

# Annual Water Quality Report



Serving our neighbors  
**Houlton Water Company**

**July 1, 2020**

We're pleased to provide you with the Houlton Water Company's 2019 Annual Water Quality Report

**This report shows that your water is of excellent quality and meets or exceeds all state and federal requirements.**

We are very proud of the quality of your water and make a constant effort to make it better and more reliable. Our goal is to provide to you a safe and dependable supply of drinking water.

## **Water System**

Your water system consists of supply, transmission, storage and distribution, We serve a total of 1892 customers in Houlton and Hodgdon.

**Supply:** Water is pumped from three ground water wells, two from McPartland Pumping Station in Houlton and one from the Coleman Pumping Station in Hodgdon. In addition we have a booster pump on the White Settlement Road in Houlton.

**Transmission:** We have over 15 miles of water transmission mains,

**Storage:** We have two underground concrete reservoirs totaling 1.5 million gallons and a steel above ground tank totaling 800 thousand gallons.

**Distribution:** We have over 31 miles of water distribution pipe and 228 hydrants.

**We pump an average of 637,620 gallons per day. We have the capability of pumping over 1.2 million gallons per day.**

## **Water Treatment**

We add sodium hypochlorite to our raw water, to prevent the formation of bacteria. We add sodium fluoride to prevent tooth decay.

## **Asbestos Testing**

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. We tested for asbestos in our water per samples collected on 10/5/17. We are pleased to inform you that as reported from the testing lab on 10/15/17, no asbestos was detected in our water. For additional information feel free to contact Greg Sherman at the HWC 21 Bangor St. office, phone 207-532-2350, e-mail [sherman@hwco.org](mailto:sherman@hwco.org)

## **Testing Your Water**

The Houlton Water Company routinely monitors for contaminants in your drinking water according to Federal and State laws, Table 1 and table 2 shows the results of our monitoring for the period of January 1st to

December 31st, 2019 (unless otherwise indicated). Your water is tested by both State of Maine Health, State of Connecticut Labs, Northeast Lab, and Pace Analytical Services.

### Questions?

If you have any questions about this report or your water utility, please contact us. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the third Tuesday of the month at 7:00 pm at our office on 21 Bangor Street. Our phone number is 532-2250, fax number is 532-1213, and e-mail is [sherman@hwco.org](mailto:sherman@hwco.org)

### Waivers

During 2017 Houlton Water Company was granted waivers by the Department of Human Services Drinking-Water Program not to test for certain substances. Three year waivers are granted when previous test results are low enough to indicate that annual testing is not necessary to ensure the safety of your water supply, **McPartland Well** waivers were; pesticide screen, semi-volatile screen, herbicide screen, and carbonate pesticide screen. **Coleman Well** waivers were; herbicide-screen, semi-volatile screen, carbonate pesticide screen, and pesticide screen. During 2017 Houlton Water Company was granted a partial waiver for synthetic organic compounds. Tested for synthetic organic contaminants including pesticides and herbicides on 10/09/17 - 12/12/17. Tested for volatile organic contaminants on 9/12/17.

### Health information from the EPA

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or manmade. As water travels over land or underground it can pick up substances or contamination. These substances can be microbes, Inorganic or organic chemicals and radioactive substances. All 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791 or DHS Drinking Water Program at 287-2070,

MCL's are set at very stringent levels, To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect,

**Radon:** We tested for Radon in 2003, The highest Radon level for our system was 442 pCi/L, taken on April 2, 2003, Radon laden water can be a source of elevated levels of Radon in indoor air, as Radon gas escapes from the water into the air Radon is found in the soil and bedrock formations and is a water soluble, gaseous by-product of Uranium. Most Radon is released to the air, moments after turning on the tap. Only about 1-2 percent of Radon in the air comes from drinking water. The USEPA is proposing setting lower standards for public drinking water, at 200-4,000 pCi/L, Currently,, the State of Maine requires follow-up action (or treatment) for Radon levels in drinking water above 20,000 pCi/L. Breathing Radon released to air from tap water increases the risk of lung cancer over the course of your lifetime,

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. Houlton Water Company 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 wafer 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

