

# 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: July 2012

Operator's Signature: Walter White  
Certificate No. & Grade: WO0012234, A Date: August 1, 2012

### TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	179	Number of 4-hour periods when plant was off-line:	7
Number of readings above 0.10 NTU:	142	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:	0.25 NTU	Average turbidity value:	0.13 NTU
Minimum turbidity reading:	0.07 NTU	Standard deviation:	0.032 NTU
CFE 95 <sup>th</sup> percentile value:	0.18 NTU	IFE 95 <sup>th</sup> percentile:	0.219 NTU
Number of days with a low CT for no more than 4.0 consecutive hours:	0	Average log inactivation for Giardia:	4.43
Number of days with a low CT for more than 4.0 consecutive hours:	0 (4)	Average log inactivation for viruses:	110.67
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 profiling data was not collected:	0
Number of days with a low residual for more than 4.0 consecutive hours:	0 (5)	Number of days when CT data was not collected:	0
Number of days with a low 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:	1.93	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 Corsicana

**PWS ID No.:** 1750002

**Month:** July **Year:** 2012

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

**Connections:** 10,845

**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	
					1	2	3	4	5	6	NTU1	NTU2	NTU3	NTU4	NTU5	NTU6	Residual	Time
1	1.788	1.788	3	91							0.11	0.18	0.14	0.12	0.10	0.10	2.2	
2	1.823	1.823	2	91							0.08	0.07	0.08	0.08	0.09	0.08	2.2	
3	1.761	1.687	2	87							0.08	0.08	0.09	0.09	0.09	0.08	1.0	
4	1.798	1.689	5	87							0.09	0.09	0.10	0.12	0.11	0.11	1.5	
5	2.116	2.015	3	86							0.11	0.11	0.11	0.12	0.11	0.12	1.3	
6	2.335	2.256	2	86							0.12	0.11	0.15	0.14	0.14	0.14	2.0	
7	2.183	2.081	2	89							0.13	0.12	0.14	0.15	0.17	0.16	2.3	
8	1.560	1.310	2	88							X	X	0.17	0.17	0.19	0.21	2.4	
9	1.581	1.493	2	85							X	X	X	0.25	0.18	0.16	1.6	
10	2.037	1.645	2	87							0.25	0.20	0.18	X	0.24	0.20	1.0	
11	1.810	1.787	3	88							0.20	0.17	0.21	0.18	0.14	0.13	2.3	
12	1.810	1.806	2	86							0.14	0.13	0.16	0.14	0.12	0.12	1.1	
13	1.800	1.755	2	86							0.13	0.12	0.12	0.13	0.10	0.10	1.2	
14	1.893	1.675	2	87							0.10	0.09	0.10	0.09	0.09	0.09	1.6	
15	1.660	1.575	2	86							0.07	0.10	0.09	0.09	0.12	0.12	1.1	
16	1.520	1.290	3	85							0.10	0.10	X	0.10	0.09	0.10	2.6	
17	1.710	1.511	2	86							0.12	0.11	0.15	0.14	0.12	0.12	3.1	
18	1.770	1.720	3	86							0.13	0.13	0.15	0.15	0.14	0.13	3.1	
19	1.800	1.682	3	87							0.13	0.13	0.14	0.14	0.11	0.12	2.1	
20	1.810	1.760	2	86							0.12	0.12	0.15	0.18	0.16	0.15	2.8	
21	1.810	1.559	2	91							0.14	0.15	0.15	0.15	0.16	0.15	3.3	
22	1.800	1.727	2	92							0.14	0.15	0.14	0.13	0.13	0.12	3.4	
23	1.810	1.686	2	91							0.11	0.12	0.12	0.11	0.11	0.10	3.3	
24	1.800	1.709	2	87							0.11	0.12	0.13	0.16	0.14	0.13	3.4	
25	1.810	1.807	2	86							0.11	0.12	0.14	0.15	0.12	0.11	3.2	
26	1.880	1.723	2	85							0.12	0.11	0.15	0.16	0.14	0.13	3.1	
27	2.010	2.008	2	86							0.15	0.16	0.17	0.14	0.14	0.14	3.5	
28	2.020	1.695	2	88							0.13	0.14	0.17	0.16	0.16	0.16	2.7	
29	2.200	2.030	3	89							0.15	0.14	0.13	0.11	0.13	0.13	3.2	
30	2.210	2.065	2	85							0.12	0.12	0.12	0.12	0.11	0.11	3.2	
31	2.200	2.056	2	87							0.12	0.11	0.17	0.13	0.10	0.10	3.2	
<b>Total</b>	58.115	54.413																
<b>Avg</b>	1.875	1.755																
<b>Max</b>	2.335	2.256																
<b>Min</b>	1.520	1.290																

