

MAR-26 '12 13:10

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 (Microfiltration/R.O.)

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

PWS ID No.: 2430001

Operator's Signature: *h. d. Smith*Report for
the Month of: August 2011

Certificate No. & Grade: W00023530, AW

Date: September 40, 2011 *March 22, 2012*

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:	10	Number of 4-hour periods when plant was on-line but turbidity data was not collected:	0
Number of readings above 0.3 NTU:	0	Number of 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: 0.12 NTU Minimum turbidity reading: 0.06 NTU CFE 95 th percentile value: 0.11 NTU	Average turbidity value: 0.09 NTU Standard deviation: 0.012 NTU IFE 95 th percentile: 0.166 NTU	
Number of days with a low CT for no more than 4.0 consecutive hours:	0	Average log inactivation for Giardia:	26.04
Number of days with a low CT for more than 4.0 consecutive hours:	0 (4)	Average log inactivation for viruses:	168.21
		Number of days when profiling data was not collected:	0
		Number of days when CT data was not collected:	0
Minimum disinfectant residual required leaving the plant:	0.5 mg/L, measured as Total Chlorine		
Number of days with a low residual for no more than 4.0 consecutive hours:	0		
Number of days with a low residual for more than 4.0 consecutive hours:	0 (5)	Number of days when disinfectant residual leaving the plant was not properly monitored:	0

DISTRIBUTION SYSTEM

Minimum disinfectant residual required in distribution system:	0.5 mg/L, measured as Total Chlorine
Total number of readings this month:	113 (at least 100 required) (8)
Average disinfectant residual value:	3.56
Number of readings with a low residual:	0
Number of readings with no detectable residual:	0
Percentage of readings with a low residual this month:	0.0 % (6A)
Percentage of readings with a low residual last month:	0.0 % (6B)

ADDITIONAL REPORTS & WORKSHEETS

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

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

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

No additional IFE Reports are required this month.

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

Corrected

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 (Microfiltration/R.O.)

PWS ID No.:

2430001

Connections:

34,618

Month:

August

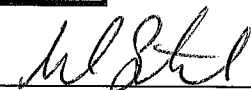
Year: 2011

Population:

PERFORMANCE DATA																		
Date	Raw Water Pumpage (MGD)	Treated Water Pumpage (MGD)	RAW WATER ANALYSES		SETTLED WATER TURBIDITY (Optional Data)						FINISHED WATER QUALITY							
											Turbidity						Lowest Residual	Time
					1	2	3	4	5	6	NTU1	NTU2	NTU3	NTU4	NTU5	NTU6		
1	8.000	21.923	5	62							0.10	0.09	0.08	0.09	0.08	0.10	2.6	
2	8.000	20.638	8	63							0.09	0.10	0.11	0.09	0.09	0.08	2.4	
3	6.667	21.165	9	62							0.08	0.08	0.09	0.09	0.07	0.09	2.5	
4	7.833	20.636	10	62							0.10	0.09	0.10	0.09	0.08	0.08	2.6	
5	9.000	20.960	10	63							0.11	0.09	0.07	0.08	0.09	0.08	3.0	
6	10.000	21.020	13	62							0.09	0.10	0.08	0.10	0.08	0.08	2.5	
7	10.000	21.212	10	62							0.10	0.11	0.08	0.10	0.10	0.09	2.7	
8	10.000	20.232	14	61							0.09	0.09	0.08	0.08	0.07	0.06	1.8	
9	9.000	20.232	12	60							0.09	0.09	0.08	0.08	0.07	0.06	1.8	
10	8.000	20.079	11	62							0.08	0.08	0.09	0.08	0.07	0.08	1.9	
11	8.000	21.167	16	62							0.09	0.08	0.09	0.08	0.09	0.08	3.0	
12	8.000	21.171	19	63							0.11	0.09	0.10	0.09	0.10	0.07	2.8	
13	7.583	21.487	16	65							0.10	0.09	0.09	0.10	0.08	0.08	3.0	
14	6.083	18.759	8	64							0.09	0.09	0.10	0.10	0.08	0.09	3.1	
15	8.000	17.302	14	66							0.09	0.09	0.10	0.09	0.10	0.07	2.8	
16	7.417	19.108	15	64							0.09	0.08	0.12	0.09	0.09	0.10	2.1	
17	7.417	19.618	19	64							0.09	0.11	0.11	0.09	0.10	0.11	2.7	
18	6.883	20.197	17	64							0.09	0.09	0.09	0.08	0.10	0.09	2.4	
19	6.583	18.860	14	66							0.10	0.10	0.09	0.08	0.10	0.09	3.1	
20	8.083	19.743	13	67							0.11	0.10	0.09	0.08	0.11	0.08	3.2	
21	10.000	21.759	17	67							0.07	0.07	0.07	0.08	0.08	0.07	2.3	
22	8.250	20.115	14	67							0.08	0.07	0.07	0.07	0.08	0.07	1.9	
23	8.000	20.412	15	66							0.07	0.08	0.07	0.07	0.06	0.07	2.4	
24	8.000	20.814	13	64							0.08	0.07	0.08	0.07	0.07	0.07	2.9	
25	7.167	21.110	11	64							0.09	0.06	0.08	0.08	0.06	0.06	2.7	
26	6.833	19.366	12	65							0.09	0.08	0.08	0.06	0.07	0.07	2.3	
27	8.000	19.578	10	68							0.10	0.08	0.09	0.09	0.08	0.07	3.1	
28	7.667	20.195	10	69							0.08	0.08	0.07	0.09	0.09	0.08	2.7	
29	6.000	20.285	12	67							0.10	0.09	0.09	0.09	0.10	0.09	2.1	
30	6.000	18.310	16	69							0.07	0.08	0.08	0.09	0.06	0.07	2.7	
31	6.000	19.475	17	70							0.07	0.08	0.08	0.07	0.08	0.09	2.8	
Total	242.466	626.928			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.													
Avg	7.821	20.223																
Max	10.000	21.923																
Min	6.000	17.302																

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, AW

Date:

September 10, 2011 March 22, 2012

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 (Microfiltration/R.O.)

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

PWS ID No.: 2430001

Operator's Signature: [Signature]

Report for

the Month of: August 2011

Certificate No. & Grade:

WO0023530, AW

Date: September 10, 2011

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:	1	Number of days when plant was on-line but individual filter turbidity data was not collected:	0
Number of readings above 0.5 NTU:	1	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:	0.5 % (1)		

Statistical Summary

Maximum turbidity reading:	0.90 NTU	Average turbidity value:	0.09 NTU
Minimum turbidity reading:	0.06 NTU	Standard deviation:	0.061 NTU
CFE 95 th percentile value:	0.11 NTU	IFE 95 th percentile:	0.166 NTU

Number of days with a low CT for no more than 4.0 consecutive hours:	0	Average log inactivation for Giardia:	26.04
Number of days with a low CT for more than 4.0 consecutive hours:	0 (4)	Average log inactivation for viruses:	168.21
		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: <u>0.5 mg/L, measured as Total Chlorine</u>			
Total number of readings this month:	113	Percentage of readings with a low residual this month:	0.0 % (6A)
(at least 100 required) (8)			
Average disinfectant residual value:	3.56	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		

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

SURFACE WATER MONTHLY OPERATING REPORT

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

Turbidity Data Page

PUBLIC WATER
SYSTEM NAME:

City of Wichita Falls

PLANT NAME
OR NUMBER:

Cypress (Microfiltration/R.O.)

PWS ID No.:

2430001

Connections:

34,618

Month:

August

Year: 2011

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.						Turbidity						Lowest Residual	Time
					1	2	3	4	5	6	NTU1	NTU2	NTU3	NTU4	NTU5	NTU6		
1	8.000	21.923	5	62							0.10	0.09	0.08	0.09	0.08	0.10	2.6	
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Max	10.000	21.923																
Min	6.000	17.302																

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, AW

Date: September 10, 2011

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 (Microfiltration/R.O.)

PWS ID No.: 2430001

Month: August Year: 2011

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	0.07	x	0.07	x	0.13	x	0.06	x											
2	0.11	x	0.06	x	0.06	x	0.05	x	0.09	x											
3	0.06	x	0.10	x	0.10	x	0.10	x	0.04	x											
4	0.07	x	0.03	x	0.03	x	0.14	x	0.04	x											
5	0.03	x	0.08	x	0.08	x	0.06	x	0.07	x											
6	0.07	x	0.06	x	0.06	x	0.07	x	0.06	x											
7	0.06	x	0.03	x	0.03	x	0.13	x	0.02	x											
8	0.06	x	0.05	x	0.05	x	0.10	x	0.04	x											
9	0.03	x	0.06	x	0.06	x	0.05	x	0.04	x											
10	0.07	x	0.11	x	0.11	x	0.05	x	0.07	x											
11	0.12	x	0.02	x	0.02	x	x	x	0.06	x											
12	0.06	x	0.10	x	0.10	x	x	x	0.06	x											
13	0.17	x	0.26	x	0.26	x	x	x	0.06	x											
14	0.04	x	0.17	x	0.17	x	0.12	x	0.06	x											
15	0.08	x	0.17	x	0.17	x	x	x	0.07	x											
16	0.06	x	0.11	x	0.11	x	x	x	0.18	x											
17	0.05	x	0.11	x	0.11	x	x	x	0.08	x											
18	0.05	x	0.08	x	0.08	x	x	x	0.06	x											
19	0.04	x	0.11	x	0.11	x	x	x	0.05	x											
20	0.04	x	0.11	x	0.11	x	x	x	0.05	x											
21	0.05	x	0.13	x	0.13	x	x	x	0.06	x											
22	0.02	x	0.01	x	0.01	x	x	x	0.01	x											
23	0.06	x	0.04	x	0.04	x	0.12	x	x	x											
24	0.19	x	0.05	x	0.05	x	0.09	x	0.07	x											
25	0.05	x	0.02	x	0.02	x	0.06	x	0.03	x											
26	0.05	x	0.04	x	0.04	x	0.04	x	0.03	x											
27	0.09	x	0.05	x	0.05	x	x	x	0.05	x											
28	0.05	x	0.02	x	0.02	x	x	x	0.02	x											
29	0.06	x	0.08	x	0.08	x	x	x	0.06	x											
30	0.08	x	0.06	x	0.06	x	x	x	0.04	x											
31	0.03	x	0.06	x	0.06	x	x	x	0.05	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 days with event(s) above 2.0 NTU this month											0
	Number of days with event(s) 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: WO0023530, AW

Date: September 10, 2011

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
PWS ID No.: 2430001

PLANT NAME
OR NUMBER: Cypress (Microfiltration/R.O.)
Month: August Year: 2011

DISINFECTION PROCESS PARAMETERS									
APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS			
Parameters	Disinfection Zones					Log Inactivations			
	D1A	D1B	D1C	D2	D3	Giardia lamblia Cysts		Viruses	
Flow Rate (MGD)	27.000	27.000	27.000	37.000		0.5		2.0	
T ₁₀ (minutes)	0.3	8.9	249.0	0.2					

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
1	NA D1A								
	NA D1B								
	CLO2 D1C	0.3	11.000	29.0	8.0	49.41	327.10	98.82	
	CLA D2	2.6	14.000	29.4	9.4			(G)	
	D3								
2	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	11.000	28.9	8.3	35.78	235.23	71.56	
	CLA D2	1.5	14.000	29.4	9.2			(G)	
	D3								
3	NA D1A								
	NA D1B								
	CLO2 D1C	0.0	12.000	29.0	8.3	4.69	31.04	9.38	
	CLA D2	2.7	14.000	31.3	9.2			(G)	
	D3								
4	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	10.000	29.0	8.3	11.25	74.46	22.50	
	CLA D2	3.7	14.000	29.1	9.0			(G)	
	D3								
5	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	10.000	29.6	8.1	9.38	64.68	18.75	
	CLA D2	2.4	14.000	28.0	8.8			(G)	
	D3								
6	NA D1A								
	NA D1B								
	CLO2 D1C	0.3	13.000	29.6	8.2	40.37	278.59	80.74	
	CLA D2	3.7	14.000	28.5	9.0			(G)	
	D3								
7	NA D1A								
	NA D1B								
	CLO2 D1C	0.3	13.000	29.1	8.3	38.93	259.49	77.86	
	CLA D2	3.7	14.000	29.3	8.8			(G)	
	D3								
8	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	13.000	29.9	8.2	31.72	223.49	63.44	
	CLA D2	3.1	14.000	28.9	8.8			(G)	
	D3								

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
9	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	13.000	29.1	8.3	8.65	57.66	17.30	
	CLA D2	0.0	14.000	29.5	9.0			(G)	
	D3								
10	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	11.000	28.8	8.2	22.15	144.61	44.30	
	CLA D2	1.6	14.000	27.3	9.0			(G)	
	D3								
11	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	10.000	29.6	8.2	22.49	155.21	44.98	
	CLA D2	1.5	14.000	27.9	9.0			(G)	
	D3								
12	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	10.000	28.5	8.1	39.36	251.67	78.72	
	CLA D2	2.1	14.000	26.9	8.8			(G)	
	D3								
13	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	11.000	28.2	8.1	8.52	53.36	17.04	
	CLA D2	2.0	14.000	28.4	8.6			(G)	
	D3								
14	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	9.000	27.8	8.1	31.24	190.28	62.48	
	CLA D2	1.9	12.000	26.5	8.7			(G)	
	D3								
15	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	11.000	27.6	8.0	34.08	204.73	68.16	
	CLA D2	2.4	14.000	30.2	8.7			(G)	
	D3								
16	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	12.000	29.1	7.6	7.81	52.07	15.63	
	CLA D2	2.9	14.000	28.8	9.1			(G)	
	D3								

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. WO0023630, AW Date: September 10, 2011
TCEQ - 0102C (11-10-09) PAGE 4 SWMOR

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
PWS ID No.: 2430001

PLANT NAME
OR NUMBER: Cypress (Microfiltration/R.O.)
Month: August Year: 2011

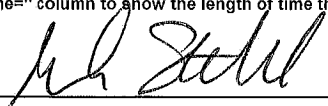
DISINFECTION PROCESS PARAMETERS									
APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS			
Parameters	Disinfection Zones					Log Inactivations			
	D1A	D1B	D1C	D2	D3	Giardia lamblia Cysts		Virus	
Flow Rate (MGD)	27.000	27.000	27.000	37.000		0.5		2.0	
T ₁₀ (minutes)	0.3	8.9	249.0	0.2					

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
17	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	10.000	28.3	8.0	18.75	118.20	37.49	
	CLA D2	2.6	14.000	27.8	8.5			(G)	
	D3								
18	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	14.000	28.1	8.1	8.04	49.98	16.08	
	CLA D2	3.5	16.000	30.5	9.0			(G)	
	D3								
19	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	10.000	28.4	8.1	18.75	119.03	37.49	
	CLA D2	3.1	14.000	27.5	8.8			(G)	
	D3								
20	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	10.000	22.7	8.4	14.41	72.16	28.82	
	CLA D2	2.3	16.000	29.4	9.1			(G)	
	D3								
21	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	13.000	27.7	8.1	23.07	139.55	46.14	
	CLA D2	1.8	16.000	29.1	8.9			(G)	
	D3								
22	NA D1A								
	NA D1B								
	CLO2 D1C	0.3	12.000	28.2	8.1	40.61	254.32	81.22	
	CLA D2	2.6	18.000	28.7	9.2			(G)	
	D3								
23	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	10.000	28.9	8.0	44.98	295.72	89.96	
	CLA D2	3.0	16.000	28.9	9.0			(G)	
	D3								
24	NA D1A								
	NA D1B								
	CLO2 D1C	0.3	10.000	28.5	8.0	52.48	335.56	104.95	
	CLA D2	2.5	16.000	29.2	8.9			(G)	
	D3								

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
25	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	10.000	29.0	8.1	15.00	99.27	29.99	
	CLA D2	2.8	16.000	27.9	9.1			(G)	
	D3								
26	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	10.000	28.4	8.0	9.38	59.52	18.75	
	CLA D2	2.8	16.000	27.3	9.0			(G)	
	D3								
27	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	11.000	27.3	7.8	34.08	200.52	68.16	
	CLA D2	2.9	16.000	29.5	8.9			(G)	
	D3								
28	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	11.000	29.0	8.1	15.34	101.52	30.67	
	CLA D2	2.4	16.000	30.9	9.0			(G)	
	D3								
29	NA D1A								
	NA D1B								
	CLO2 D1C	0.3	9.000	29.0	8.0	64.55	427.36	129.11	
	CLA D2	2.8	14.000	31.1	9.0			(G)	
	D3								
30	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	9.000	28.9	8.0	29.16	191.67	58.31	
	CLA D2	2.6	14.000	29.5	9.0			(G)	
	D3								
31	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	9.000	28.5	8.0	22.91	146.49	45.82	
	CLA D2	2.9	14.000	28.0	9.0			(G)	
	D3								
						Max	64.55	427.36	
						Min	4.69	31.04	
						Avg	26.04	168.21	
						SD	15.20	100.15	

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, AW

Date: September 10, 2011

City of Wichita Falls Microfiltration PWS ID # 2430001

INDIVIDUAL MEMBRANE RACKS

Date	Rack No. 1				Rack No. 2				Rack No. 3			
	Previous Month's 95 Percentile 0.146		Direct Integrity Test		Previous Month's 95 Percentile 0.129		Direct Integrity Test		Previous Month's 95 Percentile 0.151		Direct Integrity Test	
	Daily Max.	Post Integrity	Press. Drop	Time	Daily Max.	Post Integrity	Press. Drop	Time	Daily Max.	Post Integrity	Press. Drop	Time
1	0.125	0.016	0.47	3:33:00 PM	0.069	0.013	0.44	11:42:00 AM	0.054	0.03	0.49	10:28:00 AM
2	0.107	x	x	x	0.058	0.013	0.45	9:19:00 PM	0.049	0.039	0.41	10:05:00 AM
3	0.064	x	x	x	0.102	x	x	x	0.161	x	x	x
4	0.071	0.015	0.4	5:03:00 PM	0.029	0.013	0.43	12:56:00 PM	0.051	x	x	x
5	0.027	x	x	x	0.082	x	x	x	0.041	x	x	x
6	0.068	0.015	0.4	1:34:00 AM	0.058	0.013	0.42	3:19:00 AM	0.035	0.029	0.43	12:38:00 PM
7	0.061	0.015	0.4	9:49:00 AM	0.03	0.013	0.43	11:16:00 AM	0.038	0.03	0.44	8:27:00 PM
8	0.062	0.015	0.4	5:59:00 PM	0.053	0.013	0.42	7:30:00 PM	0.042	x	x	x
9	0.032	x	x	x	0.06	x	x	x	0.035	x	x	x
10	0.069	x	x	x	0.107	0.015	0.41	9:34:00 AM	0.052	0.022	0.4	2:20:00 PM
11	0.117	x	x	x	0.019	0.013	0.43	12:27:00 PM	0.085	0.019	0.46	4:10:00 PM
12	0.061	0.015	0.46	3:49:00 AM	0.098	x	x	x	0.039	x	x	x
13	0.172	x	x	x	0.263	x	x	x	0.034	0.023	0.044	11:02:00 AM
14	0.043	x	x	x	0.168	x	x	x	0.03	x	x	x
15	0.078	0.016	0.44	11:10:00 AM	0.166	0.012	0.42	6:55:00 AM	0.162	0.028	0.45	8:05:00 PM
16	0.059	0.015	0.45	9:59:00 AM	0.108	0.015	0.44	10:07:00 AM	0.075	0.018	0.49	4:49:00 PM
17	0.047	x	x	x	0.106	0.013	0.43	4:14:00 PM	0.04	0.011	0.46	8:16:00 PM
18	0.049	x	x	x	0.08	x	x	x	0.039	x	x	x
19	0.04	x	x	x	0.113	0.015	0.42	12:22:00 PM	0.03	x	x	x
20	0.04	0.018	0.44	8:10:00 PM	0.111	x	x	x	0.053	0.015	0.45	11:58:00 AM
21	0.045	x	x	x	0.126	0.017	0.43	8:15:00 AM	0.029	0.018	0.44	2:40:00 PM
22	0.015	0.016	0.33	6:35:00 PM	0.014	x	x	x	0.042	0.03	0.37	6:49:00 PM
23	0.062	0.27	0.31	11:38:00 AM	0.044	0.031	0.44	10:19:00 AM	0.085	0.019	0.46	12:32:00 PM
24	0.188	x	x	x	0.051	0.015	0.45	7:21:00 PM	0.031	x	x	x
25	0.049	0.015	0.44	2:18:00 AM	0.023	x	x	x	0.078	0.019	0.45	12:53:00 AM
26	0.046	0.016	0.43	3:30:00 PM	0.037	0.014	0.45	10:59:00 AM	0.069	0.2	0.44	4:24:00 PM
27	0.092	x	x	x	0.054	0.014	0.44	7:59:00 PM	0.188	x	x	x
28	0.045	0.016	0.43	12:36:00 AM	0.02	x	x	x	0.138	0.019	0.44	12:20:00 AM
29	0.061	0.017	0.43	9:31:00 AM	0.076	0.013	0.53	12:17:00 PM	0.055	0.019	0.53	3:12:00 PM
30	0.079	0.017	0.44	8:52:00 PM	0.064	x	x	x	0.116	x	x	x
31	0.029	x	x	x	0.061	0.017	0.41	4:01:00 PM	0.108	x	x	x

0.125

0.166

0.161

Indirect Integrity Test Method:

Hach Laser Trac

Direct Integrity Test Method:

Pressure Decay Test

Minimum Test Pressure:

10.2 psi

Max. Allowable Pressure Drop:

.65 psi per 1min

Pressure Test Time:

24hours of run time

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

Operator

Date

September 10, 2011

Certificate No.
& Grade

WO0023530, AW

City of Wichita Falls Microfiltration PWS ID # 2430001

INDIVIDUAL MEMBRANE RACKS

Date	Rack No. 4				Rack No. 5				Rack No. X			
	Previous Month's 95 Percentile 0.179		Direct Integrity Test		Previous Month's 95 Percentile 0.132		Direct Integrity Test		Previous Month's 95 Percentile		Direct Integrity Test	
	Daily Max.	Post Integrity	Press. Drop	Time	Daily Max.	Post Integrity	Press. Drop	Time	Daily Max.	Post Integrity	Press. Drop	Time
1	0.129	0.129	0.32	9:06:00 AM	0.058	0.015	0.41	12:41:00 AM				
2	0.051	x	x	x	0.085	x	x	x				
3	0.097	0.024	0.35	4:36:00 AM	0.041	x	x	x				
4	0.138	x	x	x	0.042	0.014	0.42	1:40:00 PM				
5	0.059	0.024	0.35	2:48:00 AM	0.065	x	x	x				
6	0.072	0.024	0.38	2:48:00 AM	0.056	0.014	0.43	3:56:00 AM				
7	0.127	0.024	0.39	6:58:00 PM	0.022	0.014	0.43	2:29:00 PM				
8	0.096	x	x	x	0.04	0.014	0.43	11:24:00 PM				
9	0.046	0.025	0.42	4:18:00 AM	0.041	x	x	x				
10	0.054	x	x	x	0.067	x	x	x				
11	x	x	x	x	0.06	0.015	0.45	2:22:00 AM				
12	x	x	x	x	0.06	x	x	x				
13	x	x	x	x	0.058	0.014	0.46	4:04:00 AM				
14	0.123	x	x	x	0.058	x	x	x				
15	x	x	x	x	0.067	0.014	0.45	4:58:00 PM				
16	x	x	x	x	0.176	x	x	x				
17	x	x	x	x	0.078	0.015	0.46	12:18:00 AM				
18	x	x	x	x	0.058	x	x	x				
19	x	x	x	x	0.052	0.015	0.57	6:14:00 PM				
20	x	x	x	x	0.051	x	x	x				
21	x	x	x	x	0.059	0.014	0.54	6:18:00 PM				
22	x	x	x	x	0.014	0.015	0.3	7:10:00 PM				
23	0.122	0.025	0.53	2:07:00 PM	x	x	x	x				
24	0.091	x	x	x	0.07	x	x	x				
25	0.059	0.048	0.5	3:50:00 PM	0.028	x	x	x				
26	0.043	0.023	0.5	3:53:00 PM	0.033	0.014	0.5	4:25:00 AM				
27	x	x	x	x	0.051	0.015	0.49	5:34:00 PM				
28	x	x	x	x	0.021	x	x	x				
29	x	x	x	x	0.061	0.015	0.49	2:27:00 AM				
30	x	x	x	x	0.039	0.015	0.48	6:20:00 PM				
31	x	x	x	x	0.05	x	x	x				

0.127

0.078

#NUM!

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

Operator

Date

September 10, 2011

Certificate No.
& Grade

WO0023530, AW

City of Wichita Falls Microfiltration PWS ID # 2430001

INDIVIDUAL MEMBRANE RACK PRODUCTION

Date Startup	Rack No. 1					Rack No. 2					Rack No. 3								
	Plant Daily Backwash Return (MG)	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling
1	X	2,595,772	231,000	21.32	5.03	4.24	80.32%	2,630,188	231,000	21.31	5.01	4.25	80.24%	2,281,572	204,600	20.72	3.73	5.55	73.46%
2		1,692,214	158,400	20.55	4.32	4.76	77.08%	2,415,429	217,800	20.85	4.76	4.34	79.20%	1,769,519	158,400	20.71	3.34	6.20	70.36%
3		1,884,711	178,200	20.21	4.39	4.60	77.45%	1,703,582	165,000	20.31	4.58	4.43	78.38%	1,709,694	158,400	19.05	2.33	8.18	57.51%
4		1,692,042	151,800	20.79	4.19	4.96	76.37%	2,409,781	231,000	19.58	4.13	4.74	76.03%	2,039,760	191,400	19.60	3.37	5.82	70.62%
5		2,387,341	211,200	19.48	4.44	4.39	77.70%	1,849,062	165,000	20.56	4.45	4.62	77.75%	2,397,841	217,800	19.66	3.52	5.59	71.88%
6		2,521,417	191,400	20.93	5.70	3.67	82.63%	2,473,045	184,800	20.97	5.73	3.66	82.72%	2,727,002	217,800	21.06	4.36	4.83	77.29%
7		2,641,768	217,800	20.38	5.52	3.69	82.07%	2,684,010	211,200	20.82	5.31	3.92	81.36%	2,520,388	204,600	20.62	4.01	5.14	75.31%
8		2,407,609	191,400	20.88	4.98	4.19	80.12%	2,422,847	198,000	20.49	5.54	3.70	82.13%	2,425,673	184,800	20.55	4.29	4.79	76.92%
9		2,280,083	204,600	19.94	5.36	3.72	81.53%	2,407,390	211,200	20.10	5.11	3.93	80.63%	5,105,203	178,200	19.90	4.01	4.96	75.31%
10		2,419,659	224,400	19.61	5.13	3.82	80.70%	2,164,202	191,400	20.19	5.38	3.75	81.60%	1,950,983	184,800	19.51	3.43	5.69	71.14%
11		2,096,980	191,400	20.21	5.20	3.89	80.96%	2,389,976	217,800	21.12	5.26	4.02	81.18%	2,159,448	204,600	20.20	5.27	3.83	81.21%
12		2,041,501	198,000	22.79	5.28	4.32	81.25%	869,619	79,200	20.39	5.35	3.81	81.50%	2,197,890	204,600	18.48	5.41	3.42	81.70%
13		2,244,493	211,200	17.17	5.28	3.25	81.25%	2,376,128	231,000	17.16	5.30	3.24	81.32%	2,389,913	224,400	20.02	5.47	3.66	81.90%
14		2,446,388	231,000	22.81	5.26	4.34	81.18%	671,241	59,400	17.56	5.13	3.42	80.70%	745,398	72,600	22.82	5.30	4.31	81.32%
15		2,376,417	224,400	18.26	4.54	4.02	78.19%	2,322,098	217,800	18.80	4.32	4.35	77.08%	2,087,328	198,000	18.77	3.17	5.92	68.77%
16		2,447,554	231,000	18.80	5.26	3.57	81.18%	1,624,748	158,400	18.79	5.28	3.56	81.25%	1,572,554	138,600	18.21	5.39	3.38	81.63%
17		1,838,719	184,800	16.73	5.31	3.15	81.36%	1,865,132	184,800	16.77	5.40	3.11	81.67%	1,899,205	184,800	16.73	5.42	3.09	81.73%
18		1,926,953	178,700	22.18	5.35	4.15	81.50%	1,651,340	158,400	22.13	5.15	4.30	80.78%	1,638,546	151,800	22.40	5.38	4.16	81.60%
19		1,450,788	138,600	19.21	5.11	3.76	80.63%	1,876,653	178,200	22.82	5.23	4.36	81.07%	1,629,293	165,000	17.85	5.45	3.28	81.83%
20		1,992,820	204,600	17.31	5.34	3.24	81.46%	1,655,755	171,600	17.34	5.26	3.30	81.18%	2,121,859	204,600	17.32	5.40	3.21	81.67%
21		2,030,754	204,600	22.48	5.24	4.29	81.11%	2,497,500	217,800	21.58	5.16	4.18	80.81%	2,499,547	217,800	21.43	5.28	4.06	81.25%
22		2,535,121	224,400	17.56	4.46	3.94	77.80%	1,110,245	92,400	17.51	3.98	4.40	75.13%	2,319,916	211,200	18.01	2.69	6.70	63.20%
23		1,307,032	105,600	21.14	6.90	3.06	85.65%	2,297,489	191,400	20.90	6.71	3.11	85.25%	2,283,490	211,200	20.72	5.23	3.96	81.07%
24		1,854,929	171,600	19.78	6.63	2.98	85.07%	2,168,325	204,600	19.70	7.02	2.81	85.90%	2,296,930	211,200	19.56	5.21	3.75	81.00%
25		2,031,179	198,000	18.86	4.91	3.84	79.84%	2,055,835	191,400	19.42	6.46	3.01	84.67%	1,835,270	178,200	19.13	4.73	4.04	79.07%
26		2,078,045	191,400	19.38	5.41	3.58	81.70%	1,914,421	184,800	19.15	6.33	3.03	84.36%	2,111,141	204,600	19.34	4.89	3.96	79.75%
27		2,506,966	231,000	20.24	5.73	3.53	82.72%	2,548,851	237,600	20.32	7.02	2.89	85.90%	2,591,137	237,600	20.38	5.44	3.75	81.80%
28		2,466,692	224,400	21.25	6.54	3.25	84.86%	2,088,059	184,800	21.82	7.79	2.80	87.29%	2,463,070	224,400	21.20	5.61	3.78	82.35%
29		2,180,448	224,400	18.68	5.15	3.63	80.78%	1,915,584	191,400	18.65	4.00	4.66	75.25%	1,740,260	171,600	18.89	3.57	5.29	72.27%
30		1,932,095	204,600	17.42	4.33	4.02	77.14%	1,837,120	204,600	17.12	3.36	5.10	70.54%	2,112,979	211,200	18.92	3.62	5.23	72.65%
31		2,081,568	224,400	17.33	4.00	4.33	75.25%	1,186,195	132,000	16.52	3.10	5.33	68.06%	2,146,233	231,000	17.77	3.26	5.45	69.63%

MEMBRANE RACK OPERATIONAL DATA										Plant Totals	
	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8			
Monthly Filtrate Production (MG):	66,390	62,082	67,769	27,987	60,455					284,682	
Backwash Flow Rate	5346 gpm	5346 gpm	5346 gpm	5346 gpm	5346 gpm						
Backwash Duration	15 secs.	15 secs.	15 secs.	15 secs.	15 secs.						
Backwash Frequency:	30 mins	30 mins	30 mins	30 mins	30 mins						
Monthly Backwash Usage (Gals):	6,158,300	5,995,800	5,959,800	2,534,400	5,715,600					26,063,900	
Monthly Backwash Return Total (MG):										0.000	
Net Plant Production:										24,043,219	

* Backwash return includes backwash water used for the strainer backwashes also.

