

# 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: December 2008

Certificate No. & Grade: WO0004220 A

Date: January 5, 2009

### TREATMENT PLANT PERFORMANCE

Total number of turbidity readings:	<u>162</u>	Number of 4-hour periods when plant was off-line:	<u>24</u>
Number of readings above 0.10 NTU:	<u>3</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 readings above 0.5 NTU:	<u>0</u>		
Number of readings above 1.0 NTU:	<u>0</u>		
Maximum allowable turbidity level:	<u>0.3</u>	Number of days with readings above 1.0 NTU:	<u>0</u> (2)
Percentage of readings above this limit:	<u>0.0</u> % (1)	Number of days with readings above 5.0 NTU:	<u>0</u> (3)
Statistical Summary	Maximum turbidity reading:	<u>0.12</u> NTU	Average turbidity value:
	Minimum turbidity reading:	<u>0.05</u> NTU	<u>0.08</u> NTU
		Average turbidity value:	<u>0.012</u> NTU
		Standard deviation:	
Additional report(s) for individual filter monitoring required:	<input checked="" type="radio"/> NONE <input type="radio"/> Filter Profile <input type="radio"/> Filter Assessment <input type="radio"/> CPE		
Additional report(s) for individual filter monitoring submitted:	<input checked="" type="radio"/> NONE <input type="radio"/> Filter Profile <input type="radio"/> Filter Assessment <input type="radio"/> CPE		
#NAME?	Number of days when plant was on-line but individual filter turbidity data was not collected: <u>0</u>		
Number of days with a low CT for no more than 4.0 consecutive hours:	<u>0</u>	Average log inactivation for Giardia:	<u>NA</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>NA</u>
		Number of days when profiling data was not collected:	<u>31</u>
		Number of days when CT data was not collected:	<u>31</u>
Minimum disinfectant residual required leaving the plant:	<u>0.5</u> mg/L	<input checked="" type="radio"/> Free Chlorine <input type="radio"/> 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	<input checked="" type="radio"/> Free Chlorine <input type="radio"/> Total Chlorine	
Total number of readings this month:	<u>61</u>	Percentage of readings with a low residual this month:	<u>0.0</u> % (6A)
Average disinfectant residual value:	<u>2.40</u>	Percentage of readings with a low residual last month:	<u>0.0</u> % (6B)
Number of readings with a low residual:	<u>0</u>		
Number of readings with no detectable residual:	<u>0</u>		

### PUBLIC NOTIFICATION

TREATMENT TECHNIQUE VIOLATIONS	YES/NO	If YES, date when notice was given to:	
		COMMISSIONERS	CUSTOMERS*
Were more than 5.0% of the turbidity readings above the acceptable level? - see (1) above	No		
Were there any days with turbidity readings above 1.0 NTU? - see (2) above	No		
Were there any days with turbidity readings above 5.0 NTU? - see (3) above	No		
Were there any periods when the plant failed to meet the CT requirements for more than 4.0 consecutive hours? - see (4) above	No		
Were there any periods when the residuals leaving the plant fell below the acceptable level for more than 4.0 consecutive hours? - see (5) above	No		
Were more than 5.0% of the residuals in the distribution system below the acceptable level for two months in a row? - see (6A) and (6B) above	No		

Due by the end of the next business day.

\* Copies of each Public Notice must accompany this report.

