FEE SCHEDULE

Laboratory Services

4007 Cherry Avenue
PO Box 788
Kearney, Nebraska 68848-0788

800-887-7645
308-234-2418
308-234-1940 Fax

www.wardlab.com
MISSION STATEMENT

“Guiding Producers Today to Feed the World Tomorrow”

Our mission statement is our statement of purpose and guides the actions of our organization. It spells out our overall goals and guides our decision making. Here are the principles of how we live that every day.

1. Accurate and Timely Sample Preparation
2. Constantly striving toward our goals for the future with economic efficiency and environmental responsibility
3. Preserving the integrity of each sample and reflecting that care in every result
4. Owning our errors and taking steps to eliminate them
5. That every action be for the direct benefit of the customer, helping them to develop the best use of soil and water resources while maintaining environmental quality

OUR PROFESSIONAL PLEDGE

The professionals at Ward Laboratories, Inc. have one goal every time we enter the door of our modern laboratory...Provide the most accurate and reliable agricultural testing available in a timely fashion.

To that end the professionals at Ward Laboratories, Inc.:

• Are thoroughly trained and educated to provide reliable analysis.
• Utilize sophisticated equipment and latest techniques.
• Are active in dozens of professional organizations to ensure constant contact with the industry.
• Are supported by cutting edge university and private research.
• Have the expertise that only experience can offer.

The professionals at Ward Laboratories realize that every test completed provides critical information essential to important production decisions impacting your bottom line. We will go the extra mile and spend a little more time to insure you have the best information possible.

We are proud of our work, proud of our reputation for excellence and dedicated to insuring the Ward Laboratories legacy continues for years to come. Ultimately, we are most proud of the results we provide each and every time.

The Professionals of Ward Laboratories, Inc.

[Signature]
Sample Supplies
Before it is time to start sampling contact Ward Laboratories for all your supply needs. We offer soil, feed, water, plant, fertilizer, and manure sampling supplies at no cost to you. We also sell soil probes and hay sampling equipment. Please contact the laboratory for pricing.

Submittal Form
Please send submittal forms with your samples. This allows us to be more efficient and enables us to identify your samples correctly. Submittal forms can be found on our website at www.wardlab.com by clicking on the "submit a sample" link and then your associated sample type. Your customer information may be filled out on these PDF forms before you print them.

Bulk entry is another way to send us your sample submittal information. Bulk entry is a submittal that you generate in an Excel spreadsheet with all pertinent information such as your customer number, grower, field, sample ID, depth and your choice of analysis. If you are interested in this option please contact laboratory for further details.

Turn-Around Time
Your samples are our priority at Ward Laboratories. We typically e-mail, fax or mail results to you within 1-2 working days after samples arrive at the lab. There are certain instances when this may not be possible, however, we strive to give you accurate results in the shortest possible time.

Invoicing and Statements
Invoices are sent with the test reports. Monthly statements will show unpaid invoices and a current balance. Terms are net 30 days. Applicable finance charges will be applied on past due accounts.

Online Result Viewing and Invoice Payment
Create an online account to pay invoices or look at past analytical results via wardlab.com. Customers may setup online access using their account details and email address. Please contact the laboratory with any questions.

Consulting Services
The professionals at Ward Laboratories, Inc. are available for consultation, whether the questions are in person, via the telephone, or by e-mail. Crop evaluation is available for in-field consultation of problems during the growing season. Our professionals are also available for assistance at seminars and producer meetings. Please contact the laboratory for assistance.

Ward Guide
The Ward Guide is a must if you are looking for a handy reference guide. It is produced from a variety of referenced sources and our forty plus years of experience in providing quality agricultural testing. The Ward Guide is designed to assist you in finding answers to daily production questions. The Ward Guide is available on our website at www.wardlab.com, under the Ward info tab.

www.wardlab.com
Please refer to our website for developments and updates.
# Popular Soil Analysis Packages

