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 Utilities

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022

Plant ID No.: 20831

Report for the Month of: June 2019

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: Adolo Vera

Certificate No. & Grade: WS0012618, C

Date: July 10, 2019

TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	133	Number of 4-hour periods when plant was off-line:	47
Number of readings above 0.10 NTU:	15	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: 4.5 (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:	0.5	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:	6.03
		Average log inactivation) (including UV) for viruses:	84.38
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:	6.60
		Number of days with pH below 7.0 in the last disinfection zone:	18.00
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:	43 (at least 30 required) (8)		
Average disinfectant residual value:	1.70	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:	10.90 NTU	Average turbidity value:	2.97 NTU
	Minimum turbidity reading:	0.24 NTU	Standard deviation:	2.523 NTU
	95th percentile value:	7.23 NTU		
IFE Stastical Summary	Maximum IFE turbidity reading:	0.27 NTU	Average IFE turbidity value:	0.08 NTU
	Minimum IFEturbidity reading:	0.03 NTU	Standard deviation:	0.038 NTU
	95th percentile IFE value:	0.14 NTU		
CFE Stastical Summary	Maximum CFE turbidity reading:	0.24 NTU	Average CFE turbidity value:	0.08 NTU
	Minimum CFE turbidity reading:	0.03 NTU	Standard deviation:	0.032 NTU
	95th percentile CFE value:	0.13 NTU		

STATISTICAL ANALYSIS OF pH DATA

Last Zone pH Stastical Summary	Maximum pH reading:	7.27 pH	Average pH value:	6.94 pH
	Minimum pH reading:	6.60 pH	Standard deviation:	0.172 pH
	95th percentile value:	7.21 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 Utilities	PLANT NAME OR NUMBER:	Rio Bravo
PWS ID No.:	2400022	Plant ID No.: 20831	Connections: 1,942
Month:	June	Year: 2019	Population: 6,797

PERFORMANCE DATA

Date	Raw Water Pumpage (MGD)	Treated Water Pumpage (MGD)	RAW WATER ANALYSES NTU	RAW WATER ANALYSES Alk.	SETTLED WATER TURBIDITY (Optional 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	1.007	1.021	82	140	2.7	3.6					0.10	X	X	0.09	0.09	0.06	2.3	
2	1.060	1.002	26	140	3.5	5.1					0.05	X	X	0.07	0.07	0.07	2.3	
3	0.960	1.074	42	140	3.8	5.0					0.09	0.09	X	0.06	0.06	0.09	1.9	
4	1.007	0.953	18	140	2.8	4.4					0.09	X	X	0.10	0.09	0.10	1.6	
5	1.021	0.940	21	140	1.5	4.6					0.10	X	X	0.10	0.10	0.10	1.3	
6	0.941	0.846	11	140	6.7	5.1					X	X	X	0.10	0.10	0.10	1.1	
7	1.035	1.046	22	140	3.0	5.6					X	X	0.06	0.09	0.09	0.09	1.2	
8	1.058	1.054	34	140	5.6	10.9					X	X	0.10	0.10	0.10	0.18	0.7	
9	1.168	1.093	28	140	3.4	9.8					0.15	0.12	X	0.10	0.05	0.07	0.7	
10	1.177	1.028	30	120	2.6	5.4					0.09	X	0.10	0.11	0.18	0.11	0.6	
11	1.320	0.991	16	120	2.8	3.5					0.13	0.13	X	0.10	0.09	0.13	1.3	
12	1.010	0.935	34	120	0.7	0.8					0.12	X	0.15	0.18	0.10	0.12	0.8	
13	1.132	1.054	16	120	0.4	0.2					0.11	X	0.24	0.10	0.05	0.10	1.2	
14	1.091	0.978	19	120	2.9	4.0					0.10	X	X	0.10	0.09	0.07	1.2	
15	1.005	1.004	24	120	0.8	4.7					0.09	X	X	0.07	0.05	0.05	0.7	
16	1.078	1.034	26	120	0.3	7.1					0.05	X	X	0.04	0.04	0.09	1.0	
17	1.152	1.095	21	140	0.3	10.7					0.04	X	0.07	0.05	0.04	0.08	0.8	
18	1.208	1.041	24	140	0.3	6.2					0.08	X	0.08	0.09	0.09	0.09	0.9	
19	1.094	1.085	28	140	0.3	3.8					0.09	X	0.08	0.08	0.08	0.08	2.6	
20	1.124	1.020	33	140	0.8	1.7					0.08	X	0.09	0.09	0.08	0.08	1.7	
21	1.153	1.021	27	140	1.6	1.0					0.09	X	0.07	0.06	0.05	0.05	2.8	
22	1.112	0.991	20	140	1.0	5.2					0.06	X	0.05	0.05	0.04	0.04	2.9	
23	1.123	1.051	22	140	1.2	1.5					0.04	X	0.03	0.04	0.05	0.05	2.8	
24	1.144	0.997	23	140	1.8	1.2					0.05	X	0.05	0.05	0.05	0.06	2.9	
25	1.095	0.963	18	120	1.8	2.3					X	X	0.07	0.07	0.08	0.09	2.7	
26	1.043	0.807	18	120	1.8	0.9					X	X	0.09	0.10	0.10	0.09	2.4	
27	0.972	0.741	14	140	0.7	1.3					X	X	0.09	0.09	0.10	0.09	2.4	
28	0.911	0.853	16	120	1.2	2.0					X	X	0.09	0.09	0.08	0.08	2.7	
29	0.951	0.923	19	140	0.4	2.4					X	X	0.08	0.06	0.05	0.05	1.5	
30	0.967	0.975	26	120	1.0	0.5					X	X	0.04	0.04	0.03	0.03	1.7	
31																		
Total	32.119	29.616		Max	6.7	10.9												
Avg	1.071	0.987		Avg	1.9	4.0												
Max	1.320	1.095		95th %	4.8	10.3												
Min	0.911	0.741		Min	0.3	0.2												
				95th percentile based on data from all basins						7.2								

