Laboratory Report of Analysis

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

Report Number: **1174398**

Client Project: **Wasilla WWTP Surface**

Dear John Marshall,

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

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

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

Sincerely,
SGS North America Inc.

_____

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

SGS North America Inc. 200 West Potter Drive, Anchorage, AK 99518
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Case Narrative

SGS Client: **Stantec Consulting Services Inc.**
SGS Project: **1174398**
Project Name/Site: **Wasilla WWTP Surface**
Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

SW-01 (1174398001) PS

5210B - BOD - LCS does not meet QC criteria (59.1%).

SW-02 (1174398002) PS

5210B - BOD - LCS does not meet QC criteria (59.1%).

SW-14 (1174398003) PS

5210B - BOD - LCS does not meet QC criteria (59.1%).

SW-15 (1174398004) PS

5210B - BOD - LCS does not meet QC criteria (59.1%).

Dup (1174398005) PS

5210B - BOD - LCS does not meet QC criteria (59.1%).

1174255001DUP (1397850) DUP

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

LCSS for HBN 1763434 [BOD/5798 (1397855) LCSS

5210B - BOD - LCS does not meet QC criteria (59.1%).

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

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Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

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

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 (DW Chemistry & Microbiology) & UST-005 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020A, 7470A, 7471B, 8015C, 8021B, 8082A, 8260C, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

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

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

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

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Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
SW-01	1174398001	07/12/2017	07/12/2017	Water (Surface, Eff., Ground)
SW-02	1174398002	07/12/2017	07/12/2017	Water (Surface, Eff., Ground)
SW-14	1174398003	07/12/2017	07/12/2017	Water (Surface, Eff., Ground)
SW-15	1174398004	07/12/2017	07/12/2017	Water (Surface, Eff., Ground)
Dup	1174398005	07/12/2017	07/12/2017	Water (Surface, Eff., Ground)

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

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Detectable Results Summary

Client Sample ID: **SW-01**
Lab Sample ID: 1174398001
Microbiology Laboratory

Waters Department

Parameter	Result	Units
E. Coli	Positive	100mL
Fecal Coliform	4.0	col/100mL
Total Coliform	Positive	100mL
Total Phosphorus	0.0654	mg/L
Total Suspended Solids	9.50	mg/L

Client Sample ID: **SW-02**
Lab Sample ID: 1174398002
Microbiology Laboratory

Waters Department

Parameter	Result	Units
Biochemical Oxygen Demand	3.89	mg/L
E. Coli	Positive	100mL
Fecal Coliform	20	col/100mL
Total Coliform	Positive	100mL
Total Phosphorus	0.0452	mg/L
Total Suspended Solids	11.0	mg/L

Client Sample ID: **SW-14**
Lab Sample ID: 1174398003
Microbiology Laboratory

Waters Department

Parameter	Result	Units
E. Coli	Negative	100mL
Fecal Coliform	1.0	col/100mL
Total Coliform	Positive	100mL
Total Phosphorus	0.244	mg/L
Total Suspended Solids	32.0	mg/L

Client Sample ID: **SW-15**
Lab Sample ID: 1174398004
Microbiology Laboratory

Waters Department

Parameter	Result	Units
Biochemical Oxygen Demand	2.32	mg/L
E. Coli	Positive	100mL
Fecal Coliform	112	col/100mL
Total Coliform	Positive	100mL
Total Phosphorus	0.0581	mg/L
Total Suspended Solids	13.8	mg/L

Client Sample ID: **Dup**
Lab Sample ID: 1174398005
Microbiology Laboratory

Waters Department

Parameter	Result	Units
Biochemical Oxygen Demand	2.31	mg/L
E. Coli	Positive	100mL
Fecal Coliform	120	col/100mL
Total Coliform	Positive	100mL
Total Phosphorus	0.0694	mg/L
Total Suspended Solids	20.0	mg/L

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Results of **SW-01**

Client Sample ID: **SW-01**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174398001
Lab Project ID: 1174398

Collection Date: 07/12/17 10:15
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.00 U		2.00	2.00	mg/L	1		07/13/17 12:47

Batch Information

Analytical Batch: BOD5798
Analytical Method: SM21 5210B
Analyst: AKD
Analytical Date/Time: 07/13/17 12:47
Container ID: 1174398001-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	4.0		1.00	1.00	col/100mL	1		07/12/17 18:10

Batch Information

Analytical Batch: BTF15767
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 07/12/17 18:10
Container ID: 1174398001-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	Positive		1	1	100mL	1		07/12/17 17:53
Total Coliform	Positive		1	1	100mL	1		07/12/17 17:53

Batch Information

Analytical Batch: BTF15766
Analytical Method: SM21 9223B
Analyst: ACF
Analytical Date/Time: 07/12/17 17:53
Container ID: 1174398001-F

Print Date: 07/21/2017 3:29:13PM

Results of **SW-01**

Client Sample ID: **SW-01**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174398001
Lab Project ID: 1174398

Collection Date: 07/12/17 10:15
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	9.50		2.50	0.775	mg/L	1		07/13/17 14:40

Batch Information

Analytical Batch: STS5548
Analytical Method: SM21 2540D
Analyst: AYC
Analytical Date/Time: 07/13/17 14:40
Container ID: 1174398001-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.100 U		0.100	0.0310	mg/L	1		07/13/17 14:04

Batch Information

Analytical Batch: WDA4019
Analytical Method: SM21 4500-NH3 G
Analyst: NEG
Analytical Date/Time: 07/13/17 14:04
Container ID: 1174398001-E

Prep Batch: WXX11909
Prep Method: METHOD
Prep Date/Time: 07/13/17 13:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100 U		0.100	0.0300	mg/L	2		07/12/17 17:57
Nitrite-N	0.100 U		0.100	0.0300	mg/L	2		07/12/17 17:57

Batch Information

Analytical Batch: WFI2578
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 07/12/17 17:57
Container ID: 1174398001-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0654		0.0200	0.00620	mg/L	1		07/17/17 12:36

Print Date: 07/21/2017 3:29:13PM

Results of **SW-01**

Client Sample ID: **SW-01**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174398001
Lab Project ID: 1174398

Collection Date: 07/12/17 10:15
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4021
Analytical Method: SM21 4500P-B,E
Analyst: NEG
Analytical Date/Time: 07/17/17 12:36
Container ID: 1174398001-E

Prep Batch: WXX11914
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/14/17 15:45
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

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Results of **SW-02**

Client Sample ID: **SW-02**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174398002
Lab Project ID: 1174398

Collection Date: 07/12/17 11:00
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	3.89		2.00	2.00	mg/L	1		07/13/17 12:47

Batch Information

Analytical Batch: BOD5798
Analytical Method: SM21 5210B
Analyst: AKD
Analytical Date/Time: 07/13/17 12:47
Container ID: 1174398002-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	20		1.00	1.00	col/100mL	1		07/12/17 18:10

Batch Information

Analytical Batch: BTF15767
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 07/12/17 18:10
Container ID: 1174398002-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	Positive		1	1	100mL	1		07/12/17 17:53
Total Coliform	Positive		1	1	100mL	1		07/12/17 17:53

Batch Information

Analytical Batch: BTF15766
Analytical Method: SM21 9223B
Analyst: ACF
Analytical Date/Time: 07/12/17 17:53
Container ID: 1174398002-F

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Results of **SW-02**

Client Sample ID: **SW-02**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174398002
Lab Project ID: 1174398

Collection Date: 07/12/17 11:00
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	11.0		3.33	1.03	mg/L	1		07/13/17 14:40

Batch Information

Analytical Batch: STS5548
Analytical Method: SM21 2540D
Analyst: AYC
Analytical Date/Time: 07/13/17 14:40
Container ID: 1174398002-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.100 U		0.100	0.0310	mg/L	1		07/13/17 14:06

Batch Information

Analytical Batch: WDA4019
Analytical Method: SM21 4500-NH3 G
Analyst: NEG
Analytical Date/Time: 07/13/17 14:06
Container ID: 1174398002-E

Prep Batch: WXX11909
Prep Method: METHOD
Prep Date/Time: 07/13/17 13:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100 U		0.100	0.0300	mg/L	2		07/12/17 17:59
Nitrite-N	0.100 U		0.100	0.0300	mg/L	2		07/12/17 17:59

Batch Information

Analytical Batch: WFI2578
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 07/12/17 17:59
Container ID: 1174398002-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0452		0.0200	0.00620	mg/L	1		07/17/17 12:37

Print Date: 07/21/2017 3:29:13PM

Results of **SW-02**

Client Sample ID: **SW-02**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174398002
Lab Project ID: 1174398

