

# Town Of Minden Consumer Confidence Report – 2017

## Covering Calendar Year – 2016

This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. It is important that customers be aware of the efforts that are continually being made to improve their water systems. To learn more, please attend any of the regularly scheduled meetings. For more information please contact Dan Kistler at 775-782-5976.

Your water comes from:

Source Name	Source Water Type
WELL 1	Ground Water
WELL 4	Ground Water
WELL 3	Ground Water
WELL 2	Ground Water
WELL 8	Ground Water
WELL 5	Ground Water
WELL 7	Ground Water
WELL 9	Ground Water
WELL 10	Ground Water

The Safe Drinking Water Act (SDWA) requires states to develop a Source Water Assessment (SWA) for each public water supply that treats and distributes raw source water in order to identify potential contamination sources. The state has completed an assessment of our source water; for results, please contact us.

### Message from EPA

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons, such as those 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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

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 (800-426-4791).

The sources of drinking water (both tap water and bottled water) included 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.

Contaminants that may be present in source water before we treat it include:

Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

Inorganic contaminants, such as salts and metals, can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

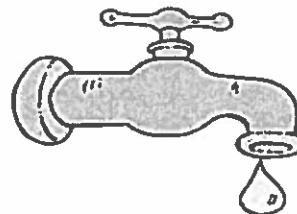
Pesticides and herbicides may come from a variety of sources such as storm water run-off, agriculture, and residential users.

Radioactive contaminants can be naturally occurring or the result of mining activity.

Organic contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, may also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system tested a minimum of 5 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presences in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio.



### Terms & Abbreviations

**Level 1 Assessment:** A level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**Maximum Contaminant Level Goal (MCLG):** the "Goal" is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLG's allow for a margin of safety.

**Maximum Contaminant Level (MCL):** the "Maximum Allowed" MCL is the highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

**Secondary Maximum Contaminant Level: SMCL's** are non-enforceable guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.

**Action Level (AL):** the concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

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

**Maximum Residual Disinfectant Level (MRDL):** the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Non-Detects (ND):** laboratory analysis indicates that the constituent is not present.

**Parts per Million (ppm)** or milligrams per liter (mg/l)

**Parts per Billion (ppb)** or micrograms per liter (µg/l)

**Picocuries per Liter (pCi/L):** picocuries per liter is a measure of the radioactivity in water.

**Millirems per Year (mrem/yr):** measure of radiation absorbed by the body.

**Million Fibers per Liter (MFL):** million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

**Nephelometric Turbidity Unit (NTU):** nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

### Water Quality Data

The tables following below list all of the drinking water contaminants that were detected during the 2016 calendar year. The presence of these contaminants does not necessarily indicate that the water poses a health risk. Unless noted, the data presented in this table is from testing done January 1- December 31, 2016. The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

### Testing Results for Town Of Minden

Microbiological	Result	MCL	MCLG	Typical Source
COLIFORM (TCR)	4 positive results in September, 2016	MCL: Systems that Collect Less Than 40 Samples per Month - No more than 1 positive monthly sample	0	Naturally present in the environment

(A) Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

(B) During the past year we were required to conduct one (1) Level 1 assessment. (1) Level 1 assessment was completed. In addition, we were required to take (1) corrective action and (1) corrective action was completed. The event was isolated to the Amber Way tank, and no water containing the bacteria was detected in the towns system. A cap was installed on the float level gauge for the tank, which could have been the possible point of entry for the contamination. The Amber Way tank and associated piping was also disinfected and flushed.

