

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

COPY

PUBLIC WATER SYSTEM NAME: Webb County Water Utility PLANT NAME OR NUMBER: Rio Bravo
 PWS ID No.: 2400022 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.
 Plant ID No.: 20831 Operator's Signature: _____
 Report for the Month of: October 2015 Certificate No. & Grade: WS0009456, C Date: November 10, 2015

TREATMENT PLANT PERFORMANCE			
Total number of turbidity readings:	<u>132</u>	Number of 4-hour periods when plant was off-line:	<u>54</u>
Number of readings above 0.10 NTU:	<u>77</u>	Number of 4-hour periods when plant was on-line but turbidity data was not collected:	<u>0</u>
Number of readings above 0.3 NTU:	<u>0</u>	Number of days when plant was on-line but individual filter turbidity data was not collected:	<u>2</u>
Number of readings above 0.5 NTU:	<u>0</u>	Number of days with readings above 1.0 NTU:	<u>0</u> (2)
Number of readings above 1.0 NTU:	<u>0</u>	Number of days with readings above 5.0 NTU:	<u>0</u> (3)
Maximum allowable turbidity level:	<u>0.3</u>		
Percentage of readings above this limit:	<u>0.0</u> % (1)		
Statistical Summary	Maximum turbidity reading: <u>0.29</u> NTU	Average turbidity value:	<u>0.11</u> NTU
	Minimum turbidity reading: <u>0.07</u> NTU	Standard deviation:	<u>0.024</u> NTU
	CFE 95 th percentile value: <u>0.15</u> NTU	IFE 95 th percentile:	<u>0.246</u> NTU
Bin Class: <u>2</u>	Crypto Credit Required: <u>4.0</u> (7A)	Crypto Credit Achieved: <u>0.0</u> (7B)	Bin 3&4 Credits: <u>0.0</u> (7C)
Watershed Protection: <u>0.0</u>	Conventional Treatment: <u>3.0</u>	Second Stage Filtration: <u>0.0</u>	
Bank Filtration: <u>0.0</u>	Enhanced Filter Performance: <u>0.5</u>	UV: <u>0.0</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 a low CT for no more than 4.0 consecutive hours: <u>0</u>	Average log inactivation for Giardia: <u>3.73</u>		
Number of days with a low CT for more than 4.0 consecutive hours: <u>0</u> (4)	Average log inactivation for viruses: <u>104.13</u>		
	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			
Number of days with a low residual for no more than 4.0 consecutive hours: <u>0</u>			
Number of days with a low residual for more than 4.0 consecutive hours: <u>0</u> (5)	Number of days when disinfectant residual leaving the plant was not properly monitored: <u>2</u>		

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>40</u> (at least 31 required) (8)			
Average disinfectant residual value: <u>1.36</u>	Percentage of readings with a low residual this month: <u>0.0</u> % (6A)		
Number of readings with a low residual: <u>0</u>			
Number of readings with no detectable residual: <u>0</u>	Percentage of readings with a low residual last month: <u>0.0</u> % (6B)		

ADDITIONAL REPORTS & WORKSHEETS			
The Page 1 Addendum (Public Notices) is required because there was at least one treatment technique or monitoring/reporting violation reported.			
Additional report(s) for individual filter monitoring required:	<input checked="" type="radio"/> NONE	<input type="radio"/> Filter Profile	<input type="radio"/> Filter Assessment
Additional report(s) for individual filter monitoring submitted:	<input checked="" type="radio"/> NONE	<input type="radio"/> Filter Profile (9)	<input type="radio"/> Filter Assessment (10)
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.			

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

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.)
Summary Page Addendum (Violations and Public Notices)

