

Permit

Permit ID: AK0023213
Permittee: JUNEAU, CITY AND BOROUGH OF
Facility: JUNEAU, CITY AND BOROUGH OF

Major:
Permittee Address: 5433 SHAUNE DRIVE
 JUNEAU, AK99801
Facility Location: 1540 THANE ROAD
 JUNEAU-DOUGLAS WWTP
 JUNEAU, AK99801
Discharge: 001-A - (no description)

Permitted Feature: 001 - External Outfall
Report Dates & Status
Monitoring Period: From 05/01/18 to 05/31/18
Status: NetDMR Validated

DMR Due Date: 06/15/18

Considerations for Form Completion

W=WEEKLY AVERAGE

Principal Executive Officer

First Name: Randall
Title: Wastewater Treatment Plant Supervisor

Last Name: Brown
Telephone: 907-586-0393

No Data Indicator (NODI)

Form NODI: -

Parameter		NODI	Quantity or Loading			Quality or Concentration			# of Ex.	Freq. of Analysis	Smpl. Type
Code	Name		Value 1	Value 2	Units	Value 1	Value 2	Value 3			

Parameter Code	Name	Quantity or Loading			Quality or Concentration			# of Ex.	Freq. of Analysis	Smpl. Type	
		Value 1	Value 2	Units	Value 1	Value 2	Value 3				
00010	Temperature, water deg. centigrade					=15.3		04 - deg C	0	05/WK - Five Per Week	GR - GRAB
	1 - Effluent Gross										
	Season: 0					Req Mon DAILY MX		04 - deg C		05/WK - Five Per Week	GR - GRAB
	NODI: -										
00300	Oxygen, dissolved [DO]			=3.4		=6.7		19 - mg/L	0	05/WK - Five Per Week	GR - GRAB
	1 - Effluent Gross										
	Season: 0			>=2 DAILY MN		<=17 DAILY MX		19 - mg/L		05/WK - Five Per Week	GR - GRAB
	NODI: -										
00310	BOD, 5-day, 20 deg. C	=39	=69	26 - lb/d	=7	=12		19 - mg/L	0	01/30 - Monthly	24 - COMP24
	1 - Effluent Gross										
	Season: 0	<=690 MO AVG	<=1380 DAILY MX	26 - lb/d	<=30 MO AVG	<=60 DAILY MX		19 - mg/L		01/30 - Monthly	24 - COMP24
	NODI: -										
00310	BOD, 5-day, 20 deg. C	=1715		26 - lb/d	=291			19 - mg/L	0	01/30 - Monthly	24 - COMP24
	G - Raw Sewage Influent										
	Season: 0	Req Mon MO AVG		26 - lb/d	Req Mon MO AVG			19 - mg/L		01/30 - Monthly	24 - COMP24
	NODI: -										
00310	BOD, 5-day, 20 deg. C	=35		26 - lb/d	=9			19 - mg/L	0	01/30 - Monthly	24 - COMP24
	W - See Comments										
	Season: 0	<=1035 WKLY AVG		26 - lb/d	<=45 WKLY AVG			19 - mg/L		01/30 - Monthly	24 - COMP24
	NODI: -										
00400	pH			=6.5		=7.4		12 - SU	0	05/WK - Five Per Week	GR - GRAB
	1 - Effluent Gross										
	Season: 0			>=6.5 MINIMUM		<=8.5 MAXIMUM		12 - SU		05/WK - Five Per Week	GR - GRAB
	NODI: -										
00530	Solids, total suspended	=42	=87	26 - lb/d	=7	=13		19 - mg/L	0	01/30 - Monthly	24 - COMP24
	1 - Effluent Gross										
	Season: 0	<=690 MO AVG	<=1380 DAILY MX	26 - lb/d	<=30 MO AVG	<=60 DAILY MX		19 - mg/L		01/30 - Monthly	24 - COMP24
	NODI: -										
00530	Solids, total suspended	=1260		26 - lb/d	=213			19 - mg/L	0	01/30 - Monthly	24 - COMP24
	G - Raw Sewage Influent										
	Season: 0	Req Mon MO AVG		26 - lb/d	Req Mon MO AVG			19 - mg/L		01/30 - Monthly	24 - COMP24
	NODI: -										
00530	Solids, total suspended	=81		26 - lb/d	=11			19 - mg/L	0	01/30 - Monthly	24 - COMP24
	W - See Comments										
	Season: 0	<=1035 WKLY AVG		26 - lb/d	<=45 WKLY AVG			19 - mg/L		01/30 - Monthly	24 - COMP24
	NODI: -										
00610	Nitrogen, ammonia total [as N]				=4	=8		19 - mg/L	0	01/30 - Monthly	24 - COMP24

