Soil pH: 6.5

**Major nutrients**

- Nitrate-N (ppm): 5
- Phosphorus (lb/A): 13.3
- Potassium (% Sat): 2.1
- Calcium (% Sat): 75.9
- Magnesium (% Sat): 22.1
- Sulfur (ppm): 6

**Micronutrients**

- Boron (ppm): 0.5
- Copper (ppm): 0.35
- Iron (ppm): 3.3
- Manganese (ppm): 5.6
- Zinc (ppm): 1.0

Soil pH is at or above the optimum level for this crop. Magnesium level is sufficient to meet crop requirement.

To meet major nutrient requirements, apply (on each 1000 sq. ft.):

- Nitrogen (2.5 lb) - from 20 lb bloodmeal or feathermeal or 100 lb alfalfa meal.
- Phosphorus (1.1 lb) - from 7 lb bonemeal or bonechar.
- Potassium (4.7 lb) - from 9 lb potassium sulfate or 100 lb alfalfa meal (see Nitrogen).

**Note:** not all sources of potassium sulfate approved for organic certification.

If you are using wood ash, discontinue until lime is needed again.

Sub-Optimum Nitrogen: Apply full rate of any recommended (1/2 rate if mid-season).

15 bushel cow or horse manure or 7-8 bushel poultry, sheep, goat, or rabbit manure/1000 sq. ft. can substitute for 1/4-1/3 recommended nutrients (apply in fall).

Apply fertilizer in spring. Apply 1/2 Nitrogen at planting time, 1/2 3-4 weeks later.

**Additional Results or Comments:**

Lead scan: NORMAL BACKGROUND LEVEL - no health risk.
SOIL QUALITY ANALYSIS

REPORT FOR:
EXAMPLE SOIL HEALTH REPORT

Physical & Biological Factors

BIOLOGICAL & PHYSICAL PARAMETERS

(see Numerical Results section for more information)

<table>
<thead>
<tr>
<th>Biological factors</th>
<th>Level Found</th>
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<th>OPTIMUM</th>
<th>HIGH</th>
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<tr>
<td>Organic Matter(%)</td>
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<td>++++</td>
<td>+++++++</td>
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<tr>
<td>POXC (active C)</td>
<td>975</td>
<td>+++++++</td>
<td>++++</td>
<td>+++++++</td>
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<tr>
<td>Respiration(CO2)</td>
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<td>++++</td>
<td>++++</td>
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<tr>
<td>Potential N Min.</td>
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<td>++++</td>
<td>+++++++</td>
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<tr>
<td>WS Aggregates (%)</td>
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<td>+++++++</td>
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<tr>
<td>Available Water(%)</td>
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<td>++++</td>
<td>+++++++</td>
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<tr>
<td>Pot. Root Depth(in)</td>
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<td>+++++++</td>
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</table>

Soil Texture Class: Sandy loam

TOC: 3.0 % Total N: .30 % C/N ratio: 9.9

RECOMMENDED ADDITIONS & MANAGEMENT PRACTICES

To Improve Soil Biological Health:
Include green manure crops in rotation to improve OM & biological activity.
Increase use of compost or cover crops to improve OM & biological activity.

To Improve Soil Workability & Water Handling
Include sod or grain cover crops to build/maintain structure, water storage, & drainage.
Manure will also improve soil structure, water storage, & drainage.
Avoid traffic on wet soil to minimize compaction.
Break up traffic pan by mechanical ripping and/or deep rooted crops.
Improve infiltration with surface mulch, zone tillage, or deep-rooted crops.

Suggested Reading & References:
Building Soils for Better Crops - Sustainable Soil Management, USDA-SARE
(sare.org/Learning-Center/Books)

USDA Soil Health website (nrcs.usda.gov/wps/portal/nrcs/main/soils/health/)

NUMERICAL RESULTS

(Test methodology: Biomass by 25C incubation/Solvita, Organic matter by LOI, PMN from 40C incubation,
POXC by Eijkelkamp, Available H2O from % SME, Hardness by penetrometer, Rooting depth to 300 psi)

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<th>Level Found</th>
<th>5.8</th>
<th>975</th>
<th>80</th>
<th>60</th>
<th>27</th>
<th>11.1</th>
<th>100</th>
<th>250</th>
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<td>50-100</td>
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<td>&lt; 150</td>
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Additional Results or Comments: