

Annual Drinking Water Quality Report for 2019
Oak Beach Wells
(Lawrence Dougherty, McCarren and McCrodden)
Oak Beach, NY
(PWS ID# 5130214)

INTRODUCTION

To comply with State regulations, The Oak Beach Community Wells (defined as the Lawrence Dougherty Well, McCarren Well, & McCrodden Well) 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, we conducted tests for approximately 110 contaminants. At the Lawrence Dougherty Well we detected 12 of those contaminants, and only found 1 of those contaminants at a level higher than the State allows, at the McCarren Well we detected 12 of those contaminants, and only found 1 of those contaminants at a level higher than the State allows and at the McCrodden Well we detected 10 of those contaminants, and only found 1 of those contaminants at a level higher than the State allows. As we told you at that time, our water temporarily exceeded a drinking water standard. We are required to inform you that a Do Not Drink Order remains in effect. 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 Brian Leshinger at Maximum Environmental Management Inc. (631) 589-1225, Joseph Guarino Town of Babylon (631) 957-3000 or contact the Suffolk County of Health (631) 852-5810. We want you to be informed about your drinking water. If you want to learn more, please contact Maximum Environmental Management Inc and we will discuss any drinking water issues with them you person.

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 and organic chemical 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.

The Lawrence Dougherty water system serves approximately 50 people through 17 service connection. Our water source is groundwater drawn from 1 approximately 300-400 foot deep drilled well which is located on the northeast side of 93 Oak Beach Road. The water system does not possess a disinfection system and as noted above is being operated under a Do Not Drink order. Therefore, no treatment is required prior to distribution.

The McCarren water system serves approximately 50 people through 23 service connection. Our water source is groundwater drawn from 1 approximately 300-400 foot deep drilled well which is located between 56 Oak Beach Road and 67 Savannah Walk. The water system does not possess a disinfection system and as noted above is being operated under a Do Not Drink order. Therefore, no treatment is required prior to distribution.

The McCrodden water system serves approximately 40 people through 15 service connection. Our water source is groundwater drawn from 1 approximately 300-400 foot deep drilled well which is located on the north side of Fire Road across from 40 & 41 Fire Road. The water system does not possess a disinfection system and as noted above is being operated under a Do Not Drink order. Therefore, no treatment is required prior to distribution.

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 and synthetic organic compounds. The table presented below depicts which compounds were detected 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 Health Department at (631) 852-5810.

Lawrence Dougherty Well Sample (Well Sample Oak Beach Road)

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Iron	Yes	3/19/2019	0.790 mg/L	0.30 mg/L	Naturally Occurring
Iron	Yes	4/18/2019	0.822 mg/L	0.30 mg/L	Naturally Occurring
1,4 – Dioxane	No	6/19/2019	Not Detected	50 ug/L	Used in manufacturing processes
Hexavalent Chromium	No	6/19/2019	Not Detected	N/A	Erosion of natural deposits
Barium	No	7/17/2019	0.037 mg/L	2.0 mg/L	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Iron	Yes	7/17/2019	0.792 mg/L	0.30 mg/L	Naturally Occurring
Manganese	No	7/17/2019	0.013 mg/L	0.30 mg/L	Naturally occurring; Indicative of landfill contamination.
Sodium	No	7/17/2019	4.788 mg/L	N/A	Naturally occurring; Road salt; Water softeners; Animal waste.
Beryllium	No	7/17/2019	0.083 ug/L	4 mg/L	Discharge from metal refineries and coil-burning factories; Discharge from electrical, aerospace, and defense industries.
Chloride	No	7/17/2019	6.03 mg/L	250 mg/L	Naturally occurring or indicative of road salt contamination.
Sulfate	No	7/17/2019	12.2 mg/L	250 mg/L	Naturally occurring.
Nitrite	No	7/17/2019	0.018 mg/L	1 mg/L	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Specific Conductivity	No	7/17/2019	62.5 umhos/cm	N/A	Total of naturally occurring minerals.
pH	No	7/17/2019	6.04 Units	N/A	Measure of water acidity or alkalinity.
Iron	Yes	10/08/2019	0.830	0.30 mg/L	Naturally Occurring

