



Department of Health and Human Services  
Health and Environmental Testing Laboratory

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SEARSPORT WATER DISTRICT  
PO BOX 289  
SEARSPORT ME 04974

Logged: 5/15/2019 9:57:02AM

Folder #: 1904194

Office Use Only: Line Item 91440 Public
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Released: 5/23/2019

No. of Samples in Folder:(1)

1904194-01 TE6

## CERTIFICATION

The HETL hereby certifies that all test results for this sample were analyzed by the method listed, including preservation, preparation, and holding times, unless otherwise indicated.

Kenneth G. Pote, PhD., Director

Richard French, Quality Assurance Officer

If we can be of further assistance to you, please call us at 287-1716.

Approved by:

Christopher Montagna  
Inorganics Supervisor/Chemist III

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Lab Sample#: 1904194-01		Sample Address:							
Sample Matrix: DW-H2O		Sample Point: TP-2		Surface:					
Description: AFTER TREATMENT & BEFORE DISTRIBUTION EP (TP 2- WELL 2- (		Sample Date: 05/14/2019		Sample Time: 07:30:00					
Test (Method)/Analyte	Result	Unit	Qualifiers	MCL	RL	High Limit	Low Limit	Analysis Date	Analyst
Color (L-10-308-00-1-A)	<5	PCU		15	5			05/15/2019 14:01:14	M.C.
<b>DW_Anions_IC (300.0)</b>									
Sulfate	5	mg/L		250	1			05/15/2019 13:44:00	T.N.
Fluoride	0.2	mg/L		4	0.1			05/15/2019 13:44:00	T.N.
Chloride	8	mg/L		250	1			05/15/2019 13:44:00	T.N.
Nitrite Nitrogen	<0.05	mg/L		1	0.05			05/15/2019 13:44:00	T.N.
Nitrate Nitrogen	0.26	mg/L		10	0.05			05/15/2019 13:44:00	T.N.
<b>METALS_200.8 (200.8)</b>									
Total Hardness	61	mg/L			0			05/16/2019 08:41:00	C.S.
Antimony	<0.5	ug/L		6	0.5			05/16/2019 08:41:00	C.S.
Arsenic	<1	ug/L		10	1			05/16/2019 08:41:00	C.S.
Barium	0.0029	mg/L		2	0.0005			05/16/2019 08:41:00	C.S.
Beryllium	<0.5	ug/L		4	0.5			05/16/2019 08:41:00	C.S.
Cadmium	<0.5	ug/L		5	0.5			05/16/2019 08:41:00	C.S.
Calcium	19	mg/L			0.05			05/16/2019 08:41:00	C.S.
Chromium	0.0014	mg/L		.1	0.0005			05/16/2019 08:41:00	C.S.
Copper	0.016	mg/L		1.3	0.0005			05/16/2019 08:41:00	C.S.
Iron	0.061	mg/L		.3	0.05			05/16/2019 08:41:00	C.S.
Lead	<0.5	ug/L		15	0.5			05/16/2019 08:41:00	C.S.
Magnesium	3.3	mg/L			0.05			05/16/2019 08:41:00	C.S.
Manganese	<0.0005	mg/L		.05	0.0005			05/16/2019 08:41:00	C.S.
Mercury	<0.1	ug/L		2	0.1			05/16/2019 08:41:00	C.S.
Nickel	<0.0005	mg/L		0.02	0.0005			05/16/2019 08:41:00	C.S.
Selenium	<0.001	mg/L		0.05	0.001			05/16/2019 08:41:00	C.S.
Silver	<0.0005	mg/L		.1	0.0005			05/16/2019 08:41:00	C.S.
Sodium	6.2	mg/L			0.05			05/16/2019 08:41:00	C.S.
Thallium	<0.0005	mg/L		.002	0.0005			05/16/2019 08:41:00	C.S.
Uranium	5.4	ug/L		30	0.5			05/16/2019 08:41:00	C.S.
Zinc	0.0051	mg/L		5	0.001			05/16/2019 08:41:00	C.S.
pH (4500-H+B)	8.0	S.U.		8.5		8.5	6.5	05/17/2019 10:47:00	J.C.
Turbidity (180.1)	<0.6	NTU			0.6			05/15/2019 16:48:00	J.C.

