

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: Navarro Mills

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: January 2014

Certificate No. & Grade: WO0004220, A

Date: February 3, 2014

TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	<u>186</u>	Number of 4-hour periods when plant was off-line:	<u>0</u>	
Number of readings above 0.10 NTU:	<u>2</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 days with readings above 1.0 NTU:	<u>0</u> (2)	
Number of readings above 1.0 NTU:	<u>0</u>	Number of days with readings above 5.0 NTU:	<u>0</u> (3)	
Maximum allowable turbidity level:	<u>0.3</u>			
Percentage of readings above this limit:	<u>0.0</u> % (1)			
Statistical Summary	Maximum turbidity reading:	<u>0.11</u> NTU	Average turbidity value:	<u>0.08</u> NTU
	Minimum turbidity reading:	<u>0.06</u> NTU	Standard deviation:	<u>0.009</u> NTU
	CFE 95 th percentile value:	<u>0.09</u> NTU	IFE 95 th percentile:	<u>0.180</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>2.52</u>	
Number of days with a low CT for more than 4.0 consecutive hours:	<u>0</u> (4)	Average log inactivation for viruses:	<u>21.88</u>	
		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:	<u>0.5</u> 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>61</u>	(at least 31 required) (8)	
Average disinfectant residual value:	<u>2.91</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 Corsicana

