

GRAND OAKS M.U.D.

2018 Annual Drinking Water Quality Report

PWS ID # 1700757

This is your water quality report from January 1, 2018 to December 31, 2018.

Phone No: 281-350-0895

En Espanol

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en espanol, por favor llame al telefono 281-350-0895.

OUR DRINKING WATER IS SAFE

This report is a summary of the quality of the water we provide to our customers. The analysis was made by using the data from the most recent U.S. Environmental Agency (USEPA) required tests and is presented in the following tables. We hope this information helps you become more knowledgeable about your drinking water.

Public Participation Opportunities concerning your water system may be made at regularly scheduled meetings on the fourth Tuesday of every other month at 12:00 p.m., 3200 Southwest Freeway, Suite 2600, Houston, Texas 77027, or you may contact Doug Jeffrey at TNG Utility Corp., phone # 281-350-0895, with any questions or concerns you may have.

Where do we get your drinking water?

Our drinking water is obtained from groundwater sources and provided by the City of Magnolia. Our water comes from water-bearing sands known as the Evangeline Aquifer.

The Texas Commission of Environmental Quality completed a Source Water Susceptibility for all drinking water systems that own their sources. This report describes the susceptibility and types of constituents that may come into contact with the drinking water source based on human activities and natural conditions. The system from which we purchase water our water received the assessment report. For more information on source water assessments and protection efforts at our system contact Katie Hargrove at TNG Utility Corp., phone # 281-350-0895, with any questions or concerns you may have.

Water Sources: Other sources of drinking water (both tap water and bottled water) can 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.

Contaminants that may be present in source water include: (i) microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; (ii) 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; (iii) pesticides and herbicides, which might

have a variety of sources such as agriculture, urban storm water runoff, and residential uses; (iv) 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 stormwater runoff, and septic systems; and (v) radioactive contaminants, which can be naturally-occurring or the result of oil and gas production and mining activities.

A Special Notice for the ELDERLY, INFANTS, CANCER PATIENTS, people with HIV/AIDS or other immune Problems:

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly, or Immuno-compromised persons such as those undergoing chemotherapy for cancer; those 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 provider. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the Safe Drinking Water Hotline (800-426-4791).

EPA website: www.epa.gov/safewater

All Drinking Water may Contain Contaminants

When drinking water meets federal standards there may not be any health based benefits to purchasing bottled water or point of use devices.

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 USEPA's Safe Drinking Water Hotline at (800-426-4791).

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



THE NEXT GENERATION OF
WATER AND WASTEWATER UTILITY SERVICES

About the Following Table

The following table contains all of the federally regulated or monitored chemical constituents which have been found in your drinking water. USEPA requires water systems to test up to 97 constituents. The data presented in the report is from the most recent testing done in accordance with the regulations.

Abbreviations and Definitions

Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Maximum Contaminant Level Goal (MCLG) - The level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Maximum Residual Disinfectant Level (MRDL) - The highest level of 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 (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 use of disinfectants to control microbial contamination.

Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.

Action Level (AL) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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.

MFL: million fibers per liter (a measure of asbestos)

ppm - milligrams per liter or parts per million-or one ounce in 7,350 gallons of water.

ppb - micrograms per liter or parts per billion-or one ounce in 7,350,000 gallons of water.

pCi/l - pico curies per liter (a measure of radioactivity)

N/A - not applicable

mrem - millirems per year (a measure of radiation absorbed by the body)

NTU - nephelometric turbidity units (a measure of turbidity)

ppt - parts per trillion, or nanograms per liter (ng/L)

ppq - parts per quadrillion, or picograms per liter (pg/L)

Grand Oaks M.U.D. - 2018 Drinking Water Quality Report Data

Inorganic Contaminants:

Collection Date	Constituent	Highest Detected Level at any Sampling Points	Range of Detected Levels	MCL	MCLG	Unit of Measure	Violation	Source of Contaminant
2018	Nitrate [measured as nitrogen]	0.03	0.03 - 0.03	10	10	ppm	No	Erosion of natural deposits. Runoff from fertilizer use; leaching from septic tank, sewage.

Disinfectant Residuals:

Year	Constituent	Average Level	Range of Detected Levels (low - high)	MRDL	MRDLG	Unit of Measure	Violation	Source of Disinfectant
2018	Chlorine Residual, Free	1.92	1.58 - 2.50	4	4	ppm	No	Disinfectant used to control microbes.

