Key to Terms and Abbreviations in the Table

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The table below lists all the drinking water contaminants that we detected during the 2013 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, 2013.

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 **Level Found** can be the highest amount found in the water or the average of all samples analyzed, depending on the regulation. If multiple samples were tested in 2013, the lowest and highest detected values are listed under **Range of Detections**. The highest level of a substance allowed in drinking water is the Maximum Contaminant Level (**MCL**), which is set by the EPA. Some contaminants also have MCL goals (**MCLGs**). This is the level of a substance where there is no known or expected health risk. MCLGs allow for a margin of safety. MCLs are set as close to MCLGs as feasible using the best available water treatment processes.

The MCL for lead and copper is known as the **Action Level (AL)**. This is the concentration which, if exceeded, triggers treatment or other requirement a water system must follow. Ninety percent of all samples tested must be below this concentration. During 2011, no samples from the Mitchell system tested above the action level for either copper or lead. The next lead and copper testing is due June-September, 2014.

Turbidity is a measure of water clarity monitored at the Mitchell Water Treatment Plant. Certain **'Treatment Techniques' (TT)** are required to reduce the level in the drinking water. Regulations require turbidity to be <0.3 NTU 95% of the time and <1.0 NTU 100% of the time. During 2013, no samples exceeded the 0.3 NTU benchmark at the Mitchell Water Treatment Plant.

Lead

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 City of Mitchell 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**

2013 Test Results

Tests shaded green were performed by the City of Mitchell. All other tests results below reflect testing done on B-Y RWS water at the B-Y treatment plant.

Detected Substance (units) Test Date	MCLG	MCL	Highest Level Detected	Range of Detections	Typical Source of Substance in Drinking Water	Meets Standards
Antimony (ppb) 5/13/13	6	6	0.3	N/A	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder.	✔
Arsenic (ppb) 5/13/13	N/A	10	3	N/A	Erosion of natural deposits; runoff from orchards;runoff from glass and electronics production wastes.	✔
Barium (ppm) 5/13/13	2	2	0.014	N/A	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.	✔
Chromium (ppb) 5/13/13	100	100	1.7	N/A	Discharge from steel and pulp mills; erosion of natural deposits.	✔
Fluoride (ppm) 1/2/13	4	4	1.3	0.95-1.3	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.	✔
Haloacetic Acids (ppb) 8/29/11	0	60	42.4	ND-42.4	By-product of drinking water chlorination.	✔
Haloacetic Acids (ppb) 7/11/13	0	60	24.2	ND-24.2	By-product of drinking water chlorination.	✔
Selenium (ppb) 5/13/13	50	50	1.9	N/A	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.	✔
Total Trihalomethanes (ppb) 6/6/11	0	80	74.9	ND-74.9	By-product of drinking water chlorination.	✔
Total Trihalomethanes (ppb) 7/11/13	0	80	46.3	ND-46.3	By-product of drinking water chlorination.	✔
Copper (ppm) 8/5/11	AL: 1.3 (90% of samples tested must be <1.3 ppm)		No Sites exceeded 1.3	90% of Samples <0.1	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.	✔
Lead (ppb) 7/28/11	AL: 15 (90% of samples tested must be <15 ppb)		No Sites exceeded 15	90% of Samples <2	Corrosion of household plumbing systems; erosion of natural deposits..	✔

Our Role in Drinking Water Safety

The Mitchell Water Treatment Plant uses a multiple barrier approach to ensure delivery of high quality water. A series of checks and balances protect the supply from the source to the faucet. This holistic approach is considered the best practice within the water utility profession to ensure public health protection.

You can help protect Mitchell's water supply by disposing of household wastes properly. Remember, what you put down the drain and on the ground eventually makes its way into the lake or underground aquifers.

Important Source Water and Health Information from the EPA

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.

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

Other Definitons: ppb: parts per billion **ppm:** parts per million **pspm:** positive samples per month **NTU:** Nephelometric Turbidity Units **NA:** not applicable (does not apply) **ND:** not detected **RR:** Removal Ratio. The TOC removal ratio is the ratio between the actual TOC removal and the TOC removal requirements. The lowest running annual average of quarterly percentages is reported.