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 Utility

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022

Plant ID No.: 20831

Report for the Month of: December 2017

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: WS0012772, B

Date: January 10, 2018

TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	89	Number of 4-hour periods when plant was off-line:	97
Number of readings above 0.10 NTU:	10	Number of 4-hour periods when plant was on-line but turbidity data was not collected:	0
Number of readings above 0.3 NTU:	0		
Number of readings above 0.5 NTU:	0	Number of days when plant was on-line but individual filter turbidity data was not collected:	0
Number of readings above 1.0 NTU:	0		
Maximum allowable turbidity level:	0.3	Number of days with readings above 1.0 NTU:	0 (2)
Percentage of readings above this limit:	0.0 % (1)	Number of days with readings above 5.0 NTU:	0 (3)

Bin Class: 2 Crypto Credit Required: 4.0 (7A) Crypto Credit Achieved: 4.5 (7B) Bin 3&4 Credits: 1.0 (7C)

Watershed Protection:	0.0	Conventional Treatment:	3.0	Second Stage Filtration:	0.0
Bank Filtration:	0.0	Enhanced Filter Performance:	0.5	UV:	1.0
Presedimentation with Coagulation:	0.0	Bag and Cartridge Filtration:	0.0	Ozone, Chlorine Dioxide:	0.0
Two-Stage Lime Softening:	0.0	Membrane Filtration:	0.0	Perform. Demonstration:	0.0

Number of days with low inactivation (including UV) for no more than 4.0 consecutive hours:	0	Average log inactivation (including UV) for Giardia:	5.72
		Average log inactivation) (including UV) for viruses:	65.94
Number of days with low inactivation (including UV) for more than 4.0 consecutive hours:	0 (4)	Number of days when profiling data was not collected:	0
		Number of days when CT data was not collected:	0

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

Number of days with a low residual for no more than 4.0 consecutive hours:	0	Minimum pH in the last disinfection zone:	7.00
		Number of days with pH below 7.0 in the last disinfection zone:	0.00
Number of days with a low residual for more than 4.0 consecutive hours:	0 (5)	Number of days when disinfectant residual leaving the plant was not properly monitored:	0

DISTRIBUTION SYSTEM

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

Total number of readings this month:	44 (at least 31 required) (8)		
Average disinfectant residual value:	2.17	Percentage of readings with a low residual this month:	0.0 % (6A)
Number of readings with a low residual:	0		
Number of readings with no detectable residual:	0	Percentage of readings with a low residual last month:	0.0 % (6B)

ADDITIONAL REPORTS & WORKSHEETS

The Page 1 Addendum (Public Notices) is not required because there were no treatment technique or monitoring/reporting violations reported.

Additional report(s) for individual filter monitoring required: ◉ NONE ○ Filter Profile ○ Filter Assessment ○ CPE

Additional report(s) for individual filter monitoring submitted: ◉ NONE ○ Filter Profile (9) ○ Filter Assessment (10) ○ CPE (11)

No additional IFE Reports are required this month.

P.2-Turbidity Data	P.3-Filter Data	P.4&5-Disinfection Data	P.6-TOCMOR
Alternate Technol.	UV–CDA	UV–Sensor Data	UV–UVT Analyzer

STATISTICAL ANALYSIS OF TURBIDITY DATA

Settled Water Stastical Summary	Maximum turbidity reading:	9.73 NTU	Average turbidity value:	4.08 NTU
	Minimum turbidity reading:	0.22 NTU	Standard deviation:	1.467 NTU
	95th percentile value:	5.60 NTU		
IFE Stastical Summary	Maximum IFE turbidity reading:	0.00 NTU	Average IFE turbidity value:	0.01 NTU
	Minimum IFEturbidity reading:	0.29 NTU	Standard deviation:	0.084 NTU
	95th percentile IFE value:	0.06 NTU		
CFE Stastical Summary	Maximum CFE turbidity reading:	0.20 NTU	Average CFE turbidity value:	0.07 NTU
	Minimum CFE turbidity reading:	0.01 NTU	Standard deviation:	0.033 NTU
	95th percentile CFE value:	0.14 NTU		

STATISTICAL ANALYSIS OF pH DATA

Last Zone pH Stastical Summary	Maximum pH reading:	7.49 pH	Average pH value:	7.20 pH
	Minimum pH reading:	7.00 pH	Standard deviation:	0.109 pH
	95th percentile value:	7.39 pH		

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.)

