical Batch: BTF16841  
Analytical Method: SM21 9222D  
Analyst: K.W  
Analytical Date/Time: 08/29/18 17:38  
Container ID: 1184853009-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	23	1	1	MPN/100r	1		08/30/18 10:29
Total Coliform	>2420	10	10	MPN/100r	10		08/30/18 10:29

**Batch Information**

Analytical Batch: BTF16840  
Analytical Method: SM21 9223B  
Analyst: K.W  
Analytical Date/Time: 08/30/18 10:29  
Container ID: 1184853009-B



**Results of SW16**

Client Sample ID: **SW16**  
 Client Project ID: **Wasilla WWTP**  
 Lab Sample ID: 1184853009  
 Lab Project ID: 1184853

Collection Date: 08/29/18 10:32  
 Received Date: 08/29/18 16:55  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

**Results by Waters Department**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	22.3	3.33	1.03	mg/L	1		08/30/18 16:24

**Batch Information**

Analytical Batch: STS6000  
 Analytical Method: SM21 2540D  
 Analyst: DMM  
 Analytical Date/Time: 08/30/18 16:24  
 Container ID: 1184853009-F

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Kjeldahl Nitrogen	0.962 J	1.00	0.310	mg/L	1		08/30/18 18:37

**Batch Information**

Analytical Batch: WDA4387  
 Analytical Method: SM21 4500-N D  
 Analyst: DMM  
 Analytical Date/Time: 08/30/18 18:37  
 Container ID: 1184853009-C

Prep Batch: WXX12510  
 Prep Method: METHOD  
 Prep Date/Time: 08/30/18 10:01  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0500 U	0.100	0.0310	mg/L	1		08/31/18 12:08

**Batch Information**

Analytical Batch: WDA4388  
 Analytical Method: SM21 4500-NH3 G  
 Analyst: DMM  
 Analytical Date/Time: 08/31/18 12:08  
 Container ID: 1184853009-C

Prep Batch: WXX12513  
 Prep Method: METHOD  
 Prep Date/Time: 08/31/18 11:00  
 Prep Initial Wt./Vol.: 6 mL  
 Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Nitrate-N	0.0500 U	0.100	0.0250	mg/L	2		08/29/18 18:52
Nitrite-N	0.0500 U	0.100	0.0250	mg/L	2		08/29/18 18:52

## Results of SW16

Client Sample ID: **SW16**  
 Client Project ID: **Wasilla WWTP**  
 Lab Sample ID: 1184853009  
 Lab Project ID: 1184853

Collection Date: 08/29/18 10:32  
 Received Date: 08/29/18 16:55  
 Matrix: Water (Surface, Eff., Ground)  
 Solids (%):  
 Location:

## Results by Waters Department

### Batch Information

Analytical Batch: WFI2747  
 Analytical Method: SM21 4500NO3-F  
 Analyst: AYC  
 Analytical Date/Time: 08/29/18 18:52  
 Container ID: 1184853009-D

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.0875	0.0200	0.00500	mg/L	1		09/05/18 11:29

### Batch Information

Analytical Batch: WDA4392  
 Analytical Method: SM21 4500P-B,E  
 Analyst: DMM  
 Analytical Date/Time: 09/05/18 11:29  
 Container ID: 1184853009-C

Prep Batch: WXX12521  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 09/04/18 13:34  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL



**Results of SW17**

Client Sample ID: **SW17**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184853010  
Lab Project ID: 1184853

Collection Date: 08/29/18 12:00  
Received Date: 08/29/18 16:55  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Microbiology Laboratory**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Biochemical Oxygen Demand	2.00 U	2.00	2.00	mg/L	1		08/30/18 18:22

**Batch Information**

Analytical Batch: BOD6131  
Analytical Method: SM21 5210B  
Analyst: A.L  
Analytical Date/Time: 08/30/18 18:22  
Container ID: 1184853010-E

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Fecal Coliform	12	1.00	1.00	col/100mL	1		08/29/18 17:38

**Batch Information**

Analytical Batch: BTF16841  
Analytical Method: SM21 9222D  
Analyst: K.W  
Analytical Date/Time: 08/29/18 17:38  
Container ID: 1184853010-A

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
E. Coli	20	1	1	MPN/100r	1		08/30/18 10:29
Total Coliform	1300	1	1	MPN/100r	1		08/30/18 10:29

**Batch Information**

Analytical Batch: BTF16840  
Analytical Method: SM21 9223B  
Analyst: K.W  
Analytical Date/Time: 08/30/18 10:29  
Container ID: 1184853010-B





**Results of SW17**

Client Sample ID: **SW17**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184853010  
Lab Project ID: 1184853

