

2004 ANNUAL DRINKING WATER QUALITY REPORT
TOWN OF PALMER LAKE
PWSID CO 0121575



Esta es informacion importante. Si no la pueden leer, necesitan que alguien se la traduzca

We are pleased to present to you this year's Annual Quality Water Report. Our constant goal is to provide you with a safe and dependable supply of drinking water.

Please contact Steve Orcutt at 719-481-2953 if you have any questions about this report, if you would like to learn more about the utility or any scheduled public meeting. We want our valued customers to be informed about your water utility, the services we provide and the quality of water we deliver to you every day.

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 the water poses a health risk. 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 of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and microbiological contaminants, call the EPA *Safe Drinking Water Hotline* at 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, in some cases, radioactive material 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 that 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 that** 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 also may come from gas stations, urban stormwater runoff, and septic systems.
- * **Radioactive contaminants**, that 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, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, and detected nitrate levels are above 5 ppm, you should ask advice from your health care provider.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead level in your home's water, you may wish to have your water tested. Flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available for the Safe Drinking Water Hotline at 1-800-426-4791.

TOWN OF PALMER LAKE routinely monitors for constituents in your drinking water according to Federal and State laws. The following tables show the results of our monitoring for the period of January 1st to December 31st, 2004, unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contaminations. Some of our data, though representative, may be more than one year old. To help you understand the terms and abbreviations used in this report, we have provided the following definitions:

- * **Parts per million (ppm) or Milligrams per liter (mg/l)** - one part per million corresponds to one minute in two years or a single penny in \$10,000.
- * **Parts per billion (ppb) or Micrograms per liter (µg/l)** - one part per billion corresponds to one minute in 2,000 per years, or a single penny in \$10,000,000.
- * **Parts per trillion (ppt) or Nanograms per liter (nanograms/l)** - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
- * **Parts per quadrillion (ppq) or Picograms per liter (picograms/l)** - one part quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.
- * **Picocuries per liter (pCiL)** - Picocuries per liter is a measure of the radioactivity in water.
- * **Nephelometric Turbidity Unit (NTU)** - nephelometric turbidity unit is a measure of the clarity of water. Turbidity is caused by

The state recently completed source water assessments for most community water systems. Please contact Steve Ocrutt at 719-481-2953 for more information about the source water assessments for our drinking water system, any questions about the annual drinking water quality report, to learn more about our system or to attend scheduled public meetings. We want you, our valued customers, to be informed about your water utility, the services we provide and the quality water we deliver to you every day.

The system's sources of water listed below. The State is conducting source water assessments for all public water systems. To find out the source water assessment for our system or to learn more about what you can do to help protect our drinking water sources, please call the contact listed at the beginning of the report.

| <u>Source Name</u> | <u>Source Type</u> | <u>Water Type</u> |
|--------------------|--------------------|-------------------|
| Surface Reservoirs | Intake | Surface water |
| WELL #1 AKA D2 | Well | Ground water |

Table of Detected Contaminants

The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Some of our data (e.g., for organic contaminants), though representative, is more than one year old.

Chemical Contaminants

| <u>Contaminant</u> | <u>Date</u> | <u>Violation</u> | <u>Level</u> | <u>Unit</u> | <u>MCLG/ MRDLG</u> | <u>MCL/ MRDL</u> | <u>Likely Source</u> |
|------------------------|-------------|------------------|--------------|-------------|------------------------|----------------------|---|
| Barium | 2/17/2004 | N | 0.15 | ppm | 2 | 2 | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits |
| Ethylbenzene | 3/3/2003 | N | 1.70 | ppb | 700 | 700 | Discharge from petroleum refineries |
| Flouride | 2/17/2004 | N | 1.90 | ppm | 4 | 4 | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories |
| Combined radium | 1/12/2004 | N | 3.00 | pCi/l | | 5 | Erosion of natural deposits |
| Sodium | 2/17/2004 | N | 6.80 | ppm | | | |
| Sulfate | 1/28/2002 | N | 6.40 | ppm | | | |
| Haloacetic Acids (HAA) | 5/5/2004 | N | 28.70 | ppb | | 60 | By-product of drinking water disinfection |
| Xylenes | 3/3/2003 | N | 0.0095 | ppm | 10 | 10 | Discharge from petroleum factories; Discharge from chemical factories |
| Nitrate | 2/17/2004 | N | 0.22 | ppm | 10 | 10 | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits |

| <u>Contaminant</u> | <u>Date</u> | <u>Percentage of Samples Below the Treatment Technique</u> | <u>Likely Source</u> |
|--------------------|-------------|--|----------------------|
| Turbidity | 1/1/2003 | 100.00% | Soil Runoff |

Lead and Cooper 90* Percentiles

| <u>Contaminant</u> | <u>Date Range</u> | <u>Level</u> | <u>Unit</u> | <u>MCLG</u> | <u>AL</u> | <u>Count</u> |
|--------------------|---------------------|--------------|-------------|-------------|-----------|--------------|
| Cooper | 1/1/2002–12/31/2004 | 0.59 | ppm | 1.3 | 1.3 | 10 |
| Lead | 1/1/2002–12/31/2004 | 4.90 | ppb | 0 | 15 | 10 |

The Town of Palmer Lake is pleased to announce that there are no violations for the year of 2003.

Required Health Effects Language

Dental fluorosis in its moderate or severe forms may result in a brown staining and or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine years of age should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water.