PLANT NAME OR NUMBER: Navarro Mills

PWS ID No.: 1750002

Connections: 10,824

Month: January Year: 2014

Population: 23,770

PERFORMANCE DATA																		
Date	Raw Water Pumpage (MGD)	Treated Water Pumpage (MGD)	RAW WATER ANALYSES		SETTLED WATER TURBIDITY (Mandatory 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	5.300	4.222	23	106	0.7	0.8	0.9	1.1	0.8	0.8	0.07	0.07	0.07	0.07	0.07	0.07	3.2	
2	5.310	4.483	20	106	0.8	0.8	0.9	0.9	0.9	0.8	0.07	0.07	0.08	0.08	0.07	0.08	3.2	
3	5.450	4.449	20	107	0.6	0.8	0.8	1.0	0.8	0.8	0.08	0.08	0.09	0.09	0.09	0.09	3.4	
4	5.140	4.029	22	110	0.7	0.8	0.9	1.0	0.8	0.8	0.08	0.08	0.09	0.08	0.08	0.08	3.3	
5	5.200	4.165	22	110	0.7	0.8	0.8	0.9	0.8	0.8	0.07	0.08	0.07	0.07	0.08	0.08	3.0	
6	5.990	5.538	21	109	0.8	0.8	0.9	0.8	0.8	0.7	0.07	0.07	0.06	0.06	0.06	0.07	1.9	
7	7.500	5.785	20	111	0.9	1.0	1.0	1.1	1.1	1.0	0.07	0.07	0.07	0.07	0.09	0.09	1.9	
8	8.670	5.758	21	110	0.9	0.9	1.2	1.1	1.2	0.9	0.08	0.08	0.08	0.08	0.09	0.08	2.7	
9	7.120	4.265	23	112	0.6	0.7	0.8	0.8	0.8	0.7	0.07	0.08	0.08	0.07	0.09	0.07	3.4	
10	5.300	5.408	22	111	0.7	0.7	0.9	0.9	0.9	0.8	0.07	0.07	0.07	0.08	0.07	0.08	3.4	
11	5.190	3.810	19	112	0.7	0.7	0.7	0.7	0.6	0.6	0.08	0.07	0.07	0.07	0.07	0.07	3.4	
12	5.320	4.307	20	111	0.5	0.7	0.8	0.8	0.6	0.6	0.08	0.07	0.07	0.06	0.07	0.07	3.3	
13	5.940	4.653	22	113	0.7	0.7	0.9	0.7	0.8	0.6	0.07	0.07	0.07	0.06	0.06	0.06	3.3	
14	7.390	5.309	22	113	0.7	1.0	1.0	1.1	0.9	0.9	0.07	0.07	0.08	0.07	0.08	0.08	3.5	
15	6.130	5.062	22	112	0.7	1.0	1.0	1.0	0.9	0.8	0.08	0.08	0.08	0.08	0.09	0.08	3.5	
16	5.310	4.103	22	113	0.7	0.8	0.9	0.9	0.8	0.8	0.08	0.08	0.08	0.09	0.10	0.09	3.3	
17	5.370	4.385	22	113	0.7	1.0	0.7	1.1	0.8	0.8	0.08	0.09	0.11	0.10	0.10	0.09	3.2	
18	5.290	4.028	22	114	0.8	0.9	0.8	1.0	0.7	0.7	0.09	0.09	0.08	0.08	0.11	0.09	3.4	
19	5.320	4.116	25	115	0.8	x	0.9	1.0	0.7	0.8	0.09	0.09	0.08	0.07	0.08	0.08	3.4	
20	5.040	4.440	24	114	0.8	x	1.0	0.8	0.8	0.7	0.08	0.09	0.07	0.07	0.07	0.07	3.3	
21	5.030	4.071	23	113	0.9	x	0.9	1.0	0.9	0.7	0.07	0.08	0.07	0.07	0.07	0.07	3.1	
22	5.100	4.054	27	114	0.9	x	1.0	1.0	0.8	0.8	0.07	0.07	0.07	0.08	0.08	0.08	3.0	
23	5.140	4.441	28	113	1.0	x	1.0	1.2	0.9	0.9	0.08	0.08	0.08	0.08	0.08	0.08	3.1	
24	5.250	4.140	24	114	0.8	0.8	0.8	0.9	0.8	0.7	0.08	0.08	0.08	0.08	0.09	0.09	3.1	
25	5.300	3.942	21	115	0.6	0.9	0.9	0.8	0.7	0.6	0.09	0.08	0.09	0.09	0.09	0.09	3.1	
26	5.370	4.894	22	116	0.6	0.7	0.9	0.8	0.7	0.7	0.09	0.08	0.08	0.08	0.08	0.08	3.0	
27	5.340	3.938	23	117	0.9	0.9	1.0	0.9	0.9	0.7	0.08	0.08	0.08	0.08	0.08	0.08	3.0	
28	5.490	4.143	26	115	0.7	0.8	0.8	0.9	0.8	0.7	0.08	0.08	0.08	0.08	0.09	0.08	3.2	
29	5.460	4.360	25	116	0.7	0.9	0.9	0.9	0.8	0.8	0.08	0.09	0.08	0.08	0.08	0.08	2.8	
30	5.540	4.120	28	118	0.8	1.0	1.2	1.0	0.9	0.8	0.08	0.08	0.08	0.07	0.08	0.08	3.1	
31	5.870	4.694	24	116	0.6	0.8	1.0	1.0	0.8	0.8	0.10	0.09	0.09	0.09	0.09	0.08	3.1	
Total	176.170	139.112																
Avg	5.683	4.487																
Max	8.670	5.785																
Min	5.030	3.810																

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: WO0004220, A Date: February 3, 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
PWS ID No.: 1750002

