SURFACE WATER MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER

Summary Page

PUBLIC WATER SYSTEM NAME: Webb County Water Utility

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022

Plant ID No.: 20831

Report for the Month of: March 2018

I certify that I am familiar with the information contained in this report and that, to the best of my knowledge, the information is true, complete, and accurate.

Operator's Signature:

Certificate No. & Grade: WS0012772, B

Date: April 10, 2018

TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	103	Number of 4-hour periods when plant was off-line:	83
Number of readings above 0.10 NTU:	84	Number of 4-hour periods when plant was on-line but turbidity data was not collected:	0
Number of readings above 0.3 NTU:	0		
Number of readings above 0.5 NTU:	0	Number of days when plant was on-line but individual filter turbidity data was not collected:	0
Number of readings above 1.0 NTU:	0		
Maximum allowable turbidity level:	0.3	Number of days with readings above 1.0 NTU:	0 (2)
Percentage of readings above this limit:	0.0 % (1)	Number of days with readings above 5.0 NTU:	0 (3)

Bin Class: 2 Crypto Credit Required: 4.0 (7A) Crypto Credit Achieved: 4.0 (7B) Bin 3&4 Credits: 1.0 (7C)

Watershed Protection:	0.0	Conventional Treatment:	3.0	Second Stage Filtration:	0.0
Bank Filtration:	0.0	Enhanced Filter Performance:	0.0	UV:	1.0
Presedimentation with Coagulation:	0.0	Bag and Cartridge Filtration:	0.0	Ozone, Chlorine Dioxide:	0.0
Two-Stage Lime Softening:	0.0	Membrane Filtration:	0.0	Perform. Demonstration:	0.0

Number of days with low inactivation (including UV) for no more than 4.0 consecutive hours:	0	Average log inactivation (including UV) for Giardia:	5.20
		Average log inactivation) (including UV) for viruses:	74.91
Number of days with low inactivation (including UV) for more than 4.0 consecutive hours:	0 (4)	Number of days when profiling data was not collected:	0
		Number of days when CT data was not collected:	0

Minimum disinfectant residual required leaving the plant: 0.5 mg/L, measured as Total Chlorine

Number of days with a low residual for no more than 4.0 consecutive hours:	0	Minimum pH in the last disinfection zone:	6.75
		Number of days with pH below 7.0 in the last disinfection zone:	5.00
Number of days with a low residual for more than 4.0 consecutive hours:	0 (5)	Number of days when disinfectant residual leaving the plant was not properly monitored:	0

DISTRIBUTION SYSTEM

Minimum disinfectant residual required in distribution system: 0.5 mg/L, measured as Total Chlorine

Total number of readings this month:	41 (at least 31 required) (8)		
Average disinfectant residual value:	2.26	Percentage of readings with a low residual this month:	0.0 % (6A)
Number of readings with a low residual:	0		
Number of readings with no detectable residual:	0	Percentage of readings with a low residual last month:	0.0 % (6B)

ADDITIONAL REPORTS & WORKSHEETS

The Page 1 Addendum (Public Notices) is not required because there were no treatment technique or monitoring/reporting violations reported.

Additional report(s) for individual filter monitoring required: ◉ NONE ○ Filter Profile ○ Filter Assessment ○ CPE

Additional report(s) for individual filter monitoring submitted: ◉ NONE ○ Filter Profile (9) ○ Filter Assessment (10) ○ CPE (11)

No additional IFE Reports are required this month.

P.2-Turbidity Data P.3-Filter Data P.4&5-Disinfection Data P.6-TOCMOR

Alternate Technol.

UV–CDA UV–Sensor Data UV–UVT Analyzer

STATISTICAL ANALYSIS OF TURBIDITY DATA

Settled Water Stastical Summary	Maximum turbidity reading:	10.31 NTU	Average turbidity value:	3.51 NTU
	Minimum turbidity reading:	0.59 NTU	Standard deviation:	1.750 NTU
	95th percentile value:	6.85 NTU		
IFE Stastical Summary	Maximum IFE turbidity reading:	0.00 NTU	Average IFE turbidity value:	0.08 NTU
	Minimum IFEturbidity reading:	0.32 NTU	Standard deviation:	0.151 NTU
	95th percentile IFE value:	0.05 NTU		
CFE Stastical Summary	Maximum CFE turbidity reading:	0.20 NTU	Average CFE turbidity value:	0.13 NTU
	Minimum CFE turbidity reading:	0.09 NTU	Standard deviation:	0.023 NTU
	95th percentile CFE value:	0.17 NTU		

STATISTICAL ANALYSIS OF pH DATA

Last Zone pH Stastical Summary	Maximum pH reading:	7.47 pH	Average pH value:	7.11 pH
	Minimum pH reading:	6.75 pH	Standard deviation:	0.146 pH
	95th percentile value:	7.29 pH		

SURFACE WATER MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER (cont.)

Turbidity Data Page

PUBLIC WATER SYSTEM NAME: Webb County Water Utility

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022 **Plant ID No.:** 20831 **Connections:** 1,941

