



CUMBERLAND VALLEY ANALYTICAL SERVICES

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

Farm: **ORCHARD ALFALFA**
Desc: **ORCHARD / ALF MIX**
Submitter: **COWLAND, CHRIS**
Account: **SPROUT MEADOWS ENTERPRISE LTD.**

Copies to:

Lab ID: **27877 044**
Sampled: **02/06/2020**
Arrived: **02/07/2020**
Completed: **02/10/2020**
Reported: **02/10/2020**

ORCHARD / ALF MIX

SAMPLE INFORMATION

Lab ID:	27877 044	Version:	1.0
Crop Year:	2019	Series:	
Feed Type:	MML FORAGE	Cutting#:	
Package:	BASIC NIR		

NIR ANALYSIS RESULTS

Moisture	14.9
Dry Matter	85.1

PROTEINS

	% SP	% CP	% DM
Crude Protein			21.4
Adjusted Protein			21.4
Soluble Protein		39.7	8.5
Ammonia (CPE)	9.1	3.6	0.77
ADF Protein (ADICP)		6.3	1.35
NDF Protein (NDICP)		14.6	3.12
NDR Protein (NDRCP)			
Rumen Degr. Protein		69.8	14.9

FIBER

	% NDF	% DM
ADF	74.2	27.0
aNDF		36.4
aNDFom		34.7
NDR (NDF w/o sulfite)		
Crude Fiber		
Lignin	12.9	4.70
NDF Digestibility (12 hr)		
NDF Digestibility (24 hr)		
NDF Digestibility (30 hr)		
NDF Digestibility (72 hr)		
NDF Digestibility (120 hr)		
NDF Digestibility (240 hr)		
uNDF (30 hr)		
uNDF (120 hr)		
uNDF (240 hr)		

CARBOHYDRATES

	% Starch	% NFC	% DM
Ethanol Soluble CHO (ESC-Sugar)		27.3	7.4
Water Soluble CHO (WSC-Sugar)			8.9
Starch	5.9		1.6
Soluble Starch			
Soluble Fiber			
Starch Dig. (7 hr, 4 mm)			
Crude Fat			3.39
Fatty Acids, Total			
C16:0			
C18:0			
C18:1			
C18:2			
C18:3			
Unsaturated Fatty Acids (RUFAL)			
Fatty Acids (%Fat)			

MINERALS

Ash (%DM)	14.9
Calcium (%DM)	1.49
Phosphorus (%DM)	0.33
Magnesium (%DM)	0.25
Potassium (%DM)	3.90
Sulfur (%DM)	
Sodium (%DM)	
Chloride (%DM)	
Iron (PPM)	
Manganese (PPM)	
Zinc (PPM)	
Copper (PPM)	
Molybdenum (PPM)	

ENERGY & INDEX CALCULATIONS

pH	
Equine TDN (%DM)	56.8
Equine DE (Mcal/lb)	1.14
Net Energy Lactation (Mcal/lb)	0.63
Net Energy Maintenance (Mcal/lb)	0.54
Net Energy Gain (Mcal/lb)	0.28
ME (Mcal/lb)	1.1
NDF Dig. Rate (Kd, %HR, Van Amburgh, Lignin*2.4)	
NDF Dig. Rate (Kd, %HR, uNDF)	4.1
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	174
Relative Forage Quality (RFQ)	
Milk per Ton (lbs/ton)	
Dig. Organic Matter Index (lbs/ton)	
Non Fiber Carbohydrates (%DM)	27.10
Non Structural Carbohydrates (%DM)	10.5
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.



Cumberland Valley Analytical Services, Inc.



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