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: April 2014

Certificate No. & Grade: WO0012234, A

Date: May 2, 2014

TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	166	Number of 4-hour periods when plant was off-line:	14
Number of readings above 0.10 NTU:	3	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:	0.14 NTU	Average turbidity value:	0.09 NTU
Minimum turbidity reading:	0.07 NTU	Standard deviation:	0.009 NTU
CFE 95th percentile value:	0.10 NTU	IFE 95th percentile:	0.100 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:	30
		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:	60 (at least 30 required) (8)		
Average disinfectant residual value:	2.64	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: 10,868

Month: April **Year:** 2014

Population: 23,770

PERFORMANCE DATA

Date	Raw Water Pumpage (MGD)	Treated Water Pumpage (MGD)	RAW WATER ANALYSES		SETTLED WATER TURBIDITY (Optional Data)						FINISHED WATER QUALITY							
					Basin No.						Turbidity						Lowest	
			NTU	Alk.	1	2	3	4	5	6	NTU1	NTU2	NTU3	NTU4	NTU5	NTU6	Residual	Time=
1	2.400	2.363	37	108							0.10	0.10	0.09	0.08	0.08	0.09	3.4	
2	2.400	2.219	37	106							0.09	0.09	0.07	0.09	0.08	0.08	3.4	
3	1.720	1.491	38	107							0.08	0.08	0.08	0.10	0.11	0.10	3.4	
4	1.800	1.738	41	108							0.10	0.09	0.09	0.10	0.09	0.10	3.2	
5	1.700	1.688	39	107							0.09	0.09	0.09	0.08	0.08	0.08	3.8	
6	1.290	1.280	39	106							x	x	x	0.09	0.09	0.09	3.4	
7	1.250	1.172	41	107							x	x	0.09	0.08	0.08	0.08	3.4	
8	1.800	1.588	42	106							0.08	0.08	0.08	0.10	0.09	0.09	2.7	
9	1.800	1.740	36	106							0.14	0.12	0.10	0.10	0.10	0.09	3.4	
10	1.790	1.769	38	109							0.08	0.08	0.08	0.08	0.09	0.09	3.5	
11	2.290	2.208	41	108							0.10	0.08	0.08	0.08	0.09	0.09	3.6	
12	1.280	1.208	36	107							x	x	0.10	0.08	0.09	0.09	3.3	
13	1.700	1.649	36	107							0.08	0.08	0.08	0.09	0.09	0.08	3.1	
14	1.250	1.206	40	107							0.08	0.08	x	x	0.09	0.09	3.6	
15	1.710	1.671	38	107							0.09	0.08	0.08	0.08	0.07	0.08	3.6	
16	1.700	1.667	38	108							0.08	0.08	0.07	0.08	0.08	0.07	3.5	
17	2.790	2.513	38	110							0.08	0.10	0.09	0.08	0.08	0.08	3.5	
18	2.800	2.687	37	111							0.08	0.08	0.08	0.08	0.08	0.08	3.1	
19	1.780	1.643	35	110							0.08	0.07	0.08	0.07	x	x	3.7	
20	1.890	1.800	32	109							0.08	0.08	0.08	0.08	0.08	0.08	3.2	
21	1.840	1.567	31	110							0.07	0.08	0.08	0.08	0.10	0.09	3.4	
22	1.700	1.720	35	112							0.10	0.10	0.09	0.09	0.09	0.08	3.1	
23	1.980	1.898	38	111							0.08	0.09	0.08	0.08	0.08	0.08	3.3	
24	3.290	3.019	43	112							0.08	0.08	0.08	0.08	0.09	0.08	3.4	
25	2.250	2.170	39	113							0.08	0.08	0.08	0.08	0.08	0.08	3.6	
26	1.480	1.377	37	113							0.09	0.08	x	x	x	0.09	3.0	
27	1.800	1.777	32	111							0.09	0.09	0.09	0.09	0.09	0.09	3.5	
28	1.800	1.655	42	112							0.08	0.08	0.08	0.08	0.08	0.08	3.4	
29	1.850	1.719	45	112							0.09	0.09	0.08	0.08	0.08	0.08	3.6	
30	3.400	3.284	43	112							0.08	0.09	0.09	0.08	0.09	0.09	3.2	
31																		
Total	58.530	55.486																
Avg	1.951	1.850																
Max	3.400	3.284																
Min	1.250	1.172																

