

# 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

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.

PWS ID No.: 2400022

Operator's Signature: [Signature]

Plant ID No.: 20831

Report for the Month of: September 2023

Certificate No. & Grade: WS0014086, B

Date: October 10, 2023

## TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	141	Number of 4-hour periods when plant was off-line:	39
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 days when plant was on-line but individual filter turbidity data was not collected:	0
Number of readings above 0.5 NTU:	0	Number of days with readings above 1.0 NTU:	0 (2)
Number of readings above 1.0 NTU:	0	Number of days with readings above 5.0 NTU:	0 (3)
Maximum allowable turbidity level:	0.3		
Percentage of readings above this limit:	0.0 % (1)		
Bin Class: <u>2</u>	Crypto Credit Required: <u>4.0 (7A)</u>	Crypto Credit Achieved: <u>4.5 (7B)</u>	Bin 3&4 Credits: <u>1.0 (7C)</u>
Watershed Protection: <u>0.0</u>	Conventional Treatment: <u>0.0</u>	Second Stage Filtration: <u>0.0</u>	
Bank Filtration: <u>0.0</u>	Enhanced Filter Performance: <u>0.5</u>	UV: <u>1.0</u>	
Presedimentation with Coagulation: <u>0.0</u>	Bag and Cartridge Filtration: <u>0.0</u>	Ozone, Chlorine Dioxide: <u>0.0</u>	
Two-Stage Lime Softening: <u>0.0</u>	Membrane Filtration: <u>0.0</u>	Perform. Demonstration: <u>0.0</u>	
Number of days with low inactivation (including UV) for no more than 4.0 consecutive hours: <u>0</u>	Average log inactivation (including UV) for Giardia: <u>6.92</u>	Average log inactivation (including UV) for viruses: <u>79.19</u>	
Number of days with low inactivation (including UV) for more than 4.0 consecutive hours: <u>0</u> (4)	Number of days when profiling data was not collected: <u>0</u>	Number of days when CT data was not collected: <u>0</u>	
Minimum disinfectant residual required leaving the plant: <u>0.5</u> mg/L, measured as Total Chlorine	Minimum pH in the last disinfection zone: <u>6.77</u>	Number of days with pH below 7.0 in the last disinfection zone: <u>17.00</u>	
Number of days with a low residual for no more than 4.0 consecutive hours: <u>0</u>	Number of days when disinfectant residual leaving the plant was not properly monitored: <u>0</u>		
Number of days with a low residual for more than 4.0 consecutive hours: <u>0</u> (5)			

## DISTRIBUTION SYSTEM

Minimum disinfectant residual required in distribution system: <u>0.5</u> mg/L, measured as Total Chlorine	
Total number of readings this month: <u>43</u> (at least 30 required) (8)	Percentage of readings with a low residual this month: <u>0.0</u> % (6A)
Average disinfectant residual value: <u>1.97</u>	Percentage of readings with a low residual last month: <u>0.0</u> % (6B)
Number of readings with a low residual: <u>0</u>	
Number of readings with no detectable residual: <u>0</u>	

## 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 Statistical Summary	Maximum turbidity reading:	4.26 NTU	Average turbidity value:	1.28 NTU
	Minimum turbidity reading:	0.45 NTU	Standard deviation:	0.752 NTU
	95 <sup>th</sup> percentile value:	2.99 NTU		
IFE Statistical Summary	Maximum IFE turbidity reading:	0.15 NTU	Average IFE turbidity value:	0.08 NTU
	Minimum IFE turbidity reading:	0.05 NTU	Standard deviation:	0.020 NTU
	95 <sup>th</sup> percentile IFE value:	0.12 NTU		
CFE Statistical Summary	Maximum CFE turbidity reading:	0.09 NTU	Average CFE turbidity value:	0.07 NTU
	Minimum CFE turbidity reading:	0.04 NTU	Standard deviation:	0.010 NTU
	95 <sup>th</sup> percentile CFE value:	0.09 NTU		

## STATISTICAL ANALYSIS OF pH DATA

Last Zone pH Statistical Summary	Maximum pH reading:	7.12 pH	Average pH value:	6.96 pH
	Minimum pH reading:	6.77 pH	Standard deviation:	0.090 pH
	95 <sup>th</sup> percentile value:	7.10 pH		

**SURFACE WATER MONTHLY OPERATING REPORT**  
TEXAS COMMISSION ON ENVIRONMENTAL QUALITY  
WATER SUPPLY DIVISION/PUBLIC DRINKING WATER SECTION (MC-155)  
SURFACE WATER MONTHLY OPERATING REPORT

This copy of the SWMOR was customized for the Webb County Water Utilities Rio Bravo SWTP and includes numerous cross-references to imported data.  
The file format was reviewed and approved by the TCEQ on February 1, 2022.