Collection Date: 07/12/17 11:00
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4021
Analytical Method: SM21 4500P-B,E
Analyst: NEG
Analytical Date/Time: 07/17/17 12:37
Container ID: 1174398002-E

Prep Batch: WXX11914
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/14/17 15:45
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

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Results of **SW-14**

Client Sample ID: **SW-14**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174398003
Lab Project ID: 1174398

Collection Date: 07/12/17 14:50
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.00 U		2.00	2.00	mg/L	1		07/13/17 12:47

Batch Information

Analytical Batch: BOD5798
Analytical Method: SM21 5210B
Analyst: AKD
Analytical Date/Time: 07/13/17 12:47
Container ID: 1174398003-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	1.0		1.00	1.00	col/100mL	1		07/12/17 18:10

Batch Information

Analytical Batch: BTF15767
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 07/12/17 18:10
Container ID: 1174398003-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	Negative		1	1	100mL	1		07/12/17 17:53
Total Coliform	Positive		1	1	100mL	1		07/12/17 17:53

Batch Information

Analytical Batch: BTF15766
Analytical Method: SM21 9223B
Analyst: ACF
Analytical Date/Time: 07/12/17 17:53
Container ID: 1174398003-F

Print Date: 07/21/2017 3:29:13PM

Results of **SW-14**

Client Sample ID: **SW-14**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174398003
Lab Project ID: 1174398

Collection Date: 07/12/17 14:50
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	32.0		3.33	1.03	mg/L	1		07/13/17 14:40

Batch Information

Analytical Batch: STS5548
Analytical Method: SM21 2540D
Analyst: AYC
Analytical Date/Time: 07/13/17 14:40
Container ID: 1174398003-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.100 U		0.100	0.0310	mg/L	1		07/13/17 14:11

Batch Information

Analytical Batch: WDA4019
Analytical Method: SM21 4500-NH3 G
Analyst: NEG
Analytical Date/Time: 07/13/17 14:11
Container ID: 1174398003-E

Prep Batch: WXX11909
Prep Method: METHOD
Prep Date/Time: 07/13/17 13:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100 U		0.100	0.0300	mg/L	2		07/12/17 18:00
Nitrite-N	0.100 U		0.100	0.0300	mg/L	2		07/12/17 18:00

Batch Information

Analytical Batch: WFI2578
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 07/12/17 18:00
Container ID: 1174398003-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.244		0.0200	0.00620	mg/L	1		07/17/17 12:37

Print Date: 07/21/2017 3:29:13PM

Results of **SW-14**

Client Sample ID: **SW-14**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174398003
Lab Project ID: 1174398

Collection Date: 07/12/17 14:50
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4021
Analytical Method: SM21 4500P-B,E
Analyst: NEG
Analytical Date/Time: 07/17/17 12:37
Container ID: 1174398003-E

Prep Batch: WXX11914
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/14/17 15:45
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

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Results of **SW-15**

Client Sample ID: **SW-15**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174398004
Lab Project ID: 1174398

Collection Date: 07/12/17 15:15
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.32		2.00	2.00	mg/L	1		07/13/17 12:47

Batch Information

Analytical Batch: BOD5798
Analytical Method: SM21 5210B
Analyst: AKD
Analytical Date/Time: 07/13/17 12:47
Container ID: 1174398004-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	112		2.00	2.00	col/100mL	1		07/12/17 18:10

Batch Information

Analytical Batch: BTF15767
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 07/12/17 18:10
Container ID: 1174398004-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	Positive		1	1	100mL	1		07/12/17 17:53
Total Coliform	Positive		1	1	100mL	1		07/12/17 17:53

Batch Information

Analytical Batch: BTF15766
Analytical Method: SM21 9223B
Analyst: ACF
Analytical Date/Time: 07/12/17 17:53
Container ID: 1174398004-F

Print Date: 07/21/2017 3:29:13PM

Results of **SW-15**

Client Sample ID: **SW-15**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174398004
Lab Project ID: 1174398

Collection Date: 07/12/17 15:15
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	13.8		2.00	0.620	mg/L	1		07/13/17 14:40

Batch Information

Analytical Batch: STS5548
Analytical Method: SM21 2540D
Analyst: AYC
Analytical Date/Time: 07/13/17 14:40
Container ID: 1174398004-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.100 U		0.100	0.0310	mg/L	1		07/13/17 14:12

Batch Information

Analytical Batch: WDA4019
Analytical Method: SM21 4500-NH3 G
Analyst: NEG
Analytical Date/Time: 07/13/17 14:12
Container ID: 1174398004-E

Prep Batch: WXX11909
Prep Method: METHOD
Prep Date/Time: 07/13/17 13:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100 U		0.100	0.0300	mg/L	2		07/12/17 18:02
Nitrite-N	0.100 U		0.100	0.0300	mg/L	2		07/12/17 18:02

Batch Information

Analytical Batch: WFI2578
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 07/12/17 18:02
Container ID: 1174398004-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0581		0.0200	0.00620	mg/L	1		07/17/17 12:38

Print Date: 07/21/2017 3:29:13PM

Results of **SW-15**

Client Sample ID: **SW-15**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174398004
Lab Project ID: 1174398

Collection Date: 07/12/17 15:15
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4021
Analytical Method: SM21 4500P-B,E
Analyst: NEG
Analytical Date/Time: 07/17/17 12:38
Container ID: 1174398004-E

Prep Batch: WXX11914
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/14/17 15:45
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

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Results of **Dup**

Client Sample ID: **Dup**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174398005
Lab Project ID: 1174398

Collection Date: 07/12/17 15:15
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.31		2.00	2.00	mg/L	1		07/13/17 12:47

Batch Information

Analytical Batch: BOD5798
Analytical Method: SM21 5210B
Analyst: AKD
Analytical Date/Time: 07/13/17 12:47
Container ID: 1174398005-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	120		2.00	2.00	col/100mL	1		07/12/17 18:10

Batch Information

Analytical Batch: BTF15767
Analytical Method: SM21 9222D
Analyst: K.W
Analytical Date/Time: 07/12/17 18:10
Container ID: 1174398005-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	Positive		1	1	100mL	1		07/12/17 17:53
Total Coliform	Positive		1	1	100mL	1		07/12/17 17:53

Batch Information

Analytical Batch: BTF15766
Analytical Method: SM21 9223B
Analyst: ACF
Analytical Date/Time: 07/12/17 17:53
Container ID: 1174398005-F

Print Date: 07/21/2017 3:29:13PM

Results of **Dup**

Client Sample ID: **Dup**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174398005
Lab Project ID: 1174398

Collection Date: 07/12/17 15:15
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	20.0		2.00	0.620	mg/L	1		07/13/17 14:40

Batch Information

Analytical Batch: STS5548
Analytical Method: SM21 2540D
Analyst: AYC
Analytical Date/Time: 07/13/17 14:40
Container ID: 1174398005-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.100 U		0.100	0.0310	mg/L	1		07/13/17 14:14

Batch Information

Analytical Batch: WDA4019
Analytical Method: SM21 4500-NH3 G
Analyst: NEG
Analytical Date/Time: 07/13/17 14:14
Container ID: 1174398005-E

Prep Batch: WXX11909
Prep Method: METHOD
Prep Date/Time: 07/13/17 13:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.100 U		0.100	0.0300	mg/L	2		07/12/17 18:04
Nitrite-N	0.100 U		0.100	0.0300	mg/L	2		07/12/17 18:04

Batch Information

Analytical Batch: WFI2578
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 07/12/17 18:04
Container ID: 1174398005-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0694		0.0200	0.00620	mg/L	1		07/17/17 12:41

Print Date: 07/21/2017 3:29:13PM

Results of **Dup**

Client Sample ID: **Dup**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174398005
Lab Project ID: 1174398

Collection Date: 07/12/17 15:15
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4021
Analytical Method: SM21 4500P-B,E
Analyst: NEG
Analytical Date/Time: 07/17/17 12:41
Container ID: 1174398005-E

Prep Batch: WXX11914
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/14/17 15:45
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

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Method Blank

Blank ID: MB for HBN 1763434 [BOD/5798]
Blank Lab ID: 1397854

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1174398001, 1174398002, 1174398003, 1174398004, 1174398005

Results by **SM21 5210B**

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

Batch Information

Analytical Batch: BOD5798
Analytical Method: SM21 5210B
Instrument:
Analyst: AKD
Analytical Date/Time: 7/13/2017 11:36:00AM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1174398 [BOD5798]
Blank Spike Lab ID: 1397855
Date Analyzed: 07/13/2017 11:36

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1174398001, 1174398002, 1174398003, 1174398004, 1174398005

Results by **SM21 5210B**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)		CL
Biochemical Oxygen Demand	198	117	59	*	(84.6-115.4

Batch Information

Analytical Batch: **BOD5798**
Analytical Method: **SM21 5210B**
Instrument:
Analyst: **AKD**

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Method Blank

Blank ID: MB for HBN 1763358 [BTF/15766]
Blank Lab ID: 1397518

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1174398001, 1174398002, 1174398003, 1174398004, 1174398005

Results by **SM21 9223B**

Parameter	Results	LOQ/CL	DL	Units
E. Coli	Negative	1	1	100mL
Total Coliform	Negative	1	1	100mL

Batch Information

Analytical Batch: BTF15766
Analytical Method: SM21 9223B
Instrument:
Analyst: K.W
Analytical Date/Time: 7/12/2017 12:43:00PM

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Method Blank

Blank ID: MB for HBN 1763366 [BTF/15767]
Blank Lab ID: 1397671

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1174398001, 1174398002, 1174398003, 1174398004, 1174398005

Results by **SM21 9222D**

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

Batch Information

Analytical Batch: BTF15767
Analytical Method: SM21 9222D
Instrument:
Analyst: K.W
Analytical Date/Time: 7/12/2017 6:10:00PM

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Method Blank

Blank ID: MB for HBN 1763366 [BTF/15767]
Blank Lab ID: 1397672

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1174398001, 1174398002, 1174398003, 1174398004, 1174398005

Results by **SM21 9222D**

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

Batch Information

Analytical Batch: BTF15767
Analytical Method: SM21 9222D
Instrument:
Analyst: ACF
Analytical Date/Time: 7/12/2017 6:50:00PM

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Method Blank

Blank ID: MB for HBN 1763431 [STS/5548]
Blank Lab ID: 1397847

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1174398001, 1174398002, 1174398003, 1174398004, 1174398005

Results by **SM21 2540D**

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

Batch Information

Analytical Batch: STS5548
Analytical Method: SM21 2540D
Instrument:
Analyst: AYC
Analytical Date/Time: 7/13/2017 2:40:11PM

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Duplicate Sample Summary

Original Sample ID: 1174255001
Duplicate Sample ID: 1397850
Analysis Date: 07/13/2017 14:40
Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1174398001, 1174398002, 1174398003, 1174398004, 1174398005

Results by **SM21 2540D**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Suspended Solids	345	375	mg/L	8.30*	(< 5)

Batch Information

Analytical Batch: STS5548
Analytical Method: SM21 2540D
Instrument:
Analyst: AYC

Print Date: 07/21/2017 3:29:25PM

Duplicate Sample Summary

Original Sample ID: 1174422001
Duplicate Sample ID: 1397851
Analysis Date: 07/13/2017 14:40
Matrix: Water (Surface, Eff., Ground)

QC for Samples:

1174398001, 1174398002, 1174398003, 1174398004, 1174398005

Results by **SM21 2540D**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Suspended Solids	118	112	mg/L	5.20*	(< 5)

Batch Information

Analytical Batch: STS5548
Analytical Method: SM21 2540D
Instrument:
Analyst: AYC

Print Date: 07/21/2017 3:29:25PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1174398 [STS5548]
Blank Spike Lab ID: 1397848
Date Analyzed: 07/13/2017 14:40

Spike Duplicate ID: LCSD for HBN 1174398 [STS5548]
Spike Duplicate Lab ID: 1397849
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1174398001, 1174398002, 1174398003, 1174398004, 1174398005

Results by **SM21 2540D**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Suspended Solids	50	50.1	100	50	49.5	99	(75-125)	1.20	(< 5)

Batch Information

Analytical Batch: **STS5548**
Analytical Method: **SM21 2540D**
Instrument:
Analyst: **AYC**

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Method Blank

Blank ID: MB for HBN 1763427 (WFI/2578)
Blank Lab ID: 1397818

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

Results by **SM21 4500NO3-F**

Parameter	Results	LOQ/CL	DL	Units
Nitrate-N	0.0526J	0.100	0.0300	mg/L
Nitrite-N	0.0500U	0.100	0.0300	mg/L
Total Nitrate/Nitrite-N	0.0672J	0.100	0.0300	mg/L

Batch Information

Analytical Batch: WFI2578
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: AYC
Analytical Date/Time: 7/12/2017 4:31:15PM

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Method Blank

Blank ID: MB for HBN 1763427 (WFI/2578)
Blank Lab ID: 1397820

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1174398001, 1174398002, 1174398003, 1174398004, 1174398005

Results by **SM21 4500NO3-F**

Parameter	Results	LOQ/CL	DL	Units
Nitrate-N	0.0526J	0.100	0.0300	mg/L
Nitrite-N	0.0500U	0.100	0.0300	mg/L
Total Nitrate/Nitrite-N	0.0674J	0.100	0.0300	mg/L

Batch Information

Analytical Batch: WFI2578
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: AYC
Analytical Date/Time: 7/12/2017 5:13:16PM

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1174398 [WFI2578]
Blank Spike Lab ID: 1397802
Date Analyzed: 07/12/2017 16:29

Matrix: Water (Surface, Eff., Ground)

QC for Samples:

Results by **SM21 4500NO3-F**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Nitrate-N	2.5	2.51	101	(70-130)
Nitrite-N	2.5	2.50	100	(90-110)
Total Nitrate/Nitrite-N	5	5.01	100	(90-110)

Batch Information

Analytical Batch: **WFI2578**
Analytical Method: **SM21 4500NO3-F**
Instrument: **Astoria segmented flow**
Analyst: **AYC**

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1174398 [WFI2578]
Blank Spike Lab ID: 1397819
Date Analyzed: 07/12/2017 17:11

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1174398001, 1174398002, 1174398003, 1174398004, 1174398005

Results by **SM21 4500NO3-F**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Nitrate-N	2.5	2.45	98	(70-130)
Nitrite-N	2.5	2.47	99	(90-110)
Total Nitrate/Nitrite-N	5	4.93	99	(90-110)

Batch Information

Analytical Batch: **WFI2578**
Analytical Method: **SM21 4500NO3-F**
Instrument: **Astoria segmented flow**
Analyst: **AYC**

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Matrix Spike Summary

Original Sample ID: 1174337001
MS Sample ID: 1397798 MS
MSD Sample ID: 1397799 MSD

Analysis Date: 07/12/2017 16:36
Analysis Date: 07/12/2017 16:38
Analysis Date: 07/12/2017 16:40
Matrix: Drinking Water

QC for Samples: 1174398001, 1174398002, 1174398003, 1174398004, 1174398005

Results by **SM21 4500NO3-F**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Nitrate-N	1.08	2.50	3.61	101	2.50	3.55	99	70-130	1.60	(< 25)
Nitrite-N	0.100U	2.50	2.52	101	2.50	2.60	104	90-110	3.20	(< 25)

Batch Information

Analytical Batch: WFI2578
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: AYC
Analytical Date/Time: 7/12/2017 4:38:15PM

Print Date: 07/21/2017 3:29:29PM

Matrix Spike Summary

Original Sample ID: 1174398005
MS Sample ID: 1397800 MS
MSD Sample ID: 1397801 MSD

Analysis Date: 07/12/2017 18:04
Analysis Date: 07/12/2017 18:06
Analysis Date: 07/12/2017 18:07
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1174398001, 1174398002, 1174398003, 1174398004, 1174398005

Results by **SM21 4500NO3-F**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Nitrate-N	0.100U	2.50	2.46	98	2.50	2.48	99	70-130	0.71	(< 25)
Nitrite-N	0.100U	2.50	2.62	105	2.50	2.61	104	90-110	0.54	(< 25)

Batch Information

Analytical Batch: WFI2578
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: AYC
Analytical Date/Time: 7/12/2017 6:06:00PM

Print Date: 07/21/2017 3:29:29PM

Method Blank

Blank ID: MB for HBN 1763479 [WXX/11909]
Blank Lab ID: 1398004

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1174398001, 1174398002, 1174398003, 1174398004, 1174398005

Results by **SM21 4500-NH3 G**

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

Batch Information

Analytical Batch: WDA4019
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: NEG
Analytical Date/Time: 7/13/2017 1:31:07PM

Prep Batch: WXX11909
Prep Method: METHOD
Prep Date/Time: 7/13/2017 1:00:00PM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1174398 [WXX11909]
Blank Spike Lab ID: 1398005
Date Analyzed: 07/13/2017 13:32

Spike Duplicate ID: LCSD for HBN 1174398 [WXX11909]
Spike Duplicate Lab ID: 1398006
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1174398001, 1174398002, 1174398003, 1174398004, 1174398005

Results by **SM21 4500-NH3 G**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	1	0.960	96	1	0.994	99	(75-125)	3.50	(< 25)

Batch Information

Analytical Batch: **WDA4019**
Analytical Method: **SM21 4500-NH3 G**
Instrument: **Discrete Analyzer 2**
Analyst: **NEG**

Prep Batch: **WXX11909**
Prep Method: **METHOD**
Prep Date/Time: **07/13/2017 13:00**
Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

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Matrix Spike Summary

Original Sample ID: 1174049001
MS Sample ID: 1398007 MS
MSD Sample ID: 1398008 MSD

Analysis Date: 07/13/2017 13:36
Analysis Date: 07/13/2017 13:37
Analysis Date: 07/13/2017 13:39
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1174398001, 1174398002, 1174398003, 1174398004, 1174398005

Results by **SM21 4500-NH3 G**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	0.0681J	1.00	.885	82	1.00	0.902	83	75-125	1.90	(< 25)

Batch Information

Analytical Batch: WDA4019
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: NEG
Analytical Date/Time: 7/13/2017 1:37:49PM

Prep Batch: WXX11909
Prep Method: Ammonia by SM21 4500F prep (W)
Prep Date/Time: 7/13/2017 1:00:00PM
Prep Initial Wt./Vol.: 6.00mL
Prep Extract Vol: 6.00mL

Print Date: 07/21/2017 3:29:32PM

Method Blank

Blank ID: MB for HBN 1763881 [WXX/11914]
Blank Lab ID: 1398700

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1174398001, 1174398002, 1174398003, 1174398004, 1174398005

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

Parameter	Results	LOQ/CL	DL	Units
Total Phosphorus	0.0129J	0.0200	0.00620	mg/L

Batch Information

Analytical Batch: WDA4021
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: NEG
Analytical Date/Time: 7/17/2017 12:18:43PM

Prep Batch: WXX11914
Prep Method: SM21 4500P-B,E
Prep Date/Time: 7/14/2017 3:45:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1174398 [WXX11914]
Blank Spike Lab ID: 1398701
Date Analyzed: 07/17/2017 12:19

Spike Duplicate ID: LCSD for HBN 1174398 [WXX11914]
Spike Duplicate Lab ID: 1398702
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1174398001, 1174398002, 1174398003, 1174398004, 1174398005

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

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Phosphorus	0.2	0.199	99	0.2	0.196	98	(85-115)	1.10	(< 25)

Batch Information

Analytical Batch: **WDA4021**
Analytical Method: **SM21 4500P-B,E**
Instrument: **Discrete Analyzer 2**
Analyst: **NEG**

Prep Batch: **WXX11914**
Prep Method: **SM21 4500P-B,E**
Prep Date/Time: **07/14/2017 15:45**
Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

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Matrix Spike Summary

Original Sample ID: 1174028001
MS Sample ID: 1398703 MS
MSD Sample ID: 1398704 MSD

Analysis Date: 07/17/2017 12:21
Analysis Date: 07/17/2017 12:22
Analysis Date: 07/17/2017 12:23
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1174398001, 1174398002, 1174398003, 1174398004, 1174398005

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

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Phosphorus	0.0385	0.200	.232	97	0.200	0.257	109	75-125	10.20	(< 25)

Batch Information

Analytical Batch: WDA4021
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: NEG
Analytical Date/Time: 7/17/2017 12:22:38PM

Prep Batch: WXX11914
Prep Method: Total Phosphorus (W) Ext.
Prep Date/Time: 7/14/2017 3:45:00PM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 07/21/2017 3:29:37PM

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CHAIN OF CUSTODY RECORD

1174398

Locations Nationwide
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North Carolina

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

Section 1

CLIENT: Stantec Consulting

CONTACT: John Marshall | PHONE #: 907-266-1108

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

REPORTS TO: John Marshall | E-MAIL: John.Marshall@Stantec.com

INVOICE TO: Stantec Consulting | QUOTE #: 348183 | P.O. #:

Section 2

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	# CONTAINERS	Pres: Type: Comp (Grab) MI (Multi-incremental)	Biochemical Oxygen Demand (None)	Total Suspended Solids (None)	Fecal Coliform (Na2SO4)	Nitrate/Nitrite Combo (None)	Ammonia (H2SO4)	Total Phosphorus	Total Coliform (Na2SO4)				REMARKS/ LOC ID
(1) A-F	SW-01	07/12/17	1015	SW	6		X	X	X	X	X	X	X				
(2) A-F	SW-02	07/12/17	1100	SW	6		X	X	X	X	X	X	X				
(3) A-F	SW-14	07/12/17	1450	SW	6		X	X	X	X	X	X	X				
(4) A-F	SW-15	07/12/17	1515	SW	6		X	X	X	X	X	X	X				
(5) A-F	Dup	07/12/17	1515	SW	6		X	X	X	X	X	X	X				

Section 5

	Date	Time	
Relinquished By: (1)			Received By:
Relinquished By: (2)			Received By:
Relinquished By: (3)			Received By:
Relinquished By: (4)	7/12/17	17:12	Received For Laboratory By:

Section 4

DOD Project? Yes (No)

Cooler ID: _____

Data Deliverable Requirements:

Requested Turnaround Time and/or Special Instructions:

Temp Blank °C: 3.5 & D21 or Ambient [ ]

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

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

HD

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

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

e-Sample Receipt Form

SGS Workorder #: **1174398**

Review Criteria	Condition (Yes, No, N/A)	Exceptions Noted below
Chain of Custody / Temperature Requirements		yes Exemption permitted if sampler hand carries/delivers.
Were Custody Seals intact? Note # & location	n/a	ABSENT
COC accompanied samples?	yes	
yes **Exemption permitted if chilled & collected <8 hours ago, or for samples where chilling is not required		
Temperature blank compliant* (i.e., 0-6 °C after CF)?	yes	Cooler ID: 1 @ 3.5 °C Therm. ID: D21
	n/a	Cooler ID: @ °C Therm. ID:
	n/a	Cooler ID: @ °C Therm. ID:
	n/a	Cooler ID: @ °C Therm. ID:
	n/a	Cooler ID: @ °C Therm. ID:
If >6°C, were samples collected <8 hours ago?	n/a	
If <0°C, were sample containers ice free?	n/a	
If samples received without a temperature blank, the "cooler temperature" will be documented in lieu of the temperature blank & "**COOLER TEMP**" will be noted to the right. In cases where neither a temp blank nor cooler temp can be obtained, note "ambient" or "chilled".		
Note: Identify containers received at non-compliant temperature . Use form FS-0029 if more space is needed.		
Holding Time / Documentation / Sample Condition Requirements		Note: Refer to form F-083 "Sample Guide" for specific holding times.
Were samples received within holding time?	yes	
Do samples **match COC**** (i.e.,sample IDs,dates/times collected)?	yes	
**Note: If times differ <1hr, record details & login per COC.		
Were analyses requested unambiguous? (i.e., method is specified for analyses with >1 option for analysis)	yes	
	n/a	***Exemption permitted for metals (e.g,200.8/6020A).
Were proper containers (type/mass/volume/preservative***)used?	yes	
Volatile / LL-Hg Requirements		
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samples?	n/a	
Were all water VOA vials free of headspace (i.e., bubbles ≤ 6mm)?	n/a	
Were all soil VOAs field extracted with MeOH+BFB?	n/a	

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

Additional notes (if applicable):

Sample 1 listed 08:36 as the collection time on the jars, but it is 10:15 on the COC. It has been logged in per the COC per JAN.

Sample Containers and Preservatives

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition
1174398001-A	No Preservative Required	OK			
1174398001-B	No Preservative Required	OK			
1174398001-C	Na2S2O3 for Chlorine Redu	OK			
1174398001-D	No Preservative Required	OK			
1174398001-E	H2SO4 to pH < 2	OK			
1174398001-F	Na2S2O3 for Chlorine Redu	OK			
1174398002-A	No Preservative Required	OK			
1174398002-B	No Preservative Required	OK			
1174398002-C	Na2S2O3 for Chlorine Redu	OK			
1174398002-D	No Preservative Required	OK			
1174398002-E	H2SO4 to pH < 2	OK			
1174398002-F	Na2S2O3 for Chlorine Redu	OK			
1174398003-A	No Preservative Required	OK			
1174398003-B	No Preservative Required	OK			
1174398003-C	Na2S2O3 for Chlorine Redu	OK			
1174398003-D	No Preservative Required	OK			
1174398003-E	H2SO4 to pH < 2	OK			
1174398003-F	Na2S2O3 for Chlorine Redu	OK			
1174398004-A	No Preservative Required	OK			
1174398004-B	No Preservative Required	OK			
1174398004-C	Na2S2O3 for Chlorine Redu	OK			
1174398004-D	No Preservative Required	OK			
1174398004-E	H2SO4 to pH < 2	OK			
1174398004-F	Na2S2O3 for Chlorine Redu	OK			
1174398005-A	No Preservative Required	OK			
1174398005-B	No Preservative Required	OK			
1174398005-C	Na2S2O3 for Chlorine Redu	OK			
1174398005-D	No Preservative Required	OK			
1174398005-E	H2SO4 to pH < 2	OK			
1174398005-F	Na2S2O3 for Chlorine Redu	OK			

Container Condition Glossary

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

OK - The container was received at an acceptable pH for the analysis requested.
BU - The container was received with headspace greater than 6mm.
DM- The container was received damaged.
FR- The container was received frozen and not usable for Bacteria or BOD analyses.
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: **1174399**

Client Project: **Wasilla WWTP Surface**

Dear John Marshall,

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

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

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

Sincerely,
SGS North America Inc.

_____

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

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

Case Narrative

SGS Client: **Stantec Consulting Services Inc.**
SGS Project: **1174399**
Project Name/Site: **Wasilla WWTP Surface**
Project Contact: **John Marshall**

Refer to sample receipt form for information on sample condition.

SW-03 (1174399001) PS

5210B - BOD - LCS does not meet QC criteria (59.1%).

SW-04 (1174399002) PS

5210B - BOD - LCS does not meet QC criteria (59.1%).

SW-05 (1174399003) PS

5210B - BOD - LCS does not meet QC criteria (59.1%).

SW-09 (1174399004) PS

5210B - BOD - LCS does not meet QC criteria (59.1%).

1174255001DUP (1397850) DUP

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

LCSS for HBN 1763434 [BOD/5798 (1397855) LCSS

5210B - BOD - LCS does not meet QC criteria (59.1%).

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

Laboratory Qualifiers

Enclosed are the analytical results associated with the above work order. All results are intended to be used in their entirety and SGS is not responsible for use of less than the complete report. This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indenmification and jurisdiction issues defined therein.

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

SGS maintains a formal Quality Assurance/Quality Control (QA/QC) program. A copy of our Quality Assurance Plan (QAP), which outlines this program, is available at your request. The laboratory certification numbers are AK00971 (DW Chemistry & Microbiology) & UST-005 (CS) for ADEC and 2944.01 for DOD ELAP/ISO17025 (RCRA methods: 1020B, 1311, 3010A, 3050B, 3520C, 3550C, 5030B, 5035A, 6020A, 7470A, 7471B, 8015C, 8021B, 8082A, 8260C, 8270D, 8270D-SIM, 9040C, 9045D, 9056A, 9060A, AK101 and AK102/103). Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP and, when applicable, other regulatory authorities.

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

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

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

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Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
SW-03	1174399001	07/12/2017	07/12/2017	Water (Surface, Eff., Ground)
SW-04	1174399002	07/12/2017	07/12/2017	Water (Surface, Eff., Ground)
SW-05	1174399003	07/12/2017	07/12/2017	Water (Surface, Eff., Ground)
SW-09	1174399004	07/12/2017	07/12/2017	Water (Surface, Eff., Ground)

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

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Detectable Results Summary

Client Sample ID: **SW-03**
Lab Sample ID: 1174399001

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	3.10	mg/L
	E. Coli	Negative	100mL
	Fecal Coliform	3.0	col/100mL
	Total Coliform	Positive	100mL
Waters Department	Nitrate-N	0.0412J	mg/L
	Total Phosphorus	0.0265	mg/L
	Total Suspended Solids	68.3	mg/L

Client Sample ID: **SW-04**
Lab Sample ID: 1174399002

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	2.19	mg/L
	E. Coli	Positive	100mL
	Fecal Coliform	1.0	col/100mL
	Total Coliform	Positive	100mL
Waters Department	Nitrate-N	0.0404J	mg/L
	Total Phosphorus	0.0251	mg/L
	Total Suspended Solids	4.00	mg/L

Client Sample ID: **SW-05**
Lab Sample ID: 1174399003

	Parameter	Result	Units
Microbiology Laboratory	Biochemical Oxygen Demand	2.74	mg/L
	E. Coli	Positive	100mL
	Fecal Coliform	720	col/100mL
	Total Coliform	Positive	100mL
Waters Department	Nitrate-N	0.0506J	mg/L
	Total Phosphorus	0.0135J	mg/L
	Total Suspended Solids	7.00	mg/L

Client Sample ID: **SW-09**
Lab Sample ID: 1174399004

	Parameter	Result	Units
Microbiology Laboratory	E. Coli	Negative	100mL
	Fecal Coliform	3.0	col/100mL
	Total Coliform	Positive	100mL
Waters Department	Nitrate-N	0.0388J	mg/L
	Total Phosphorus	0.0180J	mg/L
	Total Suspended Solids	1.80	mg/L

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Results of **SW-03**

Client Sample ID: **SW-03**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174399001
Lab Project ID: 1174399

Collection Date: 07/12/17 11:40
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	3.10		2.00	2.00	mg/L	1		07/13/17 12:47

Batch Information

Analytical Batch: BOD5798
Analytical Method: SM21 5210B
Analyst: AKD
Analytical Date/Time: 07/13/17 12:47
Container ID: 1174399001-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	3.0		1.00	1.00	col/100mL	1		07/12/17 18:50

Batch Information

Analytical Batch: BTF15767
Analytical Method: SM21 9222D
Analyst: ACF
Analytical Date/Time: 07/12/17 18:50
Container ID: 1174399001-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	Negative		1	1	100mL	1		07/12/17 18:02
Total Coliform	Positive		1	1	100mL	1		07/12/17 18:02

Batch Information

Analytical Batch: BTF15766
Analytical Method: SM21 9223B
Analyst: ACF
Analytical Date/Time: 07/12/17 18:02
Container ID: 1174399001-F

Results of **SW-03**

Client Sample ID: **SW-03**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174399001
Lab Project ID: 1174399

Collection Date: 07/12/17 11:40
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	68.3		3.33	1.03	mg/L	1		07/13/17 14:40

Batch Information

Analytical Batch: STS5548
Analytical Method: SM21 2540D
Analyst: AYC
Analytical Date/Time: 07/13/17 14:40
Container ID: 1174399001-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.0500 U		0.100	0.0310	mg/L	1		07/20/17 13:28

Batch Information

Analytical Batch: WDA4024
Analytical Method: SM21 4500-NH3 G
Analyst: NEG
Analytical Date/Time: 07/20/17 13:28
Container ID: 1174399001-E

Prep Batch: WXX11917
Prep Method: METHOD
Prep Date/Time: 07/20/17 13:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.0412 J		0.100	0.0300	mg/L	2		07/12/17 18:14
Nitrite-N	0.0500 U		0.100	0.0300	mg/L	2		07/12/17 18:14

Batch Information

Analytical Batch: WFI2578
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 07/12/17 18:14
Container ID: 1174399001-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0265		0.0200	0.00620	mg/L	1		07/17/17 12:42

Print Date: 07/21/2017 3:31:25PM

J flagging is activated

Results of **SW-03**

Client Sample ID: **SW-03**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174399001
Lab Project ID: 1174399

Collection Date: 07/12/17 11:40
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4021
Analytical Method: SM21 4500P-B,E
Analyst: NEG
Analytical Date/Time: 07/17/17 12:42
Container ID: 1174399001-E

Prep Batch: WXX11914
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/14/17 15:45
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **SW-04**

Client Sample ID: **SW-04**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174399002
Lab Project ID: 1174399

Collection Date: 07/12/17 13:00
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.19		2.00	2.00	mg/L	1		07/13/17 12:47

Batch Information

Analytical Batch: BOD5798
Analytical Method: SM21 5210B
Analyst: AKD
Analytical Date/Time: 07/13/17 12:47
Container ID: 1174399002-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	1.0		1.00	1.00	col/100mL	1		07/12/17 18:50

Batch Information

Analytical Batch: BTF15767
Analytical Method: SM21 9222D
Analyst: ACF
Analytical Date/Time: 07/12/17 18:50
Container ID: 1174399002-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	Positive		1	1	100mL	1		07/12/17 18:02
Total Coliform	Positive		1	1	100mL	1		07/12/17 18:02

Batch Information

Analytical Batch: BTF15766
Analytical Method: SM21 9223B
Analyst: ACF
Analytical Date/Time: 07/12/17 18:02
Container ID: 1174399002-F

