

# 2015 Annual Drinking Water Quality Report

#### En Espanol

Este informe incluye información importante sobre el agua potable. Sí tiene preguntas o comentarios sobre éste informe en español, favor de llamar al tel. [972] 625-1756 para hablar con una persona bilingüe en español.

PWS ID #0610081

# **FAQs**

## What is this report and why do I receive it every year?

Water system providers are mandated by federal law to provide their customers with an annual consumer confidence report (annual water quality report). This report serves many functions. It allows you, the user, to make informed choices about your water; also, it allows you to know what contaminants, if any, are in your water, and allows your water provider a chance to tell you everything it takes to deliver safe drinking water to your tap.

# What causes my water to occasionally have a "milky" appearance?

A "milky" look is caused when tiny air bubbles are in the water. These form when the water coming into your home or business is under pressure and gasses (air) are dissolved and trapped in the pressurized water. These bubbles will not affect the quality or the taste of your water.

## Is it okay to use hot water from the tap for cooking and drinking?

You should always use cold water since hot water has a higher chance of containing potential contaminants from your household plumbing and water heaters. These contaminants can include, but are not limited to rust, copper, and lead and can dissolve in hot water faster than they can in cold water.

## How much water do I use during a typical shower?

Based on the age of your house and your showerheads, anywhere from 20 to 40 gallons of water can be used during a typical shower.

#### What can I do to conserve water?

There are many things you can do to conserve water. Running your clothes washer and dishwasher only when they are full can save up to 1,000 gallons a month. Watering your lawn and garden in the morning or evening when temperatures are cooler will help minimize evaporation. Shortening your shower by a minute or two can save up to 150 gallons per month. Turning off the water while you are brushing your teeth can save up to 25 gallons per month. Also, take time to review your water bill on a regular basis as this can help you quickly realize if there are leaks in your system.

## **Our Drinking Water Is Regulated**

The City of The Colony is pleased to share this report with you. This report is a summary of the quality of the water we provide our customers. The analysis covers January 1 through December 31, 2015, and was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) and Texas Commission on Environmental Quality (TCEQ) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

#### **Source 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.

## 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 stormwater 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 stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturallyoccurring or be the result of oil and gas production and mining activities.

## All Drinking Water May Contain Contaminants

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. 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. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

## Where Do We Get Our Drinking Water?

The City of The Colony owns and operates five water wells that produce up to 9 Million Gallons per Day (MGD) of treated water. Four wells are on the Trinity Sands Aquifer and one well on the Paluxy Aquifer. The Colony purchases up to 6 MGD of treated surface water from Dallas Water Utilities (DWU). DWU water is supplied from seven reservoirs: Lake Lewisville, Lake Ray



Roberts, Lake Ray Hubbard, Lake Tawakoni and Lake Fork.

The City purchases up to 4 MGD of treated water from the City of Plano. This is a small area of Austin Ranch in The Colony, which lies south of State Highway 121 and east of the MKT Railroad line to the eastern city limits. Plano's water is supplied by North Texas Municipal Water District (NTMWD). NTMWD water is supplied from three reservoirs: Lake Lavon, Lake Jim Chapman and Lake Texoma.

The Colony owns and operates the water system within the city limits regardless of the supplier. The water quality within the system is monitored and tested in accordance to State and Federal laws by the city's staff of state licensed water system operators.



#### **Water Loss**

In the water loss audit submitted to the Texas Water Development Board for the time period of Jan-Dec 2015, our system lost an estimated 165 Million gallons of water. If you have any questions about the water loss audit please call 972-624-4431.

#### **Lead and 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. The City of The Colony Water Utilities is responsible for providing high quality drinking water, but cannot control the variety of materials used in customer plumbing components. When your water has been sitting in the home piping 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 www.epa.gov/safewater/lead.

## **2015 Testing Results**

We routinely monitor for constituents in your drinking water according to Federal and State laws. The test results table shows the results of our monitoring for the period of January 1st to December 31st, 2015. In the table you might find terms and abbreviations you are not familiar with. To help you better understand these terms we've provided the following definitions:

#### DEFINITIONS

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.

Avg. - Regulatory compliance with some MCLs is based on running annual average of monthly samples.

< - Symbol indicates the level found is less than the number that follows it.

Maximum Contaminant Level (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 (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 (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 (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.

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

NA - not applicable.

ND - not detected.

NTU - Nephelometric Turbidity Units.

Parts per billion (ppb) – micrograms per liter ( $\mu$ g/I) or one ounce in 7,800,000 gallons of water.

