



Envirodyne Laboratories, Inc
11011 Brooklet Dr., # 230
Houston, TX 77099
281.568.7880 Phone
www.envirodyne.com

18 December 2018

Si Environmental, LLC
Chris Manthei
6420 Reading Road
Rosenberg, TX 77471

Fulshear MUD 3A - WQP

Enclosed are the results of analyses for samples received by the laboratory on 03-Dec-18 14:35. The analytical data provided relates only to the samples as received in this laboratory report.

ELI certifies that all results are NELAP compliant and performed in accordance with the referenced method except as noted in the Case Narrative or as noted with a qualifier. Any reproductions of this laboratory report should be in full and only with the written authorization from the client.

The total number of pages in this report is 9

Thank you for selecting ELI for your analytical needs. If you have any questions regarding this report, please contact us.

Sincerely,

A handwritten signature in blue ink that reads 'Laura Bonjonia'.

Laura Bonjonia For Itzel Dominguez
Project Manager



Certificate No: T104704265-18-14



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Client: Si Environmental, LLC
Project: Fulshear MUD 3A - WQP
Work Order: 18L0374
PWS ID: TX0790560

Reported:
18-Dec-18 10:41

ANALYTICAL REPORT FOR SAMPLES

Sample ID		Laboratory ID	Matrix	Date Sampled	Date Received
EWQP	PBCU001 - 30438 NIGHT HERON LA	18L0374-01	Water	03-Dec-18 08:54	03-Dec-18 14:35
DSTWQP	20181 ANNA BLUE CREST	18L0374-02	Water	03-Dec-18 09:06	03-Dec-18 14:35

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Laura Bonjonia For Itzel Dominguez, Project Manager

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PBCU001 - 30438 NIGHT HERON LANE
18L0374-01 (Water) Sampled: 03-Dec-18 08:54

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
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Field Analysis

pH	7.24		SU	1	B8L0155	03-Dec-18	03-Dec-18 08:54	SM4500H+ B	CER	
Temperature	17.3	10.0	°C	1	B8L0155	03-Dec-18	03-Dec-18 08:54	SM2550 B	CER	

Wet Chemistry

Alkalinity (m) as CaCO ₃	356	20	mg/L	1	B8L0364	10-Dec-18	10-Dec-18 10:00	SM 2320 B	JNK	
Alkalinity (p) as CaCO ₃	<20	20	mg/L	1	B8L0364	10-Dec-18	10-Dec-18 10:00	SM 2320 B	JNK	
Total Alkalinity as CaCO ₃	356	20	mg/L	1	[CALC]	10-Dec-18	10-Dec-18 10:00	[CALC]	JNK	
Conductivity	537	30	uS/cm	1	B8L0758	07-Dec-18	07-Dec-18 11:21	SM2510 B	JNK	
TDS	282	10.0	mg/L	1	B8L0867	07-Dec-18	07-Dec-18 15:48	SM2540 C	JCR	

Total Metals by ICP

Calcium	49.7	0.07	mg/L	1	B8L0950	09-Dec-18	10-Dec-18 10:07	EPA 200.7	TS	
Total Hardness as CaCO ₃	153	0.79	mg/L	1	[CALC]	09-Dec-18	10-Dec-18 10:07	SM 2340B	TS	
Iron	0.236	0.0037	mg/L	1	B8L0934	10-Dec-18	10-Dec-18 15:25	EPA 200.7	TS	
Magnesium	6.93	0.15	mg/L	1	B8L0950	09-Dec-18	10-Dec-18 10:07	EPA 200.7	TS	
Manganese	0.0143	0.0005	mg/L	1	B8L0934	10-Dec-18	10-Dec-18 15:25	EPA 200.7	TS	
Sodium	44.2	0.03	mg/L	1	B8L0950	09-Dec-18	10-Dec-18 10:07	EPA 200.7	TS	

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20181 ANNA BLUE CREST
18L0374-02 (Water) Sampled: 03-Dec-18 09:06

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
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Envirodyne Laboratories, Inc.

Field Analysis

pH	7.20		SU	1	B8L0155	03-Dec-18	03-Dec-18 09:06	SM4500H+ B	CER	
Temperature	20.4	10.0	°C	1	B8L0155	03-Dec-18	03-Dec-18 09:06	SM2550 B	CER	

Wet Chemistry

Alkalinity (m) as CaCO ₃	354	20	mg/L	1	B8L0364	10-Dec-18	10-Dec-18 10:00	SM 2320 B	JNK	
Alkalinity (p) as CaCO ₃	<20	20	mg/L	1	B8L0364	10-Dec-18	10-Dec-18 10:00	SM 2320 B	JNK	
Total Alkalinity as CaCO ₃	354	20	mg/L	1	[CALC]	10-Dec-18	10-Dec-18 10:00	[CALC]	JNK	
Conductivity	532	30	uS/cm	1	B8L0758	07-Dec-18	07-Dec-18 11:21	SM2510 B	JNK	
TDS	252	10.0	mg/L	1	B8L0867	07-Dec-18	07-Dec-18 15:48	SM2540 C	JCR	