Month: March **Year:** 2018 **Population:** 6,794

PERFORMANCE DATA

Date	Raw Water Pumpage (MGD)	Treated Water Pumpage (MGD)	RAW WATER ANALYSES NTU	RAW WATER ANALYSES Alk.	SETTLED WATER TURBIDITY (Mandatory Data) Basin No. 1	2	3	4	5	6	FINISHED WATER QUALITY Combined Filter Effluent Turbidity NTU1	NTU2	NTU3	NTU4	NTU5	NTU6	Lowest Residual	Time*
1	0.992	0.527	58	140	3.3	10.3					X	X	X	0.18	0.15	0.14	3.2	
2	0.904	0.489	80	140	4.4	2.9					X	X	X	0.10	0.12	0.10	2.6	
3	0.920	0.534	99	140	1.7	3.0					X	X	X	0.10	0.10	0.11	3.3	
4	0.872	0.568	13	140	5.7	2.7					X	X	X	0.12	0.11	0.13	2.5	
5	1.059	0.537	17	140	3.6	2.3					0.13	X	X	0.14	0.15	0.15	3.2	
6	0.852	0.488	29	140	0.6	1.4					X	X	X	0.15	0.16	0.17	2.9	
7	0.911	0.530	50	140	1.1	3.2					X	X	X	0.15	0.17	0.15	3.5	
8	0.959	0.484	54	120	2.8	3.0					0.15	X	X	0.18	0.19	0.20	2.7	
9	0.807	0.492	19	120	3.1	2.1					0.15	X	X	0.12	0.12	0.13	3.4	
10	0.982	0.573	17	140	3.1	2.1					X	X	X	0.10	0.10	0.10	2.8	
11	0.867	0.483	29	140	3.3	1.5					X	X	X	0.11	0.12	0.14	2.9	
12	0.992	0.557	40	140	2.3	2.0					X	X	X	0.12	0.11	0.13	2.4	
13	0.835	0.537	11	140	0.7	2.4					0.15	X	X	0.13	0.14	0.14	2.8	
14	0.920	0.534	13	140	2.2	2.4					X	X	X	0.14	0.14	0.13	3.1	
15	0.919	0.572	23	140	1.9	2.7					X	X	X	0.13	0.13	0.12	3.0	
16	1.076	0.605	27	140	2.6	2.8					0.12	X	X	0.10	0.10	0.10	2.7	
17	0.977	0.577	16	140	2.3	2.3					0.10	X	X	0.10	0.10	0.10	2.4	
18	0.974	0.611	13	140	2.0	2.2					0.10	X	X	0.10	0.10	0.11	3.3	
19	1.073	0.616	23	140	6.1	2.3					0.12	X	X	0.10	0.13	0.12	3.5	
20	0.994	0.549	39	140	4.4	2.3					X	X	X	0.14	0.14	0.14	2.9	
21	0.971	0.578	11	120	4.8	4.1					X	X	X	0.13	0.14	0.13	2.3	
22	0.956	0.558	17	120	5.0	4.2					X	X	0.15	0.12	0.11	0.09	2.8	
23	0.897	0.555	26	120	4.3	3.9					X	X	X	0.12	0.12	0.13	2.9	
24	0.911	0.644	36	120	3.2	4.4					X	X	X	0.14	0.14	0.11	2.2	
25	1.358	0.634	37	120	3.9	3.8					0.12	X	X	0.12	0.13	0.13	2.4	
26	1.031	0.668	10	140	4.4	2.9					0.14	X	X	0.12	0.13	0.12	2.8	
27	1.007	0.579	14	120	4.3	3.5					X	X	X	0.15	0.14	X	2.1	
28	0.814	0.452	12	120	5.7	4.2					X	X	X	0.14	X	0.13	2.1	
29	1.031	0.413	42	140	7.3	5.6					0.16	X	X	0.17	0.18	0.15	2.1	
30	0.975	0.514	46	120	7.4	5.5					X	X	X	0.15	0.12	0.13	2.0	
31	0.946	0.526	22	120	6.9	5.4					X	X	X	0.13	0.11	0.12	1.9	
Total	29.782	16.984		Max	7.4	10.3												
Avg	0.961	0.548		Avg	3.7	3.3												
Max	1.358	0.668		95th %	7.1	5.6												
Min	0.807	0.413		Min	0.6	1.4												
				95th percentile based on data from all basins						6.8								

NOTE: ONLY use the "Time*" column to show the length of time that the disinfectant residual entering the distribution system fell below the acceptable level.

SUBMITTED BY: Tomas Sanchez Jr. **Certificate No. and Grade:** WS0012772, B **Date:** April 10, 2018

SURFACE WATER MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER (cont.)

Filter Data Page

PUBLIC WATER SYSTEM NAME: Webb County Water Utility

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022 **Plant ID No.:** 20831 **Month:** March **Year:** 2018

PERFORMANCE DATA

INDIVIDUAL FILTER TURBIDITY

Date	Filter No. 1		Filter No. 2		Filter No. 3		Filter No. 4		Filter No. 5		Filter No. 6		Filter No. 7		Filter No. 8		Filter No. 9		Filter No. 10	
	Max	4 Hrs	Max	4 Hrs	Max	4 Hrs	Max	4 Hrs	Max	4 Hrs	Max	4 Hrs	Max	4 Hrs	Max	4 Hrs	Max	4 Hrs	Max	4 Hrs
1	0.10		0.17		0.21		0.14													
2	0.17		0.18		0.10		0.13													
3	0.12		0.14		0.09		0.11													
4	0.10		0.22		0.12		0.13													
5	0.12		0.26		0.15		0.16													
6	0.10		0.26		0.20		0.20													
7	0.12		0.15		0.15		0.12													
8	0.13		0.27		0.25		0.13													
9	0.13		0.17		0.13		0.11													
10	0.10		0.22		0.18		0.12													
11	0.10		0.15		0.15		0.16													
12	0.10		0.17		0.19		0.24													
13	0.11		0.12		0.10		0.10													
14	0.09		0.10		0.10		0.10													
15	0.10		0.13		0.13		0.10													
16	0.08		0.13		0.15		0.12													
17	0.10		0.22		0.17		0.13													
18	0.09		0.21		0.12		0.30													
19	0.10		0.16		0.10		0.21													
20	0.10		0.11		0.13		0.10													
21	0.10		0.14		0.12		0.12													
22	0.09		0.13		0.16		0.24													
23	0.11		0.11		0.27		0.26													
24	0.16		0.14		0.23		0.11													
25	0.15		0.22		0.17		0.13													
26	0.14		0.24		0.16		0.13													
27	0.18		0.32		0.23		0.16													
28	0.16		0.12		0.14		0.14													
29	0.10		0.22		0.24		0.16													
30	0.13		0.14		0.19		0.15													
31	0.14		0.15		0.17		0.13													

