# ATTACHMENT H RESULTS OF LABORATORY ANALYSIS



Mr. Ken Nichols Nichols Engineering PO Box 32601 Juneau, AK 99803

November 22, 2016

### JNU International Airport Stormwater Sampling

Date of Collection: November 10, 2016 Sampling Location: Juneau, Alaska

### Summary

Six samples from the Juneau International Airport were received at Admiralty Environmental, Juneau, AK on November 10, 2016.

Samples were analyzed for Biochemical Oxygen Demand, pH, and Chemical Oxygen Demand. Samples were forwarded to Microbac Laboratories, Merrillville, IN for analysis of Ammonia. All laboratory acceptance criteria were met for all samples.

A complete report of the final lab results is enclosed. The official laboratory report follows this letter, and includes the analytical results, case narrative, chain of custody form, and cooler receipt form.

Kind Regards,

David Wetzel

Admiralty Environmental



641 W. Willoughby Ave., Suite 301 Juneau, AK 99801 (907) 463 - 4415 Fax (480) 247 - 4476

www.admiraltyenvironmental.com

## **Juneau International Airport**

Stormwater Sampling

November 10, 2016

Juneau, AK

## **Analytical Report**

Admiralty Environmental EPA ID AK 00976

AE 16431

Sample Location	Site 3	Site 16	Site 6	Site 7	Site 8	Site 10
Date & Time Sampled	11/10/2016; 12:50	11/10/2016; 13:00	11/10/2016; 13:10	11/10/2016; 13:18	11/10/2016; 13:20	11/10/2016; 13:25
BOD (mg/L)	3.2	< 4.0	2.7	< 2.0	< 2.0	< 4.0
COD (mg/L)	30	150	18	17	19	19
pH	7.04	7.58	7.18	6.93	6.92	6.93

### **Quality Control:**

Analysis	МВ	LCS	LCS Duplicate	RPD	Date/Time Commenced	Holding time met
BOD	< 2	103.5%	92.2%	11.5%	11/11/2016; 08:35	yes
COD	< 4	103.6%	102.8%	0.8%	11/11/2016; 11:44	yes
pН					11/10/2016; 14:40	yes

#### Analysis Description:

Allaryold Doc	oription.			
Analysis	Method	MDL	PQL	Unit
BOD	EPA 405.1	0.5	2.0	mg/L
COD	SM 5220D	4.0	15.0	mg/L
Hq	EPA 150.1	0.10	0.1	pH units

### Key:

BOD	Biochemical Oxygen Demand
COD	Chemical Oxygen Demand
LCS	Laboratory Control Standard
MB	Method Blank
MDL	Method Detection Limit
mg/L	Milligrams Per Liter
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference

### Case Narrative:

All sample analysis QA/QC parameters were met for this event.

David Wetzel
President, Admiralty Environmental
dwetzel@admiraltyenv.com



Work Order No.: 16K1236

November 22, 2016

Admiralty Environmental, LLC 641 W. Willoughby Ave, Suite 301 Juneau, AK 99801-

Re: Juneau International Airport/AE 16431

Dear David Wetzel:

Microbac Laboratories, Inc. - Chicagoland Division received 6 sample(s) on 11/17/2016 9:30:00AM for the analyses presented in the following report as Work Order 16K1236.

The enclosed results were obtained from and are applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted.

All data included in this report have been reviewed and meet the applicable project specific and certification specific requirements, unless otherwise noted. A qualifications page is included in this report and lists the programs under which Microbac maintains certification.

This report has been paginated in its entirety and shall not be reproduced except in full, without the written approval of Microbac Laboratories.

We appreciate the opportunity to service your analytical needs. If you have any questions, please contact your project manager. For any feedback, please contact Robert Crookston, Managing Director, at robert.crookston@microbac.com.

Sincerely,

Microbac Laboratories, Inc.

Carry Hadgala

Carey Gadzala Project Manager



### **WORK ORDER SAMPLE SUMMARY**

Admiralty Environmental, LLC

**Project:** Juneau International Airport/AE 16431

Lab Order: 16K1236

Client:

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
16K1236-01	3	AE 16431	11/10/2016 12:50	11/17/2016 9:30:00AM
16K1236-02	16	AE 16431	11/10/2016 13:00	11/17/2016 9:30:00AM
16K1236-03	6	AE 16431	11/10/2016 13:10	11/17/2016 9:30:00AM
16K1236-04	7	AE 16431	11/10/2016 13:18	11/17/2016 9:30:00AM
16K1236-05	8	AE 16431	11/10/2016 13:20	11/17/2016 9:30:00AM
16K1236-06	10	AE 16431	11/10/2016 13:25	11/17/2016 9:30:00AM

Tuesday, November 22, 2016

Date:



Client: Admiralty Environmental, LLC

Client Project: Juneau International Airport/AE 16431

 Client Sample ID:
 3
 Work Order/ID:
 16K1236-01

 Sample Description:
 AE 16431
 Sampled:
 11/10/2016
 12:50

 Matrix:
 Aqueous
 Received:
 11/17/2016
 9:30

Units Certs AT Result RL DF **Analyses** Qual Analyzed Analyst: GRIEFF Method: EPA 350.1 Rev 2.0 Nitrogen, Ammonia as N Prep Method: Aqueous Ammonia Distillation Prep Date/Time: 11/21/2016 12:00 Nitrogen, Ammonia (As N) di A 2.3 0.10 mg/L 11/21/2016 13:37



Client: Admiralty Environmental, LLC

Client Project: Juneau International Airport/AE 16431

 Client Sample ID:
 16
 Work Order/ID:
 16K1236-02

 Sample Description:
 AE 16431
 Sampled:
 11/10/2016
 13:00

 Matrix:
 Aqueous
 Received:
 11/17/2016
 9:30

Analyses	Certs	ΑT	Result	RL	Qual	Units	DF	Analyzed
			Method: EPA 350.1	Rev 2.0			Aı	nalyst: <b>GRIEFF</b>
Method: EPA 350.1 Rev 2.0 Analyst: GRIEFF  Nitrogen, Ammonia as N Prep Method: Aqueous Ammonia Distillation Prep Date/Time: 11/22/2016 08:15								
Nitrogen, Ammonia (As N)	di	Α	0.18	0.10		mg/L	1	11/22/2016 12:04



Client: Admiralty Environmental, LLC

Client Project: Juneau International Airport/AE 16431

 Client Sample ID:
 6
 Work Order/ID:
 16K1236-03

 Sample Description:
 AE 16431
 Sampled:
 11/10/2016 13:10

 Matrix:
 Aqueous
 Received:
 11/17/2016 9:30

Units Certs AT Result RL DF **Analyses** Qual Analyzed Analyst: GRIEFF Method: EPA 350.1 Rev 2.0 Nitrogen, Ammonia as N Prep Method: Aqueous Ammonia Distillation Prep Date/Time: 11/22/2016 08:15 Nitrogen, Ammonia (As N) di Α ND 0.10 mg/L 11/22/2016 12:06



Client: Admiralty Environmental, LLC

Client Project: Juneau International Airport/AE 16431

 Client Sample ID:
 7
 Work Order/ID:
 16K1236-04

 Sample Description:
 AE 16431
 Sampled:
 11/10/2016
 13:18

 Matrix:
 Aqueous
 Received:
 11/17/2016
 9:30

Units Certs AT Result RL DF **Analyses** Qual Analyzed Analyst: GRIEFF Method: EPA 350.1 Rev 2.0 Nitrogen, Ammonia as N Prep Method: Aqueous Ammonia Distillation Prep Date/Time: 11/22/2016 08:15 Nitrogen, Ammonia (As N) di Α ND 0.10 mg/L 11/22/2016 12:07



Client: Admiralty Environmental, LLC

Client Project: Juneau International Airport/AE 16431

 Client Sample ID:
 8
 Work Order/ID:
 16K1236-05

 Sample Description:
 AE 16431
 Sampled:
 11/10/2016
 13:20

 Matrix:
 Aqueous
 Received:
 11/17/2016
 9:30

Units Certs AT Result RL **Analyses** Qual DF Analyzed Analyst: GRIEFF Method: EPA 350.1 Rev 2.0 Nitrogen, Ammonia as N Prep Method: Aqueous Ammonia Distillation Prep Date/Time: 11/22/2016 08:15 Nitrogen, Ammonia (As N) di A 0.10 0.10 mg/L 11/22/2016 12:09



Client: Admiralty Environmental, LLC

Client Project: Juneau International Airport/AE 16431

 Client Sample ID:
 10
 Work Order/ID:
 16K1236-06

 Sample Description:
 AE 16431
 Sampled:
 11/10/2016
 13:25

 Matrix:
 Aqueous
 Received:
 11/17/2016
 9:30

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: EPA 350.	1 Rev 2.0			Α	nalyst: <b>GRIEFF</b>
Nitrogen, Ammonia as N		F	Prep Method: Aqueous	Ammonia Disti	llation	Pı	rep Date	/Time:11/22/2016 08:15
Nitrogen, Ammonia (As N)	di	Α	ND	0.10		mg/L	1	11/22/2016 12:11



### FLAGS, FOOTNOTES AND ABBREVIATIONS (as needed)

- B = Detected in the associated method Blank at a concentration above the routine RL
- b- = Detected in the associated method Blank at a concentration greater than 2.2 times the MDL
- b\* = Detected in the associated method Blank at a concentration greater than half the RL

CFU = Colony forming units

D = Dilution performed on sample

DF = Dilution Factor

g = Gram

E = Value above quantitation range

H = Analyte was prepared and/or analyzed outside of the analytical method holding time

I = Matrix Interference

J = Analyte concentration detected between RL and MDL (Metals / Organics)

LOD = Limit of Detection

LOQ = Limit of Quantitation

m3 = Meters cubed

MDL = Method Detection Limit

mg/Kg = Milligrams per Kilogram (ppm)

mg/L = Milligrams per Liter (ppm)

