KOHALA RANCH WATER COMPANY
2023 Annual Report to Consumers on Water Quality

The purpose of this report is to provide important information on the quality of water delivered by the Kohala Ranch Water Co. (KRWC) for calendar year 2023. This annual Consumer Confidence Report contains details about the Kohala Ranch water system, the quality and source of the water, how it compares to Environmental Protection Agency (EPA) and Department of Health (DOH) regulations, as well as other required educational information. The EPA has recommended this information be provided to all water customers of every water utility nationwide.

Based upon KRWC's testing, the data presented is from the most recent water quality reports, and performed in accordance with regulations. KRWC's water is safe to drink, and the water that KRWC delivers meets or exceeds state and federal standards. KRWC does not conduct formal informational meetings; therefore, any inquiries regarding this report may be directed to KRWC's on-site operations office at (808) 315-7563.

Water delivered to your residence originates from an aquifer located below the 1500 ft. elevation within the Kohala Ranch Subdivision. KRWCs two Deep Wells draw source water from the aquifer and deliver it to the ground surface. All source water is disinfected with Sodium Hypochlorite solution prior to entering the main reservoir. Water from the main reservoir flows through a network of pipelines, pumps, and valves; ending up at your residence for consumption.

Our source water assessment report was completed by the Department of Health in 2004. Should you wish to review it, please contact Bill Moore at (808) 315-7563.

KRWC's water is regularly tested for over 100 contaminants which are listed on the following page. A certified laboratory analyzes all water samples. The following table lists only those contaminants that have been detected. **Please note that there were no violations of DOH standards with respect to the detected contaminants.**

Contaminant (units)	**MCL**	**MCLG**	**Level Detected**	**Range**	**Sample Date**	**Violation**	**Typical source**
Inorganic							
Nitrate as N (ppm)	10	10	1.1	N/A	11/23	none	erosion of natural deposits Runoff from fertilizer use
Chromium (ppb)	100	100	0	N/A	04/22	none	erosion of natural deposits
Sulfate (Unregulated mg/l)	250	N/A	20.5	N/A	11/23	none	
Sodium (Unregulated mg/l)	N/A	N/A	46.0	N/A	04/22	none	
Gross Alpha Particle (pci/l)	15	0	0	N/A	07/22	none	Erosion of natural deposits
Gross Beta Particle (pci/l)	50*	0	3.98	N/A	07/22	none	Erosion of natural deposits

*The MCL for Beta particles is 4 mrem/year. EPA considers 50 pCi/L to be the level of concern for Beta Particles

Contaminant (units)	**MCLG**	**Level Detected**	**Action Level**	**Sample Date**	**Violation**	**Typical source**
Inorganic Metals						
Lead (ppb)	0	0.01075	15	8/21	none	natural deposit erosion, plumbing corrosion
Level detected is the 90th percentile of all samples collected						
Copper (ppm)	1.3	0.0	1.3	8/21	none	natural deposit erosion, plumbing corrosion
Level detected is the 90th percentile of all samples collected						

Contaminant (units)	**MCL**	**MCLG**	**Level Detected**	**Range**	**Sample Date**	**Violation**	**Typical source**
Disinfection Byproduct							
Total Trihalomethanes (ppb)	80	N/A	13.6	N/A	2/24	none	by-products of drinking water chlorination

Acronyms and their definitions:

- (MCLG) Maximum Contaminant Level Goal: 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.
- (MCL) Maximum Contaminant Level: 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.

- (AL) Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- (N) : nitrogen
- (mg/L) : milligrams per liter = parts per million(ppm)
- (ug/L) : micrograms per liter = parts per billion(ppb)
- (pCi/L): picocuries per liter
- (mrem/yr):One thousandth of a rem (millirem) per year. A millirem is a dose of energy to the body."

The state allows us to monitor for some contaminants less than once per year. Although KRWC is required to report detections of unregulated contaminants, the EPA and DOH have not as yet set a MCL or MCLG for unregulated contaminants.

CONTAMINANTS TESTED FOR IN YOUR DRINKING WATER

REGULATED CONTAMINANTS

Inorganic Contaminants
Antimony
Arsenic
Asbestos
Barium
Beryllium
Cadmium
Chromium
Copper
Cyanide
Fluoride
Lead
Mercury
Nickel
Nitrate(measured as Nitrogen)
Nitrite(measured as Nitrogen)
Selenium
Thallium

Volatile Organic Contaminants
Benzene
Carbon tetrachloride(CTC)
Chlorobenzene
o-Dichlorobenzene
p-Dichlorobenzene
1,2-Dichloroethane
1,1-Dichloroethylene
cis-1,2-Dichloroethylene
trans-1,2-Dichloroethylene
Dichloromethane
1,2-Dichloropropane(DCP)
Ethylbenzene
Haloacetic acids(HAA5)
Styrene
Tetrachloroethylene(PCE)
1,2,4-Trichlorobenzene
1,1,1-Trichloroethane(TCA)
1,1,2-Trichloroethane
Trichloroethylene(TCE)
1,2,3-Trichloropropane(TCP)
Total trihalomethanes(TTHMs)
Toluene
Vinyl chloride
m-Xylenes
o-Xylenes
p-Xylenes