SUMMARY & COMPLIANCE ACTIONS

Criteria	Filter No. 1	2	3	4	5	6	7	8	9	10	Plant
Number of days with event(s) above 0.5 NTU at 4.0 hrs this month											
Number of days with event(s) above 1.0 NTU this month	0	0	0	0							
Number of days with event(s) above 1.0 NTU last month	0	0	0	0							
Number of days with event(s) above 1.0 NTU two months ago	0	0	0	0							
Total number of days with event(s) above 1.0 NTU in three months	0	0	0	0							
Number of events above 2.0 NTU this month											0
Number of events above 2.0 NTU last month											0
Does the filter/plant have an approved Corrective Action Plan?	N	N	N	N							N
Is the plant required to submit a Filter Profile Report?	N	N	N	N							
Is the plant required to submit a Filter Assessment Report?	N	N	N	N							
Is the plant required to submit a Request for Compliance CPE?											N

SUBMITTED BY: Tomas Sanchez Jr. **Certificate No. and Grade:** WS0012772, B **Date:** April 10, 2018

SURFACE WATER MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES
OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER (cont.)
Disinfection Data Page

PUBLIC WATER SYSTEM NAME: Webb County Water Utility

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022 Plant ID No.: 20831 Month: March Year: 2018

DISINFECTION PROCESS PARAMETERS

APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS	
	Disinfection Zones					Log Inactivations	
Parameters	D1A	D1B	D2	D3	D4	Giardia lamblia Cysts	Viruses
Flow Rate (MGD)	1.250	1.250	0.625	1.250		0.5	2.0
T_{10} (minutes)	7.9	7.9	21.0	50.4			

PERFORMANCE DATA

Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
1	FCL *D1A*	1.2	0.961	22.3	7.3				
	FCL *D1B*	1.3	0.961	23.3	7.1				
	FCL *D2*	0.6	0.480	20.8	7.4	2.21	46.87	4.41	
	CLA *D3*	3.1	0.961	22.0	7.3			(G)	
	D4								
2	FCL *D1A*	1.1	0.800	20.0	7.1				
	FCL *D1B*	1.0	0.800	20.0	7.1				
	FCL *D2*	0.6	0.400	20.0	7.1	2.50	48.84	5.01	
	CLA *D3*	3.3	0.800	20.0	7.2			(G)	
	D4								
3	FCL *D1A*	1.1	0.816	21.0	6.9				
	FCL *D1B*	1.0	0.816	21.0	7.0				
	FCL *D2*	1.0	0.408	21.0	7.0	3.40	70.95	6.80	
	CLA *D3*	3.3	0.816	21.0	7.0			(G)	
	D4								
4	FCL *D1A*	0.8	0.801	22.0	7.1				
	FCL *D1B*	0.6	0.801	22.0	7.0				
	FCL *D2*	0.5	0.400	22.0	7.0	2.36	39.68	4.71	
	CLA *D3*	3.4	0.801	22.0	7.1			(G)	
	D4								
5	FCL *D1A*	1.3	0.787	21.0	7.0				
	FCL *D1B*	1.2	0.787	21.0	6.9				
	FCL *D2*	0.9	0.393	21.0	7.0	3.51	72.79	7.02	
	CLA *D3*	3.2	0.787	21.0	6.9			(G)	
	D4								
6	FCL *D1A*	1.0	0.750	20.0	7.0				
	FCL *D1B*	0.9	0.750	20.0	7.0				
	FCL *D2*	1.0	0.375	20.0	6.9	3.54	71.56	7.07	
	CLA *D3*	3.4	0.750	20.0	7.1			(G)	
	D4								
7	FCL *D1A*	1.1	0.725	21.8	7.1				
	FCL *D1B*	1.3	0.725	22.7	7.1				
	FCL *D2*	1.2	0.362	22.3	7.1	4.78	102.51	9.55	
	CLA *D3*	4.1	0.725	22.2	7.2			(G)	
	D4								
8	FCL *D1A*	1.4	0.730	20.9	6.8				
	FCL *D1B*	1.3	0.730	20.9	6.8				
	FCL *D2*	0.5	0.365	21.1	6.8	3.41	60.51	6.81	
	CLA *D3*	4.0	0.730	20.7	6.9			(G)	
	D4								

PERFORMANCE DATA

Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
9	FCL *D1A*	1.1	0.753	20.5	6.8				
	FCL *D1B*	1.3	0.753	20.3	6.8				
	FCL *D2*	1.1	0.376	21.1	6.6	4.41	85.01	8.82	
	CLA *D3*	3.5	0.753	20.5	6.8			(G)	
	D4								
10	FCL *D1A*	0.6	0.776	20.6	7.1				
	FCL *D1B*	0.5	0.776	20.9	7.1				
	FCL *D2*	0.7	0.388	20.2	7.1	2.53	48.28	5.07	
	CLA *D3*	3.0	0.776	21.9	7.0			(G)	
	D4								
11	FCL *D1A*	0.5	0.798	21.9	6.9				
	FCL *D1B*	0.5	0.798	21.5	7.1				
	FCL *D2*	0.6	0.399	20.5	7.1	2.33	43.10	4.65	
	CLA *D3*	3.2	0.798	21.2	6.9			(G)	
	D4								
12	FCL *D1A*	0.7	0.820	21.5	7.1				
	FCL *D1B*	0.8	0.820	21.5	7.1				
	FCL *D2*	0.8	0.410	20.6	7.2	2.63	53.04	5.26	
	CLA *D3*	3.2	0.820	21.4	7.1			(G)	
	D4								
13	FCL *D1A*	0.8	0.849	18.5	7.1				
	FCL *D1B*	0.7	0.849	19.0	7.2				
	FCL *D2*	0.9	0.424	19.3	7.2	2.43	50.45	4.86	
	CLA *D3*	3.4	0.849	19.6	7.1			(G)	
	D4								
14	FCL *D1A*	1.1	0.838	22.5	7.1				
	FCL *D1B*	1.2	0.838	22.2	7.0				
	FCL *D2*	1.0	0.419	21.0	7.3	3.45	76.47	6.90	
	CLA *D3*	3.4	0.838	22.5	7.2			(G)	
	D4								
15	FCL *D1A*	1.1	0.815	21.6	6.9				
	FCL *D1B*	1.4	0.815	21.2	7.1				
	FCL *D2*	1.3	0.407	21.0	7.1	4.01	90.95	8.02	
	CLA *D3*	3.0	0.815	21.4	6.9			(G)	
	D4								
16	FCL *D1A*	1.0	0.803	23.4	7.2				
	FCL *D1B*	1.1	0.803	23.3	7.2				
	FCL *D2*	1.2	0.401	20.9	7.3	3.87	85.42	7.74	
	CLA *D3*	3.8	0.803	23.3	7.1			(G)	
	D4								