**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

# 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: 11,050

Month: December Year: 2008

Population: 28,500

PERFORMANCE DATA																		
Date	Raw Water Pumpage (MGD)	Treated Water Pumpage (MGD)	RAW WATER ANALYSES		SETTLED WATER TURBIDITY (Optional Data)						FINISHED WATER QUALITY							
			NTU	Aik.	Basin No.						Turbidity						Lowest Residual	Time
					1	2	3	4	5	6	NTU1	NTU2	NTU3	NTU4	NTU5	NTU6		
1	4.060	4.015	44	111	0.4	0.3	0.4	0.4	0.3	0.3	X	X	X	0.06	0.05	0.06	2.8	
2	6.560	5.305	42	110	0.5	0.4	0.5	0.4	0.5	0.4	0.07	0.06	0.06	0.06	0.05	0.06	3.0	
3	6.920	4.920	42	109	0.4	0.4	0.4	0.5	0.5	0.4	0.07	0.07	0.05	0.06	0.06	0.08	2.9	
4	6.980	5.250	43	106	0.4	0.4	0.5	0.5	0.5	0.4	0.07	0.07	0.07	0.07	0.07	0.07	3.0	
5	6.370	4.968	46	109	0.4	0.3	0.5	0.4	0.4	0.3	0.08	0.08	0.07	0.07	0.07	0.07	3.1	
6	5.830	4.410	47	114	0.3	0.4	0.4	0.3	0.3	0.3	0.07	0.08	0.06	0.06	0.09	0.07	3.2	
7	5.770	4.440	45	115	0.3	0.3	0.4	0.3	0.3	0.3	0.07	0.07	0.05	0.05	0.07	0.07	3.1	
8	6.140	5.181	55	116	0.3	0.4	0.4	0.3	0.4	0.3	0.06	0.07	0.06	0.08	0.08	0.06	3.1	
9	6.600	4.632	40	112	0.4	0.5	0.5	0.5	0.4	0.4	0.09	0.07	0.06	0.07	0.07	0.07	3.0	
10	5.060	4.840	44	111	0.4	0.4	0.6	0.4	0.4	0.4	0.09	X	0.06	0.07	0.07	0.08	2.9	
11	6.610	5.464	42	109	0.3	0.4	0.5	0.4	0.4	0.5	0.10	0.09	0.07	0.07	0.07	0.07	3.2	
12	6.520	4.916	40	112	0.4	0.4	0.5	0.5	0.4	0.4	0.10	0.09	0.09	0.09	0.06	0.09	3.1	
13	6.550	5.672	42	116	0.5	0.4	0.5	0.5	0.5	0.4	0.08	0.07	0.07	0.07	0.07	0.08	3.1	
14	6.520	4.786	40	117	0.4	0.5	0.5	0.5	0.5	0.5	0.08	0.08	0.06	0.06	0.07	0.08	3.0	
15	4.430	3.799	49	112	0.4	0.4	0.5	0.4	0.4	0.5	X	X	0.07	0.07	0.08	0.08	2.9	
16	4.910	4.505	43	114	0.4	0.8	0.9	0.7	0.6	0.6	X	X	0.07	0.07	0.06	0.07	3.1	
17	6.690	5.068	42	113	0.4	0.3	0.5	0.4	0.4	0.3	0.09	0.08	0.07	0.06	0.07	0.07	3.1	
18	4.480	3.853	44	113	0.4	0.5	0.5	0.5	0.5	0.4	X	X	X	0.08	0.07	0.07	3.1	
19	6.710	5.176	45	113	0.3	0.3	0.5	0.5	0.3	0.3	0.09	0.09	0.07	0.07	0.07	0.07	3.0	
20	6.640	5.411	41	113	0.3	0.5	0.6	0.4	0.3	0.3	0.07	0.07	0.07	0.07	0.07	0.07	2.8	
21	6.630	5.680	43	115	0.3	0.3	0.4	0.3	0.4	0.3	0.08	0.08	0.07	0.06	0.07	0.07	2.8	
22	6.770	4.897	50	117	0.4	0.3	0.5	0.4	0.4	0.4	0.09	0.09	0.11	0.07	0.08	0.09	3.0	
23	4.180	3.337	43	113	0.4	0.5	0.7	0.6	0.6	0.6	X	X	X	0.07	0.07	0.08	2.9	
24	4.600	4.432	40	115	0.4	0.5	0.6	0.5	0.4	0.4	X	X	0.07	0.08	0.08	0.08	2.8	
25	4.890	3.804	41	114	0.4	0.4	0.5	0.6	0.5	0.5	X	X	0.08	0.08	0.08	0.08	2.8	
26	6.970	5.840	44	119	0.5	0.6	0.5	0.5	0.5	0.5	0.09	0.08	0.09	0.09	0.07	0.08	2.9	
27	5.660	4.555	40	116	0.4	0.5	0.4	0.4	0.4	0.4	0.09	0.09	X	0.07	0.08	0.08	2.8	
28	6.690	5.017	38	116	0.3	0.3	0.4	0.4	0.3	0.4	0.12	0.09	0.09	0.08	0.10	0.11	2.8	
29	4.450	4.564	34	115	0.4	0.4	0.6	0.5	0.5	0.4	X	X	X	0.09	0.09	0.09	2.8	
30	6.630	5.105	37	113	0.4	0.4	0.5	0.4	0.4	0.4	0.09	0.10	0.08	0.08	0.08	0.09	2.8	
31	4.420	3.609	33	113	0.4	0.5	0.5	0.4	0.4	0.5	X	X	0.07	0.08	0.09	0.08	2.9	
<b>Total</b>	182.240	147.451																
<b>Avg</b>	5.879	4.756																
<b>Max</b>	6.980	5.840																
<b>Min</b>	4.060	3.337																