# 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

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

**Month:** September      **Year:** 2023

**PLANT NAME OR NUMBER:** Rio Bravo

**Connections:** 1,997

**Population:** 6,989

PERFORMANCE DATA																					
Date	Raw Water Pumpage (MGD)	Treated Water Pumpage (MGD)	RAW WATER ANALYSES		SETTLED WATER TURBIDITY (Optional Data)						FINISHED WATER QUALITY										
			NTU	Alk.	Basin No.						Combined Filter Effluent Turbidity						Lowest Residual	Time			
					1	2	3	4	5	6	NTU1	NTU2	NTU3	NTU4	NTU5	NTU6					
1	1.218	0.991	22	120	2.1	1.2						X	0.07	0.06	0.06	0.06	0.06	2.1			
2	1.186	0.891	23	120	1.9	1.2						X	0.07	0.06	0.06	0.07	0.07	3.1			
3	1.096	0.908	33	120	1.7	1.2						X	0.07	0.06	0.06	0.08	0.05	2.2			
4	1.253	0.966	22	120	2.9	1.2						X	0.07	0.09	0.06	0.06	0.06	3.5			
5	1.239	0.996	17	120	2.9	0.9						0.06	0.07	0.05	0.06	0.06	0.06	2.5			
6	1.215	0.942	24	120	4.3	0.9						0.07	0.07	0.07	0.07	0.06	0.07	2.6			
7	1.142	0.933	11	120	3.0	0.9						0.06	X	0.04	0.06	0.07	0.08	3.0			
8	1.221	0.924	14	100	2.5	0.9						0.08	0.08	0.07	0.05	0.07	0.08	3.0			
9	1.131	0.934	9	100	3.3	0.9						X	0.09	0.07	0.06	0.07	0.07	2.4			
10	1.195	0.974	9	100	3.0	0.9						X	0.07	0.07	0.07	0.08	0.07	2.4			
11	1.123	1.052	18	100	0.5	1.0						X	0.09	0.07	0.07	0.07	0.07	2.6			
12	1.287	1.110	24	100	0.5	1.0						X	0.08	0.06	0.07	0.08	0.08	3.0			
13	1.211	0.940	19	100	0.5	1.0						X	0.08	0.05	0.05	0.06	0.06	3.3			
14	1.118	0.880	24	120	0.8	1.4						X	X	0.09	0.07	0.06	0.06	2.0			
15	1.085	0.914	33	120	0.6	1.0						X	X	0.07	0.08	0.07	0.08	2.9			
16	0.916	0.867	9	120	0.6	1.1						X	X	0.05	0.06	0.07	0.07	3.1			
17	0.974	0.804	5	120	0.6	1.1						X	X	0.07	0.06	0.07	0.07	2.4			
18	0.942	1.009	25	120	0.7	1.0						X	X	0.07	0.06	0.06	0.07	1.9			
19	1.202	1.028	38	120	0.7	1.1						0.07	X	0.06	0.07	0.06	0.07	3.0			
20	1.072	0.849	34	120	0.7	1.1						0.07	X	0.06	0.07	0.07	0.09	3.3			
21	1.083	0.874	7	120	0.7	1.2						X	X	0.08	0.07	0.08	0.08	2.5			
22	1.097	0.842	15	120	0.8	1.2						X	X	0.07	0.07	0.06	0.06	2.1			
23	1.101	0.877	5	120	0.9	1.2						X	X	0.07	0.07	0.07	0.07	2.1			
24	1.105	0.823	5	120	1.0	1.2						X	X	0.07	0.06	0.06	0.07	3.2			
25	1.136	0.829	5	120	1.2	1.2						X	X	0.06	0.06	0.07	0.07	3.2			
26	1.110	0.863	14	120	1.3	1.1						X	X	0.07	0.08	0.08	0.08	3.2			
27	1.077	0.793	24	120	1.3	1.0						0.08	X	0.06	0.05	0.05	0.06	3.2			
28	1.090	0.881	26	120	1.3	1.0						X	X	0.05	0.05	0.06	0.07	3.3			
29	0.996	0.759	21	120	1.3	1.0						0.07	X	0.08	0.08	0.08	0.09	3.4			
30	1.148	0.811	58	120	1.3	1.0						0.09	X	0.06	0.06	0.07	0.09	3.5			
31																					
<b>Total</b>	33.765	27.263			<b>Max</b>	4.3	1.4														
<b>Avg</b>	1.126	0.909			<b>Avg</b>	1.5	1.1														
<b>Max</b>	1.287	1.110			<b>95th %</b>	3.2	1.2														
<b>Min</b>	0.916	0.759			<b>Min</b>	0.5	0.9														
											NOTE: ONLY use the "Time" column to show the length of time that the disinfectant residual entering the distribution system fall below the acceptable level.										
											95th percentile based on data from all basins						3.0				

**SUBMITTED BY:** Jose A. Vasquez      **Certificate No. and Grade:** WS0014086, B      **Date:** October 10, 2023

# 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

SURFACE WATER  
SYSTEM NAME: Webb County Water Utilities

PLANT NAME  
OR NUMBER: Rio Bravo

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

Month: September Year: 2023

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

SUMMARY & COMPLIANCE ACTIONS	Criteria	Filter No.										Plant	
		1	2	3	4	5	6	7	8	9	10		
	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: Jose A Vasquez Certificate No. and Grade: WS0014086, B Date: October 10, 2023

