Annual Drinking Water Quality Report for 2020
Village of Chatham
77 Main Street, Chatham, NY
(Public Water Supply ID# 1000234)

INTRODUCTION

To comply with State regulations, Village of Chatham, will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year, your tap water met all State drinking water health standards. We are proud to report that our system did not violate a maximum contaminant level or any other water quality standard.. This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or concerning your drinking water, please contact Phil Genovese, Working Foreman, at 518-392-2525. We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled village board meetings. The meetings are held on the 2nd Monday of each month at 7:30 p.m. at the Tracy Memorial Hall, 77 Main Street, Chatham, N.Y.

WHERE DOES OUR WATER COME FROM?

In general, 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 activities. Contaminants that may be present in source water include: microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water system serves 3250 people through 810 service connections. Our water source is the Kline Kill Well which is located on County Rte. 21, in the Town of Ghent. The water is treated with Chlorine prior to distribution. We do not add Fluoride prior to distribution. The total water produced in 2020 from our wells was 113.039,386 gallons. The daily average of water treated and pumped into the distribution system was 309,697 gallons per day. Our highest single day was 596,200 gallons, which was due to a Water main Break on Hudson Ave.. The total amount of water metered to Ghent was 18,448,825 gallons. Their daily average was 50,548 gallons a day.

ASSESSMENT OF POTENTIAL CONTAMINATION SOURCES

In order to assess the potential for contamination within the wellhead protection area, New York Rural Water Association and the Village of Chatham conducted a reconnaissance survey. A total of six Potential point sources of contamination were detected and identified on Map 2. Location 1 is a small

Auto service shop, location 2 is a barn and apparent animal waste storage area, location 3 is the site of an apparent gasoline spill that was investigated at the Columbia County Department of Transportation Facility, location 4 is the Town of Ghent Highway Facility, location 5 is the site of a former leaking underground storage tank at the Town Hall, and location 6 is and active gasoline station and carwash Facility. In addition to these potential point sources of contamination, other sources of contamination exist within the wellhead protection area such as on-site septic systems and agricultural fields.

Zone 1 and 2

Aside from crop lands at least 200 feet from the Kline Kill Well, no potential sources of contamination exists within the critical Zones 1 and 2.Although the potential for nitrate contaminations exists from the spread of manure and liquid fertilizers on the fields, no such contamination has ever been found in the decades of use of the Kline Kill Well site.

Zone 3

Contamination within Zone 3 is only likely to be significant to the Kline Kill Well if it appreciably affects the stream water quality. There are a number of potential sources for contamination within Zone 3. Most notable is the apparent storage of a large source of gas and diesel fuel at both the Columbia County and Town of Ghent Highway garages, and Gas station in the center of town. If a spill did occur it is unlikely to reach the Kline Kill Well due to several factors, including the distance to the wellhead from the spill site, the absorptive capabilities of the aquifer to retard contaminant migration, and the vast dilution which would occur within the Kline Kill Creek itself.

A more significant threat to the quality of the well is through salt contamination. Chloride is more conservative and mobile in the hydrologic cycle than petroleum is. The potential exists for salt contamination of the well through runoff and infiltration of sand-salt piles at both highway garages. This threat has been greatly reduced since the joint building of their salt-sand storage barn.

Although agricultural runoff can contribute to elevated nitrate levels, there does not appear to be significant areas of crop lands adjacent to Zone 3 anymore.

Zone 4

Zone 4 doesn't appear to hold any significant threats to the quality of the Kline Kill or its aquifer.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, haloacetic acids, radiological and synthetic organic compounds. None of the compounds we analyzed for were detected in your drinking water. The table presented below depicts which compounds which we tested for in your drinking water. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

It should be noted that all drinking water, including bottled drinking 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 EPA's Safe Drinking Water Hotline (800-426-4791) or the Columbia County Health Department at 518-828-3358.

For this year the Health Dept. had us test for Nitrate,Disinfection Byproducts/Stage 2 and Synthetic Organic Chemicals.