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: January 5, 2009

# 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: December Year: 2008

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																		
1	0.07	X	0.06	X	X	X	0.08	X	0.08	X	0.09	X								
2	0.06	X	0.06	X	X	X	0.06	X	0.08	X	0.08	X								
3	0.06	X	0.17	0.10	0.09	0.08	0.06	X	0.07	X	0.08	X								
4	0.06	X	0.09	X	0.08	X	0.19	0.09	0.13	X	0.32	0.11								
5	0.15	0.07	0.07	X	0.10	X	0.07	X	X	X	0.09	X								
6	0.06	X	0.06	X	0.06	X	0.06	X	X	X	0.08	X								
7	0.06	X	0.07	X	0.24	0.08	0.06	X	X	X	0.08	X								
8	0.06	X	0.18	0.09	0.06	X	0.21	0.07	0.20	0.13	0.07	X								
9	0.06	X	0.08	X	0.07	X	0.07	X	0.11	X	0.70	0.09								
10	0.15	0.10	0.07	X	0.07	X	0.07	X	0.16	X	0.09	X								
11	0.07	X	0.14	0.09	0.06	X	0.07	X	0.08	X	0.08	X								
12	0.07	X	0.09	X	0.20	0.09	0.06	X	0.07	X	0.08	X								
13	0.06	X	0.07	X	0.07	X	0.23	0.08	0.24	0.09	0.08	X								
14	0.06	X	0.07	X	0.07	X	0.07	X	0.08	X	0.79	0.09								
15	X	X	0.07	X	0.07	X	0.07	X	0.08	X	0.10	X								
16	0.14	0.10	0.07	X	0.07	X	0.07	X	0.08	X	0.10	X								
17	0.08	X	0.19	0.09	0.06	X	0.07	X	0.08	X	0.09	X								
18	0.07	X	0.09	X	0.24	0.09	0.06	X	0.27	0.09	0.08	X								
19	0.06	X	0.07	X	0.07	X	0.11	0.08	0.10	X	0.08	X								
20	0.06	X	0.07	X	0.06	X	0.08	X	0.08	X	X	X								
21	0.06	X	0.06	X	0.06	X	0.07	X	0.07	X	0.16	0.09								
22	0.16	0.08	0.22	0.09	0.07	X	0.06	X	0.07	X	0.08	X								
23	0.07	X	0.09	X	0.21	0.09	0.06	X	X	X	0.08	X								
24	0.07	X	0.09	X	0.09	X	0.06	X	0.25	0.11	0.09	X								
25	0.07	X	0.08	X	0.08	X	X	X	0.11	X	0.08	X								
26	0.06	X	0.07	X	0.07	X	0.19	0.10	0.10	X	0.08	X								
27	0.06	X	0.07	X	0.07	X	0.08	X	0.08	X	0.17	0.11								
28	0.16	0.09	0.24	0.11	0.06	X	0.07	X	0.08	X	0.10	X								
29	0.08	X	0.10	X	0.20	0.09	0.07	X	0.08	X	0.09	X								
30	0.07	X	0.08	X	0.09	X	0.07	X	X	X	0.09	X								
31	0.07	X	0.08	X	0.08	X	X	X	0.18	0.13	0.09	X								

  

SUMMARY & COMPLIANCE ACTIONS	Criteria											Plant
	Filter No.											
	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
	Number of days with event(s) above 1.0 NTU this month											0
	Number of days with event(s) above 1.0 NTU last month											0
	Number of days with event(s) above 1.0 NTU two months ago											0
	Total number of days with event(s) above 1.0 NTU in three months											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 plant have an approved Corrective Action Plan?											N	
Is the plant required to submit a Filter Profile Report?											N	
Is the plant required to submit a Filter Assessment Report?											N	
Is the plant required to submit a Request for Compliance CPE?											N	

SUBMITTED BY: \_\_\_\_\_ Certificate No. and Grade: WO0004220 A Date: January 5, 2009

**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: December Year: 2008

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 <sub>10</sub> (minutes)	109.1	13.0	100.0				

PERFORMANCE DATA									
Date	DISINFECTION PROCESS DATA								
	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time=
1	NA D1								
	FCL D2	3.6	7.300	13.0	7.5				
	CLA D3	3.0	7.300	14.0	7.6				
	D4								
	D5								
2	NA D1								
	FCL D2	2.8	6.900	13.0	7.5				
	CLA D3	3.1	6.900	13.0	7.6				
	D4								
	D5								
3	NA D1								
	FCL D2	2.9	7.100	13.0	7.5				
	CLA D3	3.0	7.100	13.0	7.6				
	D4								
	D5								
4	NA D1								
	FCL D2	3.1	7.000	13.0	7.5				
	CLA D3	3.0	7.100	13.0	7.6				
	D4								
	D5								
5	NA D1								
	FCL D2	3.5	7.300	13.0	7.5				
	CLA D3	3.3	7.300	14.0	7.6				
	D4								
	D5								
6	NA D1								
	FCL D2	3.0	5.900	11.0	7.5				
	CLA D3	3.3	5.900	12.0	7.6				
	D4								
	D5								
7	NA D1								
	FCL D2	2.8	5.800	11.0	7.5				
	CLA D3	3.2	5.800	12.0	7.6				
	D4								
	D5								
8	NA D1								
	FCL D2	3.1	6.900	12.0	7.6				
	CLA D3	3.1	6.900	12.0	7.6				
	D4								
	D5								