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

PLANT NAME: Rio Bravo  
OR NUMBER: \_\_\_\_\_  
Month: September Year: 2023

DISINFECTION PROCESS PARAMETERS							
APPROVED CT STUDY PARAMETERS					PERFORMANCE STANDARDS		
Parameters	Disinfection Zones				Log Inactivations		
	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 <sub>10</sub> (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 <sub>10</sub>
1	FCL D1A	0.7	0.762	27.0	7.0				
	FCL D1B	0.9	0.762	26.9	6.9				
	FCL D2	0.3	0.381	27.5	7.0	3.20	51.28	6.40	
	CLA D3	4.0	0.762	28.5	6.8			(G)	
	D4								
2	FCL D1A	0.7	0.755	26.9	6.8				
	FCL D1B	0.7	0.755	26.8	6.8				
	FCL D2	0.5	0.378	26.1	7.0	3.80	65.05	7.60	
	CLA D3	3.8	0.755	28.6	6.8			(G)	
	D4								
3	FCL D1A	0.6	0.727	27.3	7.0				
	FCL D1B	0.7	0.727	27.8	6.9				
	FCL D2	0.2	0.364	28.6	7.0	3.02	46.62	6.03	
	CLA D3	3.7	0.727	27.9	7.0			(G)	
	D4								
4	FCL D1A	0.4	0.708	28.0	7.0				
	FCL D1B	0.4	0.708	27.1	6.8				
	FCL D2	0.6	0.354	27.2	6.9	4.08	68.27	8.16	
	CLA D3	3.9	0.708	27.4	6.9			(G)	
	D4								
5	FCL D1A	0.3	0.710	29.4	6.8				
	FCL D1B	0.4	0.710	29.8	6.8				
	FCL D2	0.4	0.355	29.4	7.0	3.50	55.96	7.00	
	CLA D3	3.8	0.710	29.5	6.8			(G)	
	D4								
6	FCL D1A	1.5	0.752	28.5	6.9				
	FCL D1B	1.7	0.752	28.0	6.9				
	FCL D2	1.4	0.376	27.2	7.0	7.71	173.06	15.42	
	CLA D3	4.1	0.752	27.5	6.9			(G)	
	D4								
7	FCL D1A	0.4	0.726	29.2	6.9				
	FCL D1B	0.4	0.726	29.1	6.9				
	FCL D2	0.5	0.363	29.0	7.1	3.93	69.21	7.87	
	CLA D3	3.9	0.726	28.6	6.9			(G)	
	D4								
8	FCL D1A	0.3	0.721	29.4	6.8				
	FCL D1B	0.4	0.721	29.5	6.8				
	FCL D2	0.4	0.360	28.8	7.0	3.31	55.34	6.62	
	CLA D3	3.3	0.721	28.6	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 <sub>10</sub>
9	FCL D1A	1.0	0.808	29.8	6.9				
	FCL D1B	1.0	0.808	29.6	6.8				
	FCL D2	0.4	0.404	28.8	6.8	3.94	73.05	7.88	
	CLA D3	3.3	0.808	29.9	6.9			(G)	
	D4								
10	FCL D1A	1.0	0.841	29.1	6.8				
	FCL D1B	1.0	0.841	29.4	6.9				
	FCL D2	0.5	0.420	28.9	6.9	4.29	82.15	8.58	
	CLA D3	3.5	0.841	29.6	6.9			(G)	
	D4								
11	FCL D1A	0.8	0.868	28.6	7.0				
	FCL D1B	0.8	0.868	28.4	6.9				
	FCL D2	0.7	0.434	28.5	7.1	4.23	84.31	8.47	
	CLA D3	3.7	0.868	29.0	6.9			(G)	
	D4								
12	FCL D1A	0.9	0.872	29.3	7.0				
	FCL D1B	0.8	0.872	28.4	6.9				
	FCL D2	1.1	0.436	29.7	7.1	5.64	125.09	11.27	
	CLA D3	3.6	0.872	28.5	7.0			(G)	
	D4								
13	FCL D1A	0.4	0.860	27.7	6.9				
	FCL D1B	0.5	0.860	27.9	6.9				
	FCL D2	0.4	0.430	28.5	7.0	2.80	46.32	5.59	
	CLA D3	3.5	0.860	27.9	7.0			(G)	
	D4								
14	FCL D1A	0.8	0.830	27.6	7.0				
	FCL D1B	1.0	0.830	26.6	7.0				
	FCL D2	1.0	0.415	27.7	7.1	4.71	106.28	9.41	
	CLA D3	2.6	0.830	26.0	6.9			(G)	
	D4								
15	FCL D1A	0.6	0.837	28.3	7.0				
	FCL D1B	0.7	0.837	28.8	6.9				
	FCL D2	0.4	0.419	28.1	7.1	2.99	52.45	5.97	
	CLA D3	3.5	0.837	29.7	7.0			(G)	
	D4								
16	FCL D1A	0.5	0.829	27.9	7.1				
	FCL D1B	0.8	0.829	27.4	7.0				
	FCL D2	0.6	0.414	27.5	7.2	3.55	66.51	7.10	
	CLA D3	3.8	0.829	27.6	7.1			(G)	
	D4								

NOTE: = ONLY use the "Time<sub>10</sub>" column to show the length of time that the total inactivation ratio was less than 1.00.