Contaminant **2019**	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measure-ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Lead	Yes	8/14/2019	0.022 0.001-0.022	Mg/L	0.015	AL-15	Corrosion of household plumbing
Copper	No	8/14/2019	0.54 0.12-0.54	Mg/L	1.3	AL-1.3	Corrosion of household plumbing
Nitrate as N	No	8/14/2019	0.5	Mg/L	10.0	mcl-10	Run off of fertilizer,sewage
Chloroform	No	8/14/2019	1.6	Ug/L			
Bromodichloromethane	No	8/14/2019	1.5	Ug/L	n/a		Fire ext.
Dibromochloromethane	No	8/14/2019	1.3	Ug/L	n/a	5	
Bromoform	No	8/14/2019	<1.0	Ug/L			
Total Trihalomethanes	No	8/14/2019	4.4	Ug/L	80		
Dibromoacetic acid	No	8/14/2019	<1.0	Ug/L			
Dichloroacetic acid	No	8/14/2019	<1.0	Ug/L			
Monobromoacetic acid	No	8/14/2019	<1.0	Ug/L			
Monochloroacetic acid	No	8/14/2019	3.4	Ug/L			
Trichloroacetic acid	No	8/14/2019	<1.0	Ug/L			
Total Haloacetic acid	No	8/14/2019	<6.0	Ug/L	60		

Inorganic Secondary Standards:

	MCL
Ph – 6.6	
Alkalinity – 86 mg/L	
Iron - <0.01 mg/L	300
Manganese - <0.01 mg/L	300
Hardness, Ca – 84 mg/L	
Dissolved Solids, total – 164 mg/L	
Corrosivity result - -1.32	

Definitions:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.
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 allow for a margin of safety.
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 contamination.
Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
Level 1 Assessment: A Level 1 assessment is an evaluation 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 an evaluation 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.
Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.
Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
Milligrams per liter (mg/l): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).
Micrograms per liter (ug/l): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).
Nanograms per liter (ng/l): Corresponds to one part of liquid to one trillion parts of liquid (parts per trillion - ppt).
Picograms per liter (pg/l): Corresponds to one part per of liquid to one quadrillion parts of liquid (parts per quadrillion – ppq).
Picocuries per liter (pCi/L): A measure of the radioactivity in water.
Millirems per year (mrem/yr): A measure of radiation absorbed by the body.
Million Fibers per Liter (MFL): A measure of the presence of asbestos fibers that are longer than 10 micrometers.

Contaminant **2020**	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Unit Measure-ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Nitrate as N	No	8/12/2020	0.6	Mg/L	10.0	mcl	Run off of fertilizer,sewage
Chloroform	No	8/12/2020	1.6	Ug/L			
Bromodichloromethane	No	8/12/2020	1.2	Ug/L	n/a		Fire ext.
Dibromochloromethane	No	8/12/2020	<1.0	Ug/L	n/a	5	
Bromoform	No	8/12/2020	<1.0	Ug/L			
Total Trihalomethanes	No	8/12/2020	2.8	Ug/L	80		
Dibromoacetic acid	No	8/12/2020	<1.0	Ug/L			
Dichloroacetic acid	No	8/12/2020	<1.0	Ug/L			
Monobromoacetic acid	No	8/12/2020	<1.0	Ug/L			
Monochloroacetic acid	No	8/12/2020	<2.0	Ug/L			
Trichloroacetic acid	No	8/12/2020	<1.0	Ug/L			
Total Haloacetic acid	No	8/12/2020	<6.0	Ug/L	60		
For more results See attached							

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these contaminants were detected below New York State requirements. It should be noted that the action level for lead was exceeded in one household. Its numbers were 0.022. The MCL or limit allowed is 0.015. We are required to present the following information on lead in drinking water:

If present, elevated levels of lead can cause serious health problems, especially for pregnant women, infants, and young children. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. The Village of Chatham 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 (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2020, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens 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 from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

INFORMATION ON UNREGULATED CONTAMINANTS

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- Saving water saves energy and some of the costs associated with both of these necessities of life;

- Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers; and
- Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential firefighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.

