Annual Drinking Water Quality Report

TX1750024 NAVARRO MILLS WSC

Annual Water Quality Report for the period of January 1 to December 31, 2015

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

For more information regarding this report contact:

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NAVARRO MILLS WSC is Purchased Surface Water

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (254) 578-1618.

Sources of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPAs Safe Drinking Water Hotline at (800) 426-4791.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact the system's business office.

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; persons who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders, can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care providers. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800-426-4791).

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Information about Source Water Assessments

A Source Water Assessment for your drinking water source(s) is currently being conducted by the TCEQ and should be provided to us this year. The report will describe the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information in this assessment will allow us to focus our source water protection strategies.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: http://gis3.tceq.state.tx.us/swav/Controller/index.jsp?wtrsrc=

Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: http://dww.tceq.texas.gov/DWW

Source Water Name		Type of Water	Report Status	Location
SW FROM CORSICANA	CC FROM TX1750002 CITY OF	SW	_Active__	Navarro Mills Lake

Lead and Copper

Definitions:
Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.
Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09/29/2014	1.3	1.3	0.22	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	09/29/2014	0	15	1.6	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Water Quality Test Results

Definitions:	The following tables contain scientific terms and measures, some of which may require explanation.
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
Maximum Contaminant Level or MCL:	The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
Maximum Contaminant Level Goal or MCLG:	The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
Maximum residual disinfectant level or MRDL:	The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Maximum residual disinfectant level goal or MRDLG:	The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants tc control microbial contaminants.
MFL	million fibers per liter (a measure of asbestos)
na:	not applicable.
NTU	nephelometric turbidity units (a measure of turbidity)
pCi/L	picocuries per liter (a measure of radioactivity)
ppb:	micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
ppm:	milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
ppt	parts per trillion, or nanograms per liter (ng/L)
ppq	parts per quadrillion, or picograms per liter (pg/L)

Maximum Residual Disinfectant Levels

Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
Free Chlorine	2.43	1.4	3.92	4.0	< 4.0	mg/L	Our water is purchased from and treated by the City of Corsicana.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)*	2015	15	0 - 42.4	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2015	40	15.5 - 68.4	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Nitrate [measured as Nitrogen]	2015	0.0975	0.0975 - 0.0975	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Violations Table

Lead and Copper Rule

The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

Violation Type	Violation Begin	Violation End	Violation Explanation
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	10/01/2014	2015	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated. ***Samples were taken and received by the lab on 10/08/14**
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	10/01/2015	2015	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated. ***We are working with TCEQ on increased monitoring and will Be taking lead and copper samples this year.**
LEAD CONSUMER NOTICE (LCR)	12/30/2014	03/27/2015	We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results. ***Results were mailed to consumers on 03/25/15**

Public Notification Rule

The Public Notification Rule helps to ensure that consumers will always know if there is a problem with their drinking water. These notices immediately alert consumers if there is a serious problem with their drinking water (e.g., a boil water emergency).

Violation Type	Violation Begin	Violation End	Violation Explanation
PUBLIC NOTICE RULE LINKED TO VIOLATION	07/11/2013	2015	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.
PUBLIC NOTICE RULE LINKED TO VIOLATION	02/13/2015	03/27/2015	We failed to adequately notify you, our drinking water consumers, about a violation of the drinking water regulations.

City of Corsicana – Analytical Results

Turbidity and Toe 2015

Navarro Mills								lake Halbert							
NTU				TOC				NTU				TOC			
Month	Average	Highest	Compliance	RawTOC	TapTOC	Removal	Compliance	Month	Average	Highest	Compliance	RawTOC	TapTOC	Removal	Compliance
Jan	0.07	0.16	100	4.39	3.61	17.8	100	Jan	0.06	0.11	100	4.99	3.74	25.1	100
Feb	0.07	0.10	100	4.70	3.90	17.0	100	Feb	0.07	0.10	100	6.62	5.13	22.5	100
Mar	0.08	0.14	100	4.74	3.66	22.8	100	Mar	0.07	0.12	100	6.42	4.80	25.2	100
Apr	0.07	0.13	100	4.84	3.74	22.7	100	Apr	0.09	0.23	100	6.54	4.66	28.7	100
May	0.06	0.13	100	4.65	3.64	21.7	100	May	0.09	0.27	100	6.72	4.50	33.0	100
Jun	0.07	0.12	100	5.20	3.17	39.0	112	Jun	0.10	0.21	100	5.89	3.21	45.5	130
Jul	0.08	0.11	100	5.59	3.73	33.3	100	Jul	0.07	0.11	100	5.45	3.43	37.1	106
Aug	0.08	0.14	100	5.78	4.14	28.4	113	Aug	0.08	0.18	100	5.12	3.29	35.7	102
Sep	0.11	0.17	100	5.47	4.11	24.9	96	Sep	0.10	0.21	100	4.82	3.26	32.4	120
Oct	0.07	0.17	100	4.87	3.70	24.0	93	Oct	0.09	0.26	100	4.77	3.14	34.2	127
Nov	0.06	0.20	100	4.82	2.94	39.0	111	Nov	0.11	0.26	100	6.03	2.88	52.2 .	116
Dee	0.06	0.10	100	4.90	3.05	37.8	108	Dee	0.11	0.29	100	6.17	3.20	48.1	107
Average	0.07		100	5.00	3.62	27.4	102.8		0.09		100	5.80	3.77	35.0	109.0
			NTU	RawTOC	TapTOC	Removal									
Average Both Plants			0.08	5.40	3.69	31.2									
Lowest of compliance for NTU			100												
Lowest of compliance forTOC			100												
Highest NTU			0.29												