NA = Not Analyzed

ND = Not Detected at the Reporting Limit (or the Method Detection Limit, if used)

NR = Not Recovered

R = RPD outside accepted recovery limits

RL = Reporting Limit

S = Spike recovery outside recovery limits

Surr = Surrogate

U = Undetected

> = Greater than

< = Less than

% = Percent

\* = Result exceeds project specific limits

### **ANALYTE TYPES: (AT)**

A,B = Target Analyte

I = Internal Standard

M = Summation Analyte

S = Surrogate

T = Tentatively Identified Compound (TIC, concentration estimated)

### **QC SAMPLE IDENTIFICATIONS**

ICSA = Interference Check Standard "A" BLK = Method Blank DUP = Method Duplicate ICSAB = Interference Check Standard "AB" BS = Method Blank Spike BSD = Method Blank Spike Duplicate MS = Matrix Spike MSD = Matrix Spike Duplicate ICB = Initial Calibration Blank ICV = Initial Calibration Verification CCB = Continuing Calibration Blank CCV = Continuing Calibration Verification CRL = Client Required Reporting Limit OPR = Ongoing Precision and Recovery Standard PDS = Post Digestion Spike SD = Serial Dilution

QCS = Quality Control Standard

### CERTIFICATIONS (Certs)

Below is a list of certifications maintained by the Microbac Merrillville Laboratory. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. Complete lists of individual analytes pursuant to each certification below are available upon request.

- d Illinois EPA drinking water, wastewater and solid waste analysis (#200064)
- i Kansas Dept Health & Env. NELAP (#E-10397)



## **Analytical QC Summary**

Client: Admiralty Environmental, LLC Wet Chemistry - Quality Control

Work Order: 16K1236

**Project:** Juneau International Airport/AE 16431

Batch:	B094806 <b>Prep</b> : Ad	jueous Ammo	nia Distillat	ion							
Nitrogen, An	nmonia as N										
Sample ID: Source:	Blank (B094806-BLK1)		N	lethod:	EPA 350	).1 Rev 2.		Prepped: Analyzed:		1/2016 C	
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Nitrogen, Ammo	nia (As N)	ND	0.10	mg/L							
Sample ID: Source:	LCS (B094806-BS1)		N	lethod:	EPA 350	).1 Rev 2.		Prepped: Analyzed:		1/2016 0 1/2016 1	-
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Nitrogen, Ammo	nia (As N)	4.10	0.10	mg/L	4.000		102	90-110			
Sample ID: Source:	Matrix Spike (B094806-N 16K1172-02	<b>I</b> S1)	N	lethod:	EPA 350	).1 Rev 2.		Prepped: Analyzed:		1/2016 0 1/2016 1	-
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Nitrogen, Ammo	nia (As N)	3.93	0.10	mg/L	4.000	0.239	92.2	90-110			
Sample ID: Source:	Matrix Spike (B094806-N 16K1177-05	IS2)	N	lethod:	EPA 350	).1 Rev 2.		Prepped: Analyzed:		1/2016 0 1/2016 1	-
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Nitrogen, Ammo	nia (As N)	3.91	0.10	mg/L	4.000	0.166	93.5	90-110			
Sample ID: Source:	Matrix Spike Dup (B0948 16K1172-02	06-MSD1)	N	lethod:	EPA 350	).1 Rev 2.		Prepped: Analyzed:		I/2016 0 I/2016 1	-
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Nitrogen, Ammo	nia (As N)	4.01	0.10	mg/L	4.000	0.239	94.3	90-110	2.15	20	
Sample ID: Source:	Matrix Spike Dup (B0948 16K1177-05	06-MSD2)	N	lethod:	EPA 350	).1 Rev 2.		Prepped: Analyzed:		1/2016 0 1/2016 1	-
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Nitrogen, Ammo	nia (As N)	3.80	0.10	mg/L	4.000	0.166	90.8	90-110	2.86	20	
Batch:	B094858 <b>Prep</b> : Ad	jueous Ammo	nia Distillat	ion							
Nitrogen, An	nmonia as N										
Sample ID: Source:	Blank (B094858-BLK1)		N	lethod:	EPA 350	).1 Rev 2.		Prepped: Analyzed:		2/2016 0 2/2016 1	-
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Nitrogen, Ammo	nia (As N)	ND	0.10	mg/L							
Sample ID: Source:	LCS (B094858-BS1)		N	lethod:	EPA 350	).1 Rev 2.		Prepped: Analyzed:		2/2016 0 2/2016 1	-
Analyte		Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Nitrogen, Ammo	nia (As N)	4.18	0.10	mg/L	4.000		105	90-110			



## **Analytical QC Summary**

Client: Admiralty Environmental, LLC Wet Chemistry - Quality Control

Work Order: 16K1236

Nitrogen, Ammonia (As N)

Project: Juneau International Airport/AE 16431

Batch: B094858 Prep: Aqueous Ammonia Distillation Matrix Spike (B094858-MS1) EPA 350.1 Rev 2.0 11/22/2016 08:15 Sample ID: Method: Prepped: Source: 16K1245-05 Analyzed: 11/22/2016 12:15 Limit Units Result %REC Limits **RPD** Limit Qual Analyte Result Level Nitrogen, Ammonia (As N) 3.81 0.10 mg/L 4.000 0.0795 93.3 90-110 Sample ID: Matrix Spike (B094858-MS2) Method: EPA 350.1 Rev 2.0 Prepped: 11/22/2016 08:15 16K1253-02 11/22/2016 12:31 Source: Analyzed: Analyte Result Limit Units Level Result %REC Limits Limit Qual Nitrogen, Ammonia (As N) 4.22 0.10 4.000 0.291 90-110 mg/L 98.2 Matrix Spike Dup (B094858-MSD1) EPA 350.1 Rev 2.0 11/22/2016 08:15 Sample ID: Method: Prepped: Source: 16K1245-05 Analyzed: 11/22/2016 12:21 Analyte Result Limit Units Level Result %REC Limits **RPD** Limit Qual Nitrogen, Ammonia (As N) 3.93 0.10 mg/L 4.000 0.0795 96.3 90-110 3.12 20 Sample ID: Matrix Spike Dup (B094858-MSD2) Method: EPA 350.1 Rev 2.0 Prepped: 11/22/2016 08:15 16K1253-02 11/22/2016 12:33 Source: Analyzed: Analyte Result Limit Units Level Result %REC Limits **RPD** Limit Qual

mg/L

4.000

0.291

0.10

4.15

90-110

1.62

20

96.5



### PREPARATION BENCH SHEET

B094806

Microbac Laboratories, Inc. - Chicagoland

Matrix: Aqueous Prepared Using: Aqueous Ammonia Distillation

			Initial	Final	Sur 1	Sur 2	Spike 1	Spike 2	Spike 1	Spike 2	Source
Lab Number	Analysis	Prepared	mL	mL	uL	uL	ID	ID	uL	uL	ID
16K1236-01	NH4_350.1	11/21/2016 12:00:00PN	50.00	50.00							
B094806-BLK1	NH4_350.1	11/21/2016 8:45:00AM	50.00	50.00							
B094806-BS1	NH4_350.1	11/21/2016 8:45:00AM	50.00	50.00			0069979		200		
B094806-MS1	NH4_350.1	11/21/2016 8:45:00AM	50.00	50.00			0069979		200		16K1172-02
B094806-MS2	NH4_350.1	11/21/2016 8:45:00AM	50.00	50.00			0069979		200		16K1177-05
B094806-MSD1	NH4_350.1	11/21/2016 8:45:00AM	50.00	50.00			0069979		200		16K1172-02
B094806-MSD2	NH4_350.1	11/21/2016 8:45:00AM	50.00	50.00			0069979		200		16K1177-05

Printed: 11/22/2016 4:55:47PM



### PREPARATION BENCH SHEET

B094858

Microbac Laboratories, Inc. - Chicagoland

Matrix: Aqueous Ammonia Distillation

			Initial	Final	Sur 1	Sur 2	Spike 1	Spike 2	Spike 1	Spike 2	Source
Lab Number	Analysis	Prepared	mL	mL	uL	uL	ID	ID	uL	uL	ID
16K1236-04	NH4_350.1	11/22/2016 8:15:00AM	50.00	50.00							
16K1236-03	NH4_350.1	11/22/2016 8:15:00AM	50.00	50.00							
16K1236-05	NH4_350.1	11/22/2016 8:15:00AM	50.00	50.00							
16K1236-06	NH4_350.1	11/22/2016 8:15:00AM	50.00	50.00							
16K1236-02	NH4_350.1	11/22/2016 8:15:00AM	50.00	50.00							
B094858-BLK1	NH4_350.1	11/22/2016 8:15:00AM	50.00	50.00							
B094858-BS1	NH4_350.1	11/22/2016 8:15:00AM	50.00	50.00			0069979		200		
B094858-MS1	NH4_350.1	11/22/2016 8:15:00AM	50.00	50.00			0069979		200		16K1245-05
B094858-MS2	NH4_350.1	11/22/2016 8:15:00AM	50.00	50.00			0069979		200		16K1253-02
B094858-MSD1	NH4_350.1	11/22/2016 8:15:00AM	50.00	50.00			0069979		200		16K1245-05
B094858-MSD2	NH4_350.1	11/22/2016 8:15:00AM	50.00	50.00			0069979		200		16K1253-02

Printed: 11/22/2016 4:55:47PM



Admiralty Environmental 641 W. Willoughby Ave., Suite 301 Juneau, AK 99801 (907) 463-4415 fax (480) 247-4476