<table>
<thead>
<tr>
<th>Package</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-1</td>
<td>NPK</td>
<td>$14.00</td>
</tr>
<tr>
<td></td>
<td>pH, Buffer pH</td>
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</tr>
<tr>
<td></td>
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<td>Potassium</td>
</tr>
<tr>
<td></td>
<td>Nitrate-Nitrogen</td>
<td>Calcium</td>
</tr>
<tr>
<td></td>
<td>Phosphorus</td>
<td>Magnesium</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sodium</td>
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<tr>
<td>S-1A</td>
<td>NPK Organic Matter, CEC &amp; S</td>
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<td>Soluble Salts</td>
<td>Potassium</td>
</tr>
<tr>
<td></td>
<td>Organic Matter</td>
<td>Calcium</td>
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<tr>
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<td>Nitrate-Nitrogen</td>
<td>Magnesium</td>
</tr>
<tr>
<td></td>
<td>Phosphorus</td>
<td>Sodium</td>
</tr>
<tr>
<td></td>
<td>Sulfur</td>
<td></td>
</tr>
<tr>
<td>S-4</td>
<td>Routine</td>
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<td>pH, Buffer pH</td>
<td>Sum of Cations (CEC)</td>
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<tr>
<td></td>
<td>Soluble Salts</td>
<td>Potassium</td>
</tr>
<tr>
<td></td>
<td>Organic Matter</td>
<td>Calcium</td>
</tr>
<tr>
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<td>Nitrate-Nitrogen</td>
<td>Magnesium</td>
</tr>
<tr>
<td></td>
<td>Phosphorus</td>
<td>Sodium</td>
</tr>
<tr>
<td></td>
<td>Zinc</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Iron</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manganese</td>
<td></td>
</tr>
<tr>
<td>S-4 Cl</td>
<td>Routine plus Chloride</td>
<td>$22.25</td>
</tr>
<tr>
<td>S-5</td>
<td>Complete</td>
<td>$22.25</td>
</tr>
<tr>
<td></td>
<td>pH, Buffer pH</td>
<td>Sum of Cations (CEC)</td>
</tr>
<tr>
<td></td>
<td>Soluble Salts</td>
<td>Potassium</td>
</tr>
<tr>
<td></td>
<td>Organic Matter</td>
<td>Calcium</td>
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<td></td>
<td>Copper</td>
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</tr>
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<td>S-5 Cl</td>
<td>Complete Plus Chloride</td>
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<tr>
<td>S-7</td>
<td>Alfalfa/Clover Special</td>
<td>$18.00</td>
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<td>pH, Buffer pH</td>
<td>Sum of Cations (CEC)</td>
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<td></td>
<td>Soluble Salts</td>
<td>Potassium</td>
</tr>
<tr>
<td></td>
<td>Organic Matter</td>
<td>Calcium</td>
</tr>
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</tr>
<tr>
<td></td>
<td>Phosphorus</td>
<td>Sodium</td>
</tr>
<tr>
<td></td>
<td>Sulfur</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Boron</td>
<td></td>
</tr>
<tr>
<td>S-8</td>
<td>Corn Belt Special</td>
<td>$18.00</td>
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<td>Soluble Salts</td>
<td>Potassium</td>
</tr>
<tr>
<td></td>
<td>Organic Matter</td>
<td>Calcium</td>
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<td>Nitrate-Nitrogen</td>
<td>Magnesium</td>
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<tr>
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<td>Sodium</td>
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<td></td>
<td>Sulfur</td>
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</tr>
<tr>
<td></td>
<td>Zinc</td>
<td></td>
</tr>
<tr>
<td>S-9</td>
<td>Subsoil Nitrate</td>
<td>$4.75</td>
</tr>
<tr>
<td>S-9A</td>
<td>Subsoil Nitrate plus Sulfur</td>
<td>$5.50</td>
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</tbody>
</table>

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**Packaging Guidelines**

**Manure/Slurry:** If you are submitting manure samples please place them in a plastic container such as a Ziploc bag. Slurry samples need to be placed in a plastic bottle and then placed inside of a Ziploc bag. Sample containers are available upon request.
INDIVIDUAL SOIL ANALYSIS