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:** Wallace Utter **Certificate No. and Grade:** WO0012234, A **Date:** August 1, 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 Corsicana  
PWS ID No.: 1750002

PLANT NAME  
OR NUMBER: Lake Halbert WTP  
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																	
1	0.12	X	0.15	X	X	X	0.10	X													
2	0.08	X	0.08	X	X	X	0.08	X													
3	0.08	X	0.08	X	0.09	0.09	0.05	X													
4	0.15	0.15	0.08	X	0.10	X	0.06	X													
5	0.12	X	0.16	0.16	0.10	X	0.07	X													
6	X	X	0.16	X	0.19	0.19	0.13	X													
7	0.25	0.23	0.14	X	0.15	X	0.13	X													
8	0.26	0.26	0.27	0.27	X	X	0.08	0.05													
9	0.19	0.19	X	X	0.29	0.29	0.20	0.18													
10	0.26	0.26	0.17	0.17	0.14	0.14	0.22	0.16													
11	0.15	X	0.16	X	0.21	0.21	X	X													
12	0.15	0.08	0.13	0.10	0.15	0.12	X	X													
13	0.08	X	0.10	X	0.13	X	0.10	0.06													
14	0.09	0.08	0.11	X	0.06	X	0.10	X													
15	0.08	0.07	0.14	0.11	X	X	0.08	0.06													
16	0.10	0.10	0.11	0.10	X	X	0.09	0.08													
17	X	X	0.11	0.11	0.14	0.11	0.11	X													
18	X	X	0.14	X	X	X	0.10	X													
19	0.11	0.11	0.12	X	X	X	0.12	X													
20	0.11	X	0.08	0.08	X	X	0.10	X													
21	0.11	X	0.07	X	X	X	0.15	0.14													
22	0.09	0.09	0.06	X	X	X	0.14	X													
23	0.10	X	X	X	X	X	0.10	X													
24	X	X	0.07	X	X	X	0.10	X													
25	0.16	0.16	0.06	X	X	X	0.09	X													
26	0.13	X	0.05	X	0.16	0.16	0.09	X													
27	0.13	X	0.13	0.13	0.15	X	0.10	X													
28	0.16	0.16	0.12	X	0.18	0.18	0.11	X													
29	0.12	X	0.11	0.11	0.14	X	0.17	X													
30	0.09	0.09	0.11	X	0.11	0.11	0.12	X													
31	0.08	X	0.09	0.09	0.11	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										
	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:

*Walter ...*

Certificate No. and Grade: WO0012234, A

Date: August 1, 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 Corsicana  
PWS ID No.: 1750002

PLANT NAME OR NUMBER: Lake Halbert WTP  
Month: July Year: 2012

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	NA D1								
	FCL D2	1.5	2.100	26.0	6.7				
	CLA D3	2.2	2.100	27.0	7.5	4.09	97.11	8.19	
	D4							(G)	
	D5								
2	NA D1								
	FCL D2	1.9	1.900	27.0	6.7				
	CLA D3	2.9	1.900	27.0	7.7	5.91	145.70	11.81	
	D4							(G)	
	D5								
3	NA D1								
	FCL D2	1.4	1.900	26.0	7.0				
	CLA D3	3.2	1.900	27.0	7.8	3.92	100.41	7.84	
	D4							(G)	
	D5								
4	NA D1								
	FCL D2	1.5	1.900	27.0	7.0				
	CLA D3	1.9	1.900	27.0	7.8	4.33	114.95	8.65	
	D4							(G)	
	D5								
5	NA D1								
	FCL D2	1.5	2.400	27.0	7.1				
	CLA D3	1.9	2.400	28.0	7.8	3.30	91.02	6.61	
	D4							(G)	
	D5								
6	NA D1								
	FCL D2	1.7	2.400	28.0	6.5				
	CLA D3	2.3	2.400	28.0	7.1	4.87	110.56	9.74	
	D4							(G)	
	D5								
7	NA D1								
	FCL D2	1.4	2.400	28.0	6.9				
	CLA D3	2.8	2.400	28.0	7.3	3.64	91.21	7.28	
	D4							(G)	
	D5								
8	NA D1								
	FCL D2	1.0	2.400	27.0	7.0				
	CLA D3	2.4	2.400	27.0	7.6	2.47	60.85	4.94	
	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	NA D1								
	FCL D2	1.4	2.300	27.0	7.2				
	CLA D3	1.6	2.300	26.0	7.9	3.12	88.58	6.25	
	D4							(G)	
	D5								
10	NA D1								
	FCL D2	1.0	2.600	27.0	6.8				
	CLA D3	1.0	2.600	27.0	7.2	2.37	55.96	4.73	
	D4							(G)	
	D5								
11	NA D1								
	FCL D2	1.7	1.800	27.0	6.9				
	CLA D3	2.4	1.800	27.0	7.8	5.28	137.56	10.56	
	D4							(G)	
	D5								
12	NA D1								
	FCL D2	1.8	1.800	27.0	6.7				
	CLA D3	1.9	1.800	27.0	7.8	5.90	145.52	11.79	
	D4							(G)	
	D5								
13	NA D1								
	FCL D2	1.6	1.800	27.0	6.9				
	CLA D3	1.2	1.800	27.0	7.3	4.94	129.25	9.87	
	D4							(G)	
	D5								
14	NA D1								
	FCL D2	1.2	1.800	27.0	6.7				
	CLA D3	2.0	1.800	27.0	7.3	4.23	97.17	8.45	
	D4							(G)	
	D5								
15	NA D1								
	FCL D2	1.2	1.800	27.0	7.0				
	CLA D3	1.4	1.800	28.0	7.4	3.76	97.06	7.51	
	D4							(G)	
	D5								
16	NA D1								
	FCL D2	1.6	1.800	27.0	6.7				
	CLA D3	2.8	1.800	28.0	7.6	5.43	129.63	10.86	
	D4							(G)	
	D5								

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

SUBMITTED BY: William [Signature] Certificate No. WO0012234, A and Grade: WO0012234, A Date: August 1, 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 Corsicana

