

# Tohono O'odham Utility Authority Annual Water Quality Report

## 32 Public Water Systems

2015

### **Is my water safe?**

This report is a snapshot of your water quality. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with information because informed customers are our best allies.

### **Do I need to take special precautions?**

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. The Environmental Protection Agency (EPA) and Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

### **Where does my water come from?**

Your water comes from ground water sources.

### **Why are there contaminants in my drinking water?**

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 Environmental Protection Agency's Safe Drinking Water Hotline (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, and can pick up substances resulting from the presence of animals or from human activity including:

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, and domestic wastewater discharges, oil and gas production, mining, 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 by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; and radioactive contaminants, which 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, EPA prescribes regulations that 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.

## Unit Descriptions

Term	Definition
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or microgram per liter (ug/L)
positives samples	positive samples/yr: the number of positive samples taken that year
% positive samples/month	% positive samples/month: % of samples taken monthly that were positive
N/A	N/A: Not applicable
ND	ND Not detected
NR	NR: Monitoring not required, but recommended.
MCLG	MCLG: Maximum Contaminant Level Goal: 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.
MCL	MCL: Maximum Contaminant Level: 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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, trigger treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. 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.
MRDL	MRDL: Maximum residual disinfectant level. The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level
mrem/yr	mrem/yr: Millirem per year

