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: May 2020

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: Rogelio Ley

Certificate No. & Grade: WS0012448, C

Date: June 10, 2020

TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	92	Number of 4-hour periods when plant was off-line:	94
Number of readings above 0.10 NTU:	0	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:	4.99
		Average log inactivation) (including UV) for viruses:	58.10
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:	6.90
		Number of days with pH below 7.0 in the last disinfection zone:	3.00
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 31 required) (8)		
Average disinfectant residual value:	1.57	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:	5.70 NTU	Average turbidity value:	2.28 NTU
	Minimum turbidity reading:	0.12 NTU	Standard deviation:	1.850 NTU
	95th percentile value:	5.29 NTU		
IFE Stastical Summary	Maximum IFE turbidity reading:	0.19 NTU	Average IFE turbidity value:	0.09 NTU
	Minimum IFEturbidity reading:	0.05 NTU	Standard deviation:	0.023 NTU
	95th percentile IFE value:	0.14 NTU		
CFE Stastical Summary	Maximum CFE turbidity reading:	0.10 NTU	Average CFE turbidity value:	0.07 NTU
	Minimum CFE turbidity reading:	0.05 NTU	Standard deviation:	0.012 NTU
	95th percentile CFE value:	0.09 NTU		

STATISTICAL ANALYSIS OF pH DATA

Last Zone pH Stastical Summary	Maximum pH reading:	7.20 pH	Average pH value:	7.08 pH
	Minimum pH reading:	6.90 pH	Standard deviation:	0.074 pH
	95th percentile value:	7.18 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: 1,963

Month: May Year: 2020 Population: 6,870

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	0.976	1.007	13	120	0.9	1.8					X	X	X	0.06	0.05	0.05	2.6	
2	1.033	1.060	21	140	3.0	2.0					0.06	X	X	0.06	0.06	0.05	2.4	
3	1.102	1.148	19	140	1.5	2.1					X	X	X	0.05	0.05	0.05	2.4	
4	1.090	1.194	12	140	1.8	2.1					0.06	X	X	0.09	0.10	0.07	2.5	
5	1.117	1.191	10	160	1.0	0.3					X	X	X	0.07	0.09	0.08	2.2	
6	1.039	1.067	14	160	1.0	0.2					X	X	X	0.06	0.06	0.06	2.6	
7	0.964	1.065	12	140	1.0	0.2					X	X	X	0.08	0.08	0.08	2.4	
8	1.004	1.103	18	140	1.0	0.2					X	X	X	0.06	0.06	0.06	2.5	
9	1.039	1.154	18	140	1.3	0.2					X	X	X	0.06	0.05	0.06	2.4	
10	0.957	0.965	15	140	1.1	0.3					X	X	X	0.06	0.06	0.06	2.6	
11	0.921	0.999	21	140	5.1	5.0					X	X	X	0.07	0.07	0.07	2.6	
12	0.934	1.154	19	140	4.3	4.1					0.07	X	X	0.06	0.07	0.07	2.7	
13	1.116	1.190	15	140	3.3	4.4					0.07	X	X	0.06	0.07	0.08	2.1	
14	1.057	1.200	23	140	1.6	5.4					X	X	X	0.08	0.06	0.06	2.4	
15	0.843	0.799	9	160	1.7	4.9					X	X	X	0.05	0.05	0.06	2.3	
16	0.936	0.920	6	140	2.2	1.7					X	X	X	X	0.08	0.08	1.9	
17	0.756	0.963	9	140	3.0	0.1					X	X	X	X	0.07	0.07	1.6	
18	0.782	0.889	11	140	4.1	3.5					0.07	X	X	0.08	0.08	0.08	2.5	
19	0.943	0.986	30	140	3.8	5.0					0.08	X	X	0.08	0.08	0.09	2.7	
20	0.896	0.949	13	140	5.1	5.0					X	X	X	0.08	0.10	0.09	2.7	
21	1.046	1.136	22	140	5.1	5.7					X	X	X	0.08	0.08	0.08	2.5	
22	0.861	0.882	12	120	4.2	3.0					X	X	X	X	0.07	0.08	2.3	
23	0.795	0.849	8	140	5.7	0.2					X	X	X	X	0.07	0.07	2.4	
24	0.798	0.958	7	140	5.3	0.2					X	X	X	0.07	0.07	0.07	2.5	
25	0.875	0.936	11	140	4.3	0.2					X	X	X	0.07	0.07	0.06	2.5	
26	0.838	0.850	13	120	2.6	0.2					X	X	X	0.06	0.05	0.05	1.9	
27	0.778	0.863	43	120	2.8	0.2					X	X	X	0.06	0.05	0.05	1.9	
28	0.780	0.822	8	120	1.6	0.2					X	X	X	0.07	0.06	0.06	2.4	
29	0.815	0.852	9	140	1.2	0.1					X	X	X	X	0.06	0.07	2.4	
30	0.749	0.810	14	140	1.1	0.2					X	X	X	X	0.06	0.06	2.1	
31	0.736	0.771	15	140	1.1	0.2					X	X	X	X	0.06	0.07	2.4	
Total	28.576	30.732		Max	5.7	5.7												
Avg	0.922	0.991		Avg	2.7	1.9												
Max	1.117	1.200		95th %	5.2	5.2												
Min	0.736	0.771		Min	0.9	0.1												
				95th percentile based on data from all basins						5.3								

