

# 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  
Report for  
the Month of: February 2013

Operator's Signature: \_\_\_\_\_  
Certificate No. & Grade: WO0012234, A Date: March 4, 2013

## TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	142	Number of 4-hour periods when plant was off-line:	26
Number of readings above 0.10 NTU:	62	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)		
<b>Statistical Summary</b>		Maximum turbidity reading:	0.21 NTU
		Minimum turbidity reading:	0.07 NTU
		CFE 95 <sup>th</sup> percentile value:	0.14 NTU
		Average turbidity value:	0.11 NTU
		Standard deviation:	0.022 NTU
		IFE 95 <sup>th</sup> percentile:	0.160 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:	27
		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:	58	(at least 28 required) (8)	
Average disinfectant residual value:	2.19	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: 10,874

Month: February Year: 2013

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								
			NTU	Alk.	Basin No.						Turbidity						Lowest Residual	Time=	
					1	2	3	4	5	6	NTU1	NTU2	NTU3	NTU4	NTU5	NTU6			
1	1.120	1.056	31	95								0.10	0.11	0.09	0.11	x	x	3.6	
2	1.760	1.572	34	95								0.10	0.10	0.09	0.11	0.13	0.12	3.1	
3	1.600	1.511	32	95								0.11	0.10	0.10	0.10	0.12	0.12	3.3	
4	1.670	1.555	29	96								0.10	0.10	0.09	0.11	0.11	0.11	3.5	
5	1.140	0.957	29	96								0.09	0.10	0.11	0.11	0.11	x	3.5	
6	0.000	0.000	X	X	X	X						X	X	X	X	X	X	X	
7	0.950	0.897	22	95								x	x	x	0.17	0.21	x	2.7	
8	1.670	1.567	28	96								0.19	0.19	0.09	0.09	0.09	0.09	3.7	
9	1.620	1.566	28	97								0.10	0.10	0.11	0.10	0.09	0.12	3.5	
10	1.670	1.648	32	96								0.12	0.11	0.11	0.10	0.12	0.12	2.0	
11	0.390	0.282	32	98								0.12	0.12	x	x	x	x	3.4	
12	0.760	0.760	37	96								x	x	x	x	0.16	0.14	2.7	
13	1.660	1.429	27	96								0.14	0.13	0.10	0.11	0.12	0.10	3.3	
14	1.570	1.550	26	97								0.12	0.12	0.09	0.08	0.08	0.10	3.4	
15	0.990	0.839	25	97								0.10	0.10	x	0.13	x	x	3.6	
16	1.020	0.884	26	97								0.12	0.11	0.14	0.13	x	x	2.9	
17	1.750	1.632	27	97								0.12	0.12	0.12	0.11	0.11	0.10	2.5	
18	1.630	1.547	22	96								0.09	0.09	0.10	0.09	0.09	0.09	2.8	
19	1.580	1.520	23	97								0.09	0.08	0.08	0.11	0.10	0.10	3.5	
20	1.760	1.396	23	98								0.10	0.10	0.09	0.08	0.09	0.10	2.0	
21	1.580	1.490	18	98								0.14	0.12	0.08	0.11	0.10	0.09	2.6	
22	1.540	1.427	24	98								0.09	0.10	0.07	0.09	0.09	0.12	3.2	
23	1.560	1.348	21	97								0.10	0.11	0.14	0.12	0.09	0.09	3.3	
24	1.570	1.494	25	97								0.12	0.11	0.11	0.11	0.10	0.10	2.9	
25	1.570	1.426	24	96								0.13	0.12	0.08	0.08	0.08	0.08	3.3	
26	1.670	1.449	26	97								0.11	0.10	0.09	0.09	0.09	0.09	3.4	
27	1.670	1.520	24	97								0.10	0.09	0.07	0.08	0.09	0.09	3.3	
28	1.670	1.594	24	99								0.10	0.09	0.08	0.08	0.11	0.11	3.6	
29																			
30																			
31																			
<b>Total</b>	39.140	35.916																	
<b>Avg</b>	1.398	1.283																	
<b>Max</b>	1.760	1.648																	
<b>Min</b>	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: WO0012234, A Date: March 4, 2013