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## EXPLANATION OF FLUORIDE RESULTS

This fact sheet is to help you understand what your fluoride test result means for you and your family. Fluoride is a mineral that helps protect teeth against tooth decay when it is present in water in the correct amount. Children benefit the most, but this benefit will continue through life for everyone who drinks fluoridated water. You should compare your test result ("Result") to the explanations on this page to see what your test result means for you and your family, and discuss fluoride levels with your family health care provider to determine whether the levels are appropriate for you and your family.

If your lab result ("Result") is:

<.2 - .29 ppm\*

Your fluoride test result shows a very small amount of fluoride in your water. This is not enough fluoride to help protect children's teeth against decay. If there are children in your family, you should talk with your family dentist or doctor to get a prescription for fluoride drops or tablets for your child(ren).

.3 - .6 ppm

Your fluoride test result shows that there is some fluoride in your water, but it may not be enough to protect your children's teeth against decay. You should talk with your family dentist or doctor to see if you need a prescription for fluoride drops or tablets for your child(ren).

>.6 ppm or higher\*

Your fluoride test result shows that there is enough fluoride in your water to help protect your children's teeth against decay. You should talk with your family dentist or doctor about this result.

\* This symbol (" $<$ ") means "less than." This symbol (" $>$ ") means "greater than."

\* "ppm" means "parts per million." "Parts per million" is also written "mg/L" which means "milligrams per liter."

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### Dietary Fluoride Supplementation Dosage Schedule in mg F/day. \*+

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Age of child (years)	Water fluoride concentration (ppm or mg/L**)		
	Less than 0.30 ppm	0.3 - 0.6 ppm	Greater than 0.60 ppm
6 months - 3 years	0.25	0	0
3 - 6 years	0.50	0.25	0
6 - at least 16 years	1.00	0.50	0

\* 2.2 mg. sodium fluoride provides 1 mg. fluoride

+ Recommended by the American Dental Association (1994)

\*\* ppm - parts per million is equivalent to mg./L

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For more information contact the Maine Department of Human Services, Bureau of Health Oral Health Program

Tel #: (207) 287-2361; Fax #: (207) 287-4631; TTY#: (207) 287-8015

Antimony is a metal found in natural deposits as ores containing other elements. The most widely used antimony compound is antimony trioxide, used as a flame retardant. It is also found in batteries, pigments, and ceramic/glass.

Antimony in amounts over the EPA primary drinking water standard of 6 micrograms per liter (UG/L) may cause nausea, vomiting and diarrhea with short term exposure and is a known carcinogen for long term exposure.

Coagulation /filtration and Reverse Osmosis are approved EPA treatment methods.

The EPA primary drinking water standard for Barium is 2 mg/L. Small doses are not harmful. Large amounts can cause increased blood pressure, nerve damage or cardiovascular disease. Contamination may come from natural deposits or through industrial waste discharges from metal refineries.

The EPA primary drinking water standard for Beryllium is 4 ug/L. Large amounts can cause intestinal lesions. Contamination may come from industrial waste discharges from metal refineries, coal burning factories and from electrical and defense industries.

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Cadmium is a metal found in natural deposits as ores containing other elements. The greatest use of Cadmium is primarily for metal plating and coating operations. It is also used in nickel-cadmium and solar batteries and in pigments.

Cadmium in amounts over the EPA primary drinking water standard of 5 micrograms per liter (UG/L) may cause nausea, vomiting, diarrhea, muscle cramps, salivation, sensory disturbances, liver injury, convulsions, shock and renal failure with short term exposure and kidney, liver, bone and blood damage for long term exposure.

Coagulation /filtration, Reverse Osmosis, Ion exchange, and Lime Softening are approved EPA treatment methods.

The EPA primary drinking water standard for Chromium is 0.1 mg/L. Large amounts over a long period of time can cause allergic dermatitis, respiratory damage or acute poisoning. Contamination may come from erosion of natural deposits or through industrial waste discharges from steel and pulp mills.

The EPA primary drinking water standard for Mercury is 2 ug/L. Mercury can cause acute poisoning in a large dose. Since Mercury accumulates in body tissues, it can cause chronic effects of the nervous system, kidney or intestines at low doses over a long period of time.

Mercury contamination of water results from discharge from refineries and factories, runoff from landfills and cropland.

The MECDC has determined that a reasonable guideline for Nickel would be about 0.020 mg/l.