SUBMITTED BY: Jose A. Vasquez

Certificate No. and Grade: WS0014086, B

Date: October 10, 2023

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

PLANT NAME OR NUMBER: Rio Bravo  
Month: September Year: 2023

DISINFECTION PROCESS PARAMETERS									
APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS			
Parameters	Disinfection Zones					Log Inactivations			
	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 <sub>10</sub> (minutes)	7.90	7.90	21.00	50.40					

PERFORMANCE DATA									
Date	DISINFECTION PROCESS DATA								
	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time (h)
17	FCL D1A	0.5	0.827	29.0	7.0				
	FCL D1B	0.5	0.827	28.3	6.9				
	FCL D2	0.7	0.413	29.0	7.1	4.21	80.99	8.41	
	CLA D3	3.9	0.827	26.5	7.0			(G)	
	D4								
18	FCL D1A	0.5	0.845	27.6	6.8				
	FCL D1B	0.7	0.845	28.1	6.8				
	FCL D2	0.3	0.422	27.8	6.8	2.69	43.15	5.39	
	CLA D3	3.2	0.845	27.7	7.0			(G)	
	D4								
19	FCL D1A	0.4	0.822	25.3	7.1				
	FCL D1B	0.5	0.822	28.1	7.0				
	FCL D2	1.0	0.411	26.0	7.2	4.13	83.88	8.27	
	CLA D3	3.9	0.822	26.6	7.0			(G)	
	D4								
20	FCL D1A	0.5	0.786	27.1	6.9				
	FCL D1B	0.5	0.786	27.3	6.9				
	FCL D2	0.9	0.393	27.4	7.0	4.76	93.66	9.53	
	CLA D3	3.9	0.786	26.1	7.0			(G)	
	D4								
21	FCL D1A	0.8	0.819	26.9	7.0				
	FCL D1B	0.8	0.819	26.2	7.0				
	FCL D2	1.0	0.409	26.4	7.1	4.80	100.19	9.60	
	CLA D3	3.8	0.819	26.8	7.0			(G)	
	D4								
22	FCL D1A	0.7	0.845	26.9	7.0				
	FCL D1B	0.8	0.845	27.5	6.9				
	FCL D2	1.0	0.423	27.6	7.1	4.83	101.98	9.67	
	CLA D3	3.7	0.845	27.0	7.0			(G)	
	D4								
23	FCL D1A	0.8	0.843	26.5	7.0				
	FCL D1B	0.8	0.843	27.0	6.9				
	FCL D2	0.9	0.422	27.3	7.0	4.50	93.00	9.00	
	CLA D3	3.5	0.843	27.0	7.0			(G)	
	D4								
24	FCL D1A	0.3	0.858	27.4	7.0				
	FCL D1B	0.3	0.858	27.2	6.9				
	FCL D2	0.7	0.429	27.7	7.0	3.42	65.32	6.84	
	CLA D3	3.3	0.858	28.0	6.9			(G)	
	D4								

PERFORMANCE DATA									
Date	DISINFECTION PROCESS DATA								
	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time (h)
25	FCL D1A	0.9	0.865	26.8	6.9				
	FCL D1B	1.0	0.865	27.4	7.0				
	FCL D2	0.9	0.433	27.7	7.1	4.70	96.21	9.39	
	CLA D3	3.9	0.865	28.1	7.1			(G)	
	D4								
26	FCL D1A	0.7	0.831	28.0	6.9				
	FCL D1B	0.5	0.831	28.1	6.9				
	FCL D2	0.7	0.415	28.1	7.0	3.93	73.84	7.86	
	CLA D3	3.6	0.831	28.0	6.9			(G)	
	D4								
27	FCL D1A	0.4	0.822	27.2	7.0				
	FCL D1B	0.4	0.822	27.5	6.9				
	FCL D2	0.6	0.411	26.7	7.1	3.17	55.16	6.35	
	CLA D3	3.7	0.822	27.9	7.0			(G)	
	D4								
28	FCL D1A	0.8	0.792	28.2	6.8				
	FCL D1B	0.9	0.792	28.1	6.9				
	FCL D2	0.8	0.396	28.9	6.9	4.94	97.28	9.87	
	CLA D3	3.5	0.792	27.7	7.0			(G)	
	D4								
29	FCL D1A	0.5	0.773	27.1	7.1				
	FCL D1B	0.6	0.773	27.3	7.0				
	FCL D2	0.8	0.386	27.4	7.2	4.27	83.17	8.54	
	CLA D3	3.9	0.773	27.7	7.0			(G)	
	D4								
30	FCL D1A	0.6	0.762	27.4	7.1				
	FCL D1B	0.7	0.762	27.3	7.1				
	FCL D2	0.7	0.381	27.7	7.1	4.42	86.87	8.84	
	CLA D3	3.9	0.762	27.5	7.1			(G)	
	D4								
31	D1A								
	D1B								
	D2								
	D3								
	D4								
						Max	7.71	173.06	15.42
						Min	2.69	43.15	5.39
						Avg	4.12	79.19	8.23
						SD	0.97	26.60	1.94

