Cumberland Valley Analytical Services

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

Farm: WEAVER FALLS
Desc: CORN SILAGE AOC
Submitter: JONES,JOHN
Account: SUPER GRAIN

Copies to:

Lab ID: **18282 085**
Sampled: **06/12/2015**
Arrived: **06/15/2015**
Completed: **06/15/2015**
Reported: **07/06/2015**

CORN SILAGE AOC

SAMPLE INFORMATION			
Lab ID:	18282 085	Version:	1.0
Crop Year:	2014	Series:	
Feed Type:	CORN SILAGE	Cutting#:	
Package:	BASIC NIR		

NIR ANALYSIS RESULTS	
Moisture	71.3
Dry Matter	28.7

PROTEINS	% SP	% CP	% DM
Crude Protein			8.6
Adjusted Protein			
Soluble Protein		61.9	5.3
Ammonia	25.9	16.0	1.37
ADF Protein (ADICP)		11.2	0.96
NDF Protein (NDICP)		14.3	1.22
NDR Protein (NDRCP)			
Rumen Degr. Protein		81.0	6.9
Rumen Deg. CP (Strep.G)			

FIBER	%NDFom	NDFom %DM	% NDF	% DM
ADF			64.7	29.6
aNDF		45.2		45.7
NDR (NDF w/o sulfite)				
peNDF				
Crude Fiber				
Lignin			7.70	3.52
NDF Digestibility (12 hr)			29.0	13.2
NDF Digestibility (24 hr)				
NDF Digestibility (30 hr)	55.7	25.2	55.2	25.3
NDF Digestibility (48 hr)				
NDF Digestibility (120 hr)	63.0	28.5	62.5	28.6
NDF Digestibility (240 hr)	74.7	33.8	74.1	33.9
uNDF (30 hr)	44.3	20.0	44.8	20.5
uNDF (120 hr)	37.0	16.7	37.5	17.2
uNDF (240 hr)	25.3	11.4	25.9	11.9

CARBOHYDRATES	% Starch	% NFC	% DM
Silage Acids		24.8	9.8
Ethanol Soluble CHO (Sugar)		1.8	0.7
Water Soluble CHO (Sugar)			
Starch		69.2	27.4
Soluble Fiber		5.9	2.32
Starch Dig. (7 hr, 4 mm)	77.9		
Fatty Acids, Total			2.79
Fatty Acids (%Fat)			75.6
Crude Fat			3.69

Values in bold were analyzed by wet chemistry methods.

Definitions and explanation of report terms

MINERALS	
Ash (%DM)	3.68
Calcium (%DM)	0.16
Phosphorus (%DM)	0.24
Potassium (%DM)	1.46
Sulfur (%DM)	0.13
Sodium (%DM)	
Iron (PPM)	
Manganese (PPM)	
Zinc (PPM)	
Copper (PPM)	
Nitrate Ion (%DM)	
Selenium (PPM)	
Molybdenum (PPM)	

QUALITATIVE	
Total VFA (%DM)	10.06
Lactic Acid (%DM)	5.61
Lactic as % of Total VFA	57
Acetic Acid (%DM)	4.22
Butyric Acid (%DM)	
1, 2 Propanediol (%DM)	0.30
Titratable Acidity (meq/100gm)	9.98

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

ENERGY & INDEX CALCULATIONS	
pH	3.82
TDN (%DM)	71.4
Net Energy Lactation (mcal/lb)	0.74
Schwab/Shaver NEL (Processed)	0.76
Schwab/Shaver NEL (Unprocessed)	0.76
Net Energy Maintenance (mcal/lb)	0.75
Net Energy Gain (mcal/lb)	0.48
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	3.55
NDF Dig. Rate (Kd, %HR, uNDF)	4.67
Starch Dig. Rate (Kd, %HR, Mertens)	22.9
Relative Feed Value (RFV)	
Relative Feed Quality (RFQ)	
Milk per Ton (lbs/ton)	3250
Dig. Organic Matter Index (lbs/ton)	
Non Fiber Carbohydrates (%DM)	38.3
Non Structural Carbohydrates (%DM)	28.1
DCAD (meq/100gdm)	
CNCPS / CPM Lignin Factor	4.9
Summative Index %	100.1

Additional sample information, source and lab pictures