### CHAIN OF CUSTODY/TRANSMITTAL RECORD PAGE 1 OF 1

CLIENT:	Junea	u International A	Airport		PRO	JEC	т: \$	Stormw	ater S	ampl	ing					
REPORT TO:		Ken Nichols, Nichols Engineering	PHONE#: 907-586 cell 208-2						ПТ	H	TT	T		AE.	121	
ADDRESS:		ox 32601, Juneau AK 99803	SAMPLED BY: Ken Nich											1	642	71
EMAIL: ken	.nichols(	@jnuairport.com / ken@	nichols-eng.com												W 1 C	
Bill to: <b>john</b>	.coleman	@jnuairport.com			# OF BOTTLES		I3									
DATE	TIME	SITE DESCRIPTION /IDENTIFIE	<b>.</b>	N. Torre	F B0	pH, BOD	COD, NH3				-     -	1	pН	Field Temp	Results	
DATE			R	MATRIX	1211	pH,										
111016	1250	3		H20	2	1	1									
11 10 4	1300	16		420	2	1	1									
11/10/16	1310	6		420	2	1	1									110,000
111010	1318	7		H20	2	1	1								76 t train	
1110/16	1320	8		H20	2	Ì	1				1 13					
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Printed Name _ Ken Nic	hols	Printed Name	Printed Name		Printed	Nam	1e			Temp/L		le.1	0	-		_
DATE 10 16		DATE 11/10/16	DATE		DATE					Conditi Custod	on of y Seals:	\ <u>\</u>				
13:4	5	1345	TIME		TIME					Initialed Shippe		4				



Admiralty Environmental 641 W. Willoughby Ave., Suite 301 Juneau, AK 99801 (907) 463-4415 fax (480) 247-4476

CHAIN OF CUSTODY/TRANSMITTAL RECORD PAGE 1 OF 1

Gadzala I. AK	i TO	W. Cont.	u International A	.4.						N N PROPERTY	pling				496		
			Ken Nichols, Nichols Engineering	PHONE#: 907 cell 2	'-586-0453 / 208-215-6039	86-0453 / B-216-6039					TI			AE.	1101	(0) 	
2	SE PO Box 32601, Juneau AK 99803  ken.nichols@jnuairport.com / ken@nichols-eng.com													2 <b>33.</b> 7 €	1112	<del>7</del> 77	
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## Admiralty Environmental Cooler Receipt Form

Client:

Admiralty Environmental, LLC

Project:

Juneau International Airport

AE# AE 16431

Date Opened: 11/10/2016 Opened by: H. O'Neill

### A. External Cooler Conditions

• Local Sampling Event

1. Project ID:

Nichols engineering, seasonal sampling

2. COC Attached? yes

Properly Completed?

ves

Signed by AE employee? yes

Small Temp. Blank

n/a

(temp in Celsius)

Large Temp. Blank:

6.00 (temp in Celsius)

Air-Transported Sampling Event

1. Project ID:

n/a

2. COC Attached? n/a Properly Completed?

n/a

Signed by AE employee? n/a

3. Airbill attached? n/a

4. Custody Seals?

n/a

n/a

Airbill #:

n/a

Temp. Blank: n/a

(temp in Celsius)

COMMENTS:

5. Seals intact?

## **B. Sample Conditions**

Number of Samples Received:

12

Packing type:

Cooler

Number of Bottles Received:

yes

1. Samples in proper bags?

2. Bottles intact?

3. Sufficient sample volume?

yes

yes

4. Labels agree with COC?

yes

5. Samples delivered within holding time?

yes

Problems encountered:

no

Was the project manager called?

no

COMMENTS:



COOLER INSPEC	TION			Date:	Tuesday, No	vember 22, 2016	
Client Name: Admiral	Client Name: Admiralty Environmental, LLC				11/17/2016 (	09:30	
Work Order Number:	16K1236		Received by	y: Nicole	Rainwater		
Checklist completed by:	11/17/2016 11:11:00AM	licole Rainwater	Reviewed b	y: <u>11/17</u>	/2016	CAG	
	<u> </u>	Carrier Name: FedEx				-	
	Cooler ID: Default Cooler		Container	/Temp Blank	Temperature:	-0.7° C	
Custody seals intact of Custody seals intact of Custody seals intact of COC present? COC included sufficient COC included a sample COC agrees with same COC identified the apple COC included date of COC included time of COC identified the apple samples in proper corporation of COC identified the apple sample containers into Sufficient sample volu All samples received with the content of the con	nt client identification? nt sample collector information? le description? ple labels? propriate matrix? collection? collection? propriate number of containers? ntainer/bottle? act? me for indicated test?		Yes	No N	Not 1	Present Present Present V	
	ii No, aujusteu by						
Samples received on i	nquished and received? ice?	,	Yes Yes Yes Yes Yes Yes	No No No No	No VO	A vials submitted	<b>✓</b>
Cooler Comments:							
	ION (excluding After-Hour Recei		NOTIFICA	TION.			
	Client Sample ID	Comments					
16K1236-01							
•	6						
16K1236-03	Ó						
16K1236-04	7						
16K1236-05	3						
16K1236-06	.0						

Microbac Laboratories, Inc.



Mr. Ken Nichols Nichols Engineering PO Box 32601 Juneau, AK 99803

December 29, 2016

### JNU International Airport Stormwater Sampling

Date of Collection: December 18, 2016 Sampling Location: Juneau, Alaska

### Summary

Eight storm water samples from the Juneau International Airport were received at Admiralty Environmental, Juneau, AK on December 19, 2016.

Samples were analyzed for Biochemical Oxygen Demand, pH, Ammonia and Chemical Oxygen Demand. All laboratory acceptance criteria were met for all samples.

A complete report of the final lab results is enclosed. The official laboratory report follows this letter, and includes the analytical results, case narrative, chain of custody form, and cooler receipt form.

Kind Regards,

David Wetzel

Admiralty Environmental



641 W. Willoughby Ave., Suite 301 Juneau, AK 99801 (907) 463 - 4415 Fax (480) 247 - 4476

www.admiraltyenvironmental.com

## **Juneau International Airport**

Stormwater Sampling

December 18, 2016

Juneau, AK

## **Analytical Report - Page 1**

Admiralty Environmental EPA ID AK 00976

AE 16628

Sample Location	10	9	8	7
Date & Time Sampled	12/18/2016; 09:10	12/18/2016; 09:20	12/18/2016; 09:25	12/18/2016; 09:30
BOD (mg/L)	12	8.2	26	51
COD (mg/L)	340	32	78	110
Ammonia (mg/L)	6.2	<0.5	11	19
рН	7.17	6.69	7.61	7.75

### Quality Control

Quality Conti	roi:					
Analysis	МВ	LCS	LCS Duplicate	RPD	Date/Time Commenced	Holding time met
BOD	< 2	102.5%	101.0%	1.5	12/19/2016; 09:35	yes
COD	< 4	103.4%	102.8%	0.6	12/19/2016; 11:20	yes
NH3	<0.5	106.0%	104.0%	1.9	12/19/2016; 14:05	yes
рН					12/19/2016; 14:55	yes

### Analysis Description:

Analysis	Method	MDL	PQL	Unit
BOD	EPA 405.1	0.5	2.0	mg/L
COD	SM 5220D	4.0	15.0	mg/L
pН	EPA 150.1	0.10	0.1	pH units
NH3	Hach 10205	0.10	0.5	mg/L

### Case Narrative:

All sample analysis QA/QC parameters were met for this event.

Key:

BOD	Biochemical Oxygen Demand
COD	Chemical Oxygen Demand
LCS	Laboratory Control Standard
MB	Method Blank
MDL	Method Detection Limit
mg/L	Milligrams Per Liter
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference

David Wetzel President, Admiralty Environmental

dwetzel@admiraltyenv.com



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## **Juneau International Airport**

Stormwater Sampling

December 18, 2016

Juneau, AK

## **Analytical Report - Page 2**

Admiralty Environmental EPA ID AK 00976

AE 16628

Sample Location	6	16	11	3
Date & Time Sampled	12/18/2016; 09:35	12/18/2016; 09:55	12/18/2016; 10:10	12/18/2016; 10:25
BOD (mg/L)	3.2	<2.0	2.4	21
COD (mg/L)	32	400	54	69
Ammonia (mg/L)	<0.5	0.51	0.94	7.0
pH	7.20	7.53	7.05	7.01

### Quality Control:

Quality Conti	roi:					
Analysis	МВ	LCS	LCS Duplicate	RPD	Date/Time Commenced	Holding time met
BOD	< 2	102.5%	101.0%	1.5	12/19/2016; 09:35	yes
COD	< 4	103.4%	102.8%	0.6	12/19/2016; 11:20	yes
NH3	<0.5	106.0%	104.0%	1.9	12/19/2016; 14:05	yes
рН					12/19/2016; 14:55	yes

### Analysis Description:

Analysis	Method	MDL	PQL	Unit
BOD	EPA 405.1	0.5	2.0	mg/L
COD	SM 5220D	4.0	15.0	mg/L
pН	EPA 150.1	0.10	0.1	pH units
NH3	Hach 10205	0.10	0.5	mg/L

### Case Narrative:

All sample analysis QA/QC parameters were met for this event.

