Appendix 8.G

Soil fertility analysis
SOIL TEST REPORT FOR:
CAROLINE LOOP
209 MRL

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SOIL NUTRIENT LEVELS

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Low</th>
<th>Optimum</th>
<th>High</th>
<th>Excessive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phosphate (P₂O₅)</td>
<td>225 lb/A</td>
<td>225 lb/A</td>
<td>225 lb/A</td>
<td></td>
</tr>
<tr>
<td>Potash (K₂O)</td>
<td>711 lb/A</td>
<td>711 lb/A</td>
<td>711 lb/A</td>
<td></td>
</tr>
<tr>
<td>Magnesium (MgO)</td>
<td>1784 lb/A</td>
<td>1784 lb/A</td>
<td>1784 lb/A</td>
<td></td>
</tr>
</tbody>
</table>

RECOMMENDATIONS FOR: RENOVATING WITH LEGUMES
YIELD GOAL: 1.0 TONS (PER ACRE)

LIMESTONE: NONE lb/A
Calcium Carbonate Equivalent

PLANT NUTRIENT NEEDS:
NITROGEN (N): 0 lb/A
PHOSPHATE (P₂O₅): 0 lb/A
POTASH (K₂O): 0 lb/A
MAGNESIUM (MgO): 0 lb/A

MESSAGES:
* FOR ALFALFA AND BARLEY, THE PH GOAL IS 7.0. FOR ALL OTHER CROPS, THE LIMESTONE RECOMMENDATION, IF ANY, IS TO BRING THE PH TO 6.5. TO ESTIMATE THE LIME REQUIREMENT FOR PH 7.0 FOR THESE CROPS, MULTIPLY THE EXCHANGEABLE ACIDITY BY 1000.
* IF MANURE WILL BE APPLIED, SEE ST-10 USE OF MANURE.
* RE-TEST NEXT YEAR.
* NOTE: THE HIGH CALCIUM LEVEL IN THIS SAMPLE INDICATES THE PROBABLE PRESENCE OF SOLUBLE CALCIUM. THEREFORE THE CEC AND PERCENT-SATURATIONS WERE CALCULATED USING A MAXIMUM EXCHANGEABLE CALCIUM LEVEL OF 15 MEQ/100G.
* IF REGROWTH IS EXPECTED, APPLY 40 LBS OF NITROGEN/ACRE AFTER GRAZING.

LABORATORY RESULTS:

<table>
<thead>
<tr>
<th>Soil pH</th>
<th>P</th>
<th>lb/A</th>
<th>Acidity</th>
<th>K</th>
<th>Mg</th>
<th>Ca</th>
<th>CEC</th>
<th>K</th>
<th>Mg</th>
<th>Ca</th>
<th>% Saturation</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.5</td>
<td>98</td>
<td>0.0</td>
<td>0.75</td>
<td>4.6</td>
<td>36.3</td>
<td>20.4</td>
<td>3.7</td>
<td>22.7</td>
<td>73.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OTHER TESTS:
AGRICULTURAL ANALYTICAL SERVICES LABORATORY  
COLLEGE OF AGRICULTURAL SCIENCES  
THE PENNSYLVANIA STATE UNIVERSITY  
UNIVERSITY PARK, PA 16802  
(814) 863-0841  

SOIL TEST REPORT FOR:  
CAROLINE LOOP  
209 MRL  

COPY SENT TO:  
CAROLINE LOOP  
209 MRL

<table>
<thead>
<tr>
<th>SOIL NUTRIENT LEVELS</th>
<th>LOW</th>
<th>OPTIMUM</th>
<th>HIGH</th>
<th>EXCESSIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil pH</td>
<td>9.9</td>
<td>XXXXXXXXX</td>
<td>XXXXXXXXX</td>
<td>XXXXXXXXX</td>
</tr>
<tr>
<td>Phosphate (P$_2$O$_5$)</td>
<td>106</td>
<td>1b/A</td>
<td>XXXXXXXXX</td>
<td>XXXXXXXXX</td>
</tr>
<tr>
<td>Potash (K$_2$O)</td>
<td>174</td>
<td>1b/A</td>
<td>XXXXXXXXX</td>
<td>XXXXXXXXX</td>
</tr>
<tr>
<td>Magnesium (MgO)</td>
<td>1380</td>
<td>1b/A</td>
<td>XXXXXXXXX</td>
<td>XXXXXXXXX</td>
</tr>
</tbody>
</table>

RECOMMENDATIONS FOR:  RENOVATING WITH LEGUMES  
(For other crops see ST 2 column: 3)

YIELD GOAL:  
1.0 TONS (PER ACRE)

LIMESTONE:  
NONE 1b/A

Calcium Carbonate Equivalent

PLANT NUTRIENT NEEDS:  
NITROGEN (N)  
PHOSPHATE (P$_2$O$_5$)  
POTASH (K$_2$O)  
MAGNESIUM (MgO)

| 0 lb/A | 70 lb/A | 0 lb/A | 0 lb/A |

MESSAGES:

* EXCESSIVE PHOSPHATE AND/OR POTASH LEVEL.

* FOR ALFALFA AND BARLEY, THE PH GOAL IS 7.0. FOR ALL OTHER CROPS, THE LIMESTONE RECOMMENDATION, IF ANY, IS TO BRING THE PH TO 6.5. TO ESTIMATE THE LIME REQUIREMENT FOR PH 7.0 FOR THESE CROPS, MULTIPLY THE EXCHANGEABLE ACIDITY BY 1000.