Results of **SW-04**

Client Sample ID: **SW-04**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174399002
Lab Project ID: 1174399

Collection Date: 07/12/17 13:00
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	4.00		2.00	0.620	mg/L	1		07/13/17 14:40

Batch Information

Analytical Batch: STS5548
Analytical Method: SM21 2540D
Analyst: AYC
Analytical Date/Time: 07/13/17 14:40
Container ID: 1174399002-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.0500 U		0.100	0.0310	mg/L	1		07/20/17 13:33

Batch Information

Analytical Batch: WDA4024
Analytical Method: SM21 4500-NH3 G
Analyst: NEG
Analytical Date/Time: 07/20/17 13:33
Container ID: 1174399002-E

Prep Batch: WXX11917
Prep Method: METHOD
Prep Date/Time: 07/20/17 13:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.0404 J		0.100	0.0300	mg/L	2		07/12/17 18:16
Nitrite-N	0.0500 U		0.100	0.0300	mg/L	2		07/12/17 18:16

Batch Information

Analytical Batch: WFI2578
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 07/12/17 18:16
Container ID: 1174399002-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0251		0.0200	0.00620	mg/L	1		07/17/17 12:43

Print Date: 07/21/2017 3:31:25PM

J flagging is activated

Results of **SW-04**

Client Sample ID: **SW-04**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174399002
Lab Project ID: 1174399

Collection Date: 07/12/17 13:00
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4021
Analytical Method: SM21 4500P-B,E
Analyst: NEG
Analytical Date/Time: 07/17/17 12:43
Container ID: 1174399002-E

Prep Batch: WXX11914
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/14/17 15:45
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **SW-05**

Client Sample ID: **SW-05**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174399003
Lab Project ID: 1174399

Collection Date: 07/12/17 13:50
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.74		2.00	2.00	mg/L	1		07/13/17 12:47

Batch Information

Analytical Batch: BOD5798
Analytical Method: SM21 5210B
Analyst: AKD
Analytical Date/Time: 07/13/17 12:47
Container ID: 1174399003-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	720		1.00	1.00	col/100mL	1		07/12/17 18:50

Batch Information

Analytical Batch: BTF15767
Analytical Method: SM21 9222D
Analyst: ACF
Analytical Date/Time: 07/12/17 18:50
Container ID: 1174399003-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	Positive		1	1	100mL	1		07/12/17 18:02
Total Coliform	Positive		1	1	100mL	1		07/12/17 18:02

Batch Information

Analytical Batch: BTF15766
Analytical Method: SM21 9223B
Analyst: ACF
Analytical Date/Time: 07/12/17 18:02
Container ID: 1174399003-F

Results of **SW-05**

Client Sample ID: **SW-05**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174399003
Lab Project ID: 1174399

Collection Date: 07/12/17 13:50
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	7.00		2.00	0.620	mg/L	1		07/13/17 14:40

Batch Information

Analytical Batch: STS5548
Analytical Method: SM21 2540D
Analyst: AYC
Analytical Date/Time: 07/13/17 14:40
Container ID: 1174399003-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.0500 U		0.100	0.0310	mg/L	1		07/20/17 13:35

Batch Information

Analytical Batch: WDA4024
Analytical Method: SM21 4500-NH3 G
Analyst: NEG
Analytical Date/Time: 07/20/17 13:35
Container ID: 1174399003-E

Prep Batch: WXX11917
Prep Method: METHOD
Prep Date/Time: 07/20/17 13:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.0506 J		0.100	0.0300	mg/L	2		07/12/17 18:18
Nitrite-N	0.0500 U		0.100	0.0300	mg/L	2		07/12/17 18:18

Batch Information

Analytical Batch: WFI2578
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 07/12/17 18:18
Container ID: 1174399003-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0135 J		0.0200	0.00620	mg/L	1		07/17/17 12:44

Print Date: 07/21/2017 3:31:25PM

J flagging is activated

Results of **SW-05**

Client Sample ID: **SW-05**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174399003
Lab Project ID: 1174399

Collection Date: 07/12/17 13:50
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4021
Analytical Method: SM21 4500P-B,E
Analyst: NEG
Analytical Date/Time: 07/17/17 12:44
Container ID: 1174399003-E

Prep Batch: WXX11914
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/14/17 15:45
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Results of **SW-09**

Client Sample ID: **SW-09**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174399004
Lab Project ID: 1174399

Collection Date: 07/12/17 13:45
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Microbiology Laboratory**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Biochemical Oxygen Demand	2.00 U		2.00	2.00	mg/L	1		07/13/17 12:47

Batch Information

Analytical Batch: BOD5798
Analytical Method: SM21 5210B
Analyst: AKD
Analytical Date/Time: 07/13/17 12:47
Container ID: 1174399004-A

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Fecal Coliform	3.0		1.00	1.00	col/100mL	1		07/12/17 18:50

Batch Information

Analytical Batch: BTF15767
Analytical Method: SM21 9222D
Analyst: ACF
Analytical Date/Time: 07/12/17 18:50
Container ID: 1174399004-C

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
E. Coli	Negative		1	1	100mL	1		07/12/17 18:02
Total Coliform	Positive		1	1	100mL	1		07/12/17 18:02

Batch Information

Analytical Batch: BTF15766
Analytical Method: SM21 9223B
Analyst: ACF
Analytical Date/Time: 07/12/17 18:02
Container ID: 1174399004-F

Results of **SW-09**

Client Sample ID: **SW-09**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174399004
Lab Project ID: 1174399

Collection Date: 07/12/17 13:45
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	1.80		1.00	0.310	mg/L	1		07/13/17 14:40

Batch Information

Analytical Batch: STS5548
Analytical Method: SM21 2540D
Analyst: AYC
Analytical Date/Time: 07/13/17 14:40
Container ID: 1174399004-B

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Ammonia-N	0.0500 U		0.100	0.0310	mg/L	1		07/20/17 13:36

Batch Information

Analytical Batch: WDA4024
Analytical Method: SM21 4500-NH3 G
Analyst: NEG
Analytical Date/Time: 07/20/17 13:36
Container ID: 1174399004-E

Prep Batch: WXX11917
Prep Method: METHOD
Prep Date/Time: 07/20/17 13:00
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Nitrate-N	0.0388 J		0.100	0.0300	mg/L	2		07/12/17 18:19
Nitrite-N	0.0500 U		0.100	0.0300	mg/L	2		07/12/17 18:19

Batch Information

Analytical Batch: WFI2578
Analytical Method: SM21 4500NO3-F
Analyst: AYC
Analytical Date/Time: 07/12/17 18:19
Container ID: 1174399004-D

Parameter	Result	Qual	LOQ/CL	DL	Units	DF	Allowable Limits	Date Analyzed
Total Phosphorus	0.0180 J		0.0200	0.00620	mg/L	1		07/17/17 12:44

Print Date: 07/21/2017 3:31:25PM

J flagging is activated

Results of **SW-09**

Client Sample ID: **SW-09**
Client Project ID: **Wasilla WWTP Surface**
Lab Sample ID: 1174399004
Lab Project ID: 1174399

Collection Date: 07/12/17 13:45
Received Date: 07/12/17 17:12
Matrix: Water (Surface, Eff., Ground)
Solids (%):
Location:

Results by **Waters Department**

Batch Information

Analytical Batch: WDA4021
Analytical Method: SM21 4500P-B,E
Analyst: NEG
Analytical Date/Time: 07/17/17 12:44
Container ID: 1174399004-E

Prep Batch: WXX11914
Prep Method: SM21 4500P-B,E
Prep Date/Time: 07/14/17 15:45
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Method Blank

Blank ID: MB for HBN 1763434 [BOD/5798]
Blank Lab ID: 1397854

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1174399001, 1174399002, 1174399003, 1174399004

Results by **SM21 5210B**

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

Batch Information

Analytical Batch: BOD5798
Analytical Method: SM21 5210B
Instrument:
Analyst: AKD
Analytical Date/Time: 7/13/2017 11:36:00AM

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1174399 [BOD5798]
Blank Spike Lab ID: 1397855
Date Analyzed: 07/13/2017 11:36

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1174399001, 1174399002, 1174399003, 1174399004

Results by **SM21 5210B**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)		CL
Biochemical Oxygen Demand	198	117	59	*	(84.6-115.4

Batch Information

Analytical Batch: **BOD5798**
Analytical Method: **SM21 5210B**
Instrument:
Analyst: **AKD**

