

BERKELEY CO P S W D-BUNKER HILL

WV3300202

Consumer Confidence Report – 2021

Covering Calendar Year – 2020

This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. If you would like to observe the decision-making process that affect drinking water quality, please call JAMES V. OUELLET at 304-267-4600.

Our drinking water is supplied from another water system through a Consecutive Connection (CC). To find out more about our drinking water sources and additional chemical sampling results, please contact our office at the number provided above. Your water comes from :

Source Name	Source Water Type
LEFEVRE SPRING	Ground Water under the Influence of Surface Water

Buyer Name	Seller Name
BERKELEY CO P S W D-BUNKER HILL	MARTINSBURG CITY OF

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those 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).

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 EPA's Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) included 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 sources water before we treat it include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water 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 storm water run-off, agriculture, and residential users.

Radioactive contaminants, which can be naturally occurring or the result of mining activity.

Organic contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system has an estimated population of 31185 and is required to test a minimum of 30 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public.

Water Quality Data

The following tables list all of the drinking water contaminants which were detected during the 2020 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from the testing done January 1- December 31, 2020. 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.

Terms & Abbreviations

Maximum Contaminant Level Goal (MCLG): the “Goal” is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL): 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.

Secondary Maximum Contaminant Level (SMCL): recommended level for a contaminant that is not regulated and has no MCL.

Action Level (AL): the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.

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

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.

Non-Detects (ND): lab analysis indicates that the contaminant is not present.

Parts per Million (ppm) or milligrams per liter (mg/l)

Parts per Billion (ppb) or micrograms per liter (µg/l)

Picocuries per Liter (pCi/L): a measure of the radioactivity in water.

Millirems per Year (mrem/yr): measure of radiation absorbed by the body.

Monitoring Period Average (MPA): An average of sample results obtained during a defined time frame, common examples of monitoring periods are monthly, quarterly and yearly.

Nephelometric Turbidity Unit (NTU): a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is not regulated for groundwater systems.

Running Annual Average (RAA): an average of sample results obtained over the most current 12 months and used to determine compliance with MCLs.

Locational Running Annual Average (LRAA): Average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

Testing Results for: BERKELEY CO P S W D-BUNKER HILL

Microbiological	Result	MCL	MCLG	Typical Source
COLIFORM (TCR)	In the month of August, 4 sample(s) returned as positive	Treatment Technique Trigger	0	Naturally present in the environment

Regulated Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
2,4-D	5/14/2019	0.0699	0 - 0.0699	ppb	70	70	Runoff from herbicide used on row crops
BARIUM	2/14/2020	0.053	0.053	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CHROMIUM	2/14/2020	2.3	2.3	ppb	100	100	Discharge from steel and pulp mills; Erosion of natural deposits
FLUORIDE	2/14/2020	1.17	0.3 - 1.17	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE	2/14/2020	2.32	2.32	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE	2/13/2018	2.76	2.76	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Disinfection Byproducts	Sample Point	Monitoring Period	Highest LRAA	Range (low/high)	Unit	MCL	MCL G	Typical Source
TOTAL HALOACETIC ACIDS (HAA5)	19 MARIKAY CT-STONEHEDGE SAMPLE BOX	2020	2	0 - 0.0042	ppb	60	0	By-product of drinking water disinfection
TOTAL HALOACETIC ACIDS (HAA5)	33 TRELIS DR-GERRARD ACRES SAMPLE BOX	2020	5	0 - 0.0011	ppb	60	0	By-product of drinking water disinfection
TTHM	19 MARIKAY CT-STONEHEDGE SAMPLE BOX	2020	3	0 - 0.0049	ppb	80	0	By-product of drinking water chlorination
TTHM	33 TRELIS DR-GERRARD ACRES SAMPLE BOX	2020	5	0 - 0.0058	ppb	80	0	By-product of drinking water chlorination

Lead and Copper	Monitoring Period	90 th Percentile	Range (low/high)	Unit	AL	Sites Over AL	Typical Source
COPPER, FREE	2017 - 2019	0.199	0.009 - 2.01	ppm	1.3	1	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD	2017 - 2019	6.9	0 - 23	ppb	15	2	Corrosion of household plumbing systems; Erosion of natural deposits

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 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>.

Chlorine/Chloramines Maximum Disinfection Level	MPA	MPA Units	RAA	RAA Units
07/01/2020 - 07/31/2020	2	MG/L	1.3	MG/L

Total Organic Carbon Lowest Month for Removal	Collection Date	Highest Value	Range	Unit	TT	Typical Source
CARBON, TOTAL	7/1/2020	0.1	0 - 0.1	MG/L	0	Naturally present in the environment

Analyte	Facility	Highest Value	Unit of Measure	Month Occurred
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TURBIDITY	TREATMENT PLANT-BUNKER HILL	0.288	NTU	December 2020
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Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2020							

Secondary Contaminants-Non Health Based Contaminants-No Federal Maximum Contaminant Level (MCL) Established.	Collection Date	Highest Value	Range (low/high)	Unit	SMCL
CARBON, TOTAL	7/1/2020	0.1	0 - 0.1	ppm	10000
NICKEL	2/14/2020	0.002	0.002	MG/L	0.1
SODIUM	2/14/2020	12.8	12.8	MG/L	1000

During the 2020 calendar year, we had the below noted violation(s) of drinking water regulations.