Total Metals by ICP

Calcium	48.6	0.07	mg/L	1	B8L0950	09-Dec-18	10-Dec-18 10:09	EPA 200.7	TS	
Total Hardness as CaCO ₃	149	0.79	mg/L	1	[CALC]	09-Dec-18	10-Dec-18 10:09	SM 2340B	TS	
Iron	0.194	0.0037	mg/L	1	B8L0934	10-Dec-18	10-Dec-18 15:28	EPA 200.7	TS	
Magnesium	6.86	0.15	mg/L	1	B8L0950	09-Dec-18	10-Dec-18 10:09	EPA 200.7	TS	
Manganese	0.0118	0.0005	mg/L	1	B8L0934	10-Dec-18	10-Dec-18 15:28	EPA 200.7	TS	
Sodium	45.2	0.03	mg/L	1	B8L0950	09-Dec-18	10-Dec-18 10:09	EPA 200.7	TS	

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Wet Chemistry - Quality Control
Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch B8L0364 - Inorganics									
Blank (B8L0364-BLK1)				Prepared & Analyzed: 10-Dec-18					
Alkalinity (m) as CaCO ₃	<20	20	mg/L						
Alkalinity (p) as CaCO ₃	<20	20	"						
LCS (B8L0364-BS1)				Prepared & Analyzed: 10-Dec-18					
Alkalinity (m) as CaCO ₃	54		mg/L	50.0	108	90-110			
Alkalinity (p) as CaCO ₃	54		"	50.0	108	90-110			
Duplicate (B8L0364-DUP1)				Source: 18K2993-01		Prepared & Analyzed: 10-Dec-18			
Alkalinity (m) as CaCO ₃	270	20	mg/L		228		16.9	20	
Alkalinity (p) as CaCO ₃	<20	20	"		<20		0	20	
Batch B8L0758 - Inorganics									
Blank (B8L0758-BLK1)				Prepared & Analyzed: 07-Dec-18					
Conductivity	<30	30	uS/cm						
Duplicate (B8L0758-DUP1)				Source: 18L0374-01		Prepared & Analyzed: 07-Dec-18			
Conductivity	536	30	uS/cm		537		0.131	20	
Reference (B8L0758-SRM1)				Prepared & Analyzed: 07-Dec-18					
Conductivity	182		uS/cm	180	101	0-200			
Batch B8L0867 - Inorganics									
Blank (B8L0867-BLK1)				Prepared & Analyzed: 07-Dec-18					
TDS	<10.0	10.0	mg/L						

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PWS ID: TX0790560

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18-Dec-18 10:41

Wet Chemistry - Quality Control

Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B8L0867 - Inorganics

Duplicate (B8L0867-DUP1)

Source: 18L0036-01

Prepared & Analyzed: 07-Dec-18

TDS	502	10.0	mg/L		506			0.794	20	
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Work Order: 18L0374
PWS ID: TX0790560

Reported:
18-Dec-18 10:41

Total Metals by ICP - Quality Control
Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B8L0934 - Metals - EPA 200.2

Blank (B8L0934-BLK1)

Prepared & Analyzed: 10-Dec-18

Manganese	<0.0005	0.0005	mg/L
Iron	<0.0037	0.0037	"

LCS (B8L0934-BS1)

Prepared & Analyzed: 10-Dec-18

Iron	252		ug/L	250		101	85-115
Manganese	251		"	250		100	85-115

Matrix Spike (B8L0934-MS1)

Source: 18L0810-01

Prepared & Analyzed: 10-Dec-18

Manganese	0.491	0.0005	mg/L	0.500	0.00245	97.7	70-130
Iron	0.627	0.0037	"	0.500	0.137	97.9	70-130

Matrix Spike Dup (B8L0934-MSD1)

Source: 18L0810-01

Prepared & Analyzed: 10-Dec-18

Manganese	0.501	0.0005	mg/L	0.500	0.00245	99.7	70-130	2.04	20
Iron	0.641	0.0037	"	0.500	0.137	101	70-130	2.18	20

Batch B8L0950 - Metals - EPA 200.2

Blank (B8L0950-BLK1)

Prepared: 09-Dec-18 Analyzed: 10-Dec-18

Magnesium	<0.15	0.15	mg/L
Calcium	<0.07	0.07	"
Sodium	<0.03	0.03	"

LCS (B8L0950-BS1)

Prepared: 09-Dec-18 Analyzed: 10-Dec-18

Magnesium	20.0		mg/L	20.0		99.8	85-115
Sodium	20.0		"	20.0		99.8	85-115
Calcium	20.2		"	20.0		101	85-115

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18-Dec-18 10:41

Total Metals by ICP - Quality Control
Envirodyne Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch B8L0950 - Metals - EPA 200.2