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

Operator

Certificate No. & Grade

W00023530, AW

Date

September 10, 2011

City of Wichita Falls Microfiltration PWS ID # 2430001

INDIVIDUAL MEMBRANE RACK PRODUCTION

Date Startup Data	Rack No. 4					Rack No. 5					Rack No. x				
	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling
1	1,107,984	99,000	20.95	3.94	5.32	1,494,048	132,000	21.78	6.03	83.58%					
2	2,221,293	204,600	21.14	3.55	72.11%	2,482,910	217,800	20.92	4.49	77.95%					
3	1,689,242	158,400	21.04	2.78	64.39%	1,596,855	132,000	20.71	4.12	75.97%					
4	1,329,093	132,000	18.62	3.99	4.67	2,224,943	211,200	19.62	4.36	77.39%					
5	2,526,910	231,000	20.10	4.69	78.89%	2,144,153	184,800	20.52	3.88	74.48%					
6	2,540,490	198,000	20.82	5.81	82.96%	1,981,795	178,200	17.73	4.06	4.37					
7	2,457,535	198,000	20.65	6.05	83.64%	2,029,421	198,000	16.88	3.23	5.23					
8	2,327,331	184,800	20.65	6.73	85.29%	2,573,005	224,400	20.54	4.98	4.12					
9	2,546,609	231,000	20.20	5.87	83.13%	1,778,660	145,200	20.05	2.92	6.87					
10	1,888,955	171,600	19.40	5.39	81.63%	1,631,899	138,600	20.04	4.80	79.38%					
11	x	x	x	x	x	2,418,762	224,400	20.12	5.26	3.83					
12	x	x	x	x	x	2,142,713	184,800	22.73	5.21	4.36					
13	x	x	x	x	x	1,472,699	145,200	19.95	5.29	3.77					
14	x	x	x	x	x	1,653,614	151,800	15.95	5.49	2.91					
15	321,191	33,000	19.84	5.99	83.47%	1,533,519	138,600	18.99	5.00	3.80					
16	x	x	x	x	x	1,621,361	158,400	20.30	5.34	3.80					
17	x	x	x	x	x	1,436,728	132,000	17.78	5.11	3.48					
18	x	x	x	x	x	1,685,954	165,000	18.79	5.28	3.56					
19	x	x	x	x	x	1,822,373	178,200	22.46	5.24	4.29					
20	x	x	x	x	x	2,134,365	204,600	17.22	5.48	3.14					
21	x	x	x	x	x	2,445,651	231,000	21.44	5.27	4.07					
22	1,446,956	132,000	16.86	5.81	82.96%	2,218,939	217,800	17.49	5.19	3.37					
23	1,747,369	184,800	18.83	8.31	88.09%	2,045,312	198,000	21.29	6.20	3.43					
24	2,335,145	224,400	18.83	7.81	87.32%	1,394,741	145,200	19.22	4.36	4.41					
25	921,510	99,000	18.75	7.24	2.59	1,972,415	191,400	19.34	5.72	3.38					
26	567,901	52,800	18.87	7.43	86.68%	2,177,745	211,200	19.33	4.72	4.10					
27	x	x	x	x	x	2,086,152	191,400	19.69	4.80	4.11					
28	x	x	x	x	x	2,503,776	231,000	21.29	6.19	3.44					
29	x	x	x	x	x	1,896,469	198,000	18.74	4.62	4.06					
30	x	x	x	x	x	1,899,444	244,200	17.28	3.92	4.41					
31	x	x	x	x	x	1,964,214	211,200	17.11	3.49	4.90					

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

Operator

Date

September 10, 2011

Certificate No.
& Grade

W00023530, AW

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 (Microfiltration/R.O.)

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

PWS ID No.: 2430001

Operator's Signature: [Signature]

Report for

the Month of: September 2011

Certificate No. & Grade:

WO0023530, AW

Date: October 10, 2011

TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	180	Number of 4-hour periods when plant was off-line:	0
Number of readings above 0.10 NTU:	74	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:	0.10 NTU
	Minimum turbidity reading:	0.06 NTU	Standard deviation:	0.019 NTU
	CFE 95 th percentile value:	0.13 NTU	IFE 95 th percentile:	0.135 NTU

Number of days with a low CT for no more than 4.0 consecutive hours:	0	Average log inactivation for Giardia:	72.74
		Average log inactivation for viruses:	367.84
Number of days with a low CT for more than 4.0 consecutive hours:	0 (4)	Number of days when profiling data was not collected:	0
		Number of days when CT data was not collected:	0

Minimum disinfectant residual required leaving the plant:	0.5 mg/L, measured as Total Chlorine
Number of days with a low residual for no more than 4.0 consecutive hours:	0
Number of days with a low residual for more than 4.0 consecutive hours:	0 (5)
Number of days when disinfectant residual leaving the plant was not properly monitored:	0

DISTRIBUTION SYSTEM

Minimum disinfectant residual required in distribution system:	0.5 mg/L, measured as Total Chlorine		
Total number of readings this month:	115	(at least 100 required) (8)	
Average disinfectant residual value:	3.61	Percentage of readings with a low residual this month:	0.0 % (6A)
Number of readings with a low residual:	0		
Number of readings with no detectable residual:	0	Percentage of readings with a low residual last month:	0.0 % (6B)

ADDITIONAL REPORTS & WORKSHEETS

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

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

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

No additional IFE Reports are required this month.

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

OCT 11 2011

TEXAS COMMISSION
ON
ENVIRONMENTAL QUALITY

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 (Microfiltration/R.O.)

PWS ID No.: 2430001

Connections: 34,691

Month: September Year: 2011

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.						Turbidity						Lowest Residual	Time
					1	2	3	4	5	6	NTU1	NTU2	NTU3	NTU4	NTU5	NTU6		
1	6.000	17.688	13	71							0.08	0.08	0.11	0.08	0.09	0.08	2.8	
2	6.800	19.846	11	72							0.10	0.10	0.10	0.11	0.12	0.09	3.1	
3	6.000	19.953	11	75							0.10	0.10	0.09	0.09	0.11	0.11	2.9	
4	6.000	16.924	18	73							0.09	0.09	0.08	0.08	0.09	0.08	2.4	
5	6.000	17.056	23	73							0.08	0.08	0.09	0.10	0.07	0.08	2.4	
6	6.000	17.106	14	75							0.07	0.08	0.08	0.06	0.06	0.07	2.5	
7	6.000	16.499	13	76							0.07	0.08	0.08	0.06	0.09	0.07	2.6	
8	6.083	16.298	19	76							0.09	0.08	0.09	0.07	0.08	0.09	2.5	
9	8.000	18.985	20	74							0.11	0.10	0.12	0.12	0.11	0.08	2.7	
10	8.000	18.595	10	76							0.08	0.09	0.09	0.08	0.08	0.09	2.9	
11	8.000	18.745	9	78							0.09	0.10	0.09	0.09	0.08	0.09	2.3	
12	8.000	18.362	12	75							0.10	0.10	0.11	0.10	0.09	0.10	2.3	
13	5.667	17.401	13	75							0.10	0.11	0.11	0.08	0.09	0.07	2.8	
14	3.333	14.300	14	72							0.11	0.11	0.09	0.09	0.09	0.08	3.1	
15	2.000	13.661	21	75							0.09	0.10	0.11	0.10	0.09	0.09	3.9	
16	2.000	13.525	14	74							0.12	0.13	0.13	0.11	0.12	0.15	4.1	
17	2.000	12.198	23	77							0.16	0.16	0.13	0.09	0.14	0.12	3.1	
18	2.000	11.456	18	76							0.11	0.12	0.13	0.13	0.11	0.10	2.6	
19	2.000	16.988	9	77							0.10	0.12	0.11	0.10	0.11	0.11	3.0	
20	2.000	12.675	9	75							0.12	0.14	0.10	0.11	0.10	0.09	2.7	
21	2.000	12.911	13	76							0.10	0.09	0.08	0.09	0.09	0.09	3.0	
22	2.000	10.782	23	77							0.11	0.10	0.12	0.13	0.11	0.13	3.0	
23	2.000	10.419	10	73							0.12	0.12	0.14	0.13	0.12	0.10	3.1	
24	2.000	10.745	10	79							0.11	0.11	0.10	0.09	0.08	0.08	3.2	
25	2.000	11.601	12	75							0.08	0.08	0.09	0.10	0.09	0.12	3.1	
26	1.833	12.647	9	74							0.11	0.11	0.12	0.11	0.11	0.10	3.0	
27	2.000	12.872	8	76							0.09	0.10	0.13	0.12	0.11	0.12	2.8	
28	2.000	14.585	8	72							0.10	0.12	0.11	0.11	0.12	0.11	3.1	
29	2.000	13.908	8	74							0.13	0.14	0.12	0.12	0.10	0.09	2.8	
30	2.000	13.334	13	71							0.10	0.12	0.12	0.11	0.11	0.11	3.1	
31																		
Total	121.716	452.065	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.															
Avg	4.057	15.069																
Max	8.000	19.953																
Min	1.833	10.419																

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, AW

Date: October 10, 2011

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 (Microfiltration/R.O.)

PWS ID No.: 2430001

Month:

September

Year:

2011

PERFORMANCE DATA																				
Date	INDIVIDUAL FILTER TURBIDITY																			
	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	0.14	x	0.06	x	0.14	x	x	x	0.10	x										
2	0.05	x	0.04	x	0.11	x	x	x	0.06	x										
3	0.05	x	0.04	x	0.03	x	x	x	0.06	x										
4	0.15	x	0.04	x	0.03	x	x	x	0.04	x										
5	0.11	x	0.03	x	0.02	x	x	x	0.04	x										
6	0.04	x	0.04	x	0.05	x	x	x	0.03	x										
7	0.06	x	0.04	x	0.04	x	x	x	0.06	x										
8	0.05	x	0.04	x	0.04	x	x	x	0.07	x										
9	0.06	x	0.04	x	0.12	x	x	x	0.04	x										
10	0.09	x	0.03	x	0.09	x	x	x	0.05	x										
11	0.07	x	0.05	x	0.16	x	x	x	0.12	x										
12	0.06	x	0.10	x	0.06	x	x	x	0.03	x										
13	0.04	x	0.04	x	0.14	x	x	x	0.02	x										
14	0.03	x	0.04	x	0.08	x	x	x	0.09	x										
15	0.05	x	0.03	x	0.04	x	x	x	0.06	x										
16	0.09	x	0.04	x	0.06	x	x	x	0.04	x										
17	0.04	x	0.03	x	0.04	x	x	x	0.05	x										
18	0.04	x	0.06	x	0.04	x	x	x	0.03	x										
19	0.05	x	0.03	x	0.04	x	x	x	0.06	x										
20	0.05	x	0.04	x	0.04	x	x	x	0.04	x										
21	0.07	x	0.03	x	0.11	x	x	x	0.03	x										
22	0.04	x	0.03	x	0.16	x	x	x	0.04	x										
23	0.04	x	0.07	x	0.04	x	x	x	0.04	x										
24	0.03	x	0.03	x	0.04	x	x	x	0.13	x										
25	0.08	x	0.03	x	0.05	x	x	x	0.03	x										
26	0.04	x	0.03	x	0.14	x	x	x	0.03	x										
27	0.03	x	0.07	x	0.04	x	x	x	0.03	x										
28	0.04	x	0.02	x	0.04	x	x	x	0.03	x										
29	0.07	x	0.04	x	0.03	x	x	x	0.03	x										
30	0.04	x	0.05	x	0.08	x	x	x	0.04	x										
31																				

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 days with event(s) above 2.0 NTU this month											0
Number of days with event(s) 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?											

SUBMITTED BY:

Certificate No.

and Grade:

WO0023530, AW

Date:

October 10, 2011

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
PWS ID No.: 2430001

PLANT NAME
OR NUMBER: Cypress (Microfiltration/R.O.)
Month: September Year: 2011

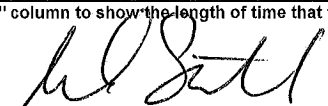
DISINFECTION PROCESS PARAMETERS									
APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS			
Parameters	Disinfection Zones					Log Inactivations			
	D1A	D1B	D1C	D2	D3	Giardia lamblia Cysts		Viruses	
Flow Rate (MGD)	27.000	27.000	27.000	37.000		0.5		2.0	
T ₁₀ (minutes)	0.3	8.9	249.0	0.2					

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time (min)
1	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	8.000	27.3	8.1	11.72	68.94	23.44	
	CLA D2	3.2	14.000	26.6	8.9			(G)	
	D3								
2	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	8.000	26.4	8.1	21.09	116.57	42.18	
	CLA D2	3.1	14.000	26.7	9.1			(G)	
	D3								
3	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	9.000	27.2	8.0	27.08	158.21	54.15	
	CLA D2	3.5	14.000	28.0	9.0			(G)	
	D3								
4	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	9.000	26.4	8.1	24.99	138.16	49.99	
	CLA D2	3.2	14.000	27.4	9.0			(G)	
	D3								
5	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	9.000	26.4	8.0	27.08	149.67	54.15	
	CLA D2	3.4	12.000	26.0	8.9			(G)	
	D3								
6	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	9.000	24.6	8.0	38.43	193.08	76.85	
	CLA D2	2.7	14.000	24.5	8.5			(G)	
	D3								
7	NA D1A								
	NA D1B								
	CLO2 D1C	0.3	8.000	23.9	8.0	54.15	272.27	108.30	
	CLA D2	2.9	14.000	23.0	9.1			(G)	
	D3								
8	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	8.000	24.4	8.1	22.43	112.75	44.86	
	CLA D2	1.9	14.000	23.9	9.0			(G)	
	D3								

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time (min)
9	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	10.000	23.5	8.1	32.04	161.01	64.09	
	CLA D2	2.4	18.000	23.5	8.7			(G)	
	D3								
10	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	10.000	23.8	9.3	22.37	112.49	44.75	
	CLA D2	3.0	18.000	23.6	8.9			(G)	
	D3								
11	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	11.000	23.7	8.1	29.53	148.42	59.05	
	CLA D2	2.9	18.000	24.2	9.0			(G)	
	D3								
12	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	10.000	23.7	8.1	41.02	206.22	82.05	
	CLA D2	2.8	18.000	24.3	8.9			(G)	
	D3								
13	NA D1A								
	NA D1B								
	CLO2 D1C	0.4	10.000	24.9	7.4	65.11	326.82	130.22	
	CLA D2	2.4	20.000	25.4	8.9			(G)	
	D3								
14	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	6.000	24.8	7.4	49.25	247.29	98.50	
	CLA D2	3.6	16.000	25.6	9.1			(G)	
	D3								
15	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	4.000	24.7	8.1	64.17	322.33	128.34	
	CLA D2	4.1	14.000	23.3	9.1			(G)	
	D3								
16	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	4.000	23.9	8.0	82.30	413.84	164.61	
	CLA D2	3.7	14.000	21.9	9.0			(G)	
	D3								

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, AW

Date: October 10, 2011

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
PWS ID No.: 2430001

PLANT NAME
OR NUMBER: Cypress (Microfiltration/R.O.)
Month: September Year: 2011

DISINFECTION PROCESS PARAMETERS

APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS	
Parameters	Disinfection Zones					Log Inactivations	
	D1A	D1B	D1C	D2	D3	Giardia lamblia Cysts	Virus
Flow Rate (MGD)	27.000	27.000	27.000	37.000		0.5	2.0
T ₁₀ (minutes)	0.3	8.9	249.0	0.2			

PERFORMANCE DATA

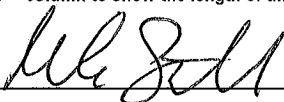
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
17	NA D1A								
	NA D1B								
	CLO2 D1C	0.3	4.000	24.4	8.0	134.56	676.47	269.13	
	CLA D2	3.3	14.000	22.7	9.0			(G)	
	D3								
18	NA D1A								
	NA D1B								
	CLO2 D1C	0.4	4.000	23.9	8.0	168.93	849.45	337.86	
	CLA D2	2.4	10.000	23.8	9.3			(G)	
	D3								
19	NA D1A								
	NA D1B								
	CLO2 D1C	0.3	4.000	23.5	8.0	143.34	720.30	286.68	
	CLA D2	2.9	12.000	23.6	9.0			(G)	
	D3								
20	NA D1A								
	NA D1B								
	CLO2 D1C	0.5	4.000	23.5	8.0	189.71	953.33	379.42	
	CLA D2	2.2	12.000	23.3	9.1			(G)	
	D3								
21	NA D1A								
	NA D1B								
	CLO2 D1C	0.4	4.000	23.9	8.1	151.61	762.33	303.21	
	CLA D2	3.1	12.000	23.0	9.1			(G)	
	D3								
22	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	4.000	23.5	8.1	21.08	105.94	42.17	
	CLA D2	3.4	14.000	23.5	8.9			(G)	
	D3								
23	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	4.000	23.1	8.1	24.64	123.65	49.29	
	CLA D2	3.0	10.000	21.2	9.2			(G)	
	D3								
24	NA D1A								
	NA D1B								
	CLO2 D1C	0.0	4.000	24.1	8.1	13.18	66.27	26.36	
	CLA D2	3.0	10.000	22.0	8.9			(G)	
	D3								

PERFORMANCE DATA

DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
25	NA D1A								
	NA D1B								
	CLO2 D1C	0.3	4.000	23.7	8.0	136.74	687.39	273.47	
	CLA D2	3.4	12.000	22.8	8.8			(G)	
	D3								
26	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	4.000	23.1	8.0	65.70	329.71	131.41	
	CLA D2	4.1	12.000	23.2	9.3			(G)	
	D3								
27	NA D1A								
	NA D1B								
	CLO2 D1C	0.9	4.000	23.3	8.1	357.78	1,796.82	715.58	
	CLA D2	2.8	12.000	22.3	8.9			(G)	
	D3								
28	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	4.000	23.6	8.1	63.67	319.99	127.33	
	CLA D2	2.9	14.000	22.9	9.0			(G)	
	D3								
29	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	4.000	24.0	8.0	47.98	241.26	95.96	
	CLA D2	2.7	14.000	23.6	9.1			(G)	
	D3								
30	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	4.000	23.5	8.1	50.59	254.23	101.19	
	CLA D2	2.6	12.000	22.9	9.2			(G)	
	D3								
31	D1A								
	D1B								
	D1C								
	D2								
	D3								
						Max	357.78	1796.82	
						Min	11.72	66.27	
						Avg	72.74	367.84	
						SD	72.53	362.86	

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, AW

Date: October 10, 2011

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 (Microfiltration/R.O.)

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

PWS ID No.: 2430001

Operator's Signature: *[Signature]*

Report for

the Month of: October 2011

Certificate No. & Grade:

W00023530, AW

Date: November 10, 2011

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:	25	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: 0.15 NTU	Average turbidity value:	0.09 NTU
	Minimum turbidity reading: 0.06 NTU	Standard deviation:	0.017 NTU
	CFE 95 th percentile value: 0.12 NTU	IFE 95 th percentile:	0.130 NTU
Number of days with a low CT for no more than 4.0 consecutive hours:	0	Average log inactivation for Giardia:	78.35
Number of days with a low CT for more than 4.0 consecutive hours:	0 (4)	Average log inactivation for viruses:	388.27
		Number of days when profiling data was not collected:	0
		Number of days when CT data was not collected:	0
Minimum disinfectant residual required leaving the plant:	0.5 mg/L, measured as Total Chlorine		
Number of days with a low residual for no more than 4.0 consecutive hours:	0		
Number of days with a low residual for more than 4.0 consecutive hours:	0 (5)	Number of days when disinfectant residual leaving the plant was not properly monitored:	0

DISTRIBUTION SYSTEM

Minimum disinfectant residual required in distribution system:	0.5 mg/L, measured as Total Chlorine
Total number of readings this month:	116 (at least 100 required) (8)
Average disinfectant residual value:	3.48
Number of readings with a low residual:	0
Number of readings with no detectable residual:	0
Percentage of readings with a low residual this month:	0.0 % (6A)
Percentage of readings with a low residual last month:	0.0 % (6B)

ADDITIONAL REPORTS & WORKSHEETS

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

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

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

No additional IFE Reports are required this month.

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

SURFACE WATER MONTHLY OPERATING REPORT

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

PUBLIC WATER SYSTEM NAME: City of Wichita Falls

PLANT NAME OR NUMBER: Cypress (Microfiltration/R.O.)

PWS ID No.: 2430001

Connections: 34,686

Month: October Year: 2011

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.						Turbidity						Lowest	Time
					1	2	3	4	5	6	NTU1	NTU2	NTU3	NTU4	NTU5	NTU6	Residual	
1	2.000	13.793	23	156							0.14	0.15	0.13	0.14	0.14	0.12	2.8	
2	2.000	15.967	23	157							0.10	0.12	0.10	0.13	0.12	0.10	3.0	
3	2.000	15.233	24	173							0.10	0.11	0.12	0.10	0.10	0.10	2.9	
4	2.000	12.488	27	172							0.11	0.11	0.13	0.12	0.10	0.09	3.1	
5	2.000	12.585	22	171							0.11	0.10	0.14	0.12	0.10	0.10	3.0	
6	2.000	12.303	29	173							0.11	0.10	0.12	0.10	0.09	0.10	2.7	
7	2.000	11.069	22	172							0.12	0.10	0.09	0.08	0.07	0.07	2.9	
8	2.000	9.212	19	140							0.08	0.10	0.08	0.08	0.08	0.09	2.3	
9	2.000	10.954	24	131							0.09	0.09	0.08	0.08	0.08	0.07	2.8	
10	2.000	11.647	32	165							0.08	0.08	0.09	0.08	0.07	0.10	3.1	
11	2.000	10.143	31	168							0.08	0.08	0.09	0.07	0.07	0.07	2.9	
12	2.000	9.664	28	164							0.08	0.08	0.09	0.08	0.07	0.10	2.3	
13	2.000	9.714	26	166							0.13	0.12	0.10	0.08	0.09	0.09	2.9	
14	2.000	8.256	21	171							0.09	0.08	0.08	0.08	0.09	0.07	3.0	
15	2.000	8.701	24	128							0.08	0.09	0.09	0.07	0.09	0.08	2.8	
16	2.000	10.034	25	171							0.09	0.09	0.10	0.10	0.09	0.08	2.9	
17	2.000	10.270	30	173							0.09	0.09	0.10	0.08	0.07	0.07	3.0	
18	2.000	9.313	29	172							0.08	0.08	0.09	0.08	0.08	0.07	3.0	
19	2.000	9.283	29	174							0.10	0.08	0.08	0.08	0.09	0.08	3.2	
20	2.000	9.827	27	173							0.10	0.09	0.11	0.08	0.10	0.10	3.1	
21	2.000	10.163	22	170							0.09	0.08	0.07	0.08	0.07	0.07	3.3	
22	2.000	10.642	7	77							0.09	0.09	0.09	0.09	0.07	0.08	3.1	
23	2.000	9.827	9	72							0.08	0.10	0.10	0.10	0.09	0.09	3.1	
24	2.000	9.791	9	70							0.10	0.11	0.10	0.07	0.07	0.06	3.2	
25	2.000	9.791	15	67							0.07	0.08	0.07	0.06	0.07	0.07	3.4	
26	2.000	10.735	18	66							0.06	0.06	0.09	0.07	0.09	0.06	3.2	
27	2.000	9.096	21	66							0.08	0.10	0.08	0.08	0.08	0.07	3.5	
28	2.000	8.000	20	61							0.08	0.08	0.09	0.10	0.09	0.08	3.0	
29	2.000	8.445	11	61							0.08	0.10	0.08	0.08	0.08	0.10	2.9	
30	2.000	9.851	12	61							0.09	0.10	0.09	0.10	0.10	0.10	3.2	
31	2.000	10.093	11	58							0.09	0.08	0.09	0.07	0.06	0.08	3.7	
Total	62.000	326.890	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.															
Avg	2.000	10.545																
Max	2.000	15.967																
Min	2.000	8.000																

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, AW

Date: November 10, 2011

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 (Microfiltration/R.O.)

PWS ID No.: 2430001

Month:

October

Year:

2011

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	0.05	x	0.03	x	0.13	x	x	x	0.03	x										
2	0.04	x	0.07	x	0.11	x	x	x	0.14	x										
3	0.08	x	0.04	x	0.06	x	x	x	0.04	x										
4	0.06	x	0.03	x	0.11	x	x	x	0.04	x										
5	0.03	x	0.02	x	0.07	x	x	x	0.03	x										
6	0.03	x	0.07	x	0.06	x	x	x	0.11	x										
7	0.08	x	0.03	x	0.09	x	x	x	0.02	x										
8	0.04	x	0.03	x	0.13	x	x	x	0.03	x										
9	0.03	x	0.02	x	0.03	x	x	x	0.02	x										
10	0.07	x	0.07	x	0.05	x	x	x	0.10	x										
11	0.14	x	0.02	x	0.05	x	x	x	0.02	x										
12	0.03	x	0.03	x	x	x	x	x	0.02	x										
13	0.12	x	0.07	x	x	x	x	x	0.07	x										
14	0.04	x	0.03	x	x	x	x	x	0.02	x										
15	0.07	x	0.03	x	x	x	x	x	0.02	x										
16	0.03	x	0.07	x	x	x	x	x	0.16	x										
17	0.08	x	0.05	x	x	x	x	x	0.03	x										
18	0.07	x	0.03	x	x	x	x	x	0.02	x										
19	0.03	x	0.07	x	x	x	x	x	0.10	x										
20	0.11	x	0.04	x	x	x	x	x	0.03	x										
21	0.12	x	0.03	x	x	x	x	x	0.02	x										
22	0.06	x	0.06	x	x	x	x	x	0.14	x										
23	0.04	x	0.06	x	x	x	x	x	0.02	x										
24	0.07	x	0.05	x	x	x	x	x	0.02	x										
25	0.04	x	0.06	x	x	x	x	x	0.09	x										
26	0.04	x	0.05	x	x	x	x	x	0.03	x										
27	0.05	x	0.05	x	x	x	x	x	0.03	x										
28	0.04	x	0.03	x	x	x	x	x	0.05	x										
29	0.03	x	0.05	x	x	x	x	x	0.02	x										
30	0.04	x	0.05	x	x	x	x	x	0.02	x										
31	0.04	x	0.05	x	x	x	x	x	0.06	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 days with event(s) above 2.0 NTU this month											0
	Number of days with event(s) 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:

WO0023530, AW

Date:

November 10, 2011

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
PWS ID No.: 2430001

PLANT NAME
OR NUMBER: Cypress (Microfiltration/R.O.)
Month: October Year: 2011

DISINFECTION PROCESS PARAMETERS

APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS	
Parameters	Disinfection Zones					Log Inactivations	
	D1A	D1B	D1C	D2	D3	Giardia lamblia Cysts	Viruses
Flow Rate (MGD)	27.000	27.000	27.000	37.000		0.5	2.0
T ₁₀ (minutes)	0.3	8.9	249.0	0.2			

PERFORMANCE DATA

DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
1	NA D1A								
	NA D1B								
	CLO2 D1C	0.4	3.000	24.2	8.1	247.66	1,245.34	495.32	
	CLA D2	2.4	14.000	21.6	9.1			(G)	
	D3								
2	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	24.2	8.0	58.97	296.52	117.94	
	CLA D2	3.2	16.000	22.3	9.1			(G)	
	D3								
3	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	4.000	22.9	8.0	52.70	264.20	105.40	
	CLA D2	3.2	14.000	23.7	9.1			(G)	
	D3								
4	NA D1A								
	NA D1B								
	CLO2 D1C	0.3	4.000	24.0	8.0	122.12	614.11	244.25	
	CLA D2	3.0	12.000	24.3	9.1			(G)	
	D3								
5	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	23.4	8.0	33.51	168.32	67.02	
	CLA D2	3.4	12.000	21.9	9.1			(G)	
	D3								
6	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	4.000	22.5	8.1	43.48	217.44	86.95	
	CLA D2	3.3	12.000	22.0	9.1			(G)	
	D3								
7	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	4.000	22.9	8.0	97.28	487.74	194.57	
	CLA D2	2.9	12.000	22.8	9.1			(G)	
	D3								
8	NA D1A								
	NA D1B								
	CLO2 D1C	0.3	3.000	23.9	7.9	155.94	784.11	311.88	
	CLA D2	2.7	10.000	23.2	9.2			(G)	
	D3								

PERFORMANCE DATA

DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
9	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	22.2	7.9	72.41	361.39	144.83	
	CLA D2	2.7	10.000	21.6	9.1			(G)	
	D3								
10	NA D1A								
	NA D1B								
	CLO2 D1C	0.3	3.000	23.2	7.9	176.34	885.29	352.68	
	CLA D2	2.7	12.000	21.9	8.7			(G)	
	D3								
11	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	3.000	21.9	7.8	76.18	379.23	152.36	
	CLA D2	2.5	12.000	21.9	9.2			(G)	
	D3								
12	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	23.2	7.9	55.11	276.67	110.23	
	CLA D2	3.1	10.000	22.3	9.2			(G)	
	D3								
13	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	4.000	21.3	7.9	62.49	309.22	124.99	
	CLA D2	3.5	10.000	21.1	9.2			(G)	
	D3								
14	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	4.000	21.7	8.0	41.40	205.72	82.81	
	CLA D2	3.2	8.000	20.2	9.0			(G)	
	D3								
15	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	4.000	22.2	8.0	31.04	154.90	62.08	
	CLA D2	3.1	8.000	21.5	9.1			(G)	
	D3								
16	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	4.000	22.3	8.0	23.42	116.98	46.85	
	CLA D2	3.0	10.000	21.5	8.1			(G)	
	D3								

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:

WO0023630, AW

Date:

November 10, 2011

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
PWS ID No.: 2430001

PLANT NAME
OR NUMBER: Cypress (Microfiltration/R.O.)
Month: October Year: 2011

DISINFECTION PROCESS PARAMETERS

APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS	
Parameters	Disinfection Zones					Log Inactivations	
	D1A	D1B	D1C	D2	D3	Giardia lamblia Cysts	Virus
Flow Rate (MGD)	27.000	27.000	27.000	37.000		0.5	2.0
T ₁₀ (minutes)	0.3	8.9	249.0	0.2			

PERFORMANCE DATA

DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
17	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	4.000	22.3	8.0	46.84	233.94	93.88	
	CLA D2	2.8	12.000	21.3	9.0			(G)	
	D3								
18	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	3.000	22.1	8.1	92.53	461.43	185.06	
	CLA D2	3.0	10.000	20.1	8.8			(G)	
	D3								
19	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	3.000	22.6	8.1	90.15	451.17	180.29	
	CLA D2	3.1	8.000	19.4	9.0			(G)	
	D3								
20	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	4.000	20.8	8.0	53.58	263.55	107.16	
	CLA D2	2.8	10.000	18.4	8.9			(G)	
	D3								
21	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	21.0	8.1	43.36	213.79	86.72	
	CLA D2	3.4	10.000	19.9	9.1			(G)	
	D3								
22	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	3.000	21.1	8.1	87.21	430.53	174.41	
	CLA D2	3.5	10.000	18.7	8.7			(G)	
	D3								
23	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	20.1	8.1	54.98	267.81	109.95	
	CLA D2	2.8	10.000	21.8	8.9			(G)	
	D3								
24	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	3.000	20.1	8.1	100.78	490.96	201.57	
	CLA D2	2.9	10.000	19.4	8.8			(G)	
	D3								

PERFORMANCE DATA

DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
25	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	20.9	8.0	52.69	259.48	105.38	
	CLA D2	2.8	10.000	19.9	9.1			(G)	
	D3								
26	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	20.2	8.2	64.49	314.61	128.98	
	CLA D2	3.6	10.000	20.7	8.9			(G)	
	D3								
27	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	3.000	19.9	8.1	81.57	396.17	163.15	
	CLA D2	3.3	8.000	18.2	9.2			(G)	
	D3								
28	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	4.000	19.6	8.0	36.80	177.85	73.59	
	CLA D2	2.6	8.000	17.9	8.9			(G)	
	D3								
29	NA D1A								
	NA D1B								
	CLO2 D1C	0.3	4.000	19.9	7.9	88.37	429.18	176.74	
	CLA D2	2.6	8.000	15.7	8.9			(G)	
	D3								
30	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	3.000	18.5	7.8	96.93	459.40	193.85	
	CLA D2	3.8	10.000	17.3	9.1			(G)	
	D3								
31	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	3.000	18.5	7.8	88.50	419.45	177.00	
	CLA D2	3.6	10.000	17.8	9.2			(G)	
	D3								
						Max	247.66	1245.34	
						Min	23.42	116.98	
						Avg	78.35	388.27	
						SD	46.04	231.51	

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, AW

Date: November 10, 2011

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 (Microfiltration/R.O.)

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

PWS ID No.: 2430001

Operator's Signature: [Signature]

Report for

the Month of: November 2011

Certificate No. & Grade: WO0023530, AW

Date: December 10, 2011

TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	126	Number of 4-hour periods when plant was off-line:	54
Number of readings above 0.10 NTU:	44	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:	0.22 NTU	Average turbidity value:	0.10 NTU
	Minimum turbidity reading:	0.06 NTU	Standard deviation:	0.025 NTU
	CFE 95 th percentile value:	0.14 NTU	IFE 95 th percentile:	0.124 NTU

Number of days with a low CT for no more than 4.0 consecutive hours:	0	Average log inactivation for Giardia:	57.95
		Average log inactivation for viruses:	263.59
Number of days with a low CT for more than 4.0 consecutive hours:	0 (4)	Number of days when profiling data was not collected:	0
		Number of days when CT data was not collected:	0

Minimum disinfectant residual required leaving the plant:	0.5 mg/L, measured as Total Chlorine
Number of days with a low residual for no more than 4.0 consecutive hours:	0
Number of days with a low residual for more than 4.0 consecutive hours:	0 (5)
Number of days when disinfectant residual leaving the plant was not properly monitored:	0

DISTRIBUTION SYSTEM

Minimum disinfectant residual required in distribution system:	0.5 mg/L, measured as Total Chlorine		
Total number of readings this month:	115	(at least 100 required) (8)	
Average disinfectant residual value:	3.57	Percentage of readings with a low residual this month:	0.0 % (6A)
Number of readings with a low residual:	0		
Number of readings with no detectable residual:	0	Percentage of readings with a low residual last month:	0.0 % (6B)

ADDITIONAL REPORTS & WORKSHEETS

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

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

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

No additional IFE Reports are required this month.