Key:

BOD	Biochemical Oxygen Demand
COD	Chemical Oxygen Demand
LCS	Laboratory Control Standard
MB	Method Blank
MDL	Method Detection Limit
mg/L	Milligrams Per Liter
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference

David Wetzel President, Admiralty Environmental

dwetzel@admiraltyenv.com



## **Admiralty Environmental**

641 W. Willoughby Ave., Suite 301 Juneau, AK 99801 (907) 463-4415 fax (480) 247-4476

# CHAIN OF CUSTODY/TRANSMITTAL RECORD PAGE 1 OF 1

NVIRONA		International A	Airport		PROJ	ECT	:Sto	rmwat	er Sa	mplin	g			
EPORT TO:		en Nichols, Nichols	PHONE#: 907-586- cell 208-2	15-6039									AE 166	28
DDRESS:	PO Bo	x 32601, Juneau AK 99803	SAMPLED BY: Ken Nich	ols			9							
MAIL: ken	.nichols@	jnuairport.com / ken@	nichols-eng.com				#							
ill to: john.	.coleman(	@jnuairport.com			LES		Brye							
					OTT	Q	T						Field Res	ults
DATE	TIME	SITE DESCRIPTION /IDENTIF	ER	MATRIX	# OF BOTTLES	pH, BOD	COD					pH	Temp	
2/18/16	0910	10		H20	2	1	1 1							
xtiolia	0920	9		1	1							-		
	0925	8												
	0930	7			K	-								
	0935	6		1/	+)	-								
	0955	16		1	1	-				+				
	1010	ll .		1	-									
1	1025	3	RELINQUISHED BY:	·	REC	EIVE	D BY:						eheratoor	
Signature	DBY:	RECEIVED BY: Signature	Signature			ature			8	Temp/L		d by Receiving L		
Printed Name Ken Nich	ols .	Printed Name BONNEI HE	Printed Name  DATE		DAT	ted Na	ame			Thermo	D#: on of	IR Gun	# <u>3</u> _	
DATE   CO	7/16	TIME 12 19 (Lb	TIME		TIM	1E				Initiale	y Seals: d By: ed Via:	B1)		



## Admiralty Environmental Cooler Receipt Form

Client: Project: Admiralty Environmental, LLC

**Juneau International Airport** 

AE# AE 16628

Date Opened: 12/19/2016 Opened by: B. He

## A. External Cooler Conditions

• Local Sampling Event

1. Project ID:

Stormwater Sampling

2. COC Attached?

yes

Signed by AE employee? yes

Properly Completed?

4.50 (temp in Celsius)

Large Temp. Blank:

Small Temp. Blank

n/a

(temp in Celsius)

Air-Transported Sampling Event

1. Project ID:

n/a

n/a

n/a

2. COC Attached?

Properly Completed?

Airbill #:

n/a

Signed by AE employee? n/a

3. Airbill attached? n/a

4. Custody Seals? n/a

n/a

Temp. Blank: n/a

(temp in Celsius)

**COMMENTS:** 

5. Seals intact?

## **B. Sample Conditions**

Number of Samples Received:

16

Packing type:

Cooler

Number of Bottles Received:

yes

1. Samples in proper bags?

2. Bottles intact?

yes

3. Sufficient sample volume?

yes

4. Labels agree with COC?

yes

5. Samples delivered within holding time?

yes

Problems encountered:

no

Was the project manager called?

no

**COMMENTS:** 

Signature:

Date and time:\_



Mr. Ken Nichols Nichols Engineering PO Box 32601 Juneau, AK 99803

February 3, 2017

### **INU International Airport Stormwater Sampling**

Date of Collection: January 24, 2017 Sampling Location: Juneau, Alaska

### **Summary**

Eight samples from Sites 2, 6, 7, 8, 9, 10, 11, and 16 of the Juneau International Airport were received at Admiralty Environmental, Juneau, AK on January 24, 2017.

Samples were analyzed for Biochemical Oxygen Demand, pH, Ammonia and Chemical Oxygen Demand. All laboratory acceptance criteria were met for all samples.

A complete report of the final lab results is enclosed. The official laboratory report follows this letter, and includes the analytical results, case narrative, chain of custody form, and cooler receipt form.

Kind Regards,

David Wetzel

Admiralty Environmental



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## **Juneau International Airport**

Stormwater Sampling

### Analytical Report - Page 1

January 24, 2017

Juneau, AK

Admiralty Environmental EPA ID AK 00976

AE 16784

Sample Location	Site 10	Site 8	Site 7	Site 6
Date & Time Sampled	1/24/2017; 08:45	1/24/2017; 09:00	1/24/2017; 09:03	1/24/2017; 09:05
BOD (mg/L)	15	11	8.1	3.3
COD (mg/L)	46	38	26	<15
Ammonia (mg/L)	31	25	20	3.4
рН	7.91	7.74	7.71	7.44

### Quality Control:

Analysis	МВ	LCS	LCS Duplicate	RPD	Date/Time Commenced	Holding time met
BOD	< 2	106.8%	80.8%	27.7%	1/25/2017; 09:30	yes
COD	< 4	100.0%	96.0%	4.1%	1/31/2017; 10:30	yes
NH3	<0.5	103.0%	101.0%	2.0%	1/27/2017; 11:11	yes
pН	_	_		_	1/24/2017: 16:10	ves

#### Analysis Description:

Method	MDL	PQL	Unit								
EPA 405.1	0.5	2.0	mg/L								
SM 5220D	4.0	15.0	mg/L								
EPA 150.1	0.10	0.1	pH units								
Hach 10205	0.10	0.5	mg/L								
	EPA 405.1 SM 5220D EPA 150.1	EPA 405.1 0.5 SM 5220D 4.0 EPA 150.1 0.10	EPA 405.1 0.5 2.0 SM 5220D 4.0 15.0 EPA 150.1 0.10 0.1								

### Case Narrative:

The BOD RPD percent recovery was above QC acceptance criteria. All other sample analysis QA/QC parameters were met for this event.

Key:

Biochemical Oxygen Demand
Chemical Oxygen Demand
Laboratory Control Standard
Method Blank
Method Detection Limit
Milligrams Per Liter
Not Detected
Practical Quantitation Limit
Relative Percent Difference

David Wetze

President, Admiralty Environmental



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## **Juneau International Airport**

Stormwater Sampling

Analytical Report - Page 2

January 24, 2017

Admiralty Environmental EPA ID AK 00976

Juneau, AK

AE 16784

Sample Location	Site 9	Site 2	Site 16	Site 11
Date & Time Sampled	1/24/2017; 09:10	1/24/2017; 09:25	1/24/2017; 14:45	1/24/2017; 15:00
BOD (mg/L)	5.7	15	34	33
COD (mg/L)	26*	160	280	68*
Ammonia (mg/L)	8.0	9.2	4.4	1.8
pH	7.36	7.48	7.43	5.99

### Quality Control:

Analysis	МВ	LCS	LCS Duplicate	RPD	Date/Time Commenced	Holding time met
BOD	< 2	106.8%	80.8%	27.7%	1/25/2017; 09:30	yes
COD	< 4	92.6%	91.2%	1.5%	1/27/2017; 10:41	yes
*COD	< 4	100.0%	96.0%	4.1%	1/31/2017; 10:30	yes
NH3	<0.5	103.0%	101.0%	2.0%	1/27/2017; 11:11	yes
pН	_	_	_	_	1/24/2017; 16:10	yes

### Analysis Description:

Analysis	Method	MDL	PQL	Unit
BOD	EPA 405.1	0.5	2.0	mg/L
COD	SM 5220D	4.0	15.0	mg/L
pН	EPA 150.1	0.10	0.1	pH units
NH3	Hach 10205	0.10	0.5	mg/L

#### Case Narrative:

The BOD RPD percent recovery was above QC acceptance criteria. All other sample analysis QA/QC parameters were met for this event.

#### Key

itoy.	
BOD	Biochemical Oxygen Demand
COD	Chemical Oxygen Demand
LCS	Laboratory Control Standard
MB	Method Blank
MDL	Method Detection Limit
mg/L	Milligrams Per Liter
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference

David Wetze

President, Admiralty Environmental

dwetzel@admiraltyenv.com



Admiralty Environmental 641 W. Willoughby Ave., Suite 301 Juneau, AK 99801 (907) 463-4415 fax (480) 247-4476

## CHAIN OF CUSTODY/TRANSMITTAL RECORD PAGE 1 OF 1

ENVIRON				<del>- 1</del>			C4	ORMAN	otor S	amn	inσ					
CLIENT:	Juneau International Airport			PROJECT: Stormwater Sampling												
REPORT TO:		arineering	PHONE#: 907-586-0 cell 208-21	5-6039			1							AE / 6	5781	4
ADDRESS:		99803	SAMPLED BY: Ken Nicho	ols												
EMAIL: ken	.nichols@	jnuairport.com / ken@	nichols-eng.com													
Bill to: john	to: john.coleman@jnuairport.com				S2											
					отті	Q	VH3							Field I	Results	
DATE	TIME .	SITE DESCRIPTION /IDENTIFIER		MATRIX	# OF BOTTLES	pH, BOD	COD, NH3						pН	Temp		
124/17	0845	10		H20	2	1	1									
12417	0900	8			1	1	1									
12412	0903	7														
1417	0905	6					Ш									
12417	0910	9													A	
1341	0925	2														
1211	1445	16														
104 10	1500	LT .		V	1	V	V					Ш			-	
RELINQUISHE		RECEIVED BY:	RELINQUISHED BY: Signature		_	EIVEI ature	DBY:			Section	to Be Com	pleted by	Receiving L	aboratory		
Signature	highest	Signature					77327			Tei	mp/Loc:	5	2.47			
Printed Name	- 11.11	Printed Name Alex Whelread	Printed Name		Prin	ted Na	ıme			Th	ermo ID#:		SRH3			
DATE	S. Nichols	DATE	DATE		DAT	E					ndition of stody Seal	s:	1			
1241	7	1/24/17	TIME		TIM	IE .				Init	tialed By:	1	BW			
TIME U	3	15; 43								Sh	ipped Via:		X			



# Admiralty Environmental Cooler Receipt Form

Client:

Admiralty Environmental, LLC

Project:

Juneau International Airport

AE# AE 16784

Date Opened:

1/24/2017 Opened by: A. Whitehead

## A. External Cooler Conditions

Local Sampling Event

1. Project ID:

Stormwater Sampling

2. COC Attached?

Properly Completed?

