

CONSUMER CONFIDENCE REPORT - OUR WATER

A WATER QUALITY REPORT FOR THE WATER USERS OF CITY OF SHELBY WATER DEPARTMENT • DATE REPORT WAS COMPLETED: **JANUARY 18, 2023**

In compliance with the 1996 Safe Drinking Water Act Amendments City of Shelby Water Department is providing our water users with this report on the quality of our drinking water. This report presents data compiled during the past twelve months from **January 1, 2022 to December 31, 2022**.

TERMS AND DEFINITIONS

AL = Action Level, the concentration of a contaminant which triggers treatment or other requirement which a water system must follow
MCL = Maximum Contaminant Level, the highest allowable amount 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
ppm = parts per million, or milligrams per liter (mg/l)
ppb = parts per billion, or micrograms per liter (µg/l)
TT = Treatment Technique
Variances & Exemptions = Permission granted by the State not to meet an MCL or treatment technique under certain conditions
Treatment Technique = A required process intended to reduce the level of a contaminant in drinking water

YOU SHOULD KNOW

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 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. EPA/CDC guidelines on appropriate means to lessen risk of infection by Cryptosporidium and other microbial contaminants are available from the **Safe Drinking Water Hotline (1-800-426-4791)**.

DID YOU KNOW?

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which 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, 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.
- 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 which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

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. The City of Shelby is responsible for providing high quality drinking water, but cannot control the variety of material 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 the 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 materials, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

OUR WATER SOURCE

Our water comes from 12 groundwater wells located 7 miles south of the City of Shelby, Montana, in Township 31 North, Range 2 West, Section 21: S1/2SW1/4, SW1/4SE1/4. It is pumped to the 4 city water tanks through one 16" water line.

TREATMENT

Our system is presently required to treat its water with UV.

SOURCE WATER ASSESSMENT

A Source Water Assessment Box: A Source Water Delineation and Assessment Report exists and can be found here:

<http://deq.mt.gov/Portals/112/Water/WPB/NRISReports/MT0000328.pdf>

BACTERIAL MONITORING

Bacteriological monitoring is performed monthly to test for the presence of coliform bacteria, fecal coliform and E. coli. Our system is required to collect 4 samples per month.

LEAD & COPPER MONITORING

Date Last Sampled for Lead: June 21, 2021 • 90th Percentile for Lead: less than .002 ppb (action level=15 ppb) • Number of Sites Exceeding Lead Action Level: 0
Date Last Sampled for Copper: June 21, 2021 • 90th Percentile for Copper: .055 MG/L (action level=1.3 MG/L) • Number of Sites Exceeding Copper Action Level: 0

CHEMICAL MONITORING

Note to our water users: The state requires us to monitor for certain contaminants less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of our data, such as for organic contaminants, though representative, is more than one year old.

VOCS (VOLATILE ORGANIC CHEMICALS) - 19 REGULATED, 7 UNREGULATED

Our sampling detected the presence of: **No detects** • Required Sampling Frequency: **Once every 3 years.** • Date Last Sampled: **December 18, 2022**

SOCS (SYNTHETIC ORGANIC CHEMICALS) - 27 REGULATED, 10 UNREGULATED

Our sampling detected the presence of: **No detects** • Required Sampling Frequency: **Once every 3 years.** • Date Last Sampled: **December 18, 2022**

IOCS (INORGANIC CHEMICALS)

See Table E - Detected Regulated Inorganic Chemicals. See Table F - Detected Unregulated Inorganic Chemicals.

Required Sampling Frequency: **Waived** • Date Last Sampled: **August 8, 2017**

RADIONUCLIDES

Our sampling detected the presence of: **No detects** • Required Sampling Frequency: **Once every 9 years.** • Date Last Sampled: **August 8, 2017**

TABLE E — DETECTED REGULATED IOC's (Inorganic Chemicals)

Detected Contaminant	Sample Date	Lowest Detected Level	Highest Detected Level	MCL	MCLG	Average	Violation (Yes or No)	Period of Violation
Fluoride	12/18/22	.3 MG/L	.3 MG/L	4PPM	4 PPM	4 PPM	No	N/A
Nitrates as N	12/28/22	.06 MG/L	.06 MG/L	10 PPM	10 PPM	.06 MG/L	No	N/A

Fluoride Likely Source: Erosion of Natural deposits; water additive which promotes strong teeth; discharge from fertilizer & aluminum factories.

Nitrate Likely Source: Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

Corrective Steps Taken: None Required.

TABLE F — DETECTED UNREGULATED IOC's (Inorganic Chemicals)

Detected Contaminant	Sample Date	Highest Detected Level	Lowest Detected Level	Average	Significance of Results
Alkalinity	2/17/99	238 MG/L	238 MG/L	238 MG/L	No known health risk, and not due to be regulated.
Calcium	7/7/08	152 MG/L	152 MG/L	152 MG/L	"
Magnesium	7/7/08	28 MG/L	28 MG/L	28 MG/L	"
Hardness	7/7/08	498 MG/L	498 MG/L	498 MG/L	"
PH	2/17/99	7.5 Units	7.5 Units	7.5 Units	"
Conductivity	2/17/99	729 UMHOS	729 UMHOS	729 UMHOS	"
Sodium	2/17/99	16 MG/L	16 MG/L	16 MG/L	"
Chloride	2/17/99	1 MG/L	1 MG/L	1 MG/L	"
Iron	2/17/99	<0.03 MG/L	<0.03 MG/L	<0.03 MG/L	"
Manganese	2/17/99	<0.01 MG/L	<0.01 MG/L	<0.01 MG/L	"
Sulfate	10/24/96	180	180	180	Proposed to be regulated.

These unregulated IOCs generally pose no health risk and are indicators of the quality of the water.

TABLE G — DETECTED RADIONUCLIDES (Inorganic Chemicals)

Detected Contaminant	Sample Date	Highest Detected Level	Range of Levels Detected	MCLG	MCL	Units	Violation (Yes or No)	Period of Violation
Combined Radium 226/228	8/08/17	1.9	1.9-1.9	0	5	pCi/L	N	Erosion of Natural Deposits
Uranium	8/08/17	1	1-1	0	30	Ug/L	N	"

TABLE H — BACTERIAL CONTAMINANTS: COLIFORM POSTITIVE SAMPLES

MCLG: 0

Potential Health Effects: Total Coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

Corrective Steps Taken: Flushed the system, resampled, repeat sample was negative. **This was the Ethridge water line.**

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation (Yes or No)	Likely Source of Contamination
0	1 positive monthly sample	1		0	N	Naturally present in environment

If you would like additional information regarding our water system, feel free to contact: Eric Kary, Public Works Director • 66 City Shop Road • Shelby, MT 59474 • 406-434-5564. The Shelby City Council meets on the first and third Mondays of each month at 6:30 p.m. at City Hall - 112 1st Street South - Shelby, MT. Public meetings are held occasionally to address water and sewer issues throughout the year. Watch the Shelby Promoter for more information.

The annual Consumer Confidence Report will Not Be Mailed out to individual water customers. A copy of this report can be picked up at City Hall or the City Shop.