NOTE: = ONLY use the "Time=" column to show the length of time that the total inactivation ratio was less than 1.00.

SUBMITTED BY: Tomas Sanchez Jr. Certificate No. and Grade: WS0012772, B Date: April 10, 2018

SURFACE WATER MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER (cont.)

Disinfection Data Page (cont.)

PUBLIC WATER SYSTEM NAME: Webb County Water Utility

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022 **Plant ID No.:** 20831 **Month:** March **Year:** 2018

DISINFECTION PROCESS PARAMETERS

APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS	
	Disinfection Zones					Log Inactivations	
Parameters	D1A	D1B	D2	D3	D4	Giardia lamblia Cysts	Virus
Flow Rate (MGD)	1.25	1.25	0.63	1.25		0.5	2.0
T_{10} (minutes)	7.90	7.90	21.00	50.40			

PERFORMANCE DATA

DISINFECTION PROCESS DATA

Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time=
17	FCL *D1A*	0.7	0.773	23.9	7.2				
	FCL *D1B*	0.7	0.773	24.1	7.3				
	FCL *D2*	0.6	0.386	21.3	7.4	2.79	54.79	5.58	
	CLA *D3*	3.3	0.773	23.2	7.2			(G)	
	D4								
18	FCL *D1A*	0.9	0.771	22.9	7.5				
	FCL *D1B*	1.0	0.771	23.1	7.5				
	FCL *D2*	1.0	0.385	21.3	7.6	3.34	77.00	6.68	
	CLA *D3*	3.7	0.771	22.8	7.5			(G)	
	D4								
19	FCL *D1A*	0.8	0.794	23.1	7.2				
	FCL *D1B*	1.2	0.794	23.3	7.1				
	FCL *D2*	0.9	0.397	22.7	7.3	3.44	70.78	6.87	
	CLA *D3*	3.5	0.794	24.1	7.1			(G)	
	D4								
20	FCL *D1A*	1.6	0.810	21.8	7.1				
	FCL *D1B*	1.8	0.810	22.0	7.1				
	FCL *D2*	1.1	0.405	20.4	7.2	3.95	89.09	7.89	
	CLA *D3*	4.0	0.810	20.6	7.0			(G)	
	D4								
21	FCL *D1A*	3.6	0.815	21.1	7.4				
	FCL *D1B*	3.8	0.815	21.4	7.3				
	FCL *D2*	0.9	0.407	22.2	7.4	4.16	119.74	8.32	
	CLA *D3*	2.9	0.815	22.7	7.2			(G)	
	D4								
22	FCL *D1A*	2.5	0.806	22.0	7.2				
	FCL *D1B*	2.2	0.806	22.0	7.1				
	FCL *D2*	1.9	0.403	22.0	7.1	5.92	153.05	11.84	
	CLA *D3*	3.6	0.806	22.0	7.1			(G)	
	D4								
23	FCL *D1A*	1.9	0.783	22.0	7.3				
	FCL *D1B*	2.2	0.783	22.0	7.2				
	FCL *D2*	1.8	0.391	22.0	7.2	5.61	145.73	11.22	
	CLA *D3*	3.9	0.783	22.0	7.2			(G)	
	D4								
24	FCL *D1A*	2.4	0.752	22.0	7.3				
	FCL *D1B*	2.5	0.752	22.0	7.2				
	FCL *D2*	1.6	0.376	22.0	7.2	5.81	150.96	11.61	
	CLA *D3*	4.0	0.752	22.0	7.3			(G)	
	D4								

