

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

PWS 2430001 MR 20150113 SWMOR

PUBLIC WATER

SYSTEM NAME: City of Wichita Falls

PLANT NAME

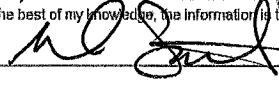
OR NUMBER: Cypress DPR (Microfiltration/RO)

PWS ID No.: 2430001

Plant ID No.: 410791

Report for

the Month of: December 2014

Operator's Signature: 

Certificate No. & Grade: W00023530, A Surface

Date: January 10, 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.

TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	186	Number of 4-hour periods when plant was off-line:	0
Number of readings above 0.10 NTU:	28	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:	0.23 NTU	Average turbidity value:	0.08 NTU
Minimum turbidity reading:	0.06 NTU	Standard deviation:	0.022 NTU
CFE 95 th percentile value:	0.12 NTU	IFE 95 th percentile:	0.284 NTU

Bin Class:	4	Crypto Credit Required:	5.5 (7A)	Crypto Credit Achieved:	6.8 (7B)	Bin 3&4 Credits:	2.8 (7C)
Watershed Protection:	0.0	Conventional Treatment:	3.0	Second Stage Filtration:	0.0		
Bank Filtration:	0.0	Enhanced Filter Performance:	0.5	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:	2.8	Perform. Demonstration:	0.5		

Number of days with a low CT for no more than 4.0 consecutive hours:	0	Average log inactivation for Giardia:	5.74
Number of days with a low CT for more than 4.0 consecutive hours:	0 (4)	Average log inactivation for viruses:	10.77
		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 when disinfectant residual leaving the plant was not properly monitored:	0
Number of days with a low residual for more than 4.0 consecutive hours:	0 (5)		

DISTRIBUTION SYSTEM

Minimum disinfectant residual required in distribution system:	0.5 mg/L, measured as Total Chlorine		
Total number of readings this month:	162 (at least 100 required) (8)	Percentage of readings with a low residual this month:	0.0 % (5A)
Average disinfectant residual value:	3.27	Percentage of readings with a low residual last month:	0.0 % (6B)
Number of readings with a low residual:	0		
Number of readings with no detectable residual:	0		

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 Technology

Enhanced IFE Worksheet

Membranes-PBT

Performance Demonstration

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

This edition of the SWMOR-Alt was customized by the TCEQ on 05/18/14 for use during the City of Wichita Falls Temporary Direct Potable Reuse Project.

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: City of Wichita Falls PLANT NAME OR NUMBER: Cypress DPR (Microfiltration/RO)

PWS ID No.: 2430001 Plant ID No.: 410791 Connections: 33,438

Month: December Year: 2014 Population: _____

					PERFORMANCE DATA													
Date	Raw Water Pumpage (MGD)	Treated Water Pumpage (MGD)	RAW WATER ANALYSES		SETTLED WATER TURBIDITY (Optional Data)						FINISHED WATER QUALITY							
			NTU	Alk.	Basin No.						Combined Filter Effluent Turbidity						Lowest	
					1	2	3	4	5	6	NTU1	NTU2	NTU3	NTU4	NTU5	NTU6	Residual	Time ^{min}
1	5.000	10.060	2	53	1.8	1.4					0.09	0.09	0.09	0.09	0.10	0.11	3.5	
2	5.000	9.950	7	45	1.7	1.2					0.12	0.11	0.10	0.10	0.10	0.12	3.7	
3	5.000	9.930	4	57	1.5	1.9					0.11	0.11	0.10	0.10	0.10	0.10	3.7	
4	5.000	10.430	3	49	1.8	2.8					0.10	0.09	0.09	0.08	0.10	0.10	3.7	
5	5.000	10.020	2	69	1.6	3.4					0.09	0.11	0.12	0.11	0.11	0.11	3.7	
6	5.000	9.720	3	50	1.4	1.5					0.11	0.11	0.10	0.10	0.10	0.11	3.6	
7	5.000	10.850	2	61	1.6	4.2					0.10	0.11	0.11	0.11	0.11	0.23	3.6	
8	5.000	9.900	3	51	1.8	1.0					0.15	0.10	0.13	0.12	0.12	0.12	3.7	
9	5.000	9.530	3	79	1.7	1.1					0.12	0.11	0.10	0.09	0.09	0.09	3.6	
10	5.000	9.970	3	84	2.2	1.0					0.09	0.09	0.09	0.09	0.09	0.09	3.5	
11	5.000	9.860	2	84	1.7	0.8					0.10	0.10	0.11	0.10	0.10	0.10	3.4	
12	5.000	10.190	3	70	1.8	1.0					0.10	0.10	0.10	0.09	0.08	0.08	3.4	
13	5.000	9.570	4	70	2.1	1.2					0.08	0.08	0.08	0.08	0.08	0.08	3.4	
14	5.000	10.530	3	65	1.5	1.3					0.09	0.09	0.09	0.08	0.10	0.10	3.3	
15	5.000	10.050	4	66	1.5	1.4					0.11	0.10	0.10	0.09	0.09	0.09	3.3	
16	5.000	10.240	2	59	1.4	1.1					0.09	0.09	0.09	0.09	0.08	0.08	3.3	
17	5.000	10.640	5	83	4.8	1.1					0.07	0.07	0.07	0.07	0.07	0.07	3.3	
18	5.000	9.830	2	91	1.9	0.7					0.06	0.06	0.06	0.06	0.06	0.06	3.4	
19	5.000	10.440	2	94	1.4	0.6					0.07	0.06	0.06	0.06	0.06	0.06	3.4	
20	5.000	9.760	3	87	1.6	0.8					0.08	0.08	0.07	0.08	0.07	0.07	3.4	
21	5.000	10.460	2	92	1.4	1.1					0.09	0.08	0.08	0.08	0.07	0.07	3.5	
22	5.000	8.837	3	66	3.2	1.2					0.07	0.07	0.07	0.07	0.08	0.08	3.6	
23	5.000	9.290	4	66	1.6	1.0					0.06	0.09	0.08	0.07	0.06	0.06	3.0	
24	5.000	9.610	3	75	1.8	1.1					0.06	0.06	0.06	0.06	0.06	0.06	3.1	
25	5.000	9.610	4	73	2.3	1.2					0.07	0.07	0.07	0.07	0.07	0.07	3.0	
26	5.000	10.250	3	62	1.9	1.4					0.06	0.06	0.06	0.06	0.06	0.06	3.0	
27	5.000	9.550	3	59	1.6	1.1					0.07	0.08	0.07	0.07	0.06	0.06	3.0	
28	5.000	9.820	3	52	1.6	1.0					0.06	0.06	0.06	0.06	0.06	0.07	3.0	
29	5.000	10.240	3	50	1.1	1.0					0.06	0.06	0.06	0.06	0.07	0.07	2.9	
30	5.000	9.120	5	64	1.6	1.5					0.07	0.08	0.07	0.07	0.07	0.06	3.3	
31	5.000	10.240	4	56	2.8	1.2					0.06	0.07	0.07	0.07	0.09	0.09	3.2	
Total	155.000	308.497	NOTE: ONLY use the "Time ^{min} " column to show the length of time that the disinfectant residual entering the distribution system fell below the acceptable level.															
Avg	5.000	9.952																
Max	5.000	10.850																
Min	5.000	8.837																

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

SUBMITTED BY: _____

Certificate No. and Grade: _____

WO0023530, A Surface

Date: January 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: City of Wichita Falls

PLANT NAME

OR NUMBER: Cypress DPR (Microfiltration/RO)

PWS ID No.: 2430001

Plant ID No.: 410791

Month:

December

Year:

2014

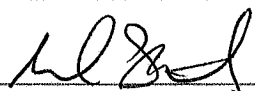
PERFORMANCE DATA

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	0.13	X	0.12	X	0.10	X	0.19	0.15	0.16	0.13										
2	0.10	X	0.10	X	0.26	0.14	0.16	X	0.12	X										
3	0.15	0.12	0.18	0.12	0.14	X	0.12	X	0.10	X										
4	0.15	X	0.10	X	0.10	X	0.17	0.14	0.19	0.13										
5	0.27	0.14	0.29	0.13	0.30	0.14	0.15	X	0.11	X										
6	0.13	X	0.11	X	0.12	X	0.29	0.13	0.22	0.14										
7	0.69	X	0.64	X	0.72	0.09	0.69	0.12	0.79	0.07										
8	0.24	0.08	0.18	0.08	0.19	X	0.26	X	0.22	X										
9	0.13	X	0.12	X	0.12	X	0.13	X	0.11	X										
10	0.10	X	0.09	X	0.23	0.14	0.27	0.15	0.09	X										
11	0.18	0.14	0.18	0.11	0.12	X	0.15	X	0.18	0.12										
12	0.15	X	0.11	X	0.10	X	0.11	X	0.10	X										
13	0.09	X	0.08	X	0.27	0.13	0.09	X	0.08	X										
14	0.16	0.14	0.16	0.12	0.15	X	0.17	0.13	0.15	0.11										
15	0.16	X	0.11	X	0.11	X	0.12	X	0.11	X										
16	0.11	X	0.09	X	0.10	X	0.11	X	0.09	X										
17	0.09	X	0.20	0.10	0.21	0.14	0.19	0.12	0.08	X										
18	0.07	X	0.13	X	0.09	X	0.10	X	0.16	0.10										
19	0.17	0.10	0.08	X	0.08	X	0.09	X	0.11	X										
20	0.08	X	0.07	X	0.07	X	0.07	X	0.07	X										
21	0.06	X	0.06	X	0.14	0.08	0.28	0.10	0.06	X										
22	0.10	X	0.16	0.10	0.13	X	0.14	X	0.10	X										
23	0.22	0.09	0.08	X	0.07	X	0.08	X	0.26	0.09										
24	0.07	X	0.07	X	0.07	X	0.07	X	0.07	X										
25	0.07	X	0.16	0.09	0.21	0.10	0.15	0.09	0.07	X										
26	0.18	0.10	0.08	X	0.07	X	0.08	X	0.06	X										
27	0.10	X	0.08	X	0.07	X	0.08	X	0.17	0.09										
28	0.07	X	0.07	X	0.07	X	0.07	X	0.07	X										
29	0.07	X	0.07	X	0.24	0.10	0.14	0.10	0.07	X										
30	0.07	X	0.23	X	0.08	X	0.09	X	0.07	X										
31	0.19	X	0.09	X	0.09	X	0.09	X	0.18	X										

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	0	0	0	0	0						
	Number of days with event(s) above 1.0 NTU this month	0	0	0	0	0						
	Number of days with event(s) above 1.0 NTU last month	0	0	0	0	0						
	Number of days with event(s) above 1.0 NTU two months ago	0	0	0	0	0						
	Total number of days with event(s) above 1.0 NTU in three months	0	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						N
	Is the plant required to submit a Filter Profile Report?	N	N	N	N	N						
	Is the plant required to submit a Filter Assessment Report?	N	N	N	N	N						
Is the plant required to submit a Request for Compliance CPE?											N	

SUBMITTED BY:



Certificate No.

and Grade: W00023530, A Surface

Date: January 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: City of Wichita Falls

PLANT NAME

OR NUMBER:

Cypress DPR (Microfiltration/RO)

PWS ID No.: 2430001

Plant ID No.: 410791

Month:

December

Year:

2014

DISINFECTION PROCESS PARAMETERS									
APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS			
Parameters	Disinfection Zones					Log Inactivations			
	D1	D2	D3	D4	D5	Giardia lamblia Cysts		Viruses	
Flow Rate (MGD)	7.500	7.500	3.308	10.000	10.000	2.0		5.0	
T ₁₀ (minutes)	357.0	223.2	5.6	67.1	223.3				

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
1	CLA D1	3.0	8.600	15.3	8.6				
	CLA D2	2.0	8.600	15.0	8.5				
	CLA D3	2.3	2.200	16.7	8.8	5.41	9.89	1.94	
	CLA D4	3.9	10.000	9.8	9.2			(V)	
	CLA D5	3.6	10.000	10.1	9.0				
2	CLA D1	2.3	8.800	12.9	6.4				
	CLA D2	2.5	8.800	15.0	6.4				
	CLA D3	1.9	2.200	17.3	6.6	4.90	8.65	1.73	
	CLA D4	3.8	10.000	9.6	8.9			(V)	
	CLA D5	3.7	10.000	11.8	8.9				
3	CLA D1	1.7	8.800	10.3	6.6				
	CLA D2	2.5	8.800	16.2	6.4				
	CLA D3	2.2	2.200	17.6	6.6	4.45	7.76	1.55	
	CLA D4	3.8	10.000	10.5	9.0			(V)	
	CLA D5	3.8	10.000	11.4	9.0				
4	CLA D1	2.9	8.900	17.8	6.6				
	CLA D2	2.8	8.900	17.6	6.4				
	CLA D3	1.7	2.200	18.3	6.6	6.32	12.05	2.41	
	CLA D4	3.7	10.000	13.7	9.2			(V)	
	CLA D5	3.8	10.000	13.7	9.1				
5	CLA D1	2.8	8.800	19.3	6.6				
	CLA D2	2.8	8.800	19.1	6.5				
	CLA D3	2.6	2.200	19.8	6.8	6.95	13.55	2.71	
	CLA D4	3.8	10.000	14.7	9.1			(V)	
	CLA D5	3.8	10.000	14.9	9.1				
6	CLA D1	1.2	8.800	18.2	6.5				
	CLA D2	2.2	8.800	19.1	6.4				
	CLA D3	2.2	2.200	19.3	6.6	5.07	9.76	1.95	
	CLA D4	4.3	10.000	15.0	8.9			(V)	
	CLA D5	4.1	10.000	15.1	8.9				
7	CLA D1	3.1	8.800	17.2	6.5				
	CLA D2	2.5	8.800	18.7	6.3				
	CLA D3	1.9	2.200	19.1	6.8	6.54	12.42	2.48	
	CLA D4	3.9	10.000	13.1	8.9			(V)	
	CLA D5	3.9	10.000	13.2	9.0				
8	CLA D1	3.0	8.700	18.2	6.5				
	CLA D2	2.8	8.700	18.9	6.4				
	CLA D3	2.6	2.200	18.9	6.6	7.32	14.24	2.85	
	CLA D4	4.1	10.000	14.1	8.8			(V)	
	CLA D5	4.2	10.000	16.1	8.9				

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
9	CLA D1	3.4	8.700	18.6	6.7				
	CLA D2	2.5	8.700	18.3	6.4				
	CLA D3	2.6	2.200	19.0	6.6	6.71	12.81	2.56	
	CLA D4	3.7	10.000	14.8	8.8			(V)	
	CLA D5	3.5	10.000	14.7	8.8				
10	CLA D1	2.8	8.800	18.1	6.8				
	CLA D2	2.3	8.800	17.8	6.6				
	CLA D3	2.1	2.200	18.9	6.9	6.05	11.68	2.34	
	CLA D4	3.7	10.000	15.0	9.0			(V)	
	CLA D5	3.2	10.000	15.1	8.8				
11	CLA D1	2.8	8.800	19.3	6.9				
	CLA D2	2.4	8.800	19.7	6.7				
	CLA D3	2.9	2.200	20.0	7.0	6.66	13.06	2.61	
	CLA D4	3.6	10.000	18.5	9.1			(V)	
	CLA D5	3.5	10.000	15.3	9.0				
12	CLA D1	2.8	8.800	19.1	6.7				
	CLA D2	2.6	8.800	19.5	6.8				
	CLA D3	2.4	2.200	19.5	6.9	6.64	13.03	2.61	
	CLA D4	4.1	10.000	15.7	9.2			(V)	
	CLA D5	3.1	10.000	16.0	9.0				
13	CLA D1	1.8	8.800	18.6	6.7				
	CLA D2	2.3	8.800	17.2	7.2				
	CLA D3	2.4	2.200	19.8	7.0	5.42	10.55	2.11	
	CLA D4	3.4	10.000	18.5	9.0			(V)	
	CLA D5	3.6	10.000	16.8	9.2				
14	CLA D1	1.0	8.800	21.5	8.5				
	CLA D2	2.4	8.800	20.1	6.5				
	CLA D3	2.2	2.200	20.3	6.7	5.15	10.16	2.04	
	CLA D4	3.5	10.000	17.3	9.0			(V)	
	CLA D5	3.5	10.000	16.9	9.0				
15	CLA D1	3.0	8.800	19.1	6.9				
	CLA D2	2.5	8.800	18.0	6.5				
	CLA D3	2.3	2.200	18.5	6.8	6.68	13.08	2.61	
	CLA D4	3.5	10.000	15.6	9.0			(V)	
	CLA D5	3.4	10.000	15.9	9.0				
16	CLA D1	2.6	8.800	18.2	6.5				
	CLA D2	2.3	8.800	18.2	6.5				
	CLA D3	1.9	2.200	19.8	6.8	6.00	11.54	2.31	
	CLA D4	4.0	10.000	14.3	9.0			(V)	
	CLA D5	3.5	10.000	14.3	8.9				

