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.:	2040022		
Plant ID No.:	20831	Operator's Signature:	
Report for the Month of:	October 2017	Certificate No. & Grade:	WS0012772, B

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.

Date: November 10, 2017

TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	89	Number of 4-hour periods when plant was off-line:	97
Number of readings above 0.10 NTU:	45	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:	7.54
		Average log inactivation) (including UV) for viruses:	93.87
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:	6.49
		Number of days with pH below 7.0 in the last disinfection zone:	31.00
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:	40 (at least 31 required) (8)		
Average disinfectant residual value:	2.00	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:	20.07 NTU	Average turbidity value:	2.80 NTU
	Minimum turbidity reading:	0.25 NTU	Standard deviation:	3.924 NTU
	95th percentile value:	11.44 NTU		
IFE Stastical Summary	Maximum IFE turbidity reading:	0.00 NTU	Average IFE turbidity value:	0.02 NTU
	Minimum IFEturbidity reading:	0.30 NTU	Standard deviation:	0.138 NTU
	95th percentile IFE value:	0.06 NTU		
CFE Stastical Summary	Maximum CFE turbidity reading:	0.19 NTU	Average CFE turbidity value:	0.11 NTU
	Minimum CFE turbidity reading:	0.04 NTU	Standard deviation:	0.032 NTU
	95th percentile CFE value:	0.16 NTU		

STATISTICAL ANALYSIS OF pH DATA

Last Zone pH Stastical Summary	Maximum pH reading:	6.95 pH	Average pH value:	6.79 pH
	Minimum pH reading:	6.49 pH	Standard deviation:	0.116 pH
	95th percentile value:	6.93 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.: 2040022 **Plant ID No.:** 20831 **Connections:** 1,932

Month: October **Year:** 2017 **Population:** 6,762

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	0.857	0.659	31	120	0.6	0.8					X	X	X	0.11	0.11	0.11	1.8	
2	0.827	0.575	22	120	0.6	1.0					0.11	X	X	0.10	0.10	0.10	3.2	
3	0.806	0.582	8	100	0.6	1.1					0.09	X	X	0.10	0.10	0.10	3.2	
4	0.818	0.572	10	120	0.4	0.9					X	X	X	X	0.11	0.11	1.9	
5	0.791	0.539	10	120	0.6	0.9					0.10	X	X	X	0.10	0.15	2.0	
6	0.955	0.552	23	120	0.6	0.8					X	X	X	X	0.13	0.13	1.9	
7	0.801	0.577	27	120	0.5	0.9					X	X	X	X	0.12	0.14	2.0	
8	0.789	0.579	22	120	0.4	1.4					0.10	X	X	X	0.12	0.09	3.0	
9	0.794	0.670	15	120	0.3	0.8					X	X	X	X	0.13	0.16	1.4	
10	0.921	0.542	24	120	0.3	0.8					0.09	0.10	X	X	0.12	0.11	3.5	
11	0.760	0.544	27	120	0.5	0.6					X	X	X	X	0.10	0.10	1.6	
12	0.820	0.574	25	120	0.7	1.0					0.09	X	X	X	0.08	0.08	3.0	
13	0.812	0.630	43	120	0.8	0.7					X	X	X	X	0.11	0.11	2.8	
14	1.040	0.586	39	120	1.0	1.2					0.13	X	X	0.15	0.16	0.15	3.6	
15	0.775	0.554	27	120	1.1	1.1					X	X	X	0.18	X	0.18	2.0	
16	0.932	0.568	40	120	1.1	3.1					X	X	X	0.19	0.18	0.16	2.3	
17	0.842	0.564	44	120	0.9	2.5					X	X	X	0.15	0.15	0.14	1.9	
18	0.730	0.568	29	120	1.2	1.8					X	X	X	0.14	0.13	0.14	3.3	
19	1.110	0.632	39	120	0.7	2.6					0.13	X	X	0.12	0.11	0.11	2.5	
20	0.871	0.590	36	120	0.8	1.9					X	X	X	0.11	0.11	0.11	3.3	
21	0.929	0.650	20	160	1.5	2.7					X	X	X	0.11	X	0.09	2.4	
22	0.648	0.576	8	160	1.1	5.1					0.10	X	X	0.06	0.08	0.08	3.5	
23	1.104	0.651	32	140	3.7	10.2					X	X	X	0.09	0.11	0.12	2.2	
24	0.973	0.576	32	120	1.3	4.2					X	X	X	0.12	0.09	0.09	3.0	
25	0.821	0.622	31	140	2.1	15.5					X	X	X	X	0.06	0.06	2.1	
26	0.835	0.612	28	140	1.7	5.1					0.04	X	X	X	0.05	0.04	3.3	
27	0.916	0.556	29	160	1.8	7.7					0.05	X	X	0.09	0.05	0.05	3.0	
28	0.948	0.596	32	160	2.1	11.5					X	X	0.07	X	0.11	0.07	2.5	
29	0.750	0.591	31	140	2.4	7.6					X	X	X	0.09	0.10	0.07	2.4	
30	0.881	0.585	27	140	4.6	20.1					X	X	X	X	0.09	0.08	2.7	
31	1.006	0.528	29	160	9.2	13.0					X	X	X	X	0.10	0.08	3.4	
Total	26.862	18.200		Max	9.2	20.1												
Avg	0.867	0.587		Avg	1.5	4.2												
Max	1.110	0.670		95th %	4.1	14.3												
Min	0.648	0.528		Min	0.3	0.6												
				95th percentile based on data from all basins						11.4								

