

**SGS**

**SGS  
AGRI-FOOD  
LABORATORIES  
2011**

**AGRI-FOOD LABORATORIES IS NOW PART OF SGS,  
THE WORLD'S LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY**

# FEED AND FORAGE PACKAGES

## WET CHEMISTRY PACKAGES

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### Type I

Moisture, crude protein

### Type II

Moisture, crude protein, calcium, phosphorus, Ca/P ratio, potassium, magnesium sodium

### Type III

Type II plus copper, zinc, manganese

### Type IV

Type II plus acid detergent fibre, net energy lactation, total digestible nutrients

### Type V

Moisture, crude protein, calcium, phosphorus, Ca/P ratio, sodium

### Swine ME

Type II plus fat, ash, crude fibre, metabolizable energy

### Poultry ME

Type II plus fat, starch, total sugar, metabolizable energy

### NCPS—Non-Forages

DM, CP, Ca, P, K, Mg, Na, SP, ADF-CP, ADF, NDF, lignin, NDF-CP, fat, ash, starch

Calculations for: TDN, NEL, NEG, NEM, NFC, UIP (est.), RFV, OARDC energy calculations.

### AFL Excel Basic

DM, CP, ADF, NDF, Ca, P, K, Mg, Na, TDN, NEL

### AFL Excel Plus

DM, CP, SP, UIP, ADF, NDF, Ca, P, K, Mg, Na, TDN, NEL

## NIR FORAGE PACKAGES

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### NW40

Crude protein, moisture, soluble protein, ADF-CP, degradable protein (est.), acid detergent fibre, neutral detergent fibre, total digestible nutrients, net energy lactation, net energy gain, net energy maintenance, relative feed value, non-fibre carbohydrates, starch, lignin

*By Wet Chemistry:* Dry matter, calcium, phosphorus, potassium, magnesium, sodium

OARDC energy calculations

### NW41

NW40 with copper, zinc and manganese, Iron by wet chemistry

### NIR 20

NW40 with all results by NIR

### NIR 40

Fermented forages only

CP, SP, ADF-CP, ADF, NDF, lignin, NDF-CP, fat, ash, starch, 24 hr and 48 hr NDF digestibility (for haylage and corn silage) (RFQ where applicable), calcium, phosphorus, potassium, magnesium, pH, digestibility rate, potentially digestible NDF with all the results by NIR

### Milk 2006

Similar to NCPS Forage. All results using NIR.

Package includes NDFD (48hr) as well as calculated milk per tonne and milk per acre.

### Rapid Scissor Cuts

DM, by NIR: CP, ADF, NDF, RFV

Quick turnaround results to evaluate forage stand quality.

### Options

(If no base package is selected, a \$10 base fee will apply)

Starch (NIR)

24 hr or 48 hr NDF Digestibility (forages only)

## ADDITIONAL FORAGE PACKAGES

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### AFL Excel Dry Cow

Forages only

*By NIR:* crude protein, soluble protein, ADF-CP, degradable protein (est.), acid detergent fibre, neutral detergent fibre, lignin, total digestible nutrients, net energy lactation, non-fibre carbohydrates, relative feed value.

*By Wet Chemistry:* dry matter, calcium, phosphorus, potassium, magnesium, sodium, chloride, sulfur, pH, dietary cationic-anionic balance index

### CPM

Fermented forages only

*By NIR:* CP, SP, ADF-CP, ADF, NDF, lignin, NDF-CP, fat, ash, starch, 24 hr and 48 hr NDF digestibility (for haylage and corn silage) (RFQ where applicable) Potentially digestible NDF

*By Wet Chemistry:* dry matter, calcium, phosphorus, potassium, magnesium, sodium, copper, zinc, manganese, pH, digestibility rate.

### **NCPS—Forages**

*By NIR:* CP, SP, ADF-CP, ADF, NDF, lignin, NDF-CP, fat, ash, starch

*By wet chemistry:* DM, Ca, P, K, Mg, Na

Calculations for: TDN, NEL, NEG, NEM, NFC, UIP (est.), RFV, OARDC energy calculations.  
MEASURE

### **Equine DE**

NW41 plus total digestible nutrients and digestible energy for horses

### **Equine Complete**

NW41 plus fat, NDF-CP, ash, starch, sugar, total digestible nutrients and digestible energy for horses.

## **PHYSICAL TESTING**

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### **Penn State Particle Size**

For TMR, corn silage, haylage

### **Physically Effective NDF**

By Penn State Particle Separator (Lammers 1996)

Calculated from physically effective factor which has been determined as the sum of the dry matter retained on two sieves of the Penn State particle Separator (for forages) or as the sum of dry matter retained in two sieves of PSPS plus dry matter retained on 1.18mm screen (TMR).

### **Options**

(If no base package is selected, a \$10 base fee will apply)

Degradable Protein or UI

ADF-CP

NDF-CP

Soluble Protein

Acid Detergent Fibre

Neutral Detergent Fibre

Crude Fat

Crude Fibre

Iron

Lignin

pH

Sulphur

Salt

Sodium

Starch (Enzymatic)

Molybdenum

Nitrate Nitrogen (Nitrates)

Metabolizable Energy\*

(for swine or poultry)

### **Corn Silage Processing Score**

Percentage of total starch that passes through a 4.75 mm screen

\*All required tests for this calculation must be selected before the option can be selected.

### **Supplies and Forms**

If you require sample containers or submission forms, please contact the laboratory.

Our submission forms are also available in a writable PDF format on our website.