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: Rogelio Ruiz Certificate No. and Grade: WS0012448, C Date: June 10, 2020

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: May Year: 2020

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	0.07		0.06		0.09		0.07													
2	0.06		0.05		0.06		0.06													
3	0.07		0.06		0.08		0.06													
4	0.10		0.06		0.08		0.10													
5	0.08		0.09		0.10		0.19													
6	0.06		0.07		0.10		0.10													
7	0.08		0.08		0.08		0.08													
8	0.08		0.06		0.08		0.10													
9	0.06		0.07		0.08		0.08													
10	0.08		0.09		0.08		0.08													
11	0.10		0.09		0.11		0.09													
12	0.10		0.08		0.10		0.10													
13	0.10		0.09		0.10		0.10													
14	0.08		0.08		0.08		0.09													
15	0.08		0.05		0.08		0.09													
16	0.08		0.10		0.09		0.08													
17	0.08		0.09		0.08		0.08													
18	0.10		0.09		0.08		0.14													
19	0.10		0.09		0.16		0.14													
20	0.14		0.12		0.14		0.11													
21	0.08		0.07		0.14		0.09													
22	0.08		0.09		0.10		0.10													
23	0.14		0.07		0.09		0.08													
24	0.16		0.07		0.09		0.07													
25	0.12		0.08		0.10		0.08													
26	0.07		0.07		0.08		0.08													
27	0.07		0.07		0.07		0.06													
28	0.07		0.07		0.07		0.07													
29	0.07		0.06		0.08		0.07													
30	0.07		0.07		0.07		0.06													
31	0.08		0.07		0.07		0.06													