2015		INORGANIC CONTAMINANTS					OTHER	DISINFECTION		MICROBIAL		LEAD & COPPER		RADIOLOGICAL CONTAMINANTS					
VILLAGE	PWSID#	ARSENIC	FLUORIDE	NITRATE	SODIUM	VARIOUS	TTHM'S	HAAS'S	Total Coliforms	Fecal Coliforms/E. Coli	Copper 90th %	Lead 90th %	Adjusted Alpha	Uranium	Total Radium				
Maximum Contaminant Level Goal (MCLG)		N/A	4 PPM	10 PPM	None	CONTAMINANTS	None	None	Zero	Zero	1.3 ppm	0 ppb	0 pCi/L	0 ppb	0 pCi/L				
Maximum Contaminant Level (MCL)		10 PPB	4 PPM	10 PPM	No PPM	See Note #	80 PPB	60 ppb	2 or more positive samples/month	2 or more positive samples/month	Action Level 1.3 ppm	Action Level 15 ppb	15 pCi/L	30 ppb	5 pCi/L				
Major Source of Contaminant		Erosion of natural deposits; runoff of orchards; glass & electronics production wastes	Erosion of natural deposits; dental water additive; discharge from factories	Runoff & leaching from fertilizer use and/or septic tanks; sewage; erosion of natural deposits	Erosion of natural deposits; salt water intrusion		By-product of drinking water chlorination	By-product of drinking water chlorination	Naturally present in the environment	Human and animal waste	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives; discharges from industrial manufacturers		Erosion of natural deposits	Erosion of natural deposits	Erosion of natural deposits				
Topawa Intertie/ Choulic/South Komelec/Coldfields	040-0001	8.5	1	1.3	44	2012 #1 - 0.062 ppb	3.55	2 Samples Range ND	All Results Negative	All Results Negative	0.076	0.58	<1.0	2013	Apr-07	<0.4	2007		
Nolic Intertie/Cababi/San Luis	040-0002	7.6	1	2009	62	2009 #2 - 42 ppb #3 - 2 ppb	80	1.5	All Results Negative	All Results Negative	1.3	ND	<1.0		4	<0.3	2007		
Chai Chu	040-0003	3.2	1	2009	47	2009 #1 - 0.092 ppm	14	2.2	All Results Negative	All Results Negative	0.59	1	1.5	7.5	0.9	2007			
Fresnal	040-0004	3	<1	2011	2,3	Range 1.8-2.3	47	2011 #1 - 0.125	All Results Negative	All Results Negative	0.1	2012	1	2012	2.5	2.9	<0.4	2009	
Queen's Well	040-0005	3.45	<1	2011	2.4	47	2011 #1 - 0.071 ppm	15	1.4	All Results Negative	All Results Negative	0.046	65	2 Samples 0.2 - 2.5	2 Samples 3.2 - 6.5	0.7	2007		
Covered Wells Regional Intertie/ Sikul Himak	040-0006	3.7	1	2010	1.2	86	2010 #1 - 0.071 ppm	9.4	1.5	All Results Negative	All Results Negative	0.23	3.15	<1.0	7.6	<0.4	2007		
Charco 27	040-0008	5.8	1	2010	9.6	210	2010 #4 - 4.4 ppb	18	1.5	All Results Negative	All Results Negative	0.057	1.85	2.3	12.2	<0.8			
Kohatk	040-0016	0.9	1	2009	6.7	114	2009 #1 - 0.0825 ppm	5.9	0.12	All Results Negative	All Results Negative	0.084	ND	2.8	1.8	<0.5	2007		
Santa Rosa Ranch Intertie/ Sil Nakya	040-0018	2.7	<1	2011	2	36.5	2011 #1 - 0.067 ppb	25	2.2	All Results Negative	All Results Negative	0.065	0.725	1.3	10.2	<0.4	2007		
New Fields	040-0019	5.9	4	1.8	55	NONE	5.8	ND	All Results Negative	All Results Negative	0.11	0.57	0.5	9.4	<0.4	2007			
Vaya Chin Intertie/ Hikwan / San Simon	040-0020	2.9	1	2010	6.3	82	2010 #4 - 2.7 ppb	9.3	1.2	All Results Negative	All Results Negative	0.059	0.5	<1.0	2013	9.1	<0.4	2007	
Ak Chin	040-0022	4.9	1	2009	1.5	86	2009	3.3	ND	All Results Negative	All Results Negative	0.034	1.85	1.1	7.4	<0.4	2007		
Menager's Dam	040-0023	Intertied to Kerwo Intertie																	
San Miguel	040-0026	5.4	1.75	0.91	47	2013 #6 - 0.0085 ppm	8.2	ND	All Results Negative	All Results Negative	0.17	2.25	<1.0	2013	8.85	<0.3	2007		
Ventana	040-0027	1.9	1	2010	5.1	97	2010	0.56	ND	All Results Negative	All Results Negative	0.34	0.5	1	2013	8	2013	<0.4	2007
North Komelec	040-0028	Intertied to Greater Santa Rosa Regional																	
Cowlic	040-0029	7.2	1.05	1.3	67.5	2012 #1 - 0.685 2009 #6 - 0.003	1.6	ND	All Results Negative	All Results Negative	0.048	0.7	<1.0	17.1	<0.4	2008			
Pishemo Intertie / Santa Cruz	040-0030	2.6	1.5	1.4	90	2010	NONE	3.9	ND	All Results Negative	All Results Negative	0.065	ND	1.4	27.7	<0.4	2013		
Gunsight	040-0032	1.1	<1	2010	3.5	42	2010 #1 - 0.024 ppm	2.8	ND	All Results Negative	All Results Negative	0.14	1.95	1.7	3.6	<0.4	2007		
Cocklebur	040-0034	2	2.7	12	234	2005	NONE	1.7	4.9	All Results Negative	All Results Negative	0.024	1.06	<1.0	2013	<1.0	2013	<0.6	2007
San Xavier West	040-0035	3.8	<1	2011	3.6	10	2011 #1 - 0.088 #4 - 10 ppb	10	1.45	All Results Negative	All Results Negative	0.047	0.82	<1.0	2013	52.9	<0.4	2007	
San Pedro	040-0036	5.55	0.585	3.6	79	2011 #4 - 3.6 ppb	1.3	ND	All Results Negative	All Results Negative	0.123	0.615	2 Samples <1.0	4.4	<0.4	2011			
Kaka	040-0037	2.45	1	2010	4.8	58	2010 #4 - 2.5 ppb	3.1	ND	All Results Negative	All Results Negative	0.032	0.92	2 Samples <1.0	3.3	<0.4	2010		
Vamori	040-0038	7.2	1.015	1.3	53	2012 #1 - 0.076 ppm	1.5	ND	All Results Negative	All Results Negative	0.089	1.4	<1.0	2013	9.3	<0.4	2010		
Little Tucson	040-0040	6.15	<1	2011	2.4	56.5	2011 #1 - 0.077 ppm	4.2	ND	All Results Negative	All Results Negative	0.14	5.6	2 Samples <1.0	11.2	<0.4	2011		
Kerwo Intertie/ Pla Oik/ Menagers Dam	040-0041	1.463	0.73	2.3	55	2013 #8 - 0.1 ppb	0.62	ND	All Results Negative	All Results Negative	0.755	2.6	<1.0	2013	4	2013	<0.4	2013	
Sells Intertie/ Big Fields	040-0042	8.6	0.5	2.6	63	2012 #1 - 0.064 ppm	6.2	ND	All Results Negative	All Results Negative	0.088	0.75	<1.0	2012	7.1	0.3	2012		
Comobabi Intertie/ Crowhang	040-0220	1.9	<1	2011	1.3	41.5	2014 #10 - 3	8.9	1.1	All Results Negative	All Results Negative	0.156	0.802	0.1	5.7	<0.4	2012		
Tohono O'dham Community College (TOCC)	040-0215	2.35	ND	1.1	46	2013 #1 - 0.074 #8 - 0.7 ppb	30.1	1.1	All Results Negative	All Results Negative	0.27	1.8	<1.0	2	0.9				
Greater Santa Rosa Regional Intertie/ Santa Rosa Blvd. School/ Anegam/ Palo Verde Stand/ Santa Rosa Subdivision/ Santa Rosa Village/North Komelec	040-0226	7.2	0.125	4.4	87	2014 #11 - 0.98 #12 - 0.0059	4.2	ND	All Results Negative	All Results Negative	0.077	1.1	Quarterly 0.9 - <1.0	Quarterly 10.2 - 13	Quarterly 1				
San Xavier ORD (East)	040-0227	1.7	0.75	1	48.75	2013 #8 - 1 ppb 2011 #1 - 0.069	1.1	8.8	All Results Negative	All Results Negative	0.195	1.25	2.4	2 Samples 7.2 - 7.3	<0.4	2011			
Mission View	040-0228	See Tucson Water CCR	See Tucson Water CCR	See Tucson Water CCR	See Tucson Water CCR	See Tucson Water CCR	7.5	ND	All Results Negative	All Results Negative	0.033	1	See Tucson Water CCR	See Tucson Water CCR	See Tucson Water CCR				
Jackrabbit	040-0231	1.4	2	2009	3.6	190	2005	1.7	ND	All Results Negative	All Results Negative	0.115	0.67	0.2	13.3	0.3			
Ak Chin Nursing Home	040-0232	9.2	1	2009	1.6	9.9	#1 - 155 ppm 2009	3.68	2011	All Results Negative	All Results Negative	0.036	2.065	1.1	<0.001	2013	<0.4	2007	