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

# 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  
 WS ID No.: 2400022

PLANT NAME OR NUMBER: Rio Bravo  
 Plant ID No.: 20831  
 Month: September Year: 2023

Type of treatment:  Conventional  Unconventional explain:

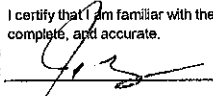
Note: Systems are required to run one TOC Sample Set every month. Additional space is provided for those systems that do additional sampling

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	
1	9/13	100	5.11	3.03	40.7	35	1.16			1.16
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		100.00	5.11	3.03	40.70		1.16			1.16
Max		100.00	5.11	3.03	40.70		1.16			1.16
Min		100.00	5.11	3.03	40.70		1.16			1.16

### TOTAL ORGANIC CARBON (TOC) REMOVAL SUMMARY

TOC Summary					Monthly Compliance Ratio
Raw Water Alkalinity	Raw Water TOC	Treated Water TOC	TOC % Removal	ACC # used	
100	5.11	3.03	40.7	NA	1.16

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: WS0014086, B Date: October 10, 2023

**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

PLANT NAME

SYSTEM NAME: Webb County Water Utilities

OR NUMBER: Rio Bravo

System ID No.: 2400022

Plant ID No.: 20831

Month: September

Year: 2023

## VALIDATED OPERATIONAL CONDITIONS

VALIDATED PARAMETERS						PERFORMANCE REQUIREMENTS	
Parameters	Reactor Number					Crypto Log Inactivation	Required UV Dose (mJ/cm <sup>2</sup> )
	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	OPERATIONAL DATA								
	Reactor	Total Product. (MG)	Max. Flow Rate (MGD)	Min UV Trans. (%)	Minimum Meas'd UV Dose (mJ/cm <sup>2</sup> )	Sensor CF	Adjusted Minimum UV Dose (mJ/cm <sup>2</sup> )	Total Off-Spec Product. (MG)	Consec. Off-Spec Hours (hr)
1	1	0.451	0.617	96.89	22.27	1.00	22.27	0.000	0.000
	2	0.589	0.808	96.89	20.12	1.00	20.12	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
2	1	0.436	0.625	96.62	22.58	1.00	22.58	0.000	0.000
	2	0.573	0.801	96.62	12.64	1.00	12.64	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
3	1	0.426	0.597	96.86	22.60	1.00	22.60	0.000	0.000
	2	0.557	0.794	96.86	11.02	1.00	11.02	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
4	1	0.453	0.699	95.85	22.50	1.00	22.50	0.000	0.000
	2	0.593	0.903	95.85	22.01	1.00	22.01	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
5	1	0.467	0.561	95.28	22.59	1.00	22.59	0.000	0.000
	2	0.611	0.763	95.28	19.62	1.00	19.62	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
6	1	0.458	0.653	96.55	0.00	1.00	0.00	0.012	0.50
	2	0.598	0.662	96.55	22.07	1.00	22.07	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
7	1	0.435	0.605	96.33	22.49	1.00	22.49	0.000	0.000
	2	0.569	0.788	96.33	7.02	1.00	7.02	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
8	1	0.470	0.682	96.41	15.80	1.00	15.80	0.000	0.000
	2	0.615	0.888	96.41	20.09	1.00	20.09	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								

## PERFORMANCE DATA

Date	OPERATIONAL DATA								
	Reactor	Total Product. (MG)	Max. Flow Rate (MGD)	Min UV Trans. (%)	Minimum Meas'd UV Dose (mJ/cm <sup>2</sup> )	Sensor CF	Adjusted Minimum UV Dose (mJ/cm <sup>2</sup> )	Total Off-Spec Product. (MG)	Consec. Off-Spec Hours (hr)
9	1	0.436	0.649	96.75	10.60	1.00	10.60	0.000	0.000
	2	0.572	0.849	96.75	19.49	1.00	19.49	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
10	1	0.457	0.716	96.40	10.44	1.00	10.44	0.000	0.000
	2	0.597	0.950	96.40	19.97	1.00	19.97	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
11	1	0.431	0.702	96.59	9.03	1.00	9.03	0.000	0.50
	2	0.564	0.935	96.59	0.00	1.00	0.00	0.022	
	3	X	X	X	X	X	X	X	
	4								
	5								
12	1	0.494	0.792	90.66	19.90	1.00	19.90	0.000	0.000
	2	0.647	1.041	90.66	9.83	1.00	9.83	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
13	1	0.466	0.776	90.64	25.89	1.00	25.89	0.000	0.000
	2	0.610	1.011	90.64	3.23	1.00	3.23	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
14	1	0.430	0.685	89.86	7.41	1.00	7.41	0.000	0.000
	2	0.562	0.910	89.86	13.45	1.00	13.45	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
15	1	0.419	0.713	89.52	7.30	1.00	7.30	0.000	0.000
	2	0.549	0.929	89.52	25.15	1.00	25.15	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
16	1	0.353	0.688	90.27	13.43	1.00	13.43	0.000	0.000
	2	0.463	0.882	90.27	26.31	1.00	26.31	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								

