

# *Annual Drinking Water Quality Report*

## *Morgan City*

### *2009*

We're very pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. Our water sources are three springs known as Bradt, North Morgan, and Robinson. We also have three wells in use known as wells number 3, 4 and 5. All these are known as ground water sources.

Morgan City has a Drinking Water Source Protection Plan that is available for review. It provides more information such as potential sources of contamination and our source protection areas. It has been determined we have a low susceptible on the spring and medium susceptible on the wells to potential sources of contamination. The spring's are in remote locations, and there are no potential contamination sources in the protection zones, so we consider our springs to have a low susceptibility to potential contamination events. The criteria in the source protection plan are enforced by a ground water protection ordinance that was originally passed by the Morgan City Council April 2, 1996.

If you have any questions about this report or concerning your water utility, please contact Jamie Grandpre at 801-829-3461. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second and fourth Tuesdays at 7:00 pm.

Morgan routinely monitors for constituents in our drinking water in accordance with the Federal and Utah State laws. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk. All of the Morgan City water sources met Federal and State requirements for the year 2009.

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

***Non-Detects (ND)*** - laboratory analysis indicates that the constituent is not present.

***ND/Low - High*** - For water systems that have multiple sources of water, the Utah Division of Drinking Water has given water systems the option of listing the test results of the constituents in one table, instead of multiple tables. To accomplish this, the lowest and highest values detected in the multiple sources are recorded in the same space in the report table.

***Parts per million (ppm) or Milligrams per liter (mg/l)*** - one part per million corresponds to one minute in two years or a single penny in \$10,000.

**Parts per billion (ppb) or Micrograms per liter (ug/l)** - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**Parts per trillion (ppt) or Nanograms per liter (nanograms/l)** - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

**Picocuries per liter (pCi/L)** - picocuries per liter is a measure of the radioactivity in water.

**Millirems per year (mrem/yr)** - measure of radiation absorbed by the body.

**Million Fibers per Liter (MFL)** - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

**Nephelometric Turbidity Unit (NTU)** - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**Action Level (AL)** - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Treatment Technique (TT)** - (mandatory language) A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

**Maximum Contaminant Level (MCL)** - (mandatory language) The “Maximum Allowed” (MCL) is 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)** - (mandatory language) The “Goal”(MCLG) is 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.

**Date**- Because of required sampling time frames i.e. yearly, 3 years, 4 years and 6 years, sampling dates “May” seem out of date.

**Waivers (W)**- Because some chemicals are not used or stored in areas around drinking water sources, some water systems have been given waivers that exempt them from having to take certain chemical samples, these waivers are also tied to Drinking Water Source Protection Plans.

<b>TEST RESULTS</b>							
Contaminant	Violation Y/N	Level Detected ND/Low-High	Unit Measurement	MCLG	MCL	Date Sampled	Likely Source of Contamination
<b>Microbiological Contaminants</b>							
1. Total Coliform Bacteria	N	0	N/A	0	Presence of coliform bacteria in 5% of monthly samples	2009	Naturally present in the environment

2. Fecal coliform and <i>E. coli</i>	N	0	N/A	0	a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive	2009	Human and animal fecal waste
3.a. Turbidity for Ground Water	N	.20-1.4	NTU	N/A	5	2009	Soil runoff
<b>Radioactive Contaminants</b>							
4. Alpha emitters	N	1.0-3.0	PCi/l	0	15	2009	Erosion of natural deposits
5. Beta emitters*	N	1.1-4.6	PCi/l	0	50	2009	Erosion of natural deposits
6. Combined radium	N	.46-1.0	PCi/l	0	5	2009	Erosion of natural deposits
*Beta Particles: The MCL for beta particles is 4 mrem/year. EPA considers 50 pCi/l to be the level of concern for beta particles.							
<b>Inorganic Contaminants</b>							
7. Antimony	N	ND	Ppb	6	6	2008	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
8. Arsenic	N	160-700	Ppt	N/A	50,000	2008	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
10. Barium	N	54-191	Ppb	2000	2000	2008	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
11. Beryllium	N	ND	Ppb	4	4	2008	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries
12. Cadmium	N	ND	Ppb	5	5	2008	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
13. Chromium	N	1.2-2.7	Ppb	100	100	2008	Discharge from steel and pulp mills; erosion of natural deposits
14. Copper a. 90% results b. # of sites that exceed the AL	N	a. 87 b. 0	Ppb	1300	AL=1300	2007	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
15. Cyanide	N	ND	Ppb	200	200	2008	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
16. Fluoride	N	100-600	Ppb	4000	4000	2008	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
17. Lead a. 90% results b. # of sites that exceed the AL	N	a. 2 b. 0	Ppb	0	AL=15	2007	Corrosion of household plumbing systems, erosion of natural deposits

18. Mercury (inorganic)	N	ND	Ppb	2	2	2008	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland
19. Nitrate (as Nitrogen)	N	300-3100	Ppb	10000	10000	2009	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
21. Selenium	N	1300-1900	Ppt	50	50,000	2008	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
22. Sodium	N	37-46	Ppm	None set by EPA	None set by EPA	2008	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills.
23. Sulfate	N	47-109	Ppm	500*	500	2008	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills, runoff from cropland
24. Thallium	N	ND	Ppb	1	2	2008	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
25. TDS (Total Dissolved Solids)	N	508-539	Ppm	1000**	1000**	2008	Erosion of natural deposits

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or are man made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. All 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 the 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 at 1-800-426-4791.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

May 14, 2010

Brett Shakespeare  
CCR Manager  
Division of Drinking Water  
P.O. Box 144830  
Salt Lake City, Utah 84114-4830

Dear Mr. Shakespeare:

Subject: Consumer Confidence Report for Morgan City #15008.

Enclosed is a copy of Morgan City Consumer Confidence Report. It contains the water quality information for our water system for the calendar year 2009 or the most recent sample data.

We have delivered this report to our customers by publishing the entire report in the local newspaper and sending a copy to those that request a copy and allowing inspection of the report at the water system office.

If you have any questions, please contact me at 801-829-3461.

Sincerely,

Jamie Grandpre,  
Water System Senior Operator

Enclosure