Yes

Signed by AE employee? Yes

Small Temp. Blank

2.47 (temp in Celsius)

Large Temp. Blank:

n/a

(temp in Celsius)

Air-Transported Sampling Event

1. Project ID:

n/a

n/a

2. COC Attached?

Properly Completed?

n/a

Airbill #:

n/a

Signed by AE employee? n/a

3. Airbill attached? n/a

4. Custody Seals? n/a

5. Seals intact? n/a

Temp. Blank: n/a

(temp in Celsius)

COMMENTS:

## B. Sample Conditions

Number of Samples Received:

16

Packing type:

Cooler

Number of Bottles Received:

1. Samples in proper bags?

yes

2. Bottles intact?

yes

3. Sufficient sample volume?

yes

4. Labels agree with COC?

yes

5. Samples delivered within holding time?

yes

Problems encountered:

no

Was the project manager called?

no

COMMENTS:



Mr. Ken Nichols Nichols Engineering PO Box 32601 Juneau, AK 99803

March 2, 2017

### JNU International Airport Stormwater Sampling

Date of Collection: February 15. 2017 Sampling Location: Juneau, Alaska

### Summary

Seven samples from sites 3, 6, 8, 9, 10, 11, and 16 of the Juneau International Airport were received at Admiralty Environmental, Juneau, AK on February 15, 2017.

Samples were analyzed for Biochemical Oxygen Demand, pH, Ammonia and Chemical Oxygen Demand. All laboratory acceptance criteria were met for all samples.

A complete report of the final lab results is enclosed. The official laboratory report follows this letter, and includes the analytical results, case narrative, chain of custody form, and cooler receipt form.

Kind Regards,

David Wetzel

Admiralty Environmental



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www.admiraltyenvironmental.com

### **Juneau International Airport**

Stormwater Sampling

### **Analytical Report**

February 15, 2017 Juneau, AK

Admiralty Environmental EPA ID AK 00976

AE 16874

Sample Location	Site 3	Site 6	Site 8	Site 9
Date & Time Sampled	2/15/2017; 10:05	2/15/2017; 09:35	2/15/2017; 09:20	2/15/2017; 09:30
BOD (mg/L)	< 2.0	< 2.0	< 2.0	< 2.0
COD (mg/L)	17	< 15	< 15	19
Ammonia (mg/L)	9.2	1.9	6.4	<0.5
pH	7.82	7.39	7.19	7.03

**Quality Control:** 

Analysis	МВ	LCS	LCS Duplicate	RPD	Date/Time Commenced	Holding time met
BOD	< 2	89.6%	87.1%	2.8	2/17/2017; 08:15	yes
COD	< 4	112.0%	100.0%	11.3	2/17/2017; 12:25	yes
NH3	<0.5	104.0%	101.0%	2.9	2/27/2017; 11:55	yes
pН					2/15/2017; 14:30	yes

**Analysis Description:** 

Analysis	Method MDL		PQL	Unit
BOD	EPA 405.1	0.5	2.0	mg/L
COD	SM 5220D	4.0	15.0	mg/L
pН	EPA 150.1	0.10	0.1	pH units
NH3	Hach 10205	0.10	0.5	mg/L

Case Narrative:

All sample analysis QA/QC parameters were met for this eve

Key:

BOD	Biochemical Oxygen Demand
COD	Chemical Oxygen Demand
LCS	Laboratory Control Standard
MB	Method Blank
MDL	Method Detection Limit
mg/L	Milligrams Per Liter
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference

David Wet

President, Admiralty Environmental

dwetzel@admiraltyenv.com



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### **Juneau International Airport**

Stormwater Sampling

### **Analytical Report**

February 15, 2017

Juneau, AK

Admiralty Environmental EPA ID AK 00976

AE 16874

Sample Location	Site 10	Site 11	Site 16
Date & Time Sampled	2/15/2017; 09:25	2/15/2017; 09:55	2/15/2017; 09:45
BOD (mg/L)	< 2.0	< 2.0	11
COD (mg/L)	22	< 15	48
Ammonia (mg/L)	4.3	<0.5	3.2
рН	6.98	6.83	7.46

Quality Control:

Analysis	МВ	LCS	LCS Duplicate	RPD	Date/Time Commenced	Holding time met	
BOD	< 2	89.6%	87.1%	2.8	2/17/2017; 08:15	yes	
COD	< 4	112.0%	100.0%	11.3	2/17/2017; 12:25	yes	
NH3	<0.5	104.0%	101.0%	2.9	2/27/2017; 11:55	yes	
pН					2/15/2017; 14:30	yes	

**Analysis Description:** 

Analysis	Method	MDL	PQL	Unit		
BOD	EPA 405.1	0.5	2.0	mg/L		
COD	COD SM 5220D		15.0	mg/L		
pН	EPA 150.1	0.10	0.1	pH units		
NH3	Hach 10205	0.10	0.5	mg/L		

Case Narrative:

All sample analysis QA/QC parameters were met for this eve

Rey.							
BOD	Biochemical Oxygen Demand						
COD	Chemical Oxygen Demand						
LCS	Laboratory Control Standard						
MB	Method Blank						
MDL	Method Detection Limit						
mg/L	Milligrams Per Liter						
ND	Not Detected						
PQL	Practical Quantitation Limit						
RPD	Relative Percent Difference						

President, Admiralty Environmental

dwetzel@admiraltyenv.com



## **Admiralty Environmental**

641 W. Willoughby Ave., Suite 301 Juneau, AK 99801 (907) 463-4415 fax (480) 247-4476

# CHAIN OF CUSTODY/TRANSMITTAL RECORD PAGE 1 OF 1

CLIENT:	Juneau International Airport					PROJECT: Stormwater Sampling											
REPORT TO:		Cen Nichols, Nichols Engineering	PHONE#: 907-586-0453 / cell 208-215-6039			П			П						AE (	6874	
ADDRESS:				SAMPLED BY: Ken Nichols													
емаіl: ker	n.nichols@	njnuairport.com / ken@	nichols-eng.com														
він to: john.coleman@jnuairport.com					# OF BOTTLES		3										
DATE	TIME	SITE DESCRIPTION /IDENTIFIE	D	MATRIX	F BO	рн, вор	COD, NH3	00, Nt						pН	Temp	Results	
DATE	TIME		Α							H							
21517	0920	8		H20	2	1	1										
वीर्जित	0930	9			2	1	(										
2/15/17	0925	10			2	1	4										
2/15/17	0935	6			2	1	1										2 %
2/15/17	0945	16			2	1	(										
2/15/7	0955	11			2	i	(		1						4		
21517	1005	3			2	1	1										
					1												
RELINQUISHED	BY:	RECEIVED BY:	RELINQUISHED BY:			RECEIVED BY:											
Signature	lils	Signature	Signature		Signature					Section to Be Completed by Receiving Leboratory							
Printed Name	Name Printed Name  Bower He		Printed Name		Printed Name					Temp/Loc: <u>5.4</u> Thermo ID#: TR Grun #3							
DATE	DATE		DATE		DATE				Condition of Custody Seals:								
TIME 10:47	TIME TIME		TIME		TIME				Initialed By:  Shipped Via:								



## Admiralty Environmental Cooler Receipt Form

Client:

Admiralty Environmental, LLC

Project:

**Juneau International Airport** 

AE# AE 16874

Date Opened:

2/15/2017 Opened by: B He

A. External Cooler Conditions

• Local Sampling Event

1. Project ID:

Stormwater Sampling

2. COC Attached? Yes

Properly Completed?

Yes

n/a

Signed by AE employee? Yes

Small Temp. Blank

5.40 (temp in Celsius)

Large Temp. Blank:

n/a

(temp in Celsius)

Air-Transported Sampling Event

1. Project ID:

n/a

2. COC Attached? n/a

Properly Completed?

Airbill #:

n/a

Signed by AE employee? n/a

4. Custody Seals?

3. Airbill attached? n/a

5. Seals intact? n/a

Temp. Blank: n/a

(temp in Celsius)

COMMENTS:

B. Sample Conditions

Number of Samples Received:

7 14 Packing type:

Cooler

Number of Bottles Received:

yes

1. Samples in proper bags?

2. Bottles intact?

yes

3. Sufficient sample volume?

yes

yes

4. Labels agree with COC?

5. Samples delivered within holding time?

yes

Problems encountered:

No

Was the project manager called?

No

COMMENTS:

Signature:

Date and time: 2 15 17 1047



Mr. Ken Nichols Nichols Engineering PO Box 32601 Juneau, AK 99803

March 31, 2017

### JNU International Airport Stormwater Sampling

Date of Collection: March 20 – 21, 2017 Sampling Location: Juneau, Alaska

### Summary

Seven samples from the Juneau International Airport were received at Admiralty Environmental, Juneau, AK on March 21, 2017.

Samples were analyzed for Biochemical Oxygen Demand, pH, Ammonia and Chemical Oxygen Demand. All laboratory acceptance criteria were met for all samples.

A complete report of the final lab results is enclosed. The official laboratory report follows this letter, and includes the analytical results, case narrative, chain of custody form, and cooler receipt form.