Ion Exchange, Lime Softening and Reverse Osmosis are treatment methods.

The EPA primary drinking water standard for Selenium is 0.050 mg/L.

Potential health effects from long term exposure are hair or fingernail loss; numbness in fingers or toes; circulatory problems.

Sources of contamination in drinking water from petroleum refineries discharge; erosion of natural deposits; discharge from mines.

The secondary maximum contaminant level for silver is 0.1 mg/L.

Skin discoloration is a cosmetic effect related to silver ingestion. This effect, called argyria, does not impair body function. The skin takes on a purplish grey color. It has never been found to be caused by drinking water in the United States. A standard has been set because silver is used as an antibacterial agent in many home water treatment devices.

The EPA primary drinking water standard for Thallium is 0.002 mg/L.

Thallium is a metal found in natural deposits such as ores containing other elements. The major sources of thallium in drinking water are leaching from ore-processing sites; and discharge from electronics, glass, and drug factories.

Some people who drink water containing thallium well in excess of the maximum contaminant level (MCL) for many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver problems.

The following treatment method(s) have proven to be effective for removing thallium to below 0.002 mg/L : activated alumina; ion exchange.

The secondary maximum contaminant level for Zinc is 5 mg/L.

Water with a zinc concentration of more than 5 mg/L may start to become chalky in appearance with a detectable deterioration in taste.

The most efficient methods to remove zinc from water are distillation and reverse osmosis.

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## HARDNESS

Hardness is caused by minerals, primarily calcium and magnesium, which are picked up by water passing through underground mineral deposits. Hard water is not considered contaminated, but it does retard the cleaning action of soap and forms a scale on cooking utensils, hot water pipes and heaters. This build-up may eventually reduce pipe capacity and water pressure. Hardness is the total concentration of calcium and magnesium in water.

The U.S. Geological Survey general guidelines for classification of waters are: 0 to 60 mg/L (milligrams per liter) is classified as soft; 61 to 120 mg/L as moderately hard; 121 to 180 mg/L as hard; and greater than 180 mg/L as very hard

There is no standard for hardness. Hard water is not harmful to health. Calcium and magnesium are essential body elements. In fact, studies suggest that hard water is better for cardiovascular health than soft water, though the reasons for this are not yet known.

Water softeners are available from water treatment specialists. In the process of removing minerals, sodium is added to the water and may be unsuitable for a person on a low-sodium diet. See the yellow pages under "Water Treatment" for the name of a specialist in your area.

IF YOU HAVE ANY QUESTIONS ON HOW TO CORRECT THE PROBLEM, PLEASE CONTACT THE HEALTH & ENVIRONMENTAL TESTING LABORATORY AT 287-1716.

## Units & Measurement

"mg/L" = Milligrams per liter;

"ug/L" = Micrograms per Liter;

"mg/Kg" = Milligrams per Kilogram;

"ug/Kg" = Micrograms per Kilogram;

"NTU" = Nephelometric Turbidity Units;

"pCi/L" = Picocuries per Liter;

The MCL, Maximum Contaminant Level is listed for comparing your results with recommended levels.

In the "Qualifier" column, an " \*\* " is placed to indicate any results that exceed this MCL.

**If there are no " \* " in the "Qualifier" column, your water is considered satisfactory for those tests.**

All solid results are reported on a "Dry Weight" basis.

RL-Reporting Limit is the lowest concentration which can be reliably reported on a routine basis.

"<" = Less than      ">" = Greater than

MCL - Maximum Contaminant Level is the highest level allowed by EPA for public water supplies. Also used here as the maximum advisory limit set by the Maine Centers for Disease Control and Prevention.

**Note: Results below the advisory limit, including < and J are considered satisfactory for that parameter.**

## Disclaimer

**Your report consists of the number of pages listed on the cover page. Any attachments after the last numbered page are for informational purposes only and are not part of the formal report.**

**The results in this report are for the submitted sample(s) only.**

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**Qualifiers Legend:**

**User selectable**

<b>Code</b>	<b>Description</b>
*	> Secondary Limit
**	> MCL
~	Approximately
Ach	Above Calibration Curve
B	Blank Contamination
Hi	
J	<RL>MDL
Lo	
Nan	Not Analyzed
Nc	Not Confirmed
Nt	NonTarget Compound
R	Rejected
Rec	Recovery
T	Temperature does not meet criteria
U	Undetected