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: Rogelio Rey

Certificate No. and Grade: WS0012448, C

Date: June 10, 2020

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: May Year: 2020

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*	0.8	0.803	25.1	7.1				
	FCL *D1B*	0.9	0.803	24.9	7.1				
	FCL *D2*	1.0	0.401	25.3	7.1	4.29	91.87	8.57	
	CLA *D3*	3.0	0.803	27.3	7.0			(G)	
	D4								
2	FCL *D1A*	0.7	0.853	24.9	7.1				
	FCL *D1B*	0.8	0.853	24.8	7.0				
	FCL *D2*	0.9	0.427	24.8	7.1	3.58	74.71	7.15	
	CLA *D3*	2.8	0.853	26.8	7.0			(G)	
	D4								
3	FCL *D1A*	0.6	0.857	25.2	7.1				
	FCL *D1B*	0.5	0.857	25.0	7.1				
	FCL *D2*	0.9	0.428	25.3	7.1	3.40	72.92	6.79	
	CLA *D3*	2.6	0.857	26.4	7.1			(G)	
	D4								
4	FCL *D1A*	0.5	0.840	24.6	7.1				
	FCL *D1B*	0.5	0.840	25.7	7.0				
	FCL *D2*	0.6	0.420	23.6	7.2	2.49	46.41	4.97	
	CLA *D3*	2.6	0.840	25.1	7.1			(G)	
	D4								
5	FCL *D1A*	0.4	0.811	26.0	7.0				
	FCL *D1B*	0.5	0.811	26.0	7.0				
	FCL *D2*	0.6	0.406	25.6	7.1	2.88	55.55	5.76	
	CLA *D3*	2.7	0.811	27.1	7.2			(G)	
	D4								
6	FCL *D1A*	0.5	0.832	24.1	7.2				
	FCL *D1B*	0.4	0.832	24.1	7.1				
	FCL *D2*	0.4	0.416	24.0	7.2	2.02	33.93	4.05	
	CLA *D3*	2.9	0.832	24.0	7.1			(G)	
	D4								
7	FCL *D1A*	1.3	0.813	25.7	7.2				
	FCL *D1B*	1.1	0.813	25.6	7.2				
	FCL *D2*	0.7	0.406	24.6	7.6	3.37	77.88	6.74	
	CLA *D3*	2.7	0.813	26.0	7.1			(G)	
	D4								
8	FCL *D1A*	0.5	0.863	24.6	7.2				
	FCL *D1B*	0.4	0.863	24.6	7.2				
	FCL *D2*	0.5	0.432	23.9	7.5	2.21	43.50	4.42	
	CLA *D3*	2.6	0.863	26.3	7.2			(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*	0.7	0.834	25.0	7.2				
	FCL *D1B*	0.5	0.834	25.1	7.1				
	FCL *D2*	0.3	0.417	24.9	7.2	1.94	33.82	3.88	
	CLA *D3*	2.4	0.834	25.4	7.1			(G)	
	D4								
10	FCL *D1A*	0.7	0.821	24.6	7.1				
	FCL *D1B*	0.7	0.821	24.5	7.1				
	FCL *D2*	0.4	0.410	23.7	7.1	2.35	42.76	4.70	
	CLA *D3*	2.6	0.821	24.4	7.1			(G)	
	D4								
11	FCL *D1A*	0.6	0.765	25.3	7.2				
	FCL *D1B*	0.5	0.765	25.1	7.1				
	FCL *D2*	0.6	0.383	25.6	7.3	3.19	60.46	6.38	
	CLA *D3*	3.3	0.765	25.4	7.1			(G)	
	D4								
12	FCL *D1A*	0.7	0.802	24.0	7.1				
	FCL *D1B*	0.7	0.802	24.2	7.1				
	FCL *D2*	0.9	0.401	23.6	7.2	3.54	74.67	7.07	
	CLA *D3*	2.9	0.802	24.6	7.1			(G)	
	D4								
13	FCL *D1A*	0.3	0.788	26.0	7.2				
	FCL *D1B*	0.3	0.788	26.0	7.1				
	FCL *D2*	0.3	0.394	25.8	7.3	1.94	29.35	3.89	
	CLA *D3*	3.0	0.788	25.7	7.2			(G)	
	D4								
14	FCL *D1A*	0.5	0.836	25.3	7.2				
	FCL *D1B*	0.6	0.836	25.1	7.1				
	FCL *D2*	0.7	0.418	25.1	7.2	2.81	58.80	5.61	
	CLA *D3*	2.4	0.836	26.3	7.1			(G)	
	D4								
15	FCL *D1A*	0.2	0.845	26.1	7.1				
	FCL *D1B*	0.2	0.845	25.8	7.1				
	FCL *D2*	0.6	0.422	25.4	7.2	2.51	46.46	5.03	
	CLA *D3*	3.0	0.845	26.8	7.0			(G)	
	D4								
16	FCL *D1A*	1.1	0.832	25.4	7.2				
	FCL *D1B*	1.0	0.832	25.6	7.1				
	FCL *D2*	1.3	0.416	25.0	7.2	4.66	111.59	9.32	
	CLA *D3*	2.7	0.832	25.8	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: Rogelio Ruiz