<https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water>

**Please call our office at 532-2250 if you have questions.**

**Microbiological Contaminants**

1. Total Coliform Bacteria
2. Fecal Coliform and E. coli
3. Turbidity

**Radioactive Contaminants**

4. Beta/positron emitters
5. Gross Alpha
6. Radon

**Inorganic Contaminants**

7. Antimony
8. Arsenic
9. Asbestos
10. Barium
11. Beryllium
12. Cadmium
13. Chromium
14. Copper
15. Cyanide
16. Fluoride
17. Lead
18. Mercury (inorganic)
19. Nitrate (as Nitrogen)
20. Nitrite (as Nitrogen)
21. Selenium
22. Thallium

**Synthetic Organic Contaminants including Pesticides and Herbicides**

23. 2,4-D
24. 2,4,5-TP (Silvex)
25. Acrylamide
26. Atrazine
27. Atrazine
28. Benzo (a) pyrene (PAH)
29. Carbofuran
30. Chlordane
31. Dacapon
32. Di (2-ethylhexyl) adipate
33. Di (2-ethylhexyl) phthalate
34. Dibromochloropropane
35. Dinoseb
36. Diquat
37. Dioxin
38. Endothal
39. Endrin
40. Epichlorohydrin
41. Ethylene dibromide
42. Glyphosate
43. Heptachlor
44. Heptachlor epoxide
45. Hexachlorobenzene
46. Hexachlorocyclo-pentadiene
47. Lindane
48. Methoxychlor
49. Oxamyl (Vydate)
50. PCBs (Polychlorinated biphenyls)
51. Pentachlorophenol
52. Picloram
53. Simazine
54. Toxaphene
55. Diquat
56. Endothal

**Volatile Organic Contaminants**

57. Benzene
58. Carbon tetrachloride
59. Chlorobenzene
60. o-Dichlorobenzene
61. p-Dichlorobenzene
62. 1,2-Dichloroethane
63. 1,1-Dichloroethane
64. cis-1,2-Dichloroethylene
65. trans-1,2-Dichloroethylene
66. Dichloromethane
67. 1,2-Dichloropropane
- 68a. Methyl-Tertiary-Butyl-ETHER (MTBE)
- (Maine MCL) Trichloroethane
69. Styrene
70. Tetrachloroethylene
71. 1,2,4-Trichlorobenzene
72. 1,1,1-Trichloroethane
73. 1,1,2-Trichloroethane
74. Trichloroethylene

**Asbestos Testing Results**

Samples taken 9/29/17  
 Samples reported as no asbestos detectable on 10/15/17 at <than .12 million fibers per liter.

**TABLE 1: McPARTLAND WELL**

| TEST RESULTS                        |               |                                               |                  |      |     |                                                                                                                           |
|-------------------------------------|---------------|-----------------------------------------------|------------------|------|-----|---------------------------------------------------------------------------------------------------------------------------|
| Contaminant                         | Violation Y/N | Level Detected                                | Unit Measurement | MCLG | MCL | Notes                                                                                                                     |
| <b>Microbiological Contaminants</b> |               |                                               |                  |      |     |                                                                                                                           |
| 1. Total Coliform Bacteria          | N             | 0 pos                                         | -                | 0    | -   | Naturally present in the environment                                                                                      |
| 3. Turbidity                        | N             | < .6                                          | NTU              | n/a  | 1.0 | Soil runoff                                                                                                               |
| <b>Radioactive Contaminants</b>     |               |                                               |                  |      |     |                                                                                                                           |
| 5. Gross Alpha                      | N             | < 3                                           | pCi/l            | 0    | 15  | Erosion of natural deposits                                                                                               |
| 6. Radon                            | N             | 442                                           | pCi/l            | -    | -   | MCL undetermined                                                                                                          |
| <b>Inorganic Contaminants</b>       |               |                                               |                  |      |     |                                                                                                                           |
| 10. Barium                          | N             | .0089<br>9/7/17                               | ppm              | 2    | 2   | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits                                |
| 14. Copper                          | N             | 90% was .009 ppm<br>9/11/17                   | ppm              | 1.3  | 1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservative                     |
| 16. Fluoride                        | N             | 1.1<br>Highest level found 1.2 ppm<br>9/08/17 | ppm              | 4    | 4   | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| 17. Lead                            | N             | 90% was 3.1 ppb<br>9/11/17                    | ppb              | 0    | 15  | Corrosion of household plumbing systems; erosion of natural deposits; no site exceeded action levels                      |
| 19. Nitrate (as Nitrogen)           | N             | 2.4                                           | ppm              | 10   | 10  | Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits                               |
| 20. Nitrite (as Nitrogen)           | N             | BDL<br><.05                                   | ppm              | 1    | 1   | Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits                               |
| 21. Sodium                          | N             | 5.8                                           | ppm              | -    | 100 | -                                                                                                                         |
| 22. Radium 228                      | N             | .236<br>5/25/12                               | pCi/l            | -    | -   | Erosion of natural deposits                                                                                               |
| 38. Endothal                        | N             | BDL<br><9                                     | ug/L             | 9    | -   | -                                                                                                                         |
| 39. Diquat                          | N             | ND                                            | ug/L             | 20   | -   | 10/09/17 & 12/12/2017                                                                                                     |

