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SAFFORD, AZ
PERMIT NO 85



PWS # AZ04-05-005

2014 Annual Drinking Water Quality Report



City of Safford natural
gas customers if you
smell gas or have a gas
emergency call:
928-432-4200
24 hours a day or call
911

CONSUMER CONFIDENCE REPORT

Report Covers Calendar Year: January 1 – December 31, 2014

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

We are pleased to present to you this years wáter quality report. Our constant goal is to provide you with a safe and dependable supply of drinking wáter.

We are also pleased to inform you we are in Full Compliance with ADEQ.

1. Public Water System (PWS) Information

PWS Name:	CITY OF SAFFORD				
PWS ID #	AZ04-05-005				
Owner / Operator Name:	CITY OF SAFFORD/HARRY WILLIAMS				
Telephone #	928-432-4243	Fax #	928-348-3150	E-mail	hwilliams@saffordaz.gov
We want our valued customers to be informed about their water quality. If you would like to learn more about public participation or to attend any of our regularly scheduled meetings, please contact Eric Buckley at 928-432-4201 for additional opportunity and meetings dates and times.					

2. 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 pick up substances resulting from the presence of animals or from human activity.

Our water source(s):	BONITA SPRINGS/BONITA ARTESIAN WELLS WELL #15 KEMPTON WELLS A,B,& C MORRIS WELLS 1,2 & 3 CARRASCO WELL ALDER WELL CLONTS WELL
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3. 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. PWS ID # AZ04 - N/A provides a consecutive connection source of water.

4. 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 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.

5. 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 of 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.

6. Source Water Assessment

(A.)If the public water system received a Source Water Assessment (SWA), include a brief summary of the susceptibility as summarized in the SWA report. Further source water assessment documentation can be obtained by contacting ADEQ, 602-771-4641.

(B.)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. Specific water quality data has not been included in this report, however that information can be obtained from the Consumer Confidence Report that is compiled and distributed by your local water provider or municipality. A summary of this Source Water Assessment Program Report will also be included in the Consumer Confidence Report.

This Source Water Assessment Report provides a one-time evaluation of your source water. All regulated water systems are required to test their water regularly and to ensure the quality of water meets the requirements of State and Federal water quality standards for over 90 contaminants.

7. Definitions

AL = Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements.
MCL = Maximum Contaminant Level - The "Maximum Allowed" is the highest level of a contaminant that is allowed in drinking water.
MCLG = Maximum Contaminant Level Goal - The "Goal" is 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.
MRDLG = Maximum Residual Disinfectant Level Goal.
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 treatment technique is 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

8. Health Effects Language – (The following contaminants and chemicals have been detected in your drinking water)

Nitrates - Nitrates 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.

Arsenic - 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. **City of Safford** 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.

Chlorine - Some people who use water containing **chlorine** well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Haloacetic Acids - Some people who drink water containing **haloacetic acids** in excess of the MCL over many years may have an increased risk of getting cancer.

Trihalomethanes - Some people who drink water containing **trihalomethanes** in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Copper - Copper is an essential nutrient, but some people who drink copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson’s Disease should consult their personal doctor.

Barium - Some people who drink water containing **barium** in excess of the MCL over many years could experience an increase in their blood pressure.

Fluoride - Some people who drink water containing **fluoride** in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.

Radionuclides - Some people who drink water containing **radium 226 or 228** in excess of the MCL over many years may have an increased risk of getting cancer. Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

9. EPA and FDA Regulations:

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.

