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

Plant ID No.: 20831

Report for the Month of: July 2015

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. & Grade: WS0009456, C

Date: August 10, 2015

TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	185	Number of 4-hour periods when plant was off-line:	1
Number of readings above 0.10 NTU:	153	Number of 4-hour periods when plant was on-line	
Number of readings above 0.3 NTU:	0	but turbidity data was not collected:	0
Number of readings above 0.5 NTU:	0	Number of days when plant was on-line	
Number of readings above 1.0 NTU:	0	but individual filter turbidity data was not collected:	0
Maximum allowable turbidity level:	0.3	Number of days with readings above 1.0 NTU:	0 (2)
Percentage of readings above this limit:	0.0 % (1)	Number of days with readings above 5.0 NTU:	0 (3)

Statistical Summary

Maximum turbidity reading:	0.30 NTU	Average turbidity value:	0.18 NTU
Minimum turbidity reading:	0.06 NTU	Standard deviation:	0.053 NTU
CFE 95th percentile value:	0.24 NTU	IFE 95th percentile:	0.300 NTU

Bin Class: 2 Crypto Credit Required: 4.0 (7A) Crypto Credit Achieved: 0.0 (7B) Bin 3&4 Credits: 0.0 (7C)

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:	16.61 (R)
		Average log inactivation for viruses:	455.57 (R)
Number of days with a low CT for more than 4.0 consecutive hours:	0 (4)	Number of days when profiling data was not collected:	0
		Number of days when CT data was not collected:	0

Minimum disinfectant residual required leaving the plant: 0.5 mg/L, measured as Total Chlorine

Number of days with a low residual for no more than 4.0 consecutive hours:	1		
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:	25

DISTRIBUTION SYSTEM

Minimum disinfectant residual required in distribution system: 0.5 mg/L, measured as Total Chlorine

Total number of readings this month:	52 (at least 31 required) (8)		
Average disinfectant residual value:	1.05	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: ◉ 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.

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: July Year: 2015

PUBLIC NOTICES

VIOLATION TYPE	DESCRIPTION OF VIOLATION	VIOLATION OCCURRED?	NOTICE TO TCEQ ■ DATE OF NOTICE	NOTICE TO CUSTOMER * DATE OF NOTICE	NOTICE TO CUSTOMER * 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				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				1, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29,
	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.

SUMITTED BY: TOMAS SANCHEZ JR. Certificate No. and Grade: WS0009456, C Date: August 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: July Year: 2015

PUBLIC NOTICES

VIOLATION TYPE	DESCRIPTION OF VIOLATION	VIOLATION OCCURRED?	NOTICE TO TCEQ ■ DATE OF NOTICE	NOTICE TO CUSTOMER * DATE OF NOTICE	NOTICE TO CUSTOMER * PENDING	VIOLATION DATES
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 *Cryptosporidium* 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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SUMITTED BY: Tomas Sanchez Jr. Certificate No. and Grade: WS0009456, C Date: August 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.)