Collection Date: 08/29/18 12:00  
Received Date: 08/29/18 16:55  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

**Results by Waters Department**

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	1.92	1.01	0.313	mg/L	1		08/30/18 16:24

**Batch Information**

Analytical Batch: STS6000  
Analytical Method: SM21 2540D  
Analyst: DMM  
Analytical Date/Time: 08/30/18 16:24  
Container ID: 1184853010-F

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Kjeldahl Nitrogen	2.36	1.00	0.310	mg/L	1		08/30/18 18:38

**Batch Information**

Analytical Batch: WDA4387	Prep Batch: WXX12510
Analytical Method: SM21 4500-N D	Prep Method: METHOD
Analyst: DMM	Prep Date/Time: 08/30/18 10:01
Analytical Date/Time: 08/30/18 18:38	Prep Initial Wt./Vol.: 25 mL
Container ID: 1184853010-C	Prep Extract Vol: 25 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Ammonia-N	0.0847 J	0.100	0.0310	mg/L	1		08/31/18 12:10

**Batch Information**

Analytical Batch: WDA4388	Prep Batch: WXX12513
Analytical Method: SM21 4500-NH3 G	Prep Method: METHOD
Analyst: DMM	Prep Date/Time: 08/31/18 11:00
Analytical Date/Time: 08/31/18 12:10	Prep Initial Wt./Vol.: 6 mL
Container ID: 1184853010-C	Prep Extract Vol: 6 mL

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Nitrate-N	1.49	0.100	0.0250	mg/L	2		08/29/18 18:53
Nitrite-N	0.0500 U	0.100	0.0250	mg/L	2		08/29/18 18:53



Results of **SW17**

Client Sample ID: **SW17**  
Client Project ID: **Wasilla WWTP**  
Lab Sample ID: 1184853010  
Lab Project ID: 1184853

Collection Date: 08/29/18 12:00  
Received Date: 08/29/18 16:55  
Matrix: Water (Surface, Eff., Ground)  
Solids (%):  
Location:

Results by **Waters Department**

**Batch Information**

Analytical Batch: WFI2747  
Analytical Method: SM21 4500NO3-F  
Analyst: AYC  
Analytical Date/Time: 08/29/18 18:53  
Container ID: 1184853010-D

<u>Parameter</u>	<u>Result Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Phosphorus	0.129	0.0200	0.00500	mg/L	1		09/05/18 11:30

**Batch Information**

Analytical Batch: WDA4392  
Analytical Method: SM21 4500P-B,E  
Analyst: DMM  
Analytical Date/Time: 09/05/18 11:30  
Container ID: 1184853010-C

Prep Batch: WXX12521  
Prep Method: SM21 4500P-B,E  
Prep Date/Time: 09/04/18 13:34  
Prep Initial Wt./Vol.: 25 mL  
Prep Extract Vol: 25 mL

## Method Blank

Blank ID: MB for HBN 1785224 [BOD/6131]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1471603

QC for Samples:

1184853001, 1184853002, 1184853003, 1184853004, 1184853005, 1184853006, 1184853007, 1184853008, 1184853009, 1184853010

## Results by SM21 5210B

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

## Batch Information

Analytical Batch: BOD6131

Analytical Method: SM21 5210B

Instrument:

Analyst: A.L

Analytical Date/Time: 8/30/2018 6:22:00PM

Print Date: 09/07/2018 3:02:58PM

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1184853 [BOD6131]

Blank Spike Lab ID: 1471604

Date Analyzed: 08/30/2018 18:22

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1184853001, 1184853002, 1184853003, 1184853004, 1184853005, 1184853006, 1184853007, 1184853008, 1184853009, 1184853010

## Results by SM21 5210B

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Biochemical Oxygen Demand	198	197	100	( 84.6-115.4

## Batch Information

Analytical Batch: **BOD6131**

Analytical Method: **SM21 5210B**

Instrument:

Analyst: **A.L**

Print Date: 09/07/2018 3:02:59PM

## Method Blank

Blank ID: MB for HBN 1785185 [BTF/16840]  
 Blank Lab ID: 1471405

Matrix: Water (Surface, Eff., Ground)

### QC for Samples:

1184853001, 1184853002, 1184853003, 1184853004, 1184853005, 1184853006, 1184853007, 1184853008, 1184853009, 1184853010

## Results by SM21 9223B

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

## Batch Information

Analytical Batch: BTF16840  
 Analytical Method: SM21 9223B  
 Instrument:  
 Analyst: K.W  
 Analytical Date/Time: 8/30/2018 10:29:00AM

Print Date: 09/07/2018 3:03:01PM

## Method Blank

Blank ID: MB for HBN 1785145 [BTF/16838]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1471328