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

SUBMITTED BY:



Certificate No.

and Grade:

W00023530, A Surface

Date:

January 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: City of Wichita Falls

PLANT NAME:
OR NUMBER: Cypress DPR (Microfiltration/RO)

PWS ID No.: 2430001

Plant ID No.: 410791

Month: December

Year: 2014

DISINFECTION PROCESS PARAMETERS									
APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS			
Parameters	Disinfection Zones					Log Inactivations			
	D1	D2	D3	D4	D5	Giardia lamblia Cysts		Virus	
Flow Rate (MGD)	7.50	7.50	3.31	10.00	10.00	2.0		5.0	
T ₁₀ (minutes)	357.00	223.20	5.60	67.10	223.30				

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time (min)
17	CLA D1	2.1	6.800	14.0	6.9				
	CLA D2	2.0	6.800	17.0	6.6				
	CLA D3	2.2	2.200	18.3	7.0	4.81	8.82	1.76	
	CLA D4	3.5	10.000	14.0	8.9			(V)	
	CLA D5	3.7	10.000	13.0	8.8				
18	CLA D1	2.9	6.900	17.4	6.8				
	CLA D2	2.0	6.900	16.4	6.8				
	CLA D3	2.1	2.200	17.4	6.9	5.49	10.29	2.06	
	CLA D4	3.7	10.000	13.1	8.9			(V)	
	CLA D5	3.0	10.000	12.9	8.7				
19	CLA D1	2.1	6.800	17.1	6.8				
	CLA D2	2.6	6.800	17.5	6.6				
	CLA D3	1.6	2.200	18.4	7.0	5.60	10.58	2.12	
	CLA D4	4.0	10.000	13.2	8.9			(V)	
	CLA D5	3.8	10.000	13.9	8.8				
20	CLA D1	1.7	6.800	17.3	6.7				
	CLA D2	2.8	6.800	16.9	6.6				
	CLA D3	2.1	2.200	18.0	6.9	5.29	10.00	2.00	
	CLA D4	3.9	10.000	13.6	9.0			(V)	
	CLA D5	3.7	10.000	14.1	9.0				
21	CLA D1	3.3	6.900	17.2	7.0				
	CLA D2	2.5	6.900	16.3	6.7				
	CLA D3	2.3	2.200	17.2	7.0	6.20	11.68	2.34	
	CLA D4	4.1	10.000	12.3	9.1			(V)	
	CLA D5	3.2	10.000	13.4	8.9				
22	CLA D1	3.3	6.800	16.8	6.7				
	CLA D2	2.8	6.900	17.1	6.6				
	CLA D3	2.3	2.200	18.1	6.8	6.72	12.74	2.55	
	CLA D4	4.1	10.000	14.1	9.1			(V)	
	CLA D5	3.8	10.000	14.2	9.0				
23	CLA D1	3.2	6.800	15.4	6.8				
	CLA D2	2.2	6.800	16.8	6.5				
	CLA D3	2.3	2.200	17.0	6.9	6.34	11.87	2.37	
	CLA D4	4.1	10.000	14.3	9.1			(V)	
	CLA D5	4.2	10.000	14.4	9.0				
24	CLA D1	0.9	6.700	13.4	6.7				
	CLA D2	2.4	6.700	16.5	6.8				
	CLA D3	1.9	2.200	18.3	6.9	3.97	7.19	1.44	
	CLA D4	3.7	10.000	11.8	9.1			(V)	
	CLA D5	3.6	10.000	12.3	9.0				

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time (min)
25	CLA D1	3.3	6.800	13.7	6.7				
	CLA D2	2.3	6.800	14.9	6.5				
	CLA D3	2.1	2.200	16.7	6.7	5.65	10.19	2.04	
	CLA D4	3.8	10.000	12.8	9.0			(V)	
	CLA D5	3.5	10.000	12.7	9.0				
26	CLA D1	2.4	6.800	18.0	6.6				
	CLA D2	2.3	6.800	17.5	6.5				
	CLA D3	2.3	2.200	18.3	7.0	5.73	10.89	2.18	
	CLA D4	3.9	10.000	13.6	9.1			(V)	
	CLA D5	3.7	10.000	13.4	9.0				
27	CLA D1	2.9	6.800	15.2	6.6				
	CLA D2	2.1	6.800	14.9	6.5				
	CLA D3	2.1	2.200	15.5	6.7	5.34	9.65	1.93	
	CLA D4	3.5	10.000	10.9	9.1			(V)	
	CLA D5	3.7	10.000	11.5	9.1				
28	CLA D1	2.7	6.800	14.8	6.6				
	CLA D2	2.2	6.800	14.3	6.4				
	CLA D3	2.4	2.200	16.1	6.7	4.99	8.87	1.77	
	CLA D4	3.3	10.000	8.9	9.0			(V)	
	CLA D5	3.5	10.000	10.7	9.0				
29	CLA D1	2.5	4.800	14.2	6.6				
	CLA D2	2.0	4.800	13.5	6.4				
	CLA D3	2.0	2.200	17.7	6.6	6.14	10.83	2.17	
	CLA D4	3.0	8.000	9.5	9.1			(V)	
	CLA D5	3.3	8.000	10.7	9.0				
30	CLA D1	1.9	6.800	11.5	6.4				
	CLA D2	2.7	6.800	15.2	6.2				
	CLA D3	2.3	2.200	16.3	6.5	4.62	8.17	1.63	
	CLA D4	3.6	10.000	12.3	9.1			(V)	
	CLA D5	3.5	10.000	12.3	9.0				
31	CLA D1	2.9	6.700	10.8	6.7				
	CLA D2	2.1	6.700	11.1	6.5				
	CLA D3	2.4	2.200	13.4	6.7	4.85	6.10	1.62	
	CLA D4	4.5	10.000	10.8	9.3			(V)	
	CLA D5	3.6	10.000	10.8	9.2				
						Max	7.32	14.24	
						Min	3.97	7.19	
						Avg	5.74	10.77	
						SD	0.82	1.83	

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

SUBMITTED BY:



Certificate No.
and Grade:

W00023530, A Surface

Date: January 19, 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.)

