

# Crooked Oaks Canyon Homeowners Drinking Water Information

## (System Information, Sampling Requirements, and Compliance Report)



### 2017 Certificate of Achievement Award.

<b>Population Served:</b>	75	<b>System Population:</b>	75
<b>Certified Operator:</b>	Mr Ed Striebel 7005 Timberline Road Black Hawk, SD 57718	<b>Work Phone:</b>	(605)787-5653
		<b>Home Phone:</b>	(605)787-5653
		<b>Cell Phone:</b>	
		<b>Fax:</b>	(605)787-5653
		<b>Email:</b>	estriebel@rap.midco.net
<b>Financial Contact:</b>	Ms Robin Douglas 4534 Crooked Oaks Piedmont, SD 57769	<b>Work Phone:</b>	
		<b>Home Phone:</b>	(605)787-7927
		<b>Cell Phone:</b>	
		<b>Fax:</b>	
		<b>Email:</b>	
<b>Other Contacts:</b>	Mr Ed Heisinger 4391 Crooked Oaks Road Piedmont, SD 57769	<b>Work Phone:</b>	
		<b>Home Phone:</b>	(605)787-4739
		<b>Cell Phone:</b>	
		<b>Fax:</b>	
		<b>Email:</b>	
<b>Last Inspection:</b>	March 15, 2017		
<b>Type of System:</b>	Community	<b>Area Served:</b>	Meade County
<b>Number of Service Connections:</b>	28	<b>Contamination Risk:</b>	moderate
<b>Water Produced And Used By The Crooked Oaks Canyon Homeowners Public Water System</b>			
<b>PWS Owner Type:</b>	Private Ownership	<b>Service Area:</b>	Housing Development
<b>Contract Laboratory:</b>			Midcontinent Laboratory

# Monitoring/Reporting - Entry Point

Crooked Oaks Canyon Homeowners

EPA ID: 0915

## SAMPLING

Entry point: Treat Site For Well #2

	Chemical	Sampling Frequency	Waivers	Taken Last	Due Next	Notes
1	Inorganic Chemicals					
	A. Antimony	Every nine years	Yes	Feb-13		
	B. Arsenic	Every nine years	Yes	Feb-13		
	C. Barium	Every nine years	Yes	Feb-13		
	D. Beryllium	Every nine years	Yes	Feb-13		
	E. Cadmium	Every nine years	Yes	Feb-13		
	F. Chromium	Every nine years	Yes	Feb-13		
	G. Cyanide		Yes			State-wide waiver
	H. Fluoride	Every nine years	Yes	Feb-13		
	I. Mercury	Every nine years	Yes	Feb-13		
	J. Nickel	Every nine years	Yes	Feb-13		
	K. Selenium	Every nine years	Yes	Feb-13		
	L. Thallium	Every nine years	Yes	Feb-13		
2	Radiological Chemicals	Every nine years	N/A			
3	VOC Chemicals	Quarterly	No	Feb-16	2019	
4	SOC Chemicals					
	A. Method 515.1	Triennially	No	Feb-16	2019	
	B. Method 524	Triennially	No	Feb-16	2019	
	C. Method 525	Triennially	No	Feb-16	2019	
	D. Method 531.1	Triennially	No	Feb-16	2019	
	E. Method 547	Triennially	No	Feb-16	2019	
	F. Method 548	Triennially	No	Feb-16	2019	
	G. Method 549	Triennially	No	Feb-16	2019	
5	Nitrate	Annually	N/A	Mar-17		
6	Nitrite	Triennially	N/A	Feb-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>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 12, 2016</u>
B	Samples required:	<u>5</u>
C	Sampling Frequency	<u>Triennially</u>
D	Date Due Next	<u>2019</u>
E	Lead - 90% Level	<u>2</u> Action Level - 15 ug/l
F	Copper 90% Level	<u>0.075</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>1.13</u> mg/l
D	Running Annual Average:	<u>1.02</u> mg/l
E	Date of last DBP test:	<u>September 19, 2016</u>
F	THM - Qtr Average:	<u>5.55</u> ug/l
G	Haa5 - Qtr Average:	<u>0</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

**Crooked Oaks Canyon Homeowners**

**EPA ID: 0915**

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

Violation Type	Parameter	Date	Status
No Violations			

Significant Deficiency	Date Identified	Date Corrected

# EPA ID#: 0915 System Name: Crooked Oaks Canyon Homeowners

Sampler- Mr Ed Striebel Work Phone-(605)787-5653  
Title- Contract Operator  
Address- 7005 Timberline Road  
Black Hawk SD 57718

Location- City: Rapid City County: Meade  
Service Area- Homeowners Association  
PWS Owner Type- Private Ownership  
Water Supply Type- Groundwater Supply

Population Served- 75 Service Connections- 28

## Sources for Crooked Oaks Canyon Homeowners

Source	Name	Year Built	Depth (feet)	Diameter (inches)	Availability	Type	Vulnerability	Treatment
01	#1	1977	225	6	Emergency	Groundwater	Vulnerable	No Treatment
03	TREAT SITE FOR #2				Permanent	Treatment Plant	Non-Vulnerable	Disinfection - Hypochlorites
04	#2	2000	400	6	Permanent	Groundwater	Non-Vulnerable	Treatment At Plant

# EPA ID#: 0915 System Name: Crooked Oaks Canyon Homeowners

## 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	Raw	03/02/92	706	1070	7.13	260	0	279	102.0	119.0	33.0	0.05	0.03	4.0	376	317	0	433	-0.23	0.1	0.48
01	Raw	02/08/96	774	1090	7.24	260	0	32	12.0	141.0	36.0	0.05	0.03	6.0	356	317	0	501	+0.35	0.1	0.39
01	Raw	06/29/99	832	1190	7.27	320	0	26	9.0	160.0	36.0	0.02	0.01	10.0	399	390	1	548	+0.38	0.2	0.63
Averages			771	1117	7.21	280	0	112	41.0	140.0	35.0	0.04	0.02	6.7	377	341	0	494		0.2	0.50

Source	Type	Date	TDS	Conductance	pH	Alk-M	Alk-P	Na	K	Ca	Mg	Fe	Mn	Cl	SO4	HCO3	CO3	Hardness	Langlier	NO3	F
04	Treated	03/25/02	912	1356	7.75	237	0	176	7.6	89.2	24.9	0.16	0.05	6.0	114	289	0	325	+0.57	0.1	0.20
03	Treated	12/13/04	897	1390	7.92	234	0	200	8.5	76.7	26.1	0.20	0.01	10.0	435	286	0	299	+0.67	0.5	0.18
03	Treated	04/14/08	871	1380	7.94	238	0	181	9.4	74.3	23.5	0.23	0.01	9.0	466	291	0	282	+0.69	0.5	0.21
03	Treated	04/07/11	901	1380	7.74	238	0	195	7.9	78.6	25.4	0.35	0.02	9.1	534	291	0	301	+0.51	0.2	0.19
03	Treated	05/07/14	929	1340	7.63	244	0	208	8.0	72.0	26.0	0.34	0.01	12.0	470	297	0	290	+0.30	0.0	0.20
03	Treated	03/15/17	883	1370	7.75	245	0	193	8.8	69.6	24.3	0.23	0.02	9.7	464	299	0	274	+0.48	0.0	0.19
Averages			899	1369	7.79	239	0	192	8.4	76.7	25.0	0.25	0.02	9.3	414	292	0	295		0.2	0.20

You can contact us by calling or  
write us at  
4534 Crooked Oaks  
Piedmont SD 57769

# Crooked Oaks Canyon Homeowners

## 2017 Drinking Water Report

*It's your tap water!*



EPA ID: 0915



# Water Quality

*Last year, the Crooked Oaks Canyon Homeowners 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 75 customers an average of 6,000 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 Crooked Oaks Canyon Homeowners public water supply system is medium.

For more information about your water and information on opportunities to participate in public meetings, call and ask for Robin Douglas.

## 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 Crooked Oaks Canyon Homeowners 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 Crooked Oaks Canyon Homeowners (EPA ID 0915)

### 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	08/12/16	AL=1.3	0	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead	2	0	08/12/16	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
Fluoride	0.19		03/15/17	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.

Please direct questions regarding this information to Mr Ed Striebel with the Crooked Oaks Canyon Homeowners public water system.