

HOLMES LABORATORY INC.
 3559 US 62
 Millersburg, OH 44654

FORAGE/FEEDSTUFF
 ANALYSIS REPORT
 [A Vital Key to Today's Agriculture]
 (330) 893-2933 * www.holmeslab.com
 Test Performed: 9

Customer: Jeff Groeschel-Andy's Field

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

Date Reported: 08/22/2014
 Lab Number: 14-2704
 SAMPLE I.D.: Grass Hay
 2nd Cut Orchard Grs.

Item	Units	As Sampled Basis	Dry Matter Basis
Moisture	%	13.99	
Dry Matter	%	86.01	
Crude Protein	%	11.50	13.37
Available Protein	%	9.92	11.53
Adjusted Crude Protein	%	11.07	12.87
A.D.F. Protein	%	1.58	1.84
N.D.F. Protein	%	3.54	4.11
Soluble Protein	%		
Protein Solubility	%		
Lignin	%	8.03	9.34
Acid Detergent Fiber	%	29.85	34.71
Neutral Detergent Fiber	%	50.20	58.36
NFC (Non-Fiber Carbohydrate)	%	16.51	19.19
Sugar	%		
Starch	%		
NSC = Starch + Sugar	%		
Crude Fat	%	3.44	4.00
TDN	%	45.96	53.43
NEl	Mcal/lb.	.464	.539
NEM	Mcal/lb.	.424	.493
NEg	Mcal/lb.	.207	.241
Ash	%	7.57	8.80
Lignin Insoluble Ash	%	.35	.41
Calcium (Ca)	%	.11	.13
Phosphorus (P)	%	.24	.28
Magnesium (Mg)	%	.16	.19
Potassium (K)	%	2.28	2.65
Sulfur (S)	%	.16	.19
Sodium (Na)	%	.013	.015
Chloride (Cl)	%		
Copper (Cu)	ppm	6	7
Manganese (Mn)	ppm	87	101
Zinc (Zn)	ppm	15	18
Iron (Fe)	ppm	34	40
Molybdenum (Mo)	ppm		
Aluminum (Al)	ppm		
Nitrate (NO3)	%		Positive
pH			
RFV (Relative Feed Value)			99
Horse DE	Mcal/lb.		
Horse TDN	%		
Crude Fiber	%		
DCAD	meq./100g DM		
DCAD	meq./1 lb.DM		