



# 2021 Annual Drinking Water Quality Report Laughlin Air Force Base Water System



## INTRODUCTION

This report is a summary of the quality of water Laughlin Air Force Base provides its customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become knowledgeable about what is 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 material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

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.

## WHERE DO WE GET OUR DRINKING WATER

Our drinking water is purchased from the City of Del Rio. The City of Del Rio obtains the water from the San Felipe Springs, a surface water source. The Texas Commission on Environmental Quality (TCEQ) has completed a Source Water Assessment of the water source. 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 City of Del Rio received the assessment report. For more information on source water assessments and protection efforts at our system contact Bioenvironmental Engineering Flight, 47 OMRS/SGXB, at (830) 298-6859.

## 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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

## 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 of Texas, not the EPA. These constituents are not causes for health concern. Therefore, secondary's are not required to be reported in this document, but they may greatly affect the appearance and taste of your water.

## HEALTH INFORMATION ABOUT LEAD

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 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 two 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>.

## SPECIAL NOTICE

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 Safe Drinking Water Hotline at 800- 426-4791.

## DEFINITIONS

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

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

**ALG (Action Level Goal)** – 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.

**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.

**MFL** – Million fibers per liter (a measure of asbestos)

**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

**NTU** – Nephelometric Turbidity Units

**pCi/L** – Picocuries per liter (a measure of radioactivity)

**ppm** – Parts per million or milligrams per liter (mg/L)

**ppb** – Parts per billion or micrograms per liter (µg/L)

**ppt** – Parts per trillion or nanograms per liter (ng/L)

**ppq** – Parts per quadrillion or picograms per liter (pg/L)

**TT** – Treatment technique

**µmhos/cm** – Micromhos per centimeter (a measure of conductivity)

## HOW TO READ YOUR WATER QUALITY REPORT

| The year or years tests were conducted. | The concentration of a contaminant which, if exceeded, triggers treatment or other requirements LAFB must follow. | The highest amount of a contaminant EPA allows in drinking water. | Below this level, a contaminant has no known or expected health risks. | How a contaminant ends up in LAFB drinking water. |      |  |
|---|---|---|--|---|------|--|
| Contaminants (2007-2013)                |   |   |  |   |      |  |
| Substance                               | Action Level  | Concentration Range Found   | Avg. Conc. Found   | MCL   | MCLG | Potential Source   |
| Substance 1 (ppm)                       | 0.05  | 0.024-0.112   | 0.05   | 2   | 2    | Discharge from drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Substance 2 (ppb)                       | 0-8.4   | 0-8.4   | 2.4  | 100   | 100  | Erosion of natural deposits; discharge from fertilizer and aluminum factories                |

Parts per billion – one ppb equals to one teaspoon in 1,302,000 gallons.

Parts per million – one ppm equals to one teaspoon in 1,302 gallons.

The amount from lowest to highest of a contaminant detected in LAFB drinking water.

The average amount of a contaminant detected in LAFB drinking water.

This describes some of the ways contaminants enter drinking water; wording is provided by EPA



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## COLIFORM BACTERIA

| Constituent       | MCLG | Total Coliform MCL                       | Highest Number of Positive | Fecal Coliform or E.Coli MCL | Total Number of Positive E.Coli or Fecal Coliform Samples | Violation | Likely Source of Contamination       |
|-------------------|------|--|----------------------------|------------------------------|---|-----------|--------------------------------------|
| Coliform Bacteria | 0    | No more than 1 positive sample per month | 0                          | 0                            | 0   | No        | Naturally present in the environment |

## MAXIMUM RESIDUAL DISINFECTANT LEVEL

| Disinfectant            | Test Year | Average Concentration Found | Minimum Level | Maximum Level | MRDL | MRDLG | Units | Likely Source of Contamination        |
|-------------------------|-----------|-----------------------------|---------------|---------------|------|-------|-------|---------------------------------------|
| Chlorine Residual, Free | 2021      | 1.28                        | 0.72          | 1.54          | 4    | 4     | mg/L  | Disinfectant used to control microbes |

## LEAD AND COPPER

| Constituent | Date Sampled | MCLG | Action Level (AL) | 90th Percentile | Number of Sites Over AL | Units | Violation | Likely Source of Contamination  |
|-------------|--------------|------|-------------------|-----------------|-------------------------|-------|-----------|---|
| Copper      | 2020         | 1.3  | 1.3               | 0.181           | 0                       | mg/L  | No        | Corrosion of household plumbing system; erosion of natural deposits; leaching from wood preservatives |
| Lead        | 2020         | 0    | 0.015             | 0.004           | 0                       | mg/L  | No        | Corrosion of household plumbing systems; erosion of natural deposits                                  |

## DISINFECTANTS AND DISINFECTION BY-PRODUCTS

| Constituent                   | Collection Date | Highest Locational Running Annual Average | Concentration Range Found | MCLG | MCL | Units | Violation | Likely Source of Contamination            |
|-------------------------------|-----------------|---|---------------------------|------|-----|-------|-----------|---|
| Total Trihalomethanes (TTHMs) | 2021            | 29  | 9.6-30.6                  | N/A  | 80  | ug/L  | No        | By-product of drinking water disinfection |
| Total Haloacetic Acids (HAAs) | 2021            | 9   | 1.2-6.8                   | N/A  | 60  | ug/L  | No        | By-product of drinking water disinfection |

## INORGANIC CONTAMINANTS

| Constituent | Collection Date | Highest Level Detected | Concentration Range Found | MCLG | MCL  | Units | Violation | Likely Source of Contamination  |
|-------------|-----------------|------------------------|---------------------------|------|------|-------|-----------|---|
| Arsenic     | 2020            | <0.002                 | <0.002                    | 0    | 0.01 | mg/L  | No        | Erosion of natural deposits; runoff from orchids; runoff from glass and electronics production wastes               |
| Barium      | 2020            | 0.0686                 | 0.0686 – 0.0686           | 2    | 2    | mg/L  | No        | Discharge from drilling wastes; discharge from metal refineries; erosion of natural deposits                        |
| Fluoride    | 2020            | 0.21                   | 0.21 – 0.21               | 4    | 4    | mg/L  | No        | Erosion of natural deposits; discharge from fertilizer and aluminum factories; additive which promotes strong teeth |
| Nitrate     | 2021            | 1.75                   | 1.75 – 1.75               | 10   | 10   | mg/L  | No        | Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits                         |

## RADIOACTIVE CONTAMINANTS

| Constituent             | Collection Date | Highest Level Detected | Concentration Range Found | MCLG | MCL | Units | Violation | Likely Source of Contamination |
|-------------------------|-----------------|------------------------|---------------------------|------|-----|-------|-----------|--------------------------------|
| Combined Radium 226/228 | 2017            | 1.5                    | 1.5 – 1.5                 | 0    | 5   | pCi/L | No        | Erosion of natural deposits    |

## VOLATILE ORGANIC CONTAMINANTS

| Constituent         | Collection Date | Highest Level Detected | MCLG | MCL    | Units | Violation | Likely Source of Contamination                  |
|---------------------|-----------------|------------------------|------|--------|-------|-----------|---|
| Ethylbenzene        | 2020            | <0.5                   | 0    | 700    | ppb   | No        | Discharge from factories and dry cleaners       |
| Tetrachloroethylene | 2020            | <0.5                   | 0    | 5      | ppb   | No        | Discharge from factories and dry cleaners       |
| Xylenes, Total      | 2020            | <0.5                   | 0    | 10,000 | ppb   | No        | Discharge from petroleum and chemical factories |

## PFOS/PFOA

| Constituent                         | Collection Date | Highest Level Detected | MCLG | MCL | Units | Violation | Likely Source of Contamination            |
|-------------------------------------|-----------------|------------------------|------|-----|-------|-----------|---|
| Perfluorooctanesulfonic Acid (PFOS) | 2021            | <0.2                   | 0    | 2   | ng/L  | No        | Discharge from factories and dry cleaners |
| Perfluorooctanoic Acid (PFOA)       | 2021            | <0.5                   | 0    | 2   | ng/L  | No        | Discharge from factories and dry cleaners |

## Laughlin AFB, TX Water System

PWS ID Number: TX 2330006

### Questions About Your Water Quality Report?

If you would like more information or a copy of this Water Quality Report, call Bioenvironmental Engineering office:

**Commercial (830) 298-6859**  
**DSN 732-6859**

### Call the CE 24 Hour Help Desk for:

- Report Leaks
- Main breaks
- Sewer back-ups

**Commercial (830) 298-5488**

For more information regarding the Bioenvironmental Engineering Flight, please visit our sharepoint:

[https://usaf.dps.mil/teams/aetc-lgn-47mdg/47OMRS/Bioenvironmental\\_Engineering/SitePages/Home.aspx](https://usaf.dps.mil/teams/aetc-lgn-47mdg/47OMRS/Bioenvironmental_Engineering/SitePages/Home.aspx)

For more information about water systems go to Texas Drinking Water Watch:  
<http://dww2.tceq.texas.gov/DWW/>

## Bioenvironmental Engineering

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### Hours of Operation:

Monday – Thursday: 0730-1630  
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