

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

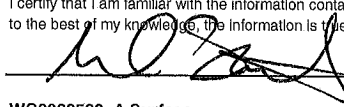
SYSTEM NAME: City of Wichita Falls

PLANT NAME

OR NUMBER: Cypress DPR (Microfiltration/RO)

PWS ID No.: 2430001

Plant ID No.: 410791

Report for
the Month of: January 2015Operator's Signature: 

Certificate No. & Grade: W00023530, A Surface

Date: February 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:	11	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:	0.16 NTU	Average turbidity value:	0.08 NTU
Minimum turbidity reading:	0.05 NTU	Standard deviation:	0.018 NTU
CFE 95 th percentile value:	0.11 NTU	IFE 95 th percentile:	0.279 NTU

Bin Class:	4	Crypto Credit Required:	5.5 (7A)	Crypto Credit Achieved:	7.3 (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:	1.0	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:	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:	6.54
Number of days with a low CT for more than 4.0 consecutive hours:	0 (4)	Average log inactivation for viruses:	17.14
		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:	175	(at least 100 required) (8)	
Average disinfectant residual value:	3.28	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	☐ CPF
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

Enhanced IFE Worksheet

Alternate
Technol.

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

RECEIVED

FEB 10 2015

TCEQ

PDW/PROT

This edition of the SWMOR-Ait was customized by the TCEQ on 05/18/14 for use during the City of Wichita Falls Temporary Direct Potable Water 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:

33,344

Month:

January

Year:

2015

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 Residual	Time*
					1	2	3	4	5	6	NTU1	NTU2	NTU3	NTU4	NTU5	NTU6		
1	5.000	9.560	4	57	2.1	1.4					0.09	0.09	0.09	0.08	0.08	0.08	3.5	
2	5.000	8.700	4	56	2.1	1.3					0.08	0.08	0.08	0.08	0.09	0.11	3.5	
3	5.000	10.040	6	72	2.1	2.0					0.10	0.10	0.10	0.10	0.09	0.09	3.8	
4	5.000	10.510	3	63	2.1	2.3					0.09	0.09	0.10	0.09	0.09	0.09	3.9	
5	5.000	9.680	5	64	2.0	2.1					0.09	0.09	0.08	0.08	0.08	0.08	3.9	
6	5.000	10.650	3	59	1.9	3.2					0.08	0.08	0.09	0.09	0.08	0.08	3.9	
7	5.000	8.520	4	68	3.1	20.0					0.08	0.08	0.11	0.11	0.16	0.13	3.6	
8	5.000	7.600	5	76	2.2	7.6					0.11	0.10	0.10	0.09	0.10	0.09	3.5	
9	5.000	9.030	2	81	1.9	2.1					0.08	0.08	0.08	0.08	0.09	0.09	3.5	
10	5.000	9.390	3	74	1.5	2.8					0.09	0.09	0.08	0.10	0.10	0.09	3.6	
11	5.000	8.160	2	71	1.8	2.6					0.08	0.09	0.09	0.09	0.09	0.08	3.6	
12	4.000	8.210	3	68	1.8	2.3					0.06	0.06	0.06	0.06	0.06	0.07	3.4	
13	4.000	7.750	3	73	1.9	2.1					0.06	0.06	0.05	0.05	0.06	0.07	3.5	
14	4.000	7.800	3	78	1.5	1.5					0.06	0.06	0.05	0.05	0.06	0.06	3.4	
15	4.000	7.610	2	79	1.8	3.2					0.06	0.06	0.08	0.06	0.07	0.09	3.3	
16	5.000	8.130	2	82	1.5	5.3					0.12	0.14	0.13	0.11	0.13	0.09	3.3	
17	4.000	7.570	2	89	1.8	4.5					0.07	0.08	0.06	0.06	0.06	0.07	3.3	
18	4.000	7.650	2	79	1.6	1.9					0.05	0.06	0.05	0.06	0.06	0.05	3.3	
19	4.000	8.070	3	76	1.7	1.5					0.06	0.05	0.05	0.05	0.07	0.07	3.2	
20	4.000	8.620	2	82	2.0	1.3					0.07	0.08	0.07	0.06	0.07	0.07	3.1	
21	4.000	6.230	2	92	1.5	1.2					0.07	0.07	0.07	0.07	0.07	0.07	3.1	
22	5.000	8.890	4	94	2.5	1.9					0.06	0.07	0.07	0.07	0.07	0.07	3.1	
23	5.000	9.230	2	97	2.7	1.2					0.07	0.06	0.06	0.06	0.06	0.06	3.1	
24	4.000	8.470	2	90	2.1	1.3					0.06	0.07	0.07	0.06	0.06	0.06	3.3	
25	4.000	7.400	2	92	2.2	1.0					0.07	0.07	0.07	0.08	0.08	0.08	3.3	
26	5.000	9.260	2	85	2.2	1.1					0.07	0.07	0.06	0.06	0.07	0.09	3.3	
27	5.000	9.290	2	68	1.8	1.4					0.08	0.08	0.08	0.09	0.08	0.08	3.2	
28	5.000	10.280	1	88	2.4	1.4					0.09	0.08	0.08	0.08	0.06	0.06	3.7	
29	5.000	10.270	2	73	1.7	1.8					0.08	0.07	0.07	0.07	0.08	0.09	3.7	
30	5.000	9.650	2	80	1.5	1.1					0.07	0.08	0.07	0.07	0.07	0.08	3.7	
31	5.000	9.680	4	85	1.3	1.0					0.07	0.07	0.06	0.06	0.07	0.07	3.7	
Total	144.000	271.900																
Avg	4.645	8.771																
Max	5.000	10.650																
Min	4.000	6.230																

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:



Certificate No.
and Grade:

WO0023530, A Surface

Date:

February 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: January 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	0.10	x	0.09	x	0.09	x	0.09	x	0.10	x										
2	0.09	x	0.08	x	0.19	0.17	0.34	0.15	0.09	x										
3	0.09	x	0.21	0.13	0.12	x	0.14	x	0.09	x										
4	0.35	0.13	0.11	x	0.10	x	0.10	x	0.24	0.12										
5	0.10	x	0.09	x	0.09	x	0.09	x	0.11	x										
6	0.09	x	0.08	x	0.09	x	0.09	x	0.09	x										
7	0.27	0.15	0.27	x	0.29	x	0.27	0.15	0.26	0.09										
8	0.12	x	0.10	x	0.32	0.15	0.12	x	0.12	x										
9	0.08	x	0.27	0.13	0.11	x	0.13	x	0.08	x										
10	0.10	x	0.11	x	0.10	x	0.32	0.14	0.12	x										
11	0.19	x	0.09	x	0.10	x	0.12	x	0.24	x										
12	0.06	x	0.06	x	0.19	x	0.07	x	0.08	x										
13	0.06	x	0.26	x	0.10	x	0.07	x	0.06	x										
14	0.05	x	0.08	x	0.07	x	0.24	0.09	0.05	x										
15	0.21	0.08	0.10	x	0.11	x	0.12	x	0.29	0.20										
16	0.18	x	0.16	x	0.32	0.09	0.16	x	0.02	x										
17	0.09	x	0.07	x	0.13	x	0.09	x	0.09	x										
18	0.06	x	0.26	0.08	0.07	x	0.23	x	0.06	x										
19	0.10	0.09	0.06	x	0.08	x	0.10	x	0.05	x										
20	0.08	x	0.06	x	0.07	x	0.08	x	0.24	0.08										
21	0.07	x	0.06	x	0.22	0.10	0.08	x	0.07	x										
22	0.07	x	0.19	0.09	0.10	x	0.09	x	0.08	x										
23	0.16	0.08	0.07	x	0.07	x	0.25	0.09	0.06	x										
24	0.07	x	0.06	x	0.23	0.06	0.08	x	0.16	0.08										
25	0.07	x	0.06	x	0.23	0.07	0.08	x	0.16	0.08										
26	0.20	0.10	0.07	x	0.08	x	0.19	0.10	0.07	x										
27	0.12	x	0.18	0.09	0.19	0.09	0.19	x	0.30	0.08										
28	0.10	X	0.08	X	0.09	X	0.11	0.08	0.11	X										
29	0.07	x	0.13	0.08	0.14	0.10	0.15	0.10	0.09	x										
30	0.19	0.09	0.07	x	0.09	x	0.11	x	0.06	x										
31	0.07	x	0.19	0.09	0.08	x	0.08	x	0.12	0.08										

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. WO0023530, A Surface and Grade: WO0023530, A Surface Date: February 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: January

Year: 2015

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 (min)
1	CLA D1	2.5	4.800	11.8	6.5				
	CLA D2	2.4	4.800	11.6	6.4				
	CLA D3	2.1	2.200	13.2	6.7	5.65	9.57	1.91	
	CLA D4	3.7	10.000	9.3	9.1			(V)	
	CLA D5	3.2	10.000	10.8	9.1				
2	CLA D1	2.8	4.800	12.8	6.6				
	CLA D2	2.0	4.800	12.6	6.4				
	CLA D3	2.4	2.200	12.9	6.7	6.16	10.59	2.12	
	CLA D4	4.1	10.000	10.1	9.1			(V)	
	CLA D5	3.9	10.000	10.0	9.1				
3	CLA D1	2.6	4.800	12.2	6.6				
	CLA D2	1.9	4.800	13.6	6.5				
	CLA D3	3.6	2.200	15.1	6.7	6.00	10.26	2.05	
	CLA D4	3.9	10.000	9.4	9.1			(V)	
	CLA D5	4.3	10.000	9.8	9.0				
4	CLA D1	2.5	4.500	13.1	6.6				
	CLA D2	3.1	4.500	12.9	6.4				
	CLA D3	2.8	2.200	13.5	6.7	6.73	11.41	2.28	
	CLA D4	3.9	10.000	6.3	9.1			(V)	
	CLA D5	4.0	10.000	6.9	9.0				
5	CLA D1	3.1	4.800	13.3	6.6				
	CLA D2	2.5	4.800	12.8	6.4				
	CLA D3	2.8	2.200	13.6	6.7	6.79	11.76	2.35	
	CLA D4	3.9	10.000	9.1	9.2			(V)	
	CLA D5	3.8	10.000	9.6	9.1				
6	CLA D1	3.0	4.700	12.8	6.6				
	CLA D2	2.4	4.700	12.9	6.4				
	CLA D3	2.2	2.200	13.1	6.8	6.86	11.72	2.34	
	CLA D4	4.2	10.000	7.4	8.9			(V)	
	CLA D5	4.4	10.000	9.4	8.9				
7	CLA D1	2.9	4.800	11.9	6.6				
	CLA D2	2.4	4.800	11.7	6.6				
	CLA D3	2.3	2.200	12.8	6.7	5.68	9.39	1.86	
	CLA D4	3.9	10.000	5.8	9.2			(V)	
	CLA D5	2.7	10.000	6.0	8.9				
8	CLA D1	2.6	4.800	9.9	6.7				
	CLA D2	2.0	4.800	10.6	6.6				
	CLA D3	2.1	2.200	12.4	6.7	5.39	8.54	1.71	
	CLA D4	3.9	10.000	6.1	9.0			(V)	
	CLA D5	4.1	10.000	7.3	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)
9	CLA D1	3.2	4.800	11.4	6.7				
	CLA D2	1.7	4.800	12.0	6.7				
	CLA D3	2.0	2.200	129.0	6.9	5.91	184.31	2.96	
	CLA D4	3.2	10.000	7.9	9.2			(V)	
	CLA D5	3.7	10.000	8.5	9.3				
10	CLA D1	2.1	4.800	11.8	6.8				
	CLA D2	3.9	4.800	12.7	6.9				
	CLA D3	2.6	2.200	13.7	7.0	6.57	11.11	2.22	
	CLA D4	4.1	10.000	9.4	9.2			(V)	
	CLA D5	4.1	10.000	8.7	9.1				
11	CLA D1	2.9	4.800	13.1	6.7				
	CLA D2	2.1	4.800	12.8	6.6				
	CLA D3	1.8	2.200	13.5	6.9	6.57	11.20	2.24	
	CLA D4	3.5	8.000	8.9	9.1			(V)	
	CLA D5	3.7	8.000	8.7	9.1				
12	CLA D1	3.0	4.800	12.9	6.7				
	CLA D2	2.8	4.800	13.1	6.5				
	CLA D3	2.1	2.200	13.7	6.8	7.27	12.42	2.48	
	CLA D4	3.9	8.000	8.2	9.3			(V)	
	CLA D5	3.9	8.000	8.9	9.2				
13	CLA D1	3.2	4.800	11.4	6.6				
	CLA D2	2.0	4.800	11.5	6.5				
	CLA D3	2.3	2.200	12.3	6.8	6.55	10.74	2.15	
	CLA D4	3.5	8.000	8.0	9.2			(V)	
	CLA D5	3.9	8.000	7.9	9.2				
14	CLA D1	2.9	4.800	11.9	6.7				
	CLA D2	2.0	4.800	11.6	6.5				
	CLA D3	2.0	2.200	12.8	6.7	5.94	9.96	1.99	
	CLA D4	3.1	8.000	8.9	9.2			(V)	
	CLA D5	3.0	8.000	9.1	9.2				
15	CLA D1	2.9	4.800	13.8	6.7				
	CLA D2	3.6	4.800	13.3	6.5				
	CLA D3	3.9	2.200	14.2	6.7	7.66	13.30	2.66	
	CLA D4	3.3	8.000	9.0	9.2			(V)	
	CLA D5	3.6	8.000	8.7	9.2				
16	CLA D1	1.7	4.800	13.4	6.7				
	CLA D2	5.4	4.800	13.8	6.5				
	CLA D3	1.6	2.200	14.9	6.7	7.23	12.64	2.53	
	CLA D4	3.9	10.000	9.1	9.0			(V)	
	CLA D5	3.6	10.000	8.9	9.0				

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: WO0023530, A Surface

Date: February 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: January

Year: 2015

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
17	CLA D1	3.2	4.800	12.7	6.8				
	CLA D2	2.0	4.800	12.5	6.6				
	CLA D3	1.0	2.200	13.2	6.8	6.81	11.41	2.28	
	CLA D4	3.9	8.000	8.1	9.2			(V)	
	CLA D5	4.0	8.000	7.3	9.1				
18	CLA D1	2.8	4.800	15.8	6.7				
	CLA D2	1.8	4.800	15.1	6.6				
	CLA D3	1.6	2.200	15.1	6.8	7.00	12.76	2.55	
	CLA D4	3.4	8.000	12.9	9.0			(V)	
	CLA D5	3.7	8.000	11.0	9.0				
19	CLA D1	3.5	4.900	15.7	6.9				
	CLA D2	2.4	4.900	15.4	6.7				
	CLA D3	2.5	2.200	16.4	6.7	8.05	14.78	2.96	
	CLA D4	3.5	8.000	11.7	9.1			(V)	
	CLA D5	3.4	8.000	11.5	9.1				
20	CLA D1	2.0	4.800	17.7	6.8				
	CLA D2	4.0	4.800	17.0	6.6				
	CLA D3	2.1	2.200	16.9	6.9	8.02	14.82	2.96	
	CLA D4	3.6	8.000	9.6	9.1			(V)	
	CLA D5	3.7	8.000	9.1	9.0				
21	CLA D1	3.1	4.800	16.6	6.9				
	CLA D2	2.5	4.800	16.8	6.8				
	CLA D3	3.1	2.200	16.8	6.9	8.06	15.11	3.02	
	CLA D4	3.8	8.000	11.9	9.0			(V)	
	CLA D5	3.1	8.000	12.6	9.0				
22	CLA D1	3.1	7.000	13.0	6.8				
	CLA D2	2.4	7.000	13.2	6.8				
	CLA D3	2.4	2.200	17.8	7.1	5.41	9.40	1.88	
	CLA D4	4.3	10.000	10.7	9.0			(V)	
	CLA D5	4.0	10.000	10.9	9.0				
23	CLA D1	3.8	6.900	11.8	6.8				
	CLA D2	2.9	6.900	14.3	6.7				
	CLA D3	2.7	2.200	15.1	6.9	6.12	10.74	2.15	
	CLA D4	4.2	10.000	11.7	9.1			(V)	
	CLA D5	3.7	10.000	12.6	9.0				
24	CLA D1	3.8	7.000	15.0	6.8				
	CLA D2	2.8	7.000	14.6	6.7				
	CLA D3	3.1	2.200	15.8	6.9	6.38	11.48	2.30	
	CLA D4	3.7	10.000	11.0	9.0			(V)	
	CLA D5	4.0	10.000	10.9	9.0				

