

# Consumer Confidence Report For Calendar Year 2016

Este informe contiene informactión muy importante sobre el aqua usted bebe. Tradúscalo ó hable con alguien que lo entienda bien.

I. Public Water System (PWS) Information

PWS ID Number	PWS Name				
AZ04 -09016	Joseph City Utilities				
<b>Contact Person and Title</b>	Phone Number E-Mail Address				
Jeff Hammond Operator		Operator 928-245-1677 jeffhammond@yahoo.com			
more about public participa	mers to be informed about their water quality. If you would like to learn ation or to attend any of our regularly scheduled meetings, please at				
and meeting dates and times.					

## II. Drinking Water Sources

The sources of drinking water (both tap 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 pickup substances resulting from the presence of animals or from human activity.

The report must contain a brief explanation regarding contaminants which may reasonably be expected to be found in drinking water. This explanation may include the language of paragraph 40 CFR 141.153 (h)(1)(iii) shown below, or the system may use their own comparable language:

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

Our water source(s): Wells #55628495 and #55628496

#### III. Consecutive Connection Sources

A public water system that receives some or all of its finished water from one or more wholesale systems by means of a direct connection or through the distribution system of one or more consecutive systems. Systems that purchase water from another system report regulated contaminants detected from the source water supply in a separate table.

#### IV. Drinking Water Contaminants

<u>Microbial contaminants</u>, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

<u>Inorganic contaminants</u>, 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.

<u>Pesticides and herbicides</u> that may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.

<u>Organic chemical contaminants</u>, 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.

## V. 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.

## VI. Source Water Assessment

Further source water assessment documentation can be obtained by contacting ADEQ, 602-771-4641. CCR LOW RISK: Based on the information currently available on the hydrogeological settings of and the adjacent land uses that are in the specified proximity of the drinking water source(s) of this public water systems, the Arizona Department of Environmental Quality has given us a low risk designation for the degree to which this public water system drinking water source(s) are protected. A low risk designation indicates that most source water protection measures are either already implemented, or the hydrogeology is such that the source water protection measures will have little impact on protection.

#### VII. Definitions

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

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

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

MFL = Million fibers per liter.

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

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

 $\underline{\mathsf{MREM}} = \underline{\mathsf{Millirems}} \ \mathsf{per} \ \mathsf{year} - \mathsf{a} \ \mathsf{measure} \ \mathsf{of} \ \mathsf{radiation} \ \mathsf{absorbed} \ \mathsf{by} \ \mathsf{the} \ \mathsf{body}.$ 

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

<u>NTU = Nephelometric Turbidity Units</u>, a measure of water clarity.

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

<u>PPM = Parts per million</u> or Milligrams per liter (mg/L).

 $\underline{PPB} = \underline{Parts \ per \ billion}$  or Micrograms per liter (µg/L).

<u>PPT = Parts per trillion</u> or Nanograms per liter.

<u>PPQ = Parts per quadrillion</u> or Picograms per liter.

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

ppm x 1000 = ppb ppb x 1000 = ppt ppt x 1000 = ppq

## VIII. 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. **Joseph City Utilities** 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 <a href="https://www.epa.gov/safewater/lead">www.epa.gov/safewater/lead</a>.

IX. Water Quality Data

Microbiological	Violation Y or N	Number of Samples Present <u>OR</u> Highest Level Detected	Absent (A) or Present (P) <u>OR</u> Range of All Samples (L-H)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Total Coliform Bacteria (System takes ≥ 40 monthly samples) 5% of monthly samples are positive; (System takes ≤ 40 monthly samples) 1 positive monthly sample	N	0		0	0		Naturally Present in Environment
Fecal coliform and E. Coli (TC Rule)	N	0		0	0		Human and animal fecal waste
Fecal Indicators (E. coli, enterococci or coliphage) (GW Rule)	N	0		TT	n/a		Human and animal fecal waste
Disinfectants	Violation Y or N	Running Annual Average (RAA)	Range of All Samples (L-H)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Chlorine (ppm)	N	0.71	0-2	MRDL = 4	MRDLG = 4	1- 12/2016	Water additive used to control microbes
Disinfection By-Products	Violation Y or N	Running Annual Average (RAA) <u>OR</u> Highest Level Detected	Range of All Samples (L-H)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Haloacetic Acids (ppb) (HAA5)	N	ND		60	n/a	8/16	Byproduct of drinking water disinfection
Total Trihalomethanes (ppb) (TTHM)	N	ND		80	n/a	8/16	Byproduct of drinking water disinfection
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
Copper (ppm)	N	90 <sup>th</sup> Percentile = 0.17 0over	<0.02-0.17	AL = 1.3	ALG = 1.3	8/16	Corrosion of household plumbing systems; erosion of natural