* IF MANURE WILL BE APPLIED, SEE ST 10 "USE OF MANURE".

* NOTE: THE HIGH CALCIUM LEVEL IN THIS SAMPLE INDICATES THE PROBABLE PRESENCE OF SOLUBLE CALCIUM. THEREFORE THE CEC AND PERCENT-SATURATIONS WERE CALCULATED USING A MAXIMUM EXCHANGEABLE CALCIUM LEVEL OF 15 MEQ/100G.

* IF REGROWTH IS EXPECTED, APPLY 40 LBS OF NITROGEN/ACRE AFTER GRAZING

LABORATORY RESULTS:

<table>
<thead>
<tr>
<th>9.9</th>
<th>46</th>
<th>0.0</th>
<th>1.86</th>
<th>3.6</th>
<th>53.8</th>
<th>20.5</th>
<th>9.0</th>
<th>17.5</th>
<th>73.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil pH</td>
<td>P</td>
<td>lb/A</td>
<td>ACIDITY</td>
<td>K</td>
<td>Mg</td>
<td>Ca</td>
<td>CEC</td>
<td>K</td>
<td>Mg</td>
</tr>
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<td>0.0</td>
<td>1.86</td>
<td>3.6</td>
<td>53.8</td>
<td>20.5</td>
<td>9.0</td>
<td>17.5</td>
<td>73.1</td>
</tr>
</tbody>
</table>

OTHER TESTS:
SOIL TEST REPORT FOR:
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COPY SENT TO:
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SOIL NUTRIENT LEVELS

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Low</th>
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<th>High</th>
<th>Excessive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil pH</td>
<td>9.9</td>
<td>XXXXXXX</td>
<td>XXXXX</td>
<td>XXXXX</td>
</tr>
<tr>
<td>Phosphate (P₂O₅)</td>
<td>64</td>
<td>1 lb/A</td>
<td>XXXXX</td>
<td>XXXXX</td>
</tr>
<tr>
<td>Potash (K₂O)</td>
<td>711</td>
<td>1 lb/A</td>
<td>XXXXX</td>
<td>XXXXX</td>
</tr>
<tr>
<td>Magnesium (MgO)</td>
<td>1380</td>
<td>1 lb/A</td>
<td>XXXXX</td>
<td>XXXXX</td>
</tr>
</tbody>
</table>

RECOMMENDATIONS FOR
RENOVATING WITH LEGUMES
(For other crops see ST 2 column: 3)
YIELD GOAL: 1.0 TONS (PER ACRE)

LIMESTONE: NONE 1 lb/A Calcium Carbonate Equivalent

PLANT NUTRIENT NEEDS:
- NITROGEN (N) 0 lb/A
- PHOSPHATE (P₂O₅) 170 lb/A
- POTASH (K₂O) 0 lb/A
- MAGNESIUM (MgO) 0 lb/A

MESSAGES:
* FOR ALFALFA AND BARLEY, THE PH GOAL IS 7.0. FOR ALL OTHER CROPS, THE LIMESTONE RECOMMENDATION, IF ANY, IS TO BRING THE PH TO 6.5. TO ESTIMATE THE LIME REQUIREMENT FOR PH 7.0 FOR THESE CROPS, MULTIPLY THE EXCHANGEABLE ACIDITY BY 1000.
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LABORATORY RESULTS:

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<tr>
<th>Soil pH</th>
<th>P lb/A</th>
<th>Acidity</th>
<th>K</th>
<th>Mg</th>
<th>Ca</th>
<th>CEC</th>
<th>K</th>
<th>Mg</th>
<th>Ca</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.9</td>
<td>28</td>
<td>0.0</td>
<td>0.76</td>
<td>3.6</td>
<td>57.5</td>
<td>19.4</td>
<td>3.9</td>
<td>18.5</td>
<td>77.3</td>
</tr>
</tbody>
</table>

EXCHANGEABLE CATIONS (meq/100 g) % SATURATION

OTHER TESTS:
SOIL TEST REPORT FOR:
CAROLINE LOOP
209 MRL

00000

RECOMMENDATIONS FOR: RENOVATING WITH LEGUMES (For other crops see ST 2 column: 3)
YIELD GOAL 1.0 TONS (PER ACRE)

LIMESTONE: NONE 1 lb/A
Calcium Carbonate Equivalent

PLANT NUTRIENT NEEDS:
NITROGEN (N) PHOSPHATE (P₂O₅) POTASH (K₂O) MAGNESIUM (MgO)
0 lb/A  170 lb/A  0 lb/A  0 lb/A

MESSAGES:
* EXCESSIVE PHOSPHATE AND/OR POTASH LEVEL.
* FOR ALFALFA AND BARLEY, THE PH GOAL IS 7.0. FOR ALL OTHER CROPS, THE LIMESTONE RECOMMENDATION, IF ANY, IS TO BRING THE PH TO 6.5. TO ESTIMATE THE LIME REQUIREMENT FOR PH 7.0 FOR THESE CROPS, MULTIPLY THE EXCHANGEABLE ACIDITY BY 1000.
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LABORATORY RESULTS:

<table>
<thead>
<tr>
<th>SOIL pH</th>
<th>0.0</th>
<th>2.48</th>
<th>5.1</th>
<th>75.0</th>
<th>22.6</th>
<th>10.9</th>
<th>22.5</th>
<th>66.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ACIDITY K Mg Ca
EXCHANGEABLE CATIONS (meq/100 g)
% SATURATION

OTHER TESTS: