Permit

Permit ID:

AK0023213

Permittee:

JUNEAU, CITY AND BOROUGH OF

Facility:

JUNEAU, CITY AND BOROUGH OF

Major:

5433 SHAUNE DRIVE **Permittee Address:** JUNEAU, AK99801

1540 THANE ROAD

JUNEAU-DOUGLAS WWTP JUNEAU , AK99801

Permitted Feature:

001 - External Outfall

Discharge:

DMR Due Date:

Facility Location:

001-A - (no description)

Report Dates & Status

Monitoring Period:

From 05/01/18 to 05/31/18

Status: **NetDMR Validated**

Considerations for Form Completion

W=WEEKLY AVERAGE

Principal Executive Officer

First Name:

Randall

Value 1

Title:

Wastewwater Treatment Plant Supervisor

Value 2

Last Name:

Brown

06/15/18

Telephone:

907-586-0393

No Data Indicator (NODI)

Form NODI:

Code

Parameter Name NODI

Quantity or Loading

Units Value 1

Quality or Concentration Value 2

Value 3

Units

Freg. of Analysis Smpl. Type

Pa	rameter	NODI	Quant	ity or Loading			Quality or Co	ncentration		#	Freq. of	Smpl.
Code	Name		Value 1	Value 2	Units	Value 1	Value 2	Value 3	Units	of Ex.	Analysis	Туре
00010	Temperature, water deg. centigrade	Smpl.						=15.3	04 - deg C	0	05/WK - Five Per Week	GR = GRAB
1 - Efflu	ient Gross											
Season	: 0	Req.						Req Mon DAILY MX	04 - deg C		05/WK - Five Per Week	GR - GRAB
NODI:		NODI										
	Oxygen, dissolved [DO]	Smpl.				=3.4		=6.7	19 - mg/L	0	05/WK - Flve Per Week	GR = GRAB
1 - Efflu	ient Gross										05/14/17	
Season	: 0	Req.				>=2 DAILY MN		<=17 DAILY MX	19 = mg/L		05/WK - Five Per Week	GR - GRAB
NODI:		NODI										
	BOD, 5-day, 20 deg. C	Smpl.	=39	=69	26 - lb/d		=7	=12	19 - mg/L	0	01/30 - Monthly	24 ≕ COMP24
1 - Effic	ient Gross		<=690 MO	<=1380 DAILY	26 -		<=30 MO		19 -		01/30 -	24 -
Season	: 0	Req.	AVG	MX	lb/d		AVG	<=60 DAILY MX	mg/L		Monthly	COMP24
NODI: -		NODI										
	BOD, 5-day, 20 deg. C	Smpl.	=1715		26 - lb/d		=291		19 - mg/L	0	01/30 - Monthly	24 =: COMP24
Influent	Sewage :											
Season		Req.	Req Mon MO AVG		26 - lb/d		Req Mon MO AVG		19 - mg/L		01/30 - Monthly	24 = COMP24
NODI:		NODI										
	BOD, 5-day, 20 deg. C	Smpl.	=35		26 - lb/d		=9		19 - mg/L	0	01/30 - Monthly	24 = COMP24
Season		Req.	<=1035 WKLY AVG		26 - lb/d		<=45 WKLY AVG		19 - mg/L		01/30 - Monthly	24 = COMP24
NODI: -		NODI										
00400 1 - Effle	pH lent Gross	Smpl.				=6.5		=7.4	12 - SU	0	05/WK - Five Per Week	GR - GRAB
Season		Req.				>=6.5 MINIMUM		<=8.5 MAXIMUM	12 - SU		05/WK - Five Per	GR - GRAB
NODI: -		NODI									Week	GIGIE
00530	Solids, total suspended	Smpl.	=42	=87	26 - lb/d		=7	=13	19 - mg/L	0	01/30 - Monthly	24 - COMP24
1 - Efflu	ient Gross											
Season		Req.	<=690 MO AVG	<=1380 DAILY MX	26 - lb/d		<=30 MO AVG	<=60 DAILY MX	19 - mg/L		01/30 - Monthly	24 - COMP24
NODI: -	Solids, total	NODI										
	suspended Sewage	Smpl.	=1260		26 - lb/d		=213		19 - mg/L	0	01/30 - Monthly	24 - COMP24
Influent Season	:	Req.	Req Mon MO		26 -		Req Mon MO		19 -		01/30 -	24 -
NODI: -		NODI	AVG		lb/d		AVG		mg/L		Monthly	COMP24
	Solids, total	MODI										
	suspended Comments	Smpl.	=81		26 - lb/d		=11		19 - mg/L	0	01/30 - Monthly	24 - COMP24
Season	: 0	Req.	<=1035 WKLY AVG		26 - lb/d		<=45 WKLY AVG		19 -		01/30 - Monthly	24 - COMP24
NODI: -		NODI	AVG		ID/Q		AVG		mg/L		Monthly	COMPZ4
00610	Nitrogen,	Smpl.					=4	=8	19 -	0	01/30 -	24 -
	ammonia total [as N]								mg/L		Monthly	COMP24

P	arameter	NODI	Quan	tity or Loading			Quality or Co	ncentration		#	Freq. of	Smpl.
Code	Name		Value 1	Value 2	Units	Value 1	Value 2	Value 3	Units	of Ex.	Analysis	Туре
1 - Effl	uent Gross											
Season	ı: 0	Req.					<=14 MO AVG	<=30 DAILY MX	19 - mg/L		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 - Se	e Comments								ilig/ E		rionemy	COIN 24
Season	ı: O	Req.					<=21 WKLY AVG		19 - mg/L		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 - Effl	uent Gross											
Season	ı: O	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 -	GR -
1 - Effi	uent Gross	·									See Permit	
Season		Req.						Req Mon DAILY MX	13 - #/100mL		09/99 - See Permit	GR - GRAB
NODI:		NODI										
	Coliform, fecal general	Smpl.					=21	=320	13 - #/100mL	0	01/07 - Weekly	GR - GRAB
1 - Effi	uent Gross								.=			
Season	: 0	Req.					<=200 MO GEOMN	<=800 DAILY MX	13 - #/100mL		01/07 - Weekly	GR - GRAB
NODI:	-	NODI										
	Coliform, fecal general e Comments	Smpl.					=320		13 = #/100mL	0	01/07 - Weekly	GR = GRAB
		_					<=400 WKLY		13 -		01/07 -	GR -
Season	: 0	Req.					AVG		#/100mL		Weekly	GRAB
NODI:		NODI										
81010	BOD, 5-day, percent removal	Smpl.				=98			23 - %	0	01/30 - Monthly	CA = CALCTD
K - Per	cent Removal											
Season	: 0	Req.				>=85 MN % RMV			23 - %		01/30 - Monthly	CA = CALCTD
NODI:	-	NODI										
81011	Solids, suspended percent removal	Smpl.				=97			23 - %	0	01/30 - Monthly	CA = CALCTD
K - Per	cent Removal											
Season	: 0	Req.				>=85 MN % RMV			23 - %		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)

©2008 NetDMR

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

MAILING ADDRESS: 155 S. Seward Street CONTACT NAME: Mark Mow

Juneau, AK 99801

PERMIT NUMBER: AK0023213

FACILITY: JUNEAU DOUGLAS WW TREATMENT FACILITY

LOCATION: 1540 Thane Rd

Juneau, AK 99801

MONITORING PERIOD: 5/1/2018

To 5/31/2018

MONITORING POINT: 002 (N-11) (P) Sta.AE

NO DISCHARGE:

Parameter	$\overline{}$	Quantity or Loading	Loading	Units	Qual	Quality or Concentration	tion	Units	No.	Frequency of	Sample Type
		Augman							1		
		TAKELAGE	Maximum		Minimum	Average	Maximum		EX.	Analysis	
Biochemical Oxygen Demand Sal	Sample				****						
(BOD5) m	meas.				4 4 4						
1 - Final Effluent Permit	rmit —	Report	Report	lbs/day	* * * * * * * * * * * * * * * * * * * *	Report	Report	mg/l		When Discharging	Grab
00310 R reqmt	_	monthly average	daily maximum			monthly average	daily maximum				
Total Suspended Solids San	Sample				****						
	meas.										
1 - Final Effluent Pe	Permit	Report	Report	lbs/day	****	Report	Report	mg/l		When Discharging	Grab
00530 R reqmt.	_	monthly average	daily maximum			monthly average	daily maximum				
Coliform, fecal MF, M-FC broth, Sar	Sample	* * * *	***		***						
44.5 C	meas.										
1 - Final Effluent Pe	Permit	****	***		**	Report		cts/100 ml		When Discharging	Grab
31616 R reqmt.	Įmt.					mean mean	daily maximum				
Flow	Sample				****	*****	****				
	meas.	Report	P P P P P P P P P P P P P P P P P P P	200			* * * * * * * * * * * * * * * * * * *			Who Discharing	
1 - Final Effluent Permit	_	monthly average	daily maximum	RIG						when Discharging	Recorded
Duration of Discharge San	Sample meas.	* * * *			* * * * *	* * * * *	* * * * *				
1 - Final Effluent Per 81381 R rev	Permit reqmt.	!	report daily maximum	min/day	**	i	语 糖糖 教養 教者			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.

_	_						_	_
TYPED OR PRINTED				Mark Mow/Wastewater Collections SR:				NAME/TITLE PRINCIPLE EXECUTIVE OFFICE
imprisonment for knowing violations.	penalties for submitting false information, including the possibility of fine and	belief, true, accurate, and complete. I am aware that there are significant	information, the information submitted is, to the best of my knowledge and	manage the system, or those persons directly responsible for gathering the	information submitted. Based on my inquiry of the person or persons who	designed to assure that qualified personnel properly gather and evaluated the	prepared under my direction or supervision in accordance with a system	NAME/TITLE PRINCIPLE EXECUTIVE OFFICE I certify under penalty of law that this document and all attachments were
ALITHORIZED AGENT	EXECUTIVE OFFICER OR	SIGNATURE OF PRINCIPAL	1110m x.110m.	May Lynn	1			
AREA/N			907 58					TELEP

YY/MM/DD	AREA/NUMBER	AUTHORIZED AGENT	
		EXECUTIVE OFFICER OR	and
		SIGNATURE OF PRINCIPAL	
6/1/10	907 586-0393	1110m X 1110m	<u>g</u>
11/19		The Thirty	Э
		1	0
			d the
DATE	TELEPHONE		æ

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

CONTACT NAME: Mark Mow

[AILING ADDRESS: 155 S. Seward Street]

MAILING ADDRESS: 155 S. Seward Street Juneau, AK 99801

PERMIT NUMBER: AK0023213

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:

							200 (minute) (a) 00	000			,
Parameter		Quantity or Loading	r Loading	Units	Qual	Quality or Concentration	tion	Units	No.	Frequency of	Sample Type
		Average	Maximum		Minimum	Average	Maximum		Ex.	Analysis	
Biochemical Oxygen Demand	Sample				****						
(BOD5)	meas.										
1 - Final Effluent Permit	Permit	Report	Report	lbs/day	***	Report	Report	mg/l		When Discharging	Grab
00310 R	reqmt	monthly average	daily maximum			monthly average	daily maximum				
Total Suspended Solids	Sample				***						
	meno.										
1 - Final Effluent Permit	Permit	Report	Report	lbs/day	**	Report	Report	mg/l		When Discharging	Grab
00530 R reqmt.	reqmt.	monthly average	daily maximum			monthly average	daily maximum				
Coliform, fecal MF, M-FC broth,	Sample	***	***		****						
44.5 C	meas.										
1 - Final Effluent	Permit	***	******		****	Report	Report	cts/100 ml		When Discharging	Grab
31616 R	reqmt.					monthly geometric mean	daily maximum				
Flow	Sample				****	****	****				
	meas.										
1 - Final Effluent Permit	Permit	Report	Report	MGD	***	***	****			When Discharging	Recorded
50050 R	reqmt.	monuniy average	daily maximum								
Duration of Discharge	Sample	****			*****	****	****				
	meas.										
1 - Final Effluent Permit 81381 R reqmt	Permit reqmt.	** ** ** **	report daily maximum	min/day	**************************************	* * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * *			When Discharging	Instantaneous Reading
COMMENTS:									Į		

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.

YY/MM/DD	AREA/NUMBER YY/MM/DD	AUTHORIZED AGENT	in prisonneat for knowing violations.	TYPED OR PRINTED
		EXECUTIVE OFFICER OR	penalties for submitting false information, including the possibility of fine and	
7		SIGNATURE OF PRINCIPAL	belief, true, accurate, and complete. I am aware that there are significant	
907 586-0393 6/1/10	907 586-0393	11/000 4.111000.	information, the information submitted is, to the best of my knowledge and	
1.10		Mr. Char	manage the system, or those persons directly responsible for gathering the	Mark Mow/Wastewater Collections SR.
		1	information submitted. Based on my inquiry of the person or persons who	
			designed to assure that qualified personnel properly gather and evaluated the	
			prepared under my direction or supervision in accordance with a system	
DATE	TELEPHONE		NAME/TITLE PRINCIPLE EXECUTIVE OFFICE I certify under penalty of law that this document and all attachments were	NAME/TITLE PRINCIPLE EXECUTIVE OFFICE

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: AK0023213

FACILITY: JUNEAU DOUGLAS WW TREATMENT FACILITY

LOCATION: 1540 Thane Rd

Juneau, AK 99801

MONITORING PERIOD: 5/1/2018 OT

MONITORING POINT: 004 (N-15.1) (R) Douglas

NO DISCHARGE: 5/31/2018

								0			
Parameter		Quantity or Loading	or Loading	Units	Qual	Quality or Concentration	tion	Units	No.	Frequency of	Sample Type
		Average	Maximum		Minimum	Average	Maximum		Ex.	Analysis	
Biochemical Oxygen Demand	Sample				****						
1 - Final Effluent Permit	Permit regmt.	Report monthly average	Report daily maximum	lbs/day	**	Report monthly average	Report daily maximum	mg/l		When Discharging	Grab
Total Suspended Solids	Sample meas.				* * * * * * * * * * * * * * * * * * * *						
1 - Final Effluent Permit	Permit	Report	Report	lbs/day	* * * *	Report	Report	mg/l		When Discharging	Grab
00530 R	reqmt.	monthly average	daily maximum			monthly average	daily maximum				
Coliform, fecal MF, M-FC broth, 44.5 C	Sample meas.	* * * *	***		***						
1 - Final Effluent 31616 R	Permit reqmt.	**************************************	***		# # # #	Report monthly geometric	Report daily maximum	cts/100 ml		When Discharging	Grab
Flow	Sample meas.				****	****	* * * *				
1 - Final Effluent Permit 50050 R regmt.	Permit reqmt.	Report monthly average	Report daily maximum	MGD	***************************************	**************************************	i			When Discharging	Recorded
Duration of Discharge	Sample meas.	****			***	***	**				
1 - Final Effluent 81381 R	Permit reqmt	# # # #	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

_			_			_	_	_	1
TYPED OR PRINTED		Cociaco		Mark Mow/Wastewater Collections SR.				NAME/TITLE PRINCIPLE EXECUTIVE OFFICE	
imprisonment for knowing violations.	penalties for submitting false information, including the possibility of fine and	belief, true, accurate, and complete. I am aware that there are significant	information, the information submitted is, to the best of my knowledge and	manage the system, or those persons directly responsible for gathering the	information submitted. Based on my inquiry of the person or persons who	designed to assure that qualified personnel properly gather and evaluated the	prepared under my direction or supervision in accordance with a system	NAME/TITLE PRINCIPLE EXECUTIVE OFFICE certify under penalty of law that this document and all attachments were	Attach an explanation of any violations. Reference all attachments below.
AUTHORIZED AGENT	EXECUTIVE OFFICER OR	SIGNATURE OF PRINCIPAL	11164 4. 111000.	July 1 hours					below.
AREA/NUMBER YY/MM/E			907 586-0393 61111					TELEPHONE	
YY/MM/E			chil	///				DATE	

the	•		
	Mass. mow	907 586-0393	6/1/18
<u>n</u>	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR		
	AUTHORIZED AGENT	AREA/NUMBER	YY/MM/DD
	AUTHORIZED AGENT	AREA/NUMBER	YY/MM/DD