PERFORMANCE DATA

DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
25	CLA D1	3.2	4.900	15.4	6.8				
	CLA D2	2.4	4.900	15.1	6.7				
	CLA D3	3.2	2.200	15.4	7.1	7.50	13.67	2.73	
	CLA D4	4.0	10.000	10.3	9.0			(V)	
	CLA D5	4.1	10.000	11.5	9.0				
26	CLA D1	3.5	7.000	17.5	6.8				
	CLA D2	1.9	7.000	16.9	6.7				
	CLA D3	1.7	2.200	17.3	7.1	5.99	11.23	2.25	
	CLA D4	3.4	10.000	10.0	9.1			(V)	
	CLA D5	3.5	10.000	12.1	9.0				
27	CLA D1	3.6	7.000	16.6	6.9				
	CLA D2	2.7	7.000	16.3	6.6				
	CLA D3	2.4	2.200	16.3	7.0	6.55	12.12	2.42	
	CLA D4	4.0	10.000	11.1	9.1			(V)	
	CLA D5	3.9	10.000	11.6	9.1				
28	CLA D1	3.6	6.800	16.7	6.8				
	CLA D2	2.6	6.800	17.0	6.6				
	CLA D3	3.1	2.200	17.8	6.9	6.71	12.66	2.53	
	CLA D4	4.0	10.000	14.2	9.2			(V)	
	CLA D5	3.5	10.000	13.1	9.1				
29	CLA D1	3.3	6.700	16.7	7.1				
	CLA D2	2.9	6.700	16.9	6.7				
	CLA D3	2.5	2.200	17.7	7.1	6.60	12.47	2.49	
	CLA D4	3.4	10.000	14.1	9.2			(V)	
	CLA D5	3.5	10.000	13.4	9.2				
30	CLA D1	3.8	6.700	16.6	6.9				
	CLA D2	2.3	6.700	16.2	6.6				
	CLA D3	3.3	2.200	17.1	6.9	6.67	12.53	2.51	
	CLA D4	3.8	10.000	13.3	9.2			(V)	
	CLA D5	3.5	10.000	13.1	9.2				
31	CLA D1	1.0	6.600	11.3	6.7				
	CLA D2	2.5	6.600	15.4	6.7				
	CLA D3	1.8	2.200	17.2	7.1	4.05	7.14	1.43	
	CLA D4	4.0	10.000	12.7	9.0			(V)	
	CLA D5	3.8	10.000	11.1	9.1				
						Max	8.06	184.31	
						Min	4.05	7.14	
						Avg	6.54	17.14	
						SD	0.85	30.57	

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: WO0023530, A Surface

Date: February 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.)
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:

January

Year:

2015

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	2,950	37	1.25%	0	26				
2	2,941	38	1.29%	0	27				
3	2,952	57	1.93%	0	28				
4	2,950	42	1.42%	0	29				
5	2,946	63	2.14%	0	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	<i>Giardia and Cryptosporidium Log Removal Credit Allowed this Month For Enhanced IFE Performance</i>				1.0
	Did any of the filters have confirmed IFE readings above 0.3 NTU?			No					

SUBMITTED BY:



Certificate No.

and Grade: WO0023530, A Surface

Date: February 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: January

Year: 2015

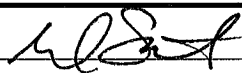
TEST PARAMETERS & ADDITIONAL DATA

DIT CONDITIONS & ADDITIONAL DATA	Unit No. 1										Unit No. 2									
	DIT Cond'n's	P _{test} psi	LRC	UCL		Prev. Month Data	DIT _{test} date	Pass? Yea/No	C/A Success?		DIT Cond'n's	P _{test} psi	LRC	UCL		Prev. Month	DIT _{test} date	Pass? Yea/No	C/A Success?	
		16.5	2.8	1.650			12/31/14	YES	NA			16.5	2.8	1.650			12/31/14	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	0.869	14.2	9.5	1.50	45		17.9	0.640	YES	NA	0.815	14.3	6.2	2.31	33		18.1	0.500	YES	NA
2	0.855	14.2	9.7	1.46	30		17.9	0.620	YES	NA	0.850	14.3	5.9	2.41	26		18.1	0.510	YES	NA
3	0.850	14.2	10.1	1.41	31		17.9	0.600	YES	NA	0.934	14.2	6.1	2.32	28		18.0	0.490	YES	NA
4	0.838	14.2	1.0	14.67	40		17.8	0.650	YES	NA	0.864	14.2	6.4	2.24	36		18.1	0.510	YES	NA
5	0.914	14.2	10.1	1.41	43		17.8	0.650	YES	NA	0.887	14.2	6.1	2.32	22		18.0	0.530	YES	NA
6	0.914	14.2	9.4	1.51	32		17.6	0.670	YES	NA	0.464	14.3	4.3	3.30	30		17.0	1.150	YES	NA
7	0.891	14.1	10.0	1.42	38		18.6	0.700	YES	NA	0.867	14.2	4.5	3.14	18		18.0	0.800	YES	NA
8	0.805	14.1	10.4	1.36	40		18.7	0.690	YES	NA	0.892	14.1	4.8	2.95	37		18.6	0.680	YES	NA
9	0.849	14.1	10.1	1.40	34		18.7	0.690	YES	NA	0.717	14.2	4.8	2.97	36		18.6	0.640	YES	NA
10	0.859	14.1	10.6	1.33	34		18.8	0.640	YES	NA	0.813	14.2	4.9	2.91	32		18.4	0.600	YES	NA
11	0.372	14.1	10.8	1.31	29	YES	16.2	1.230	NO	YES	1.026	14.2	4.9	2.88	26		18.8	0.610	YES	NA
12	0.599	14.2	3.2	4.45	27		16.6	1.180	YES	NA	0.852	14.1	4.7	3.03	26		18.9	0.610	YES	NA
13	0.909	14.2	3.6	3.91	24		17.8	0.950	YES	NA	0.894	14.2	4.9	2.88	22		18.8	0.600	YES	NA
14	0.857	14.2	3.9	3.63	21		18.1	0.870	YES	NA	0.758	14.2	4.5	3.15	44		18.5	0.600	YES	NA
15	0.000	X	X	X	X		X	X	X		0.463	14.1	3.9	3.60	26		19.8	0.650	YES	NA
16	0.251	14.2	3.3	4.27	78		16.5	1.190	YES	NA	0.252	14.1	3.9	3.66	37		20.2	0.670	YES	NA
17	0.908	14.2	3.5	4.02	35		19.3	0.970	YES	NA	0.859	14.2	3.9	3.67	20		20.1	0.640	YES	NA
18	0.852	14.2	3.5	4.01	21		19.5	0.920	YES	NA	0.833	14.1	3.7	3.79	27		20.3	0.640	YES	NA
19	0.732	14.2	3.4	4.19	25		19.6	0.880	YES	NA	0.870	14.5	3.6	4.02	18		20.3	0.630	YES	NA
20	0.858	14.2	3.3	4.34	29		19.5	0.900	YES	NA	0.878	14.1	3.6	3.98	39	YES	20.4	0.620	YES	NA
21	0.874	14.2	3.5	4.07	24		19.7	0.870	YES	NA	0.804	14.1	3.6	3.88	28		20.3	0.660	YES	NA
22	0.968	14.2	3.7	3.88	32		19.7	0.850	YES	NA	1.058	14.2	3.8	3.74	31		20.2	0.640	YES	NA
23	1.321	14.1	3.8	3.70	30		19.7	0.840	YES	NA	1.266	14.1	4.0	3.52	19		20.4	0.590	YES	NA
24	0.991	14.1	3.8	3.73	29		19.9	0.810	YES	NA	1.034	14.1	3.9	3.64	15		20.4	0.610	YES	NA
25	0.882	14.2	3.7	3.83	29		19.9	0.820	YES	NA	0.855	14.2	3.9	3.60	15		20.5	0.570	YES	NA
26	1.162	14.2	3.7	3.81	31		20.0	0.790	YES	NA	0.968	14.3	3.9	3.69	84		20.5	0.670	YES	NA
27	1.186	14.1	3.5	4.03	30		20.0	0.810	YES	NA	1.300	14.1	3.7	3.78	20		20.2	0.610	YES	NA
28	1.170	14.1	3.6	3.90	26		19.9	0.840	YES	NA	1.230	14.1	3.6	3.88	22		20.5	0.640	YES	NA
29	1.292	14.1	3.4	4.10	28		19.7	0.880	YES	NA	1.288	14.1	3.7	3.86	26		20.5	0.590	YES	NA
30	1.260	14.2	3.6	3.89	86		17.3	0.690	YES	NA	1.275	14.1	3.7	3.82	21		20.3	0.640	YES	NA
31	1.304	14.2	3.6	3.89	32		19.8	0.850	YES	NA	1.331	14.2	3.8	3.69	34		20.5	0.670	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										0									
	Number of days with a monitoring violation										0									