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:** 1,941

Month: December **Year:** 2017 **Population:** 6,794

PERFORMANCE DATA

Date	Raw Water Pumpage (MGD)	Treated Water Pumpage (MGD)	RAW WATER ANALYSES NTU	RAW WATER ANALYSES Alk.	SETTLED WATER TURBIDITY (Mandatory Data) Basin No. 1	2	3	4	5	6	FINISHED WATER QUALITY Combined Filter Effluent Turbidity NTU1	NTU2	NTU3	NTU4	NTU5	NTU6	Lowest Residual	Time*
1	1.096	0.575	26	180	4.2	4.4					0.20	0.14	X	0.08	0.09	0.08	3.2	
2	0.923	0.641	22	180	2.5	2.7					X	X	X	0.06	0.06	0.05	3.3	
3	0.809	0.522	22	180	2.5	2.5					0.05	X	X	0.05	0.06	0.05	3.5	
4	0.856	0.641	29	180	2.4	2.4					X	X	X	X	0.05	0.03	2.7	
5	0.955	0.512	28	180	2.4	2.8					0.05	X	X	0.05	0.05	0.05	2.9	
6	0.934	0.463	19	160	2.6	5.2					0.06	X	X	0.05	0.05	0.06	2.9	
7	0.664	0.444	24	140	3.5	3.5					X	X	X	X	0.10	0.09	2.9	
8	0.694	0.502	24	140	4.9	3.4					X	X	X	X	0.09	0.08	2.6	
9	0.746	0.526	38	140	4.3	4.2					X	X	X	0.11	0.07	0.07	2.7	
10	0.708	0.470	51	140	5.2	4.8					X	X	X	X	0.10	0.06	2.5	
11	0.952	0.700	64	140	3.7	4.5					X	X	X	0.05	0.07	0.08	2.1	
12	0.861	0.477	14	140	4.0	4.2					0.08	X	X	0.10	0.11	0.11	3.3	
13	0.836	0.538	19	140	5.1	0.2					X	X	X	0.04	0.07	0.06	3.6	
14	0.615	0.513	28	140	4.2	5.1					X	X	X	0.07	0.03	0.13	3.1	
15	0.719	0.406	33	140	4.8	3.6					X	X	X	0.09	0.05	0.06	3.6	
16	0.658	0.294	21	140	3.6	3.8					X	X	X	X	0.05	0.03	3.0	
17	0.709	0.105	22	140	4.0	3.6					X	X	X	X	0.05	0.05	2.8	
18	0.894	0.517	21	140	5.1	4.1					X	X	X	0.06	0.08	0.06	2.7	
19	0.760	0.395	18	140	0.4	4.8					X	X	X	0.14	0.14	0.07	2.7	
20	0.824	0.591	19	160	7.3	5.6					X	X	X	X	0.19	0.09	2.8	
21	0.722	0.495	25	160	9.7	4.5					X	X	X	0.15	0.02	0.01	2.9	
22	0.754	0.515	36	160	5.6	2.5					X	X	X	0.05	0.05	0.05	2.7	
23	0.751	0.496	45	180	4.9	4.6					X	X	X	0.08	0.08	0.05	2.8	
24	0.858	0.519	10	160	4.6	4.2					X	X	X	0.04	0.04	0.03	3.3	
25	0.817	0.464	21	160	4.5	5.1					0.04	X	X	0.04	0.06	0.06	4.2	
26	0.821	0.516	28	180	6.8	4.2					X	X	X	0.05	0.07	0.07	3.4	
27	0.692	0.400	23	140	1.9	2.7					X	X	X	X	0.05	0.05	3.2	
28	0.803	0.789	29	140	5.5	5.4					X	X	X	X	0.03	0.06	3.2	
29	0.780	0.561	44	140	5.1	3.8					0.06	X	X	X	0.07	0.07	3.1	
30	0.691	0.547	58	140	4.1	4.0					X	X	X	X	0.08	0.07	3.0	
31	0.726	0.414	75	160	4.4	2.7					X	X	X	X	0.05	0.06	3.0	
Total	24.628	15.548		Max	9.7	5.6												
Avg	0.794	0.502		Avg	4.3	3.8												
Max	1.096	0.789		95th %	7.1	5.3												
Min	0.615	0.105		Min	0.4	0.2												
				95th percentile based on data from all basins						5.6								

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:** WS0012772, B **Date:** January 10, 2018

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: December Year: 2017

PERFORMANCE DATA

INDIVIDUAL FILTER TURBIDITY

Date	Filter No. 1		Filter No. 2		Filter No. 3		Filter No. 4		Filter No. 5		Filter No. 6		Filter No. 7		Filter No. 8		Filter No. 9		Filter No. 10	
	Max	4 Hrs	Max	4 Hrs	Max	4 Hrs	Max	4 Hrs	Max	4 Hrs	Max	4 Hrs	Max	4 Hrs	Max	4 Hrs	Max	4 Hrs	Max	4 Hrs
1	0.07		0.09		0.28		0.18													
2	0.06		0.03		0.11		0.10													
3	0.05		0.03		0.08		0.13													
4	0.07		0.04		0.14		0.12													
5	0.19		0.07		0.17		0.13													
6	0.05		0.06		0.19		0.09													
7	0.03		0.05		0.18		0.07													
8	0.06		0.04		0.13		0.07													
9	0.04		0.02		0.16		0.19													
10	0.04		0.02		0.14		0.08													
11	0.11		0.03		0.07		0.10													
12	0.04		0.04		0.12		0.10													
13	0.06		0.02		0.08		0.21													
14	0.05		0.01		0.10		0.08													
15	0.05		0.01		0.07		0.06													
16	0.04		0.01		0.07		0.27													
17	0.04		0.01		0.07		0.06													
18	0.06		0.03		0.07		0.09													
19	0.06		0.02		0.11		0.07													
20	0.06		0.01		0.14		0.06													
21	0.06		0.01		0.08		0.06													
22	0.05		0.10		0.11		0.05													
23	0.04		0.01		0.14		0.05													
24	0.07		0.02		0.27		0.10													
25	0.05		0.06		0.13		0.09													
26	0.06		0.06		0.15		0.08													
27	0.09		0.07		0.29		0.13													
28	0.14		0.07		0.10		0.14													
29	0.04		0.05		0.10		0.07													
30	0.04		0.04		0.10		0.08													
31	0.08		0.08		0.13		0.07													

