



## Consumer Confidence Report for Calendar Year 2017

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

<b>Public Water System ID Number</b>	<b>Public Water System Name</b>		
AZ04-054	Town of Hayden		
<b>Contact Name and Title</b>	<b>Phone Number</b>	<b>E-mail Address</b>	
David J. Garcia, Certified Operator	520-483-9462	Davegarcia236@yahoo.com	
<p>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>Town Hall</u> at <u>520-356-7067</u> for additional opportunity and meeting dates and times.</p>			

### 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.

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):** ASARCO-Hayden Well Field

### 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 # AZ04-012, ASARCO LLC Hayden Concentrator and PWS ID# AZ04-001 ASARCO Hayden Smelter provides us a consecutive connection source of 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 that 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:** Such as agriculture, urban storm water runoff, and residential uses that may come from a variety of sources

**Organic Chemical Contaminants:** Such as synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also may come from gas stations, urban storm water 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.

**Source Water Assessment**

This PWS did not receive a SWAP because the PWS was either inactive at the time or the PWS did not exist. Further source water assessment documentation can be obtained by contacting ADEQ.

**Definitions**

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water

**Level 1 Assessment:** A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria was present

**Level 2 Assessment:** A very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria was present

**Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment, or other requirements

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health

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

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

**Minimum Reporting Limit (MRL):** The smallest measured concentration of a substance that can be reliably measured by a given analytical method

**Millirems per year (MREM):** A measure of radiation absorbed by the body

**Not Applicable (NA):** Sampling was not completed by regulation or was not required

**Not Detected (ND or <):** Not detectable at reporting limit

**Nephelometric Turbidity Units (NTU):** A measure of water clarity

**Million fibers per liter (MFL)**

**Picocuries per liter (pCi/L):** 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 (ng/L)

**ppq:** Parts per quadrillion or Picograms per liter (pg/L)

**Lead Informational Statement:** *(Applies to All Water Systems, please do not remove even if your system did not detect any Lead)*

Lead, in drinking water, is primarily from materials and components associated with service lines and home plumbing. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Town of Hayden 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. 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 – Regulated Contaminants**

Microbiological (RTCR)	TT Violation Y or N	Number of Positive Samples	Positive Sample(s) Month & Year	MCL	MCLG	Likely Source of Contamination
E. Coli	N	0	0	0	0	Human and animal fecal waste
Fecal Indicator (From GWR source) (coliphage, enterococci and/or E. coli)	N	0	0	0	0	Human and animal fecal waste

Disinfectants	MCL Violation Y or N	Running Annual Average (RAA)	Range of All Samples (Low-High)	MRDL	MRDLG	Sample Month & Year	Likely Source of Contamination
Chlorine/Chloramine (ppm)	N	0.69	0.27 - 1.52	4	0	Jan-Dec 2017	Water additive used to control microbes
Disinfection By-Products	MCL Violation Y or N	Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	N	3.4	2.7-4.4	60	N/A	Sept 2017	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	N	17.3	9 - 30	80	N/A	Sept 2017	Byproduct of drinking water disinfection
Lead & Copper	MCL Violation Y or N	90 <sup>th</sup> Percentile	Number of Samples Exceeds AL	AL	ALG	Sample Month & Year	Likely Source of Contamination
Copper (ppm)	N	.37	0	1.3	1.3	Sept 2017	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	N	1.3	0	15	0	Sept 2017	Corrosion of household plumbing systems; erosion of natural deposits

### Water Quality Data – Regulated Contaminants from ASARCO Hayden Smelter and Operations 04001 & 04012

Radionuclides	MCL Violation Y or N	Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Alpha Emitters (pCi/L)	N	6.1 ± 0.5	6.1	15	0	Nov 2016	Erosion of natural deposits
Combined Radium-226 & -228 (pCi/L)	N	ND	ND	5	0	Nov 2016	Erosion of natural deposits
Uranium (ug/L)	N	ND	ND	30	0	Nov 2016	Erosion of natural deposits
Inorganic Chemicals (IOC)	MCL Violation Y or N	Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Antimony (ppb)	N	ND	ND	6	6	Nov 2016	Discharge from petroleum refineries; fire retardants; ceramics, electronics and solder
Arsenic <sup>1</sup> (ppb)	N	6.1	5 - 6.1	10	0	Nov 2016	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes
Asbestos (MFL)	N	ND	ND	7	7	Mar 2013	Decay of asbestos cement water mains; Erosion of natural deposits
Barium (ppm)	N	.0047	0.0043 – 0.0047	2	2	Nov 2016	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits
Beryllium (ppb)	N	ND	ND	4	4	Nov 2016	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
Cadmium (ppb)	N	ND	ND	5	5	Nov 2016	Corrosion of galvanized pipes; natural deposits; metal refineries; runoff from waste batteries and paints
Chromium (ppb)	N	2.3	< .1 - 2.3	100	100	Nov 2016	Discharge from steel and pulp mills; Erosion of natural deposits
Cyanide (ppb)	N	ND	ND	200	200	Nov 2016	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Fluoride (ppm)	N	1.7	1.6 – 1.7	4	4	Nov 2016	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Mercury (ppb)	N	ND	ND	2	2	Nov 2016	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills and cropland.
Nitrate (ppm)	N	1.5	1.3 – 1.5	10	10	Nov 2017	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Nitrite <sup>2</sup> (ppm)	N	ND	ND	1	1	Mar 2013	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	N	12	5.7 - 12	50	50	Nov 2016	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium (ppm)	N	170	170	N/A	N/A	Nov 2016	Erosion of natural deposits
Thallium (ppb)	N	ND	ND	2	0.5	Nov 2016	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories

<sup>1</sup> Arsenic is a mineral known to cause cancer in humans at high concentration and is linked to other health effects, such as skin damage and circulatory problems. 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, and continues to research the health effects of low levels of arsenic.

<sup>2</sup> 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.

Synthetic Organic Chemicals (SOC)	MCL Violation Y or N	Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
2,4-D (ppb)	N	ND	ND	70	70	Nov 2016	Runoff from herbicide used on row crops
2,4,5-TP (a.k.a. Silvex) (ppb)	N	ND	ND	50	50	Nov 2016	Residue of banned herbicide
Atrazine (ppb)	N	ND	ND	3	3	Nov 2016	Runoff from herbicide used on row crops
Benzo (a) pyrene (PAH) (ppt)	N	ND	ND	200	0	Nov 2016	Leaching from linings of water storage tanks and distribution lines
Carbofuran (ppb)	N	ND	ND	40	40	Nov 2016	Leaching of soil fumigant used on rice and alfalfa
Chlordane (ppb)	N	ND	ND	2	0	Nov 2016	Residue of banned termiticide
Dalapon (ppb)	N	ND	ND	200	200	Nov 2016	Runoff from herbicide used on rights of way
Di (2-ethylhexyl) adipate (ppb)	N	ND	ND	400	400	Nov 2016	Discharge from chemical factories
Di (2-ethylhexyl) phthalate (ppb)	N	ND	ND	6	0	Nov 2016	Discharge from rubber and chemical factories
Dibromochloropropane (ppt)	N	ND	ND	200	0	Nov 2016	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
Dinoseb (ppb)	N	ND	ND	7	7	Nov 2016	Runoff from herbicide used on soybeans and vegetables
Diquat (ppb)	N	ND	ND	20	20	Nov 2016	Runoff from herbicide use
Dioxin [a.k.a. 2,3,7,8-TCDD] (ppq)	N	ND	ND	30	0	Nov 2016	Emissions from waste incineration and other combustion; discharge from chemical factories
Endothalil (ppb)	N	ND	ND	100	100	Nov 2016	Runoff from herbicide use
Endrin (ppb)	N	ND	ND	2	2	Nov 2016	Residue of banned insecticide
Epichlorohydrin	N	ND	ND	TT	0	Nov 2016	Discharge from industrial chemical factories; an impurity of some water treatment chemicals
Ethylene dibromide (ppt)	N	ND	ND	50	0	Nov 2016	Discharge from petroleum refineries
Glyphosate (ppb)	N	ND	ND	700	700	Nov 2016	Runoff from herbicide use
Heptachlor (ppt)	N	ND	ND	400	0	Nov 2016	Residue of banned termiticide
Heptachlor epoxide (ppt)	N	ND	ND	200	0	Nov 2016	Breakdown of heptachlor
Hexachlorobenzene (ppb)	N	ND	ND	1	0	Nov 2016	Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclo pentadiene (ppb)	N	ND	ND	50	50	Nov 2016	Discharge from chemical factories