QC for Samples:

1184853001, 1184853002, 1184853003, 1184853004, 1184853005, 1184853006, 1184853007, 1184853008, 1184853009, 1184853010

## Results by SM21 9222D

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

## Batch Information

Analytical Batch: BTF16841

Analytical Method: SM21 9222D

Instrument:

Analyst: K.W

Analytical Date/Time: 8/29/2018 5:18:00PM

Print Date: 09/07/2018 3:03:03PM

## Method Blank

Blank ID: MB for HBN 1785197 [STS/6000]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1471490

QC for Samples:

1184853001, 1184853002, 1184853003, 1184853004, 1184853005, 1184853006, 1184853007, 1184853008, 1184853009, 1184853010

## Results by SM21 2540D

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

## Batch Information

Analytical Batch: STS6000

Analytical Method: SM21 2540D

Instrument:

Analyst: DMM

Analytical Date/Time: 8/30/2018 4:24:50PM

Print Date: 09/07/2018 3:03:04PM

## Duplicate Sample Summary

Original Sample ID: 1184850001

Duplicate Sample ID: 1471493

QC for Samples:

Analysis Date: 08/30/2018 16:24

Matrix: Water (Surface, Eff., Ground)

## Results by SM21 2540D

<u>NAME</u>	<u>Original</u>	<u>Duplicate</u>	<u>Units</u>	<u>RPD (%)</u>	<u>RPD CL</u>
Total Suspended Solids	133	141	mg/L	5.80*	(< 5 )

## Batch Information

Analytical Batch: STS6000

Analytical Method: SM21 2540D

Instrument:

Analyst: DMM

Print Date: 09/07/2018 3:03:05PM



## Duplicate Sample Summary

Original Sample ID: 1184850003

Analysis Date: 08/30/2018 16:24

Duplicate Sample ID: 1471494

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1184853001, 1184853002, 1184853003, 1184853004, 1184853005, 1184853006, 1184853007, 1184853008, 1184853009, 1184853010

## Results by SM21 2540D

<u>NAME</u>	<u>Original</u>	<u>Duplicate</u>	<u>Units</u>	<u>RPD (%)</u>	<u>RPD CL</u>
Total Suspended Solids	148	157	mg/L	5.90*	(< 5 )

## Batch Information

Analytical Batch: STS6000

Analytical Method: SM21 2540D

Instrument:

Analyst: DMM

Print Date: 09/07/2018 3:03:05PM

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1184853 [STS6000]  
 Blank Spike Lab ID: 1471491  
 Date Analyzed: 08/30/2018 16:24

Spike Duplicate ID: LCSD for HBN 1184853 [STS6000]  
 Spike Duplicate Lab ID: 1471492  
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1184853001, 1184853002, 1184853003, 1184853004, 1184853005, 1184853006, 1184853007, 1184853008, 1184853009, 1184853010

## Results by SM21 2540D

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Suspended Solids	25	21.5	86	25	22.5	90	( 75-125 )	4.50	(< 5 )

## Batch Information

Analytical Batch: STS6000  
 Analytical Method: SM21 2540D  
 Instrument:  
 Analyst: DMM

## Method Blank

Blank ID: MB for HBN 1785181 (WFI/2747)

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1471393

QC for Samples:

1184853001, 1184853002, 1184853003, 1184853004, 1184853005, 1184853006, 1184853007, 1184853008, 1184853009, 1184853010

## Results by SM21 4500NO3-F

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Nitrate-N	0.0500U	0.100	0.0250	mg/L
Nitrite-N	0.0500U	0.100	0.0250	mg/L
Total Nitrate/Nitrite-N	0.0500U	0.100	0.0250	mg/L

## Batch Information

Analytical Batch: WFI2747

Analytical Method: SM21 4500NO3-F

Instrument: Astoria segmented flow

Analyst: AYC

Analytical Date/Time: 8/29/2018 6:22:16PM

Print Date: 09/07/2018 3:03:08PM

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1184853 [WFI2747]

Blank Spike Lab ID: 1471383

Date Analyzed: 08/29/2018 18:20

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1184853001, 1184853002, 1184853003, 1184853004, 1184853005, 1184853006, 1184853007, 1184853008, 1184853009, 1184853010

## Results by SM21 4500NO3-F

Parameter	Blank Spike (mg/L)			CL
	Spike	Result	Rec (%)	
Nitrate-N	2.5	2.44	98	( 70-130 )
Nitrite-N	2.5	2.50	100	( 90-110 )
Total Nitrate/Nitrite-N	5	4.94	99	( 90-110 )