SUBMITTED BY:  Certificate No. and Grade: WO0023530, A Surface Date: February 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: January

Year: 2015

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 _{test} date	Pass? Yea/No	C/A Success?		DIT Cond'n's	P _{test} psi	LRC -	UCL psi/min		Prev. Month	DIT _{test} date	Pass? Yea/No	C/A Success?	
		16.5	2.8	1.650			12/31/14	YES	NA			16.5	2.8	1.650			12/31/14	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	0.917	14.3	5.0	2.87	25		17.7	0.610	YES	NA	0.876	14.3	2.4	5.91	25		18.3	0.430	YES	NA
2	0.855	14.3	5.2	2.76	23		17.8	0.590	YES	NA	0.900	14.3	2.5	5.73	24		18.3	0.420	YES	NA
3	0.885	14.3	5.1	2.83	33		17.8	0.590	YES	NA	0.779	14.3	2.5	5.78	24		18.3	0.410	YES	NA
4	0.918	14.3	5.2	2.73	27		17.7	0.610	YES	NA	0.841	14.3	2.5	5.81	28		18.2	0.420	YES	NA
5	0.859	14.2	5.3	2.71	20		17.7	0.600	YES	NA	0.775	14.3	2.5	5.77	24		18.2	0.420	YES	NA
6	0.953	14.3	5.1	2.82	20		17.7	0.620	YES	NA	0.991	14.3	2.4	5.93	24		18.2	0.430	YES	NA
7	0.907	14.2	5.3	2.70	38		18.5	0.660	YES	NA	0.791	14.2	2.4	5.87	23		19.2	0.450	YES	NA
8	0.889	14.2	5.3	2.66	36		18.6	0.660	YES	NA	0.830	14.2	2.5	5.66	23		19.2	0.450	YES	NA
9	0.767	14.2	5.4	2.63	36		18.6	0.640	YES	NA	0.752	14.4	2.5	5.66	25		19.2	0.450	YES	NA
10	0.860	14.2	5.6	2.55	25		18.7	0.630	YES	NA	0.896	14.2	2.6	5.53	25		19.2	0.450	YES	NA
11	0.958	14.2	5.3	2.70	22		18.7	0.630	YES	NA	0.951	14.2	2.6	5.57	25		19.2	0.450	YES	NA
12	0.951	14.2	5.3	2.69	20		18.8	0.640	YES	NA	0.974	14.2	2.4	5.89	24		19.2	0.460	YES	NA
13	0.791	14.2	5.5	2.57	29		18.7	0.630	YES	NA	0.817	14.2	2.5	5.68	25		19.2	0.450	YES	NA
14	0.876	14.2	5.1	2.76	39		18.6	0.680	YES	NA	0.888	14.3	2.5	5.67	25		19.2	0.460	YES	NA
15	0.577	14.2	5.1	2.76	33		19.7	0.700	YES	NA	0.562	14.3	2.5	5.74	28		20.3	0.490	YES	NA
16	0.226	14.2	5.0	2.83	53		20.1	0.700	YES	NA	0.218	14.3	2.4	5.88	29		20.7	0.500	YES	NA
17	0.849	14.2	4.9	2.87	43		20.1	0.730	YES	NA	0.791	14.3	2.4	5.88	25		20.7	0.500	YES	NA
18	0.939	14.2	4.5	3.16	27		20.0	0.730	YES	NA	0.817	14.3	2.3	6.24	25		20.6	0.500	YES	NA
19	0.859	14.2	4.5	3.19	35		20.1	0.700	YES	NA	0.783	14.3	2.2	6.50	25		20.7	0.510	YES	NA
20	0.778	14.2	4.3	3.26	33		20.2	0.680	YES	NA	0.825	14.2	2.2	6.45	26		20.7	0.510	YES	NA
21	0.899	14.2	4.4	3.24	36		20.1	0.710	YES	NA	0.806	14.2	2.2	6.34	22		20.7	0.500	YES	NA
22	1.005	14.2	4.7	3.00	43		20.1	0.690	YES	NA	0.982	14.2	2.4	5.99	21		20.7	0.510	YES	NA
23	1.211	14.2	4.7	3.01	27		20.1	0.670	YES	NA	1.146	14.2	2.5	5.78	26		20.6	0.510	YES	NA
24	1.081	14.2	4.7	2.99	17		20.2	0.650	YES	NA	1.023	14.3	2.5	5.80	21		20.6	0.510	YES	NA
25	0.750	14.2	4.6	3.10	17		20.2	0.640	YES	NA	0.860	14.2	2.5	5.73	21		20.6	0.510	YES	NA
26	1.166	14.2	4.4	3.21	17		20.3	0.630	YES	NA	1.143	14.6	2.5	5.87	31		20.7	0.510	YES	NA
27	1.229	14.2	4.4	3.22	21		20.2	0.630	YES	NA	1.278	14.2	2.3	6.12	26		20.7	0.510	YES	NA
28	1.323	14.1	4.2	3.33	24		20.2	0.670	YES	NA	1.256	14.2	2.2	6.47	35		20.7	0.520	YES	NA
29	1.215	14.2	4.2	3.38	23		20.3	0.650	YES	NA	1.262	14.2	2.2	6.38	32		20.7	0.520	YES	NA
30	1.356	14.2	4.3	3.28	39		20.2	0.660	YES	NA	1.271	14.2	2.2	6.51	30		20.7	0.520	YES	NA
31	1.224	14.2	4.3	3.27	31		20.2	0.660	YES	NA	1.219	14.2	2.3	6.28	23		20.7	0.510	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 a monitoring violation									
	Number of days with failure to pass a DIT										Number of days with a treatment technique violation									

SUBMITTED BY:



Certificate No. and Grade: WO0023530, A Surface

Date: February 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: January

Year: 2015

TEST PARAMETERS & ADDITIONAL DATA

DIT CONDITIONS & ADDITIONAL DATA	Unit No. 5										Unit No. 6									
	DIT	P _{test}	LRC	UCL		Prev.	DIT _{test}	Pass?	C/A		DIT	P _{test}	LRC	UCL		Prev.	DIT _{test}	Pass?	C/A	
	Cond'n's	psi	-	psi/min		Month	date	Yes/No	Success?		Cond'n's	psi	-	psi/min		Month	date	Yes/No	Success?	
		16.5	2.8	1.650			12/31/14	YES	NA											
Optional Data	Filt.Flux	TMP									Optional Data	Filt.Flux	TMP							
	gfd	psi										gfd	psi							