Disinfection By-Products:

Collection Date	Constituent	Average Detected Level at any Sampling Points	Range of Detected Levels	MCL	MCLG	Unit of Measure	Violation	Source of Contaminant
2018	Total Trihalomethanes (TTHM)	1	1.3-1.3	80	N/A	ppb	No	By-product of drinking water disinfection.

*The value in the Highest Level or Average Detected Level column is the highest average of all TTHM sample results collected at a location over a year.

Lead and Copper: - These samples are taken from the customer taps. 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.

Date Sampled	Constituent	The 90th * Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	MCLG	Violation	Source of Contaminant
8/08/16	Lead	1.1	0	15	ppb	0	No	Corrosion of household plumbing systems; Natural erosion.

* The 90th percentile of the Lead/ Copper analysis means the top 10% (highest sample results) of all samples collected.

Total Coliform: MONTHLY TESTS FOUND NO COLIFORM BACTERIA

Organics: TESTING WAIVED, NOT REPORTED, OR NONE DETECTED

Fecal Coliform: MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA

Turbidity: NOT REQUIRED

Recommended Additional Health Information for Lead in Drinking Water:

"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. This water supply is responsible for providing high quality drinking water, but cannot control the variety of materials used in home 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 by an approved laboratory. 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>."

Grand Oaks M.U.D. - 2018 Drinking Water Quality Report Data Continuation

Grand Oaks M.U.D. purchases groundwater from City of Magnolia and below is the constituents levels for the water they supply.

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
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Haloacetic Acids (HAA5)	2018	13	12.5 - 12.5	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
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* The value in the Highest Level or Average Detected column is the highest average of all HAA5 sample results collected at a location over a year'

Total Trihalomethanes (TTHM)	2018	13	12.9 - 12.9	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
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* The value in the Highest Level or Average Detected column is the highest average of all TTHM sample results collected at a location over a year'

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	04/10/2017	0.148	0.148 - 0.148	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	04/10/2017	0.32	0.32 - 0.32	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2018	0.02	0.02 - 0.02	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/ photon emitters	09/22/2015	7.3	7.3 - 7.3	0	50	pCi/L*	N	Decay of natural and man-made deposits.

*EPA considers 50 pCi/L to be the level of concern for beta particles.

Combined Radium 226/228	09/22/2015	1.36	1.36 - 1.36	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	09/22/2015	6	6 - 6	0	15	pCi/L	N	Erosion of natural deposits.
Uranium	09/22/2015	1.1	1.1 - 1.1	0	30	ug/l	N	Erosion of natural deposits.



Violations

Chlorine			
Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.			
Violation Type	Violation Begin	Violation End	Violation Explanation
Disinfectant Level Quarterly Operating Report (DLQOR).	10/01/2018	12/31/2018	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.

Mandatory Language for Monitoring and Reporting Violation

Failure to Submit a Disinfectant Level Quarterly Operating Report (DLQOR)

MONITORING, ROUTINE (DBP), MAJOR/CHLORINE

The **GRAND OAKS MUD** water system PWS ID 1700757 has violated the monitoring and reporting requirements set by Texas Commission on Environmental Quality (TCEQ) in Title 30, Texas Administrative Code (30 TAC), Section 290, Subchapter F. Public water systems are required to properly disinfect water before distribution, maintain acceptable disinfection residuals within the distribution system, monitor the disinfectant residual at various locations throughout the distribution system, and report the results of that monitoring to the TCEQ on a quarterly basis.

Results of regular monitoring are an indicator of whether or not your drinking water is safe from microbial contamination.

This violation occurred in the monitoring period(s) 10/01/2018 -12/31/2018, the report was received after the deadline.

We are taking the following actions to address this issue:

There was retraining on the deadlines for the report.

Please share this information with all people who drink this water, especially those who may not have received this notice directly (i.e., people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

If you have questions regarding this matter, you may contact **Katie Hargrove** at (281) 350-0895

**TNG Utility Corp.
P.O. Box 2749
Spring, TX 77383**

2018 Drinking Water Quality Report Enclosed

Grand Oaks M.U.D.

PRESORTED STANDARD US POSTAGE PAID SPRING, TX PERMIT #176
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