PLANT NAME
OR NUMBER: Navarro Mills
Month: January 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																
1	0.08	x	x	x	x	x	0.11	x	0.11	x	0.18	0.11								
2	0.09	x	x	x	0.18	0.12	0.11	x	x	x	0.10	x								
3	0.07	x	x	x	0.11	x	x	x	x	x	0.09	x								
4	0.07	x	x	x	0.09	x	x	x	x	x	0.08	x								
5	0.07	x	x	x	0.08	x	x	x	x	x	0.08	x								
6	0.07	x	0.17	0.10	0.08	x	x	x	x	x	0.08	x								
7	0.07	x	0.11	x	0.08	x	0.21	0.13	x	x	0.09	x								
8	x	x	0.10	x	0.08	x	0.12	x	0.17	0.10	0.08	x								
9	x	x	0.07	x	0.07	x	0.08	x	0.09	x	x	x								
10	x	x	0.07	x	x	x	0.08	x	0.09	x	x	x								
11	x	x	0.12	x	x	x	0.11	x	0.09	x	x	x								
12	x	x	0.23	x	x	x	0.11	x	0.08	x	x	x								
13	0.14	0.11	0.23	x	x	x	0.18	x	0.12	x	x	x								
14	0.11	x	0.20	x	x	x	0.12	x	0.12	x	0.15	0.12								
15	0.10	x	x	x	x	x	0.11	x	0.08	x	0.12	x								
16	0.10	x	0.17	0.12	x	x	0.09	x	x	x	0.10	x								
17	0.10	x	0.12	x	x	x	x	x	x	x	0.10	x								
18	0.10	x	0.10	x	x	x	x	x	x	x	0.10	x								
19	0.07	x	0.08	x	x	x	x	x	x	x	0.08	x								
20	0.11	x	0.09	x	x	x	x	x	x	x	0.10	x								
21	0.10	x	0.08	x	x	x	x	x	x	x	0.08	x								
22	0.09	x	0.17	x	0.19	0.13	x	x	x	x	0.11	x								
23	x	x	0.08	x	0.12	x	x	x	x	x	0.09	x								
24	x	x	0.09	x	0.11	x	x	x	0.17	0.13	0.11	x								
25	x	x	0.07	x	0.10	x	x	x	0.12	x	x	x								
26	x	x	0.15	x	0.09	x	x	x	0.10	x	x	x								
27	x	x	x	x	0.09	x	0.11	x	0.10	x	x	x								
28	x	x	x	x	0.08	x	0.11	x	0.09	x	x	x								
29	x	x	x	x	0.08	x	0.11	x	0.09	x	x	x								
30	x	x	x	x	0.09	x	0.10	x	0.10	x	0.17	0.13								
31	0.15	0.12	x	x	x	x	0.09	x	0.08	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	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: WO0004220, A Date: February 3, 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
PWS ID No.: 1750002

PLANT NAME OR NUMBER: Navarro Mills
Month: January Year: 2014

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)	20.250	20.250	20.250			0.5		2.0	
T ₁₀ (minutes)	109.1	13.0	100.0						

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	0.6	5.500	10.0	7.0				
	CLA D3	3.4	5.500	10.0	7.7	2.94	25.37	5.88	
	D4							(G)	
	D5								
2	NA D1								
	FCL D2	0.5	5.600	10.0	7.1				
	CLA D3	3.4	5.600	10.0	7.9	2.73	21.44	5.46	
	D4							(G)	
	D5								
3	NA D1								
	FCL D2	0.6	5.600	10.0	7.1				
	CLA D3	3.4	5.600	10.0	7.9	2.86	24.91	5.72	
	D4							(G)	
	D5								
4	NA D1								
	FCL D2	0.5	5.200	10.0	7.1				
	CLA D3	3.3	5.600	10.0	7.6	2.72	22.66	5.45	
	D4							(G)	
	D5								
5	NA D1								
	FCL D2	0.6	5.500	9.0	7.1				
	CLA D3	3.0	5.500	10.0	7.9	2.61	23.46	5.22	
	D4							(G)	
	D5								
6	NA D1								
	FCL D2	0.6	7.300	8.0	7.1				
	CLA D3	2.7	7.300	10.0	7.8	1.79	16.40	3.58	
	D4							(G)	
	D5								
7	NA D1								
	FCL D2	0.5	8.500	8.0	7.1				
	CLA D3	3.0	8.500	9.0	7.6	1.54	12.17	3.08	
	D4							(G)	
	D5								
8	NA D1								
	FCL D2	0.5	8.800	8.0	7.0				
	CLA D3	3.3	8.800	9.0	7.7	1.61	11.97	3.22	
	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	0.7	8.700	8.0	7.0				
	CLA D3	3.4	8.700	9.0	7.7	1.81	16.07	3.63	
	D4							(G)	
	D5								
10	NA D1								
	FCL D2	0.6	5.600	10.0	7.1				
	CLA D3	3.4	5.600	9.0	7.3	2.78	24.64	5.57	
	D4							(G)	
	D5								
11	NA D1								
	FCL D2	0.5	5.500	10.0	7.1				
	CLA D3	3.5	5.500	10.0	7.6	2.84	21.95	5.68	
	D4							(G)	
	D5								
12	NA D1								
	FCL D2	0.6	5.500	10.0	7.0				
	CLA D3	3.3	5.500	10.0	7.7	2.88	25.25	5.76	
	D4							(G)	
	D5								
13	NA D1								
	FCL D2	0.5	7.600	10.0	7.0				
	CLA D3	3.5	7.600	10.0	7.8	2.08	15.88	4.15	
	D4							(G)	
	D5								
14	NA D1								
	FCL D2	0.6	7.600	10.0	7.0				
	CLA D3	3.5	7.600	11.0	7.5	2.23	18.67	4.47	
	D4							(G)	
	D5								
15	NA D1								
	FCL D2	0.6	7.600	10.0	7.0				
	CLA D3	3.5	7.600	10.0	7.4	2.17	18.45	4.34	
	D4							(G)	
	D5								
16	NA D1								
	FCL D2	0.5	5.500	10.0	7.1				
	CLA D3	3.3	5.500	10.0	7.9	2.72	21.71	5.44	
	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: _____ Certificate No. and Grade: WO0004220, A Date: February 3, 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
 PWS ID No.: 1750002
 Type of treatment: Conventional Unconventional explain: _____