Enhanced Individual Filter Performance Data Page

PUBLIC WATER
SYSTEM NAME:

City of Wichita Falls

PLANT NAME

OR NUMBER:

Cypress DPR (Microfiltration/RO)

PWS ID No.:

2430001

Plant ID No.:

410791

Month:

December

Year:

2014

Optimized Individual Filter Effluent (IFE) Performance

PERFORMANCE DATA										
Filter No.	Total No. of Readings	No. of Readings > or = 0.15 NTU	Percent of Readings > or = 0.15 NTU	No. of Confirmed Readings > 0.3 NTU		Filter No.	Total No. of Readings	No. of Readings > or = 0.15 NTU	Percent of Readings > or = 0.15 NTU	No. of Confirmed Readings > 0.3 NTU
1	2,947	34	1.15%	1		26				
2	2,950	40	1.36%	1		27				
3	2,942	58	1.97%	1		28				
4	2,944	57	1.94%	1		29				
5	2,940	26	0.88%	1		30				
6						31				
7						32				
8						33				
9						34				
10						35				
11						36				
12						37				
13						38				
14						39				
15						40				
16						41				
17						42				
18						43				
19						44				
20						45				
21						46				
22						47				
23						48				
24						49				
25						50				
Summary	Were more than 5% of the IFE readings from any of the filters above the 0.15 NTU performance criteria?			No	Giardia and Cryptosporidium Log Removal Credit Allowed this Month For Enhanced IFE Performance					0.0
	Did any of the filters have confirmed IFE readings above 0.3 NTU?			Yes						

SUBMITTED BY:



Certificate No.

and Grade:

WO0023530, A Surface

Date:

January 10, 2015

MEMBRANE MONTHLY OPERATING REPORT
 FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES
 OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER
 Pressure Decay Rate Direct Integrity Tests

PUBLIC WATER
 SYSTEM NAME: City of Wichita Falls

PLANT NAME
 OR NUMBER: Cypress DPR (Microfiltration/RO)

PWS ID No.: 2430001

Plant ID No.: 410791

Month: December

Year: 2014

TEST PARAMETERS & ADDITIONAL DATA

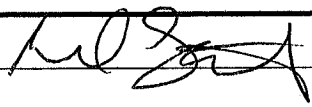
DIT CONDITIONS & ADDITIONAL DATA	Unit No. 1										Unit No. 2									
	DIT Cond'n's	P _{test} psi	LRC -	UCL psi/min		Prev. Month Data	DIT _{test} date	Pass? Year/No	C/A Success?		DIT Cond'n's	P _{test} psi	LRC -	UCL psi/min		Prev. Month	DIT _{test} date	Pass? Year/No	C/A Success?	
		16.5	2.8	1.650			11/30/14	YES	NA			16.5	2.8	1.650			11/30/14	YES	NA	
	Optional Data	Filt.Flux gfd	TMP psi								Optional Data	Filt.Flux gfd	TMP psi							

PERFORMANCE DATA

Date	Unit No. 1										Unit No. 2									
	Operational Data					DIT Data					Operational Data					DIT Data				
	Daily Pump. MG	Norm. Filt.Flux gfd	TMP psi	Norm. Spc.Flux gfd/psi	Daily Max. mNTU	CIP done?	P _{initial} psi	ΔP _{test} /Δt psi/min	DIT pass?	C/A success?	Daily Pump. MG	Norm. Filt.Flux gfd	TMP psi	Norm. Spc.Flux gfd/psi	Daily Max. mNTU	CIP done?	P _{initial} psi	ΔP _{test} /Δt psi/min	DIT pass?	C/A success?
1	1.291	14.1	7.4	1.92	31		18.2	0.550	YES	NA	1.312	14.1	3.6	3.91	18		18.4	0.450	YES	NA
2	1.231	14.1	7.2	1.97	38		18.3	0.540	YES	NA	1.272	14.1	3.6	3.93	29		18.3	0.440	YES	NA
3	1.291	14.1	7.4	1.92	34		18.2	0.550	YES	NA	1.312	14.1	3.6	3.91	20		18.4	0.450	YES	NA
4	1.270	14.1	7.1	1.99	46		18.2	0.560	YES	NA	1.282	14.1	3.5	4.03	24		18.4	0.460	YES	NA
5	1.304	14.1	7.0	2.01	43		18.1	0.610	YES	NA	1.299	14.2	3.4	4.15	28		18.3	0.500	YES	NA
6	1.270	14.1	6.7	2.10	38		18.1	0.600	YES	NA	1.247	14.4	3.4	4.30	35		18.4	0.480	YES	NA
7	1.370	14.1	7.1	2.00	34		18.1	0.600	YES	NA	1.368	14.1	3.4	4.12	25		18.3	0.500	YES	NA
8	1.259	14.1	6.8	2.07	34		18.2	0.600	YES	NA	1.265	14.2	3.5	4.08	16		18.4	0.480	YES	NA
9	1.282	14.2	7.3	1.94	37		18.2	0.590	YES	NA	1.315	14.2	3.6	3.96	19		18.3	0.480	YES	NA
10	1.263	14.2	7.1	2.00	38		18.0	0.630	YES	NA	1.215	14.2	3.6	3.96	63		18.3	0.480	YES	NA
11	1.192	14.2	7.5	1.89	42		18.2	0.590	YES	NA	1.310	14.2	3.7	3.84	24		18.4	0.480	YES	NA
12	1.196	14.2	7.0	2.03	40		18.1	0.630	YES	NA	1.235	14.2	3.6	4.00	51		18.3	0.460	YES	NA
13	1.216	14.2	7.4	1.91	38		18.2	0.610	YES	NA	1.302	14.2	3.7	3.83	27		18.4	0.480	YES	NA
14	1.302	14.2	7.1	2.00	42		18.0	0.620	YES	NA	1.182	14.2	3.6	3.94	50		18.3	0.520	YES	NA
15	1.252	14.2	7.6	1.86	32		18.2	0.600	YES	NA	1.269	14.2	3.9	3.88	23		18.4	0.480	YES	NA
16	1.324	14.2	7.8	1.82	39		18.1	0.640	YES	NA	1.317	14.2	4.0	3.59	23		18.2	0.510	YES	NA
17	0.596	14.2	6.1	2.33	48	YES	16.8	0.950	YES	NA	1.482	14.2	4.3	3.28	30		18.3	0.490	YES	NA
18	1.556	14.2	6.2	2.28	42		17.6	0.750	YES	NA	1.543	14.2	4.6	3.13	24		18.3	0.480	YES	NA
19	1.372	14.2	6.7	2.14	44		17.9	0.660	YES	NA	1.335	14.2	4.7	3.02	37		18.3	0.470	YES	NA
20	1.267	14.2	6.3	2.26	39		17.8	0.650	YES	NA	1.265	14.2	4.4	3.21	24		18.1	0.520	YES	NA
21	1.225	14.2	6.7	2.13	34		18.0	0.620	YES	NA	1.312	14.2	4.6	3.08	22		18.3	0.470	YES	NA
22	0.934	14.2	6.3	2.26	38		17.8	0.650	YES	NA	0.907	14.2	4.4	3.23	27		18.2	0.510	YES	NA
23	1.235	14.2	6.6	2.15	36		17.9	0.650	YES	NA	1.332	14.2	4.6	3.08	18		18.2	0.490	YES	NA
24	1.289	14.1	6.8	2.07	38		17.8	0.670	YES	NA	1.203	14.1	4.6	3.07	19		17.9	0.610	YES	NA
25	1.249	14.1	7.3	1.92	50		18.0	0.620	YES	NA	1.359	14.1	4.9	2.86	24		18.2	0.580	YES	NA
26	1.260	14.1	7.3	1.94	36		17.9	0.630	YES	NA	1.183	14.1	4.8	2.97	32		17.9	0.550	YES	NA
27	1.273	14.1	7.6	1.87	34		17.9	0.650	YES	NA	1.224	14.1	5.0	2.81	19		18.2	0.540	YES	NA
28	0.994	14.1	7.9	1.79	34		17.9	0.640	YES	NA	0.948	14.1	5.0	2.81	29		18.1	0.520	YES	NA
29	0.855	14.2	8.3	1.72	39		17.9	0.620	YES	NA	0.869	14.2	5.2	2.73	21		18.2	0.490	YES	NA
30	1.224	14.2	8.1	1.76	35		17.9	0.630	YES	NA	1.098	14.2	5.3	2.67	22		18.1	0.520	YES	NA
31	1.000	14.2	9.3	1.53	35		17.9	0.620	YES	NA	1.028	14.2	5.7	2.49	37		18.1	0.500	YES	NA

SUMMARY	Unit No. 1										Unit No. 2									
	Operational Data										Operational Data									
	DIT Data										DIT Data									
	Number of days with DIT triggered by high turbidity or particle count										Number of days with a monitoring violation									
	Number of days with a treatment technique violation										Number of days with a treatment technique violation									

SUBMITTED BY:



Certificate No. and Grade: W00023530, A Surface

Date: January 10, 2015

TCEQ - 20356-MGD (07-01-13)

Membranes, PBT

MMOR

MEMBRANE MONTHLY OPERATING REPORT
 FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES
 OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER (cont.)
 Pressure Decay Rate Direct Integrity Tests (cont.)