Parts per million (ppm) - milligrams per liter (mg/l) or one ounce in 7,800 gallons of water.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Regulated Substances												
Substance and unit of measure	Colony Dallas Plano			MCL [MRDL]	The Colony Water Utility		Dallas Wate	er Utility	Plano Water Utilities		Typical Source	
	Yea	ear Sampleo	d	[INIKDEG]	[ININDL]	Amount Detected	Range Low-High	Amount Detected	Range Low-High	Highest Level detected	Range Low-High	
Antimony (ppb)		2015	2015	6	6	NA	NA	0.21	<0.200 - 0.32	0.2	0 - 0.2	Discharge from petroleum refineries, fire retardan ceramics, electronics, solder
Arsenic (ppb)	2015	2015	2015	0	10	.00084	.00084	0.32	<0.700 - 0.95	0.7	0.0 - 0.7	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wast
Atrazine (ppb)		2015	2015	3	3	NA	NA	0.11	<0.08 - 0.30	0.19	0.13 - 0.19	Runoff from herbicide used on row crops
Barium (ppm)	2015	2015	2015	2	2	0.076	0.076	0.023	0.013 - 0.041	0.055	0.039 - 0.055	Discharge of drilling wastes; Discharge from meta refineries; erosion of natural deposits
Beta/photon emitters (pCi/L)		2011	2010	0	50*	NA	NA	5.3	4 - 7.2	4.4	4.4 - 4.4	Decay of natural and man-made deposits
Chromium (ppb)	2015	2015	2015	100	100	0.0024	0.0024	0.82	0.78 - 0.86	0.92	0.53 - 0.92	Discharge from steel and pulp mills; erosion of natural deposits
Combined Radium (226 & 228) (pCi/L)	2015	2011		5	0	1.5	1.5	1	1.0 - 1.0	NA	NA	Erosion of natural deposits.
Cyanide (ppm)		2015		0.2	0.2	NA	NA	77.2	23.0 - 155.0	NA	NA	Discharge from steel/metal factories; discharge fi plastic and fertilizer factories
Di (2-Ethylhexyl) ohthalate (ppm)			2015	0	6	NA	NA	NA	NA	0.7	0.0 - 0.7	Discharge from rubber and chemical factories
Fluoride (ppm)	2015	2015	2015	4	4	0.575	0.575	0.529	0.521 - 0.536	0.86	0.25 - 0.86	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer a aluminum factories
Haloacetic Acids (ppb)	2015			NA	60	19.2	6.7 - 36.5	NA	NA	NA	NA	By-product of drinking water disinfection
Nitrate as N (ppm)	2015			10	10	0.453	0.0135 - 1.17	NA	NA	NA	NA	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)		2015	2015	50	50	NA	NA	2.77	2.00 - 3.81	2	0 - 2	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Simazine (ppb)		2015		4	4	NA	NA	0.04	<0.05 - 0.25	NA	NA	Herbicide runoff
Total Trihalomethanes [TTHMs] (ppb)	2015			NA	80	18.7	8.87 - 38.6	NA	NA	NA	NA	By-product of drinking water disinfection
otal Organic Carbon (ppm)	Year Sampled		MCLG Treated Water Alkalinity	MCL	NA	NA	Highest level Detected	Range of Levels Detected	Highest level Detected	Range of Levels Detected	Naturally presents in the environment	
Drinking Water	NA	2015	2015	<60 mg/L a	as CaCO3	NA	NA	4.11	2.71 - 5.03	6.32	1.45 - 6.32	Naturally present in the environment
Turbidity (NTU)**	Year Sampled		MCLG	MCL	Highest Single measurements	Lowest Monthly % of Samples Meeting Limits	manage surface	Lowest Monthly % of Samples Meeting Limits	Highest Single measurements	Lowest Monthly % of Samples Meeting Limits	Soil runoff	
Turbidity (lowest monthly percent of samples meeting limit	NA	2015	2015	NA	TT = 95% of Samples <.03	NA	NA	0.22	100%	0.65	99.00%	Soil runoff
Secondary Unregulated Substanc												
Cuhatanaa	es					Amount	Panga			Highest level	Panga	Tunical Course
Substance		ear Sampleo	d	Seconda	ry MCL	Amount Detected	Range Low-High			Highest level Detected	Range Low-High	Typical Source
		ar Sampled	d 2015	Seconda			Low-High 3.68				Low-High 45.3 - 113	Abundant naturally occurring element
Calcium (ppm)	Yea	ar Sampled			1	Detected	Low-High			Detected	Low-High	Abundant naturally occurring element
Calcium (ppm) Chloride (ppm) Magnesium (ppm)	Yea	ar Sample	2015	N/	\ \	Detected 3.68	Low-High 3.68			Detected 113 143	Low-High 45.3 - 113	Abundant naturally occurring element Abundant naturally occurring element; used in wa
