Covering Calendar Year – 2015

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 1613 WATER ST	Ground Water
WELL 4 1769 IRONWOOD DR	Ground Water
WELL 3 1648 COUNTY RD	Ground Water
WELL 2 1573 COUNTY RD	Ground Water
WELL 8 1745 BUCKEYE RD	Ground Water
WELL 5 1715 BOUGAINVILLEA	Ground Water
WELL 7 1730 U. ORBIT WAY	Ground Water
WELL 9 1330 BUCKEYE RD	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:

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

<u>Inorganic contaminants</u>, 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.

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

<u>Radioactive contaminants</u> can be naturally occurring or the result of mining activity.

<u>Organic contaminants</u>, 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

<u>Maximum Contaminant Level Goal (MCLG):</u> 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.

<u>Maximum Contaminant Level (MCL):</u> 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.

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.

<u>Maximum Residual Disinfectant Level (MRDL):</u> 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.

<u>Maximum Residual Disinfectant Level Goal (MRDLG):</u> 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)

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

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

<u>Million Fibers per Liter (MFL):</u> million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers. <u>Nephelometric Turbidity Unit (NTU):</u> 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 2015 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, 2015. 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. The bottom line is that the water that is provided to you is safe.

Testing Results for Town Of Minden

Microbiological	Result	MCL	MCLG	Typical Source
COLIFORM (TCR)	1 positive result in	MCL: Systems that Collect Less Than	0	Naturally present in the
	January, 2015	40 Samples per Month - No more than		environment
		1 positive monthly sample		

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 is a warning of potential problems. We performed additional sampling in January and all samples have since shown no further evidence of this biological contaminant.

Lead and Copper	Date	90 TH Percentile	Unit	AL	Sites Over AL	Typical Source
COPPER	2011 - 2013	0.055	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
ARSENIC	1/5/15	14	3-14	ppb	10	0	Erosion of natural deposits; Runoff from orchards; runoff from glass and electronic production waste.
BARIUM	8/3/15	0.22	0.07-0.22	ppm	2	2	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits.
CHROMIUM	12/21/15	3	1 - 3	ppb	100	100	Discharge from steel and pulp mills; Erosion of natural deposits.
FLUORIDE	12/21/15	0.2	0.2	ppm	2	4	Natural deposits; Water additive which promotes strong teeth.
NITRATE	12/21/15	3.5	0.5-3.5	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)	9/29/15	0.9	0.6-0.9	pCi/L	5	0	Erosion of natural deposits
COMBINED URANIUM	8/3/15	21	2-21	μg/L	30	0	Erosion of natural deposits
GROSS ALPHA, INCL. RADON & U	8/3/15	13.6	2.1-13.6	pCi/L	15	0	Decay of natural and man-made deposits
GROSS BETA PARTICLE ACTIVITY	9/3/15	4.5	1.9-4.5	pCi/L	50	0	Decay of natural and man-made deposits.
RADON	8/3/15	557.6	365-557.6	pCi/L	•	•	

Secondary Contaminants	Collection Date	Highest Value	Range	Unit	SMCL	MCLG
ALKALINITY, BICARBONATE	6/18/14	180	130-180	mg/L		
ALKALINITY, CACO3 STABILITY	8/3/15	280	20-280	mg/L		
ALKALINITY, TOTAL	8/3/15	280	160-280	mg/L		
ALUMINUM	4/20/15	0.8	0.02-0.8	mg/L	0.2	
BIOCARBONATE AS HCO3	8/3/15	340	140-340	mg/L	1	
BORON, TOTAL	8/3/15	0.2	0.1 - 0.2	mg/L		
CALCIUM	8/3/15	71	29 - 71	mg/L		
CHLORIDE	8/3/15	9	6 - 9	mg/L	400	
COLOR	8/3/15	<5	0 - <5	CU	15	
CONDUCTIVITY @ 25 C UMHOS/CM	8/3/15	560	260- 560	uMHO/CI	M	
HARDNESS, CALCIUM MAGNESIUM	6/18/14	150	100-150	mg/L		
HARDNESS, TOTAL (AS CACO3)	8/3/15	260	100-260	mg/L		

Secondary Contaminants	Collection Date	Highest Value	Range	Unit	SMCL	MCLG
IRON	4/20/15	0.79	0.16-0.79	mg/L	0.6	
MAGNESIUM	8/3/15	19	6-19	mg/L	150	
MANGANESE	8/3/15	0.04	0.03-0.04	mg/L	0.1	
pН	12/21/15	8.28	7.69-8.28	PH	8.5	
SILICA	4/20/15	47	32-47	mg/L		
SODIUM	8/3/15	27	16-27	mg/L	200	20
SULFATE	11/16/15	26	19-26	mg/L	500	•
TDS	8/3/15	340	180-340	mg/L	1000	

Health Information About Water Quality

Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

We take seven samples for Arsenic in the area around Wells #7 and #8. NDEP allows for a quarterly total summation, taken in the distribution system, to be used as long as the running annual average (RAA) does not exceed the MCL of 10 ppb set down by the EPA in January 2006. On 1/5/15 a reading of 14 was recorded with a RAA of 9.25. Due to tank operations and low wintertime flows, Well #8 was pumping at a lower volume than normal. Low flows in this well have a tendency to raise arsenic levels. We are presently investigating options to meet future compliance for this contaminant. Shutting off Wells #7 and #8 during low demand time of year will eliminate the introduction of higher concentrations of arsenic into the system.

Violations

During the 2015 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.

Туре	Category	Analyte	Compliance Period			
No Violations Occurred in the Calendar Year of 2015						

Health Information About the Above Violation(s)

There are no additional required health effects violation notices.