

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: Andy Groeschl

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

Date Reported: 07/30/2015  
 Lab Number: 15-2587  
 SAMPLE I.D.: Grass Hay  
 Andy's 2nd

Item	Units	As Sampled Basis	Dry Matter Basis
Moisture	%	12.42	
Dry Matter	%	87.58	
Crude Protein	%	8.59	9.81
Available Protein	%	8.18	9.34
Adjusted Crude Protein	%	8.59	9.81
A.D.F. Protein	%	.41	.47
N.D.F. Protein	%	3.38	3.86
Soluble Protein	%		
Protein Solubility	%		
Lignin	%	5.97	6.82
Acid Detergent Fiber	%	32.27	36.85
Neutral Detergent Fiber	%	55.14	62.96
NFC (Non-Fiber Carbohydrate)	%	17.26	19.71
Sugar	%		
Starch	%		
NSC = Starch + Sugar	%		
Crude Fat	%	2.65	3.03
TDN	%	49.41	56.42
NEl	Mcal/lb.	.501	.572
NEm	Mcal/lb.	.472	.539
NEg	Mcal/lb.	.249	.284
Ash	%	6.96	7.95
Lignin Insoluble Ash	%	1.09	1.24
Calcium (Ca)	%	.29	.33
Phosphorus (P)	%	.19	.22
Magnesium (Mg)	%	.19	.22
Potassium (K)	%	2.61	2.98
Sulfur (S)	%	.27	.31
Sodium (Na)	%	.060	.069
Chloride (Cl)	%		
Copper (Cu)	ppm	1	1
Manganese (Mn)	ppm	130	149
Zinc (Zn)	ppm	13	15
Iron (Fe)	ppm	32	36
Molybdenum (Mo)	ppm		
Aluminum (Al)	ppm		
Nitrate (NO3)	%		Negative
pH			
RFV (Relative Feed Value)			89
Horse DE	Mcal/lb.		
Horse TDN	%		
Crude Fiber	%		
DCAD	meq./100g DM		
DCAD	meq./1 lb.DM		