Parameter Code	Name	NODI	Quantity or Loading			Quality or Concentration			# of Ex.	Freq. of Analysis	Smpl. Type	
			Value 1	Value 2	Units	Value 1	Value 2	Value 3				Units
1 - Effluent Gross												
Season: 0		Req.					<=14 MO AVG	<=30 DAILY MX	19 - mg/L	0	01/30 - Monthly	24 - COMP24
NODI: -		NODI										
00610	Nitrogen, ammonia total [as N]	Smpl.					=8		19 - mg/L	0	01/30 - Monthly	24 - COMP24
W - See Comments												
Season: 0		Req.					<=21 WKLY AVG		19 - mg/L	0	01/30 - Monthly	24 - COMP24
NODI: -		NODI										
50050	Flow, in conduit or thru treatment plant	Smpl.	=0.78	=1.2	03 - MGD					0	99/99 - Continuous	RC - Recorder (auto)
1 - Effluent Gross												
Season: 0		Req.	<=2.76 MO AVG	<=6 DAILY MX	03 - MGD						99/99 - Continuous	RC - Recorder (auto)
NODI: -		NODI										
61211	Enterococci	Smpl.					=1		13 - #/100mL	0	09/99 - See Permit	GR - GRAB
1 - Effluent Gross												
Season: 0		Req.					Req Mon DAILY MX		13 - #/100mL	0	09/99 - See Permit	GR - GRAB
NODI: -		NODI										
74055	Coliform, fecal general	Smpl.					=21	=320	13 - #/100mL	0	01/07 - Weekly	GR - GRAB
1 - Effluent Gross												
Season: 0		Req.					<=200 MO GEOMN	<=800 DAILY MX	13 - #/100mL	0	01/07 - Weekly	GR - GRAB
NODI: -		NODI										
74055	Coliform, fecal general	Smpl.					=320		13 - #/100mL	0	01/07 - Weekly	GR - GRAB
W - See Comments												
Season: 0		Req.					<=400 WKLY AVG		13 - #/100mL	0	01/07 - Weekly	GR - GRAB
NODI: -		NODI										
81010	BOD, 5-day, percent removal	Smpl.				=98			23 - %	0	01/30 - Monthly	CA - CALCTD
K - Percent Removal												
Season: 0		Req.				>=85 MN % RMV			23 - %	0	01/30 - Monthly	CA - CALCTD
NODI: -		NODI										
81011	Solids, suspended percent removal	Smpl.				=97			23 - %	0	01/30 - Monthly	CA - CALCTD
K - Percent Removal												
Season: 0		Req.				>=85 MN % RMV			23 - %	0	01/30 - Monthly	CA - CALCTD
NODI: -		NODI										

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments**Attachments**

Name	Type	Size
3392_001.pdf	pdf	263497
3398_001.pdf	pdf	920219

Report Last Saved By**JUNEAU, CITY AND BOROUGH OF**

User: CBJWASTEWATER1
Name: James Westcott
E-Mail: jim.westcott@juneau.org
Date/Time: 2018-06-13 13:36 (Time Zone:-08:00)

Report Last Signed By

User: CBJWASTEWATER1
Name: James Westcott
E-Mail: jim.westcott@juneau.org
Date/Time: 2018-06-13 13:37 (Time Zone:-08:00)

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Alaska Department of Environmental Conservation Monthly Discharge Monitoring Report (DMR)


CONTACT NAME: Mark Mow
 MAILING ADDRESS: 155 S. Seward Street
 Juneau, AK 99801

FACILITY: JUNEAU DOUGLAS WW TREATMENT FACILITY
 LOCATION: 1540 Thane Rd
 Juneau, AK 99801

PERMIT NUMBER: AK0023213
 MONITORING PERIOD: 5/1/2018 TO 5/31/2018
 MONITORING POINT: 002 (N-11) (P) Sta.AE NO DISCHARGE:

Parameter	Sample meas.	Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
		Average	Maximum		Minimum	Average	Maximum				
Biochemical Oxygen Demand (BOD5)	1 - Final Effluent 00310 R	Report monthly average	Report daily maximum	lbs/day	*****	*****	Report monthly average	Report daily maximum	mg/l	When Discharging	Grab
Total Suspended Solids	1 - Final Effluent 00530 R	Report monthly average	Report daily maximum	lbs/day	*****	*****	Report monthly average	Report daily maximum	mg/l	When Discharging	Grab
Coliform, fecal MF, M-FC broth, 44.5 C	1 - Final Effluent 31616 R	*****	*****	Report monthly geometric mean	*****	*****	Report daily maximum	*****	cts/100 ml	When Discharging	Grab
Flow	1 - Final Effluent 50050 R	Report monthly average	Report daily maximum	MGD	*****	*****	*****	*****		When Discharging	Recorded
Duration of Discharge	1 - Final Effluent 81381 R	Sample meas. *****	Report daily maximum	min/day	*****	*****	*****	*****		When Discharging	Instantaneous Reading
COMMENTS:											

Mail this report when completed to ADEC, Division of Water, 555 Cordova Street, Anchorage, AK 99501-2617
 Attach an explanation of any violations. Reference all attachments below.

NAME/TITLE PRINCIPLE EXECUTIVE OFFICE	TELEPHONE	DATE
Mark Mow/Wastewater Collections SR. Operator	907 586-0393	6/1/18
TYPED OR PRINTED	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	AREA/NUMBER
		
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.		

Alaska Department of Environmental Conservation Monthly Discharge Monitoring Report (DMR)

CONTACT NAME: Mark Mow
 MAILING ADDRESS: 155 S. Seward Street
 Juneau, AK 99801


FACILITY: JUNEAU DOUGLAS WW TREATMENT FACILITY
 LOCATION: 1540 Thane Rd
 Juneau, AK 99801

MONITORING PERIOD: 5/1/2018 TO 5/31/2018
 MONITORING POINT: 003 (N11.2) (Q) Sta C NO DISCHARGE:

Parameter	Sample meas.	Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type	
		Average	Maximum		Minimum	Average	Maximum					
Biochemical Oxygen Demand (BOD5)	1 - Final Effluent 00310 R	Report monthly average	Report daily maximum	lbs/day	*****	*****	Report monthly average	Report daily maximum	mg/l		When Discharging	Grab
Total Suspended Solids	1 - Final Effluent 00530 R	Report monthly average	Report daily maximum	lbs/day	*****	*****	Report monthly average	Report daily maximum	mg/l		When Discharging	Grab
Coliform, fecal MF, M-FC broth, 44.5 C	1 - Final Effluent 31616 R	*****	*****		*****	*****	Report monthly geometric mean	Report daily maximum	cts/100 ml		When Discharging	Grab
Flow	1 - Final Effluent 50050 R	Report monthly average	Report daily maximum	MGD	*****	*****	*****	*****			When Discharging	Recorded
Duration of Discharge	1 - Final Effluent 81381 R	Sample meas. *****	Report daily maximum	min/day	*****	*****	*****	*****			When Discharging	Instantaneous Reading

COMMENTS:

Mail this report when completed to ADEC, Division of Water, 555 Cordova Street, Anchorage, AK 99501-2617
 Attach an explanation of any violations. Reference all attachments below.