PLANT NAME OR NUMBER: Navarro Mills
 Month: January Year: 2014

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	1/7	112	5.05	3.75	25.7	35	0.74	14.7	1.8	1.75
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		112.00	5.05	3.75	25.74		0.74		1.8	1.75
Max		112.00	5.05	3.75	25.74		0.74		1.8	1.75
Min		112.00	5.05	3.75	25.74		0.74		1.8	1.75

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	
112	5.05	3.75	25.7	NA	1.75

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: WO0004220, A Date: February 3, 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: Navarro Mills
Month: January 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			Q2			Q3			Q4		
	01/2013	02/2013	03/2013	04/2013	05/2013	06/2013	07/2013	08/2013	09/2013	10/2013	11/2013	12/2013	
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	5.05											
	Month/Year	Q1			Q2			Q3			Q4		
	01/2013	02/2013	03/2013	04/2013	05/2013	06/2013	07/2013	08/2013	09/2013	10/2013	11/2013	12/2013	
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		
	01/2013	02/2013	03/2013	04/2013	05/2013	06/2013	07/2013	08/2013	09/2013	10/2013	11/2013	12/2013	
	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 2013: <input type="text"/> mg/L HAA5 RAA for the 4 quarter that end December 2013: <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 2013: <input type="text"/> mg/L HAA5 RAA for the 4 quarters that end December 2013: <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		
	01/2013	02/2013	03/2013	04/2013	05/2013	06/2013	07/2013	08/2013	09/2013	10/2013	11/2013	12/2013	
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 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			Q2			Q3			Q4		
01/2013	02/2013	03/2013	04/2013	05/2013	06/2013	07/2013	08/2013	09/2013	10/2013	11/2013	12/2013	
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		
	01/2013	02/2013	03/2013	04/2013	05/2013	06/2013	07/2013	08/2013	09/2013	10/2013	11/2013	12/2013	
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		
01/2013	02/2013	03/2013	04/2013	05/2013	06/2013	07/2013	08/2013	09/2013	10/2013	11/2013	12/2013	
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: WO0004220, A Date: February 3, 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
 PWS ID No.: 1750002