Certificate No. and Grade: WS0012448, C

Date: June 10, 2020

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: May Year: 2020

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

Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time=
17	FCL *D1A*	0.5	0.752	26.0	7.2				
	FCL *D1B*	0.6	0.752	26.0	7.1				
	FCL *D2*	0.8	0.376	26.0	7.1	3.81	76.79	7.62	
	CLA *D3*	3.0	0.752	26.0	7.1			(G)	
	D4								
18	FCL *D1A*	0.2	0.781	25.6	7.2				
	FCL *D1B*	0.2	0.781	25.7	7.2				
	FCL *D2*	0.3	0.391	25.9	7.2	1.84	29.59	3.69	
	CLA *D3*	2.5	0.781	27.0	7.1			(G)	
	D4								
19	FCL *D1A*	0.3	0.793	27.0	7.1				
	FCL *D1B*	0.2	0.793	26.3	7.1				
	FCL *D2*	0.3	0.397	25.9	7.1	1.85	27.79	3.71	
	CLA *D3*	2.7	0.793	26.4	7.0			(G)	
	D4								
20	FCL *D1A*	0.2	0.804	27.2	7.1				
	FCL *D1B*	0.2	0.804	27.1	7.0				
	FCL *D2*	0.6	0.402	27.2	7.1	2.96	56.17	5.93	
	CLA *D3*	2.9	0.804	26.2	7.1			(G)	
	D4								
21	FCL *D1A*	0.3	0.845	25.9	7.0				
	FCL *D1B*	0.3	0.845	26.1	7.2				
	FCL *D2*	0.1	0.422	26.2	7.3	1.35	17.38	2.69	
	CLA *D3*	2.5	0.845	25.8	7.0			(G)	
	D4								
22	FCL *D1A*	0.2	0.819	26.1	7.2				
	FCL *D1B*	0.3	0.819	26.6	7.1				
	FCL *D2*	0.5	0.409	26.7	7.2	2.38	46.04	4.77	
	CLA *D3*	2.3	0.819	28.1	7.2			(G)	
	D4								
23	FCL *D1A*	0.3	0.809	26.0	7.1				
	FCL *D1B*	0.3	0.809	26.0	7.2				
	FCL *D2*	0.4	0.405	27.0	7.1	2.50	42.83	5.01	
	CLA *D3*	3.0	0.809	27.0	7.1			(G)	
	D4								
24	FCL *D1A*	0.6	0.793	27.0	7.1				
	FCL *D1B*	0.8	0.793	27.0	7.2				
	FCL *D2*	0.6	0.396	27.0	7.0	3.30	63.75	6.60	
	CLA *D3*	2.7	0.793	27.0	7.1			(G)	
	D4								

PERFORMANCE DATA

Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time=
25	FCL *D1A*	1.0	0.774	26.0	7.1				
	FCL *D1B*	1.0	0.774	27.0	7.1				
	FCL *D2*	0.2	0.387	26.0	7.2	2.55	45.50	5.10	
	CLA *D3*	2.9	0.774	26.0	7.1			(G)	
	D4								
26	FCL *D1A*	1.6	0.760	24.2	7.2				
	FCL *D1B*	1.3	0.760	24.4	7.2				
	FCL *D2*	0.9	0.380	24.9	7.1	4.31	102.69	8.62	
	CLA *D3*	2.0	0.760	25.2	7.1			(G)	
	D4								
27	FCL *D1A*	0.7	0.790	26.7	7.1				
	FCL *D1B*	0.6	0.790	26.8	7.0				
	FCL *D2*	0.9	0.397	27.0	7.1	4.26	91.69	8.52	
	CLA *D3*	2.8	0.790	28.4	6.9			(G)	
	D4								
28	FCL *D1A*	0.3	0.774	25.9	7.0				
	FCL *D1B*	0.3	0.774	26.3	6.9				
	FCL *D2*	0.2	0.387	26.3	7.1	1.78	27.21	3.56	
	CLA *D3*	2.4	0.774	28.1	6.9			(G)	
	D4								
29	FCL *D1A*	0.9	0.794	26.0	7.0				
	FCL *D1B*	0.6	0.794	27.0	7.0				
	FCL *D2*	0.5	0.397	27.0	7.0	3.28	60.42	6.57	
	CLA *D3*	3.0	0.794	26.0	6.9			(G)	
	D4								
30	FCL *D1A*	0.2	0.808	26.0	7.0				
	FCL *D1B*	0.7	0.808	26.0	7.1				
	FCL *D2*	1.0	0.404	26.0	7.1	3.87	81.19	7.74	
	CLA *D3*	3.0	0.808	26.0	7.0			(G)	
	D4								
31	FCL *D1A*	0.7	0.809	25.0	7.0				
	FCL *D1B*	0.3	0.809	26.0	7.1				
	FCL *D2*	1.0	0.404	25.0	7.1	3.71	76.97	7.42	
	CLA *D3*	3.0	0.809	25.0	7.1			(G)	
	D4								
					Max	4.66	111.59	9.32	
					Min	1.35	17.38	2.69	
					Avg	2.93	58.09	5.87	
					SD	0.86	23.54	1.73	