PERFORMANCE DATA

DISINFECTION PROCESS DATA

Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time=
25	FCL *D1A*	1.8	0.737	22.0	7.4				
	FCL *D1B*	1.4	0.737	22.0	7.3				
	FCL *D2*	1.6	0.368	22.0	7.1	5.51	131.47	11.02	
	CLA *D3*	4.4	0.737	21.0	7.0			(G)	
	D4								
26	FCL *D1A*	1.1	0.936	21.1	7.2				
	FCL *D1B*	1.0	0.936	21.7	7.2				
	FCL *D2*	1.0	0.468	21.3	7.2	2.86	63.10	5.71	
	CLA *D3*	2.8	0.936	22.8	7.0			(G)	
	D4								
27	FCL *D1A*	1.7	0.938	22.0	7.2				
	FCL *D1B*	1.4	0.938	22.0	7.1				
	FCL *D2*	0.8	0.469	22.0	7.1	3.05	66.13	6.09	
	CLA *D3*	3.2	0.938	22.0	7.1			(G)	
	D4								
28	FCL *D1A*	1.4	0.956	22.1	7.2				
	FCL *D1B*	1.4	0.956	21.9	7.1				
	FCL *D2*	1.0	0.478	21.6	7.3	3.02	72.07	6.05	
	CLA *D3*	2.8	0.956	21.9	7.2			(G)	
	D4								
29	FCL *D1A*	0.5	1.004	22.9	7.1				
	FCL *D1B*	0.6	1.004	23.2	7.1				
	FCL *D2*	0.2	0.502	22.0	7.5	1.17	19.12	2.34	
	CLA *D3*	2.6	1.004	22.5	7.2			(G)	
	D4								
30	FCL *D1A*	0.5	1.011	22.7	7.0				
	FCL *D1B*	0.8	1.011	22.9	7.1				
	FCL *D2*	0.4	0.505	22.6	7.1	1.57	27.25	3.13	
	CLA *D3*	2.5	1.011	23.0	7.3			(G)	
	D4								
31	FCL *D1A*	1.2	0.988	22.8	7.1				
	FCL *D1B*	1.2	0.988	23.1	7.1				
	FCL *D2*	0.2	0.494	23.1	7.1	1.86	33.65	3.73	
	CLA *D3*	2.8	0.988	24.0	7.1			(G)	
	D4								

	Giardia Log	Virus Log	Inact. Ratio
Max	5.92	153.05	11.84
Min	1.17	19.12	2.34
Avg	3.40	74.85	6.80
SD	1.20	34.56	2.39

NOTE: = ONLY use the "Time=" column to show the length of time that the total inactivation ratio was less than 1.00.

SUBMITTED BY: Tomas Sanchez Jr **Certificate No. and Grade:** WS0012772, B **Date:** April 10, 2018

MONTHLY TOTAL ORGANIC CARBON REMOVAL REPORT (TOCMOR)

FOR SURFACE WATER OR GROUND WATER UNDER THE INFLUENCE OF SURFACE WATER SYSTEMS

PUBLIC WATER SYSTEM NAME: Webb County Water Utility

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022

Plant ID No.: 20831

Month: March

Year: 2018

Type of treatment: [X] Conventional [ ] Unconventional explain:

Note: Systems are required to run one TOC Sample Set every month. Additional space is provided for those systems that do additional sampling

Test No.	Test Date	Monthly TOC Sample Set			Actual % TOC Removed	Step 1 Required % Removal	Step 1 Removal Ratio	Optional data		INDIVIDUAL SAMPLE COMPLIANCE REMOVAL RATIO
		Raw Alkalinity	Raw TOC	Treated TOC				Step 2 Required % Removal	Step 2 Removal Ratio	
		Enter the Sample Set results			calculated	calculated from matrix	calculated			calculated
1	3/5	140	3.30	2.51	23.9	15	1.60			1.60
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
Avg		140.00	3.30	2.51	23.94		1.60			1.60
Max		140.00	3.30	2.51	23.94		1.60			1.60
Min		140.00	3.30	2.51	23.94		1.60			1.60

TOTAL ORGANIC CARBON (TOC) REMOVAL SUMMARY

TOC Summary					Monthly Compliance Ratio
Raw Water Alkalinity	Raw Water TOC	Treated Water TOC	TOC % Removal	ACC # used	
140	3.30	2.51	23.9	NA	1.60

I certify that I am familiar with the information contained in this report and that, to the best of my knowledge, the information is true, complete, and accurate.

Operator's Signature:

Certificate No. and Grade: WS0012772, B

Date: April 10, 2018

Submit the report by the 10th of the month following the reporting period to:

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
WATER SUPPLY DIVISION/PUBLIC DRINKING WATER SECTION (MC-155)
P.O. BOX 13087, AUSTIN, TEXAS 78711-3087

UV MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER

UV Calculated Dose Approach Reactors

PUBLIC WATER SYSTEM NAME: Webb County Water Utility

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022 **Plant ID No.:** 20831 **Month:** March **Year:** 2018

VALIDATED OPERATIONAL CONDITIONS

VALIDATED PARAMETERS						PERFORMANCE REQUIREMENTS	
Parameters	Reactor Number					Crypto Log Inactivation	Required UV Dose (mJ/cm^2)
	UVCD1	UVCD2	UVCD3	UVCD4	UVCD5		
Max Validated Flow Rate (MGD)	5.080	5.080	5.080			1.0	2.50
Min Validated UVT (%)	69.20	69.20	69.20				

PERFORMANCE DATA

Date	Reactor	Total Product. (MG)	Max. Flow Rate (MGD)	Min UV Trans. (%)	Minimum Meas'd UV Dose (mJ/cm^2)	Sensor CF	Adjusted Minimum UV Dose (mJ/cm^2)	Total Off-Spec Product. (MG)	Consec. Off-Spec Hours (hr)
1	1	X	X	X	X	X	X	X	0.50
	2	0.448	1.278	93.90	0.00	1.00	0.00	0.005	
	3	0.316	0.847	93.90	0.00	1.00	0.00	0.003	
	4								
	5								
2	1	X	X	X	X	X	X	X	0.25
	2	0.461	0.890	97.00	0.00	1.00	0.00	0.008	
	3	0.315	0.605	97.00	0.00	1.00	0.00	0.005	
	4								
	5								
3	1	X	X	X	X	X	X	X	0.25
	2	0.496	0.951	85.20	0.00	1.00	0.00	0.010	
	3	0.324	0.618	85.20	0.00	1.00	0.00	0.006	
	4								
	5								
4	1	X	X	X	X	X	X	X	0.25
	2	0.392	0.913	85.40	0.00	1.00	0.00	0.009	
	3	0.279	0.611	85.40	0.00	1.00	0.00	0.006	
	4								
	5								
5	1	X	X	X	X	X	X	X	0.25
	2	0.526	0.899	98.20	0.00	1.00	0.00	0.006	
	3	0.370	0.582	98.20	0.00	1.00	0.00	0.004	
	4								
	5								
6	1	X	X	X	X	X	X	X	0.25
	2	0.436	0.947	87.10	0.00	1.00	0.00	0.003	
	3	0.286	0.594	87.10	0.00	1.00	0.00	0.002	
	4								
	5								
7	1	X	X	X	X	X	X	X	0.25
	2	0.420	0.870	85.90	0.00	1.00	0.00	0.001	
	3	0.293	0.554	85.90	65.88	1.00	65.88	0.000	
	4								
	5								
8	1	X	X	X	X	X	X	X	0.000
	2	0.494	0.896	99.60	6.74	1.00	6.74	0.000	
	3	0.320	0.571	99.60	63.36	1.00	63.36	0.000	
	4								
	5								

PERFORMANCE DATA

Date	Reactor	Total Product. (MG)	Max. Flow Rate (MGD)	Min UV Trans. (%)	Minimum Meas'd UV Dose (mJ/cm^2)	Sensor CF	Adjusted Minimum UV Dose (mJ/cm^2)	Total Off-Spec Product. (MG)	Consec. Off-Spec Hours (hr)
9	1	X	X	X	X	X	X	X	0.25
	2	0.425	1.046	87.90	0.00	1.00	0.00	0.001	
	3	0.274	0.651	87.90	56.58	1.00	56.58	0.000	
	4								
	5								
10	1	X	X	X	X	X	X	X	0.25
	2	0.493	0.938	87.60	0.00	1.00	0.00	0.004	
	3	0.333	0.614	87.60	0.00	1.00	0.00	0.003	
	4								
	5								
11	1	X	X	X	X	X	X	X	0.25
	2	0.393	1.267	88.10	0.00	1.00	0.00	0.002	
	3	0.269	0.834	88.10	0.00	1.00	0.00	0.001	
	4								
	5								
12	1	X	X	X	X	X	X	X	0.000
	2	0.552	1.279	99.00	28.56	1.00	28.56	0.000	
	3	0.349	0.827	99.00	46.17	1.00	46.17	0.000	
	4								
	5								
13	1	X	X	X	X	X	X	X	0.75
	2	0.460	1.144	92.70	0.00	1.00	0.00	0.007	
	3	0.304	0.725	92.70	0.00	1.00	0.00	0.005	
	4								
	5								
14	1	X	X	X	X	X	X	X	0.000
	2	0.491	1.007	85.70	35.00	1.00	35.00	0.000	
	3	0.322	0.660	85.70	55.09	1.00	55.09	0.000	
	4								
	5								
15	1	X	X	X	X	X	X	X	0.000
	2	0.526	0.974	88.10	33.79	1.00	33.79	0.000	
	3	0.349	0.663	88.10	55.83	1.00	55.83	0.000	
	4								
	5								
16	1	X	X	X	X	X	X	X	0.25
	2	0.520	0.938	95.00	0.00	1.00	0.00	0.008	
	3	0.361	0.614	95.00	0.00	1.00	0.00	0.005	
	4								
	5								

SUBMITTED BY: Tomas Sanchez Jr

Certificate No. and Grade: WS0012772, B **Date:** April 10, 2018

UV MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES
OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER (cont.)
UV Calculated Dose Approach Reactors (cont.)

PUBLIC WATER SYSTEM NAME: Webb County Water Utility

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022 Plant ID No.: 20831 Month: March Year: 2018

TRUE

VALIDATED OPERATIONAL CONDITIONS

VALIDATED PARAMETERS						PERFORMANCE REQUIREMENTS	
Parameters	Reactor Number					Crypto Log Inactivation	Required UV Dose (mJ/cm^2)
	UVCD1	UVCD2	UVCD3	UVCD4	UVCD5		
Max Validated Flow Rate (MGD)	5.080	5.080	5.080			1.0	2.50
Min Validated UVT (%)	69.20	69.20	69.20				

PERFORMANCE DATA

Date	Reactor	Total Product. (MG)	Max. Flow Rate (MGD)	Min UV Trans. (%)	Minimum Meas'd UV Dose (mJ/cm^2)	Sensor CF	Adjusted Minimum UV Dose (mJ/cm^2)	Total Off-Spec Product. (MG)	Consec. Off-Spec Hours (hr)
17	1	X	X	X	X	X	X	X	0.000
	2	0.460	0.922	94.50	29.88	1.00	29.88	0.000	
	3	0.336	0.766	94.50	48.02	1.00	48.02	0.000	
	4								
	5								
18	1	X	X	X	X	X	X	X	0.000
	2	0.474	0.857	97.10	2.50	1.00	2.50	0.000	
	3	0.347	0.608	97.10	59.66	1.00	59.66	0.000	
	4								
	5								
19	1	X	X	X	X	X	X	X	0.000
	2	0.491	0.927	94.20	36.00	1.00	36.00	0.000	
	3	0.371	0.615	94.20	57.54	1.00	57.54	0.000	
	4								
	5								
20	1	X	X	X	X	X	X	X	0.25
	2	0.445	0.908	100.00	0.00	1.00	0.00	0.002	
	3	0.332	0.659	100.00	0.00	1.00	0.00	0.002	
	4								
	5								
21	1	X	X	X	X	X	X	X	0.25
	2	0.480	1.349	99.50	24.83	1.00	24.83	0.000	
	3	0.346	0.911	99.50	0.00	1.00	0.00	0.001	
	4								
	5								
22	1	X	X	X	X	X	X	X	0.25
	2	0.514	0.939	89.90	0.00	1.00	0.00	0.002	
	3	0.341	0.616	89.90	0.00	1.00	0.00	0.002	
	4								
	5								
23	1	X	X	X	X	X	X	X	0.25
	2	0.472	0.866	88.90	0.00	1.00	0.00	0.001	
	3	0.320	0.597	88.90	57.75	1.00	57.75	0.000	
	4								
	5								
24	1	X	X	X	X	X	X	X	0.25
	2	0.488	1.202	96.90	0.00	1.00	0.00	0.005	
	3	0.343	0.762	96.90	0.00	1.00	0.00	0.004	
	4								
	5								

PERFORMANCE DATA

Date	Reactor	Total Product. (MG)	Max. Flow Rate (MGD)	Min UV Trans. (%)	Minimum Meas'd UV Dose (mJ/cm^2)	Sensor CF	Adjusted Minimum UV Dose (mJ/cm^2)	Total Off-Spec Product. (MG)	Consec. Off-Spec Hours (hr)
25	1	X	X	X	X	X	X	X	0.25
	2	0.613	1.012	95.40	0.00	1.00	0.00	0.004	
	3	0.435	0.685	95.40	0.00	1.00	0.00	0.003	
	4								
	5								
26	1	X	X	X	X	X	X	X	0.25
	2	0.555	1.065	99.00	0.00	1.00	0.00	0.005	
	3	0.377	0.695	99.00	0.00	1.00	0.00	0.002	
	4								
	5								
27	1	X	X	X	X	X	X	X	0.000
	2	0.521	1.068	86.30	30.61	1.00	30.61	0.000	
	3	0.354	0.714	86.30	49.50	1.00	49.50	0.000	
	4								
	5								
28	1	X	X	X	X	X	X	X	0.25
	2	0.463	1.122	91.10	0.00	1.00	0.00	0.003	
	3	0.305	0.782	91.10	0.00	1.00	0.00	0.001	
	4								
	5								
29	1	X	X	X	X	X	X	X	0.25
	2	0.418	1.197	87.70	0.00	1.00	0.00	0.002	
	3	0.289	0.785	87.70	0.00	1.00	0.00	0.001	
	4								
	5								
30	1	X	X	X	X	X	X	X	0.000
	2	0.474	1.500	85.30	22.11	1.00	22.11	0.000	
	3	0.311	1.110	85.30	31.92	1.00	31.92	0.000	
	4								
	5								
31	1	X	X	X	X	X	X	X	0.000
	2	0.490	1.126	85.20	12.12	1.00	12.12	0.000	
	3	0.319	0.736	85.20	46.02	1.00	46.02	0.000	
	4								
	5								

SUBMITTED BY: Tomas Sanchez Jr.

Certificate No. and Grade: WS0012772, B Date: April 10, 2018

UV MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER (cont.)

UV Calculated Dose Approach - Daily Minimum Inactivation Summary Page

PUBLIC WATER SYSTEM NAME: Webb County Water Utility

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022 **Plant ID No.:** 20831 **Month:** March **Year:** 2018

DAILY MINIMUM INACTIVATION

Reactor Range	Date	Min Dose (mJ/cm²)	Inactivation Credit Achieved: Giardia Log	Virus Log	Crypto Log	Reactor Range	Date	Min Dose (mJ/cm²)	Min Inactivation: Giardia Log	Virus Log	Crypto Log
1 to 3	1	0.00*	1.00	0.00	1.00	1 to 3	9	0.00	1.00	0.00	1.00
	2	0.00*	1.00	0.00	1.00		10	0.00*	1.00	0.00	1.00
	3	0.00*	1.00	0.00	1.00		11	0.00*	1.00	0.00	1.00
	4	0.00*	1.00	0.00	1.00		12	28.56	4.00	0.19	1.00
	5	0.00*	1.00	0.00	1.00		13	0.00*	1.00	0.00	1.00
	6	0.00*	1.00	0.00	1.00		14	35.00	4.00	0.38	1.00
	7	0.00	1.00	0.00	1.00		15	33.79	4.00	0.35	1.00
	8	6.74	2.31	0.00	1.00		16	0.00*	1.00	0.00	1.00

DAILY MINIMUM INACTIVATION

Reactor Range	Date	Min Dose (mJ/cm²)	Min Inactivation: Giardia Log	Virus Log	Crypto Log	Reactor Range	Date	Min Dose (mJ/cm²)	Min Inactivation: Giardia Log	Virus Log	Crypto Log
1 to 3	17	29.88	4.00	0.23	1.00	1 to 3	25	0.00*	1.00	0.00	1.00
	18	2.50	1.25	0.00	1.00		26	0.00*	1.00	0.00	1.00
	19	36.00	4.00	0.41	1.00		27	30.61	4.00	0.25	1.00
	20	0.00*	1.00	0.00	1.00		28	0.00*	1.00	0.00	1.00
	21	0.00	1.00	0.00	1.00		29	0.00*	1.00	0.00	1.00
	22	0.00*	1.00	0.00	1.00		30	22.11	4.00	0.00	1.00
	23	0.00	1.00	0.00	1.00		31	12.12	3.14	0.00	1.00
	24	0.00*	1.00	0.00	1.00						

Total volume of water treated by all CDA reactors: 25.08 MG

Total volume of off-spec water produced by all CDA reactors: 0.14 MG

Percentage of off-spec water produced by all CDA reactors: 0.57 %

Crypto Log-Inactivation Credit for treatment by CDA reactors: 1.00 log

Treated water pumpage and total production by all UV reactors differ by more than 15% on these days: (March, 2018) 1, 4, 5, 6, 7, 8, 10, 11, 16, 17, 18, 19, 20, 25, 29, 30,

SUBMITTED BY: Tomas Sanchez Jr.

Certificate No. and Grade: WS0012772, B **Date:** April 10, 2018

UV MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER (cont.)

UV Sensor Calibration for Calculated Dose Reactors

PUBLIC WATER SYSTEM NAME: Webb County Water Utility

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022 **Plant ID No.:** 20831

Month: March **Year:** 2018

CALIBRATION DATA

UV Sensor Calibration Report for Calculated Dose Reactors

CDA Reactor Number	Calibration Date and Data	Duty Sensor	Duty Sensor Serial #	Ref Sensor Serial #	Duty Sensor Reading (mJ/cm²)	Ref Sensor Reading (mJ/cm²)	Cal Ratio	Duty Sensor Replaced?	Calculated Sensor CF
UVCD No. 1	Previous Month's Sensor CF	1	X	X	ND	ND	nd		off-line
		2							
		3							
	1.00	4							
	Calibration Date	5							
		6							
	3/1/18	7							
	New Sensor CF	8							
		9							
	1.00	10							
UVCD No. 2	Previous Month's Sensor CF	1	44	38	71.40	78.20	0.91	NA	1.00
		2							
		3							
	1.00	4							
	Calibration Date	5							
		6							
	3/1/18	7							
	New Sensor CF	8							
		9							
	1.00	10							
UVCD No. 3	Previous Month's Sensor CF	1	39	38	79.00	76.10	1.04	NA	1.00
		2							
		3							
	1.00	4							
	Calibration Date	5							
		6							
	3/1/18	7							
	New Sensor CF	8							
		9							
	1.00	10							
UVCD No. 4	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 5	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							

CALIBRATION DATA

UV Sensor Calibration Report for Calculated Dose Reactors

CDA Reactor Number	Calibration Date	Duty Sensor	Duty Sensor Serial #	Ref Sensor Serial #	Duty Sensor Reading (mJ/cm²)	Ref Sensor Reading (mJ/cm²)	Cal Ratio	Duty Sensor Replaced?	Calculated Sensor CF
UVCD No. 6	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 7	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 8	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 9	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 10	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							

SUBMITTED BY: Tomas Sanchez Jr.

Certificate No. and Grade: WS0012772, B

Date: April 10, 2018

UV MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER (cont.)

UV Sensor Calibration for Calculated Dose Reactors (cont.)

PUBLIC WATER SYSTEM NAME: Webb County Water Utility

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022 **Plant ID No.:** 20831

Month: March **Year:** 2018

CALIBRATION DATA

UV Sensor Calibration Report for Calculated Dose Reactors

CDA Reactor Number	Calibration Date	Duty Sensor	Duty Sensor Serial #	Ref Sensor Serial #	Duty Sensor Reading (mJ/cm²)	Ref Sensor Reading (mJ/cm²)	Cal Ratio	Duty Sensor Replaced?	Calculated Sensor CF
UVCD No. 11	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 12	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 13	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 14	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 15	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							

CALIBRATION DATA

UV Sensor Calibration Report for Calculated Dose Reactors

CDA Reactor Number	Calibration Date	Duty Sensor	Duty Sensor Serial #	Ref Sensor Serial #	Duty Sensor Reading (mJ/cm²)	Ref Sensor Reading (mJ/cm²)	Cal Ratio	Duty Sensor Replaced?	Calculated Sensor CF
UVCD No. 16	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 17	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 18	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 19	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 20	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							

SUBMITTED BY: Tomas Sanchez Jr.

Certificate No. and Grade: WS0012772, B

Date: April 10, 2018

UV MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES
OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER (cont.)

UVT Analyzer Calibration

PUBLIC WATER SYSTEM NAME: Webb County Water Utility

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022

Plant ID 20831

Month: March

Year: 2018

CALIBRATION DATA

Benchtop UVT Analyzer Serial Number: P0108955

UVT Analyzer Number	Week	Calibration Date	On-line UVT Analyzer Serial #	On-line Reading (% UVT)	Grab Sample Reading (% UVT)	Difference (% UVT)	Recalibration Performed? (if Diff > 2%)	Other Action Taken
UVT No. 1	1	3/1/18	78713	97.00	96.40	0.60	NA	NA
	2	3/5/18	78713	99.50	98.30	1.20	NA	NA
	3	3/12/18	78713	99.10	98.40	0.70	NA	NA
	4	3/19/18	78713	99.30	90.20	9.10	NO	None
	5	3/26/18	78713	98.90	92.10	6.80	NO	None
UVT No. 2	1							
	2							
	3							
	4							
	5							
UVT No. 3	1							
	2							
	3							
	4							
	5							
UVT No. 4	1							
	2							
	3							
	4							
	5							
UVT No. 5	1							
	2							
	3							
	4							
	5							
UVT No. 6	1							
	2							
	3							
	4							
	5							
UVT No. 7	1							
	2							
	3							
	4							
	5							
UVT No. 8	1							
	2							
	3							
	4							
	5							
UVT No. 9	1							
	2							
	3							
	4							
	5							
UVT No. 10	1							
	2							
	3							
	4							
	5							

CALIBRATION DATA

Benchtop UVT Analyzer Serial Number: P0108955

UVT Analyzer Number	Week	Calibration Date	On-line UVT Analyzer Serial #	On-line Reading (% UVT)	Grab Sample Reading (% UVT)	Difference (% UVT)	Recalibration Performed? (if Diff > 2%)	Other Action Taken
UVT No. 11	1							
	2							
	3							
	4							
	5							
UVT No. 12	1							
	2							
	3							
	4							
	5							
UVT No. 13	1							
	2							
	3							
	4							
	5							
UVT No. 14	1							
	2							
	3							
	4							
	5							
UVT No. 15	1							
	2							
	3							
	4							
	5							
UVT No. 16	1							
	2							
	3							
	4							
	5							
UVT No. 17	1							
	2							
	3							
	4							
	5							
UVT No. 18	1							
	2							
	3							
	4							
	5							
UVT No. 19	1							
	2							
	3							
	4							
	5							
UVT No. 20	1							
	2							
	3							
	4							
	5							

SUBMITTED BY: Tomas Sanchez Jr.

Certificate No. and Grade: WS0012772, B

Date: April 10, 2018