

# **Forages and TMR**

### **All Analysis by Wet Chemistry**

#### **Excel Basic**

DM, CP, ADF, NDF,

Ca, P, K, Mg, Na, Cu, Fe, Mn, Zn,

Starch by NIR included, only for TMR+corn silage.

Calculations: TDN, NEL, NEG, NEM, RFV.

### **NCPS**

Feeds and Forages:

DM, CP, SP, ADF, ADF-CP, NDF, NDF-CP, lignin, fat, ash, starch, Ca, P, K, Mg, Na, Cu, Fe, Mn, Zn.

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

## **Ingredients and Finished Feed Packages**

#### **All Analysis by Wet Chemistry**

### Forage Mineral I (added to NIR pkgs)

Ca, P, K, Mg, Na

(pricing available with an NIR package)

### Forage Mineral II (added to NIR pkgs)

Ca, P, Mg, K, S, Na, Cl, Cu, Zn, Mn, Fe (pricing available with an NIR package)

#### Package I

DM, CP

### Package II

DM CP

Ca, P, K, Mg, Na

### Package III

Type II plus

Zn, Mn, Cu, Fe

### Package IV

Type II plus ADF, NEL, TDN

#### Package V

DM. CP

Ca, P, Na

#### Swine ME

DM, CP, fat, ash, crude fibre, Ca, P, K, Mg, Na

Calculations: metabolizable energy

### **Poultry ME**

DM, CP, fat, starch, total sugar, Ca, P, K, Mg, Na

Calculations: metabolizable energy

Submission forms and sample containers are available upon request.

HMC = High Moisture Corn

CCM = Corn Cob Meal

GC = Grain Corn

# Forages and TMR by NIR

### **NIR Analysis - Minerals by Wet Chemistry**

#### **Equine Complete**

By NIR: CP, SP, ADF, ADF-CP, NDF, NDF-CP, lignin, ash, fat, starch, total sugars (WSC), simple sugars (ESC). By Wet Chemistry: DM, Ca, P, K, Na, Mg, Cu, Fe, Mn, Zn. Calculations: NFC, TDN and DE for horses.

# **Forages and TMR**

### All Analysis NIR - Minerals by NIR

#### **NIR Standard**

DM, CP, SP, ADF, ADF-CP, NDF, NDF-CP, NDFd 24, 30, 48, lignin, ash, fat, starch, sugar (WSC),

Ca, P, K, Mg, Na, S, Cl.

Calculations: UIP, NFC, TDN, NEL, NEG, NEM, RFV, DCAB

#### **NIR Complete**

DM, CP, SP, ADF, ADF-CP, NDF, NDF-CP, NDFd 24, 30, 48; uNDF 120, 240; 7hr SCHd (CS); lignin, ash, fat, starch, sugar (WSC), ESC, VFA and ammonia,

Ca, P, K, Mg, Na, S, Cl,

Calculations: TDN, NEL, NEG, NEM, RFV, Milk per tonne, Beef per tonne. NDF disappearance rate (kd, Mertens), DCAB

### **NIR CNCPS/NASEM**

DM, CP, SP, ADF, ADF-CP, NDF, NDF-CP, lignin, ash, fat, starch, sugar (WSC), ESC, NDFd 24, 30, 48; uNDF 120,240; 7hr SCHd (CS); total fatty acids, C16:0, C18:0, C18:1, C18:2, C18:3; VFA and ammonia

Ca, P, K, Mg, Na, Cl, S;

Calculations: TDN, NEL, NEG, NEM, RFV; Milk per tonne, Beef per tonne, UIP, NFC, DCAB, pH (ensiled forages). NDF disappearance rate (kd, Mertens)

#### **NIR TMR**

DM, CP, SP, ADF, ADF-CP, NDF, NDF-CP, lignin, starch, fat, ash,

Ca, P, K, Mg, Na,

UIP as %CP,

Calculations: TDN, NEL, NEG, NEM

### NIR Corn (HMC, CCM, GC)

DM, CP, ADF, ADF-CP (HMC), NDF, lignin (HMC), starch, fat, ash, 7h SCHd (HMC),

Ca, P, K, Mg.

Calculations: NFC. TDN, NEL, NEG, NEM)

### **Rapid Scissors Cut**

DM, CP, ADF, NDF Calculaton: RFV

# **Wet Chemistry Options**

(If no package is selected, a \$14.20 base fee may apply)

ADF-CP

NDF-CP

Soluble protein

Undegradable intake protein

Acid Detergent Fibre

Neutral Detergent Fibre

Crude Fat

Crude Fibre

Lignin

рΗ

Sulphur

Sulphur and Chloride

Salt

Ash

Starch (Enzymatic)

Molybdenum

Nitrate-Nitrogen (NO3-N-Nitrates)

Ammonia-Nitrogen (NH3-N-Ammonia)

Water soluble carbohydrates (WSC-Total sugars)

Ethanol soluble carbohydrates (ESC-Simple sugars)

Corn Silage Processing Score

# Livestock Water

### **Mineral Analysis**

pH, EC (total salts), nitrate-nitrogen, phosphorus, potassium, magnesium, calcium, sodium, zinc, manganese, copper, iron, boron, chloride, sulphate, bicarbonate, total dissolved solids, total hardness

Minimum sample size: 300 ml

Samples in a microbiological bottle cannot be used for

mineral analysis

Samples for human consumption will not be analysed based on the Ontario Safe Drinking Water Act 2002

# Manure Analysis

### Liquid

Dry matter, nitrogen, phosphorus, potassium, total salt (EC), ammonia-N

#### Drv

Dry matter, nitrogen, phosphorus, potassium, ammonia-N

### **Fecal Starch**

#### **Options**

(If no package is selected, a \$14.20 base fee may apply) pH

Calcium and Magnesium

Zinc, Manganese, Copper, Iron

Sulphur

Carbon/Nitrogen Ratio

# **Toxin Screens**

Vomitoxin

Zearalenone

T-2

Aflatoxin

Submission forms and sample containers are available upon request.

Contact details:

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