

2014 Annual Drinking Water Quality Report

IVANHOE PUBLIC UTILITY DISTRICT

*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, 2014*

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

We are pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the water and services we have delivered to you over the past year. Our goal is and always has been, to provide you with a safe and dependable supply of drinking water. Our water source comes from 3 active groundwater wells, Well Nos. 4, 6 and 8. Due to high levels of nitrate, water from Well Nos. 1, 2, 5 and 7 are used only for non-potable purposes. Well No. 8 was put online January, 2014. The District is seeking funding for Well No. 9.

A source water assessment was conducted for the water supply wells of the Ivanhoe Public Utility District water system in February 2003. The sources are considered most vulnerable to the following activities associated with contaminants detected in the water supply: fertilizer, pesticide and/or herbicide applications. The sources are considered most vulnerable to the following activities not associated with any detected contaminants: chemical and/or petroleum processing and/or storage; metal plating and/or finishing and/or fabricating; historic gas stations; automobile gas stations; sewer collection systems; and agricultural and/or irrigation wells. A copy of the complete assessment may be viewed at Ivanhoe Public Utility District, 15859 Azalea Avenue, Ivanhoe, CA 93235. If you would like a summary of the assessment sent to you, please contact Refugio Gallegos, Chief Operator, at 559/798-0512.

If you have any questions about this report or concerning your water utility, please contact Refugio Gallegos, General Manager, at the Ivanhoe Public Utility District at 559/798-0512. We want our 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 the 1st Monday of each month at 6:00 p.m., at the District Office Building located at 15859 Azalea Avenue in Ivanhoe.

The following are definitions of some of the TERMS USED IN THIS REPORT:

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

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).

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

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.

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

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.

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

Variations and Exemptions: State Water Resources Control Board – Division of Drinking Water (DDW) permission to exceed an MCL or not comply with a treatment technique under certain conditions.

NA: not applicable.

ND: not detectable at testing limit.

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

ppb: parts per billion or micrograms per liter (ug/l).

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

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

In general, sources of drinking water (both tap water and bottled water) may 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.

Constituents that may be present in source water to contamination levels 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 and residential uses.

- Organic chemical contaminants, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production and can also come from gas stations, urban storm water runoff, agricultural application and septic systems.
- Radioactive contaminants that can be naturally occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U. S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board – Division of Drinking Water (DDW) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DDW regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

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. Ivanhoe Public Utility District 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>.

The Tables below and on the following page(s) lists all the drinking water constituents that were detected during the most recent samplings for the constituent. The presence of these constituents in the water does not necessarily indicate that the water poses a health risk. The DDW requires us to monitor for certain constituents less than once per year because the concentrations of these constituents are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, are therefore more than one year old.

TEST RESULTS (A)

Lead and Copper Rule	No. of samples collected	MCLG	Action Level	90 th percentile level detected	No. Sites Exceeding Action Level	Typical Source of Contamination
Lead (ppb) 2012	19	2	15	ND	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm) 2012	19	0.3	1.3	0.11	0	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 2012, we were only able to obtain nineteen (19) lead & copper samples instead of the required twenty (20) samples. The results shown above are the results of nineteen (19) samples. The health effects of insufficient sampling during 2012 are not known.

Radioactive Contaminants

Constituent	MCL	PHG (MCLG)	Sample Date	Average Level Detected	Range (B)	Likely Source of Contamination
Gross Alpha Activity (pCi/L)	15	N/A	2012 & 2014	3.97 (B)	ND to 6.09	Erosion of natural deposits
Uranium (pCi/L)	20	0.43	2005 & 2014	2.77	ND to 4	Erosion of natural deposits

SAMPLING RESULTS FOR SODIUM AND HARDNESS

Constituent	MCL	PHG [MCLG]	Sample Date	Average Level Detected	Range	Likely Source of Contamination
Hardness (ppm)	None	None	2014	169	78 to 270	Generally found in ground and surface water
Sodium (ppm)	None	None	8/28/2014	29	20 to 39	Generally found in ground and surface water

DETECTION OF SYNTHETIC ORGANIC CONTAMINANTS INCLUDING PESTICIDES & HERBICIDES

Constituent	MC L	PHG [MCLG]	Sample Date	Average Level Detected	Range	Likely Source of Contamination
Dibromochloropropane (DBCP) (ppt)	200	1.7	2014	10	ND to 10	Banned nematocide that may still be present in soils due to runoff/leaching from former use on soybeans, cotton, vineyards, tomatoes and tree fruit.

DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Constituent	MCL [AL]	PHG [MCLG]	Sample Date	Average Level Detected	Range	Likely Source of Contamination
Barium (ppm)	1	2	2014	0.11	ND to 0.14	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (ppm)	2	1	2014	0.14	0.11 to 0.16	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate as NO ₃ (ppm)	45	45	2014	26	10 to 43 (C)	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Constituent	MCL	Sample Date	Average Level Detected	Range	Likely Source of Contamination
Chloride (ppm)	500	2014	14.8	6.4 to 23	Runoff/leaching from natural deposits; seawater influence
Color (Units)	15	2014	< 4	< 1 to < 5	Naturally-occurring organic materials
Odor (Units)	3	2014	1	< 1 to 1.5	Naturally-occurring organic materials
Specific Conductance (µS/cm)	1600	2014	440	230 to 650	Substances that form ions when in water; seawater influence
Sulfate (ppm)	500	2014	25.7	10 to 42	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS) (ppm)	1000	2014	290	150 to 440	Runoff/leaching from natural deposits
Turbidity (Units)	5	2014	0.18	< 0.1 to 0.23	Soil runoff

DETECTION OF UNREGULATED CONTAMINANTS

Constituent	Notification Level	PHG [MCLG]	Sample Date	Average Level Detected	Range	Health Effects Language
Trichloropropane (1,2,3-TCP) (ppt)	5	7	2014	30	ND to 54	Some people who use water containing 1,2,3-Trichloropropane (TCP) in excess of the Notification Level over many years may have an increased risk of getting cancer, based on studies in laboratory animals.

- (A) Results reported due to regulatory requirement or detection of a constituent.
- (B) Results reported include amounts that are less than the State Water Resources Control Board – Division of Drinking Water (DDW) required detection level for this constituent.
- (C) **ABOUT NITRATE:** Nitrate in drinking water at levels above 45 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

Additional General Information On Drinking Water

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some constituents. The presence of constituents does not necessarily indicate that the water poses a health risk. More information about constituents, contaminant levels and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1/800/426-4791 or their website <http://www.epa.gov/safewater/hfacts.html>.

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 and 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 microbiological contaminants are available from the Safe Drinking Water Hotline 1/800/426-4791.

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