Kind Regards,

David Wetzel

Admiralty Environmental



Stormwater Sampling

March 20, 2017

Juneau, AK

#### **Analytical Report**

Admiralty Environmental EPA ID AK 00976

AE 17007

Sample Location	10	9	8	7	6	11	3
Date & Time Sampled	03/20/2017; 15:30	03/20/2017; 15:35	03/20/2017; 15:40	03/20/2017; 15:45	03/20/2017; 15:50	03/20/2017; 16:05	03/21/2017; 07:55
BOD (mg/L)	110	13	120	170	83	26	7.3
COD (mg/L)	280	130	320	330	200	300	87
Ammonia (mg/L)	140	33	120	200	94	40	10
рН	8.66	8.51	8.95	8.68	8.75	8.30	6.52

Quality Control:						
Analysis	МВ	LCS	LCS Duplicate	RPD	Date/Time Commenced	Holding tim met
BOD	< 2	79.8%	79.0%	1.0	03/22/2017; 08:15	yes
COD	< 4	104.0%	103.0%	1.0	03/27/2017; 09:48	yes
NH3 (3,11,9)	<0.5	100.0%	99.6%	0.4	03/24/2017; 15:27	yes
NH3 (10,8,7,6)	<0.5	103.0%	103.0%	0.0	03/24/2017; 16:22	yes
- 11					00/01/00/5	

Analysis	Description:

Analysis	Method	MDL	PQL	Unit
BOD	EPA 405.1	0.5	2.0	mg/L
COD	SM 5220D	4.0	15.0	mg/L
NH3	Hach 10205	0.10	0.5	mg/L
pH	EPA 150.1	0.10	0.1	pH units

#### Key:

,.			
BOD	Biochemical Oxygen Demand	ND	Not Detected
COD	Chemical Oxygen Demand	PQL	Practical Quantitation Limit
LCS	Laboratory Control Standard	RPD	Relative Percent Difference
MB	Method Blank	NH3	Ammonia as N
MDL	Method Detection Limit	mg/L	Milligrams Per Liter

Case Narrative:
All sample analysis QA/QC parameters were met for this event.

President, Admiralty Environmental

dwetzel@admiraltyenv.com



#### **Admiralty Environmental**

641 W. Willoughby Ave., Suite 301 Juneau, AK 99801 (907) 463-4415 fax (480) 247-4476

ENVIRUN							C			a			Г				
CLIENT:	Juneau	ı International A	Airport		PRO	JECT	r: S1	torm	water	San	apli	ng					1
REPORT TO:		en Nichols, Nichols ngineering	PHONE#: 907-586 cell 208-2				T	П	$\Pi$	П	T		T		AE	700	+
ADDRESS:		ox 32601, Juneau AK 99803	SAMPLED BY: Ken Nich	ols													
емаіl: ken	.nichols@	jnuairport.com / ken@	nichols-eng.com		ñ												
Bill to: <b>john</b> .	.coleman	@jnuairport.com			TTLES		13								Field	Results	
DATE	TIME	SITE DESCRIPTION /IDENTIFIE	ER .	MATRIX	# OF BOTTLES	pH, BOD	COD, NH3							pН	Тетр	Results	
320 17	1530	10		H20	2	1	1										
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/	1545	٦		7	2	(	1										
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Signature A	Streha	Signature	Signature		Signa	ture		19		Sect	ion to	Be Comp		Receiving La	aboratory		
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3 21 17		3/21/2017	DATE								Custo	dy Seals:		k14			
TIME 1155		TIME 1155	TIME		TIMI	3					Shipp	d By: ed Via:		<i>D</i> [T			



Client:

Admiralty Environmental, LLC

Project:

Juneau International Airport

AE# AE 17007

Date Opened:

3/21/2017 Opened by: BH

#### A. External Cooler Conditions

Local Sampling Event

1. Project ID:

Stormwater Sampling

2. COC Attached? Yes

Yes

Signed by AE employee? Yes

Small Temp. Blank

3.32 (temp in Celsius)

Large Temp. Blank:

n/a

(temp in Celsius)

Air-Transported Sampling Event

1. Project ID:

n/a

n/a

2. COC Attached? n/a

Properly Completed?

Properly Completed?

n/a

Signed by AE employee? n/a

3. Airbill attached? n/a

Airbill #:

n/a

4. Custody Seals?

5. Seals intact? n/a

Temp. Blank: n/a

(temp in Celsius)

COMMENTS:

#### **B. Sample Conditions**

Number of Samples Received:

14

Packing type:

Cooler

Number of Bottles Received:

Yes

1. Samples in proper bags?

2. Bottles intact?

Yes

3. Sufficient sample volume?

Yes

Yes

4. Labels agree with COC?

Yes

Problems encountered:

No

Was the project manager called?

5. Samples delivered within holding time?

No

COMMENTS:



Mr. Ken Nichols Nichols Engineering PO Box 32601 Juneau, AK 99803

April 18, 2017

#### JNU International Airport Stormwater Sampling

Date of Collection: April 5, 2017 Sampling Location: Juneau, Alaska

#### Summary

Six samples from Site 6, Site, 8, Site 9, Site 10, Site 11, and Site 16 of the Juneau International Airport were received at Admiralty Environmental, Juneau, AK on April 5, 2017.

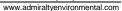
Samples were analyzed for Biochemical Oxygen Demand, pH, Ammonia and Chemical Oxygen Demand. All laboratory acceptance criteria were met for all samples.

A complete report of the final lab results is enclosed. The official laboratory report follows this letter, and includes the analytical results, case narrative, chain of custody form, and cooler receipt form.

Kind Regards,

David Wetzel

Admiralty Environmental





#### Stormwater Sampling

April 5, 2017

Juneau, AK

#### **Analytical Report**

Admiralty Environmental EPA ID AK 00976

AE 17076

Sample Location	Site 6	Site 8	Site 9	Site 10	Site 11	Site 16
Date & Time Sampled	4/5/2017; 11:55	4/5/2017; 12:00	4/5/2017; 12:05	4/5/2017; 12:10	4/5/2017; 12:30	4/5/2017; 12:20
BOD (mg/L)	140	< 2.0	< 2.0	< 2.0	7.4	12
COD (mg/L)	240	14	12	150	23	83
Ammonia (mg/L)	12	9.9	1.8	26	1.1	11
pH	7.21	7.53	7.52	7.11	7.28	8.52

Quality Control:						
Analysis	МВ	LCS	LCS Duplicate	RPD	Date/Time Commenced	Holding time met
BOD	< 2	85.1%	84.8%	0.4	4/6/2017; 08:40	yes
COD	< 4	102.0%	101.8%	0.2	4/10/2017; 11:07	yes
NH3	<0.5	105.0%	102.0%	2.9	4/10/2017; 13:11	yes
nH					1/E/2017: 1E-22	

Case Narrative:						
All sample analysis QA/QC parameters were met for this						
event.						

Analy	/sis	Descri	ption:

Analysis	Method	MDL	PQL	Unit
BOD	EPA 405.1	0.5	2.0	mg/L
COD	SM 5220D	4.0	15.0	mg/L
NH3	Hach 10205	0.10	0.5	mg/L
pН	EPA 150.1	0.10	0.1	pH units

K	е	у	:

BOD	Biochemical Oxygen Demand	ND	Not Detected
COD	Chemical Oxygen Demand	PQL	Practical Quantitation Limit
LCS	Laboratory Control Standard	RPD	Relative Percent Difference
MB	Method Blank	NH3	Ammonia as N
MDL	Method Detection Limit	mg/L	Milligrams Per Liter

David Wetzel
President, Admiralty Environmental
dwetzel@admiraltyenv.com



Admiralty Environmental 641 W. Willoughby Ave., Suite 301 Juneau, AK 99801 (907) 463-4415 fax (480) 247-4476

CLIENT:	June	au International	Airport		PRO	)JE(	CT: S	tormy	water	Sam	pling			
REPORT TO	):	Ken Nichols, Nichols Engineering		7-586-0453 / 208-215-6039				П	TI	П	H		AEIC	
ADDRESS:	PO	Box 32601, Juneau AK 99803	SAMPLED BY: Ken I										AE	016
EMAIL: kei	n.nichols	s@jnuairport.com / ken@	nichols-eng.com		1									
Bill to: <b>j0h</b> 1	n.colema	n@jnuairport.com	C. C.		OF BOTTLES	0	COD							
DATE	TIME	SITE DESCRIPTION /IDENTIFIE	ER	MATRIX	# OF BO	рН, ВОD	NH3 (					рН	Field R	esults
4517	1155	6		H20	2	1	1							
4/5/17	1200	8		#20	2	1	1							
45/17	1205	9		420	2	1	(						5	
4/5/17	1210	(0		H20	2	1	(							
4517	1220	16		H20	2	1	(							
4517	1230	Li de la companya de		H20	2	(	(				27			
ELINQUISHED E	BY:	RECEIVED BY: Signature	RELINQUISHED BY: Signature		RECEI Signatu	-	BY:			Section	to Re Complet	ed by Receiving La		
rinted Name	150	Printed Name	Printed Name									0.86	Doratory	
en Nich	ds	Hope O Neill	rimed Name		Printed	Nam	e				np/Loc:	0.00		
4/5/17	1	DATE 4/6/17	DATE		DATE					Thermo ID#: Condition of Custody Seals:				
1438	71	1438	TIME		TIME						aled By:	1000		



Client:

Admiralty Environmental, LLC

Project:

Juneau International Airport

AE# AE 17076

Date Opened:

4/5/2017 Opened by: H. O'Neill

#### A. External Cooler Conditions

• Local Sampling Event

1. Project ID:

Stormwater Sampling

2. COC Attached? yes

Properly Completed?

yes

n/a

Signed by AE employee? yes

Small Temp. Blank

n/a

(temp in Celsius)

Large Temp. Blank:

0.86 (temp in Celsius)

• Air-Transported Sampling Event

1. Project ID:

n/a

2. COC Attached?

Properly Completed?

3. Airbill attached? n/a

Airbill #: n/a

Signed by AE employee? n/a

4. Custody Seals? n/a

5. Seals intact? n/a

Temp. Blank: n/a

(temp in Celsius)

**COMMENTS:** 

#### **B. Sample Conditions**

Number of Samples Received:

12

Packing type:

Cooler

Number of Bottles Received:

Yes

1. Samples in proper bags?

2. Bottles intact?

Yes

3. Sufficient sample volume?

Yes Yes

4. Labels agree with COC?

Yes

Problems encountered:

No

Was the project manager called?