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

SUBMITTED BY: Rogelio Ruiz

Certificate No. and Grade: WS0012448, C

Date: June 10, 2020

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: May

Year: 2020

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	5/4	140	3.34	2.63	21.3	15	1.42			1.42
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	3.34	2.63	21.26		1.42			1.42
Max		140.00	3.34	2.63	21.26		1.42			1.42
Min		140.00	3.34	2.63	21.26		1.42			1.42

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	3.34	2.63	21.3	NA	1.42

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 No. and Grade: WS0012448, C

Date: June 10, 2020

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: May Year: 2020

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)
	OPERATIONAL DATA								
1	1	0.421	0.732	89.93	5.83	1.00	5.83	0.000	0.000
	2	0.558	0.974	89.93	26.25	1.00	26.25	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
2	1	0.431	0.799	90.13	31.95	1.00	31.95	0.000	0.000
	2	0.574	1.055	90.13	3.03	1.00	3.03	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
3	1	0.451	0.813	88.00	2.26	1.00	2.26	0.008	0.25
	2	0.599	1.036	88.00	3.12	1.00	3.12	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
4	1	0.454	0.758	86.49	25.46	1.00	25.46	0.000	0.000
	2	0.586	1.034	86.49	17.49	1.00	17.49	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
5	1	0.431	0.768	91.33	29.83	1.00	29.83	0.000	0.000
	2	0.573	1.007	91.33	18.49	1.00	18.49	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
6	1	0.399	0.764	90.79	34.13	1.00	34.13	0.000	0.000
	2	0.529	1.018	90.79	26.53	1.00	26.53	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
7	1	0.425	0.778	90.15	4.00	1.00	4.00	0.000	0.000
	2	0.564	1.045	90.15	10.88	1.00	10.88	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
8	1	0.433	0.914	88.81	2.85	1.00	2.85	0.000	0.000
	2	0.575	1.230	88.81	23.06	1.00	23.06	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)
	OPERATIONAL DATA								
9	1	0.405	0.763	88.88	10.40	1.00	10.40	0.000	0.000
	2	0.527	1.010	88.88	22.21	1.00	22.21	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
10	1	0.391	0.762	88.86	30.60	1.00	30.60	0.000	0.000
	2	0.517	0.973	88.86	15.56	1.00	15.56	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
11	1	0.396	0.714	89.59	0.00	1.00	0.00	0.002	0.25
	2	0.512	0.917	89.59	0.00	1.00	0.00	0.012	
	3	X	X	X	X	X	X	X	
	4								
	5								
12	1	0.421	0.723	89.40	29.33	1.00	29.33	0.000	0.000
	2	0.556	0.953	89.40	23.85	1.00	23.85	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
13	1	0.419	0.721	92.89	0.00	1.00	0.00	0.005	0.25
	2	0.547	0.934	92.89	0.00	1.00	0.00	0.007	
	3	X	X	X	X	X	X	X	
	4								
	5								
14	1	0.347	0.789	91.06	32.06	1.00	32.06	0.000	0.000
	2	0.464	1.054	91.06	15.71	1.00	15.71	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
15	1	0.381	0.762	90.28	0.00	1.00	0.00	0.006	0.25
	2	0.509	1.004	90.28	0.00	1.00	0.00	0.007	
	3	X	X	X	X	X	X	X	
	4								
	5								
16	1	0.319	0.827	88.42	0.00	1.00	0.00	0.008	0.25
	2	0.414	1.035	88.42	0.00	1.00	0.00	0.010	
	3	X	X	X	X	X	X	X	
	4								
	5								

