

HOLMES LABORATORY INC.
 3559 US 62
 Millersburg, OH 44654
 Phone (330) 893-2933
 E-mail: holmeslabinfo@wifi7.com

FORAGE/FEEDSTUFF
 ANALYSIS REPORT

Web Site: www.holmeslab.com
 Date Reported: 08/11/2010
 Customer: Joyful Journey

Alpacas
 [A Vital Key to Today's Agriculture]

Lab Number: 10-5038

Joyful Journey Alpacas, LLC
 13920 W. State Rd. 77
 Hayward, WI 54843

SAMPLE I.D.: Grass Hay
 2nd Cut

Item	Units	As Sampled Basis	Dry Matter Basis
Moisture	%	12.20	
Dry Matter	%	87.80	
Crude Protein	%	8.62	9.82
Available Protein	%		
Adjusted Crude Protein	%		
A.D.F. Protein	%		
N.D.F. Protein	%		
Soluble Protein	%		
Protein Solubility	%		
Lignin	%		
Acid Detergent Fiber	%	31.44	35.81
Neutral Detergent Fiber	%	49.50	56.38
N.D.F. (Protein Free)	%		
NFC (Non-Fiber Carbohydrate)	%	21.07	24.00
Sugar	%		
Starch (est.)	%	3.16	3.60
Crude Fat	%		
TDN	%	47.61	54.22
NEl	Mcal/lb.	.481	.548
NE _m	Mcal/lb.	.443	.505
NE _g	Mcal/lb.	.222	.253
Ash	%		
Lignin Insoluble Ash	%		
Calcium (Ca)	%	.39	.44
Phosphorus (P)	%	.26	.30
Magnesium (Mg)	%	.29	.33
Potassium (K)	%	1.46	1.66
Sulfur (S)	%		
Sodium (Na)	%	.012	.014
Chloride (Cl)	%		
Copper (Cu)	ppm	3	3
Manganese (Mn)	ppm	99	113
Zinc (Zn)	ppm	11	13
Iron (Fe)	ppm	49	56
Molybdenum (Mo)	ppm		
Aluminum (Al)	ppm		
Nitrate (NO ₃)	%		
pH			
RFV (Relative Feed Value)			101
Horse DE	Mcal/lb.		
Horse TDN	%		
Crude Fiber	%		
DCAD	meq./100g DM		