



CUMBERLAND VALLEY ANALYTICAL SERVICES

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

Farm: WEAVER FALLS DAIRY
Desc: CORN SILAGE
Submitter: JONES,JOHN
Account: FOUR STATE FEEDS

Copies to:

Lab ID: 21429 161
Sampled: 02/22/2017
Arrived: 02/24/2017
Completed: 02/25/2017
Reported: 02/25/2017

CORN SILAGE

SAMPLE INFORMATION

Lab ID: 21429 161 Version: 1.0
Crop Year: 2016 Series:
Feed Type: CORN SILAGE Cutting#:
Package: NIR Wet Minerals, Cl, S

NIR ANALYSIS RESULTS

Moisture 59.7
Dry Matter 40.3

PROTEINS

	% SP	% CP	% DM
Crude Protein			9.5
Adjusted Protein			
Soluble Protein		55.5	5.3
Ammonia (CPE)	20.5	11.4	1.08
ADF Protein (ADICP)		8.0	0.76
NDF Protein (NDICP)		11.1	1.05
NDR Protein (NDRCP)			
Rumen Degr. Protein		77.7	7.4
Rumen Deg. CP (Strep.G)			

FIBER

	% NDFom	NDFom %DM	% NDF	% DM
ADF			61.2	25.2
aNDF		40.8		41.2
NDR (NDF w/o sulfite)				
peNDF				
Crude Fiber				
Lignin			6.56	2.70
NDF Digestibility (12 hr)			24.7	10.2
NDF Digestibility (24 hr)				
NDF Digestibility (30 hr)	59.8	24.4	59.1	24.3
NDF Digestibility (48 hr)				
NDF Digestibility (120 hr)	73.6	30.0	72.8	30.0
NDF Digestibility (240 hr)	77.5	31.6	76.6	31.5
uNDF (30 hr)	40.2	16.4	40.9	16.8
uNDF (120 hr)	26.5	10.8	27.2	11.2
uNDF (240 hr)	22.5	9.2	23.4	9.6

CARBOHYDRATES

	% Starch	% NFC	% DM
Silage Acids		15.3	6.6
Ethanol Soluble CHO (Sugar)		7.5	3.2
Water Soluble CHO (Sugar)			
Starch		58.3	25.1
Soluble Fiber		17.1	7.36
Starch Dig. (7 hr, 4 mm)	76.8		
Fatty Acids, Total			1.91
Unsaturated Fatty Acids (RUFAL)			1.38
Saturated Fatty Acids			0.53
Crude Fat			3.04

MINERALS

Ash (%DM)	4.27
Calcium (%DM)	0.37
Phosphorus (%DM)	0.27
Magnesium (%DM)	0.28
Potassium (%DM)	1.03
Sulfur (%DM)	0.14
Sodium (%DM)	0.01
Chloride (%DM)	0.38
Iron (PPM)	61
Manganese (PPM)	29
Zinc (PPM)	27
Copper (PPM)	7
Nitrate Ion (%DM)	
Selenium (PPM)	
Molybdenum (PPM)	

QUALITATIVE

Total VFA (%DM)	6.61
Lactic Acid (%DM)	5.87
Lactic as % of Total VFA	89
Acetic Acid (%DM)	0.74
Butyric Acid (%DM)	
1, 2 Propanediol (%DM)	

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

ENERGY & INDEX CALCULATIONS

pH	3.93
TDN (%DM)	72.7
Net Energy Lactation (mcal/lb)	0.75
Schwab/Shaver NEL (Processed)	0.70
Schwab/Shaver NEL (Unprocessed)	0.63
Net Energy Maintenance (mcal/lb)	0.77
Net Energy Gain (mcal/lb)	0.49
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	3.77
NDF Dig. Rate (Kd, %HR, uNDF)	4.80
Starch Dig. Rate (Kd, %HR, Mertens)	22.1
Relative Feed Value (RFV)	
Relative Feed Quality (RFQ)	
Milk per Ton (lbs/ton)	2835
Dig. Organic Matter Index (lbs/ton)	
Non Fiber Carbohydrates (%DM)	43.1
Non Structural Carbohydrates (%DM)	28.3
DCAD (meq/100gdm)	7.33
CNCPS / CPM Lignin Factor	4.0
RFC - Fill Index	2.92
Summative Index % (Mass Balance)	99.5
Additional sample information, source and lab pictures	



Values in bold were analyzed by wet chemistry methods.

Definitions and explanation of report terms



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4999 Zane A. Miller Drive, Waynesboro, PA 17268
www.foragelab.com | mail@foragelab.com | 301-790-1980 | 800-CVAS-LAB