<table>
<thead>
<tr>
<th>Test</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum (KCL)</td>
<td>$7.50</td>
</tr>
<tr>
<td>Boron</td>
<td>$5.75</td>
</tr>
<tr>
<td>Cations (K, Ca, Mg, Na)</td>
<td>$5.75</td>
</tr>
<tr>
<td>Chloride</td>
<td>$5.50</td>
</tr>
<tr>
<td>DTPA (Zn, Fe, Mn, Cu)</td>
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<tr>
<td>KCl Ammonium</td>
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<tr>
<td>KCl Nitrate</td>
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<tr>
<td>Organic Carbon</td>
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<tr>
<td>Organic Matter (LOI)</td>
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<tr>
<td>pH (pH, BpH, EC)</td>
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<tr>
<td>P Bray P1</td>
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</tr>
<tr>
<td>P Bray P2</td>
<td>$5.75</td>
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<tr>
<td>P Mehlich P3</td>
<td>$5.75</td>
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<tr>
<td>P Olsen P</td>
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<tr>
<td>Pre Side-Dress Nitrate</td>
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</tr>
<tr>
<td>Salt pH</td>
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<tr>
<td>Soil Moisture</td>
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<tr>
<td>Texture by Feel</td>
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<tr>
<td>Texture by Hydrometer</td>
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<tr>
<td>Total Alkalinity</td>
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<tr>
<td>Total Carbon</td>
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<tr>
<td>Total Nitrogen</td>
<td>$7.75</td>
</tr>
<tr>
<td>Total Phosphorus</td>
<td>$7.75</td>
</tr>
<tr>
<td>Total Sulfur</td>
<td>$7.75</td>
</tr>
<tr>
<td>Total Zinc</td>
<td>$7.75</td>
</tr>
<tr>
<td>Water Soluble K</td>
<td>$5.50</td>
</tr>
<tr>
<td>SAR</td>
<td>$5.50</td>
</tr>
<tr>
<td>Calcium %</td>
<td>$4.75</td>
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<tr>
<td>Magnesium</td>
<td>$5.75</td>
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<tr>
<td>Sodium</td>
<td>$5.50</td>
</tr>
<tr>
<td>Sulfur</td>
<td>$5.50</td>
</tr>
<tr>
<td>Bicarbonate</td>
<td>$5.50</td>
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<tr>
<td>pH (pH, BpH, EC)</td>
<td>$5.50</td>
</tr>
<tr>
<td>Total Alkalinity</td>
<td>$11.00</td>
</tr>
<tr>
<td>Total Carbon</td>
<td>$7.75</td>
</tr>
<tr>
<td>Total Nitrogen</td>
<td>$7.75</td>
</tr>
<tr>
<td>Total Phosphorus</td>
<td>$7.75</td>
</tr>
<tr>
<td>Total Sulfur</td>
<td>$7.75</td>
</tr>
<tr>
<td>Total Carbon</td>
<td>$7.75</td>
</tr>
<tr>
<td>Total Nitrogen</td>
<td>$7.75</td>
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<tr>
<td>Water Soluble K</td>
<td>$5.50</td>
</tr>
</tbody>
</table>

SOIL HEALTH

We are currently developing and analyzing other tests to add to our Soil Health program so please call the lab or check our website for further developments and pricing.

PLFA ................................................................................................................. $59.50

Soil biological testing at Ward Laboratories is conducted by analyzing phospholipid fatty acids, or PLFA. PLFA gives a representation of living soil microbial biomass and allows us to identify the presence or absence of various functional groups of interest through known PLFA biomarkers. PLFA is a snapshot of soil community structure and abundance at the time of sampling. As environmental conditions such as temperature and moisture change so does the microbial community. This ability of the soil microbial community to change provides producers with a tool to compare agricultural management techniques with respect to overall better microbial community health.

Haney Test ................................................................................................................. $49.50

The Haney Test is a dual extraction procedure that allows the producer to assess overall soil health. The test is used to track changes in soil health based on management decisions. This test examines total organic carbon and total organic nitrogen to determine a C:N ratio used to make general cover crop recommendations. This test also includes the Solvita CO\textsubscript{2} Burst Test to look at microbial activity and potentially mineralizable nitrogen. The weak acid (H3A) extraction represents some available plant nutrients.

Solvita CO\textsubscript{2} Burst Test ................................................................................ $25.00

The Solvita CO\textsubscript{2} Burst Test is a new tool which easily and accurately measures soil biological CO\textsubscript{2} respiration. (Solvita.com, 2012)
WATER SAMPLING PROCEDURES

1. Use a clean plastic container for submitting your sample. Water can be sent in any clean plastic container. Bottles can be obtained from the laboratory.

2. Rinse the container several times with water that is being sampled. Send a full container of at least one half pint water to be tested.

3. Wells should be pumped several hours before sampling. Test wells should be sampled after pipe and screen are in place. Pump well for at least 10 hours before sampling.

4. Samples of lakes, streams, and ponds should be taken from below surface.

5. If it is not possible to send the sample immediately after collection, refrigerate until it is sent.

POPULAR FEED PACKAGES

WET CHEMISTRY

F-1 ................................................................................................... $11.00
Moisture
Dry Matter
Crude Protein

F-2 ................................................................................................... $17.00
Moisture
Dry Matter
Crude Protein

F-3 ................................................................................................... $16.00
Moisture
Dry Matter
Crude Protein

F-4 ................................................................................................... $23.00
Moisture
Dry Matter
Crude Protein

F-4A RFV Wet Chemistry .................................................................. $33.00
Moisture
Dry Matter
Crude Protein

F-5 ................................................................................................... $17.00
Moisture
Dry Matter
Crude Protein

F-6 Liquid Protein Supplement ..................................................... $25.50
Moisture
Dry Matter
Crude Protein

INDIVIDUAL WATER ANALYSIS

www.wardlab.com
**F-8 Mineral Test**

<table>
<thead>
<tr>
<th>Component</th>
<th>Cost</th>
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</thead>
<tbody>
<tr>
<td>Moisture</td>
<td>Potassium</td>
</tr>
<tr>
<td>Dry Matter</td>
<td>Magnesium</td>
</tr>
<tr>
<td>Calcium</td>
<td>Zinc</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>Iron</td>
</tr>
<tr>
<td></td>
<td></td>
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</table>

**F-9 Nitrate**

<table>
<thead>
<tr>
<th>Component</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moisture</td>
<td>Nitrate-Nitrogen</td>
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<td>Dry Matter</td>
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</tr>
</tbody>
</table>

**NIR (NEAR INFRARED REFLECTANCE)**

NIR can be run on Forages, Silages, Haylages, and Corn Grain- other sample types please refer to feed packages

**Silages and Corn Grain-RFV**

<table>
<thead>
<tr>
<th>Component</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moisture</td>
<td>Acid Detergent Fiber (ADF) Calcium</td>
</tr>
<tr>
<td>Dry Matter</td>
<td>Neutral Detergent Fiber (NDF) Phosphorus</td>
</tr>
<tr>
<td>Crude Protein</td>
<td>Calculated TDN Potassium</td>
</tr>
<tr>
<td></td>
<td>Calculated NEm, NEg, NEl Magnesium</td>
</tr>
<tr>
<td></td>
<td>Relative Feed Value Ash</td>
</tr>
</tbody>
</table>

**Haylages and Hay (Grass, Grass/Legume, Legume)-RFQ**

<table>
<thead>
<tr>
<th>Component</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moisture</td>
<td>Acid Detergent Fiber (ADF) Calcium</td>
</tr>
<tr>
<td>Dry Matter</td>
<td>Neutral Detergent Fiber (NDF) Phosphorus</td>
</tr>
<tr>
<td>Crude Protein</td>
<td>NDFD (NDF digestibility) Potassium</td>
</tr>
<tr>
<td></td>
<td>Calculated TDN Magnesium</td>
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<tr>
<td></td>
<td>Calculated NEm, NEg, NEl Lignin</td>
</tr>
<tr>
<td></td>
<td>Relative Feed Value Fat</td>
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<tr>
<td></td>
<td>Relative Feed Quality Ash</td>
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**INDIVIDUAL FEED ANALYSIS WITH FEED OR NIR PACKAGES ABOVE**

<table>
<thead>
<tr>
<th>Component</th>
<th>Cost</th>
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</thead>
<tbody>
<tr>
<td>ADF</td>
<td>$8.50</td>
</tr>
<tr>
<td>Aflatoxin</td>
<td>$24.25</td>
</tr>
<tr>
<td>Ash</td>
<td>$6.25</td>
</tr>
<tr>
<td>Available Starch</td>
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<tr>
<td>Crude Fiber</td>
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</tr>
<tr>
<td>Crude Protein</td>
<td>$7.75</td>
</tr>
<tr>
<td>Dry Matter-Karl Fischer</td>
<td>$10.00</td>
</tr>
<tr>
<td>Dry Matter-Oven</td>
<td>$6.00</td>
</tr>
<tr>
<td>Dry Matter-Vacuum Oven</td>
<td>$7.75</td>
</tr>
<tr>
<td>Fat</td>
<td>$7.25</td>
</tr>
<tr>
<td>Fat, Acid Hydrolysis (Liquid Feeds)</td>
<td>$10.45</td>
</tr>
<tr>
<td>HDP/ADF insoluble Crude Protein</td>
<td>$14.50</td>
</tr>
<tr>
<td>Lignin</td>
<td>$14.50</td>
</tr>
<tr>
<td>Mold Count</td>
<td>$17.75</td>
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<tr>
<td>Nitrate</td>
<td>$9.00</td>
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<tr>
<td>NPN</td>
<td>$9.00</td>
</tr>
<tr>
<td>Particle Size</td>
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<tr>
<td>pH</td>
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<tr>
<td>Prussic Acid</td>
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</tr>
<tr>
<td>Salt based on Chloride</td>
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<tr>
<td>Soluble Protein</td>
<td>$10.00</td>
</tr>
<tr>
<td>Total Starch</td>
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<tr>
<td>Total Carbon</td>
<td>$7.75</td>
</tr>
<tr>
<td>TSI</td>
<td>$12.00</td>
</tr>
</tbody>
</table>

1-800-887-7645
www.wardlab.com
PLANT ANALYSIS

P-2  
**Routine** ..................................................................................... $25.00  
Nitrogen   Sulfur   Boron  
Phosphorus  Zinc   Molybdenum  
Potassium   Iron   
Calcium     Manganese  
Magnesium   Copper  

P-3  
**Super Complete** ........................................................................ $32.75  
Nitrogen   Sulfur   Boron  
Phosphorus  Zinc   Molybdenum  
Potassium   Iron   Chloride  
Calcium     Manganese  
Magnesium   Copper  

P-4  
**Stalk Nitrate** .............................................................................. $11.00  
A corn stalk nitrate sample is taken from 6 inches to 14 inches above the soil surface. A sample should contain 10-8 inch stalks.

INDIVIDUAL PLANT ANALYSIS

Chloride .................................................................$7.75  
Dry Matter ...............................................................$6.00  
Minerals (Routine excluding N) .........................$17.25  
Nitrogen .................................................................$7.75  
Nitrate-Nitrogen ...................................................$7.75  
Phosphate-Phosphorus .........................................$7.75  
Total Carbon ..........................................................$7.75
Plant analysis provides two approaches to enhancing fertilizer effectiveness. One is the diagnostic approach where plant analysis is made when there is an obvious growth problem in the field. A sample is taken from the poor growing area and compared to a sample from an adjacent normal growing area.

Ward Laboratories, Inc. suggests using this diagnostic approach for researching production problems. The comparative samples are very important for proper interpretation of the analysis. **The testing fee for the normal comparative sample is one-half the regular fee.**

The monitoring approach is used to confirm that the plant had proper nutrition. Plant samples should be taken with the crops at the bloom (reproductive) stage of growth. Samples taken earlier than bloom stage contain higher levels of nutrients. For this reason it is very important to identify the growth stage for proper interpretation.

**Packaging Guidelines**

**Plants:** Tissue samples need to be placed in paper bags and submitted to the laboratory. Plant sample bags are available upon request.

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### PLANT SAMPLING PROCEDURE

<table>
<thead>
<tr>
<th>Field Crops</th>
<th>Stage of Growth</th>
<th>Plant part to Sample</th>
<th>Number of plants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Corn</strong></td>
<td>Seedling Stage (less than 12&quot;)</td>
<td>All above ground portion</td>
<td>20-30</td>
</tr>
<tr>
<td></td>
<td>Prior to tasseling</td>
<td>Top leaf with collar</td>
<td>15-25</td>
</tr>
<tr>
<td></td>
<td>Tasseling to early silking</td>
<td>Ear Leaf</td>
<td>15-25</td>
</tr>
<tr>
<td><strong>Soybeans</strong></td>
<td>Seedling Stage (less than 12&quot;)</td>
<td>All above ground portion</td>
<td>20-30</td>
</tr>
<tr>
<td></td>
<td>Flowering</td>
<td>Uppermost fully developed</td>
<td>20-30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>trifoliate leaves</td>
<td></td>
</tr>
<tr>
<td><strong>Small Grain</strong></td>
<td>Seedling Stage (less than 12&quot;)</td>
<td>All above ground portion</td>
<td>50-100</td>
</tr>
<tr>
<td></td>
<td>Boot to heading</td>
<td>All above ground portion</td>
<td>20-30</td>
</tr>
<tr>
<td><strong>Hay, pasture or forage grasses</strong></td>
<td>Just prior to seed head emergence or 4-6 weeks after clipping</td>
<td>All above ground portion</td>
<td>20-30</td>
</tr>
<tr>
<td><strong>Alfalfa</strong></td>
<td>Bud stage to 1/10 bloom</td>
<td>Upper 1/3 of plant</td>
<td>15-25</td>
</tr>
<tr>
<td><strong>Milo</strong></td>
<td>Seedling Stage (less than 12&quot;)</td>
<td>All above ground portion</td>
<td>20-30</td>
</tr>
<tr>
<td></td>
<td>Very Early heading</td>
<td>2nd leaf from the top</td>
<td>15-25</td>
</tr>
</tbody>
</table>
## WATER ANALYSIS

### W-1 Irrigation Water Quality .......................................................... $21.75
- Sodium: Nitrate
- Calcium: Carbonate
- Magnesium: Bicarbonate
- Potassium: Sulfate
- Chloride: Electrical Conductivity
- pH: Est. Total Dissolved Solids
- Total Hardness (Lime):  
- Total Alkalinity:  
- Boron:  
- Sodium Adsorption Ratio (SAR):  
- Adj. SAR:  
- Acid Titration Curve:  
- pHc: 

### W-1A Sub-Surface Irrigation .......................................................... $61.00
- Sodium: Nitrate
- Calcium: Carbonate
- Magnesium: Bicarbonate
- Potassium: Sulfate
- Chloride: Electrical Conductivity
- pH: Est. Total Dissolved Solids
- Total Hardness (Lime):  
- Total Alkalinity:  
- Boron:  
- Iron:  
- Sodium Adsorption Ratio (SAR):  
- Acid Titration Curve:  
- pHe: 