City and Borough of Juneau Public Works Utilities Department 2009 Radcliffe Road, Juneau, Alaska 99801 Telephone: 586-0393 FAX: 789-1681

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	рН	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

			12
			!
	10		



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
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)	1984		<2.0	-	<2.0
Enterococci (MPN/100ml)	-	44844	<10	_	<10
BOD (mg/L)	2.8	350	1		
TSS (mg/L)	<4.0	388	(man		-
Ammonia (mg/L)	12) 244	· 	_	_
Salinity (ppt)		3004	Same Same	33	

Quality Control:

Analysis	МВ	LC\$	LCS Duplicate	RPD	Date/Time Commenced	Holding Time Me
BOD	< 2	87.9%	85.4%	2.9%	04/04/18; 09:25	ves
TSS	< 4	97.0%	97.0%	0.0%	04/05/18; 12:30	yes
FC	< 2			***	04/03/18; 14:05	ves
Entero	4 1				04/03/18; 14:30	yes
NH3	<0.5	102.0%	101.0%	1.0%	04/13/18; 11:38	yes
Salinity	544			1,00	04/05/18; 14:50	ves

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

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

Case Narrative:

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

David Wetzel

President, Admirally Environmental dwelzel@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 18D0325-01 Client Sample ID

J-D Effluent 24hr Composite

Tag Number

Collection Date

Date Received

AE 19594 04/03/2018 08:35 4

4/5/2018 9:35:00AM



Analytical Results

Date:

Monday, April 9, 2018

Client:

Admiralty Environmental, LLC

Client Project:

CBJ Wastewater/AE 19594

Client Sample ID:

J-D Effluent 24hr Composite

Sample Description:

AE 19594

Aqueous

Work Order/ID:

18D0325-01

Sampled:

04/03/2018 8:35

Matrix: **Analyses**

Certs AT Result

Received: Units

04/05/2018 9:35

RL Qual

Analyzed Analyst: SJE

Total Recoverable Metals by ICP/MS Copper

dijl A 7.2

Method: EPA 200.8 Rev 5.4 Prep Method: 200.7_200.8

1.0 ppb Prep Date/Time: 04/06/2018 09:46 1 04/06/2018 16:29



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 quantilation 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 Duplicale

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.

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

Microbac Laboratories, Inc.



Analytical QC Summary

Client:

Admiralty Environmental, LLC

Metals - Quality Control

Work Order:

18D0325

CBJ Wastewater/AE 19594

Project: Batch:

B118865 Prep: 200.7 200.8

BULGITI	2110000 110p. 200.0									
Total Recove	erable Metals by ICP/MS									
Sample ID:	Blank (B118865-BLK1)	N	lethod:	EPA 20	0.8 Rev 5	.4	Prepped: Analyzed:		6/2018 6/2018	
Analyte Copper	Result ND	Limit 1.0	Units ppb	Level	Result	%REC	•	RPD	Limit	Qual
Sample ID: Source:	LCS (B118865-BS1)	N	lethod:	EPA 20	0.8 Rev 5	.4	Prepped: Analyzed:		6/2018 (6/2018	
Analyte ^{Copper}	Result 18.6	Limit 1.0	Units ppb	Level 20.00	Result	%REC 93.2	•	RPD	Limit	
Sample ID: Source:	Matrix Spike (B118865-MS1) 18D0324-01	N	lethod:	EPA 200	0.8 Rev 5	.4	Prepped: Analyzed:		5/2018(5/2018)	
Analyte ^{Copper}	Result 18.9	Limit 1.0	Units ppb	Level 20.00	Result 0.874	%REC 90.1	-	RPD	Limit	Qual
Sample ID: 'rce:	Matrix Spike Dup (B118865-MSD1) 18D0324-01	N	lethod:	EPA 200	0.8 Rev 5	.4	Prepped: Analyzed:		6/2018(6/2018 <i>~</i>	
alyte Copper	- Result	Limit	Units	Level	Result	%REC	•	RPD	Limit	Qual



April 18, 2018

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

Re: CBJ Wastewater/AE 19594

Work Order No.: 18D0786

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.