# 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  
PWS ID No.: 1750002

PLANT NAME  
OR NUMBER: Lake Halbert WTP  
Month: February Year: 2013

## 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	0.10	x	0.10	x												
2	x	x	0.11	0.10	0.09	0.09	0.13	0.03												
3	x	x	0.09	x	x	x	0.11	x												
4	x	x	0.07	x	0.13	0.13	0.09	x												
5	0.12	x	x	x	0.14	x	x	x												
6	X	X	X	X	X	X	X	X												
7	x	x	x	x	0.16	x	0.21	x												
8	x	x	x	x	0.11	x	0.14	x												
9	0.12	0.12	x	x	x	x	0.11	x												
10	0.07	x	0.10	0.10	x	x	0.10	x												
11	x	x	0.08	x	0.13	0.13	0.10	x												
12	x	x	0.11	0.11	0.16	0.16	0.13	0.12												
13	0.11	0.11	0.09	x	0.11	x	x	x												
14	0.07	x	0.06	x	0.09	x	x	x												
15	0.07	x	x	x	0.13	0.13	0.12	0.12												
16	x	x	x	x	0.12	0.12	0.20	0.20												
17	0.13	0.13	x	x	0.11	0.11	0.17	0.17												
18	0.08	x	x	x	0.08	x	0.15	x												
19	0.06	x	x	x	0.08	x	0.11	x												
20	0.09	0.09	0.09	0.09	x	x	0.13	x												
21	0.09	x	0.06	x	x	x	x	x												
22	0.09	x	0.11	x	0.11	0.10	0.12	0.11												
23	x	x	x	x	0.09	x	0.13	x												
24	x	x	x	x	0.08	x	0.13	x												
25	x	x	0.08	0.08	x	x	0.12	x												
26	x	x	0.07	x	0.13	0.13	x	x												
27	0.11	0.11	0.08	x	0.10	x	x	x												
28	0.09	x	0.09	0.09	0.10	x	x	x												
29																				
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																
	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: March 4, 2013

# 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  
PWS ID No.: 1750002

PLANT NAME OR NUMBER: Lake Halbert WTP  
Month: February Year: 2013

DISINFECTION PROCESS PARAMETERS									
APPROVED CT STUDY PARAMETERS					PERFORMANCE STANDARDS				
Parameters	Disinfection Zones					Log Inactivations			
	D1	D2	D3	D4	D5	Giardia lamblia Cysts		Viruses	
Flow Rate (MGD)	4.000	4.000	4.000			0.5		2.0	
T <sub>10</sub> (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=
1	FCL D1								
	FCL D2	1.6	1.700	14.0	6.6				
	CLA D3	3.8	1.700	14.0	7.7	2.48*	55.82*	4.96	
	D4							(G)	
	D5								
2	FCL D1								
	FCL D2	1.5	1.700	13.0	6.6				
	CLA D3	3.1	1.700	14.0	7.4	2.18*	48.80*	4.36	
	D4							(G)	
	D5								
3	FCL D1								
	FCL D2	1.5	1.700	14.0	6.6				
	CLA D3	3.8	1.700	14.0	7.8	2.36*	52.35*	4.72	
	D4							(G)	
	D5								
4	FCL D1								
	FCL D2	1.4	1.700	14.0	6.7				
	CLA D3	3.5	1.700	14.0	7.8	2.15*	48.86*	4.29	
	D4							(G)	
	D5								
5	FCL D1								
	FCL D2	1.3	1.700	14.0	6.6				
	CLA D3	3.5	1.700	14.0	7.6	2.09*	45.39*	4.18	
	D4							(G)	
	D5								
6	NA D1								
	NA D2								
	NA D3					NA	NA	NA	
	D4								
	D5								
7	FCL D1								
	FCL D2	1.2	1.700	15.0	6.9				
	CLA D3	2.9	1.700	15.0	7.6	1.87*	44.87*	3.74	
	D4							(G)	
	D5								
8	FCL D1								
	FCL D2	1.5	1.700	15.0	6.9				
	CLA D3	3.8	1.700	15.0	7.8	2.28*	56.11*	4.56	
	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=
9	FCL D1								
	FCL D2	1.5	1.700	15.0	6.6				
	CLA D3	3.7	1.700	15.0	7.3	2.52*	56.10*	5.04	
	D4							(G)	
	D5								
10	FCL D1								
	FCL D2	1.3	1.700	15.0	6.6				
	CLA D3	3.3	1.700	15.0	7.2	2.23*	48.63*	4.46	
	D4							(G)	
	D5								
11	FCL D1								
	FCL D2	1.2	1.700	15.0	6.6				
	CLA D3	3.4	1.700	15.0	7.6	2.09*	44.92*	4.19	
	D4							(G)	
	D5								
12	FCL D1								
	FCL D2	1.4	1.700	15.0	6.7				
	CLA D3	3.1	1.700	15.0	8.1	2.28*	52.32*	4.56	
	D4							(G)	
	D5								
13	FCL D1								
	FCL D2	1.6	1.700	15.0	6.7				
	CLA D3	3.8	1.700	15.0	8.3	2.57*	59.82*	5.14	
	D4							(G)	
	D5								
14	FCL D1								
	FCL D2	1.4	1.700	14.0	6.6				
	CLA D3	3.4	1.700	14.0	7.7	2.22*	48.85*	4.43	
	D4							(G)	
	D5								
15	FCL D1								
	FCL D2	1.3	1.600	14.0	6.6				
	CLA D3	3.6	1.600	14.0	7.5	2.23*	48.24*	4.45	
	D4							(G)	
	D5								
16	FCL D1								
	FCL D2	1.2	1.600	14.0	6.6				
	CLA D3	2.9	1.600	14.0	8.3	2.06*	44.48*	4.11	
	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: March 4, 2013



