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: **21441 061**
Sampled: **02/21/2017**
Arrived: **02/23/2017**
Completed: **02/24/2017**
Reported: **02/24/2017**

CORN SILAGE

SAMPLE INFORMATION

Lab ID:	21441 061	Version:	1.0
Crop Year:	2016	Series:	
Feed Type:	CORN SILAGE	Cutting#:	
Package:	BASIC NIR		

NIR ANALYSIS RESULTS

Moisture	63.8
Dry Matter	36.2

PROTEINS	% SP	% CP	% DM
Crude Protein			9.4
Adjusted Protein			
Soluble Protein		54.6	5.1
Ammonia (CPE)	24.2	13.2	1.24
ADF Protein (ADICP)		8.3	0.78
NDF Protein (NDICP)		11.2	1.05
NDR Protein (NDRCP)			
Rumen Degr. Protein		77.3	7.3
Rumen Deg. CP (Strep.G)			

FIBER	%NDFom	NDFom %DM	% NDF	% DM
ADF			50.7	22.5
aNDF		43.5		44.4
NDR (NDF w/o sulfite)				
peNDF				
Crude Fiber				
Lignin			6.39	2.84
NDF Digestibility (12 hr)			28.7	12.7
NDF Digestibility (24 hr)				
NDF Digestibility (30 hr)	64.4	28.0	63.2	28.0
NDF Digestibility (48 hr)				
NDF Digestibility (120 hr)	81.4	35.4	79.8	35.4
NDF Digestibility (240 hr)	85.7	37.3	84.0	37.3
uNDF (30 hr)	35.7	15.5	36.9	16.4
uNDF (120 hr)	18.6	8.1	20.2	9.0
uNDF (240 hr)	14.3	6.2	16.0	7.1

CARBOHYDRATES	% Starch	% NFC	% DM
Silage Acids		20.8	8.2
Ethanol Soluble CHO (Sugar)		1.0	0.4
Water Soluble CHO (Sugar)			
Starch		68.4	27.0
Soluble Fiber		16.0	6.31
Starch Dig. (7 hr, 4 mm)	72.4		
Fatty Acids, Total			1.46
Unsaturated Fatty Acids (RUFAL)			1.13
Saturated Fatty Acids			0.33
Crude Fat			3.03

Values in bold were analyzed by wet chemistry methods.

Definitions and explanation of report terms

MINERALS

Ash (%DM)	4.69
Calcium (%DM)	0.32
Phosphorus (%DM)	0.27
Magnesium (%DM)	0.24
Potassium (%DM)	1.61
Sulfur (%DM)	0.13
Sodium (%DM)	
Chloride (%DM)	
Iron (PPM)	
Manganese (PPM)	
Zinc (PPM)	
Copper (PPM)	
Nitrate Ion (%DM)	
Selenium (PPM)	
Molybdenum (PPM)	

QUALITATIVE

Total VFA (%DM)	8.22
Lactic Acid (%DM)	5.31
Lactic as % of Total VFA	64
Acetic Acid (%DM)	2.91
Butyric Acid (%DM)	
1, 2 Propanediol (%DM)	

Soil Contamination Probability	Probable low to none
Nitrate Probability	Probable low nitrate level
NIR Statistical Confidence	Prediction Potential Concern

ENERGY & INDEX CALCULATIONS

pH	3.95
TDN (%DM)	71.1
Net Energy Lactation (mcal/lb)	0.73
Schwab/Shaver NEL (Processed)	0.71
Schwab/Shaver NEL (Unprocessed)	0.67
Net Energy Maintenance (mcal/lb)	0.75
Net Energy Gain (mcal/lb)	0.47
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	4.22
NDF Dig. Rate (Kd, %HR, uNDF)	4.61
Starch Dig. Rate (Kd, %HR, Mertens)	19.5
Relative Feed Value (RFV)	
Relative Feed Quality (RFQ)	
Milk per Ton (lbs/ton)	3189
Dig. Organic Matter Index (lbs/ton)	
Non Fiber Carbohydrates (%DM)	39.5
Non Structural Carbohydrates (%DM)	27.4
DCAD (meq/100gdm)	
CNCPS / CPM Lignin Factor	3.0
RFC - Fill Index	3.35
Summative Index % (Mass Balance)	101.1

Additional sample information, source and lab pictures