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:** November 10, 2017

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.: 2040022 **Plant ID No.:** 20831 **Month:** October **Year:** 2017

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	0.11		0.09		0.15		0.15													
2	0.10		0.08		0.16		0.18													
3	0.12		0.08		0.17		0.12													
4	0.13		0.06		0.20		0.20													
5	0.18		0.05		0.18		0.17													
6	0.12		0.09		0.20		0.14													
7	0.11		0.09		0.16		0.15													
8	0.11		0.10		0.15		0.13													
9	0.11		0.05		0.15		0.17													
10	0.11		0.05		0.23		0.16													
11	0.12		0.04		0.15		0.15													
12	0.08		0.02		0.25		0.15													
13	0.13		0.23		0.23		0.15													
14	0.19		0.23		0.26		0.23													
15	0.30		0.24		0.30		0.27													
16	0.25		0.24		0.26		0.26													
17	0.24		0.07		0.16		0.15													
18	0.24		0.06		0.16		0.18													
19	0.24		0.08		0.13		0.15													
20	0.24		0.07		0.12		0.14													
21	0.20		0.13		0.12		0.13													
22	0.12		0.13		0.20		0.10													
23	0.13		0.06		0.19		0.13													
24	0.14		0.11		0.11		0.15													
25	0.10		0.07		0.11		0.14													
26	0.10		0.04		0.07		0.08													
27	0.09		0.04		0.07		0.07													
28	0.07		0.04		0.14		0.14													
29	0.08		0.06		0.11		0.10													
30	0.08		0.07		0.08		0.22													
31	0.09		0.06		0.12		0.11													

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:** November 10, 2017

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.: 2040022 **Plant ID No.:** 20831 **Month:** October **Year:** 2017