TTHM's 2015

Date of Samples	*1/28/2015*	*4/612015*	*7/29/2015*	*11/12/2015*	
Address of Sample	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Average of Quarters
4501 E HWY 31	28.6	53.6	78.3	80.3	60.2
2103 W 15th Ave	26.0	37.6	105.0	69.9	59.6
3500 Northpark	28.5	35.1	89.6	71.0	56.1
700 E 16th Ave	27.1	37.1	90.8	66.0	55.3
Average for each quarter	27.6	40.9	90.9	71.8	57.8

HaaS's 2015

Date of Samples	*1/2812015*	*4/612015*	*7/29/2015*	*11/12/2015*	
Address of Sample	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Average of Quarters
4501 E HWY 31	17.9	37.7	55.2	80.8	47.9
2103 W 15th Ave	15.5	22.9	66.2	62.0	41.7
3500 Northpark	19.0	22.1	75.5	64.2	45.2
700 E 16th Ave	15.1	22.1	48.5	25.5	27.8
Average for each quarter	16.9	26.2	61.4	58.1	40.6

Average Chlorine Residual 2015

Month	Average Residual (mg/L)
January	2.68
February	2.20
March	2.12
April	2.02
May	2.18
June	1.55
July	1.55
August	1.74
September	1.81
October	1.84
November	1.78
December	1.87
2015 Yearly Average	1.95 mg/L

Min reading	0.5 mg/l
Max Reading	4.8 mg/l

Detected Regulated Contaminates for 2015

EP2 Lake Halbert

VOC's	Detected Quantity	MC/L	Date Collected	Analytical Method
Cholroform	42.4 ug/l	N/A	8/6/2015	E524.2 GC/MS
Dibromidchloromethane	14.6 ug/l	N/A	8/6/2015	E524.2 GC/MS
Dibromochloromethane	3.30 ug/l	N/A	8/6/2015	E524.2 GC/MS
Inorganics				
Chloride	13.6 mg/l	300 mg/l	1/28/2015	E300.0 Anions
Fluoride	0.504 mg/l	4mg/1	1/28/2015	E300.0 Anions
Nitrate (as N)	0.0355	10 mg/l	1/28/2015	E300.0 Anions
Sulfate	61.7 mg/l	300 mg/l	1/28/2015	E300.0 Anions
Total Dissolved Solids	230 mg/l	1000 mg/l	1/28/2015	SM2s40C
Inorganics				
Metals Trace Elements				
Sodium Total	23.5 mg/l	20,000 mg/l	1/28/2015	E200.7 Metals, Trace
E200.8 ICP-MS				
Aluminum Total	0.026 mg/l	0.2 mg/l	1/28/2015	E200.8 IC-MS
Arsenic Total	0.00084 mg/l	0.01 mg/l	1/28/2015	E200.8 IC-MS
Barium Total	0.049 mg/l	2 mg/l	1/28/2015	E200.8 IC-MS
Chromium Total	0.00085 mg/l	0.1 mg/l	1/28/2015	E200.8 IC-MS
Copper Total	.0014 rng/l	1.3 mg/l	1/28/2015	E200.8 IC-MS
Manganese Total	.00037 mg/l	0.05 mg/l	1/28/2015	E200.8 IC-MS
Nickel Total	.00090 mg/l	.1 mg/l	1/28/2015	E200.8 IC-MS
Cyanide Total	0.0863 mg/l	0.2 mg/l	1/28/2015	E3ss.4 CN

Detected Regulated Contaminates for 2015

EP 1 Navarro Mills

sac Pesticide	Detected Quantity	MCL	Date Collected	Analytical Method
Atrazine	0.54 ug/l	3 ug/l	1/28/2015	E525.2 GC/MS
VOC's				
Cholroform	56.7 ug/l	N/A	8/6/2015	E524.2 GC/MS
Dibromidchloromethane	15.4 ug/l	N/A	8/6/2015	E524.2 GC/MS
Dibromochloromethane	2.85 ug/l	N/A	8/6/2015	E524.2 GC/MS
Inorganics				
Chloride	10.1 mg/l	300 mg/l	1/28/2015	E300.0 Anions
Fluoride	0.857 mg/l	4mg/1	1/28/2015	E300.0 Anions
Sulfate	42.5 mg/l	300 mg/l	1/28/2015	E300.0 Anions
Total Dissolved Solids	202 mg/l	1000 mg/l	1/28/2015	SM2540C
Inorganics				
Metals Trace Elements				
Sodium Total	19.6 mg/l	20,000 rng/l	1/28/2015	E200.7 Metals, Trace
E200.8 ICP-MS				
Aluminum Total	0.029 mg/l	0.2 mg/l	1/28/2015	E200.8 IC-MS
Antimony Total	0.00023 mg/l	0.006 mg/l	1/28/2015	E200.8 IC-MS
Arsenic Total	0.00087 mg/l	0.01 mg/l	1/28/2015	E200.8 IC-MS
Barium Total	0.048 mg/l	2 mg/l	1/28/2015	E200.8 IC-MS
Chromium Total	0.00082 mg/l	0.1 mg/l	1/28/2015	E200.8 IC-MS
Copper Total	.0021 mg/l	1.3 mg/l AL	1/28/2015	E200.8 IC-MS
Manganese Total	.00071 rng/l	0.05 mg/l	1/28/2015	E200.8 IC-MS
Nickel Total	.0013 mg/l	.1 mg/l	1/28/2015	E200.8 IC-MS
Selenium Total	.0011 mg/l	.05 mg/l	1/28/2015	E200.8 IC-MS
Heavy Metals				
Mercury Total	.000269 mg/l	.002 mg/l	1/28/2015	E245.1 Mercury
Cyanide Total	0.156 mg/l	0.2 mg/l	1/28/2015	E355.4 CN