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 Corsicana

PLANT NAME OR NUMBER: Lake Halbert WTP

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.: 1750002

Operator's Signature:

Report for the Month of: March 2014

Certificate No. & Grade: WO0012234, A

Date: April 2, 2014

TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	161	Number of 4-hour periods when plant was off-line:	25
Number of readings above 0.10 NTU:	12	Number of 4-hour periods when plant was on-line	
Number of readings above 0.3 NTU:	0	but turbidity data was not collected:	0
Number of readings above 0.5 NTU:	0	Number of days when plant was on-line	
Number of readings above 1.0 NTU:	0	but individual filter turbidity data was not collected:	0
Maximum allowable turbidity level:	0.3	Number of days with readings above 1.0 NTU:	0 (2)
Percentage of readings above this limit:	0.0 % (1)	Number of days with readings above 5.0 NTU:	0 (3)

Statistical Summary

Maximum turbidity reading:	0.17 NTU	Average turbidity value:	0.09 NTU
Minimum turbidity reading:	0.07 NTU	Standard deviation:	0.016 NTU
CFE 95th percentile value:	0.11 NTU	IFE 95th percentile:	0.133 NTU

Number of days with a low CT for no more than 4.0 consecutive hours:	0	Average log inactivation for Giardia:	NA
		Average log inactivation for viruses:	NA
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:	31
		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:	61 (at least 31 required) (8)		
Average disinfectant residual value:	2.69	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 Corsicana
PLANT NAME OR NUMBER: Lake Halbert WTP
PWS ID No.: 1750002
Connections: 10,877
Month: March **Year:** 2014
Population: 23,770

PERFORMANCE DATA

Date	Raw Water Pumpage (MGD)	Treated Water Pumpage (MGD)	RAW WATER ANALYSES NTU	RAW WATER ANALYSES Alk.	SETTLED WATER TURBIDITY (Optional Data) Basin No. 1	2	3	4	5	6	FINISHED WATER QUALITY Turbidity NTU1	NTU2	NTU3	NTU4	NTU5	NTU6	Lowest Residual	Time=
1	1.400	1.294	25	97							x	x	0.10	0.10	0.10	0.09	3.5	
2	1.870	1.763	25	97							0.11	0.10	0.09	0.10	0.10	0.10	3.6	
3	0.900	0.883	29	98							x	x	x	x	0.15	0.14	1.3	
4	2.120	1.851	33	99							0.15	0.14	0.11	0.10	0.10	0.10	1.9	
5	2.220	2.077	32	99							0.10	0.10	0.09	0.08	0.09	0.09	3.0	
6	2.020	1.827	30	99							0.09	0.08	0.09	0.09	0.09	0.08	3.0	
7	1.800	1.705	29	101							0.08	0.09	0.08	0.09	0.08	0.08	2.8	
8	1.800	1.696	31	100							0.08	0.08	0.09	0.09	0.09	0.08	2.9	
9	1.700	1.349	33	101							0.08	0.08	0.09	0.09	0.12	0.10	3.5	
10	1.710	1.513	35	100							0.10	0.10	0.11	0.11	0.10	0.10	3.7	
11	1.370	1.063	35	100							x	x	x	x	0.17	0.10	3.2	
12	2.330	1.842	37	102							0.09	0.08	0.07	0.07	x	0.09	3.4	
13	2.960	2.619	39	104							0.11	0.09	0.10	0.09	0.10	0.09	3.7	
14	1.670	1.504	39	103							0.09	0.09	0.08	0.09	0.09	0.08	3.0	
15	1.800	1.603	38	102							0.08	0.07	0.08	0.07	0.08	0.07	3.2	
16	1.600	1.500	37	103							0.08	0.08	0.09	0.09	0.09	0.09	3.5	
17	1.600	1.501	36	102							0.08	0.08	0.07	0.07	0.07	0.08	3.6	
18	1.600	1.468	37	103							0.07	0.07	0.07	0.08	0.08	0.08	3.4	
19	1.000	1.001	39	104							0.08	0.08	0.07	0.07	x	x	3.4	
20	1.250	1.194	40	105							x	0.08	0.08	0.08	x	x	3.3	
21	1.480	1.360	51	108							0.09	0.10	0.08	0.08	x	x	3.1	
22	1.450	1.390	36	107							x	0.09	0.08	0.08	x	x	3.4	
23	1.280	1.280	36	107							0.08	0.08	0.08	0.07	x	x	3.5	
24	1.810	1.664	33	108							0.08	0.07	0.07	0.07	0.07	0.07	3.4	
25	1.800	1.627	40	106							0.07	0.07	0.07	0.07	0.10	0.09	3.6	
26	1.800	1.596	38	106							0.11	0.10	0.09	0.08	0.10	0.10	3.4	
27	1.800	1.767	38	106							0.10	0.09	0.09	0.09	0.09	0.09	3.3	
28	2.100	2.063	41	109							0.09	0.09	0.08	0.08	0.10	0.09	3.7	
29	1.460	1.215	39	109							0.08	0.08	x	x	0.10	0.09	3.0	
30	1.810	1.712	41	109							0.10	0.10	0.09	0.10	0.10	0.10	3.5	
31	1.860	1.607	39	109							0.09	0.10	0.10	0.09	0.09	0.09	3.5	
Total	53.370	48.534																
Avg	1.722	1.566																
Max	2.960	2.619																
Min	0.900	0.883																