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: 1,904

Month: July Year: 2015 Population: 6,664

PERFORMANCE DATA

Date	Raw Water Pumpage (MGD)	Treated Water Pumpage (MGD)	RAW WATER ANALYSES		SETTLED WATER TURBIDITY (Optional Data) Basin No.						FINISHED WATER QUALITY Combined Filter Effluent Turbidity						Lowest Residual	Time[1]
			NTU	Alk.	1	2	3	4	5	6	NTU1	NTU2	NTU3	NTU4	NTU5	NTU6		
1	1.280	0.848	10	120	1.0	1.0					0.08	0.08	0.11	0.08	0.08	0.08	MD	
2	1.236	0.942	11	120	1.2	1.3					0.08	0.07	0.11	0.07	0.08	0.08	2.0	
3	1.551	0.926	11	120	0.7	1.3					0.08	0.07	0.10	0.07	0.06	0.08	1.7	
4	1.405	0.940	11	100	0.9	1.0					0.06	0.07	0.08	0.14	0.08	0.07	1.6	
5	1.321	1.031	12	100	1.2	0.9					0.08	0.08	0.11	0.10	0.09	0.09	1.7	
6	1.364	0.925	13	120	0.9	0.9					0.09	0.10	0.22	0.19	0.20	0.20	MD	
7	1.305	0.978	15	120	1.0	0.8					0.20	0.20	0.20	0.23	0.24	0.24	MD	
8	1.400	0.998	17	120	0.8	1.0					0.24	0.25	0.24	0.24	0.21	0.23	MD	
9	1.417	1.101	21	120	1.6	0.6					0.21	0.21	0.22	0.21	0.20	0.20	MD	
10	1.370	1.026	19	120	0.9	0.9					0.20	0.20	0.19	0.18	0.17	0.17	MD	
11	1.569	1.150	14	80	1.4	1.1					0.24	0.30	0.20	0.19	0.18	0.17	MD	
12	0.995	0.858	14	100	1.0	0.8					0.18	0.15	0.18	0.18	0.18	0.18	MD	
13	1.337	1.128	14	120	1.0	1.1					0.20	0.15	0.14	0.19	0.19	0.20	MD	
14	1.554	1.006	23	120	1.2	1.4					0.20	0.21	0.21	0.21	0.25	0.23	MD	
15	1.335	1.053	20	120	1.3	1.1					0.24	0.23	0.20	0.22	0.22	0.23	MD	
16	1.596	1.095	17	100	1.4	1.1					0.23	0.21	0.22	X	0.24	0.21	MD	
17	1.370	0.915	18	120	1.3	1.0					0.20	0.15	0.14	0.22	0.21	0.20	MD	
18	1.566	1.189	28	120	1.4	0.9					0.10	0.10	0.24	0.24	0.23	0.23	MD	
19	1.499	1.093	17	120	0.9	1.2					0.25	0.24	0.24	0.25	0.24	0.24	MD	
20	1.512	1.141	19	120	1.1	1.2					0.24	0.17	0.21	0.15	0.17	0.10	MD	
21	1.562	1.059	16	120	1.5	1.0					0.10	0.27	0.19	0.21	0.18	0.18	MD	
22	1.386	1.136	30	100	1.1	1.0					0.18	0.18	0.18	0.17	0.21	0.20	MD	
23	1.443	1.166	18	100	1.2	1.6					0.20	0.17	0.18	0.17	0.18	0.18	MD	
24	1.340	1.103	28	100	1.4	0.9					0.18	0.17	0.17	0.15	0.20	0.18	MD	
25	1.603	1.129	16	100	1.5	0.9					0.18	0.19	0.20	0.19	0.18	0.17	MD	
26	1.289	1.070	11	100	1.3	1.1					0.18	0.15	0.15	0.15	0.17	0.18	MD	
27	1.419	1.072	11	100	1.4	1.6					0.18	0.20	0.28	0.20	0.20	0.18	MD	
28	1.633	1.116	9	100	1.7	1.1					0.18	0.19	0.18	0.13	0.18	0.20	MD	
29	1.548	1.157	8	100	1.0	1.0					0.20	0.22	0.20	0.20	0.22	0.23	MD	
30	1.382	1.058	13	100	1.1	1.4					0.20	0.19	0.20	0.20	0.24	0.25	0.1	0.25
31	1.583	1.069	16	120	1.3	1.4					0.21	0.19	0.19	0.20	0.23	0.21	2.0	
Total	44.170	32.478																
Avg	1.425	1.048																
Max	1.633	1.189																
Min	0.995	0.848																

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: August 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: July 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	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	0.20		0.27		0.28		0.26													
2	0.30		0.20		0.21		0.20													
3	0.30		0.18		0.23		0.24													
4	0.30		0.19		0.19		0.28													
5	0.23		0.28		0.27		0.26													
6	0.24		0.22		0.22		0.30													
7	0.20		0.30		0.28		0.27													
8	0.23		0.20		0.23		0.27													
9	0.24		0.21		0.26		0.26													
10	0.19		0.19		0.24		0.26													
11	0.18		0.24		0.23		0.27													
12	0.24		0.20		0.23		0.27													
13	0.20		0.18		0.18		0.22													
14	0.24		0.20		0.20		0.23													
15	0.26		0.23		0.24		0.32													
16	0.24		0.24		0.26		0.30													
17	0.18		0.14		0.16		0.19													
18	0.30		0.17		0.17		0.19													
19	0.12		0.16		0.20		0.24													
20	0.28		0.26		0.26		0.23													
21	0.18		0.34		0.22		0.22													
22	0.22		0.30		0.26		0.26													
23	0.15		0.25		0.19		0.20													
24	0.17		0.30		0.20		0.29													
25	0.24		0.40		0.19		0.21													
26	0.24		0.20		0.20		0.30													
27	0.20		0.16		0.19		0.24													
28	0.27		0.21		0.19		0.24													
29	0.19		0.29		0.24		0.26													
30	0.19		0.25		0.31		0.25													
31	0.25		0.32		0.23		0.29													