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: Adolio Vasquez

Certificate No. and Grade: WS0012618, C

Date: July 10, 2019

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 Utilities

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022 Plant ID No.: 20831 Month: June Year: 2019

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	0.08		0.06		0.12		0.03													
2	0.06		0.06		0.08		0.05													
3	0.09		0.06		0.08		0.04													
4	0.11		0.06		0.07		0.06													
5	0.09		0.06		0.09		0.04													
6	0.09		0.10		0.09		0.10													
7	0.09		0.06		0.14		0.05													
8	0.22		0.09		0.09		0.08													
9	0.10		0.08		0.27		0.06													
10	0.10		0.15		0.10		0.13													
11	0.08		0.12		0.18		0.10													
12	0.10		0.09		0.11		0.05													
13	0.10		0.12		0.09		0.14													
14	0.08		0.07		0.08		0.05													
15	0.06		0.12		0.07		0.03													
16	0.07		0.12		0.10		0.04													
17	0.06		0.09		0.11		0.07													
18	0.11		0.10		0.13		0.03													
19	0.22		0.07		0.08		0.03													
20	0.12		0.08		0.08		0.05													
21	0.08		0.05		0.08		0.03													
22	0.09		0.07		0.07		0.07													
23	0.09		0.08		0.07		0.04													
24	0.05		0.06		0.07		0.05													
25	0.06		0.05		0.06		0.04													
26	0.07		0.04		0.07		0.08													
27	0.12		0.10		0.10		0.04													
28	0.06		0.05		0.09		0.04													
29	0.08		0.05		0.09		0.04													
30	0.05		0.04		0.05		0.08													
31																				

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: Adolio Vasquez

Certificate No. and Grade: WS0012618, C

Date: July 10, 2019

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 Utilities

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022 **Plant ID No.:** 20831 **Month:** June **Year:** 2019

