2019 Consumer Confidence Report

Water System Name: **CalEnergy (ENG. & TECH.) #1300642** Report Date: 06/24/2020

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 to December 31, 2019 and may include earlier monitoring data.

Type of water source(s) in use: Surface Water and Potable Bulk Hauled Water

Name & general location of source(s): East Highline Canal & VAIL LAT 4 - GATE 416A

Listed results are from raw source water, except the TTHM's, HAA5's, Copper and Lead Rule are from treated water.

Drinking Water Source Assessment information: Assessment conducted by ICPHD on May 2003. Please contact Environmental Services for a copy of the DWSA. Water not used for drinking.

Time and place of regularly scheduled board meetings for public participation: Not Applicable

For more information, contact: D. Anetha Lue Phone: (760) 348-4275

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 (U.S. EPA).

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.

Variances and Exemptions: Permissions from the State Water Resources Control Board (State Board) to exceed an MCL or not comply with a treatment technique under certain conditions.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

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)

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

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 byproducts 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 U.S. EPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, 5, and 6 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 State Board 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. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

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 (state Total Coliform Rule)	(In a month)	0	1 positive monthly sample	0	Naturally present in the environment
Fecal Coliform or *E. coli* (state Total Coliform Rule)	(In the year)	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or *E. coli* positive	0	Human and animal fecal waste
E. coli (federal Revised Total Coliform Rule)	(In the year)	0	(a)	0	Human and animal fecal waste

(a) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

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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**	**90th Percentile Level Detected**	**No. Sites Exceeding AL**	**AL**	**PHG**	**No. of Schools Requesting Lead Sampling**	**Typical Source of Contaminant**
Lead (ug/L)	8/14/19	5	ND	0	15	0.2	Not applicable	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ug/L)	8/14/19	5	185	0	1300	300	Not applicable	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)	East Highline Canal	10-24-19	150	N/A	None	None	Salt present in the water and is generally naturally occurring
	Vail Lat 4 – Gate 416A	07-25-19	100	N/A			
Hardness (ppm)	East Highline Canal	10-24-19	370	N/A	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring
	Vail Lat 4 – Gate 416A	07-25-19	300	N/A			

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

Radioactive Contaminants

Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL [MRDL]**	**PHG (MCLG) [MRDLG]**	**Typical Source of Contaminant**
Gross Alpha (pCi/L)	10/24/19	3.2	+- 0.83-0.74	15	0	Erosion of natural deposits
Uranium (pCi/L)	10/24/19	2.7	0	20	0.43	Erosion of natural deposits

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

Inorganic Contaminants

Chemical or Constituent (and reporting units)	Sampling Location	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Aluminum (ug/L)	East Highline Canal	4 quarterly samples in 2019	340	340-1600	1,000	600	Erosion of natural deposits: residue from some surface water treatment process.
	Vail Lat 4 – Gate 416A	4 quarterly samples in 2019	310	280-3200			
Arsenic (ug/L)	East Highline Canal	10-24-19	2.0	N/A	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
	Vail Lat 4 – Gate 416A	07/25/19	3.2	N/A			
Barium (ug/L)	East Highline Canal	10-24-19	110	N/A	1,000	2,000	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
	Vail Lat 4 – Gate 416A	07-25-19	120	N/A			
Fluoride (mg/L)	East Highline Canal	10-24-19	0.48	N/A	2.0	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
	Vail Lat 4 – Gate 416A	07-25-19	0.37	N/A			

Synthetic Organic Contaminants

Diethylhexylphthalate (ug/L)	East Highline Canal	10/24/19	4.0	N/A	4	12	Discharge from rubber and chemical factories; inert ingredient in pesticides
	Vail Lat 4 – Gate 416A	07/25/19	ND	N/A			

Volatile Organic Compound Contaminants

Toluene (ug/L)	East Highline Canal	10/24/19	ND	N/A	150	150	Discharge from petroleum and chemical factories; underground gas tank leaks
	Vail Lat 4 – Gate 416A	2 quarterly samples in 2019	2.6	ND – 2.6			
Dichloromethane (ug/L)	East Highline Canal	10/24/19	ND	N/A	5	4	Discharge from pharmaceutical and chemical factories; insecticide
	Vail Lat 4 – Gate 416A	4 quarterly samples in 2019	ND	ND – 1.2			

Disinfection Byproducts, Disinfectant Residuals, and Disinfection Byproduct Precursors

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
TTHMs (Total Trihalomethanes) (ug/L)	08/14/19	8.3	4.6 – 12.0	80	N/A	By-product of drinking water disinfection
Haloacetic Acid (ug/L)	08/14/19	ND	N/A	60	N/A	By-product of drinking water disinfection

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

Inorganic Contaminants

Chemical or Constituent (and reporting units)	Sampling Location	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sparkletts TTHMs (Total Trihalomethanes) (ug/L)		08/14/19	ND	N/A	80	N/A	By-product of drinking water disinfection
Sparkletts Haloacetic Acid (ug/L)		08/14/19	ND	N/A	60	N/A	By-product of drinking water disinfection

