



# CUMBERLAND VALLEY ANALYTICAL SERVICES

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

Farm: **WEAVER FALLS**  
Desc: **CORN SILAGE**  
Submitter: **CVAS**  
Account: **CVAS**

Copies to:

Lab ID: **12345 106**  
Sampled:  
Arrived: **08/21/2019**  
Completed: **08/21/2019**  
Reported: **08/21/2019**

## CORN SILAGE

SAMPLE INFORMATION			
Lab ID:	26833 106	Version:	1.0
Crop Year:	2018	Series:	
Feed Type:	CORN SILAGE	Cutting#:	
Package:	BASIC NIR		

NIR ANALYSIS RESULTS	
Moisture	60.5
Dry Matter	39.5

PROTEINS	% SP	% CP	% DM
Crude Protein			8.9
Adjusted Protein			
Soluble Protein		55.5	5.0
Ammonia (CPE)	28.4	15.8	1.41
ADF Protein (ADICP)		10.0	0.89
NDF Protein (NDICP)		12.0	1.07
NDR Protein (NDRCP)			
Rumen Degr. Protein		77.8	6.9

FIBER	%NDFom	NDFom %DM	% NDF	% DM
ADF			62.5	22.9
aNDF		33.8		36.7
NDR (NDF w/o sulfite)				
Crude Fiber				
Lignin			6.24	2.29
NDF Digestibility (12 hr)			33.4	12.3
NDF Digestibility (24 hr)				
NDF Digestibility (30 hr)	71.7	24.2	65.8	24.2
NDF Digestibility (72 hr)				
NDF Digestibility (120 hr)	87.1	29.4	80.1	29.4
NDF Digestibility (240 hr)	90.6	30.6	83.5	30.6
uNDF (30 hr)	28.3	9.6	34.2	12.5
uNDF (120 hr)	12.9	4.4	19.9	7.3
uNDF (240 hr)	9.4	3.2	16.5	6.1

CARBOHYDRATES	% Starch	% NFC	% DM
Silage Acids		14.0	6.4
Ethanol Soluble CHO (ESC-Sugar)		2.0	0.9
Water Soluble CHO (WSC-Sugar)			2.0
Starch		76.5	35.1
Soluble Starch			
Soluble Fiber		12.9	5.91
Starch Dig. (7 hr, 4 mm)	71.7		
Crude Fat			3.29
Fatty Acids, Total			2.75
C16:0			0.48
C18:0			0.07
C18:1			0.79
C18:2			1.17
C18:3			0.09
Unsaturated Fatty Acids (RUFAL)			2.05
Fatty Acids (%Fat)			83.6

MINERALS	
Ash (%DM)	6.21
Calcium (%DM)	0.34
Phosphorus (%DM)	0.19
Magnesium (%DM)	0.19
Potassium (%DM)	1.03
Sulfur (%DM)	0.13
Sodium (%DM)	
Chloride (%DM)	
Iron (PPM)	
Manganese (PPM)	
Zinc (PPM)	
Copper (PPM)	
Molybdenum (PPM)	

QUALITATIVE	
Total VFA (%DM)	6.44
Lactic Acid (%DM)	2.16
Lactic as % of Total VFA	34
Acetic Acid (%DM)	4.28
Butyric Acid (%DM)	
1, 2 Propanediol (%DM)	0.38
Nitrate Ion (%DM)	

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

ENERGY & INDEX CALCULATIONS	
pH	4.09
TDN (%DM)	73.1
Net Energy Lactation (Mcal/lb)	0.76
Net Energy Maintenance (Mcal/lb)	0.77
Net Energy Gain (Mcal/lb)	0.50
ME (Mcal/lb)	2.8
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	4.53
NDF Dig. Rate (Kd, %HR, uNDF)	4.6
Starch Dig. Rate (Kd, %HR, Mertens)	19.1
Relative Feed Value (RFV)	
Relative Forage Quality (RFQ)	
Milk per Ton (lbs/ton)	3166
Dig. Organic Matter Index (lbs/ton)	
Non Fiber Carbohydrates (%DM)	45.90
Non Structural Carbohydrates (%DM)	36.0
DCAD (meq/100gdm)	
RFC - Fill Index	4.74
Summative Index % (Mass Balance)	98.5

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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