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: WS0012772, B

Date: January 10, 2018

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:** December **Year:** 2017

DISINFECTION PROCESS PARAMETERS

APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS	
	Disinfection Zones					Log Inactivations	
Parameters	D1A	D1B	D2	D3	D4	Giardia lamblia Cysts	Viruses
Flow Rate (MGD)	1.250	1.250	0.625	1.250		0.5	2.0
T_{10} (minutes)	7.9	7.9	21.0	50.4			

PERFORMANCE DATA

DISINFECTION PROCESS DATA

Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time=
1	FCL D1A	1.1	0.774	20.6	7.5				
	FCL D1B	1.4	0.774	20.7	7.5				
	FCL D2	0.8	0.387	21.5	7.3	3.35	69.28	6.71	
	CLA D3	4.7	0.774	20.2	7.2			(G)	
	D4								
2	FCL D1A	1.3	0.761	20.0	7.4				
	FCL D1B	1.3	0.761	20.0	7.3				
	FCL D2	1.2	0.380	20.0	7.2	3.75	88.67	7.49	
	CLA D3	3.5	0.761	20.0	7.2			(G)	
	D4								
3	FCL D1A	1.4	0.745	21.0	7.2				
	FCL D1B	1.5	0.745	21.0	7.2				
	FCL D2	1.4	0.372	21.0	7.1	4.64	109.80	9.29	
	CLA D3	3.5	0.745	21.0	7.1			(G)	
	D4								
4	FCL D1A	1.1	0.760	21.0	7.1				
	FCL D1B	1.3	0.760	21.0	7.1				
	FCL D2	0.5	0.380	21.0	7.1	2.80	54.21	5.60	
	CLA D3	3.4	0.760	21.0	7.1			(G)	
	D4								
5	FCL D1A	1.0	0.778	19.9	7.3				
	FCL D1B	1.2	0.778	20.0	7.2				
	FCL D2	1.1	0.389	20.6	7.2	3.47	79.47	6.94	
	CLA D3	3.5	0.778	20.1	7.2			(G)	
	D4								
6	FCL D1A	1.1	0.811	19.2	7.2				
	FCL D1B	1.1	0.811	18.8	7.1				
	FCL D2	0.9	0.405	20.1	7.3	2.88	64.41	5.76	
	CLA D3	3.7	0.811	18.1	7.2			(G)	
	D4								
7	FCL D1A	0.5	0.838	15.0	7.0				
	FCL D1B	0.5	0.838	14.5	7.0				
	FCL D2	0.9	0.419	15.7	7.2	1.84	38.22	3.69	
	CLA D3	3.1	0.838	14.3	7.0			(G)	
	D4								
8	FCL D1A	0.5	0.812	15.9	7.1				
	FCL D1B	0.5	0.812	16.0	7.0				
	FCL D2	0.7	0.406	16.0	7.2	1.67	33.72	3.35	
	CLA D3	2.6	0.812	15.8	7.1			(G)	
	D4								

PERFORMANCE DATA

DISINFECTION PROCESS DATA

Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time=
9	FCL D1A	0.7	0.791	16.4	7.1				
	FCL D1B	0.8	0.791	16.4	7.1				
	FCL D2	0.6	0.395	16.2	7.1	1.72	33.41	3.43	
	CLA D3	2.7	0.791	16.7	7.1			(G)	
	D4								
10	FCL D1A	0.8	0.781	18.2	7.1				
	FCL D1B	0.9	0.781	18.6	7.1				
	FCL D2	1.1	0.390	17.9	7.2	2.80	61.67	5.60	
	CLA D3	3.1	0.781	18.5	7.1			(G)	
	D4								
11	FCL D1A	0.9	0.763	16.5	7.1				
	FCL D1B	0.9	0.763	16.7	7.1				
	FCL D2	1.2	0.381	16.9	7.2	2.79	63.44	5.58	
	CLA D3	3.2	0.763	17.0	7.2			(G)	
	D4								
12	FCL D1A	1.0	0.754	17.2	7.1				
	FCL D1B	0.7	0.754	17.7	7.1				
	FCL D2	1.3	0.377	17.6	7.2	3.10	70.38	6.20	
	CLA D3	3.6	0.754	17.4	7.2			(G)	
	D4								
13	FCL D1A	1.6	0.729	16.0	7.1				
	FCL D1B	1.8	0.729	15.9	7.2				
	FCL D2	1.3	0.364	16.9	7.2	3.43	80.54	6.86	
	CLA D3	3.7	0.729	16.3	7.1			(G)	
	D4								
14	FCL D1A	1.5	0.740	16.7	7.1				
	FCL D1B	1.4	0.740	16.7	7.1				
	FCL D2	0.9	0.370	16.9	7.2	2.87	61.23	5.73	
	CLA D3	3.9	0.740	16.9	7.2			(G)	
	D4								
15	FCL D1A	1.3	0.761	14.8	7.3				
	FCL D1B	1.4	0.761	15.0	7.3				
	FCL D2	1.3	0.380	15.3	7.4	2.77	67.83	5.53	
	CLA D3	3.7	0.761	14.6	7.3			(G)	
	D4								
16	FCL D1A	0.8	0.792	15.9	7.2				
	FCL D1B	0.7	0.792	15.6	7.1				
	FCL D2	1.1	0.396	15.8	7.4	2.27	50.86	4.55	
	CLA D3	3.3	0.792	16.9	7.5			(G)	
	D4								

