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FLUORIDE NOTICE INSIDE

2020
Twenty Second Annual
Drinking Water Quality Report

TOWN OF PARKER
Public Water System #AZ0415013

Published 2020, covering 2019 Water Quality Testing

Este reporte contiene informacion muy importante sobre su agua potable.
Hable con alguien que se lo pueda tradusir paraque entienda bien el contenido.

TOWN OF PARKER

2020 22nd Annual Drinking Water Quality Report

Covering 2019 Water Quality Testing

We are happy to report that the drinking water provided by the Town of Parker Is in compliance with U.S. Environmental Protection Agency Water Quality Standards

Introduction

This report explains that the drinking water provided by the Town of Parker of the highest quality. Included is information on the sources of Parker's drinking water, general water quality information, and specific results of analytical tests conducted on the Town of Parker's drinking water in 2019, (or in the case of testing not conducted every year, the most recent results).

Where does our water come from?

All the water pumped by Town of Parker is ground water (well water). We have three active wells. Depth to water from the surface of the ground is approximately 75 feet near the center of town, and 90 feet at the well in the northeast corner of town, which is on higher ground. Our pumps are set at depths of 180 to 230 feet.

In 2019 we pumped a total of 275,639,000 gallons, for an average of 755,175 gallons per day. (This was down from 284,924,000 gallons total and 780,614 gallons per day in 2018.) Our usage fluctuates seasonally; we pump twice as much water in the summer months as we do in the winter months.

In 2019, our primary well, Well 7, produced 88.3% of the total, or 243,380,000 gallons. Well 8 produced 31,984,000 gallons, 11.6% of the total; and Well 6 produced 275,000 gallons, less than .10% of the total.

In the past, most of the water we pumped was just well water, pure and untreated. The Town started continual chlorination of the water supply in April of 2008.

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.

Water Quality

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Certain quantities of some substances are essential to good health, but excessive quantities can be hazardous. Similarly, small quantities of some substances may have no effect on people, but large quantities can be harmful. 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 US EPA's Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons, such as cancer patients 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 for appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791), or on the web at www.epa.gov/safewater/ccr.html

Definitions:

In this report you may find terms and abbreviations that are not familiar to you. To help you better understand these terms we provide the following definitions.

Non-Detect **(ND) -** laboratory analysis indicates that the constituent is not present.

Parts per million **(ppm)** *or Milligrams per liter (mg/l)* - one part per million, or one milligram per liter, corresponds to one minute in two years or a single penny in $10,000.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.

Parts per billion **(ppb)** *or Micrograms per liter* - one part per billion, or one microgram per liter, corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Picocuries per liter **(pCi/L)** - picocuries per liter is a measure of radioactivity in water.

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

Treatment Technique *(TT)* - (mandatory language) A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level **(MCL)**- The "Maximum Allowed" (MCL) is 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 "Goal" (MCLG) is 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)** means 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)** means 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.

Contaminants that may be present in source water include:

- **Microbiological 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, 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 naturally occurring or can be the result of oil and gas production and mining activities.
- **Cryptosporidium** is a microbial parasite found in surface water throughout the United States. The Town of Parker has not pumped any surface water since 1996.

FLUORIDE NOTICE

Fluoride: this is an alert about your drinking water and a cosmetic dental problem that might affect children under nine years of age. At low levels, fluoride can help prevent cavities, but children drinking water containing more than 2 milligrams per liter (mg/L) of fluoride may develop cosmetic coloration of their permanent teeth (dental fluorosis). The drinking water provided by the Town of Parker has a fluoride concentration of 1.2 - 2.1 mg/L (See page 6).

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 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 or pitting of their permanent teeth.

You may also want to contact your dentist about proper use by young children of fluoride-containing products.

Drinking water containing more than 4 mg/L of fluoride (the U.S. Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water does not contain more than 4 mg/L of fluoride, but we're required to notify you when we discover that the fluoride levels in your drinking water exceed 2 mg/L because of this cosmetic dental problem.

For more information, please call the Town of Parker Water Division at (928) 669-9265. Some home water treatment units are also available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at 1-877-867-3435, or visit their website at nfs.org.

Nitrate in drinking water at levels above 10 ppm (parts per million) 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 you should ask advice from your health care provider. Town of Parker's water has not exceeded the 10 ppm limit for Nitrate.

Arsenic: In 2003, EPA reduced the MCL (maximum contaminant level) for arsenic by 80%, from 50 ppb (parts per billion) to 10 ppb. Town of Parker's water has always been low enough in arsenic to meet the new standard. The following is a required Educational Statement. "While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against balancing the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems."

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. The Town of Parker is responsible for providing high quality drinking water, but cannot control the variety of material used in your 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, testing methods, and steps you can take to minimize exposure is available from the Safe Water Drinking Hotline or at http://www.epa.gov.safewater/lead."

WATER TEST RESULTS

Section One: No Violations.

Section Two: No Violation; Contaminant detected within limits

Test Results:

Microbiological Contaminants Detected within limits; No violation.						
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria.	No	None	Presence or absence of bacteria	0	More than one coliform positive sample in any month	Naturally present in the environment. These samples are taken from customers' garden hose taps.

Total Coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Any positive sample triggers testing for fecal coliform/E.coli, and a series of three repeat samples. We took a total of 36 samples for microbiological testing in 2019.

Radioactive Contaminants Detected within limits; No violation. Tested every six years.							
Contaminant	*Source*	*Violation Y/N*	*Level Detected*	*Unit Measurement*	*MCLG*	*MCL*	*Likely Source of Contamination*
Gross Alpha	Well 7, 4/2014	No	3.7 +/-0.9	pCi/L	0	15	Erosion of natural deposits.
	Well 8, 2/2014	No	5.5 +/1.0				
	Well 6, 4/2014	No	5.1 +/1.1				

Inorganic Contaminants Detected within limits; No violation Tested every nine years, except as noted							
Contaminant	*Source*	*Violation Y/N*	*Level Detected*	*Unit Measurement*	*MCLG*	*MCL*	*Likely Source of Contamination*
Arsenic	Well 7, 2/2017	No	5	ppb	0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
	Well 6, 3/2011	No	4				
	Well 8, 3/2011	No	2				
Barium	Well 7, 2/2017	No	0.031	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
	Well 8, 3/2011	No	0.030				

	Well 6, 3/2011	No	0.034				
Chromium	Well 7, 2/2017	No	4.6	ppb	100	100	Discharge from steel and
	Well 8, 3/2011	No	6.9				Pulp mills; Erosion of
	Well 6, 3/2011	No	8.8				Natural deposits.

Section Two: No Violation; Contaminant detected within limits *(Continued)*

Contaminant	*Source*	*Violation Y/N*	*Level Detected*	*Unit Measurement*	*MCLG*	*MCL*	*Likely source of contamination*
Copper * 7/2017	Customers' kitchen or bathroom taps – (10)	No	0.059	ppm 90th Percentile	1.3	Action Level = 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Fluoride	Well 7, 3/2011	No	2.1	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
	Well 8, 3/2011	No	1.9				
	Well 6, 3/2011	No	1.20				

Lead * 7/2017	Customers' kitchen or bathroom taps – (10)	No	.69	ppb 90th Percentile	0	Action Level = 15	Corrosion of household plumbing systems; erosion of natural deposits.
** In 2000 Town of Parker was granted reduced monitoring of lead and copper (reduced from 20 yearly samples to ten samples every third year), based on good results in yearly testing from 1993 to 1999.*							
Nitrate (as Nitrogen)	Well 7, 4/2019	No	3.3	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.
	Well 6, 2/2019	No	.47				
	Well 8, 2/2019	No	6.5				
Nitrite (as Nitrogen)	Well 7, 3/2011	No	ND	ppm	1	1	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.
	Well 6, 3/2011	No	ND				
	Well 8 2/2019	No	ND				

Volatile Organic Compounds Detected within limits; No violation							
Contaminant	*Source*	*Violation Y/N*	*Level Detected*	*Unit Measurement*	*MCLG*	*MCL*	*Likely Source of Contamination*
Tetrachloro-ethylene	Well 7 4/2018	No	<0.50	ppb	0	5	Discharge from factories and dry cleaners.
	Well 6 1,4,7,10, 2019	No	Range: <0.50 To 0.71				
(Well 8 sampled every three yr.)	Well 8, 1/2018	No	ND				

Disinfection Byproducts Detected within limits;							
Contaminant	*Source*	*Violation Y/N*	*Level Detected*	*Unit Measurement*	*MCLG*	*MCL*	*Likely Source of Contamination*
Halo acetic Acids (HAA5)	Distribution System	No	<1	ppb	N/A	60	By-product of drinking water disinfection.
Total Trihalomethanes (TTHMs)	Distribution System	No	Average .002 Range 1.4 to 2.5	ppb	N/A	80	By-product of drinking water disinfection.

Section Three: Non-Detects

Radioactive Contaminants tested but NOT DETECTED Tested every six years (2014)							
Contaminant	*Source*	*Violation Y/N*	*Level Detected*	*Unit Measurement*	*MCLG*	*MCL*	*Likely Source of Contamination*
Radium 226 Radium 228 Combined R	Well 7, 4/14 Well 8, 2/14 Well 6, 2/14	No No No	ND ND ND	pCi/L	0	5	Erosion of natural deposits

Inorganic Contaminants tested but NOT DETECTED All three sources.

Normally tested every nine years. 5/2017

Antimony	Asbestos*	Beryllium	Cadmium
Cyanide *	Mercury	Thallium	Nickel
Selenium		*(* last tested in 2017)*	

Synthetic Organic Compounds tested but NOT DETECTED (including Pesticides and Herbicides) All three sources.

Tested every nine years 5/2017

Toxaphene	Alachor	Chlordane	DibromoChloropropane	Ethylene Dibromide
Heptachlor	Lindane	Endrin	Heptachlor Epoxide	Methoxychlor
2,4,- D	Atrazine	Carbofuran	2,4,5 – TP (Silvex)	Pentachlorophenol
Dalapon	Dinoseb	Diquat	Benzo (a) Pyrene	Hexachlorocyclopentadiene
Endothall	Glyphosate	Di (2-ethylhexyl) phthalate		Di (2-ethylhexyl) adipate
Oxamyl	Picloram	Simazine	2,3,7,8-TCDD (Dioxin)	Hexachlorobenzene

Volatile Organic Compounds tested but NOT DETECTED All three sources.

Tested every three years (2017)

Benzene	Carbon tetrachloride	(mono) chlorobenzene	oDichlorobenzene
para-Dichlorobenzene	1,2 – Dichloroethane	1,1 – Dichloroethylene	cis-1,2-Dichloroethylene
trans-1,2 –Dichloroethylene	Dichloromethane	1,2-Dichloropropane	Ethylbenzene
Styrene	1,2,4 –Trichlorobenzene	1,1,1 – Trichloroethane	1,1,2 –Trichloroethane
Trichloroethylene	Toluene	Vinyl Chloride	Xylenes

Aroclor (PCB's Screening Test) Tested but not detected All three sources 5/2017

As you can see by the above test results, our 2019 water quality testing yielded no violations of state or federal water quality standards. We are fortunate that our water meets or exceeds all Federal and State requirements.

We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

MCLs (Maximum Contaminant Levels) are set at very stringent levels. To illustrate the possible health effects described for many regulated constituents, a person would have to drink two liters of water every day at the MCL level for a lifetime to have a *one-in-a-million* chance of having the described health effect.

Test results show that Parker's water is in compliance with all applicable standards. The Town of Parker water system routinely monitors for constituents in your drinking water according to Federal and State laws. The previous tables and lists show the results of our 2019 monitoring (or in the case of monitoring not done every year, the most recent results). ADEQ has reduced our monitoring frequency on many contaminants due to our monitoring history. We are pleased to report that our drinking water is safe, and meets federal and state requirements.

The Arizona Department of Environmental Quality has completed (in draft form) a **Source Water Assessment Report** for our water system. In its conclusion, this report states the following:

"Based on the information currently available on the hydrogeologic settings and the adjacent land uses that are in the specified proximity of the drinking water source(s) of this public water system, the Arizona Department of Environmental Quality (ADEQ) has given a high risk designation for the degree to which this public water system drinking water source(s) are protected. A designation of high risk indicates there may be additional source water protection measures which can be implemented on the local level. This does not imply that the source water is contaminated nor does it mean that contamination is imminent. Rather, it simply states that land use activities or hydrogeologic conditions exist that make the source water susceptible to possible future contamination."

More information on the Source Water Assessment Report can be obtained from ADEQ, Drinking Water Section, Monitoring and Assessment Unit, 1110 W. Washington St., Phoenix, AZ 85007, or by calling 1-800-234-5677, or from the ADEQ website at www.azdeq.gov.

Who do I contact if I have questions about the Town of Parker's drinking water system or this report?

If you have any questions concerning this report or your water utility, please contact Town of Parker Water Division at (928) 669-9265 during normal business hours (8:00 am to 5:00 p.m., Monday through Friday, except holidays). You may also contact the US EPA's Safe Drinking Water Hotline (800-426-4791) about the Safe Drinking Water Act or the US EPA's other drinking water programs.

***We want our valued customers to be** informed about their water utility. If other people, such as tenants, residents, patients, students, or employees, receive water from you, it is important that you provide this notice to them by posting it in a conspicuous location or by direct hand or mail delivery.*

Since this is a municipal utility, the ultimate authority rests with the Town Council. The Council holds regularly scheduled meetings on the first and third Tuesdays of each

month at 6:00 p.m. in the Council Chamber, at Town Hall, 1314 11th Street, in Parker.

In our continuing efforts to maintain a safe and dependable water supply, it may be necessary to make improvements to your water system. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements.

A brief note concerning consumption/water bills… If you notice your water bill increasing as the weather warms up, don't be surprised. The town as a whole uses fully *twice as much* water in the summer as in the winter. In the winter months (December, January, February) we pump 16.8 million gallons per month (three year average). In the summer months (June, July, August) we pump 30.6 million gallons per month (three year average); less than twice as much as in the winter months.

We at the Town of Parker Water Division work 365 days per year to provide a reliable supply of top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.