2018 Consumer Confidence Report

Water System Name:	Bakman Water Company	Report Date:	July 1, 2019	

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, 2018 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Bakman Water Company a (559) 255 - 0324 para asistirlo en español.

这份报告含有关于您的饮用水的重要讯息。请用以下地址和电话联系 Bakman Water Company 以获得中文的帮助: (559) 255 - 0324

Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipagugnayan sa Bakman Water Company o tumawag sa (559) 255 - 0324 para matulungan sa wikang Tagalog.

Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Xin vui lòng liên hệ Bakman Water Company tại (559) 255 - 0324 để được hỗ trợ giúp bằng tiếng Việt.

Tsab ntawv no muaj cov ntsiab lus tseem ceeb txog koj cov dej haus. Thov hu rau Bakman Water Company ntawm (559) 255 - 0324 rau kev pab hauv lus Askiv.

A Message from Richard Tim Bakman, President of Bakman Water Company

Dear Customer,

On behalf of our team, we are pleased to present to you our 2018 Consumer Confidence Report. This Report is designed to inform you about the quality of water we delivered by providing a snapshot of last year's water sampling results. Our treatment technicians routinely monitor the system for drinking water contaminants in accordance with our approved sampling plans and procedures. Included are details about where your water comes from, what it contains, and how it compares to State standards. Most importantly, this is a chance for us to keep our valued customers better informed.

In 2018, we had near average levels of rainfall and snowpack but began this year with above average precipitation in the Central Valley with the help of some strong storms in early 2019. While the weather outlook is positive from a hydrologic standpoint, it remains crucial for us to continue managing our water usage and continue efficient use of the water we do use. Together we averaged over 25% in savings last year from our baseline usage from 2013, equating to over 350,000,000 gallons of water saved. In 2018, we identified and noticed close to 200 incidences of possible water wasting and use violations. We want to thank you, our customers, for working with us to help ensure that we continue to deliver a sustainable water supply for generations to come.

Bakman Water Company continues to work towards maintaining a sustainable water supply by minimizing water waste through conservation measures and practicing sustainable groundwater management. In 2018, we completed a Meter Installation Project, enabling our customers to now view their water usage at www.eyeonwater.com. Also, as discussed in previous years, Bakman Water Company is representing our customers' interests as a voting Board member of the North Kings Groundwater Sustainability Agency (NKGSA). The next year will be critical for groundwater stewardship as Groundwater Sustainability Plans will be submitted to the State before January 31, 2020. For more information on the NKGSA, visit www.northkingsgsa.org.

Since the company's formation in 1948, our culture has been built on a tradition of serving our customers with pride. Over 70 years later, customer loyalty and an appreciation for the business of providing a life-sustaining element continues to be at the heart of our core values. We will continue to grow with the community and our customers because we understand that team work today provides the best solutions for tomorrow. Thank you for your continued support.

Type of water source(s) in use: Grou	ındwater			
Name & general location of source(s):	Bakman Water Company wells	located in Southeast	Fresno, California	
Drinking Water Source Assessment infor	mation:			
A source water assessment was complete identifies the vulnerability of the drinking intended to facilitate and provide the basidrinking water supply. These assessment Avenue, Fresno, California 93727. If you appointment during our business hours: Marchael Marchael Street, and the suppose the suppose of th	g water supply to contamination fr c information necessary for a local s are kept on file at Bakman Water have questions regarding these as	om typical human ac al community to devel r Company's office lossessments, contact of	tivities. The assessments lop a program to protect to cated at 5105 East Belm	the
For more information, contact: Tim I	Bakman or Steve Pickens	Phone:	(559) 255-0324	

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)

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

Chemical or Constituent

Sample

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)	1	1 positive monthly sample	0	Naturally present in the environment			
Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule)	(In the year) 2018 0	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive		Human and animal fecal waste			
E. coli (federal Revised Total Coliform Rule)	(In the year) 2018 0	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.

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	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant	
Lead (ppb)	2016	31	0.0008	0	15	0.2	0	Internal corrosion of	
							We contacted	household water plumbing	
							and performed	systems; discharges from	
							sampling for 3	industrial manufacturers;	
							schools	erosion of natural deposits	
Copper (ppm)	2016	31	0.073	0	1.3	0.3	0	Internal corrosion of	
							We contacted	household plumbing	
							and performed	systems; erosion of natural	
	1	1	1	1		1	1	l	

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

Range of

sampling for 3

schools

PHG

deposits; leaching from

wood preservatives

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2018	25.88	16 - 35	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2018	128.36	62.9 - 275	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring
TABLE 4 – DET	ECTION O	F CONTAMIN	ANTS WITH A	<u>PRIMARY</u>	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
Aluminum (ppm)	2018	0	0	1	0.6	Erosion of natural deposits, residue from surface water treatment processes
Antimony (ppb)	2018	0	0	6	1	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppb)	2018	1.37	0 - 3	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Asbestos (MFL)	2012	<0.2	0 - <0.2	7	7	Internal corrosion of asbestos cement water mains; erosion of natural deposits
Barium (ppm)	2018	0.016	0133	1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Beryllium (ppb)	2018	0	0	4	1	Discharge from metal refineries, coal-burning factories and electrical, aerospace and defense industries

