IN5212004 KIRKLIN WATER DEPARTMENT

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.

KIRKLIN WATER DEPARTMENT is Ground Water

For more information regarding this report contact:

Name Billy L. Walker

Phone 765-209-2655

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.

TOWN OF KIRKLIN
2020 CONSUMER CONFIDENCE REPORT

Annual Drinking Water Quality Report for the period of January 1 to December 31, 2019. This report is intended to provide you with information about your drinking water and the efforts made by the water system to provide safe drinking water.

Is my water safe?

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

Sources 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.

Drinking water, including bottled water, may be reasonably 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.

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, 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.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (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.

Contaminants may be found in drinking water that may cause taste, color or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor or color of drinking water, please contact the system's business office.

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 (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking 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 are responsible for providing high quality drinking water, but 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.

Where does my water come from?

The Kirklin water supply is groundwater pumped from two wells located in the town.

Source water assessment and its availability

We have a source water assessment plan available from our office that provides more information such as potential sources

of contamination. I am pleased to report that our water is safe and meets federal and state requirements.

How can I get involved?

If you have any questions about this report or your water utility, please contact the Town of Kirklin by calling 765-279-8786 or by writing P.O. Box 147, 113 N. Main St. Kirklin, IN 46050. If you want to learn more about your water utility, you can attend any of our regularly scheduled meetings The meetings are held on the second Monday of each month at the Community Center, 113 N. Main St. Kirklin, IN.

Description of Water Treatment Process

Your water is treated by disinfection. Disinfection involves the addition of chlorine or other disinfectant to kill dangerous bacteria and microorganisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century.

Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference – try one today and soon it will become second nature.

- Take short showers - a 5 minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!
- Visit www.epa.gov/watersense for more information.

Source Water Information

SWA = Source Water Assessment

Source Water Name	Type of Water	Report Status	Location
WELL #1	GW	Active	Water Plant
WELL #2	GW	Active	Water Plant

Source Water Protection Tips

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community, or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste - Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were found in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table..

Inorganic Contaminants								
Nitrate [measured as Nitrogen] (ppm)	10	10	0.5	NA		2016	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite [measured as Nitrogen] (ppm)	1	1	NA			2014	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Fluoride (ppm)	4	4	NA			2015	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Barium (ppm)	2	2	NA			2015	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Antimony (ppb)	6	6	NA			2015	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition.
Arsenic (ppb)	0	10	NA			2015	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Beryllium (ppb)	4	4	NA			2015	No	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries
Cadmium (ppb)	5	5	NA			2015	No	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; runoff from waste batteries and paints
Chromium (ppb)	100	100	NA			2015	No	Discharge from steel and pulp mills; Erosion of natural deposits
Mercury [Inorganic] (ppb)	2	2	NA			2015	No	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland
Cyanide [as Free Cn] (ppb)	200	200	NA			2015	No	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories
Selenium (ppb)	50	50	NA			2015	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines

Thallium (ppb)	0.5	2	NA			2015	No	Discharge from electronics, glass, and Leaching from ore-processing sites; drug factories
Radioactive Contaminants								
Beta/photon emitters (pCi/L)	0	50	NA			2014	No	Decay of natural and man-made deposits. The EPA considers 50 pCi/L to be the level of concern for Beta particles.
Alpha emitters (pCi/L)	0	15	NA			2014	No	Erosion of natural deposits
Uranium (ug/L)	0	30	NA			2014	No	Erosion of natural deposits

Synthetic organic contaminants including pesticides and herbicides								
Atrazine (ppb)	3	3	NA			2016	No	Runoff from herbicide used on row crops
Benzo(a)pyrene (ppt)	0	200	NA			2016	No	Leaching from linings of water storage tanks and distribution lines
Carbofuran (ppb)	40	40	NA			2016	No	Leaching of soil fumigant used on rice and alfalfa
Chlordane (ppb)	0	2	NA			2016	No	Residue of banned termiticide
2,4-D (ppb)	70	70	NA			2016	No	Runoff from herbicide used on row crops
Dalapon (ppb)	200	200	NA			2016	No	Runoff from herbicide used on rights of way
Dinoseb (ppb)	7	7	NA			2016	No	Runoff from herbicide used on soybeans and vegetables
Diquat (ppb)	20	20	NA			2016	No	Runoff from herbicide use
Endothall (ppb)	100	100	NA			2016	No	Runoff from herbicide use
Endrin (ppb)	2	2	NA			2016	No	Residue of banned insecticide
Ethylene dibromide (ppt)	0	50	NA			2016	No	Discharge from petroleum refineries
Glyphosate (ppb)	700	700	NA			2016	No	Runoff from herbicide use
Heptachlor (ppt)	0	400	NA			2016	No	Residue of banned pesticide
Heptachlor epoxide (ppt)	0	200	NA			2016	No	Breakdown of heptachlor
Hexachlorobenzene (ppb)	0	1	NA			2016	No	Discharge from metal refineries and agricultural chemical factories
Hexachlorocyclopentadiene (ppb)	50	50	NA			2016	No	Discharge from chemical factories
Lindane (ppt)	200	200	NA			2016	No	Runoff/leaching from insecticide used on cattle, lumber, gardens
Methoxychlor (ppb)	40	40	NA			2016	No	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
Oxamyl [Vydate] (ppb)	200	200	NA			2016	No	Runoff/leaching from insecticide used on apples, potatoes and tomatoes
Pentachlorophenol (ppb)	0	1	NA			2016	No	Discharge from wood preserving factories
Picloram (ppb)	500	500	NA			2016	No	Herbicide runoff
Simazine (ppb)	4	4	NA			2016	No	Herbicide runoff
2,4,5-TP (Silvex) (ppb)	50	50	NA			2016	No	Residue of banned herbicide
Toxaphene (ppb)	0	3	NA			2016	No	Runoff/leaching from insecticide used on cotton and cattle

