Housatonic Water Company – Water Discoloration Monitoring and Sampling Program

Housatonic Water Company is committed to ensuring the safety and quality of our community's water supply. We have established a formal program to monitor, document, and respond to reports of water discoloration within our distribution system.

Complaint Documentation

- All water discoloration complaints will be recorded using a standardized complaint form.
- The form will include:
  - Customer location
  - Quadrant location (based on our nine-quadrant distribution map)
  - Discoloration severity rating (1 = lowest, 5 = highest)

Sampling Plan

- Our sampling program reflects the geographic diversity of complaints received.
- If three or more water discoloration complaints are reported in a single quadrant, Housatonic Water Company will initiate targeted water sample collection in that section of the distribution system.
- Sampling and laboratory analysis will be performed by an independent third-party vendor.

Reporting of Results

- Laboratory test results will be submitted simultaneously to:
  - Massachusetts Department of Environmental Protection
  - Great Barrington Board of Health
  - Housatonic Water Works Company
- A log of all water discoloration reports throughout the system is maintained and updated weekly on our website to reflect the most recent complaints received.
- Lab testing results will also be posted .

Additional Information

To support customer understanding of service areas:

- A map of the distribution system shows the quadrant boundaries.
- A list of streets contained within each quadrant provides detailed reference information.

Commitment to Customers

We value transparency and public health. Customers are encouraged to report any instances of water discoloration immediately.

For questions or to report water discoloration, please contact:
Housatonic Water Company

413.528.1780 housatonicwater@gmail.com

Water Discoloration Log
August 1, 2025 - October 24, 2026

Date	Quad	Street	Color (1-5)	Test ? (Y/N)
Aug 1				
Aug 2				
Aug 3				
	IB	North Plain Road		
Aug 4				
	IB	North Plain Road		
Aug 5				
	IB	North Plain Road	5	
	IB	Main Street	2	
Aug 6				
IB Tested 8/		North Plain Road	5	Y
Aug 7				
	IIB	Christian Hill Road	4	
Aug 8				
Aug 9				
Aug 10				
Aug 11				
Aug 12				
IIB Tested 8/		Main Street	4	Y
	IC	Division Street		
Aug 13				
Aug 14				
Aug 15				
	IB	North Plain Road		
Aug 16				
Aug 17				
Aug 18				
Aug 19				
Aug 20				
	IB	Crimson Lane	4	
Aug 21				
Aug 22				
Aug 23				
Aug 24				
Aug 25				
	III C	Walnut Street	2	
Aug 26				
Aug 27				
	IB	North Plain Road	4	
Aug 28				
Aug 29				
	II B	Prospect Street	3	
Aug 30				
	II B	Prospect Street	3	
Aug 31				
	II B	Prospect Street	3	
Sep 1				
	IB	North Plain Road	3	
Sep 2				

	IB	North Plain Road	3	
Sep 3				
	IB	North Plain Road	3	
Sep 4				
	IC	Division Street	5	
	IB	North Plain Road	3	
Sep 5				
Sep 6				
Sep 7				
Sep 8				
Sep 9				
Sep 10				
	II B	Kirk Street		
	II A	Pleasant Street	4	
	I C	North Plain Road	3	
	I B	Wyantenuck St.	3	
Sep 11				
	1B	North Plain Road	4	
Sep 12				
	II A	Pleasant Street	4	
	1B	North Plain Road	4	
Sep 13				
	1B	North Plain Road	4	
Sep 14				
	1B	North Plain Road	4	
Sep 15				
	1B	North Plain Road	3	
	IB	North Plain Road	4	
	1B	North Plain Road	4	
Sep 16				
	II C	Vandeusenville Road	5	
	I A	Main Street	4	
	II A	Pleasant Street	4	
Sep 17				
Sep 18				
Sep 19				
Sep 20				
Sep 21				
Sep 22				
Sep 23				
Sep 24				
Sep 25				
Sep 26				
Sep 27				
Sep 28				
Sep 29				
Sep 30				
Oct 1				
Oct 2				
	IIB	Pleasant St.	3	
Oct 3				
	IIB	Pleasant St.	3	
Oct 4				
Oct 5				
Oct 6				
Oct 7				
Oct 8				
Oct 9				
Oct 10				
	IIB	Main Street	3	
Oct 11				
Oct 12				
Oct 13				
Oct 14				
	IIB	Pleasant St - Flushing Day	5	
	IIB	Main St - Flushing Day	4	
Oct 15				
	IIB	Pleasant St - Flushing Day	5	
	IIB	Pleasant St - Flushing Day	4	
	IIB	Highland St - Flushing Day	5	

