

Butte-Meade SWD-Bean Well Drinking Water Information

(System Information, Sampling Requirements, and Compliance Report)



Secretary Award For Drinking Water Excellence

Population Served:	1,572	System Population:	1,448
Certified Operator:	Mr Mike Wolff PO Box 5 Newell, SD 57760-0005	Work Phone:	(605)456-2288
		Home Phone:	
		Cell Phone:	
		Fax:	
		Email:	bmswd@sdplains.com
Financial Contact:	Mr Mike Wolff PO Box 5 Newell, SD 57760-0005	Work Phone:	(605)456-2288
		Home Phone:	
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		Email:	bmswd@sdplains.com
Other Contacts:	Mr Charles Yuill 18296 Winkler Newell, SD 57760	Work Phone:	
		Home Phone:	
		Cell Phone:	
		Fax:	
		Email:	
Last Inspection:	May 27, 2015		
Type of System:	Community	Area Served:	Butte, Meade County
Number of Service Connections:	579	Contamination Risk:	low
Water Sold To:			Fruitdale, Riverside Mobile Home Court
PWS Owner Type:	Private Ownership	Service Area:	Rural Water System/Colonies
Contract Laboratory:			Midcontinent Laboratory

Monitoring/Reporting - Entry Point

Butte-Meade SWD-Bean Well

EPA ID: 0223

SAMPLING

Entry point: Treat Site - Bean Well

	Chemical	Sampling Frequency	Waivers	Taken Last	Due Next	Notes
1	Inorganic Chemicals					
	A. Antimony	Every nine years	Yes	Aug-11		
	B. Arsenic	Every nine years	Yes	Aug-11		
	C. Barium	Every nine years	Yes	Aug-11		
	D. Beryllium	Every nine years	Yes	Aug-11		
	E. Cadmium	Every nine years	Yes	Aug-11		
	F. Chromium	Every nine years	Yes	Aug-11		
	G. Cyanide		Yes			State-wide waiver
	H. Fluoride	Every nine years	Yes	Nov-17		
	I. Mercury	Every nine years	Yes	Aug-11		
	J. Nickel	Every nine years	Yes	Aug-11		
	K. Selenium	Every nine years	Yes	Aug-11		
	L. Thallium	Every nine years	Yes	Aug-11		
2	Radiological Chemicals	Triennially	N/A			
3	VOC Chemicals		No	Sep-17	2017	
4	SOC Chemicals					
	A. Method 515.1	Not Required	Yes			
	B. Method 524	Not Required	Yes			
	C. Method 525	Not Required	Yes			
	D. Method 531.1	Not Required	Yes			
	E. Method 547	Not Required	Yes			
	F. Method 548	Not Required	Yes			
	G. Method 549	Not Required	Yes			
5	Nitrate	Annually	N/A	Sep-17		
6	Nitrite	Triennially	N/A	Sep-16		

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

Bacteriological Monitoring

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

A	Samples submitted:	<u>24</u>
B	Samples required:	<u>Two Samples Each Month.</u>
C	Survey samples:	<u>0</u>
D	Safe samples:	<u>24</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>September 12, 2017</u>
B	Samples required:	<u>10</u>
C	Sampling Frequency	<u>Triennially</u>
D	Date Due Next	<u>2017</u>
E	Lead - 90% Level	<u>2.4</u> Action Level - 15 ug/l
F	Copper 90% Level	<u>0.11</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>24</u>
B	Samples required:	<u>Two Samples Each Month.</u>
C	Last Qtr Cl Residual:	<u>0.43</u> mg/l
D	Running Annual Average:	<u>0.44</u> mg/l
E	Date of last DBP test:	<u>September 20, 2017</u>
F	THM - Qtr Average:	<u>0</u> ug/l
G	Haa5 - Qtr Average:	<u>0</u> ug/l

Asbestos

A	Date of last test:	<u>November 14, 2011</u>
B	Asbestos Result:	<u>ND</u> million fibers per liter

Comments

Violations and Significant Deficiencies

Butte-Meade SWD-Bean Well

EPA ID: 0223

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

Violation Type	Parameter	Date	Status
No Violations			

Significant Deficiency	Date Identified	Date Corrected

EPA ID#: 0223 System Name: Butte-Meade SWD-Bean Well

Sampler- Mr Mike Wolff Work Phone-(605)456-2288
Title- Manager
Address- PO Box 5
Newell SD 57760-0005

Location- City: Newell County: Butte, Meade
Service Area- Other residential areas
PWS Owner Type- Private Ownership
Water Supply Type- Groundwater Supply

Population Served- 1,448 Service Connections- 579

Sources for Butte-Meade SWD-Bean Well

Source	Name	Year Built	Depth (feet)	Diameter (inches)	Availability	Type	Vulnerability	Treatment
01	TREAT SITE-REID WELL				Emergency	Treatment Plant	Non-Vulnerable	Disinfection - Gas Chlorine
02	TREAT SITE - BEAN WELL				Permanent	Treatment Plant	Non-Vulnerable	Disinfection - Gas Chlorine
03	TREAT SITE - VALE WELL				Emergency	Treatment Plant	Non-Vulnerable	Disinfection - Gas Chlorine
11	REID WELL	1967	2040	6	Emergency	Groundwater	Non-Vulnerable	Treatment At Plant
12	BEAN WELL	1978	3200	10	Permanent	Groundwater	Non-Vulnerable	Treatment At Plant
13	VALE WELL	1996	2395	10	Emergency	Groundwater	Non-Vulnerable	Treatment At Plant

EPA ID#: 0223 System Name: Butte-Meade SWD-Bean Well

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
02	Raw	06/21/94	866	1160	7.40	142	0	14	6.0	186.0	58.0	0.05	0.03	18.0	530	173	0	704	+0.32	0.3	1.71
03	Raw	11/19/96	542	709	8.23	190	0	172	8.5	9.0	3.0	27.30	0.19	3.0	208	232	0	35	-0.10	0.1	0.47
01	Raw	11/19/96	858	1145	7.98	176	0	163	9.2	73.7	25.9	0.46	0.02	4.0	442	215	0	291	+0.47	0.3	0.47
Averages			755	1005	7.87	169	0	116	7.9	89.6	29.0	9.27	0.08	8.3	393	207	0	343		0.2	0.88

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	09/21/88	862	1260	8.07	191	0	150	12.0	71.0	27.0	0.43	0.03	3.0	521	233	0	289	+0.36	0.1	0.43
01	Treated	06/25/91	640	1280	7.81	178	0	151	12.0	62.0	25.0	0.05	0.03	4.0	506	217	0	258	+0.01	0.1	1.65
02	Treated	11/19/96	809	1090	7.28	148	0	14	4.8	153.0	55.8	0.12	0.04	19.0	474	181	0	612	-0.30	0.2	1.62
02	Treated	02/02/00	864	1170	7.31	162	0	13	4.0	140.0	51.0	0.15	0.01	18.0	516	198	0	570	+0.07	0.2	1.70
03	Treated	02/02/00	466	793	8.02	200	0	160	3.0	6.0	2.0	0.62	0.01	4.0	207	244	0	23	-0.47	0.1	1.40
12	Treated	11/20/02	914	1163	7.77	153	0	15	4.7	143.0	57.9	0.05	0.05	18.0	496	187	0	596	+0.61	0.5	1.72
13	Treated	11/20/02	496	813	8.02	185	0	166	4.1	10.6	2.7	0.32	0.05	8.0	204	225	0	38	-0.19	0.1	1.31
02	Treated	05/04/06	893	1210	7.75	153	0	15	4.7	145.0	56.5	0.18	0.01	18.0	485	187	0	595	+0.59	0.5	1.68
03	Treated	05/04/06	464	826	7.83	182	0	157	4.5	9.5	2.7	0.24	0.01	10.8	215	222	0	35	-0.43	0.5	1.29
02	Treated	10/18/11	906	1190	7.55	149	0	17	4.8	145.0	56.1	0.05	0.01	16.5	513	181	0	593	+0.38	0.4	1.67
02	Treated	05/27/15	855	1210	7.65	151	0	15	4.8	162.0	56.6	0.00	0.00	17.6	505	184	0	637	+0.54	0.0	1.70
Averages			743	1091	7.73	168	0	79	5.8	95.2	35.8	0.20	0.02	12.4	422	205	0	386		0.2	1.47

You can contact us by calling
(605)456-2288 or write us at
PO Box 5
Newell SD 57760-0005

Butte-Meade SWD-Bean Well

2017 Drinking Water Report

It's your tap water!



EPA ID: 0223



Water Quality



Secretary's Award

The Butte-Meade SWD-Bean Well has supplied seventeen consecutive years of safe drinking water to the public it serves and has been awarded the Secretary's Award for Drinking Water Excellence by the South Dakota Department of Environment and Natural Resources. 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 1,448 customers an average of 350,000 gallons of water per day. Our water is groundwater that we produce from local wells. The state has performed an assessment of our source water and they have determined that the relative susceptibility rating for the Butte-Meade SWD-Bean Well public water supply system is low.

For more information about your water and information on opportunities to participate in public meetings, call (605)456-2288 and ask for Mike Wolff.

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 Butte-Meade SWD-Bean Well 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.

2017 Table of Detected Contaminants For Butte-Meade SWD-Bean Well (EPA ID 0223)

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	0.1	0	09/12/17	AL=1.3	0	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead	2	0	09/12/17	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
Alpha emitters	8	ND - 8	09/20/17	15	0	pCi/l	Erosion of natural deposits.
Combined Radium	1	ND - 1	09/20/17	5	0	pCi/l	Erosion of natural deposits.
Fluoride	1.89		11/14/17	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate (as Nitrogen)	0.780		09/20/17	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

Please direct questions regarding this information to Mr Mike Wolff with the Butte-Meade SWD-Bean Well public water system at (605)456-2288.