Matrix Spike (B8L0950-MS1)		Source: 18L0810-01			Prepared: 09-Dec-18 Analyzed: 10-Dec-18					
Calcium	83.4	0.07	mg/L	20.0	60.7	113	70-130			
Magnesium	26.3	0.15	"	20.0	6.31	100	70-130			
Sodium	50.0	0.03	"	20.0	28.8	106	70-130			
Matrix Spike Dup (B8L0950-MSD1)		Source: 18L0810-01			Prepared: 09-Dec-18 Analyzed: 10-Dec-18					
Sodium	48.2	0.03	mg/L	20.0	28.8	97.2	70-130	3.67	20	
Magnesium	26.1	0.15	"	20.0	6.31	98.9	70-130	0.959	20	
Calcium	80.4	0.07	"	20.0	60.7	98.5	70-130	3.57	20	

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18-Dec-18 10:41

Notes and Definitions

DET Analyte DETECTED
ND Analyte NOT DETECTED at or above the reporting limit
NR Not Reported
dry Sample results reported on a dry weight basis
RPD Relative Percent Difference
CLT Client Representative

Envirodyne Laboratories, Inc.

A handwritten signature in blue ink that reads "Laura Bonjonia".

Laura Bonjonia For Itzel Dominguez, Project Manager

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**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
WATER QUALITY PARAMETER MONITORING FORM 20679**

Completed by PWS (or Agent)										Completed by Laboratory														
PWS Name: Fulshear MUD 3A					Laboratory Name: Envirodyne Laboratories, Inc.																			
PWS ID #: TX 0790560					TCEQ Lab ID #: TX-288																			
PWS Address:					Laboratory Address: 11011 Brooklet Dr #230 Houston, TX 77099																			
PWS Contact: Mike Thornhill																								
PWS Contact Phone #: 832-490-1507					Laboratory Contact: Laura Bonjonia																			
Inhibitor or Stabilizer Used (✓):										Phosphate					Silica					Calcium carbonate				
TREATMENT					Alkalinity Dosage Rate:					Inhibitor Dosage Rate:					Laboratory Contact Phone #: 281-568-7880									
Sample Information										Parameters Requested: Analyses are required for the parameters checked. * If inhibitors containing phosphate or silica are used, then these parameters should also be analyzed depending on which is in use.														
Sample Type (✓): <input checked="" type="checkbox"/> Compliance					<input type="checkbox"/> Non-compliance																			
Sample Collector (✓): Public Water System					<input checked="" type="checkbox"/> Accredited Lab															3rd Party Contractor --> LAB ID AL TX-288				
Temperature and pH (Y or N): Y					Are temperature and pH included on the sampling entity's Laboratory Approval Form on file at the TCEQ?					Y					Were temperature and pH measured in the field within 15 minutes of sample collection?									
Facility ID (e.g. DS01, PBCU001)	Sample Point ID (e.g. DSTWQP, EWQP)	Sample Location	Sample Collection		Field Measurements		Replacement? (✓)	Original Sample ID #	Original Sample Date (MMDDYY)	Lab Sample ID	Alkalinity (1927)	Calcium (1919)	Chloride (1017)	Conductivity (1064)	Hardness (1915)	Iron (1028)	Manganese (1032)	Sodium (1052)	Sulfate (1055)	TDS (1930)	O-Phosphate (1044) *	Silica (1049) *		
			Date (MMDDYY)	Time - 24 hr (HHMM)	pH	Temp (°C)																		
PBCU001	EWQP	30438 Night Heron Lane	120318	0854	7.24	17.3				18L0374-01	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
DS01	DSTWQP	20181 Anna Blue Crest	120318	0906	7.20	20.4				18L0374-02	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
											✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
											✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
											✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
											✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
											✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
I acknowledge that information on this form is true and correct and sites selected for sampling follow the instructions in the TCEQ Monitoring and Sample Collection Guidance for Water Quality Parameters. This includes, but not limited to the measurement of pH and temperature immediately upon collection. Falsification of this form or tampering with water samples is a crime punishable under state and/or federal law. (Texas Penal Code, Title 8, Chapter 37.10)										<input checked="" type="checkbox"/> Sample Conditions Upon Receipt (✓) <input type="checkbox"/> Samples received unpreserved? <input checked="" type="checkbox"/> Iced <input type="checkbox"/> Ambient Rejection Code (if applicable): Actual / Corrected sample temperature: 3.6/3.6 Date & Time of Sample Preservation (Acidified): 1815 12/6/18 Thermometer ID #: <i>1815</i>														
Name of Authorized PWS Representative (Print)			Signature		Organization			Date																
<i>Laura Bonjonia</i>			<i>Laura Bonjonia</i>		Envirodyne			12/3/18																
Chain of Custody																								
Relinquished By (Signature)			Date/Time: 1435 12/3/18		Relinquished By Courier (Signature)			Date/Time: 12-3-18		Laboratory Comments: 1815 12/6/18														
Received By Courier (Signature)			Date/Time:		Received By Lab (Signature)			Date/Time: 12/3/18		1435 12-3-18														

TCEQ 20679 (Rev 01/2018)