Annual Drinking Water Quality Report

COOKE CITY WATER DISTRICT

MT0000187

Annual Water Quality Report for the period of January 1 to December 31, 2020

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

The source of drinking water used by MOOKE CITY WATER DISTRICT is Ground Water

'or more information regarding this report contact:

ame Marilyn Hartley, Clerk hone 406-224-3891

ste informe contiene información muy importante sobre lagua que usted bebe. Tradúzcalo ó hable con alguien ue lo entienda bien.

Source of Drinking 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, 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 broduction, 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.

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 EPAs Safe Drinking Water Hotline at (800) 426-4791.

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.

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).

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. We 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

Source Water Information

Source Water Name	Type of Water	Report Status	Location
WELL 1 S GWIC 251912	GW	-	
WELL 2 N GWIC 251889	GW		
WELL 3 W GWIC 251907	GW		

ead and Copper

efinitions:

ction Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of

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

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
lopper	09/17/2019	1,3	1, 3	0,25	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
.ead	09/17/2019	0	15	3	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

ater Quality Test Results

efinitions:

The following tables contain scientific terms and measures, some of which may require explanation.

vq:

Regulatory compliance with some MCLs are based on running annual average of monthly samples.

evel 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.

evel 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.

aximum 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.

aximum 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.

aximum residual disinfectant level or 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.

aximum residual disinfectant level

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.

pal or MRDLG:

millirems per year (a measure of radiation absorbed by the body)

not applicable.

ıb:

micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.

milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.

Water Quality Test Results

Treatment Technique or TT:

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

Regulated Contaminants

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Nitrate [measured as Nitrogen]	12/19/2019	0.04	0.04 - 0.04	10	10	mqq	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	12/27/2016	0.986	0.986 ~ 0.986	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha	12/27/2016	0.583	0.583 - 0.583	0	15	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and uranium	12/27/2016	0.583	0.583 - 0.583	0	15	pCi/L	N	Erosion of natural deposits
Synthetic organic Contaminants ncluding pesticides nd herbicides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
i (2-ethylhexyl) hthalate	2020	5	1 - 6	0	6	ppb	N	Discharge from rubber and chemical factories.

2,4,5-TP (Silvex)

Some people who drink water containing silvex in excess of the MCL over many years could experience liver problems,

Violation Type	Violation Begin	Violation End	Violation Explanation
40NITORING, ROUTINE MAJOR	04/01/2020	06/30/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated

2,4-D

some people who drink water containing the weed killer 2,4-D well in excess of the MCL over many years could experience problems with their kidneys, liver, or adrenal glands.

iolation Type	Violation Begin	Violation End	Violation Explanation
ONITORING, ROUTINE MAJOR	04/01/2020	06/30/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated

lachlor

ome people who drink water containing alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, or sperience anemia, and may have an increased risk of getting cancer.

iolation Type	Violation Begin	Violation End	Violation Explanation
)NITORING, ROUTINE MAJOR	04/01/2020	06/30/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

trazine

me people who drink water containing atrazine well in excess of the MCL over many years could experience problems with their cardiovascular system or productive difficulties.

olation Type	Violation Begin	Violation End	Violation Explanation
NITORING, ROUTINE MAJOR	04/01/2020	06/30/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Benzo(a)pyrene

Some people who drink water containing benzo(a)pyrene in excess of the MCL over many years may experience reproductive difficulties and may have an increased risk of getting cancer.

Violation Type	Violation Begin	Violation End	Violation Explanation
40NITORING, ROUTINE MAJOR	04/01/2020	06/30/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period
			indicated,

Carbofuran

some people who drink water containing carbofuran in excess of the MCL over many years could experience problems with their blood, or nervous or reproductive ystems.

iolation Type	Violation Begin	Violation End	Violation Explanation
ONITORING, ROUTINE MAJOR	04/01/2020	06/30/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

hlordane

ome people who drink water containing chlordane in excess of the MCL over many years could experience problems with their liver or nervous system, and may are an increased risk of getting cancer.

iolation Type	Violation Begin	Violation End	Violation Explanation
)NITORING, ROUTINE MAJOR	04/01/2020	06/30/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

onsumer Confidence Rule

e Consumer Confidence Rule requires community water systems to prepare and provide to their customers annual consumer confidence reports on the quality of e water delivered by the systems.

olation Type	Violation Begin	Violation End	Violation Explanation
R REPORT	07/01/2020		We failed to provide to you, our drinking water customers, an annual report that informs you about the quality of our drinking water and characterizes the risks from exposure to contaminants detected in our drinking water.