Microbiological Contaminants
Total Coliform bacteria
Fecal Coliform and E. Coli

Radioactive Contaminants
Alpha emitters
Beta/photon emitters

Synthetic Organic Contaminants
2,4-D
2,4,5-TP (Silvex)
Alachlor
Atrazine
Benzo(a)pyrene(PAHs)
Carbofuran
Chlordane
Dalapon
Di(2-ethylhexyl)adipate
Di(2-ethylhexyl)pthalate
Dibromochloropropane(DBCP)
Dinoseb
Dioxin (2,3,7,8 - TCDD)
Diquat
Endothal
Endrin
Ethylene dibromide (EDB)
Glyphosate
Heptachlor
Heptachlor epoxide
Hexachlorobenzene
Hexachlorocyclopentadiene
Lindane (gamma-BHC)
Methoxychlor
Oxamyl [Vydate]
Paraquat
PCBs(Polychlorinated Biphenyls)
Pentachlorophenol
Picloram
Simazine
Toxaphene

UNREGULATED CONTAMINANTS

Aldicarb
Aldicarb sulfone
Aldicarb sulfoxide
Aldrin
Bromobenzene
Bromochloromethane
Bromodichloromethane
Bromomethane
Butachlor
Carbaryl
Chlorodibromomethane
Chloroethane
Chloroform
Chloromethane
o-Chlorotoluene
p-Chlorotoluene
Dibromomethane
Dicamba
m-Dichlorobenzene
1,1-Dichloroethane
2,2-Dichloropropane
1,3-Dichloropropane
1,1-Dichloropropene
1,3 Dichloropropene
Dieldrin
3-Hydroxycarbofuran
Hexachlorobutadiene
Methomyl
Metolachlor
Metribuzin
Naphthalene
Propachlor
Sodium
Sulfate
1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane
1,2,3-Trichlorobenzene

The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

ADDITIONAL REQUIRED EDUCATIONAL INFORMATION

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) Safe Drinking Water (SDW) Hotline (800-426-4791). Or visit the EPA Website: www.epa.gov/safewater.

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/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the SDW Hotline (800-426-4791). Or visit the EPA Website: www.epa.gov/safewater.

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. The KOHALA RANCH 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. 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 www.epa.gov/safewater/lead.

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 radioactive material, and can pick up substances resulting from the presence of animals of from human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm 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 agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which 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, EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

KAWAIHAE UNIT #1
Water System
Report to the Consumer for
Calendar Year 2023

Introduction

This report is being made available to you pursuant to the requirements of the 1996 Amendments to the Federal Safe Drinking Water Act, which requires this water system provide information to its consumers related to personal health-based decisions regarding their drinking water consumption. The Kawaihae Unit #1 Water System services the Kawaihae Subdivision. It is owned and operated by the Dept. of Hawaiian Home Lands. This water system had no violation of State or Federal safe drinking water regulations in 2023.

Definitions of Terms Used in This Report

Maximum Contaminant Level Goal or 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 Contaminant Level or 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.

Action Level: The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.

Maximum Residual Disinfection Level Goal or MRDLG: the level of drinking water disinfection below, which there is no expected risk to health. *MRDLG's* do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Maximum Residual Disinfection Level or 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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.
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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

Important Information Regarding Drinking Water Contaminants and Immuno-Compromised Persons
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).

Additional information
For additional information concerning this report contact: Mr. Brandon Basilio
Operations Manager
Pural Water Specialty Co., Inc.
94-405 Maikoiko Street
Waipahu, HI 96797
Telephone: (808) 488-8434

Opportunities for Public/Consumer Participation
We welcome your input and participation in the decision-making process that affects the quality of the drinking water supplied to you by the Kawaihae Unit #1 Water System. Should you desire to provide input or have pertinent comments regarding our system, please contact Mr. Ian Ichimura or the Owner's Representative, Jim Du Pont at (808) 887-6053, Supervisor, Department of Hawaiian Homelands.

General Information Relating to Drinking Water Contaminants and Health Risks

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, which may come from sewage treatment plants, septic systems, agricultural 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 agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.
- 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. The Kawaihae Unit #1 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**."

Water Source Infonnation

The Kawaihae Unit #I (DHHL) Water System is a consecutive water system supplied by the Kohala Ranch Water Supply. Kawaihae Unit #I Water System adds chlorine to your drinking water. The water is disinfected by DHHL Water System contractor to ensure that your water meets the Safe Drinking Water Regulations of the EPA and the State of Hawaii Department of Health. The results of the 2023 testing of your water were all within the limits prescribed by EPA and the State. The State of Hawaii, SDWB completed a source water assessment for this water system in 2004. The result of the assessment is available for review by contacting Mr. Brandon Basilio at (808) 488-8414.

Contaminants Detected in Kawaihae Unit#I Water System

This system is required to test for over 80 different drinking water contaminants. The table below lists only those drinking water contaminants that were detected in the water system. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in the table are from testing done January I-December 31, 2023. The State allows us to monitor for some contaminants less than once per year because the concentration of these contaminants does not change frequently.

Table ofEPA Regulated Contaminants Detected in the Kawaihae Unit #I Water System

MCL - Maximum Contaminant Level
MCLG:.Maximum Contaminant Level Goal
MRDL=Maximum residual disinfection levels
MRDLG - Maximum residual disinfection levels goals.
ppm - parts per million, or milligrams per liter (mg/l)
ppb-parts per billion, or micrograms per liter (µg/1)

Regulated Contaminant	Unit	MCL	MCLG	Highest Detected Contaminant Level	Range of Detected Contaminant Levels	Likely Source(s) of Contamination	Remarks
Chlorine	ppm	4.0	4.0	0.30	0.20 - 0.30	Added to water during the water treatment process	2023 Test Results
Total Trihalomethanes (TTI-IM)	ppb	80	*NIA*	20.20	*NIA*	By-product of drinking water disinfection	2021 Test Results
Haloacetic Acids (HAA5)	ppb	60	*NIA*	2.6	*NIA*	By-product of drinking waler disinfection	2021 Test Results