NAME/TITLE PRINCIPLE EXECUTIVE OFFICE Mark Mow/Wastewater Collections SR. Operator TYPED OR PRINTED	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT 	TELEPHONE 907 586-0393
AREA/NUMBER 61118	DATE 6/1/18

Alaska Department of Environmental Conservation Monthly Discharge Monitoring Report (DMR)

CONTACT NAME: Mark Mow
 MAILING ADDRESS: 155 S. Seward Street
 Juneau, AK 99801
 PERMIT NUMBER: AK00023213


FACILITY: JUNEAU DOUGLAS WW TREATMENT FACILITY
 LOCATION: 1540 Thane Rd
 Juneau, AK 99801

MONITORING PERIOD: 5/1/2018
 MONITORING POINT: 004 (N-15.1) (R) Douglas

TO 5/31/2018
 NO DISCHARGE: X

Parameter	Sample meas.	Quantity or Loading		Units	Quality or Concentration		Units	No. Ex.	Frequency of Analysis	Sample Type	
		Average	Maximum		Minimum	Average					Maximum
Biochemical Oxygen Demand (BOD5)	1 - Final Effluent 00310 R	Report monthly average	Report daily maximum	lbs/day	*****	*****	Report monthly average	Report daily maximum	mg/l	When Discharging	Grab
Total Suspended Solids	1 - Final Effluent 00530 R	Report monthly average	Report daily maximum	lbs/day	*****	*****	Report monthly average	Report daily maximum	mg/l	When Discharging	Grab
Coliform, fecal MF, M-FC broth, 44.5 C	1 - Final Effluent 31616 R	*****	*****		*****	*****	Report monthly geometric mean	Report daily maximum	cts/100 ml	When Discharging	Grab
Flow	1 - Final Effluent 50050 R	Report monthly average	Report daily maximum	MGD	*****	*****	*****	*****		When Discharging	Recorded
Duration of Discharge	1 - Final Effluent 81381 R	*****	report daily maximum	min/day	*****	*****	*****	*****		When Discharging	Instantaneous Reading
COMMENTS:											

Mail this report when completed to ADEC, Division of Water, 555 Cordova Street, Anchorage, AK 99501-2617
 Attach an explanation of any violations. Reference all attachments below.

NAME/TITLE PRINCIPLE EXECUTIVE OFFICE	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.		TELEPHONE	DATE
Mark Mow/Wastewater Collections SR. Operator	 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		907 586-0393	5/1/18
TYPED OR PRINTED			AREA/NUMBER	YY/MM/DD



April 3, 2018

Alaska Department of Environmental Conservation
Division of Water
555 Cordova Street
Anchorage, AK 99501-2617

Reference: Permit # AK-0023213

Ms. Bennet,

The following results are of the receiving water samples for JDWWTF collected April 3, 2018.

Sample date	Flow (MGD)	Fecal coliform col/100 ml	Enterococci count/100 ml	Total Ammonia as N	pH	Temperature	Salinity
April 3	.500	<2	<10	0.21 mg/l	7.93 s.u.	3.4 c	33 s.u.

Enclosed are the analytical laboratory results. This report includes dates of sampling, results of sample analysis and relevant QA/QC information.

Should questions arise, I can be contacted at (907)586-0393.

Regards,

Jim Westcott
CBJ Senior Wastewater Treatment Operator
jim.westcott@juneau.org

cc: File J-D DMR Permit #AK-002321-3



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

www.admiraltyenvironmental.com

CBJ Wastewater: Juneau-Douglas TP

Permit AK-002321-3

April 3, 2018

Juneau, AK

Analytical Report

Admiralty Environmental EPA ID AK 00976

AE 19594

Sample Location	Effluent Composite	Influent Composite	Effluent Grab	Ambient Station	Chronic Mixing Zone
Date & Time Sampled	04/03/18; 08:35	04/03/18; 08:30	04/03/18; 08:35	04/03/18; 08:50	04/03/18; 08:50
Fecal Coliform (FC/100 mL)	---	---	<2.0	---	<2.0
Enterococci (MPN/100ml)	---	---	<10	---	<10
BOD (mg/L)	2.8	350	---	---	---
TSS (mg/L)	<4.0	388	---	---	---
Ammonia (mg/L)	12	---	---	---	---
Salinity (ppt)	---	---	---	33	---

Quality Control:

Analysis	MB	LCS	LCS Duplicate	RPD	Date/Time Commenced	Holding Time Met
BOD	< 2	87.9%	85.4%	2.9%	04/04/18; 09:25	yes
TSS	< 4	97.0%	97.0%	0.0%	04/05/18; 12:30	yes
FC	< 2	---	---	---	04/03/18; 14:05	yes
Entero	< 1	---	---	---	04/03/18; 14:30	yes
NH3	<0.5	102.0%	101.0%	1.0%	04/13/18; 11:38	yes
Salinity	---	---	---	---	04/05/18; 14:50	yes