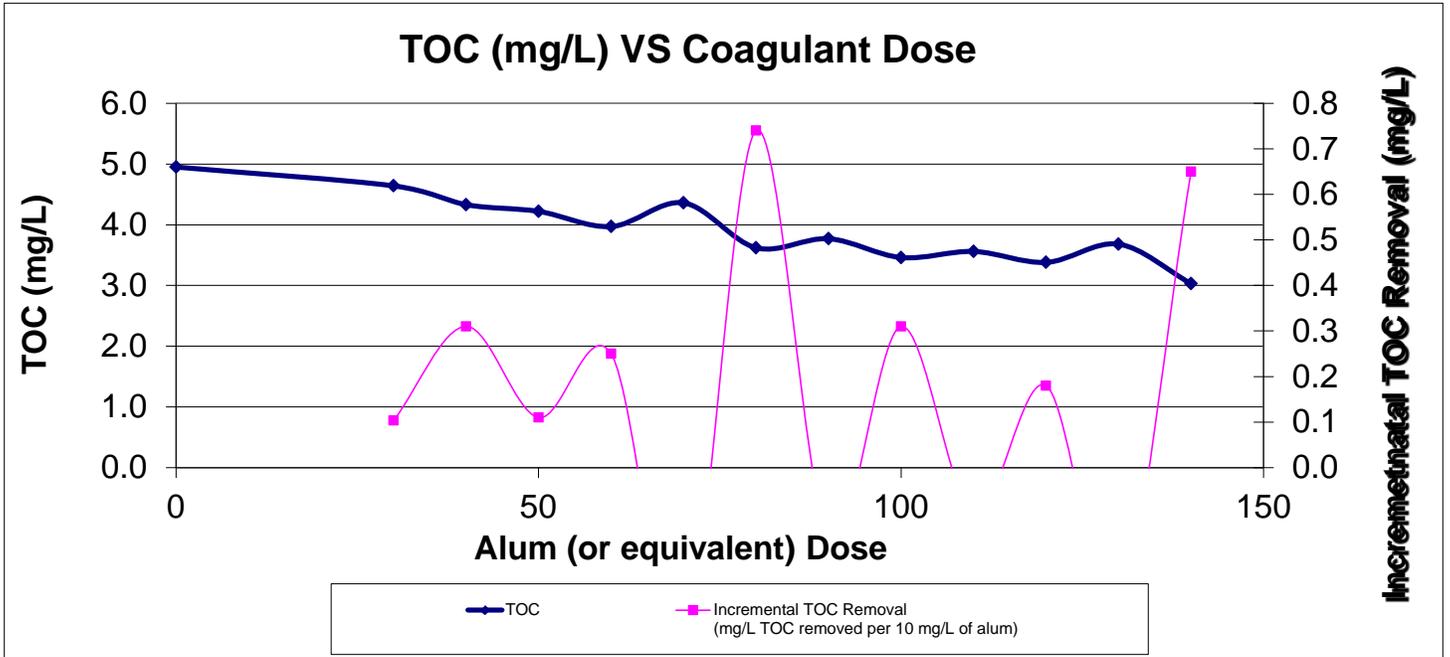
PLANT NAME OR NUMBER: Navarro Mills
 DATE OF JAR TEST: January 13, 2014

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)
Navarro Mills	Alum	108.00	NA		NA		Caustic	18.00

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	NA		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	30	1.50	1.00	2.50	Target pH (based on raw water alkalinity)	7.9	4.6	0.1	6.3
2	40	2.00	2.00	3.50		7.6	4.3	0.3	12.5
3	50	2.50	3.00	4.50		7.6	4.2	0.1	14.7
4	60	3.00	4.00	5.50		7.6	4.0	0.3	19.8
5	70	3.50	5.00	6.50		7.7	4.4	-0.4	bad data point
6	80	4.00	6.00	7.50		7.6	3.6	0.7	26.9
7	90	4.50	7.00	8.50		7.6	3.8	-0.2	bad data point
8	100	5.00	8.00	9.50		6.3	7.7	3.5	30.1
9	110	5.50	9.00	10.50		7.6	3.6	-0.1	bad data point
10	120	6.00	10.00	11.50		7.6	3.4	0.2	31.7
11	130	6.50	11.00	12.50		7.5	3.7	-0.3	bad data point
12	140	7.00	12.00	13.50		7.5	3.0	0.7	38.8

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:	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: WO0004220, A