

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

FORAGE/FEEDSTUFF  
 ANALYSIS REPORT  
 [A Vital Key to Today's Agriculture]  
 www.holmeslab.com  
 Test Performed: 9

Customer: Joyful Journey Alpacas-Winter Field

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

Date Reported: 08/31/2012  
 Lab Number: 12-3635  
 SAMPLE I.D.: Grass Hay  
 3rd Cut Orchard Grs.

Item	Units	As Sampled	Basis	Dry Matter Basis
Moisture	%	11.99		
Dry Matter	%	88.01		
Crude Protein	%	10.42		11.84
Available Protein	%	9.54		10.84
Adjusted Crude Protein	%	10.42		11.84
A.D.F. Protein	%	.88		1.00
N.D.F. Protein	%	3.47		3.94
Soluble Protein	%			
Protein Solubility	%			
Lignin	%	3.23		3.67
Acid Detergent Fiber	%	29.28		33.27
Neutral Detergent Fiber	%	50.71		57.62
N.D.F.(Protein Free)	%	47.24		53.68
NFC (Non-Fiber Carbohydrate)	%	21.24		24.13
Sugar	%			
Starch (est.)	%	3.19		3.62
Crude Fat	%	3.44		3.91
TDN	%	57.72		65.58
NEL	Mcal/lb.	.593		.674
NEM	Mcal/lb.	.596		.677
NEG	Mcal/lb.	.360		.409
Ash	%	5.24		5.95
Lignin Insoluble Ash	%	1.26		1.43
Calcium (Ca)	%	.32		.36
Phosphorus (P)	%	.21		.24
Magnesium (Mg)	%	.28		.32
Potassium (K)	%	1.38		1.57
Sulfur (S)	%	.13		.15
Sodium (Na)	%	.033		.038
Chloride (Cl)	%			
Copper (Cu)	ppm	3		3
Manganese (Mn)	ppm	60		68
Zinc (Zn)	ppm	13		15
Iron (Fe)	ppm	44		50
Molybdenum (Mo)	ppm			
Aluminum (Al)	ppm			
Nitrate (NO3)	%			Negative
pH				
RFV (Relative Feed Value)				102
Horse DE	Mcal/lb.			
Horse TDN	%			
Crude Fiber	%			
DCAD	meq./100g DM			
DCAD	meq./1 lb.DM			