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:** WO0012234, A **Date:** April 2, 2014

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 Corsicana
PLANT NAME OR NUMBER: Lake Halbert WTP
PWS ID No.: 1750002
Month: March **Year:** 2014

PERFORMANCE DATA

INDIVIDUAL FILTER TURBIDITY

Date	Filter No. 1		Filter No. 2		Filter No. 3		Filter No. 4		Filter No. 5		Filter No. 6		Filter No. 7		Filter No. 8		Filter No. 9		Filter No. 10	
	Max	4 Hrs	Max	4 Hrs	Max	4 Hrs	Max	4 Hrs	Max	4 Hrs	Max	4 Hrs	Max	4 Hrs	Max	4 Hrs	Max	4 Hrs	Max	4 Hrs
1	0.12	0.12	0.07	0.07	0.08	0.07	0.11	0.11												
2	0.10	x	0.07	x	0.15	0.15	0.11	x												
3	x	x	0.15	0.15	0.13	0.13	0.10	0.10												
4	0.15	0.15	0.12	x	0.11	x	0.12	0.12												
5	0.10	x	0.08	0.08	0.12	0.11	0.10	x												
6	0.13	0.13	0.11	0.11	0.11	x	0.08	x												
7	x	x	0.10	x	0.09	x	0.08	x												
8	0.12	0.12	0.08	x	0.08	x	0.07	x												
9	0.09	x	0.07	x	0.15	0.15	0.09	x												
10	0.13	0.13	0.11	0.11	0.10	0.10	0.11	0.11												
11	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.07												
12	0.09	0.08	0.08	0.08	0.08	0.08	0.10	0.09												
13	0.15	0.15	0.11	0.11	0.15	0.15	0.09	x												
14	0.08	0.08	0.09	0.09	0.08	0.08	0.11	x												
15	0.07	x	0.08	x	0.07	x	0.09	0.09												
16	0.11	0.11	0.07	x	0.07	x	0.09	x												
17	0.10	x	0.06	x	x	x	0.07	x												
18	0.08	x	0.07	x	0.11	0.11	0.06	x												
19	0.04	x	x	x	0.09	x	0.06	x												
20	0.06	0.05	0.10	0.10	0.08	0.08	0.06	0.05												
21	0.08	0.08	0.09	0.09	0.07	0.07	0.05	0.05												
22	0.08	0.07	0.08	0.08	0.07	0.06	0.06	0.05												
23	0.06	0.06	0.07	0.07	0.05	0.05	0.05	0.04												
24	0.06	0.06	0.07	0.07	x	x	0.05	0.04												
25	0.06	x	0.12	0.12	0.11	0.11	0.05	x												
26	0.09	0.09	0.10	x	0.09	x	0.05	x												
27	0.09	x	0.09	x	0.06	x	x	x												
28	0.07	x	0.07	x	0.05	x	0.12	0.12												
29	0.09	0.05	0.06	0.06	0.08	0.08	0.08	0.08												
30	0.07	x	0.12	0.12	0.07	x	0.07	x												
31	0.12	0.12	0.09	x	0.08	x	0.07	x												

