

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: <u>Webb County Water Utility</u>	PLANT NAME OR NUMBER: <u>Rio Bravo</u>
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.: <u>2400022</u>	Operator's Signature:
Plant ID No.: <u>20831</u>	Certificate No. & Grade: <u>WS0009456, C</u>
Report for the Month of: <u>April 2016</u>	Date: <u>May 10, 2016</u>

TREATMENT PLANT PERFORMANCE					
Total number of turbidity readings:	138	Number of 4-hour periods when plant was off-line:	42		
Number of readings above 0.10 NTU:	105	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)				
Statistical Summary	Maximum turbidity reading:	0.30 NTU	Average turbidity value:	0.15 NTU	
	Minimum turbidity reading:	0.06 NTU	Standard deviation:	0.060 NTU	
	CFE 95 th percentile value:	0.28 NTU	IFE 95 th percentile:	0.290 NTU	
Bin Class: <u>2</u>	Crypto Credit Required: <u>4.0 (7A)</u>	Crypto Credit Achieved: <u>3.0 (7B)</u>	Bin 3&4 Credits: <u>0.0 (7C)</u>		
Watershed Protection:	0.0	Conventional Treatment:	3.0	Second Stage Filtration:	0.0
Bank Filtration:	0.0	Enhanced Filter Performance:	0.0	UV:	0.0
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 a low CT for no more than 4.0 consecutive hours:	0	Average log inactivation for Giardia:	2.60		
Number of days with a low CT for more than 4.0 consecutive hours:	0 (4)	Average log inactivation for viruses:	51.73		
		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				
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:	39	(at least 30 required) (8)	
Average disinfectant residual value:	1.02	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 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.: 240022

Plant ID No.: 20931

Month: April

Year: 2016

PUBLIC NOTICES						
VIOLATION TYPE	DESCRIPTION OF VIOLATION	VIOLATION OCCURRED?	NOTICE TO TCEQ <input checked="" type="checkbox"/> DATE OF NOTICE	NOTICE TO CUSTOMER * DATE OF NOTICE PENDING		VIOLATION DATES
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	04/04/16	04/29/16	NO	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
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	No				
	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	No				
	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.

SUBMITTED BY: Tomás Sánchez Jr.

Certificate No. and Grade: WS0009456, C

Date: May 10, 2016

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: April Year: 2016

PUBLIC NOTICES						
VIOLATION TYPE	DESCRIPTION OF VIOLATION	VIOLATION OCCURRED?	NOTICE TO TCEQ <input checked="" type="checkbox"/>	NOTICE TO CUSTOMER * <input type="checkbox"/>		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					

Treatment technique violation notices are due no later than the end of the next business day. Please include a copy if possible.
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SUBMITTED BY: TOMAS SANCHEZ JR.