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	0.684	27.1	7.1				
	FCL *D1B*	0.7	0.684	27.1	7.1				
	FCL *D2*	1.2	0.342	26.1	7.3	5.15	127.09	10.30	
	CLA *D3*	2.3	0.684	26.4	7.0			(G)	
	D4								
2	FCL *D1A*	0.5	0.724	27.6	7.2				
	FCL *D1B*	0.5	0.724	26.9	7.2				
	FCL *D2*	1.0	0.362	26.9	7.2	4.77	105.53	9.54	
	CLA *D3*	3.1	0.724	26.3	7.2			(G)	
	D4								
3	FCL *D1A*	0.4	0.700	26.0	7.2				
	FCL *D1B*	0.8	0.700	27.0	7.1				
	FCL *D2*	1.1	0.350	27.0	7.0	5.07	113.97	10.14	
	CLA *D3*	2.3	0.700	27.0	6.9			(G)	
	D4								
4	FCL *D1A*	0.6	0.708	27.0	7.1				
	FCL *D1B*	1.3	0.708	27.0	7.2				
	FCL *D2*	1.1	0.354	27.0	7.1	5.01	119.81	10.01	
	CLA *D3*	1.8	0.708	27.0	7.1			(G)	
	D4								
5	FCL *D1A*	0.9	0.723	27.0	7.1				
	FCL *D1B*	1.1	0.723	27.0	7.2				
	FCL *D2*	1.0	0.361	27.0	6.9	5.25	118.66	10.49	
	CLA *D3*	1.9	0.723	27.0	6.6			(G)	
	D4								
6	FCL *D1A*	0.8	0.715	26.7	7.0				
	FCL *D1B*	0.9	0.715	27.4	6.9				
	FCL *D2*	1.0	0.357	26.7	7.1	4.75	114.09	9.51	
	CLA *D3*	1.5	0.715	28.6	6.8			(G)	
	D4								
7	FCL *D1A*	0.1	0.705	26.1	7.0				
	FCL *D1B*	0.2	0.705	27.2	6.9				
	FCL *D2*	0.6	0.352	27.0	6.9	3.00	58.59	6.00	
	CLA *D3*	1.8	0.705	26.6	7.0			(G)	
	D4								
8	FCL *D1A*	0.1	0.690	26.7	6.9				
	FCL *D1B*	0.1	0.690	28.1	6.8				
	FCL *D2*	0.3	0.345	27.7	6.9	2.01	34.16	4.03	
	CLA *D3*	1.8	0.690	28.9	6.6			(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*	0.1	0.668	26.0	6.8				
	FCL *D1B*	0.1	0.668	26.5	6.7				
	FCL *D2*	0.4	0.334	27.3	6.9	2.38	43.84	4.76	
	CLA *D3*	1.6	0.668	29.8	6.8			(G)	
	D4								
10	FCL *D1A*	0.2	0.661	28.3	6.7				
	FCL *D1B*	0.2	0.661	27.9	6.6				
	FCL *D2*	0.7	0.330	26.1	6.6	4.29	73.17	8.58	
	CLA *D3*	2.8	0.661	26.1	6.7			(G)	
	D4								
11	FCL *D1A*	0.1	0.715	27.8	6.7				
	FCL *D1B*	0.2	0.715	27.0	6.7				
	FCL *D2*	0.9	0.357	27.1	6.7	4.63	89.88	9.26	
	CLA *D3*	2.5	0.715	27.5	6.8			(G)	
	D4								
12	FCL *D1A*	1.2	0.690	26.9	7.1				
	FCL *D1B*	0.9	0.690	27.1	7.1				
	FCL *D2*	0.6	0.345	27.3	6.9	3.91	84.19	7.82	
	CLA *D3*	1.7	0.690	27.1	6.8			(G)	
	D4								
13	FCL *D1A*	0.2	0.683	26.4	7.1				
	FCL *D1B*	0.3	0.683	26.2	6.9				
	FCL *D2*	0.2	0.341	26.4	7.3	1.63	23.70	3.26	
	CLA *D3*	2.3	0.683	27.4	6.9			(G)	
	D4								
14	FCL *D1A*	0.6	0.683	27.5	6.9				
	FCL *D1B*	0.4	0.683	27.7	7.0				
	FCL *D2*	0.4	0.342	26.6	7.2	2.90	54.01	5.79	
	CLA *D3*	2.4	0.683	26.7	7.0			(G)	
	D4								
15	FCL *D1A*	0.9	0.703	27.3	7.1				
	FCL *D1B*	0.9	0.703	27.6	7.0				
	FCL *D2*	0.5	0.352	28.3	7.1	4.03	81.92	8.06	
	CLA *D3*	2.7	0.703	27.5	6.9			(G)	
	D4								
16	FCL *D1A*	0.2	0.718	29.0	7.0				
	FCL *D1B*	0.3	0.718	29.0	7.1				
	FCL *D2*	0.5	0.359	29.0	7.0	3.41	60.89	6.83	
	CLA *D3*	3.1	0.718	29.0	7.0			(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: Adolio Vasquez **Certificate No. and Grade:** WS0012618, C **Date:** July 10, 2019

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 Utilities

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022 Plant ID No.: 20831 Month: June Year: 2019

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*	0.6	0.726	29.1	7.0				
	FCL *D1B*	0.7	0.726	29.5	6.9				
	FCL *D2*	0.4	0.363	29.0	7.1	2.75	61.59	5.51	
	CLA *D3*	0.9	0.726	29.9	6.9			(G)	
	D4								
18	FCL *D1A*	0.3	0.737	28.4	7.0				
	FCL *D1B*	0.4	0.737	28.8	7.0				
	FCL *D2*	0.6	0.368	28.7	7.1	3.78	73.89	7.57	
	CLA *D3*	3.1	0.737	29.7	6.9			(G)	
	D4								
19	FCL *D1A*	0.3	1.095	29.1	7.0				
	FCL *D1B*	0.4	1.095	29.8	6.9				
	FCL *D2*	0.4	0.963	29.4	7.1	1.51	22.55	3.02	
	CLA *D3*	3.1	1.095	31.0	7.1			(G)	
	D4								
20	FCL *D1A*	0.2	0.740	27.3	7.3				
	FCL *D1B*	0.4	0.740	27.9	7.1				
	FCL *D2*	0.3	0.370	27.5	7.3	2.12	34.23	4.24	
	CLA *D3*	2.8	0.740	27.5	7.3			(G)	
	D4								
21	FCL *D1A*	0.5	0.737	29.0	7.4				
	FCL *D1B*	0.4	0.737	28.8	7.3				
	FCL *D2*	0.4	0.369	28.9	7.3	2.94	55.49	5.88	
	CLA *D3*	3.0	0.737	29.4	7.1			(G)	
	D4								
22	FCL *D1A*	0.7	0.745	28.7	7.2				
	FCL *D1B*	0.8	0.745	28.6	7.2				
	FCL *D2*	0.6	0.373	30.0	7.2	4.26	87.33	8.51	
	CLA *D3*	3.3	0.745	30.0	7.2			(G)	
	D4								
23	FCL *D1A*	0.9	0.754	29.2	7.4				
	FCL *D1B*	0.9	0.754	29.1	7.8				
	FCL *D2*	0.4	0.377	29.0	7.2	3.28	68.40	6.57	
	CLA *D3*	3.3	0.754	29.2	7.2			(G)	
	D4								
24	FCL *D1A*	0.9	0.760	28.3	7.4				
	FCL *D1B*	0.9	0.760	28.0	7.3				
	FCL *D2*	0.6	0.380	28.9	7.2	4.24	90.82	8.48	
	CLA *D3*	3.3	0.760	29.0	6.9			(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*	1.2	0.778	26.5	6.7				
	FCL *D1B*	1.1	0.778	26.9	6.8				
	FCL *D2*	1.0	0.389	26.1	6.6	5.79	115.14	11.58	
	CLA *D3*	2.9	0.778	28.6	6.8			(G)	
	D4								
26	FCL *D1A*	1.3	0.773	27.4	6.9				
	FCL *D1B*	1.0	0.773	27.4	6.9				
	FCL *D2*	1.4	0.386	26.6	7.2	5.87	144.50	11.74	
	CLA *D3*	2.6	0.773	26.6	7.1			(G)	
	D4								
27	FCL *D1A*	1.3	0.749	26.5	7.0				
	FCL *D1B*	1.3	0.749	27.5	6.8				
	FCL *D2*	1.4	0.374	26.9	7.0	6.54	155.64	13.07	
	CLA *D3*	2.5	0.749	27.6	6.9			(G)	
	D4								
28	FCL *D1A*	0.6	0.694	28.5	6.9				
	FCL *D1B*	0.8	0.694	28.9	6.8				
	FCL *D2*	1.0	0.347	28.2	7.0	5.89	121.56	11.78	
	CLA *D3*	3.4	0.694	29.3	6.9			(G)	
	D4								
29	FCL *D1A*	0.3	0.705	27.7	6.8				
	FCL *D1B*	0.4	0.705	27.7	6.8				
	FCL *D2*	0.7	0.352	28.2	6.9	4.36	81.60	8.72	
	CLA *D3*	3.1	0.705	28.9	6.9			(G)	
	D4								
30	FCL *D1A*	0.8	0.718	27.1	7.0				
	FCL *D1B*	0.9	0.718	27.3	6.9				
	FCL *D2*	1.0	0.359	26.8	7.0	5.34	114.55	10.68	
	CLA *D3*	3.1	0.718	28.4	7.0			(G)	
	D4								
31	*D1A*								
	D1B								
	D2								
	D3								
	D4								
					Max	6.54	155.64	13.07	
					Min	1.51	22.55	3.02	
					Avg	4.03	84.36	8.06	
					SD	1.33	34.95	2.66	

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

SUBMITTED BY: Adolio Vasquez

Certificate No. and Grade: WS0012618, C

Date: July 10, 2019

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 Utilities

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022

Plant ID No.: 20831

Month: June

Year: 2019

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	6/3	140	3.22	2.39	25.8	15	1.72			1.72
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
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16										
17										
18										
19										
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21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
Avg		140.00	3.22	2.39	25.78		1.72			1.72
Max		140.00	3.22	2.39	25.78		1.72			1.72
Min		140.00	3.22	2.39	25.78		1.72			1.72

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	3.22	2.39	25.8	NA	1.72

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: [signature]

Certificate and Grade No.: WS0012618, C

Date: July 10, 2019

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 Utilities

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022 **Plant ID No.:** 20831 **Month:** June **Year:** 2019

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	0.426	0.616	83.68	0.00	1.00	0.00	0.006	0.25
	2	0.558	0.836	83.68	0.00	1.00	0.00	0.006	
	3	X	X	X	X	X	X	X	
	4								
	5								
2	1	0.446	0.658	86.86	29.73	1.00	29.73	0.000	0.000
	2	0.584	0.909	86.86	17.73	1.00	17.73	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
3	1	0.422	0.683	73.45	9.65	1.00	9.65	0.000	0.000
	2	0.548	0.909	73.45	18.37	1.00	18.37	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
4	1	0.854	1.460	90.45	0.00	1.00	0.00	0.010	0.25
	2	0.085	0.847	90.45	34.46	1.00	34.46	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
5	1	0.421	0.673	88.94	34.55	1.00	34.55	0.000	0.000
	2	0.571	0.892	88.94	29.04	1.00	29.04	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
6	1	0.377	0.629	91.01	36.36	1.00	36.36	0.000	0.000
	2	0.509	0.846	91.01	30.22	1.00	30.22	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
7	1	0.426	0.680	91.81	0.00	1.00	0.00	0.005	0.25
	2	0.556	0.933	91.81	0.00	1.00	0.00	0.007	
	3	X	X	X	X	X	X	X	
	4								
	5								
8	1	0.410	0.604	91.23	0.00	1.00	0.00	0.004	0.75
	2	0.541	0.809	91.23	0.00	1.00	0.00	0.005	
	3	X	X	X	X	X	X	X	
	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	0.348	0.924	90.84	0.00	1.00	0.00	0.100	0.25
	2	0.468	1.220	90.84	0.00	1.00	0.00	0.013	
	3	X	X	X	X	X	X	X	
	4								
	5								
10	1	0.472	0.614	90.01	0.00	1.00	0.00	0.005	0.25
	2	0.634	0.832	90.01	0.00	1.00	0.00	0.007	
	3	X	X	X	X	X	X	X	
	4								
	5								
11	1	0.533	0.625	84.29	28.72	1.00	28.72	0.000	0.000
	2	0.729	0.845	84.29	18.47	1.00	18.47	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
12	1	0.387	0.773	83.61	0.00	1.00	0.00	0.003	0.25
	2	0.527	1.075	83.61	0.00	1.00	0.00	0.012	
	3	X	X	X	X	X	X	X	
	4								
	5								
13	1	0.454	0.809	86.95	0.00	1.00	0.00	0.008	0.25
	2	0.601	0.964	86.95	1.72	1.00	1.72	0.008	
	3	X	X	X	X	X	X	X	
	4								
	5								
14	1	0.448	0.607	86.98	0.00	1.00	0.00	0.004	0.25
	2	0.598	0.832	86.98	0.00	1.00	0.00	0.006	
	3	X	X	X	X	X	X	X	
	4								
	5								
15	1	0.420	0.649	85.68	0.00	1.00	0.00	0.006	0.25
	2	0.563	0.860	85.68	24.17	1.00	24.17	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
16	1	0.456	0.670	84.66	26.17	1.00	26.17	0.000	0.000
	2	0.618	0.918	84.66	16.72	1.00	16.72	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								

SUBMITTED BY: Adolio Vasquez

Certificate No. and Grade: WS0012618, C **Date:** July 10, 2019

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 Utilities

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022 Plant ID No.: 20831 Month: June Year: 2019