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

SUBMITTED BY: Tomas Sanchez Jr **Certificate No. and Grade:** WS0012772, B **Date:** January 10, 2018

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: December Year: 2017

DISINFECTION PROCESS PARAMETERS

APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS	
	Disinfection Zones					Log Inactivations	
Parameters	D1A	D1B	D2	D3	D4	Giardia lamblia Cysts	Virus
Flow Rate (MGD)	1.25	1.25	0.63	1.25		0.5	2.0
T_{10} (minutes)	7.90	7.90	21.00	50.40			

PERFORMANCE DATA

DISINFECTION PROCESS DATA

Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time=
17	FCL *D1A*	0.6	0.783	16.5	7.4				
	FCL *D1B*	0.6	0.783	16.5	7.3				
	FCL *D2*	0.9	0.391	15.9	7.5	1.94	43.04	3.87	
	CLA *D3*	3.1	0.783	15.8	7.3			(G)	
	D4								
18	FCL *D1A*	0.7	0.822	14.8	7.4				
	FCL *D1B*	0.7	0.822	14.7	7.4				
	FCL *D2*	0.7	0.411	15.8	7.5	1.53	32.83	3.06	
	CLA *D3*	2.8	0.822	14.8	7.5			(G)	
	D4								
19	FCL *D1A*	0.9	0.812	17.9	7.3				
	FCL *D1B*	0.9	0.812	18.1	7.3				
	FCL *D2*	1.5	0.406	16.6	7.4	2.94	71.04	5.87	
	CLA *D3*	3.6	0.812	17.8	7.3			(G)	
	D4								
20	FCL *D1A*	0.7	0.794	17.8	7.2				
	FCL *D1B*	0.6	0.794	17.4	7.2				
	FCL *D2*	0.6	0.397	16.1	7.3	1.76	32.36	3.51	
	CLA *D3*	3.4	0.794	16.5	7.3			(G)	
	D4								
21	FCL *D1A*	0.7	0.768	17.8	7.1				
	FCL *D1B*	0.3	0.768	17.7	7.1				
	FCL *D2*	0.3	0.384	18.6	7.3	1.37	21.01	2.73	
	CLA *D3*	3.3	0.768	17.0	7.2			(G)	
	D4								
22	FCL *D1A*	1.1	0.755	20.6	7.0				
	FCL *D1B*	1.0	0.755	20.5	7.1				
	FCL *D2*	0.8	0.377	21.9	7.0	3.34	67.17	6.69	
	CLA *D3*	3.4	0.755	20.5	7.1			(G)	
	D4								
23	FCL *D1A*	1.2	0.735	18.0	7.0				
	FCL *D1B*	1.0	0.735	17.6	7.0				
	FCL *D2*	0.7	0.367	18.6	7.1	2.67	50.49	5.33	
	CLA *D3*	3.9	0.735	17.2	7.1			(G)	
	D4								
24	FCL *D1A*	1.0	0.711	18.0	7.2				
	FCL *D1B*	1.0	0.711	18.0	7.2				
	FCL *D2*	0.7	0.355	18.4	7.3	2.66	51.99	5.31	
	CLA *D3*	3.6	0.711	19.4	7.2			(G)	
	D4								

PERFORMANCE DATA

DISINFECTION PROCESS DATA

Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time=
25	FCL *D1A*	1.0	0.741	17.0	7.2				
	FCL *D1B*	1.0	0.741	17.0	7.1				
	FCL *D2*	1.7	0.370	17.0	7.2	3.81	90.41	7.62	
	CLA *D3*	4.3	0.741	17.0	7.2			(G)	
	D4								
26	FCL *D1A*	1.8	0.732	17.0	7.0				
	FCL *D1B*	1.5	0.732	17.0	7.1				
	FCL *D2*	1.6	0.366	17.0	7.0	4.13	95.08	8.26	
	CLA *D3*	4.0	0.732	17.0	7.0			(G)	
	D4								
27	FCL *D1A*	2.1	0.779	16.1	7.1				
	FCL *D1B*	1.9	0.779	16.0	7.1				
	FCL *D2*	1.8	0.389	16.5	7.2	3.94	99.63	7.88	
	CLA *D3*	3.8	0.779	16.0	7.2			(G)	
	D4								
28	FCL *D1A*	1.8	0.790	16.0	7.2				
	FCL *D1B*	1.6	0.790	15.7	7.2				
	FCL *D2*	1.5	0.395	16.8	7.3	3.32	82.18	6.63	
	CLA *D3*	3.6	0.790	16.3	7.2			(G)	
	D4								
29	FCL *D1A*	1.7	0.805	15.4	7.1				
	FCL *D1B*	1.5	0.805	14.8	7.2				
	FCL *D2*	1.7	0.402	16.7	7.2	3.28	84.15	6.56	
	CLA *D3*	3.1	0.805	15.3	7.2			(G)	
	D4								
30	FCL *D1A*	1.9	0.840	17.9	7.2				
	FCL *D1B*	1.7	0.840	17.7	8.3				
	FCL *D2*	1.7	0.420	17.4	7.3	3.24	91.14	6.48	
	CLA *D3*	3.5	0.840	17.1	7.2			(G)	
	D4								
31	FCL *D1A*	2.1	0.807	16.7	7.4				
	FCL *D1B*	2.0	0.807	17.7	7.5				
	FCL *D2*	1.6	0.403	17.6	7.4	3.55	97.71	7.09	
	CLA *D3*	3.3	0.807	16.3	7.3			(G)	
	D4								
					Max	4.64	109.80	9.29	
					Min	1.37	21.01	2.73	
					Avg	2.89	65.72	5.78	
					SD	0.81	22.86	1.61	