Certificate No. and Grade: WS0009456, C

Date: May 10, 2016

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: 1,916

Month: April Year: 2016 Population: 6,706

PERFORMANCE DATA																			
Date	Raw Water Pumpage (MGD)	Treated Water Pumpage (MGD)	RAW WATER ANALYSES		SETTLED WATER TURBIDITY (Mandatory Data)						FINISHED WATER QUALITY								
			NTU	Alk.	Basin No.						Combined Filter Effluent Turbidity						Lowest Residual	Time \bar{E}	
					1	2	3	4	5	6	NTU1	NTU2	NTU3	NTU4	NTU5	NTU6			
1	1.118	0.764	18	120	0.5	1.0						0.07	0.06	0.08	0.08	0.08	0.09	1.1	
2	1.300	0.737	20	120	0.8	0.7						0.10	0.08	0.11	0.08	0.09	0.09	0.8	
3	1.309	0.768	26	120	0.6	0.9						0.10	0.11	0.11	0.10	0.10	0.10	1.5	
4	1.150	0.810	17	120	0.9	0.7						0.10	0.10	0.11	0.10	0.12	0.15	1.0	
5	1.323	0.795	17	120	1.0	1.2						0.15	0.14	X	0.14	0.15	0.15	0.7	
6	1.122	0.816	16	140	0.8	0.8						0.22	X	X	0.17	0.16	0.14	1.0	
7	1.083	0.855	17	140	0.6	1.2						0.16	X	X	0.15	0.18	0.14	1.9	
8	1.163	0.793	16	140	0.7	1.2						0.14	X	X	0.15	0.26	0.16	1.5	
9	1.150	0.683	20	120	0.9	0.7						0.20	X	X	0.22	0.19	0.20	1.2	
10	1.085	0.679	22	120	1.6	0.9						0.21	X	X	0.23	0.22	0.25	1.8	
11	1.055	0.745	22	140	2.5	0.9						0.24	X	X	0.19	0.08	0.08	1.0	
12	1.468	0.801	15	140	1.3	1.1						0.09	X	X	0.10	0.10	0.10	1.3	
13	0.969	0.658	13	140	1.5	1.6						X	X	0.25	0.25	0.27	0.28	1.5	
14	1.326	0.825	28	140	0.6	1.9						0.24	X	0.22	0.20	0.21	0.20	1.3	
15	1.271	0.779	30	140	0.7	1.9						0.28	X	0.20	0.19	0.28	0.26	1.4	
16	1.339	0.742	26	120	1.0	2.0						0.26	X	0.26	0.26	0.27	0.28	0.6	
17	1.398	0.814	19	140	1.4	1.3						0.30	0.29	0.28	0.27	0.30	0.08	2.0	
18	1.491	0.775	49	160	1.0	1.8						0.11	0.10	0.09	0.12	0.15	0.13	1.2	
19	1.414	0.784	47	180	1.9	0.8						0.12	0.13	0.12	0.11	0.12	0.12	0.9	
20	1.097	0.710	72	180	0.7	1.3						0.12	X	X	0.13	0.14	0.13	0.8	
21	1.020	0.692	90	160	0.6	0.6						0.13	X	0.13	0.14	0.12	0.12	1.4	
22	1.025	0.743	106	140	0.5	3.7						0.16	X	X	0.15	0.16	0.14	0.6	
23	1.205	0.755	27	140	0.3	0.7						X	X	0.15	X	0.12	0.12	0.7	
24	1.057	0.665	41	120	1.1	1.1						0.15	X	X	0.17	0.16	0.16	1.0	
25	0.849	0.778	23	120	0.5	2.2						X	X	X	0.12	0.12	0.13	1.6	
26	1.074	0.797	32	140	1.6	1.1						X	X	0.12	0.14	0.14	X	1.1	
27	1.327	0.733	36	120	1.5	1.4						X	X	0.17	0.15	0.16	0.15	1.0	
28	1.284	0.947	65	100	1.2	1.1						0.15	X	X	0.15	0.14	0.13	1.5	
29	1.231	0.864	28	140	2.6	1.3						0.13	X	0.15	0.13	0.11	0.09	0.6	
30	1.086	0.812	29	120	0.7	1.3						0.09	0.09	X	0.09	0.09	0.09	0.7	
31																			
Total	35.789	23.119																	
Avg	1.193	0.771																	
Max	1.491	0.947																	
Min	0.849	0.658																	

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: May 10, 2016

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: April Year: 2016

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	0.12		0.23		0.17		0.14													
2	0.15		0.20		0.30		0.13													
3	0.13		0.22		0.16		0.14													
4	0.19		0.19		0.17		0.14													
5	0.17		0.15		0.21		0.20													
6	0.17		0.17		0.15		0.18													
7	0.17		0.16		0.18		0.17													
8	0.19		0.26		0.21		0.16													
9	0.27		0.27		0.27		0.29													
10	0.27		0.22		0.26		0.26													
11	0.21		0.25		0.22		0.23													
12	0.27		0.27		0.25		0.29													
13	0.24		0.30		0.25		0.29													
14	0.25		0.25		0.20		0.20													
15	0.28		0.29		0.18		0.23													
16	0.28		0.29		0.18		0.23													
17	0.29		0.30		0.28		0.27													
18	0.24		0.28		0.13		0.19													
19	0.18		0.18		0.10		0.10													
20	0.17		0.16		0.11		0.23													
21	0.21		0.19		0.14		0.16													
22	0.22		0.18		0.15		0.18													
23	0.20		0.13		0.17		0.23													
24	0.21		0.18		0.18		0.18													
25	0.22		0.18		0.18		0.16													
26	0.21		0.18		0.15		0.17													
27	0.21		0.15		0.17		0.16													
28	0.18		0.14		0.13		0.16													
29	0.19		0.13		0.13		0.14													
30	0.12		0.11		0.11		0.10													
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: Tomas Sanchez Jr.