Carry Hackpala

Carey Gadzala Project Manager



WORK ORDER SAMPLE SUMMARY

Date:

Wednesday, April 18, 2018

Client:

Admiralty Environmental, LLC

Project:

CBJ Wastewater/AE 19594

Lab Order: 18D0786

Lab Sample ID 18D0786-01

Client Sample ID **Ambient Station Grab**

Tag Number AE 19594

Collection Date

Date Received

04/03/2018 08:50 4/12/2018 9:35:00AM



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

Work Order/ID:

DF

18D0786-01

Sampled:

Units

04/03/2018 8:50

Matrix:

Aqueous

Received:

04/12/2018 9:35

Analyzed

Analyses

Result Certs AT

Method: EPA 350.1 Rev 2.0

Qual

Analyst: ABG

Nitrogen, Ammonia as N Nitrogen, Ammonia (As N)

Prep Method: Aqueous Ammonia Distillation A 0.21

dio

0.10

mg/L

Prep Date/Time: 04/17/2018 12:22 1 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

a = 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.

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

Microbac Laboratories, Inc.



Analytical QC Summary

Client:

Admiralty Environmental, LLC

18D0786

Work Order: Project:

CBJ Wastewater/AE 19594

Batch:

B119318 Prep: Aqueous Ammonia Distillation

Nitrogen, Am	monia as N										
Sample ID: Source:	Blank (B119318-BLK1)		М	ethod:	EPA 350	.1 Rev 2.		Prepped: Analyzed:		7/2018 0	
Analyte Nitrogen, Ammor	nia (As N)	Result ND	Limit 0.10	Units mg/L	Level	Result	%REC	•	RPD	Limit	Qual
Sample ID: Source:	LCS (B119318-BS1)		M	ethod:	EPA 350),1 Rev 2.		Prepped: Analyzed:		7/2018 0 7/2018 1	
Analyte Nitrogen, Ammor	nia (As N)	Result 3.81	Limit 0,10	Units mg/L	Level	Result	%REC 95.2	Limits 90-110	RPD	Limit	Qual
Sample ID: Source:	Matrix Spike (B119318- 18D0713-06	MS1)	M	lethod:	EPA 350),1 Rev 2.	0	Prepped: Analyzed:		7/2018 0 7/2018 1	1:38
Analyte Nitrogen, Ammor	nia (As N)	Result 12.5	Limit 0.20	Units mg/L	Level 8.000	Result 4.52	%REC 99.2	90-110	RPD	Limit	Qual
Sample ID:	Matrix Spike (B119318-	-MS2)	Method:		EPA 350.1 Rev 2.0		0	Prepped: Analyzed:		7/2018 1 8/2018 1	
alyte Nitrogen, Ammo		Result 33.6	Limit 0,20	Units mg/L	Level 8,000	Result 25.6	%REC 100	90-110	RPD	Limit	Qua
Sample ID: Source:	Matrix Spike Dup (B119	9318-MSD1)	Method:		EPA 350.1 Rev 2.0		Prepped: Analyzed:		7/2018 0 7/2018 1		
Analyte Nitrogen, Ammo		Result	Limit 0.20	Units mg/L	Level 8,000	Result 4.52	%REC 91.5	Limits 90-110	RPD 5.10	Limit 20	Qua
Sample ID: Source:	Matrix Spike Dup (B11)	9318-MSD2)	T.	lethod:	EPA 35	0.1 Rev 2	.0	Prepped: Analyzed:		7/2018 1 8/2018 1	
Analyte Nitrogen, Ammo		Result 32,3	Limit 0.20	Units mg/L	Level 8.000	Result 25.6	%RE0 83.7	•	RPD 3,95	Limit 20	Qua S

Wet Chemistry - Quality Control

Admiralty Environm 11 641 W. Willoughby Ave., Ste 301 Juneau, AK 99801 (907) 463-4415 fax (480) 247-4476

ghby Ave., Sie 301 CHAIN OF CUSTODY/TRANSMITTAL RECORD 8001 (907)