Oct 16				
	IIB	Pleasant St - Flushing Day	5	
	IIB	Pleasant St - Flushing Day	5	
	IIB	Pleasant St - Flushing Day	4	
Oct 17				
Oct 18				
Oct 19				
Oct 20				
Oct 21				
Oct 22				
Oct 23				
Oct 24				
Oct 25				
Oct 26				
Oct 27				
Oct 28				
Oct 29				
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Nov 4				
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Nov 6				
Nov 7				
Nov 8				
Nov 9				
Nov 10				
Nov 11				
Nov 12				
	I B	Wyantenuck St.	2	
Nov 13				
Nov 14				
Nov 15				
Nov 16				
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Nov 19				
Nov 20				
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Nov 22				
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Jan 15				
Jan 16				
	III B	Chestnut Ridge	2	
	II B	Kirk	3	
	II B	Pleasant	3	
	II B	Prospect	3	
Jan 17				
Jan 18				
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Jan 20				
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Mar 26				
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Mar 30				
Mar 31				
Apr 1				
		Kirk Street		
		North Street		
		Kirk Street		
		Forrest Street		
	IB	North Plain Road		
	IIA	Beacon Hill		
	IIB	Main Street		
	IIB	Fairview Road		
	IIA	High Street		
	IIIB	Chestnut Ridge		
	IIB	Prospect Street		
Apr 2				
	IIB	Kirk Street		
	IIB	North Street		
	IIB	Kirk Street		
	IIB	Forest Street		
	IIB	Prospect Street		
	IIA	High Street		
	IIIA	Housatonic Court		
	IIB	Ryan Terrace		
	IIB	Main Street		
	IIC	Williams Street		
	IIB	Prospect Street		
	IIA	Beacon Hill		
	IIB	Main Street		
	IIB	Kirk Street		
	IIB	Main Street		
	IIC	Van Deusenville Road		
	IIB	Main Street		
		South Street		
	IIB	Hart Street		
	IIB	North Street		
	IIB	Fairview Road		
	IIA	High Street		
		Hart Street		
		Main Street		
	IIB	Prospect Street		
Apr 3				
Apr 4				
Apr 5				
Apr 6				
Apr 7				
Apr 8				

Apr 9				
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	IB	North Plain Road	3	N
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May 31				
Jun 1				
Jun 2				
Jun 3				
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Jun 25				
Jun 26				
Jun 27				
Jun 28				
Jun 29				
Jun 30				
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Jul 5				
	I C	North Plain Road	3	N
Jul 6				
	I C	North Plain Road	3	N
Jul 7				
	IIB	Pleasant	3	N
	I C	North Plain Road	3	N
Jul 8				
	IIB	Pleasant	3	N
	I C	North Plain Road	3	N
Jul 9				
	IIB	Pleasant	3	N
	I C	North Plain Road	3	N
Jul 10				
	I C	North Plain Road	3	N
	III B	Chestnut Ridge	2	N
	IIB	Pleasant	3	N
	II B	Pleasant	3	N
	IIIB	Chestnut Ridge	3	N
Jul 11				
	I C	North Plain Road	3	N
Jul 12				
	I C	North Plain Road	3	N
Jul 13				
	I C	North Plain Road	3	N
Jul 14				
	I C	North Plain Road	3	N
Jul 15				
	I C	North Plain Road	3	N
Jul 16				
	I C	North Plain Road	3	N
Jul 17				
	I C	North Plain Road	3	N
Jul 18				
	I C	North Plain Road	3	N
Jul 19				
	I C	North Plain Road	3	N
Jul 20				
	I C	North Plain Road	3	N
Jul 21				
	I C	North Plain Road	3	N
	IIB	Kirk St		N
Jul 22				
Jul 23				
	IC	Wright Lane		N
	IIB	Oak		N
Jul 24				
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Aug 1				
Aug 2				
Aug 3				
Aug 4				
Aug 5				