### W-2 Nitrate Sulfate .................................................................. $8.50

### W-3 Nitrate .............................................................................. $5.50

### W-4 Livestock Suitability ......................................................... $21.00
- Sodium: Nitrate
- Calcium: Carbonate
- Magnesium: Bicarbonate
- Potassium: Sulfate
- Chloride: Electrical Conductivity
- pH: Est. Total Dissolved Solids
- Total Alkalinity:  

### W-5 Household Complete Mineral Test .................................. $27.25
- Sodium: Nitrate
- Calcium: Carbonate
- Magnesium: Bicarbonate
- Potassium: Sulfate
- Chloride: Electrical Conductivity
- pH: Est. Total Dissolved Solids
- Total Hardness (Lime):  
- Total Alkalinity:  
- Iron:  
- Fluoride:  

### W-5A Brewers Test ................................................................. $27.25
- Sodium: Nitrate
- Calcium: Carbonate
- Magnesium: Bicarbonate
- Potassium: Sulfate
- Chloride: Electrical Conductivity
- pH: Est. Total Dissolved Solids
- Total Hardness (Lime):  
- Total Alkalinity:  
- Iron:  
- Phosphorus:  

---

**Note:**
- **NIR (NEAR INFRARED REFLECTANCE):**
  - Can be run on Forages, Silages, Haylages, and Corn Grain. Other sample types please refer to feed packages.

**Individual Feed Analysis with Feed or NIR Packages Above:**
- Aflatoxin: $24.25
- Ash: $6.25
- Available Starch: $15.00
- Crude Fiber: $9.50
- Crude Protein: $7.75
- Dry Matter-Karl Fischer: $10.00
- Dry Matter-Oven: $6.00
- Dry Matter-Vacuum Oven: $7.75
- Fat: $7.25
- Fat, Acid Hydrolysis (Liquid Feeds): $10.45
- HDP/ADF insoluble Crude Protein: $14.50
- Lignin: $14.50
- Mold Count: $17.75
- NDF: $9.00
- Nitrate: $7.25
- NPN: $9.00
- Particle Size: $17.75
- pH: $4.00
- Prussic Acid: $11.00
- Salt based on Chloride: $7.75
- Soluble Protein: $10.00
- Total Starch: $19.00
- Total Carbon: $7.75
- TSI: $12.00
WATER SAMPLING PROCEDURES

1. Use a clean plastic container for submitting your sample. Water can be sent in any clean plastic container. For volume testing bottles can be obtained from the laboratory.

2. Rinse the container several times with water that is being sampled. Send a full container of at least one half pint water to be tested.

3. Wells should be pumped several hours before sampling. Test wells should be sampled after pipe and screen are in place. Pump well for at least 10 hours before sampling.

4. Samples of lakes, streams, and ponds should be taken from below surface.

5. If it is not possible to send the sample immediately after collection, refrigerate until it is sent.

---

### Individual Water Analysis

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum</td>
<td>$5.50</td>
</tr>
<tr>
<td>Ammonium</td>
<td>$6.50</td>
</tr>
<tr>
<td>Boron</td>
<td>$6.00</td>
</tr>
<tr>
<td>Carbonate/Bicarbonate</td>
<td>$8.00</td>
</tr>
<tr>
<td>Chloride</td>
<td>$6.00</td>
</tr>
<tr>
<td>Copper</td>
<td>$6.50</td>
</tr>
<tr>
<td>Fluoride</td>
<td>$6.00</td>
</tr>
<tr>
<td>Hardness</td>
<td>$6.50</td>
</tr>
<tr>
<td>Iron</td>
<td>$6.50</td>
</tr>
<tr>
<td>Iron Bacteria (8 day)</td>
<td>$19.25</td>
</tr>
<tr>
<td>Manganese</td>
<td>$6.50</td>
</tr>
<tr>
<td>Ortho Phosphorus</td>
<td>$6.00</td>
</tr>
<tr>
<td>pH</td>
<td>$5.50</td>
</tr>
<tr>
<td>Silica</td>
<td>$6.00</td>
</tr>
<tr>
<td>Total Dissolved Solids</td>
<td>$8.00</td>
</tr>
<tr>
<td>Total Nitrogen</td>
<td>$6.50</td>
</tr>
<tr>
<td>Total Phosphorus</td>
<td>$6.00</td>
</tr>
<tr>
<td>Total Suspended Solids</td>
<td>$8.00</td>
</tr>
<tr>
<td>Zinc</td>
<td>$6.50</td>
</tr>
</tbody>
</table>

---

### Popular Feed Packages

- **F-1**
  - Moisture
  - Dry Matter
  - Crude Protein
  - **$11.00**

- **F-2**
  - Moisture
  - Crude Fiber (CF)
  - Dry Matter
  - Calculated TDN
  - Crude Protein
  - Calculated NEm, NEg, NEl
  - **$17.00**