5. Samples delivered within holding time?

No

COMMENTS:

Signature:

Date and time:



Paul Lingley III 1873 Shell Simmons Dr. Suite 200 Juneau, AK 99801

March 22, 2018

#### JNU International Airport Stormwater Sampling

Date of Collection: March 12, 2018 Sampling Location: Juneau, Alaska

#### Summary

Eight samples from the Juneau International Airport Stormwater were received at Admiralty Environmental, Juneau, AK on March 12, 2018.

The samples were analyzed for Biochemical Oxygen Demand, pH, Ammonia and Chemical Oxygen Demand. All laboratory acceptance criteria were met for all samples.

A complete report of the final lab results is enclosed. The official laboratory report follows this letter, and includes the analytical results, case narrative, chain of custody form, and cooler receipt form.

Kind Regards,

David Wetzel

Admiralty Environmental



Stormwater Sampling March 12, 2018

, , ,

Juneau, AK

#### **Analytical Report**

Admiralty Environmental EPA ID AK 00976

AE 19473

Sample Location	Upper Duck Creek - 2/#3	Terminal Area Discharge #6	Taxiway E-F Infield W. #7	Taxiway E-F Infield E. #8	NE Development Area Outlet #9	Taxiway G Culvert #10	Jordan Ck. Culvert Outlet #11	Pond Discharge to River #16
Date & Time Sampled	3/12/18; 10:05	3/12/18; 10:37	3/12/18; 10:50	3/12/18; 10:46	3/12/18; 10:31	3/12/18; 10:27	3/12/18; 10:36	3/12/18; 10:56
BOD (mg/L)	<2.0	310	35	64	4.2	25	110	83
COD (mg/L)	17	460	81	120	21	52	160	230
Ammonia (mg/L)	<0.5	10	28	49	0.58	15	2.9	6.2
рН	6.99	7.81	8.16	8.37	7.46	8.11	7.15	7.97

1112	litz.	2	ntrol

addity Control.						
Analysis	МВ	LCS	LCS Duplicate	RPD	Date/Time Commenced	Holding time met
BOD	< 2	115.4%	114.4%	0.9	3/13/18; 08:30	yes
COD	< 4	103.4%	103.0%	0.4	3/16/18; 09:55	yes
NH3	<0.5	92.9%	93.3%	0.4	3/16/18; 10:40	yes
pH					3/12/18: 13:15	ves

#### Analysis Description:

Analysis	Method	MDL	PQL	Unit
BOD	EPA 405.1	0.5	2.0	mg/L
COD	SM 5220D	4.0	15	mg/L
NH3	Hach 10205	0.10	0.5	mg/L
pH	EPA 150.1	0.10	0.1	pH units

#### Key:

BOD	Biochemical Oxygen Demand	ND	Not Detected
COD	Chemical Oxygen Demand	PQL	Practical Quantitation Limit
LCS	Laboratory Control Standard	RPD	Relative Percent Difference
MB	Method Blank	NH3	Ammonia as N
MDL	Method Detection Limit	mg/L	Milligrams Per Liter

Case Narrative:

All sample analysis QA/QC parameters were met for this event.

David Wetzel President, Admiralty Environmental dwetzel@admiraltyenv.com



#### **Admiralty Environmental**

641 W. Willoughby Ave., Suite 301 Juneau, AK 99801 (907) 463-4415 fax (480) 247-4476

T: J	uneau I	nternational Airpor	·			St	ori	nw	ate	r S	amı	olin	g				
TTO:		ul Lingley III	PHONE#: 907-	209-0555											AE	947	-2
ESS: 18	873 Shell Sir uneau AK 99															1 ) ]	
· naul.l	ingleylll@jn	uairport.com															
: john.c	oleman@jn	uairport.com			LES												
					BOTTLES	do	COD, NH3								FIE	LD RESU	LTS
	TIME	SITE DESCRIPTION /IDENT		MATRIX	# OF	рн, вор	COD,					Ц		pH	Ter	np	
ATE 12	10:05	Terminal Area Terminal Area Toxiway E-Finti Taxiway E-Finti NE Development Toxiway 6 CAllver	cek - 2/3	H <sub>2</sub> 0	2	1	1										
2-10	10127	Terminal Area	Discharge 1 56	H <sub>2</sub> 0	2	1	1						Ш				
5-18	10:50	Torsinua E-Finti	eld west 1 17	H <sub>2</sub> 0	2	1	1										
2.18	10.5	Training E-P inti	eld East / #8	H <sub>2</sub> 0	2	1	1										
12-18	10.96	NIF Development	Aren outset 1th	H <sub>2</sub> 0	2	1	1										
12-18	(0:31	The word to contine	+ / # 10	H <sub>2</sub> 0	2	1	1										
12-18	10:27	Jorden Creek	when outlet /11	H <sub>2</sub> 0	2	1	1										
12-18	10:36			H <sub>2</sub> 0	2	1	1										
INQUISHS	10:56 DBY:	RECEIVED BY:	RELINQUISHED BY: Signature		RECE		BY:				Section	to Be C	omplete	d by Receivi	ing Laborator	у	
oeture out 1	John Sy	Printed Name	Printed Name		Printe	d Na	me				(20)	mp/Loc nermo II		3.0	3	_	
. ILing	leg III	Date 117 110	Date		Date						C	ondition ustody \$	of	V			
3-12-1	8	Time			Time Initialed By:			By:	OH)			_					



Client:

Admiralty Environmental, LLC

Project:

**INU International Airport** 

AE# AE 19473

Date Opened:

3/12/2018 Opened by: H. O'Neill

#### A. External Cooler Conditions

Local Sampling Event

1. Project ID:

Stormwater Sampling

2. COC Attached? Yes

Properly Completed?

Yes

Signed by AE employee?

Small Temp. Blank Large Temp. Blank:

n/a

3.00 (temp in Celsius) (temp in Celsius)

Air-Transported Sampling Event

1. Project ID:

n/a

2. COC Attached? n/a

Properly Completed?

n/a

Airbill #:

n/a

Signed by AE employee?

3. Airbill attached? n/a

4. Custody Seals?

5. Seals intact?

n/a

Temp. Blank: n/a

(temp in Celsius)

COMMENTS:

#### B. Sample Conditions

Number of Samples Received:

8 16 Packing type:

Cooler

Number of Bottles Received:

yes

1. Samples in proper bags?

2. Bottles intact?

yes

3. Sufficient sample volume?

yes

4. Labels agree with COC?

yes

5. Samples delivered within holding time?

yes

Problems encountered:

no

Was the project manager called?

no

COMMENTS:

Signature:



Paul Lingley III 1873 Shell Simmons Dr. Suite 200 Juneau, AK 99801

December 6, 2018

#### JNU International Airport Stormwater Sampling

Date of Collection: November 26, 2018 Sampling Location: Juneau, Alaska

#### Summary

Seven samples from the Juneau International Airport were received at Admiralty Environmental, Juneau, AK on November 26, 2018.

Samples were analyzed for biochemical oxygen demand, chemical oxygen demand, ammonia and pH. All laboratory acceptance criteria were met for all samples.

A complete report of the final lab results is enclosed. The official laboratory report follows this letter, and includes the analytical results, case narrative, chain of custody form, and cooler receipt form.

Kind Regards,

David Wetzel

Admiralty Environmental

www.admiraltyenvironmental.com

#### **Juneau International Airport**

Stormwater Sampling

#### **Analytical Report**

November 26, 2018

Admiralty Environmental EPA ID AK 00976

Juneau, AK AE 21465

Sample Location	Pond Discharge to River #16	Jordan Creek Culvert Outlet #11	Taxiway & Culvert #10	NE Development Area Outlet #9	Taxiway E-F in field East #8	Terminal Area Discharge #6	Upper Duck Creek-2 #3
Date & Time Sampled	11/26/2018; 12:01	11/26/2018; 12:16	11/26/2018; 11:37	11/26/2018; 11:33	11/26/2018; 12:21	11/26/2018; 12:26	11/26/2018; 11:38
BOD (mg/L)	9.3	8.2	5.2	<2.0	<2.0	360	15
COD (mg/L)	120	23	42	<15	17	600	42
Ammonia (mg/L)	1.0	<0.5	0.61	<0.5	0.86	6.3	9.9
рН	7.70	7.20	7.63	7.38	7.48	7.40	7.55

**Quality Control:** 

Analysis	МВ	LCS	LCS Duplicate	LCS Duplicate RPD Date/Time Commenced		Holding time met
BOD	< 2	106.3%	109.1%	2.6%	11/28/2018; 08:25	Yes
COD	< 4	99.4%	100.0%	0.6%	11/30/2018; 12:15	Yes
NH3	<0.5	106.0%	106.0%	0.0%	11/30/2018; 15:05	Yes
pН					11/26/2018; 13:45	No

Analysis Description:

Allalysis Des	cription.			
Analysis	Method	MDL	PQL	Unit
BOD	BOD EPA 405.1		2.0	mg/L
COD	SM 5220D	4.0	15.0	mg/L
NH3	Hach 10205	0.10	0.5	mg/L
pН	EPA 150.1	0.10	0.1	pH units

Key:

BOD	Biochemical Oxygen Demand	ND	Not Detected
COD	Chemical Oxygen Demand	PQL	Practical Quantitation Limit
LCS	Laboratory Control Standard	RPD	Relative Percent Difference
MB	Method Blank	NH3	Ammonia as N
MDL	Method Detection Limit	mg/L	Milligrams Per Liter

Case Narrative:

All sample analysis QA/QC parameters were met for this event.