## Batch Information

Analytical Batch: **WFI2747**

Analytical Method: **SM21 4500NO3-F**

Instrument: **Astoria segmented flow**

Analyst: **AYC**

## Matrix Spike Summary

Original Sample ID: 1184853005  
 MS Sample ID: 1471381 MS  
 MSD Sample ID: 1471382 MSD

Analysis Date: 08/29/2018 18:36  
 Analysis Date: 08/29/2018 18:38  
 Analysis Date: 08/29/2018 18:39  
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1184853001, 1184853002, 1184853003, 1184853004, 1184853005, 1184853006, 1184853007, 1184853008, 1184853009, 1184853010

## Results by SM21 4500NO3-F

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Nitrate-N	0.0500U	2.50	2.67	107	2.50	2.45	98	70-130	8.60	(< 25 )
Nitrite-N	0.0500U	2.50	2.38	95	2.50	2.38	95	90-110	0.13	(< 25 )

## Batch Information

Analytical Batch: WFI2747  
 Analytical Method: SM21 4500NO3-F  
 Instrument: Astoria segmented flow  
 Analyst: AYC  
 Analytical Date/Time: 8/29/2018 6:38:01PM

## Method Blank

Blank ID: MB for HBN 1785241 [WXX/12510]

Matrix: Water (Surface, Eff., Ground)

Blank Lab ID: 1471675

QC for Samples:

1184853001, 1184853002, 1184853003, 1184853004, 1184853005, 1184853006, 1184853007, 1184853008, 1184853009, 1184853010

## Results by SM21 4500-N D

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Total Kjeldahl Nitrogen	0.430J	1.00	0.310	mg/L

## Batch Information

Analytical Batch: WDA4387  
Analytical Method: SM21 4500-N D  
Instrument: Discrete Analyzer 2  
Analyst: DMM  
Analytical Date/Time: 8/30/2018 6:17:50PM

Prep Batch: WXX12510  
Prep Method: METHOD  
Prep Date/Time: 8/30/2018 10:01:00AM  
Prep Initial Wt./Vol.: 25 mL  
Prep Extract Vol: 25 mL

Print Date: 09/07/2018 3:03:12PM

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1184853 [WXX12510]  
 Blank Spike Lab ID: 1471676  
 Date Analyzed: 08/30/2018 18:19

Spike Duplicate ID: LCSD for HBN 1184853 [WXX12510]  
 Spike Duplicate Lab ID: 1471677  
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1184853001, 1184853002, 1184853003, 1184853004, 1184853005, 1184853006, 1184853007, 1184853008, 1184853009, 1184853010

## Results by SM21 4500-N D

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Kjeldahl Nitrogen	4	3.79	95	4	3.83	96	( 75-125 )	0.94	(< 25 )

## Batch Information

Analytical Batch: **WDA4387**  
 Analytical Method: **SM21 4500-N D**  
 Instrument: **Discrete Analyzer 2**  
 Analyst: **DMM**

Prep Batch: **WXX12510**  
 Prep Method: **METHOD**  
 Prep Date/Time: **08/30/2018 10:01**  
 Spike Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL  
 Dupe Init Wt./Vol.: 4 mg/L Extract Vol: 25 mL

Print Date: 09/07/2018 3:03:13PM

## Matrix Spike Summary

Original Sample ID: 1184853001  
 MS Sample ID: 1471678 MS  
 MSD Sample ID: 1471679 MSD

Analysis Date: 08/30/2018 18:21  
 Analysis Date: 08/30/2018 18:23  
 Analysis Date: 08/30/2018 18:24  
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1184853001, 1184853002, 1184853003, 1184853004, 1184853005, 1184853006, 1184853007, 1184853008, 1184853009, 1184853010

## Results by SM21 4500-N D

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Kjeldahl Nitrogen	0.738J	4.00	4.18	86	4.00	4.57	96	75-125	9.00	(< 25 )

## Batch Information

Analytical Batch: WDA4387  
 Analytical Method: SM21 4500-N D  
 Instrument: Discrete Analyzer 2  
 Analyst: DMM  
 Analytical Date/Time: 8/30/2018 6:23:07PM

Prep Batch: WXX12510  
 Prep Method: Distillation TKN by Phenate (W)  
 Prep Date/Time: 8/30/2018 10:01:00AM  
 Prep Initial Wt./Vol.: 25.00mL  
 Prep Extract Vol: 25.00mL

Print Date: 09/07/2018 3:03:14PM



## Method Blank

Blank ID: MB for HBN 1785268 [WXX/12513]  
 Blank Lab ID: 1471851

Matrix: Water (Surface, Eff., Ground)