Compliance Period	Analyte	Comments
12/1/2019 - 2/28/2020	TRIHALOMETHANES	MONITORING, ROUTINE (DBP), MAJOR
12/1/2019 - 2/28/2020	HALOACETIC ACIDS	MONITORING, ROUTINE (DBP), MAJOR

Additional Required Health Effects Language:

Infants and children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4761).

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

There are no additional required health effects violation notices. Some or all of our drinking water is supplied from another water system. The table below lists all of the drinking water contaminants, which were detected during the 2020 calendar year from the water systems that we purchase drinking water from.

Regulated Contaminants	Collection Date	Water System	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
2,4,5-TP	4/9/2020	MARTINSBURG CITY OF	0.008	0 - 0.008	ppb	50	50	Residue of banned herbicide
2,4-D	4/9/2020	MARTINSBURG CITY OF	0.02	0 - 0.02	ppb	70	70	Runoff from herbicide used on row crops
ATRAZINE	10/26/2020	MARTINSBURG CITY OF	0.03	0 - 0.03	ppb	3	3	Runoff from herbicide used on row crops
BARIUM	1/17/2020	MARTINSBURG CITY OF	0.066	0.044 - 0.066	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CHROMIUM	1/17/2020	MARTINSBURG CITY OF	1.3	1.2 - 1.3	ppb	100	100	Discharge from steel and pulp mills; Erosion of natural deposits
DALAPON	4/9/2020	MARTINSBURG CITY OF	0.028	0 - 0.028	ppb	200	200	Runoff from herbicide used on rights of way
FLUORIDE	1/17/2020	MARTINSBURG CITY OF	1.07	0.87 - 1.07	ppm	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE	10/7/2020	MARTINSBURG CITY OF	3.32	2.75 - 3.32	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE	10/7/2020	MARTINSBURG CITY OF	3.32	3.32	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
PICLORAM	10/26/2020	MARTINSBURG CITY OF	0.05	0 - 0.05	ppb	500	500	Herbicide runoff
SELENIUM	1/8/2020	MARTINSBURG CITY OF	3	0 - 3	ppb	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines

Disinfection Byproducts	Monitoring Period	Water System	Highest RAA	Range	Unit	MCL	MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2020								

DIST4	WV3300212	MARTINSBURG CITY OF	GROSS ALPHA, EXCL. RADON & U	4000	12-Feb-19	2.12	PCI/L
DIST4	WV3300212	MARTINSBURG CITY OF	RADIUM-228	4030	12-Feb-19	0.313	PCI/L

DIST4	WV3300212	MARTINSBURG CITY OF	GROSS ALPHA, EXCL. RADON & U	4000	22-Jan-19	1.05	PCI/L
DIST4	WV3300212	MARTINSBURG CITY OF	RADIUM-228	4030	22-Jan-19	0.352	PCI/L

Radiological Contaminants	Collection Date	Highest Value	Range (low/high)	Unit	MCL	MCLG	Typical Source
GROSS ALPHA, EXCL. RADON & U	02/19/2019	2.12	1.05 -2.12	pCi/L	15	0	Erosion of natural deposits
Radium-228	01/22/2019	0.352	0.313 – 0.352	pCi/L	5	0	Erosion of natural deposits

Secondary Contaminants	Collection Date	Water System	Highest Value	Range (low/high)	Unit	SMCL
BIS(2-ETHYLHEXYL) PHTHALATE	4/30/2019	MARTINSBURG CITY OF	0.00121	0.00121	MG/L	
NICKEL	1/8/2020	MARTINSBURG CITY OF	0.0049	0.0028 - 0.0049	MG/L	0.1
SODIUM	1/8/2020	MARTINSBURG CITY OF	27.4	11.7 - 27.4	MG/L	1000
SULFATE	2/23/2017	MARTINSBURG CITY OF	28.3	28.3	MG/L	250

Please Note: Because of sampling schedules, results may be older than 1 year.

During the 2020 calendar year, the water systems that we purchase water from had the below noted violation(s) of drinking water regulations.

Water System	Type	Category	Analyte	Compliance Period
MARTINSBURG CITY OF	CCR ADEQUACY/AVAILABILITY/CONTENT	RPT	CONSUMER CONFIDENCE RULE	10/1/2020
MARTINSBURG CITY OF	FAILURE ADDRESS DEFICIENCY (EPA SURVEY)	TT	LT2ESWTR	1/28/2020 - 7/6/2020
MARTINSBURG CITY OF	MONITORING, ROUTINE (DBP), MAJOR	MON	CARBON, TOTAL	4/1/2020 - 6/30/2020
MARTINSBURG CITY OF	MONITORING, ROUTINE MAJOR	MON	SYNTHETIC ORGANICS 2	10/1/2020 - 12/31/2020

There are no additional required health effects violation notices. There are no additional required health effects notices.

Your CCR is available at www://berkeleywater.org/ccr. To receive a paper copy in the mail, please contact us at the phone number above.