

Monitoring/Reporting - Entry Point

Town of Garden City

EPA ID: 0137

SAMPLING

Entry point: Treat Site - Well #1 And #2

Chemical	Sampling Frequency	Waivers	Taken Last	Due Next	Notes
1	Inorganic Chemicals				
	A. Antimony	Triennially	No	May-16	
	B. Arsenic	Triennially	No	May-16	
	C. Barium	Triennially	No	May-16	
	D. Beryllium	Triennially	No	May-16	
	E. Cadmium	Triennially	No	May-16	
	F. Chromium	Triennially	No	May-16	
	G. Cyanide		Yes		State-wide waiver
	H. Fluoride	Triennially	No	May-16	
	I. Mercury	Triennially	No	May-16	
	J. Nickel	Triennially	No	May-16	
	K. Selenium	Triennially	No	May-16	
	L. Thallium	Triennially	No	May-16	
2	Radiological Chemicals	Every nine years	N/A		
3	VOC Chemicals	Quarterly	No	Jul-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	Aug-17	
6	Nitrite	Quarterly	N/A	Feb-18	

(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:	<u></u>

Lead and Copper Monitoring

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

A	Date Last Tested:	<u>June 6, 2017</u>
B	Samples required:	<u>5</u>
C	Sampling Frequency	<u>Exceeds Pb or Cu Action Level</u>
D	Date Due Next	<u></u>
E	Lead - 90% Level	<u>53.85</u> Action Level - 15 ug/l
F	Copper 90% Level	<u>0.55</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>1.32</u> mg/l
D	Running Annual Average:	<u>1.78</u> mg/l
E	Date of last DBP test:	<u>August 9, 2017</u>
F	THM - Qtr Average:	<u>0</u> ug/l
G	Haa5 - Qtr Average:	<u>1.48</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 Garden City

EPA ID: 0137

Violations From January 1, 2013 To January 1, 2018

Violation Type	Parameter	Date	Status
Failure To Address Significant Deficiency On	Groundwater Rule	10/27/2017	Intentional No-Action
Failure to Monitor	SOCs - 2,4-D	01/01/2014	Public Notice Requested
	SOCs - 2,4-D		Compliance Achieved
Failure to Monitor	SOCs - Pichloram	01/01/2014	Public Notice Requested
	SOCs - Pichloram		Compliance Achieved
Failure to Monitor	SOCs - Pentachlorophenol	01/01/2014	Public Notice Requested
	SOCs - Pentachlorophenol		Compliance Achieved
Failure to Monitor	SOCs - 2,4,5-TP (Silvex)	01/01/2014	Public Notice Requested
	SOCs - 2,4,5-TP (Silvex)		Compliance Achieved
Failure to Monitor	SOCs - Dinoseb	01/01/2014	Public Notice Requested
	SOCs - Dinoseb		Compliance Achieved
Failure to Monitor	SOCs - Dalapon	01/01/2014	Public Notice Requested
	SOCs - Dalapon		Compliance Achieved
DBP Failure To Monitor	Chlorine	04/01/2013	Public Notice Requested
	Chlorine		Compliance Achieved

Significant Deficiency	Date Identified	Date Corrected

EPA ID#: 0137 System Name: Town of Garden City

Sampler- Mr Alan Luckhurst Work Phone-
 Title- Utilities Manager
 Address- 308 N Grover
 Garden City SD 57236

Location- City: Garden City County: Clark
 Service Area- Municipality
 PWS Owner Type- Local Government
 Water Supply Type- Groundwater Supply

Population Served- 50 Service Connections- 43

Sources for Garden City

Source	Name	Year Built	Depth (feet)	Diameter (inches)	Availability	Type	Vulnerability	Treatment
01	#1	1961	550	6	Permanent	Groundwater	Non-Vulnerable	Treatment At Plant
02	#2	1976	500	4	Permanent	Groundwater	Non-Vulnerable	Treatment At Plant
03	TREAT SITE - #1 AND #2				Permanent	Treatment Plant	Non-Vulnerable	Disinfection - Hypochlorites Corrosion Control - Phosphates