SUBMITTED BY: Rogelio Ruiz

Certificate No. and Grade: WS0012448, C Date: June 10, 2020

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: May Year: 2020

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)
	OPERATIONAL DATA								
17	1	0.336	0.769	83.80	33.84	1.00	33.84	0.000	0.25
	2	0.395	1.000	83.80	0.00	1.00	0.00	0.008	
	3	X	X	X	X	X	X	X	
	4								
	5								
18	1	0.376	0.711	85.39	0.00	1.00	0.00	0.001	0.25
	2	0.433	0.829	85.39	26.40	1.00	26.40	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
19	1	0.372	0.734	90.06	34.67	1.00	34.67	0.000	0.000
	2	0.462	0.914	90.06	28.16	1.00	28.16	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
20	1	0.436	0.729	90.28	8.57	1.00	8.57	0.000	0.000
	2	0.573	0.960	90.28	14.23	1.00	14.23	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
21	1	0.363	0.766	88.42	27.87	1.00	27.87	0.000	0.000
	2	0.454	1.015	88.42	22.30	1.00	22.30	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
22	1	0.343	0.792	87.76	0.00	1.00	0.00	0.002	0.25
	2	0.403	0.921	87.76	25.30	1.00	25.30	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
23	1	0.342	0.727	86.98	0.00	1.00	0.00	0.005	0.25
	2	0.443	0.982	86.98	0.00	1.00	0.00	0.005	
	3	X	X	X	X	X	X	X	
	4								
	5								
24	1	0.372	0.711	86.44	0.00	1.00	0.00	0.006	0.25
	2	0.498	0.959	86.44	0.00	1.00	0.00	0.007	
	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)
	OPERATIONAL DATA								
25	1	0.355	1.141	84.71	16.76	1.00	16.76	0.000	0.000
	2	0.470	1.500	84.71	2.72	1.00	2.72	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
26	1	0.331	0.732	87.13	0.00	1.00	0.00	0.007	0.25
	2	0.442	0.973	87.13	0.00	1.00	0.00	0.009	
	3	X	X	X	X	X	X	X	
	4								
	5								
27	1	0.329	0.867	88.91	0.00	1.00	0.00	0.003	0.25
	2	0.439	1.151	88.91	0.00	1.00	0.00	0.004	
	3	X	X	X	X	X	X	X	
	4								
	5								
28	1	0.351	0.730	86.25	0.00	1.00	0.00	0.008	0.25
	2	0.466	0.981	86.25	0.00	1.00	0.00	0.020	
	3	X	X	X	X	X	X	X	
	4								
	5								
29	1	0.314	0.959	85.50	18.19	1.00	18.19	0.000	0.000
	2	0.400	1.251	85.50	12.57	1.00	12.57	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
30	1	0.310	0.740	85.73	0.00	1.00	0.00	0.006	0.25
	2	0.390	0.950	85.73	0.00	1.00	0.00	0.007	
	3	X	X	X	X	X	X	X	
	4								
	5								
31	1	0.303	0.739	85.39	2.77	1.00	2.77	0.000	0.000
	2	0.406	0.986	85.39	9.34	1.00	9.34	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								

SUBMITTED BY: Rogelio Ruiz

Certificate No. and Grade: WS0012448, C Date: June 10, 2020

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: May Year: 2020

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	5.83	2.13	0.00	1.00	1 to 3	9	10.40	2.91	0.00	1.00
	2	3.03	1.51	0.00	1.00		10	15.56	3.54	0.00	1.00
	3	2.26*	1.11	0.00	1.00		11	0.00*	1.00	0.00	1.00
	4	17.49	3.68	0.00	1.00		12	23.85	4.00	0.04	1.00
	5	18.49	3.75	0.00	1.00		13	0.00*	1.00	0.00	1.00
	6	26.53	4.00	0.13	1.00		14	15.71	3.55	0.00	1.00
	7	4.00	1.80	0.00	1.00		15	0.00*	1.00	0.00	1.00
	8	2.85	1.43	0.00	1.00		16	0.00*	1.00	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	0.00*	1.00	0.00	1.00	1 to 3	25	2.72	1.37	0.00	1.00
	18	0.00*	1.00	0.00	1.00		26	0.00*	1.00	0.00	1.00
	19	28.16	4.00	0.18	1.00		27	0.00*	1.00	0.00	1.00
	20	8.57	2.63	0.00	1.00		28	0.00*	1.00	0.00	1.00
	21	22.30	4.00	0.00	1.00		29	12.57	3.20	0.00	1.00
	22	0.00*	1.00	0.00	1.00		30	0.00*	1.00	0.00	1.00
	23	0.00*	1.00	0.00	1.00		31	2.77	1.40	0.00	1.00
	24	0.00*	1.00	0.00	1.00						

Total volume of water treated by all CDA reactors: 27.04 MG
Total volume of off-spec water produced by all CDA reactors: 0.16 MG
Percentage of off-spec water produced by all CDA reactors: 0.60 %
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: 14, 16, 21,

SUBMITTED BY: [signature]