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

SURFACE WATER MONTHLY OPERATING REPORT

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

Turbidity Data Page

PUBLIC WATER

SYSTEM NAME: City of Wichita Falls

PLANT NAME

OR NUMBER: Cypress (Microfiltration/R.O.)

PWS ID No.: 2430001

Connections: 34,527

Month: November

Year: 2011

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.						Turbidity						Lowest Residual	Time
					1	2	3	4	5	6	NTU1	NTU2	NTU3	NTU4	NTU5	NTU6		
1	2.000	8.951	15	59							0.08	0.08	0.09	0.08	0.08	0.07	3.9	
2	2.000	9.852	13	59							0.07	0.11	0.10	0.08	0.08	0.10	3.6	
3	1.917	9.382	25	62							0.10	0.18	0.09	0.08	0.08	0.09	3.7	
4	0.833	9.415	15	55							0.12	0.12	0.15	0.14	0.10	0.09	3.6	
5	1.917	9.837	12	58							0.11	0.10	0.13	0.13	0.13	0.12	3.6	
6	0.000	8.828	X	X	X						X	X	X	X	X	X	3.8	
7	0.000	8.535	X	X	X						X	X	X	X	X	X	3.8	
8	0.000	7.315	X	X	X						X	X	X	X	X	X	4.2	
9	0.000	8.060	X	X	X						X	X	X	X	X	X	3.5	
10	0.000	8.070	X	X	X						X	X	X	X	X	X	3.1	
11	0.000	8.655	X	X	X						X	X	X	X	X	X	2.9	
12	1.916	9.557	11	67							0.10	0.12	0.15	0.14	0.12	0.09	3.3	
13	0.000	8.209	X	X	X						X	X	X	X	X	X	3.5	
14	1.750	9.517	9	70							0.11	0.11	0.12	0.11	0.11	0.10	2.7	
15	0.917	9.964	8	74							0.11	0.11	0.11	0.11	0.10	0.07	3.1	
16	2.000	9.549	6	71							0.07	0.07	0.14	0.08	0.10	0.08	3.4	
17	2.000	9.791	8	72							0.10	0.10	0.10	0.09	0.09	0.09	3.7	
18	1.917	9.062	8	67							0.07	0.07	0.22	0.11	0.11	0.09	3.6	
19	0.000	8.362	X	X	X						X	X	X	X	X	X	4.0	
20	0.000	8.396	X	X	X						X	X	X	X	X	X	3.9	
21	0.250	8.543	6	71							0.10	0.11	0.11	0.11	0.11	0.10	3.4	
22	2.000	9.199	5	75							0.15	0.17	0.13	0.09	0.08	0.08	3.4	
23	2.000	10.582	4	75							0.13	0.11	0.13	0.11	0.09	0.10	3.1	
24	2.000	10.768	5	78							0.11	0.12	0.12	0.08	0.08	0.09	3.2	
25	2.000	10.386	6	80							0.07	0.07	0.10	0.07	0.08	0.06	3.3	
26	2.000	9.548	13	80							0.07	0.10	0.08	0.09	0.11	0.09	3.0	
27	2.000	9.837	12	83							0.08	0.08	0.13	0.09	0.09	0.08	3.2	
28	2.000	10.618	11	81							0.08	0.08	0.09	0.08	0.08	0.09	3.0	
29	2.000	10.246	8	99							0.09	0.08	0.08	0.07	0.07	0.08	3.2	
30	2.000	10.163	8	84							0.08	0.08	0.10	0.07	0.07	0.08	2.8	
31																		
Total	37.417	279.197	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.															
Avg	1.247	9.307																
Max	2.000	10.768																
Min	0.000	7.315																

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, AW

Date: December 10, 2011

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 (Microfiltration/R.O.)

PWS ID No.: 2430001

Month:

November

Year:

2011

PERFORMANCE DATA																				
Date	INDIVIDUAL FILTER TURBIDITY																			
	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	0.04	x	0.06	x	x	x	x	x	0.04	x										
2	0.06	x	0.05	x	x	x	x	x	0.03	x										
3	0.04	x	0.03	x	x	x	x	x	0.08	x										
4	0.03	x	0.03	x	x	x	x	x	0.02	x										
5	0.05	x	x	x	x	x	x	x	0.03	x										
6	x	x	x	x	x	x	x	x	x	x										
7	x	x	x	x	x	x	x	x	x	x										
8	x	x	x	x	x	x	x	x	x	x										
9	x	x	x	x	x	x	x	x	x	x										
10	x	x	x	x	x	x	x	x	x	x										
11	x	x	x	x	x	x	x	x	x	x										
12	0.02	x	0.04	x	x	x	x	x	0.04	x										
13	x	x	x	x	x	x	x	x	x	x										
14	0.03	x	0.13	x	x	x	x	x	0.05	x										
15	0.08	x	0.08	x	x	x	x	x	0.05	x										
16	0.03	x	0.04	x	x	x	x	x	0.03	x										
17	0.04	x	0.03	x	x	x	x	x	0.04	x										
18	0.05	x	0.06	x	x	x	x	x	0.05	x										
19	x	x	x	x	x	x	x	x	x	x										
20	x	x	x	x	x	x	x	x	x	x										
21	0.08	x	0.06	x	x	x	x	x	0.08	x										
22	0.03	x	0.03	x	x	x	x	x	0.05	x										
23	0.04	x	0.03	x	x	x	x	x	0.03	x										
24	0.06	x	0.05	x	x	x	x	x	0.05	x										
25	0.03	x	0.06	x	x	x	x	x	0.11	x										
26	0.04	x	0.10	x	x	x	x	x	0.17	x										
27	0.08	x	0.08	x	x	x	x	x	0.06	x										
28	0.03	x	0.12	x	x	x	x	x	0.13	x										
29	0.01	x	0.12	x	x	x	x	x	0.03	x										
30	0.01	x	0.12	x	x	x	x	x	0.07	x										
31																				

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 days with event(s) above 2.0 NTU this month											0
Number of days with event(s) 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: WO0023530, AW

Date: December 10, 2011

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

PWS ID No.: 2430001

PLANT NAME
OR NUMBER: Cypress (Microfiltration/R.O.)

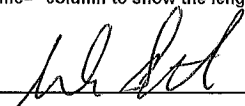
Month: November Year: 2011

DISINFECTION PROCESS PARAMETERS									
APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS			
Parameters	Disinfection Zones					Log Inactivations			
	D1A	D1B	D1C	D2	D3	Giardia lamblia Cysts	Viruses		
Flow Rate (MGD)	27.000	27.000	27.000	37.000		0.5	2.0		
T ₁₀ (minutes)	0.3	8.9	249.0	0.2					

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
1	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	3.000	18.4	8.0	79.67	376.88	159.34	
	CLA D2	3.5	10.000	18.0	9.2			(G)	
	D3								
2	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	3.000	18.2	8.1	70.58	332.57	141.17	
	CLA D2	4.0	10.000	18.4	8.7			(G)	
	D3								
3	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	4.000	16.9	8.0	46.82	214.53	93.64	
	CLA D2	3.0	10.000	15.2	9.1			(G)	
	D3								
4	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	17.2	7.9	55.40	255.54	110.79	
	CLA D2	3.6	10.000	15.6	9.0			(G)	
	D3								
5	NA D1A								
	NA D1B								
	CLO2 D1C	0.3	4.000	17.1	7.9	82.70	380.66	165.40	
	CLA D2	3.6	10.000	15.1	9.2			(G)	
	D3								
6	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
7	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
8	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
9	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
10	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
11	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
12	NA D1A								
	NA D1B								
	CLO2 D1C	0.3	3.000	18.2	8.1	141.16	665.12	282.31	
	CLA D2	3.0	10.000	15.5	9.3			(G)	
	D3								
13	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
14	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	17.6	8.1	40.33	187.66	80.65	
	CLA D2	3.2	10.000	15.8	9.2			(G)	
	D3								
15	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	18.6	8.1	46.60	221.26	93.20	
	CLA D2	3.6	2.000	2.0	8.6			(G)	
	D3								
16	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	16.8	8.2	19.42	88.78	38.84	
	CLA D2	3.3	10.000	16.3	8.5			(G)	
	D3								

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, AW

Date: December 10, 2011

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 (Microfiltration/R.O.)

PWS ID No.:

2430001

Month:

November

Year: 2011

DISINFECTION PROCESS PARAMETERS

APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS	
Parameters	Disinfection Zones					Log Inactivations	
	D1A	D1B	D1C	D2	D3	Giardia lamblia Cysts	Virus
Flow Rate (MGD)	27.000	27.000	27.000	37.000		0.5	2.0
T ₁₀ (minutes)	0.3	8.9	249.0	0.2			

PERFORMANCE DATA

DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
17	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	4.000	16.0	8.1	30.90	138.57	61.81	
	CLA D2	4.1	10.000	12.9	9.3			(G)	
	D3								
18	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	4.000	16.0	8.2	30.90	138.58	61.81	
	CLA D2	3.9	10.000	15.8	8.9			(G)	
	D3								
19	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
20	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
21	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	4.000	15.3	8.1	27.24	120.01	54.49	
	CLA D2	2.9	10.000	14.8	8.6			(G)	
	D3								
22	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	3.000	15.0	8.2	57.37	250.74	114.75	
	CLA D2	3.2	10.000	14.6	9.0			(G)	
	D3								
23	NA D1A								
	NA D1B								
	CLO2 D1C	0.3	3.000	16.2	8.2	94.47	425.76	188.95	
	CLA D2	3.5	10.000	14.3	9.0			(G)	
	D3								
24	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	4.000	16.1	8.2	42.33	190.27	84.65	
	CLA D2	2.9	10.000	14.6	8.7			(G)	
	D3								

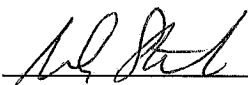
PERFORMANCE DATA

DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
25	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	4.000	15.6	8.1	19.32	85.78	38.65	
	CLA D2	3.8	10.000	15.2	9.0			(G)	
	D3								
26	NA D1A								
	NA D1B								
	CLO2 D1C	0.3	3.000	17.0	8.3	117.59	540.04	235.18	
	CLA D2	3.6	10.000	16.4	9.2			(G)	
	D3								
27	NA D1A								
	NA D1B								
	CLO2 D1C	0.3	3.000	13.5	8.1	91.00	381.34	182.00	
	CLA D2	3.2	10.000	12.8	9.2			(G)	
	D3								
28	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	14.9	8.1	35.71	155.63	71.42	
	CLA D2	3.0	10.000	11.4	8.9			(G)	
	D3								
29	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	15.9	8.1	44.75	200.16	89.49	
	CLA D2	3.2	10.000	10.0	9.4			(G)	
	D3								
30	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	14.8	8.0	42.67	185.47	85.33	
	CLA D2	2.5	10.000	13.2	8.8			(G)	
	D3								
31	D1A								
	D1B								
	D1C								
	D2								
	D3								

Max	141.16	665.12
Min	19.32	85.78
Avg	57.95	263.59
SD	31.81	148.09

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, AW

Date: December 10, 2011

City of Wichita Falls Microfiltration PWS ID # 2430001

INDIVIDUAL MEMBRANE RACKS

Date	Rack No. 1				Rack No. 2				Rack No. 3			
	Previous Month's 95 Percentile 0.118		Direct Integrity Test		Previous Month's 95 Percentile 0.071		Direct Integrity Test		Previous Month's 95 Percentile 0.112		Direct Integrity Test	
	Daily Max.	Post Integrity	Press. Drop	Time	Daily Max.	Post Integrity	Press. Drop	Time	Daily Max.	Post Integrity	Press. Drop	Time
1	0.036	x	x	x	0.06	0.014	0.44	6:17:00 AM	x	x	x	x
2	0.056	x	x	x	0.049	x	x	x	x	x	x	x
3	0.039	0.015	0.45	5:48:00 AM	0.03	x	x	x	x	x	x	x
4	0.03	x	x	x	0.029	0.014	0.72	7:43:00 PM	x	x	x	x
5	0.051	0.016	0.45	6:33:00 PM	x	x	x	x	x	x	x	x
6	x	x	x	x	x	x	x	x	x	x	x	x
7	x	x	x	x	x	x	x	x	x	x	x	x
8	x	x	x	x	x	x	x	x	x	x	x	x
9	x	x	x	x	x	x	x	x	x	x	x	x
10	x	x	x	x	x	x	x	x	x	x	x	x
11	0.018	x	x	x	0.035	x	x	x	x	x	x	x
12	0.018	0.018	0.41	6:22:00 PM	0.035	0.035	0.36	12:04:00 PM	x	x	x	x
13	x	x	x	x	x	x	x	x	x	x	x	x
14	0.032	x	x	x	0.127	x	x	x	x	x	x	x
15	0.075	0.015	0.41	6:51:00 PM	0.084	0.014	0.45	3:26:00 PM	x	x	x	x
16	0.031	x	x	x	0.042	x	x	x	x	x	x	x
17	0.04	x	x	x	0.025	x	x	x	x	x	x	x
18	0.047	0.015	0.4	4:45:00 PM	0.062	0.013	0.47	4:27:00 PM	x	x	x	x
19	x	x	x	x	x	x	x	x	x	x	x	x
20	x	x	x	x	x	x	x	x	x	x	x	x
21	0.083	0.015	0.41	4:14:00 PM	0.061	0.014	0.57	10:10:00 PM	x	x	x	x
22	0.033	x	x	x	0.033	x	x	x	x	x	x	x
23	0.041	x	x	x	0.031	x	x	x	x	x	x	x
24	0.06	0.015	0.41	12:36:00 PM	0.05	0.015	0.49	10:17:00 PM	x	x	x	x
25	0.033	x	x	x	0.063	x	x	x	x	x	x	x
26	0.04	x	x	x	0.097	x	x	x	x	x	x	x
27	0.077	0.015	0.4	1:27:00 PM	0.084	x	x	x	x	x	x	x
28	0.033	x	x	x	0.118	0.014	0.53	12:00:00 AM	x	x	x	x
29	0.01	0.003	0.39	6:44:00 PM	0.12	x	x	x	x	x	x	x
30	0.008	x	x	x	0.124	x	x	x	x	x	x	x
31	x	x	x	x	x	x	x	x	x	x	x	x

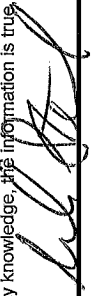
0.075

0.12

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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.

Indirect Integrity Test Method: Hach Laser Trac
 Direct Integrity Test Method: Pressure Decay Test
 Minimum Test Pressure: 10.2 psi
 Max. Allowable Pressure Drop: .65 psi per 1min
 Pressure Test Time: 24hours of run time

Operator  Date December 10, 2011

Certificate No. & Grade WO0023530, AW

City of Wichita Falls Microfiltration PWS ID # 2430001

INDIVIDUAL MEMBRANE RACKS

Date	Rack No. 4				Rack No. 5				Rack No. X			
	Previous Month's 95 Percentile 0.127		Direct Integrity Test		Previous Month's 95 Percentile 0.138		Direct Integrity Test		Previous Month's 95 Percentile		Direct Integrity Test	
	Daily Max.	Post Integrity	Press. Drop	Time	Daily Max.	Post Integrity	Press. Drop	Time	Daily Max.	Post Integrity	Press. Drop	Time
1	x	x	x	x	0.04	x	x	x				
2	x	x	x	x	0.026	x	x	x				
3	x	x	x	x	0.075	0.012	0.34	5:37:00 PM				
4	x	x	x	x	0.024	x	x	x				
5	x	x	x	x	0.03	x	x	x				
6	x	x	x	x	x	x	x	x				
7	x	x	x	x	x	x	x	x				
8	x	x	x	x	x	x	x	x				
9	x	x	x	x	x	x	x	x				
10	x	x	x	x	x	x	x	x				
11	x	x	x	x	0.043	x	x	x				
12	x	x	x	x	0.038	0.013	0.37	12:36:00 AM				
13	x	x	x	x	x	x	x	x				
14	x	x	x	x	0.046	x	x	x				
15	x	x	x	x	0.049	x	x	x				
16	x	x	x	x	0.034	x	x	x				
17	x	x	x	x	0.039	0.013	0.36	9:56:00 PM				
18	x	x	x	x	0.053	x	x	x				
19	x	x	x	x	x	x	x	x				
20	x	x	x	x	x	x	x	x				
21	x	x	x	x	0.077	x	x	x				
22	x	x	x	x	0.048	x	x	x				
23	x	x	x	x	0.029	0.013	0.36	10:44:00 PM				
24	x	x	x	x	0.048	x	x	x				
25	x	x	x	x	0.114	x	x	x				
26	x	x	x	x	0.171	0.011	0.35	10:53:00 PM				
27	x	x	x	x	0.064	x	x	x				
28	x	x	x	x	0.129	x	x	x				
29	x	x	x	x	0.025	0.011	0.35	12:02:00 AM				
30	x	x	x	x	0.073	x	x	x				
31	x	x	x	x	x	x	x	x				

#NUM!

0.114

#NUM!

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

Operator

Date

December 10, 2011

Certificate No.
& Grade

WO0023530, AW

City of Wichita Falls Microfiltration PWS ID # 2430001

INDIVIDUAL MEMBRANE BACK PRODUCTION

Date Startup Data	Rack No. 1										Rack No. 2										Rack No. 3									
	Plant Daily Backwash Return (MG)	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling					
1	x	x	x	10.83	0.99	11.11	0	x	x	10.83	0.96	11.3	0	x	x	x	10.81	1.09	9.04	0	x	x	x	x	9.04	0				
2		1,023,053	112,200	17.24	4.23	4.08	76.60%	710,438	105,600	12.91	6.72	1.92	85.71%	x	x	x	x	x	x	x	x	x	x	x	x	x				
3		720,499	99,000	12.03	2.65	4.54	62.64%	800,093	105,600	11.79	7.10	1.86	86.48%	x	x	x	x	x	x	x	x	x	x	x	x	x				
4		1,095,033	118,800	15.63	4.73	3.30	79.07%	603,264	145,200	10.97	7.99	1.37	87.98%	x	x	x	x	x	x	x	x	x	x	x	x	x				
5		1,166,273	125,400	16.48	6.17	2.67	83.95%	480,463	92,400	10.19	7.48	1.36	87.17%	x	x	x	x	x	x	x	x	x	x	x	x	x				
6		1,302,987	145,200	16.11	5.93	2.72	83.31%	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				
7		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				
8		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				
9		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				
10		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				
11		599,598	99,000	10.48	3.43	3.06	71.14%	666,969	112,200	10.46	6.39	1.64	84.98%	x	x	x	x	x	x	x	x	x	x	x	x	x				
12		751,701	112,200	11.68	3.96	2.95	75.00%	728,087	118,800	11.34	7.67	1.48	87.48%	x	x	x	x	x	x	x	x	x	x	x	x	x				
13		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				
14		692,072	105,600	11.80	3.59	3.29	72.42%	686,684	105,600	11.72	7.16	1.64	86.59%	x	x	x	x	x	x	x	x	x	x	x	x	x				
15		691,890	99,000	11.70	3.49	3.35	71.63%	693,265	105,600	11.67	7.45	1.57	87.11%	x	x	x	x	x	x	x	x	x	x	x	x	x				
16		860,571	138,600	11.56	3.64	3.18	72.80%	700,418	112,200	11.49	7.40	1.55	87.03%	x	x	x	x	x	x	x	x	x	x	x	x	x				
17		662,459	92,400	11.36	3.31	3.43	70.09%	706,071	112,200	11.33	6.89	1.64	86.07%	x	x	x	x	x	x	x	x	x	x	x	x	x				
18		675,852	105,600	11.53	3.36	3.43	70.54%	669,038	99,000	11.51	7.06	1.63	86.40%	x	x	x	x	x	x	x	x	x	x	x	x	x				
19		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				
20		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				
21		721,849	112,200	11.33	3.15	3.60	68.57%	690,427	105,600	11.31	6.70	1.69	85.67%	x	x	x	x	x	x	x	x	x	x	x	x	x				
22		793,178	118,800	11.45	3.22	3.56	69.25%	690,758	105,600	11.38	6.77	1.68	85.82%	x	x	x	x	x	x	x	x	x	x	x	x	x				
23		694,789	105,600	11.39	2.95	3.86	66.44%	651,994	105,600	11.36	6.29	1.81	84.74%	x	x	x	x	x	x	x	x	x	x	x	x	x				
24		720,740	112,200	11.45	3.11	3.68	68.17%	706,504	105,600	11.41	6.65	1.72	85.56%	x	x	x	x	x	x	x	x	x	x	x	x	x				
25		723,087	112,200	11.42	3.11	3.67	68.17%	598,727	92,400	11.39	6.61	1.72	85.48%	x	x	x	x	x	x	x	x	x	x	x	x	x				
26		732,375	105,600	11.31	3.18	3.56	68.87%	590,507	92,400	11.29	5.09	2.22	81.14%	x	x	x	x	x	x	x	x	x	x	x	x	x				
27		708,958	105,600	11.90	3.69	3.23	73.17%	739,580	105,600	11.91	3.61	3.30	73.41%	x	x	x	x	x	x	x	x	x	x	x	x	x				
28		652,812	92,400	12.00	3.74	3.21	73.53%	734,066	105,600	12.02	3.47	3.47	72.33%	x	x	x	x	x	x	x	x	x	x	x	x	x				
29		760,224	105,600	12.00	3.63	3.30	72.73%	698,233	99,000	11.97	3.35	3.57	71.34%	x	x	x	x	x	x	x	x	x	x	x	x	x				
30		645,099	99,000	11.73	3.72	3.15	73.39%	693,444	105,600	11.78	3.36	3.51	71.43%	x	x	x	x	x	x	x	x	x	x	x	x	x				
31		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				

MEMBRANE RACK OPERATIONAL DATA							
No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8
Monthly Filtrate Production (MG):	17,395	14,039	5346 gpm	5346 gpm	5346 gpm	5346 gpm	5346 gpm
Backwash Flow Rate:	5346 gpm	5346 gpm	5346 gpm	5346 gpm	5346 gpm	5346 gpm	5346 gpm
Backwash Duration:	15 secs.	15 secs.	15 secs.	15 secs.	15 secs.	15 secs.	15 secs.
Backwash Frequency:	30 mins	30 mins	30 mins	30 mins	30 mins	30 mins	30 mins
Monthly Backwash Usage (Gals):	2,422,200	2,237,400	0	0	2,389,200	0	7,048,800
Monthly Backwash Return Total (MG):							0.000
Net Plant Production:							-21,483,421
Plant Totals				49,005			

Backwash Return includes backwash water used for the strainer backwashes also.

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

Operator

Certificate No. & Grade

WO0023530, AW

Date

December 10, 2011

City of Wichita Falls Microfiltration PWS ID # 2430001

INDIVIDUAL MEMBRANE RACK PRODUCTION

Date Startup Data	Rack No. 4					Rack No. 5					Rack No. x						
	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cummulative % Irreversible Fouling	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cummulative % Irreversible Fouling	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	Specific Flux @ 20 C (gfd/psi)	Cummulative % Irreversible Fouling
1	x	x	10.87	0.89	12.54	0	x	x	10.87	0.77	14.49	0					
2	x	x	x	x	x	x	887,033	92,400	16.81	3.73	4.51	79.36%					
3	x	x	x	x	x	x	841,068	118,800	12.25	2.41	5.08	68.05%					
4	x	x	x	x	x	x	1,037,167	112,200	16.66	4.44	3.63	82.66%					
5	x	x	x	x	x	x	1,073,244	105,600	16.68	5.65	2.95	86.37%					
6	x	x	x	x	x	x	1,497,364	165,000	16.32	5.54	2.95	86.10%					
7	x	x	x	x	x	x	x	x	x	x	x	x					
8	x	x	x	x	x	x	x	x	x	x	x	x					
9	x	x	x	x	x	x	x	x	x	x	x	x					
10	x	x	x	x	x	x	x	x	x	x	x	x					
11	x	x	x	x	x	x	663,339	105,600	10.49	3.54	2.96	78.25%					
12	x	x	x	x	x	x	732,535	99,000	11.63	3.95	2.94	80.51%					
13	x	x	x	x	x	x	x	x	x	x	x	x					
14	x	x	x	x	x	x	755,362	112,200	11.82	3.74	3.16	79.41%					
15	x	x	x	x	x	x	677,005	99,000	11.71	3.66	3.20	78.96%					
16	x	x	x	x	x	x	791,383	118,800	11.63	3.48	3.34	77.87%					
17	x	x	x	x	x	x	665,755	105,600	11.36	3.54	3.21	78.25%					
18	x	x	x	x	x	x	708,783	105,600	11.54	3.55	3.25	78.31%					
19	x	x	x	x	x	x	x	x	x	x	x	x					
20	x	x	x	x	x	x	x	x	x	x	x	x					
21	x	x	x	x	x	x	663,059	99,000	11.35	3.35	3.39	77.01%					
22	x	x	x	x	x	x	807,522	118,800	11.58	3.08	3.76	75.00%					
23	x	x	x	x	x	x	699,299	105,600	11.41	3.11	3.67	75.24%					
24	x	x	x	x	x	x	677,744	99,000	11.48	3.18	3.61	75.79%					
25	x	x	x	x	x	x	682,913	105,600	11.42	3.00	3.81	74.33%					
26	x	x	x	x	x	x	768,576	112,200	11.24	3.34	3.37	76.93%					
27	x	x	x	x	x	x	733,250	99,000	11.92	3.82	3.12	79.84%					
28	x	x	x	x	x	x	789,187	105,600	12.02	3.61	3.33	78.67%					
29	x	x	x	x	x	x	743,514	105,600	12.02	3.84	3.13	79.95%					
30	x	x	x	x	x	x	655,328	99,000	11.75	3.86	3.04	80.05%					
31	x	x	x	x	x	x	x	x	x	x	x	x					

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

Operator

Date December 10, 2011

Certificate No.
& Grade

W00023530, AW

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 (Microfiltration/R.O.)

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

PWS ID No.: 2430001

Operator's Signature: [Signature]

Report for

the Month of: December 2011

Certificate No. & Grade:

WO0023530, AW

Date: January 10, 2012

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:	50	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:	0.10 NTU
	Minimum turbidity reading:	0.06 NTU	Standard deviation:	0.019 NTU
	CFE 95 th percentile value:	0.13 NTU	IFE 95 th percentile:	0.175 NTU

Number of days with a low CT for no more than 4.0 consecutive hours:	0	Average log inactivation for Giardia:	51.93
		Average log inactivation for viruses:	204.48
Number of days with a low CT for more than 4.0 consecutive hours:	0 (4)	Number of days when profiling data was not collected:	0
		Number of days when CT data was not collected:	0

Minimum disinfectant residual required leaving the plant:	0.5 mg/L, measured as Total Chlorine
Number of days with a low residual for no more than 4.0 consecutive hours:	0
Number of days with a low residual for more than 4.0 consecutive hours:	0 (5)
Number of days when disinfectant residual leaving the plant was not properly monitored:	0

DISTRIBUTION SYSTEM

Minimum disinfectant residual required in distribution system:	0.5 mg/L, measured as Total Chlorine		
Total number of readings this month:	116	(at least 100 required) (8)	
Average disinfectant residual value:	3.77	Percentage of readings with a low residual this month:	0.0 % (6A)
Number of readings with a low residual:	0		
Number of readings with no detectable residual:	0	Percentage of readings with a low residual last month:	0.0 % (6B)

ADDITIONAL REPORTS & WORKSHEETS

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

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

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

No additional IFE Reports are required this month.

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

SURFACE WATER MONTHLY OPERATING REPORT

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

Turbidity Data Page

PUBLIC WATER SYSTEM NAME: City of Wichita Falls

PLANT NAME OR NUMBER: Cypress (Microfiltration/R.O.)

PWS ID No.: 2430001

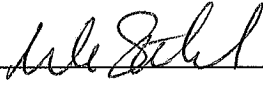
Connections: 34,438

Month: December Year: 2011

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.						Turbidity						Lowest	Time
					1	2	3	4	5	6	NTU1	NTU2	NTU3	NTU4	NTU5	NTU6	Residual	
1	2.000	10.961	10	82							0.09	0.08	0.11	0.08	0.08	0.10	3.0	
2	2.000	9.641	12	87							0.10	0.10	0.11	0.10	0.11	0.10	3.0	
3	2.000	9.884	16	89							0.10	0.14	0.13	0.12	0.11	0.10	2.9	
4	2.000	10.931	11	95							0.10	0.11	0.11	0.10	0.10	0.09	2.9	
5	2.000	10.432	9	87							0.09	0.10	0.10	0.10	0.10	0.11	2.5	
6	2.000	9.967	12	90							0.11	0.12	0.11	0.10	0.09	0.09	3.5	
7	2.000	10.791	11	90							0.09	0.09	0.08	0.07	0.09	0.08	3.2	
8	2.000	10.200	10	91							0.08	0.09	0.11	0.08	0.09	0.09	3.7	
9	2.000	9.152	11	51							0.11	0.12	0.13	0.12	0.12	0.11	3.3	
10	2.000	9.953	9	90							0.15	0.11	0.12	0.13	0.13	0.11	3.3	
11	2.000	11.247	9	90							0.11	0.11	0.11	0.10	0.10	0.10	3.6	
12	2.000	9.757	13	97							0.10	0.12	0.15	0.13	0.12	0.12	3.1	
13	2.000	9.558	10	90							0.11	0.16	0.14	0.14	0.12	0.11	3.2	
14	2.000	10.116	9	89							0.10	0.10	0.08	0.09	0.09	0.09	3.5	
15	2.000	10.153	10	89							0.09	0.08	0.09	0.09	0.10	0.10	3.6	
16	2.000	10.269	13	96							0.09	0.09	0.08	0.09	0.07	0.07	3.4	
17	2.000	9.837	11	98							0.07	0.09	0.09	0.08	0.07	0.08	2.8	
18	2.000	10.618	10	97							0.07	0.07	0.08	0.08	0.07	0.10	2.8	
19	2.000	9.824	12	100							0.11	0.10	0.12	0.10	0.10	0.10	3.0	
20	2.000	10.256	15	100							0.07	0.07	0.10	0.08	0.08	0.07	3.2	
21	2.000	9.967	13	104							0.09	0.10	0.11	0.10	0.08	0.08	3.1	
22	2.000	10.083	12	102							0.08	0.09	0.11	0.10	0.10	0.11	2.9	
23	2.000	9.930	17	104							0.11	0.11	0.12	0.10	0.09	0.09	2.6	
24	2.000	9.744	12	107							0.11	0.09	0.09	0.07	0.07	0.08	3.0	
25	2.000	9.804	12	106							0.08	0.08	0.09	0.09	0.09	0.10	3.0	
26	2.000	10.688	12	103							0.10	0.12	0.10	0.09	0.09	0.09	2.7	
27	2.000	9.511	12	99							0.08	0.08	0.09	0.09	0.08	0.07	3.2	
28	2.000	10.060	11	99							0.08	0.09	0.09	0.07	0.10	0.08	3.3	
29	2.000	10.223	10	98							0.08	0.08	0.08	0.08	0.10	0.10	3.2	
30	2.000	10.116	11	98							0.08	0.07	0.08	0.07	0.07	0.06	3.3	
31	2.000	9.851	11	101							0.06	0.06	0.10	0.06	0.07	0.06	3.3	
Total	62.000	313.524	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.															
Avg	2.000	10.114																
Max	2.000	11.247																
Min	2.000	9.152																

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, AW Date: January 10, 2012

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 (Microfiltration/R.O.)

PWS ID No.: 2430001

Month:

December

Year:

2011

PERFORMANCE DATA																				
Date	INDIVIDUAL FILTER TURBIDITY																			
	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	0.01	x	0.09	x	x	x	x	x	0.03	x										
2	0.01	x	0.11	x	x	x	x	x	0.05	x										
3	0.01	x	0.13	x	x	x	x	x	0.13	x										
4	0.01	x	0.09	x	x	x	x	x	0.05	x										
5	0.01	x	0.12	x	x	x	x	x	0.04	x										
6	0.01	x	0.11	x	x	x	x	x	0.03	x										
7	0.01	x	0.09	x	x	x	x	x	0.06	x										
8	0.01	x	0.12	x	x	x	x	x	0.08	x										
9	0.01	x	0.10	x	x	x	x	x	0.16	x										
10	0.02	x	0.18	x	x	x	x	x	0.05	x										
11	0.02	x	0.18	x	x	x	x	x	0.06	x										
12	0.01	x	0.14	x	0.18	x	x	x	0.16	x										
13	0.02	x	0.17	x	0.13	x	x	x	0.17	x										
14	0.11	x	0.17	x	0.13	x	x	x	0.18	x										
15	0.02	x	0.15	x	0.10	x	x	x	0.12	x										
16	0.05	x	0.18	x	0.17	x	x	x	0.06	x										
17	0.06	x	0.16	x	0.07	x	x	x	0.08	x										
18	0.05	x	0.13	x	0.08	x	x	x	0.10	x										
19	0.07	x	0.13	x	0.07	x	x	x	0.10	x										
20	0.05	x	0.10	x	0.10	x	x	x	0.04	x										
21	0.07	x	0.12	x	0.10	x	x	x	0.18	x										
22	0.04	x	0.10	x	0.05	x	x	x	0.08	x										
23	0.05	x	0.06	x	0.05	x	x	x	0.04	x										
24	0.04	x	0.10	x	0.05	x	x	x	0.18	x										
25	0.08	x	0.10	x	0.12	x	x	x	0.14	x										
26	0.04	x	0.12	x	0.06	x	x	x	0.07	x										
27	0.06	x	0.10	x	0.07	x	x	x	0.05	x										
28	0.05	x	0.14	x	0.08	x	x	x	0.18	x										
29	0.08	x	0.12	x	0.15	x	x	x	0.09	x										
30	0.06	x	0.14	x	0.07	x	x	x	0.06	x										
31	0.08	x	0.17	x	0.07	x	x	x	x	x										

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 days with event(s) above 2.0 NTU this month											0
Number of days with event(s) 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?											