SUMMARY & COMPLIANCE ACTIONS

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

SUBMITTED BY: _____ **Certificate No. and Grade:** WO0012234, A **Date:** April 2, 2014

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 Corsicana

PLANT NAME OR NUMBER: Lake Halbert WTP

PWS ID No.: 1750002

Month: March **Year:** 2014

DISINFECTION PROCESS PARAMETERS

APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS	
	Disinfection Zones					Log Inactivations	
Parameters	D1	D2	D3	D4	D5	Giardia lamblia Cysts	Viruses
Flow Rate (MGD)	4.000	4.000	4.000			0.5	2.0
T_{10} (minutes)	78.3	15.1	9.0				

PERFORMANCE DATA

Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time=
1	FCL *D1*								
	FCL *D2*	1.6	2.000	13.0	6.7				
	CLA *D3*	3.5	2.000	13.0	7.2	1.90*	44.25*	3.79	
	D4							(G)	
	D5								
2	FCL *D1*								
	FCL *D2*	1.6	2.000	13.0	6.7				
	CLA *D3*	3.9	2.000	13.0	7.2	1.91*	44.27*	3.82	
	D4							(G)	
	D5								
3	FCL *D1*								
	FCL *D2*	1.4	1.800	12.0	6.8				
	CLA *D3*	3.2	1.800	12.0	3.2	1.59*	39.90*	3.17	
	D4							(G)	
	D5								
4	FCL *D1*								
	FCL *D2*	1.3	2.800	11.0	6.8				
	CLA *D3*	3.5	2.800	11.0	7.2	0.97*	22.38*	1.94	
	D4							(G)	
	D5								
5	FCL *D1*								
	FCL *D2*	1.3	2.400	10.0	6.7				
	CLA *D3*	3.4	2.400	10.0	7.5	1.09*	24.36*	2.18	
	D4							(G)	
	D5								
6	FCL *D1*								
	FCL *D2*	1.8	2.400	10.0	6.8				
	CLA *D3*	3.0	2.400	10.0	7.6	1.35*	33.65*	2.71	
	D4							(G)	
	D5								
7	FCL *D1*								
	FCL *D2*	1.5	1.800	10.0	6.7				
	CLA *D3*	3.4	1.800	10.0	7.4	1.63*	37.44*	3.26	
	D4							(G)	
	D5								
8	FCL *D1*								
	FCL *D2*	1.5	1.800	11.0	6.6				
	CLA *D3*	3.3	1.800	10.0	7.3	1.80*	40.11*	3.60	
	D4							(G)	
	D5								

PERFORMANCE DATA

Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time=
9	FCL *D1*								
	FCL *D2*	1.5	1.700	11.0	6.7				
	CLA *D3*	3.9	1.700	11.0	7.6	1.87*	42.53*	3.73	
	D4							(G)	
	D5								
10	FCL *D1*								
	FCL *D2*	1.0	2.400	11.0	6.8				
	CLA *D3*	3.9	2.400	11.0	7.7	0.93*	20.15*	1.85	
	D4							(G)	
	D5								
11	FCL *D1*								
	FCL *D2*	1.0	3.000	12.0	6.9				
	CLA *D3*	3.2	3.000	12.0	7.9	0.75*	17.25*	1.50	
	D4							(G)	
	D5								
12	FCL *D1*								
	FCL *D2*	1.5	3.000	13.0	6.8				
	CLA *D3*	3.4	3.000	13.0	7.5	1.16*	27.66*	2.32	
	D4							(G)	
	D5								
13	FCL *D1*								
	FCL *D2*	1.7	3.000	13.0	6.7				
	CLA *D3*	4.0	3.000	13.0	7.6	1.34*	31.35*	2.67	
	D4							(G)	
	D5								
14	FCL *D1*								
	FCL *D2*	1.7	1.800	13.0	6.7				
	CLA *D3*	3.8	1.800	13.0	7.4	2.22*	52.24*	4.44	
	D4							(G)	
	D5								
15	FCL *D1*								
	FCL *D2*	1.7	1.800	14.0	6.8				
	CLA *D3*	3.2	1.800	14.0	7.4	2.27*	55.94*	4.54	
	D4							(G)	
	D5								
16	FCL *D1*								
	FCL *D2*	1.4	1.600	14.0	6.7				
	CLA *D3*	3.8	1.600	14.0	7.4	2.29*	51.94*	4.59	
	D4							(G)	
	D5								