Aug 6				
Aug 7				
Aug 8				
Aug 9				
Aug 10				
Aug 11				
	I C	North Plain Road	3	N
Aug 13				
Aug 14				
Aug 15				
Aug 16				
Aug 17				
	IIB	Kirk Street	3	N
Aug 18				
Aug 19				
Aug 20				
Aug 21				
Aug 22				
Aug 23				
Aug 24				
Aug 25				
	1C	North Plain Road	4	N
	IB	North Plain Road	4	N
	IIC	Vandeusenville Road	4	N
Aug 26				
	IB	North Plain Road	4	N
	IIB	Oak Street	4	N
	IC	Wright Lane	4	N
	IIB	Kirk Street	4	N
Aug 27				
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	IIB	Kirk Street	4	N
Sep 8				
Sep 9				
Sep 10				
Sep 11				
Sep 12				
Sep 13				
Sep 14				
	IIB	Kirk Street	3	N
Sep 15				
Sep 16				
Sep 17				
Sep 18				
Sep 19				
Sep 20				
Sep 21				
	IC	Wright Lane	3	N
Sep 22				
Sep 23				
Sep 24				
Sep 25				
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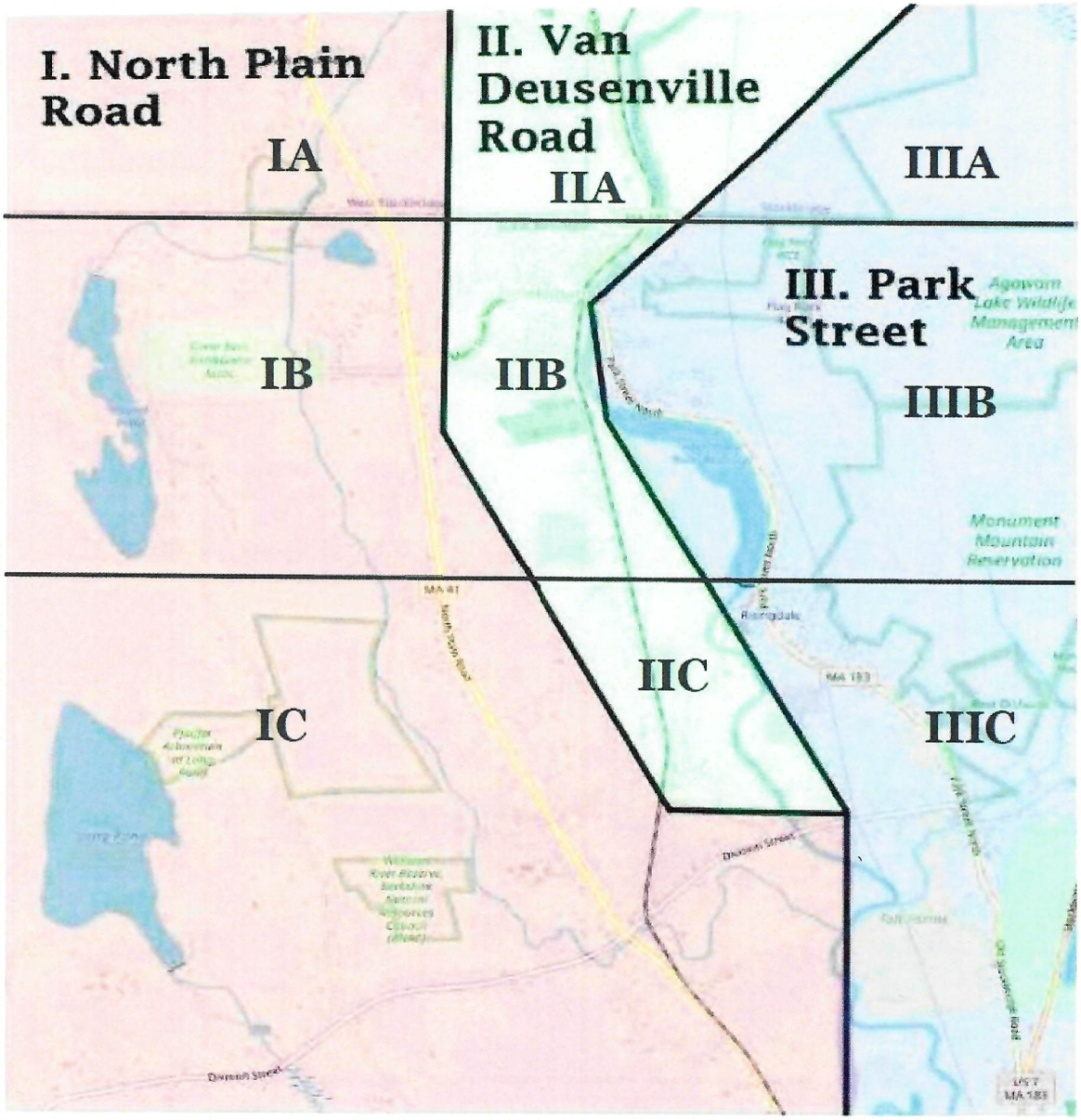
Distribution Map