EPA ID#: 0137 System Name: Town of Garden City

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	08/23/89	1827	2450	7.87	315	0	372	8.9	126.0	70.9	1.06	0.52	61.6	981	384	0	606	+0.59	0.2	0.21
02	Raw	11/03/76	1972	0	7.90	321	0	360	10.0	0.0	0.0	1.70	0.30	58.0	1020	392	0	630	+0.64	1.0	0.20
Averages			1900	1225	7.89	318	0	366	9.5	63.0	35.5	1.38	0.41	59.8	1001	388	0	618		0.6	0.21

Source	Type	Date	TDS	Conductance	pH	Alk-M	Alk-P	Na	K	Ca	Mg	Fe	Mn	Cl	SO4	HCO3	CO3	Hardness	Langlier	NO3	F
03	Treated	11/01/93	1843	2464	8.32	344	0	382	12.1	139.0	73.9	1.74	0.32	62.0	1025	420	0	651	+1.23	0.4	0.21
03	Treated	03/27/96	1825	2515	0.00	324	0	377	12.0	132.3	77.8	1.06	0.22	73.0	1080	395	0	651	+1.40	0.2	0.24
03	Treated	05/25/99	1853	2470	7.66	328	0	372	10.1	117.0	70.0	0.86	0.27	60.7	969	400	0	580	+0.52	0.1	0.21
03	Treated	06/04/02	1898	2630	7.84	334	0	373	10.1	127.0	70.8	0.75	0.26	69.0	970	407	0	608	+0.43	0.1	0.21
03	Treated	04/21/05	1895	2560	7.75	333	0	376	10.4	117.0	70.3	0.77	0.31	69.0	989	406	0	581	+0.62	0.1	0.24
03	Treated	02/07/08	1872	2500	7.89	332	0	381	11.3	127.0	68.7	0.53	0.24	65.0	1030	405	0	600	+0.79	0.4	0.23
03	Treated	12/22/10	1884	2610	7.85	330	0	361	9.3	127.0	76.4	0.74	0.23	68.0	1020	403	0	631	+0.75	0.2	0.27
03	Treated	06/25/14	1861	2550	7.98	336	0	354	9.7	129.0	79.6	0.90	0.30	53.0	986	410	0	650	00.89	0.0	0.25
03	Treated	05/24/17	1872	2530	7.89	302	0	340	9.8	123.0	77.2	1.28	0.32	56.0	1024	368	0	632	+0.74	0.0	0.24
Averages			1867	2537	7.02	329	0	368	10.5	126.5	73.9	0.96	0.27	64.0	1010	402	0	620		0.2	0.23

You can contact us by calling or
write us at
PO Box 134
Garden City SD 57236-0134

Town of Garden City

2017 Drinking Water Report

It's your tap water!



EPA ID: 0137



Water Quality

Last year, the Town of Garden City 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 50 customers an average of 3,750 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 Garden City public water supply system is low.

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

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 Garden City 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 Garden City (EPA ID 0137)

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
- *pCi/l: picocuries per liter(a measure of radioactivity)
- *ppt: parts per trillion, or nanograms per liter
- *mrem/year: millirems per year(a measure of radiation absorbed by the body)
- *ppm: parts per million, or milligrams per liter(mg/l)
- *ppq: parts per quadrillion, or picograms per liter
- *NTU: Nephelometric Turbidity Units
- *ppb: parts per billion, or micrograms per liter(ug/l)
- *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	06/06/17	AL=1.3	0	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead	54	1	06/06/17	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
Barium	0.007		05/23/16	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
Chromium	2.6		05/23/16	100	100	ppb	Discharge from steel and pulp mills; erosion of natural deposits.
Fluoride	0.3		05/23/16	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Haloacetic Acids (RAA)	1.48		08/09/17	60	0	ppb	By-product of drinking water chlorination. Results are reported as a running annual average of test results.
Mercury (Inorganic)	0.26		05/23/16	2	2	ppb	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland.
Nitrite (as Nitrogen)	0.97		08/09/17	1	1	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Selenium	1.7		05/23/16	50	50	ppb	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.

Please direct questions regarding this information to Mr Alan Luckhurst with the Garden City public water system.