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: WS0012772, B Date: January 10, 2018

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: December

Year: 2017

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	12/4	180	2.67	2.09	21.7	15	1.45			1.45
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		180.00	2.67	2.09	21.72		1.45			1.45
Max		180.00	2.67	2.09	21.72		1.45			1.45
Min		180.00	2.67	2.09	21.72		1.45			1.45

TOTAL ORGANIC CARBON (TOC) REMOVAL SUMMARY

TOC Summary					Monthly Compliance Ratio
Raw Water Alkalinity	Raw Water TOC	Treated Water TOC	TOC % Removal	ACC # used	
180	2.67	2.09	21.7	NA	1.45

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: WS0012772, B

Date: January 10, 2018

Submit the report by the 10th of the month following the reporting period to:

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

UV MONTHLY OPERATING REPORT

FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER

UV Calculated Dose Approach Reactors

PUBLIC WATER SYSTEM NAME: Webb County Water Utility

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022 **Plant ID No.:** 20831 **Month:** December **Year:** 2017

VALIDATED OPERATIONAL CONDITIONS

VALIDATED PARAMETERS						PERFORMANCE REQUIREMENTS	
Parameters	Reactor Number					Crypto Log Inactivation	Required UV Dose (mJ/cm^2)
	UVCD1	UVCD2	UVCD3	UVCD4	UVCD5		
Max Validated Flow Rate (MGD)	5.080	5.080	5.080			1.0	2.50
Min Validated UVT (%)	69.20	69.20	69.20				

PERFORMANCE DATA

Date	Reactor	Total Product. (MG)	Max. Flow Rate (MGD)	Min UV Trans. (%)	Minimum Meas'd UV Dose (mJ/cm^2)	Sensor CF	Adjusted Minimum UV Dose (mJ/cm^2)	Total Off-Spec Product. (MG)	Consec. Off-Spec Hours (hr)
		OPERATIONAL DATA							
1	1	X	X	X	X	X	X	X	0.25
	2	0.594	0.958	97.40	0.00	1.00	0.00	0.001	
	3	0.386	0.626	97.40	59.00	1.00	59.00	0.000	
	4								
	5								
2	1	X	X	X	X	X	X	X	0.25
	2	0.485	1.235	100.00	0.00	1.00	0.00	0.002	
	3	0.316	0.769	100.00	32.41	1.00	32.41	0.000	
	4								
	5								
3	1	X	X	X	X	X	X	X	0.25
	2	0.474	1.180	98.00	0.00	1.00	0.00	0.005	
	3	0.311	0.747	98.00	0.00	1.00	0.00	0.002	
	4								
	5								
4	1	X	X	X	X	X	X	X	0.000
	2	0.444	1.014	84.30	2.74	1.00	2.74	0.000	
	3	0.291	0.664	84.30	58.21	1.00	58.21	0.000	
	4								
	5								
5	1	X	X	X	X	X	X	X	0.50
	2	0.494	1.186	100.00	0.00	1.00	0.00	0.007	
	3	0.324	0.747	100.00	31.11	1.00	31.11	0.000	
	4								
	5								
6	1	X	X	X	X	X	X	X	0.000
	2	0.514	0.958	100.00	33.83	1.00	33.83	0.000	
	3	0.338	0.707	100.00	54.54	1.00	54.54	0.000	
	4								
	5								
7	1	X	X	X	X	X	X	X	0.000
	2	0.361	0.989	95.90	37.78	1.00	37.78	0.000	
	3	0.239	0.649	95.90	59.28	1.00	59.28	0.000	
	4								
	5								
8	1	X	X	X	X	X	X	X	0.000
	2	0.388	0.989	96.50	31.88	1.00	31.88	0.000	
	3	0.256	0.641	96.50	59.33	1.00	59.33	0.000	
	4								
	5								