The system exceeded the MCL level for Iron

Lawrence Dougherty Distribution Sample (93 Oak Beach Road)

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Barium	No	7/17/2019	0.037 mg/L	2.0 mg/L	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Iron	Yes	7/17/2019	0.813 mg/L	0.30 mg/L	Naturally Occurring
Manganese	No	7/17/2019	0.013 mg/L	0.30 mg/L	Naturally occurring; Indicative of landfill contamination.
Sodium	No	7/17/2019	4.816 mg/L	N/A	Naturally occurring; Road salt; Water softeners; Animal waste.
Chloride	No	7/17/2019	6.06 mg/L	250 mg/L	Naturally occurring or indicative of road salt contamination.
Specific Conductivity	No	7/17/2019	61.9 umhos/cm	N/A	Total of naturally occurring minerals.
pH	No	7/17/2019	6.16 Units	N/A	Measure of water acidity or alkalinity.
Alkalinity, Total	No	7/17/2019	5 mg/L	N/A	Naturally occurring.

The system exceeded the MCL level for Iron

McCarren Well Sample

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Iron	Yes	3/19/2019	0.420 mg/L	0.30 mg/L	Naturally Occurring
Iron	Yes	4/18/2019	0.463 mg/L	0.30 mg/L	Naturally Occurring
1,4 – Dioxane	No	6/19/2019	Not Detected	50 ug/L	Used in manufacturing processes
Hexavalent Chromium	No	6/19/2019	Not Detected	N/A	Erosion of natural deposits
Chloromethane	No	7/17/2019	0.50 ug/L	5 ug/L	Used in organic chemistry; used as an extractant for greases, oils, and resins; as a solvent in the rubber industry; as a refrigerant, blowing agent and propellant in polystyrene foam production; as an anesthetic; as an intermediate in drug manufacturing; as a food additive, a fumigant and a fire extinguisher
Barium	No	7/17/2019	0.031 mg/L	2.0 mg/L	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Iron	Yes	7/17/2019	0.458 mg/L	0.30 mg/L	Naturally Occurring
Sodium	No	7/17/2019	7.636 mg/L	N/A	Naturally occurring; Road salt; Water softeners; Animal waste.
Beryllium	No	7/17/2019	0.081 ug/L	4 mg/L	Discharge from metal refineries and coil-burning factories; Discharge from electrical, aerospace, and defense industries.
Chloride	No	7/17/2019	9.51 mg/L	250 mg/L	Naturally occurring or indicative of road salt contamination.
Sulfate	No	7/17/2019	13.3 mg/L	250 mg/L	Naturally occurring.
Specific Conductivity	No	7/17/2019	78.7 umhos/cm	N/A	Total of naturally occurring minerals.
pH	No	7/17/2019	6.00 Units	N/A	Measure of water acidity or alkalinity.
Alkalinity, Total	No	7/17/2019	6 mg/L	N/A	Naturally occurring.
Iron	Yes	10/08/2019	0.672	0.30 mg/L	Naturally Occurring

The system exceeded the MCL level for Iron

McCarren Distribution Sample (77A Oak Beach Road)

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Sodium	No	7/17/2019	26.31 mg/L	N/A	Naturally occurring; Road salt; Water softeners; Animal waste.
Chloride	No	7/17/2019	9.65 mg/L	250 mg/L	Naturally occurring or indicative of road salt contamination.
Nitrate	No	7/17/2019	0.018 mg/L	10 mg/L	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Specific Conductivity	No	7/17/2019	144.4 umhos/cm	N/A	Total of naturally occurring minerals.
pH	No	7/17/2019	6.95 Units	N/A	Measure of water acidity or alkalinity.
Alkalinity, Total	No	7/17/2019	44 mg/L	N/A	Naturally occurring.