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

*** Not representative of total log inactivation(s) and/or total inactivation ratio for all disinfection zones; Excluded from statistical summary calculations.**

SUBMITTED BY: _____ **Certificate No. and Grade:** WO0012234, A **Date:** April 2, 2014

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 Corsicana **PLANT NAME OR NUMBER:** Lake Halbert WTP

PWS ID No.: 1750002 **Month:** March **Year:** 2014

DISINFECTION PROCESS PARAMETERS

APPROVED CT STUDY PARAMETERS						PERFORMANCE STANDARDS	
	Disinfection Zones					Log Inactivations	
Parameters	D1	D2	D3	D4	D5	Giardia lamblia Cysts	Virus
Flow Rate (MGD)	4.000	4.000	4.000			0.5	2.0
T_{10} (minutes)	78.3	15.1	9.0				

PERFORMANCE DATA

	DISINFECTION PROCESS DATA								
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time=
17	FCL *D1*								
	FCL *D2*	1.5	1.600	14.0	6.7				
	CLA *D3*	3.6	1.600	14.0	7.5	2.41*	55.60*	4.83	
	D4							(G)	
	D5								
18	FCL *D1*								
	FCL *D2*	1.4	1.600	14.0	6.7				
	CLA *D3*	3.8	1.600	14.0	7.4	2.29*	51.94*	4.59	
	D4							(G)	
	D5								
19	FCL *D1*								
	FCL *D2*	1.1	1.600	13.0	6.7				
	CLA *D3*	3.5	1.600	14.0	7.6	1.76*	38.15*	3.52	
	D4							(G)	
	D5								
20	FCL *D1*								
	FCL *D2*	1.4	2.400	14.0	6.7				
	CLA *D3*	3.6	2.400	14.0	7.4	1.52*	34.61*	3.05	
	D4							(G)	
	D5								
21	FCL *D1*								
	FCL *D2*	2.3	2.400	14.0	6.7				
	CLA *D3*	3.5	2.400	14.0	7.4	2.23*	56.71*	4.47	
	D4							(G)	
	D5								
22	FCL *D1*								
	FCL *D2*	1.4	2.400	15.0	6.7				
	CLA *D3*	3.4	2.400	15.0	7.7	1.62*	37.08*	3.25	
	D4							(G)	
	D5								
23	FCL *D1*								
	FCL *D2*	1.6	2.100	15.0	6.8				
	CLA *D3*	3.5	2.100	15.0	7.5	2.00*	48.40*	4.00	
	D4							(G)	
	D5								
24	FCL *D1*								
	FCL *D2*	1.3	1.800	15.0	6.7				
	CLA *D3*	3.6	1.800	15.0	7.6	2.05*	45.95*	4.10	
	D4							(G)	
	D5								