PERFORMANCE DATA									
Date	DISINFECTION PROCESS DATA								
	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time=
9	NA D1								
	FCL D2	2.9	6.800	12.0	7.6				
	CLA D3	3.0	6.800	12.0	7.7				
	D4								
	D5								
10	NA D1								
	FCL D2	3.4	6.700	11.0	7.6				
	CLA D3	3.2	6.700	12.0	7.7				
	D4								
	D5								
11	NA D1								
	FCL D2	3.1	6.800	10.0	7.5				
	CLA D3	3.3	6.800	11.0	7.6				
	D4								
	D5								
12	NA D1								
	FCL D2	3.1	6.800	11.0	7.5				
	CLA D3	3.2	6.800	11.0	7.6				
	D4								
	D5								
13	NA D1								
	FCL D2	3.2	6.800	11.0	7.6				
	CLA D3	3.2	6.800	11.0	7.6				
	D4								
	D5								
14	NA D1								
	FCL D2	3.0	6.700	11.0	7.5				
	CLA D3	3.1	6.700	11.0	7.6				
	D4								
	D5								
15	NA D1								
	FCL D2	3.2	6.800	10.0	7.5				
	CLA D3	3.4	6.800	12.0	7.5				
	D4								
	D5								
16	NA D1								
	FCL D2	2.7	6.900	10.0	7.7				
	CLA D3	3.5	6.900	11.0	7.7				
	D4								
	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: W00004220 A Date: January 5, 2009

# 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  
PWS ID No.: 1750002

PLANT NAME OR NUMBER: Navarro Mills  
Month: December Year: 2008

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)	20.250	20.250	20.250			0.5	2.0
T <sub>10</sub> (minutes)	109.1	13.0	100.0				

PERFORMANCE DATA									
Date	DISINFECTION PROCESS DATA								
	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
17	NA D1								
	FCL D2	3.1	6.800	10.0	7.6				
	CLA D3	3.1	6.800	10.0	7.6				
	D4								
	D5								
18	NA D1								
	FCL D2	2.6	6.700	10.0	7.5				
	CLA D3	3.1	6.700	11.0	7.6				
	D4								
	D5								
19	NA D1								
	FCL D2	2.8	7.000	12.0	7.5				
	CLA D3	3.0	7.000	11.0	7.6				
	D4								
	D5								
20	NA D1								
	FCL D2	2.9	6.900	11.0	7.5				
	CLA D3	2.8	6.900	11.0	7.5				
	D4								
	D5								
21	NA D1								
	FCL D2	3.0	6.700	11.0	7.5				
	CLA D3	2.8	6.700	12.0	7.6				
	D4								
	D5								
22	NA D1								
	FCL D2	3.1	7.100	10.0	7.5				
	CLA D3	3.1	7.100	11.0	7.6				
	D4								
	D5								
23	NA D1								
	FCL D2	2.8	7.400	10.0	7.5				
	CLA D3	2.9	7.400	10.0	7.6				
	D4								
	D5								
24	NA D1								
	FCL D2	2.8	7.100	10.0	7.6				
	CLA D3	2.8	7.100	10.0	7.7				
	D4								
	D5								

PERFORMANCE DATA									
Date	DISINFECTION PROCESS DATA								
	Disinfectant	C (mg/L)	Flow (MGD)	Temp (°C)	pH	Giardia Log	Virus Log	Inact. Ratio	Time
25	NA D1								
	FCL D2	2.9	7.000	10.0	7.6				
	CLA D3	2.9	7.000	10.0	7.6				
	D4								
	D5								
26	NA D1								
	FCL D2	3.0	7.000	10.0	7.5				
	CLA D3	3.0	7.000	10.0	7.6				
	D4								
	D5								
27	NA D1								
	FCL D2	2.8	6.900	11.0	7.6				
	CLA D3	2.9	6.900	11.0	7.6				
	D4								
	D5								
28	NA D1								
	FCL D2	2.9	6.900	11.0	7.5				
	CLA D3	3.0	6.900	12.0	7.6				
	D4								
	D5								
29	NA D1								
	FCL D2	2.7	6.900	12.0	7.5				
	CLA D3	2.8	6.900	12.0	7.6				
	D4								
	D5								
30	NA D1								
	FCL D2	2.8	6.700	12.0	7.6				
	CLA D3	3.0	6.700	12.0	7.6				
	D4								
	D5								
31	NA D1								
	FCL D2	3.6	6.900	12.0	7.5				
	CLA D3	2.9	6.900	12.0	7.6				
	D4								
	D5								
						Max	NA	NA	
						Min	NA	NA	
						Avg	NA	NA	
						SD	NA	NA	

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: January 5, 2009