

Town of Badger Drinking Water Information

(System Information, Sampling Requirements, and Compliance Report)



2017 Certificate of Achievement Award.

Population Served:	125	System Population:	125
Certified Operator:	Mr Steve Norgaard PO Box 44 Badger, SD 57214-0127	Work Phone:	(605)983-5121
		Home Phone:	
		Cell Phone:	
		Fax:	
		Email:	norgaardcountry@mncomm.com
Financial Contact:	Ms Tanya Jensen Box 127 Badger, SD 57214	Work Phone:	(605)983-5915
		Home Phone:	
		Cell Phone:	
		Fax:	
		Email:	btana@amerion.com
Other Contacts:	President Myron Andersen Box 127 Badger, SD 57214	Work Phone:	
		Home Phone:	
		Cell Phone:	
		Fax:	
		Email:	btana@amerion.com
Last Inspection:	December 29, 2015		
Type of System:	Community	Area Served:	Kingsbury County
Number of Service Connections:	72	Contamination Risk:	low
Water Purchased From:			Kingbrook I Rural Water System (0431)
PWS Owner Type:	Local Government	Service Area:	Municipality
Contract Laboratory:			State Health Lab, Pierre

Bacteriological Monitoring

Bacteriological sampling and analysis: January 1, 2017 to January 1, 2018

A	Samples submitted:	<u>12</u>
B	Samples required:	<u>One Sample Each Month.</u>
C	Survey samples:	<u>0</u>
D	Safe samples:	<u>12</u>
E	Unsafe samples:	<u>0</u>
F	Repeat samples:	<u>0</u>
H	Groundwater Samples:	

Lead and Copper Monitoring

(These values are calculated from available data. Check correspondence for verification.)

A	Date Last Tested:	<u>August 27, 2017</u>
B	Samples required:	<u>5</u>
C	Sampling Frequency	<u>Triennially</u>
D	Date Due Next	<u>2017</u>
E	Lead - 90% Level	<u>1.4</u> Action Level - 15 ug/l
F	Copper 90% Level	<u>0.635</u> Action Level - 1.3 mg/l

Disinfectant Residual Monitoring

Residual sampling and analysis: January 1, 2017 to January 1, 2018

A	Samples submitted:	<u>12</u>
B	Samples required:	<u>One Sample Each Month.</u>
C	Last Qtr Cl Residual:	<u>1</u> mg/l
D	Running Annual Average:	<u>1.25</u> mg/l
E	Date of last DBP test:	<u>August 9, 2017</u>
F	THM - Qtr Average:	<u>23.8</u> ug/l
G	Haa5 - Qtr Average:	<u>9.73</u> ug/l

Asbestos

A	Date of last test:	<u>Waiver - Testing Not Required</u>
B	Asbestos Result:	<u></u> million fibers per liter

Comments

Violations and Significant Deficiencies

Town of Badger

EPA ID: 0032

Violations From **January 1, 2013** To **January 1, 2018**

Violation Type	Parameter	Date	Status
Lack of Certified Operator	Certified Operator	02/01/2015	Reminder Notice
	DBP		Compliance Achieved

Significant Deficiency	Date Identified	Date Corrected

EPA ID#: 0032 System Name: Town of Badger

Sampler- Mr Steve Norgaard Work Phone-(605)983-5121
Title- Water Superintendent
Address- PO Box 44
Badger SD 57214-0127

Location- City: Badger County: Kingsbury
Service Area- Municipality
PWS Owner Type- Local Government
Water Supply Type- Purchased Groundwater Supply

Population Served- 125 Service Connections- 72

Sources for Badger

Source	Name	Year Built	Depth (feet)	Diameter (inches)	Availability	Type	Vulnerability	Treatment
01	#1	1962	290	8		Groundwater	Non-Vulnerable	Treatment At Plant
02	KINGBROOK I RWS	0000	0000	0000	Permanent	Purchased Groundwater	Non-Vulnerable	Water Treated By Seller - Purchased Surface Only
04	TREAT SITE - #1					Treatment Plant	Non-Vulnerable	Disinfection - Hypochlorites Corrosion Control - Phosphates

EPA ID#: 0032 System Name: Town of Badger

Common Ion Data

(All chemical data are reported in milligrams per liter (mg/l) except pH and Langlier Index)

Please refer to Private Well Data for more information about these test results.

Source	Type	Date	TDS	Conductance	pH	Alk-M	Alk-P	Na	K	Ca	Mg	Fe	Mn	Cl	SO4	HCO3	CO3	Hardness	Langlier	NO3	F
01	Treated	06/22/95	1472	1799	7.89	268	0	150	10.3	175.2	60.2	0.47	2.03	72.0	655	327	0	685	+0.87	0.1	0.33
01	Treated	04/02/98	1384	1780	7.42	275	0	142	10.4	177.0	61.5	0.97	2.01	45.0	669	336	0	695	+0.43	0.1	0.35
04	Treated	09/12/00	1424	1730	7.39	275	0	144	10.2	178.0	59.4	0.45	1.92	40.0	656	336	0	689	+0.40	0.1	0.30
04	Treated	02/24/04	1369	1770	7.78	280	0	144	10.3	201.0	64.0	1.33	1.92	44.0	702	342	0	765	+0.85	0.1	0.30
04	Treated	03/08/07	1354	1820	7.60	278	0	141	11.0	190.0	59.4	1.23	2.14	43.0	700	339	0	719	+0.65	0.1	0.30
04	Treated	12/30/09	1351	1740	7.68	277	0	131	9.4	176.0	60.5	0.55	1.97	42.0	679	338	0	688	+0.69	0.2	0.35
Averages			1392	1773	7.63	276	0	142	10.3	182.9	60.8	0.83	2.00	47.7	677	336	0	707		0.1	0.32

You can contact us by calling
(605)983-5915 or write us at
Box 127
Badger SD 57214

Town of Badger

2017 Drinking Water Report

It's your tap water!



EPA ID: 0032



Water Quality

Last year, the Town of Badger monitored your drinking water for possible contaminants. This brochure is a snapshot of the quality of the water that we provided last year. Included are 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.

Water Source

We serve more than 125 customers an average of 10,000 gallons of water per day. Our water is groundwater that we purchase from another water system. The state has performed an assessment of our source water and they have determined that the relative susceptibility rating for the Badger public water supply system is low.

For more information about your water and information on opportunities to participate in public meetings, call (605)983-5915 and ask for Tanya Jensen.

Additional Information

The sources of drinking water (both tap water 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 can pick up substances resulting from the presence of animals or from human activity.

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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants can be obtained by calling the Environment Protection Agency's Safe Drinking Water Hotline (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 Town of Badger public water supply system 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 <http://www.epa.gov/safewater/lead>.

Detected Contaminants

The attached table lists all the drinking water contaminants that we detected during the 2017 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done January 1 – December 31, 2017. 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 Town of Badger public water system purchases 100% of their water from Kingbrook I Rural Water System (0431).

2017 Table of Detected Contaminants For Badger (EPA ID 0032)

Terms and abbreviations used in this table:

- * *Maximum Contaminant Level Goal(MCLG): the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.*
- * *Maximum Contaminant Level(MCL): the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.*
- * *Action Level(AL): the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. For Lead and Copper, 90% of the samples must be below the AL.*
- * *Treatment Technique(TT): A required process intended to reduce the level of a contaminant in drinking water. For turbidity, 95% of samples must be less than 0.3 NTU*
- * *Running Annual Average(RAA): Compliance is calculated using the running annual average of samples from designated monitoring locations.*

Units:

- *MFL: million fibers per liter
- *mrem/year: millirems per year(a measure of radiation absorbed by the body)
- *NTU: Nephelometric Turbidity Units
- *pCi/l: picocuries per liter(a measure of radioactivity)
- *ppm: parts per million, or milligrams per liter(mg/l)
- *ppb: parts per billion, or micrograms per liter(ug/l)
- *ppt: parts per trillion, or nanograms per liter
- *ppq: parts per quadrillion, or picograms per liter
- *pspm: positive samples per month

Substance	90% Level	Test Sites > Action Level	Date Tested	Highest Level Allowed (AL)	Ideal Goal	Units	Major Source of Contaminant
Copper	0.6	0	08/24/17	AL=1.3	0	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead	1	0	08/24/17	AL=15	0	ppb	Corrosion of household plumbing systems; erosion of natural deposits.

Substance	Highest Level Detected	Range	Date Tested	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Units	Major Source of Contaminant
Haloacetic Acids (RAA)	9.73		08/09/17	60	0	ppb	By-product of drinking water chlorination. Results are reported as a running annual average of test results.
Haloacetic Acids (RAA) *	6.49		08/14/17	60	0	ppb	By-product of drinking water chlorination. Results are reported as a running annual average of test results.
Total trihalomethanes (RAA)	23.8		08/09/17	80	0	ppb	By-product of drinking water chlorination. Results are reported as a running annual average of test results.
Total trihalomethanes (RAA) *	20.0		08/14/17	80	0	ppb	By-product of drinking water chlorination. Results are reported as a running annual average of test results.

Please direct questions regarding this information to Mr Steve Norgaard with the Badger public water system at (605)983-5915.

* Kingbrook I Rural Water System (0431) test result.