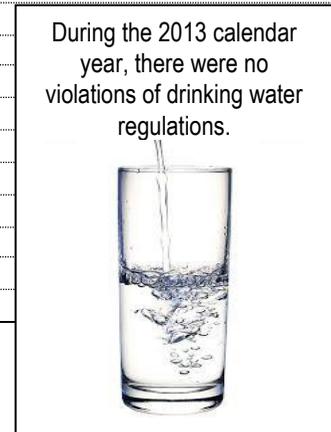


## Test Results (Collected in 2013 Unless Noted)

MICROBIOLOGICAL	Highest No. of Positive Samples	MCL	MCLG	Likely Source of Contamination		Violations Present	
No Detected Results were found in the Calendar Year of 2013							
<b>LEAD AND COPPER</b>							
	Monitoring Period	90 <sup>th</sup> Percentile	Range	Unit	AL	Sites Over AL	Likely Source of Contamination
Copper, Free	2011 – 2013	0.332	0.0086 – 0.436	ppm	1.3	0	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing.
Lead	2011 – 2013	5.49	1.02 - 24	ppb	15	0	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing.
<b>REGULATED CONTAMINANTS</b>							
	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Likely Source of Contamination
Arsenic	09/03/13	8.74	4.02 – 8.74	ppb	10	0	Erosion of natural deposits; runoff from orchards; runoff from glass electronics production wastes.
Barium	05/06/13	0.0652	0.0551 – 0.0652	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	08/12/13	15.3	5.06 – 15.3	ppb	100	100	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	05/06/13	0.375	0.277 – 0.375	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Fertilizer discharge.
Nitrate-Nitrite	07/26/13	8.81	2.19 – 8.81	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	08/12/13	5.17	5.17	ppb	50	50	Erosion of natural deposits.
Uranium Mass	04/15/13	35.1	29.1 – 35.1	ug/L	30	0	Erosion of natural deposits.
<b>RADIOLOGICAL CONTAMINANTS</b>							
Combined Radium (-226 & -228)	02/06/12	3.2	0.09 – 3.2	pCi/L	5	0	Erosion of natural deposits.
Combined Uranium	07/08/13	35	20 - 35	pCi/L	20	0	Erosion of natural deposits.
Gross Alpha, Incl. Radon & Uranium	07/08/13	43.6	13.3 – 43.6	pCi/L	15	0	Erosion of natural deposits.
Radium-226	02/06/12	0.2	0.09 – 0.2	pCi/L	5	0	Erosion of natural deposits.
Radium-228	02/06/12	3	0.7 - 3	pCi/L	5	0	Erosion of natural deposits.
<b>DISINFECTION BYPRODUCTS</b>							
	Monitoring Period	Highest RAA		Unit	MCL	MCLG	Likely Source of Contamination
Total Haloacetic Acids (HAA5)	01/11/13-12/31/13	3.791	1.29 – 5.63	ppb	60	0	By-product of drinking water disinfection.
TTHM	07/11/12-06/30/13	14.654	3.43 – 34.3	ppb	80	0	By-product of drinking water disinfection.
<b>UNREGULATED Water Quality Data</b>							
	Collection Date	Highest Value	Range	Unit	Secondary MCL		
Nickel	09/03/13	0.00274	0.00199-0.00274	mg/L	0.1		
Sulfate	09/03/13	327	244 - 327	mg/L	250		



**During the 2013 calendar year, there were no violations of the drinking water regulations.**

The EPA and State Drinking Water Program establish the safe drinking water regulations that limit the amount of contaminants allowed in drinking water. This table shows the concentrations of detected substances in comparison to the regulatory limits. Substances not detected are not included in the table. The State requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data may be older than one year.

**UNIT OF MEASUREMENT DEFINITIONS** 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. 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. Action Level (AL)-The concentration of a contaminant which, if exceeded triggers treatment or other requirements which a water system must follow. Maximum Residual Disinfectant Level (MRDL)-The highest level of a disinfectant allowed in drinking water. Maximum Residual Disinfectant Level Goal (MRDLG)-The level of disinfectant in drinking water below which there is no known or expected risk to health. Not applicable (N/A). Not detectable (ND). Parts Per Million (ppm)-One ppm or mg/L corresponds to 1 gallon of water in 10,000 gallons. Parts Per Billion (ppb)-One ppb corresponds to 1 gallon of water in 10,000,000 gallons. PicoCuries Per Liter (pCi/L)-Radioactivity concentration unit. Micrograms per Liter (ug/L)-Measurement of radioactivity. Nephelometric Turbidity Units (NTU)-Measurement of water clarity. Quarterly Running Annual Average (QRAA)-An ongoing annual average calculation of data from the most recent four quarters. 90<sup>th</sup> Percentile-Represents the highest value found out of 90% of the samples taken in a representative group. If the 90<sup>th</sup> percentile is greater than the action level, it will trigger a treatment or other requirements that a water system must follow. Treatment Technique (TT)-A required process intended to reduce the level of a contaminant in drinking water.