SUMMARY & COMPLIANCE ACTIONS

Criteria	Filter No. 1	2	3	4	5	6	7	8	9	10	Plant
Number of days with event(s) above 0.5 NTU at 4.0 hrs this month											
Number of days with event(s) above 1.0 NTU this month	0	0	0	0							
Number of days with event(s) above 1.0 NTU last month	0	0	0	0							
Number of days with event(s) above 1.0 NTU two months ago	0	0	0	0							
Total number of days with event(s) above 1.0 NTU in three months	0	0	0	0							
Number of events above 2.0 NTU this month											0
Number of events above 2.0 NTU last month											0
Does the filter/plant have an approved Corrective Action Plan?	N	N	N	N							N
Is the plant required to submit a Filter Profile Report?	N	N	N	N							
Is the plant required to submit a Filter Assessment Report?	N	N	N	N							
Is the plant required to submit a Request for Compliance CPE?											N

SUBMITTED BY: Tomas Sanchez Jr Certificate No. and Grade: WS0009456, C Date: August 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: July Year: 2015

DISINFECTION PROCESS PARAMETERS

APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS	
	Disinfection Zones					Log Inactivations	
Parameters	D1A	D1B	D2	D3	D4	Giardia lamblia Cysts	Viruses
Flow Rate (MGD)	1.250	1.250	0.625	1.250		0.5	2.0
T_{10} (minutes)	17.3	17.3	21.3	50.4			

PERFORMANCE DATA

DISINFECTION PROCESS DATA

Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
1	FCL *D1A*	1.4	0.756	28.0	6.3	13.70	307.83	27.40 (G)	
	FCL *D1B*	1.7	0.756	27.0	6.3				
	FCL *D2*	3.4	0.378	22.0	6.2				
	CLA *D3*	2.7	1.513	28.0	6.5				
	D4								
2	FCL *D1A*	1.7	0.785	27.0	6.5	17.61	440.21	35.22 (G)	
	FCL *D1B*	1.9	0.785	27.0	6.4				
	FCL *D2*	4.4	0.392	27.0	6.3				
	CLA *D3*	2.9	1.571	28.0	6.7				
	D4								
3	FCL *D1A*	1.5	0.784	27.0	6.4	17.41	441.61	34.83 (G)	
	FCL *D1B*	1.9	0.784	27.0	6.4				
	FCL *D2*	3.9	0.392	28.0	6.4				
	CLA *D3*	2.7	1.568	27.0	6.3				
	D4								
4	FCL *D1A*	1.3	0.786	28.2	6.4	17.42	433.05	34.83 (G)	
	FCL *D1B*	1.8	0.786	28.2	6.4				
	FCL *D2*	3.9	0.393	27.9	6.3				
	CLA *D3*	2.6	1.572	27.1	6.4				
	D4								
5	FCL *D1A*	1.5	0.778	29.0	6.5	17.31	444.44	34.62 (G)	
	FCL *D1B*	1.6	0.778	28.0	6.4				
	FCL *D2*	4.3	0.389	27.0	6.4				
	CLA *D3*	2.1	1.556	29.0	6.6				
	D4								
6	FCL *D1A*	1.1	0.787	28.0	6.9	15.08	427.60	30.15 (G)	
	FCL *D1B*	1.7	0.787	28.0	6.8				
	FCL *D2*	6.9	0.393	28.0	6.6				
	CLA *D3*	1.9	1.575	28.0	7.0				
	D4								
7	FCL *D1A*	1.6	0.755	28.0	7.0	15.93	482.81	31.86 (G)	
	FCL *D1B*	2.1	0.755	28.0	6.8				
	FCL *D2*	6.2	0.377	28.0	6.8				
	CLA *D3*	2.3	1.510	28.0	6.9				
	D4								
8	FCL *D1A*	1.2	0.730	29.0	6.8	16.98	502.32	33.96 (G)	
	FCL *D1B*	1.3	0.730	28.0	6.7				
	FCL *D2*	5.3	0.365	29.0	6.8				
	CLA *D3*	3.0	1.460	29.0	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
9	FCL *D1A*	1.7	0.764	29.0	7.0	16.07	489.92	32.14 (G)	
	FCL *D1B*	1.9	0.764	29.0	6.9				
	FCL *D2*	3.7	0.382	29.0	6.9				
	CLA *D3*	2.5	1.529	29.0	6.9				
	D4								
10	FCL *D1A*	1.6	0.748	27.4	6.6	15.61	437.79	31.23 (G)	
	FCL *D1B*	1.9	0.748	27.0	6.7				
	FCL *D2*	5.4	0.374	26.2	6.7				
	CLA *D3*	2.8	1.497	27.8	6.7				
	D4								
11	FCL *D1A*	1.4	0.784	28.0	6.7	14.46	450.14	28.92 (G)	
	FCL *D1B*	1.6	0.784	28.0	6.8				
	FCL *D2*	5.5	0.392	28.0	7.0				
	CLA *D3*	2.0	1.569	28.0	6.7				
	D4								
12	FCL *D1A*	1.3	0.777	29.0	6.6	18.34	507.18	36.68 (G)	
	FCL *D1B*	1.6	0.777	29.0	6.7				
	FCL *D2*	5.5	0.388	30.0	6.6				
	CLA *D3*	2.6	1.555	30.0	6.6				
	D4								
13	FCL *D1A*	1.8	0.786	29.3	6.9	17.84	539.52	35.68 (G)	
	FCL *D1B*	2.0	0.786	28.8	6.9				
	FCL *D2*	4.0	0.393	29.9	6.8				
	CLA *D3*	2.3	1.573	30.0	6.8				
	D4								
14	FCL *D1A*	1.6	0.783	28.0	6.3	18.46	465.85	36.92 (G)	
	FCL *D1B*	1.8	0.783	28.0	6.4				
	FCL *D2*	4.3	0.391	28.0	6.4				
	CLA *D3*	2.8	1.566	29.0	6.4				
	D4								
15	FCL *D1A*	1.2	0.812	30.9	6.5	19.25	495.10	38.51 (G)	
	FCL *D1B*	1.8	0.812	31.1	6.5				
	FCL *D2*	3.8	0.406	30.9	6.4				
	CLA *D3*	2.5	1.625	31.1	6.6				
	D4								
16	FCL *D1A*	1.5	0.819	28.0	6.6	16.31	438.11	32.62 (G)	
	FCL *D1B*	1.7	0.819	28.0	6.5				
	FCL *D2*	4.8	0.409	28.0	6.5				
	CLA *D3*	2.0	1.638	28.0	6.7				
	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: August 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: July Year: 2015

DISINFECTION PROCESS PARAMETERS

APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS	
	Disinfection Zones					Log Inactivations	
Parameters	D1A	D1B	D2	D3	D4	Giardia lamblia Cysts	Virus
Flow Rate (MGD)	1.25	1.25	0.63	1.25		0.5	2.0
T_{10} (minutes)	17.30	17.30	21.30	50.40			

PERFORMANCE DATA

Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
17	FCL *D1A*	1.7	0.817	30.8	6.6	19.04	545.39	38.07 (G)	
	FCL *D1B*	2.0	0.817	31.0	6.7				
	FCL *D2*	4.7	0.408	30.6	6.7				
	CLA *D3*	2.6	1.635	31.3	6.7				
	D4								
18	FCL *D1A*	1.3	0.780	27.5	6.9	14.11	428.39	28.21 (G)	
	FCL *D1B*	1.6	0.780	27.6	6.8				
	FCL *D2*	4.6	0.390	27.3	6.9				
	CLA *D3*	2.4	1.560	27.4	6.9				
	D4								
19	FCL *D1A*	1.6	0.752	27.6	6.6	17.48	480.85	34.97 (G)	
	FCL *D1B*	1.9	0.752	27.7	6.6				
	FCL *D2*	4.8	0.376	27.9	6.6				
	CLA *D3*	2.7	1.504	28.1	6.7				
	D4								
20	FCL *D1A*	1.8	0.759	30.3	6.5	17.68	535.08	35.37 (G)	
	FCL *D1B*	2.1	0.759	29.9	6.5				
	FCL *D2*	4.6	0.379	28.7	7.0				
	CLA *D3*	2.1	1.519	31.6	6.4				
	D4								
21	FCL *D1A*	1.7	0.763	29.0	6.6	18.12	470.63	36.25 (G)	
	FCL *D1B*	1.5	0.763	28.0	6.6				
	FCL *D2*	4.4	0.381	28.0	6.4				
	CLA *D3*	2.7	1.527	28.0	6.8				
	D4								
22	FCL *D1A*	1.4	0.769	29.6	6.5	19.17	501.20	38.34 (G)	
	FCL *D1B*	1.6	0.769	29.9	6.4				
	FCL *D2*	4.6	0.384	29.3	6.5				
	CLA *D3*	2.1	1.539	31.2	6.4				
	D4								
23	FCL *D1A*	1.1	0.781	28.0	6.5	16.19	431.02	32.38 (G)	
	FCL *D1B*	1.5	0.781	28.0	6.4				
	FCL *D2*	4.4	0.390	28.0	6.5				
	CLA *D3*	2.2	1.563	28.0	6.8				
	D4								
24	FCL *D1A*	1.4	0.797	30.0	6.6	17.59	485.15	35.18 (G)	
	FCL *D1B*	1.1	0.797	30.0	6.6				
	FCL *D2*	4.7	0.398	30.0	6.6				
	CLA *D3*	2.0	1.594	31.0	6.6				
	D4								