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:** May 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: April **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	0.10	0.10	0.08	0.08	0.07	0.07												
2	0.07	x	0.07	x	0.09	0.09	0.06	x												
3	0.06	x	0.11	0.11	0.08	0.08	0.05	0.05												
4	0.11	0.11	0.10	x	0.08	x	0.07	x												
5	0.09	x	0.09	x	0.07	x	x	x												
6	0.08	0.08	0.08	0.08	0.06	0.06	0.10	0.10												
7	0.07	0.07	0.08	0.08	0.06	0.06	x	x												
8	0.11	0.11	0.07	x	0.09	0.09	0.09	0.09												
9	0.10	x	x	x	0.08	x	0.08	x												
10	0.07	x	x	x	0.07	x	0.07	x												
11	0.06	x	0.10	0.10	0.06	x	0.07	x												
12	0.05	0.05	0.09	0.09	0.05	0.05	0.06	0.06												
13	x	x	0.09	x	0.05	x	0.06	x												
14	0.09	0.09	0.08	0.08	x	x	0.06	0.06												
15	0.08	x	0.07	x	x	x	0.06	x												
16	0.06	x	0.07	x	x	x	0.06	x												
17	0.05	x	0.10	0.10	0.09	0.09	0.06	x												
18	0.08	0.08	0.08	x	0.07	x	0.05	x												
19	0.06	x	0.06	x	0.05	x	0.08	0.08												
20	0.06	0.06	0.05	0.05	0.05	0.05	0.08	0.06												
21	0.10	0.10	0.06	x	0.09	0.09	0.07	x												
22	0.09	x	x	x	0.08	x	0.07	x												
23	0.06	x	x	x	0.06	x	0.06	x												
24	0.09	0.09	0.10	0.10	0.05	x	0.06	x												
25	0.09	x	0.08	x	0.08	0.08	0.06	x												
26	0.06	0.06	0.06	0.06	0.07	0.07	0.10	0.10												
27	0.05	x	x	x	0.07	x	0.10	x												
28	0.09	0.09	0.06	0.06	0.06	0.06	0.08	x												
29	0.09	x	0.10	0.10	0.05	x	0.07	x												
30	0.07	x	0.10	x	0.10	0.10	0.07	x												
31																				

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:** May 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: April **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*	2.3	2.400	17.0	6.8				
	CLA *D3*	3.9	2.400	18.0	7.6	2.67*	69.87*	5.34	
	D4							(G)	
	D5								
2	FCL *D1*								
	FCL *D2*	1.5	2.400	18.0	6.8				
	CLA *D3*	3.5	2.400	19.0	7.5	2.05*	48.93*	4.09	
	D4							(G)	
	D5								
3	FCL *D1*								
	FCL *D2*	1.4	1.800	19.0	6.6				
	CLA *D3*	3.4	1.800	19.0	7.5	2.94*	65.24*	5.89	
	D4							(G)	
	D5								
4	FCL *D1*								
	FCL *D2*	1.3	1.800	20.0	6.7				
	CLA *D3*	3.5	1.800	20.0	7.4	2.88*	64.98*	5.75	
	D4							(G)	
	D5								
5	FCL *D1*								
	FCL *D2*	1.5	1.800	19.0	6.8				
	CLA *D3*	4.0	1.800	19.0	7.5	2.94*	69.95*	5.87	
	D4							(G)	
	D5								
6	FCL *D1*								
	FCL *D2*	1.1	2.800	18.0	6.7				
	CLA *D3*	3.9	2.800	18.0	7.4	1.42*	30.84*	2.84	
	D4							(G)	
	D5								
7	FCL *D1*								
	FCL *D2*	1.2	1.800	18.0	6.7				
	CLA *D3*	3.4	1.800	18.0	7.4	2.34*	52.23*	4.69	
	D4							(G)	
	D5								
8	FCL *D1*								
	FCL *D2*	1.2	1.800	18.0	6.8				
	CLA *D3*	3.6	1.800	18.0	7.6	2.28*	52.26*	4.55	
	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*	1.7	1.800	17.0	6.7				
	CLA *D3*	3.6	1.800	17.0	7.2	2.91*	68.91*	5.81	
	D4							(G)	
	D5								
10	FCL *D1*								
	FCL *D2*	1.6	1.800	18.0	6.7				
	CLA *D3*	3.5	1.800	18.0	7.3	2.96*	69.53*	5.92	
	D4							(G)	
	D5								
11	FCL *D1*								
	FCL *D2*	1.4	3.300	18.0	6.7				
	CLA *D3*	3.6	3.300	18.0	7.4	1.45*	33.22*	2.91	
	D4							(G)	
	D5								
12	FCL *D1*								
	FCL *D2*	1.1	1.800	19.0	6.7				
	CLA *D3*	3.3	1.800	19.0	7.4	2.33*	51.34*	4.66	
	D4							(G)	
	D5								
13	FCL *D1*								
	FCL *D2*	1.3	1.700	19.0	6.8				
	CLA *D3*	3.5	1.700	19.0	7.5	2.75*	64.19*	5.50	
	D4							(G)	
	D5								
14	FCL *D1*								
	FCL *D2*	1.7	1.700	19.0	6.8				
	CLA *D3*	3.6	1.700	20.0	7.5	3.42*	83.85*	6.84	
	D4							(G)	
	D5								
15	FCL *D1*								
	FCL *D2*	1.7	1.700	19.0	6.7				
	CLA *D3*	3.8	1.700	19.0	7.4	3.54*	83.84*	7.08	
	D4							(G)	
	D5								
16	FCL *D1*								
	FCL *D2*	1.5	1.700	18.0	6.7				
	CLA *D3*	3.8	1.700	19.0	7.4	3.01*	69.11*	6.01	
	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:** May 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:** April **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

Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time=
17	FCL *D1*								
	FCL *D2*	1.5	2.800	18.0	6.7				
	CLA *D3*	3.5	2.800	18.0	7.5	1.81*	41.92*	3.62	
	D4							(G)	
	D5								
18	FCL *D1*								
	FCL *D2*	1.5	2.800	18.0	6.7				
	CLA *D3*	3.7	2.800	18.0	7.3	1.81*	41.93*	3.63	
	D4							(G)	
	D5								
19	FCL *D1*								
	FCL *D2*	1.4	2.800	18.0	6.6				
	CLA *D3*	3.8	2.800	18.0	7.3	1.78*	39.16*	3.56	
	D4							(G)	
	D5								
20	FCL *D1*								
	FCL *D2*	1.3	2.100	19.0	6.7				
	CLA *D3*	3.2	2.100	19.0	7.3	2.29*	51.93*	4.58	
	D4							(G)	
	D5								
21	FCL *D1*								
	FCL *D2*	1.6	2.100	19.0	6.7				
	CLA *D3*	3.8	2.100	19.0	7.5	2.73*	63.90*	5.46	
	D4							(G)	
	D5								
22	FCL *D1*								
	FCL *D2*	1.8	1.700	19.0	6.7				
	CLA *D3*	3.9	1.700	20.0	7.4	3.72*	88.79*	7.44	
	D4							(G)	
	D5								
23	FCL *D1*								
	FCL *D2*	1.4	2.400	20.0	6.7				
	CLA *D3*	3.6	2.400	21.0	7.5	2.30*	52.49*	4.61	
	D4							(G)	
	D5								
24	FCL *D1*								
	FCL *D2*	1.5	3.300	20.0	6.6				
	CLA *D3*	3.7	3.300	20.0	7.3	1.83*	40.87*	3.65	
	D4							(G)	
	D5								

PERFORMANCE DATA

Date	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time=
25	FCL *D1*								
	FCL *D2*	1.3	2.400	21.0	6.6				
	CLA *D3*	3.7	2.400	21.0	7.4	2.40*	52.25*	4.80	
	D4							(G)	
	D5								
26	FCL *D1*								
	FCL *D2*	1.2	2.400	22.0	6.7				
	CLA *D3*	3.0	2.400	22.0	3.0	2.16*	51.30*	4.32	
	D4							(G)	
	D5								
27	FCL *D1*								
	FCL *D2*	1.6	1.800	24.0	6.7				
	CLA *D3*	3.7	1.800	24.0	7.6	4.50*	105.42*	9.00	
	D4							(G)	
	D5								
28	FCL *D1*								
	FCL *D2*	1.7	1.800	23.0	6.7				
	CLA *D3*	3.7	1.800	23.0	7.7	4.40*	104.47*	8.80	
	D4							(G)	
	D5								
29	FCL *D1*								
	FCL *D2*	1.6	1.800	23.0	6.7				
	CLA *D3*	3.6	1.800	23.0	7.6	4.19*	98.34*	8.38	
	D4							(G)	
	D5								
30	FCL *D1*								
	FCL *D2*	1.5	3.400	23.0	6.8				
	CLA *D3*	3.9	3.400	23.0	7.8	2.05*	48.85*	4.09	
	D4							(G)	
	D5								
31	*D1*								
	D2								
	D3								
	D4								
	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:** May 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: April **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	4/1	99	6.99	4.82	31.0	35	0.89	16.0	1.9	1.94
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
Avg		99.00	6.99	4.82	31.04		0.89		1.9	1.94
Max		99.00	6.99	4.82	31.04		0.89		1.9	1.94
Min		99.00	6.99	4.82	31.04		0.89		1.9	1.94

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	
99	6.99	4.82	31.0	NA	1.94

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: May 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: April **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
6.99	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
4.82	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												
Treated	Monthly Treated Mg Hardness												
	Monthly Mg Removal												
Removal	Quarterly Average 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:** May 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

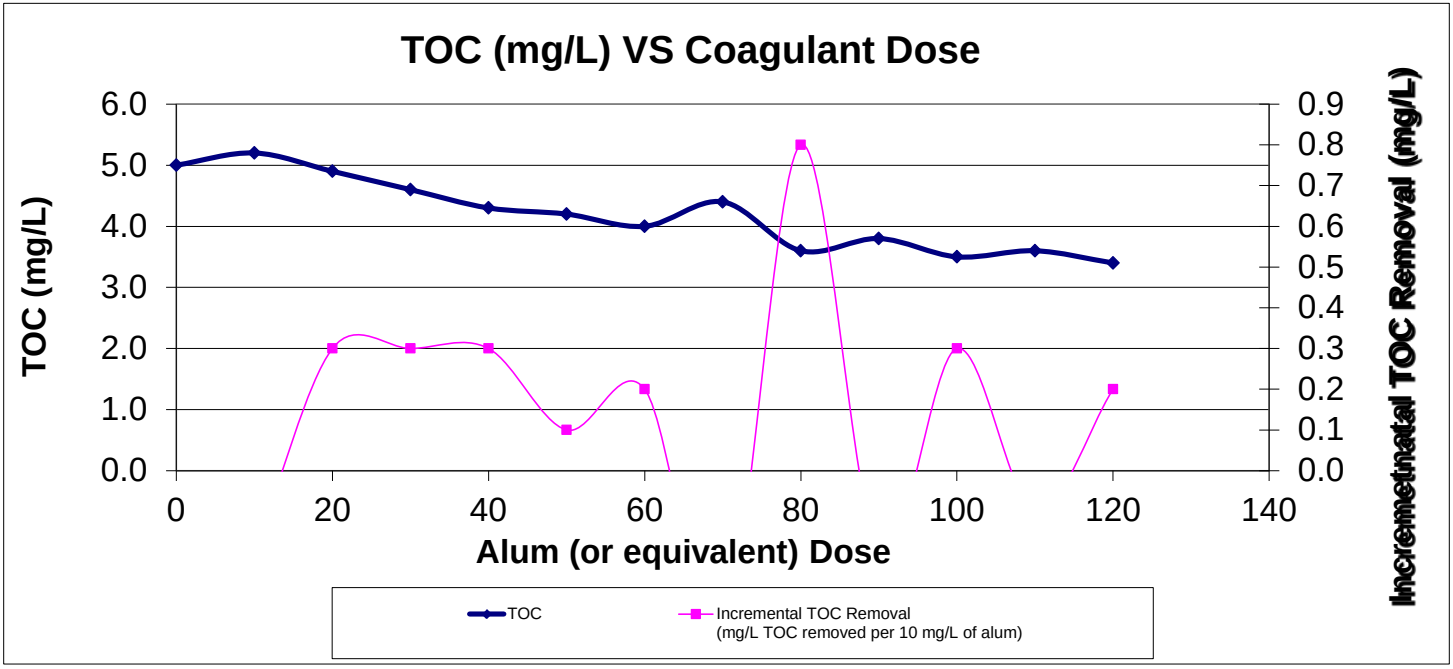
JAR TEST RESULTS

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	2.0
3	30	1.50	3.00	1.50		7.9	4.6	0.3	8.0
4	40	2.00	4.00	2.00	Target pH (based on raw water alkalinity)	7.6	4.3	0.3	14.0
5	50	2.50	5.00	2.50		7.6	4.2	0.1	16.0
6	60	3.00	6.00	3.00		7.6	4.0	0.2	20.0
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	0.8	28.0
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	30.0
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	32.0

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: 16.0%



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