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Lead (ppb)	N	90 <sup>th</sup> Percentile = 0.0022 2 over	<0.0010-0.45	AL = 15	0	8/16	deposits  Corrosion of household plumbing systems; erosion of natural deposits
Radionuclides	Violation Y or N	Running Annual Average (RAA) <u>OR</u> Highest Level Detected	Range of All Samples (L-H)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Alpha emitters (pCi/L) (this is Gross Alpha 4002)	N	5.6-5.9		15	0	11/2014	Erosion of natural deposits
Combined Radium 226 & 228 (pCi/L)	N	ND-3.2		5	0	11/2014	Erosion of natural deposits
Inorganic Chemicals (IOC)	Violation Y or N	Running Annual Average (RAA) <u>OR</u> Highest Level Detected	Range of All Samples (L-H)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Nitrate (ppm)	N	<0.05		10	10	11/16	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (ppm)	N	<0.1		1	1	12/13	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Synthetic Organic Chemicals (SOC)	Violation Y or N	Running Annual Average (RAA) <u>OR</u> Highest Level Detected	Range of All Samples (L-H)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
2,4-D (ppb)	N	N/D		70	70	11/2014	Runoff from herbicide used on row crops
2,4,5-TP (a.k.a. Silvex) (ppb)	N	N/D		50	50	11/2014	Residue of banned herbicide
Acrylamide	N	N/D		TT	0	11/2014	Added to water during sewage / wastewater treatment
Alachlor (ppb)	N	N/D		2	0	11/2014	Runoff from herbicide used on row crops
Atrazine (ppb)	N	N/D		3	3	11/2014	Runoff from herbicide used on row crops
Benzo (a) pyrene (PAH) (ppt)	N	N/D		200	0	11/2014	Leaching from linings of water storage tanks and distribution lines
Carbofuran (ppb)	N	N/D		40	40	11/2014	Leaching of soil fumigant used on rice and alfalfa
Chlordane (ppb)	N	N/D		2	0	11/2014	Residue of banned termiticide
Dalapon (ppb)	N	N/D		200	200	11/2014	Runoff from herbicide used on rights of way
Di (2-ethylhexyl) adipate (ppb)	N	N/D		400	400	11/2014	Discharge from chemical factories
Di (2-ethylhexyl) phthalate (ppb)	N	N/D		6	0	11/2014	Discharge from rubber and chemical factories
Dibromochloropropane (ppt)	N	N/D		200	0	11/2014	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
Dinoseb (ppb)	N	N/D		7	7	11/2014	Runoff from herbicide used on soybeans and vegetables
Diquat (ppb)	N	N/D		20	20	11/2014	Runoff from herbicide use