David Wetzel

President, Admiralty Environmental dwetzel@admiraltyenv.com



#### Admiralty Environmental

641 W. Willoughby Ave., Suite 301 Juneau, AK 99801 (907) 463-4415 fax (480) 247-4476

CLIENT:	Juneau	International Airport				S	toı	rm	wa	ter (	Sa	mp	ling	J			5	
REPORT TO	): P	aul Lingley III	PHONE#: 907-20	9-0555						П						AE 2\	465	
ADDRESS:	1873 Shell S Juneau AK 9	immons Drive, Suite 200, 99801	SAMPLED BY: Paul Langley II	9														
EMAIL: pau	l.lingleylll@jr	nuairport.com	1	F														
Bill to: john	.coleman@jr	nuairport.com			BOTTLES		3	-										5
						300	Ä,									FIELD F	RESULTS	
DATE	TIME	SITE DESCRIPTION /IDENTIFI	ER	MATRIX	# 0F	pH, BOD	COD, NH3								рН	Temp		
11-26-18	12:01	Pond Dischurge to Rive.	/# 16	H <sub>2</sub> 0	2	1	1											
11-26-18	12:46	Ford Discharge to River Jordan Crek culver	+04/let/#11	H <sub>2</sub> 0	2	1	1											
11-26-18		Taxinay & Calvet.		H <sub>2</sub> 0	2	1	1											
11-26-18	11:33	NE Development Aren	outlet 1 # 9	H <sub>2</sub> 0	2	1	1											
11-26-18	12:21	Taxinay En Finticle Terminal Arey Discha	East 18	H <sub>2</sub> 0	2	1	1											V
11-24-18	12:26	Terminal Arry Discho	rge 16	H <sub>2</sub> 0	2	1	1											
11-26-18	11:38	upper Duck Creek-Z	1#3	H <sub>2</sub> 0	2	1	1											
				H <sub>2</sub> 0	2													
RELINQUISHED	BY:	RECEIVED BY:	RELINQUISHED BY:		RECE	IVE	BY:											
Signature	hos	Signature All	Signature		Signa	ture					Se	ction t	Be Co	mpleted I	by Receiving L	aboratory	State State	<b>南州</b>
Printed Name	naleuTh	Printed Name  Kellie M Warre	Printed Name		Print	ed Na	me						ip/Loc: rmo ID#		4.45	M <u></u>	***************************************	
Paul L 12 Date 11-26-12	7/17	Date	Date		Date							Con	dition o	f		= 3		
11~26 -12 Time	7	11 26 18 Time	Time		Time	2							aled By		KMW			<del></del> 4
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### Admiralty Admiralty Environmental Cooler Receipt Form

Client:

Admiralty Environmental, LLC

Project:

**Juneau International Airport** 

AE# AE 21465

Date Opened: 11/26/2018 Opened by: K. Warren

#### A. External Cooler Conditions

Local Sampling Event

1. Project ID:

Stormwater Sampling

2. COC Attached? Yes

Properly Completed?

Yes

Signed by AE employee?

Small Temp. Blank

4.45 (temp in Celsius)

Large Temp. Blank:

n/a

(temp in Celsius)

Air-Transported Sampling Event

1. Project ID:

n/a

2. COC Attached? n/a

n/a

Properly Completed?

n/a

Signed by AE employee? n/a

3. Airbill attached? n/a

4. Custody Seals? n/a

5. Seals intact?

Airbill #: n/a

Temp. Blank: n/a

(temp in Celsius)

COMMENTS:

#### B. Sample Conditions

Number of Samples Received:

7 14 Packing type:

Cooler

Number of Bottles Received:

Yes

1. Samples in proper bags?

2. Bottles intact?

Yes

3. Sufficient sample volume?

4. Labels agree with COC?

Yes Yes

5. Samples delivered within holding time?

No - pH analyzed upon lab receipt

Problems encountered:

No

Was the project manager called?

No

COMMENTS:

Date and time: 1126/18, 1302



Paul Lingley III 1873 Shell Simmons Dr. Suite 200 Juneau, AK 99801

February 7, 2020

#### JNU International Airport Stormwater Sampling

Date of Collection: January 28, 2020 Sampling Location: Juneau, Alaska

#### Summary

Seven samples from the Juneau International Airport were received at Admiralty Environmental, Juneau, AK on January 28, 2020.

The samples were analyzed for biochemical oxygen demand, chemical oxygen demand, ammonia and pH. All laboratory acceptance criteria were met for all samples.

A complete report of the final lab results is enclosed. The official laboratory report follows this letter, and includes the analytical results, case narrative, chain of custody form, and cooler receipt form.

Kind Regards,

Diana Cote

Admiralty Environmental

Desia Coto



Admiralty Environmental
641 W. Willoughby Ave., Suite 301
Juneau, AK 99801
(907) 463-4415 fax (480) 247-4476

CLIENT: JUNEAU Internation REPORT TO: Paul Lingley III ADDRESS: 1873 Shell Simmons Drive Juneau AK 99801 EMAIL: paul.lingleylll@inuairport.com	CLIENT: Juneau International Airport REPORT TO: Paul Lingley III ADDRESS: 1873 Shell Simmons Drive, Suite 200, Juneau AK 99801 EMAIL: paul.lingleyIII@inuairport.com	PHONE#: 907.2 SAMPLED BY:	907-209-0555	8	Stormwater Sampling	ampling		AE 24205	- Ls
Bill to: john.coleman@jnuairport.com  DATE TIME SITE DESC	nuairport.com	24	MATRIX	# OF BOTTLES	сор' инз		Hd	FIELD RESULTS	g
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11.11 02.82-1	Joidun Cir Culury Or	Outlet / #11	H <sub>2</sub> 0	2 1					
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50121 07-62-	NE Development wen	py + 24 00	H <sub>2</sub> 0	2 1	1				
01 2 7-12	Tuximuy E-Finsield Eust	En1/ES	H <sub>2</sub> 0	2 1	_				
-25-20 (2:11	Taxiony E-15 infield west	west / #7	H <sub>2</sub> 0	2 1	_				
-23-20 (2:16	Terminal arey Discharge	14 14 6	H <sub>2</sub> 0	2 1	1				
			H <sub>2</sub> 0	2 1	1				
RELINQUISHED BY:	D BY:	RELINQUISHED BY:		RECEIVED BY:					
Signature	Signature	Signature		Signature		Section to Be Completed by Receiving Laboratory	Receiving La	oorstory	
Printed Name	Printed Name AIRXO FRANCS	Printed Name		Printed Name	6		010.14 010.47		
) -28-20	Date 1/28/20	Date		Date		Condition of Custody Seals:	7		
Time [2:40	Time (2. 38	Time		Time		Initialed By: Shipped Via:	# 1		



Client:

Admiralty Environmental, LLC

Project:

Juneau International Airport

AE# AE 24265

Date Opened:

1/28/2020 Opened by: A. Franks

#### A. External Cooler Conditions

Local Sampling Event

1. Project ID:

WW

2. COC Attached? yes

Properly Completed?

yes

Signed by AE employee?

yes

Small Temp. Blank

0.94 (temp in Celsius)

Large Temp. Blank:

n/a

(temp in Celsius)

Air-Transported Sampling Event

1. Project ID:

n/a

2. COC Attached? n/a

Properly Completed?

n/a

Airbill #:

n/a

Signed by AE employee?

n/a

3. Airbill attached? n/a

4. Custody Seals? 1

5. Seals intact?

n/a

n/a

Temp. Blank: N/A

(temp in Celsius)

COMMENTS:

#### **B. Sample Conditions**

Number of Samples Received:

7

Packing type:

Cooler

Number of Bottles Received: 1. Samples in proper bags?

14

2. Bottles intact?

yes yes

yes

3. Sufficient sample volume?4. Labels agree with COC?

5. Samples delivered within holding time?

ves

6. Sample preservation checked?

AF.

Problems encountered:

-0 100

Was the project manager called?

no

COMMENTS:

Signature

Date and time:

1/28/20 13:52



Permit AKR05CD55 Compliance

January 28, 2020

Juneau, AK

641 W. Willoughby Ave., Suite 301 Juneau, AK 99801 (907) 463 - 4415 Fax (480) 247 - 4476 www.admiraltyenvironmental.com

# **Analytical Report**

Admiralty Environmental EPA ID AK 00976

AE 24265

	9	V	V		
Site #6	1/28/20; 12:16	096	1300	<0.5	7.12
Site #7	1/28/20; 12:11	26	50	<0.5	7.45
Site #8	1/28/20; 12:10	48	06	<0.5	7.61
Site #9	1/28/20; 12:05	3.7	19	<0.5	7.27
Site #10	1/28/20; 12:01	47	43	<0.5	7.37
Site #11	1/28/20; 11:41	41	74	<0.5	6.99
Site #3	1/28/20; 11:28	32	61	0.91	6.72
Sample Location	Sate & Time Sampled	BOD (mg/L)	COD (mg/L)	Ammonia (mg/L)	pH (S.U.)

1			
3		5	
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	2	2	١
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Analysis	MB	SOT	LCS Duplicate	GPD	Date/Time Commence
BOD	<2.0	76.0%	76.8%	1.0	1/30/20; 08:37
COD	<4.0	104.4%	103.6%	0.8	1/31/20; 12:16
NH3	<0.5	102.0%	98.3%	2.7	1/31/20; 12:57
Hd	ì		1	ı	1/28/20; 13:00

# Analysis Description:

Analysis	Method	MDL	HOL	Unit
BOD	EPA 405.1	2.0	2.0	mg/L
COD	SM 5220D	4.0	15.0	mg/L
NH3	Hach 10205	0,10	5'0	mg/L
Hď	EPA 150.1	0.10	0.1	pH units

RPD RPD NH3 Biochemical Oxygen Demand Chemical Oxygen Demand Laboratory Control Standard Method Blank

ROD COD WB WB

Method Detection Limit

Practical Quantitation Limit Relative Percent Difference Ammonia as N Milligrams Per Liter

Not Detected

Case Narrative: All sample analysis QA/QC parameters were met for this event.

Holding time met

lime Commenced

David Wetzel President, Admiralty Environmental dwetzel@admiraltyenv.com