### QC for Samples:

1184853001, 1184853002, 1184853003, 1184853004, 1184853005, 1184853006, 1184853007, 1184853008, 1184853009, 1184853010

## Results by SM21 4500-NH3 G

<u>Parameter</u>	<u>Results</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>Units</u>
Ammonia-N	0.0311J	0.100	0.0310	mg/L

## Batch Information

Analytical Batch: WDA4388  
 Analytical Method: SM21 4500-NH3 G  
 Instrument: Discrete Analyzer 2  
 Analyst: DMM  
 Analytical Date/Time: 8/31/2018 11:43:23AM

Prep Batch: WXX12513  
 Prep Method: METHOD  
 Prep Date/Time: 8/31/2018 11:00:00AM  
 Prep Initial Wt./Vol.: 6 mL  
 Prep Extract Vol: 6 mL

Print Date: 09/07/2018 3:03:15PM

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1184853 [WXX12513]  
 Blank Spike Lab ID: 1471852  
 Date Analyzed: 08/31/2018 11:45

Spike Duplicate ID: LCSD for HBN 1184853 [WXX12513]  
 Spike Duplicate Lab ID: 1471853  
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1184853001, 1184853002, 1184853003, 1184853004, 1184853005, 1184853006, 1184853007, 1184853008, 1184853009, 1184853010

## Results by SM21 4500-NH3 G

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Ammonia-N	1	0.946	95	1	0.998	100	( 75-125 )	5.30	(< 25 )

## Batch Information

Analytical Batch: **WDA4388**  
 Analytical Method: **SM21 4500-NH3 G**  
 Instrument: **Discrete Analyzer 2**  
 Analyst: **DMM**

Prep Batch: **WXX12513**  
 Prep Method: **METHOD**  
 Prep Date/Time: **08/31/2018 11:00**  
 Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL  
 Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

## Matrix Spike Summary

Original Sample ID: 1184853001  
 MS Sample ID: 1471854 MS  
 MSD Sample ID: 1471855 MSD

Analysis Date: 08/31/2018 11:48  
 Analysis Date: 08/31/2018 11:50  
 Analysis Date: 08/31/2018 11:51  
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1184853001, 1184853002, 1184853003, 1184853004, 1184853005, 1184853006, 1184853007, 1184853008, 1184853009, 1184853010

## Results by SM21 4500-NH3 G

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Ammonia-N	0.115	1.00	.903	79	1.00	0.695	58 *	75-125	26.10	* (< 25)

## Batch Information

Analytical Batch: WDA4388  
 Analytical Method: SM21 4500-NH3 G  
 Instrument: Discrete Analyzer 2  
 Analyst: DMM  
 Analytical Date/Time: 8/31/2018 11:50:06AM

Prep Batch: WXX12513  
 Prep Method: Ammonia by SM21 4500F prep (W)  
 Prep Date/Time: 8/31/2018 11:00:00AM  
 Prep Initial Wt./Vol.: 6.00mL  
 Prep Extract Vol: 6.00mL

## Method Blank

Blank ID: MB for HBN 1785478 [WXX/12521]  
 Blank Lab ID: 1472799

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1184853003, 1184853004, 1184853005, 1184853006, 1184853007, 1184853008, 1184853009, 1184853010

## Results by SM21 4500P-B,E

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

## Batch Information

Analytical Batch: WDA4392  
 Analytical Method: SM21 4500P-B,E  
 Instrument: Discrete Analyzer 2  
 Analyst: DMM  
 Analytical Date/Time: 9/5/2018 11:02:17AM

Prep Batch: WXX12521  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 9/4/2018 1:34:00PM  
 Prep Initial Wt./Vol.: 25 mL  
 Prep Extract Vol: 25 mL

Print Date: 09/07/2018 3:03:18PM

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1184853 [WXX12521]  
 Blank Spike Lab ID: 1472800  
 Date Analyzed: 09/05/2018 11:03

Spike Duplicate ID: LCSD for HBN 1184853 [WXX12521]  
 Spike Duplicate Lab ID: 1472801  
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1184853003, 1184853004, 1184853005, 1184853006, 1184853007, 1184853008, 1184853009, 1184853010

## Results by SM21 4500P-B,E

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Phosphorus	0.2	0.201	101	0.2	0.198	99	( 75-125 )	1.50	(< 25 )

## Batch Information

Analytical Batch: WDA4392  
 Analytical Method: SM21 4500P-B,E  
 Instrument: Discrete Analyzer 2  
 Analyst: DMM

Prep Batch: WXX12521  
 Prep Method: SM21 4500P-B,E  
 Prep Date/Time: 09/04/2018 13:34  
 Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL  
 Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