# 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  
 PWS ID No.: 1750002  
 Type of treatment:  Conventional  Unconventional explain: \_\_\_\_\_

PLANT NAME OR NUMBER: Lake Halbert WTP  
 Month: February Year: 2013

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						<i>calculated</i>	<i>calculated from matrix</i>	
1	2/4	91	5.67	4.03	28.9	35	0.83	15.8	1.8	1.83
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
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19										
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21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
<b>Avg</b>		91.00	5.67	4.03	28.92		0.83		1.8	1.83
<b>Max</b>		91.00	5.67	4.03	28.92		0.83		1.8	1.83
<b>Min</b>		91.00	5.67	4.03	28.92		0.83		1.8	1.83

### TOTAL ORGANIC CARBON (TOC) REMOVAL SUMMARY

<b>TOC Summary: Don't forget to include a copy of your P.8-TOC Step 2 worksheet with your report.</b>					<b>Monthly Compliance Ratio</b>
Raw Water Alkalinity	Raw Water TOC	Treated Water TOC	TOC % Removal	ACC # used	
91	5.67	4.03	28.9	NA	1.83

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: March 4, 2013

**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: February Year: 2013

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			Q2			Q3			Q4		
	01/2012	02/2012	03/2012	04/2012	05/2012	06/2012	07/2012	08/2012	09/2012	10/2012	11/2012	12/2012	
	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			Q2			Q3			Q4		
	01/2012	02/2012	03/2012	04/2012	05/2012	06/2012	07/2012	08/2012	09/2012	10/2012	11/2012	12/2012	
	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			Q2			Q3			Q4		
	01/2012	02/2012	03/2012	04/2012	05/2012	06/2012	07/2012	08/2012	09/2012	10/2012	11/2012	12/2012	
		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 December 2012: <input type="text"/> mg/L HAA5 RAA for the 4 quarter that end December 2012: <input type="text"/> 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 December 2012: <input type="text"/> mg/L HAA5 RAA for the 4 quarters that end December 2012: <input type="text"/> mg/L											
	AND only chlorine is used in the whole plant and distribution system. Chlorine only?: <input type="text"/>											
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)												
	Current Month SUVA												
	Month/Year	Q1			Q2			Q3			Q4		
	01/2012	02/2012	03/2012	04/2012	05/2012	06/2012	07/2012	08/2012	09/2012	10/2012	11/2012	12/2012	
	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:	<input type="text"/>	In Plant									
		<input type="text"/>	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			Q2			Q3			Q4		
01/2012	02/2012	03/2012	04/2012	05/2012	06/2012	07/2012	08/2012	09/2012	10/2012	11/2012	12/2012	
	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			Q2			Q3			Q4		
	01/2012	02/2012	03/2012	04/2012	05/2012	06/2012	07/2012	08/2012	09/2012	10/2012	11/2012	12/2012	
	Monthly Treated Alkalinity												
	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											
	Raw											
	Treated											
Removal												
Month/Year	Q1			Q2			Q3			Q4		
01/2012	02/2012	03/2012	04/2012	05/2012	06/2012	07/2012	08/2012	09/2012	10/2012	11/2012	12/2012	
	Monthly Raw Mg Hardness											
	Monthly Treated Mg Hardness											
	Monthly Mg 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: March 4, 2013