SYSTEM IMPROVEMENTS

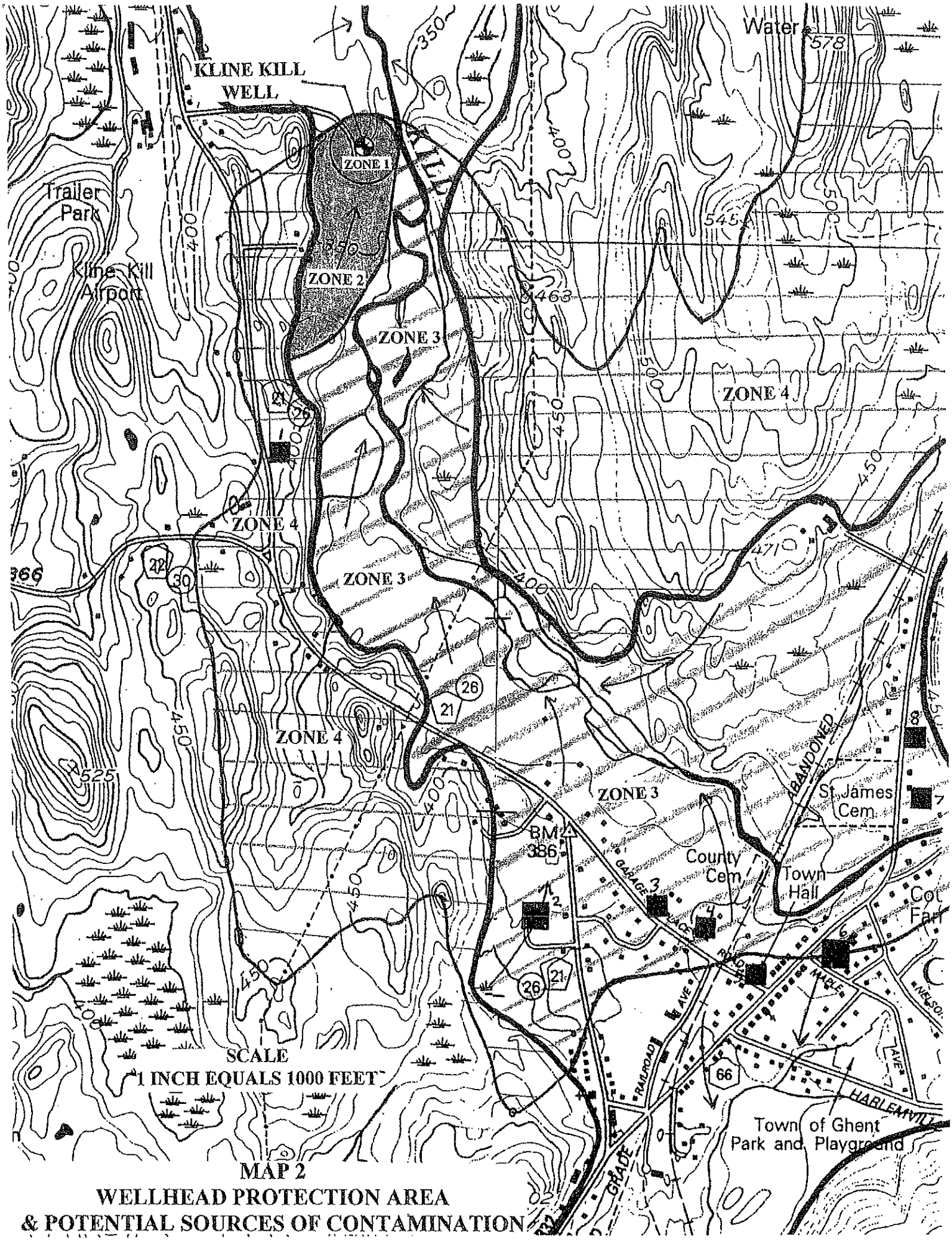
Due to Covid, No preventative maintenance was performed. We just maintained the current system and repaired any problems that arose.

CLOSING

Thank you for allowing us to continue to provide your family with quality drinking water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. The costs of these improvements may be reflected in the rate structure. Rate adjustments may be necessary in order to address these improvements. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call our office if you have questions.