SUBMITTED BY:



Certificate No.

and Grade: WO0023530, AW

Date: January 10, 2012

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
PWS ID No.: 2430001

PLANT NAME
OR NUMBER: Cypress (Microfiltration/R.O.)
Month: December Year: 2011

DISINFECTION PROCESS PARAMETERS									
APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS			
Parameters	Disinfection Zones					Log Inactivations			
	D1A	D1B	D1C	D2	D3	Giardia lamblia Cysts		Viruses	
Flow Rate (MGD)	27.000	27.000	27.000	37.000		0.5		2.0	
T ₁₀ (minutes)	0.3	8.9	249.0	0.2					

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
1	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	4.000	14.4	8.1	49.83	214.22	99.65	
	CLA D2	3.0	10.000	14.0	8.4			(G)	
	D3								
2	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	4.000	13.9	8.1	53.95	228.70	107.90	
	CLA D2	2.7	10.000	11.8	8.9			(G)	
	D3								
3	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	4.000	13.6	8.2	45.68	192.00	91.37	
	CLA D2	2.6	10.000	11.4	9.0			(G)	
	D3								
4	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	13.3	8.2	33.44	139.30	66.88	
	CLA D2	3.0	10.000	13.1	9.1			(G)	
	D3								
5	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	3.000	13.1	8.4	53.08	219.80	106.16	
	CLA D2	2.9	10.000	11.3	9.3			(G)	
	D3								
6	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	11.6	8.2	37.59	148.58	74.29	
	CLA D2	4.0	10.000	10.7	9.2			(V)	
	D3								
7	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	3.000	11.8	8.1	69.69	278.10	139.05	
	CLA D2	3.4	10.000	10.6	9.3			(V)	
	D3								
8	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	4.000	12.2	8.0	31.24	125.85	62.48	
	CLA D2	3.7	10.000	10.7	8.9			(G)	
	D3								

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
9	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	4.000	11.0	8.0	52.85	204.87	102.44	
	CLA D2	3.7	10.000	10.7	8.3			(V)	
	D3								
10	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	10.0	8.1	26.61	99.73	49.87	
	CLA D2	3.4	10.000	8.2	9.2			(V)	
	D3								
11	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	3.000	10.7	8.0	72.74	279.17	139.59	
	CLA D2	4.2	10.000	10.6	9.0			(V)	
	D3								
12	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	3.000	10.5	8.0	72.22	275.33	137.66	
	CLA D2	3.9	10.000	10.5	8.5			(V)	
	D3								
13	NA D1A								
	NA D1B								
	CLO2 D1C	1.5	3.000	11.1	8.1	448.92	1,745.99	872.99	
	CLA D2	3.9	10.000	11.1	8.6			(V)	
	D3								
14	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	11.2	8.1	15.44	60.22	30.11	
	CLA D2	3.8	10.000	14.3	8.9			(V)	
	D3								
15	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	4.000	11.2	8.0	20.84	81.29	40.65	
	CLA D2	3.6	10.000	13.4	8.7			(V)	
	D3								
16	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	10.9	8.1	39.89	153.33	76.67	
	CLA D2	3.5	10.000	11.4	8.7			(V)	
	D3								

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

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

PWS ID No.: 2430001

PLANT NAME

OR NUMBER: Cypress (Microfiltration/R.O.)

Month:

December

Year: 2011

DISINFECTION PROCESS PARAMETERS

APPROVED CT STUDY PARAMETERS

PERFORMANCE STANDARDS

Parameters	Disinfection Zones					Log Inactivations	
	D1A	D1B	D1C	D2	D3	Giardia lamblia Cysts	Virus
Flow Rate (MGD)	27.000	27.000	27.000	37.000		0.5	2.0
T ₁₀ (minutes)	0.3	8.9	249.0	0.2			

PERFORMANCE DATA

DISINFECTION PROCESS DATA

Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time=
17	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	10.6	8.1	27.18	103.97	51.98	
	CLA D2	2.8	10.000	10.2	9.1			(V)	
	D3								
18	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	11.7	8.0	18.87	74.81	37.40	
	CLA D2	3.5	10.000	11.6	8.9			(V)	
	D3								
19	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	11.9	8.0	22.17	88.49	44.25	
	CLA D2	2.3	10.000	12.4	9.2			(V)	
	D3								
20	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	12.0	8.0	22.26	89.11	44.52	
	CLA D2	3.2	10.000	11.9	8.6			(G)	
	D3								
21	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	1.3	8.0	7.84	37.51	15.68	
	CLA D2	3.0	10.000	9.6	9.3			(G)	
	D3								
22	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	12.4	8.0	29.06	117.78	58.11	
	CLA D2	2.4	10.000	10.7	8.8			(G)	
	D3								
23	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	4.000	11.4	8.0	27.98	109.90	54.95	
	CLA D2	2.9	10.000	9.2	8.5			(V)	
	D3								
24	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	3.000	10.8	8.0	51.71	199.12	99.56	
	CLA D2	2.6	10.000	9.6	9.0			(V)	
	D3								

PERFORMANCE DATA

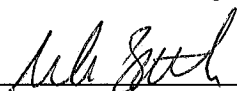
DISINFECTION PROCESS DATA

Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time=
25	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	10.7	8.1	27.28	104.69	52.35	
	CLA D2	2.8	10.000	10.7	9.1			(V)	
	D3								
26	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	3.000	10.8	8.0	63.87	245.97	122.99	
	CLA D2	3.3	10.000	10.7	9.2			(V)	
	D3								
27	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	10.1	8.0	38.57	145.06	72.53	
	CLA D2	3.0	10.000	9.7	9.2			(V)	
	D3								
28	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	10.1	8.1	32.63	122.74	61.37	
	CLA D2	3.0	10.000	10.6	8.2			(V)	
	D3								
29	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	10.7	8.0	18.19	69.80	34.90	
	CLA D2	2.9	10.000	10.1	8.9			(V)	
	D3								
30	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	11.9	8.1	34.84	139.05	69.53	
	CLA D2	2.7	10.000	11.1	8.8			(V)	
	D3								
31	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	3.000	10.7	8.1	63.64	244.27	122.14	
	CLA D2	3.1	10.000	10.6	8.4			(V)	
	D3								

Max	448.92	1745.99
Min	7.84	37.51
Avg	51.93	204.48
SD	74.54	289.63

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, AW

Date: January 10, 2012

INDIVIDUAL MEMBRANE RACKS

Rack No. 1					Rack No. 2					Rack No. 3				
Previous Month's 95 Percentile 0.075		Direct Integrity Test			Previous Month's 95 Percentile 0.12		Direct Integrity Test			Previous Month's 95 Percentile 0.112		Direct Integrity Test		
Date	Daily Max.	Post Integrity	Press. Drop	Time	Daily Max.	Post Integrity	Press. Drop	Time	Daily Max.	Post Integrity	Press. Drop	Time		
1	0.006	x	x	x	0.085	0.014	0.52	9:18:00 AM	x	x	x	x		
2	0.008	x	x	x	0.130	x	x	x	x	x	x	x		
3	0.014	0.003	0.4	6:16:00 PM	0.093	0.014	0.53	12:50:00 PM	x	x	x	x		
4	0.009	x	x	x	0.118	x	x	x	x	x	x	x		
5	0.012	x	x	x	0.112	x	x	x	x	x	x	x		
6	0.009	x	x	x	0.090	0.013	0.56	3:00:00 PM	x	x	x	x		
7	0.010	0.003	0.41	3:22:00 AM	0.120	x	x	x	x	x	x	x		
8	0.014	x	x	x	0.103	x	x	x	x	x	x	x		
9	0.010	x	x	x	0.182	0.013	0.58	3:21:36 AM	x	x	x	x		
10	0.017	0.003	0.43	6:00:00 AM	0.176	x	x	x	x	x	x	x		
11	0.017	x	x	x	0.136	0.014	0.42	4:32:00 PM	0.183	0.142	0.43	5:05:00 PM		
12	0.011	x	x	x	0.172	x	x	x	0.131	x	x	x		
13	0.020	0.003	0.45	1:35:00 PM	0.168	x	x	x	0.132	x	x	x		
14	0.110	x	x	x	0.152	x	x	x	0.097	x	x	x		
15	0.018	x	x	x	0.175	x	x	x	0.172	0.025	0.45	7:24:00 PM		
16	0.051	x	x	x	0.161	0.014	0.7	8:51:00 AM	0.074	x	x	x		
17	0.063	0.017	0.46	2:48:00 PM	0.130	0.014	0.45	12:05:00 AM	0.077	x	x	x		
18	0.051	x	x	x	0.102	x	x	x	0.086	x	x	x		
19	0.072	x	x	x	0.122	x	x	x	0.102	0.022	0.5	4:04:00 PM		
20	0.046	x	x	x	0.115	x	x	x	0.051	x	x	x		
21	0.068	0.016	0.46	6:27:00 PM	0.101	x	x	x	0.050	x	x	x		
22	0.037	x	x	x	0.063	0.014	0.46	12:39:00 AM	0.054	x	x	x		
23	0.045	x	x	x	0.104	x	x	x	0.117	0.016	0.46	7:24:00 AM		
24	0.040	x	x	x	0.123	x	x	x	0.059	x	x	x		
25	0.075	0.016	0.47	9:24:00 PM	0.104	0.014	0.49	2:34:00 AM	0.071	x	x	x		
26	0.043	x	x	x	0.139	x	x	x	0.077	x	x	x		
27	0.055	x	x	x	0.142	x	x	x	0.150	0.021	0.54	5:03:00 PM		
28	0.050	x	x	x	0.174	x	x	x	0.067	x	x	x		
29	0.078	0.016	0.48	7:21:00 PM	0.014	0.54	3:00:00 AM	0.065	x	x	x	x		
30	0.057	x	x	x										
31	0.061	x	x	x										
0.078					0.175					0.150				

Indirect Integrity Test Method:	Haach Laser Trac
Direct Integrity Test Method:	Pressure Decay Test
Minimum Test Pressure:	10.2 psi
Max. Allowable Pressure Drop:	.65 psi per 1min
Pressure Test Time:	24hours of run time

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

Operator

12/24/11

Date _____

January 10, 2012

Certificate No.
& Grade

MO0023530, AIV

City of Wichita Falls Microfiltration PWS ID # 2430001

INDIVIDUAL MEMBRANE RACKS

Date	Rack No. 4				Rack No. 5				Rack No. X			
	Daily Max.	Post Integrity	Press. Drop	Time	Daily Max.	Post Integrity	Press. Drop	Time	Daily Max.	Post Integrity	Press. Drop	Time
1	X	X	X	X	0.031	X	X	X				
2	X	X	X	X	0.047	X	X	X				
3	X	X	X	X	0.134	0.011	0.35	8:01:00 AM				
4	X	X	X	X	0.046	X	X	X				
5	X	X	X	X	0.039	X	X	X				
6	X	X	X	X	0.027	0.012	0.35	5:37:00 AM				
7	X	X	X	X	0.055	X	X	X				
8	X	X	X	X	0.080	X	X	X				
9	X	X	X	X	0.163	0.012	0.52	5:18:00 AM				
10	X	X	X	X	0.045	X	X	X				
11	X	X	X	X	0.060	X	X	X				
12	X	X	X	X	0.164	0.013	0.38	10:56:00 AM				
13	X	X	X	X	0.172	X	X	X				
14	X	X	X	X	0.177	X	X	X				
15	X	X	X	X	0.119	X	X	X				
16	X	X	X	X	0.064	0.013	0.37	1:50:00 PM				
17	X	X	X	X	0.077	X	X	X				
18	X	X	X	X	0.104	X	X	X				
19	X	X	X	X	0.098	X	X	X				
20	X	X	X	X	0.040	0.012	0.37	2:09:00 AM				
21	X	X	X	X	0.177	X	X	X				
22	X	X	X	X	0.077	X	X	X				
23	X	X	X	X	0.037	X	X	X				
24	X	X	X	X	0.177	0.012	0.38	4:23:00 AM				
25	X	X	X	X	0.138	X	X	X				
26	X	X	X	X	0.066	X	X	X				
27	X	X	X	X	0.052	X	X	X				
28	X	X	X	X	0.175	0.013	0.43	6:01:00 AM				
29	X	X	X	X	0.094	X	X	X				
30	X	X	X	X	0.057	X	X	X				
31	X	X	X	X	X	X	X	X				

#NUM!

0.177

#NUM!

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

Operator

Date

January 10, 2012

Certificate No.

& Grade

W00023530, AW

INDIVIDUAL MEMBRANE RACK PRODUCTION

Rack No. 1										Rack No. 2										Rack No. 3									
Plant Daily Backwash Return (MG)	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMF (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMF (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMF (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling											
Start-up Date	X	X	10.83	0.99	11.11	0	X	X	10.83	0.96	11.3	0	X	X	10.81	1.09	9.04	0											
1	855,278	116,809	11.69	4.06	2.88	73.62%	741,014	105,800	11.73	3.59	3.27	73.26%	X	X	X	X	X	X											
2	737,289	105,600	11.74	4.07	2.69	73.68%	737,189	98,000	11.76	3.88	3.20	73.91%	X	X	X	X	X	X											
3	701,337	99,000	11.56	4.23	2.73	76.09%	736,288	105,800	11.56	3.75	3.09	74.49%	X	X	X	X	X	X											
4	575,172	66,000	11.70	8.22	1.88	84.08%	810,249	112,200	11.67	4.11	2.84	76.64%	X	X	X	X	X	X											
5	652,302	99,000	10.34	4.13	2.60	76.03%	673,580	82,400	11.84	4.27	2.73	77.52%	X	X	X	X	X	X											
6	683,498	105,800	10.29	4.09	2.82	75.79%	659,763	92,400	11.19	4.30	2.60	77.67%	X	X	X	X	X	X											
7	735,362	112,200	10.93	4.53	2.41	78.13%	750,929	112,200	11.50	4.51	2.55	78.14%	X	X	X	X	X	X											
8	728,226	112,200	11.34	4.64	2.44	78.66%	699,351	83,800	11.37	4.28	2.69	77.57%	X	X	X	X	X	X											
9	718,840	105,600	11.31	4.67	2.82	79.67%	731,461	99,000	11.34	4.53	2.50	78.81%	X	X	X	X	X	X											
10	711,371	99,000	11.26	5.16	2.18	80.81%	732,069	105,600	11.29	4.80	2.35	80.06%	X	X	X	X	X	X											
11	581,288	92,400	11.22	5.36	2.12	81.33%	745,949	105,800	11.25	4.83	2.33	80.12%	X	X	X	X	X	X											
12	828,938	125,400	11.01	4.95	2.22	80.09%	447,143	66,000	11.03	4.74	2.33	79.75%	186,062	35,600	11.02	3.86	3.01	70.12%											
13	575,668	79,200	11.70	5.54	2.11	82.13%	419,320	59,400	11.69	4.96	2.35	80.73%	638,723	82,400	11.83	4.85	2.44	77.59%											
14	575,462	79,200	11.64	5.49	2.12	81.97%	517,902	79,200	11.58	5.01	2.31	80.84%	800,728	66,600	11.64	5.06	2.29	78.54%											
15	504,165	66,000	11.26	5.09	2.21	80.53%	550,841	79,200	11.31	4.97	2.28	80.68%	544,295	85,800	11.48	5.38	2.13	79.74%											
16	680,932	85,600	11.85	5.56	2.14	82.19%	579,005	79,200	11.83	5.16	2.29	81.40%	461,229	59,400	11.57	5.22	2.22	79.12%											
17	628,977	92,400	11.49	5.24	2.19	81.11%	512,240	72,600	11.42	4.92	2.32	80.49%	390,283	59,400	11.16	4.59	2.43	76.29%											
18	528,386	72,600	12.22	5.50	2.22	83.00%	571,858	79,200	12.27	5.33	2.30	81.99%	626,567	79,200	12.28	5.25	2.34	79.24%											
19	534,005	72,600	11.53	4.91	2.43	79.84%	570,509	72,600	12.12	5.32	2.37	81.25%	545,173	79,200	12.05	5.21	2.31	79.08%											
20	551,143	79,200	11.74	5.04	2.33	80.36%	606,917	85,800	11.91	5.11	2.33	81.21%	598,505	85,800	11.75	5.27	2.23	79.33%											
21	686,102	85,600	13.18	5.11	2.15	83.80%	659,417	92,400	13.29	6.08	2.18	84.24%	633,820	79,200	13.34	6.13	2.16	82.12%											
22	600,527	79,200	12.05	5.44	2.22	81.89%	555,390	79,200	11.88	5.37	2.21	82.11%	588,846	79,200	11.96	5.41	2.22	79.85%											
23	605,546	72,600	13.10	6.16	2.12	83.98%	615,250	79,200	12.51	6.38	2.03	84.91%	632,905	85,600	13.04	6.57	1.98	83.41%											
24	641,054	79,200	13.47	6.47	2.08	84.70%	653,602	79,200	13.47	6.66	2.02	85.59%	637,770	72,600	13.31	7.07	1.86	84.58%											
25	655,557	79,200	13.22	6.63	1.99	83.07%	693,654	85,800	13.08	6.82	1.92	85.92%	593,288	85,600	12.89	6.61	1.89	83.51%											
26	646,309	85,800	11.81	5.89	2.01	83.13%	604,500	79,200	11.72	6.14	1.91	84.36%	465,935	66,000	11.69	5.91	1.98	81.56%											
27	674,163	85,800	12.89	6.92	1.86	85.69%	576,183	79,200	12.85	7.78	1.69	87.66%	675,962	85,600	12.82	7.50	1.64	86.20%											
28	639,740	85,800	12.72	7.01	1.81	85.98%	606,106	79,200	12.63	7.27	1.74	86.89%	592,104	79,200	12.86	7.92	1.59	86.24%											
29	637,740	79,200	13.31	7.50	1.77	86.80%	716,568	85,800	13.27	8.12	1.83	88.18%	589,114	72,600	13.15	7.79	1.69	85.95%											
30	655,444	85,800	12.82	6.91	1.81	85.67%	682,836	79,200	12.55	7.64	1.64	87.43%	697,378	85,600	12.61	7.36	1.71	85.11%											
31	646,178	99,000	13.25	7.35	1.60	86.53%	756,379	99,000	13.30	8.34	1.59	88.40%	994,270	116,600	13.84	8.58	1.58	87.22%											

MEMBRANE RACK OPERATIONAL DATA								Plant Totals
No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8	
Monthly Filtrate Production (MG):	20,410	19,847	11,857	18,956				71,870
Backwash Flow Rate	5346 gpm	5346 gpm	5346 gpm	5346 gpm				
Backwash Duration	15 secs.	15 secs.	15 secs.	15 secs.				
Backwash Frequency	30 mins	30 mins	30 mins	30 mins				
Monthly Backwash Usage (Gals):	2,785,200	2,706,000	1,577,400	2,706,000				9,774,600
Monthly Backwash Return Total (MG):								0.000
Net Plant Production:								-25,876073

* Backwash Return includes backwash water used for the strainer backwashes also.

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

Operator

Certificate No. & Grade

W00023530, AWF

Date

January 10, 2012

City of Wichita Falls Microfiltration PWS ID # 2490001

INDIVIDUAL MEMBRANE RACK PRODUCTION

Rack No. 4										Rack No. 5										Rack No. X									
Date	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling					
Startup Data	X	X	10.87	0.89	12.54	0	X	X	10.87	0.77	14.49	0																	
1	X	X	X	X	X	X	613,282	92,400	11.71	3.79	3.08	79.68%																	
2	X	X	X	X	X	X	747,639	105,800	11.73	4.13	2.84	81.36%																	
3	X	X	X	X	X	X	725,429	99,000	11.57	4.29	2.70	82.05%																	
4	X	X	X	X	X	X	835,546	116,800	11.85	4.50	2.63	83.89%																	
5	X	X	X	X	X	X	883,408	116,800	11.85	5.05	2.35	84.73%																	
6	X	X	X	X	X	X	867,235	92,400	11.03	4.95	2.23	84.44%																	
7	X	X	X	X	X	X	711,946	105,800	11.45	4.64	2.47	84.41%																	
8	X	X	X	X	X	X	886,825	126,400	11.37	4.82	2.38	84.03%																	
9	X	X	X	X	X	X	748,138	105,800	11.32	5.19	2.18	83.16%																	
10	X	X	X	X	X	X	699,225	99,000	11.26	5.14	2.19	83.02%																	
11	X	X	X	X	X	X	853,546	116,800	11.23	5.36	2.09	83.69%																	
12	X	X	X	X	X	X	583,281	79,200	11.01	5.34	2.08	83.58%																	
13	X	X	X	X	X	X	600,672	79,200	11.65	5.68	2.06	86.44%																	
14	X	X	X	X	X	X	674,347	79,200	11.73	5.54	2.12	86.10%																	
15	X	X	X	X	X	X	611,632	85,800	11.42	5.51	2.07	86.03%																	
16	X	X	X	X	X	X	591,518	79,200	11.97	6.03	1.99	87.33%																	
17	X	X	X	X	X	X	576,647	79,200	11.62	5.38	2.16	85.69%																	
18	X	X	X	X	X	X	621,934	85,800	12.30	5.54	2.22	86.10%																	
19	X	X	X	X	X	X	634,514	79,200	12.18	5.46	2.22	85.93%																	
20	X	X	X	X	X	X	585,819	79,200	12.00	5.87	2.12	86.42%																	
21	X	X	X	X	X	X	804,151	65,800	13.32	6.28	2.12	87.74%																	
22	X	X	X	X	X	X	595,468	79,200	12.02	5.48	2.19	85.93%																	
23	X	X	X	X	X	X	676,562	85,800	13.15	6.55	2.01	88.24%																	
24	X	X	X	X	X	X	868,968	79,200	13.59	7.25	1.87	89.38%																	
25	X	X	X	X	X	X	604,135	72,600	13.09	6.74	1.94	88.58%																	
26	X	X	X	X	X	X	588,163	79,200	11.75	5.87	1.97	87.10%																	
27	X	X	X	X	X	X	673,797	65,800	13.00	7.58	1.72	89.84%																	
28	X	X	X	X	X	X	654,970	79,200	12.74	7.83	1.63	90.17%																	
29	X	X	X	X	X	X	674,386	85,800	13.26	7.83	1.68	90.17%																	
30	X	X	X	X	X	X	602,750	66,000	12.59	8.27	1.52	90.69%																	
31	X	X	X	X	X	X	X	X	X	X	X	X																	

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

Operator



Date

January 10, 2012

Certificate No.

WCO023530, AW

PWS/2430001/MP

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 (Microfiltration/R.O.)

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

PWS ID No.: 2430001
Report for
the Month of: January 2012

Operator's Signature: [Signature]
Certificate No. & Grade: WO0023530, AW

Date: February 10, 2012

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:	6	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:	0.15 NTU	Average turbidity value:	0.08 NTU
	Minimum turbidity reading:	0.05 NTU	Standard deviation:	0.013 NTU
	CFE 95 th percentile value:	0.10 NTU	IFE 95 th percentile:	0.157 NTU

Number of days with a low CT for no more than 4.0 consecutive hours:	0	Average log inactivation for Giardia:	41.28
Number of days with a low CT for more than 4.0 consecutive hours:	0 (4)	Average log inactivation for viruses:	160.53
		Number of days when profiling data was not collected:	0
		Number of days when CT data was not collected:	0

Minimum disinfectant residual required leaving the plant:	0.5 mg/L, measured as Total Chlorine
Number of days with a low residual for no more than 4.0 consecutive hours:	0
Number of days with a low residual for more than 4.0 consecutive hours:	0 (5)
	Number of days when disinfectant residual leaving the plant was not properly monitored:
	0

DISTRIBUTION SYSTEM

Minimum disinfectant residual required in distribution system:	0.5 mg/L, measured as Total Chlorine		
Total number of readings this month:	116	(at least 100 required) (8)	
Average disinfectant residual value:	4.03	Percentage of readings with a low residual this month:	0.0 % (6A)
Number of readings with a low residual:	0		
Number of readings with no detectable residual:	0	Percentage of readings with a low residual last month:	0.0 % (6B)

ADDITIONAL REPORTS & WORKSHEETS

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

Additional report(s) for individual filter monitoring required: ☒ NONE ☐ Filter Profile ☐ Filter Assessment ☐ CPE
 Additional report(s) for individual filter monitoring submitted: ☒ NONE ☐ Filter Profile (9) ☐ Filter Assessment (10) ☐ CPE (11)
 No additional IFE Reports are required this month.

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

SURFACE WATER MONTHLY OPERATING REPORT

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

Turbidity Data Page

PUBLIC WATER

SYSTEM NAME: City of Wichita Falls

PLANT NAME

OR NUMBER: Cypress (Microfiltration/R.O.)

PWS ID No.: 2430001

Connections: 34,365

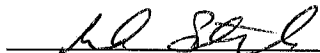
Month: January Year: 2012

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.						Turbidity						Lowest Residual	Time
					1	2	3	4	5	6	NTU1	NTU2	NTU3	NTU4	NTU5	NTU6		
1	2.000	9.804	16	98							0.06	0.07	0.08	0.07	0.07	0.08	3.3	
2	2.000	9.697	15	97							0.08	0.15	0.12	0.12	0.09	0.09	3.1	
3	2.000	10.698	18	98							0.10	0.12	0.10	0.08	0.09	0.08	3.1	
4	2.000	9.944	14	106							0.08	0.08	0.09	0.08	0.07	0.09	3.1	
5	2.000	10.874	13	97							0.08	0.08	0.09	0.08	0.07	0.08	3.5	
6	2.000	9.907	14	100							0.08	0.08	0.09	0.07	0.07	0.07	3.4	
7	2.000	10.432	18	99							0.08	0.08	0.08	0.08	0.10	0.10	2.5	
8	2.000	9.585	18	98							0.08	0.09	0.10	0.09	0.10	0.10	3.1	
9	2.000	10.349	15	99							0.08	0.08	0.11	0.09	0.08	0.07	2.9	
10	3.917	14.084	17	102							0.08	0.08	0.07	0.07	0.06	0.07	2.4	
11	4.000	11.781	14	98							0.09	0.08	0.08	0.07	0.07	0.08	2.6	
12	4.000	11.641	17	99							0.09	0.08	0.09	0.07	0.08	0.09	3.1	
13	3.917	15.565	15	98							0.07	0.07	0.06	0.06	0.06	0.05	3.1	
14	2.000	15.010	14	97							0.06	0.08	0.07	0.07	0.06	0.08	3.4	
15	2.000	15.844	12	92							0.08	0.08	0.08	0.08	0.07	0.08	3.5	
16	2.000	16.643	15	95							0.07	0.08	0.07	0.08	0.07	0.07	3.9	
17	2.000	15.133	16	96							0.08	0.09	0.07	0.07	0.07	0.07	3.2	
18	2.000	14.489	16	96							0.08	0.07	0.09	0.08	0.06	0.09	3.7	
19	2.000	20.499	14	97							0.07	0.08	0.09	0.07	0.08	0.09	3.2	
20	2.000	16.337	14	98							0.09	0.09	0.11	0.09	0.07	0.08	2.9	
21	2.000	15.742	15	98							0.08	0.08	0.08	0.07	0.08	0.08	2.5	
22	2.000	14.930	73	99							0.08	0.09	0.08	0.07	0.08	0.08	3.1	
23	2.000	13.045	23	42							0.08	0.08	0.10	0.09	0.08	0.07	3.2	
24	2.000	15.805	17	100							0.07	0.08	0.08	0.07	0.07	0.09	3.5	
25	2.000	14.823	19	98							0.08	0.07	0.09	0.06	0.06	0.07	3.5	
26	2.000	16.068	18	101							0.07	0.07	0.09	0.09	0.09	0.08	3.5	
27	2.000	11.906	17	98							0.09	0.09	0.09	0.07	0.06	0.07	3.5	
28	2.000	19.850	13	97							0.08	0.07	0.07	0.06	0.06	0.06	3.3	
29	2.000	16.453	14	98							0.09	0.07	0.08	0.07	0.08	0.08	3.9	
30	2.000	15.716	14	97							0.07	0.08	0.07	0.06	0.07	0.08	3.5	
31	2.000	15.374	18	100							0.07	0.08	0.09	0.07	0.05	0.05	3.5	
Total	69.834	428.028	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.															
Avg	2.253	13.807																
Max	4.000	20.499																
Min	2.000	9.585																

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, AW

Date: February 10, 2012

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 (Microfiltration/R.O.)