PERFORMANCE DATA

Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
25	FCL *D1A*	1.0	0.800	28.0	6.7	14.35	413.30	28.71 (G)	
	FCL *D1B*	1.4	0.800	28.0	6.6				
	FCL *D2*	4.5	0.400	28.0	6.7				
	CLA *D3*	2.0	1.601	28.0	6.7				
	D4								
26	FCL *D1A*	1.4	0.804	29.0	6.6	17.79	461.31	35.57 (G)	
	FCL *D1B*	1.5	0.804	29.0	6.5				
	FCL *D2*	3.9	0.402	29.0	6.4				
	CLA *D3*	2.0	1.609	29.0	6.3				
	D4								
27	FCL *D1A*	1.3	0.816	29.0	6.5	16.43	412.88	32.85 (G)	
	FCL *D1B*	1.2	0.816	29.0	6.5				
	FCL *D2*	3.6	0.408	29.0	6.4				
	CLA *D3*	2.0	1.635	29.0	6.7				
	D4								
28	FCL *D1A*	0.9	0.818	29.3	6.8	14.71	434.89	29.43 (G)	
	FCL *D1B*	1.1	0.818	29.1	6.8				
	FCL *D2*	5.7	0.409	29.2	6.8				
	CLA *D3*	2.6	1.637	29.8	6.7				
	D4								
29	FCL *D1A*	1.5	0.812	29.7	6.6	17.06	472.67	34.13 (G)	
	FCL *D1B*	1.4	0.812	28.4	6.6				
	FCL *D2*	4.0	0.406	29.4	6.6				
	CLA *D3*	2.0	1.625	31.1	6.6				
	D4								
30	FCL *D1A*	1.1	0.818	28.3	6.6	14.59	402.15	29.18 (G)	
	FCL *D1B*	1.7	0.818	28.4	6.6				
	FCL *D2*	3.6	0.409	29.0	6.7				
	CLA *D3*	1.9	1.637	29.8	6.6				
	D4								
31	FCL *D1A*	1.0	0.817	28.3	6.5	12.75	344.36	25.50 (G)	
	FCL *D1B*	1.1	0.817	28.7	6.5				
	FCL *D2*	3.3	0.408	27.8	6.7				
	CLA *D3*	1.7	1.635	25.9	6.7				
	D4								
					Max	19.25	545.39	38.51	
					Min	12.75	307.83	25.50	
					Avg	16.61	455.57	33.22	
					SD	1.69	50.46	3.38	

NOTE: The log removal credits for this plant were restricted on at least one day this month due to high free chlorine levels in one or more zones or trains.

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: August 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

PWS ID No.: 2400022

Plant ID No.: 20831

PLANT NAME OR NUMBER: Rio Bravo

Month: July

Year: 2015

Type of treatment: X Conventional

Unconventional explain:

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

Test No.	Test Date	Monthly TOC Sample Set			Actual % TOC Removed	Step 1 Required % Removal	Step 1 Removal Ratio	Optional data		INDIVIDUAL SAMPLE COMPLIANCE REMOVAL RATIO
		Raw Alkalinity	Raw TOC	Treated TOC				Step 2 Required % Removal	Step 2 Removal Ratio	
		Enter the Sample Set results			calculated	calculated from matrix	calculated			calculated
1	7/1	120	4.33	2.62	39.5	35	1.13			1.13
2										
3										
4										
5										
6										
7										
8										
9										
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31										
Avg		120.00	4.33	2.62	39.49		1.13			1.13
Max		120.00	4.33	2.62	39.49		1.13			1.13
Min		120.00	4.33	2.62	39.49		1.13			1.13

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	4.33	2.62	39.5	NA	1.13

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: August 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