PERFORMANCE DATA

	DISINFECTION PROCESS DATA								
Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time=
25	FCL *D1*								
	FCL *D2*	1.2	1.800	15.0	6.8				
	CLA *D3*	3.6	1.800	15.0	7.8	1.86*	42.44*	3.71	
	D4							(G)	
	D5								
26	FCL *D1*								
	FCL *D2*	1.6	1.800	15.0	6.8				
	CLA *D3*	3.7	1.800	15.0	7.5	2.34*	56.49*	4.68	
	D4							(G)	
	D5								
27	FCL *D1*								
	FCL *D2*	0.8	1.800	14.0	6.7				
	CLA *D3*	3.4	1.800	14.0	7.9	1.28*	26.49*	2.56	
	D4							(G)	
	D5								
28	FCL *D1*								
	FCL *D2*	1.4	2.400	16.0	6.7				
	CLA *D3*	3.9	2.400	16.0	7.5	1.75*	39.78*	3.51	
	D4							(G)	
	D5								
29	FCL *D1*								
	FCL *D2*	2.3	2.400	16.0	6.7				
	CLA *D3*	4.1	2.400	16.0	7.4	2.58*	65.18*	5.16	
	D4							(G)	
	D5								
30	FCL *D1*								
	FCL *D2*	1.5	1.800	16.0	6.7				
	CLA *D3*	3.5	1.800	16.0	7.6	2.45*	56.76*	4.91	
	D4							(G)	
	D5								
31	FCL *D1*								
	FCL *D2*	1.4	1.800	17.0	6.7				
	CLA *D3*	3.9	1.800	17.0	7.5	2.50*	56.85*	5.01	
	D4							(G)	
	D5								
					Max	NA	NA		
					Min	NA	NA		
					Avg	NA	NA		
					SD	NA	NA		

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

*** Not representative of total log inactivation(s) and/or total inactivation ratio for all disinfection zones; Excluded from statistical summary calculations.**

SUBMITTED BY: **Certificate No. and Grade:** WO0012234, A **Date:** April 2, 2014

MONTHLY TOTAL ORGANIC CARBON REMOVAL REPORT (TOCMOR)

FOR SURFACE WATER OR GROUND WATER UNDER THE INFLUENCE OF SURFACE WATER SYSTEMS

PUBLIC WATER SYSTEM NAME: City Of Corsicana

PLANT NAME OR NUMBER: Lake Halbert WTP

PWS ID No.: 1750002

Month: March **Year:** 2014

Type of treatment: X Conventional ____ Unconventional explain: ____

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

Test No.	Test Date	Monthly TOC Sample Set			Actual % TOC Removed	Step 1 Required % Removal	Step 1 Removal Ratio	Optional data		COMPLIANCE REMOVAL RATIO
		Raw Alkalinity	Raw TOC	Treated TOC				Step 2 Required % Removal	Step 2 Removal Ratio	
		Enter the Sample Set results			*calculated*	*calculated from matrix*	*calculated*	*Please attach the p3-Step2 worksheet*	*calculated*	*calculated*
1	3/4	92	7.10	4.79	32.5	35	0.93	14.7	2.2	2.21
2										
3										
4										
5										
6										
7										
8										
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27										
28										
29										
30										
31										
Avg		91.80	7.10	4.79	32.54		0.93		2.2	2.21
Max		91.80	7.10	4.79	32.54		0.93		2.2	2.21
Min		91.80	7.10	4.79	32.54		0.93		2.2	2.21

TOTAL ORGANIC CARBON (TOC) REMOVAL SUMMARY

TOC Summary: Don't forget to include a copy of your P.8-TOC Step 2 worksheet with your report.					Monthly Compliance Ratio
Raw Water Alkalinity	Raw Water TOC	Treated Water TOC	TOC % Removal	ACC # used	
92	7.10	4.79	32.5	NA	2.21

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

Operator's Signature: ____ Certificate No. and Grade: WO0012234, A Date: April 2, 2014

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

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

TOC ALTERNATIVE COMPLIANCE CRITERIA REPORT

FOR SURFACE WATER OR GROUND WATER UNDER THE INFLUENCE OF SURFACE WATER SYSTEMS

PUBLIC WATER SYSTEM NAME: City Of Corsicana
PWS ID No.: 1750002
PLANT NAME OR NUMBER: Lake Halbert WTP
Month: March **Year:** 2014

This Alternative Compliance Criteria (ACC) Report is being submitted to request the following ACC: (check one)

(Before you can begin entering data, you must put an "X" in the box that shows the number of the Alternative Compliance Criteria you are applying for.)