Volatile Organic Contaminants								
Benzene (ppb)	0	5	NA			2014	No	Discharge from factories; Leaching from gas storage tanks and landfills
Carbon Tetrachloride (ppb)	0	5	NA			2014	No	Discharge from chemical plants and other industrial activities
Chlorobenzene (monochlorobenzene) (ppb)	100	100	NA			2014	No	Discharge from chemical and agricultural chemical factories
Dichloromethane (ppb)	0	5	NA			2014	No	Discharge from pharmaceutical and chemical factories

Volatile Organic Contaminants								
1,1-Dichloroethylene (ppb)	7	7	NA			2014	No	Discharge from industrial chemical factories
1,2-Dichloroethane (ppb)	0	5	NA			2014	No	Discharge from industrial chemical factories
1,2-Dichloropropane (ppb)	0	5	NA			2014	No	Discharge from industrial chemical factories
Ethylbenzene (ppb)	700	700	NA			2014	No	Discharge from petroleum refineries
Styrene (ppb)	100	100	NA			2014	No	Discharge from rubber and plastic factories; Leaching from landfills
Tetrachloroethylene (ppb)	0	5	NA			2014	No	Discharge from factories and dry cleaners
Toluene (ppm)	1	1	NA			2014	No	Discharge from petroleum factories
trans-1,2-Dichloroethylene (ppb)	100	100	NA			2014	No	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene (ppb)	70	70	NA			2014	No	Discharge from industrial chemical factories
1,1,1-Trichloroethane (ppb)	200	200	NA			2014	No	Discharge from metal degreasing sites and other factories
1,1,2-Trichloroethane (ppb)	3	5	NA			2014	No	Discharge from industrial chemical factories
1,2,4-Trichlorobenzene (ppb)	70	70	NA			2014	No	Discharge from textile-finishing factories
Trichloroethylene (ppb)	0	5	NA			2014	No	Discharge from metal degreasing sites and other factories
Vinyl Chloride (ppb)	0	2	NA			2014	No	Leaching from PVC piping; Discharge from plastics factories
Xylenes (ppm)	10	10	NA			2014	No	Discharge from petroleum factories; Discharge from chemical factories

Lead and Copper

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

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 are responsible for providing high quality drinking water, but 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.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09/18/2018	1.3	1.3	0.069	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	09/18/2018	0	15	2.1	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Water Quality Test Results

Definitions:	The following tables contain scientific terms and measures, some of which may require explanation.
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
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.
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.
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.
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.
Maximum residual disinfectant 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.
Maximum residual disinfectant level goal or 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.
na:	not applicable.
mrem:	millirems per year (a measure of radiation absorbed by the body)
ppb:	micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
ppm:	milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
Treatment Technique or TT:	A required process intended to reduce the level of a contaminant in drinking water.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2020	59	10.5 - 86	No goal for the total	60	ppb	Y	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2020	100	67.9 - 140	No goal for the total	80	ppb	Y	By-product of drinking water disinfection.
Inorganic Contaminants	**Collection Date**	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source of Contamination**
Barium	09/18/2018	0.257	0.257 - 0.257	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	09/18/2018	0.854	0.854 - 0.854	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Radioactive Contaminants	**Collection Date**	**Highest Level Detected**	**Range of Levels Detected**	**MCLG**	**MCL**	**Units**	**Violation**	**Likely Source of Contamination**
Beta/photon emitters	05/16/2017	0.9	0.9 - 0.9	0	4	mrem/yr	N	Decay of natural and man-made deposits.

Violations Table

Haloacetic Acids (HAA5)			
Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MCL, LRAA	07/01/2020	09/30/2020	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, LRAA	10/01/2020	12/31/2020	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.

Total Trihalomethanes (TTHM)			
Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.			
Violation Type	Violation Begin	Violation End	Violation Explanation
MCL, LRAA	07/01/2020	09/30/2020	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, LRAA	10/01/2020	12/31/2020	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.

Unit Descriptions	
Term	**Definition**
ug/L	ug/L : Number of micrograms of substance in one liter of water
ppm	ppm: parts per million, or milligrams per liter (mg/L)
ppb	ppb: parts per billion, or micrograms per liter (µg/L)
ppt	ppt: parts per trillion, or nanograms per liter
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
NA	NA: not applicable
ND	ND: Not detected
NR	NR: Monitoring not required, but recommended.

We are continuing to monitor our testing of the Haloacetic Acids (HAA5) and Total Trihalomethanes (TTHM). Our most recent round of testing which was in March 2021, passed and was below the limits.
We tested again in June 2021 and are awaiting the results. We expect the Long Running Annual Average (LRAA) of these elements will be below levels when we receive the test results sometime in July.
We have adjusted the feed rate of Sodium Hypochlorite, which is what we use for disinfection of the water, at the water plant and are regularly flushing hydrants in town to assure you get the freshest water possible.
If you have any further questions about the TTHM/HAA5 testing or any other item in this report, please contact Billy L. Walker, Town of Kirklin Superintendent at cell # 765-209-2655 or e-mail KirkIin5251@sbcglobal.net

For more information please contact:

Contact Name: **Billy L. Walker**
Address: **Box 147**
Kirklin, IN 46050
Phone: **1-765-209-2655**
Fax: **1-765-279-5086**
Office: **1-765-279-8786**
E-Mail: **kirklin5251@sbcglobal.net**