Certificate No. and Grade: WS0012448, C Date: June 10, 2020

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: May **Year:** 2020

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	70.60	72.80	0.97	NA	1.00
		2							
		3							
	1.00	4							
	Calibration Date	5							
		6							
	5/1/20	7							
	New Sensor CF	8							
		9							
	1.00	10							
UVCD No. 2	Previous Month's Sensor CF	1	38	44	72.10	72.00	1.00	NA	1.00
		2							
		3							
	1.00	4							
	Calibration Date	5							
		6							
	5/1/20	7							
	New Sensor CF	8							
		9							
	1.00	10							
UVCD No. 3	Previous Month's Sensor CF	1	39	44	10.90	6.90	1.58	YES	Replaced
		2							
		3							
	1.00	4							
	Calibration Date	5							
		6							
	5/1/20	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: Rogelio Ruiz

Certificate No. and Grade: WS0012448, C

Date: June 10, 2020

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: May Year: 2020

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: Rogelio Ruiz

Certificate No. and Grade: WS0012448, C

Date: June 10, 2020

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

NA

Month: May

Year: 2020

CALIBRATION DATA

Benchtop UVT Analyzer Serial Number: UVT08-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	5/1/20	78713	91.50	92.50	1.00	NA	NA
	2	5/4/20	78713	92.70	92.80	0.10	NA	NA
	3	5/11/20	78713	90.00	92.00	2.00	NA	NA
	4	5/18/20	78713	91.00	92.60	1.60	NA	NA
	5	5/25/20	78713	88.60	89.10	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: UVT08-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: Rogelio Ruiz

Certificate No. and Grade: WS0012448, C

Date: June 10, 2020

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: May Year: 2020

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					2.50										1.00		
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: May Year: 2020

	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	6.41					6.41	91.87					91.87
2	4.50					4.50	1.00					1.00	5.80					5.80	74.71					74.71
3	4.50					4.50	1.00					1.00	4.50					4.50	72.92					72.92
4	4.50					4.50	1.00					1.00	6.16					6.16	46.41					46.41
5	4.50					4.50	1.00					1.00	6.63					6.63	55.55					55.55
6	4.50					4.50	1.00					1.00	6.02					6.02	34.05					34.05
7	4.50					4.50	1.00					1.00	5.18					5.18	77.88					77.88
8	4.50					4.50	1.00					1.00	3.64					3.64	43.50					43.50
9	4.50					4.50	1.00					1.00	4.85					4.85	33.82					33.82
10	4.50					4.50	1.00					1.00	5.89					5.89	42.76					42.76
11	4.50					4.50	1.00					1.00	4.19					4.19	60.46					60.46
12	4.50					4.50	1.00					1.00	7.54					7.54	74.71					74.71
13	4.50					4.50	1.00					1.00	2.94					2.94	29.35					29.35
14	4.50					4.50	1.00					1.00	6.36					6.36	58.80					58.80
15	4.50					4.50	1.00					1.00	3.51					3.51	46.46					46.46
16	4.50					4.50	1.00					1.00	5.66					5.66	111.59					111.59
17	4.50					4.50	1.00					1.00	4.81					4.81	76.79					76.79
18	4.50					4.50	1.00					1.00	2.84					2.84	29.59					29.59
19	4.50					4.50	1.00					1.00	5.85					5.85	27.96					27.96
20	4.50					4.50	1.00					1.00	5.60					5.60	56.17					56.17
21	4.50					4.50	1.00					1.00	5.35					5.35	17.38					17.38
22	4.50					4.50	1.00					1.00	3.38					3.38	46.04					46.04
23	4.50					4.50	1.00					1.00	3.50					3.50	42.83					42.83
24	4.50					4.50	1.00					1.00	4.30					4.30	63.75					63.75
25	4.50					4.50	1.00					1.00	3.92					3.92	45.50					45.50
26	4.50					4.50	1.00					1.00	5.31					5.31	102.69					102.69
27	4.50					4.50	1.00					1.00	5.26					5.26	91.69					91.69
28	4.50					4.50	1.00					1.00	2.78					2.78	27.21					27.21
29	4.50					4.50	1.00					1.00	6.48					6.48	60.42					60.42
30	4.50					4.50	1.00					1.00	4.87					4.87	81.19					81.19
31	4.50					4.50	1.00					1.00	5.11					5.11	76.97					76.97
MIN	4.50					4.50	1.00					1.00	2.78					2.78	17.38					17.38
AVG	4.50					4.50	1.00					1.00	4.99					4.99	58.10					58.10
MAX	4.50					4.50	1.00					1.00	7.54					7.54	111.59					111.59