PERFORMANCE DATA

Date	Reactor	Total Product. (MG)	Max. Flow Rate (MGD)	Min UV Trans. (%)	Minimum Meas'd UV Dose (mJ/cm^2)	Sensor CF	Adjusted Minimum UV Dose (mJ/cm^2)	Total Off-Spec Product. (MG)	Consec. Off-Spec Hours (hr)
		OPERATIONAL DATA							
9	1	X	X	X	X	X	X	X	0.000
	2	0.421	0.949	99.30	14.71	1.00	14.71	0.000	
	3	0.277	0.636	99.30	60.32	1.00	60.32	0.000	
	4								
	5								
10	1	X	X	X	X	X	X	X	0.000
	2	0.400	0.957	95.60	37.13	1.00	37.13	0.000	
	3	0.264	0.647	95.60	57.47	1.00	57.47	0.000	
	4								
	5								
11	1	X	X	X	X	X	X	X	0.000
	2	0.498	1.191	95.60	31.94	1.00	31.94	0.000	
	3	0.330	0.791	95.60	50.48	1.00	50.48	0.000	
	4								
	5								
12	1	X	X	X	X	X	X	X	0.000
	2	0.504	0.900	95.90	41.33	1.00	41.33	0.000	
	3	0.334	0.607	95.90	62.32	1.00	62.32	0.000	
	4								
	5								
13	1	X	X	X	X	X	X	X	0.000
	2	0.440	1.395	95.20	27.73	1.00	27.73	0.000	
	3	0.292	0.909	95.20	45.15	1.00	45.15	0.000	
	4								
	5								
14	1	X	X	X	X	X	X	X	0.000
	2	0.350	1.025	95.30	28.46	1.00	28.46	0.000	
	3	0.232	0.668	95.30	64.04	1.00	64.04	0.000	
	4								
	5								
15	1	X	X	X	X	X	X	X	0.25
	2	0.415	1.500	95.00	0.00	1.00	0.00	0.016	
	3	0.273	1.078	95.00	0.00	1.00	0.00	0.011	
	4								
	5								
16	1	X	X	X	X	X	X	X	0.000
	2	0.380	1.116	94.80	36.17	1.00	36.17	0.000	
	3	0.251	0.736	94.80	57.87	1.00	57.87	0.000	
	4								
	5								

SUBMITTED BY: Tomas Sanchez Jr.

Certificate No. and Grade: WS0012772, B **Date:** January 10, 2018

UV MONTHLY OPERATING REPORT

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

UV Calculated Dose Approach Reactors (cont.)

PUBLIC WATER SYSTEM NAME: Webb County Water Utility

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022 Plant ID No.: 20831 Month: December Year: 2017

TRUE

VALIDATED OPERATIONAL CONDITIONS

VALIDATED PARAMETERS						PERFORMANCE REQUIREMENTS	
Parameters	Reactor Number					Crypto Log Inactivation	Required UV Dose (mJ/cm^2)
	UVCD1	UVCD2	UVCD3	UVCD4	UVCD5		
Max Validated Flow Rate (MGD)	5.080	5.080	5.080			1.0	2.50
Min Validated UVT (%)	69.20	69.20	69.20				

PERFORMANCE DATA

Date	Reactor	Total Product. (MG)	Max. Flow Rate (MGD)	Min UV Trans. (%)	Minimum Meas'd UV Dose (mJ/cm^2)	Sensor CF	Adjusted Minimum UV Dose (mJ/cm^2)	Total Off-Spec Product. (MG)	Consec. Off-Spec Hours (hr)
		OPERATIONAL DATA							
17	1	X	X	X	X	X	X	X	0.000
	2	0.404	1.029	94.80	38.20	1.00	38.20	0.000	
	3	0.267	0.688	94.80	61.46	1.00	61.46	0.000	
	4								
	5								
18	1	X	X	X	X	X	X	X	0.000
	2	0.453	1.500	94.60	31.82	1.00	31.82	0.000	
	3	0.299	0.988	94.60	52.20	1.00	52.20	0.000	
	4								
	5								
19	1	X	X	X	X	X	X	X	0.25
	2	0.432	0.996	95.50	0.00	1.00	0.00	0.007	
	3	0.284	0.653	95.50	0.00	1.00	0.00	0.004	
	4								
	5								
20	1	X	X	X	X	X	X	X	0.25
	2	0.475	1.129	95.10	0.00	1.00	0.00	0.007	
	3	0.316	0.717	95.10	0.00	1.00	0.00	0.005	
	4								
	5								
21	1	X	X	X	X	X	X	X	0.000
	2	0.394	0.900	95.40	40.02	1.00	40.02	0.000	
	3	0.274	0.617	95.40	61.90	1.00	61.90	0.000	
	4								
	5								
22	1	X	X	X	X	X	X	X	0.25
	2	0.422	1.114	95.00	0.00	1.00	0.00	0.003	
	3	0.280	0.760	95.00	0.00	1.00	0.00	0.001	
	4								
	5								
23	1	X	X	X	X	X	X	X	0.000
	2	0.413	1.010	94.70	33.75	1.00	33.75	0.000	
	3	0.283	0.659	94.70	55.41	1.00	55.41	0.000	
	4								
	5								
24	1	X	X	X	X	X	X	X	0.25
	2	0.453	0.904	94.70	0.00	1.00	0.00	0.001	
	3	0.307	0.606	94.70	63.01	1.00	63.01	0.000	
	4								
	5								