I A – North Plain Road - Great Barrington Road

From #279 to #317
Including side streets:

- Long Pond Road
- Robin Road
- Water Street (in West Stockbridge)

I B – North Plain Road

From #273 to #415
Including side streets:

- Brookside Court
- Comstock Lane
- Crimson Lane
- Linda Lane
- Wyantenuck Street

I C – North Plain Road

From #231 to #271
#54 Division Street to #165 Division Street
Including side streets:

- Grant Lane
- Lucky Lane
- Wright Lane

II A – Van Deusenville Road- High Street

From #7 to #64

II B – Van Deusenville Road-Core of Town (1011 Main Street to 1099 Main Street)

Including side streets:

- Cottage Street
- Depot Street
- Fairview Street
- Forrest Street
- Hart Street
- Highland Street
- Kirk Street
- Meadow Lane
- Meadow Street
- North Street
- Oak Street
- Pine Street
- Pleasant Street
- Prospect Street
- Ryan Terrace
- South Street
- Front Street

II C – Van Deusenville Road

From #10 to #97
Including side streets:

- Nolan Drive
- Williams Street

III A Park Street- Glendale Road

From #50 to #62
Including side streets:

- Apple Street
- Housatonic Court
- North Housatonic Court

III B – Park Street

From #302 to #430
Including side streets:

- Bernard Gibbons Drive
- Chestnut Ridge
- Cone Avenue
- Grove Street
- Mountain View Avenue
- Waubeck Street

IIIC – Park Street

From #298 to #115
Including side streets:

- Maple Street
- Ramsdell Road
- Spruce Street
- Walnut Street

Housatonic Water Company – Water Discoloration Monitoring and Sampling Program

The Housatonic Water Company is committed to ensuring the safety and quality of our water supply. If you experience discolored water, please either call us at (413) 528-1780 or complete this intake form and email it to housatonicwater@gmail.com.

Housatonic Water Works Company

Water Discoloration Intake Form

Date:_____

1. Name: _____

2. Address: _____

3. Type of Residence:

☐ Single-family ☐ Multi-family ☐ Apartment ☐ Other: _____

4. Known Plumbing:

Service Line Materials (check all that apply):

☐ Copper ☐ Plastic (PVC/PEX) ☐ Galvanized Iron ☐ Unknown

☐ Other: _____

_____

Interior Plumbing Materials (check all that apply):

☐ Copper ☐ Plastic (PVC/PEX) ☐ Galvanized Iron ☐ Unknown

☐ Other: _____

_____

5. Frequency of Discolored Water in 2025

How often have you experienced discolored water this year?

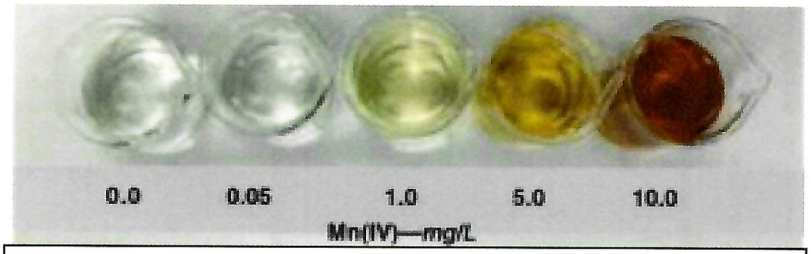
_____

6. Approximate Dates of Occurrence (if known):

_____

7. Water Appearance

Please circle the photo below that most closely resembles the color of the water you observed:



Example: A: Clear B: Light Yellow C: Orange D: Brown E: Dark Brown

Additional Comments (optional):

_____

_____

_____

_____

Test Results

The test results presented in this section summarize water quality monitoring. Parameters analyzed include color, iron, manganese, and other indicators relevant to tracking water discoloration. These results offer insights into both aesthetic and operational aspects of water quality, helping to identify potential sources of discoloration and ensure compliance with monitoring requirements.