PLANT NAME OR NUMBER: Lake Halbert WTP

PWS ID No.: 1750002

Month: July

Year: 2012

## DISINFECTION PROCESS PARAMETERS

### APPROVED CT STUDY PARAMETERS

### PERFORMANCE STANDARDS

Parameters	Disinfection Zones					Log Inactivations	
	D1	D2	D3	D4	D5	Giardia lamblia Cysts	Virus
Flow Rate (MGD)	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
17	NA D1								
	FCL D2	1.6	1.800	27.0	6.9				
	CLA D3	3.1	1.800	28.0	7.2	5.08	129.70	10.17	
	D4							(G)	
	D5								
18	NA D1								
	FCL D2	1.3	1.800	28.0	6.8				
	CLA D3	3.9	1.800	28.0	7.9	4.82	113.22	9.63	
	D4							(G)	
	D5								
19	NA D1								
	FCL D2	1.8	1.800	28.0	6.9				
	CLA D3	3.7	1.800	28.0	7.6	6.01	156.38	12.02	
	D4							(G)	
	D5								
20	NA D1								
	FCL D2	1.0	1.800	27.0	6.9				
	CLA D3	3.4	1.800	27.0	7.2	3.49	81.35	6.97	
	D4							(G)	
	D5								
21	NA D1								
	FCL D2	1.7	1.800	28.0	6.9				
	CLA D3	3.7	1.800	28.0	7.5	5.75	147.74	11.50	
	D4							(G)	
	D5								
22	NA D1								
	FCL D2	1.3	1.800	28.0	6.9				
	CLA D3	3.5	1.800	28.0	7.4	4.62	113.13	9.24	
	D4							(G)	
	D5								
23	NA D1								
	FCL D2	1.2	1.800	27.0	7.0				
	CLA D3	3.3	1.800	28.0	7.4	3.91	97.50	7.81	
	D4							(G)	
	D5								
24	NA D1								
	FCL D2	1.2	1.800	27.0	6.9				
	CLA D3	3.7	1.800	18.0	7.6	3.96	97.17	7.92	
	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	NA D1								
	FCL D2	1.2	1.800	27.0	7.0				
	CLA D3	3.6	1.800	28.0	7.5	3.93	97.57	7.86	
	D4							(G)	
	D5								
26	NA D1								
	FCL D2	1.6	1.800	28.0	6.9				
	CLA D3	3.4	1.800	28.0	7.6	5.46	139.03	10.91	
	D4							(G)	
	D5								
27	NA D1								
	FCL D2	1.8	2.000	28.0	6.9				
	CLA D3	3.5	2.000	28.0	7.6	5.40	140.70	10.79	
	D4							(G)	
	D5								
28	NA D1								
	FCL D2	1.6	2.000	28.0	6.9				
	CLA D3	3.5	2.000	28.0	7.3	4.92	125.15	9.83	
	D4							(G)	
	D5								
29	NA D1								
	FCL D2	1.5	2.300	28.0	6.9				
	CLA D3	3.6	2.300	28.0	7.5	4.07	102.08	8.13	
	D4							(G)	
	D5								
30	NA D1								
	FCL D2	1.5	2.300	28.0	6.7				
	CLA D3	3.4	2.300	29.0	6.9	4.35	102.09	8.70	
	D4							(G)	
	D5								
31	NA D1								
	FCL D2	1.4	2.300	28.0	6.7				
	CLA D3	3.9	2.300	29.0	7.4	4.14	95.42	8.28	
	D4							(G)	
	D5								
						Max	6.01	156.38	
						Min	2.37	55.96	
						Avg	4.43	110.67	
						SD	0.95	24.62	

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

SUBMITTED BY: William [Signature]

Certificate No. and Grade: W00012234, A

Date: August 1, 2012

# 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

PLANT NAME OR NUMBER: Lake Halbert WTP  
 Month: July Year: 2012

Type of treatment:  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						<i>calculated</i>	<i>calculated from matrix</i>	
1	7/3	133	6.48	3.19	50.8	25	2.03			2.03
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
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26										
27										
28										
29										
30										
31										
Avg		133.00	6.48	3.19	50.77		2.03			2.03
Max		133.00	6.48	3.19	50.77		2.03			2.03
Min		133.00	6.48	3.19	50.77		2.03			2.03

### TOTAL ORGANIC CARBON (TOC) REMOVAL SUMMARY

TOC Summary					Monthly Compliance Ratio
Raw Water Alkalinity	Raw Water TOC	Treated Water TOC	TOC % Removal	ACC # used	
133	6.48	3.19	50.8	NA	2.03

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: *William W. [Signature]*

Certificate No. and Grade: WO0012234, A

Date: August 1, 2012

**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