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***2021***  
***Twenty Third Annual***  
***Drinking Water Quality Report***

**TOWN OF PARKER**  
**Public Water System #AZ0415013**

Published 2021, covering 2020 Water Quality Testing  
**Este reporte contiene información muy importante sobre su agua potable.**

Hable con alguien que se lo pueda traducir para que entienda bien el contenido.

## TOWN OF PARKER

### 2021 23rd Annual Drinking Water Quality Report

Covering 2020 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 is 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 2020, (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 the Town of Parker is groundwater (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 2020 we pumped a total of 287,042,003 gallons, for an average of 797,338 gallons per day. (This is up from 275,639,000 gallons total and 755,175 gallons per day in 2019.) Our usage fluctuates seasonally;

we pump twice as much water in the summer months as we do in the winter months.

In 2020, our primary well, Well 7, produced 78.87% of the total, or 226,402,000 gallons. Well 8 produced 1,202,003 gallons, 0.43% of the total; and Well 6 produced 59,427,200 gallons, 20.7% 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](http://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.

**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:** 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 2 - 2.3 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. Older children and adults may safely drink the water.

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 1-877-8-NSF-HELP, or visit their website at [nsf.org](http://nsf.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 and detected nitrate levels above 5ppm, you should ask advice from your health care provider. The Town of Parker 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. The Town of Parker 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 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 water, 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 Quality Data - Regulated Contaminants

<b>Microbiological Contaminants</b>						
Detected within limits; No violation. Tested every month						
<i>Contaminant</i>	<i>Violation Y/N</i>	<i>Number of Positive Samples</i>	<i>Unit Measurement</i>	<i>MCL</i>	<i>MCLG</i>	<i>Likely Source of Contamination</i>
Total Coliform Bacteria.	No	0	Presence or absence of bacteria	0	0	Human or animal waste, naturally present in the environment.

**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 2020.

<b>Disinfectants</b>							
Detected within limits. Tested daily							
<i>Disinfectant</i>	<i>MCL Violation Y/N</i>	<i>Running Annual Average (RAA)</i>	<i>Range of All Samples</i>	<i>MRDL</i>	<i>MRDLG</i>	<i>Sample Month/Year</i>	<i>Likely Source of Contamination</i>
Chlorine/Chloramine	No	0.77	0.65 – 1.06	4	4	7/2020	Water additive used to control microbes

<b>Disinfection By-Products</b>							
Detected within limits. Tested every year							
<i>Contaminant</i>	<i>MCL Violation Y/N</i>	<i>Running Annual Avg. or Highest Level Detected</i>	<i>Range of All Samples</i>	<i>MCL</i>	<i>MCLG</i>	<i>Sample Month/Year</i>	<i>Likely Source of Contamination</i>
Haloacetic Acids (HAA5) ppb	No	<1	<1	60	N/A	9/2020	By-product of drinking water disinfection.
Total Trihalomethanes (TTHMs) ppb	No	1.8	1.8	80	N/A	9/2020	By-product of drinking water disinfection.

<b>Lead &amp; Copper</b>								
Detected within limits. Tested every three years								
<i>Contaminant</i>	<i>MCL Violation Y/N</i>	<i>90<sup>th</sup> Percentile</i>	<i>Number of Samples Exceeds AL</i>	<i>Unit Measurement</i>	<i>AL</i>	<i>ALG</i>	<i>Sample Month/Year</i>	<i>Likely Source of Contamination</i>
Copper	No	.17	0	ppm	1.3	1.3	7/2020	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead	No	ND (<0.5)	0	ppb	15	0	7/2020	Corrosion of household plumbing systems; erosion of natural deposits.

### Radionuclides

Detected within limits. Tested every six years at all 3 well sites

Contaminant	MCL Violation Y/N	Running Annual Avg. or Highest Level Detected	Range of Samples	MCL	MCLG	Sample Month/Year	Likely Source of Contamination
Alpha Emitters	No	4.5	< 3 – 4.5	15	0	2/2020	Erosion of natural deposits.
Combined Radium 226 & 228	No	ND	ND	5	0	2/2020	Erosion of natural deposits

### Inorganic Contaminants

Detected within limits; Tested every nine years, at all 3 well sites, except as noted

Contaminant	MCL Violation Y/N	Running Annual Avg. or Highest Level Detected	Range of All Samples	MCL	MCLG	Sample Month/Year	Likely Source of Contamination
Arsenic (ppb)	No	7.5	6.2 – 7.5	10	0	7/2020	Erosion of natural deposits, runoff from orchards; Runoff from glass and electronics production wastes
Barium (ppm)	No	.033	.020 - .033	2	2	4/2020	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)	No	2.6	ND - 2.6	100	100	4/2020	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	No	2.3	2 - 2.3	4	4	7/2020	Erosion of natural deposits; Discharge from fertilizer and aluminum factories
Nitrate <sup>1</sup>	No	3.3	.28 - 3.3	10	10	4/2020,	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium <sup>2</sup> (ppm)	No	260	200-260	N/A	N/A	1/2018	Erosion of natural deposits

<sup>1</sup>Nitrate is tested yearly

<sup>2</sup>Sodium is tested every 3 years

### Inorganic Contaminants tested but NOT DETECTED

Tested every nine years at all 3 well sites. Tested in 2/2020, 4/2020, 7/2020

Antimony      Asbestos      Beryllium      Cadmium      Cyanide      Mercury      Nitrite  
Selenium      Thallium

### Synthetic Organic Compounds tested but NOT DETECTED

Tested every three years at all 3 well sites. Tested in 2/2020, 4/2020, 7/2020

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

### Volatile Organic Chemicals (VOC)

Detected within limits. Tested annually at 2 well sites and every 3 years at 1 well site.

Contaminant	MCL Violation Y/N	Running Annual Avg. or Highest Level Detected	Range of All Samples	MCL	MCLG	Sample Month/Year	Likely Source of Contamination
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Ethylbenzene (ppb)	No	0.52	ND - 0.52	700	700	7/2020	Discharge from petroleum factories
Tetrachloro - ethylene (ppb)	No	0.52	ND - 0.52	5	0	7/2020	Discharge from factories and dry cleaners
Total Xylenes (ppm)	No	0.0034	ND - 0.0034	10	10	7/2020	Discharge from petroleum or chemical factories

**Volatile Organic Compounds tested but NOT DETECTED**

**Tested every year at 2 well sites and every three years at 1 well site. Tested in 4/2020, 7/2020, 12/2020**

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 Styrene  
 1,2,4 –Trichlorobenzene 1,1,1 – Trichloroethane 1,1,2 –Trichloroethane Trichloroethylene  
 Toluene Vinyl Chloride

**Aroclor (PCB’s Screening Test) tested but NOT DETECTED**

**Tested every three years at all 3 well sites. Tested in 2/2020, 4/2020, 7/2020**

**Violation Summary (for MCL, MRDL, AL, TT, or Monitoring & Reporting Requirement)**

Violation Type	Explanation, Health Effects	Time Period	Corrective Actions
Reporting	June 2020 Revised Total Coliform Rule (RTCR) results submitted to ADEQ after the due date	7/10/2020 – 7/30/2020	Results submitted late on 7/30/2020
Reporting	2Q2020 Maximum Residual Disinfectant Level (MRDL) report submitted to ADEQ after the due date	7/10/2020 – 8/20/2020	Report submitted late on 8/20/2020
Reporting	2018-2020 copper results submitted to ADEQ after the due date	10/10/2020 – 11/25/2020	Results submitted late on 11/25/2020
Reporting	Lead Consumer Notices (LCNs) delivered to consumers after the 30 day time frame	10/9/2020 – 12/1/2020	LCNs were distributed

As you can see by the above test results, our 2020 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, the average 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 2020 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 either 602-771-4597 or 602-771-4298, or from the ADEQ website at [www.azdeq.gov](http://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.