PUBLIC WATER SYSTEM NAME: Webb County Water Utility

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022

Plant ID No.: 20831

Month: October

Year: 2015

		PUBLIC NOTICES				
VIOLATION TYPE	DESCRIPTION OF VIOLATION	VIOLATION OCCURRED?	NOTICE TO TCEQ <input checked="" type="checkbox"/>	NOTICE TO CUSTOMER *		VIOLATION DATES
			DATE OF NOTICE	DATE OF NOTICE	PENDING	
TREATMENT TECHNIQUE	Were more than 5.0% of the turbidity readings above the acceptable level? - see (1) on the Summary Page	No				
	Were there any days with turbidity readings above 1.0 NTU? - see (2) on the Summary Page	No				
	Were there any days with turbidity readings above 5.0 NTU? - see (3) on the Summary Page	No				
	Were there any periods when the plant failed to meet the CT requirements for more than 4.0 consecutive hours? - see (4) on the Summary Page	No				
	Were there any periods when the residuals leaving the plant fell below the acceptable level for more than 4.0 consecutive hours? - see (5) on the Summary Page	No				
	Were more than 5.0% of the residuals in the distribution system below the acceptable level for two months in a row? - see (6A) and (6B) on the Summary Page	No				
	Was Cryptosporidium removal credit less than required based on Bin Classification? - see (7A), (7B), and (7C) on the Summary Page	Yes				1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31
MONITORING & REPORTING	Were there any days when the plant failed to report all of the required Combined Filter Effluent (CFE) turbidity readings? - see the Turbidity Data Page	No				
	Were there any days when the plant failed to report all the CT data needed to evaluate the level of microbial inactivation achieved? - see the Disinfection Data Page	No				
	Were there any days when the plant failed to report the minimum disinfectant residual entering the distribution system? - see the Turbidity Data Page	Yes				8, 9
	Did the system fail to collect enough samples in the distribution system to meet the minimum disinfectant monitoring requirements? - see (8) on the Summary Page	No				
	Were there any days when the plant failed to report the maximum individual filter effluent (IFE) turbidity level produced by each filter? - see the Filter Data Page	Yes				8, 9
	Were there any days when the plant failed to report the IFE turbidity level 4-hours after beginning a filter run? - see the Filter Data Page	Not Applicable				
	Did the plant fail to submit a Filter Profile Report if one was required? - see (9) on the Summary page	No				
	Did the plant fail to submit a Filter Assessment Report if one was required? - see (10) on the Summary Page	No				
	Did the plant fail to submit a Comprehensive Performance Evaluation Request if one was required? - see (11) on the Summary Page	No				
Did the plant fail to collect at least one Total Organic Carbon sample set? - see TOCMOR Page	No					

Treatment technique violation notices are due no later than the end of the next business day. Please include a copy if possible.
 * Copies of each Public Notice must accompany this report if they have already been issued.

SUMMITTED BY: TOMAS SANCHEZ JR.

Certificate No. and Grade: WS0009456, C

Date: November 10, 2015

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.)
 Summary Page Addendum (Violations and Public Notices)

PUBLIC WATER SYSTEM NAME: Webb County Water Utility

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022

Plant ID No.: 20831

Month: October

Year: 2015

PUBLIC NOTICES						
VIOLATION TYPE	DESCRIPTION OF VIOLATION	VIOLATION OCCURRED?	NOTICE TO TCEQ	NOTICE TO CUSTOMER *		VIOLATION DATES
			DATE OF NOTICE	DATE OF NOTICE	PENDING	
MONITORING & REPORTING FOR ALTERNATIVE TECHNOLOGIES	Were there any days when the plant failed to report all of the data required to evaluate its watershed protection program?	Not Applicable				
	Were there any days when the plant failed to report all of the data required to evaluate its bank filters? - see the Prefilters worksheet	Not Applicable				
	Were there any days when the plant failed to report all of the data needed to evaluate its presedimentation basin? - see the Prefilters worksheet	Not Applicable				
	Were there any days when the plant failed to report all of the data needed to evaluate its two stage softening process? - see the Prefilters worksheet	Not Applicable				
	Were there any days when the plant failed to report all of the data needed to evaluate its bag or cartridge filters? - see the Bag, Cartridge worksheet	Not Applicable				
	Were there any days when the plant failed to report all of the data needed to evaluate its 2nd stage filters? - see the 2ndStageFilters worksheet	Not Applicable				
	Were there any days when the plant failed to report all of the data needed to evaluate its membrane filters? - see the membrane worksheets	Not Applicable				
	Were there any days when the plant failed to report all of the data needed to evaluate its UV reactors? - see the UV-ISA and UV-CDA worksheets	Not Applicable				
	Did the plant fail to report the data needed to evaluate its UV sensors or UV Transmittance analyzers? - see the UV-Sensors and UVT worksheets	Not Applicable				
	Were there any days when the plant failed to report all the CT data needed to evaluate the level of <i>Cryptosporidium</i> inactivation achieved? - see the Crypto CT worksheet	Not Applicable				
Were there any days when the plant failed to report all of the data required by the Demonstration of Performance approval letter issued by the TCEQ?	Not Applicable					

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SUBMITTED BY: TOMAS SANCHEZ JR.