Lindane (ppt)	N	ND	ND	200	200	Nov 2016	Runoff/leaching from insecticide used on cattle, lumber, gardens
Methoxychlor (ppb)	N	ND	ND	40	40	Nov 2016	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa,
Oxamyl (a.k.a. Vydate) (ppb)	N	ND	ND	200	200	Nov 2016	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
Pentachlorophenol (ppb)	N	ND	ND	1	0	Nov 2016	Discharge from wood preserving factories
Picloram (ppb)	N	ND	ND	500	500	Nov 2016	Herbicide runoff
Simazine (ppb)	N	ND	ND	4	4	Nov 2016	Herbicide runoff
Toxaphene (ppb)	N	ND	ND	3	0	Nov 2016	Runoff/leaching from insecticide used on cotton and cattle
<b>Volatile Organic Chemicals (VOC)</b>	<b>MCL Violation Y or N</b>	<b>Highest Level Detected</b>	<b>Range of All Samples (Low-High)</b>	<b>MCL</b>	<b>MCLG</b>	<b>Sample Month &amp; Year</b>	<b>Likely Source of Contamination</b>
Benzene (ppb)	N	ND	ND	5	0	Nov 2016	Discharge from factories; leaching from gas storage tanks and landfills
Carbon tetrachloride (ppb)	N	ND	ND	5	0	Nov 2016	Discharge from chemical plants and other industrial activities
Chlorobenzene (ppb)	N	ND	ND	100	100	Nov 2016	Discharge from chemical and agricultural chemical factories
o-Dichlorobenzene (ppb)	N	ND	ND	600	600	Nov 2016	Discharge from industrial chemical factories
p-Dichlorobenzene (ppb)	N	ND	ND	75	75	Nov 2016	Discharge from industrial chemical factories
1,2-Dichloroethane (ppb)	N	ND	ND	5	0	Nov 2016	Discharge from industrial chemical factories
1,1-Dichloroethylene (ppb)	N	ND	ND	7	7	Nov 2016	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene (ppb)	N	ND	ND	70	70	Nov 2016	Discharge from industrial chemical factories
trans-1,2-Dichloroethylene (ppb)	N	ND	ND	100	100	Nov 2016	Discharge from industrial chemical factories
Dichloromethane (ppb)	N	ND	ND	5	0	Nov 2016	Discharge from pharmaceutical and chemical factories
1,2-Dichloropropane (ppb)	N	ND	ND	5	0	Nov 2016	Discharge from industrial chemical factories
Ethylbenzene (ppb)	N	ND	ND	700	700	Nov 2016	Discharge from petroleum refineries
Styrene (ppb)	N	ND	ND	100	100	Nov 2016	Discharge from rubber and plastic factories; leaching from landfills
Tetrachloroethylene (ppb)	N	ND	ND	5	0	Nov 2016	Discharge from factories and dry cleaners
1,2,4-Trichlorobenzene (ppb)	N	ND	ND	70	70	Nov 2016	Discharge from textile-finishing factories
1,1,1-Trichloroethane (ppb)	N	ND	ND	200	200	Nov 2016	Discharge from metal degreasing sites and other factories
1,1,2-Trichloroethane (ppb)	N	ND	ND	5	3	Nov 2016	Discharge from industrial chemical factories
Trichloroethylene (ppb)	N	ND	ND	5	0	Nov 2016	Discharge from metal degreasing sites and other factories
Toluene (ppm)	N	ND	ND	1	1	Nov 2016	Discharge from petroleum factories
Vinyl Chloride (ppb)	N	ND	ND	2	0	Nov 2016	Leaching from PVC piping; discharge from chemical factories
Xylenes (ppm)	N	ND	ND	10	10	Nov 2016	Discharge from petroleum or chemical factories

#### Violation Summary (for MCL, MRDL, AL, TT, or Monitoring & Reporting Requirement)

Violation Type	Explanation, Health Effects	Time Period	Corrective Actions
Reporting failure, MRDL	Reported 1 <sup>st</sup> Qtr MRDL results after Due Date	1 <sup>st</sup> Quarter 2017	Sent in 1 <sup>st</sup> Quarter 2017 results after the due date.



20<sup>17</sup> Annual Consumer Confidence Report Mailing Waiver  
(For Community Water Systems Serving < 10,000 People)

**Public Water System Name:** Town of Hayden

**Public Water System Number:** AZ04-04-054

As outlined in Title 40, Code of Federal Regulations (CFR) § 141.155, as incorporated by reference in the Arizona Administrative Code R18-4-117, the Public Water System (PWS) named above hereby confirms that its Consumer Confidence Report (CCR) has been distributed to its customers. The PWS also certifies that the information contained in the CCR is correct and consistent with the compliance monitoring data previously submitted to the Arizona Department of Environmental Quality.

All community water systems must mail or otherwise direct deliver one copy of the report to each customer (defined as billing units or service connections) (use CCR Certification Form), except for systems serving < 10,000 people that may opt to meet the delivery requirements via the State of Arizona's CCR Waiver instead (use this Form).

Requirements for Community Water Systems Serving > 500 and < 10,000 Persons:

**The PWS Certifies That All of the Following Were Performed:**

- Inform customers it will not be providing copies of the CCR by mail or other direct delivery methods; and
- Publish the entire report annually in one (or more) local newspaper or other news media serving areas in which the system's customers are located; and
- Make copies of the CCR available to the public upon request; and
- Keep copies available for a period of three (3) years.

Requirements for Community Water Systems Serving ≤ 500 Persons:

**The PWS Certifies That All of the Following Were Performed:**

- Inform customers it will not be providing copies of the CCR by mail or other direct delivery methods; and
- Make copies of the CCR available to the public upon request; and *post on website.*
- Keep copies available for a period of three (3) years.

**Certified by:**

Name & Signature: David J. Garcia *David J. Garcia*

Title: ADEQ Certified Operator

Phone #: 520-483-9462 Date: 6/21/2018