# STEP 2 JAR TEST REPORT

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

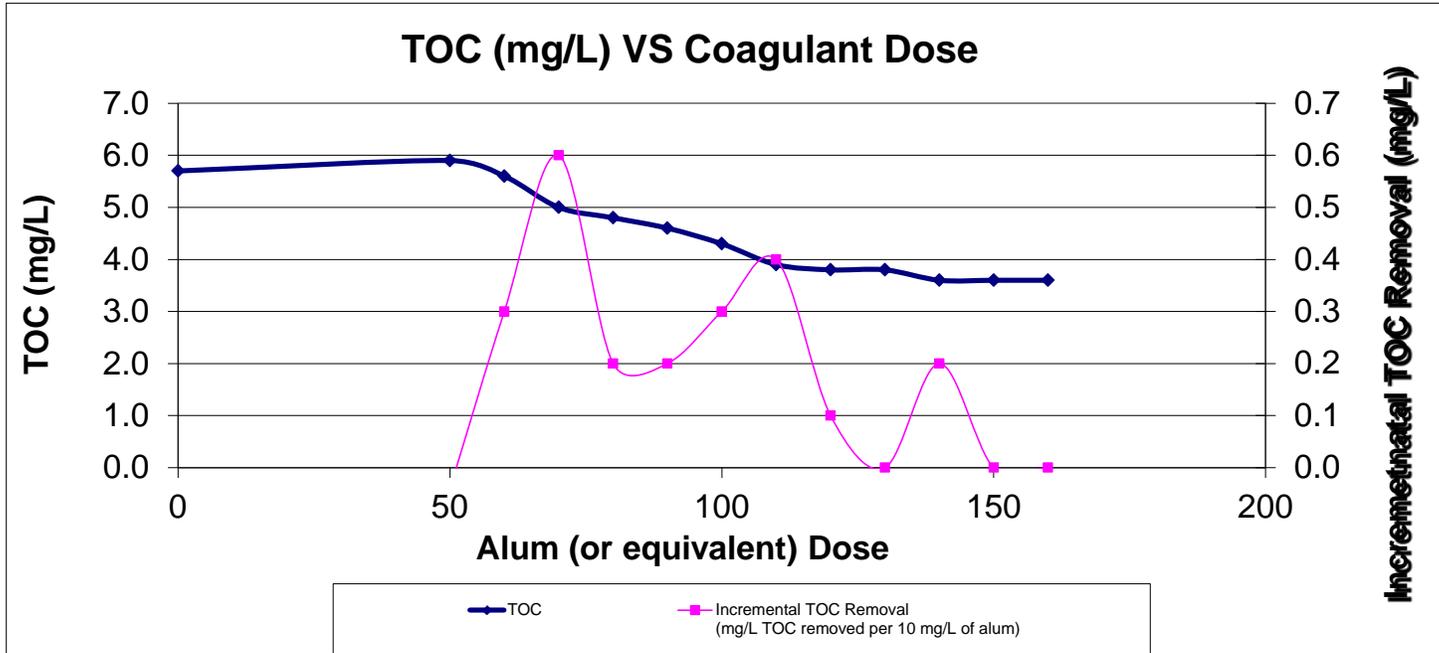
PUBLIC WATER SYSTEM NAME: City Of Corsicana  
 PWS ID No.: 1750002

PLANT NAME OR NUMBER: Lake Halbert WTP  
 DATE OF JAR TEST: October 2, 2012

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	152.00	N/A	0.00	N/A	0.00	Caustic	0.00

STEP 2 JAR TEST PARAMETERS									
COAGULANT		BASE		JAR SIZE	JAR TEST CONDITIONS				
Type	Stock Solution Concentration (g/L)	Type	Stock Solution Concentration (g/L)	Volume (liters)	Rapid Mix		Flocculation		Settling
					Speed (rpm)	Duration (minutes)	Speed (rpm)	Duration (minutes)	Duration (minutes)
Alum	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 <sub>3</sub> )	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					92	7.9	5.7			
1	50	0.50	0.00		Target pH (based on raw water alkalinity)	7.5	5.9	0.0	bad data point	
2	60	1.00	0.00			7.5	5.6	0.3	1.8	
3	70	1.50	0.00			7.4	5.0	0.6	12.3	
4	80	2.00	0.00			7.3	4.8	0.2	15.8	
5	90	2.50	0.00			7.1	4.6	0.2	19.3	
6	100	3.00	0.00			7.1	4.3	0.3	24.6	
7	110	3.50	0.00			7.1	3.9	0.4	31.6	
8	120	4.00	0.00			6.3	3.8	0.1	33.3	
9	130	4.50	0.00			6.8	3.8	0.0	33.3	
10	140	5.00	0.00			6.7	3.6	0.2	36.8	
11	150	5.50	0.00			6.6	3.6	0.0	36.8	
12	160	6.00	0.00			6.6	3.6	0.0	36.8	
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:			15.8%		



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