	1	N/D				11/2014	Emissions from waste
Dioxin [a.k.a. 2,3,7,8-TCDD] (ppq)	N			30	0		incineration and other combustion; discharge from chemical factories
Endothall (ppb)	N	N/D		100	100	11/2014	Runoff from herbicide use
Endrin (ppb)	N	N/D		2	2	11/2014	Residue of banned insecticide
Epichlorohydrin	N	N/D		ТТ	0	11/2014	Discharge from industrial chemical factories; an impurity of some water treatment chemicals
Ethylene dibromide (ppt)	N	N/D		50	0	11/2014	Discharge from petroleum refineries
Glyphosate (ppb)	N	N/D		700	700	11/2014	Runoff from herbicide use
Heptachlor (ppt)	N	N/D		400	0	11/2014	Residue of banned termiticide
Heptachlor epoxide (ppt)	N	N/D		200	0	11/2014	Breakdown of heptachlor
Hexachlorobenzene (ppb)	N	N/D		1	0	11/2014	Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclo pentadiene (ppb)	N	N/D		50	50	11/2014	Discharge from chemical factories
Lindane (ppt)	N	N/D		200	200	11/2014	Runoff/leaching from insecticide used on cattle, lumber, gardens
Methoxychlor (ppb)	N	N/D		40	40	11/2014	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa,
Oxamyl (a.k.a. Vydate) (ppb)	N	N/D		200	200	11/2014	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
PCBs [Polychlorinated biphenyls] (ppt)	N	N/D		500	0	11/2014	Runoff from landfills; discharge of waste chemicals
Pentachlorophenol (ppb)	N	N/D		1	0	11/2014	Discharge from wood preserving factories
Picloram (ppb)	N	N/D		500	500	11/2014	Herbicide runoff
Simazine (ppb)	N	N/D		4	4	11/2014	Herbicide runoff
Toxaphene (ppb)	N	N/D		3	0	11/2014	Runoff/leaching from insecticide used on cotton and cattle
Volatile Organic Chemicals (VOC)	Violation Y or N	Running Annual Average (RAA) <u>OR</u> Highest Level Detected	Range of All Samples (L-H)	MCL	MCLG		Likely Source of Contamination
Benzene (ppb)	N	N/D		5	0	11/14	Discharge from factories; leaching from gas storage tanks and landfills
Carbon tetrachloride (ppb)	N	N/D		5	0	11/14	Discharge from chemical plants and other industrial activities

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Chlorobenzene (ppb)	N	N/D		100	100	11/14	Discharge from chemical and agricultural chemical factories
o-Dichlorobenzene (ppb)	N	N/D		600	600	11/14	Discharge from industrial chemical factories
p-Dichlorobenzene (ppb)	N	N/D		75	75	11/14	Discharge from industrial chemical factories
1,2-Dichloroethane (ppb)	N	N/D		5	0	11/14	Discharge from industrial chemical factories
1,1-Dichloroethylene (ppb)	N	N/D		7	7	11/14	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene (ppb)	N	N/D		70	70	11/14	Discharge from industrial chemical factories
trans-1,2- Dichloroethylene (ppb)	N	N/D		100	100	11/14	Discharge from industrial chemical factories
Dichloromethane (ppb)	N	N/D		5	0	11/14	Discharge from pharmaceutical and chemical factories
1,2-Dichloropropane (ppb)	N	N/D		5	0	11/14	Discharge from industrial chemical factories
Ethylbenzene (ppb)	N	N/D		700	700	11/14	Discharge from petroleum refineries
Styrene (ppb)	N	N/D		100	100	11/14	Discharge from rubber and plastic factories; leaching from landfills
Tetrachloroethylene (ppb)	N	N/D		5	0	11/14	Discharge from factories and dry cleaners
1,2,4-Trichlorobenzene (ppb)	N	N/D		70	70	11/14	Discharge from textile-finishing factories
1,1,1-Trichloroethane (ppb)	N	N/D		200	200	11/14	Discharge from metal degreasing sites and other factories
1,1,2-Trichloroethane (ppb)	N	N/D		5	3	11/14	Discharge from industrial chemical factories
Trichloroethylene (ppb)	N	N/D		5	0	11/14	Discharge from metal degreasing sites and other factories
Toluene (ppm)	N	N/D		1	1	11/14	Discharge from petroleum factories
Vinyl Chloride (ppb)	N	N/D		2	0	11/14	Leaching from PVC piping; discharge from chemical factories
Xylenes (ppm)	N	N/D		10	10	11/14	Discharge from petroleum or chemical factories

# X. Violations

Type / Description	Compliance Period	Corrective Actions taken by PWS
Copper/Lead	2016 sample on time, late submittal	Submitted after due date
Chlorine Residual	1 <sup>st</sup> Qtr 4th Qtr late submittal	Submitted after due date

An explanation of the violation(s) in the above table, the steps taken to resolve the violation(s) and any required health effects information <u>are required to be included with this report</u>. (Attach copy of Public Notice if available.)