PWS ID No.: 2430001

Month: January Year: 2012

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	0.05	x	0.16	x	0.07	x	x	x	x	x										
2	0.08	x	0.14	x	0.08	x	x	x	x	x										
3	0.06	x	0.13	x	0.06	x	x	x	x	x										
4	0.05	x	0.15	x	0.06	x	x	x	x	x										
5	0.08	x	0.13	x	0.10	x	x	x	0.13	x										
6	0.05	x	0.12	x	0.15	x	x	x	0.15	x										
7	0.05	x	x	x	0.03	x	x	x	0.08	x										
8	0.07	x	x	x	0.03	x	x	x	0.05	x										
9	0.07	x	x	x	0.05	x	x	x	0.06	x										
10	0.08	x	0.16	x	0.04	x	x	x	0.06	x										
11	0.05	x	0.08	x	0.02	x	x	x	0.06	x										
12	0.04	x	0.06	x	0.03	x	x	x	0.05	x										
13	0.09	x	0.07	x	0.03	x	x	x	0.12	x										
14	0.05	x	0.06	x	0.05	x	x	x	0.13	x										
15	0.08	x	0.09	x	0.03	x	x	x	0.06	x										
16	0.05	x	x	x	x	x	x	x	0.17	x										
17	0.04	x	x	x	x	x	x	x	0.07	x										
18	0.47	x	x	x	0.16	x	x	x	0.06	x										
19	0.06	x	x	x	0.03	x	x	x	0.12	x										
20	0.06	x	0.12	x	0.03	x	x	x	0.08	x										
21	0.04	x	0.64	x	0.05	x	x	x	0.03	x										
22	0.06	x	0.05	x	0.04	x	x	x	0.06	x										
23	0.04	x	0.05	x	0.05	x	x	x	0.11	x										
24	0.05	x	0.05	x	0.03	x	x	x	0.11	x										
25	0.04	x	x	x	0.05	x	x	x	0.04	x										
26	0.06	x	0.10	x	0.03	x	x	x	0.07	x										
27	0.06	x	0.06	x	0.04	x	x	x	0.11	x										
28	0.04	x	0.04	x	0.04	x	x	x	0.05	x										
29	0.04	x	0.05	x	0.03	x	x	x	0.06	x										
30	0.05	x	0.03	x	0.03	x	x	x	0.15	x										
31	0.04	x	x	x	0.04	x	x	x	0.17	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 days with event(s) above 2.0 NTU this month												0
	Number of days with event(s) 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:

Handwritten Signature

Certificate No.

and Grade: WO0023530, AW

Date: February 10, 2012

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
PWS ID No.: 2430001

PLANT NAME
OR NUMBER: Cypress (Microfiltration/R.O.)
Month: January Year: 2012

DISINFECTION PROCESS PARAMETERS									
APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS			
Parameters	Disinfection Zones					Log Inactivations			
	D1A	D1B	D1C	D2	D3	Giardia lamblia Cysts		Viruses	
Flow Rate (MGD)	27.000	27.000	27.000	37.000		0.5		2.0	
T ₁₀ (minutes)	0.3	8.9	249.0	0.2					

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
1	NA D1A								
	NA D1B								
	CLO2 D1C	0.3	3.000	11.0	8.0	88.85	344.41	172.21	
	CLA D2	2.5	10.000	11.6	8.7			(N)	
	D3								
2	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	10.2	8.1	23.82	89.89	44.95	
	CLA D2	3.0	10.000	10.4	9.3			(N)	
	D3								
3	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	10.3	8.0	38.84	147.08	73.54	
	CLA D2	3.0	10.000	9.4	8.8			(N)	
	D3								
4	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	11.1	8.0	30.75	119.59	59.80	
	CLA D2	2.5	10.000	11.5	8.7			(N)	
	D3								
5	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	11.2	7.9	40.12	156.55	78.28	
	CLA D2	2.7	10.000	10.6	9.1			(N)	
	D3								
6	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	11.3	8.0	43.37	169.77	84.88	
	CLA D2	2.7	10.000	10.9	8.8			(N)	
	D3								
7	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	10.8	7.9	30.42	117.13	58.57	
	CLA D2	2.9	10.000	10.7	9.1			(N)	
	D3								
8	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	11.2	8.0	27.78	108.38	54.19	
	CLA D2	2.5	10.000	11.5	9.1			(N)	
	D3								

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
9	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	11.7	7.9	34.58	137.14	68.57	
	CLA D2	2.9	10.000	11.6	8.9			(N)	
	D3								
10	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	6.000	11.3	7.7	18.59	72.76	36.38	
	CLA D2	2.8	16.000	10.8	9.1			(N)	
	D3								
11	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	5.000	11.1	8.0	20.30	78.93	39.47	
	CLA D2	2.6	16.000	9.9	9.0			(N)	
	D3								
12	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	5.000	10.2	8.0	12.51	47.19	23.60	
	CLA D2	3.1	16.000	10.2	9.2			(N)	
	D3								
13	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	5.000	10.1	7.9	17.80	66.95	33.48	
	CLA D2	3.3	18.000	9.1	9.2			(N)	
	D3								
14	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	9.2	7.9	28.76	104.84	52.42	
	CLA D2	4.1	16.000	9.2	9.3			(N)	
	D3								
15	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	3.000	10.0	8.0	47.30	177.30	88.65	
	CLA D2	3.4	12.000	13.8	8.7			(N)	
	D3								
16	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	4.000	10.9	8.0	22.90	88.46	44.23	
	CLA D2	4.0	14.000	12.5	8.9			(N)	
	D3								

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. WO0023530, AW Date: February 10, 2012
TCEQ - 0102C (11-10-09) PAGE 4 SWMOR

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
PWS ID No.: 2430001

PLANT NAME
OR NUMBER: Cypress (Microfiltration/R.O.)
Month: January Year: 2012

DISINFECTION PROCESS PARAMETERS

APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS	
Parameters	Disinfection Zones					Log Inactivations	
	D1A	D1B	D1C	D2	D3	Giardia lamblia Cysts	Virus
Flow Rate (MGD)	27.000	27.000	27.000	37.000		0.5	2.0
T ₁₀ (minutes)	0.3	8.9	249.0	0.2			

PERFORMANCE DATA

DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
17	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	4.000	10.9	8.0	45.79	176.92	88.46	
	CLA D2	3.2	10.000	10.6	8.4			(V)	
	D3								
18	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	3.000	9.9	8.0	50.08	187.08	93.54	
	CLA D2	3.0	10.000	11.2	9.1			(V)	
	D3								
19	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	10.9	8.1	39.69	153.33	76.67	
	CLA D2	3.1	10.000	11.5	8.9			(V)	
	D3								
20	NA D1A								
	NA D1B								
	CLO2 D1C	0.3	3.000	11.6	8.0	84.57	334.28	167.14	
	CLA D2	3.3	14.000	11.9	8.9			(V)	
	D3								
21	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	10.3	7.9	38.84	147.08	73.54	
	CLA D2	2.8	14.000	8.1	9.0			(V)	
	D3								
22	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	12.0	8.0	38.15	152.75	76.31	
	CLA D2	3.1	10.000	8.0	8.4			(S)	
	D3								
23	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	10.9	8.1	42.74	165.12	82.56	
	CLA D2	3.3	14.000	11.4	8.7			(V)	
	D3								
24	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	4.000	11.5	7.9	35.11	138.33	69.16	
	CLA D2	3.7	10.000	12.7	8.6			(V)	
	D3								

PERFORMANCE DATA

DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
25	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	3.000	11.2	7.9	52.47	204.72	102.36	
	CLA D2	3.8	10.000	11.0	8.9			(V)	
	D3								
26	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	3.000	11.2	7.9	46.29	180.64	90.32	
	CLA D2	3.7	14.000	11.9	9.0			(V)	
	D3								
27	NA D1A								
	NA D1B								
	CLO2 D1C	0.3	3.000	11.0	7.9	79.66	308.79	154.39	
	CLA D2	4.1	12.000	10.5	9.0			(V)	
	D3								
28	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	4.000	12.4	7.9	33.90	137.42	67.80	
	CLA D2	3.9	8.000	10.8	8.7			(S)	
	D3								
29	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	2.000	11.5	7.8	84.25	331.97	165.99	
	CLA D2	4.3	14.000	11.1	8.9			(V)	
	D3								
30	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	12.6	7.9	39.04	159.24	78.08	
	CLA D2	4.2	14.000	11.5	9.0			(S)	
	D3								
31	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	12.6	7.9	42.29	172.51	84.59	
	CLA D2	3.7	10.000	12.5	9.0			(S)	
	D3								
						Max	88.85	344.41	
						Min	12.51	47.19	
						Avg	41.28	160.53	
						SD	19.23	75.53	

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, AW

Date: February 10, 2012

MAR-12 '12 14:05 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 (Microfiltration/R.O.)

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

PWS ID No.: 2430001

Operator's Signature: *[Signature]*

Report for

the Month of: February 2012

Certificate No. & Grade:

WO0023530, AW

Date: March 10, 2012

TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	48	Number of 4-hour periods when plant was off-line:	126
Number of readings above 0.10 NTU:	0	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: 0.09 NTU Minimum turbidity reading: 0.05 NTU CFE 95 th percentile value: 0.08 NTU	Average turbidity value: 0.06 NTU Standard deviation: 0.008 NTU IFE 95 th percentile: 0.123 NTU	
Number of days with a low CT for no more than 4.0 consecutive hours:	0	Average log inactivation for Giardia:	41.09
Number of days with a low CT for more than 4.0 consecutive hours:	0 (4)	Average log inactivation for viruses:	170.75
		Number of days when profiling data was not collected:	0
		Number of days when CT data was not collected:	0
Minimum disinfectant residual required leaving the plant:	0.5 mg/L, measured as Total Chlorine		
Number of days with a low residual for no more than 4.0 consecutive hours:	0		
Number of days with a low residual for more than 4.0 consecutive hours:	0 (5)	Number of days when disinfectant residual leaving the plant was not properly monitored:	0

DISTRIBUTION SYSTEM

Minimum disinfectant residual required in distribution system:	0.5 mg/L, measured as Total Chlorine
Total number of readings this month:	114 (at least 100 required) (8)
Average disinfectant residual value:	4.16
Percentage of readings with a low residual this month:	0.0 % (6A)
Number of readings with a low residual:	0
Percentage of readings with a low residual last month:	0.0 % (6B)
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.

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

SURFACE WATER MONTHLY OPERATING REPORT

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

Turbidity Data Page

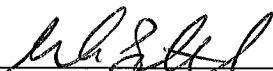
PUBLIC WATER SYSTEM NAME: City of Wichita Falls PLANT NAME OR NUMBER: Cypress (Microfiltration/R.O.)

PWS ID No.: 2430001 Connections: 34,540

Month: February Year: 2012 Population: _____

PERFORMANCE DATA																		
Date	Raw Water Pumpage (MGD)	Treated Water Pumpage (MGD)	RAW WATER ANALYSES		SETTLED WATER TURBIDITY (Optional Data)						FINISHED WATER QUALITY							
											Turbidity						Lowest	Time
			NTU	Alk.	1	2	3	4	5	6	NTU1	NTU2	NTU3	NTU4	NTU5	NTU6	Residual	
1	2.000	15.720	14	99							0.08	0.07	0.07	0.06	0.06	0.06	3.4	
2	2.000	15.166	11	101							0.06	0.06	0.06	0.06	0.06	0.06	3.5	
3	2.000	16.381	11	102							0.05	0.07	0.07	0.06	0.06	0.07	3.3	
4	2.000	18.939	14	93							0.06	0.07	0.07	0.06	0.06	0.06	3.6	
5	2.000	19.730	14	98							0.06	0.07	0.08	0.07	0.07	0.07	3.8	
6	2.000	12.603	14	96							0.07	0.07	0.06	0.06	0.05	0.06	3.1	
7	2.000	9.220	12	100							0.07	0.06	0.07	0.08	0.06	0.05	3.0	
8	0.667	8.472	11	99							0.09	0.07	0.07	0.06	0.05	0.06	3.2	
9	0.000	8.539	X	X	X						X	X	X	X	X	X	3.5	
10	0.000	7.855	X	X	X						X	X	X	X	X	X	3.6	
11	0.000	5.976	X	X	X						X	X	X	X	X	X	2.9	
12	0.000	7.157	X	X	X						X	X	X	X	X	X	2.8	
13	0.000	2.070	X	X	X						X	X	X	X	X	X	3.0	
14	0.000	0.000	X	X	X						X	X	X	X	X	X	X	
15	0.000	0.000	X	X	X						X	X	X	X	X	X	X	
16	0.000	0.000	X	X	X						X	X	X	X	X	X	X	
17	0.000	3.954	X	X	X						X	X	X	X	X	X	3.0	
18	0.000	0.000	X	X	X						X	X	X	X	X	X	X	
19	0.000	0.000	X	X	X						X	X	X	X	X	X	X	
20	0.000	0.000	X	X	X						X	X	X	X	X	X	X	
21	0.000	4.006	X	X	X						X	X	X	X	X	X	3.2	
22	0.000	6.640	X	X	X						X	X	X	X	X	X	2.9	
23	0.000	8.707	X	X	X						X	X	X	X	X	X	3.1	
24	0.000	7.841	X	X	X						X	X	X	X	X	X	2.5	
25	0.000	8.256	X	X	X						X	X	X	X	X	X	3.1	
26	0.000	7.622	X	X	X						X	X	X	X	X	X	3.0	
27	0.000	7.241	X	X	X						X	X	X	X	X	X	2.9	
28	0.000	7.986	X	X	X						X	X	X	X	X	X	2.7	
29	0.000	7.045	X	X	X						X	X	X	X	X	X	3.0	
30																		
31																		
Total	14.667	217.126	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.															
Avg	0.506	7.487																
Max	2.000	19.730																
Min	0.000	0.000																

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, AW Date: March 10, 2012

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 (Microfiltration/R.O.)

PWS ID No.: 2430001

Month:

February

Year: 2012

PERFORMANCE DATA																				
Date	INDIVIDUAL FILTER TURBIDITY																			
	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	0.06	x	x	x	0.03	x	x	x	0.12	x										
2	0.04	x	x	x	0.03	x	x	x	0.14	x										
3	0.03	x	x	x	0.04	x	x	x	0.07	x										
4	0.04	x	x	x	0.03	x	x	x	0.08	x										
5	0.06	x	x	x	0.02	x	x	x	0.06	x										
6	0.05	x	0.06	x	0.04	x	x	x	0.13	x										
7	0.09	x	0.10	x	0.03	x	x	x	0.11	x										
8	0.04	x	0.04	x	0.03	x	x	x	0.05	x										
9	X	X	X	X	X	X	X	X	X	X										
10	X	X	X	X	X	X	X	X	X	X										
11	X	X	X	X	X	X	X	X	X	X										
12	X	X	X	X	X	X	X	X	X	X										
13	X	X	X	X	X	X	X	X	X	X										
14	X	X	X	X	X	X	X	X	X	X										
15	X	X	X	X	X	X	X	X	X	X										
16	X	X	X	X	X	X	X	X	X	X										
17	X	X	X	X	X	X	X	X	X	X										
18	X	X	X	X	X	X	X	X	X	X										
19	X	X	X	X	X	X	X	X	X	X										
20	X	X	X	X	X	X	X	X	X	X										
21	X	X	X	X	X	X	X	X	X	X										
22	X	X	X	X	X	X	X	X	X	X										
23	X	X	X	X	X	X	X	X	X	X										
24	X	X	X	X	X	X	X	X	X	X										
25	X	X	X	X	X	X	X	X	X	X										
26	X	X	X	X	X	X	X	X	X	X										
27	X	X	X	X	X	X	X	X	X	X										
28	X	X	X	X	X	X	X	X	X	X										
29	X	X	X	X	X	X	X	X	X	X										
30																				
31																				

SUMMARY & COMPLIANCE ACTIONS	Criteria	Filter No.										Plant
		1	2	3	4	5	6	7	8	9	10	
	Number of days with event(s) above 0.5 NTU at 4.0 hrs this month	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 days with event(s) above 2.0 NTU this month											0
	Number of days with event(s) 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?											

SUBMITTED BY:

Certificate No.

and Grade: WO0023530, AW

Date: March 10, 2012

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
PWS ID No.: 2430001

PLANT NAME OR NUMBER: Cypress (Microfiltration/R.O.)
Month: February Year: 2012

DISINFECTION PROCESS PARAMETERS									
APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS			
Parameters	Disinfection Zones					Log Inactivations			
	D1A	D1B	D1C	D2	D3	Giardia lamblia Cysts		Viruses	
Flow Rate (MGD)	27.000	27.000	27.000	37.000		0.5		2.0	
T ₁₀ (minutes)	0.3	8.9	249.0	0.2					

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
1	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	11.6	7.8	43.85	173.33	86.67	
	CLA D2	3.9	14.000	12.8	8.7			(G)	
	D3								
2	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	15.1	7.7	46.82	205.14	93.63	
	CLA D2	3.9	14.000	12.6	9.2			(G)	
	D3								
3	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	14.2	7.9	48.55	207.57	97.10	
	CLA D2	3.8	10.000	16.1	9.2			(G)	
	D3								
4	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	3.000	12.6	7.9	48.80	199.04	97.60	
	CLA D2	4.0	14.000	11.9	9.0			(G)	
	D3								
5	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	3.500	12.4	7.9	47.04	190.69	94.08	
	CLA D2	4.2	15.800	11.4	9.0			(G)	
	D3								
6	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	4.000	12.9	7.9	29.63	121.94	59.25	
	CLA D2	3.3	10.000	13.5	9.2			(G)	
	D3								
7	NA D1A								
	NA D1B								
	CLO2 D1C	0.2	4.000	14.1	7.9	41.45	176.69	82.89	
	CLA D2	3.3	6.000	11.6	8.8			(G)	
	D3								
8	NA D1A								
	NA D1B								
	CLO2 D1C	0.1	3.000	12.4	7.9	22.61	91.62	45.21	
	CLA D2	3.9	6.000	12.1	8.7			(G)	
	D3								

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
9	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
10	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
11	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
12	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
13	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
14	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
15	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
16	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								

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

SUBMITTED BY:

[Signature]

Certificate No.
and Grade:

WO0023530, AW

Date: March 10, 2012

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 (Microfiltration/R.O.)

PWS ID No.: 2430001

Month: February Year: 2012

DISINFECTION PROCESS PARAMETERS									
APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS			
Parameters	Disinfection Zones					Log Inactivations			
	D1A	D1B	D1C	D2	D3	Giardia lamblia Cysts		Virus	
Flow Rate (MGD)	27.000	27.000	27.000	37.000		0.5		2.0	
T ₁₀ (minutes)	0.3	8.9	249.0	0.2					

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
17	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
18	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
19	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
20	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
21	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
22	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
23	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
24	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
25	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
26	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
27	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
28	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
29	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
30	D1A								
	D1B								
	D1C								
	D2								
	D3								
31	D1A								
	D1B								
	D1C								
	D2								
	D3								
						Max	48.80	207.57	
						Min	22.61	91.62	
						Avg	41.09	170.75	
						SD	9.11	39.41	

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, AW

Date: March 10, 2012

City of Wichita Falls Microfiltration PWS ID # 2430001

INDIVIDUAL MEMBRANE RACKS

Rack No. 1				Rack No. 2				Rack No. 3				
Previous Month's 95 Percentile 0.084		Direct Integrity Test		Previous Month's 95 Percentile 0.155		Direct Integrity Test		Previous Month's 95 Percentile 0.097		Direct Integrity Test		
Date	Daily Max.	Post Integrity	Press. Drop	Time	Daily Max.	Post Integrity	Press. Drop	Time	Daily Max.	Post Integrity	Press. Drop	Time
1	0.056	0.016	0.49	7:38:00 PM	X	X	X	X	0.029	X	X	X
2	0.039	X	X	X	X	X	X	X	0.027	X	X	X
3	0.034	X	X	X	X	X	X	X	0.042	0.012	0.42	10:20:00 AM
4	0.038	X	X	X	X	X	X	X	0.028	X	X	X
5	0.057	0.019	0.57	1:40:00 PM	X	X	X	X	0.024	X	X	X
6	0.047	X	X	X	0.058	0.049	0.46	3:52:00 PM	0.04	0.013	0.44	3:48:00 AM
7	0.089	0.029	0.4	2:55:00 PM	0.097	X	X	X	0.034	X	X	X
8	0.035	X	X	X	0.041	X	X	X	0.029	X	X	X
9	X	X	X	X	X	X	X	X	X	X	X	X
10	X	X	X	X	X	X	X	X	X	X	X	X
11	X	X	X	X	X	X	X	X	X	X	X	X
12	X	X	X	X	X	X	X	X	X	X	X	X
13	X	X	X	X	X	X	X	X	X	X	X	X
14	X	X	X	X	X	X	X	X	X	X	X	X
15	X	X	X	X	X	X	X	X	X	X	X	X
16	X	X	X	X	X	X	X	X	X	X	X	X
17	X	X	X	X	X	X	X	X	X	X	X	X
18	X	X	X	X	X	X	X	X	X	X	X	X
19	X	X	X	X	X	X	X	X	X	X	X	X
20	X	X	X	X	X	X	X	X	X	X	X	X
21	X	X	X	X	X	X	X	X	X	X	X	X
22	X	X	X	X	X	X	X	X	X	X	X	X
23	X	X	X	X	X	X	X	X	X	X	X	X
24	X	X	X	X	X	X	X	X	X	X	X	X
25	X	X	X	X	X	X	X	X	X	X	X	X
26	X	X	X	X	X	X	X	X	X	X	X	X
27	X	X	X	X	X	X	X	X	X	X	X	X
28	X	X	X	X	X	X	X	X	X	X	X	X
29	X	X	X	X	X	X	X	X	X	X	X	X
30	X	X	X	X	X	X	X	X	X	X	X	X
31	X	X	X	X	X	X	X	X	X	X	X	X

0.056

0.041

0.034

Indirect Integrity Test Method:

Hach Laser Trac

Direct Integrity Test Method:

Pressure Decay Test

Minimum Test Pressure:

10.2 psi

Max. Allowable Pressure Drop:

.65 psi per 1min

Pressure Test Time:

24 hours of run time

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

Operator



Date

March 10, 2012

Certificate No.
& Grade

WO0023530, AW

City of Wichita Falls Microfiltration PWS ID # 2430001

INDIVIDUAL MEMBRANE RACKS

Date	Rack No. 4				Rack No. 5				Rack No. X			
	Previous Month's 95 Percentile 0.127		Direct Integrity Test		Previous Month's 95 Percentile 0.153		Direct Integrity Test		Previous Month's 95 Percentile		Direct Integrity Test	
	Daily Max.	Post Integrity	Press. Drop	Time	Daily Max.	Post Integrity	Press. Drop	Time	Daily Max.	Post Integrity	Press. Drop	Time
1	X	X	X	X	0.117	X	X	X				
2	X	X	X	X	0.142	X	X	X				
3	X	X	X	X	0.074	0.013	0.49	4:43:00 AM				
4	X	X	X	X	0.08	X	X	X				
5	X	X	X	X	0.06	X	X	X				
6	X	X	X	X	0.126	0.015	0.53	12:02:00 AM				
7	X	X	X	X	0.106	X	X	X				
8	X	X	X	X	0.05	0.015	0.41	11:12:00 AM				
9	X	X	X	X	X	X	X	X				
10	X	X	X	X	X	X	X	X				
11	X	X	X	X	X	X	X	X				
12	X	X	X	X	X	X	X	X				
13	X	X	X	X	X	X	X	X				
14	X	X	X	X	X	X	X	X				
15	X	X	X	X	X	X	X	X				
16	X	X	X	X	X	X	X	X				
17	X	X	X	X	X	X	X	X				
18	X	X	X	X	X	X	X	X				
19	X	X	X	X	X	X	X	X				
20	X	X	X	X	X	X	X	X				
21	X	X	X	X	X	X	X	X				
22	X	X	X	X	X	X	X	X				
23	X	X	X	X	X	X	X	X				
24	X	X	X	X	X	X	X	X				
25	X	X	X	X	X	X	X	X				
26	X	X	X	X	X	X	X	X				
27	X	X	X	X	X	X	X	X				
28	X	X	X	X	X	X	X	X				
29	X	X	X	X	X	X	X	X				
30	X	X	X	X	X	X	X	X				
31	X	X	X	X	X	X	X	X				

#NUM!

0.117

#NUM!

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

Operator



Date

March 10, 2012

Certificate No.
& Grade

W00023530, AW

INDIVIDUAL MEMBRANE RACK PRODUCTION

Date	Plant Daily Backwash Return (MG)	Production Total	Backwash Total	Rack No. 1			Rack No. 2			Rack No. 3									
				Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cummulative % Irreversible Fouling	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cummulative % Irreversible Fouling	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cummulative % Irreversible Fouling
Startup Data	X	X	X	10.83	0.99	11.11	0	X	X	10.83	0.96	11.3	0	X	X	10.81	1.09	9.04	0
1		762,892	99,000	14.49	6.42	2.26	84.58%	X	X	X	X	X	X	766,560	99,000	14.12	6.54	2.16	83.33%
2		504,386	66,000	14.09	6.23	2.26	84.11%	X	X	X	X	X	X	969,697	125,400	14.12	6.37	2.22	82.89%
3		450,625	59,400	14.13	4.19	3.37	76.37%	X	X	X	X	X	X	1,145,103	151,800	14.13	6.53	2.16	83.31%
4		977,145	132,000	14.63	4.32	3.39	77.08%	X	X	X	X	X	X	836,919	118,800	14.47	6.69	2.16	83.71%
5		548,687	72,600	15.07	4.52	3.33	78.10%	X	X	X	X	X	X	1,002,078	125,400	15.07	7.52	2.00	85.51%
6		881,511	105,600	15.08	4.42	3.41	77.60%	185,687	26,400	14.20	6.27	2.26	84.69%	872,665	112,200	15.06	7.51	2.01	85.49%
7		316,819	39,600	15.05	4.15	3.63	76.14%	630,177	79,200	15.06	7.24	2.08	86.74%	773,376	99,000	15.07	7.22	2.09	84.90%
8		734,897	92,400	15.07	4.37	3.45	77.35%	779,912	99,000	15.04	7.67	1.96	87.48%	386,497	46,200	15.06	7.48	2.01	85.43%
9		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
11		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
12		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
16		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
20		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
21		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
23		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
24		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
25		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
26		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
27		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
28		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
29		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
30		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
31		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

MEMBRANE RACK OPERATIONAL DATA								Plant Totals	
	No. 1	No. 2	No. 4	No. 5	No. 6	No. 7	No. 8		
Monthly Filtrate Production (MG):	5,177	1,596	6,745		6,673			20,191	
Backwash Flow Rate	5346 gpm	5346 gpm	5346 gpm	5346 gpm	5346 gpm				
Backwash Duration	15 secs.	15 secs.	15 secs.	15 secs.	15 secs.				
Backwash Frequency:	30 mins	30 mins	30 mins	30 mins	30 mins				
Monthly Backwash Usage (Gals):	666,600	204,600	877,800	0	1,696,200			3,445,200	
Monthly Backwash Return Total (MG):								0.000	
Net Plant Production:								-14,261,391	

* Backwash return includes backwash water used for the strainer backwashes also.

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

Operator

Certificate No. & Grade

W000023530, AW

Date

March 10, 2012

INDIVIDUAL MEMBRANE RACK PRODUCTION

Date Startup Data	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling
1	X	X	10.87	0.89	12.54	0	X	X	10.87	0.77	14.49	0												
2	X	X	X	X	X	X	828,224	105,800	14.47	5.99	2.42	87.15%												
3	X	X	X	X	X	X	961,851	132,000	14.13	5.89	2.40	86.93%												
4	X	X	X	X	X	X	1,009,979	132,000	14.13	5.84	2.42	86.82%												
5	X	X	X	X	X	X	761,409	924,000	14.71	6.23	2.36	87.64%												
6	X	X	X	X	X	X	967,115	125,400	15.09	6.69	2.26	88.49%												
7	X	X	X	X	X	X	828,351	112,200	15.08	6.52	2.31	88.19%												
8	X	X	X	X	X	X	730,049	85,800	15.07	6.43	2.34	88.02%												
9	X	X	X	X	X	X	586,018	79,200	15.07	6.56	2.30	88.26%												
10	X	X	X	X	X	X	X	X	X	X	X	X												
11	X	X	X	X	X	X	X	X	X	X	X	X												
12	X	X	X	X	X	X	X	X	X	X	X	X												
13	X	X	X	X	X	X	X	X	X	X	X	X												
14	X	X	X	X	X	X	X	X	X	X	X	X												
15	X	X	X	X	X	X	X	X	X	X	X	X												
16	X	X	X	X	X	X	X	X	X	X	X	X												
17	X	X	X	X	X	X	X	X	X	X	X	X												
18	X	X	X	X	X	X	X	X	X	X	X	X												
19	X	X	X	X	X	X	X	X	X	X	X	X												
20	X	X	X	X	X	X	X	X	X	X	X	X												
21	X	X	X	X	X	X	X	X	X	X	X	X												
22	X	X	X	X	X	X	X	X	X	X	X	X												
23	X	X	X	X	X	X	X	X	X	X	X	X												
24	X	X	X	X	X	X	X	X	X	X	X	X												
25	X	X	X	X	X	X	X	X	X	X	X	X												
26	X	X	X	X	X	X	X	X	X	X	X	X												
27	X	X	X	X	X	X	X	X	X	X	X	X												
28	X	X	X	X	X	X	X	X	X	X	X	X												
29	X	X	X	X	X	X	X	X	X	X	X	X												
30	X	X	X	X	X	X	X	X	X	X	X	X												
31	X	X	X	X	X	X	X	X	X	X	X	X												

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

Operator

Date

March 10, 2012

Certificate No. & Grade

W00023530, AW

APR 13 '12 09:50

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

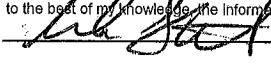
SYSTEM NAME: City of Wichita Falls

PLANT NAME

OR NUMBER: Cypress (Microfiltration/R.O.)

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

PWS ID No.: 2430001

Operator's Signature: 

Report for

the Month of: March 2012

Certificate No. & Grade:

WO0023530, AW

Date: April 10, 2012

TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	0	Number of 4-hour periods when plant was off-line:	186
Number of readings above 0.10 NTU:	0	Number of 4-hour periods when plant was on-line	
Number of readings above 0.3 NTU:	0	but turbidity data was not collected:	0
Number of readings above 0.5 NTU:	0	Number of days when plant was on-line	
Number of readings above 1.0 NTU:	0	but individual filter turbidity data was not collected:	0
Maximum allowable turbidity level:	0.3	Number of days with readings above 1.0 NTU:	0 (2)
Percentage of readings above this limit:	NA % (1)	Number of days with readings above 5.0 NTU:	0 (3)

Statistical
Summary

Maximum turbidity reading:	NA NTU	Average turbidity value:	NA NTU
Minimum turbidity reading:	NA NTU	Standard deviation:	NA NTU
CFE 95 th percentile value:	NA NTU	IFE 95 th percentile:	NA NTU

Number of days with a low CT for no more than 4.0 consecutive hours:	0	Average log inactivation for Giardia:	NA
Number of days with a low CT for more than 4.0 consecutive hours:	0 (4)	Average log inactivation for viruses:	NA
		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:	115 (at least 100 required) (8)
Average disinfectant residual value:	3.98
Percentage of readings with a low residual this month:	0.0 % (8A)
Number of readings with a low residual:	0
Percentage of readings with a low residual last month:	0.0 % (8B)
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.

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

SURFACE WATER MONTHLY OPERATING REPORT

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

Turbidity Data Page

PUBLIC WATER
SYSTEM NAME: City of Wichita Falls

PLANT NAME
OR NUMBER: Cypress (Microfiltration/R.O.)

PWS ID No.: 2430001

Connections: 34,599

Month: March Year: 2012

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.						Turbidity						Lowest	Time	
					1	2	3	4	5	6	NTU1	NTU2	NTU3	NTU4	NTU5	NTU6	Residual		
1	0.000	7.362	X	X	X							X	X	X	X	X	X	3.3	
2	0.000	7.790	X	X	X							X	X	X	X	X	X	3.2	
3	0.000	7.349	X	X	X							X	X	X	X	X	X	3.0	
4	0.000	8.055	X	X	X							X	X	X	X	X	X	3.1	
5	0.000	8.041	X	X	X							X	X	X	X	X	X	3.1	
6	0.000	7.427	X	X	X							X	X	X	X	X	X	3.2	
7	0.000	7.576	X	X	X							X	X	X	X	X	X	3.4	
8	0.000	7.241	X	X	X							X	X	X	X	X	X	3.4	
9	0.000	7.711	X	X	X							X	X	X	X	X	X	3.4	
10	0.000	8.362	X	X	X							X	X	X	X	X	X	3.3	
11	0.000	7.094	X	X	X							X	X	X	X	X	X	3.4	
12	0.000	8.157	X	X	X							X	X	X	X	X	X	3.6	
13	0.000	7.412	X	X	X							X	X	X	X	X	X	3.7	
14	0.000	6.288	X	X	X							X	X	X	X	X	X	3.5	
15	0.000	7.258	X	X	X							X	X	X	X	X	X	3.5	
16	0.000	7.734	X	X	X							X	X	X	X	X	X	3.5	
17	0.000	7.342	X	X	X							X	X	X	X	X	X	3.5	
18	0.000	7.799	X	X	X							X	X	X	X	X	X	3.3	
19	0.000	7.613	X	X	X							X	X	X	X	X	X	3.3	
20	0.000	8.843	X	X	X							X	X	X	X	X	X	3.1	
21	0.000	8.172	X	X	X							X	X	X	X	X	X	3.3	
22	0.000	7.622	X	X	X							X	X	X	X	X	X	3.3	
23	0.000	8.023	X	X	X							X	X	X	X	X	X	3.4	
24	0.000	7.883	X	X	X							X	X	X	X	X	X	3.1	
25	0.000	8.311	X	X	X							X	X	X	X	X	X	3.1	
26	0.000	7.613	X	X	X							X	X	X	X	X	X	3.0	
27	0.000	8.995	X	X	X							X	X	X	X	X	X	3.0	
28	0.000	8.159	X	X	X							X	X	X	X	X	X	3.2	
29	0.000	6.924	X	X	X							X	X	X	X	X	X	2.9	
30	0.000	7.776	X	X	X							X	X	X	X	X	X	3.1	
31	0.000	9.196	X	X	X							X	X	X	X	X	X	2.9	
Total	0.000	241.128	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.																
Avg	0.000	7.778																	
Max	0.000	9.196																	
Min	0.000	6.288																	

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, AW

Date: April 10, 2012

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 (Microfiltration/R.O.)

PWS ID No.: 2430001

Month:

March

Year:

2012

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	X	X	X	X	X	X	X	X	X	X										
2	X	X	X	X	X	X	X	X	X	X										
3	X	X	X	X	X	X	X	X	X	X										
4	X	X	X	X	X	X	X	X	X	X										
5	X	X	X	X	X	X	X	X	X	X										
6	X	X	X	X	X	X	X	X	X	X										
7	X	X	X	X	X	X	X	X	X	X										
8	X	X	X	X	X	X	X	X	X	X										
9	X	X	X	X	X	X	X	X	X	X										
10	X	X	X	X	X	X	X	X	X	X										
11	X	X	X	X	X	X	X	X	X	X										
12	X	X	X	X	X	X	X	X	X	X										
13	X	X	X	X	X	X	X	X	X	X										
14	X	X	X	X	X	X	X	X	X	X										
15	X	X	X	X	X	X	X	X	X	X										
16	X	X	X	X	X	X	X	X	X	X										
17	X	X	X	X	X	X	X	X	X	X										
18	X	X	X	X	X	X	X	X	X	X										
19	X	X	X	X	X	X	X	X	X	X										
20	X	X	X	X	X	X	X	X	X	X										
21	X	X	X	X	X	X	X	X	X	X										
22	X	X	X	X	X	X	X	X	X	X										
23	X	X	X	X	X	X	X	X	X	X										
24	X	X	X	X	X	X	X	X	X	X										
25	X	X	X	X	X	X	X	X	X	X										
26	X	X	X	X	X	X	X	X	X	X										
27	X	X	X	X	X	X	X	X	X	X										
28	X	X	X	X	X	X	X	X	X	X										
29	X	X	X	X	X	X	X	X	X	X										
30	X	X	X	X	X	X	X	X	X	X										
31	X	X	X	X	X	X	X	X	X	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 days with event(s) above 2.0 NTU this month											0
	Number of days with event(s) 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: WO0023530, AW

Date: April 10, 2012

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 (Microfiltration/R.O.)