- **F-3**
  - Moisture
  - Acid Detergent Fiber (ADF)
  - Dry Matter
  - Calculated TDN
  - Crude Protein
  - Calculated NEm, NEg, NEl
  - **$16.00**

- **F-4**
  - Moisture
  - Acid Detergent Fiber (ADF)
  - Calcium
  - Dry Matter
  - Calculated TDN
  - Phosphorus
  - Crude Protein
  - Calculated NEm, NEg, NEl
  - **$23.00**

- **F-4A RFV Wet Chemistry**
  - Moisture
  - Acid Detergent Fiber (ADF)
  - Calcium
  - Dry Matter
  - Neutral Detergent Fiber (NDF)
  - Phosphorus
  - Crude Protein
  - Calculated TDN
  - Potassium
  - Calculated RFV
  - Magnesium
  - **$33.00**

- **F-5**
  - Moisture
  - Calcium
  - Dry Matter
  - Phosphorus
  - Crude Protein
  - **$17.00**

- **F-6 Liquid Protein Supplement**
  - Moisture (Karl Fischer)
  - Calcium
  - Dry Matter
  - Phosphorus
  - Crude Protein
  - Non-Protein Nitrogen
  - **$25.50**

---

### Household Mineral Test

- Sodium
- Nitrate
- Total Hardness (Lime)
- Calcium
- Carbonate
- Total Alkalinity
- Magnesium
- Bicarbonate
- Potassium
- Sulfate
- Chloride
- Electrical Conductivity
- pH
  - Est. Total Dissolved Solids
  - **$21.00**

### Household Coliform Bacteria

- Coliform
- E. Coli
  - **$19.25**

### Hydroponic Fertilizer Test

- Sodium
- Carbonate
- Copper
- Calcium
- Bicarbonate
- Total Nitrogen
- Magnesium
- Sulfate
- Ammonium Nitrogen
- Potassium
- Electrical Conductivity
- Total Phosphorus
- Chloride
- Zinc
- Boron
- pH
- Iron
- Molybdenum
- Nitrate
- $5.50
- Manganese
- $6.50

*A special sampling procedure and bottle is required for bacteria testing. Please contact the laboratory for assistance. Bacteria samples can be dropped off Monday-Thursday 8-3pm only.*
FERTILIZER ANALYSIS

Fertilizer Analysis ................................................................. $14.75 per element
- Nitrogen
- Phosphorus
- Potassium
- Sulfur
- Specific Gravity Included (Liquids)

Screening Test (Approximate Fertilizer Analysis) ....................... $63.75
- Nitrogen
- Phosphorus
- Potassium
- Sulfur
- Specific Gravity Included (Liquids)

Lime Purity %CaCO₃ .............................................................. $21.75
- Effective Calcium Carbonate (%ECC)
- Moisture
- Sieve Analysis (on 8-mesh, on 60-mesh, and through 60-mesh sieves)

Lime Quality % ECC .............................................................. $25.50
- Lime Purity (%CaCO₃)
- Fineness of grind

LIQUID FERTILIZER SAMPLING PROCEDURE

A critical requirement in getting a representative sample of a liquid fertilizer is to take the sample directly from the main body of the material without contamination. Avoid whenever possible taking samples from lines and valves. Listed below are the preferred points of sampling in order of preference.

1. Directly from mixing vat.
2. From the top opening of storage or transport tank after agitation for 15 minutes.
3. From a delivery or recirculating line after proper recirculation.

Please submit liquid fertilizer in a plastic container. Bottles can be obtained from the laboratory.
MANURE, SLURRY AND WASTEWATER ANALYSIS

Standard .............................................................................................................. $36.00
pH Potassium Zinc Total Nitrogen
Soluble Salts Calcium Iron Ammonium-Nitrogen
Phosphorus Magnesium Nitrate-Nitrogen
Moisture Sulfur Copper Organic-Nitrogen
Dry Matter SAR Sodium Boron

Packaging Guidelines
Manure/Slurry: If you are submitting manure samples please place them in a plastic container
such as a Ziploc bag. Slurry samples need to be placed in a plastic bottle and then placed inside
of a Ziploc bag. Sample containers are available upon request.

INDIVIDUAL MANURE, SLURRY AND WASTEWATER ANALYSIS

Ash ..............................................................$6.25 pH & EC .........................................................$5.50
Biological Oxygen Demand (5 day) ..............$28.75 Total Alkalinity ..............................$11.00
Bulk Density ..................................................$6.75 Total Carbon .................................$7.75
Chemical Oxygen Demand .........................$22.00 Total Dissolved Solids ..................$9.25
Chloride .......................................................$7.75 Total Suspended Solids ..................$9.25
Organic Carbon ..........................................$8.75
Sample Supplies
Before it is time to start sampling contact Ward Laboratories for all your supply needs. We offer soil, feed, water, plant, fertilizer, and manure sampling supplies at no cost to you. We also sell soil probes and hay sampling equipment. Please contact the laboratory for pricing.