PERFORMANCE DATA

Date	Reactor	Total Product. (MG)	Max. Flow Rate (MGD)	Min UV Trans. (%)	Minimum Meas'd UV Dose (mJ/cm^2)	Sensor CF	Adjusted Minimum UV Dose (mJ/cm^2)	Total Off-Spec Product. (MG)	Consec. Off-Spec Hours (hr)
		OPERATIONAL DATA							
25	1	X	X	X	X	X	X	X	0.50
	2	0.440	1.102	94.80	0.00	1.00	0.00	0.002	
	3	0.295	0.693	94.80	57.45	1.00	57.45	0.000	
	4								
	5								
26	1	X	X	X	X	X	X	X	0.000
	2	0.452	0.882	100.00	41.83	1.00	41.83	0.000	
	3	0.299	0.589	100.00	65.08	1.00	65.08	0.000	
	4								
	5								
27	1	X	X	X	X	X	X	X	0.000
	2	0.375	0.938	94.00	37.58	1.00	37.58	0.000	
	3	0.253	0.621	94.00	60.13	1.00	60.13	0.000	
	4								
	5								
28	1	X	X	X	X	X	X	X	0.000
	2	0.387	0.952	93.20	39.68	1.00	39.68	0.000	
	3	0.264	0.629	93.20	60.89	1.00	60.89	0.000	
	4								
	5								
29	1	X	X	X	X	X	X	X	0.25
	2	0.449	1.000	93.40	1.64	1.00	1.64	0.010	
	3	0.302	0.656	93.40	59.10	1.00	59.10	0.000	
	4								
	5								
30	1	X	X	X	X	X	X	X	0.000
	2	0.392	1.025	93.60	33.79	1.00	33.79	0.000	
	3	0.263	0.678	93.60	57.67	1.00	57.67	0.000	
	4								
	5								
31	1	X	X	X	X	X	X	X	0.000
	2	0.388	1.038	93.70	29.30	1.00	29.30	0.000	
	3	0.258	0.668	93.70	56.74	1.00	56.74	0.000	
	4								
	5								

SUBMITTED BY: Tomas Sanchez Jr.

Certificate No. and Grade: WS0012772, B

Date: January 10, 2018

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 Utility

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022 **Plant ID No.:** 20831 **Month:** December **Year:** 2017

DAILY MINIMUM INACTIVATION

Reactor Range	Date	Min Dose (mJ/cm²)	Inactivation Credit Achieved Giardia Log	Virus Log	Crypto Log	Reactor Range	Date	Min Dose (mJ/cm²)	Min Inactivation Giardia Log	Virus Log	Crypto Log
1 to 3	1	0.00	1.00	0.00	1.00	1 to 3	9	14.71	3.46	0.00	1.00
	2	0.00	1.00	0.00	1.00		10	37.13	4.00	0.45	1.00
	3	0.00*	1.00	0.00	1.00		11	31.94	4.00	0.29	1.00
	4	2.74	1.38	0.00	1.00		12	41.33	4.00	0.56	1.00
	5	0.00	1.00	0.00	1.00		13	27.73	4.00	0.16	1.00
	6	33.83	4.00	0.35	1.00		14	28.46	4.00	0.19	1.00
	7	37.78	4.00	0.46	1.00		15	0.00*	1.00	0.00	1.00
	8	31.88	4.00	0.29	1.00		16	36.17	4.00	0.42	1.00

DAILY MINIMUM INACTIVATION

Reactor Range	Date	Min Dose (mJ/cm²)	Min Inactivation Giardia Log	Virus Log	Crypto Log	Reactor Range	Date	Min Dose (mJ/cm²)	Min Inactivation Giardia Log	Virus Log	Crypto Log
1 to 3	17	38.20	4.00	0.48	1.00	1 to 3	25	0.00	1.00	0.00	1.00
	18	31.82	4.00	0.29	1.00		26	41.83	4.00	0.58	1.00
	19	0.00*	1.00	0.00	1.00		27	37.58	4.00	0.46	1.00
	20	0.00*	1.00	0.00	1.00		28	39.68	4.00	0.52	1.00
	21	40.02	4.00	0.53	1.00		29	1.64	1.00	0.00	1.00
	22	0.00*	1.00	0.00	1.00		30	33.79	4.00	0.35	1.00
	23	33.75	4.00	0.35	1.00		31	29.30	4.00	0.21	1.00
	24	0.00	1.00	0.00	1.00						

Total volume of water treated by all CDA reactors: 22.45 MG

Total volume of off-spec water produced by all CDA reactors: 0.08 MG

Percentage of off-spec water produced by all CDA reactors: 0.37 %

Crypto Log-Inactivation Credit for treatment by CDA reactors: 1.00 log

Treated water pumpage and total production by all UV reactors differ by more than 15% on these days: 18, 28,

SUBMITTED BY: Tomas Sanchez Jr.

