281 N Main St., STE # 101
Wasilla AK, 99654
907-373-6130

Alaska Laboratory# AK01000

Client	ADEC Nonpoint Source Pollution Program
Contact	Sarah Apsens, Laura Eldred
Project Name	SOA Bristol Bay Pathogens Sampling 6 2022
AWL #	AWL-22-02225
PWS #	None

Please direct any questions regarding the final report to Mary@AKWaterLabs.com or Matt@AKWaterLabs.com, or call 907-373-6130.

The results presented in this report meet the requirement of the laboratory's certifications and internal QC processes. Any exceptions will be noted in the case narratives attached. Subcontract Data has been entered into the AWL Final Report, however the full subcontract report is available upon request.

The attached should contain analytical results for the analyses submitted on the client chain of custody. The information includes no opinions of the analysts or labs, data is represented after meeting certified testing requirements, and quality control measures.

Reproduction of the report in full requires the written approval of the laboratory.

Mary Curry Digitally signed by Mary Curry Date: 2022.07.14 17:53:47 -08'00'

Signature of Laboratory Management Date

Alaska Water Laboratories

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Alaska Laboratory# AK01000

Client Project Name	SOA Bristol Bay Pathogens Sampling 6 2022	AWL #	AWL-22-02225
Receipt Date and Time	7/12/2022 17:53	Due Date	7/14/2022
Cooler/Sample Temp (C)	2.09	Sampler Initials	BM

Sample Receipt Comments Sample received by MCC on 7/12/2022 at 2.09C (RT#1), on frozen ice.

Samples Received

Microbiological

Sample Location	AWL ID	Collection Date/ Time	Analysis Date/Time	Analysis	Notes
Scandinavian-071222-001	AWL-22-02225-001	7/12/2022 12:25	7/12/2022 18:52	Fecal Coliform	AWL-00526, 520
Scandinavian-071222-002	AWL-22-02225-002	7/12/2022 12:25	7/12/2022 18:47	Entero	AWL-00518, 522
Scandinavian-071222-004 DUP	AWL-22-02225-005	7/12/2022 12:25	7/12/2022 18:52	Fecal Coliform	AWL-00xxx
Scandinavian-071222-004 DUP	AWL-22-02225-004	7/12/2022 12:25	7/12/2022 18:47	Entero	AWL-00525
Scandinavian-071222-006-Field Blank	AWL-22-02225-006	7/12/2022 12:25	7/12/2022 18:52	Fecal Coliform	FIELD BLANK - Lab Buffer Water - AWL-00521
Scandinavian-071222-006-Field Blank	AWL-22-02225-007	7/12/2022 12:25	7/12/2022 18:47	Entero	FIELD BLANK - Lab Sterile Water - AWL-00524

Analytical Methods

Analyte	Method	Comments
Fecal Coliform	SM9222D MF	Both 1 and 10mL plates showed Heavy Sediment Masking. Colony counts may be biased low due to masking. RPD recovered for the sample and dup at 66.6%. The RPD exceeded the control limits of +/- 60% of the study. It should be noted the number of colonies only varied on the 10mL plates, which did show significant sendiment masking which may have biased samples low.
Enterococci	ASTM D6503	RPD recovery of 43.14% between the sample and duplicate. The value lies within the control limits set for the study.

Log In Initials: MCC 7-13-22
DQO Initials: JKR 7-13-22

Cert Required AK DW
CMDP #

Comments: MST logged under AWL-22-02228 to be reported after subcontracting.
Fecal Coliform and Enterococci Field Blanks were reported with Sampling 6, and were both non-detect for both Fecal Coliform and Enterococci bacterial analysis.

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Definitions:	
DUP	Sample Duplicate
LCS/LCSD	Laboratory Control Sample/Laboratory Control Sample Duplicate
MRL	Method Reporting Limit
MB	Method Blank
MCL	Maximum Contaminant Level
MDL	Method Detection Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
N/A	Not Applicable
TNTC	Count is Too Numerous To Count
<MDL	Result recovery is below the detectable laboratory limit, listed as the MDL

Data Qualifiers:	
B	The result of both the method blank and the target sample are above the MDL.
D	Sample analysis accomplished through dilution.
J	The reported result is an estimated value above the LOD but below the LOQ, or above the MDL but below the PQL.
U	Result is below the MDL, PQL, LOD, or LOQ
*	LCS/LCSD or Sample DUP fails all Duplicate criteria.
H	Holding time exceeded
E	Exceeds MCL
Q	One or more quality control criteria failed.

General Comments:	
1.0)	Basis: “As Received” = analyzed as received from client; “Dry” = dried prior to being analyzed; “Dry Weight Corrected” = analyzed as received; result corrected for percent moisture.

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Contact	Sarah Apsens, Laura Eldred		
Project	SOA Bristol Bay Pathogens Sampling 6 2022	**Collection**	
DW Y/N	N	Date / time	7/12/2022 12:25
PWS#	None		
		AWL Batch ID:	071222-02-FC
AWL #	AWL-22-02225		
Sample Location	Scandinavian-071222-001		
AWL ID/ Fraction	AWL-22-02225-001	Matrix AQ	

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Analyst	Date/Time	Notes
Fecal Coliform	59.41	CFU/100mL	9.9			9.9	SM9222D MF	MCC	7/12/2022 18:52	

Analyst Batching initials/date MCC 7-14-22

Analyst Reviewer initials/date MJG 7-14-22

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Client	ADEC Nonpoint Source Pollution Program		
Contact	Sarah Apsens, Laura Eldred		
Project	SOA Bristol Bay Pathogens Sampling 6 2022	**Collection**	
DW Y/N	N	Date / time	7/12/2022 12:25
PWS#	None		
		AWL Batch ID:	071222-01 ENT
AWL #	AWL-22-02225		
Sample Location	Scandinavian-071222-002		
AWL ID/ Fraction	AWL-22-02225-002	Matrix AQ	

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Analyst	Date/Time	Notes
Enterococci	2	MPN/100mL	1			1	ASTMD-6503-99	MJG	7/12/2022 18:47	

Analyst Batching initials/date MJG 7-14-22

Analyst Reviewer initials/date MCC 7-14-22

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Client	ADEC Nonpoint Source Pollution Program		
Contact	Sarah Apsens, Laura Eldred		
Project	SOA Bristol Bay Pathogens Sampling 6 2022	**Collection**	
DW Y/N	N	Date / time	7/12/2022 12:25
PWS#	None		
		AWL Batch ID:	071222-02-FC
AWL #	AWL-22-02225		
Sample Location	Scandinavian-071222-004 DUP		
AWL ID/ Fraction	AWL-22-02225-005	Matrix	AQ

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Analyst	Date/Time	Notes
Fecal Coliform	118.81	CFU/100mL	9.9			9.9	SM9222D MF	MCC	7/12/2022 18:52	

Analyst Batching initials/date	MCC 7-14-22
Analyst Reviewer initials/date	MJG 7-14-22

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Client	ADEC Nonpoint Source Pollution Program		
Contact	Sarah Apsens, Laura Eldred		
Project	SOA Bristol Bay Pathogens Sampling 6 2022	**Collection**	
DW Y/N	N	Date / time	7/12/2022 12:25
PWS#	None		
		AWL Batch ID:	071222-01 ENT
AWL #	AWL-22-02225		
Sample Location	Scandinavian-071222-004 DUP		
AWL ID/ Fraction	AWL-22-02225-004	Matrix AQ	

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Analyst	Date/Time	Notes
Enterococci	3.1	MPN/100mL	1			1	ASTMD-6503-99	MJG	7/12/2022 18:47	

Analyst Batching initials/date	MJG 7-14-22
Analyst Reviewer initials/date	MCC 7-14-22

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Client	ADEC Nonpoint Source Pollution Program		
Contact	Sarah Apsens, Laura Eldred		
Project	SOA Bristol Bay Pathogens Sampling 6 2022	**Collection**	
DW Y/N	N	Date / time	7/12/2022 12:25
PWS#	None		
		AWL Batch ID:	071222-02-FC
AWL #	AWL-22-02225		
Sample Location	Scandinavian-071222-006-Field Blank		
AWL ID/ Fraction	AWL-22-02225-006	Matrix AQ	

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Analyst	Date/Time	Notes
Fecal Coliform	<1	CFU/100mL	1		U	1	SM9222D MF	MCC	7/12/2022 18:52	

Analyst Batching initials/date	MCC 7-14-22
Analyst Reviewer initials/date	MJG 7-14-22

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Client	ADEC Nonpoint Source Pollution Program		
Contact	Sarah Apsens, Laura Eldred		
Project	SOA Bristol Bay Pathogens Sampling 6 2022	**Collection**	
DW Y/N	N	Date / time	7/12/2022 12:25
PWS#	None		
		AWL Batch ID:	071222-01 ENT
AWL #	AWL-22-02225		
Sample Location	Scandinavian-071222-006-Field Blank		
AWL ID/ Fraction	AWL-22-02225-007	Matrix AQ	

Analyte	Result	Units	MDL	MCL	Flags	DF	Method	Analyst	Date/Time	Notes
Enterococci	<1	MPN/100mL	1			1	ASTMD-6503-99	MJG	7/12/2022 18:47	

Analyst Batching initials/date MJG 7-14-22

Analyst Reviewer initials/date MCC 7-14-22

AWL Chain of Custody

Custody form MUST be signed
Please provide as much information as possible

Alaska Water Laboratories

Alaska Water Laboratories

AWL-22- 02225

Client/Company Name & Address:
ADEC - Nonpoint Source Pollution Porgram

Public Water System (PWS) ID:

Project Name/ID : SOA Bristol Bay Pathogens - 2022
Scandinavian 7/12/2022 Sampling 6

AWL Staff
Quote Number AWL #
Account #: Check Credit

Turnaround Time (TAT) for Results
___ Standard X Expedited (prior authorization required)
*Specify Requested Due Date if not standard

Contact Person: Sarah Apsens, Laura Eldred
Phone No:
Fax No:
E-mail:

Requested Date for Results: Email notification within 36 hours
Results to STATE: Yes No
Routine Non-Routine
Specify if REPEAT sample

Invoice Contact Name & Address & Phone:

PO/Contract No.:

Special Instructions/Requirements:
x VOL container for FC and Entero taken - only used if sample container is broken

Requested Analysis/Method

Kit Preparation/Shipping Charge:

	Client Sample Identification (Name, Designation, Location, etc.)	Date Sampled	Time Sampled	Matrix (DW, WW, SO)	No. of Containers	Cl Residual	Fecal Coliform SM 9222D Preservative Lot# 624,520	Enterococci ASTM Preservative Lot# 518,522	MST - Filter and Freeze Preservative Lot# 0517	Preservative Lot#	Preservative Lot#	Preservative Lot#	State Pt. Sampling ID	Facility ID	Trigger/ Repeat/ Special
1	Scandinavian-071222-001	7/12/2022	1225		2		x								
2	Scandinavian-071222-002	7/12/2022	1225		2			x							
3	Scandinavian-071222-003	7/12/2022	1225		2		-005		x						
4	Scandinavian-071222-004 DUP	7/12/2022	1225		2		x /	-004 x 525							
5	Scandinavian-071222-006-Field Blanks	7/12/2022	1225		2	521	x / 006	/ 017 x ~~525~~ 524							
6															
7															
8															
9															
10															

Relinquished by:	Date	Time	Received by:	Date	Time
Ben Matlock	7-12-22	1753	MCC	7-12-22	17:53
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time

Name of Sampler: (printed) Ben Matlock

Section To Be Completed by AWL

Custody Seal (circle): Intact Broken Absent

Temperature on arrival: 2.09 °C

Thermo ID: RT-4

Recv Notes:

Temp TB Cooler

Ice Frozen Wet

Delivery Method (Circle) Courier USPS/Mail Hand

Version 0.1 12/21

2225

Alaska Water Laboratories

Bristol Bay Pathogen Testing Program
Sanitary Survey

SITE

Name of Beach	Scandinavian		
Beach Code	Scand	**Date of sampling**	7-12-22
Latitude N	59°02.225	**Longitude**	158°28.502

SAMPLES

Sample ID (FC)	Scand 071222-001	Collected Date/Time	7-12-22 / ~~1255~~	1225
Sample ID (Entero)	Scand 071222-002	Collected Date/Time	7-12-22 / ~~1255~~	1225
Sample ID (MST)	Scand 071222-003	Collected Date/Time	7-12-22 / ~~1255~~	1225
Replicate ID	Scand-071222-004 Dup	Collected Date/Time	7-12-22 / ~~1255~~	1225
Field Blank ID	Scand 071222-006	Collected Date/Time	7-12-22 / ~~1255~~	1225

BM

CONDITIONS

Weather Conditions		Water Conditions
Sunny and Clear	**Air Temp** 14.7 C	Clear
Cloudy/Overcast	**Wind Direction** NE	Cloudy/Murky
Rain	**Wind Speed (MPH)** 7	Oily Film
Fog	**Precipitation in last 24 hrs.** 0 in	Other: Mostly murky water.
	Notes: Cloudy w/ light breeze	

Potential Pollution Sources

Activity on Beach	
Water Fowl Seaguls + Tern	Adults: Children: Dogs: Other: Type Seaguls Estimated Number 150-200 Other Sources: Arctic Tern – only saw 4 Oil-like film flowing toward water from Rocks. Several dead fish on beach.

Beach and Tidal Conditions

Beach Condition: On Shore Debris? Dead fish, Trash In Water Debris? Set nets + Buoys, Boats
On Shore Vegetation (Est %) 40 % In Water Vegetation (%) 20%
Odors: Y / N Stormwater Pipes: Y / N Fish Processing: Y / N

Tidal Conditions: Low / High Flooding / Ebbing
Tide Height: _____ ft/m
Time of observation: 1225 am/pm

Probe and Onsite Values

Water Temperature: 16.1 C/F Air Temperature: 14.7 C/F
pH: 7.7
Turbidity (Visible): 5" visability into water

OTHER COMMENTS OR OBSERVATIONS OF SITE:
Several dead fish on shore. Oil substance coming from rocks, some trash on beach. Many birds, only saw 4 Arctic Terns though. 7 Boats seen in water from sample location. Higher Tide, but still had to walk 100' into water to get to 3' deep.

Signature of Surveyor: Ben Mac **Date/Time** 7-12-22 | 1400