SUBMITTED BY:

*Jose A Vasquez*

Certificate No. and Grade:

WS0014086, B

Date:

October 10, 2023

# 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

PLANT NAME

OR NUMBER:

Rio Bravo

SYSTEM NAME:

Webb County Water Utilities

S ID No.: 2400022

Plant ID No.: 20831

Month: September

Year: 2023

TRUE

## VALIDATED OPERATIONAL CONDITIONS

VALIDATED PARAMETERS						PERFORMANCE REQUIREMENTS	
Parameters	Reactor Number					Crypto Log Inactivation	Required UV Dose (mJ/cm <sup>2</sup> )
	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	OPERATIONAL DATA								
	Reactor	Total Product. (MG)	Max. Flow Rate (MGD)	Min UV Trans. (%)	Minimum Meas'd UV Dose (mJ/cm <sup>2</sup> )	Sensor CF	Adjusted Minimum UV Dose (mJ/cm <sup>2</sup> )	Total Off-Spec Product. (MG)	Consec. Off-Spec Hours (hr)
17	1	0.375	0.744	90.26	8.77	1.00	8.77	0.000	0.000
	2	0.492	0.970	90.26	23.56	1.00	23.56	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
18	1	0.361	0.677	89.99	17.58	1.00	17.58	0.000	0.000
	2	0.473	0.886	89.99	25.90	1.00	25.90	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
19	1	0.459	0.688	89.22	9.83	1.00	9.83	0.000	0.000
	2	0.601	0.887	89.22	26.13	1.00	26.13	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
20	1	0.421	0.677	89.74	25.57	1.00	25.57	0.000	0.000
	2	0.551	0.909	89.74	6.35	1.00	6.35	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
21	1	0.424	0.700	89.72	7.00	1.00	7.00	0.000	0.000
	2	0.555	0.912	89.72	25.24	1.00	25.24	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
22	1	0.428	0.688	89.45	26.41	1.00	26.41	0.000	0.000
	2	0.561	0.897	89.45	6.36	1.00	6.36	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
23	1	0.428	0.690	89.44	17.57	1.00	17.57	0.000	0.000
	2	0.561	0.897	89.44	25.02	1.00	25.02	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
24	1	0.430	0.733	89.42	7.09	1.00	7.09	0.000	0.25
	2	0.564	0.981	89.42	0.00	1.00	0.00	0.018	
	3	X	X	X	X	X	X	X	
	4								
	5								

## PERFORMANCE DATA

Date	OPERATIONAL DATA								
	Reactor	Total Product. (MG)	Max. Flow Rate (MGD)	Min UV Trans. (%)	Minimum Meas'd UV Dose (mJ/cm <sup>2</sup> )	Sensor CF	Adjusted Minimum UV Dose (mJ/cm <sup>2</sup> )	Total Off-Spec Product. (MG)	Consec. Off-Spec Hours (hr)
25	1	0.442	0.707	89.41	6.52	1.00	6.52	0.000	0.000
	2	0.579	0.969	89.41	24.04	1.00	24.04	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
26	1	0.424	0.687	88.88	28.40	1.00	28.40	0.000	0.000
	2	0.555	0.901	88.88	24.78	1.00	24.78	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
27	1	0.416	0.676	89.13	26.46	1.00	26.46	0.000	0.000
	2	0.544	0.881	89.13	16.36	1.00	16.36	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
28	1	0.419	0.675	89.12	6.76	1.00	6.76	0.000	0.000
	2	0.547	0.876	89.12	15.79	1.00	15.79	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
29	1	0.386	0.707	75.23	24.72	1.00	24.72	0.000	0.000
	2	0.504	0.910	75.23	24.37	1.00	24.37	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
30	1	0.423	0.670	89.01	26.40	1.00	26.40	0.000	0.000
	2	0.553	0.877	89.01	15.80	1.00	15.80	0.000	
	3	X	X	X	X	X	X	X	
	4								
	5								
31	1								
	2								
	3								
	4								
	5								

SUBMITTED BY:

*Jose A Vasquez*

Certificate No. and Grade:

WS0014086, B

Date:

October 10, 2023



# 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  
SWS ID No.: 2400022

Plant ID No.: 20831

PLANT NAME OR NUMBER: Rio Bravo

Month: September

Year: 2023

DAILY MINIMUM INACTIVATION											
Reactor Range	SUMMARY DATA					Reactor Range	SUMMARY DATA				
	Date	Min Dose (mJ/cm <sup>2</sup> )	Inactivation Credit Achieved				Date	Min Dose (mJ/cm <sup>2</sup> )	Min Inactivation		
			Giardia Log	Virus Log	Crypto Log				Giardia Log	Virus Log	Crypto Log
1 to 3	1	20.12	3.87	0.00	1.00	1 to 3	9	10.60	2.94	0.00	1.00
	2	12.64	3.21	0.00	1.00		10	10.44	2.92	0.00	1.00
	3	11.02	3.00	0.00	1.00		11	0.00*	1.00	0.00	1.00
	4	22.01	4.00	0.00	1.00		12	9.83	2.82	0.00	1.00
	5	19.62	3.83	0.00	1.00		13	3.23	1.59	0.00	1.00
	6	0.00*	1.00	0.00	1.00		14	7.41	2.44	0.00	1.00
	7	7.02	2.36	0.00	1.00		15	7.30	2.42	0.00	1.00
	8	15.80	3.56	0.00	1.00		16	13.43	3.30	0.00	1.00

DAILY MINIMUM INACTIVATION											
Reactor Range	SUMMARY DATA					Reactor Range	SUMMARY DATA				
	Date	Min Dose (mJ/cm <sup>2</sup> )	Min Inactivation				Date	Min Dose (mJ/cm <sup>2</sup> )	Min Inactivation		
			Giardia Log	Virus Log	Crypto Log				Giardia Log	Virus Log	Crypto Log
1 to 3	17	8.77	2.66	0.00	1.00	1 to 3	25	6.52	2.28	0.00	1.00
	18	17.58	3.68	0.00	1.00		26	24.78	4.00	0.07	1.00
	19	9.83	2.82	0.00	1.00		27	16.36	3.60	0.00	1.00
	20	6.35	2.23	0.00	1.00		28	6.76	2.31	0.00	1.00
	21	7.00	2.36	0.00	1.00		29	24.37	4.00	0.08	1.00
	22	6.36	2.23	0.00	1.00		30	15.80	3.56	0.00	1.00
	23	17.57	3.68	0.00	1.00		31				1.00
	24	0.00*	1.00	0.00	1.00						

Total volume of water treated by all CDA reactors: 29.83 MG  
 Total volume of off-spec water produced by all CDA reactors: 0.05 MG  
 Percentage of off-spec water produced by all CDA reactors: 0.17 %  
 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:

4,

SUBMITTED BY:

Jose A. Vasquez

Certificate No. and Grade:

WS0014086, B

Date:

October 10, 2023

# 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.:

2406022

Plant ID No.: 20831

Month:

September

Year: 2023

CALIBRATION DATA									
CDA Reactor Number	UV Sensor Calibration Report for Calculated Dose Reactors								
	Calibration Date and Data	Duty Sensor	Duty Sensor Serial #	Ref Sensor Serial #	Duty Sensor Reading (mJ/cm <sup>2</sup> )	Ref Sensor Reading (mJ/cm <sup>2</sup> )	Cal Ratio	Duty Sensor Replaced?	Calculated Sensor CF
UVCD No. 1	Previous Month's Sensor CF	1	92	40	54.20	53.20	1.02	NA	1.00
		2							
		3							
	1.00	4							
	Calibration Date	5							
		6							
	9/1/23	7							
	New Sensor CF	8							
		9							
	1.00	10							
UVCD No. 2	Previous Month's Sensor CF	1	38	40	59.60	59.10	1.01		1.00
		2							
		3							
	1.00	4							
	Calibration Date	5							
		6							
	9/1/23	7							
	New Sensor CF	8							
		9							
	1.00	10							
UVCD No. 3	Previous Month's Sensor CF	1	44	40	53.90	56.50	0.95		off-line
		2							
		3							
	1.00	4							
	Calibration Date	5							
		6							
	9/1/23	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									
CDA Reactor Number	UV Sensor Calibration Report for Calculated Dose Reactors								
	Calibration Date	Duty Sensor	Duty Sensor Serial #	Ref Sensor Serial #	Duty Sensor Reading (mJ/cm <sup>2</sup> )	Ref Sensor Reading (mJ/cm <sup>2</sup> )	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:

*Jose A Vasquez*

Certificate No. and Grade:

WS0014086, B

Date:

October 10, 2023

# 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:

September

Year: 2023

CALIBRATION DATA									
GDA Reactor Number	UV Sensor Calibration Report for Calculated Dose Reactors								
	Calibration Date	Duty Sensor	Duty Sensor Serial #	Ref Sensor Serial #	Duty Sensor Reading (mJ/cm <sup>2</sup> )	Ref Sensor Reading (mJ/cm <sup>2</sup> )	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									
GDA Reactor Number	UV Sensor Calibration Report for Calculated Dose Reactors								
	Calibration Date	Duty Sensor	Duty Sensor Serial #	Ref Sensor Serial #	Duty Sensor Reading (mJ/cm <sup>2</sup> )	Ref Sensor Reading (mJ/cm <sup>2</sup> )	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:

*Jose A Vasquez*

Certificate No.  
and Grade:

WS0014086, B

Date:

October 10, 2023

# 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

ID No.: 2400022

Plant ID 20831

Month: September

Year: 2023

## CALIBRATION DATA

UVT Analyzer Number	Benchtop UVT Analyzer Serial Number: <u>UVT-08-P0108955</u>							
	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	9/1/23	90422	97.20	98.70	1.50	NA	NA
	2	9/4/23	90422	96.80	95.10	0.70	NA	NA
	3	9/12/23	90422	90.90	91.30	0.40	NA	NA
	4	9/18/23	90422	90.50	90.90	0.40	NA	NA
	5	9/25/23	90422	90.10	91.60	1.50	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

UVT Analyzer Number	Benchtop UVT Analyzer Serial Number: <u>UVT-08-P0108955</u>							
	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:

*José Vasquez*

Certificate No. and Grade:

WS0014086, B

Date:

October 10, 2023

**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.)

L72ESWTR Summary Page

PUBLIC WATER SYSTEM NAME: Webb County Water Utilities PLANT NAME: Rio Bravo  
 PWS ID No.: 2400022 Plant ID No.: 20831 OR NUMBER: \_\_\_\_\_  
 Month: September Year: 2023

Note: Indicate the treatment processes in each train. (see comment)	PRETREATMENT CREDITS				FILTRATION TECHNOLOGY CREDITS						ENHANCED PERFORMANCE CREDITS		DISINFECTION TECHNOLOGY CREDITS			OTHER TREATMENT CREDITS	
	Riverbank Filtration	Pressed with Coagulant	Two-stage Lime Softening	Conventional Sedimentation or Clarification	Conventional Granular Media Filters	Bag or Cartridge Filtration	Two-Stage Filtration	Membrane Filtration (MBF)	Membrane Filtration (MBT)	Membrane Filtration (MBT)	Enhanced O/E Perform.	Optimized I/E Perform.	Crypto Chemical Disinfect.	UV Disinfect. (ISA)	UV Disinfect. (GDA)	Watershed Protection	Perform. Demon.
Train 1	FALSE	FALSE	FALSE	TRUE	TRUE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	
Train 2																	
Train 3																	
Train 4																	
Train 5																	
Overall	FALSE	FALSE	FALSE	TRUE	TRUE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	
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				0.50	2.50					0.50				1.00			
16					2.50									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				0.5	2.5					0.5				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.)  
 LTZESWTR Summary Page (cont)

PUBLIC WATER SYSTEM NAME: **Webb County Water Utilities** PLANT NAME: **Rio Bravo**  
 PWS ID No.: **2400022** Plant ID No.: **20831** OR NUMBER: **September** Month: **September** Year: **2023**

Overall	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				
	Train 1	Train 2	Train 3	Train 4	Train 5	Train 1	Train 2	Train 3	Train 4	Train 5	Train 1	Train 2	Train 3	Train 4	Train 5	Train 1	Train 2	Train 3	Train 4	Train 5
1	TRUE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE	FALSE	FALSE	FALSE
2	4.50					4.50					1.00					7.07				
3	4.50					4.50					1.00					6.41				
4	4.50					4.50					1.00					6.02				
5	4.50					4.50					1.00					6.08				
6	4.50					4.50					1.00					7.33				
7	4.50					4.50					1.00					7.33				
8	4.50					4.50					1.00					6.30				
9	4.50					4.50					1.00					6.87				
10	4.50					4.50					1.00					6.88				
11	4.50					4.50					1.00					7.21				
12	4.50					4.50					1.00					5.23				
13	4.50					4.50					1.00					8.46				
14	4.50					4.50					1.00					4.38				
15	4.50					4.50					1.00					7.15				
16	4.50					4.50					1.00					5.41				
17	4.50					4.50					1.00					6.86				
18	4.50					4.50					1.00					6.87				
19	4.50					4.50					1.00					6.38				
20	4.50					4.50					1.00					4.35				
21	4.50					4.50					1.00					6.96				
22	4.50					4.50					1.00					6.96				
23	4.50					4.50					1.00					93.95				
24	4.50					4.50					1.00					6.96				
25	4.50					4.50					1.00					7.93				
26	4.50					4.50					1.00					6.77				
27	4.50					4.50					1.00					7.25				
28	4.50					4.50					1.00					8.27				
29	4.50					4.50					1.00					7.98				
30	4.50					4.50					1.00					4.38				
31	4.50					4.50					1.00					6.92				
MIN	4.50					4.50					1.00					8.71				
AVG	4.50					4.50					1.00					6.87				
W	4.50					4.50					1.00					73.06				