Massachusetts Department of Environmental Protection - Drinking Water Program

Secondary Contaminant Report

SEC

I. PWS INFORMATION: Please refer to your DEP Water Quality Sampling Schedule (WQSS) to help complete this form

AUGUST TEST RESULTS QUADRANT IB

DEP LOCATION (LOC) ID#	DEP Location Name	Sample Information	Date Collected	Collected By
	North Plain Road	☐ (M)ultiple ☒ (S)ingle ☐ (R)aw ☒ (F)inished	08/15/25	Erick Bartlett

Routine or Special Sample	Original, Resubmitted or Confirmation Report	If Resubmitted Report, list below: (1) Reason for Resubmission	(2) Collection Date of Original Sample
☐ RS ☒ SS	☐ Original ☐ Resubmitted ☐ Confirmation	☐ Resample ☐ Reanalysis ☐ Report Correction	

SAMPLE NOTES - (Such as, if a Manifold/Multiple sample, list the sources that were on-line during sample collection).

II. ANALYTICAL LABORATORY INFORMATION

Primary Lab MA Cert. #: M-MA1146 **Primary Lab Name:** Microbac Laboratories, Inc., Lee **Subcontract? (Y/N)** Y

Contaminant	Result	Result Qualifier	SMCL	Lab MDL	Lab MRL	Dilution Factor	Lab Method	Date Analyzed	Analysis Lab MA Cert. #	Analysis Lab Sample ID#
ALKALINITY (CACO3), TOTAL (mg CaCO3/L)	77.5		*None*	1.00	1.00	1.00	SM 2320 B-1997	08/21/2025	M-CT008	E5H0357-02
COLOR (CU)	40	Y1	**15**	1	1	1.00	SM 2120 B-2001	08/15/2025	M-CT008	E5H0357-02
IRON (mg/L)	ND		**0.3**	0.00428	0.0500	1.00	EPA 200.7, Rv. 4.4 (1994)	08/18/2025	M-CT008	E5H0357-02
MANGANESE (mg/L)	0.0662		**0.05***	0.000584	0.00204	1.00	EPA 200.7, Rv. 4.4 (1994)	08/18/2025	M-CT008	E5H0357-02
TURBIDITY (NTU)	0.64		*None*		0.20	1.00	SM 2130 B-2001	08/15/2025	M-CT008	E5H0357-02
TOTAL DISSOLVED SOLIDS (mg/L)	133		**500**		10.0	1.00	SM 2540 C-1997	08/20/2025	M-CT008	E5H0357-02

* EPA has established a lifetime Health Advisory (HA) for manganese at 0.3 mg/L and an acute HA at 1.0 mg/L.

Lab Analysis Comments	Result Qualifier	Result Qualifier Description
	Y1	Accreditation is not offered by the accrediting body for this analyte.

I certify under penalties of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best extent of my knowledge

Primary Lab Director Signature: R. Warik

Date: 8/25/2025

In accordance with 310 CMR 22.15(2), if mailing paper reports, TWO copies of this report must be received by your MassDEP Regional Office no later than 10 days after the end of the month in which the results are received or no later than 10 days after the end of the monitoring period, whichever is sooner. Please note: Electronic reporting (eDEP) deadline is the same as above.

DEP REVIEW STATUS (Initial & Date)	Review Comments		☐ WQTS Data Entered
☐ Accepted ☐ Disapproved			

Massachusetts Department of Environmental Protection - Drinking Water Program

SEC

Secondary Contaminant Report

I. PWS INFORMATION: Please refer to your DEP Water Quality Sampling Schedule (WQSS) to help complete this form

AUGUST TEST RESULTS QUADRANT IIB

DEP LOCATION (LOC) ID#	DEP Location Name	Sample Information		Date Collected	Collected By
	Main Street	☐ (M)ultiple ☒ (S)ingle	☐ (R)aw ☒ (F)inished	08/15/25	Erick Bartlett

Routine or Special Sample	Original, Resubmitted or Confirmation Report	If Resubmitted Report, list below	
		(1) Reason for Resubmission	(2) Collection Date of Original Sample
☐ RS ☒ SS	☐ Original ☐ Resubmitted ☐ Confirmation	☐ Resample ☐ Reanalysis ☐ Report Correction	

SAMPLE NOTES - (Such as, if a Manifold/Multiple sample, list the sources that were on-line during sample collection).