PUBLIC WATER
 SYSTEM NAME: City of Wichita Falls

PLANT NAME
 OR NUMBER: Cypress DPR (Microfiltration/RO)

PWS ID No.: 2430001

Plant ID No.: 410791

Month: December

Year: 2014

TEST PARAMETERS & ADDITIONAL DATA

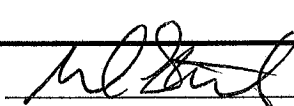
DIT CONDITIONS & ADDITIONAL DATA	Unit No. 3										Unit No. 4									
	DIT Cond'n's	P _{test} psi	LRC -	UCL psi/min		Prev. Month	DIT _{last} date	Pass? Yes/No	C/A Success?		DIT Cond'n's	P _{test} psi	LRC -	UCL psi/min		Prev. Month	DIT _{last} date	Pass? Yes/No	C/A Success?	
		16.5	2.8	1.650			11/30/14	YES	NA			16.5	2.8	1.650			11/30/14	YES	NA	
	Optional Data	Filt.Flux gfd	TMP psi								Optional Data	Filt.Flux gfd	TMP psi							

PERFORMANCE DATA

Date	Unit No. 3										Unit No. 4									
	Operational Data						DIT Data				Operational Data						DIT Data			
	Daily Pump. MG	Norm. Filt.Flux gfd	TMP psi	Norm. Spc.Flux gfd/psi	Daily Max. mNTU	CIP done?	P _{initial} psi	ΔP _{test} /Δt psi/min	DIT pass?	C/A success?	Daily Pump. MG	Norm. Filt.Flux gfd	TMP psi	Norm. Spc.Flux gfd/psi	Daily Max. mNTU	CIP done?	P _{initial} psi	ΔP _{test} /Δt psi/min	DIT pass?	C/A success?
1	1.305	14.2	9.4	1.51	45		18.2	0.510	YES	NA	1.254	14.2	1.4	10.00	29		18.4	0.450	YES	NA
2	1.192	14.1	8.9	1.59	46		18.2	0.500	YES	NA	1.234	14.2	1.5	9.73	26		18.4	0.440	YES	NA
3	1.333	14.2	9.4	1.51	33		18.2	0.510	YES	NA	1.254	14.2	1.4	10.00	27		18.4	0.450	YES	NA
4	1.252	14.1	8.7	1.62	37		18.0	0.540	YES	NA	1.228	14.2	1.4	9.94	36		18.4	0.440	YES	NA
5	1.240	14.1	8.9	1.59	33		18.2	0.540	YES	NA	1.359	14.4	1.3	10.71	31		18.4	0.440	YES	NA
6	1.382	14.1	8.4	1.69	39		18.2	0.540	YES	NA	1.255	14.2	1.3	10.62	27		18.5	0.430	YES	NA
7	1.301	14.1	8.9	1.59	33		18.2	0.540	YES	NA	1.396	14.4	1.4	10.47	46		18.5	0.440	YES	NA
8	1.365	14.1	8.8	1.61	30		18.1	0.550	YES	NA	1.206	14.3	1.4	10.12	22		18.4	0.430	YES	NA
9	1.193	14.2	9.1	1.57	52		18.1	0.540	YES	NA	1.353	14.3	1.4	10.08	29		18.5	0.430	YES	NA
10	1.310	14.2	9.3	1.52	54		18.1	0.540	YES	NA	1.229	14.3	1.5	9.73	28		18.5	0.440	YES	NA
11	1.198	14.2	9.3	1.52	38		18.1	0.550	YES	NA	1.324	14.6	1.5	9.64	36		18.5	0.430	YES	NA
12	1.324	14.2	9.3	1.53	35		18.1	0.550	YES	NA	1.240	14.3	1.5	9.85	37		18.5	0.430	YES	NA
13	1.240	14.2	9.3	1.53	48		18.2	0.560	YES	NA	1.272	14.3	1.5	9.73	36		18.5	0.430	YES	NA
14	1.292	14.2	9.5	1.50	38		18.2	0.560	YES	NA	1.241	14.4	1.5	9.52	32		18.5	0.430	YES	NA
15	1.234	14.2	9.7	1.46	48		18.2	0.550	YES	NA	1.336	14.3	1.6	9.21	33		18.6	0.430	YES	NA
16	1.287	14.2	10.3	1.37	37		18.0	0.570	YES	NA	1.176	14.4	1.7	8.65	25		18.5	0.430	YES	NA
17	1.145	13.7	11.1	1.24	54	YES	18.1	0.550	YES	NA	1.547	14.4	1.8	8.00	44		18.5	0.430	YES	NA
18	0.000	X	X	X	X	YES	15.7	1.090	NO	YES	1.554	14.5	2.0	7.30	37		18.5	0.420	YES	NA
19	1.122	14.2	2.7	5.29	22		16.7	1.050	YES	NA	1.272	14.3	1.9	7.53	40		18.5	0.420	YES	NA
20	1.242	14.3	3.1	4.64	23		17.4	0.710	YES	NA	1.228	14.3	1.9	7.64	25		18.4	0.420	YES	NA
21	1.288	14.3	3.1	4.63	36		17.7	0.650	YES	NA	1.249	14.3	1.9	7.73	26		18.4	0.420	YES	NA
22	0.942	14.3	3.3	4.34	53		17.7	0.650	YES	NA	0.922	14.5	1.9	7.57	25		18.4	0.430	YES	NA
23	1.242	14.3	3.3	4.29	36		17.7	0.670	YES	NA	1.335	14.4	1.9	7.57	29		18.4	0.430	YES	NA
24	1.302	14.2	3.6	3.95	42		17.6	0.650	YES	NA	1.314	14.2	1.9	7.37	30		18.3	0.430	YES	NA
25	1.298	14.2	3.7	3.82	28		17.7	0.630	YES	NA	1.261	14.2	2.0	7.14	32		18.4	0.420	YES	NA
26	1.294	14.2	3.9	3.65	30		17.7	0.630	YES	NA	1.303	14.2	2.0	7.12	31		18.4	0.420	YES	NA
27	1.280	14.2	3.8	3.69	21		17.8	0.610	YES	NA	1.269	14.2	2.0	7.03	27		18.4	0.420	YES	NA
28	1.013	14.2	4.2	3.36	24		17.7	0.610	YES	NA	0.910	14.2	2.1	6.72	27		18.3	0.430	YES	NA
29	0.820	14.3	4.1	3.48	21		17.7	0.620	YES	NA	0.861	14.3	2.2	6.65	27		18.3	0.420	YES	NA
30	1.350	14.3	4.4	3.25	19		17.7	0.630	YES	NA	1.293	14.3	2.2	6.81	28		18.3	0.420	YES	NA
31	0.953	14.2	4.8	2.99	19		17.8	0.610	YES	NA	0.997	14.3	2.4	5.97	31		18.3	0.420	YES	NA

SUMMARY	Unit No. 3										Unit No. 4									
	Operational Data										Operational Data									
	DIT Data										DIT Data									
	Number of days with DIT triggered by high turbidity or particle count										Number of days with DIT triggered by high turbidity or particle count									
	Number of days with a monitoring violation										Number of days with a monitoring violation									

SUBMITTED BY:



Certificate No.
 and Grade: WO0023530, A Surface

Date: January 10, 2015

MEMBRANE MONTHLY OPERATING REPORT
 FOR PUBLIC WATER SYSTEMS THAT ARE USING SURFACE WATER SOURCES
 OR GROUND WATER SOURCES UNDER THE INFLUENCE OF SURFACE WATER (cont.)
 Pressure Decay Rate Direct Integrity Tests (cont.)

PUBLIC WATER
 SYSTEM NAME: City of Wichita Falls

PLANT NAME
 OR NUMBER: Cypress DPR (Microfiltration/RO)

PWS ID No.: 2430001

Plant ID No.: 410791

Month: December

Year: 2014

TEST PARAMETERS & ADDITIONAL DATA

DIT CONDITIONS & ADDITIONAL DATA	Unit No. 5										Unit No. 6									
	DIT Cond'ns	P _{test} psi	LRC -	UCL psi/min		Prev. Month	DIT _{test} date	Pass? Yes/No	C/A Success?		DIT Cond'ns	P _{test} psi	LRC -	UCL psi/min		Prev. Month	DIT _{test} date	Pass? Yes/No	C/A Success?	
		16.5	2.8	1.650			11/30/14	YES	NA											
	Optional Data	Filt.Fluc gfd	TMP psi								Optional Data	Filt.Fluc gfd	TMP psi							

PERFORMANCE DATA

Date	Unit No. 5										Unit No. 6									
	Operational Data						DIT Data				Operational Data						DIT Data			
	Daily Pump. MG	Norm. Filt.Fluc gfd	TMP psi	Norm. Spc.Fluc gfd/psi	Daily Max. mNTU	CIP done?	P _{initial} psi	ΔP _{test} /Δt psi/min	DIT pass?	C/A success?	Daily Pump. MG	Norm. Filt.Fluc gfd	TMP psi	Norm. Spc.Fluc gfd/psi	Daily Max. mNTU	CIP done?	P _{initial} psi	ΔP _{test} /Δt psi/min	DIT pass?	C/A success?
1	1.223	14.2	3.1	4.64	17		18.7	0.350	YES	NA										
2	1.341	14.1	3.1	4.60	19		18.8	0.340	YES	NA										
3	1.223	14.2	3.1	4.64	19		18.7	0.380	YES	NA										
4	1.338	14.2	3.1	4.63	39		18.8	0.340	YES	NA										
5	1.190	14.2	2.8	5.06	32		18.8	0.370	YES	NA										
6	1.240	14.2	2.9	4.90	37		18.8	0.350	YES	NA										
7	0.933	14.2	2.3	6.15	25	yes	16.6	0.950	YES	NA										
8	1.297	14.2	2.4	5.81	27		17.9	0.650	YES	NA										
9	1.255	14.2	2.5	5.78	16		18.2	0.570	YES	NA										
10	1.306	14.2	2.7	5.37	18		18.2	0.530	YES	NA										
11	1.239	14.3	2.6	5.63	19		20.0	0.800	YES	NA										
12	1.298	14.2	2.7	5.32	19		18.5	0.490	YES	NA										
13	1.242	14.2	2.6	5.48	16		18.4	0.480	YES	NA										
14	1.281	14.2	2.8	5.15	20		18.5	0.480	YES	NA										
15	1.207	14.2	2.7	5.21	19		18.4	0.500	YES	NA										
16	1.206	14.2	3.1	4.62	15		18.5	0.460	YES	NA										
17	1.472	14.3	3.2	4.48	18		18.4	0.480	YES	NA										
18	1.542	14.2	3.6	4.01	51		18.6	0.430	YES	NA										
19	1.386	14.2	3.5	4.02	23		18.6	0.430	YES	NA										
20	1.284	14.2	3.4	4.15	20		18.5	0.440	YES	NA										
21	1.161	14.2	3.4	4.14	20		18.5	0.430	YES	NA										
22	0.856	14.3	3.4	4.24	17		18.5	0.430	YES	NA										
23	1.217	14.2	3.5	4.08	16		18.5	0.420	YES	NA										
24	1.235	14.2	3.4	4.13	23		18.4	0.440	YES	NA										
25	1.184	14.1	3.7	3.79	18		18.5	0.420	YES	NA										
26	1.321	14.2	3.6	3.93	20		18.5	0.440	YES	NA										
27	1.293	14.2	3.8	3.75	17		18.5	0.410	YES	NA										
28	0.962	14.1	3.8	3.71	17		18.5	0.420	YES	NA										
29	0.905	14.3	4.0	3.58	20		18.5	0.410	YES	NA										
30	1.212	14.2	4.0	3.57	16		18.5	0.410	YES	NA										
31	1.031	14.2	4.4	3.23	21		18.5	0.410	YES	NA										

SUMMARY	Unit No. 5										Unit No. 6									
	DIT										DIT									
	Number of days with DIT triggered by high turbidity or particle count										0									
	Number of dates with monitoring violation										0									
	Number of dates with failure to pass DIT										0									
Comments	General Remarks										Additional Comments									

SUBMITTED BY:



Certificate No. and Grade: WO0023530, A Surface

Date: January 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.)
L72ESWTR Summary Page

PUBLIC WATER SYSTEM NAME: City of Wichita Falls PLANT NAME: Cypress DPR (Microfiltration/RO)
 PWS ID No.: 2430001 Plant ID No.: 410791 OR NUMBER: December 2014 Year: 2014

Note: Indicate the treatment processes in each train. (see comment)	PRETREATMENT CREDITS				FILTRATION TECHNOLOGY CREDITS					ENHANCED PERFORMANCE CREDITS			DISINFECTION TECHNOLOGY CREDITS			OTHER TREATMENT CREDITS	
	Riverbank Filtration	Pressed. with Coagul.	Two-stage Lime Softening	Conventional Sedimentation or Clarification	Conventional Granular Media Filtration	Bag or Cartridge Filtration	Two-Stage Filtration	Membrane Filtration (PbT)	Membrane Filtration (dBT)	Membrane Filtration (MBT)	Enhanced CFE Perform.	Optimized IFE Perform.	Crypto Disinfect.	UV Disinfect. (ISA)	UV Disinfect. (CPA)	Watershed Protection	Perform. Demon.
Overall	FALSE	FALSE	FALSE	TRUE	TRUE	FALSE	FALSE	TRUE	TRUE	TRUE	TRUE	TRUE	FALSE	FALSE	FALSE	FALSE	TRUE
Train 1				TRUE	TRUE												
Train 2																	
Train 3																	
Train 4																	
Train 5																	
1								2.80									0.50
2								2.80									0.50
3								2.80									0.50
4								2.80									0.50
5								2.80									0.50
6								2.80									0.50
7								2.80									0.50
8								2.80									0.50
9								2.80									0.50
10								2.80									0.50
11								2.80									0.50
12								2.80									0.50
13								2.80									0.50
14								2.80									0.50
15								2.80									0.50
16				0.50	2.50			2.80			0.50	0.00					0.50
17								2.80									0.50
18								2.80									0.50
19								2.80									0.50
20								2.80									0.50
21								2.80									0.50
22								2.80									0.50
23								2.80									0.50
24								2.80									0.50
25								2.80									0.50
26								2.80									0.50
27								2.80									0.50
28								2.80									0.50
29								2.80									0.50
30								2.80									0.50
31								2.80									0.50
MIN				0.5	2.5			2.80			0.5	0.0					0.5

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.)

LITZSWTR Summary Page (cont)

PUBLIC WATER SYSTEM NAME: City of Wichita Falls **PLANT NAME:** Cypress DPR (Microfiltration/RO)
PWS ID No.: 2430001 **Plant ID No.:** 410791 **OR NUMBER:** December **Month:** December **Year:** 2014