Admiralty ENVIRONMENTAL PROJECT NAME

PROJECT NAME.	CBJ	CBJ Wastewater Juneau-Douglas Treatment Plant Permit # AK- 002321-3	lant Permit # AJ	K- 002321	n		ADEC	Com	ADEC Compliance	0		2		8
REPORT TO:	City and E-mail: k jem.westo noo.temp	City and Borough of Juneau E-mail: karen.sewell@imeau.org jan.westoot@juneau.org rico.tempe@juneau.org	PHONE#: (907) 5.	(907) 586-0393			,					AE	AE 195414	
ADDRESSS:	2009 R. Juneau	2009 Radcliffe Road Juneau, AK 99801	SAMPLED BY:	6	# of Bottles		175000	8100	4:					
			7		' bas	Coli	1-2-		<i></i>	į,		Fe	Field Results	
DATE TDAR		SITE DESCRIPTION ADENTIFIER	25	MATRIX	uva		127	्र उस्र	-5	: 1	Hq	Temp	D.O.	
5890 81-8-1		J-D WTP Effluent 24hr Composite	omposite	H20	.×	* *	×	X	-		w _			
, 3º		J-D WTP influent 24hr Composite	omposite	H ₂ O	×					0.4				
St. 378-4		J-D WTP Effluent Grab		HzO	CK.	×				X.				
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Character Director	1	(1)	T of	' ×	>							
1 3 C	(·)	さける しょうかん	L Li Dint	A	d		×		×	•	1.2	J.M	300	7
			7		,					t.				
Comments:					Avojavogaj Bupqarosa figipstojdavos jag pa vogoseg	a comp	alsed by rac	abyling lab	Kalony	Запр	Sample Recept:	Yes //vo		
*-	۵ با د بسی				<u>į</u> 5	Temp (°C):	v			Borries	Bottles Intact	7	1	
Reliquished by: [signature]	<u> </u>	Reliquished by: (print)	Date: Time: 4-3-48 OS		<u>į</u>	Thermo D#:		l 1		Suffici	Sufficient Sample Volumeः			
Recieved by (signature)	2	y: (print)		7		Condition of Custody seal	1			Labels	Labels Agree with COC:	24	ĵ	iji
Reliquished by. (signature)	2	ished by: (print)	Date: Time:		e eesses	Infizied By:				Holdin	Holding Time Met	79.		4.4
Rocleved by: (signature)	₫.	Received by: (print)	Dato: Time:		17-7	Shipped Via:	1	1		Problems	: KE	1	-	
										-111			1	

CHAIN OF CUSTOBY (TRANSMITTAL RECORD PAGE 1 OF 1

Admiralty Environmental 641 W. Willoughby Ave., Ste 301

Juneau, AK 99801 463-4415 fax (480) 247-4476

Page/Lob 15.489.C **AE** 19594 D.0. 80038 Fred Results Temp kolding Time Met Labels Agree with COC: Sufficient Sample 띮 Bottles Intact SHE CO. порють Volume: 1 3 1.5 À . ż; ADEC Compliance 加多 5.79 /WX Skipped Via: femp (°C): Condition of 6 (4 # of Bottles Juneau-Douglas Treatment Plant Permit # AK- 002321-3 MATRIX O, H O, O.H P35 0430 (907) 586-0393 0017 8 0 STO 4-2-4 45-18 31/4/4 J-D WTP Effluent 24hr Composite J-D WTP Influent 24hr Composite 400 Joseph 2 te 3 J-D WTP Effluent Grab Chronic mining SITE DESCRIPTION ADENTIFIER 500 **CBJ Wastewater** Ambien City and Borough of Juneau E-malt: karen sewell@uneau.org jim.westoott@juneau.org rico.tempel@juneau.org Stephanie eliquished by: (print Received by: (print) 2009 Radcliffe Road Juneau, AK 99801 0835 0820 0850 -3-18/0835 0835 TOME miralty ONMENTAL eved by: (signature 4318 4-3-18 Comments 4-3-18 NAMES: 4-3-19 DATE ż

