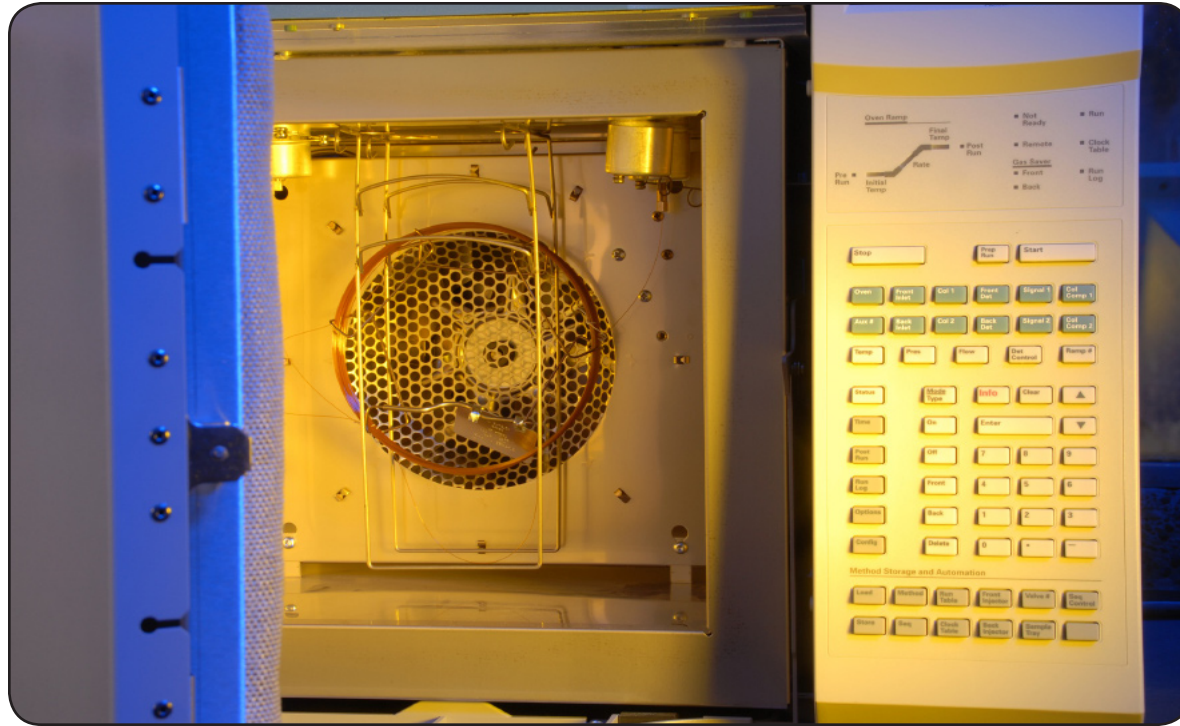


# Analytical Laboratory Services



*Disclaimer: The analytical laboratory at AURI is not an accredited or certified laboratory. All analytical test results generated are for development use only.*

**AURI Analytical Lab**  
1501 State Street  
Marshall, MN 56258  
Phone: (507) 537-7440  
Fax: (507) 537-7441



**Agricultural Utilization Research Institute**  
1501 State Street  
Marshall, MN 56258  
(507) 537-7440  
[www.auri.org](http://www.auri.org)



[www.auri.org](http://www.auri.org)

(updated July 2009)



# Analytical Laboratory Services

AURI operates an analytical laboratory capable of performing both instrumental and wet chemistry tests suitable for defining physical and chemical characteristics of a variety of sample types. This diverse range of analytical techniques helps AURI clients resolve quality issues, enhance research projects, make decisions based on data, and much more.

A wide range of methods are used to test samples in accordance with compendial procedures including but not limited to: AOAC, AOCS, ASTM, In-house, and client supplied methods. Common tests performed are nutritional analyses on meat and food products for nutritional labeling requirements. Biodiesel analyses are conducted for compliance with ASTM D 6751 specifications. Testing performed on biomass evaluates potential combustion performance.

The summary below of testing services offered by AURI's analytical laboratory is not all inclusive. Contact AURI for more information regarding your specific requirements.

## Meat Analysis

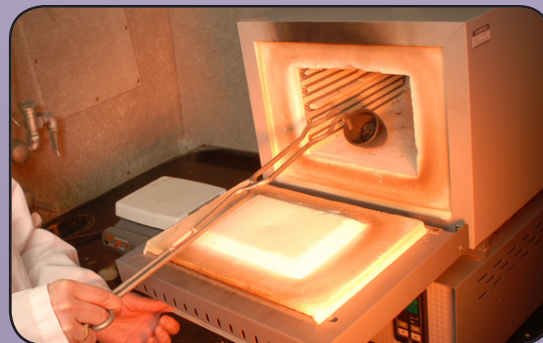
- Ash
- Fat
- Fatty Acid Composition
- Moisture
- pH
- Protein
- Salt
- TBARS
- Water Activity

## Biodiesel Analysis

- Acid Number
- Cloud Point
- Cold Soak Filtration
- Flash Point
- Free and Total Glycerin
- Kinematic Viscosity
- Sulfated Ash
- Water Content

## Biomass/Feed Analysis

- Ash
- Energy
- Moisture
- Chlorides
- Carbon
- Hydrogen
- Nitrogen
- Sulfur
- Trypsin Inhibitor



# Analytical Laboratory Services

## Food Analysis

- Ash
- Calcium
- Cholesterol
- Fat
- Fatty Acid Composition
- Iron
- Moisture
- pH
- Potassium
- Protein
- Sodium
- trans* Fatty Acid
- Water Activity

## Fat/Oil Analysis

- Acid Value
- Color
- Fatty Acid Composition
- Flash Point
- Free Fatty Acid
- Iodine Value
- Melting Point
- Peroxide Value
- Specific Gravity
- Viscosity

## Analytical Laboratory Equipment

- Atomic Absorption Spectrometer
- Balances (analytical & top-loading)
- Brookfield Viscometer
- Capillary Melting Point
- CEM Microwave Moisture Analyzer
- Centrifuge (bench top)
- CHNSO Analyzer
- Circulating Water Baths
- Cleveland Open Cup Flash Point
- Cloud Point Apparatus
- Cyclotech Sample Mill
- Differential Scanning Calorimetry
- Dropping Point Apparatus
- Gas Chromatograph
- Hot Plate-Stirrers
- Karl Fischer Titrator
- Kinematic Viscosity Bath
- Laboratory Ovens
- Lovibond Gardner Color Comparator
- Lovibond Tintometer
- Microscope
- Muffle Furnace
- Oxidative Stability Instrument
- PARR Bomb Calorimeter
- Penetrometer
- Pensky Martens Flash Point Apparatus
- pH Meter
- Protein Digestion Block & Distillation Unit
- Refractometer
- Rotary Evaporator
- Soxtec Extraction Unit
- Tensiometer
- UV-Vis Spectrophotometer
- Vacuum Pumps
- Water Activity Meter