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

Chemical or Constituent (and reporting units)	Sampling Location	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Aluminum (ug/L)	East Highline Canal	4 quarterly samples in 2019	340	340-1600	200	N/A	Erosion of natural deposits; residual from some surface water treatment processes
	Vail Lat 4 – Gate 416A	4 quarterly samples in 2019	310	280-3200			
Color (Units)	East Highline Canal	10-24-19	10	N/A	15	N/A	Naturally-occurring organic materials
	Vail Lat 4 – Gate 416A	07-25-19	15	N/A			
Iron (ug/L)	East Highline Canal	4 quarterly samples in 2019	420	420-1500	300	N/A	Leaching from natural deposits; industrial wastes
	Vail Lat 4 – Gate 416A	4 quarterly samples in 2019	440	270-2600			
Odor-Threshold (TON)	East Highline Canal	10-24-19	2	N/A	3	N/A	Naturally-occurring organic materials
	Vail Lat 4 – Gate 416A	07-25-19	2	N/A			
Turbidity (Units)	East Highline Canal	10-24-19	4.3	N/A	5	N/A	Soil runoff
	Vail Lat 4 – Gate 416A	07-25-19	31	N/A			
Total Dissolved Solids (TDS) (mg/L)	East Highline Canal	10-24-19	770	N/A	1000	N/A	Runoff/leaching from natural deposits
	Vail Lat 4 – Gate 416A	07-25-19	650	N/A			
Specific Conductance (uS/cm)	East Highline Canal	10-24-19	1200	N/A	1600	N/A	Substances that form ions when in water; seawater influence
	Vail Lat 4 – Gate 416A	07-25-19	1000	N/A			
Chloride (mg/L)	East Highline Canal	10-24-19	130	N/A	500	N/A	Runoff/leaching from natural deposits; seawater influence

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TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD							
Chemical or Constituent (and reporting units)	**Sampling Location**	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**PHG (MCLG)**	**Typical Source of Contaminant**
	Vail Lat 4 – Gate 416A	07-25-19	100	N/A			
Manganese (ug/L)	East Highline Canal	4 quarterly samples in 2019	25	ND - 42	50	N/A	leaching from natural deposits
	Vail Lat 4 – Gate 416A	4 quarterly samples in 2019	28	ND - 75			
Sulfate (mg/L)	East Highline Canal	10-24-19	290	N/A	500	N/A	Runoff/leaching from natural deposits; industrial wastes
	Vail Lat 4 – Gate 416A	07-25-19	250	N/A			
Zinc (ug/L)	East Highline Canal	10-24-19	ND	N/A	5000	N/A	Runoff/leaching from natural deposits; industrial wastes
	Vail Lat 4 – Gate 416A	07-25-19	83	N/A			

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS						
Chemical or Constituent (and reporting units)		**Sample Date**	**Level Detected**	**Range of Detections**	**Notification Level**	**Health Effects Language**
Vanadium (ug/L)	East Highline Canal	10-24-19	3.1	N/A	50	Vanadium exposures resulted in developmental and reproductive effects in rats.
	Vail Lat 4 – Gate 416A	07-25-19	5.9	N/A		
Boron (ug/L)	East Highline Canal	10-24-19	230	N/A	1000	Boron exposures resulted in decreased fetal weight (developmental effects) in newborn rats.
	Vail Lat 4 – Gate 416A	07-25-19	180	N/A		

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 U.S. EPA'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. U.S. EPA/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).

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Lead-Specific Language: 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. CalEnergy (ENG. & TECH.) # 1300642 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. [***OPTIONAL:*** If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.] 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 (1-800-426-4791) or at http://www.epa.gov/lead.

Joint Monitoring Program (JMP) data indicated secondary MCLs for aluminum, iron and turbidity were exceeded in 2019. The primary MCL was exceeded or met for aluminum and diethylhexylphthalate (DEHP), respectively.

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	**N/A**	N/A	N/A	N/A

For Systems Providing Surface Water as a Source of Drinking Water

TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES	
Treatment Technique [(a)] (Type of approved filtration technology used)	DESAL DK-5 Membranes
Turbidity Performance Standards [(b)] (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 – Be less than or equal to 0.10 NTU in 95% of measurements in a month. 2 – Not exceed 0.09 NTU for more than eight consecutive hours. 3 – Not exceed 1.0 NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	85% - The potable water system was out of service throughout February 2020. Only 13 samples were collected. Eleven out of 13 samples were below 0.10 NTU.
Highest single turbidity measurement during the year	1.00 NTU (Turbidity discrete data points are related to cleaning/maintenance of equipment)
Number of violations of any surface water treatment requirements	0

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

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

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Summary Information for Violation of a Surface Water TT

VIOLATION OF A SURFACE WATER TT				
TT Violation	**Explanation**	**Duration**	**Actions Taken to Correct the Violation**	**Health Effects Language**
NONE	**N/A**	**N/A**	**N/A**	**N/A**

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