II. ANALYTICAL LABORATORY INFORMATION

Primary Lab MA Cert. #: M-MA1146 **Primary Lab Name:** Microbac Laboratories, Inc., Lee **Subcontract? (Y/N)** Y

Contaminant	Result	Result Qualifier	SMCL	Lab MDL	Lab MRL	Dilution Factor	Lab Method	Date Analyzed	Analysis Lab MA Cert. #	Analysis Lab Sample ID#
ALKALINITY (CACO3), TOTAL (mg CaCO3/L)	77.5		*None*	1.00	1.00	1.00	SM 2320 B-1997	08/21/2025	M-CT008	E5H0357-01
COLOR (CU)	40	Y1	**15**	1	1	1.00	SM 2120 B-2001	08/15/2025	M-CT008	E5H0357-01
IRON (mg/L)	ND		**0.3**	0.00428	0.0500	1.00	EPA 200.7, Rv. 4.4 (1994)	08/18/2025	M-CT008	E5H0357-01
MANGANESE (mg/L)	0.102		**0.05***	0.000584	0.00204	1.00	EPA 200.7, Rv. 4.4 (1994)	08/18/2025	M-CT008	E5H0357-01
TURBIDITY (NTU)	0.94		*None*		0.20	1.00	SM 2130 B-2001	08/15/2025	M-CT008	E5H0357-01
TOTAL DISSOLVED SOLIDS (mg/L)	102		**500**		10.0	1.00	SM 2540 C-1997	08/20/2025	M-CT008	E5H0357-01

* EPA has established a lifetime Health Advisory (HA) for manganese at 0.3 mg/L and an acute HA at 1.0 mg/L.

Lab Analysis Comments	Result Qualifier	Result Qualifier Description
	Y1	Accreditation is not offered by the accrediting body for this analyte.

I certify under penalties of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best extent of my knowledge

Primary Lab Director Signature: R. Wain

Date: 8/25/2025

In accordance with 310 CMR 22.15(2), if mailing paper reports, TWO copies of this report must be received by your MassDEP Regional Office no later than 10 days after the end of the month in which the results are received or no later than 10 days after the end of the monitoring period, whichever is sooner. Please note: Electronic reporting (eDEP) deadline is the same as above.

DEP REVIEW STATUS (Initial & Date)	Review Comments		☐ WQTS Data Entered
☐ Accepted ☐ Disapproved			

Massachusetts Department of Environmental Protection - Drinking Water Program

WQA-A

Lead and Copper Water Quality Parameter Report
Initial Sampling

I. PWS INFORMATION: Please refer to your DEP Water Quality Sampling Schedule (WQSS) to help complete this form

PWS ID #: 1113003 **City / Town:** Gt. Barrington **Sample Collection Date:** 08/15/2025

PWS Name: Housatonic Water Works **PWS Class:** COM [X] NTNC [ ] TNC [ ]

Number of Distribution Samples Required:		**Number of Distribution Tap Samples Submitted:**	
Number of Entry Point Samples Required:		**Number of Entry Point Samples Submitted:**	

SAMPLE NOTES

II. ANALYTICAL LABORATORY INFORMATION

Sample Site Address		Field Parameters		Parameter				
		pH	Temperature (°F)	Alkalinity (mg/L)	Conductivity (µmho/cm)	Calcium (mg/L)	Orthophosphate* (mg/L)	Silica* (mg/L)
	Main Street	7.70	70.1	77.5				
	North Plain Road	7.60	68.9	77.5				

* Required when using corrosion control inhibitor containing phosphate or silicate compounds.

I certify under penalties of law that I am the person authorized to fill out this form and the information contained herein is true, accurate and complete to the best extent of my knowledge

Primary Lab Director Signature: R. Waite

Date: 8/25/2025

If not submitting results electronically, mail TWO copies of this report to your DEP Regional Office no later than 10 days after the end of the month in which you received this report or no later than 10 days after the end of the reporting period, whichever is sooner.