Certificate No. and Grade: WS0009456, C Date: May 10, 2016

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

PLANT NAME OR NUMBER: Rio Bravo
 Month: April Year: 2016

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 (min)
1	FCL D1A	0.5	0.753	23.0	7.1				
	FCL D1B	0.5	0.753	23.0	7.0				
	FCL D2	0.6	0.376	23.0	7.3	2.54	53.30	5.08	
	CLA D3	2.3	0.753	23.0	7.2				
	D4								
2	FCL D1A	0.8	0.781	22.7	7.0				
	FCL D1B	0.9	0.781	22.4	7.0				
	FCL D2	1.1	0.390	22.9	7.1	3.85	87.33	7.70	
	CLA D3	2.6	0.781	22.9	7.0				
	D4								
3	FCL D1A	0.6	0.792	22.3	7.1				
	FCL D1B	0.7	0.792	22.5	7.0				
	FCL D2	1.1	0.396	22.7	7.2	3.41	77.92	6.83	
	CLA D3	2.5	0.792	23.4	7.1				
	D4								
4	FCL D1A	0.9	0.806	22.2	7.0				
	FCL D1B	0.9	0.806	22.3	6.9				
	FCL D2	0.7	0.403	21.7	7.2	2.66	56.72	5.31	
	CLA D3	2.0	0.806	23.2	7.0				
	D4								
5	FCL D1A	0.5	0.822	22.1	6.9				
	FCL D1B	0.3	0.822	22.3	7.0				
	FCL D2	0.7	0.411	21.9	7.0	2.18	43.83	4.36	
	CLA D3	1.9	0.822	22.7	6.8				
	D4								
6	FCL D1A	0.4	0.820	22.7	7.1				
	FCL D1B	0.5	0.820	22.9	6.9				
	FCL D2	0.6	0.410	22.8	7.1	2.22	46.11	4.43	
	CLA D3	1.7	0.820	23.7	7.0				
	D4								
7	FCL D1A	0.2	0.792	22.0	7.1				
	FCL D1B	0.4	0.792	22.0	7.0				
	FCL D2	0.6	0.396	21.9	7.2	2.16	40.78	4.32	
	CLA D3	2.6	0.792	22.7	7.1				
	D4								
8	FCL D1A	0.2	0.768	22.3	6.9				
	FCL D1B	0.3	0.768	28.0	6.9				
	FCL D2	0.6	0.384	22.2	7.2	2.42	42.66	4.84	
	CLA D3	3.4	0.768	22.3	7.1				
	D4								

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time (min)
9	FCL D1A	0.3	0.788	22.8	7.0				
	FCL D1B	0.4	0.788	22.9	6.9				
	FCL D2	0.8	0.394	22.8	7.0	3.03	57.01	6.07	
	CLA D3	3.4	0.788	23.0	7.0				
	D4								
10	FCL D1A	0.5	0.810	23.5	7.1				
	FCL D1B	0.6	0.810	23.5	7.0				
	FCL D2	0.8	0.405	23.2	7.1	3.11	62.01	6.22	
	CLA D3	2.8	0.810	24.2	7.1				
	D4								
11	FCL D1A	0.2	0.822	24.1	7.0				
	FCL D1B	0.2	0.822	24.6	6.8				
	FCL D2	0.6	0.411	24.4	7.1	2.30	41.98	4.60	
	CLA D3	2.3	0.822	25.2	7.0				
	D4								
12	FCL D1A	0.3	0.838	23.9	7.0				
	FCL D1B	0.4	0.838	24.1	6.9				
	FCL D2	0.8	0.419	23.7	7.1	2.67	56.04	5.33	
	CLA D3	2.3	0.838	23.3	7.0				
	D4								
13	FCL D1A	0.5	0.834	23.5	6.7				
	FCL D1B	0.5	0.834	23.8	6.7				
	FCL D2	0.8	0.417	23.0	6.9	2.94	56.23	5.88	
	CLA D3	2.3	0.834	24.0	6.8				
	D4								
14	FCL D1A	0.7	0.805	23.2	6.8				
	FCL D1B	1.2	0.805	23.2	6.7				
	FCL D2	1.1	0.402	23.8	6.9	3.90	83.15	7.79	
	CLA D3	2.1	0.805	22.6	6.7				
	D4								
15	FCL D1A	0.6	0.778	23.6	7.2				
	FCL D1B	0.7	0.778	23.3	7.1				
	FCL D2	0.7	0.389	23.8	7.2	2.27	57.43	4.55	
	CLA D3	0.6	0.778	23.9	7.2				
	D4								
16	FCL D1A	0.6	0.745	24.2	7.1				
	FCL D1B	0.7	0.745	24.0	7.0				
	FCL D2	0.6	0.372	24.0	7.1	2.77	56.54	5.53	
	CLA D3	2.0	0.745	23.9	7.2				
	D4								

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

SUBMITTED BY: Tomas Sanchez Jr.