Certificate No. and Grade: WS0009456, C

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SURFACE WATER MONTHLY OPERATING REPORT

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

PUBLIC WATER SYSTEM NAME: Webb County Water Utility PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022 Plant ID No.: 20831 Connections: 1,902

Month: October Year: 2015 Population: 6,658

PERFORMANCE DATA																			
Date	Raw Water Pumpage (MGD)	Treated Water Pumpage (MGD)	RAW WATER ANALYSES		SETTLED WATER TURBIDITY (Optional Data)						FINISHED WATER QUALITY								
			NTU	Aik.	Basin No.						Combined Filter Effluent Turbidity						Lowest Residual	Time	
					1	2	3	4	5	6	NTU1	NTU2	NTU3	NTU4	NTU5	NTU6			
1	1.314	0.887	9	120	0.8	0.8						0.11	X	0.11	0.10	0.10	0.10	0.9	
2	1.478	1.015	8	100	0.7	1.2						0.11	X	0.11	0.11	0.11	0.13	0.9	
3	1.362	0.922	8	100	0.8	0.7						0.11	X	0.11	0.11	0.10	0.09	0.9	
4	1.454	0.940	7	100	0.7	0.5						0.11	X	0.11	0.11	0.09	0.10	1.5	
5	1.465	0.889	12	120	0.7	0.9						0.11	X	0.11	0.10	0.10	0.10	1.0	
6	1.462	0.923	7	120	0.9	1.5						0.10	X	0.10	0.10	0.11	0.10	2.0	
7	1.425	0.915	11	120	0.8	1.1						0.11	X	0.10	0.10	0.10	0.10	1.6	
8	1.519	0.878	6	120	0.7	0.3						0.09	X	X	0.08	0.10	0.10	MD	
9	1.268	1.026	6	120	0.7	0.6						0.12	X	X	0.11	X	X	MD	
10	1.322	0.405	7	120	0.9	0.8						X	X	X	0.10	0.12	0.12	1.5	
11	1.208	1.079	5	120	1.0	0.7						0.13	X	0.12	0.11	X	0.10	2.0	
12	1.464	0.939	3	120	0.9	1.0						0.10	X	0.10	0.10	0.11	0.12	1.2	
13	1.471	0.875	9	100	0.9	0.9						0.11	X	0.12	0.13	0.11	0.10	2.0	
14	1.326	0.882	34	80	0.7	1.2						0.10	X	0.10	0.12	0.14	0.13	1.7	
15	1.323	0.880	13	100	0.9	1.5						0.14	X	0.14	0.13	0.14	0.13	1.1	
16	1.391	0.882	14	120	1.3	0.9						0.14	X	0.16	0.16	0.15	0.15	1.4	
17	1.310	0.893	8	100	0.7	2.0						X	X	0.13	0.12	0.14	0.13	2.1	
18	1.311	0.885	7	120	1.1	1.6						X	X	0.13	0.12	0.13	0.13	2.5	
19	1.302	0.865	11	120	0.8	1.1						0.13	X	0.15	0.10	0.11	0.11	1.6	
20	1.535	0.886	9	120	0.9	1.1						0.09	0.10	0.11	X	0.10	0.09	2.6	
21	1.406	0.836	14	120	0.8	1.2						0.10	X	0.12	0.11	0.11	0.10	1.7	
22	1.218	0.864	8	140	0.6	1.6						0.10	X	0.12	0.08	0.08	0.09	1.5	
23	1.415	0.785	13	140	0.7	1.4						0.09	X	X	0.10	0.09	0.13	1.8	
24	0.762	0.672	13	140	0.6	0.6						0.13	X	X	0.13	0.12	X	1.5	
25	1.236	0.495	9	140	0.7	0.9						X	0.12	0.11	X	0.12	0.13	1.3	
26	1.058	0.939	6	160	0.9	1.5						0.11	X	X	0.12	0.11	0.11	2.2	
27	1.071	0.741	7	160	1.5	1.4						X	X	X	0.10	0.10	0.10	1.9	
28	1.094	0.771	8	120	1.1	1.6						X	X	X	0.10	0.10	0.10	1.6	
29	1.153	0.806	10	120	1.6	1.1						X	X	X	0.09	0.10	0.12	1.4	
30	1.121	0.562	7	140	1.9	1.0						X	X	0.29	0.08	0.18	0.18	1.6	
31	1.057	0.794	6	140	1.8	0.8						X	X	0.12	0.07	0.07	X	1.4	
Total	40.301	26.131																	
Avg	1.300	0.843																	
Max	1.535	1.079																	
Min	0.762	0.405																	