0325 Carey Gadzala Admiralty - Juneau, AK CBJ Wastewater/AE 19594 04/05/2018

Page 7 of 7

Fod Fr

Admiralty Environmen.... 641 W. Willoughby Ave., Ste 301

Juneau, AK 99801 463-4415 fax (480) 247-4476

CHAIN OF CUSTODY/GRANSMITTAL RECORD
PAGE 1 OF 1

/ 6) 0 7 8 6

F 90 D,O Field Results Temp Sufficient Sample: Holding Time Mel abels Agree with COC: 띰 Sottles Intact 1 Problems: Volume: 30. '2; ! À ADEC Compliance 西京 Ų 記る 5.79 / H/ Temp ("C): # of Bottles Juneau-Douglas Treatment Plant Permit # AK- 002321-3 MATRIX 0837 (907) 586-0393 0430 0935 8 200 4/11/13 DWIP Emuent 24hr Composite 4000 4111115 B WITP Influent 24hr Composit 3-D-WTP Efficient Grab Dow BRIMT SITE DESCRIPTION ADENTIFIER REP.E **CBJ Wastewater** Mores City and Borough of Juneau E-mail: karan.sewell@juneau.org jm.westcott@juneau.org tellquished by: (print) 2009 Radcilffe Road nco.tempel@juneau.org Juneau, AK 99801 0850 Sun THE T cleved by: (signature) K M E NT'A 37 P Comments DATE Carey Gadzala

18D0786 Carey Gadzala Admiralty - Juneau, AK CBJ Wastewater/AE 19594 04/12/2018



COOLER INSPECT	ION			Date:		pril 9, 2018		
Client Name: Admiralty	Environmental, LLC		Date/Time Rec	eived:	04/05/2018	3 09:35		
Work Order Number:	18D0325		Received by:	Nicole	Rainwater			
Checklist completed by:	4/5/2018 5:35:00PM	Nicole Rainwater	Reviewed by:	4/6/20	018	CAG		
	#	Carrier Name: FedEx	:					
Co	ooler ID: Default Cooler		Container/Te	mp Blank	c Temperatur	re: 1	6.0° C	
Custody seals intact on COC present? COC included sufficient COC included sufficient COC included a sample COC agrees with samp COC identified the appr COC included date of COC included time of COC included time of COC identified the appr Samples in proper cont Sample containers intact Sufficient sample volum All samples received with	shipping container/cooler? sample containers? client identification? sample collector information description? le labels? copriate matrix? collection? collection? copriate number of container ainer/bottle? ct? ne for indicated test?	on? ers?	Yes	No N	No.	t Present t Present t Present		
	If No, adjuste	ed by?	-					
Cooler Comments: ANY "NO" EVALUATI	quished and received? e?		Yes Yes Yes Yes Yes Yes Yes	No No No No ON.	No Vo	OA vials sub	omitted	V
	D Effluent 24hr Composite	Comments			7			



COOLER INSPECT Client Name: Admiralty	Environmental, LLC		Date/Time F		04/12/2018	April 18, 201: 09:35	8
Work Order Number:	18D0786		-		•	lava	
Checklist completed by:	4/12/2018 5:03:00PM D	ave Bryant	Reviewed by	y: 4/12/2	2018	CAG	
		Carrier Name: FedEx					
C	ooler ID: Default Cooler		Container	Temp Blank	c Temperature	3.0	° C
Custody seals intact on COC present? COC included sufficient COC included sufficient COC included a sample COC agrees with samp COC identified the appr COC included date of COC included time of COC identified the appr Samples in proper cont Sample containers intac Sufficient sample volum All samples received with	shipping container/cooler? sample containers? t client identification? t sample collector information? d description? le labels? ropriate matrix? collection? collection? ropriate number of containers? ainer/bottle? ct? ne for indicated test?	entified?	Yes	No N	Not	Present Present Present	
	If No, adjusted by			A2 51			
Cooler Comments: ANY "NO" EVALUATION	quished and received? ee? erved? eamples have zero headspace? ON (excluding After-Hour Recei	ot) REQUIRES CLIENT	Yes / Yes / Yes / Yes / Yes /	No No No No No	No VO	A vials submit	tted 🗸
	lient Sample ID	Comments					

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		9				