Print Date: 09/07/2018 3:03:19PM

## Matrix Spike Summary

Original Sample ID: 1184812002  
 MS Sample ID: 1472802 MS  
 MSD Sample ID: 1472803 MSD

Analysis Date: 09/05/2018 11:06  
 Analysis Date: 09/05/2018 11:07  
 Analysis Date: 09/05/2018 11:08  
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1184853003, 1184853004, 1184853005, 1184853006, 1184853007, 1184853008, 1184853009, 1184853010

## Results by SM21 4500P-B,E

Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Phosphorus	0.0259	0.200	.229	102	0.200	0.229	102	75-125	0.09	(< 25 )

## Batch Information

Analytical Batch: WDA4392  
 Analytical Method: SM21 4500P-B,E  
 Instrument: Discrete Analyzer 2  
 Analyst: DMM  
 Analytical Date/Time: 9/5/2018 11:07:12AM

Prep Batch: WXX12521  
 Prep Method: Total Phosphorus (W) Ext.  
 Prep Date/Time: 9/4/2018 1:34:00PM  
 Prep Initial Wt./Vol.: 25.00mL  
 Prep Extract Vol: 25.00mL

Print Date: 09/07/2018 3:03:20PM

## Method Blank

Blank ID: MB for HBN 1785619 [WXX/12530]

Blank Lab ID: 1473430

QC for Samples:

1184853001, 1184853002

Matrix: Water (Surface, Eff., Ground)

## Results by SM21 4500P-B,E

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

## Batch Information

Analytical Batch: WDA4394

Analytical Method: SM21 4500P-B,E

Instrument: Discrete Analyzer 2

Analyst: DMM

Analytical Date/Time: 9/7/2018 11:21:16AM

Prep Batch: WXX12530

Prep Method: SM21 4500P-B,E

Prep Date/Time: 9/6/2018 5:00:00PM

Prep Initial Wt./Vol.: 25 mL

Prep Extract Vol: 25 mL

Print Date: 09/07/2018 3:03:21PM

## Blank Spike Summary

Blank Spike ID: LCS for HBN 1184853 [WXX12530]  
 Blank Spike Lab ID: 1473431  
 Date Analyzed: 09/07/2018 11:22

Spike Duplicate ID: LCSD for HBN 1184853 [WXX12530]  
 Spike Duplicate Lab ID: 1473432  
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1184853001, 1184853002

## Results by SM21 4500P-B,E

Parameter	Blank Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
	Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Phosphorus	0.2	0.198	99	0.2	0.205	103	( 75-125 )	3.70	(< 25 )

## Batch Information

Analytical Batch: **WDA4394**  
 Analytical Method: **SM21 4500P-B,E**  
 Instrument: **Discrete Analyzer 2**  
 Analyst: **DMM**

Prep Batch: **WXX12530**  
 Prep Method: **SM21 4500P-B,E**  
 Prep Date/Time: **09/06/2018 17:00**  
 Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL  
 Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

Print Date: 09/07/2018 3:03:22PM



## Matrix Spike Summary

Original Sample ID: 1184853001  
 MS Sample ID: 1473433 MS  
 MSD Sample ID: 1473434 MSD

Analysis Date: 09/07/2018 11:24  
 Analysis Date: 09/07/2018 11:25  
 Analysis Date: 09/07/2018 11:26  
 Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1184853001, 1184853002

## Results by SM21 4500P-B,E

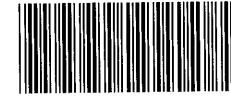
Parameter	Sample	Matrix Spike (mg/L)			Spike Duplicate (mg/L)			CL	RPD (%)	RPD CL
		Spike	Result	Rec (%)	Spike	Result	Rec (%)			
Total Phosphorus	0.684	2.00	2.8	106	2.00	2.77	104	75-125	1.20	(< 25 )

## Batch Information

Analytical Batch: WDA4394  
 Analytical Method: SM21 4500P-B,E  
 Instrument: Discrete Analyzer 2  
 Analyst: DMM  
 Analytical Date/Time: 9/7/2018 11:25:08AM

Prep Batch: WXX12530  
 Prep Method: Total Phosphorus (W) Ext.  
 Prep Date/Time: 9/6/2018 5:00:00PM  
 Prep Initial Wt./Vol.: 2.50mL  
 Prep Extract Vol: 25.00mL