McCrodden Well Sample

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Iron	Yes	3/19/2019	0.669 mg/L	0.30 mg/L	Naturally Occurring
Iron	Yes	4/18/2019	0.718 mg/L	0.30 mg/L	Naturally Occurring
1,4 – Dioxane	No	6/19/2019	Not Detected	50 ug/L	Used in manufacturing processes
Hexavalent Chromium	No	6/19/2019	Not Detected	N/A	Erosion of natural deposits
Barium	No	7/17/2019	0.040 mg/L	2.0 mg/L	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Iron	Yes	7/17/2019	0.716 mg/L	0.30 mg/L	Naturally Occurring
Manganese	No	7/17/2019	0.012 mg/L	0.30 mg/L	Naturally occurring; Indicative of landfill contamination.
Sodium	No	7/17/2019	4.282 mg/L	N/A	Naturally occurring; Road salt; Water softeners; Animal waste.
Chloride	No	7/17/2019	5.38 mg/L	250 mg/L	Naturally occurring or indicative of road salt contamination.
Sulfate	No	7/17/2019	11.9 mg/L	250 mg/L	Naturally Occurring
pH	No	7/17/2019	6.03 Units	N/A	Measure of water acidity or alkalinity.
Specific Conductivity	No	7/17/2019	58.40 umhos/cm	N/A	Total of naturally occurring minerals.
Alkalinity, Total	No	7/17/2019	5.5 mg/L	N/A	Naturally occurring.
Iron	Yes	10/08/2019	0.704 mg/L	0.30 mg/L	Naturally Occurring

The system exceeded the MCL level for Iron

McCrodden Distribution Sample (37 Fire Road)

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg/Max) (Range)	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Sodium	No	7/17/2019	28.7 mg/L	N/A	Naturally occurring; Road salt; Water softeners; Animal waste.
Chloride	No	7/17/2019	5.25 mg/L	250 mg/L	Naturally occurring or indicative of road salt contamination.
pH	No	7/17/2019	7.35 Units	N/A	Measure of water acidity or alkalinity.
Specific Conductivity	No	7/17/2019	163.4 umhos/cm	N/A	Total of naturally occurring minerals.
Alkalinity, Total	No	7/17/2019	62.5 mg/L	N/A	Naturally occurring.

The system exceeded the MCL level for Iron

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.

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.

WHAT DOES THIS INFORMATION MEAN?

The table shows that The Oak Beach Community Wells (defined as the Lawrence Dougherty Well, McCarren Well, & McCrodden Well) uncovered some problems this year. The Maximum Contaminant Level (MCL) for iron was exceeded. Iron is essential for maintaining good health. However, too much iron can cause adverse health effects. Drinking water with very large amounts of iron can cause nausea, vomiting, diarrhea, constipation and stomach pain. These effects usually diminish once the elevated iron exposure is stopped. A small number of people have a condition called hemochromatosis, in which the body absorbs and stores too much iron. People with hemochromatosis may be at greater risk for health effects resulting from too much iron in the body (sometimes called “iron overload”) and should be aware of their overall iron intake. The New York State standard for iron in drinking water is 0.3 milligrams per liter, and is based on iron’s effects on the taste, odor and color of the 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 Oak Beach Community Wells (defined as the Lawrence Dougherty Well, McCarren Well, & McCrodden Well) are 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>.

Corrective actions are in process to address the systems problem as highlighted in this report and the Do Not Drink order. The Town of Babylon has approved a contract for the design of a drinking water system for The Oak Beach Communities. We anticipate a timeframe of twenty-four (24) months for completion.

Historically the Oak Beach Water System has had lead issues. In order to deal with them, corrosion control treatment will be installed with the water system upgrades. Once treatment is installed, lead and copper testing will resume. Further action will be taken if required but is not expected at this time. In the interim, please remember to not drink the water as there multiple water quality issues.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2019, with the exception of Iron, the Oak Beach Community Wells (defined as the Lawrence Dougherty Well, McCarren Well, & McCrodden Well) were in compliance with applicable State drinking water operating, monitoring and reporting requirements.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

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).

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although The Oak Beach Community Wells (defined as the Lawrence Dougherty Well, McCarren Well, & McCrodden Well) have 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.

CLOSING

Thank you for allowing us to continue to provide your families 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 families. These improvements may be reflected in increased costs. Additional money may be necessary in order to address these improvements. We ask that all our families help us protect our water sources, which are the heart of our community. Please call if you have questions.