Cadmium (ppb)	2018	0	0	5	0.04	Internal corrosion of galvanized pipes; erosion of natural deposits; discharge from electroplating and industrial chemical factories and metal refineries; runoff from waste batteries and paints
Chromium (Total) (ppb)	2018	0	0	50	(100)	Discharge from steel and pulp mills, chrome plating; erosion form natural deposits
Fluoride (F) (ppm) (Natural source)	2018	.05	0 – 0.1	2.0	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Mercury (ppb)	2018	0	0	2	1.2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and cropland
Nickel (ppb)	2018	0	0	100	12	Erosion of natural deposits; discharge from metal factories
Perchlorate (ppb)	2018	0	0	6	1	Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches and a variety of industries. It usually gets into drinking water as a result of environmental contamination from historical aerospace or other industrial operations that used, stored or disposed of perchlorate and its salts
Selenium (ppb)	2018	0	0	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)
1,2,3 Trichloropropane (ppb) (123 TCP)	2018	0.004	0 – 0.013	0.005	0.0007	Discharge from Industrial and Agriculture chemical factories; leaching from hazardous waste sites; used as cleaning and maintenance solvent, paint and varnish remover and degreasing agent; byproduct during the production of other compounds and pesticides
Thallium (ppb)	2018	0	0	2	0.1	Leaching from ore-processing sites; discharge from electronics glass and drug factories
Cyanide (ppb)	2018	0	0	150	150	Discharge from steel /metal plastic and fertilizer factories
Gross Alpha (pCi/L)	2018	2.72	0 – 8.66	15	0	Erosion of natural deposits
Nitrate as N (ppm)	2018	3.9	1.4 – 8.6	10	10	Run off and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Hexavalent Chromium (ppb)	2018	1.66	0 – 3.08	N/A	0.02	Discharge from electroplating factories, leather tanneries, wood preservatives, chemical synthesis, refractory production and textile manufacturing facilities; erosion of natural deposits

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm)	2018	10.9	6 - 28	500	N/A	Runoff leaching from natural deposits, sea water intrusion
Color (units)	2018	0	0	15	15	Naturally occurring organic materials
Copper (ppm)	2018	0	0	1.0	1.3	Erosion of natural deposits leaching from wood preservatives
Iron (ppb)	2018	0	0	300	N/A	Leaching from natural deposits; industrial wastes
Manganese (ppb)	2018	0	0	50	N/A	Leaching from natural deposits
Odor Threshold (units)	2018	.625	0 - 2	3	3	Naturally occurring organic materials
Silver (ppm)	2018	0	0	0.1	N/A	Leaching from natural deposits
Specific Conductance (Umhos/cm2)	2018	376.6	242 - 723	1600	N/A	Substances that form ions when in water, sea water influence
Sulfate (ppm)	2018	11.3	4.3 -31.2	500	N/A	Runoff/ leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS)	2018	230	160 - 460	1000	1500	Leaching from natural deposits
Turbidity (NTU)	2018	0.505	0 - 2	5	N/A	Soil run off
Zinc (ppm)	2018	0	0	5	N/A	Leaching from natural deposits
Aluminum (ppm)	2018	0	0	1	0.6	Erosion of natural deposits, residue from surface water treatment processes

	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 (ppb)	2017	28.9	19 - 36	50	Babies of some pregnant women who drink water containing vanadium in excess of the notification level may have increased risk of developmental effects, based on studies in laboratory animals			
Bicarbonate Alkalinity (ppm)	2018	185	130 - 350	N/A	N/A			
Calcium (ppm)	2018	26.5	12 - 54	N/A	N/A			
Carbonate (ppm)	2018	0	0	N/A	N/A			
Hydroxide (ppm)	2018	0	0	N/A	N/A			
Magnesium (ppm)	2018	15.1	8 – 34	N/A	Erosion of natural deposits			
pH (std. units)	2018	7.65	6.4 – 8.1	N/A	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).

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. <u>Bakman Water Company</u> 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 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.

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				
123 TCP	3 wells exceeded the MCL for 123 TCP	Only during the 6 month testing period	These wells have been moved to Standby status until well head treatment can be installed	Discharge from Industrial and Agriculture chemical factories; leaching from hazardous waste sites; used as cleaning and maintenance solvent, paint and varnish remover and degreasing agent; byproduct during the production of other compounds and pesticides				

For Water Systems Providing Groundwater as a Source of Drinking Water

TABLE 7 – SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUNDWATER SOURCE SAMPLES								
Microbiological Contaminants (complete if fecal-indicator detected) Total No. of Detections Sample Dates MCL (MRDL) [MRDL] Typical Source of Contaminant Typical Source of Contaminant								
E. coli	(In the year of 2018)	N/A	0	(0)	Human and animal fecal waste			
Enterococci	(In the year of 2018)	N/A	TT	N/A	Human and animal fecal waste			
Coliphage	(In the year of 2018)	N/A	TT	N/A	Human and animal fecal waste			