DEP REVIEW STATUS (Initial & Date)	Review Comments		☐ WQTS Data Entered
☐ Accepted ☐ Disapproved			

MassDEP Fact Sheet

Manganese in Drinking Water: Questions and Answers for Consumers

Introduction
This fact sheet is intended to inform you about manganese in drinking water, typical concentrations, its contribution to overall manganese exposure in humans, especially infants, and provide guidance on health protective limits in drinking water.

What is manganese and where does it come from?
Manganese is a common naturally-occurring mineral found in rocks, soil, groundwater, and surface water. It is a natural component of most foods and is necessary for proper nutrition. It is also present in infant formulas.

How are people exposed to manganese?
Manganese exposures can come from air, food or water. This fact sheet focuses on water. The majority of manganese exposure in the general population comes from the diet. Grains, beans, nuts and teas in particular are rich in manganese. It is an **essential** trace mineral for the body to function, however excess manganese exposure has potential health implications.

In situations where manganese levels in drinking water are elevated, the contribution from drinking water can increase the overall intake of manganese.

In a residential setting, breathing in manganese is an unlikely route of concern for exposure, in contrast to certain occupational settings where workers may be exposed to manganese particles in the air (*e.g.*, steel welding). Manganese is poorly absorbed through the skin, thus, skin contact with food or liquid containing manganese is an unlikely exposure route of concern.

What health effects are associated with exposure to manganese?
Manganese is necessary for normal immune system function, digestion and bone strength. At elevated levels, manganese could produce neurological effects with some variation in sensitivity between individuals.

Infants and children younger than 12 months old are potentially most susceptible to excess manganese exposure because of their developing neurological and gastrointestinal systems. Infants appear to absorb more manganese than older age children and adults, but excrete less.

If infant formulas are prepared with water that also contains manganese at concentrations greater than our guideline levels (see below), the infant may get a higher amount of manganese than necessary. This represents a greater potential for exposure and adverse effects in the very young. Thus, it is very important to know what the levels in drinking water are when using it to make baby formula.

What are the levels of concern?
The United States Environmental Protection Agency (US EPA) and MassDEP currently list manganese as a secondary contaminant because of aesthetic concerns including unacceptable taste, staining of fixtures and dark, cloudy water at levels greater than 0.05 milligrams per liter (mg/L).

MassDEP recommends that infants up to 1 year of age should not be given water with manganese concentrations greater than 0.3 mg/L for more than a total of 10-days in a year, nor should the water be used to make formula for more than a total of 10-days in a year.

The recommended water concentration limit for lifetime exposures to manganese is 0.3 mg/L. People may also want to limit consumption of waters containing greater than 1 mg/L. See the MassDEP Advisory at: https://www.mass.gov/doc/massdep-office-of-research-and-standards-guideline-orsg-for-manganese/download Individual requirements for, as well as adverse effects from, manganese can be highly variable. The general population water concentration exposure limits of 0.3 and 1 mg/L have been set based upon typical daily dietary manganese intake levels not known to be associated with adverse health effects. This does not imply that intakes above these levels will necessarily cause health problems. As a precaution, the general population should consider limiting their consumption of drinking water with high levels of manganese to decrease their exposures and to decrease the possibility of adverse neurological effects.

Should I be concerned if I am pregnant or am breastfeeding my child if the manganese levels are above 0.3 mg/L?

No. There is no correlation between manganese levels in water and manganese levels in breast milk and hence, if you are healthy and breastfeeding you should continue to do so. If you are pregnant, have significant health issues and/or are concerned, you should talk to your health care provider and bring a copy of this fact sheet with you.

How does manganese get into my drinking water?

Water that is used as a source of drinking water invariably has some natural manganese in it. In addition, minerals such as manganese can settle out and build up as fine sediment in water pipes as water flows through the distribution system of water mains to your tap. When there is a disturbance in the system, such as a water main break, use of fire hydrants, or a flushing operation to clean the pipes, sediment may get stirred up and drawn into home plumbing. This water may temporarily have higher than normal levels of manganese and may appear visibly discolored.

Can I cook with the water?

You may reduce your potential exposure to manganese by limiting use of this water and substituting bottled water or water from another low manganese source for preparing dried foods (e.g., pasta, rice, hot oatmeal, etc.) that absorb considerable amounts of water and for soups made with added water.

Can I brush my teeth with the water?

Yes. You are unlikely to ingest enough manganese to be of concern.

Can I bathe, shower or wash my hands with the water? Can I bathe my infant in this water?

Yes. Manganese is poorly absorbed through the skin.

Can I use it to wash dishes?

Yes.

Can I use ice made with the water?

Occasional use of ice for use in drinks represents only a fraction of water consumed daily and will not greatly increase your manganese intake. If you use ice frequently in drinks and your water has high manganese

concentrations, you may choose to use bottled water or water from another low manganese source to make ice or you may just purchase ice.

I have already been using the water for some time for cooking, making ice and drinks. Should I be concerned? Is this something I should go to the doctor about?
See answers to concerns about these uses above. If you have still have concerns or have significant health issues, you should talk to your health care provider. When you meet with them, provide a copy of your manganese sampling results and this fact sheet.

I have used this water to make formula for my baby. Should I be concerned? Is this something I should go to the doctor about?
If you have concerns, you should speak to your health care provider. When you meet with them, provide a copy of your manganese sampling results and this fact sheet.

Can I give the water to my pets?
No information is available on the effect of elevated manganese in drinking water on pets.

How can I find out about manganese in my water?
If you get your water from a public water system you should contact them for this information. For a contact list for all public water systems in the Commonwealth you may visit: https://www.mass.gov/media/831461/

For private well owners, MassDEP recommends that a baseline sample be taken to determine the manganese concentration in their well water. Thereafter, the well owner should follow the: "Private Wells - Testing Parameters and Frequency Guidelines", which can be found on the MassDEP website http://www.mass.gov/eea/agencies/massdep/water/drinking/private-wells.html. First click on "A guide to water quality testing for private wells" and then scroll down to "Private Wells –Testing Parameters and Frequency Guidelines".

What options are available when manganese in drinking water is elevated?

- You may use:
  - ✓ Bottled water. Bottled water should only be used if it has been tested. The Massachusetts Department of Public Health requires companies licensed to sell or distribute bottled water or carbonated non-alcoholic beverages to test for manganese. See https://www.mass.gov/info-details/water-quality-standards-for-bottled-water-in-massachusetts For manganese, the recognized standard is 0.05 mg/L.
  - ✓ Water from another MassDEP approved public water system that does not have elevated levels of manganese.
  - ✓ A water pitcher filter or a home water filter unit that is capable of removing dissolved metals (using a water softener employing cation exchange technology or reverse osmosis; activated carbon units alone have poor manganese removal capabilities). For more information on these types of filter units please visit National Sanitation Foundation (NSF) at NSF Consumer Information (http://info.nsf.org/Certified/DWTU/) or call 1-800-673-8010 or visit MassDEP's website https://www.mass.gov/service-details/home-water-treatment-devices-point-of-entry-and-point-of-use-drinking-water-treatment for consumer information on home water treatment.
- Do not:
  - ⊘ boil the water as boiling will not destroy manganese. If boiled too long, the manganese will be concentrated in the water.
  - ⊘ freeze or try to filter the water through paper filters to remove manganese as neither will reduce its concentrations.

- ⊘ try to reduce manganese concentrations by letting the water stand overnight since it is not volatile but stays in the water

Please note: Only a Massachusetts state certified laboratory or another party who complies with Massachusetts General Law Chapter 111, Section 160D should test your water for manganese.
https://eeaonline.eea.state.ma.us/DEP/Labcert/Labcert.aspx
https://www.mass.gov/doc/required-disclosure-of-water-test-results-0/download

Where can I get more information on manganese?

For more information on manganese in public drinking water please see:

- US EPA Drinking Water Health Advisory for Manganese https://www.epa.gov/sites/production/files/2014-09/documents/support_cc1_magnese_dwreport_0.pdf
- CDC ATSDR information on manganese https://wwwn.cdc.gov/TSP/substances/ToxSubstance.aspx?toxid=23

You may also contact the MassDEP Drinking Water Program at program.director-dwp@mass.gov

For questions related to manganese exposure and health you may contact MassDEP's Office of Research and Standards (C.Mark.Smith@mass.gov). You may also contact your Local Board of Health and/or your healthcare provider.