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

DISINFECTION PROCESS DATA

Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time*
1	FCL *D1A*	0.6	0.722	25.0	6.5				
	FCL *D1B*	0.8	0.722	25.3	6.5				
	FCL *D2*	0.8	0.361	25.3	6.4	4.82	80.69	9.65	
	CLA *D3*	3.1	0.722	27.7	6.5			(G)	
	D4								
2	FCL *D1A*	0.7	0.707	24.2	6.3				
	FCL *D1B*	0.8	0.707	24.9	6.2				
	FCL *D2*	0.9	0.353	23.5	6.6	5.21	86.96	10.42	
	CLA *D3*	4.1	0.707	23.8	6.5			(G)	
	D4								
3	FCL *D1A*	1.7	0.709	25.3	6.5				
	FCL *D1B*	1.4	0.709	24.4	6.5				
	FCL *D2*	1.2	0.354	25.2	6.7	6.69	133.82	13.37	
	CLA *D3*	3.4	0.709	24.6	6.6			(G)	
	D4								
4	FCL *D1A*	1.4	0.743	24.5	6.6				
	FCL *D1B*	1.2	0.743	24.6	6.7				
	FCL *D2*	1.2	0.371	25.8	6.8	6.38	128.06	12.76	
	CLA *D3*	3.8	0.743	25.1	6.6			(G)	
	D4								
5	FCL *D1A*	1.0	0.761	25.6	6.7				
	FCL *D1B*	1.0	0.761	25.4	6.7				
	FCL *D2*	1.0	0.380	25.8	6.9	5.56	108.27	11.13	
	CLA *D3*	4.1	0.761	24.6	6.8			(G)	
	D4								
6	FCL *D1A*	1.2	0.779	29.2	6.7				
	FCL *D1B*	1.4	0.779	24.3	6.8				
	FCL *D2*	1.1	0.389	24.5	6.9	5.66	115.22	11.32	
	CLA *D3*	3.8	0.779	24.5	6.7			(G)	
	D4								
7	FCL *D1A*	1.3	0.771	24.7	6.8				
	FCL *D1B*	1.4	0.771	25.1	6.8				
	FCL *D2*	1.2	0.385	26.0	6.9	6.18	131.02	12.37	
	CLA *D3*	3.6	0.771	25.8	6.8			(G)	
	D4								
8	FCL *D1A*	0.7	0.773	26.3	6.7				
	FCL *D1B*	0.8	0.773	25.9	6.7				
	FCL *D2*	1.1	0.386	26.2	6.9	5.33	105.33	10.66	
	CLA *D3*	3.5	0.773	26.0	6.7			(G)	
	D4								

PERFORMANCE DATA

DISINFECTION PROCESS DATA

Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time*
9	FCL *D1A*	1.7	0.710	26.7	6.6				
	FCL *D1B*	1.6	0.710	27.0	6.5				
	FCL *D2*	1.3	0.355	26.2	6.8	8.02	164.77	16.04	
	CLA *D3*	4.1	0.710	27.1	6.9			(G)	
	D4								
10	FCL *D1A*	1.5	0.695	24.4	6.5				
	FCL *D1B*	1.4	0.695	24.3	6.6				
	FCL *D2*	1.2	0.347	24.0	6.8	6.42	130.60	12.84	
	CLA *D3*	3.8	0.695	22.8	6.7			(G)	
	D4								
11	FCL *D1A*	0.9	0.725	24.6	6.9				
	FCL *D1B*	1.0	0.725	24.3	6.8				
	FCL *D2*	1.1	0.362	24.7	6.8	5.65	109.25	11.30	
	CLA *D3*	3.9	0.725	25.2	6.7			(G)	
	D4								
12	FCL *D1A*	1.0	0.758	23.6	6.9				
	FCL *D1B*	1.1	0.758	23.8	6.9				
	FCL *D2*	1.1	0.379	24.1	6.9	4.94	102.65	9.89	
	CLA *D3*	3.8	0.758	22.3	6.9			(G)	
	D4								
13	FCL *D1A*	0.5	0.759	24.4	6.9				
	FCL *D1B*	0.6	0.759	25.0	6.9				
	FCL *D2*	0.8	0.379	25.1	6.8	4.25	76.20	8.49	
	CLA *D3*	3.6	0.759	26.1	7.0			(G)	
	D4								
14	FCL *D1A*	0.7	0.792	24.4	6.9				
	FCL *D1B*	0.5	0.792	24.5	7.0				
	FCL *D2*	1.2	0.396	25.5	7.0	4.95	98.53	9.90	
	CLA *D3*	4.0	0.792	26.0	6.9			(G)	
	D4								
15	FCL *D1A*	0.6	0.800	23.9	6.8				
	FCL *D1B*	0.8	0.800	23.9	6.9				
	FCL *D2*	0.4	0.400	23.8	6.9	2.45	37.53	4.89	
	CLA *D3*	3.1	0.800	24.8	6.9			(G)	
	D4								
16	FCL *D1A*	1.0	0.810	24.0	6.8				
	FCL *D1B*	1.1	0.810	25.0	6.7				
	FCL *D2*	0.5	0.405	24.0	6.8	3.14	54.57	6.28	
	CLA *D3*	3.2	0.810	24.0	6.8			(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:** November 10, 2017

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.: 2040022 **Plant ID No.:** 20831 **Month:** October **Year:** 2017

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*	0.9	0.781	24.0	6.8				
	FCL *D1B*	1.0	0.781	24.0	6.8				
	FCL *D2*	0.8	0.390	23.0	6.9	3.82	74.31	7.65	
	CLA *D3*	3.2	0.781	23.0	6.8			(G)	
	D4								
18	FCL *D1A*	1.1	0.722	23.0	6.8				
	FCL *D1B*	1.0	0.722	23.0	7.0				
	FCL *D2*	0.6	0.361	23.0	6.9	3.36	63.00	6.71	
	CLA *D3*	3.3	0.722	22.0	6.9			(G)	
	D4								
19	FCL *D1A*	1.7	0.754	24.0	6.6				
	FCL *D1B*	1.8	0.754	24.0	6.6				
	FCL *D2*	1.7	0.377	23.0	6.8	7.23	154.33	14.47	
	CLA *D3*	4.6	0.754	23.0	6.8			(G)	
	D4								
20	FCL *D1A*	1.6	0.794	24.0	6.7				
	FCL *D1B*	1.5	0.794	24.0	6.6				
	FCL *D2*	1.2	0.397	23.0	6.9	5.17	108.96	10.35	
	CLA *D3*	3.3	0.794	23.0	6.8			(G)	
	D4								
21	FCL *D1A*	1.6	0.815	24.0	6.7				
	FCL *D1B*	1.8	0.815	23.0	6.6				
	FCL *D2*	0.3	0.407	24.0	6.7	3.29	59.10	6.58	
	CLA *D3*	3.2	0.815	24.0	6.7			(G)	
	D4								
22	FCL *D1A*	1.4	0.810	24.0	6.9				
	FCL *D1B*	1.6	0.810	24.0	6.9				
	FCL *D2*	1.3	0.405	23.0	6.8	5.60	114.87	11.20	
	CLA *D3*	4.2	0.810	24.0	6.8			(G)	
	D4								
23	FCL *D1A*	0.4	1.037	23.6	6.9				
	FCL *D1B*	0.6	1.037	23.7	6.8				
	FCL *D2*	0.5	0.518	23.3	6.8	2.11	32.82	4.21	
	CLA *D3*	3.1	1.037	25.7	6.7			(G)	
	D4								
24	FCL *D1A*	0.5	0.829	22.3	6.8				
	FCL *D1B*	0.9	0.829	22.5	6.8				
	FCL *D2*	0.8	0.414	23.4	6.8	3.26	58.17	6.52	
	CLA *D3*	3.1	0.829	24.5	6.8			(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*	1.5	0.786	24.0	6.9				
	FCL *D1B*	1.7	0.786	23.8	6.9				
	FCL *D2*	1.4	0.393	22.5	6.9	5.86	124.02	11.73	
	CLA *D3*	4.1	0.786	24.9	6.8			(G)	
	D4								
26	FCL *D1A*	1.3	0.777	21.8	6.8				
	FCL *D1B*	1.4	0.777	22.0	6.7				
	FCL *D2*	0.9	0.388	22.3	7.0	4.29	81.85	8.59	
	CLA *D3*	4.3	0.777	23.0	6.9			(G)	
	D4								
27	FCL *D1A*	1.2	0.775	21.9	6.9				
	FCL *D1B*	1.4	0.775	21.8	6.9				
	FCL *D2*	1.2	0.387	22.4	6.9	4.66	96.28	9.32	
	CLA *D3*	3.9	0.775	21.8	6.8			(G)	
	D4								
28	FCL *D1A*	0.6	0.779	21.1	6.8				
	FCL *D1B*	0.6	0.779	21.0	6.8				
	FCL *D2*	0.7	0.389	21.2	6.9	2.93	52.19	5.86	
	CLA *D3*	3.5	0.779	21.4	6.9			(G)	
	D4								
29	FCL *D1A*	1.3	0.791	20.7	6.8				
	FCL *D1B*	1.3	0.791	21.0	6.7				
	FCL *D2*	1.4	0.395	20.8	6.9	4.84	102.13	9.67	
	CLA *D3*	3.8	0.791	22.3	6.9			(G)	
	D4								
30	FCL *D1A*	1.1	0.810	20.6	6.8				
	FCL *D1B*	0.7	0.810	21.1	6.9				
	FCL *D2*	1.0	0.405	18.9	6.9	3.28	61.55	6.56	
	CLA *D3*	4.0	0.810	21.1	6.9			(G)	
	D4								
31	FCL *D1A*	1.0	0.816	19.4	6.8				
	FCL *D1B*	0.5	0.816	19.6	6.8				
	FCL *D2*	1.1	0.408	19.0	7.0	3.04	59.24	6.09	
	CLA *D3*	4.0	0.816	19.7	6.8			(G)	
	D4								

	Giardia Log	Virus Log	Inact. Ratio
Max	8.02	164.77	16.04
Min	2.11	32.82	4.21
Avg	4.79	93.75	9.57
SD	1.44	33.06	2.87

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:** November 10, 2017

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.: 2040022

Plant ID No.: 20831

Month: October

Year: 2017

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	10/12	120	3.28	2.27	30.8	25	1.23			1.23
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		120.00	3.28	2.27	30.79		1.23			1.23
Max		120.00	3.28	2.27	30.79		1.23			1.23
Min		120.00	3.28	2.27	30.79		1.23			1.23

TOTAL ORGANIC CARBON (TOC) REMOVAL SUMMARY

TOC Summary					Monthly Compliance Ratio
Raw Water Alkalinity	Raw Water TOC	Treated Water TOC	TOC % Removal	ACC # used	
120	3.28	2.27	30.8	NA	1.23

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: November 10, 2017

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.: 2040022 **Plant ID No.:** 20831 **Month:** October **Year:** 2017

VALIDATED OPERATIONAL CONDITIONS

VALIDATED PARAMETERS						PERFORMANCE REQUIREMENTS	
	Reactor Number						
Parameters	UVCD1	UVCD2	UVCD3	UVCD4	UVCD5	Crypto Log Inactivation	Required UV Dose (mJ/cm^2)
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

OPERATIONAL 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	0.301	0.632	97.70	45.63	1.00	45.63	0.000	0.000
	2	0.420	0.889	97.70	43.64	1.00	43.64	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
2	1	0.323	0.677	97.80	44.66	1.00	44.66	0.000	0.000
	2	0.451	0.966	97.80	9.15	1.00	9.15	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
3	1	0.037	0.481	97.40	0.00	1.00	0.00	0.010	0.50
	2	0.437	1.008	97.40	38.23	1.00	38.23	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
4	1	X	X	X	X	X	X	X	0.000
	2	0.411	1.047	96.60	3.29	1.00	3.29	0.000	
	3	0.257	0.624	96.60	2.93	1.00	2.93	0.000	
	4								
	5								
5	1	X	X	X	X	X	X	X	0.000
	2	0.446	0.973	95.40	35.03	1.00	35.03	0.000	
	3	0.278	0.611	95.40	56.57	1.00	56.57	0.000	
	4								
	5								
6	1	X	X	X	X	X	X	X	0.000
	2	0.421	1.110	92.90	14.44	1.00	14.44	0.000	
	3	0.259	0.689	92.90	51.61	1.00	51.61	0.000	
	4								
	5								
7	1	X	X	X	X	X	X	X	0.000
	2	0.448	1.067	92.20	30.96	1.00	30.96	0.000	
	3	0.277	0.658	92.20	51.05	1.00	51.05	0.000	
	4								
	5								
8	1	X	X	X	X	X	X	X	0.000
	2	0.458	1.094	95.80	30.73	1.00	30.73	0.000	
	3	0.284	0.686	95.80	2.54	1.00	2.54	0.000	
	4								
	5								

PERFORMANCE DATA

OPERATIONAL 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	0.000
	2	0.423	0.870	91.70	34.19	1.00	34.19	0.000	
	3	0.264	0.532	91.70	63.83	1.00	63.83	0.000	
	4								
	5								
10	1	X	X	X	X	X	X	X	0.25
	2	0.508	1.045	91.20	2.00	1.00	2.00	0.008	
	3	0.318	0.641	91.20	55.37	1.00	55.37	0.000	
	4								
	5								
11	1	X	X	X	X	X	X	X	0.000
	2	0.418	1.047	90.80	23.23	1.00	23.23	0.000	
	3	0.261	0.637	90.80	53.42	1.00	53.42	0.000	
	4								
	5								
12	1	X	X	X	X	X	X	X	0.000
	2	0.438	1.095	96.40	29.75	1.00	29.75	0.000	
	3	0.274	0.690	96.40	49.47	1.00	49.47	0.000	
	4								
	5								
13	1	X	X	X	X	X	X	X	0.000
	2	0.426	1.100	93.70	29.62	1.00	29.62	0.000	
	3	0.266	0.700	93.70	49.68	1.00	49.68	0.000	
	4								
	5								
14	1	X	X	X	X	X	X	X	0.000
	2	0.558	1.027	94.40	22.96	1.00	22.96	0.000	
	3	0.346	0.629	94.40	50.12	1.00	50.12	0.000	
	4								
	5								
15	1	X	X	X	X	X	X	X	0.000
	2	0.375	1.114	95.00	27.73	1.00	27.73	0.000	
	3	0.230	0.690	95.00	45.56	1.00	45.56	0.000	
	4								
	5								
16	1	X	X	X	X	X	X	X	0.000
	2	0.511	1.070	95.70	29.32	1.00	29.32	0.000	
	3	0.316	0.680	95.70	49.59	1.00	49.59	0.000	
	4								
	5								

SUBMITTED BY: Tomas Sanchez Jr.

Certificate No. and Grade: WS0012772, B **Date:** November 10, 2017

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.: 2040022 Plant ID No.: 20831 Month: October Year: 2017

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	0.441	1.111	96.30	18.95	1.00	18.95	0.000	
	3	0.275	0.700	96.30	47.01	1.00	47.01	0.000	
	4								
	5								
18	1	0.012	0.307	96.50	0.00	1.00	0.00	0.006	0.50
	2	0.344	1.045	96.50	30.70	1.00	30.70	0.000	
	3	0.214	0.676	96.50	31.32	1.00	31.32	0.000	
	4								
	5								
19	1	X	X	X	X	X	X	X	0.000
	2	0.570	1.106	93.10	11.27	1.00	11.27	0.000	
	3	0.364	0.718	93.10	50.31	1.00	50.31	0.000	
	4								
	5								
20	1	X	X	X	X	X	X	X	0.25
	2	0.483	1.111	96.30	17.08	1.00	17.08	0.000	
	3	0.310	0.727	96.30	2.01	1.00	2.01	0.006	
	4								
	5								
21	1	X	X	X	X	X	X	X	0.000
	2	0.499	1.255	96.60	27.43	1.00	27.43	0.000	
	3	0.321	0.781	96.60	2.96	1.00	2.96	0.000	
	4								
	5								
22	1	X	X	X	X	X	X	X	0.000
	2	0.479	0.989	96.40	33.46	1.00	33.46	0.000	
	3	0.307	0.640	96.40	54.43	1.00	54.43	0.000	
	4								
	5								
23	1	X	X	X	X	X	X	X	0.000
	2	0.528	1.438	95.40	23.36	1.00	23.36	0.000	
	3	0.338	0.910	95.40	38.48	1.00	38.48	0.000	
	4								
	5								
24	1	X	X	X	X	X	X	X	0.000
	2	0.457	1.312	96.20	6.24	1.00	6.24	0.000	
	3	0.294	0.840	96.20	4.05	1.00	4.05	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)
25	1	X	X	X	X	X	X	X	0.000
	2	0.413	0.912	96.50	7.62	1.00	7.62	0.000	
	3	0.287	0.625	96.50	34.93	1.00	34.93	0.000	
	4								
	5								
26	1	X	X	X	X	X	X	X	0.25
	2	0.423	0.865	96.10	0.00	1.00	0.00	0.006	
	3	0.275	0.576	96.10	0.00	1.00	0.00	0.003	
	4								
	5								
27	1	X	X	X	X	X	X	X	0.000
	2	0.475	0.997	96.60	34.23	1.00	34.23	0.000	
	3	0.311	0.649	96.60	46.90	1.00	46.90	0.000	
	4								
	5								
28	1	X	X	X	X	X	X	X	3.00
	2	0.502	0.962	96.30	0.00	1.00	0.00	0.002	
	3	0.333	0.627	96.30	0.00	1.00	0.00	0.065	
	4								
	5								
29	1	X	X	X	X	X	X	X	0.000
	2	0.392	0.930	98.40	32.89	1.00	32.89	0.000	
	3	0.270	0.613	98.40	58.71	1.00	58.71	0.000	
	4								
	5								
30	1	X	X	X	X	X	X	X	1.25
	2	0.488	1.168	97.60	0.00	1.00	0.00	0.024	
	3	0.319	0.773	97.60	0.00	1.00	0.00	0.015	
	4								
	5								
31	1	X	X	X	X	X	X	X	0.25
	2	0.018	1.105	95.60	0.00	1.00	0.00	0.004	
	3	0.334	0.726	95.60	0.00	1.00	0.00	0.003	
	4								
	5								

