



CUMBERLAND VALLEY ANALYTICAL SERVICES

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

Farm: **WEAVER FALLS**
Desc: **ALFALFA HAY**
Submitter: **JONES, JOHN**
Account: **CVAS**

Copies to:

Lab ID: **12345 064**
Sampled: **09/16/2019**
Arrived: **09/17/2019**
Completed: **09/17/2019**
Reported: **09/17/2019**

ALFALFA HAY

SAMPLE INFORMATION			
Lab ID:	26995 064	Version:	1.0
Crop Year:	2019	Series:	
Feed Type:	LEGUME FORAGE	Cutting#:	3
Package:	BASIC NIR		

NIR ANALYSIS RESULTS	
Moisture	13.6
Dry Matter	86.4

PROTEINS	% SP	% CP	% DM
Crude Protein			20.3
Adjusted Protein			
Soluble Protein		31.3	6.4
Ammonia (CPE)	13.1	4.1	0.83
ADF Protein (ADICP)		7.3	1.47
NDF Protein (NDICP)		19.1	3.86
NDR Protein (NDRCP)			
Rumen Degr. Protein		65.7	13.3

FIBER	%NDFom	NDFom %DM	% NDF	% DM
ADF			80.6	35.2
aNDF		43.2		43.6
NDR (NDF w/o sulfite)				
Crude Fiber				
Lignin			18.4	8.04
NDF Digestibility (12 hr)				
NDF Digestibility (24 hr)				
NDF Digestibility (30 hr)	45.9	19.8	45.4	19.8
NDF Digestibility (72 hr)				
NDF Digestibility (120 hr)	48.2	20.8	47.8	20.8
NDF Digestibility (240 hr)	50.3	21.7	49.9	21.7
uNDF (30 hr)	54.1	23.4	54.6	23.8
uNDF (120 hr)	51.8	22.4	52.2	22.8
uNDF (240 hr)	49.7	21.5	50.1	21.9

CARBOHYDRATES	% Starch	% NFC	% DM
Silage Acids			
Ethanol Soluble CHO (ESC-Sugar)		19.5	5.5
Water Soluble CHO (WSC-Sugar)			6.9
Starch	2.4		0.7
Soluble Starch			
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			2.09
Crude Fat			1.21
Fatty Acids, Total			0.37
C16:0			0.06
C18:0			0.04
C18:1			0.22
C18:2			0.39
C18:3			0.65
Unsaturated Fatty Acids (RUFAL)			57.9
Fatty Acids (%Fat)			

MINERALS	
Ash (%DM)	9.82
Calcium (%DM)	1.20
Phosphorus (%DM)	0.31
Magnesium (%DM)	0.21
Potassium (%DM)	3.45
Sulfur (%DM)	0.28
Sodium (%DM)	
Chloride (%DM)	
Iron (PPM)	
Manganese (PPM)	
Zinc (PPM)	
Copper (PPM)	
Molybdenum (PPM)	

QUALITATIVE	
Total VFA (%DM)	
Lactic Acid (%DM)	
Lactic as % of Total VFA	
Acetic Acid (%DM)	
Butyric Acid (%DM)	
1, 2 Propanediol (%DM)	
Nitrate Ion (%DM)	
Soil Contamination Probability	Probable low to none
Nitrate Probability	Probable moderate nitrate level
NIR Statistical Confidence	Excellent prediction potential

ENERGY & INDEX CALCULATIONS	
pH	
TDN (%DM)	59.3
Net Energy Lactation (Mcal/lb)	0.63
Net Energy Maintenance (Mcal/lb)	0.61
Net Energy Gain (Mcal/lb)	0.35
ME (Mcal/lb)	2.2
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	5.04
NDF Dig. Rate (Kd, %HR, uNDF)	5.4
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	131
Relative Forage Quality (RFQ)	130
Milk per Ton (lbs/ton)	2718
Dig. Organic Matter Index (lbs/ton)	1147
Non Fiber Carbohydrates (%DM)	28.10
Non Structural Carbohydrates (%DM)	6.2
DCAD (meq/100gdm)	
Summative Index % (Mass Balance)	

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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