PERFORMANCE DATA

Date	Unit No. 5										Unit No. 6									
	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	0.845	14.3	4.6	3.10	17		18.5	0.390	YES	NA										
2	0.890	14.3	4.6	3.12	21		18.4	0.410	YES	NA										
3	0.886	14.3	4.7	3.03	19		18.5	0.400	YES	NA										
4	0.850	14.3	4.7	3.07	24		18.3	0.410	YES	NA										
5	0.870	14.3	4.7	3.06	22		18.5	0.390	YES	NA										
6	0.985	14.3	4.7	3.02	20		18.5	0.410	YES	NA										
7	0.873	14.2	4.5	3.16	17		19.3	0.470	YES	NA										
8	0.882	14.2	4.8	2.96	20		19.4	0.430	YES	NA										
9	0.720	14.2	4.9	2.88	16		19.4	0.420	YES	NA										
10	0.873	14.2	4.7	3.01	15		19.3	0.430	YES	NA										
11	0.994	14.2	4.8	2.98	20		19.4	0.430	YES	NA										
12	0.929	14.2	4.7	3.05	18		19.5	0.440	YES	NA										
13	0.900	14.2	4.7	3.03	19		19.4	0.440	YES	NA										
14	0.930	14.2	4.8	2.93	16		19.4	0.430	YES	NA										
15	0.479	14.1	4.7	3.02	15		19.7	0.450	YES	NA										
16	0.205	14.2	4.4	3.25	22		20.9	0.520	YES	NA										
17	0.928	14.2	4.5	3.18	16		20.8	0.520	YES	NA										
18	0.903	14.2	4.3	3.28	14		20.9	0.490	YES	NA										
19	0.822	14.3	4.1	3.49	18		20.7	0.530	YES	NA										
20	0.919	14.2	4.1	3.49	18		20.9	0.490	YES	NA										
21	0.858	14.2	4.2	3.37	18		20.9	0.490	YES	NA										
22	1.037	14.2	4.3	3.32	17		20.8	0.500	YES	NA										
23	1.334	14.1	4.5	3.11	17		20.9	0.470	YES	NA										
24	0.960	14.2	4.4	3.24	14		20.8	0.480	YES	NA										
25	0.830	14.1	4.3	3.26	14		20.9	0.450	YES	NA										
26	1.089	14.2	4.3	3.34	16		20.9	0.450	YES	NA										
27	1.258	14.1	4.0	3.51	15		20.9	0.470	YES	NA										
28	1.220	14.1	3.9	3.58	14		20.9	0.480	YES	NA										
29	1.260	14.1	3.8	3.69	18		21.0	0.490	YES	NA										
30	1.243	14.2	3.9	3.60	14		20.9	0.470	YES	NA										
31	1.346	14.2	4.0	3.56	16		20.9	0.480	YES	NA										

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

SUBMITTED BY:

Certificate No.
 and Grade: WO0023530, A Surface

Date: February 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

OR NUMBER:

Cypress DPR (Microfiltration/RO)

PWS ID No.: 2430001

Plant ID No.: 410791

Month:

January

Year: 2015

TREATMENT TECHNOLOGIES																	
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 Filters	Bag or Cartridge Filtration	Two-Stage Filtration	Membrane Filtration (PBT)	Membrane Filtration (QBT)	Membrane Filtration (MBT)	Enhanced CFE Perform.	Optimized IFE Perform.	Crypto Chemical Disinfect.	UV Disinfect. (ISA)	UV Disinfect. (CDA)	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				TRUE		TRUE	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								2.80									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			0.0	1.0					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.)

L72ESWTR Summary Page (cont)

PUBLIC WATER	PLANT NAME	Year:	2015
SYSTEM NAME:	OR NUMBER:	January	
PWS ID No.:	Plant ID No.:	Month:	
2430001	410791	January	

GIARDIA AND CRYPTOSPORIDIUM TREATMENT CREDITS					GIARDIA INACTIVATION CREDITS					VIRAL INACTIVATION CREDITS				
Total Daily Credit By Train					Total Daily Inactivation Credit By Train					Total Daily Inactivation Credit by Train				
Overall	TRUE	FALSE	FALSE	Minimum	TRUE	FALSE	FALSE	FALSE	Minimum	TRUE	FALSE	FALSE	FALSE	Minimum
Train 1	7.30			7.30	2.80			FALSE	2.80	5.65			FALSE	5.65
Train 2	7.30			7.30	2.80				2.80	6.16				6.16
Train 3	7.30			7.30	2.80				2.80	6.00				6.00
Train 4	7.30			7.30	2.80				2.80	6.73				6.73
Train 5	7.30			7.30	2.80				2.80	6.79				6.79
1	7.30			7.30	2.80				2.80	6.86				6.86
2	7.30			7.30	2.80				2.80	5.68				5.68
3	7.30			7.30	2.80				2.80	5.39				5.39
4	7.30			7.30	2.80				2.80	5.91				5.91
5	7.30			7.30	2.80				2.80	6.57				6.57
6	7.30			7.30	2.80				2.80	6.57				6.57
7	7.30			7.30	2.80				2.80	7.27				7.27
8	7.30			7.30	2.80				2.80	6.55				6.55
9	7.30			7.30	2.80				2.80	5.94				5.94
10	7.30			7.30	2.80				2.80	7.66				7.66
11	7.30			7.30	2.80				2.80	7.23				7.23
12	7.30			7.30	2.80				2.80	6.81				6.81
13	7.30			7.30	2.80				2.80	7.00				7.00
14	7.30			7.30	2.80				2.80	8.05				8.05
15	7.30			7.30	2.80				2.80	8.02				8.02
16	7.30			7.30	2.80				2.80	8.06				8.06
17	7.30			7.30	2.80				2.80	5.41				5.41
18	7.30			7.30	2.80				2.80	6.12				6.12
19	7.30			7.30	2.80				2.80	6.38				6.38
20	7.30			7.30	2.80				2.80	7.50				7.50
21	7.30			7.30	2.80				2.80	5.99				5.99
22	7.30			7.30	2.80				2.80	6.55				6.55
23	7.30			7.30	2.80				2.80	6.71				6.71
24	7.30			7.30	2.80				2.80	6.60				6.60
25	7.30			7.30	2.80				2.80	6.67				6.67
26	7.30			7.30	2.80				2.80	4.05				4.05
27	7.30			7.30	2.80				2.80	4.05				4.05
28	7.30			7.30	2.80				2.80	6.54				6.54
29	7.30			7.30	2.80				2.80	4.05				4.05
30	7.30			7.30	2.80				2.80	7.14				7.14
31	7.30			7.30	2.80				2.80	7.14				7.14
MIN	7.30			7.30	2.80				2.80	7.14				7.14
AVG	7.30			7.30	2.80				2.80	7.14				7.14
MAX	7.30			7.30	2.80				2.80	7.14				7.14

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:

January

Year:

2015

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
1/1	5.86	3.02	<4.00	2.9	1.5	1.4	X	1.5	X	1.41	1.39	1.4	X	1.42	X
1/2	7.32	3.16	<4.00	1.1	X	X	1.4	CIP	2.1	1.41	X	X	1.4	CIP	1.4
1/3	7.77	3.74	<4.00	0.9	X	X	1.6	CIP	CIP	1.41	X	X	1.4	CIP	CIP
1/4	5.55	3.77	<4.00	X	X	X	1.3	1.7	CIP	X	X	X	1.4	1.41	CIP
1/5	5.02	3.27	<4.00	0.9	X	X	X	X	1.9	1.46	X	X	X	X	1.41
1/6	4.85	3.75	<4.00	X	X	X	2.3	1.9	X	X	X	X	1.4	1.41	X
1/7	3.81	3.14	<4.00	1.7	X	X	X	X	1.9	1.4	X	X	X	X	1.4
1/8	3.68	3.22	<4.00	X	X	X	1.7	1.9	X	X	X	X	1.41	1.41	X
1/9	3.74	4.13	<4.00	1.8	X	X	X	X	2.7	1.41	X	X	X	X	1.39
1/10	3.71	4.01	<4.00	X	X	X	1.9	2.4	X	X	X	X	1.41	1.42	X
1/11	3.51	3.76	<4.00	1.9	X	X	X	X	1.8	1.41	X	X	X	X	1.42
1/12	3.27	3.77	<4.00	X	X	X	1.9	1.4	X	X	X	X	1.4	1.42	X
1/13	2.98	3.47	136	1.1	X	X	X	X	1.3	1.42	X	X	X	X	1.41
1/14	3.85	3.78	<4.00	X	X	CIP	1.8	1.9	X	X	X	CIP	1.45	1.44	X
1/15	2.85	3.02	<4.00	1.1	X	CIP	X	X	2.1	1.41	X	CIP	X	X	1.41
1/16	3.12	0.00	<4.00	X	X	X	2.3	1.5	X	X	X	X	1.39	1.39	X
1/17	2.61	4.21	<4.00	X	X	1.3	X	X	1.8	X	X	1.41	X	X	1.41
1/18	2.77	4.07	<4.00	X	X	X	2	1.7	X	X	X	X	1.4	1.41	X
1/19	2.54	4.36	<4.00	X	1.4	0.8	X	X	X	X	1.4	1.4	X	X	X
1/20	3.27	3.09	<4.00	1.8	CIP	X	2.4	X	X	1.42	CIP	X	1.4	X	X
1/21	2.42	3.74	<4.00	X	CIP	1.5	X	1.8	X	X	CIP	1.4	X	1.41	X
1/22	2.60	3.62	<4.00	CIP	1.4	X	2.2	X	1.5	CIP	1.53	X	1.53	X	1.52
1/23	2.50	3.22	<4.00	CIP	1.6	1.5	X	1.5	X	CIP	1.55	1.55	X	1.54	X
1/24	2.36	3.32	<4.00	1.7	X	X	1	X	1.5	1.53	X	X	1.53	X	1.53
1/25	2.58	4.12	<4.00	X	X	1.7	X	X	1.9	X	X	1.39	X	X	1.41
1/26	2.59	3.42	<4.00	X	1.2	1.4	X	X	1.9	X	1.58	1.57	X	X	1.57
1/27	2.08	3.99	<4.00	2.1	X	X	2.4	2	X	1.51	X	X	1.51	1.5	X
1/28	2.10	3.13	<4.00	X	1.2	1.7	X	X	1.9	X	1.51	1.5	X	X	1.51
1/29	2.21	3.63	<4.00	1.6	X	X	1.6	2	X	1.51	X	X	1.5	1.51	X
1/30	2.28	4.11	<4.00	X	1	1.5	X	X	1.5	X	1.51	1.51	X	X	1.52
1/31	3.10	3.53	<4.00	2	X	X	2.3	1.9	X	1.52	X	X	1.5	1.51	X

Submitted by:



Certificate No.

and Grade:

WO0023530, AW

Date:

10-Feb-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: January Year: 2015

Location:	TCEQ-20J						TCEQ-22J												
	Salt Rejection (% Removal)						Max 15-Min. Lagoon Return %	2-Hour Average Lagoon Return % Flows											
Date	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
1/1	98.7	98.8	98.8	X	98.8	X	30.36	X	X	X	X	X	X	X	X	X	X	X	X
1/2	98.8	X	X	98.1	CIP	98.1	29.01	X	X	X	X	X	X	X	X	X	X	X	X
1/3	98.7	X	X	98	CIP	CIP	33.00	X	X	X	X	X	X	X	X	X	X	X	X
1/4	X	X	X	98.1	98.5	CIP	29.64	X	X	X	X	X	X	X	X	X	X	X	X
1/5	98.7	X	X	X	X	98.3	30.26	X	X	X	X	X	X	X	X	X	X	X	X
1/6	X	X	X	97.9	98.4	X	28.87	X	X	X	X	X	X	X	X	X	X	X	X
1/7	98.7	X	X	X	X	98.3	28.61	X	X	X	X	X	X	X	X	X	X	X	X
1/8	X	X	X	98.2	98.6	X	28.71	X	X	X	X	X	X	X	X	X	X	X	X
1/9	98.9	X	X	X	X	98.4	26.51	X	X	X	X	X	X	X	X	X	X	X	X
1/10	X	X	X	98.1	98.6	X	24.86	X	X	X	X	X	X	X	X	X	X	X	X
1/11	98.8	X	X	X	X	98.5	35.27	X	X	X	X	X	X	X	X	X	X	X	X
1/12	X	X	X	98.2	98.4	X	35.16	X	X	X	X	X	X	X	X	X	X	X	X
1/13	98.7	X	X	X	X	98.4	38.40	X	X	X	X	X	X	X	X	X	X	X	X
1/14	X	X	CIP	98.3	98.5	X	36.23	X	X	X	X	X	X	X	X	X	X	X	X
1/15	98.7	X	CIP	X	X	98.3	35.01	X	X	X	X	X	X	X	X	X	X	X	X
1/16	X	X	X	98	98.6	X	28.82	X	X	X	X	X	X	X	X	X	X	X	X
1/17	X	X	98.8	X	X	98.3	35.08	X	X	X	X	X	X	X	X	X	X	X	X
1/18	X	X	X	98	98.4	X	35.22	X	X	X	X	X	X	X	X	X	X	X	X
1/19	X	98.5	98.4	X	X	X	34.81	X	X	X	X	X	X	X	X	X	X	X	X
1/20	98.5	CIP	X	97.9	X	X	35.26	X	X	X	X	X	X	X	X	X	X	X	X
1/21	98.9	CIP	98.2	X	X	X	34.86	X	X	X	X	X	X	X	X	X	X	X	X
1/22	CIP	98.6	X	98.1	X	98.1	46.69	X	X	X	X	X	X	X	X	X	X	X	X
1/23	CIP	98.8	98.7	X	98.6	X	46.39	X	X	X	X	X	X	X	X	X	X	X	X
1/24	97.8	X	X	97.8	X	98.1	45.05	X	X	X	X	X	X	X	X	X	X	X	X
1/25	X	X	98.6	X	X	97.9	45.05	X	X	X	X	X	X	X	X	X	X	X	X
1/26	X	98.7	98.7	X	X	98.2	42.61	X	X	X	X	X	X	X	X	X	X	X	X
1/27	97.8	X	X	98	98.3	X	43.28	X	X	X	X	X	X	X	X	X	X	X	X
1/28	X	98.6	98.7	X	X	98.1	47.75	X	X	X	X	X	X	X	X	X	X	X	X
1/29	97.8	X	X	97.7	98.1	X	48.75	X	X	X	X	X	X	X	X	X	X	X	X
1/30	X	98.6	98.6	X	X	98.1	48.11	X	X	X	X	X	X	X	X	X	X	X	X
1/31	97.9	X	X	97.9	98.4	X	45.45	X	X	X	X	X	X	X	X	X	X	X	X

Submitted by: 

Certificate No. WO0023530, AW Date: 10-Feb-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: January Year: 2015

Location:	TCEQ-41J	TCEQ-42J
	Min. Ground Storage Tank Level (% Full)	Min Total Chlorine Residual (ppm)
Date		
1/1	56%	3.50
1/2	54%	3.50
1/3	52%	3.80
1/4	50%	3.90
1/5	51%	3.90
1/6	52%	3.90
1/7	52%	3.60
1/8	61%	3.50
1/9	67%	3.50
1/10	75%	3.60
1/11	77%	3.60
1/12	78%	3.40
1/13	77%	3.50
1/14	75%	3.40
1/15	71%	3.30
1/16	70%	3.30
1/17	77%	3.30
1/18	76%	3.30
1/19	75%	3.20
1/20	69%	3.10
1/21	67%	3.10
1/22	72%	3.10
1/23	71%	3.10
1/24	74%	3.30
1/25	75%	3.30
1/26	70%	3.30
1/27	76%	3.20
1/28	80%	3.70
1/29	77%	3.70
1/30	77%	3.70
1/31	80%	3.70

TCEQ-20J					
Current Month Average Salt Rejection					
Train 1	Train 2	Train 3	Train 4	Train 5	Train 6
98.49	98.7	98.6	98	98.5	98.2

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

TCEQ-42J			
	Nitrate-N	Nitrite-N	<i>E. coli</i>
Date	(ppm)	(ppm)	MPN
1/5	0.25	0.01	<0.02
1/12	0.27	0.01	<0.02
1/19	0.27	0.01	<0.02
1/26	0.33	0.02	<0.02