Submittal Form
Please send submittal forms with your samples. This allows us to be more efficient and enables us to identify your samples correctly. Submittal forms can be found on our website at www.wardlab.com by clicking on the “submit a sample” link and then your associated sample type. Your customer information may be filled out on these PDF forms before you print them. Bulk entry is another way to send us your sample submittal information. Bulk entry is a submittal that you generate in an Excel spreadsheet with all pertinent information such as your customer number, grower, field, sample ID, depth and your choice of analysis. If you are interested in this option please contact laboratory for further details.

Turn-Around Time
Your samples are our priority at Ward Laboratories. We typically e-mail, fax or mail results to you within 1-2 working days after samples arrive at the lab. There are certain instances when this may not be possible, however, we strive to give you accurate results in the shortest possible time.

Invoicing and Statements
Invoices are sent with the test reports. Monthly statements will show unpaid invoices and a current balance. Terms are net 30 days. Applicable finance charges will be applied on past due accounts.

Online Result Viewing and Invoice Payment
Create an online account to pay invoices or look at past analytical results via wardlab.com. Customers may setup online access using their account details and email address. Please contact the laboratory with any questions.

Consulting Services
The professionals at Ward Laboratories, Inc. are available for consultation, whether the questions are in person, via the telephone, or by e-mail. Crop evaluation is available for in-field consultation of problems during the growing season. Our professionals are also available for assistance at seminars and producer meetings. Please contact the laboratory for assistance.

Ward Guide
The Ward Guide is a must if you are looking for a handy reference guide. It is produced from a variety of referenced sources and our forty plus years of experience in providing quality agricultural testing. The Ward Guide is designed to assist you in finding answers to daily production questions. The Ward Guide is available on our website at www.wardlab.com, under the Ward info tab.
Agricultural Laboratory Proficiency: Participant
American Association for the Advancement of Science: Member
American Association of Cereal Chemists: Member
Association of American Feed Control Officials: Participant in Proficiency Testing
American Oil Chemists Society: Member
American Society of Agronomy: Member
American Soybean Association: Member (Nebraska Chapter)
ARCPACS -
    Certified Professional Agronomist
    Certified Professional Soil Scientist
    Certified Crop Advisor
Association of Official Analytical Chemists: Member
Bio Nebraska: Member
Council for Agricultural Science & Technology: Member
Kansas Association of Independent Crop Consultants
Minnesota Department of Agriculture - Manure Testing Laboratory Certification
National Alliance of Independent Crop Consultants: Member
National Corn Growers Association: Member
National Forage Testing Association: Member & Certified
Nebraska Alfalfa Marketing Association: Member
Nebraska Agri Business: Member
Nebraska Independent Crop Consulting Association: Member
NIR Consortium: Member
North American Proficiency Testing Program: Participant
Soil & Plant Analysis Council: Member
Soil & Water Conservation Society of America: Member
Soil Science Society of America: Member
South Dakota Fertilizer & Ag Chemical Association: Member
South Dakota Independent Crop Consultants Association: Member

MISSION STATEMENT

"Guiding Producers Today to Feed the World Tomorrow"

Our mission statement is our statement of purpose and guides the actions of our organization. It spells out our overall goals and guides our decision making. Here are the principles of how we live that every day.

1. Accurate and Timely Sample Preparation
2. Constantly striving toward our goals for the future with economic efficiency and environmental responsibility
3. Preserving the integrity of each sample and reflecting that care in every result
4. Owning our errors and taking steps to eliminate them
5. That every action be for the direct benefit of the customer, helping them to develop the best use of soil and water resources while maintaining environmental quality

OUR PROFESSIONAL PLEDGE

The professionals at Ward Laboratories, Inc. have one goal every time we enter the door of our modern laboratory…Provide the most accurate and reliable agricultural testing available in a timely fashion.

To that end the professionals at Ward Laboratories, Inc.:
• Are thoroughly trained and educated to provide reliable analysis.
• Utilize sophisticated equipment and latest techniques.
• Are active in dozens of professional organizations to ensure constant contact with the industry.
• Are supported by cutting edge university and private research.
• Have the expertise that only experience can offer.

The professionals at Ward Laboratories realize that every test completed provides critical information essential to important production decisions impacting your bottom line. We will go the extra mile and spend a little more time to insure you have the best information possible.

We are proud of our work, proud of our reputation for excellence and dedicated to insuring the Ward Laboratories legacy continues for years to come. Ultimately, we are most proud of the results we provide each and every time.

INTRODUCTION

The Professionals of Ward Laboratories, Inc.