#1 [ ] #2 [ ] #3 [ ] #4 [ ] #5 [ ] #6 [ ] #7 [ ] #8 [ ]

ACC #1

Source Water TOC less than 2.0?
(either based on most recent month's data OR calculated quarterly as a running annual average)

Current Month TOC	Month/Year	Q1 04/2013	Q1 05/2013	Q1 06/2013	Q2 07/2013	Q2 08/2013	Q2 09/2013	Q3 10/2013	Q3 11/2013	Q3 12/2013	Q4 01/2014	Q4 02/2014	Q4 03/2014
7.10	Average Raw Water TOC												
	Quarterly Average												
	RAA												

ACC #2

Treated Water TOC less than 2.0?
(either based on most recent month's data OR calculated quarterly as a running annual average)

Current Month TOC	Month/Year	Q1 04/2013	Q1 05/2013	Q1 06/2013	Q2 07/2013	Q2 08/2013	Q2 09/2013	Q3 10/2013	Q3 11/2013	Q3 12/2013	Q4 01/2014	Q4 02/2014	Q4 03/2014
4.79	Average Treated Water TOC												
	Quarterly Average												
	RAA												

ACC #3

Source Water TOC less than 4.0? (calculated quarterly as a running annual average)
AND Source water alkalinity over 60 mg/L (as CaCO3)? (calculated quarterly as a running annual average)

Month/Year	Q1 04/2013	Q1 05/2013	Q1 06/2013	Q2 07/2013	Q2 08/2013	Q2 09/2013	Q3 10/2013	Q3 11/2013	Q3 12/2013	Q4 01/2014	Q4 02/2014	Q4 03/2014
Average Raw Water TOC												
Quarterly Average												
RAA												
Average Raw Water Alkalinity												
Quarterly Average												
RAA												

AND TTHM and HAA5 no greater than 0.040 mg/L and 0.030 mg/L, respectively? (calculated as a running annual average of quarterly averages)

TTHM RAA for the 4 quarters that end March 2014: [ ] **mg/L** **HAA5 RAA for the 4 quarter that end March 2014:** [ ] **mg/L**

ACC #4

TTHM and HAA5 no greater than 0.040 mg/L and 0.030 mg/L, respectively? (calculated as a running annual average of quarterly averages)

TTHM RAA for the 4 quarters that end March 2014: [ ] **mg/L** **HAA5 RAA for the 4 quarters that end March 2014:** [ ] **mg/L**

AND only chlorine is used in the whole plant and distribution system. **Chlorine only?:** [ ]

I certify that for the last 12 months, only free chlorine was used as a disinfectant for primary disinfection and for maintenance of a residual in the distribution system.

Certified Operators Signature/ Certificate Number / Date

ACC #5

Source water SUVA less than or equal to 2.0 L/mg-m?
(either based on most recent month's data OR calculated quarterly as a running annual average)
(Source water SUVA is the dissolved organic carbon concentration divided by the ultraviolet light absorption at 254 nanometers in the source water before any treatment of any kind. Measure monthly.

Current Month SUVA	Month/Year	Q1 04/2013	Q1 05/2013	Q1 06/2013	Q2 07/2013	Q2 08/2013	Q2 09/2013	Q3 10/2013	Q3 11/2013	Q3 12/2013	Q4 01/2014	Q4 02/2014	Q4 03/2014
	Monthly Raw Water SUVA												
	Quarterly Average												
	RAA												

ACC #6

Treated water SUVA less than or equal to 2.0 L/mg-m?
(either based on most recent month's data OR calculated quarterly as a running annual average)
(Treated water SUVA is the dissolved organic carbon concentration divided by the ultraviolet light absorption at 254 nanometers in the finished water before any disinfection of any kind, or measured using a finished water SUVA jar test. (See the Instructions worksheet for more info.) Measure monthly.

Treated water SUVA measured: [ ] In Plant [ ] By Finished Water SUVA Jar Test

I certify that an oxidant was used upstream of the Treated Water TOC monitoring point during the period for which treated water SUVA data is reported.

