

ANNUAL
WATER
QUALITY
REPORT

Water testing performed in 2008



PWSID#: 2460022

This report was prepared by:
Jonah Water Special Utility District
4050 FM 1660
Hutto, TX 78634

Este informe incluye informacion importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en espanol, favor de llamar at tel. (512) 759-1286 para hablar con una persona bilingue en espanol.

Continuing Our Commitment

This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from U.S. Environmental Protection Agency (EPA) required testing done between January 1, 2008 and December 31, 2008 and is presented in the following.

Water quality reports increase the availability of information. Informed and involved citizens can be strong allies of water systems, large and small, as they take action on pressing problems. Also, an increase in public awareness can give sensitive sub-populations the information they need to protect themselves.

For more information about this report, or for any questions relating to your drinking water, please call Bill Brown, General Manager, Jonah Water Special Utility District at (512)-759-1286.

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. We meet the fourth Thursday of each month beginning at 7 p.m. at 4050 FM 1660, Hutto, Texas 78634.

Where Does My Water Come From?

Our drinking water is obtained from GROUND and SURFACE water sources. The GROUND water comes from the following Lake/River/Reservoir/Aquifer: EDWARDS AND ASSOCIATED LIMESTONES, EDWARDS AND ASSOCIATED LIMESTONES - (BALCONES FAULT). The SURFACE water comes from the East Williamson County Regional Water System. A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality and will 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 contained in the assessment will allow us to focus our source water protection strategies. For more information on source water assessments and protection efforts at our system, please contact us.

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. We are responsible for providing high quality drinking water, but 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 www.epa.gov/safewater/lead.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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 can acquire naturally occurring minerals, in some cases, radioactive material; and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife; Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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 by-products of industrial processes and petroleum production, and which may also come from gas stations, urban stormwater runoff, and septic systems; Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

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 our business office. For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

What's Your Water Footprint?

You may have some understanding about your carbon footprint, but how much do you know about your water footprint? The water footprint of an individual, community, or business is defined as the total volume of freshwater that is used to produce the goods and services that are consumed by the individual or community or produced by the business. For example, 11 gallons of water are needed to irrigate and wash the fruit in one half-gallon container of orange juice. Thirty-seven gallons of water are used to grow, produce, package, and ship the beans in that morning cup of coffee. Two hundred and sixty-four gallons of water are required to produce one quart of milk, and 4,200 gallons of water are required to produce two pounds of beef.

According to the U.S. EPA, the average American uses about 100 gallons of water daily. In fact, in the developed world, one flush of a toilet uses as much water as the average person in the developing world allocates for an entire day's cooking, washing, cleaning, and drinking. The annual American per capita water footprint is about 8,000 cubic feet; twice the global per capita average. With water use increasing six-fold in the past century, our demands for freshwater are rapidly outstripping what the planet can replenish.

To check out your own water footprint, go to www.h2oconserve.org or visit www.waterfootprint.org to see how the water footprints of other nations compare.

Monitoring and Reporting Violation

We are required to monitor your drinking water for specific contaminants on a regular basis. From 5/1/2008 to 5/31/2008 we did not correctly monitor for Total Coliform Bacteria. Additionally, from 5/1/2008 to 5/31/2008 and 7/1/2008 to 7/31/2008 Coliforms were found in more samples than allowed and this was a warning of potential problems. However, no fecal coliform was found. Upon being notified of this violation by TCEQ, we immediately analyzed our water supply. Results of the analysis have been received and properly recorded as required by state and federal law. We have already taken the steps to ensure that adequate monitoring and reporting will be performed in the future so that this oversight will not be repeated.

Important Health Information

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; 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 U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Information on the Internet

The U.S. EPA Office of Water (www.epa.gov/watrhme) and the Centers for Disease Control and Prevention (www.cdc.gov) Web sites provide a substantial amount of information on many issues relating to water resources, water conservation and public health. Also, the TCEQ has a Web site (www.tceq.com) that provides complete and current information on water issues in Texas, including valuable information about our watershed.