PWS ID No.:

2430001

Month:

March

Year:

2012

DISINFECTION PROCESS PARAMETERS

APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS	
Parameters	Disinfection Zones					Log Inactivations	
	D1A	D1B	D1C	D2	D3	Giardia lamblia Cysts	Viruses
Flow Rate (MGD)	NA	NA	NA	NA		NA	NA
T ₁₀ (minutes)	NA	NA	NA	NA			

PERFORMANCE DATA

DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
1	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
2	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
3	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
4	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
5	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
6	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
7	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
8	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								

PERFORMANCE DATA

DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
9	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
10	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
11	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
12	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
13	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
14	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
15	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
16	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								

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, AW

Date:

April 10, 2012

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: <u>City of Wichita Falls</u> PWS ID No.: <u>2430001</u>	PLANT NAME OR NUMBER: <u>Cypress (Microfiltration/R.O.)</u> Month: <u>March</u> Year: <u>2012</u>
--	---

DISINFECTION PROCESS PARAMETERS									
APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS			
Parameters	Disinfection Zones					Log Inactivations			
	D1A	D1B	D1C	D2	D3	Giardia lamblia Cysts		Virus	
Flow Rate (MGD)	NA	NA	NA	NA		NA		NA	
T ₁₀ (minutes)	NA	NA	NA	NA					

PERFORMANCE DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	DISINFECTION PROCESS DATA			
						Giardia Log	Virus Log	Inact. Ratio	Time=
17	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
18	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
19	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
20	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
21	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
22	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
23	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
24	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								

PERFORMANCE DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	DISINFECTION PROCESS DATA			
						Giardia Log	Virus Log	Inact. Ratio	Time=
25	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
26	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
27	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
28	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
29	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
30	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								
31	NA D1A								
	NA D1B								
	NA D1C					NA	NA	NA	
	NA D2								
	D3								

Max	NA	NA
Min	NA	NA
Avg	NA	NA
SD	NA	NA

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

City of Wichita Falls Microfiltration PWS ID # 2430001

INDIVIDUAL MEMBRANE RACKS

Date	Rack No. 1			Rack No. 2			Rack No. 3		
	Previous Month's 95 Percentile 0.056			Previous Month's 95 Percentile 0.041			Previous Month's 95 Percentile 0.034		
	Daily Max	Post Integrity	Press. Drop	Daily Max	Post Integrity	Press. Drop	Daily Max	Post Integrity	Press. Drop
1	X	X	X	X	X	X	X	X	X
2	X	X	X	X	X	X	X	X	X
3	X	X	X	X	X	X	X	X	X
4	X	X	X	X	X	X	X	X	X
5	X	X	X	X	X	X	X	X	X
6	X	X	X	X	X	X	X	X	X
7	X	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X	X	X	X
9	X	X	X	X	X	X	X	X	X
10	X	X	X	X	X	X	X	X	X
11	X	X	X	X	X	X	X	X	X
12	X	X	X	X	X	X	X	X	X
13	X	X	X	X	X	X	X	X	X
14	X	X	X	X	X	X	X	X	X
15	X	X	X	X	X	X	X	X	X
16	X	X	X	X	X	X	X	X	X
17	X	X	X	X	X	X	X	X	X
18	X	X	X	X	X	X	X	X	X
19	X	X	X	X	X	X	X	X	X
20	X	X	X	X	X	X	X	X	X
21	X	X	X	X	X	X	X	X	X
22	X	X	X	X	X	X	X	X	X
23	X	X	X	X	X	X	X	X	X
24	X	X	X	X	X	X	X	X	X
25	X	X	X	X	X	X	X	X	X
26	X	X	X	X	X	X	X	X	X
27	X	X	X	X	X	X	X	X	X
28	X	X	X	X	X	X	X	X	X
29	X	X	X	X	X	X	X	X	X
30	X	X	X	X	X	X	X	X	X
31	X	X	X	X	X	X	X	X	X

#NUM!

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Indirect Integrity Test Method: Hach Laser Trac
 Direct Integrity Test Method: Pressure Decay Test
 Minimum Test Pressure: 10.2 psi
 Max. Allowable Pressure Drop: .65 psi per 1min
 Pressure Test Time: 24hours of run time

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

Operator

Date

April 10, 2012

Certificate No. & Grade

WO0023530, AW

City of Wichita Falls Microfiltration PWS ID # 2430001

INDIVIDUAL MEMBRANE RACKS

Date	Rack No. 4				Rack No. 5				Rack No. X			
	Previous Month's 95 Percentile 0.127		Direct Integrity Test		Previous Month's 95 Percentile 0.117		Direct Integrity Test		Previous Month's 95 Percentile		Direct Integrity Test	
	Daily Max.	Post Integrity	Press. Drop	Time	Daily Max.	Post Integrity	Press. Drop	Time	Daily Max.	Post Integrity	Press. Drop	Time
1	X	X	X	X	X	X	X	X				
2	X	X	X	X	X	X	X	X				
3	X	X	X	X	X	X	X	X				
4	X	X	X	X	X	X	X	X				
5	X	X	X	X	X	X	X	X				
6	X	X	X	X	X	X	X	X				
7	X	X	X	X	X	X	X	X				
8	X	X	X	X	X	X	X	X				
9	X	X	X	X	X	X	X	X				
10	X	X	X	X	X	X	X	X				
11	X	X	X	X	X	X	X	X				
12	X	X	X	X	X	X	X	X				
13	X	X	X	X	X	X	X	X				
14	X	X	X	X	X	X	X	X				
15	X	X	X	X	X	X	X	X				
16	X	X	X	X	X	X	X	X				
17	X	X	X	X	X	X	X	X				
18	X	X	X	X	X	X	X	X				
19	X	X	X	X	X	X	X	X				
20	X	X	X	X	X	X	X	X				
21	X	X	X	X	X	X	X	X				
22	X	X	X	X	X	X	X	X				
23	X	X	X	X	X	X	X	X				
24	X	X	X	X	X	X	X	X				
25	X	X	X	X	X	X	X	X				
26	X	X	X	X	X	X	X	X				
27	X	X	X	X	X	X	X	X				
28	X	X	X	X	X	X	X	X				
29	X	X	X	X	X	X	X	X				
30	X	X	X	X	X	X	X	X				
31	X	X	X	X	X	X	X	X				

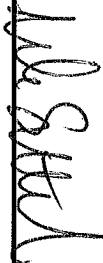
#NUM!

#NUM!

#NUM!

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

Operator



Date

April 10, 2012

Certificate No. & Grade

WO0023530, AW

INDIVIDUAL MEMBRANE RACK PRODUCTION

[illegible]

* Backwash return includes backwash water used for the strainer backwashes also.

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.

April 10, 2012

[illegible]

City of Wichita Falls Microfiltration PWS ID # 2430001
INDIVIDUAL MEMBRANE RACK PRODUCTION

Date	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling
Startup Data	X	X	10.87	0.89	12.54	0	X	X	10.87	0.77	14.49	0						
1	X	X	X	X	X	X	X	X	X	X	X	X						
2	X	X	X	X	X	X	X	X	X	X	X	X						
3	X	X	X	X	X	X	X	X	X	X	X	X						
4	X	X	X	X	X	X	X	X	X	X	X	X						
5	X	X	X	X	X	X	X	X	X	X	X	X						
6	X	X	X	X	X	X	X	X	X	X	X	X						
7	X	X	X	X	X	X	X	X	X	X	X	X						
8	X	X	X	X	X	X	X	X	X	X	X	X						
9	X	X	X	X	X	X	X	X	X	X	X	X						
10	X	X	X	X	X	X	X	X	X	X	X	X						
11	X	X	X	X	X	X	X	X	X	X	X	X						
12	X	X	X	X	X	X	X	X	X	X	X	X						
13	X	X	X	X	X	X	X	X	X	X	X	X						
14	X	X	X	X	X	X	X	X	X	X	X	X						
15	X	X	X	X	X	X	X	X	X	X	X	X						
16	X	X	X	X	X	X	X	X	X	X	X	X						
17	X	X	X	X	X	X	X	X	X	X	X	X						
18	X	X	X	X	X	X	X	X	X	X	X	X						
19	X	X	X	X	X	X	X	X	X	X	X	X						
20	X	X	X	X	X	X	X	X	X	X	X	X						
21	X	X	X	X	X	X	X	X	X	X	X	X						
22	X	X	X	X	X	X	X	X	X	X	X	X						
23	X	X	X	X	X	X	X	X	X	X	X	X						
24	X	X	X	X	X	X	X	X	X	X	X	X						
25	X	X	X	X	X	X	X	X	X	X	X	X						
26	X	X	X	X	X	X	X	X	X	X	X	X						
27	X	X	X	X	X	X	X	X	X	X	X	X						
28	X	X	X	X	X	X	X	X	X	X	X	X						
29	X	X	X	X	X	X	X	X	X	X	X	X						
30	X	X	X	X	X	X	X	X	X	X	X	X						
31	X	X	X	X	X	X	X	X	X	X	X	X						

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

Operator



Date

April 10, 2012

Certificate No.

WO0023530, AVV

MAY-14 '12 16:00

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

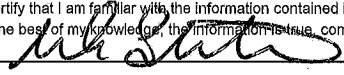
SYSTEM NAME: City of Wichita Falls

PLANT NAME

OR NUMBER: Cypress (Microfiltration/R.O.)

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

PWS ID No.: 2430001

Operator's Signature: 

Report for

the Month of: April 2012

Certificate No. & Grade: WO0023530, AW

Date: May 10, 2012

TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	0	Number of 4-hour periods when plant was off-line:	180
Number of readings above 0.10 NTU:	0	Number of 4-hour periods when plant was on-line	
Number of readings above 0.3 NTU:	0	but turbidity data was not collected:	0
Number of readings above 0.5 NTU:	0	Number of days when plant was on-line	
Number of readings above 1.0 NTU:	0	but individual filter turbidity data was not collected:	0
Maximum allowable turbidity level:	0.3	Number of days with readings above 1.0 NTU:	0 (2)
Percentage of readings above this limit:	NA % (1)	Number of days with readings above 5.0 NTU:	0 (3)
Statistical Summary	Maximum turbidity reading: NA NTU	Average turbidity value:	NA NTU
	Minimum turbidity reading: NA NTU	Standard deviation:	NA NTU
	CFE 95 th percentile value: NA NTU	IFE 95 th percentile:	NA NTU
Number of days with a low CT		Average log inactivation for Giardia:	NA
for no more than 4.0 consecutive hours:	0	Average log inactivation for viruses:	NA
Number of days with a low CT		Number of days when profiling data was not collected:	0
for more than 4.0 consecutive hours:	0 (4)	Number of days when CT data was not collected:	0
Minimum disinfectant residual required leaving the plant:	0.5 mg/L, measured as Total Chlorine		
Number of days with a low residual			
for no more than 4.0 consecutive hours:	0		
Number of days with a low residual		Number of days when disinfectant residual	
for more than 4.0 consecutive hours:	0 (5)	leaving the plant was not properly monitored:	0

DISTRIBUTION SYSTEM

Minimum disinfectant residual required in distribution system:	0.5 mg/L, measured as Total Chlorine
Total number of readings this month:	114 (at least 100 required) (8)
Average disinfectant residual value:	3.60
Percentage of readings with a low residual this month:	0.0 % (6A)
Number of readings with a low residual:	0
Percentage of readings with a low residual last month:	0.0 % (6B)
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.

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

SURFACE WATER MONTHLY OPERATING REPORT

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

Turbidity Data Page

PUBLIC WATER
SYSTEM NAME:

City of Wichita Falls

PLANT NAME
OR NUMBER:

Cypress (Microfiltration/R.O.)

PWS ID No.:

2430001

Connections:

34,610

Month:

April

Year: 2012

Population:

PERFORMANCE DATA																		
Date	Raw Water Pumpage (MGD)	Treated Water Pumpage (MGD)	RAW WATER ANALYSES		SETTLED WATER TURBIDITY (Optional Data)						FINISHED WATER QUALITY							
											Turbidity						Lowest	Time
			NTU	Alk.	1	2	3	4	5	6	NTU1	NTU2	NTU3	NTU4	NTU5	NTU6	Residual	
1	0.000	7.832	X	X	X						X	X	X	X	X	X	2.7	
2	0.000	8.231	X	X	X						X	X	X	X	X	X	3.2	
3	0.000	7.072	X	X	X						X	X	X	X	X	X	3.2	
4	0.000	6.874	X	X	X						X	X	X	X	X	X	3.6	
5	0.000	7.218	X	X	X						X	X	X	X	X	X	3.3	
6	0.000	7.603	X	X	X						X	X	X	X	X	X	3.3	
7	0.000	7.590	X	X	X						X	X	X	X	X	X	3.1	
8	0.000	7.288	X	X	X						X	X	X	X	X	X	2.9	
9	0.000	7.875	X	X	X						X	X	X	X	X	X	2.7	
10	0.000	6.250	X	X	X						X	X	X	X	X	X	2.9	
11	0.000	8.203	X	X	X						X	X	X	X	X	X	2.7	
12	0.000	7.707	X	X	X						X	X	X	X	X	X	2.8	
13	0.000	8.362	X	X	X						X	X	X	X	X	X	3.0	
14	0.000	7.595	X	X	X						X	X	X	X	X	X	3.3	
15	0.000	7.753	X	X	X						X	X	X	X	X	X	3.1	
16	0.000	8.413	X	X	X						X	X	X	X	X	X	3.1	
17	0.000	7.986	X	X	X						X	X	X	X	X	X	3.1	
18	0.000	8.172	X	X	X						X	X	X	X	X	X	2.8	
19	0.000	8.754	X	X	X						X	X	X	X	X	X	2.8	
20	0.000	7.222	X	X	X						X	X	X	X	X	X	2.9	
21	0.000	8.483	X	X	X						X	X	X	X	X	X	3.0	
22	0.000	7.697	X	X	X						X	X	X	X	X	X	2.7	
23	0.000	8.073	X	X	X						X	X	X	X	X	X	3.0	
24	0.000	9.506	X	X	X						X	X	X	X	X	X	3.1	
25	0.000	11.460	X	X	X						X	X	X	X	X	X	3.1	
26	0.000	9.604	X	X	X						X	X	X	X	X	X	3.0	
27	0.000	10.013	X	X	X						X	X	X	X	X	X	3.3	
28	0.000	9.608	X	X	X						X	X	X	X	X	X	2.9	
29	0.000	11.168	X	X	X						X	X	X	X	X	X	3.2	
30	0.000	13.278	X	X	X						X	X	X	X	X	X	3.2	
31																		
Total	0.000	252.890	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.															
Avg	0.000	8.430																
Max	0.000	13.278																
Min	0.000	6.250																

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, AW

Date: May 10, 2012

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 (Microfiltration/R.O.)

PWS ID No.: 2430001

Month:

April

Year:

2012

PERFORMANCE DATA																				
Date	INDIVIDUAL FILTER TURBIDITY																			
	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	X	X	X	X	X	X	X	X	X	X										
2	X	X	X	X	X	X	X	X	X	X										
3	X	X	X	X	X	X	X	X	X	X										
4	X	X	X	X	X	X	X	X	X	X										
5	X	X	X	X	X	X	X	X	X	X										
6	X	X	X	X	X	X	X	X	X	X										
7	X	X	X	X	X	X	X	X	X	X										
8	X	X	X	X	X	X	X	X	X	X										
9	X	X	X	X	X	X	X	X	X	X										
10	X	X	X	X	X	X	X	X	X	X										
11	X	X	X	X	X	X	X	X	X	X										
12	X	X	X	X	X	X	X	X	X	X										
13	X	X	X	X	X	X	X	X	X	X										
14	X	X	X	X	X	X	X	X	X	X										
15	X	X	X	X	X	X	X	X	X	X										
16	X	X	X	X	X	X	X	X	X	X										
17	X	X	X	X	X	X	X	X	X	X										
18	X	X	X	X	X	X	X	X	X	X										
19	X	X	X	X	X	X	X	X	X	X										
20	X	X	X	X	X	X	X	X	X	X										
21	X	X	X	X	X	X	X	X	X	X										
22	X	X	X	X	X	X	X	X	X	X										
23	X	X	X	X	X	X	X	X	X	X										
24	X	X	X	X	X	X	X	X	X	X										
25	X	X	X	X	X	X	X	X	X	X										
26	X	X	X	X	X	X	X	X	X	X										
27	X	X	X	X	X	X	X	X	X	X										
28	X	X	X	X	X	X	X	X	X	X										
29	X	X	X	X	X	X	X	X	X	X										
30	X	X	X	X	X	X	X	X	X	X										
31																				

SUMMARY & COMPLIANCE ACTIONS	Criteria	Filter No.										Plant	
		1	2	3	4	5	6	7	8	9	10		
	Number of days with event(s) above 0.5 NTU at 4.0 hrs this month	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 days with event(s) above 2.0 NTU this month											0	
	Number of days with event(s) 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: WO0023530, AW

Date: May 10, 2012

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 (Microfiltration/R.O.)

PWS ID No.:

2430001

Month:

April

Year:

2012

DISINFECTION PROCESS PARAMETERS

APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS	
Parameters	Disinfection Zones					Log Inactivations	
	D1	D2	D3	D4A	D4B	Giardia lamblia Cysts	Viruses
Flow Rate (MGD)	NA	NA	NA	NA	NA	NA	NA
T ₁₀ (minutes)	NA	NA	NA	NA	NA		

PERFORMANCE DATA

DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
1	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
2	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
3	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
4	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
5	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
6	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
7	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
8	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								

PERFORMANCE DATA

DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
9	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
10	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
11	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
12	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
13	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
14	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
15	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
16	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								

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, AW

Date: May 10, 2012

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 (Microfiltration/R.O.)

PWS ID No.: 2430001

Month: April

Year: 2012

DISINFECTION PROCESS PARAMETERS

APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS	
Parameters	Disinfection Zones					Log Inactivations	
	D5A	D5B	D5C	D6	D7	Giardia lamblia Cysts	Virus
Flow Rate (MGD)	NA	NA	NA			NA	NA
T ₁₀ (minutes)	NA	NA	NA				

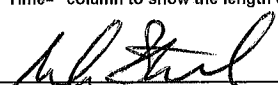
PERFORMANCE DATA

DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
1	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
2	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
3	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
4	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
5	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
6	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
7	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
8	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								

PERFORMANCE DATA

DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
9	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
10	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
11	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
12	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
13	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
14	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
15	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
16	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								

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, AW

Date: May 10, 2012

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: <u>City of Wichita Falls</u> PWS ID No.: <u>2430001</u>	PLANT NAME OR NUMBER: <u>Cypress (Microfiltration/R.O.)</u> Month: <u>April</u> Year: <u>2012</u>
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DISINFECTION PROCESS PARAMETERS							
APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS	
Parameters	Disinfection Zones					Log Inactivations	
	D1	D2	D3	D4A	D4B	Giardia lamblia Cysts	Virus
Flow Rate (MGD)	NA	NA	NA	NA	NA	NA	NA
T ₁₀ (minutes)	NA	NA	NA	NA	NA	NA	NA

PERFORMANCE DATA									
Date	DISINFECTION PROCESS DATA								
	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
17	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
18	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
19	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
20	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
21	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
22	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
23	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
24	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								

PERFORMANCE DATA									
Date	DISINFECTION PROCESS DATA								
	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
25	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
26	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
27	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
28	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
29	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
30	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
31	D1								
	D2								
	D3								
	D4A								
	D4B								
Max						NA	NA		
Min						NA	NA		
Avg						NA	NA		
SD						NA	NA		

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: <u>WO0023530, AW</u>	Date: <u>May 10, 2012</u>
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TCEQ - 0102C (11-10-09)
PAGE 5
SWMOR

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 (Microfiltration/R.O.)

PWS ID No.: 2430001

Month: April Year: 2012

DISINFECTION PROCESS PARAMETERS

APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS	
Parameters	Disinfection Zones					Log Inactivations	
	D5A	D5B	D5C	D6	D7	Giardia lamblia Cysts	Virus
Flow Rate (MGD)	NA	NA	NA			NA	NA
T ₁₀ (minutes)	NA	NA	NA				

PERFORMANCE DATA

DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time=
17	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
18	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
19	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
20	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
21	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
22	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
23	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
24	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								

PERFORMANCE DATA

DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time=
25	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
26	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
27	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
28	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
29	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
30	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
31	D5A								
	D5B								
	D5C								
	D6								
	D7								
						Max			
						Min			
						Avg			
						SD			

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, AW

Date: May 10, 2012

City of Wichita Falls Microfiltration PWS ID # 2430001

INDIVIDUAL MEMBRANE RACKS

Date	Rack No. 1				Rack No. 2				Rack No. 3			
	Previous Month's 95 Percentile 0.056		Direct Integrity Test		Previous Month's 95 Percentile 0.041		Direct Integrity Test		Previous Month's 95 Percentile 0.034		Direct Integrity Test	
	Daily Max.	Post Integrity	Press. Drop	Time	Daily Max.	Post Integrity	Press. Drop	Time	Daily Max.	Post Integrity	Press. Drop	Time
1	X	X	X	X	X	X	X	X	X	X	X	X
2	X	X	X	X	X	X	X	X	X	X	X	X
3	X	X	X	X	X	X	X	X	X	X	X	X
4	X	X	X	X	X	X	X	X	X	X	X	X
5	X	X	X	X	X	X	X	X	X	X	X	X
6	X	X	X	X	X	X	X	X	X	X	X	X
7	X	X	X	X	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X	X	X	X	X	X	X
9	X	X	X	X	X	X	X	X	X	X	X	X
10	X	X	X	X	X	X	X	X	X	X	X	X
11	X	X	X	X	X	X	X	X	X	X	X	X
12	X	X	X	X	X	X	X	X	X	X	X	X
13	X	X	X	X	X	X	X	X	X	X	X	X
14	X	X	X	X	X	X	X	X	X	X	X	X
15	X	X	X	X	X	X	X	X	X	X	X	X
16	X	X	X	X	X	X	X	X	X	X	X	X
17	X	X	X	X	X	X	X	X	X	X	X	X
18	X	X	X	X	X	X	X	X	X	X	X	X
19	X	X	X	X	X	X	X	X	X	X	X	X
20	X	X	X	X	X	X	X	X	X	X	X	X
21	X	X	X	X	X	X	X	X	X	X	X	X
22	X	X	X	X	X	X	X	X	X	X	X	X
23	X	X	X	X	X	X	X	X	X	X	X	X
24	X	X	X	X	X	X	X	X	X	X	X	X
25	X	X	X	X	X	X	X	X	X	X	X	X
26	X	X	X	X	X	X	X	X	X	X	X	X
27	X	X	X	X	X	X	X	X	X	X	X	X
28	X	X	X	X	X	X	X	X	X	X	X	X
29	X	X	X	X	X	X	X	X	X	X	X	X
30	X	X	X	X	X	X	X	X	X	X	X	X
31	X	X	X	X	X	X	X	X	X	X	X	X

#NUM!

Indirect Integrity Test Method:

Direct Integrity Test Method:

Minimum Test Pressure:

Max. Allowable Pressure Drop:

Pressure Test Time:

Hach Laser Trac

Pressure Decay Test

10.2 psi

65 psi per 1min

24hours of run time

#NUM!

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

Operator



Date

May 10, 2012

Certificate No.
& Grade

WO0023530, AW

City of Wichita Falls Microfiltration PWS ID # 2430001

INDIVIDUAL MEMBRANE RACKS

Date	Rack No. 4				Rack No. 5				Rack No. X			
	Previous Month's 95 Percentile 0.127		Direct Integrity Test		Previous Month's 95 Percentile 0.117		Direct Integrity Test		Previous Month's 95 Percentile		Direct Integrity Test	
	Daily Max.	Post Integrity	Press. Drop	Time	Daily Max.	Post Integrity	Press. Drop	Time	Daily Max.	Post Integrity	Press. Drop	Time
1	X	X	X	X	X	X	X	X				
2	X	X	X	X	X	X	X	X				
3	X	X	X	X	X	X	X	X				
4	X	X	X	X	X	X	X	X				
5	X	X	X	X	X	X	X	X				
6	X	X	X	X	X	X	X	X				
7	X	X	X	X	X	X	X	X				
8	X	X	X	X	X	X	X	X				
9	X	X	X	X	X	X	X	X				
10	X	X	X	X	X	X	X	X				
11	X	X	X	X	X	X	X	X				
12	X	X	X	X	X	X	X	X				
13	X	X	X	X	X	X	X	X				
14	X	X	X	X	X	X	X	X				
15	X	X	X	X	X	X	X	X				
16	X	X	X	X	X	X	X	X				
17	X	X	X	X	X	X	X	X				
18	X	X	X	X	X	X	X	X				
19	X	X	X	X	X	X	X	X				
20	X	X	X	X	X	X	X	X				
21	X	X	X	X	X	X	X	X				
22	X	X	X	X	X	X	X	X				
23	X	X	X	X	X	X	X	X				
24	X	X	X	X	X	X	X	X				
25	X	X	X	X	X	X	X	X				
26	X	X	X	X	X	X	X	X				
27	X	X	X	X	X	X	X	X				
28	X	X	X	X	X	X	X	X				
29	X	X	X	X	X	X	X	X				
30	X	X	X	X	X	X	X	X				
31	X	X	X	X	X	X	X	X				

#NUM!

#NUM!

#NUM!

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

Operator

Date

May 10, 2012

Certificate No.
& Grade

WO0023530, AW

INDIVIDUAL MEMBRANE RACK PRODUCTION

Date	Rack No. 1							Rack No. 2							Rack No. 3						
	Plant Daily Backwash Return (MG)	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling		
Startup Data	X	X	X	10.83	0.99	11.11	0	X	X	10.83	0.96	11.3	0	X	X	10.81	1.09	9.04	0		
1		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
2		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
3		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
4		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
5		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
6		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
7		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
8		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
9		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
10		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
11		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
12		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
13		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
14		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
15		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
16		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
17		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
18		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
19		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
20		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
21		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
22		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
23		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
24		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
25		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
26		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
27		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
28		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
29		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
30		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
31		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		

MEMBRANE RACK OPERATIONAL DATA								Plant Totals	
No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8		
Monthly Filtrate Production (MG):	5346 gpm	5346 gpm	5346 gpm	5346 gpm	5346 gpm	5346 gpm	5346 gpm	0.000	
Backwash Flow Rate	15 secs.	15 secs.	15 secs.	15 secs.	15 secs.	15 secs.	15 secs.		
Backwash Duration	30 mins	30 mins	30 mins	30 mins	30 mins	30 mins	30 mins		
Backwash Frequency	0	0	0	0	0	0	0		
Monthly Backwash Usage (Gals):								0	
Monthly Backwash Return Total (MG):								0.000	
Net Plant Production:								0	

* Backwash return includes backwash water used for the strainer backwashes also.

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

Operator

Certificate No. & Grade

WO0023530, AW

Date

May 10, 2012

City of Wichita Falls Microfiltration PWS ID # 2430001

INDIVIDUAL MEMBRANE RACK PRODUCTION

Date Startup Data	Rack No. 4						Rack No. 5						Rack No. x					
	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling	Production Total	Backwash Total	Filtrate Flux @ 20 C (gfd)	TMP (psi)	Specific Flux @ 20 C (gfd/psi)	Cumulative % Irreversible Fouling
1	x	x	x	0.89	12.54	0	x	x	10.87	0.77	14.49	0						
2	x	x	x	x	x	x	x	x	x	x	x	x						
3	x	x	x	x	x	x												
4	x	x	x	x	x	x	x	x	x	x	x	x						
5	x	x	x	x	x	x	x	x	x	x	x	x						
6	x	x	x	x	x	x	x	x	x	x	x	x						
7	x	x	x	x	x	x	x	x	x	x	x	x						
8	x	x	x	x	x	x	x	x	x	x	x	x						
9	x	x	x	x	x	x	x	x	x	x	x	x						
10	x	x	x	x	x	x	x	x	x	x	x	x						
11	x	x	x	x	x	x	x	x	x	x	x	x						
12	x	x	x	x	x	x	x	x	x	x	x	x						
13	x	x	x	x	x	x	x	x	x	x	x	x						
14	x	x	x	x	x	x	x	x	x	x	x	x						
15	x	x	x	x	x	x	x	x	x	x	x	x						
16	x	x	x	x	x	x	x	x	x	x	x	x						
17	x	x	x	x	x	x	x	x	x	x	x	x						
18	x	x	x	x	x	x	x	x	x	x	x	x						
19	x	x	x	x	x	x	x	x	x	x	x	x						
20	x	x	x	x	x	x	x	x	x	x	x	x						
21	x	x	x	x	x	x	x	x	x	x	x	x						
22	x	x	x	x	x	x	x	x	x	x	x	x						
23	x	x	x	x	x	x	x	x	x	x	x	x						
24	x	x	x	x	x	x	x	x	x	x	x	x						
25	x	x	x	x	x	x	x	x	x	x	x	x						
26	x	x	x	x	x	x	x	x	x	x	x	x						
27	x	x	x	x	x	x	x	x	x	x	x	x						
28	x	x	x	x	x	x	x	x	x	x	x	x						
29	x	x	x	x	x	x	x	x	x	x	x	x						
30	x	x	x	x	x	x	x	x	x	x	x	x						
31	x	x	x	x	x	x	x	x	x	x	x	x						

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

Operator

Date

May 10, 2012

 Certificate No.
& Grade

WO0023530, AW

JUN-15 '12 15:34

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

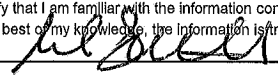
SYSTEM NAME: City of Wichita Falls

PLANT NAME

OR NUMBER: Cypress (Microfiltration/R.O.)

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

PWS ID No.: 2430001

Operator's Signature: 

Report for

the Month of: May 2012

Certificate No. & Grade:

WO0023530, AW

Date: June 10, 2012

TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	126	Number of 4-hour periods when plant was off-line:	60
Number of readings above 0.10 NTU:	1	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: 0.11 NTU	Average turbidity value:	0.08 NTU
	Minimum turbidity reading: 0.06 NTU	Standard deviation:	0.010 NTU
	CFE 95 th percentile value: 0.09 NTU	IFE 95 th percentile:	0.184 NTU
Number of days with a low CT for no more than 4.0 consecutive hours:	0	Average log inactivation for Giardia:	149.24
Number of days with a low CT for more than 4.0 consecutive hours:	0 (4)	Average log inactivation for viruses:	743.80
		Number of days when profiling data was not collected:	0
		Number of days when CT data was not collected:	0
Minimum disinfectant residual required leaving the plant:	0.5 mg/L, measured as Total Chlorine		
Number of days with a low residual for no more than 4.0 consecutive hours:	0		
Number of days with a low residual for more than 4.0 consecutive hours:	0 (5)	Number of days when disinfectant residual leaving the plant was not properly monitored:	0

DISTRIBUTION SYSTEM

Minimum disinfectant residual required in distribution system:	0.5 mg/L, measured as Total Chlorine		
Total number of readings this month:	114 (at least 100 required) (8)	Percentage of readings with a low residual this month:	0.0 % (6A)
Average disinfectant residual value:	3.70	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.

SURFACE WATER MONTHLY OPERATING REPORT

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

SURFACE WATER MONTHLY OPERATING REPORT

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

Turbidity Data Page

PUBLIC WATER
SYSTEM NAME:

City of Wichita Falls

PLANT NAME
OR NUMBER:

Cypress (Microfiltration/R.O.)

PWS ID No.:

2430001

Connections:

34,707

Month:

May

Year: 2012

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.						Turbidity						Lowest	Time
					1	2	3	4	5	6	NTU1	NTU2	NTU3	NTU4	NTU5	NTU6	Residual	
1	0.000	18.766	X	X	X							X	X	X	X	X	3.1	
2	0.000	15.934	X	X	X							X	X	X	X	X	3.4	
3	0.000	16.402	X	X	X							X	X	X	X	X	2.8	
4	0.000	12.112	X	X	X							X	X	X	X	X	2.9	
5	0.000	12.107	X	X	X							X	X	X	X	X	2.9	
6	0.000	12.517	X	X	X							X	X	X	X	X	3.3	
7	0.000	12.523	X	X	X							X	X	X	X	X	3.1	
8	0.750	13.361	29	68								0.08	0.09	0.10	0.08	0.09	0.09	2.9
9	2.000	15.899	29	67								0.09	0.07	0.09	0.08	0.08	0.08	2.5
10	2.000	12.578	19	67								0.08	0.06	0.07	0.07	0.06	0.07	2.6
11	2.000	10.382	26	70								0.06	0.10	0.08	0.07	0.07	0.07	3.0
12	2.000	8.980	21	74								0.08	0.08	0.07	0.07	0.08	0.07	3.0
13	2.000	10.304	24	75								0.09	0.07	0.08	0.07	0.07	0.07	3.1
14	2.000	12.732	17	76								0.08	0.08	0.07	0.07	0.06	0.09	3.1
15	2.000	8.649	14	70								0.08	0.07	0.10	0.07	0.08	0.08	3.3
16	2.000	11.368	15	70								0.08	0.08	0.09	0.08	0.09	0.08	3.1
17	0.833	12.488	17	75								0.08	0.08	0.08	0.08	0.07	0.07	3.1
18	0.000	12.423	X	X	X							X	X	X	X	X	X	2.9
19	0.000	11.287	X	X	X							X	X	X	X	X	X	3.0
20	0.000	11.804	X	X	X							X	X	X	X	X	X	3.3
21	0.917	13.196	16	81								0.09	0.09	0.11	0.08	0.08	0.08	3.3
22	2.000	11.990	21	90								0.07	0.07	0.09	0.08	0.07	0.07	3.1
23	1.917	13.601	17	86								0.08	0.06	0.07	0.08	0.09	0.09	3.3
24	2.000	16.748	23	90								0.08	0.07	0.07	0.07	0.08	0.09	3.6
25	2.000	16.802	15	93								0.10	0.09	0.08	0.08	0.07	0.08	3.5
26	2.000	16.166	19	87								0.08	0.09	0.08	0.08	0.08	0.08	3.4
27	2.000	17.503	23	86								0.09	0.08	0.07	0.06	0.06	0.07	3.1
28	1.583	16.557	18	88								0.07	0.06	0.08	0.07	0.08	0.07	3.1
29	2.000	12.774	16	80								0.09	0.08	0.08	0.08	0.08	0.07	3.1
30	2.000	14.648	19	78								0.08	0.07	0.08	0.08	0.08	0.08	3.1
31	2.000	14.692	20	81								0.08	0.07	0.10	0.07	0.08	0.09	3.0
Total	38.000	417.293	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.															
Avg	1.226	13.461																
Max	2.000	18.766																
Min	0.000	8.649																

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, AW

Date: June 10, 2012

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 (Microfiltration/R.O.)

