



2015
City of Safford
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

I. Public Water System (PWS) Information

PWS ID Number	PWS Name		
AZ04 -05-005	City of Safford		
Contact Person and Title		Phone Number	E-Mail Address
Water Operator/Morgan Seale		(928)432-4243	mseale@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 <u>Jenny Howard</u> at (928)432-4201 for additional opportunity 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 pick up 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):	BONITA ARTESIAN WELLS WELL #15 CLONTS WELL KEMPTON WELLS A,B&C MORRIS WELLS 1,2&3 CARRASCO WELL ALDER WELL
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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.

PWS ID # AZ04 - N/A provides a consecutive connection source of water.

IV. 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.

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

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.

VII. 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

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. **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.

IX. 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
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	(A)	0	0	WEEKLY -2015	Naturally Present in Environment
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	0.35	0.32-0.41	MRDL = 4	MRDLG = 4	RAA-2015	Water additive used to control microbes
Disinfection By-Products	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
Haloacetic Acids (ppb) (HAA5)	N	5.6	1.0-5.6	60	n/a	Quarterly -2015	Byproduct of drinking water disinfection
Total Trihalomethanes (ppb) (TTHM)	N	32	2.0-32	80	n/a	Quarterly -2015	Byproduct of drinking water disinfection
Lead & Copper	Violation Y or N	90 th 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 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)	N	90 th Percentile = 3.9	<1.0-8.8	AL = 15	0	AUGUST -2014	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
Alpha emitters (pCi/L) (this is Gross Alpha 4002)	N	5.8	3.0-5.8	15	0	JULY-2014	Erosion of natural deposits
Combined Radium 226 & 228 (pCi/L)	N	<0.7	<0.7-0.4	5	0	JULY-2014	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
Arsenic (ppb)	N	7.0	3.2-7.0	10	0	May-2014	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes
Arsenic (ppb) EPDS#005 Reported in RAA	N	6.6	5.4-7.2	10	0	Quarterly -2015	
Asbestos (MFL)	N	<0.2	<0.2	7	7	June-2014	Decay of asbestos cement water mains; Erosion of natural deposits
Barium (ppm)	N	.028	.002-.028	2	2	May-2014	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	N	2.0	.46-2.0	4	4	May-2014	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Fluoride (ppm) EPDS#005 Reported in RAA	N	1.6	1.6-1.7	4	4	Quarterly -2015	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills and cropland.
Nitrate (ppm)	N	3.7	0.27-3.7	10	10	May-2015	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	N	3.0	3.0	50	50	May-2014	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)	N	170	23-170	N/A	N/A	May-2014	N/A
Thallium (ppb)	N	1.0	1.0	2	0.5	May-2014	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories

XI. Violations

Type / Description	Compliance Period	Corrective Actions taken by PWS
NO VIOLATIONS	CALENDAR YEAR 2015	N/A