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	0.456	0.663	86.76	23.27	1.00	23.27	0.000	0.000
	2	0.614	0.896	86.76	24.78	1.00	24.78	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
18	1	0.507	0.700	88.66	24.78	1.00	24.78	0.000	0.000
	2	0.675	0.946	88.66	12.50	1.00	12.50	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
19	1	0.458	0.699	87.30	0.00	1.00	0.00	0.004	0.25
	2	0.617	0.966	87.30	0.00	1.00	0.00	0.006	
	3	X	X	X	X	X	X	X	
	4								
	5								
20	1	0.493	0.662	85.95	0.00	1.00	0.00	0.004	0.25
	2	0.666	0.901	85.95	0.00	1.00	0.00	0.006	
	3	X	X	X	X	X	X	X	
	4								
	5								
21	1	0.474	0.667	82.83	0.00	1.00	0.00	0.005	0.25
	2	0.639	0.886	82.83	0.00	1.00	0.00	0.007	
	3	X	X	X	X	X	X	X	
	4								
	5								
22	1	0.452	0.664	85.03	0.00	1.00	0.00	0.009	0.50
	2	0.609	0.907	85.03	0.00	1.00	0.00	0.012	
	3	X	X	X	X	X	X	X	
	4								
	5								
23	1	0.455	0.686	84.88	15.95	1.00	15.95	0.000	0.000
	2	0.615	0.946	84.88	5.09	1.00	5.09	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
24	1	0.441	0.693	85.00	2.43	1.00	2.43	0.007	0.25
	2	0.605	0.915	85.00	24.78	1.00	24.78	0.000	
	3	X	X	X	X	X	X	X	
	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	0.460	0.793	84.78	10.37	1.00	10.37	0.000	0.000
	2	0.628	1.115	84.78	12.65	1.00	12.65	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
26	1	0.434	0.873	82.93	24.01	1.00	24.01	0.000	0.000
	2	0.592	1.194	82.93	17.77	1.00	17.77	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
27	1	0.392	0.842	85.37	25.36	1.00	25.36	0.000	0.000
	2	0.535	1.142	85.37	18.96	1.00	18.96	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
28	1	0.387	0.611	84.95	0.00	1.00	0.00	0.004	0.25
	2	0.514	0.843	84.95	0.00	1.00	0.00	0.006	
	3	X	X	X	X	X	X	X	
	4								
	5								
29	1	0.409	0.644	84.71	0.00	1.00	0.00	0.004	0.25
	2	0.543	0.886	84.71	0.00	1.00	0.00	0.006	
	3	X	X	X	X	X	X	X	
	4								
	5								
30	1	0.411	0.701	85.54	0.00	1.00	0.00	0.019	0.75
	2	0.524	0.940	85.54	0.00	1.00	0.00	0.026	
	3	X	X	X	X	X	X	X	
	4								
	5								
31	1								
	2								
	3								
	4								
	5								

SUBMITTED BY: Adolio Vasquez

Certificate No. and Grade: WS0012618, C

Date: July 10, 2019

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 Utilities

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022 **Plant ID No.:** 20831 **Month:** June **Year:** 2019

DAILY MINIMUM INACTIVATION

Reactor Range	SUMMARY DATA					Reactor Range	SUMMARY DATA				
	Date	Min Dose (mJ/cm²)	Inactivation Credit Achieved: Giardia Log	Virus Log	Crypto Log		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	17.73	3.69	0.00	1.00		10	0.00*	1.00	0.00	1.00
	3	9.65	2.80	0.00	1.00		11	18.47	3.75	0.00	1.00
	4	0.00*	1.00	0.00	1.00		12	0.00*	1.00	0.00	1.00
	5	29.04	4.00	0.20	1.00		13	0.00*	1.00	0.00	1.00
	6	30.22	4.00	0.24	1.00		14	0.00*	1.00	0.00	1.00
	7	0.00*	1.00	0.00	1.00		15	0.00*	1.00	0.00	1.00
	8	0.00*	1.00	0.00	1.00		16	16.72	3.62	0.00	1.00

DAILY MINIMUM INACTIVATION

Reactor Range	SUMMARY DATA					Reactor Range	SUMMARY DATA				
	Date	Min Dose (mJ/cm²)	Min Inactivation: Giardia Log	Virus Log	Crypto Log		Date	Min Dose (mJ/cm²)	Min Inactivation: Giardia Log	Virus Log	Crypto Log
1 to 3	17	23.27	4.00	0.02	1.00	1 to 3	25	10.37	2.90	0.00	1.00
	18	12.50	3.19	0.00	1.00		26	17.77	3.70	0.00	1.00
	19	0.00*	1.00	0.00	1.00		27	18.96	3.78	0.00	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	0.00*	1.00	0.00	1.00
	23	5.09	1.98	0.00	1.00		31				1.00
	24	2.43*	1.21	0.00	1.00						

Total volume of water treated by all CDA reactors:	30.60	MG
Total volume of off-spec water produced by all CDA reactors:	0.34	MG
Percentage of off-spec water produced by all CDA reactors:	1.11	%
Crypto Log-Inactivation Credit for treatment by CDA reactors:	1.00	log

Raw water pumpage and total production by all UV reactors differ by more than 15% on these days: 9,

SUBMITTED BY: Adolio Vasquez

Certificate No. and Grade: WS0012618, C **Date:** July 10, 2019

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 Utilities

PLANT NAME OR NUMBER: Rio Bravo

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

Month: June **Year:** 2019

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	92	44	67.00	64.00	1.05	NA	1.00
		2							
		3							
	1.00	4							
	Calibration Date	5							
		6							
	6/1/19	7							
	New Sensor CF	8							
		9							
	1.00	10							
UVCD No. 2	Previous Month's Sensor CF	1	38	44	74.00	67.00	1.10	NA	1.00
		2							
		3							
	1.00	4							
	Calibration Date	5							
		6							
	6/1/19	7							
	New Sensor CF	8							
		9							
	1.00	10							
UVCD No. 3	Previous Month's Sensor CF	1	39	44	91.00	81.00	1.12		off-line
		2							
		3							
	1.00	4							
	Calibration Date	5							
		6							
	6/1/19	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: Adolio Vasquez

Certificate No. and Grade: WS0012618, C

Date: July 10, 2019

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 Utilities

PLANT NAME OR NUMBER: Rio Bravo

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

Month: June **Year:** 2019

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							

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Certificate No. and Grade: WS0012618, C

Date: July 10, 2019

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 Utilities

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022

Plant ID 20831

Month: June

Year: 2019

#VALUE!

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	6/1/19	78713	92.80	91.60	1.20	NA	NA
	2	6/3/19	78713	87.60	92.60	5.00	YES	NA
	3	6/10/19	78713	90.60	90.20	0.40	NA	NA
	4	6/17/19	78713	88.60	89.10	0.50	NA	NA
	5	6/24/19	78713	88.80	89.30	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: Adolio Vasquez

Certificate No. and Grade: WS0012618, C

Date: July 10, 2019

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.)

LT2ESWTR Summary Page

PUBLIC WATER SYSTEM NAME: Webb County Water Utilities

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022 Plant ID No.: 20831 Month: June Year: 2019

Note: Indicate the treatment processes in each train. (see comment)	TREATMENT TECHNOLOGIES																
	PRETREATMENT CREDITS				FILTRATION TECHNOLOGY CREDITS						ENHANCED PERFORMANCE CREDITS		DISINFECTION TECHNOLOGY CREDITS			OTHER TREATMENT CREDITS	
	Riverbank Filtration	Presed. with Coagul.	Two-stage Lime Softening	Conventional Sedimentation or Clarification	Conventional Granular Media Filters	Bag or Cartridge Filtration	Two-Stage Filtration	Membrane Filtration (PBT)	Membrane Filtration (QBT)	Membrane Filtration (MBT)	Enhanced CFE Perform.	Optimized IFE Perform.	Crypto Chemical Disinfect.	UV Disinfect. (ISA)	UV Disinfect. (CDA)	Watershed Protection	Perform. Demon.
Overall	FALSE	FALSE	FALSE	TRUE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE
Train 1				TRUE	TRUE						TRUE	FALSE			TRUE		
Train 2																	
Train 3																	
Train 4																	
Train 5																	
1					2.50										1.00		
2					2.50										1.00		
3					2.50										1.00		
4					2.50										1.00		
5					2.50										1.00		
6					2.50										1.00		
7					2.50										1.00		
8					2.50										1.00		
9					2.50										1.00		
10					2.50										1.00		
11					2.50										1.00		
12					2.50										1.00		
13					2.50										1.00		
14					2.50										1.00		
15					2.50										1.00		
16				0.50	2.50						0.50				1.00		
17					2.50										1.00		
18					2.50										1.00		
19					2.50										1.00		
20					2.50										1.00		
21					2.50										1.00		
22					2.50										1.00		
23					2.50										1.00		
24					2.50										1.00		
25					2.50										1.00		
26					2.50										1.00		
27					2.50										1.00		
28					2.50										1.00		
29					2.50										1.00		
30					2.50										1.00		
31																	
MIN				0.5	2.5						0.5				1.00		

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.)