SUBMITTED BY: Tomas Sanchez Jr

Certificate No. and Grade: WS0012772, B Date: November 10, 2017

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.: 2040022 **Plant ID No.:** 20831 **Month:** October **Year:** 2017

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	43.64	4.00	0.63	1.00	1 to 3	9	34.19	4.00	0.36	1.00
	2	9.15	2.72	0.00	1.00		10	2.00	1.00	0.00	1.00
	3	0.00	1.00	0.00	1.00		11	23.23	4.00	0.02	1.00
	4	2.93	1.47	0.00	1.00		12	29.75	4.00	0.23	1.00
	5	35.03	4.00	0.39	1.00		13	29.62	4.00	0.22	1.00
	6	14.44	3.43	0.00	1.00		14	22.96	4.00	0.01	1.00
	7	30.96	4.00	0.26	1.00		15	27.73	4.00	0.16	1.00
	8	2.54	1.28	0.00	1.00		16	29.32	4.00	0.21	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	18.95	3.78	0.00	1.00	1 to 3	25	7.62	2.48	0.00	1.00
	18	0.00	1.00	0.00	1.00		26	0.00*	1.00	0.00	1.00
	19	11.27	3.03	0.00	1.00		27	34.23	4.00	0.36	1.00
	20	2.01	1.00	0.00	1.00		28	0.00*	1.00	0.00	1.00
	21	2.96	1.48	0.00	1.00		29	32.89	4.00	0.32	1.00
	22	33.46	4.00	0.34	1.00		30	0.00*	1.00	0.00	1.00
	23	23.36	4.00	0.02	1.00		31	0.00*	1.00	0.00	1.00
	24	4.05	1.81	0.00	1.00						

Total volume of water treated by all CDA reactors:	22.52	MG
Total volume of off-spec water produced by all CDA reactors:	0.15	MG
Percentage of off-spec water produced by all CDA reactors:	0.68	%
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: (October, 2017) 1, 3, 4, 6, 15, 18, 19, 22, 23, 24, 26, 31

SUBMITTED BY: Tomas Sanchez Jr

Certificate No. and Grade: WS0012772, B **Date:** November 10, 2017

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.: 2040022 **Plant ID No.:** 20831

Month: October **Year:** 2017

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	44	92	66.90	67.90	0.99	NA	1.00
		2							
		3							
	1.00	4							
	Calibration Date	5							
		6							
	10/1/17	7							
	New Sensor CF	8							
		9							
	1.00	10							
UVCD No. 2	Previous Month's Sensor CF	1	40	92	80.60	81.30	0.99	NA	1.00
		2							
		3							
	1.00	4							
	Calibration Date	5							
		6							
	10/1/17	7							
	New Sensor CF	8							
		9							
	1.00	10							
UVCD No. 3	Previous Month's Sensor CF	1	39	38	85.05	81.90	1.04	NA	1.00
		2							
		3							
	1.00	4							
	Calibration Date	5							
		6							
	10/4/17	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: November 10, 2017

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.: 2040022 **Plant ID No.:** 20831

Month: October **Year:** 2017

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: November 10, 2017

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.: 2040022

Plant ID 20831

Month: October

Year: 2017

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	10/2/17	AF45-WD	97.40	98.30	0.90	NA	NA
	2	10/9/17	AF45-WD	96.70	97.90	1.20	NA	NA
	3	10/16/17	AF45-WD	95.20	95.70	0.50	NA	NA
	4	10/23/17	AF45-WD	96.60	96.70	0.10	NA	NA
	5	10/30/17	AF45-WD	97.20	97.70	0.50	NA	NA
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: November 10, 2017