



Town of Northbridge  
 Board of Health  
 7 Main Street  
 Whitinsville, MA 01588  
 Phone (508) 234-3272  
 Fax (508) 234-0821

**Application for WELL CONSTRUCTION Permit**

**Fee: \$100.00**

*(Check made payable to the Town of Northbridge)*

**PERMIT #:** \_\_\_\_\_

**APPLICATION IS HEREBY MADE FOR A PERMIT TO CONSTRUCT A WELL:**

**WELL LOCATION:**

STREET ADDRESS \_\_\_\_\_ LOT#: \_\_\_\_\_

REASON FOR WELL INSTALLATION \_\_\_\_\_

**PROPERTY OWNER**

OWNER NAME & ADDRESS: \_\_\_\_\_

\_\_\_\_\_ PHONE#: \_\_\_\_\_

**WELL DRILLER INFORMATION**

WELL DRILLER NAME & ADDRESS: \_\_\_\_\_

\_\_\_\_\_

PHONE#: \_\_\_\_\_ DEM REGISTRATION #: \_\_\_\_\_

***FOR NEW CONSTRUCTION:***

SEPTIC PLANS DATED (LAST REVISED): \_\_\_\_\_

SEPTIC PLAN APPROVAL DATE: \_\_\_\_\_

***FOR EXISTING PROPERTIES:***

ATTACH SKETCH LOCATING EXISTING SEPTIC SYSTEMS, WELLS, STRUCTURES, DRIVEWAYS & WETLANDS, ETC. WITHIN 200' OF PROPOSED WELL. NOTE IF WITHIN 1000 FEET OF A LANDFILL.

Are all structures, wetlands, driveways, septic systems, & wells noted or shown in accordance with Section 201-10(B) of the Northbridge Board of Health regulations: YES or NO

I have read and understand the requirements of the Northbridge Board of Health Regulations governing the installation of wells and agree to abide by them.

\_\_\_\_\_  
 Signature of Applicant

\_\_\_\_\_  
 Date

***This permit is not valid unless signed below by the Board of Health or its Agent.***

Approved by: \_\_\_\_\_  
*Board of Health Agent*

Date of Issue: \_\_\_\_\_ Expiration Date: (One Year from Date of Issue) \_\_\_\_\_

***Application for Well Permit – Addendum for Geo-thermal Well Applications***

1. Geo-thermal well application shall be for:

- Heat Only                       Heat & Potable Water

2. Geo-thermal well installation shall be:

- Open Loop                       Closed Loop  
(Closed loop heat well pumps shall not be used to produce water)

3. For Closed Loop Systems: Refrigerant to be used: \_\_\_\_\_

4. For Open Loop systems:

Water is being returned to the same aquifer via: \_\_\_\_\_

System bleed is being directed to: \_\_\_\_\_

5. Has owner/operator of GSHP registered with the MassDEP UIC Program?

Yes; DEP/UIC Registration Number: \_\_\_\_\_

No; Please explain \_\_\_\_\_  
\_\_\_\_\_

6. Is GSHP flow greater than 15,000 gallons per day?

- Yes                       No

If yes, has owner/operator obtained permit from Groundwater Discharge Program? \_\_\_\_\_  
\_\_\_\_\_

**7. Open Loop GSHP wells must meet Primary Drinking Water Standards – water quality results are required to be submitted to the Northbridge Board of Health office.**

**Setback Requirements for GSHP Wells:**

Open-loop, Closed-loop and Direct Exchange (DX) GSHP Wells shall be set back a minimum of 25-feet from potential sources of contamination including but not limited to, septic tanks/fields, lagoons, livestock pens, and oil or hazardous materials storage tanks and 10-feet from any property line. Closed loop and DX wells shall be sited at least 50-feet from any private potable water supply well and 10-feet from any surface water bodies. If a dual purpose well, then all Primary Potable water setbacks must be met.

# Town of Northbridge – Board of Health

## Water Quality Testing Requirements

1. Before use, or in the case of new construction, before the issuance of a building permit, the well water must be tested by a laboratory that is certified by the Department of Environmental Protection to test drinking water for the parameters analyzed. All analyses shall be performed in accordance with US EPA methods for drinking water analysis.
2. The laboratory performing the testing must collect such samples. Written proof of the individual's certification must be supplied to the Board of Health upon request. The original results of the water quality tests, chain of custody, and verification of the Laboratory's certification for the parameters analyzed must be submitted directly to the Board of Health within two weeks of sampling. In no event shall a water treatment device be installed prior to sampling.
3. If the initial test did not pass and a filter or other treatment system is necessary, a second representative sample for laboratory analysis must be collected in accordance with Section D(2) above after the treatment system is installed. The second sample shall be retested for all failed parameters, plus any other parameters deemed necessary by the Board. A laboratory report indicating all test results meet EPA drinking water standards must be submitted to the Board prior to issuing a certificate of occupancy.
4. The following parameters shall be tested:

### **Total Bacteria**

### **Coliform Bacteria**

### **Turbidity**

### **Inorganic Compounds:**

Antimony	Flouride
Arsenic	Lead
Barium	Mercury
Beryllium	Nitrate
Cadmium	Nitrite
Chromium	Selenium
Copper	Sodium
Cyanide	Thallium

### **Volatile Organic Compounds (VOC's) (Using EPA method 524.2)**

### **Radon**

### **Secondary Standards for Drinking Water:**

Aluminum	Manganese
Chloride	Odor
Color	PH
Copper	Silver
Flouride	Sulfate
Iron	Total Dissolved Solids
Hardness	Zinc
Ammonia	

*Note #1:* High concentrations of Nitrate, Chloride, and Ammonia could indicate that well is drawing in septic effluent. Further testing of VOC's may be requested by the Board of Health.

*Note #2:* High concentrations of Iron, Manganese, Total Dissolved Solids, Nitrogen (as ammonia or nitrate) & Hardness could indicate that well is drawing in landfill leachate. Further testing of regulated and unregulated VOC's may be requested by the Board of Health.

5. The Board of Health may require that any well drilled within 500' of a landfill, waste site, or 21E site, may be required to conduct water quality analysis of Synthetic Organic Chemicals (SOCs).
6. The US EPA Drinking Water Standards for Primary and Secondary Drinking Water Maximum Contaminant Levels (MCL's) shall be used as the guidelines for private water supplies.
7. All costs and laboratory arrangements for collections of water samples and testing are the responsibility of the applicant.



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## Water Quantity Report

**Location:** \_\_\_\_\_ Lot #: \_\_\_\_\_

Number of Bedrooms (BR): \_\_\_\_\_

### Volume of Water:

\_\_\_\_\_ (No. of BR +1) x 110 gallons x 2 = \_\_\_\_\_ Number of Gallons needed Daily

### Storage Capacity:

Diameter of Casing = 6" (1.5 gallons per foot): \_\_\_\_\_ 1.5 \_\_\_\_\_ x Depth of Well (below static water level): \_\_\_\_\_  
\_\_\_\_\_ = Storage Capacity: \_\_\_\_\_ Gallons

*(If casing other than 6" is used please contact BOH for gallons/foot determination)*

### REQUIRED VOLUME:

Volume of Water + Storage Capacity: \_\_\_\_\_ Gallons

### PUMP TEST DATA (Volume pumped must be equal to or greater than REQUIRED VOLUME as determined above):

Pre-Pumped Static Water Level: \_\_\_\_\_ Actual Depth of Well: \_\_\_\_\_

Pump Rate: \_\_\_\_\_ gpm How pumped: Air or Pump

Start Time: \_\_\_\_\_ End Time: \_\_\_\_\_ Total Time of Pump: \_\_\_\_\_ Hours

Volume Pumped: \_\_\_\_\_ Gallons

Total Gallons Pumped divided by 1440 Minutes (24 hours) = \_\_\_\_\_ gpm

***Well must be capable of producing an amount greater than .5 gpm***

Static Water Level after 24 Hour Recovery Period: \_\_\_\_\_

(Must be within 85 % of the pre-pumped static water level)

***I certify that the Water Quantity Report was completed in accordance with the regulations of the Northbridge Board of Health and that the information contained herein is factual.***

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

Registered Well Driller

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**Application for Water Supply Certificate**

The undersigned applicant being the Owner/Agent of property located at:

\_\_\_\_\_

requests the issuance of a **Water Supply Certificate** by the Northbridge Board of Health. The following items are attached for your review as per the requirements of Regulations Section 201-10(E):

- Well Construction Permit
- Water Well Completion Report (DEM Form)
- Water Quantity Report (Pump Test)
- Water Quality Report (Must include copy of certified laboratory's test results for all parameters, verification of lab certification for parameters analyzed, name of individual who performed the sampling, where on the system the sample was taken, and chain of custody of water sample)

\_\_\_\_\_ Date

\_\_\_\_\_ Signature of Applicant

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**For Board of Health Use Only**

Please be advised that the Northbridge Board of Health has reviewed your request for the issuance of a **Water Supply Certificate** and has made the following determination:

\_\_\_\_\_ **APPROVED**

\_\_\_\_\_ **DENIED (Reason specified below)**

\_\_\_\_\_ **CONDITIONAL APPROVAL (Reason specified below)**

**Reason for DENIED / CONDITIONAL APPROVAL:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

*The issuance of this **Water Supply Certificate** shall not be construed as a guarantee that the system will function satisfactorily. The Northbridge Board of Health assumes no liability as to water quality or quantity on the constructed well.*

\_\_\_\_\_ Date

\_\_\_\_\_ Signature: Board of Health Chairman/Agent