Print Date: 07/21/2017 3:31:31PM

Method Blank

Blank ID: MB for HBN 1763358 [BTF/15766]
Blank Lab ID: 1397518

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1174399001, 1174399002, 1174399003, 1174399004

Results by **SM21 9223B**

Parameter	Results	LOQ/CL	DL	Units
E. Coli	Negative	1	1	100mL
Total Coliform	Negative	1	1	100mL

Batch Information

Analytical Batch: BTF15766
Analytical Method: SM21 9223B
Instrument:
Analyst: K.W
Analytical Date/Time: 7/12/2017 12:43:00PM

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Method Blank

Blank ID: MB for HBN 1763366 [BTF/15767]
Blank Lab ID: 1397672

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1174399001, 1174399002, 1174399003, 1174399004

Results by **SM21 9222D**

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

Batch Information

Analytical Batch: BTF15767
Analytical Method: SM21 9222D
Instrument:
Analyst: ACF
Analytical Date/Time: 7/12/2017 6:50:00PM

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Method Blank

Blank ID: MB for HBN 1763431 [STS/5548]
Blank Lab ID: 1397847

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1174399001, 1174399002, 1174399003, 1174399004

Results by **SM21 2540D**

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

Batch Information

Analytical Batch: STS5548
Analytical Method: SM21 2540D
Instrument:
Analyst: AYC
Analytical Date/Time: 7/13/2017 2:40:11PM

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Duplicate Sample Summary

Original Sample ID: 1174255001
Duplicate Sample ID: 1397850
QC for Samples:
1174399001, 1174399002, 1174399003, 1174399004

Analysis Date: 07/13/2017 14:40
Matrix: Water (Surface, Eff., Ground)

Results by **SM21 2540D**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Suspended Solids	345	375	mg/L	8.30*	(< 5)

Batch Information

Analytical Batch: STS5548
Analytical Method: SM21 2540D
Instrument:
Analyst: AYC

Print Date: 07/21/2017 3:31:38PM

Duplicate Sample Summary

Original Sample ID: 1174422001
Duplicate Sample ID: 1397851
QC for Samples:
1174399001, 1174399002, 1174399003, 1174399004

Analysis Date: 07/13/2017 14:40
Matrix: Water (Surface, Eff., Ground)

Results by **SM21 2540D**

NAME	Original	Duplicate	Units	RPD (%)	RPD CL
Total Suspended Solids	118	112	mg/L	5.20*	(< 5)

Batch Information

Analytical Batch: STS5548
Analytical Method: SM21 2540D
Instrument:
Analyst: AYC

Print Date: 07/21/2017 3:31:38PM

Blank Spike Summary

Blank Spike ID: LCS for HBN 1174399 [STS5548]
Blank Spike Lab ID: 1397848
Date Analyzed: 07/13/2017 14:40

Spike Duplicate ID: LCSD for HBN 1174399 [STS5548]
Spike Duplicate Lab ID: 1397849
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1174399001, 1174399002, 1174399003, 1174399004

Results by **SM21 2540D**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Suspended Solids	50	50.1	100	50	49.5	99	(75-125)	1.20	(< 5)

Batch Information

Analytical Batch: **STS5548**
Analytical Method: **SM21 2540D**
Instrument:
Analyst: **AYC**

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Method Blank

Blank ID: MB for HBN 1763427 (WFI/2578)
Blank Lab ID: 1397820

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1174399001, 1174399002, 1174399003, 1174399004

Results by **SM21 4500NO3-F**

Parameter	Results	LOQ/CL	DL	Units
Nitrate-N	0.0526J	0.100	0.0300	mg/L
Nitrite-N	0.0500U	0.100	0.0300	mg/L
Total Nitrate/Nitrite-N	0.0674J	0.100	0.0300	mg/L

Batch Information

Analytical Batch: WFI2578
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: AYC
Analytical Date/Time: 7/12/2017 5:13:16PM

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1174399 [WFI2578]
Blank Spike Lab ID: 1397819
Date Analyzed: 07/12/2017 17:11

Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1174399001, 1174399002, 1174399003, 1174399004

Results by **SM21 4500NO3-F**

Blank Spike (mg/L)

Parameter	Spike	Result	Rec (%)	CL
Nitrate-N	2.5	2.45	98	(70-130)
Nitrite-N	2.5	2.47	99	(90-110)
Total Nitrate/Nitrite-N	5	4.93	99	(90-110)

Batch Information

Analytical Batch: **WFI2578**
Analytical Method: **SM21 4500NO3-F**
Instrument: **Astoria segmented flow**
Analyst: **AYC**

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Matrix Spike Summary

Original Sample ID: 1174337001
MS Sample ID: 1397798 MS
MSD Sample ID: 1397799 MSD

Analysis Date: 07/12/2017 16:36
Analysis Date: 07/12/2017 16:38
Analysis Date: 07/12/2017 16:40
Matrix: Drinking Water

QC for Samples:

Results by **SM21 4500NO3-F**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Nitrate-N	1.08	2.50	3.61	101	2.50	3.55	99	70-130	1.60	(< 25)
Nitrite-N	0.100U	2.50	2.52	101	2.50	2.60	104	90-110	3.20	(< 25)

Batch Information

Analytical Batch: WFI2578
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: AYC
Analytical Date/Time: 7/12/2017 4:38:15PM

Print Date: 07/21/2017 3:31:43PM

Matrix Spike Summary

Original Sample ID: 1174398005
MS Sample ID: 1397800 MS
MSD Sample ID: 1397801 MSD

Analysis Date: 07/12/2017 18:04
Analysis Date: 07/12/2017 18:06
Analysis Date: 07/12/2017 18:07
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1174399001, 1174399002, 1174399003, 1174399004

Results by **SM21 4500NO3-F**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Nitrate-N	0.100U	2.50	2.46	98	2.50	2.48	99	70-130	0.71	(< 25)
Nitrite-N	0.100U	2.50	2.62	105	2.50	2.61	104	90-110	0.54	(< 25)

Batch Information

Analytical Batch: WFI2578
Analytical Method: SM21 4500NO3-F
Instrument: Astoria segmented flow
Analyst: AYC
Analytical Date/Time: 7/12/2017 6:06:00PM

Print Date: 07/21/2017 3:31:43PM

Method Blank

Blank ID: MB for HBN 1763881 [WXX/11914]
Blank Lab ID: 1398700

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1174399001, 1174399002, 1174399003, 1174399004

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

Parameter	Results	LOQ/CL	DL	Units
Total Phosphorus	0.0129J	0.0200	0.00620	mg/L

Batch Information

Analytical Batch: WDA4021
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: NEG
Analytical Date/Time: 7/17/2017 12:18:43PM

Prep Batch: WXX11914
Prep Method: SM21 4500P-B,E
Prep Date/Time: 7/14/2017 3:45:00PM
Prep Initial Wt./Vol.: 25 mL
Prep Extract Vol: 25 mL

Blank Spike Summary

Blank Spike ID: LCS for HBN 1174399 [WXX11914]
Blank Spike Lab ID: 1398701
Date Analyzed: 07/17/2017 12:19

Spike Duplicate ID: LCSD for HBN 1174399 [WXX11914]
Spike Duplicate Lab ID: 1398702
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1174399001, 1174399002, 1174399003, 1174399004

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

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Phosphorus	0.2	0.199	99	0.2	0.196	98	(85-115)	1.10	(< 25)

Batch Information

Analytical Batch: **WDA4021**
Analytical Method: **SM21 4500P-B,E**
Instrument: **Discrete Analyzer 2**
Analyst: **NEG**

Prep Batch: **WXX11914**
Prep Method: **SM21 4500P-B,E**
Prep Date/Time: **07/14/2017 15:45**
Spike Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL
Dupe Init Wt./Vol.: 0.2 mg/L Extract Vol: 25 mL

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Matrix Spike Summary

Original Sample ID: 1174028001
MS Sample ID: 1398703 MS
MSD Sample ID: 1398704 MSD

Analysis Date: 07/17/2017 12:21
Analysis Date: 07/17/2017 12:22
Analysis Date: 07/17/2017 12:23
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1174399001, 1174399002, 1174399003, 1174399004

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

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Total Phosphorus	0.0385	0.200	.232	97	0.200	0.257	109	75-125	10.20	(< 25)

Batch Information

Analytical Batch: WDA4021
Analytical Method: SM21 4500P-B,E
Instrument: Discrete Analyzer 2
Analyst: NEG
Analytical Date/Time: 7/17/2017 12:22:38PM

Prep Batch: WXX11914
Prep Method: Total Phosphorus (W) Ext.
Prep Date/Time: 7/14/2017 3:45:00PM
Prep Initial Wt./Vol.: 25.00mL
Prep Extract Vol: 25.00mL