Dalapon

Some people who drink water containing dalapon well in excess of the MCL over many years could experience minor kidney changes.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2020		We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Di (2-ethylhexyl) adipate

Some people who drink water containing di (2-ethylhexyl) adipate well in excess of the MCL over many years could experience general toxic effects or reproductive difficulties.

Violation Type	Violation Begin	Violation End	Violation Explanation
ONITORING, ROUTINE MAJOR	04/01/2020		We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

)i (2-ethylhexyl) phthalate

ome people who drink water containing di (2-ethylhexyl) phthalate in excess of the MCL over many years may have problems with their liver, or experience eproductive difficulties, and may have an increased risk of getting cancer.

iolation Type	Violation Begin	Violation End	Violation Explanation
ONITORING, ROUTINE MAJOR	04/01/2020	06/30/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
ONITORING, ROUTINE MAJOR	10/01/2020	12/31/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

inoseb

ome people who drink water containing dinoseb well in excess of the MCL over many years could experience reproductive difficulties.

iolation Type	Violation Begin	Violation End	Violation Explanation
ONITORING, ROUTINE MAJOR	04/01/2020		We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Endrin

Some people who drink water containing endrin in excess of the MCL over many years could experience liver problems.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2020		We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Heptachlor

Some people who drink water containing heptachlor in excess of the MCL over many years could experience liver damage and may have an increased risk of getting cancer.

/iolation Type	Violation Begin	Violation End	Violation Explanation
40NITORING, ROUTINE MAJOR	04/01/2020		We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period
			indicated.

Heptachlor epoxide

Some people who drink water containing heptachlor epoxide in excess of the MCL over many years could experience liver damage, and may have an increased risk of getting cancer.

iolation Type	Violation Begin	Violation End	Violation Explanation
ONITORING, ROUTINE MAJOR	04/01/2020	06/30/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

lexachlorobenzene

ome people who drink water containing hexachlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys, or dverse reproductive effects, and may have an increased risk of getting cancer.

iolation Type	Violation Begin	Violation End	Violation Explanation
ONITORING, ROUTINE MAJOR	04/01/2020		We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Hexachlorocyclopentadiene

Some people who drink water containing hexachlorocyclopentadiene well in excess of the MCL over many years could experience problems with their kidneys or stomach.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2020	06/30/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Lead and Copper Rule

The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead and copper containing plumbing materials.

/iolation Type	Violation Begin	Violation End	Violation Explanation
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	10/01/2009		We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Lindane

some people who drink water containing lindane in excess of the MCL over many years could experience problems with their kidneys or liver.

'iolation Type	Violation Begin	Violation End	Violation Explanation
ONITORING, ROUTINE MAJOR	04/01/2020		We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

fethoxychlor

ome people who drink water containing methoxychlor in excess of the MCL over many years could experience reproductive difficulties.

iolation Type	Violation Begin	Violation End	Violation Explanation
ONITORING, ROUTINE MAJOR	04/01/2020		We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Nitrate and nitrite [measured as Nitrogen]

Infants below the age of six months who drink water containing nitrate and nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020	12/31/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Oxamyl [Vydate]

Some people who drink water containing oxamyl in excess of the MCL over many years could experience slight nervous system effects.

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2020		We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Pentachlorophenol

Some people who drink water containing pentachlorophenol in excess of the MCL over many years could experience problems with their liver or kidneys, and may have an increased risk of getting cancer.

/iolation Type	Violation Begin	Violation End	Violation Explanation
ONITORING, ROUTINE MAJOR	04/01/2020	06/30/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

'icloram

lome people who drink water containing picloram in excess of the MCL over many years could experience problems with their liver.

iolation Type	Violation Begin	Violation End	Violation Explanation
ONITORING, ROUTINE MAJOR	04/01/2020	06/30/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Revised Total Coliform Rule (RTCR)

The Revised Total Coliform Rule (RTCR) seeks to prevent waterborne diseases caused by E. coli, E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes, Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches,

Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE, MAJOR (RTCR)	01/01/2020	01/31/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
MONITORING, ROUTINE, MAJOR (RTCR)	09/01/2020	09/30/2020	We failed to test our drinking water for the contaminant and period indicated, Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Simazine

Some people who drink water containing simazine in excess of the MCL over many years could experience problems with their blood.

/iolation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	04/01/2020	06/30/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

[oxaphene

some people who drink water containing toxaphene in excess of the MCL over many years could have problems with their kidneys, liver, or thyroid, and may have in increased risk of getting cancer.

iolation Type	Violation Begin	Violation End	Violation Explanation
ONITORING, ROUTINE MAJOR	04/01/2020	06/30/2020	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.