#### Disinfection Byproducts

Year	Detected Constituent	Measured Concentration	Range	No. of Analyses	MCL	Unit of Measure	Source of Constituent
2016	Total Trihalomethanes	58	58.2 - 58.2	1	80	ppb	Byproduct of drinking water disinfection. Byproduct of drinking water disinfection.
2016	Total Haloacetic acids	18	17.9 - 17.9	1	60	ppb	

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. Turbidity is measured 4 times per day through grab samples and continuously through automatic on-line individual filter turbidity monitors.

Yea	r Detected Constituent	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measure	Source of Constituent
201	6 Turbidity	0.07	100	0.3	NTU	Soil runoff.

Total Coliform *E.coli* 

Reported monthly tests found no total coliform bacteria. Reported monthly tests found no *E.coli* bacteria.

Secondary and Other Constituents Not Regulated (No associated adverse health effects)

Year	Constituent	Measured Concentration	Number of Analyses	Secondary Unit	Unit of Measure	Source of Constituent
2016	pН	8.4	1	7	Units	Measure of corrosivity of water.
2016	Total Alkalinity as CaCO3	167	1	NA	ppm	Naturally-occurring soluble mineral salts.
2016	Bicarbonate	204	1	NA	ppm	Abundant naturally-occurring element.
2016	Chloride	19	1	300	ppm	Abundant naturally-occurring element; used in water purification; by-
2016	Sulfate	19	1	300	ppm	product of oil field activity.  Naturally occurring common industrial byproduct; byproduct of oil
2016	Total Dissolved Solids	232	1	1000	ppm	field activity.  Total dissolved mineral constituents in water.

#### Required Additional Health Information

In order to ensure that tap water is safe to drink, the USEPA 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 that must provide the same protection for public health.

All 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 (1-800-426-4791).

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 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:

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

#### National Primary Drinking Water Regulation Compliance

This report was prepared with technical assistance from the Guadalupe-Blanco River Authority. GBRA will be happy to answer any questions about the Lomas Water System or its water quality and treatment process. Please contact us at 830-379-5822 or through our website at www.gbra.org. Water quality data for community water systems throughout the United States is available at www.epa.gov/safewater/dwinfo/index.html.



Main Office: 933 East Court Street ~ Seguin, Texas 78155

flowing solutions

# WATER QUALITY '16

## Guadalupe-Blanco River Authority

Lomas Water - Comal Trace EXCELLENCE IN WATER QUALITY

**GBRA Main Office 830-379-5822** 

Dear Customer:

The Guadalupe-Blanco River Authority (GBRA) is pleased to provide you with this 2016 Water Quality Report. We take all possible precautions to safeguard your water supply and hope you will be encouraged to learn about the high quality of water provided to you.

The federal Safe Drinking Water Act (SDWA) requires water utilities to issue an annual report to customers, in addition to other notices that may be required by law. This report explains where your drinking water comes from, what it contains, and the health risks our water testing and treatment are designed to prevent.

We are committed to providing you with information about your water supply because informed customers are our best allies in supporting improvements needed to maintain the highest drinking water standards.



We are proud to report that the Texas Commission on Environmental Quality (TCEQ) has assessed our system and determined that your drinking water, provided by the Guadalupe-Blanco River Authority water treatment plant, meets or exceeds all federal and state established water quality standards.

The tables in this report list all substances that were detected in our treated water, and the highest level at which they were detected. The tables also reflect the highest levels allowed by federal regulatory agencies. Please read this information carefully and if you have questions, call the numbers listed in this report.



#### **Customer Views Welcome**

The Guadalupe-Blanco River Authority strongly supports the national primary drinking water regulation compliance process. If you are interested in learning more about the water department, water quality, or participating in the decision-making process, there are a number of opportunities available.

Questions about water quality can be answered by calling GBRA 830-379-5822 from 8 a.m. - 5 p.m., Monday through Friday. Inquiries about public participation and policy decisions should be directed to the Western Canyon Division Manager's office at 830-885-2639.

The GBRA Board of Directors meets every third Wednesday of the month at 10:00 a.m. at the GBRA River Annex located at 905 Nolan St., Seguin, Texas and all meetings are open to the public.

#### En Español

Éste informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en Español, favor de llamar al tel. 830-379-5822 para hablar con una persona bilingüe en español durante las horas regulares de oficina (8 a.m. - 5 p.m.).

### **Special Notice**

#### Required language for ALL community public water supplies:

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

#### Where Do We Get Our Drinking Water?

Lomas Water/Comal Trace receives its water from a water well which pumps from the Trinity aquifer and from Canyon Lake via the GBRA Western Canyon Water Treatment Plant. The water system is operated by the Guadalupe-Blanco River Authority (GBRA).

A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by TCEQ. This information describes 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 contained in the assessment allows us to focus 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: <a href="http://www.tceq.texas.gov/gis/swaview">http://www.tceq.texas.gov/gis/swaview</a>. Further details about sources and source water assessments are available in Drinking Water Watch at the following URL: <a href="http://dww2.tceq.texas.gov/DWW/">http://dww2.tceq.texas.gov/DWW/</a>. Trained operators monitor and test the water, including the addition of chlorine, to ensure that our water meets or exceeds all state and federal drinking water standards. The treated water is delivered to the subdivision's water tanks and delivered through its distribution system to you. For information on the treatment of your drinking water and water quality protection efforts contact the GBRA Western Canyon Regional Treated Water Plant at 830-885-2639

#### What We Found

The following tables list the contaminants that have been found in your drinking water. USEPA requires water systems to test for more than 97 contaminants. The column marked "Highest Level at Any Sampling Point" shows the highest test results during the year. The "Source of Constituent" column shows where this substance usually originates. In the water loss audit submitted to the Texas Water Development Board for the time period of January 2016 thru December 2016, our system lost an estimated 3,145,370 gallons of water. If you have any questions about the water loss audit please call (830) 885-2639.

#### **DEFINITIONS**

Maximum Contaminant Level (MCL) - the highest level of the contaminant 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 health risk. MCLGs allow for a margin of safety.

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

NTU - Nephelometric Turbidity Units.

**ppm** - parts per million, or milligrams per liter (mg/L).

ppb - parts per billion, or micrograms per liter (ug/L).
MRDL - Maximum Residual Disinfection Level.

WINDE - Maximum Residual Distinection Level

Table I - Test results for the GBRA Lomas Water System (sampled in distribution system)

Inorganics Contaminants (source water)

Year	Detected Constituent	Measured Concentration	Number of Analyses Performed	MCL	MCLG	Unit of Measure	Source of Constituent
2016	Barium	0.0288	1	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2012	Combined Radium	1.0	1	5	0	pCi/L	Erosion of natural deposits.
2014	Fluoride	0.22	1	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2016	Nitrate	0.56	1	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits.
2012	Chromium	0.001	1	1	1	ppm	Discharge from steel and pulp mills; erosion of natural deposits.
2016	Selenium	3.6	1	50	50	ppb	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.
2012	Thallium	0.00005	1	0.002	0.0005	ppm	Leeching from ore processing sites; discharge from electronics, glass and drug factories.

#### Maximum Residual Disinfectant Level

	Year	Constituent	Average	Range of Detects (Low - High)	MRDL	Unit of Measure	Source of Constituent
Ī	2016	Chlorine	1.11	0.92 - 1.52	4	ppm	Disinfectant used to control microbes.

#### Unregulated Contaminants

Year	Contaminate	Average Concentration	No. of Analyses	Unit of Measure	Source of Constituent
2016	Dibromochloromethane	12	4	ppb	Byproduct of drinking water disinfection.

Lomas CCR 2016

#### Disinfection Byproducts

Year	Detected Constituent	Measured Concentration	Range	No. of Analyses	MCL	Unit of Measure	Source of Constituent
2016	Total Trihalomethanes	58	43.1 - 58.3	4	80	ppb	Byproduct of drinking water disinfection.
2016	Total Haloacetic acids	16	13.2 - 15.7	4	60	ppb	Byproduct of drinking water disinfection.

Total Coliform NOT DETECTED

E.coli NOT DETECTED

Secondary and Other Constituents Not Regulated (No associated adverse health effects)

Year	Constituent	Measured Concentration	Number of Analyses	Secondary Unit	Unit of Measure	Source of Constituent
2011	Bicarbonate	224	1	NA	ppm	Corrosion of carbonate rocks such as limestone.
2016	Calcium	68.3	1	NA	ppm	Abundant naturally-occurring element.
2014	Chloride	24.0	1	300	ppm	Abundant naturally-occurring element; used in water purification; byproduct of oil field activity.
2016	Magnesium	17.2	1	NA	ppm	Abundant naturally-occurring element.
2011	pH	7.8	1	7	units	Measure of corrosivity of water.
2016	Sodium	9.56	1	NA	ppm	Erosion of natural deposits; byproduct of oil field activity.
2014	Sulfate	23.0	1	300	ppm	Naturally-occurring; common industrial byproduct; byproduct of oil field activity.
2014	Total Alkalinity as CaCO3	170	1	NA	ppm	Naturally-occurring soluble mineral salts.
2014	Total Dissolved Solids	253	1	1000	ppm	Total dissolved mineral constituents in water.
2016	Hardness as CaCO3	241	1	NA	ppm	Naturally-occurring calcium.
2016	Nickel	0.0016	1	NA	ppm	Erosion of natural deposits.
2016	Zinc	0.0225	1	5	ppm	Moderately abundant naturally-occurring element; used in the metal industry.
2016	Copper	0.0026	1	1	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preserative.

#### Lead and Copper (Analyzed every nine years)

Year	Contaminant	The 90th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Constituent
2014	Lead	4	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
2014	Copper	0.26	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

#### 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.

### Table II - Test results for the GBRA-Western Canyon Water Treatment Plant (sampled at the GBRA Western Canyon Water Treatment Plant)

#### Inorganics Contaminants (source water)

Year	Detected Constituent	Measured Concentration	Number of Analyses Performed	MCL	MCLG	Unit of Measure	Source of Constituent
2016	Barium	0.0268	1	2	2	ppm	Discharge of drilling wastes; discharge from metal refiniries; erosion of natural deposits.
2016	Fluoride	0.2	1	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; runoff from fertilizer use.
2016	Nitrate	0.35	1	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks; treated wastewater effluent; erosion of natural deposits.

#### Maximum Residual Disinfectant Level

Year	Constituent	Average	Range	MRDL	Unit of Measure	Source of Constituent
2016	Chlorine	0.7	0.3-1.0	4	ppm	Disinfectant used to control microbes.