Horse Cave Water Company
Water Quality Report for year 2014

Water - Essential for Life

P.O. Box 399
Cave City, Ky. 42127

Meetings: Houk Insurance Office
Meeting Dates and Time: Last Tuesday of Month 2:00 PM

KY0500476

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This report is designed to inform the public about the quality of water and services provided on a daily basis. Our commitment is to provide our customers with a safe, clean, and reliable supply of drinking water. We want to assure that we will continue to monitor, improve, and protect the water system and deliver a high quality product. Water is the most indispensable product in every home and we ask everyone to be conservative and help us in our efforts to protect the water source and the water system.

We purchase all water from Green River Valley Water District. The following is the Summary for the Green River Valley Water District: The source of raw surface water for the Green River Valley Water District is the Green River and Rio Springs in Hart County. An analysis of the overall susceptibility to contamination of the Green River Valley Water District's water supply indicated that this this susceptibility is high. Sources of high potential impact include: Highway 31E and Route 569, underground storage tanks, agricultural land use, domestic water wells, and septic systems. This source assessment for GRVWD raw water supply is available through Barren River Development District P.O. Box 9005, Bowling Green Ky., 42102, (270)781-2381 or through David Paige (270)773-2135

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 may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

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 may 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, (sewage plants, septic systems, livestock operations, or wildlife). Inorganic contaminants, such as salts and metals, (naturally occurring or from stormwater runoff, wastewater discharges, oil and gas production, mining, or farming). Pesticides and herbicides, (stormwater runoff, agriculture or residential uses). Organic chemical contaminants, including synthetic and volatile organic chemicals, (by-products of industrial processes and petroleum production, or from gas stations, stormwater runoff, or septic systems). Radioactive contaminants, (naturally occurring or from oil and gas production or mining activities).

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water to provide the same protection for public health.

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 (800-426-4791).

Some or all of these definitions may be found in this report:

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.

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.

Below Detection Levels (BDL) - laboratory analysis indicates that the contaminant is not present.

Not Applicable (N/A) - does not apply.

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, (µg/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) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.

Parts per quadrillion (ppq) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in $10,000,000,000,000.

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

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

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

Nephelometric Turbidity Unit (NTU) - a measure of the clarity of water. Turbidity has no health effects. However, turbidity can provide a medium for microbial growth. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

Variances & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

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

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

Information About 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. Your local public water 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.

Spanish (Español) Este informe contiene información muy importante sobre la calidad de su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.

The data presented in this report are from the most recent testing done in accordance with administrative regulations in 401 KAR Chapter 8. As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data in this table, though representative, may be more than one year old. Unless otherwise noted, the report level is the highest level detected.

A=Green River Valley Water District B= Horse Cave Water Company

	Allowable Levels	Source	Highest Single Measurement	Lowest Monthly %	Violation	Likely Source of Turbidity
Turbidity (NTU) TT * Representative samples of filtered water	No more than 1 NTU* Less than 0.3 NTU in 95% monthly samples	A=	0.205	100%	No	Soil runoff