Analysis Description:

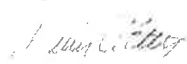
Analysis	Method	MDL	PQL	Unit
BOD	SM 5210B	0.5	2.0	mg/L
Entero	ASTM D6503-99	1.0	10	MPN/100ml
FC	SM 9222D	1.0	2.0	FC/100ml
TSS	SM 2540D	1.0	4.0	mg/L
NH3	Hach 10205	0.1	0.5	mg/L
Salinity	SM 2520A	1.0	1.0	ppt

Case Narrative:

The Effluent Nitrate/Nitrite result is 5.0mg/L. All sample analysis QA/QC parameters were met for this event.

Key:

BOD	Biochemical Oxygen Demand
Entero	Enterococci
FC	Fecal Coliform
LCS	Laboratory Control Standard
MB	Method Blank
MDL	Method Detection Limit
mg/L	Milligrams Per Liter
MPN	Most Probable Number
ND	Not Detected
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TSS	Total Suspended Solids


 David Wetzel
 President, Admiralty Environmental
 dwetzel@admiraltyenv.com



WORK ORDER SAMPLE SUMMARY

Date: *Monday, April 9, 2018*

Client: Admiralty Environmental, LLC
Project: CBJ Wastewater/AE 19594
Lab Order: 18D0325

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
18D0325-01	J-D Effluent 24hr Composite	AE 19594	04/03/2018 08:35	4/5/2018 9:35:00AM

Microbac Laboratories, Inc.

250 West 84th Drive | Merrillville, IN 46410 | 800.536.8379 p | 219.769.8378 p | 219.769.1664 f | www.microbac.com



Analytical Results

Date: *Monday, April 9, 2018*

Client:	Admiralty Environmental, LLC	Work Order/ID:	18D0325-01
Client Project:	CBJ Wastewater/AE 19594	Sampled:	04/03/2018 8:35
Client Sample ID:	J-D Effluent 24hr Composite	Received:	04/05/2018 9:35
Sample Description:	AE 19594		
Matrix:	Aqueous		

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: EPA 200.8 Rev 5.4		Analyst: SJE			
			Prep Method: 200.7_200.8		Prep Date/Time: 04/06/2018 09:46			
Total Recoverable Metals by ICP/MS								
Copper	dijl	A	7.2	1.0		ppb	1	04/06/2018 16:29

Microbac Laboratories, Inc.

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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

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

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.

- ¶ Illinois EPA drinking water, wastewater and solid waste analysis (#200064)
- ¶ Kansas Dept Health & Env. NELAP (#E-10397)
- ¶ Kentucky Wastewater Laboratory Certification Program (#90147)
- ¶ North Carolina DENR NPDES effluent, surface water (#597)



Analytical QC Summary

Client: Admiralty Environmental, LLC **Metals - Quality Control**
Work Order: 18D0325
Project: CBJ Wastewater/AE 19594
Batch: B118865 **Prep:** 200.7 200.8

Total Recoverable Metals by ICP/MS

Sample ID:	Method:	Prepped:	Source:	Analyzed:						
Blank (B118865-BLK1)	EPA 200.8 Rev 5.4	04/06/2018 09:46		04/06/2018 12:32						
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Copper	ND	1.0	ppb							
Sample ID:	Method:	Prepped:	Source:	Analyzed:						
LCS (B118865-BS1)	EPA 200.8 Rev 5.4	04/06/2018 09:46		04/06/2018 12:36						
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Copper	18.6	1.0	ppb	20.00		93.2	85-115			
Sample ID:	Method:	Prepped:	Source:	Analyzed:						
Matrix Spike (B118865-MS1)	EPA 200.8 Rev 5.4	04/06/2018 09:46	18D0324-01	04/06/2018 16:20						
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Copper	18.9	1.0	ppb	20.00	0.874	90.1	70-130			
Sample ID:	Method:	Prepped:	Source:	Analyzed:						
Matrix Spike Dup (B118865-MSD1)	EPA 200.8 Rev 5.4	04/06/2018 09:46	18D0324-01	04/06/2018 16:25						
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Qual
Copper	18.6	1.0	ppb	20.00	0.874	88.8	70-130	1.57	20	



April 18, 2018

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

Work Order No.: 18D0786

Re: CBJ Wastewater/AE 19594

Dear David Wetzel:

Microbac Laboratories, Inc. - Chicagoland Division received 1 sample(s) on 4/12/2018 9:35:00AM for the analyses presented in the following report as Work Order 18D0786.