Alachlor	Cancelled	2	ug/L	EPA 525.2	MN	8/17/2020
Atrazine	Cancelled	3	ug/L	EPA 525.2	MN	8/17/2020
Heptachlor	Cancelled	0.4	ug/L	EPA 525.2	MN	8/17/2020
Heptachlor Epoxide	Cancelled	0.2	ug/L	EPA 525.2	MN	8/17/2020
Hexachlorocyclopentadiene	Cancelled	5	ug/L	EPA 525.2	MN	8/17/2020
Lindane	Cancelled	0.2	ug/L	EPA 525.2	MN	8/17/2020
Methoxychlor	Cancelled	40	ug/L	EPA 525.2	MN	8/17/2020
Carbaryl	<0.500		ug/L	EPA 531.2	SUB*	3/5/2020
Methomyl	<0.500		ug/L	EPA 531.2	SUB*	3/5/2020
Aldicarb sulfoxide	<0.500	4	ug/L	EPA 531.2	SUB*	3/5/2020
Aldicarb sulfone	<0.800	2	ug/L	EPA 531.2	SUB*	3/5/2020
Aldicarb	<0.500	3	ug/L	EPA 531.2	SUB*	3/5/2020
3-Hydroxycarbofuran	<0.500		ug/L	EPA 531.2	SUB*	3/5/2020
Oxamyl	<2.00	50	ug/L	EPA 531.2	SUB*	3/5/2020
Carbofuran	<0.900	40	ug/L	EPA 531.2	SUB*	3/5/2020

Test	Result	MCL	Qualifiers	Units	Method Used	Analyst	Analysis Date
1,2 Dibromoethane	<0.0100	0.05		ug/L	EPA 504.1	SUB*	3/5/2020
1,2 Dibromo3chloropropane	<0.0100	0.2		ug/L	EPA 504.1	SUB*	3/5/2020
Aroclor 1221	<20.0			ug/l	EPA 505	SUB*	3/5/2020
Dieldrin	<0.0200			ug/l	EPA 505	SUB*	3/5/2020
Aroclor 1260	<0.100			ug/l	EPA 505	SUB*	3/5/2020
Aroclor 1254	<0.100			ug/l	EPA 505	SUB*	3/5/2020
Aroclor 1248	<0.100			ug/l	EPA 505	SUB*	3/5/2020
Aroclor 1242	<0.300			ug/l	EPA 505	SUB*	3/5/2020
Aroclor 1232	<0.500			ug/l	EPA 505	SUB*	3/5/2020
Endrin	<0.0100			ug/l	EPA 505	SUB*	3/5/2020
Toxaphene	<1.00	3		ug/l	EPA 505	SUB*	3/5/2020
Chlordane	<0.200	2		ug/l	EPA 505	SUB*	3/5/2020
Aroclor 1016	<0.0800			ug/l	EPA 505	SUB*	3/5/2020
Silvex(2,4,5-TP)	<0.200	10		ug/l	EPA 505	SUB*	3/5/2020
2,4,D	<0.100	50		ug/L	EPA 515.3	SUB*	3/6/2020
Dicamba	<0.100	50		ug/L	EPA 515.3	SUB*	3/6/2020
Dinoseb	<0.200	7		ug/L	EPA 515.3	SUB*	3/6/2020
Pentachlorophenol	<0.0400	1		ug/L	EPA 515.3	SUB*	3/6/2020
Picloram	<0.100	50		ug/L	EPA 515.3	SUB*	3/6/2020
Dalapon	<1.00	50		ug/L	EPA 515.3	SUB*	3/6/2020
Metolachlor	Cancelled	50		ug/L	EPA 515.3	SUB*	3/6/2020
Butachlor	Cancelled	50		ug/L	EPA 525.2	MN	8/17/2020
Propachlor	Cancelled	50		ug/L	EPA 525.2	MN	8/17/2020
Aldrin	Cancelled	5		ug/L	EPA 525.2	MN	8/17/2020
Metribuzin	Cancelled	50		ug/L	EPA 525.2	MN	8/17/2020
Di(2-ethylhexyl)adipate	Cancelled	50		ug/L	EPA 525.2	MN	8/17/2020
Hexachlorobenzene	Cancelled	1		ug/L	EPA 525.2	MN	8/17/2020
Di(2-ethylhexyl)phthalate	Cancelled	6		ug/L	EPA 525.2	MN	8/17/2020
Benzo(A)pyrene	Cancelled	0.2		ug/L	EPA 525.2	MN	8/17/2020
Simazine	Cancelled	4		ug/L	EPA 525.2	MN	8/17/2020



MAP 2

WELLHEAD PROTECTION AREA

& POTENTIAL SOURCES OF CONTAMINATION