

## 2018 Consumer Confidence Report for Public Water System CITY OF HUDSON OAKS

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (682) 229-2400.

System: City of Hudson Oaks

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PWS ID No. TX1840006

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

The Hudson Oaks City Council meets on the fourth Thursday of each month at 7:00 p. m. at the City Hall building located at 210 Hudson Oaks Drive, Hudson Oaks, Texas 76087. For more information regarding the city council meetings contact City Secretary, Shelley Major at 682-229-2411. Public participation is encouraged.

THE CITY OF HUDSON OAKS provides treated Groundwater and Purchased Surface Water. Both sources are presented below.

### Definitions and Abbreviations

The following tables contain scientific terms and measures, some of which may require explanation.

Action Level:

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.

Avg:

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

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.

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 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 to control microbial contaminants.

MFL

million fibers per liter (a measure of asbestos)

mrem:

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

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.

ppq

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

ppt

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

Treatment Technique or TT:

A required process intended to reduce the level of a contaminant in drinking water.

## Information about your 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 EPA's 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**

The City of Hudson Oaks provides treated groundwater from the Trinity Aquifer in Parker County and purchases treated surface water from the City of Weatherford from Lake Benbrook in Tarrant County, Texas. The water quality data from the City of Weatherford and the City of Hudson Oaks are presented below.

**City of Weatherford 2018 Water Quality Data- PWS 1840005**

About the following tables: The following tables list all of the federally regulated or monitored constituents which have been found in your drinking water. The U.S.EPA requires water systems to test up to 97 different constituents.

<b>INORGANIC CONTAMINANTS</b>							
<i>Year</i>	<i>Contaminant</i>	<i>Highest Level at any Sampling Point</i>	<i>Range of Detected Levels</i>	<i>MCL</i>	<i>MCLG</i>	<i>Unit of Measure</i>	<i>Source of Contaminant</i>
2018	Barium	0.069	0.069	2	2	ppm	Erosion of natural deposits; Discharge of drilling wastes; Discharge from metal refineries.
2018	Fluoride	0.545	0.545	4	4	ppm	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
2018	Nitrate	0.0473	0.0473-0.0473	10	10	ppm	Erosion of natural deposits; Runoff from fertilizer use; Leaching from septic tanks, sewage.
2017	Gross Beta Emitters	4.2	4.2-4.2	50	0	pCi/l	Decay of natural and manmade deposits.

## SECONDARY AND OTHER CONSTITUENTS NOT REGULATED

(No associated adverse health effects)

**Secondary Constituents** – Many constituents, such as calcium, sodium or iron, which are often found in drinking water, can cause taste, color and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the state, nor the EPA.

Year	Constituent	Average of all Sampling Points	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Source of Constituent
2018	Total Dissolved Solids	228	228	228	1000	ppm	Total dissolved mineral constituents in water.
2018	Bicarbonate	133	133	133	n/a	ppm	Corrosion of carbonate rocks such as limestone.
2018	Total Alkalinity as CaCO <sub>3</sub>	133	133	133	n/a	ppm	Naturally occurring soluble mineral salts.
2018	Total Hardness as CaCO <sub>3</sub>	157	157	157	n/a	ppm	Naturally occurring calcium and magnesium.
2018	Sulfate	37.9	37.9	37.9	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2018	Sodium	28.9	28.9	28.9	n/a	ppm	Erosion of natural deposits; byproducts of oil field activity.
2018	Nickel	Not Detected	-	-	n/a	ppm	Erosion of natural deposits.
2018	Magnesium	12.8	12.8	12.8	n/a	ppm	Abundant naturally occurring element.
2018	Chloride	44.6	44.6	44.6	300	ppm	Abundant, naturally occurring element; used in water purification; byproduct of oil field activity
2018	Calcium	42.2	42.2	42.2	n/a	ppm	Abundant naturally occurring element.
2018	Aluminum	0.077	0.077	0.077	0.20	ppm	Abundant naturally occurring element.
2018	pH	8.35	8.35	8.35	n/a	units	Measure of corrosivity of water.
2018	Hardness as Ca/Mg	158	158	158	n/a	ppm	Naturally occurring calcium and magnesium

### UNREGULATED CONTAMINANTS

Bromoform, chloroform, dibromochloromethane, and bromodichloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

<i>Year or Range</i>	<i>Contaminant</i>	<i>Average Level</i>	<i>Minimum Level</i>	<i>Maximum Level</i>	<i>Unit of Measure</i>	<i>Source of Contaminant</i>
2018	Chloroform	4.69	4.69	4.69	ppb	Byproduct of drinking water disinfection
2018	Bromoform	5.32	5.32	5.32	ppb	Byproduct of drinking water disinfection
2018	Bromodichloromethane	9.77	9.77	9.77	ppb	Byproduct of drinking water disinfection
2018	Dibromochloromethane	14.7	14.7	14.7	ppb	Byproduct of drinking water disinfection

### TURBIDITY

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

<i>Year</i>	<i>Constituent</i>	<i>Highest Single Measurement</i>	<i>Lowest Monthly % of Samples Meeting Limits</i>	<i>Turbidity Limits</i>	<i>Unit of Measure</i>	<i>Source of Constituent</i>
2018	Turbidity	0.29	100%	0.3	NTU	Soil Runoff

**City of Hudson Oaks, PWS ID 1840006**

'No Source Water Assessment for your drinking water source(s) has been conducted by the TCEQ for your water system. The report describes the susceptibility and the 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 allows us to focus our source water protection strategies.'

**Coliform Bacteria**

Maximum Contaminant Level	Total Coliform Maximum	Highest No. of Positive	Fecal Coliform or E. Coli Maximum	Total No. of Positive E. Coli or Fecal	Violation	Likely Source of Contamination
0	1 positive monthly sample.	1		0	N	Naturally present in the environment.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
<b>Copper</b>	06/08/2016	1.3	1.3	0.1302	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

<b>Lead</b>	06/08/2016	0	15	4.8	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.
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**2018 Water Quality Test Results**

Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual	MCLG	MCL	Units	Violation	Likely Source of Contamination
<b>Haloacetic Acids (HAA5)</b>	2018	6	0 - 7.4	No goal for the total	60	ppb	N	By-product of drinking water disinfection.

\* 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'

<b>Total Trihalomethanes</b>	2018	18	0 - 23.5	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	MCLG	MCL	Units	Violation	Likely Source of Contamination
<b>Barium</b>	2018	0.13	0.13 - 0.13	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of

Chromium	2018	1.4	1.3 - 1.4	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	2018	0.429	0.125 - 0.429	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	1	0.162 - 1.44	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	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	2018	7.3	0 - 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	2018	1.85	0 - 1.85	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	2018	9	5 - 9	0	15	pCi/L	N	Erosion of natural deposits.
Uranium	2018	3.5	2.2 - 3.5	0	30	ug/l	N	Erosion of natural deposits.

Synthetic organic contaminants	Collection Date	Highest Level Detected	Range of Individual	MCLG	MCL	Units	Violation	Likely Source of Contamination
Di (2-ethylhexyl) phthalate	03/29/2017	0.5	0.5 - 0.5	0	6	ppb	N	Discharge from rubber and chemical factories.

#### Disinfectant Residual

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Source in Drinking Water
Free and Chloramine	2018	1.46	0.44 - 4.2	4	4	ppm	ppm	Water additive used to control microbes.