

# Oak Creek Water District

## 2020 Consumer Confidence Report

Este informe contiene información muy importante sobre el agua usted bebe. Tradúscalo ó hable con alguien que lo entienda

### Public Water System (PWS) Information

PWS ID Number	PWS Name		
AZ04 -13-041	Oak Creek Water District		
Contact Person and Title	Phone Number	E-Mail Address	
Doug Bowen - President	928 282-3404	info@oakcreekwater.com	
We want our valued customers to be informed about their water quality. If you would like to learn more please contact Oak Creek Water District at (928) 282-3404 for additional information;			

### Drinking Water Sources

Our groundwater is pumped from three 600' wells located within our service area. We routinely monitor for contaminants in our drinking water. This report provides information allowing you to make more informed decisions regarding your drinking water.

### Drinking Water Contaminants

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 by-products 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.

### Vulnerable Population

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. 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 from 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.

## Definitions

AL = Action Level - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements.

MCL = Maximum Contaminant Level – The highest level of a contaminant that is allowed in drinking water.

MCLG = Maximum Contaminant Level Goal - The level of a contaminant in drinking water below which there is no known or expected risk to health.

MFL = Million fibers per liter.

MRDL = Maximum Residual Disinfectant Level. The level of disinfectant added for water treatment that may not be exceeded at the consumer's tap.

MRDLG = Maximum Residual Disinfectant Level Goal. The level of disinfectant added for treatment at which no known or anticipated adverse effect on health of persons would occur.

MREM = Millirems per year – a measure of radiation absorbed by the body.

NA = Not Applicable, sampling was not completed by regulation or was not required.

NTU = Nephelometric Turbidity Units, a measure of water clarity.

PCi/L = Picocuries per liter - picocuries per liter is a measure of the radioactivity in water.

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.

PPQ = Parts per quadrillion or Picograms per liter.

TT = Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water.

ppm x 1000 = ppb
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ppb x 1000 = ppt
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ppt x 1000 = ppq
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## Health Effects Language

**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.

If **arsenic** is less than or equal to the MCL, your drinking water meets EPA's standards. 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. Oak Creek Water 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 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](http://www.epa.gov/safewater/lead).

## Water Quality Data

Microbiological	Violation Y or N	Number of Samples Present OR Highest Level Detected	Absent (A) or Present (P) OR Range of All Samples (L-H)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
<b>Total Coliform Bacteria</b>	N	0	Absent	Absent	Absent	1/1/20-12/31/20	Naturally Present in Environment
Lead & Copper	Violation Y or N	90 <sup>th</sup> Percentile AND Number of Samples Over the AL	Range of All Samples (L-H)	AL	ALG	Sample Month & Year	Likely Source of Contamination
<b>Copper (ppm)</b>	N	90 <sup>th</sup> Percentile =0.18	0.005-0.19	AL = 1.3	ALG = 1.3	9/2019	Corrosion of household plumbing systems; erosion of natural deposits
<b>Lead (ppb)</b>	N	90 <sup>th</sup> Percentile = 1.1	ND-1.0	AL = 15	0	9/2019	Corrosion of household plumbing systems; erosion of natural deposits
Radionuclides	Violation Y or N	Running Annual Average (RAA) OR Highest Level Detected	Range of All Samples (L-H)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
<b>Gross Alpha emitters (pCi/L)</b>	N	3.2+/-1.0 PCI/L	<3-3.2+/-1.0 PCI/L	15	0	11/2019	Erosion of natural deposits
<b>Combined Radium 226 &amp; 228 (pCi/L)</b>	N	<1	<1 PCI/L	5	0	11/2019	Erosion of natural deposits
Inorganic Chemicals (IOC)	Violation Y or N	Running Annual Average (RAA) OR Highest Level Detected	Range of All Samples (L-H)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
<b>Antimony (ppb)</b>	N	<1.0	<1.0	6	6	8-2020	Discharge from petroleum refineries; fire retardants; ceramics, electronics and solder
<b>Arsenic (ppb)</b>	Y	RAA = 10.33	9.6-11.0	10	0	2020 Quarterly	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes
<b>Asbestos (MFL)</b>	N	<0.2	<0.2	7	7	6-2016	Decay of asbestos cement water mains; Erosion of natural deposits
<b>Barium (ppm)</b>	N	0.22	0.22	2	2	8-2020	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits
<b>Beryllium (ppb)</b>	N	<1.0	<1.0	4	4	8-2020	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
<b>Cadmium (ppb)</b>	N	<0.5	<0.5	5	5	8-2020	Corrosion of galvanized pipes; natural deposits; metal refineries; runoff from waste batteries and paints
<b>Chromium (ppb)</b>	N	1.8	1.8	100	100	8-2020	Discharge from steel and pulp mills; Erosion of natural deposits
<b>Cyanide (ppb)</b>	N	<25	<25	200	200	8-2020	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories

Fluoride (ppm)	N	0.084	0.084	4	4	8-2020	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Mercury (ppb)	N	<0.2	<0.2	2	2	8-2020	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills and cropland.
Nitrate (ppm)	N	0.66	0.45-0.77	10	10	8-2020	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (ppm)	N	<0.05	<0.05	1	1	6-2016	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nickle (ppb)	N	<0.005	<0.005	No MCL		8-2020	
Selenium (ppb)	N	<0.005	<0.005	50	50	8-2020	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)	N	9.7	9.7	3000	3000	8-2020	N/A
Thallium (ppb)	N	<1.0	<1.0	2	0.5	8-2020	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
Synthetic Organic Chemicals (SOC)	Violation Y or N	Running Annual Average (RAA) OR Highest Level Detected	Range of All Samples (L-H)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
2,4-D (ppb)	N	<0.1	<0.1	70	70	11-2019	Runoff from herbicide used on row crops
2,4,5-TP (a.k.a. Silvex) (ppb)	N	<0.2	<0.2	50	50	11-2019	Residue of banned herbicide
Atrazine (ppb)	N	<0.05	<0.05	3	3	11-2019	Runoff from herbicide used on row crops
Benzo (a) pyrene (PAH) (ppt)	N	<50	<50	200	0	11-2019	Leaching from linings of water storage tanks and distribution lines
Carbofuran (ppb)	N	<0.5	<0.5	40	40	11-2019	Leaching of soil fumigant used on rice and alfalfa
Chlordane (ppb)	N	<0.1	<0.1	2	0	11-2019	Residue of banned termiticide
Dalapon (ppb)	N	<1	<1	200	200	11-2019	Runoff from herbicide used on rights of way
Di (2-ethylhexyl) adipate (ppb)	N	<0.6	<0.6	400	400	11-2019	Discharge from chemical factories
Di (2-ethylhexyl) phthalate (ppb)	N	<0.6	<0.6	6	0	11-2019	Discharge from rubber and chemical factories
Dibromochloropropane (1,2-DIBROMO-3-CHLOROPROPANE) (ppt)	N	<100	<100	200	0	11/2019	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
Dinoseb (ppb)	N	<0.2	<0.2	7	7	11-2019	Runoff from herbicide used on soybeans and vegetables
Diquat (ppb)	N	<0.4	<0.4	20	20	11-2019	Runoff from herbicide use

<b>Violations</b>		
Type/ Description	Compliance Period	Corrective Actions taken by PWS
Monitoring, Routine (Arsenic) EPDS003- EPDS004	01/01/2020 – 03/31/2020	Quarterly sampling, Installing Arsenic Treatment 2021
Monitoring, Routine (Arsenic) EPDS002- EPDS003- EPDS004	04/01/2020 – 06/30/2020	Quarterly sampling, Installing Arsenic Treatment 2021
Monitoring, Routine (Arsenic) EPDS002- EPDS003- EPDS004	07/01/2020 – 09/30/2020	Quarterly sampling, Installing Arsenic Treatment 2021
Monitoring, Routine (Arsenic) EPDS003	10/1/20 – 12/31/2020	Quarterly sampling, Installing Arsenic Treatment 2021

<b>Dioxin [a.k.a. 2,3,7,8-TCDD] (ppq)</b>	N	<5	<5	30	0	11-2019	Emissions from waste incineration and other combustion; discharge from chemical factories
<b>Endothall (ppb)</b>	N	<5	<5	100	100	11-2019	Runoff from herbicide use
<b>Endrin (ppb)</b>	N	<0.01	<0.01	2	2	11-2019	Residue of banned insecticide
<b>Ethylene dibromide (ppt)</b>	N	<10	<10	50	0	11-2019	Discharge from petroleum refineries
<b>Glyphosate (ppb)</b>	N	<6	<6	700	700	11-2019	Runoff from herbicide use
<b>Heptachlor (ppt)</b>	N	<100	<100	400	0	11-2019	Residue of banned termiticide
<b>Heptachlor epoxide (ppt)</b>	N	<100	<100	200	0	11-2019	Breakdown of heptachlor
<b>Hexachlorobenzene (ppb)</b>	N	<0.05	<0.05	1	0	11-2019	Discharge from metal refineries and agricultural chemical factories
<b>Hexachlorocyclopentadiene (ppb)</b>	N	<0.05	<0.05	50	50	11-2019	Discharge from chemical factories
<b>Lindane (aka BHC-Gamma) (ppt)</b>	N	<10	<10	200	200	11-2019	Runoff/leaching from insecticide used on cattle, lumber, gardens
<b>Methoxychlor (ppb)</b>	N	<0.05	<0.05	40	40	11-2019	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa,
<b>Oxamyl (a.k.a. Vydate) (ppb)</b>	N	<0.5	<0.5	200	200	11-2019	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
<b>PCBs [Polychlorinated biphenyls] (aka Aroclor) (ppt)</b>	N	<100	<100	500	0	11-2019	Runoff from landfills; discharge of waste chemicals
<b>Pentachlorophenol (ppb)</b>	N	<0.04	<0.04	1	0	11-2019	Discharge from wood preserving factories
<b>Picloram (ppb)</b>	N	<0.1	<0.1	500	500	11-2019	Herbicide runoff
<b>Simazine (ppb)</b>	N	<0.05	<0.05	4	4	11-2019	Herbicide runoff
<b>Toxaphene</b>	N	<0.05	<0.05	3	3	11-2019	Herbicide runoff
<b>Volatile Organic Chemicals (VOC)</b>	<b>Violation Y or N</b>	<b>Running Annual Average (RAA) OR Highest Level Detected</b>	<b>Range of All Samples (L-H)</b>	<b>MCL</b>	<b>MCLG</b>	<b>Sample Month &amp; Year</b>	<b>Likely Source of Contamination</b>
<b>Benzene (ppb)</b>	N	<0.5	<0.5	5	0	11-2019	Discharge from factories; leaching from gas storage tanks and landfills
<b>Carbon tetrachloride (ppb)</b>	N	<0.5	<0.5	5	0	11-2019	Discharge from chemical plants and other industrial activities
<b>Chlorobenzene (ppb)</b>	N	<0.5	<0.5	100	100	11-2019	Discharge from chemical and agricultural chemical factories
<b>o-Dichlorobenzene (ppb)</b>	N	<0.5	<0.5	600	600	11-2019	Discharge from industrial chemical factories
<b>p-Dichlorobenzene (ppb)</b>	N	<0.5	<0.5	75	75	11-2019	Discharge from industrial chemical factories

<b>1,2-Dichloroethane (ppb)</b>	N	<0.5	<0.5	5	0	6-2016	Discharge from industrial chemical factories
<b>1,1-Dichloroethylene (ppb)</b>	N	<0.5	<0.5	7	7	11-2019	Discharge from industrial chemical factories
<b>cis-1,2-Dichloroethylene (ppb)</b>	N	<0.5	<0.5	70	70	6-2016	Discharge from industrial chemical factories
<b>trans-1,2-Dichloroethylene (ppb)</b>	N	<0.5	<0.5	100	100	6-2016	Discharge from industrial chemical factories
<b>Dichloromethane (ppb)</b>	N	<0.5	<0.5	5	0	6-2016	Discharge from pharmaceutical and chemical factories
<b>1,2-Dichloropropane (ppb)</b>	N	<0.5	<0.5	5	0	11-2019	Discharge from industrial chemical factories
<b>Ethylbenzene (ppb)</b>	N	<0.5	<0.5	700	700	11-2019	Discharge from petroleum refineries
<b>Styrene (ppb)</b>	N	<0.5	<0.5	100	100	11-2019	Discharge from rubber and plastic factories; leaching from landfills
<b>Tetrachloroethylene (ppb)</b>	N	<0.5	<0.5	5	0	11-2019	Discharge from factories and dry cleaners
<b>1,2,4-Trichlorobenzene (ppb)</b>	N	<0.5	<0.5	7	0	6-2016	Discharge from textile-finishing factories
<b>1,1,1-Trichloroethane (ppb)</b>	N	<0.5	<0.5	200	200	11-2019	Discharge from metal degreasing sites and other factories
<b>1,1,2-Trichloroethane (ppb)</b>	N	<0.5	<0.5	5	3	11-2019	Discharge from industrial chemical factories
<b>Trichloroethylene (ppb)</b>	N	<0.5	<0.5	5	0	11-2019	Discharge from metal degreasing sites and other factories
<b>Toluene (ppm)</b>	N	<0.5	<0.5	1	1	11-2019	Discharge from petroleum factories
<b>Vinyl Chloride (ppb)</b>	N	<0.3	<0.3	2	0	11-2019	Leaching from PVC piping; discharge from chemical factories
<b>Xylenes (ppm)</b>	N	<0.5	<0.5	10	10	11-2019	Discharge from petroleum or chemical factories