



Soil Quality Enhancement Activity – SQL15 – Utilize the soil health nutrient tool to assess soil nutrient pools

State Criteria (same as NATIONAL CRITERIA)

Additional Criteria for Nebraska:

Soil samples for nutrient analysis should always be taken from fields with similar soils and managements and should never represent an area greater than 40 acres. Areas of the field for which any of the following are different should be sampled separately.

- Soil texture, slope or landscape position that affect yield potential or nutrient availability (i.e. soil organic matter, soil texture, bottomland versus upland),
- Previous crop (i.e. soybeans or other legume that provide an nitrogen credit),
- Manure history (i.e. manure applied to only a portion of a field),
- Fertilizer history (i.e. higher rate of nitrogen applied in one area versus another in previous year),
- Dryland vs. irrigated,
- Irrigation water management practices that may have leached nitrate differently (i.e. upper, middle and lower end of a gravity irrigated field), and
- Other significant differences in crop yield, site conditions, or management history.

Considerations:

- There are two major ways to use the information from the soil health nutrient tool (SHNT).
 - First, you can use the test just as a soil health indicator, meaning that you are still using more traditional soil tests to evaluate fertilizer needs. This means that a sample can be pulled any time of the year, but you will want to be consistent from year to year for making comparisons and tracking changes in soil health.
 - Second, you can use the SHNT test results to help guide a fertility program. If this is the goal, then samples should be taken either in the fall or spring prior to fertilizer application. The test can also be pulled prior to side dress applications or fertigation to adjust N rates based on the amount of potentially mineralizable N in your soil.
 - You can also use the SHNT for both soil health tracking and fertility planning, but this means that you must pull samples at a time that is going to coincide with your fertilizer application.
- For pastures take samples prior to first grazing period.
- Due to the experimental nature of the SHNT and the cost of the test, consider applying this enhancement on only on a portion of your farm.
 - One potential application would be to set up test strips to compare nutrient application rates based on SHNT recommendations to standard nutrient recommendations.
 - The SHNT could also be used to monitor changes in soil health associated with the implementation of other soil health related enhancements such as:
 - ENR12 – Use of legume cover crops as a nitrogen source
 - PLT20 – High residue cover crops for weed suppression and soil health
 - SOE05 – Intensive no-till
 - SQL04 – Use of cover crop mixes
 - SQL12 – Intensive cover cropping in annual crops
 - SQL18 – Soil health crop rotation
- This enhancement would also work well to compare different management systems on similar soils such as no-till versus mulch till or continuous grazing versus rotational grazing.



Documentation Requirements (SEE NATIONAL ENHANCEMENT ACTIVITY JOBSHEET)

Additional Documentation Requirements:

Complete the Table below:

To be completed by NRCS and Producer during planning				To be completed by Producer during certification		
1	2	3	4	4		
Tract & Field	Acres Sampled	Crop Rotation	Management System	Sampling Date	Number of Samples	Acres Applied
<i>Ex. T1001 Field 1</i>	80	<i>C-B-W</i>	<i>Cont. No-till</i>	<i>April 1, 2015</i>	2	80
<i>Ex. T1001 Pasture 1</i>	40	<i>Cool Season Pasture</i>	<i>Cont. Grazing 4/1 – 6/30</i>	<i>April 1, 2015</i>	1	40

Ex. = example. NRCS completes column 1, 2 & 3 (Tract, Field and Acres Planned, etc). Operator completes remaining columns.

In addition:

1. Provide a map showing fields where samples were collected.
2. Provide copies of the Soil Health Tool Reports

I certify that the enhancement criteria have been met and the required documentation provided to NRCS.

Certified by: _____ **Date:** _____



Soil Testing Labs That Offer the Soil Health Nutrient Tool as of February 2015

Here is a list of soil testing labs that have been confirmed to be capable of conducting the Soil Health Nutrient Tool (Haney Test). There are a number of labs across the country that offer the Slovita test only (respiration measurement), while a good test it does not do the complete nutrient assessment that the Haney Test does. Make sure that producers selecting the SQL-15 get the correct test.

Ward Labs: Nebraska

4007 Cherry Ave.

P. O. Box 788,

Kearney, NE 68848-0788

Phone: 800-887-7645 or 308-234-2418

Fax: 308-234-1940

<https://producers.wardlab.com/default.aspx?ReturnUrl=%2f>

Brookside Labs: Ohio

200 White Mountain Drive New Bremen, OH 45869

Phone: 419-977-2766

Fax: 419-977-2767

<http://www.blinc.com/ag.htm>

Woods End Lab: Maine

290 Belgrade Road P.O. Box 297 Mt Vernon, ME 04352 USA

Phone: 800-451-0337 or 207-293-2457

<https://woodsend.org/>

A&L Labs, Memphis, Tennessee

2790 Whitten Road Memphis, TN 38133

Phone: 800-264-4522 or 901-213-2400

Fax: 901-213-2440

<http://www.allabs.com/>

Midwest labs: Nebraska

13611 B St. Omaha, NE 68144

Phone: 402-334-7770

<https://www.midwestlabs.com/>