NOTE: RESULTS IN YELLOW EXCEED THE MAXIMUM CONTAMINANT LEVEL

Color coded villages signify that the distribution system of more than one village has been intertied.

VARIOUS OTHER CONTAMINANTS:

#1 BARIUM	MCL - 2 ppm	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
#2 CHROMIUM	MCL - 100 ppb	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
#3 THALLIUM	MCL - 2 ppb	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
#4 SELENIUM	MCL - 50 ppb	Discharge from petroleum, glass and metal refineries, mines & chemical manufacturers; erosion of natural deposits; runoff
#5 MERCURY	MCL - 2 ppb	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and/or cropland
#6 TOLUENE - VOC	MCL - 1 ppm	Discharge from petroleum and chemical factories; underground gas tank leaks
#7 ANTIMONY	MCL - 6 ppb	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
#8 Di(2-ethylhexyl) phthalate	MCL - 6 ppb	SOC - Discharge from rubber and chemical factories; inert ingredient in pesticides
#9 Cyanide	MCL - 0.2 mg/L	Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid
#10 Selenium	MCL - 0.05 mg/L	Some people who drink water containing selenium well in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with circulation
#11 Ethylbenzene	MCL - 0.7mg/L	Some people who drink water containing ethylbenzenes well in excess of the MCL over many years could experience problems with their liver or kidneys
#12 Xylenes	MCL - 10 mg/L	Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system

### **Additional Information for Arsenic**

While your drinking water meets the EPA standard for arsenic, it does contain low levels of arsenic. The EPA standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The 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.

### **Additional Information for 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. PWS system 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 at 1-800-426-4791 or at <http://www.epa.gov/your-drinking-water/basic-information-about-lead-drinking-water>.

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### **How can I get involved?**

Please feel free to contact the number provided below for more information. Your input is important to us!

**For more information please contact:**

Myrt McIntyre, Manager, P.O. Box 816 , Sells, Arizona 85634

**Phone:** (520) 383-5830

**Fax:** (520) 419-4525