

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

12 November 2019

Gulf Utility Michael Williams P.O Box 1629 Spring, TX 77383

River Club Water - WQP

Enclosed are the results of analyses for samples received by the laboratory on 29-Oct-19 17:05. 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,

Kily

Kyle Chernosky For Ike Nkaginieme Project Coordinator



Certificate No: T104704265-19-16

		Envirodyne Laboratories, Inc 11011 Brooklet Dr., # 230 Houston, TX 77099 281.568.7880 Phone www.envirodyne.com
Client:	Gulf Utility	
Project:	River Club Water - WQP	Reported:
Work Order:	19J4137	12-Nov-19 09:32
PWS ID:	TX1700185	

ANALYTICAL REPORT FOR SAMPLES

Sample ID)	Laboratory ID	Matrix	Date Sampled	Date Received
EWQP	PBCU001 TRT-TAP-SORTERS RD	19J4137-01	Water	29-Oct-19 13:12	29-Oct-19 17:05
DSTWQP	DS01 11931 RIVER RIDGE LN	19J4137-02	Water	29-Oct-19 13:00	29-Oct-19 17:05

Envirodyne Laboratories, Inc.

Kyl y



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

Reported: 12-Nov-19 09:32

PBCU001 TRT-TAP-SORTERS RD 19J4137-01 (Water) Sampled: 29-Oct-19 13:12

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
Thirdyte	itebuit						ThatyZea	method	Thuryst	110105
			Envirody	yne Labo	ratories, I	nc.				
Field Analysis										
рН	7.58		SU	1	B9J4236	29-Oct-19	29-Oct-19 13:12	SM4500H+ B	CBA	
Temperature	26.1	10.0	°C	1	B9J4236	29-Oct-19	29-Oct-19 13:12	SM2550 B	CBA	
Wet Chemistry										
Alkalinity (m) as CaCO3	160	20.0	mg/L	1	B9K0063	01-Nov-19	01-Nov-19 11:37	SM 2320 B	SNG	
Alkalinity (p) as CaCO3	<20.0	20.0	mg/L	1	B9K0063	01-Nov-19	01-Nov-19 11:37	SM 2320 B	SNG	
Total Alkalinity as CaCO3	160	20.0	mg/L	1	[CALC]	01-Nov-19	01-Nov-19 11:37	[CALC]	SNG	
Conductivity	487	30	uS/cm	1	B9J4402	01-Nov-19	01-Nov-19 09:40	SM2510 B	SNG	
OrthoPhosphate as P	0.81	0.10	mg/L	1	B9J4018	30-Oct-19	30-Oct-19 10:07	SM4500-P E	AT	
TDS	526	10.0	mg/L	1	B9K0367	04-Nov-19	05-Nov-19 15:20	SM2540 C	MNF	
Total Metals by ICP										
Calcium	54.2	2.00	mg/L	1	B9K1310	08-Nov-19	11-Nov-19 17:03	EPA 200.7	JPC	
Total Hardness as CaCO3	161	13.2	mg/L	1	[CALC]	08-Nov-19	11-Nov-19 17:03	SM 2340B	JPC	
Iron	< 0.0050	0.0050	mg/L	1	B9K1314	11-Nov-19	11-Nov-19 16:57	EPA 200.7	JPC	
Magnesium	6.22	2.00	mg/L	1	B9K1310	08-Nov-19	11-Nov-19 17:03	EPA 200.7	JPC	
Manganese	< 0.0050	0.0050	mg/L	1	B9K1314	11-Nov-19	11-Nov-19 16:57	EPA 200.7	JPC	
Sodium	24.3	2.0	mg/L	1	B9K1310	08-Nov-19	11-Nov-19 17:03	EPA 200.7	JPC	

Envirodyne Laboratories, Inc.

Kil y



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

Reported: 12-Nov-19 09:32

DS01 11931 RIVER RIDGE LN 19J4137-02 (Water) Sampled: 29-Oct-19 13:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Analyst	Notes
]	Envirody	yne Labo	ratories, I	nc.				
Field Analysis										
рН	7.42		SU	1	B9J4236	29-Oct-19	29-Oct-19 13:00	SM4500H+ B	CBA	
Temperature	26.1	10.0	°C	1	B9J4236	29-Oct-19	29-Oct-19 13:00	SM2550 B	CBA	
Wet Chemistry										
Alkalinity (m) as CaCO3	148	20.0	mg/L	1	B9K0063	01-Nov-19	01-Nov-19 11:37	SM 2320 B	SNG	
Alkalinity (p) as CaCO3	<20.0	20.0	mg/L	1	B9K0063	01-Nov-19	01-Nov-19 11:37	SM 2320 B	SNG	
Total Alkalinity as CaCO3	148	20.0	mg/L	1	[CALC]	01-Nov-19	01-Nov-19 11:37	[CALC]	SNG	
Conductivity	477	30	uS/cm	1	B9J4402	01-Nov-19	01-Nov-19 09:40	SM2510 B	SNG	
OrthoPhosphate as P	0.65	0.10	mg/L	1	B9J4018	30-Oct-19	30-Oct-19 10:07	SM4500-P E	AT	
TDS	318	10.0	mg/L	1	B9K0367	04-Nov-19	05-Nov-19 15:20	SM2540 C	MNF	
Total Metals by ICP										
Calcium	55.8	2.00	mg/L	1	B9K1310	08-Nov-19	11-Nov-19 17:03	EPA 200.7	JPC	
Total Hardness as CaCO3	165	13.2	mg/L	1	[CALC]	08-Nov-19	11-Nov-19 17:03	SM 2340B	JPC	
Iron	< 0.0050	0.0050	mg/L	1	B9K1314	11-Nov-19	11-Nov-19 16:57	EPA 200.7	JPC	
Magnesium	6.32	2.00	mg/L	1	B9K1310	08-Nov-19	11-Nov-19 17:03	EPA 200.7	JPC	
Manganese	< 0.0050	0.0050	mg/L	1	B9K1314	11-Nov-19	11-Nov-19 16:57	EPA 200.7	JPC	
Sodium	24.7	2.0	mg/L	1	B9K1310	08-Nov-19	11-Nov-19 17:03	EPA 200.7	JPC	

Envirodyne Laboratories, Inc.

Kyl y



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

Reported: 12-Nov-19 09:32

Wet Chemistry - Quality Control

Envirodyne Laboratories, Inc.

		•								
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B9J4018 - Inorganics										
Blank (B9J4018-BLK1)				Prepared &	Analyzed:	30-Oct-19				
OrthoPhosphate as P	<0.10	0.10	mg/L							
LCS (B9J4018-BS1)				Prepared & Analyzed: 30-Oct-19						
OrthoPhosphate as P	0.990		mg/L	1.00	1 2		80-120			
Matrix Spike (B9J4018-MS1)	Sourc	ce: 19J4139-	11	Prepared &						
OrthoPhosphate as P	0.630	0.10	mg/L	0.333	0.290	102	80-120			
Matrix Spike Dup (B9J4018-MSD1)	Sourc	ce: 19J4139-	11	Prepared &						
OrthoPhosphate as P	0.630	0.10	mg/L	0.333	0.290	102	80-120	0.00	20	
Batch B9J4402 - Inorganics										
Blank (B9J4402-BLK1)				Prepared &	Analyzed:	01-Nov-19)			
Conductivity	<30	30	uS/cm							
Duplicate (B9J4402-DUP1)	Sourc	ce: 19J4193-	01	Prepared &	Analyzed:	01-Nov-19)			
Conductivity	61.8	30	uS/cm		61.8			0.00	20	
Reference (B9J4402-SRM1)				Prepared & Analyzed: 01-Nov-19)				
Conductivity	177		uS/cm	180 98.3		0-200				
Batch B9K0063 - Inorganics										
Blank (B9K0063-BLK1)				Prepared &	Analyzed:	01-Nov-19)			
Alkalinity (m) as CaCO3	<20.0	20.0	mg/L							
Alkalinity (p) as CaCO3	<20.0	20.0	"							

Envirodyne Laboratories, Inc.

Kyl y



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

Reported: 12-Nov-19 09:32

Wet Chemistry - Quality Control

Envirodyne Laboratories, Inc.

		v		,						
Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B9K0063 - Inorganics										
LCS (B9K0063-BS1)				Prepared &	د Analyzed:	01-Nov-19				
Alkalinity (m) as CaCO3	51.0		mg/L	50.0		102	90-110			
Alkalinity (p) as CaCO3	50.0		"	50.0		100	90-110			
Duplicate (B9K0063-DUP1)	Sour	Prepared &	د Analyzed:	01-Nov-19						
Alkalinity (m) as CaCO3	34.0	20.0	mg/L		40.0			16.2	20	
Alkalinity (p) as CaCO3	<20.0	20.0	"		<20.0			0	20	
Batch B9K0367 - Inorganics										
Blank (B9K0367-BLK1)				Prepared &	analyzed:	04-Nov-19				
TDS	<10.0	10.0	mg/L							
Duplicate (B9K0367-DUP1)	Sour	Source: 19J3682-01 Prepared & Analyzed: 04-Nov-19								
TDS	488	10.0	mg/L	478			2.07	20		

Envirodyne Laboratories, Inc.

Kil y



Client:Gulf UtilityProject:River Club Water - WQPWork Order:19J4137PWS ID:TX1700185

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

> **Reported:** 12-Nov-19 09:32

Total Metals by ICP - Quality Control

Envirodyne Laboratories, Inc.

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B9K1310 - Metals - EPA 200.2										
Blank (B9K1310-BLK1)				Prepared: ()8-Nov-19 A	Analyzed: 1	1-Nov-19			
Calcium	<2.00	2.00	mg/L							
Magnesium	<2.00	2.00	"							
Sodium	<2.0	2.0	"							
LCS (B9K1310-BS1)				Prepared: ()8-Nov-19 A	Analyzed: 1	1-Nov-19			
Magnesium	19.9		mg/L	20.0		99.3	85-115			
Calcium	19.7		"	20.0		98.6	85-115			
Sodium	19.9		"	20.0		99.6	85-115			
Matrix Spike (B9K1310-MS1)	Sour	ce: 19K0494-	01	Prepared: ()8-Nov-19 /	Analyzed: 1	1-Nov-19			
Calcium	32.8	2.00	mg/L	20.0	13.0	99.1	70-130			
Magnesium	23.0	2.00	"	20.0	3.19	99.0	70-130			
Sodium	159	2.0	"	20.0	137	107	70-130			
Matrix Spike Dup (B9K1310-MSD1)	Sour	ce: 19K0494-	01	Prepared: ()8-Nov-19 /	Analyzed: 1	1-Nov-19			
Magnesium	22.9	2.00	mg/L	20.0	3.19	98.7	70-130	0.289	20	
Sodium	157	2.0	"	20.0	137	99.1	70-130	1.04	20	
Calcium	32.6	2.00	"	20.0	13.0	98.0	70-130	0.680	20	
Batch B9K1314 - Metals - EPA 200.2										
Blank (B9K1314-BLK1)				Prepared &	Analyzed:	11-Nov-19)			
Iron	< 0.0050	0.0050	mg/L							
Manganese	< 0.0050	0.0050	"							

 LCS (B9K1314-BS1)
 Prepared & Analyzed: 11-Nov-19

 Iron
 259
 ug/L
 250
 104
 85-115

 Manganese
 250
 "
 250
 99.9
 85-115

Envirodyne Laboratories, Inc.

Kyl y



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

> **Reported:** 12-Nov-19 09:32

Total Metals by ICP - Quality Control

Envirodyne Laboratories, Inc.

Analyte Batch B9K1314 - Metals - EPA 200.2	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Matrix Spike (B9K1314-MS1)	Source: 19K0494-01 Pr			Prepared &	k Analyzed:	11-Nov-19)			
Iron	1.01	0.0050	mg/L	0.500	0.528	95.8	70-130			
Manganese	0.496	0.0050	"	0.500	0.0155	96.1	70-130			
Matrix Spike Dup (B9K1314-MSD1)	Source: 19K0494-01			Prepared 8	analyzed:	11-Nov-19)			
Manganese	0.493	0.0050	mg/L	0.500	0.0155	95.6	70-130	0.576	20	
Iron	0.992	0.0050	"	0.500	0.528	92.8	70-130	1.51	20	

Envirodyne Laboratories, Inc.

Kyl y



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

Client:	Gulf Utility	
Project:	River Club Water - WQP	Reported:
Work Order:	19J4137	12-Nov-19 09:32
PWS ID:	TX1700185	

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.