Print Date: 09/07/2018 3:03:23PM



<b>Section 1</b> CLIENT: <u>Stantec</u> CONTACT: <u>Jake Alward</u> PHONE NO: <u>343-5202</u> PROJECT NAME: <u>Wasilla WWTTP</u> PROJECT/PWSID/PERMIT#: _____ REPORTS TO: _____ E-MAIL: <u>jake.alward@stantec.com</u> INVOICE TO: _____ QUOTE #: _____ P.O. #: <u>204700415</u>					<b>Section 3</b> Instructions: Sections 1 - 5 must be filled out. Omissions may delay the onset of analysis.					Preservative # _____ Type _____ C = COMP G = GRAB MI = Multi Incremental Soils																																																																																																																																																																																																																																																																																																																							
<b>Section 2</b> <table border="1"> <thead> <tr> <th>RESERVED for lab use</th> <th>SAMPLE IDENTIFICATION</th> <th>DATE mm/dd/yy</th> <th>TIME HH:MM</th> <th>MATRIX/MATRIX CODE</th> <th>#</th> <th>Type</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> <th>7</th> <th>8</th> <th>9</th> <th>10</th> <th>11</th> <th>12</th> <th>13</th> <th>14</th> <th>15</th> <th>16</th> <th>17</th> <th>18</th> <th>19</th> <th>20</th> <th>REMARKS/LOC ID</th> </tr> </thead> <tbody> <tr> <td>①</td> <td>A-F <del>SW18</del> SW18</td> <td>8/29/18</td> <td>1225</td> <td>WATER</td> <td>6</td> <td>G</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td></td> </tr> <tr> <td>②</td> <td>A-F <del>SW18</del> SW18</td> <td></td> <td>1225</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>③</td> <td>A-F <del>SW18</del> SW18</td> <td></td> <td>1301</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>④</td> <td>A-F SW11</td> <td></td> <td>930</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>⑤</td> <td>A-F SW12</td> <td></td> <td>950</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>⑥</td> <td>A-F SW13</td> <td></td> <td>1012</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>⑦</td> <td>A-F SW14</td> <td></td> <td>1113</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>⑧</td> <td>A-F SW15</td> <td></td> <td>1052</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>⑨</td> <td>A-F SW16</td> <td></td> <td>1032</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>⑩</td> <td>A-F SW17</td> <td></td> <td>1200</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>					RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/MATRIX CODE	#	Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	REMARKS/LOC ID	①	A-F <del>SW18</del> SW18	8/29/18	1225	WATER	6	G	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		②	A-F <del>SW18</del> SW18		1225																									③	A-F <del>SW18</del> SW18		1301																									④	A-F SW11		930																									⑤	A-F SW12		950																									⑥	A-F SW13		1012																									⑦	A-F SW14		1113																									⑧	A-F SW15		1052																									⑨	A-F SW16		1032																									⑩	A-F SW17		1200																									<b>Section 4</b> DOD Project? Yes No Cooler ID: _____ Requested Turnaround Time and/or Special Instructions: _____ Temp Blank °C: _____ or Ambient [ ] (See attached Sample Receipt Form)					Data Deliverable Requirements: Chain of Custody Seal: (Circle) INTACT BROKEN <u>ABSENT</u> (See attached Sample Receipt Form)				
RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/MATRIX CODE	#	Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	REMARKS/LOC ID																																																																																																																																																																																																																																																																																																						
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<b>Section 5</b> Relinquished By: (1) _____ Date: <u>8/29/18</u> Time: <u>1655</u> Received By: _____ Relinquished By: (2) _____ Date: _____ Time: _____ Received By: _____ Relinquished By: (3) _____ Date: _____ Time: _____ Received By: _____ Relinquished By: (4) _____ Date: <u>8/29/18</u> Time: <u>16:55</u> Received For Laboratory By: <u>KET</u>																																																																																																																																																																																																																																																																																																																																	



e-Sample Receipt Form

SGS Workorder #:

1184853



1 1 8 4 8 5 3

Review Criteria	Condition (Yes, No, N/A)	Exceptions Noted below
<b>Chain of Custody / Temperature Requirements</b>		<input checked="" type="checkbox"/> Exemption permitted if sampler hand carries/delivers.
Were Custody Seals intact? Note # & location	<input type="checkbox"/> n/a	hand delivered
COC accompanied samples?	<input checked="" type="checkbox"/> yes	
<input type="checkbox"/> 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)?	<input checked="" type="checkbox"/> yes	Cooler ID: 1 @ 3.4 °C Therm. ID: D36
	<input checked="" type="checkbox"/> yes	Cooler ID: 2 @ 2.3 °C Therm. ID: D45
	<input type="checkbox"/>	Cooler ID: @ °C Therm. ID:
	<input type="checkbox"/>	Cooler ID: @ °C Therm. ID:
*If >6°C, were samples collected <8 hours ago?	<input type="checkbox"/> n/a	
If <0°C, were sample containers ice free?	<input type="checkbox"/> n/a	
If samples received <u>without</u> 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.		
<b>Holding Time / Documentation / Sample Condition Requirements</b>		Note: Refer to form F-083 "Sample Guide" for specific holding times.
Were samples received within holding time?	<input checked="" type="checkbox"/> yes	
Do samples <b>match COC**</b> (i.e., sample IDs, dates/times collected)?	<input checked="" type="checkbox"/> 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)	<input checked="" type="checkbox"/> yes	
Were proper containers (type/mass/volume/preservative***) used?	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> n/a ***Exemption permitted for metals (e.g.200.8/6020A).
<b>Volatile / LL-Hg Requirements</b>		
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samples?	<input type="checkbox"/> n/a	
Were all water VOA vials free of headspace (i.e., bubbles ≤ 6mm)?	<input type="checkbox"/> n/a	
Were all soil VOAs field extracted with MeOH+BFB?	<input type="checkbox"/> n/a	
<b>Note to Client:</b> Any "No", answer above indicates non-compliance with standard procedures and may impact data quality.		
Additional notes (if applicable):		



### Sample Containers and Preservatives

<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>	<u>Container Id</u>	<u>Preservative</u>	<u>Container Condition</u>
1184853001-A	Na2S2O3 for Chlorine Redu	OK	1184853009-C	H2SO4 to pH < 2	OK
1184853001-B	Na2S2O3 for Chlorine Redu	OK	1184853009-D	No Preservative Required	OK
1184853001-C	H2SO4 to pH < 2	OK	1184853009-E	No Preservative Required	OK
1184853001-D	No Preservative Required	OK	1184853009-F	No Preservative Required	OK
1184853001-E	No Preservative Required	OK	1184853010-A	Na2S2O3 for Chlorine Redu	OK
1184853001-F	No Preservative Required	OK	1184853010-B	Na2S2O3 for Chlorine Redu	OK
1184853002-A	Na2S2O3 for Chlorine Redu	OK	1184853010-C	H2SO4 to pH < 2	OK
1184853002-B	Na2S2O3 for Chlorine Redu	OK	1184853010-D	No Preservative Required	OK
1184853002-C	H2SO4 to pH < 2	OK	1184853010-E	No Preservative Required	OK
1184853002-D	No Preservative Required	OK	1184853010-F	No Preservative Required	OK
1184853002-E	No Preservative Required	OK			
1184853002-F	No Preservative Required	OK			
1184853003-A	Na2S2O3 for Chlorine Redu	OK			
1184853003-B	Na2S2O3 for Chlorine Redu	OK			
1184853003-C	H2SO4 to pH < 2	OK			
1184853003-D	No Preservative Required	OK			
1184853003-E	No Preservative Required	OK			
1184853003-F	No Preservative Required	OK			
1184853004-A	Na2S2O3 for Chlorine Redu	OK			
1184853004-B	Na2S2O3 for Chlorine Redu	OK			
1184853004-C	H2SO4 to pH < 2	OK			
1184853004-D	No Preservative Required	OK			
1184853004-E	No Preservative Required	OK			
1184853004-F	No Preservative Required	OK			
1184853005-A	Na2S2O3 for Chlorine Redu	OK			
1184853005-B	Na2S2O3 for Chlorine Redu	OK			
1184853005-C	H2SO4 to pH < 2	OK			
1184853005-D	No Preservative Required	OK			
1184853005-E	No Preservative Required	OK			
1184853005-F	No Preservative Required	OK			
1184853006-A	Na2S2O3 for Chlorine Redu	OK			
1184853006-B	Na2S2O3 for Chlorine Redu	OK			
1184853006-C	H2SO4 to pH < 2	OK			
1184853006-D	No Preservative Required	OK			
1184853006-E	No Preservative Required	OK			
1184853006-F	No Preservative Required	OK			
1184853007-A	Na2S2O3 for Chlorine Redu	OK			
1184853007-B	Na2S2O3 for Chlorine Redu	OK			
1184853007-C	H2SO4 to pH < 2	OK			
1184853007-D	No Preservative Required	OK			
1184853007-E	No Preservative Required	OK			
1184853007-F	No Preservative Required	OK			
1184853008-A	Na2S2O3 for Chlorine Redu	OK			
1184853008-B	Na2S2O3 for Chlorine Redu	OK			
1184853008-C	H2SO4 to pH < 2	OK			
1184853008-D	No Preservative Required	OK			
1184853008-E	No Preservative Required	OK			
1184853008-F	No Preservative Required	OK			
1184853009-A	Na2S2O3 for Chlorine Redu	OK			
1184853009-B	Na2S2O3 for Chlorine Redu	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 that 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.