Certificate No. and Grade: WS0012772, B **Date:** January 10, 2018

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 Utility

PLANT NAME OR NUMBER: Rio Bravo

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

Month: December Year: 2017

CALIBRATION DATA

UV Sensor Calibration Report for Calculated Dose Reactors

CDA Reactor Number	Calibration Date and Data	Duty Sensor	Duty Sensor Serial #	Ref Sensor Serial #	Duty Sensor Reading (mJ/cm²)	Ref Sensor Reading (mJ/cm²)	Cal Ratio	Duty Sensor Replaced?	Calculated Sensor CF
UVCD No. 1	Previous Month's Sensor CF	1	ND	ND	ND	ND	nd		off-line
		2							
		3							
	1.00	4							
	Calibration Date	5							
		6							
	12/1/17	7							
	New Sensor CF	8							
		9							
	1.00	10							
UVCD No. 2	Previous Month's Sensor CF	1	44	38	76.50	80.50	0.95	NA	1.00
		2							
		3							
	1.00	4							
	Calibration Date	5							
		6							
	12/1/17	7							
	New Sensor CF	8							
		9							
	1.00	10							
UVCD No. 3	Previous Month's Sensor CF	1	39	38	84.40	85.20	0.99	NA	1.00
		2							
		3							
	1.00	4							
	Calibration Date	5							
		6							
	12/1/17	7							
	New Sensor CF	8							
		9							
	1.00	10							
UVCD No. 4	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 5	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							

CALIBRATION DATA

UV Sensor Calibration Report for Calculated Dose Reactors

CDA Reactor Number	Calibration Date	Duty Sensor	Duty Sensor Serial #	Ref Sensor Serial #	Duty Sensor Reading (mJ/cm²)	Ref Sensor Reading (mJ/cm²)	Cal Ratio	Duty Sensor Replaced?	Calculated Sensor CF
UVCD No. 6	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 7	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 8	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 9	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 10	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							

SUBMITTED BY: Tomas Sanchez Jr.

Certificate No. and Grade: WS0012772, B

Date: January 10, 2018

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 Utility

PLANT NAME OR NUMBER: Rio Bravo

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

Month: December **Year:** 2017

CALIBRATION DATA

UV Sensor Calibration Report for Calculated Dose Reactors

CDA Reactor Number	Calibration Date	Duty Sensor	Duty Sensor Serial #	Ref Sensor Serial #	Duty Sensor Reading (mJ/cm²)	Ref Sensor Reading (mJ/cm²)	Cal Ratio	Duty Sensor Replaced?	Calculated Sensor CF
UVCD No. 11	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 12	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 13	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 14	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 15	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							

CALIBRATION DATA

UV Sensor Calibration Report for Calculated Dose Reactors

CDA Reactor Number	Calibration Date	Duty Sensor	Duty Sensor Serial #	Ref Sensor Serial #	Duty Sensor Reading (mJ/cm²)	Ref Sensor Reading (mJ/cm²)	Cal Ratio	Duty Sensor Replaced?	Calculated Sensor CF
UVCD No. 16	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 17	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 18	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 19	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							
UVCD No. 20	Previous Month's Sensor CF	1							
		2							
		3							
		4							
	Calibration Date	5							
		6							
		7							
	New Sensor CF	8							
		9							
		10							

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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 Utility

PLANT NAME OR NUMBER: Rio Bravo

PWS ID No.: 2400022

Plant ID 20831

Month: December

Year: 2017

CALIBRATION DATA

Benchtop UVT Analyzer Serial Number: P0108955

UVT Analyzer Number	Week	Calibration Date	On-line UVT Analyzer Serial #	On-line Reading (% UVT)	Grab Sample Reading (% UVT)	Difference (% UVT)	Recalibration Performed? (if Diff > 2%)	Other Action Taken
UVT No. 1	1	12/2/17	AF45WD	100.00	100.00	0.00	NA	NA
	2	12/4/17	AF45WD	100.00	100.00	0.00	NA	NA
	3	12/11/17	AF45WD	100.00	92.60	7.40	NO	None
	4	12/18/17	AF45WD	100.00	90.10	9.90	NO	None
	5	12/25/17	AF45WD	100.00	93.20	6.80	NO	None
UVT No. 2	1							
	2							
	3							
	4							
	5							
UVT No. 3	1							
	2							
	3							
	4							
	5							
UVT No. 4	1							
	2							
	3							
	4							
	5							
UVT No. 5	1							
	2							
	3							
	4							
	5							
UVT No. 6	1							
	2							
	3							
	4							
	5							
UVT No. 7	1							
	2							
	3							
	4							
	5							
UVT No. 8	1							
	2							
	3							
	4							
	5							
UVT No. 9	1							
	2							
	3							
	4							
	5							
UVT No. 10	1							
	2							
	3							
	4							
	5							

CALIBRATION DATA

Benchtop UVT Analyzer Serial Number: P0108955

UVT Analyzer Number	Week	Calibration Date	On-line UVT Analyzer Serial #	On-line Reading (% UVT)	Grab Sample Reading (% UVT)	Difference (% UVT)	Recalibration Performed? (if Diff > 2%)	Other Action Taken
UVT No. 11	1							
	2							
	3							
	4							
	5							
UVT No. 12	1							
	2							
	3							
	4							
	5							
UVT No. 13	1							
	2							
	3							
	4							
	5							
UVT No. 14	1							
	2							
	3							
	4							
	5							
UVT No. 15	1							
	2							
	3							
	4							
	5							
UVT No. 16	1							
	2							
	3							
	4							
	5							
UVT No. 17	1							
	2							
	3							
	4							
	5							
UVT No. 18	1							
	2							
	3							
	4							
	5							
UVT No. 19	1							
	2							
	3							
	4							
	5							
UVT No. 20	1							
	2							
	3							
	4							
	5							

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