Kyl y

	-Pot	:31	916			1 df	413	7											
TCEQ			Contract of the second	w					NTAL QUALITY RING FORM 20	679	N.					1000			
			Cor	npleted by PW	S (or Agent)						Co	mpl	eted	by L	abora	tory			2.579
	PWS Name:	River CI	ub Water			16			Labo	ratory Name	Enviro	odyne Laboratories, Inc.					Inc.		
	PWS ID#:	TX 1700)185						т	:		TX	-28	8					
P	WS Address:	20235 F	Russell Drive, Porter,	TX 77365			14				11011	В	roo	kle	t Dr	#23	10		
P	WS Contact:	Michea	I Williams		0		-1		Labora	tory Address	Houst	ton	, T.	X 7	709	19	T.		
PWS Conta	act Phone #:	281-355	5-1312					Labora	tory Contact	Laura	Bo	nic	mir						
Inhibit	or or Stablizer L	lsed (√): X	Phosphate	Silica		Calcium car	bonate				Laura	DC	nije	110	•				
TR	EATMENT	4	Ukalinity Dosage Rate:	Inhibitor Do	sage Rate:		141		Laboratory C	ontact Phone #:	281-50	58-	788	30					
				Sample Infor	mation						Contract Manager		the second		N.S.	10.25	a state	THE SHE	
	Sample	rype (√): X	Compliance	Non-com					TX 000		Parameters Requeste checked. * If inhibitors	conta	aining	n nho	snhate	A OF CIL	CD DE	ucod H	
	Sample Colle	ctor (v):	Public Water System	X Accredite	And Share a strend of the		ntractor> L		AL TX-288		I these parameters shou	ld als	to be	analy	yzed d	lepend	ng on	which is	in
Temp	erature and pH	(Y or N): Y	Are temperature and pH include Laboratory Appreval Form on fil	e at the TCEQ?	ntity's Y	collection?	ture and pH me	in the field within 15 n	ninutes of sample			u	ise.						
	Sample Point ID			Sample	Collection	Field Mea	surements	ement?				Alkalinity (1927)	Calcium (1919)	Chloride (1017) Conductivity (1064)	lardness (1915)	ron (1028) Manganese (1032)	052)	(1930) (1931) nosphate (1044) *	.(8
Facility ID	(e.g.	Sec. 19 19					olace		Original		inity) un	ide (ness	Iron (1028) Manganese	Sodium (1052)	1930	ica (1049)	
(e.g. DS01, PBCU001)	DSTWQP, EWQP)	5	Sample Location	(MMDDYY)	Time - 24 hr (HHMM)	pH	Temp (°C)	Ref	Original Sample ID #	(MMDDYY)	Lab Sample ID	Alkal	Calci	Chio	Hard	Iron (Mang	Sodiu	TDS (1930) O-Phosphate (Silica
PBCU001	EWQP	SORTER	RS RD	102919	1312	758	26.1				1994137-01	V	\checkmark	v v	/ /	VV	~		1
DS01	DSTWQP	11931 R	RIVER RIDGE LN	102519	1300	7.42	261				1934137-02	V	V	V V	′ √	$\sqrt{}$	~ ~	∕	
8												V	V	V V	1	V V	VV	/ v	
												V	V	V - V	/ v ·	VV	VV	<pre>/</pre>	
													-		++	V V	V V	V	
												\checkmark	~	VV	1	$\vee \vee $	VV	\checkmark	
I acknowledge th	at information on	this form is tru	e and correct and sites selected measurement of pH and tempera	for sampling follow t ture immediately up	the instructions in on collection. Fall	the TCEQ Monit	form or tamperi	ng with	ction Guidance for W water samples is a c	ater Quality	Sample					pt (√)			
under state and/	or federal law. (T	exas Penal Cod	te, Title 8, Chapter 37.10)						1		Samples received unprese	erved?		Ice	Sector 1		Ambien		
Name of Author	rized PWS Repre	sentative (Pri	nt) Signature	Organization					Date		Rejection Code (if applicable): Actual / Corrected sample temperature:				4.1	4.1			
- Cl	Ches aly Ches				5 1	Envir	slyre	10-291	9	Date & Time of Sample Preservation (Acidified): (0-31-19 P12:00 Thermometer ID #: 1R				#4					
Relinquished By (Date/Time: Relinquished By Courier (Signature)								Date/Time:	Laboratory Comments:				(Contract)				_	
Cha	hals and 102513																		
Received By Cour	rier (Signature)	0		Date/Time:	Date/Time: Received By Lab (Signature) Date/Time: 10/2/11/9														
TCEQ 20679 (Rev	(12/2017)			1		JUd	telle investigation	2		1705			10/15/2	-	-	-			