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

SUBMITTED BY: TOMAS SANCHEZ JR Certificate No. and Grade: WS0009456, C Date: November 10, 2015

SURFACE WATER MONTHLY OPERATING REPORT

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

Filter Data Page

PUBLIC WATER
SYSTEM NAME: Webb County Water Utility

PLANT NAME
OR NUMBER: Rio Bravo

PWS ID No.: 2400022

Plant ID No.: 20831

Month: October

Year: 2015

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																
1	0.13		0.18		0.18		0.15													
2	0.11		0.19		0.26		0.18													
3	0.10		0.19		0.29		0.21													
4	0.07		0.20		0.26		0.16													
5	0.09		0.21		0.16		0.15													
6	0.08		0.20		0.15		0.15													
7	0.08		0.19		0.14		0.15													
8	MD		MD		MD		MD													
9	MD		MD		MD		MD													
10	0.14		0.18		0.13		0.16													
11	0.11		0.16		0.14		0.18													
12	0.08		0.19		0.13		0.17													
13	0.07		0.09		0.11		0.30													
14	0.12		0.22		0.19		0.19													
15	0.11		0.24		0.19		0.21													
16	0.11		0.26		0.21		0.23													
17	0.08		0.19		0.19		0.21													
18	0.08		0.24		0.20		0.21													
19	0.10		0.25		0.21		0.19													
20	0.14		0.16		0.16		0.15													
21	0.12		0.18		0.14		0.19													
22	0.10		0.13		0.13		0.16													
23	0.11		0.15		0.11		0.20													
24	0.14		0.18		0.15		0.18													
25	0.21		0.19		0.17		0.18													
26	0.12		0.15		0.11		0.18													
27	0.10		0.13		0.09		0.15													
28	0.10		0.13		0.09		0.15													
29	0.09		0.15		0.09		0.14													
30	0.11		0.15		0.11		0.17													
31	0.11		0.12		0.09		0.14													

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:

TOMAS SANLUEZ JR.

Certificate No.

and Grade: WS0009456, C

Date: November 10, 2015

SURFACE WATER MONTHLY OPERATING REPORT

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

PUBLIC WATER
SYSTEM NAME: Webb County Water Utility

PLANT NAME
OR NUMBER: Rio Bravo

PWS ID No.: 2400022

Plant ID No.: 20831

Month: October

Year: 2015

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 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 ^h
1	FCL D1A	0.3	0.863	25.6	7.2				
	FCL D1B	0.4	0.863	25.8	7.0				
	FCL D2	1.5	0.431	23.6	7.4	3.32	95.88	6.64	
	CLA D3	2.1	1.726	30.0	7.1				
	D4								
2	FCL D1A	0.8	0.872	29.0	7.1				
	FCL D1B	0.4	0.872	29.0	7.0				
	FCL D2	1.5	0.438	29.0	7.3	4.87	138.88	9.74	
	CLA D3	1.8	1.745	29.0	7.1				
	D4								
3	FCL D1A	1.1	0.871	26.2	7.4				
	FCL D1B	1.1	0.871	26.1	7.2				
	FCL D2	2.0	0.435	27.1	7.4	5.72	172.88	11.45	
	CLA D3	2.6	1.743	26.0	7.2				
	D4								
4	FCL D1A	0.4	0.879	26.4	7.4				
	FCL D1B	0.6	0.879	25.8	7.2				
	FCL D2	1.8	0.439	27.2	7.3	4.94	143.55	9.88	
	CLA D3	3.0	1.759	26.0	7.2				
	D4								
5	FCL D1A	0.7	0.886	25.2	7.8				
	FCL D1B	0.6	0.886	25.0	7.7				
	FCL D2	1.7	0.443	25.8	7.8	3.64	125.81	7.28	
	CLA D3	2.3	1.772	26.7	7.8				
	D4								
6	FCL D1A	0.7	0.880	24.8	7.1				
	FCL D1B	0.5	0.880	24.3	7.0				
	FCL D2	1.0	0.440	25.2	7.4	2.96	74.80	5.93	
	CLA D3	2.8	1.761	25.7	7.1				
	D4								
7	FCL D1A	0.7	0.859	26.2	7.1				
	FCL D1B	0.7	0.859	26.4	6.9				
	FCL D2	1.4	0.429	25.8	7.1	4.25	113.88	8.50	
	CLA D3	1.5	1.719	26.8	7.0				
	D4								
8	FCL D1A	0.7	0.859	24.6	7.2				
	FCL D1B	0.8	0.859	24.4	7.2				
	FCL D2	1.5	0.429	27.1	7.1	4.64	124.19	9.27	
	CLA D3	2.2	1.719	24.6	7.3				
	D4								