Certified Operators Signature / Certificate Number / Date

Current Month SUVA	Month/Year	Q1 04/2013	Q1 05/2013	Q1 06/2013	Q2 07/2013	Q2 08/2013	Q2 09/2013	Q3 10/2013	Q3 11/2013	Q3 12/2013	Q4 01/2014	Q4 02/2014	Q4 03/2014
	Monthly Treated Water SUVA												
	Quarterly Average												
	RAA												

ACC #7

Treated water alkalinity less than 60 mg/L (as CaCO3)? (softening practiced)
(either based on most recent month's data OR calculated quarterly as a running annual average)

Current Month ALK	Month/Year	Q1 04/2013	Q1 05/2013	Q1 06/2013	Q2 07/2013	Q2 08/2013	Q2 09/2013	Q3 10/2013	Q3 11/2013	Q3 12/2013	Q4 01/2014	Q4 02/2014	Q4 03/2014
	Monthly TreatedAlkalinity												
	Quarterly Average												
	RAA												

ACC #8

Magnesium hardness removal greater than or equal to 10 mg/L (as CaCO3)? (softening practiced)
(either based on most recent month's data OR calculated quarterly as a running annual average)

Current Month Mg Hardness	Month/Year	Q1 04/2013	Q1 05/2013	Q1 06/2013	Q2 07/2013	Q2 08/2013	Q2 09/2013	Q3 10/2013	Q3 11/2013	Q3 12/2013	Q4 01/2014	Q4 02/2014	Q4 03/2014
Raw	Monthly Raw Mg Hardness												
	Monthly Treated Mg Hardness												
Treated	Monthly Mg Removal												
	Quarterly Average Removal												
Removal	RAA Removal												

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

Operator's Signature: _____ **Certificate No. and Grade:** WO0012234, A **Date:** April 2, 2014

STEP 2 JAR TEST REPORT

FOR SURFACE WATER OR GROUND WATER UNDER THE INFLUENCE OF SURFACE WATER SYSTEMS

PUBLIC WATER SYSTEM NAME: City Of Corsicana

PLANT NAME OR NUMBER: Lake Halbert WTP

PWS ID No.: 1750002

DATE OF JAR TEST: February 10, 2014

PLANT CONDITIONS

RAW WATER SOURCE(s)	COAGULANT		COAGULANT AID		FLOC AID		pH ADJUSTMENT	
	Type	Dose (mg/L)	Type	Dose (mg/L)	Type	Dose (mg/L)	Type	Dose (mg/L)
Lake Halbert	Alum	126.00	N/A	0.00	N/A	0.00	Caustic	37.00

STEP 2 JAR TEST PARAMETERS

COAGULANT		BASE		JAR SIZE	JAR TEST CONDITIONS				
					Rapid Mix		Flocculation		Settling
Type	Stock Solution Concentration (g/L)	Type	Stock Solution Concentration (g/L)	Volume (liters)	Speed (rpm)	Duration (minutes)	Speed (rpm)	Duration (minutes)	Duration (minutes)
Al2(s04)3-18H20	11	N/A	-	0.5	100.0	1.0	30.0	20.0	40.0