Print Date: 07/21/2017 3:31:47PM

Method Blank

Blank ID: MB for HBN 1764036 [WXX/11917]
Blank Lab ID: 1399374

Matrix: Water (Surface, Eff., Ground)

QC for Samples:
1174399001, 1174399002, 1174399003, 1174399004

Results by **SM21 4500-NH3 G**

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

Batch Information

Analytical Batch: WDA4024
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: NEG
Analytical Date/Time: 7/20/2017 1:23:23PM

Prep Batch: WXX11917
Prep Method: METHOD
Prep Date/Time: 7/20/2017 1:00:00PM
Prep Initial Wt./Vol.: 6 mL
Prep Extract Vol: 6 mL

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Blank Spike Summary

Blank Spike ID: LCS for HBN 1174399 [WXX11917]
Blank Spike Lab ID: 1399375
Date Analyzed: 07/20/2017 13:25

Spike Duplicate ID: LCSD for HBN 1174399 [WXX11917]
Spike Duplicate Lab ID: 1399376
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1174399001, 1174399002, 1174399003, 1174399004

Results by **SM21 4500-NH3 G**

	Blank Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	1	1.00	100	1	1.02	102	(75-125)	1.40	(< 25)

Batch Information

Analytical Batch: **WDA4024**
Analytical Method: **SM21 4500-NH3 G**
Instrument: **Discrete Analyzer 2**
Analyst: **NEG**

Prep Batch: **WXX11917**
Prep Method: **METHOD**
Prep Date/Time: **07/20/2017 13:00**
Spike Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL
Dupe Init Wt./Vol.: 1 mg/L Extract Vol: 6 mL

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Matrix Spike Summary

Original Sample ID: 1174399001
MS Sample ID: 1399377 MS
MSD Sample ID: 1399378 MSD

Analysis Date: 07/20/2017 13:28
Analysis Date: 07/20/2017 13:30
Analysis Date: 07/20/2017 13:31
Matrix: Water (Surface, Eff., Ground)

QC for Samples: 1174399001, 1174399002, 1174399003, 1174399004

Results by **SM21 4500-NH3 G**

		Matrix Spike (mg/L)			Spike Duplicate (mg/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
Ammonia-N	0.0500U	1.00	.906	91	1.00	0.832	83	75-125	8.50	(< 25)

Batch Information

Analytical Batch: WDA4024
Analytical Method: SM21 4500-NH3 G
Instrument: Discrete Analyzer 2
Analyst: NEG
Analytical Date/Time: 7/20/2017 1:30:06PM

Prep Batch: WXX11917
Prep Method: Ammonia by SM21 4500F prep (W)
Prep Date/Time: 7/20/2017 1:00:00PM
Prep Initial Wt./Vol.: 6.00mL
Prep Extract Vol: 6.00mL

Print Date: 07/21/2017 3:31:51PM

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CHAIN OF CUSTODY RECORD

1174399

Locations Nationwide
Alaska Maryland
New Jersey New York
North Carolina

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

Page ____ of ____

Section 1

CLIENT: Stantec Consulting

CONTACT: John Marshall — PHONE #: 907-266-1108

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

REPORTS TO: John Marshall — E-MAIL: John.marshall@Stantec.com

INVOICE TO: Stantec Consulting — QUOTE #: 348183 — P.O. #:

Section 2

RESERVED for lab use	SAMPLE IDENTIFICATION	DATE mm/dd/yy	TIME HH:MM	MATRIX/ MATRIX CODE	# CONTAINERS	Pres: Type: Comp / Grab / MI (Multi-incremental)	Biochemical Oxygen Demand (None)	Total Suspended Solids (None)	Fecal Coliform (Na2SO4)	Nitrate/Nitrite Combo (None)	Ammonia (H2SO4)	Total Phosphorus	Total Coliform (Na2SO4)				REMARKS/ LOC ID
(1) A-F	SW-03	07/12/17	1140	SW	6	Grab	X	X	X	X	X	X	X				
(2) A-F	SW-04	07/12/17	1300	SW	6	Grab	X	X	X	X	X	X	X				
(3) A-F	SW-05	07/12/17	1350	SW	6	Grab	X	X	X	X	X	X	X				
(4) A-F	SW-09	07/12/17	1345	SW	6	Grab	X	X	X	X	X	X	X				

Section 5

	Date	Time	
Relinquished By: (1)			Received By:
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date 7/12/17	Time 17:12	Received For Laboratory By:

Section 4

DOD Project? Yes (No)

Cooler ID: _____

Data Deliverable Requirements:

Requested Turnaround Time and/or Special Instructions:

Temp Blank °C: 4.1 #02 or Ambient [ ]

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

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

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[ ] 5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557

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e-Sample Receipt Form

SGS Workorder #: **1174399**

1 1 7 4 3 9 9

Review Criteria	Condition (Yes, No, N/A)	Exceptions Noted below
Chain of Custody / Temperature Requirements		yes Exemption permitted if sampler hand carries/delivers.
Were Custody Seals intact? Note # & location	n/a	ABSENT
COC accompanied samples?	yes	
yes **Exemption permitted if chilled & collected <8 hours ago, or for samples where chilling is not required		
Temperature blank compliant* (i.e., 0-6 °C after CF)?	yes	Cooler ID: 1 @ 4.1 °C Therm. ID: D21
	n/a	Cooler ID: @ °C Therm. ID:
	n/a	Cooler ID: @ °C Therm. ID:
	n/a	Cooler ID: @ °C Therm. ID:
	n/a	Cooler ID: @ °C Therm. ID:
If >6°C, were samples collected <8 hours ago?	n/a	
If <0°C, were sample containers ice free?	n/a	
If samples received without a temperature blank, the "cooler temperature" will be documented in lieu of the temperature blank & "**COOLER TEMP**" will be noted to the right. In cases where neither a temp blank nor cooler temp can be obtained, note "ambient" or "chilled".		
Note: Identify containers received at non-compliant temperature . Use form FS-0029 if more space is needed.		
Holding Time / Documentation / Sample Condition Requirements		Note: Refer to form F-083 "Sample Guide" for specific holding times.
Were samples received within holding time?	yes	
Do samples **match COC**** (i.e.,sample IDs,dates/times collected)?	yes	
**Note: If times differ <1hr, record details & login per COC.		
Were analyses requested unambiguous? (i.e., method is specified for analyses with >1 option for analysis)	yes	
	n/a	***Exemption permitted for metals (e.g,200.8/6020A).
Were proper containers (type/mass/volume/preservative***)used?	yes	
Volatile / LL-Hg Requirements		
Were Trip Blanks (i.e., VOAs, LL-Hg) in cooler with samples?	n/a	
Were all water VOA vials free of headspace (i.e., bubbles ≤ 6mm)?	n/a	
Were all soil VOAs field extracted with MeOH+BFB?	n/a	

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

Additional notes (if applicable):

Sample Containers and Preservatives

Container Id	Preservative	Container Condition	Container Id	Preservative	Container Condition
1174399001-A	No Preservative Required	OK			
1174399001-B	No Preservative Required	OK			
1174399001-C	Na2S2O3 for Chlorine Redu	OK			
1174399001-D	No Preservative Required	OK			
1174399001-E	H2SO4 to pH < 2	OK			
1174399001-F	Na2S2O3 for Chlorine Redu	OK			
1174399002-A	No Preservative Required	OK			
1174399002-B	No Preservative Required	OK			
1174399002-C	Na2S2O3 for Chlorine Redu	OK			
1174399002-D	No Preservative Required	OK			
1174399002-E	H2SO4 to pH < 2	OK			
1174399002-F	Na2S2O3 for Chlorine Redu	OK			
1174399003-A	No Preservative Required	OK			
1174399003-B	No Preservative Required	OK			
1174399003-C	Na2S2O3 for Chlorine Redu	OK			
1174399003-D	No Preservative Required	OK			
1174399003-E	H2SO4 to pH < 2	OK			
1174399003-F	Na2S2O3 for Chlorine Redu	OK			
1174399004-A	No Preservative Required	OK			
1174399004-B	No Preservative Required	OK			
1174399004-C	Na2S2O3 for Chlorine Redu	OK			
1174399004-D	No Preservative Required	OK			
1174399004-E	H2SO4 to pH < 2	OK			
1174399004-F	Na2S2O3 for Chlorine Redu	OK			

Container Condition Glossary

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

OK - The container was received at an acceptable pH for the analysis requested.
BU - The container was received with headspace greater than 6mm.
DM- The container was received damaged.
FR- The container was received frozen and not usable for Bacteria or BOD analyses.
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.