GIARDIA AND CRYPTOSPORIDIUM TREATMENT CREDITS										GIARDIA INACTIVATION CREDITS										VIRAL INACTIVATION CREDITS																			
Total Daily Credit By Train										Total Daily Bin 3 & 4 Credit by Train										Total Daily Inactivation Credit By Train										Total Daily Inactivation Credit by Train									
Overall	TRUE	FALSE	FALSE	FALSE	FALSE	Minimum	TRUE	FALSE	FALSE	FALSE	FALSE	Minimum	TRUE	FALSE	FALSE	FALSE	FALSE	Minimum	TRUE	FALSE	FALSE	FALSE	Minimum																
Train 1																																							
Train 2																																							
Train 3																																							
Train 4																																							
Train 5																																							
1	6.80					6.80	2.80					2.80	5.41					5.41	9.69				9.69																
2	6.80					6.80	2.80					2.80	4.90					4.90	8.65				8.65																
3	6.80					6.80	2.80					2.80	4.45					4.45	7.76				7.76																
4	6.80					6.80	2.80					2.80	6.32					6.32	12.05				12.05																
5	6.80					6.80	2.80					2.80	6.95					6.95	13.55				13.55																
6	6.80					6.80	2.80					2.80	5.07					5.07	9.76				9.76																
7	6.80					6.80	2.80					2.80	6.54					6.54	12.42				12.42																
8	6.80					6.80	2.80					2.80	7.32					7.32	14.24				14.24																
9	6.80					6.80	2.80					2.80	6.71					6.71	12.81				12.81																
10	6.80					6.80	2.80					2.80	6.05					6.05	11.68				11.68																
11	6.80					6.80	2.80					2.80	6.66					6.66	13.06				13.06																
12	6.80					6.80	2.80					2.80	6.64					6.64	13.03				13.03																
13	6.80					6.80	2.80					2.80	5.42					5.42	10.55				10.55																
14	6.80					6.80	2.80					2.80	5.15					5.15	10.18				10.18																
15	6.80					6.80	2.80					2.80	6.68					6.68	13.06				13.06																
16	6.80					6.80	2.80					2.80	6.00					6.00	11.54				11.54																
17	6.80					6.80	2.80					2.80	4.81					4.81	8.82				8.82																
18	6.80					6.80	2.80					2.80	5.46					5.46	10.29				10.29																
19	6.80					6.80	2.80					2.80	5.60					5.60	10.58				10.58																
20	6.80					6.80	2.80					2.80	5.29					5.29	10.00				10.00																
21	6.80					6.80	2.80					2.80	6.20					6.20	11.68				11.68																
22	6.80					6.80	2.80					2.80	6.72					6.72	12.74				12.74																
23	6.80					6.80	2.80					2.80	6.34					6.34	11.87				11.87																
24	6.80					6.80	2.80					2.80	3.97					3.97	7.19				7.19																
25	6.80					6.80	2.80					2.80	5.65					5.65	10.19				10.19																
26	6.80					6.80	2.80					2.80	5.73					5.73	10.89				10.89																
27	6.80					6.80	2.80					2.80	5.34					5.34	9.65				9.65																
28	6.80					6.80	2.80					2.80	4.99					4.99	8.87				8.87																
29	6.80					6.80	2.80					2.80	6.14					6.14	10.83				10.83																
30	6.80					6.80	2.80					2.80	4.62					4.62	8.17				8.17																
31	6.80					6.80	2.80					2.80	4.85					4.85	8.10				8.10																
MIN	6.80					6.80	2.80					2.80	3.97					3.97	7.19				7.19																
AVG	6.80					6.80	2.80					2.80	5.74					5.74	10.77				10.77																
MAX	6.80					6.80	2.80					2.80	3.97					3.97	7.19				7.19																

Surface Water Monthly Operating Report

Addendum for the Direct Potable Reuse Plant

Public Water

System Name:

City of Wichita Falls

Plant Name or Number:

Cypress DPR (Microfiltration/RO)

PWS ID No.:

2430001

Month:

December

Year:

2014

Location:	TCEQ-1J	TCEQ-2J	TCEQ-2JB	TCEQ-20J						TCEQ-20J					
	Max Turbidity (NTU)	Min Mono- chloramine (ppm)	E. coli (CFU/100mL)	Nitrate-N (ppm)						Flow (MGD)					
Date				Train 1	Train 2	Train 3	Train 4	Train 5	Train 6	Train 1	Train 2	Train 3	Train 4	Train 5	Train 6
12/1	3.41	3.15	<4.00	1.6	X	X	X	1.6	1.4	1.51	X	X	X	1.51	1.56
12/2	4.04	3.27	<4.00	X	1.3	1.7	2.4	X	X	X	1.5	1.5	1.5	X	X
12/3	3.24	3.25	<4.00	1.5	X	X	X	2	1.6	1.52	X	X	X	1.51	1.51
12/4	3.44	3.73	<4.00	X	1.3	2	1.4	X	X	X	1.51	1.51	1.51	X	X
12/5	2.63	4.10	<4.00	1.1	X	X	X	1.4	1.2	1.51	X	X	X	1.51	1.51
12/6	2.79	4.28	<4.00	X	1.2	1.1	1.7	X	X	X	1.5	1.51	1.5	X	X
12/7	3.53	4.33	<4.00	3	X	X	X	1.7	1.9	1.52	X	X	X	1.51	1.51
12/8	3.69	4.14	<4.00	X	1.3	1.3	X	X	1.8	X	1.51	1.51	X	X	1.51
12/9	3.76	3.92	<4.00	1.2	X	X	1.8	1.7	X	1.51	X	X	1.52	1.51	X
12/10	4.33	3.84	<4.00	X	1.5	1.6	X	X	1.2	X	1.52	1.52	X	X	1.5
12/11	4.02	4.12	<4.00	1.7	X	X	1.9	1.3	X	1.49	X	X	1.52	1.5	X
12/12	4.18	4.21	<4.00	X	1.1	1.4	X	X	1	X	1.51	1.51	X	X	1.48
12/13	4.25	4.08	<4.00	1.4	X	X	1.5	1.4	X	1.5	X	X	1.51	1.5	X
12/14	3.76	3.87	<4.00	X	1.1	1.4	X	X	1.3	X	1.5	1.5	X	X	1.49
12/15	3.42	3.43	<4.00	1.2	1.7	X	1.9	X	X	1.51	1.51	X	1.5	X	X
12/16	4.37	3.73	<4.00	2.2	1.6	1.6	X	X	2	1.49	1.5	1.5	X	X	1.51
12/17	4.01	3.65	<4.00	2.6	X	1.5	2	X	X	1.52	X	1.5	1.51	X	X
12/18	3.62	3.08	<4.00	X	1.1	X	X	1.6	1.4	X	1.5	X	X	1.51	1.5
12/19	3.12	4.11	<4.00	1.1	X	1.1	1.3	X	X	1.51	X	1.5	1.51	X	X
12/20	3.31	4.18	<4.00	X	1.5	X	CIP	0.9	1.3	X	1.51	X	CIP	1.51	1.51
12/21	3.85	4.27	<4.00	1.6	1.6	1.8	CIP	X	X	1.53	1.51	1.5	CIP	X	X
12/22	3.49	0.01	<4.00	1.5	X	1.8	CIP	2	1.9	1.74	X	1.5	CIP	1.49	1.49
12/23	3.77	3.66	<4.00	1.3	1.6	X	X	X	1.8	1.51	1.51	X	X	X	1.52
12/24	3.89	4.02	<4.00	1.6	X	X	X	1.3	1.6	1.5	X	X	X	1.51	1.51
12/25	3.90	3.66	<4.00	1.3	0.9	1.1	X	X	X	1.51	1.51	1.5	X	X	X
12/26	4.03	4.02	<4.00	1.4	X	X	X	1.6	1.6	1.51	X	X	X	1.51	1.5
12/27	3.97	3.96	<4.00	X	X	1.1	X	1.5	1.4	X	X	1.5	X	1.49	1.5
12/28	4.19	3.82	<4.00	2	X	X	X	1.7	3.6	1.5	X	X	X	1.47	1.5
12/29	15.57	3.27	<4.00	X	1.1	1.8	X	X	X	X	1.46	1.46	X	X	X
12/30	5.88	3.46	<4.00	2	1.4	1.2	X	1.2	1.7	1.48	1.42	1.45	X	1.44	1.46
12/31	6.24	3.90	<4.00	1.1	X	1.7	X	1.7	1.4	1.43	X	1.44	X	1.41	1.44

Submitted by:



Certificate No.

and Grade:

WO0023530, AW

Date:

10-Jan-15

Surface Water Monthly Operating Report

Addendum for the Direct Potable Reuse Plant

Public Water System

Name:

City of Wichita Falls

Plant Name or Number:

Cypress DPR (Microfiltration/RO)

PWS ID No.:

2430001

Month:

December Year: 2014

Location:	TCEQ-20J						TCEQ-22J												
Date	Salt Rejection (% Removal)						Max 15-Min. Lagoon Return %	2-Hour Average Lagoon Return % Flows											
	Train 1	Train 2	Train 3	Train 4	Train 5	Train 6		12-2	2-4	4-6	6-8	8-10	10-12	12-2	2-4	4-6	6-8	8-10	10-12
12/1	98.3	X	X	X	98.3	98.2	47.61	X	X	X	X	X	X	X	X	X	X	X	X
12/2	X	98.4	98.5	97.5	X	X	48.18	X	X	X	X	X	X	X	X	X	X	X	X
12/3	98.5	X	X	X	98.5	98.4	49.43	X	X	X	X	X	X	X	X	X	X	X	X
12/4	X	98.4	98.7	97.3	X	X	46.42	X	X	X	X	X	X	X	X	X	X	X	X
12/5	98.5	X	X	X	98.6	98.4	46.95	X	X	X	X	X	X	X	X	X	X	X	X
12/6	X	98.6	98.6	97.6	X	X	47.71	X	X	X	X	X	X	X	X	X	X	X	X
12/7	98.4	X	X	X	98.6	98.4	48.44	X	X	X	X	X	X	X	X	X	X	X	X
12/8	X	98.5	98.6	X	X	98.4	46.08	X	X	X	X	X	X	X	X	X	X	X	X
12/9	98.4	X	X	97.6	98.5	X	48.17	X	X	X	X	X	X	X	X	X	X	X	X
12/10	X	98.6	98.7	X	X	98.5	49.27	X	X	X	X	X	X	X	X	X	X	X	X
12/11	98.4	X	X	97.3	98.5	X	48.30	X	X	X	X	X	X	X	X	X	X	X	X
12/12	X	98.6	98.6	X	X	98.4	47.97	X	X	X	X	X	X	X	X	X	X	X	X
12/13	98.5	X	X	97.6	98.6	X	47.71	X	X	X	X	X	X	X	X	X	X	X	X
12/14	X	98.5	98.7	X	X	98.3	48.59	X	X	X	X	X	X	X	X	X	X	X	X
12/15	98.2	98.5	X	97.5	X	X	46.90	X	X	X	X	X	X	X	X	X	X	X	X
12/16	98.4	98.7	98.6	X	X	98.4	45.69	X	X	X	X	X	X	X	X	X	X	X	X
12/17	98.5	X	98.8	97.9	X	X	48.70	X	X	X	X	X	X	X	X	X	X	X	X
12/18	X	98.7	X	X	98.4	98.5	47.60	X	X	X	X	X	X	X	X	X	X	X	X
12/19	98.6	X	98.6	97.7	X	X	48.56	X	X	X	X	X	X	X	X	X	X	X	X
12/20	X	98.7	X	CIP	98.7	98.4	49.49	X	X	X	X	X	X	X	X	X	X	X	X
12/21	98.6	98.8	98.7	CIP	X	X	50.71	44.71	45.33	45.26	44.78	45.78	45.95	45.67	45.40	45.23	42.94	44.83	44.38
12/22	98	X	98.7	CIP	98.6	98.5	53.57	43.93	43.93	43.54	44.27	10.77	0.00	0.00	17.80	43.64	43.48	43.48	43.37
12/23	98.5	98.7	X	X	X	98.5	47.08	X	X	X	X	X	X	X	X	X	X	X	X
12/24	98.6	X	X	X	98.7	98.6	45.67	X	X	X	X	X	X	X	X	X	X	X	X
12/25	98.6	98.8	98.8	X	X	X	48.46	X	X	X	X	X	X	X	X	X	X	X	X
12/26	98.5	X	X	X	98.7	98.5	47.81	X	X	X	X	X	X	X	X	X	X	X	X
12/27	X	X	98.8	X	98.8	98.6	45.88	X	X	X	X	X	X	X	X	X	X	X	X
12/28	98.5	X	X	X	98.7	98.6	44.51	X	X	X	X	X	X	X	X	X	X	X	X
12/29	X	98.7	98.7	X	X	X	42.49	X	X	X	X	X	X	X	X	X	X	X	X
12/30	98.6	98.6	98.7	X	98.6	98.6	46.25	X	X	X	X	X	X	X	X	X	X	X	X
12/31	98.7	X	98.8	X	98.9	98.7	43.95	X	X	X	X	X	X	X	X	X	X	X	X

Submitted by: 

Certificate No.

and Grade: W00023530, AW Date: 10-Jan-15

Surface Water Monthly Operating Report

Addendum for the Direct Potable Reuse Plant

Public Water System Name: City of Wichita Falls

Plant Name or Number: Cypress DPR (Microfiltration/RO)

PWS ID No.: 2430001

Month: December **Year:** 2014

Location:	TCEQ-41J	TCEQ-42J
	Min. Ground Storage Tank Level (% Full)	Min Total Chlorine Residual (ppm)
Date		
12/1	72%	3.50
12/2	72%	3.70
12/3	75%	3.70
12/4	75%	3.70
12/5	74%	3.70
12/6	77%	3.60
12/7	71%	3.60
12/8	70%	3.70
12/9	73%	3.60
12/10	79%	3.50
12/11	79%	3.40
12/12	80%	3.40
12/13	79%	3.40
12/14	81%	3.30
12/15	78%	3.30
12/16	82%	3.30
12/17	83%	3.30
12/18	86%	3.40
12/19	85%	3.40
12/20	84%	3.40
12/21	81%	3.50
12/22	72%	3.60
12/23	73%	3.00
12/24	79%	3.10
12/25	86%	3.00
12/26	84%	3.00
12/27	84%	3.00
12/28	80%	3.00
12/29	56%	2.90
12/30	55%	3.20
12/31	60%	3.30

TCEQ-20J					
Current Month Average Salt Rejection					
Train 1	Train 2	Train 3	Train 4	Train 5	Train 6
98.47	98.6	98.7	97.6	98.6	98.5

TCEQ-20J					
Previous Month Average Salt Rejection					
Train 1	Train 2	Train 3	Train 4	Train 5	Train 6
97.1	97.7	93	95.6	95	89.6

TCEQ-42J			
	Nitrate-N	Nitrite-N	E. coli
Date	(ppm)	(ppm)	MPN
12/1	0.23	0.02	<0.02
12/8	0.24	<0.01	<0.02
12/15	0.22	<0.01	<0.02
12/22	0.26	0.02	<0.02
12/29	0.22	0.01	<0.02

TCEQ-2JB			
	Cryptosporidium	Giardia	TCV
Date	(oocysts/L)	(cysts/L)	MPN
12/1	<1.25	17.50	*

Previous Virus Data			
TCEQ-2JB			
	Enterovirus	Norovirus	TCV
Date	MPN/100mL		
10/6	<25.253	<25.253	<0.0234

TCEQ-42J			
	Cryptosporidium	Giardia	TCV
Date	(oocysts/L)	(cysts/L)	MPN
12/2	<0.00762	<0.00762	*
12/16	<0.00573	<0.00573	*

TCEQ-42J			
	Enterovirus	Norovirus	TCV
Date	MPN/100mL		
10/7	<0.3090	<0.3090	<0.0016

Submitted by: 

Certificate No. and Grade: WO0023530, AW **Date:** 10-Jan-15

Date of Problem 12-22-2014	River Road WWTP 2J-B DPR Scheduled Pump Shutdown.
Describe the problem (what happened, when it was detected, how it was detected, etc)	This was a scheduled shutdown to make tie-ins at The Cypress Plant for installation of the UV System.
Describe how the problem impacted or could have impacted the DPR treatment processes.	No negative impacts as this was a scheduled event. With the pump being off, however, the monochloramine analyzer lost flow and showed low monochloramine values.
Describe the response. (who did what and when; did the responses achieve the desire results; how long did it take return to normal operations, etc)	At the request of the Cypress operators, the DPR pump was turned off at 8:00 A.M. and was turned back on same day at 2:30 P.M. The rate of flow was 6.8 MGD. Therefore during this period 1,841,667 gallons of effluent was bypassed at site 2JB.
What options are available, if any, to avoid a recurrence?	N/A Scheduled event.
What options, if any, could be implemented to reduce response time if the problem does reoccur?	N/A
Action Plan	N/A