LT2ESWTR Summary Page (cont)

PUBLIC WATER SYSTEM NAME: Webb County Water Utilities

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022 Plant ID No.: 20831 Month: June Year: 2019

	GIARDIA AND CRYPTOSPORIDIUM TREATMENT CREDITS												GIARDIA INACTIVATION CREDITS						VIRAL INACTIVATION CREDITS					
	Total Daily Credit By Train						Total Daily Bin 3 & 4 Credit by Train						Total Daily Inactivation Credit By Train						Total Daily Inactivation Credit by Train					
Overall						Minimum						Minimum						Minimum						Minimum
Train 1	TRUE						TRUE						TRUE						TRUE					
Train 2		FALSE						FALSE						FALSE						FALSE				
Train 3			FALSE						FALSE						FALSE						FALSE			
Train 4				FALSE						FALSE						FALSE						FALSE		
Train 5					FALSE						FALSE						FALSE						FALSE	
1	4.50					4.50	1.00					1.00	6.15					6.15	127.09					127.09
2	4.50					4.50	1.00					1.00	8.84					8.84	105.53					105.53
3	4.50					4.50	1.00					1.00	7.87					7.87	113.97					113.97
4	4.50					4.50	1.00					1.00	6.01					6.01	119.81					119.81
5	4.50					4.50	1.00					1.00	9.25					9.25	118.86					118.86
6	4.50					4.50	1.00					1.00	8.75					8.75	114.33					114.33
7	4.50					4.50	1.00					1.00	4.00					4.00	58.59					58.59
8	4.50					4.50	1.00					1.00	3.01					3.01	34.16					34.16
9	4.50					4.50	1.00					1.00	3.38					3.38	43.84					43.84
10	4.50					4.50	1.00					1.00	5.29					5.29	73.17					73.17
11	4.50					4.50	1.00					1.00	8.38					8.38	89.88					89.88
12	4.50					4.50	1.00					1.00	4.91					4.91	84.19					84.19
13	4.50					4.50	1.00					1.00	2.63					2.63	23.70					23.70
14	4.50					4.50	1.00					1.00	3.90					3.90	54.01					54.01
15	4.50					4.50	1.00					1.00	5.03					5.03	81.92					81.92
16	4.50					4.50	1.00					1.00	7.04					7.04	60.89					60.89
17	4.50					4.50	1.00					1.00	6.75					6.75	61.61					61.61
18	4.50					4.50	1.00					1.00	6.97					6.97	73.89					73.89
19	4.50					4.50	1.00					1.00	2.51					2.51	22.55					22.55
20	4.50					4.50	1.00					1.00	3.12					3.12	34.23					34.23
21	4.50					4.50	1.00					1.00	3.94					3.94	55.49					55.49
22	4.50					4.50	1.00					1.00	5.26					5.26	87.33					87.33
23	4.50					4.50	1.00					1.00	5.27					5.27	68.40					68.40
24	4.50					4.50	1.00					1.00	5.46					5.46	90.82					90.82
25	4.50					4.50	1.00					1.00	8.70					8.70	115.14					115.14
26	4.50					4.50	1.00					1.00	9.57					9.57	144.50					144.50
27	4.50					4.50	1.00					1.00	10.32					10.32	155.64					155.64
28	4.50					4.50	1.00					1.00	6.89					6.89	121.56					121.56
29	4.50					4.50	1.00					1.00	5.36					5.36	81.60					81.60
30	4.50					4.50	1.00					1.00	6.34					6.34	114.55					114.55
31																								
MIN	4.50					4.50	1.00					1.00	2.51					2.51	22.55					22.55
AVG	4.50					4.50	1.00					1.00	6.03					6.03	84.38					84.38
MAX	4.50					4.50	1.00					1.00	10.32					10.32	155.64					155.64