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 Ron Misiunas, Division Manager, at ron.misiunas@microbac.com.

Sincerely,
Microbac Laboratories, Inc.

A handwritten signature in black ink that reads "Carey Gadzala".

Carey Gadzala
Project Manager

Microbac Laboratories, Inc.

250 West 84th Drive | Merrillville, IN 46410 | 800.536.8379 p | 219.769.8378 p | 219.769.1664 f | www.microbac.com



WORK ORDER SAMPLE SUMMARY

Date: *Wednesday, April 18, 2018*

Client: Admiralty Environmental, LLC
Project: CBJ Wastewater/AE 19594
Lab Order: 18D0786

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
18D0786-01	Ambient Station Grab	AE 19594	04/03/2018 08:50	4/12/2018 9:35:00AM

Microbac Laboratories, Inc.

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Analytical Results

Date: *Wednesday, April 18, 2018*

Client: Admiralty Environmental, LLC
Client Project: CBJ Wastewater/AE 19594
Client Sample ID: Ambient Station Grab
Sample Description: AE 19594
Matrix: Aqueous

Work Order/ID: 18D0786-01
Sampled: 04/03/2018 8:50
Received: 04/12/2018 9:35

Analyses	Certs	AT	Result	RL	Qual	Units	DF	Analyzed
			Method: EPA 350.1 Rev 2.0					
			Prep Method: Aqueous Ammonia Distillation					
Nitrogen, Ammonia as N								Analyst: ABG
Nitrogen, Ammonia (As N)	dio	A	0.21	0.10		mg/L	1	Prep Date/Time: 04/17/2018 12:22 04/18/2018 14:16



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

- | | |
|---------------------------------------|---|
| BLK = Method Blank | ICSA = Interference Check Standard "A" |
| 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.

- Illinois EPA drinking water, wastewater and solid waste analysis (#200064)
- Kansas Dept Health & Env. NELAP (#E-10397)
- Virginia Department of General Services Division of Consolidated Laboratory Services (#7990)

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Analytical QC Summary

Client: Admiralty Environmental, LLC
Work Order: 18D0786
Project: CBJ Wastewater/AE 19594

Wet Chemistry - Quality Control

Batch: B119318 **Prep:** Aqueous Ammonia Distillation

Nitrogen, Ammonia as N

Sample ID: Blank (B119318-BLK1)	Method: EPA 350.1 Rev 2.0	Prepped: 04/17/2018 08:40
Source:		Analyzed: 04/17/2018 11:10
Analyte	Result	Limit Units Level Result %REC Limits RPD Limit Qual
Nitrogen, Ammonia (As N)	ND	0.10 mg/L

Sample ID: LCS (B119318-BS1)	Method: EPA 350.1 Rev 2.0	Prepped: 04/17/2018 08:40
Source:		Analyzed: 04/17/2018 11:12
Analyte	Result	Limit Units Level Result %REC Limits RPD Limit Qual
Nitrogen, Ammonia (As N)	3.81	0.10 mg/L 4.000 95.2 90-110

Sample ID: Matrix Spike (B119318-MS1)	Method: EPA 350.1 Rev 2.0	Prepped: 04/17/2018 08:40
Source: 18D0713-06		Analyzed: 04/17/2018 11:38
Analyte	Result	Limit Units Level Result %REC Limits RPD Limit Qual
Nitrogen, Ammonia (As N)	12.5	0.20 mg/L 8.000 4.52 99.2 90-110

Sample ID: Matrix Spike (B119318-MS2)	Method: EPA 350.1 Rev 2.0	Prepped: 04/17/2018 12:22
Source: 18D0811-01		Analyzed: 04/18/2018 14:21
Analyte	Result	Limit Units Level Result %REC Limits RPD Limit Qual
Nitrogen, Ammonia (As N)	33.6	0.20 mg/L 8.000 25.6 100 90-110

