

2013 Consumer Confidence Report

Water System Name: CITY OF FIREBAUGH Report Date: June 4th 2014

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2013 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

Type of water source(s) in use: 5 Ground Water Wells

Name & general location of source(s): WELLS #13, #15 AND #16 SERVICE WATER TREATMENT PLANT #1.
WELLS #11 AND #12 SERVICE WATER TREATMENT PLANT #2.

Drinking Water Source Assessment information: A source water assessment survey for wells #10, #11, #12, #13 which produce water for the City of Firebaugh Water System was conducted on July 1st 2002. A source water assessment was completed September 2012 for wells #15 and #16.

Well #10

The source is considered most vulnerable to the following activities not associated with any detected contaminants: Surface water bodies, agricultural drainage, fleet/truck/bus terminals, mining-sand/gravel, sewer collection systems, automobile-gas stations and landfill/dumps.

Well #11

The source is considered most vulnerable to the following activities not associated with any detected contaminants: Surface water bodies, automobile-gas stations and septic systems-high density >1 acre.

Well #12

The source is considered most vulnerable to the following activities not associated with any detected contaminants: Surface water bodies, automobile-gas stations and septic systems-high density >1 acre.

Well #13

The source is considered most vulnerable to the following activities not associated with any detected contaminants: Surface water bodies, automobile-gas stations, landfill/dumps, wastewater treatment plants and septic systems-higher density >1 acre.

Well #15

The source is considered most vulnerable to the following activities associated with contaminants detected in the water supply:

Schools

The source is considered most vulnerable to the following activities not associated with any detected contaminants:

Agricultural drainage

Well #16

The source is considered most vulnerable to the following activities associated with contaminants detected in the water supply:

Airports-maintenance fueling areas, automobile-body shops, automobile-repair shops, fleet/truck/bus terminals, junk/scrap/salvage yards, schools.

The source is considered most vulnerable to the following activities not associated with contaminants detected in the water supply:

Historic gas stations.

Time and place of regularly scheduled board meetings for public participation: _____

Third Monday of each month

At 7:00 pm. Location is at the Firebaugh Community Center, 1655 13th Street

For more information, contact: Anthony Chavarria Phone: (559) 659-2043

TERMS USED IN THIS REPORT

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

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 are set by the U.S. Environmental Protection Agency (USEPA).

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Variations and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (µg/L)

ppt: parts per trillion or nanograms per liter (ng/L)

ppq: parts per quadrillion or picogram per liter (pg/L)

pCi/L: picocuries per liter (a measure of radiation)

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, in some cases, radioactive material, 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, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, that 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*, that 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, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, that 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, the USEPA and the California Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, 5, 7, and 8 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department allows us to monitor for certain contaminants less than once per year because

the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	8/2012	20	6.2	1	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	8/2012	20	0.16	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2013	100.8	74-120	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2013	163.6	78-260	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

*Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
ARSENIC (ppb) TREATMENT SITE #1 TREATMENT SITE #2	2013 2013	6.33 1.79	4.2-8.9 N/D-6.3	10	.004	Erosion of natural deposits; run off and from orchards; glass and electronics production waste.
BARIUM (PPM)	2014	0.13	.076-.20	1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
CHLORINE (ppm) (distribution system residual chlorine)	2013	0.70	0.67-0.70	4	4	Drinking water disinfectant added for treatment
GROSS ALPHA (pCi/L)	2010	3.31	1.99-6.63	15	N/A	Decay of natural and man-made deposits
SELENIUM (ppb)	2014	3.075	N/D – 4.5	50	30	Discharge from petroleum, glass and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots(feed additive)

RADIUM 226 (pCi/L)	2011	2.51	N/D-5.08	5	.05	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.
TTHMs (Total (ppb) Trihalomethanes)	2013	33	31-33	80	N/A	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.
Haloacetic Acids (ppb)	2013	6.8	6.6-6.8	60	N/A	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
COLOR (units)	2014	8	5-10	15	N/A	Naturally-occurring organic materials
CONDUCTIVITY (umhos/cm)	2014	810	640-1000	1600	N/A	Substance that form ions when in water; seawater influence.
CHLORIDE (ppm)	2014	128.8	85-180	500	N/A	Runoff/leaching from natural deposits; seawater influence
IRON (ppb) TREATMENT SITE #1 TREATMENT SITE #2	2013	2 17.5	ND-50 ND- *610	300	N/A	Leaching from natural deposits; industrial wastes
MANGANESE (ppb) TREATMENT SITE #1 TREATMENT SITE #2	2013	.88 ND	ND-33 ND	50	N/A	Leaching from natural deposits;
ODOR (units)	2014	1.3	1-2	3	N/A	Natural occurring organic materials
SULFATE (ppm)	2014	83.8	66-120	500	N/A	Runoff/leaching from natural deposits; industrial wastes
TURBIDITY (ntu)	2014	.742	N/D-1.4	5	N/A	Soil runoff
TOTAL DISSOLVED SOLIDS (ppm)	2014	482	420-590	1000	N/A	Runoff/leaching from natural deposits

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
NONE					

*Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

Additional General Information on Drinking Water

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 USEPA’s Safe Drinking Water Hotline (1-800-426-4791).

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. USEPA/Centers for Disease Control (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 (1-800-426-4791).

Lead-Specific Language for Community Water Systems: 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 Firebaugh 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>.

While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic’s possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency 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.

**Summary Information for Violation of a MCL, MRDL, AL, TT,
or Monitoring and Reporting Requirement**

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT				
Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
None				

For Water Systems Providing Ground Water as a Source of Drinking Water

TABLE 7 – SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLES					
Microbiological Contaminants (complete if fecal-indicator detected)	Total No. of Detections	Sample Dates	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
<i>E. coli</i>	0	N/A	0	(0)	Human and animal fecal waste
Enterococci	0	N/A	TT	n/a	Human and animal fecal waste
Coliphage	0	N/A	TT	n/a	Human and animal fecal waste

**Summary Information for Fecal Indicator-Positive Ground Water Source Samples,
Uncorrected Significant Deficiencies, or Ground Water TT**

SPECIAL NOTICE OF FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLE				
SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES				
VIOLATION OF GROUND WATER TT				
TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
NONE				