



Cumberland Valley Analytical Services, Inc.

Quantitative and Qualitative Analysis
of Feeds for the Dairy Industry

Type: GRASS FORAGE
Farm: 1
Desc: 1ST CUT HAY
GREEN MOUNTAIN FEED TESTING LAB
GREEN MOUNTAIN FEED TESTING LAB

Regression: DM
Cutting #:
Copies to:
#2:

Report Date: 2/11/2011
Lab ID: 11388 017
Date Sampled: 1/31/2011
Date Arrived Lab: 2/2/2011
Date Completed: 2/2/2011

NIRS ANALYSIS RESULTS

Dry Matter	81.3	
Moisture	18.8	
Proteins	% DM	% CP
Crude Protein	8.0	
Adjusted Protein		
Soluble Protein	2.02	25.4
Ammonia (NPN)		
ADF Protein (ADICP)	1.31	16.5
NDF Protein (NDICP)	3.40	42.7
Rumen Degr. Protein	4.99	62.7
Fiber	% DM	% NDF
Acid Detergent Fiber	36.6	58.6
Neutral Detergent Fiber	62.5	
NDR (NDF w/o sulfite)		
peNDF		
Crude Fiber		
Lignin	4.97	8.0
NDF 12 HR Digestibility		
NDF 24 HR Digestibility		
NDF 30 HR Digestibility	26.8	42.9
NDF 48 HR Digestibility		
Indigestible NDF, Invitro 120 HR	19.6	31.3
B2/B3 Kd (%HR)	2.4	
Carbohydrates	% DM	% NFC
Silage Acids		
Ethanol Soluble CHO (Sugar)	7.1	28.3
Starch	8.4	33.3
Soluble Fiber		
Glucose		
Sucrose		
Fructose		
Digestible Dry Matter (fast)		
Starch Digestibility 7 HR		
Fatty Acids, Total (%DM)	0.67	
Crude Fat	1.57	
Acid Hydrolysis Fat		
ENERGY & INDEX CALCULATIONS		
Equine TDN (%DM)	45.7	
Equine DE (mcal/lb)	0.91	
TDN (%DM)	44.8	
Net Energy Lactation (mcal/lb)	0.60	
Net Energy Maintenance (mcal/lb)	0.35	
Net Energy Gain (mcal/lb)	0.11	
Relative Feed Value (RFV)	90	
Relative Feed Quality (RFQ)	96	
Milk Per Ton		
Non Fiber Carbohydrates (%DM)	25.1	
Non Structural Carbohydrates (%DM)	15.5	

MINERALS

Ash (%DM)	6.34
Calcium (%DM)	0.29
Phosphorus (%DM)	0.22
Magnesium (%DM)	0.13
Potassium (%DM)	1.53
Sulfur (%DM)	0.15
Sodium (%DM)	
Chloride (%DM)	0.39
Iron (PPM)	
Manganese (PPM)	
Zinc (PPM)	
Copper (PPM)	
Selenium (PPM)	
Molybdenum (PPM)	
DCAD (meq/100gdm)	

QUALITATIVE

pH	
Total VFA	
Lactic Acid (%DM)	
Lactic as % of Total VFA	
Acetic Acid (%DM)	
Propionic Acid (%DM)	
Butyric Acid (%DM)	
Isobutyric Acid (%DM)	
Titrateable Acidity (meq/gm)	
1, 2 Propeniol (%DM)	
Mold Count (col/gm)	
Yeast Count (col/gm)	
Soil Contamination Probability	LOW
Nitrate Ion (%DM)	
Corn Silage Processing Score	
Particle Size (Penn State)	
- Partides greater than 0.75"	
- Partides from 0.31" to 0.75"	
- Partides less than 0.31"	

* Wet chemistry analysis performed.