10. Water Quality Data

Contaminant (units)	Violation Y / N	Highest Level Detected	Range Detected Absent (A) or Present (P)	MCL	MCLG	Sample Month Year	Likely Source of Contamination
Microbiological							
Total Coliform Bacteria (System takes ≥ 40 monthly samples) 5% of monthly samples are positive; (System takes ≤ 40 monthly samples) 1 positive monthly sample	NO	0	(A)	1 positive monthly sample	0	WEEKLY 2014	Naturally Present in Environment
Fecal coliform and E. Coli (TC Rule)	N/A	N/A	N/A	0	0	N/A	Human and animal fecal waste
Fecal Indicators (E. coli, enterococci or coliphage) (GW Rule)	N/A	N/A	N/A	TT	n/a	N/A	Human and animal fecal waste
Total Organic Carbon (ppm)	N/A	N/A	N/A	TT	n/a	N/A	Naturally present in the environment
Turbidity (NTU), surface water only	N/A	N/A	N/A	TT	n/a	N/A	Soil Runoff
Disinfectants							
Chloramines (ppm)	N/A	N/A	N/A	MRDL = 4	MRDLG = 4	N/A	Water additive used to control microbes
Chlorine (ppm)	NO	0.48	0.37 – 0.48	MRDL = 4	MRDLG = 4	RAA-2014	Water additive used to control microbes
Chloride dioxide (ppb)	N/A	N/A	N/A	MRDL = 800	MRDLG = 800	N/A	Water additive used to control microbes
Disinfection By-Products							
Haloacetic Acids (ppb) (HAA5)	NO	5.7	1.4 – 5.7	60	n/a	Quarterly 2014	Byproduct of drinking water disinfection
Total Trihalomethanes (ppb) (TTHM)	NO	52	4.7 - 52	80	n/a	Quarterly 2014	Byproduct of drinking water disinfection
Bromate (ppb)	N/A	N/A	N/A	10	0	N/A	Byproduct of drinking water disinfection
Chlorite (ppm)	N/A	N/A	N/A	1	0.8	N/A	Byproduct of drinking water disinfection
Lead & Copper							
Copper (ppm)	NO	90 th Percentile = 0.28	0.031 – 0.40	AL = 1.3	ALG = 1.3	AUGUST - 2014	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	NO	90 th Percentile = 3.9	<1.0 – 8.8	AL = 15	0	AUGUST - 2014	Corrosion of household plumbing systems; erosion of natural deposits
Radionuclides							
Beta / photon emitters (mrem/yr)	N/A	N/A	N/A	4	0	N/A	Decay of natural and man-made deposits
Alpha emitters (pCi/L)	NO	5.8	3.0 – 5.8	15	0	JULY - 2014	Erosion of natural deposits
Combined Radium 226 & 228 (pCi/L)	NO	<0.7	<0.7 - 0.4	5	0	JULY - 2014	Erosion of natural deposits
Uranium (pCi/L)	N/A	N/A	N/A	30	0	N/A	Erosion of natural deposits
Inorganics							
Arsenic (ppb)	NO	3.2	3.2 – 9.1	10	0	Quarterly - 2014	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes
Barium (ppm)	NO	0.028	0.020 – 0.028	2	2	MAY - 2014	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	NO	2.0	0.46 – 2.0	4	4	Quarterly - 2014	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (ppm)	NO	4.3	0.21 – 4.3	10	10	MAY – 2014	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Synthetic Organic Contaminants

The City of Safford sampled all of its water sources for Synthetic Organic Contaminants and all sample results came back with no detects. If you have any questions about any of the Synthetic Organic Contaminants please feel free to contact us.

Volatile Organics

The City of Safford sampled all of its water sources for Volatile Organic Contaminants and all sample results came back with no detects. If you have any questions about any of the Volatile Organic Contaminants please feel free to contact us.

Sodium results: Sodium results for 2014 for the City of Safford ranged from 22mg/l to 290mg/l for an average of 158mg/l

Nickel results: Nickel results for 2014 for the City of Safford were all the same. <0.010mg/l

SECTION 11. (IS NOT APPLICABLE) - THE CITY OF SAFFORD IS A GROUNDWATER SYSTEM.

X. Cryptosporidium Monitoring (surface water systems only)

We detected *Cryptosporidium* in the finished water or source water. We detected *Cryptosporidium* in N/A of our N/A samples tested.

We have to provide additional treatment if *Cryptosporidium* is found at greater than 0.075 oocyst per liter.

We believe it is important for you to know that *Cryptosporidium* may cause serious illness in 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. These people should seek advice from their health care providers.

12. UNREGULATED CONTAMINANT MONITORING RULE. (UCMR)

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Unregulated Contaminants

Chromium, Hexavalent Chromium, Molybdenum, Strontium, Vanadium.

13. Violations

Type / Description	Compliance Period	Corrective Actions taken by PWS
NONE	January 1 st 2014 – December 31 st 2014	N/A

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

Water Conservation – Water Restrictions

Water Conservation is an important issue to everyone here in the Gila Valley. Many customers of the Safford Water Department have already discovered that using water wisely is easy and simple.

Wise water use stretches our water resources, which is especially critical during times of drought and also during the summer months when we experience high temperatures. On hot summer days, water use greatly exceeds that of the average winter day.

The City of Safford is currently in STAGE 3 of our WATER RESTRICTIONS.

The following schedule shall be the allowed watering days.

- **Outside watering shall be prohibited between 10:00 a.m. and 6:00 p.m. Watering is limited to two (2) hours on designated allowed watering days.**
- **If your address ends with an even number, water on Wednesday and Saturday**
- **If your address ends with an odd number, water on Tuesday and Friday.**

No person shall:

- **Install swimming pools, spas, wading pools or ornamental fountains not to exceed 5,500 gallons.**
- **Fill or refill swimming pools, spas, wading pools, or ornamental fountains.**
- **Plant or install new sod or turf.**
- **Wash vehicles on the allowed days unless a bucket and hose with a positive cutoff nozzle is used. No restrictions apply to vehicles that must be washed for public health, safety or welfare purposes, or to commercial car washes.**
- **Hose off of pavement, sidewalks, walkways, parking lots, tennis courts, basketball courts, buildings or any structures, except for health or safety reasons.**
- **Use water from a fire hydrant except for emergencies or upon the written approval of the Utilities Director and Fire Chief; and except for such use associated with firefighting activities, public health, safety or welfare.**

Citizens, Keep up the Good Work – Continue to Make Every Drop Count!