Sample ID: Matrix Spike Dup (B119318-MSD1)	Method: EPA 350.1 Rev 2.0	Prepped: 04/17/2018 08:40
Source: 18D0713-06		Analyzed: 04/17/2018 11:40
Analyte	Result	Limit Units Level Result %REC Limits RPD Limit Qual
Nitrogen, Ammonia (As N)	11.8	0.20 mg/L 8.000 4.52 91.5 90-110 5.10 20

Sample ID: Matrix Spike Dup (B119318-MSD2)	Method: EPA 350.1 Rev 2.0	Prepped: 04/17/2018 12:22
Source: 18D0811-01		Analyzed: 04/18/2018 14:23
Analyte	Result	Limit Units Level Result %REC Limits RPD Limit Qual
Nitrogen, Ammonia (As N)	32.3	0.20 mg/L 8.000 25.6 83.7 90-110 3.95 20 S



COOLER INSPECTION

Client Name: Admiralty Environmental, LLC

Work Order Number: 18D0325

Checklist completed by: 4/5/2018 5:35:00PM | Nicole Rainwater

Carrier Name: FedEx

Date: Monday, April 9, 2018

Date/Time Received: 04/05/2018 09:35

Received by: Nicole Rainwater

Reviewed by: 4/6/2018 | CAG

Cooler ID: Default Cooler

Container/Temp Blank Temperature: 16.0° C

After-Hour Arrival?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>		
Shipping container/cooler in good condition?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Not Present	<input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Not Present	<input type="checkbox"/>
Custody seals intact on sample containers?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	Not Present	<input checked="" type="checkbox"/>
COC present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>		
COC included sufficient client identification?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>		
COC included sufficient sample collector information?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>		
COC included a sample description?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>		
COC agrees with sample labels?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>		
COC identified the appropriate matrix?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>		
COC included date of collection?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>		
COC included time of collection?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>		
COC identified the appropriate number of containers?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>		
Samples in proper container/bottle?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>		
Sample containers intact?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>		
Sufficient sample volume for indicated test?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>		
All samples received within holding time?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>		
If the samples are preserved, are the preservatives identified?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>		

If No, adjusted by? _____

COC included the requested analyses?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
COC signed when relinquished and received?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
Samples received on ice?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	
Samples properly preserved?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
Voa vials for aqueous samples have zero headspace?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>

Cooler Comments:

ANY "NO" EVALUATION (excluding After-Hour Receipt) REQUIRES CLIENT NOTIFICATION.

Sample ID	Client Sample ID	Comments
18D0325-01	J-D Effluent 24hr Composite	



COOLER INSPECTION

Client Name: Admiralty Environmental, LLC

Work Order Number: 18D0786

Checklist completed by: 4/12/2018 5:03:00PM | Dave Bryant

Carrier Name: FedEx

Date: Wednesday, April 18, 2018

Date/Time Received: 04/12/2018 09:35

Received by: Dave Bryant

Reviewed by: 4/12/2018 | CAG

Cooler ID: Default Cooler

Container/Temp Blank Temperature: 3.0° C

After-Hour Arrival?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>	
Shipping container/cooler in good condition?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample containers?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
COC present?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
COC included sufficient client identification?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
COC included sufficient sample collector information?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
COC included a sample description?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
COC agrees with sample labels?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
COC identified the appropriate matrix?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
COC included date of collection?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
COC included time of collection?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
COC identified the appropriate number of containers?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
Samples in proper container/bottle?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
Sample containers intact?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
All samples received within holding time?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
If the samples are preserved, are the preservatives identified?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	

If No, adjusted by? _____

COC included the requested analyses?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
COC signed when relinquished and received?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
Samples received on ice?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
Samples properly preserved?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	
VoA vials for aqueous samples have zero headspace?	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>

Cooler Comments:

ANY "NO" EVALUATION (excluding After-Hour Receipt) REQUIRES CLIENT NOTIFICATION.

Sample ID	Client Sample ID	Comments
18D0786-01	Ambient Station Grab	

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