**TABLE 2: COLEMAN WELL**

| TEST RESULTS                        |               |                                                           |                  |      |     |                                                                                                                           |
|-------------------------------------|---------------|-----------------------------------------------------------|------------------|------|-----|---------------------------------------------------------------------------------------------------------------------------|
| Contaminant                         | Violation Y/N | Level Detected                                            | Unit Measurement | MCLG | MCL | Notes                                                                                                                     |
| <b>Microbiological Contaminants</b> |               |                                                           |                  |      |     |                                                                                                                           |
| 1. Total Coliform Bacteria          | N             | 0 pos                                                     | -                | 0    | -   | Naturally present in the environment                                                                                      |
| 3. Turbidity                        | N             | < .6                                                      | NTU              | n/a  | 1.0 | Soil runoff                                                                                                               |
| <b>Radioactive Contaminants</b>     |               |                                                           |                  |      |     |                                                                                                                           |
| 5. Gross Alpha                      | N             | < 3                                                       | pCi/l            | 0    | 15  | Erosion of natural deposits                                                                                               |
| 6. Radon                            | N             | 442                                                       | pCi/l            | -    | -   | MCL undetermined                                                                                                          |
| <b>Inorganic Contaminants</b>       |               |                                                           |                  |      |     |                                                                                                                           |
| 10. Barium                          | N             | .0046<br>9/11/17                                          | ppm              | 2    | 2   | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits                                |
| 14. Copper                          | N             | 9/11/2017<br>90% was .140 ppm<br>9/11/14                  | ppm              | 1.3  | 1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservative                     |
| 16. Fluoride                        | N             | 1.1<br>7/09/18<br>Highest level found 3.2 ppm<br>19/11/14 | ppm              | 4    | 4   | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| 17. Lead                            | N             | 9 ppb<br>09/11/17<br>90% was 3.2 ppb<br>9/11/14           | ppb              | 0    | 15  | Corrosion of household plumbing systems; erosion of natural deposits; no site exceeded action levels                      |
| 19. Nitrate (as Nitrogen)           | N             | .63                                                       | ppm              | 10   | 10  | Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits                               |
| 20. Nitrite (as Nitrogen)           | N             | BDL<br><.05                                               | ppm              | 1    | 1   | Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits                               |
| 21. Sodium                          | N             | 5.3                                                       | ppm              | -    | 100 | -                                                                                                                         |
| 22. Radium 228                      | N             | .111<br>5/25/12                                           | pCi/l            | -    | -   | Erosion of natural deposits                                                                                               |
| 38. Endothal                        | N             | BDL                                                       | ug/L             | 9    | -   | -                                                                                                                         |
| 36. Diquat                          | N             | ND                                                        | ug/L             | 20   | -   | 10/09/2017 & 12/12/2017                                                                                                   |

**Definitions**

In the tables you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

*Parts per million (ppm) or Milligrams per liter (mg/l)* - one part per million corresponds to one minute in two years or a single penny in \$10,000.

*Parts per billion (ppb) or Micrograms per liter* - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

*Picocuries per liter (pCi/L)* - picocuries per liter is a measure of radioactivity in water.

*Millirems per year (mrem/yr)* - measure of radiation absorbed by the body.

*Nephelometric Turbidity Unit (NTU)* - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

*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 treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

*Below Detection Limit (BDL)* - Test that cannot detect substance below a certain level.

*Maximum Contaminant Level (MCL)* - The MCL is 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.

*Maximum Contaminant Level Goal (MCLG)* - The MCLG is 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.

We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The Maine Drinking Water program and the EPA has determined that your water is SAFE at these levels.