Sampling Results

During the past year we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. The table below shows only those contaminants that were detected in the water. The state allows us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES							
SUBSTANCE (UNIT OF MEASURE)	YEAR OR RANGE	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2008 2005	15	0	3.53	2.6–5.3	No	Erosion of natural deposits.
Barium (ppm)	2008 2005	2	2	0.056	0.03–0.095	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Beta/Photon Emitters (pCi/L)	2008 2005	50	0	3.43	0–7.4	No	Decay of natural and man-made deposits.
Chloramines (ppm)	2008	[4]	[4]	1.27	0.8–2.46	No	Disinfectant used to control microbes.
Chlorine (ppm)	2008	[4]	[4]	1.08	0.81–1.61	No	Disinfectant used to control microbes.
Combined Radium (pCi/L)	2008 2005	5	0	0.53	0–1.6	No	Erosion of natural deposits.
Fluoride (ppm)	2008 2004	4	4	2.41	0.26–3.72	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Haloacetic Acids [HAA] (ppb)	2008	60	NA	5.2	0–19.8	No	By-product of drinking water disinfection.
Nitrate (ppm)	2008	10	10	0.72	0.02–2.25	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
TTHMs [Total Trihalomethanes] (ppb)	2008	80	NA	18.3	3–58.3	No	By-product of drinking water disinfection.
Total Coliform Bacteria ¹ (# positive samples)	2008	More than 1 positive monthly sample	0	3	NA	No	Naturally present in the environment.
Turbidity ² (NTU)	2008	TT	NA	0.40	NA–0.40	No	Soil runoff.

OTHER REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR OR RANGE	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Bicarbonate (ppm)	2008 2007	NA	NA	326	282–401	No	Corrosion of carbonate rocks such as limestone.
Calcium (ppm)	2008 2005	NA	NA	60.3	41.1–87.9	No	Abundant naturally occurring element.
Haloacetic Acids [HAA]- IDSE Results (ppb)	2008	NA	NA	3.6	0–8.2	No	Byproduct of drinking water disinfection.
Lead (ppm)	2008 2005	NA	NA	0.001	0–0.003	No	Corrosion of household plumbing systems; erosion of natural deposits.
Magnesium (ppm)	2008 2005	NA	NA	27.4	23–32.1	No	Abundant naturally occurring element.
Nickel (ppm)	2008 2005	NA	NA	0.001	0–0.003	No	Erosion of natural deposits.
Sodium (ppm)	2008 2005	NA	NA	54	20–89	No	Erosion of natural deposits; byproduct of oil field activity.
TTHMs [Total Trihalomethanes]–IDSE Results (ppb)	2008	NA	NA	18.3	0–37.8	No	Byproduct of drinking water disinfection.
Total Alkalinity as CaCO₃ (ppm)	2008 2007	NA	NA	267	231–329	No	Naturally occurring soluble mineral salts.
Total Hardness as CaCO₃ (ppm)	2008	NA	NA	263	197–314	No	Naturally occurring calcium.

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR OR RANGE	SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppm)	2008 2005	NA	NA	0.009	0–0.055	No	Abundant naturally occurring element.
Chloride (ppm)	2008 2007	300	NA	42	23–73	No	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
Copper (ppm)	2008 2005	1.0	NA	0.004	0–0.009	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Iron (ppm)	2008 2005	.3	NA	0.343	0.033–1.22	No	Erosion of natural deposits; iron or steel water delivery equipment or facilities.
Manganese (ppm)	2008 2005	.05	NA	0.0016	0–0.0047	No	Abundant naturally occurring element.
Sulfate (ppm)	2008 2007	300	NA	58	19–115	No	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
Total Dissolved Solids [TDS] (ppm)	2008 2007	1000	NA	423	349–559	No	Total dissolved mineral constituents in water.
Zinc (ppm)	2008 2005	5	NA	0.006	0–0.022	No	Runoff/leaching from natural deposits; Industrial wastes.
pH (Units)	2008 2007	>7.0	NA	7.1	6.9–7.3	No	Measure of corrosivity of water.

UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR OR RANGE	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Bromodichloromethane (ppb)	2008 2006	3.65	0.8–11	Byproduct of drinking water disinfection.
Bromoform (ppb)	2008 2006	1.53	0–3.3	Byproduct of drinking water disinfection.
Chloroform (ppb)	2008 2006	3.35	1.1–1.3	Byproduct of drinking water disinfection.
Dibromochloromethane (ppb)	2008 2006	3.7	1.6–6.8	Byproduct of drinking water disinfection.

¹Footnote for Jonah Water SUD: REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA.

²Footnote for Jonah Water SUD: Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

We were required by the U.S. EPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE) and is intended to identify locations in our distribution system that have elevated disinfection by-product concentrations. Disinfection by-products (e.g., HAAs and TTHMs) result from continuous disinfection of drinking water and form when disinfectants combine with organic matter that naturally occurs in the source water.

The MCL for beta particles is 4 mrem/year. U.S. EPA considers 50 pCi/L to be the level of concern for beta particles.

Unregulated contaminants are those for which the U.S. EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the U.S. EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Definitions

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

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level Goal): 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.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

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