TCEQ-2JB			
	<i>Cryptosporidium</i>	<i>Giardia</i>	TCV
Date	(oocysts/L)	(cysts/L)	MPN
1/5	<1.309	17.02	*

TCEQ-42J			
	<i>Cryptosporidium</i>	<i>Giardia</i>	TCV
Date	(oocysts/L)	(cysts/L)	MPN
1/6	<0.00712	<0.00712	*
1/20	<0.00636	<0.00636	*

Previous Virus Data			
TCEQ-2JB			
	<i>Enterovirus</i>	<i>Norovirus</i>	TCV
Date	MPN/100mL		
11/3	<144.79	<144.79	<0.0291

TCEQ-42J			
	<i>Enterovirus</i>	<i>Norovirus</i>	TCV
Date	MPN/100mL		
11/4	<0.3569	<0.3569	<0.0018
11/19	<0.3279	<0.3279	<0.00165

Submitted by: 

Certificate No. and
Grade:

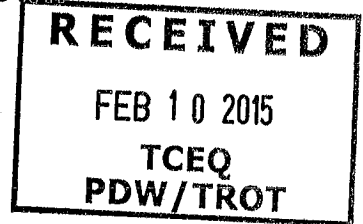
W00023530, AW Date: 10-Feb-15

Date of Problem January 16, 2015	River Road WWTP 2J DPR minimum monochloramine of 0.00 ppm.
Describe the problem (what happened, when it was detected, how it was detected, etc)	The DPR pump was offline during this time due to an <i>E. coli</i> shutdown trigger. While the pump was off, treated wastewater effluent was diverted, potentially causing loss of flow to the analyzer. Wastewater mechanics also took time during the shutdown to perform preventative maintenance in the analyzer.
Describe how the problem impacted or could have impacted the DPR treatment processes.	There was no impact to the DPR plant, as the pump was off line and water was already being diverted.
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)	N/A
What options are available, if any, to avoid a recurrence?	N/A
What options, if any, could be implemented to reduce response time if the problem does reoccur?	N/A
Action Plan	At this time there are no additional actions planned.

After Action Report for High *E.-Coli* Shutdown

Date:

1/15/2015



Description of Problem:

The City shut down the DPR plant following an elevated *E. coli* sample result at location TCEQ-2JB from the River Road WWTP 01/15/2015.

The TCEQ required shutdown limit is 75 cfu/100 ml and the sample result showed 136 cfu/100 ml.

Potential Impacts:

The monitoring of *E. coli* at TCEQ-2JB was intended to be an early warning of high pathogen loading in the wastewater effluent, or a failure of the disinfection system.

Response:

Several samples were collected and evaluated in order to ensure *E. coli* was not present throughout the treatment process prior to bringing the plant back online.

The series of events on 01/15/2015 through 01/16/2015 that shut down the DPR are as follows:

- Notified of *E. coli* of 136 cfu/100 ml on 1/15/2015 from River Road Lab staff.
- Notified Mark Southard (Cypress WTP) @1117 hrs same day.
- Collected a grab sample from Site 2JB and delivered to Red River Authority Lab for testing. Results/COC attached.
- DPR pump and Cypress lagoon pumps were shut down @ 1134 hrs on 1/15/2015.
- Microfilters shut down at 1146 hrs on 1/15/2015.
- RO Trains shut down at 1150 hrs on 1/15/2015.
- Collected grab samples in the Cypress WTP at the combined MF effluent and the RO Permeate lagoon on 1/15/2015. Both samples were tested for *E. coli* using Colilert 18. (Results were negative on 1/16/2015)
- Received phone conformation (1/16/2015) from Red River Authority Lab that the result for sample was <1 MPN/100 ml.
- Sample collected on 1/14/2015 had results of <4 cfu/100 ml. (River Road WWTP Lab)
- City discussed all sample results with TCEQ during conference call on 1/16/2015 and received approval to restart DPR pump.
- DPR pump turned on @ 1732 hrs 1/16/2015, microfilters, RO trains and lagoon pumps were brought online following.
- 6,018,305 gallons of water was diverted during the shutdown period.

Was Response Effective?

Both the City of Wichita Falls staff and the TCEQ staff feel that the Alarm/Shutdown Triggers were implemented correctly and that the protocols that were developed proved to be effective.

Follow-up *E. coli* analysis was implemented quickly and the results allowed the Direct Potable Reuse system to be returned to operation the following day.

Corrective Actions:

It was determined that the River Road WWTP lab was examining the samples after 24 hours of incubation. If no *E. coli* indication was present (Blue Dots), the sample was held for another 24 hours, read and results reported.

Upon closer examination of the test procedure, m-ColiBlue24, if no *E. coli* indicators are present after 24 hours of incubation then the results are to be reported as zero.

The sample in question that caused the shutdown had no *E. coli* indicators present at the end of the initial 24 hour incubation period. Therefore, no *E. coli* was present and the result that was reported after 48 hours was a false positive.

The River Road WWTP laboratory *E. coli* SOP has been updated to reflect the change in reading sample results. All lab staff has been trained on the procedure and fully understand that the samples will be read and reported after the initial 24 hour incubation period.

1005 RIVER ROAD
WICHITATA FALLS TX 76305

E COLI

SAMPLE NAME: **2J-B**

Volume filtered(ml): #1	1.00	Colony count:	0
#2	10.0	Colony count	0
#3	25.0	Colony count	0

DUPLICATE: #1	Colony count
#2	Colony count
#3	Colony count

BLANK

#1. Volume filtered: 10.0 ml	Colony count
#2. Volume filtered: 10.0 ml	Colony count

Collected by: IF	Date: 1-14-15	Time: 11:18 AM
Delivered by: IF	Date: 1-14-15	Time: 1:31 PM
Received by: C. Ganey	Date: 1-14-15	Time: 1:31 PM
Tested by: C. Ganey	Date: 1-14-15	Time: 1:50 PM

INCUBATED TIME: 2:30 PM TEMP: 35.0 °C

Read by: C. Ganey Date: 1-16-15 Time: 11:01 AM

Calculation: $\frac{100 \text{ ml} \times \text{Colony count}}{\text{Volume (ml) used}}$

RESULT: 24.00 CFU/100 ml copied for J. E. H. 1-16-15 @ 11:00 AM

Reported by: C. Ganey Date: 1-16-15 Time: 11:03 AM

NOTE: DUP QC!

14300/12700 = 5.57% 100%

SAMPLE NO. 114.1 DATE 1/14/15
TIME 11:18 AM
SAMPLING POINT 2JB
ANALYSIS REQUIRED (circle):
TOTAL FECAL MPN MF (OTHER) ECOLI
COLI. COLI.
SAMPLER'S INITIALS TI
NAME RR WWTP
ADDRESS 1005 RIVER RD
W.F., TX 76305



Red River Authority of Texas

Environmental Laboratory

P.O. Box 240

Wichita Falls, TX 76307-0240

Telephone: (940) 723-1717 Fax: (940) 723-6529

E-mail: lab@rra.texas.gov



T104704274-14-9

Wednesday, January 21, 2015

COC No: 13559

Bill Thornton
Wichita Falls, City of WWTP
1005 River Road
Wichita Falls, TX 76305

Re: Analytical Report for samples received Thursday, January 15, 2015

This final report provides results related only to the sample(s) received for the above referenced lab order number. I certify that all results are in accordance with the referenced methods and the National Environmental Laboratory Accreditation Program (NELAP), unless specified otherwise in the comments section of the report. This report will not be released by us to any other agency without written authorization from you. The report may only be reproduced in full.

This report contains 3 pages (including the cover page, excluding any attachments).

Thank you for selecting us for your analytical needs. If you have any questions concerning this report, please contact us at (940) 723-1717 or fax us at (940) 723-6529.

A handwritten signature in cursive script that reads "Jill Simpson".