Certificate No. and Grade: WS0009456, C

Date: May 10, 2016

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: April

Year: 2016

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
17	FCL D1A	0.7	0.693	25.0	8.9				
	FCL D1B	0.8	0.693	25.0	6.9				
	FCL D2	0.6	0.346	24.7	7.1	3.76	70.19	7.52	
	CLA D3	3.2	0.693	24.3	7.0				
	D4								
18	FCL D1A	0.8	0.705	26.1	7.0				
	FCL D1B	0.8	0.705	25.9	7.0				
	FCL D2	0.3	0.352	25.9	7.4	2.51	47.93	5.02	
	CLA D3	2.2	0.705	24.6	6.9				
	D4								
19	FCL D1A	0.6	0.722	25.8	7.2				
	FCL D1B	0.7	0.722	26.1	7.1				
	FCL D2	0.5	0.361	26.0	7.3	2.78	57.99	5.57	
	CLA D3	2.1	0.722	26.2	7.3				
	D4								
20	FCL D1A	0.5	0.731	24.7	7.1				
	FCL D1B	0.5	0.731	24.7	7.0				
	FCL D2	0.4	0.365	25.0	7.2	2.38	45.47	4.75	
	CLA D3	2.0	0.731	25.0	7.2				
	D4								
21	FCL D1A	0.1	0.753	24.0	7.1				
	FCL D1B	0.2	0.753	24.5	7.0				
	FCL D2	0.2	0.394	24.5	6.9	1.22	14.33	2.45	
	CLA D3	2.2	0.753	24.6	7.1				
	D4								
22	FCL D1A	0.2	0.789	24.3	7.1				
	FCL D1B	0.1	0.789	24.5	7.1				
	FCL D2	0.1	0.394	25.3	7.0	0.93	12.40	1.86	
	CLA D3	1.5	0.789	24.9	7.0				
	D4								
23	FCL D1A	0.5	0.816	25.6	6.9				
	FCL D1B	0.5	0.816	25.1	6.9				
	FCL D2	0.9	0.408	24.9	7.2	3.82	78.17	7.64	
	CLA D3	3.3	0.816	26.2	6.9				
	D4								
24	FCL D1A	0.5	0.832	24.5	7.0				
	FCL D1B	0.6	0.832	25.1	6.9				
	FCL D2	0.5	0.416	25.4	6.9	2.45	47.37	4.91	
	CLA D3	1.8	0.832	24.9	7.0				
	D4								

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
25	FCL D1A	0.7	0.851	26.0	7.1				
	FCL D1B	0.8	0.851	26.0	7.1				
	FCL D2	0.7	0.425	26.0	7.3	2.99	70.00	5.98	
	CLA D3	1.7	0.851	26.0	7.0				
	D4								
26	FCL D1A	0.3	0.855	24.9	7.1				
	FCL D1B	0.3	0.855	25.2	7.0				
	FCL D2	0.3	0.427	24.9	7.1	1.39	26.69	2.78	
	CLA D3	1.2	0.855	25.3	6.9				
	D4								
27	FCL D1A	0.2	0.875	25.7	6.9				
	FCL D1B	0.2	0.875	26.0	6.8				
	FCL D2	0.5	0.437	26.0	7.2	1.99	38.73	3.97	
	CLA D3	1.9	0.875	26.0	6.8				
	D4								
28	FCL D1A	0.2	0.863	25.2	6.8				
	FCL D1B	0.1	0.863	25.8	6.1				
	FCL D2	0.2	0.431	25.1	6.9	1.38	14.62	2.73	
	CLA D3	2.7	0.863	25.8	6.8				
	D4								
29	FCL D1A	0.2	0.824	26.3	6.6				
	FCL D1B	0.2	0.824	26.4	6.6				
	FCL D2	0.7	0.412	26.0	6.8	3.09	59.52	6.18	
	CLA D3	2.1	0.824	26.4	6.6				
	D4								
30	FCL D1A	0.6	0.826	26.0	6.6				
	FCL D1B	0.6	0.826	26.0	6.5				
	FCL D2	0.5	0.413	26.0	6.8	2.84	49.36	5.68	
	CLA D3	2.3	0.826	26.0	7.0				
	D4								
31	D1A								
	D1B								
	D2								
	D3								
	D4								
						Max	3.90	87.33	7.79
						Min	0.93	12.40	1.86
						Avg	2.60	51.73	5.19
						SD	0.75	18.49	1.49

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

SUBMITTED BY: TOMAS SANCHEZ JR.

Certificate No. and Grade: WS0009456, C

Date: May 10, 2016

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
 PWS ID No.: 2400022

PLANT NAME OR NUMBER: Rio Bravo
 Month: April Year: 2016

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	4/13	140	3.03	2.25	25.7	15	1.72			1.72
2										
3										
4										
5										
6										
7										
8										
9										
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Avg		140.00	3.03	2.25	25.74		1.72			1.72
Max		140.00	3.03	2.25	25.74		1.72			1.72
Min		140.00	3.03	2.25	25.74		1.72			1.72

TOTAL ORGANIC CARBON (TOC) REMOVAL SUMMARY

TOC Summary					Monthly Compliance Ratio
Raw Water Alkalinity	Raw Water TOC	Treated Water TOC	TOC % Removal	ACC # used	
140	3.03	2.25	25.7	NA	1.72

I certify that I am familiar with the information contained in this report and that, to the best of my knowledge, the information is true, complete, and accurate.

Operator's Signature: Certificate No. and Grade: WS0009456, C Date: May 10, 2016

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