**Drinking Water Health Notes**

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 are available from the Safe Drinking Water Hotline at 800-426-4791.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. Flushing your tap for 30 seconds to 2 minutes before using your tap water will clear the line of any lead that may have leached into the water while the line was idle. Additional information is available from the Safe Drinking Water Hotline 800-426-4791 or the Department of Health and Human Services/Division of Public Health/Office of Drinking Water 402-471-2541.

Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.



# City of Scottsbluff Annual Water Quality Report

For the period of  
January 1, 2013 to December 31, 2013

«NAME»  
«ADDRESS»  
«CITY», «STATE» «ZIP»

### Why is this Report Necessary?

This report is intended to provide you with important information about your drinking water and the efforts made by the City of Scottsbluff water system to provide safe drinking water. For more information regarding this report, contact Jack Satur, Water System Supervisor, at 308-630-6258.

*City of Scottsbluff Water Department, 2525 Circle Dr., Scottsbluff, NE 69361  
Water Maintenance: 308-630-6258 Water Utility Billing: 308-630-6220*

### Para Clientes Que Hablan Espanol

Este informe contiene informacion muy importante sobre el agua que usted bebe. Traduzcalo o hable con alguien que lo entienda bien.

If you would like to observe the decision-making processes that affect drinking water quality, please attend the regularly scheduled meetings of the City Council. If you would like to participate in the process, contact the City Clerk by calling 308-630-6221 to arrange to be placed on the agenda for these meetings.

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 at 800-426-4791.

### Source Water Assessment Availability

The Nebraska Department of Environmental Quality (NDEQ) has completed the City's Source Water Assessment. Included in the assessment is a Wellhead Protection Area map, potential contaminant source inventory, vulnerability rating, and source water protection information. To view the Source Water Assessment or for more information, please contact the Water Department at 308-630-6258 or the NDEQ at 402-471-6988 or go to [www.deq.state.ne.us](http://www.deq.state.ne.us).

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.

### Sources of Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and groundwater 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. The source of drinking water used by the City of Scottsbluff is groundwater. This water is pumped from wells maintained by the City of Scottsbluff.

### 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 storm water 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 storm water 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 storm water runoff, and septic systems.
- Radioactive Contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

### The City of Scottsbluff is required to test for the following contaminants:

Coliform Bacteria, Antimony, Arsenic, Asbestos, Barium, Beryllium, Cadmium, Chromium, Copper, Cyanide, Fluoride, Lead, Mercury, Nickel, Nitrate, Nitrite, Selenium, Sodium, Thallium, Alachlor, Atrazine, Benzo(a)pyrene, Carbofuran, Chlordane, Dalapon, Di(2-ethylhexyl)adipate, Dibromo-chloropropane, Dinoseb, Di(2-ethylhexyl)-phthalate, Diquat, 2,4-D, Endothall, Endrin, Ethylene dibromide, Glyphosate, Heptachlor, Heptachlor epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane, Metho-xychlor, Oxamyl (Vydate), Pentachlorophenol, Picloram, Polychlorinated biphenyls, Simazine, Toxaphene, Dioxin, Silvex, Benzene, Carbon Tetrachloride, o-Dichlorobenzene, Para-Dichlorobenzene, 1,2-Dichlorethane, 1,1-Dichloroethylene, Cis-1,2-Dichloroethylene, Trans-1,2-Dichloroethylene, Dichloromethane, 1,2-Dichloropropane, Ethylbenzene, Mono-chlorobenzene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethylene, Vinyl Chloride, Styrene, Tetrachloroethylene, Toluene, Xylenes (total), Gross Alpha (minus Uranium & Radium 226), Radium 226 plus Radium 228, Sulfate, Chloroform, Bromodichloromethane, Chloro-dibromomethane, Bromoform, Chlorobenzene, m-Dichlorobenzene, 1,1-Dichloropropene, 1,1-Dichloroethane, 1,1,2,2-Tetrachlorethane, 1,2-Dichloropropane, Chloromethane, Bro-momethane, 1,2,3-Trichloropropane, 1,1,1,2-Tetrachloroethane, Chloroethane, 2,2-Dichloro-propene, o-Chlorotoluene, p-Chlorotoluene, Bromobenzene, 1,3-Dichloropropene, Aldrin, Butachlor, Carbaryl, Dicamba, Dieldrin, 3-Hydroxycarbofuran, Methomyl, Metolachlor, Metribuzin, Propachlor.

City of Scottsbluff  
Water Department  
2525 Circle Drive  
Scottsbluff, NE 69361