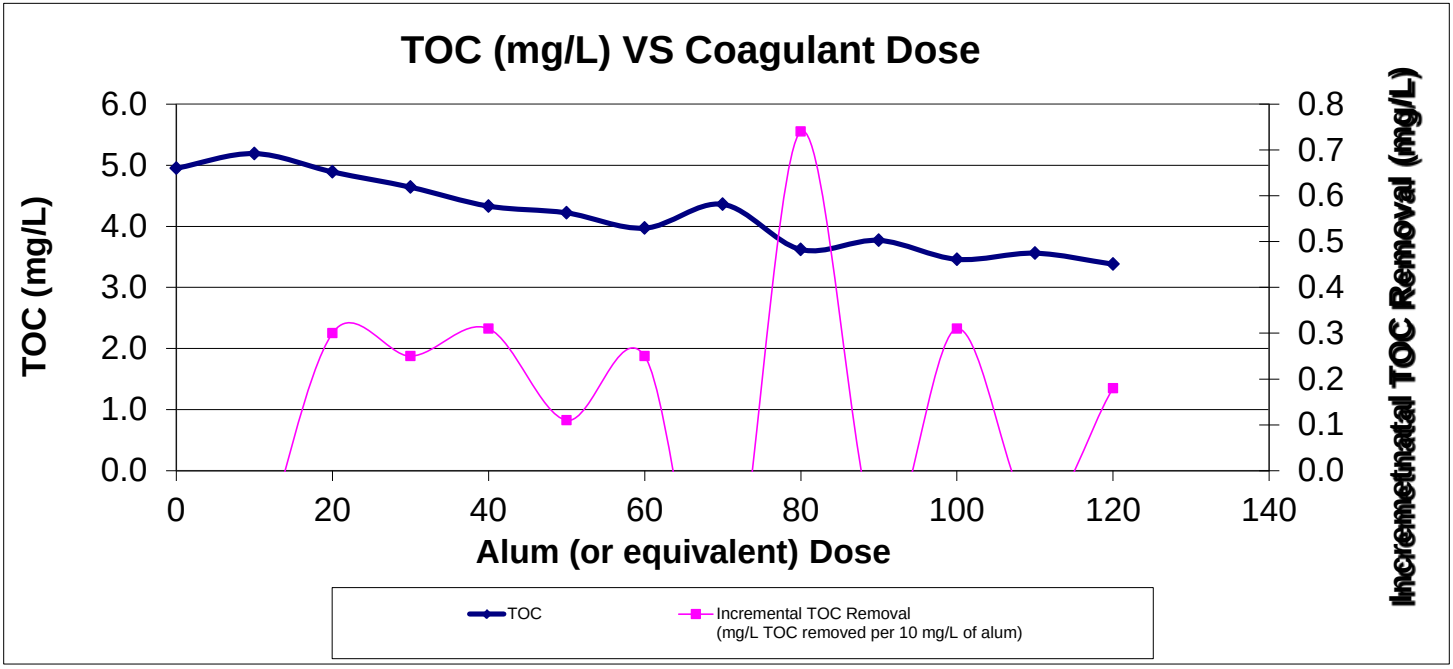
JAR TEST RESULTS

Jar No.	COAGULANT		BASE		Alkalinity (mg/L as $CaCO_3$)	pH	TOC (mg/L)	Incremental TOC Removal (mg/L TOC removed per 10 mg/L of alum)	Cumulative TOC Removal (%)
	Dose (Alum eq.) (mg/L)	Volume (mL)	Dose (mg/L)	Volume (mL)					
RAW					109	8.1	5.0		
1	10	0.50	1.00	0.50		7.9	5.2	-0.2	bad data point
2	20	1.00	2.00	1.00		8.0	4.9	0.3	1.2
3	30	1.50	3.00	1.50		7.9	4.6	0.3	6.3
4	40	2.00	4.00	2.00	Target pH (based on raw water alkalinity)	7.6	4.3	0.3	12.5
5	50	2.50	5.00	2.50		7.6	4.2	0.1	14.7
6	60	3.00	6.00	3.00		7.6	4.0	0.3	19.8
7	70	3.50	7.00	3.50		7.7	4.4	-0.4	bad data point
8	80	4.00	8.00	4.00	6.3	7.6	3.6	0.7	26.9
9	90	4.50	9.00	4.50		7.6	3.8	-0.2	bad data point
10	100	5.00	10.00	5.00		7.5	3.5	0.3	30.1
11	110	5.50	11.00	5.50		7.5	3.6	-0.1	bad data point
12	120	6.00	12.00	6.00		7.5	3.4	0.2	31.7

Has the TCEQ approved this source as "Not Amenable" to Treatment even though Target pH was not reached?
If "yes", provide the date of the TCEQ letter or e-mail.

TOC, % Removal at Apparent PODR: More than 1 PODR

More than one PODR found; please enter correct PODR value: 14.7%



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

Operator's Signature:

Certificate No. and Grade: WO0012234, A