Calcium (ppm) Chloride (ppm) Magnesium (ppm) Hardness, Calcium/Magnesium	Ye:	ar Sample	2015	NA NA	4	Detected 3.68 NA	Low-High 3.68 NA			Detected 113 143	Low-High 45.3 - 113 16.1 - 142	Abundant naturally occurring element  Abundant naturally occurring element; used in wa purification; by-product of oil field activity.
Calcium (ppm) Chloride (ppm) Magnesium (ppm) Hardness, Calcium/Magnesium As CaCO3) (ppm)	2015 2015	ar Sample	2015 2015 2015	NA NA	1 1	3.68 NA 7.55	Low-Ḥigh 3.68 NA .821 - 7.55			Detected 113 143 9.36	Low-High 45.3 - 113 16.1 - 142 3.22 - 9.36	Abundant naturally occurring element  Abundant naturally occurring element; used in wa purification; by-product of oil field activity.  Abundant naturally occurring element
Calcium (ppm)  Chloride (ppm)  Magnesium (ppm)  Hardness, Calcium/Magnesium (As CaCO3) (ppm)  Total Hardness as CaCO3 (ppm)	2015 2015	ar Sample	2015 2015 2015 2015	NA NA NA	A A A A A A A A A A A A A A A A A A A	Detected 3.68  NA 7.55 12.7	Low-Ḥigh 3.68 NA .821 - 7.55 12.7			Detected 113 143 9.36 190 300	Low-High 45.3 - 113 16.1 - 142 3.22 - 9.36 106 - 190	Abundant naturally occurring element  Abundant naturally occurring element; used in wa purification; by-product of oil field activity.  Abundant naturally occurring element  Naturally occurring calcium
Calcium (ppm) Chloride (ppm) Magnesium (ppm) Hardness, Calcium/Magnesium As CaCO3) (ppm) Total Hardness as CaCO3 (ppm) Sodium (ppm)	2015 2015 2015 2015	ar Sample	2015 2015 2015 2015 2015 2015	NA NA NA		Detected 3.68  NA 7.55  12.7  NA	Low-High 3.68  NA .821 - 7.55  12.7  NA			Detected 113 143 9.36 190 300	Low-High 45.3 - 113 16.1 - 142 3.22 - 9.36 106 - 190 100 - 300	Abundant naturally occurring element Abundant naturally occurring element; used in wa purification; by-product of oil field activity. Abundant naturally occurring element Naturally occurring calcium Naturally occurring calcium. Naturally occurring
Calcium (ppm) Chloride (ppm) Magnesium (ppm) Hardness, Calcium/Magnesium As CaCO3) (ppm) Fotal Hardness as CaCO3 (ppm) Sodium (ppm)	2015 2015 2015 2015 2015	ar Sample	2015 2015 2015 2015 2015 2015	NA NA NA NA		Detected 3.68  NA 7.55  12.7  NA 339	Low-High  3.68  NA  .821 - 7.55  12.7  NA  339			Detected 113 143 9.36 190 300 60.1 NA	Low-High 45.3 - 113 16.1 - 142 3.22 - 9.36 106 - 190 100 - 300 53.2 - 76.7	Abundant naturally occurring element  Abundant naturally occurring element; used in wa purification; by-product of oil field activity.  Abundant naturally occurring element  Naturally occurring calcium  Naturally occurring calcium.  Naturally occurring  Naturally occurring; common industrial by-productive services and the services of the services o
Calcium (ppm)  Chloride (ppm)  Magnesium (ppm)  Hardness, Calcium/Magnesium (As CaCO3) (ppm)  Total Hardness as CaCO3 (ppm)  Sodium (ppm)  Sulfate  pH (pH Units)	2015 2015 2015 2015 2015 2015	ar Sample	2015 2015 2015 2015 2015 2015 2015	NA NA NA NA NA	A A A A A A A A A A A A A A A A A A A	Detected  3.68  NA  7.55  12.7  NA  339  90.5	Low-High  3.68  NA  .821 - 7.55  12.7  NA  339  90.5			Detected 113 143 9.36 190 300 60.1 NA	Low-High 45.3 - 113 16.1 - 142 3.22 - 9.36 106 - 190 100 - 300 53.2 - 76.7 NA	Abundant naturally occurring element Abundant naturally occurring element; used in war purification; by-product of oil field activity. Abundant naturally occurring element Naturally occurring calcium Naturally occurring calcium. Naturally occurring Naturally occurring Naturally occurring; common industrial by-product of oil field activity.