PWS ID No.: 2430001

Month:

May

Year:

2012

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	X	X	X	X	X	X	X	X	X	X										
2	X	X	X	X	X	X	X	X	X	X										
3	X	X	X	X	X	X	X	X	X	X										
4	X	X	X	X	X	X	X	X	X	X										
5	X	X	X	X	X	X	X	X	X	X										
6	X	X	X	X	X	X	X	X	X	X										
7	X	X	X	X	X	X	X	X	X	X										
8	0.03	x	0.18	x	x	x	0.07	x	x	x										
9	0.03	x	0.02	x	x	x	0.06	x	x	x										
10	0.10	x	0.04	x	x	x	0.10	x	x	x										
11	0.03	x	x	x	x	x	0.18	x	x	x										
12	0.10	x	x	x	x	x	0.17	x	x	x										
13	0.29	x	x	x	x	x	0.18	x	x	x										
14	0.31	x	0.19	x	x	x	0.18	x	x	x										
15	0.09	x	0.18	x	x	x	0.11	x	x	x										
16	0.04	x	0.03	x	x	x	0.15	x	x	x										
17	0.03	x	0.03	x	x	x	0.18	x	x	x										
18	X	X	X	X	X	X	X	X	X	X										
19	X	X	X	X	X	X	X	X	X	X										
20	X	X	X	X	X	X	X	X	X	X										
21	0.07	x	0.09	x	x	x	0.10	x	x	x										
22	0.07	x	0.07	x	x	x	0.11	x	x	x										
23	0.02	x	0.02	x	x	x	0.10	x	x	x										
24	0.07	x	0.09	x	x	x	0.12	x	x	x										
25	0.03	x	0.02	x	x	x	0.10	x	x	x										
26	0.02	x	0.05	x	x	x	0.05	x	x	x										
27	0.06	x	0.02	x	x	x	0.17	x	x	x										
28	0.09	x	0.14	x	x	x	0.18	x	x	x										
29	0.02	x	0.05	x	x	x	0.12	x	x	x										
30	0.11	x	0.04	x	x	x	0.12	x	x	x										
31	0.03	x	0.06	x	x	x	0.18	x	x	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	0					
Number of days with event(s) above 1.0 NTU this month	0	0	0	0	0	0						
Number of days with event(s) above 1.0 NTU last month	0	0	0	0	0	0						
Number of days with event(s) above 1.0 NTU two months ago	0	0	0	0	0	0						
Total number of days with event(s) above 1.0 NTU in three months	0	0	0	0	0	0						
Number of days with event(s) above 2.0 NTU this month												0
Number of days with event(s) above 2.0 NTU last month												0
Does the filter/plant have an approved Corrective Action Plan?	N	N	N	N	N	N						N
Is the plant required to submit a Filter Profile Report?	N	N	N	N	N	N						
Is the plant required to submit a Filter Assessment Report?	N	N	N	N	N	N						
Is the plant required to submit a Request for Compliance CPE?												N

SUBMITTED BY:

Certificate No.

and Grade: WO0023530, AW

Date: June 10, 2012

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 (Microfiltration/R.O.)

PWS ID No.:

2430001

Month:

May

Year:

2012

DISINFECTION PROCESS PARAMETERS

APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS	
Parameters	Disinfection Zones					Log Inactivations	
	D1	D2	D3	D4A	D4B	Giardia lamblia Cysts	Viruses
Flow Rate (MGD)	14.000	14.000	14.000	19.999	26.001	0.5	2.0
T ₁₀ (minutes)	0.6	16.5	464.1	3.9	1.8		

PERFORMANCE DATA

DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
1	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
2	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
3	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
4	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
5	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
6	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
7	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
8	NA D1								
	NA D2								
	CLO2 D3	0.3	5.000	23.7	7.6	92.11	447.06	184.22	
	NA D4A								
	CLA D4B	3.0	2.000	23.7	8.0				

PERFORMANCE DATA

DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
9	NA D1								
	NA D2								
	CLO2 D3	0.2	2.800	22.9	7.6	112.88	563.48	225.75	
	NA D4A								
	CLA D4B	3.7	12.000	21.1	7.8				
10	NA D1								
	NA D2								
	CLO2 D3	0.3	2.800	22.9	7.6	146.27	731.38	292.54	
	NA D4A								
	CLA D4B	2.7	16.000	21.5	8.8				
11	NA D1								
	NA D2								
	CLO2 D3	0.2	2.800	21.9	7.5	111.26	551.78	222.53	
	NA D4A								
	CLA D4B	3.2	16.000	21.6	9.0				
12	NA D1								
	NA D2								
	CLO2 D3	0.2	3.000	21.8	7.6	113.38	560.97	228.77	
	NA D4A								
	CLA D4B	4.4	12.000	22.3	8.7				
13	NA D1								
	NA D2								
	CLO2 D3	0.4	3.000	21.9	7.4	203.01	1,006.12	406.01	
	NA D4A								
	CLA D4B	3.6	8.000	20.6	8.3				
14	NA D1								
	NA D2								
	CLO2 D3	0.1	4.000	22.1	7.4	50.01	245.41	100.02	
	NA D4A								
	CLA D4B	3.5	10.000	22.5	8.7				
15	NA D1								
	NA D2								
	CLO2 D3	0.3	4.000	21.3	7.5	97.07	477.45	194.14	
	NA D4A								
	CLA D4B	3.7	14.000	22.5	8.8				
16	NA D1								
	NA D2								
	CLO2 D3	0.3	4.000	21.2	7.7	103.59	509.10	207.18	
	NA D4A								
	CLA D4B	3.9	14.000	23.7	8.7				

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, AW

Date: June 10, 2012

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 (Microfiltration/R.O.)

PWS ID No.: 2430001

Month: May

Year: 2012

DISINFECTION PROCESS PARAMETERS

APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS	
Parameters	Disinfection Zones					Log Inactivations	
	D5A	D5B	D5C	D6	D7	Giardia lamblia Cysts	Virus
Flow Rate (MGD)	36.400	6.759	8.840			0.5	2.0
T ₁₀ (minutes)	59.2	53.0	24.3				

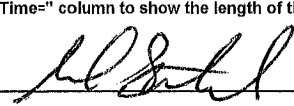
PERFORMANCE DATA

DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
1	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
2	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
3	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
4	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
5	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
6	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
7	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
8	CLA D5A	3.2	1.112	21.1	8.9				
	CLA D5B	3.2	0.554	21.1	8.9				
	CLA D5C	3.2	0.334	21.1	8.9				
	D6								
	D7								

PERFORMANCE DATA

DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
9	CLA D5A	2.6	6.672	22.8	8.9				
	CLA D5B	2.6	3.324	22.8	8.9				
	CLA D5C	2.6	2.004	22.8	8.9				
	D6								
	D7								
10	CLA D5A	3.1	8.896	21.6	8.8				
	CLA D5B	3.1	4.432	21.6	8.8				
	CLA D5C	3.1	2.672	21.6	8.8				
	D6								
	D7								
11	CLA D5A	3.3	8.896	23.1	9.2				
	CLA D5B	3.3	4.432	23.1	9.2				
	CLA D5C	3.0	2.672	23.1	9.2				
	D6								
	D7								
12	CLA D5A	3.4	6.672	22.0	8.9				
	CLA D5B	3.4	3.324	22.0	8.9				
	CLA D5C	3.4	2.004	22.0	8.9				
	D6								
	D7								
13	CLA D5A	3.3	4.448	22.7	8.7				
	CLA D5B	3.3	2.216	22.7	8.7				
	CLA D5C	3.3	1.336	22.7	8.7				
	D6								
	D7								
14	CLA D5A	3.7	5.580	22.5	8.6				
	CLA D5B	3.7	2.770	22.5	8.6				
	CLA D5C	3.7	1.670	22.5	8.6				
	D6								
	D7								
15	CLA D5A	3.8	7.784	22.5	8.7				
	CLA D5B	3.8	3.878	22.5	8.7				
	CLA D5C	3.8	2.338	22.5	8.7				
	D6								
	D7								
16	CLA D5A	3.7	7.784	22.9	8.8				
	CLA D5B	3.7	3.878	22.9	8.8				
	CLA D5C	3.7	2.338	22.9	8.8				
	D6								
	D7								

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, AW

Date: June 10, 2012

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 (Microfiltration/R.O.)

PWS ID No.:

2430001

Month:

May

Year:

2012

DISINFECTION PROCESS PARAMETERS

APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS	
Parameters	Disinfection Zones					Log Inactivations	
	D1	D2	D3	D4A	D4B	Giardia lamblia Cysts	Virus
Flow Rate (MGD)	14.000	14.000	14.000	19.999	26.001	0.5	2.0
T ₁₀ (minutes)	0.6	16.5	464.1	3.9	1.8		

PERFORMANCE DATA

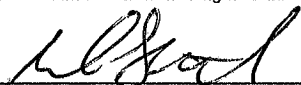
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
17	NA D1								
	NA D2								
	CLO2 D3	0.2	2.500	21.8	7.7	124.01	614.08	248.02	
	NA D4A							(G)	
	CLA D4B	2.7	14.000	22.0	9.1				
18	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
19	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
20	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	NA D4A								
	NA D4B								
21	NA D1								
	NA D2								
	CLO2 D3	0.3	4.000	22.9	7.7	115.17	573.36	230.34	
	NA D4A							(G)	
	CLA D4B	3.7	12.000	24.0	8.7				
22	NA D1								
	NA D2								
	CLO2 D3	0.2	3.000	23.3	7.7	130.32	650.19	260.64	
	NA D4A							(G)	
	CLA D4B	4.0	10.000	23.2	8.9				
23	NA D1								
	NA D2								
	CLO2 D3	0.2	3.000	23.2	7.7	113.02	564.32	226.03	
	NA D4A							(G)	
	CLA D4B	4.0	14.000	23.5	8.8				
24	NA D1								
	NA D2								
	CLO2 D3	0.4	2.800	23.6	7.7	258.85	1,298.39	517.71	
	NA D4A							(G)	
	CLA D4B	3.8	18.000	23.6	8.7				

PERFORMANCE DATA

DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
25	NA D1								
	NA D2								
	CLO2 D3	0.5	2.800	23.8	7.7	274.38	1,376.51	548.75	
	NA D4A							(G)	
	CLA D4B	3.5	18.000	24.4	9.0				
26	NA D1								
	NA D2								
	CLO2 D3	0.3	4.000	24.3	7.8	108.63	543.52	217.26	
	NA D4A							(G)	
	CLA D4B	3.7	10.000	24.7	8.6				
27	NA D1								
	NA D2								
	CLO2 D3	0.3	3.000	24.7	7.7	154.33	773.21	308.67	
	NA D4A							(G)	
	CLA D4B	2.5	13.000	23.8	8.6				
28	NA D1								
	NA D2								
	CLO2 D3	0.3	3.000	24.9	7.9	192.82	965.11	385.64	
	NA D4A							(G)	
	CLA D4B	3.2	9.000	24.5	8.9				
29	NA D1								
	NA D2								
	CLO2 D3	0.3	3.000	24.2	7.7	172.10	862.44	344.20	
	NA D4A							(G)	
	CLA D4B	3.0	14.000	23.7	9.4				
30	NA D1								
	NA D2								
	CLO2 D3	0.3	4.000	24.5	7.6	142.61	709.26	285.23	
	NA D4A							(G)	
	CLA D4B	3.1	10.000	23.6	8.3				
31	NA D1								
	NA D2								
	CLO2 D3	0.6	3.000	24.1	7.6	318.11	1,596.55	636.21	
	NA D4A							(G)	
	CLA D4B	2.8	10.000	23.2	9.0				
						Max	318.11	1596.55	
						Min	50.01	245.41	
						Avg	149.24	743.80	
						SD	64.98	328.15	

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, AW

Date: June 10, 2012

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: Cypress (Microfiltration/R.O.)
PWS ID No.: 2430001 OR NUMBER: Month: May Year: 2012

DISINFECTION PROCESS PARAMETERS							
APPROVED CT STUDY PARAMETERS					PERFORMANCE STANDARDS		
Parameters	Disinfection Zones					Log Inactivations	
	D5A	D5B	D5C	D6	D7	Giardia lamblia Cysts	Virus
Flow Rate (MGD)	36.400	6.759	8.840			0.5	2.0
T ₁₀ (minutes)	59.2	53.0	24.3				

PERFORMANCE DATA									
Date	DISINFECTION PROCESS DATA								
	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
17	CLA D5A	3.4	7.784	23.1	8.5				
	CLA D5B	3.4	3.878	23.1	8.5				
	CLA D5C	3.4	2.338	23.1	8.5				
	D6								
	D7								
18	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
19	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
20	NA D5A								
	NA D5B								
	NA D5C								
	D6								
	D7								
21	CLA D5A	4.0	6.672	23.8	8.8				
	CLA D5B	4.0	3.325	23.8	8.8				
	CLA D5C	4.0	2.004	23.8	8.8				
	D6								
	D7								
22	CLA D5A	3.6	5.556	23.5	8.8				
	CLA D5B	3.6	2.770	23.5	8.8				
	CLA D5C	3.6	1.670	23.5	8.8				
	D6								
	D7								
23	CLA D5A	3.4	7.784	24.1	9.0				
	CLA D5B	3.4	3.878	24.1	9.0				
	CLA D5C	3.4	2.338	24.1	9.0				
	D6								
	D7								
24	CLA D5A	3.9	10.008	24.0	8.8				
	CLA D5B	3.9	4.986	24.0	8.8				
	CLA D5C	3.9	3.006	24.0	8.8				
	D6								
	D7								

PERFORMANCE DATA									
Date	DISINFECTION PROCESS DATA								
	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
25	CLA D5A	4.3	10.008	24.3	9.3				
	CLA D5B	4.3	4.986	24.3	9.3				
	CLA D5C	4.3	3.006	24.3	9.3				
	D6								
	D7								
26	CLA D5A	3.8	10.008	23.8	8.5				
	CLA D5B	3.8	4.986	23.8	8.5				
	CLA D5C	3.8	3.006	23.8	8.5				
	D6								
	D7								
27	CLA D5A	3.6	13.344	25.1	8.7				
	CLA D5B	3.6	6.648	25.1	8.7				
	CLA D5C	3.6	4.008	25.1	8.7				
	D6								
	D7								
28	CLA D5A	3.3	8.896	24.5	9.1				
	CLA D5B	3.3	4.432	24.5	9.1				
	CLA D5C	3.3	2.672	24.5	9.1				
	D6								
	D7								
29	CLA D5A	3.5	7.784	23.4	9.0				
	CLA D5B	3.5	3.878	23.4	9.0				
	CLA D5C	3.5	2.338	23.4	9.0				
	D6								
	D7								
30	CLA D5A	3.4	3.336	25.3	8.8				
	CLA D5B	3.4	1.662	25.3	8.8				
	CLA D5C	3.4	1.002	25.3	8.8				
	D6								
	D7								
31	CLA D5A	3.2	7.784	25.3	8.8				
	CLA D5B	3.2	3.878	25.3	8.8				
	CLA D5C	3.2	2.338	25.3	8.8				
	D6								
	D7								
						Max			
						Min			
						Avg			
						SD			

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. WO0023530, AW Date: June 10, 2012
TCEQ - 0102C (11-10-09) PAGE 5 - Addendum SWMOR

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 (Microfiltration/R.O.)

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

PWS ID No.: 2430001

Operator's Signature: [Signature]

Report for

the Month of: June 2012

Certificate No. & Grade: WO0023530, AW

Date: July 10, 2012

TREATMENT PLANT PERFORMANCE

Total number of turbidity readings: <u>180</u>	Number of 4-hour periods when plant was off-line: <u>0</u>	
Number of readings above 0.10 NTU: <u>30</u>	Number of 4-hour periods when plant was on-line but turbidity data was not collected: <u>0</u>	
Number of readings above 0.3 NTU: <u>0</u>	Number of days when plant was on-line but individual filter turbidity data was not collected: <u>0</u>	
Number of readings above 0.5 NTU: <u>0</u>		
Number of readings above 1.0 NTU: <u>0</u>	Number of days with readings above 1.0 NTU: <u>0</u> (2)	
Maximum allowable turbidity level: <u>0.3</u>	Number of days with readings above 5.0 NTU: <u>0</u> (3)	
Percentage of readings above this limit: <u>0.0</u> % (1)		

Statistical Summary

Maximum turbidity reading: <u>0.15</u> NTU	Average turbidity value: <u>0.09</u> NTU
Minimum turbidity reading: <u>0.06</u> NTU	Standard deviation: <u>0.013</u> NTU
CFE 95 th percentile value: <u>0.11</u> NTU	IFE 95 th percentile: <u>0.171</u> NTU

Number of days with a low CT for no more than 4.0 consecutive hours: <u>0</u>	Average log inactivation for Giardia: <u>120.14</u>
	Average log inactivation for viruses: <u>629.37</u>
Number of days with a low CT for more than 4.0 consecutive hours: <u>0</u> (4)	Number of days when profiling data was not collected: <u>0</u>
	Number of days when CT data was not collected: <u>0</u>

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: <u>0</u>	
Number of days with a low residual for more than 4.0 consecutive hours: <u>0</u> (5)	Number of days when disinfectant residual leaving the plant was not properly monitored: <u>0</u>

DISTRIBUTION SYSTEM

Minimum disinfectant residual required in distribution system: <u>0.5</u> mg/L, measured as Total Chlorine	
Total number of readings this month: <u>115</u> (at least 100 required) (8)	
Average disinfectant residual value: <u>3.40</u>	Percentage of readings with a low residual this month: <u>0.0</u> % (6A)
Number of readings with a low residual: <u>0</u>	
Number of readings with no detectable residual: <u>0</u>	Percentage of readings with a low residual last month: <u>0.0</u> % (6B)

ADDITIONAL REPORTS & WORKSHEETS

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

Additional report(s) for individual filter monitoring required:	☒ NONE	☐ Filter Profile	☐ Filter Assessment	☐ CPE
Additional report(s) for individual filter monitoring submitted:	☒ NONE	☐ Filter Profile (9)	☐ Filter Assessment (10)	☐ CPE (11)

No additional IFE Reports are required this month.

SURFACE WATER MONTHLY OPERATING REPORT

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

SURFACE WATER MONTHLY OPERATING REPORT

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

Turbidity Data Page

PUBLIC WATER
SYSTEM NAME:

City of Wichita Falls

PLANT NAME
OR NUMBER:

Cypress (Microfiltration/R.O.)

PWS ID No.:

2430001

Connections:

34,633

Month:

June

Year: 2012

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.						Turbidity						Lowest	Time
					1	2	3	4	5	6	NTU1	NTU2	NTU3	NTU4	NTU5	NTU6	Residual	
1	2.000	15.202	14	82							0.08	0.08	0.11	0.09	0.09	0.09	2.9	
2	2.000	16.962	13	79							0.10	0.09	0.09	0.09	0.09	0.09	2.7	
3	2.000	18.912	10	78							0.11	0.09	0.09	0.09	0.09	0.10	3.0	
4	2.000	19.009	10	78							0.09	0.09	0.09	0.09	0.08	0.09	3.0	
5	2.000	14.009	14	79							0.07	0.08	0.08	0.08	0.09	0.06	3.1	
6	2.000	12.308	11	79							0.06	0.06	0.10	0.07	0.08	0.08	3.0	
7	2.000	9.094	14	78							0.08	0.08	0.09	0.08	0.08	0.09	3.0	
8	2.000	9.928	20	78							0.08	0.08	0.09	0.08	0.08	0.08	3.0	
9	2.000	9.541	17	75							0.11	0.10	0.10	0.10	0.10	0.11	2.7	
10	2.000	12.898	19	72							0.10	0.12	0.10	0.11	0.11	0.09	2.7	
11	2.000	14.375	16	69							0.11	0.11	0.11	0.08	0.08	0.08	2.4	
12	2.000	10.049	16	75							0.10	0.09	0.11	0.09	0.11	0.08	3.0	
13	2.000	7.907	20	77							0.09	0.08	0.10	0.08	0.09	0.09	2.6	
14	2.000	9.822	16	80							0.08	0.09	0.09	0.09	0.11	0.11	2.7	
15	2.813	10.715	17	81							0.09	0.08	0.09	0.09	0.09	0.08	2.3	
16	4.000	9.759	14	79							0.09	0.09	0.09	0.08	0.08	0.07	3.0	
17	4.000	11.064	12	81							0.10	0.09	0.08	0.08	0.09	0.08	2.5	
18	4.000	12.519	13	80							0.08	0.09	0.07	0.07	0.08	0.08	3.1	
19	4.000	12.920	16	82							0.09	0.08	0.10	0.09	0.10	0.09	2.7	
20	4.000	15.081	18	81							0.10	0.10	0.09	0.09	0.10	0.11	2.5	
21	4.000	14.603	18	97							0.15	0.12	0.11	0.09	0.08	0.09	2.0	
22	4.000	9.571	18	87							0.10	0.09	0.09	0.06	0.07	0.07	2.4	
23	4.000	11.359	19	87							0.10	0.09	0.07	0.09	0.09	0.09	2.7	
24	4.000	13.715	29	83							0.09	0.08	0.08	0.08	0.08	0.08	2.7	
25	4.000	15.686	19	81							0.10	0.09	0.08	0.08	0.08	0.09	2.9	
26	4.000	17.516	22	79							0.08	0.09	0.10	0.10	0.09	0.09	3.2	
27	4.000	21.255	23	79							0.10	0.09	0.11	0.11	0.10	0.09	3.2	
28	4.000	19.175	10	79							0.12	0.11	0.11	0.10	0.10	0.11	3.1	
29	4.000	19.864	18	84							0.13	0.12	0.11	0.12	0.10	0.09	3.8	
30	4.000	16.159	18	85							0.09	0.09	0.11	0.11	0.09	0.09	2.6	
31																		
Total	90.813	410.977	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.															
Avg	3.027	13.699																
Max	4.000	21.255																
Min	2.000	7.907																

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:

[Signature]

Certificate No.
and Grade:

WO0023530, AW

Date: July 10, 2012

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
PWS ID No.: 2430001

PLANT NAME
OR NUMBER: Cypress (Microfiltration/R.O.)
Month: June Year: 2012

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	0.02	x	0.06	x	x	x	0.17	x	x	x											
2	0.06	x	0.02	x	0.02	x	0.16	x	x	x											
3	0.03	x	0.02	x	0.03	x	0.03	x	x	x											
4	0.04	x	0.06	x	0.04	x	0.03	x	x	x											
5	0.03	x	0.05	x	0.04	x	0.04	x	x	x											
6	0.14	x	0.11	x	0.06	x	0.18	x	x	x											
7	0.02	x	0.02	x	0.03	x	0.03	x	x	x											
8	0.02	x	0.07	x	0.03	x	0.17	x	x	x											
9	0.02	x	0.07	x	0.07	x	0.16	x	x	x											
10	0.02	x	0.02	x	0.03	x	0.12	x	x	x											
11	0.10	x	0.05	x	0.06	x	0.18	x	x	x											
12	0.02	x	0.08	x	0.03	x	0.05	x	x	x											
13	0.02	x	0.05	x	0.07	x	0.12	x	x	x											
14	0.02	x	0.02	x	0.04	x	0.17	x	x	x											
15	0.05	x	0.02	x	0.03	x	0.09	x	x	x											
16	0.02	x	0.08	x	0.06	x	0.08	x	x	x											
17	0.04	x	0.02	x	0.03	x	0.17	x	x	x											
18	0.17	x	0.06	x	0.05	x	0.06	x	x	x											
19	0.16	x	0.02	x	0.03	x	0.03	x	0.13	x											
20	0.02	x	0.08	x	0.03	x	x	x	0.02	x											
21	0.05	x	0.03	x	0.07	x	x	x	0.05	x											
22	0.16	x	0.08	x	0.03	x	x	x	0.03	x											
23	0.03	x	0.06	x	0.07	x	x	x	0.03	x											
24	0.05	x	0.02	x	0.03	x	x	x	0.05	x											
25	0.18	x	0.10	x	0.08	x	x	x	0.02	x											
26	0.06	x	0.02	x	0.03	x	x	x	0.10	x											
27	0.02	x	0.12	x	x	x	x	x	0.03	x											
28	0.14	x	0.03	x	x	x	x	x	0.05	x											
29	0.10	x	0.14	x	0.05	x	x	x	0.04	x											
30	0.25	x	0.08	x	0.03	x	x	x	0.03	x											
31																					

SUMMARY & COMPLIANCE ACTIONS	Criteria		Filter No.										Plant	
			1	2	3	4	5	6	7	8	9	10		
	Number of days with event(s) above 0.5 NTU at 4.0 hrs this month		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 days with event(s) above 2.0 NTU this month												0	
	Number of days with event(s) 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:

WO0023530, AW

Date: July 10, 2012

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 (Microfiltration/R.O.)
PWS ID No.: 2430001 Month: June Year: 2012

DISINFECTION PROCESS PARAMETERS							
APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS	
Parameters	Disinfection Zones					Log Inactivations	
	D1	D2	D3	D4A	D4B	Giardia lamblia Cysts	Viruses
Flow Rate (MGD)	14.000	14.000	14.000	19.999	26.001	0.5	2.0
T ₁₀ (minutes)	0.6	16.5	464.1	3.9	1.8		

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
1	NA D1								
	NA D2								
	CLO2 D3	0.4	3.000	24.0	7.8	248.31	1,246.03	496.63	
	NA D4A							(G)	
	CLA D4B	3.4	10.000	22.2	9.2				
2	NA D1								
	NA D2								
	CLO2 D3	0.4	3.000	24.6	7.7	218.07	1,092.82	436.14	
	NA D4A							(G)	
	CLA D4B	2.9	10.000	23.5	9.2				
3	NA D1								
	NA D2								
	CLO2 D3	0.3	3.000	24.9	7.6	150.49	753.62	300.98	
	NA D4A							(G)	
	CLA D4B	2.9	16.000	23.8	9.3				
4	NA D1								
	NA D2								
	CLO2 D3	0.2	3.000	24.8	7.7	137.52	688.74	275.04	
	NA D4A							(G)	
	CLA D4B	3.3	16.000	25.1	8.2				
5	NA D1								
	NA D2								
	CLO2 D3	0.4	3.000	24.7	7.9	207.77	1,040.89	415.54	
	NA D4A							(G)	
	CLA D4B	2.7	8.000	24.9	9.1				
6	NA D1								
	NA D2								
	CLO2 D3	0.3	3.000	24.9	7.7	175.33	876.08	350.66	
	NA D4A							(G)	
	CLA D4B	3.3	8.000	24.7	8.0				
7	NA D1								
	NA D2								
	CLO2 D3	0.4	4.000	24.6	7.7	173.71	867.24	347.42	
	NA D4A							(G)	
	CLA D4B	3.7	8.000	23.3	8.8				
8	NA D1								
	NA D2								
	CLO2 D3	0.4	3.000	25.3	7.6	255.70	1,304.18	511.40	
	NA D4A							(G)	
	CLA D4B	3.3	8.000	22.9	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	NA D1								
	NA D2								
	CLO2 D3	0.2	4.000	25.1	7.8	91.67	460.18	183.34	
	NA D4A							(G)	
	CLA D4B	3.5	14.000	24.7	8.9				
10	NA D1								
	NA D2								
	CLO2 D3	0.2	3.000	24.8	7.7	126.01	630.00	252.02	
	NA D4A							(G)	
	CLA D4B	3.0	12.000	27.6	8.9				
11	NA D1								
	NA D2								
	CLO2 D3	0.5	3.000	25.3	7.8	302.88	1,548.89	605.76	
	NA D4A							(G)	
	CLA D4B	3.2	12.000	25.9	8.4				
12	NA D1								
	NA D2								
	CLO2 D3	0.3	3.000	25.1	7.8	176.26	887.35	352.52	
	NA D4A							(G)	
	CLA D4B	3.1	12.000	25.6	8.6				
13	NA D1								
	NA D2								
	CLO2 D3	0.1	3.000	25.6	7.9	74.35	383.47	148.70	
	NA D4A							(G)	
	CLA D4B	3.4	8.000	24.6	8.6				
14	NA D1								
	NA D2								
	CLO2 D3	0.2	3.000	24.9	7.9	121.55	606.98	243.09	
	NA D4A							(G)	
	CLA D4B	3.7	8.000	24.5	8.6				
15	NA D1								
	NA D2								
	CLO2 D3	0.3	7.200	25.2	7.6	63.82	322.29	127.64	
	NA D4A							(G)	
	CLA D4B	3.8	14.000	28.1	8.0				
16	NA D1								
	NA D2								
	CLO2 D3	0.1	6.000	25.1	7.7	22.82	110.94	45.63	
	NA D4A							(G)	
	CLA D4B	3.9	10.000	25.8	8.4				

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, AW Date: July 10, 2012

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
PWS ID No.: 2430001

PLANT NAME
OR NUMBER: Cypress (Microfiltration/R.O.)
Month: June Year: 2012

DISINFECTION PROCESS PARAMETERS							
APPROVED CT STUDY PARAMETERS					PERFORMANCE STANDARDS		
Parameters	Disinfection Zones					Log Inactivations	
	D5A	D5B	D5C	D6	D7	Giardia lamblia Cysts	Virus
Flow Rate (MGD)	36.400	6.759	8.840			0.5	2.0
T ₁₀ (minutes)	59.2	53.0	24.3				

PERFORMANCE DATA									
Date	DISINFECTION PROCESS DATA								
	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
1	CLA D5A	3.3	7.784	22.7	9.0				
	CLA D5B	3.3	3.878	22.7	9.0				
	CLA D5C	3.3	2.338	22.7	9.0				
	D6								
	D7								
2	CLA D5A	3.2	7.784	24.4	9.1				
	CLA D5B	3.2	3.878	24.4	9.1				
	CLA D5C	3.2	2.338	24.4	9.1				
	D6								
	D7								
3	CLA D5A	3.1	13.344	24.9	9.0				
	CLA D5B	3.1	6.648	24.9	9.0				
	CLA D5C	3.1	4.008	24.9	9.0				
	D6								
	D7								
4	CLA D5A	3.3	13.344	24.4	9.2				
	CLA D5B	3.3	6.648	24.4	9.2				
	CLA D5C	3.3	4.008	24.4	9.2				
	D6								
	D7								
5	CLA D5A	3.3	8.896	24.7	9.1				
	CLA D5B	3.3	4.432	24.7	9.1				
	CLA D5C	3.3	2.672	24.7	9.1				
	D6								
	D7								
6	CLA D5A	3.5	6.672	25.3	8.9				
	CLA D5B	3.5	3.324	25.3	8.9				
	CLA D5C	3.5	2.004	25.3	8.9				
	D6								
	D7								
7	CLA D5A	3.4	4.448	25.6	8.8				
	CLA D5B	3.4	2.216	25.6	8.8				
	CLA D5C	3.4	1.336	25.6	8.8				
	D6								
	D7								
8	CLA D5A	3.3	4.448	25.5	8.9				
	CLA D5B	3.3	2.216	25.5	8.9				
	CLA D5C	3.3	1.336	25.5	8.9				
	D6								
	D7								