Jill Simpson
Laboratory Supervisor
Red River Authority of Texas



Red River Authority of Texas
Environmental Laboratory
P.O. Box 240
Wichita Falls, TX 76307-0240
Telephone: (940) 723-1717 Fax: (940) 723-6529
E-mail: lab@rra.texas.gov



T104704274-14-9

Sample Receipt Checklist

Client Name:	Wichita Falls, City of WWTP	Date Received:	01/15/2015
COC No:	13559	Received By:	Melanie Sears
Login completed by:	Sears Melanie		01/15/2015

Carrier Name: Walk In

Chain of Custody present?	☒ YES	☐ NO
Chain of Custody signed when relinquished and received?	☒ YES	☐ NO
Chain of Custody agrees with sample labels?	☒ YES	☐ NO
Samples in proper container/bottles?	☒ YES	☐ NO
Sample containers intact?	☒ YES	☐ NO
Sufficient sample volume for indicated tests?	☒ YES	☐ NO
All samples received within holding times?	☒ YES	☐ NO
Sample on Ice?	☒ YES	☐ NO
Water - VOA vials have zero headspace?	☐ YES	☐ NO ☒ No VOA Vials submitted
Water - pH acceptable upon receipt?	☐ YES	☐ NO ☒ Not Applicable
IDEXX Bottle Lot Number	HK004	

Rec. pH Value: N/A pH Adjusted ? No Adj. pH Value: N/A pH Paper Lot#: N/A

Sample Temp: 16.2 °C Thermometer ID: 43 Checked By: RRA-M. Sears

Comments: Any No response must be detailed in the comments section below.



Red River Authority of Texas
Environmental Laboratory
P.O. Box 240
Wichita Falls, TX 76307-0240
Telephone: (940) 723-1717 Fax: (940) 723-6529
E-mail: lab@rra.texas.gov



T104704274-14-9

Sample Analysis Report

Sample ID:	S150151433	Client ID:	WWTP 2JB	Sampler:	HB
------------	------------	------------	----------	----------	----

Client: Wichita Falls, City of WWTP

COC No: 13559

Sampled: 01/15/2015

Completed: 01/15/2015

Location: River Road WWTP

Type: Grab

Receiving Notation:

Matrix: Wastewater

Analysis Notation:

Analyte	Date	Time	Result	DF	LOQ	Method
E. coli, IDEXX mpn/100 ml	1/15/2015	14:45	<1	1	1	SM 9223 B

COC = Chain of Custody

DF = Dilution Factor

LOQ = Limit of Quantitation

City of Wichita Falls Water Purification Laboratory
Microbiological / Bacteriological Testing Section

Water Bacteriological Testing Report

System Identification Number: 2430001

Texas Commission on Environmental Quality Laboratory ID Number: 48180-2006A

Sample Number: 25810

System Name: City of Wichita Falls

County: Wichita

Collection Point: RO plant (MF Break tank)

Collection Date / Time: 01/15/15 / 3:52 AM / (PM)

Collected By: EDT Total Chlorine Residual: _____ mg/L

Type of System: Public

Type of Sample:

Distribution: _____

Raw: _____

Repeat: _____

Special: ☒

Upstream: _____

Const: _____

Downstream: _____

Water Sources: Lakes Arrowhead, Kickapoo, and Kemp.

For Laboratory Use Only

Water of Satisfactory Bacteriological Quality Must Be Free Of All Coliform Organisms

Date / Time Sample Inoculated: 01/15/15 / 4:27 AM / (PM)

Date / Time Incubated: 01/15/15 / 4:33 AM / (PM)

Received By: EDT

Test Method: Colilert 24 with Quantitray

Colilert 18 with Quantitray

None Found (Negative): ☒

Found (Positive): _____

Read By: MT

Total Coliform: _____ / _____ MPN

Date / Time Read: 01/16/15 / 10:33A

E.Coli: _____ / _____ MPN

Sample Unsuitable (Reason): _____

TCEQ Notified of Positive Samples By: _____

Name of Contact Person: _____

Date and Time Contacted: _____ / _____ AM / PM

City of Wichita Falls Water Purification Laboratory
Microbiological / Bacteriological Testing Section

Water Bacteriological Testing Report

System Identification Number: 2430001

Texas Commission on Environmental Quality Laboratory ID Number: 48180-2006A

Sample Number: 25811

System Name: City of Wichita Falls

County: Wichita

Collection Point: RO plant (MF Break tank)

Collection Date / Time: 01/15/15 / 3:52 AM / PM

Collected By: EDT Total Chlorine Residual: _____ mg/L

Type of System: Public

Type of Sample:

Distribution: _____

Raw: _____

Repeat: _____

Special: ✓

Upstream: _____

Const: _____

Downstream: _____

Water Sources: Lakes Arrowhead, Kickapoo, and Kemp.

For Laboratory Use Only

Water of Satisfactory Bacteriological Quality Must Be Free Of All Coliform Organisms

Date / Time Sample Inoculated: 01/15/15 / 4:27 AM / PM

Date / Time Incubated: 01/15/15 / 4:33 AM / PM

Received By: EDT

Test Method: Colilert 24 with Quantitray

Colilert 18 with Quantitray

None Found (Negative): ✓

Found (Positive): _____

Read By: UA

Total Coliform: / MPN

Date / Time Read: 01/16/15 / 10:33 AM

E.Coli: / MPN

Sample Unsuitable (Reason): _____

TCEQ Notified of Positive Samples By: _____

Name of Contact Person: _____

Date and Time Contacted: _____ / _____ AM / PM

City of Wichita Falls Water Purification Laboratory
Microbiological / Bacteriological Testing Section

Water Bacteriological Testing Report

System Identification Number: 2430001

Texas Commission on Environmental Quality Laboratory ID Number: 48180-2006A

Sample Number: 85 25812

System Name: City of Wichita Falls

County: Wichita

Collection Point:

DPR pipeline (RO Permeate Line to Lagoon)

Collection Date / Time:

01/15/15 1 3:47 AM / PM

Collected By:

HA

Total Chlorine Residual:

mg/L

Type of System: Public

Type of Sample:

Distribution:

Raw:

Repeat:

Special:

Upstream:

Const:

Downstream:

Water Sources: Lakes Arrowhead, Kickapoo, and Kemp.

For Laboratory Use Only

Water of Satisfactory Bacteriological Quality Must Be Free Of All Coliform Organisms

Date / Time Sample Inoculated:

01/15/15 1 4:27 AM / PM

Date / Time Incubated:

01/15/15 1 4:33 AM / PM

Received By:

EDT

Test Method:

Colilert 24 with Quantitray

Colilert 18 with Quantitray

None Found (Negative):

✓

Found (Positive):

Read By:

HA

Total Coliform:

/

MPN

Date / Time Read:

01/16/15 1 12:33 AM

E.Coli:

/

MPN

Sample Unsuitable (Reason):

TCEQ Notified of Positive Samples By:

Name of Contact Person:

Date and Time Contacted:

/

AM / PM

City of Wichita Falls Water Purification Laboratory
Microbiological / Bacteriological Testing Section

Water Bacteriological Testing Report

System Identification Number: 2430001

Texas Commission on Environmental Quality Laboratory ID Number: 48180-2006A

Sample Number: 258/3

System Name: City of Wichita Falls

County: Wichita

Collection Point: DPR pipeline (RO Permeate Line to Lagoon)

Collection Date / Time: 01/15/15 1 3:47 AM / PM

Collected By: ~~EDT~~ HA Total Chlorine Residual: _____ mg/L

01/15/15 EDT

Type of System: Public

Type of Sample:

Distribution: _____

Raw: _____

Repeat: _____

Special: ✓

Upstream: _____

Const: _____

Downstream: _____

Water Sources: Lakes Arrowhead, Kickapoo, and Kemp.

For Laboratory Use Only

Water of Satisfactory Bacteriological Quality Must Be Free Of All Coliform Organisms

Date / Time Sample Inoculated: 01/15/15 1 4:27 AM / PM

Date / Time Incubated: 01/15/15 1 4:33 AM / PM

Received By: EDT

Test Method: Colilert 24 with Quantitray

Colilert 18 with Quantitray

None Found (Negative): ✓

Found (Positive): _____

Read By: HA

Total Coliform: / MPN

Date / Time Read: 01/16/15 1 10:33 AM

E.Coli: / MPN

Sample Unsuitable (Reason): _____

TCEQ Notified of Positive Samples By: _____

Name of Contact Person: _____

Date and Time Contacted: _____ / _____ AM / PM