2018 Consumer Confidence Report

Water System Name: North Kranenburg Water System Mutual Water Report Date: May 7, 2019

Company CA1503669

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.

Type of water source(s) in use: Ground, well raw

Name & general location of source(s): 17442 No. Kranenburg Ave., Bakersfield, CA 93314

Drinking Water Source Assessment information:

North Kranenburg well and system draws from a porous media aquifer estimated at 400,000,000 cubic acre feet. Water is distributed from wellhead to pressure tank. Vulnerability, not including contaminants in the water supply would include the above ground tank and crops irrigated. A source assessment was conducted by Osiel Jaime 661-335-7347.

Time and place of regularly scheduled board meetings for public participation:

As scheduled on January of each year

at 17426 Kranenburg Ave. Bakersfield,

CA 93314

For more information, contact: Mary DeGeare, Secretary Phone: (661) 343-5317

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.

 \mathbf{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.

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 <i>E. coli</i> (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 <i>E. coli</i> 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*.

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)	6/19/18	5	0.0	0	15	0.2	N/A	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	6/19/18	5	2.0 .0048 ppm	0	1.3	0.3	Not applicable	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

	TABLE 3	– SAMPLING I	RESULTS FOR	SODIUM A	AND HARD	NESS
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	12/26/18	21 ppm	N/A	None	None	Salt present in the water and is generally naturally occurring
Hardness as CaCO3 (ppm)	12/26/18	61 ppm	N/A	None	None	Sum of polyvalent cations present i
Calcium	12/26/18	29 ppm	N/A	None	None	the water, generally magnesium and
Magnesium	12/26/18	2.3 ppm	N/A	None	None	calcium, and are usually naturally occurring
TABLE 4 – DE	FECTION C	OF CONTAMINA	ANTS WITH A	PRIMARY	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
Barium	12/26/18	31 ppm	N/A	1	2	Some people who drink water containing barium in excess of the MCL over many years may experience an increase in blood pressure.
Nitrate as N	12/26/18	3.0 ppm	N/A	45	45	Infants below the age of six
Chemical or Constituent	ECTION OF Sample		NTS WITH A <u>S</u> Range of		<u>Y</u> DRINKIN PHG	months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women. GWATER STANDARD Typical Source of Contaminant
(and reporting units)	Date	Level Detected	Detections	SMCL	(MCLG)	
Chloride (ppm)	12/26/18	27 ppm	N/A	600	ND	Runoff/leaching from natural deposits; seawater influence
Sulfate (ppm)	12/26/18	24 ppm	N/A	600	ND	Runoff/leaching from natural deposits; industrial wastes
Specific Conductance (EC) (uS/cm)	12/26/18	291 umhos/cm	N/A	2,200	ND	Substances that form ions when in water; seawater influence
Total Dissolved solids (TDS) (ppm)	12/26/18	180 ppm	N/A	1,500	ND	Runoff/leaching from natural deposits
Color (Units)	12/26/18	1.0	N/A	15	1 Unit	Naturally-occurring organic materials
Turbidity (Units)	12/26/18	0.18 NT Units	N/A	5	ND	Soil runoff.
	TABLE	6 – DETECTION	N OF UNREGU	LATED CO	ONTAMINA	NTS
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections		ntion Level	Health Effects Language
Hexavalent Chromium	03/11/15	0.95 ug/L	N/A	0.010	ml/L	Some people who drink water containing hexavalent chromium in excess of the MCL over many years may

		have an increased risk of
		getting cancer

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. North Kranenburg_Water System Mutual Water Company_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.

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				
Compliance Order No. 03_12_18R_047	1,2,3-Trichloropropane MCL Violation	4 th quarter, 2018	Requires quarterly samples and reports.	TCP is a contaminant of interest to the government, private sector and other parties. It is a persistent pollutant in groundwater and has been classified as "likely to be carcinogenic to humans" by the EPA.				

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]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
E. coli	(In the year)	Monthly	0	(0)	Human and animal fecal waste
Enterococci	(In the year)	Monthly	TT	N/A	Human and animal fecal waste
Coliphage	(In the year)	Monthly	TT	N/A	Human and animal fecal waste

Summary Information for Fecal Indicator-Positive Groundwater Source Samples, Uncorrected Significant Deficiencies, or Groundwater TT

SPECIAL NOTICE OF FECAL INDICATOR-POSITIVE GROUNDWATER SOURCE SAMPLE								
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	SPECIAL NOTICE FOR	UNCORRECTED SIGN	NIFICANT DEFICIENCIES					
	VIOLA	TION OF CROUNDW	ATED TT					
VIOLATION OF GROUNDWATER TT								
TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language				
None.								