



CUMBERLAND VALLEY ANALYTICAL SERVICES

"Laboratory services for agriculture ... from the field to the feed bunk"

Farm: BRUNSWICK
Desc: TRITICALE BALAGE - BYRON'S
Submitter: BRUNSWICK, TIM
Account: BRUNSWICK DAIRY

Copies to:

Lab ID: 28502 062
Sampled:
Arrived: 05/28/2020
Completed: 05/28/2020
Reported: 05/28/2020

TRITICALE BALAGE - BYRON'S

SAMPLE INFORMATION

Lab ID: 28502 062 Version: 1.0
Crop Year: 2020 Series:
Feed Type: TRITICALE FORAGE Cutting#:
Package: BASIC NIR

NIR ANALYSIS RESULTS

Moisture 64.2
Dry Matter 35.8

PROTEINS % SP % CP % DM

Crude Protein 12.3
Adjusted Protein
Soluble Protein 75.5 9.3
Ammonia (CPE) 11.5 8.7 1.07
ADF Protein (ADICP) 4.0 0.49
NDF Protein (NDICP) 4.5 0.55
NDR Protein (NDRCP)
Rumen Degr. Protein 87.7 10.8
Amino Acid Protein, Total 68.54 8.44

FIBER %NDFom NDFom % DM

ADF 59.9 26.0
aNDF 43.0 43.4
NDR (NDF w/o sulfite)
Crude Fiber
Lignin 6.42 2.79
NDF Digestibility (12 hr)
NDF Digestibility (24 hr)
NDF Digestibility (30 hr) 68.4 29.4 67.7 29.4
NDF Digestibility (72 hr)
NDF Digestibility (120 hr) 79.1 34.0 78.3 34.0
NDF Digestibility (240 hr) 82.4 35.4 81.6 35.4
uNDF (12 hr)
uNDF (30 hr) 31.6 13.6 32.3 14.0
uNDF (120 hr) 20.9 9.0 21.7 9.4
uNDF (240 hr) 17.6 7.6 18.4 8.0

CARBOHYDRATES % Starch % NFC % DM

Silage Acids 14.9 5.1
Ethanol Soluble CHO (ESC-Sugar) 40.9 14.1
Water Soluble CHO (WSC-Sugar) 15.8
Starch 2.5 0.9
Soluble Starch
Soluble Fiber 35.8 12.3
Starch Dig. (7 hr, 4 mm)
Crude Fat 3.41
Fatty Acids, Total 1.40
C16:0 0.24
C18:0 0.02
C18:1 0.07
C18:2 0.33
C18:3 0.86
Unsaturated Fatty Acids (RUFAL) 1.26
Fatty Acids (%Fat) 41.1

MINERALS

Ash (%DM) 6.90
Calcium (%DM) 0.37
Phosphorus (%DM) 0.36
Magnesium (%DM) 0.15
Potassium (%DM) 2.90
Sulfur (%DM) 0.22
Sodium (%DM)
Chloride (%DM)
Iron (PPM)
Manganese (PPM)
Zinc (PPM)
Copper (PPM)
Molybdenum (PPM)

QUALITATIVE

pH 4.55
Total VFA (%DM) 5.14
Lactic Acid (%DM) 3.78
Lactic as % of Total VFA 74
Acetic Acid (%DM) 0.89
Butyric Acid (%DM) 0.47
1, 2 Propanediol (%DM)
Nitrate Ion (%DM)

Soil Contamination Probability Probable low to none
Nitrate Probability Probable low nitrate level
NIR Statistical Confidence Excellent prediction potential

ENERGY & INDEX CALCULATIONS

TDN (%DM) 69.8
Net Energy Lactation (Mcal/lb) 0.72
Net Energy Maintenance (Mcal/lb) 0.73
Net Energy Gain (Mcal/lb) 0.45
ME (Mcal/lb) 1.2
AA Protein as % of Total Protein 68.5
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4) 4.85
NDF Dig. Rate (Kd, %HR, uNDF) 5.0
Starch Dig. Rate (Kd, %HR, Mertens)
Relative Feed Value (RFV) 147
Relative Forage Quality (RFQ) 211
Milk per Ton (lbs/ton) 3644
Dig. Organic Matter Index (lbs/ton) 566
Non Fiber Carbohydrates (%DM) 34.50
Non Structural Carbohydrates (%DM) 15.0
DCAD (meq/100gdm)
Summative Index % (Mass Balance) 97.4

Additional sample information, submitted documents and lab pictures linked to QR code.



Values in bold were analyzed by wet chemistry methods.



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