Regulated Contaminant Test Results

Contaminant [code] (units)	MCL	MCLG	Source	Report Level	Range of Detection			Date of Sample	Violation	Likely Source of Contamination
Radioactive Contaminants										
Uranium (µg/L)	30	0	A=	2.2	2.2	to	2.2	Feb-14	No	Erosion of natural deposits
Inorganic Contaminants										
Antimony [1074] (ppb)	6	6	A=	0.4	0.4	to	0.4	Feb-14	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic [1005] (ppb)	10	N/A	A=	0.5	0.5	to	0.5	Feb-14	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium [1010] (ppm)	2	2	A=	0.041	0.041	to	0.041	Feb-14	No	Drilling wastes; metal refineries; erosion of natural deposits
Beryllium [1075] (ppb)	4	4	A=	2	2	to	2	Feb-14	No	Metal refineries and coal-burning factories; electrical, aerospace, and defense industries
Cadmium [1015] (ppb)	5	5	A=	0.5	0.5	to	0.5	Feb-14	No	Corrosion of galvanized pipes; erosion of natural deposits; metal refineries; waste batteries and paints
Chromium [1020] (ppb)	100	100	A=	2	2	to	2	Feb-14	No	Discharge from steel and pulp mills; erosion of natural deposits
Copper [1022] (ppm) sites exceeding action level 0	AL = 1.3	1.3	A=	0.023 (90th percentile)	0.0013	to	0.0269	Aug.-13	No	Corrosion of household plumbing systems
Cyanide [1024] (ppb)	200	200	A=	30	30	to	30	Feb-14	No	Discharge from steel/metal factories; plastic and fertilizer factories
Fluoride [1025] (ppm)	4	4	A=	1.1	1.1	to	1.1	Aug.-14	No	Water additive which promotes strong teeth
Mercury [1035] (ppb)	2	2	A=	0.2	0.2	to	0.2	Feb-14	No	Erosion of natural deposits; refineries and factories; landfills; runoff from cropland
Nickel (ppm) (US EPA remanded MCL in February 1995.)	N/A	N/A	A=	2	2	to	2	Feb-14	No	N/A
Nitrate [1040] (ppm)	10	10	A=	1.1	1.1	to	1.1	Feb-14	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite [1041] (ppm)	1	1	A=	0.001	0.001	to	0.001	Feb-14	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Thallium [1085] (ppb)	2	0.5	A=	0.5	0.5	to	0.5	Feb-14	No	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
Disinfectants/Disinfection Byproducts and Precursors										
Total Organic Carbon (ppm) (report level=lowest avg. range of monthly ratios)	TT*	N/A	A=	1.90	1	to	4.44	Year 2014	No	Naturally present in environment.
*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average of the monthly ratios must be 1.00 or greater for compliance.										
Chlorine (ppm)	MRDL = 4	MRDLG = 4	B=	1.71	1.25	to	2.21	Year 2014	No	Water additive used to control microbes.
HAA (ppb) (individual sites) [Haloacetic acids] Stage 2	60	N/A	B=	24	1	to	51	Year 2014	NO	Byproduct of drinking water disinfection
TTHM (ppb) (individual sites) [total trihalomethanes] Stage 2	80	N/A	B=	28	1	to	62	Year 2014	No	Byproduct of drinking water disinfection
vanadium			A=	0.33	0.27	to	0.4	Jul. 14		
strontium			A=	101.5	95.7	to	107	Apr-14		
chlorate			A=	12.68	0	to	25.5	Mar-14		
total chromium			A=	0.62	0.58	to	0.7	Apr-14		

Public Notice of Availability of Data: In 2013,Green River Valley Water District completed unregulated contaminant monitoring as required by the Unregulated Contaminant Monitoring Rule 3 (UCMR3). In 2014,Green River Valley Water District completed two of four quarters of required monitoring. The last quarter of monitoring was completed in the first quarter of 2015 and those results will appear in the 2015 CCR. Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of the unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. The detected contaminants from 2014 monitoring are listed above under the Unregulated Contaminants section of this Water Quality Table.

Our water system violated one or more drinking water standards over the past year. Even though these were not emergencies, as our customers, you have a right to know what happened and what we did to correct these situations.

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 compliance periods of 5/1/2014-5/31/2014, 6/1/2014-6/30/2014 & 7/1/2014-7/31/2014 we did not complete all monitoring or testing for Free & Total Chlorine and therefore cannot be sure of the quality of our drinking water during that time.

There is nothing you need to do at this time. You do not need to use an alternative (e.g., bottled) water supply.

The table below lists the contaminant(s) we did not properly test for during the last year, how often we are supposed to sample for [this contaminant/these contaminants] and how many samples we are supposed to take, how many samples we took, when samples should have been taken, and the date on which follow-up samples were (or will be) taken.

contaminant	required sampling frequency	number of samples taken	samples should have been taken	when samples were or will be taken
Total & Free Chlorine	Daily	48	124	N/A
Total & Free Chlorine	Daily	60	120	N/A
Total & Free Chlorine	Daily	60	124	N/A

What happened? Who is at risk? What is being done?

We neglected to take chlorine samples/residuals in the distribution system during the weekends during the compliance periods of 5/1/2014-5/31/2014, 6/1/2014-6/30/2014 & 7/1/2014-7/31/2014.There were no health effects due to this oversight. However, the water quality during this period in time is unknown. Remedial actions included performing public notification and the required certification. We currently monitor our chlorine per Kentucky Division of Water requirements.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.