

## Soil Test Report

### Prepared For:

Mike Brown  
Masterson Loam  
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978-750-5626

### Sample Information:

Sample ID: Screened

Order Number: 29770

Lab Number: S170503-105

Area Sampled:

Received: 5/3/2017

Reported: 5/11/2017

## Results

<i>Analysis</i>	<i>Value Found</i>	<i>Optimum Range</i>	<i>Analysis</i>	<i>Value Found</i>	<i>Optimum Range</i>
Soil pH (1:1, H <sub>2</sub> O)	6.2		Cation Exch. Capacity, meq/100g	12.7	
Modified Morgan extractable, ppm			Exch. Acidity, meq/100g	1.0	
<i>Macronutrients</i>			<b>Base Saturation, %</b>		
Phosphorus (P)	10.1	4-14	Calcium Base Saturation	76	50-80
Potassium (K)	319	100-160	Magnesium Base Saturation	10	10-30
Calcium (Ca)	1937	1000-1500	Potassium Base Saturation	6	2.0-7.0
Magnesium (Mg)	155	50-120	<b>Scoop Density, g/cc</b>	0.95	
Sulfur (S)	89.0	>10	<b>Optional tests</b>		
<i>Micronutrients *</i>			Soil Organic Matter (LOI), %	6.6	
Boron (B)	0.7	0.1-0.5	Soluble Salts (1:2), dS/m	0.52	<0.6
Manganese (Mn)	41.0	1.1-6.3	Nitrate-N (NO <sub>3</sub> -N), ppm	249	
Zinc (Zn)	5.7	1.0-7.6			
Copper (Cu)	0.7	0.3-0.6			
Iron (Fe)	33.5	2.7-9.4			
Aluminum (Al)	65	<75			
Lead (Pb)	4.5	<22			

\* Micronutrient deficiencies rarely occur in New England soils; therefore, an Optimum Range has never been defined. Values provided represent the normal range found in soils and are for reference only.

### Soil Test Interpretation

Nutrient	Very Low	Low	Optimum	Above Optimum
<b>Phosphorus (P):</b>				
<b>Potassium (K):</b>				
<b>Calcium (Ca):</b>				
<b>Magnesium (Mg):</b>				

***Recommendations for New Lawn Construction***

Limestone (Target pH of 6.5)	Nitrogen, N	Phosphorus, P2O5	Potassium, K2O
25	2 - 4	0.5	0

**Comments:**

- For instructions on converting nutrient recommendations to fertilizer applications in home gardens, lawns and landscapes, see Reference "Step-by-Step Fertilizer Guide for Home Grounds and Gardening" (listed below).
- Incorporate limestone thoroughly into the top 6 inches of soil.
- Many fertilizer sources and rates may be combined to provide acceptable turfgrass fertility.
- Avoid overfertilization. In addition to threatening water quality, excessive nutrient applications can compromise plant health and contribute to insect and disease problems. For details, see Reference "Corrective Measures and Management of Over-Fertilized Soils" (listed below).
- For best results, split the N, P2O5, and K2O recommendations above into three to four applications over the course of the growing season at six to eight week intervals, beginning in mid- to late-April.

**References:**

Home Lawn and Garden Information	<a href="http://ag.umass.edu/resources/home-lawn-garden">http://ag.umass.edu/resources/home-lawn-garden</a>
Step-by-Step Fertilizer Guide for Home Grounds and Gardening	<a href="https://soiltest.umass.edu/fact-sheets/step-step-fertilizer-guide-home-grounds-and-gardening">https://soiltest.umass.edu/fact-sheets/step-step-fertilizer-guide-home-grounds-and-gardening</a>
Corrective Measures and Management of Over-Fertilized Soils	<a href="https://ag.umass.edu/soil-plant-tissue-testing-lab/fact-sheets/corrective-measures-management-of-over-fertilized-soils">https://ag.umass.edu/soil-plant-tissue-testing-lab/fact-sheets/corrective-measures-management-of-over-fertilized-soils</a>

**General References:**

Interpreting Your Soil Test Results	<a href="http://soiltest.umass.edu/fact-sheets/interpreting-your-soil-test-results">http://soiltest.umass.edu/fact-sheets/interpreting-your-soil-test-results</a>
For current information and order forms, please visit	<a href="http://soiltest.umass.edu/">http://soiltest.umass.edu/</a>
UMass Extension Nutrient Management	<a href="http://ag.umass.edu/agriculture-resources/nutrient-management">http://ag.umass.edu/agriculture-resources/nutrient-management</a>

**Particle Size Analysis - Comprehensive**

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**Sample Information:**

Sample ID: Screened

Order Number: 29652

Lab Number: X170504-102

Received: 5/4/2017

Reported: 5/9/2017

<u>USDA Size Fraction</u>			<u>Percent of Whole Sample Passing</u>		
<b><u>Main Fractions</u></b>	<b><u>Size (mm)</u></b>	<b><u>Percent</u></b>	<b><u>Size (mm)</u></b>	<b><u>Sieve #</u></b>	<b><u>Whole Sample % of Sample Passing</u></b>
Sand	0.05-2.0	55.6	2.00	#10	76.5
Silt	0.002-0.05	33.1	1.00	#18	70.4
Clay	<0.002	11.3	0.50	#35	63.5
			0.25	#60	55.4
			0.10	#140	42.6
			0.053	#270	34.0
<b><u>Sand Fractions</u></b>	<b><u>Size (mm)</u></b>	<b><u>Percent</u></b>	0.02	20 um	19.2
Very Coarse	1.0-2.0	7.9	0.005	5 um	10.5
Coarse	0.5-1.0	9.0	0.002	2 um	8.7
Medium	0.25-0.5	10.7			
Fine	0.10-0.25	16.7			
Very Fine	0.05-0.10	11.3			
<b><u>Silt Fractions</u></b>	<b><u>Size (mm)</u></b>	<b><u>Percent</u></b>			
Coarse	0.02-0.05	19.4			
Medium	0.005-0.02	11.4			
Fine	0.002-0.005	2.4			

**USDA Textural Class: fine sandy loam**

**Gravel Content: (%) 23.5**