Lead and Copper	Date	90 <sup>th</sup> Percentile	Unit	AL	Sites Over AL	Typical Source
COPPER	2014-2016	0.096	ppm	13	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
LEAD	2014-2016	N/D (non-detect)	ppb	15	0	

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
ARSENIC	1/4/16	28	7-28	ppb	10	0	Erosion of natural deposits; Runoff from orchards; runoff from glass and electronic production waste.
ASBESTOS	6/6/16	N/D	N/D	MFL	7	7	Decay of Asbestos Cement in water mains, erosion of natural deposits
BARIUM	8/22/16	0.11	0.07-0.11	ppm	2	2	Discharge of drilling waste, discharge from metal refineries, erosion of natural deposits.
FLUORIDE	9/20/16	0.1	N/D-0.1	ppm	2	4	Natural deposits; Water additive which promotes strong teeth.
NITRATE	11/1/16	1.0	N/D-1.0	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Radionuclides	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
COMBINED RADIUM (-226 & -228)	7/8/16	0.8	0.7-0.8	pCi/L	5	0	Erosion of natural deposits
COMBINED URANIUM	7/22/16	6	2.2-6	µg/L	30	0	Erosion of natural deposits
GROSS ALPHA, INCL. RADON & U	7/6/16	7.5	1.9-7.5	pCi/L	15	0	Decay of natural and man-made deposits
GROSS BETA PARTICLE ACTIVITY	7/6/16	2.6	1.9-2.6	pCi/L	50	0	Decay of natural and man-made deposits.

Secondary Contaminants	Collection Date	Highest Value	Range	Unit	SMCL	MCLG
ALKALINITY, CaCO3 STABILITY	8/22/16	130	100-130	mg/L		
ALUMINUM	8/22/16	N/D	N/D	mg/L	0.2	
BIOCARBONATE AS HCO3	8/22/16	160	120-160	mg/L		
BORON, TOTAL	8/22/16	0.2	0.1 - 0.2	mg/L		
CALCIUM	7/5/16	41	26-41	mg/L		
CHLORIDE	8/22/16	6	N/D-6	mg/L	400	
COLOR	7/5/16	N/D	N/D	CU	15	
CONDUCTIVITY @ 25 C UMHOS/CM	8/22/16	330	260-330	uMHO/CM		
HARDNESS, TOTAL (AS CaCO3)	7/5/16	140	94-140	mg/L		
IRON	7/5/16	N/D	N/D	mg/L	0.6	
MAGNESIUM	8/22/16	10	5-10	mg/L	150	
MANGANESE	7/5/16	N/D	N/D	mg/L	0.1	
Secondary Contaminants	Collection Date	Highest Value	Range	Unit	SMCL	MCLG
pH	9/20/16	8.30	8.18-8.30	PH	8.5	
SILICA	11/1/16	47	30-47	mg/L		

SODIUM	11/1/16	19	15-19	mg/L	200	20
SULFATE	8/22/16	25	N/D-25	mg/L	500	
TDS	11/1/16	210	180-210	mg/L	1000	
Nitrate	11/1/16	1	N/D-1	mg/L	10	

### Health Information About Water Quality

The Town of Minden has several wells whose output could contain arsenic levels above the 10ppb standard set in 2006 by the EPA. The arsenic levels in the water supplied to our customers has been successfully managed through well use management, and blending between well sources. Compliance with the MCL regulation is based on a running annual average at some sample sites. Samples are taken monthly at those sites. While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. EPA continues to research the health effects of low level 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.

On January 4, 2016 a reading of 28 ppb was recorded with a confirmation sample reading of 8 ppb at well #7. The Safe Drinking Water Act (SDWA) allows for a confirmation sample to be taken within 14 days of learning of a high result, and the confirmation sample result can be averaged with the original high result to determine a median. The confirmation sample, taken on January 20, 2016 provided a result of 8 ppb, with a median of 18 ppb. This site is monitored monthly, and results of samples taken on February 1 and March 7, 2016 came in at 7 ppb, yielding a quarterly average of 10 ppb, which is in compliance with the arsenic standard. The sample taken containing 28 ppb was likely erroneous, in that the highest arsenic level seen in the past monitoring at this site is 11 ppb and averages 10 ppb.

Since January 4, 2016, Well #7 has not been pumped into the distribution system, and the Town is considering designating it as an Emergency Well.

### Violations

During the 2016 calendar year, TOWN OF MINDEN is required to include an explanation of the violation(s) in the table below and the steps taken to resolve the violation(s) with this report.

Type	Category	Analyte	Compliance Period
No Violations Occurred in the Calendar Year of 2016.			

### Health Information About the Above Violation(s)

There are no additional required health effects violation notices.