PERFORMANCE DATA									
Date	DISINFECTION PROCESS DATA								
	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
9	CLA D5A	3.1	7.784	24.5	8.7				
	CLA D5B	3.1	3.878	24.5	8.7				
	CLA D5C	3.1	2.338	24.5	8.7				
	D6								
	D7								
10	CLA D5A	3.3	8.896	25.4	8.7				
	CLA D5B	3.3	4.432	25.4	8.7				
	CLA D5C	3.3	2.672	25.4	8.7				
	D6								
	D7								
11	CLA D5A	3.1	8.896	25.8	8.7				
	CLA D5B	3.1	4.432	25.8	8.7				
	CLA D5C	3.1	2.672	25.8	8.7				
	D6								
	D7								
12	CLA D5A	2.7	6.672	25.1	8.8				
	CLA D5B	2.7	3.324	25.1	8.8				
	CLA D5C	2.7	2.004	25.1	8.8				
	D6								
	D7								
13	CLA D5A	2.9	4.448	25.1	8.7				
	CLA D5B	2.9	2.216	25.1	8.7				
	CLA D5C	2.9	1.336	25.1	8.7				
	D6								
	D7								
14	CLA D5A	3.2	5.560	29.3	8.4				
	CLA D5B	3.2	2.770	29.3	8.4				
	CLA D5C	3.2	1.670	29.3	8.4				
	D6								
	D7								
15	CLA D5A	2.8	8.896	25.8	8.5				
	CLA D5B	2.8	4.432	25.8	8.5				
	CLA D5C	2.8	2.672	25.8	8.5				
	D6								
	D7								
16	CLA D5A	3.2	5.560	25.6	8.8				
	CLA D5B	3.2	2.770	25.6	8.8				
	CLA D5C	3.2	1.670	25.6	8.8				
	D6								
	D7								

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, AW

Date: July 10, 2012

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 (Microfiltration/R.O.)
PWS ID No.: 2430001 Month: June Year: 2012

DISINFECTION PROCESS PARAMETERS

APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS	
Parameters	Disinfection Zones					Log Inactivations	
	D1	D2	D3	D4A	D4B	Giardia lamblia Cysts	Virus
Flow Rate (MGD)	14.000	14.000	14.000	19.999	26.001	0.5	2.0
T ₁₀ (minutes)	0.6	16.5	464.1	3.9	1.8		

PERFORMANCE DATA

DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
17	NA D1								
	NA D2								
	CLO2 D3	0.4	5.000	26.1	7.9	131.89	709.79	263.78	
	NA D4A							(G)	
	CLA D4B	4.3	10.000	25.3	8.9				
18	NA D1								
	NA D2								
	CLO2 D3	0.2	6.000	26.6	7.8	58.71	325.00	117.42	
	NA D4A							(G)	
	CLA D4B	3.5	12.000	27.5	8.8				
19	NA D1								
	NA D2								
	CLO2 D3	0.2	5.000	26.3	7.9	70.03	381.08	140.07	
	NA D4A							(G)	
	CLA D4B	4.5	14.000	26.0	8.9				
20	NA D1								
	NA D2								
	CLO2 D3	0.2	4.600	26.9	7.9	95.63	543.73	191.26	
	NA D4A							(G)	
	CLA D4B	4.4	14.000	25.6	8.7				
21	NA D1								
	NA D2								
	CLO2 D3	0.2	6.000	25.8	8.0	58.19	306.38	116.38	
	NA D4A							(G)	
	CLA D4B	3.5	14.000	25.2	7.4				
22	NA D1								
	NA D2								
	CLO2 D3	0.3	6.000	25.0	8.0	76.44	381.17	152.88	
	NA D4A							(G)	
	CLA D4B	5.9	14.000	24.9	9.1				
23	NA D1								
	NA D2								
	CLO2 D3	0.2	6.000	26.2	7.9	73.60	398.12	147.20	
	NA D4A							(G)	
	CLA D4B	3.1	14.000	26.3	9.3				
24	NA D1								
	NA D2								
	CLO2 D3	0.2	5.000	25.9	7.8	66.33	351.14	132.65	
	NA D4A							(G)	
	CLA D4B	3.4	14.000	26.3	8.5				

PERFORMANCE DATA

DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
25	NA D1								
	NA D2								
	CLO2 D3	0.3	6.000	27.8	7.9	82.69	499.59	165.39	
	NA D4A							(G)	
	CLA D4B	4.1	10.000	27.0	8.6				
26	NA D1								
	NA D2								
	CLO2 D3	0.3	6.000	28.4	7.9	76.71	482.47	153.42	
	NA D4A							(G)	
	CLA D4B	5.1	12.000	26.7	8.8				
27	NA D1								
	NA D2								
	CLO2 D3	0.2	7.000	28.6	7.9	60.29	385.57	120.59	
	NA D4A							(G)	
	CLA D4B	3.8	18.000	28.4	8.8				
28	NA D1								
	NA D2								
	CLO2 D3	0.2	6.000	28.4	7.8	64.09	404.68	128.19	
	NA D4A							(G)	
	CLA D4B	3.5	18.000	27.4	9.0				
29	NA D1								
	NA D2								
	CLO2 D3	0.2	6.000	28.1	7.8	73.32	452.87	146.63	
	NA D4A							(G)	
	CLA D4B	3.1	18.000	27.2	9.3				
30	NA D1								
	NA D2								
	CLO2 D3	0.2	6.000	28.3	8.0	70.07	439.83	140.14	
	NA D4A							(G)	
	CLA D4B	2.6	18.000	28.3	9.2				
31	D1								
	D2								
	D3								
	D4A								
	D4B								

Max	302.88	1548.89
Mln	22.82	110.94
Avg	120.14	629.37
SD	69.26	336.71

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, AW

Date: July 10, 2012

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 (Microfiltration/R.O.)

PWS ID No.: 2430001

Month:

June

Year: 2012

DISINFECTION PROCESS PARAMETERS

APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS	
Parameters	Disinfection Zones					Log Inactivations	
	D5A	D5B	D5C	D6	D7	Giardia lamblia Cysts	Virus
Flow Rate (MGD)	36.400	6.759	8.840			0.5	2.0
T ₁₀ (minutes)	59.2	53.0	24.3				

PERFORMANCE DATA

Date	DISINFECTION PROCESS DATA								
	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
17	CLA D5A	2.8	5.560	25.6	8.8				
	CLA D5B	2.8	2.770	25.6	8.8				
	CLA D5C	2.8	1.670	25.6	8.8				
	D6								
	D7								
18	CLA D5A	3.1	6.672	26.1	8.6				
	CLA D5B	3.1	3.324	26.1	8.6				
	CLA D5C	3.1	2.004	26.1	8.6				
	D6								
	D7								
19	CLA D5A	3.2	7.784	26.6	8.6				
	CLA D5B	3.2	3.878	26.6	8.6				
	CLA D5C	3.2	2.338	26.6	8.6				
	D6								
	D7								
20	CLA D5A	3.0	7.784	26.0	8.4				
	CLA D5B	3.0	3.878	26.0	8.4				
	CLA D5C	3.0	2.338	26.0	8.4				
	D6								
	D7								
21	CLA D5A	2.2	7.784	26.6	8.6				
	CLA D5B	2.2	3.878	26.6	8.6				
	CLA D5C	2.2	2.338	26.6	8.6				
	D6								
	D7								
22	CLA D5A	2.5	7.784	26.4	8.6				
	CLA D5B	2.5	3.878	26.4	8.6				
	CLA D5C	2.5	2.338	26.4	8.6				
	D6								
	D7								
23	CLA D5A	3.1	7.784	26.8	8.6				
	CLA D5B	3.1	3.878	26.8	8.6				
	CLA D5C	3.1	2.338	26.8	8.6				
	D6								
	D7								
24	CLA D5A	3.0	7.784	26.4	8.5				
	CLA D5B	3.0	3.878	26.4	8.5				
	CLA D5C	3.0	2.338	26.4	8.5				
	D6								
	D7								

PERFORMANCE DATA

Date	DISINFECTION PROCESS DATA								
	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
25	CLA D5A	3.1	7.784	26.2	8.6				
	CLA D5B	3.1	3.878	26.2	8.6				
	CLA D5C	3.1	2.338	26.2	8.6				
	D6								
	D7								
26	CLA D5A	3.7	8.896	26.2	8.7				
	CLA D5B	3.7	4.432	26.2	8.7				
	CLA D5C	3.7	2.672	26.2	8.7				
	D6								
	D7								
27	CLA D5A	3.7	13.900	28.5	8.8				
	CLA D5B	3.7	6.925	28.5	8.8				
	CLA D5C	3.7	4.175	28.5	8.8				
	D6								
	D7								
28	CLA D5A	3.3	13.900	28.4	8.8				
	CLA D5B	3.3	6.925	28.4	8.8				
	CLA D5C	3.3	4.125	28.4	8.8				
	D6								
	D7								
29	CLA D5A	3.0	10.008	26.2	9.1				
	CLA D5B	3.0	4.988	26.2	9.1				
	CLA D5C	3.0	3.006	26.2	9.1				
	D6								
	D7								
30	CLA D5A	2.7	12.232	28.6	9.1				
	CLA D5B	2.7	6.094	28.6	9.1				
	CLA D5C	2.7	3.674	28.6	9.1				
	D6								
	D7								
31	D5A								
	D5B								
	D5C								
	D6								
	D7								

Max

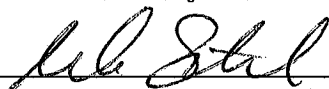
Min

Avg

SD

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, AW

Date: July 10, 2012

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 (Microfiltration/R.O.)

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

PWS ID No.: 2430001

Operator's Signature: [Signature]

Report for the Month of: July 2012

Certificate No. & Grade: WO0023530, AW

Date: August 10, 2012

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:	51	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:	0.14 NTU	Average turbidity value:	0.10 NTU
	Minimum turbidity reading:	0.06 NTU	Standard deviation:	0.017 NTU
	CFE 95 th percentile value:	0.13 NTU	IFE 95 th percentile:	0.178 NTU

Number of days with a low CT for no more than 4.0 consecutive hours:	0	Average log inactivation for Giardia:	88.19
		Average log inactivation for viruses:	524.80
Number of days with a low CT for more than 4.0 consecutive hours:	0 (4)	Number of days when profiling data was not collected:	0
		Number of days when CT data was not collected:	0

Minimum disinfectant residual required leaving the plant:	0.5 mg/L, measured as Total Chlorine
Number of days with a low residual for no more than 4.0 consecutive hours:	0
Number of days with a low residual for more than 4.0 consecutive hours:	0 (5)
Number of days when disinfectant residual leaving the plant was not properly monitored:	0

DISTRIBUTION SYSTEM

Minimum disinfectant residual required in distribution system:	0.5 mg/L, measured as Total Chlorine		
Total number of readings this month:	117	(at least 100 required) (8)	
Average disinfectant residual value:	3.20	Percentage of readings with a low residual this month:	0.0 % (6A)
Number of readings with a low residual:	0	Percentage of readings with a low residual last month:	0.0 % (6B)
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.

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

SURFACE WATER MONTHLY OPERATING REPORT

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

Turbidity Data Page

PUBLIC WATER
SYSTEM NAME:

City of Wichita Falls

PLANT NAME
OR NUMBER:

Cypress (Microfiltration/R.O.)

PWS ID No.:

2430001

Connections:

34,801

Month:

July

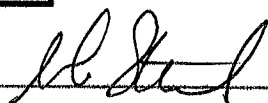
Year: 2012

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.						Turbidity						Lowest		
					1	2	3	4	5	6	NTU1	NTU2	NTU3	NTU4	NTU5	NTU6	Residual	Time	
1	2.687	13.513	19	84								0.09	0.09	0.09	0.09	0.10	0.10	2.4	
2	2.333	17.791	15	83								0.11	0.10	0.09	0.08	0.08	0.08	2.7	
3	3.917	19.055	17	68								0.08	0.09	0.09	0.08	0.07	0.08	3.1	
4	2.000	19.110	16	79								0.09	0.08	0.09	0.10	0.08	0.09	2.5	
5	2.083	18.804	15	78								0.09	0.09	0.09	0.08	0.08	0.09	2.7	
6	4.000	21.949	13	79								0.09	0.09	0.08	0.08	0.08	0.09	2.7	
7	2.250	15.026	14	80								0.09	0.09	0.09	0.10	0.10	0.09	2.7	
8	1.083	12.999	15	79								0.10	0.09	0.09	0.09	0.09	0.09	2.8	
9	2.000	13.643	12	79								0.09	0.09	0.09	0.08	0.07	0.07	3.5	
10	2.000	16.069	16	60								0.10	0.08	0.08	0.07	0.07	0.07	2.7	
11	2.000	21.128	11	62								0.07	0.07	0.09	0.08	0.08	0.09	2.4	
12	2.000	19.887	11	63								0.09	0.08	0.08	0.08	0.07	0.07	2.8	
13	4.000	23.677	11	61								0.07	0.10	0.09	0.12	0.11	0.10	2.7	
14	3.313	19.786	13	60								0.11	0.10	0.09	0.10	0.09	0.10	2.9	
15	1.983	14.245	12	59								0.11	0.10	0.10	0.11	0.11	0.09	3.4	
16	2.250	16.245	11	62								0.09	0.09	0.09	0.09	0.07	0.08	4.0	
17	4.000	19.351	13	65								0.09	0.08	0.08	0.08	0.09	0.08	2.5	
18	4.000	20.856	15	62								0.09	0.10	0.11	0.10	0.10	0.10	1.7	
19	4.000	21.453	12	61								0.10	0.11	0.10	0.09	0.09	0.09	1.6	
20	3.108	23.021	13	58								0.08	0.09	0.10	0.10	0.10	0.11	1.3	
21	2.000	17.411	17	58								0.10	0.11	0.11	0.11	0.10	0.10	2.0	
22	2.000	15.888	16	61								0.10	0.10	0.09	0.08	0.08	0.08	3.0	
23	1.888	17.774	12	59								0.08	0.08	0.08	0.08	0.08	0.08	3.1	
24	2.342	19.991	10	59								0.07	0.07	0.08	0.09	0.08	0.09	3.1	
25	3.954	22.490	11	62								0.10	0.12	0.11	0.11	0.10	0.11	3.0	
26	3.800	21.530	11	59								0.14	0.12	0.14	0.10	0.10	0.11	3.4	
27	3.433	21.256	9	58								0.12	0.12	0.13	0.12	0.11	0.12	2.9	
28	3.446	15.588	13	59								0.13	0.13	0.13	0.13	0.13	0.12	3.1	
29	3.400	16.417	10	58								0.13	0.12	0.12	0.12	0.11	0.11	3.3	
30	3.400	18.933	10	58								0.11	0.11	0.14	0.11	0.11	0.11	3.0	
31	3.400	23.890	12	58								0.11	0.12	0.13	0.13	0.14	0.13	3.1	
Total	88.050	578.776			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.														
Avg	2.840	18.670																	
Max	4.000	23.890																	
Min	1.083	12.999																	

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, AW

Date: August 10, 2012

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 (Microfiltration/R.O.)

PWS ID No.: 2430001

Month: July Year: 2012

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	0.04	x	x	x	0.03	x	x	x	0.04	x											
2	0.02	x	x	x	0.06	x	x	x	0.04	x											
3	0.06	x	x	x	0.03	x	x	x	0.07	x											
4	0.02	x	x	x	x	x	x	x	0.04	x											
5	0.03	x	x	x	x	x	0.05	x	0.03	x											
6	0.03	x	x	x	x	x	0.04	x	0.10	x											
7	0.04	x	x	x	x	x	0.06	x	0.08	x											
8	0.05	x	x	x	x	x	0.03	x	0.06	x											
9	0.04	x	x	x	x	x	0.03	x	0.03	x											
10	0.04	x	x	x	x	x	0.14	x	0.07	x											
11	0.03	x	x	x	x	x	0.03	x	0.05	x											
12	0.04	x	x	x	x	x	0.03	x	0.07	x											
13	0.17	x	x	x	x	x	0.02	x	0.04	x											
14	0.18	x	x	x	x	x	0.03	x	0.03	x											
15	0.04	x	x	x	x	x	0.04	x	0.07	x											
16	0.16	x	x	x	x	x	0.08	x	0.03	x											
17	0.04	x	x	x	x	x	0.07	x	0.09	x											
18	0.18	x	x	x	x	x	0.09	x	0.03	x											
19	0.08	x	x	x	x	x	0.03	x	0.13	x											
20	0.04	x	x	x	x	x	0.12	x	0.07	x											
21	0.04	x	x	x	x	x	0.03	x	0.03	x											
22	0.12	x	x	x	x	x	0.17	x	0.03	x											
23	0.04	x	x	x	x	x	0.03	x	0.15	x											
24	0.36	x	x	x	x	x	0.03	x	0.05	x											
25	0.20	x	x	x	x	x	0.14	x	0.06	x											
26	0.04	x	1.00	x	x	x	0.03	x	0.03	x											
27	x	x	0.04	x	x	x	0.08	x	0.04	x											
28	x	x	0.12	x	x	x	0.03	x	0.06	x											
29	x	x	0.05	x	x	x	0.16	x	0.06	x											
30	x	x	0.10	x	x	x	0.12	x	0.03	x											
31	x	x	0.18	x	x	x	0.12	x	0.11	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 days with event(s) above 2.0 NTU this month											0	
	Number of days with event(s) 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, AW

Date: August 10, 2012

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
PWS ID No.: 2430001

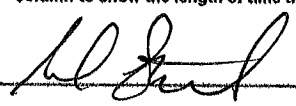
PLANT NAME
OR NUMBER: Cypress (Microfiltration/R.O.)
Month: July Year: 2012

DISINFECTION PROCESS PARAMETERS									
APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS			
Parameters	Disinfection Zones					Log Inactivations			
	D1	D2	D3	D4A	D4B	Giardia lamblia Cysts		Viruses	
Flow Rate (MGD)	14.000	14.000	14.000	19.999	26.001	0.5		2.0	
T ₁₀ (minutes)	0.6	16.5	484.1	3.9	1.8				

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
1	NA D1								
	NA D2								
	CLO2 D3	0.2	6.500	27.9	8.0	65.05	395.80	130.09	
	NA D4A							(G)	
	CLA D4B	3.3	10.000	26.7	8.6				
2	NA D1								
	NA D2								
	CLO2 D3	0.2	6.500	28.0	8.0	42.92	261.68	85.85	
	NA D4A							(G)	
	CLA D4B	4.9	14.000	25.7	8.6				
3	NA D1								
	NA D2								
	CLO2 D3	0.4	5.000	28.1	8.0	153.08	949.03	306.17	
	NA D4A							(G)	
	CLA D4B	1.4	16.000	28.0	8.3				
4	NA D1								
	NA D2								
	CLO2 D3	0.3	4.000	27.5	8.1	132.04	785.64	264.07	
	NA D4A							(G)	
	CLA D4B	1.8	14.000	25.9	8.2				
5	NA D1								
	NA D2								
	CLO2 D3	0.6	3.500	27.4	8.1	316.42	1,872.63	632.83	
	NA D4A							(G)	
	CLA D4B	2.5	14.000	26.0	9.1				
6	NA D1								
	NA D2								
	CLO2 D3	0.2	5.600	26.8	8.0	68.62	388.12	137.25	
	NA D4A							(G)	
	CLA D4B	5.6	16.000	25.4	7.4				
7	NA D1								
	NA D2								
	CLO2 D3	1.0	6.000	27.0	8.0	303.01	1,742.85	606.01	
	NA D4A							(G)	
	CLA D4B	4.6	16.000	26.5	7.7				
8	NA D1								
	NA D2								
	CLO2 D3	0.2	3.000	27.1	8.0	146.29	845.12	292.59	
	NA D4A							(G)	
	CLA D4B	3.8	10.000	26.9	8.3				

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
9	NA D1								
	NA D2								
	CLO2 D3	0.7	3.000	27.8	8.0	442.07	2,688.89	884.13	
	NA D4A							(G)	
	CLA D4B	5.4	10.000	27.3	8.0				
10	NA D1								
	NA D2								
	CLO2 D3	0.2	3.000	26.9	7.9	97.91	556.48	195.81	
	NA D4A							(G)	
	CLA D4B	4.3	10.000	26.5	8.4				
11	NA D1								
	NA D2								
	CLO2 D3	0.3	3.000	27.4	7.9	188.16	1,111.94	376.33	
	NA D4A							(G)	
	CLA D4B	4.9	10.000	25.7	8.5				
12	NA D1								
	NA D2								
	CLO2 D3	0.2	4.000	27.5	7.8	100.29	596.22	200.57	
	NA D4A							(G)	
	CLA D4B	5.1	10.000	27.3	8.5				
13	NA D1								
	NA D2								
	CLO2 D3	0.1	5.000	25.1	7.9	40.54	203.41	81.08	
	NA D4A							(G)	
	CLA D4B	2.8	16.000	27.9	9.3				
14	NA D1								
	NA D2								
	CLO2 D3	0.1	5.000	26.7	7.9	40.71	227.55	81.41	
	NA D4A							(G)	
	CLA D4B	4.2	14.000	27.5	8.8				
15	NA D1								
	NA D2								
	CLO2 D3	0.1	4.000	26.9	7.9	42.14	237.47	84.28	
	NA D4A							(G)	
	CLA D4B	6.4	12.000	25.0	9.1				
16	NA D1								
	NA D2								
	CLO2 D3	0.1	6.000	27.9	7.9	28.60	170.70	57.20	
	NA D4A							(G)	
	CLA D4B	3.8	16.000	28.0	9.3				

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, AW Date: August 10, 2012

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
PWS ID No.: 2430001

PLANT NAME
OR NUMBER: Cypress (Microfiltration/R.O.)
Month: July Year: 2012

DISINFECTION PROCESS PARAMETERS									
APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS			
Parameters	Disinfection Zones					Log Inactivations			
	D5A	D5B	D5C	D6	D7	Giardia lamblia Cysts		Virus	
Flow Rate (MGD)	36.400	6.759	8.840			0.5		2.0	
T ₁₀ (minutes)	59.2	53.0	24.3						

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 D5A	2.5	7.784	27.3	8.6				
	CLA D5B	2.5	3.878	27.3	8.6				
	CLA D5C	2.5	2.338	27.3	8.6				
	D6								
	D7								
2	CLA D5A	3.8	10.008	28.6	8.4				
	CLA D5B	3.8	4.986	28.6	8.4				
	CLA D5C	3.8	3.006	28.6	8.4				
	D6								
	D7								
3	CLA D5A	3.7	11.120	27.9	8.8				
	CLA D5B	3.7	5.540	27.9	8.8				
	CLA D5C	3.7	3.340	27.9	8.8				
	D6								
	D7								
4	CLA D5A	2.8	11.120	28.4	8.9				
	CLA D5B	2.8	5.540	28.4	8.9				
	CLA D5C	2.8	3.340	28.4	8.9				
	D6								
	D7								
5	CLA D5A	2.9	11.120	28.3	9.1				
	CLA D5B	2.9	5.540	28.3	9.1				
	CLA D5C	2.9	3.340	28.3	9.1				
	D6								
	D7								
6	CLA D5A	2.8	12.232	28.3	9.0				
	CLA D5B	2.8	6.094	28.3	9.0				
	CLA D5C	2.8	3.674	28.3	9.0				
	D6								
	D7								
7	CLA D5A	4.8	12.232	27.1	8.7				
	CLA D5B	4.8	6.094	27.1	8.7				
	CLA D5C	4.8	3.674	27.1	8.7				
	D6								
	D7								
8	CLA D5A	3.7	7.784	28.6	8.7				
	CLA D5B	3.7	3.878	28.6	8.7				
	CLA D5C	3.7	2.338	28.6	8.7				
	D6								
	D7								

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 D5A	3.5	7.784	28.6	8.9				
	CLA D5B	3.5	3.878	28.6	8.9				
	CLA D5C	3.5	2.338	28.6	8.9				
	D6								
	D7								
10	CLA D5A	3.5	7.951	27.2	8.7				
	CLA D5B	3.5	3.961	27.2	8.7				
	CLA D5C	3.5	2.368	27.2	8.7				
	D6								
	D7								
11	CLA D5A	3.3	10.008	28.4	8.4				
	CLA D5B	3.3	4.986	28.4	8.4				
	CLA D5C	3.3	3.006	28.4	8.4				
	D6								
	D7								
12	CLA D5A	2.3	11.120	27.3	8.8				
	CLA D5B	2.3	5.540	27.3	8.8				
	CLA D5C	2.3	3.340	27.3	8.8				
	D6								
	D7								
13	CLA D5A	2.9	12.232	28.5	8.3				
	CLA D5B	2.9	6.094	28.5	8.3				
	CLA D5C	2.9	3.674	28.5	8.3				
	D6								
	D7								
14	CLA D5A	3.2	11.120	28.7	8.4				
	CLA D5B	3.2	5.540	28.7	8.4				
	CLA D5C	3.2	3.340	28.7	8.4				
	D6								
	D7								
15	CLA D5A	4.1	8.896	28.8	9.1				
	CLA D5B	4.1	4.432	28.8	9.1				
	CLA D5C	4.1	2.672	28.8	9.1				
	D6								
	D7								
16	CLA D5A	4.4	8.896	27.5	9.2				
	CLA D5B	4.4	4.432	27.5	9.2				
	CLA D5C	4.4	2.672	27.5	9.2				
	D6								
	D7								

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, AW

Date: August 10, 2012

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
PWS ID No.: 2430001

PLANT NAME OR NUMBER: Cypress (Microfiltration/R.O.)
Month: July Year: 2012

DISINFECTION PROCESS PARAMETERS							
APPROVED CT STUDY PARAMETERS					PERFORMANCE STANDARDS		
Parameters	Disinfection Zones					Log Inactivations	
	D1	D2	D3	D4A	D4B	Giardia lamblia Cysts	Virus
Flow Rate (MGD)	14.000	14.000	14.000	19.999	26.001	0.5	2.0
T ₁₀ (minutes)	0.6	16.5	464.1	3.9	1.8		

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
17	NA D1								
	NA D2								
	CLO2 D3	0.1	6.500	28.0	7.8	14.54	87.91	29.09	
	NA D4A							(G)	
	CLA D4B	2.4	18.000	27.1	9.3				
18	NA D1								
	NA D2								
	CLO2 D3	0.1	6.000	28.0	7.8	24.62	150.62	49.23	
	NA D4A							(G)	
	CLA D4B	2.7	18.000	28.0	9.3				
19	NA D1								
	NA D2								
	CLO2 D3	0.1	6.000	27.7	7.9	42.69	257.15	85.37	
	NA D4A							(G)	
	CLA D4B	2.6	18.000	30.2	9.0				
20	NA D1								
	NA D2								
	CLO2 D3	0.1	6.000	28.1	8.1	21.50	132.66	43.01	
	NA D4A							(G)	
	CLA D4B	3.0	18.000	27.1	9.4				
21	NA D1								
	NA D2								
	CLO2 D3	0.1	4.000	28.5	8.1	45.79	291.22	91.58	
	NA D4A							(G)	
	CLA D4B	2.7	16.000	27.0	9.1				
22	NA D1								
	NA D2								
	CLO2 D3	0.1	3.000	29.0	7.9	55.29	362.79	110.57	
	NA D4A							(G)	
	CLA D4B	5.0	10.000	28.0	9.1				
23	NA D1								
	NA D2								
	CLO2 D3	0.1	4.000	28.1	7.9	50.85	312.57	101.70	
	NA D4A							(G)	
	CLA D4B	4.2	12.000	27.9	8.5				
24	NA D1								
	NA D2								
	CLO2 D3	0.1	6.000	28.0	7.9	43.15	263.96	86.30	
	NA D4A							(G)	
	CLA D4B	6.1	16.000	28.0	9.3				

PERFORMANCE DATA									
DISINFECTION PROCESS DATA									
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
25	NA D1								
	NA D2								
	CLO2 D3	0.0	6.000	29.1	8.0	12.83	82.93	25.66	
	NA D4A							(G)	
	CLA D4B	5.7	18.000	29.3	9.4				
26	NA D1								
	NA D2								
	CLO2 D3	0.1	7.000	29.1	8.1	24.03	157.64	48.07	
	NA D4A							(G)	
	CLA D4B	3.3	12.000	28.4	8.5				
27	NA D1								
	NA D2								
	CLO2 D3	0.1	6.000	27.8	8.1	34.10	205.23	68.20	
	NA D4A							(G)	
	CLA D4B	4.1	12.000	30.9	9.3				
28	NA D1								
	NA D2								
	CLO2 D3	0.1	6.000	27.0	8.1	34.14	194.10	68.29	
	NA D4A							(G)	
	CLA D4B	3.8	12.000	27.3	8.5				
29	NA D1								
	NA D2								
	CLO2 D3	0.1	5.000	26.8	8.0	44.70	250.57	89.39	
	NA D4A							(G)	
	CLA D4B	4.1	12.000	27.6	8.2				
30	NA D1								
	NA D2								
	CLO2 D3	0.1	6.000	27.0	7.9	19.00	107.60	38.01	
	NA D4A							(G)	
	CLA D4B	3.9	12.000	27.7	8.3				
31	NA D1								
	NA D2								
	CLO2 D3	0.2	5.000	28.7	7.9	58.87	378.43	117.75	
	NA D4A							(G)	
	CLA D4B	4.0	12.000	27.6	9.2				

Max	442.07	2688.89
Min	12.83	82.93
Avg	88.19	524.60
SD	98.67	588.92

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. WO0023530, AW and Grade: WO0023530, AW Date: August 10, 2012

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
PWS ID No.: 2430001

PLANT NAME OR NUMBER: Cypress (Microfiltration/R.O.)
Month: July Year: 2012

DISINFECTION PROCESS PARAMETERS									
APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS			
Parameters	Disinfection Zones					Log Inactivations			
	D5A	D5B	D5C	D6	D7	Giardia lamblia Cysts		Virus	
Flow Rate (MGD)	36.400	6.769	8.640			0.5		2.0	
T ₁₀ (minutes)	59.2	53.0	24.3						

PERFORMANCE DATA									
Date	DISINFECTION PROCESS DATA								
	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time (min)
17	CLA D5A	2.8	13.344	28.5	9.1				
	CLA D5B	2.8	6.648	28.5	9.1				
	CLA D5C	2.8	4.008	28.5	9.1				
	D6								
	D7								
18	CLA D5A	2.1	13.344	28.9	9.1				
	CLA D5B	2.1	6.648	28.9	9.1				
	CLA D5C	2.1	4.008	28.9	9.1				
	D6								
	D7								
19	CLA D5A	1.9	13.344	30.5	9.0				
	CLA D5B	1.9	6.648	30.7	9.0				
	CLA D5C	1.9	4.008	30.5	9.0				
	D6								
	D7								
20	CLA D5A	1.7	13.900	30.0	8.7				
	CLA D5B	1.7	6.925	30.0	8.7				
	CLA D5C	1.7	4.175	30.0	8.7				
	D6								
	D7								
21	CLA D5A	2.2	12.788	29.7	8.8				
	CLA D5B	2.2	6.371	29.7	8.8				
	CLA D5C	2.2	3.841	29.7	8.8				
	D6								
	D7								
22	CLA D5A	2.9	9.452	29.6	8.7				
	CLA D5B	2.9	4.709	29.6	8.7				
	CLA D5C	2.9	2.839	29.6	8.7				
	D6								
	D7								
23	CLA D5A	3.5	10.008	26.5	8.8				
	CLA D5B	3.5	4.986	26.5	8.8				
	CLA D5C	3.5	3.006	26.5	8.8				
	D6								
	D7								
24	CLA D5A	3.9	13.344	29.8	8.8				
	CLA D5B	3.9	6.648	29.8	8.8				
	CLA D5C	3.9	4.008	29.8	8.8				
	D6								
	D7								

PERFORMANCE DATA									
Date	DISINFECTION PROCESS DATA								
	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time (min)
25	CLA D5A	3.6	14.456	29.4	8.9				
	CLA D5B	3.6	7.202	29.4	8.9				
	CLA D5C	3.6	4.342	29.4	8.9				
	D6								
	D7								
26	CLA D5A	3.6	14.456	29.4	9.0				
	CLA D5B	3.6	7.202	29.4	9.0				
	CLA D5C	3.6	4.342	29.4	9.0				
	D6								
	D7								
27	CLA D5A	3.3	11.120	29.6	9.0				
	CLA D5B	3.3	5.540	29.6	9.0				
	CLA D5C	3.3	3.340	29.6	9.0				
	D6								
	D7								
28	CLA D5A	3.5	11.120	27.9	9.1				
	CLA D5B	3.5	5.540	27.9	9.1				
	CLA D5C	3.5	3.340	27.9	9.1				
	D6								
	D7								
29	CLA D5A	3.7	8.896	27.6	8.8				
	CLA D5B	3.7	4.432	27.6	8.8				
	CLA D5C	3.7	2.672	27.6	8.8				
	D6								
	D7								
30	CLA D5A	3.3	11.120	31.2	8.6				
	CLA D5B	3.3	5.540	31.2	8.6				
	CLA D5C	3.3	3.340	31.2	8.6				
	D6								
	D7								
31	CLA D5A	3.4	11.120	27.7	8.7				
	CLA D5B	3.4	5.540	27.7	8.7				
	CLA D5C	3.4	3.340	27.7	8.7				
	D6								
	D7								
						Max			
						Min			
						Avg			
						SD			

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, AW

Date: August 10, 2012