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time ^h
9	FCL D1A	1.0	0.869	25.7	7.4				
	FCL D1B	1.1	0.869	25.3	7.2				
	FCL D2	1.2	0.434	26.9	7.3	4.08	113.48	6.16	
	CLA D3	2.2	1.736	25.9	7.4				
	D4								
10	FCL D1A	0.7	0.877	24.1	7.2				
	FCL D1B	0.6	0.877	24.2	7.1				
	FCL D2	1.5	0.438	25.0	7.4	3.78	107.70	7.55	
	CLA D3	2.1	1.755	24.6	7.3				
	D4								
11	FCL D1A	0.8	0.860	25.2	6.9				
	FCL D1B	0.8	0.861	24.6	6.8				
	FCL D2	1.5	0.430	25.6	7.1	4.52	116.18	9.04	
	CLA D3	2.1	1.723	25.9	7.0				
	D4								
12	FCL D1A	0.8	0.852	25.5	7.1				
	FCL D1B	0.6	0.852	24.9	6.9				
	FCL D2	1.0	0.426	25.7	7.1	3.38	82.86	6.76	
	CLA D3	2.0	1.704	26.0	7.1				
	D4								
13	FCL D1A	0.7	0.856	25.4	7.1				
	FCL D1B	0.8	0.858	25.0	6.4				
	FCL D2	1.2	0.428	26.0	7.0	4.07	100.19	8.15	
	CLA D3	2.3	1.712	26.1	7.1				
	D4								
14	FCL D1A	0.5	0.863	27.1	6.9				
	FCL D1B	0.6	0.863	27.0	6.8				
	FCL D2	1.5	0.431	26.7	6.9	5.04	122.77	10.08	
	CLA D3	2.0	1.726	28.9	6.8				
	D4								
15	FCL D1A	0.3	0.861	25.9	7.2				
	FCL D1B	0.3	0.861	25.3	7.2				
	FCL D2	0.7	0.430	25.4	7.6	1.92	51.07	3.83	
	CLA D3	1.8	1.722	27.1	7.3				
	D4								
16	FCL D1A	0.5	0.875	23.7	7.3				
	FCL D1B	0.5	0.875	23.3	6.9				
	FCL D2	1.7	0.437	25.5	7.4	3.95	120.36	7.90	
	CLA D3	2.0	1.751	23.9	7.1				
	D4								

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

SUBMITTED BY: TOMAS SAUCHEZ JR.

Certificate No. and Grade: WS0009456, C

Date: November 10, 2015

SURFACE WATER MONTHLY OPERATING REPORT

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

PUBLIC WATER SYSTEM NAME: Webb County Water Utility

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022

Plant ID No.: 20831

Month: October

Year: 2015

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 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 ₁₀
17	FCL D1A	0.9	0.865	24.5	7.3				
	FCL D1B	0.9	0.865	25.0	7.3				
	FCL D2	2.0	0.432	25.4	7.3	5.28	154.38	10.57	
	CLA D3	2.8	1.730	25.4	7.4				
	D4								
18	FCL D1A	1.0	0.831	25.4	7.4				
	FCL D1B	1.1	0.831	25.2	7.3				
	FCL D2	2.2	0.415	25.5	7.4	5.78	176.85	11.55	
	CLA D3	3.4	1.663	27.3	7.3				
	D4								
19	FCL D1A	0.7	0.842	25.6	7.2				
	FCL D1B	0.9	0.842	25.9	7.0				
	FCL D2	1.7	0.421	24.3	7.1	4.68	128.81	9.36	
	CLA D3	2.6	1.684	24.0	7.4				
	D4								
20	FCL D1A	0.7	0.857	23.3	7.3				
	FCL D1B	0.9	0.857	23.5	7.4				
	FCL D2	1.4	0.428	24.0	7.4	3.57	101.16	7.15	
	CLA D3	2.9	1.715	24.0	7.4				
	D4								
21	FCL D1A	0.7	0.858	25.1	7.4				
	FCL D1B	1.0	0.858	25.3	7.2				
	FCL D2	1.8	0.429	24.7	7.2	4.65	130.40	9.30	
	CLA D3	3.0	1.716	24.8	7.4				
	D4								
22	FCL D1A	1.0	0.861	24.3	7.5				
	FCL D1B	0.9	0.861	24.2	7.5				
	FCL D2	1.0	0.430	24.0	7.5	2.82	80.32	5.64	
	CLA D3	1.8	1.723	25.1	7.6				
	D4								
23	FCL D1A	0.5	0.882	24.7	7.3				
	FCL D1B	0.4	0.882	24.8	7.2				
	FCL D2	1.3	0.441	25.9	7.3	3.58	95.76	7.16	
	CLA D3	2.3	1.785	25.6	7.2				
	D4								
24	FCL D1A	0.2	0.876	23.8	7.1				
	FCL D1B	0.3	0.876	23.3	7.1				
	FCL D2	0.3	0.438	24.1	7.5	1.04	22.99	2.08	
	CLA D3	1.9	1.753	24.1	7.4				
	D4								