Calcium (ppm) Chloride (ppm) Magnesium (ppm) Hardness, Calcium/Magnesium As CaCO3) (ppm) Fotal Hardness as CaCO3 (ppm) Sodium (ppm) Sulfate OH (pH Units) Fotal Dissolved Solids (ppm)	2015 2015 2015 2015 2015 2015 2013	ar Sample	2015 2015 2015 2015 2015 2015 2015	NA NA NA NA NA NA NA	A A A A A A A A A A A A A A A A A A A	Detected  3.68  NA  7.55  12.7  NA  339  90.5  8.6	Low-High  3.68  NA  .821 - 7.55  12.7  NA  339  90.5  8.5 - 8.7			Detected 113 143 9.36 190 300 60.1 NA 9.88	Low-High 45.3 - 113 16.1 - 142 3.22 - 9.36 106 - 190 100 - 300 53.2 - 76.7 NA 6.75 - 9.88 158 - 620	Abundant naturally occurring element Abundant naturally occurring element; used in wa purification; by-product of oil field activity. Abundant naturally occurring element Naturally occurring calcium Naturally occurring calcium. Naturally occurring Naturally occurring; common industrial by-product of oil field activity. Measure of corrosivity of water
Calcium (ppm) Chloride (ppm) Magnesium (ppm) Hardness, Calcium/Magnesium As CaCO3) (ppm) Fotal Hardness as CaCO3 (ppm) Sodium (ppm) Sulfate DH (pH Units) Fotal Dissolved Solids (ppm) Fotal Alkalinity (As CaCO3) Maximum Residual Disinfectant L	2015 2015 2015 2015 2015 2015 2015 2015	ar Sample	2015 2015 2015 2015 2015 2015 2015 2015	NA NA NA NA NA NA NA 6.5 -	A A A A A A A A A A A A A A A A A A A	Detected  3.68  NA  7.55  12.7  NA  339  90.5  8.6  900	Low-High  3.68  NA  .821 - 7.55  12.7  NA  339  90.5  8.5 - 8.7  900			Detected 113 143 9.36 190 300 60.1 NA 9.88 620	Low-High 45.3 - 113 16.1 - 142 3.22 - 9.36 106 - 190 100 - 300 53.2 - 76.7 NA 6.75 - 9.88 158 - 620	Abundant naturally occurring element Abundant naturally occurring element; used in wa purification; by-product of oil field activity. Abundant naturally occurring element Naturally occurring calcium Naturally occurring calcium. Naturally occurring Naturally occurring; common industrial by-product of oil field activity. Measure of corrosivity of water Total dissolved mineral constituents in water.
Substance  Calcium (ppm)  Chloride (ppm)  Magnesium (ppm)  Hardness, Calcium/Magnesium (As CaCO3) (ppm)  Total Hardness as CaCO3 (ppm)  Sodium (ppm)  Sulfate  pH (pH Units)  Total Dissolved Solids (ppm)  Total Alkalinity (As CaCO3)  Maximum Residual Disinfectant L  The Colony Water Utility	2015 2015 2015 2015 2015 2015 2015 2015	ear Sampled	2015 2015 2015 2015 2015 2015 2015 2015	NA NA NA NA NA 6.5 -	A A A A A A A A A A A A A A A A A A A	Detected  3.68  NA  7.55  12.7  NA  339  90.5  8.6  900  309	Low-High  3.68  NA  .821 - 7.55  12.7  NA  339  90.5  8.5 - 8.7  900	(Highest resingle sar		Detected 113 143 9.36 190 300 60.1 NA 9.88 620	Low-High 45.3 - 113 16.1 - 142 3.22 - 9.36 106 - 190 100 - 300 53.2 - 76.7 NA 6.75 - 9.88 158 - 620 38 - 154	Abundant naturally occurring element  Abundant naturally occurring element; used in wat purification; by-product of oil field activity.  Abundant naturally occurring element  Naturally occurring calcium  Naturally occurring calcium.  Naturally occurring  Naturally occurring; common industrial by-product by-product of oil field activity.  Measure of corrosivity of water  Total dissolved mineral constituents in water.

Total Number

of Sites

30

30

90th

Percentile

0.1047

0.00119

Year

Sampled

2013

2013

The Colony Water Utility

Copper (ppm)

Lead (ppm)

**Number Sites** 

above Action Level

MCLG

1.3

**Action Level** 

1.3

15

**Typical Source** 

Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.

Corrosion of household plumbing systems; erosion of natural deposits.

Notes: \*The MCL for Beta Particles is 4 mrem/year. The U.S. EPA considers 50 pCi/L to be the level of concern for Beta Particles.

\*\* Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of the filtration system.





## **PUBLIC PARTICIPATION OPPORTUNITIES**

The public is invited to participate at the next meeting.

**Date:** July 26th, 2016 **Time:** 5:30 p.m. –6 p.m.

**Location:** Office Creek Pump Station, 4180 Main Street, The Colony, TX 75056

For more information about this report, or for any questions relating to your drinking water, please contact Jimmy Arthur, Water Production Department Supervisor, at 972-624-4431.