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time ₁₀
25	FCL D1A	0.2	0.869	22.1	7.7				
	FCL D1B	0.3	0.869	22.2	7.7				
	FCL D2	0.4	0.434	22.0	7.8	0.97	25.42	1.94	
	CLA D3	1.7	1.739	22.4	7.8				
	D4								
26	FCL D1A	0.7	0.847	24.1	7.3				
	FCL D1B	0.8	0.847	23.8	7.3				
	FCL D2	1.5	0.423	23.1	7.6	3.32	101.54	6.65	
	CLA D3	2.4	1.694	21.0	7.6				
	D4								
27	FCL D1A	0.3	0.858	21.8	7.5				
	FCL D1B	0.4	0.858	21.7	7.4				
	FCL D2	1.6	0.429	22.4	7.6	2.88	89.37	5.77	
	CLA D3	2.0	1.716	23.1	7.7				
	D4								
28	FCL D1A	0.5	0.874	22.5	7.5				
	FCL D1B	0.5	0.874	22.7	7.5				
	FCL D2	0.8	0.437	22.6	7.5	2.00	53.59	4.00	
	CLA D3	2.1	1.748	23.5	7.7				
	D4								
29	FCL D1A	0.5	0.892	22.3	7.6				
	FCL D1B	0.5	0.892	22.1	7.5				
	FCL D2	1.5	0.447	23.7	7.6	3.03	85.05	6.06	
	CLA D3	1.8	1.784	22.9	7.7				
	D4								
30	FCL D1A	1.0	0.889	23.1	6.9				
	FCL D1B	0.9	0.889	23.1	6.9				
	FCL D2	1.5	0.444	23.2	7.0	3.93	98.88	7.86	
	CLA D3	2.1	1.778	23.2	6.9				
	D4								
31	FCL D1A	0.7	0.902	22.9	7.1				
	FCL D1B	0.7	0.902	22.8	6.9				
	FCL D2	1.1	0.451	22.4	7.0	2.91	71.88	5.82	
	CLA D3	1.7	1.804	23.3	7.3				
	D4								
						Max	5.78	176.85	11.55
						Min	0.97	22.99	1.94
						Avg	3.73	104.13	7.45
						SD	1.19	35.85	2.38

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

SUBMITTED BY: Tomás Sanchez Jr

Certificate No. and Grade: WS0009456, C

Date: November 10, 2015

MONTHLY TOTAL ORGANIC CARBON REMOVAL REPORT (TOCMOR)

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

PUBLIC WATER SYSTEM NAME: Webb County Water Utility PLANT NAME OR NUMBER: Rio Bravo
 PWS ID No.: 2400022 Plant ID No.: 20831 Month: October Year: 2015
 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	10/5	120	3.53	2.16	38.8	25	1.55			1.55
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
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26										
27										
28										
29										
30										
31										
Avg		120.00	3.53	2.16	38.81		1.55			1.55
Max		120.00	3.53	2.16	38.81		1.55			1.55
Min		120.00	3.53	2.16	38.81		1.55			1.55

TOTAL ORGANIC CARBON (TOC) REMOVAL SUMMARY

TOC Summary					Monthly Compliance Ratio
Raw Water Alkalinity	Raw Water TOC	Treated Water TOC	TOC % Removal	ACC # used	
120	3.53	2.16	38.8	NA	1.55

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: WS0009456, C Date: November 10, 2015

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