

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: AG

Customer: Andy Groeschl

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

Date Reported: 06/20/2014
 Lab Number: 14-1790
 SAMPLE I.D.: Grass Hay
 Andy's Orch.-1st '14

Item	Units	As Sampled Basis	Dry Matter Basis
Moisture	%	15.47	
Dry Matter	%	84.53	
Crude Protein	%	9.57	11.32
Available Protein	%		
Adjusted Crude Protein	%		
A.D.F. Protein	%		
N.D.F. Protein	%		
Soluble Protein	%		
Protein Solubility	%		
Lignin	%		
Acid Detergent Fiber	%	27.29	32.28
Neutral Detergent Fiber	%	47.97	56.75
NFC (Non-Fiber Carbohydrate)	%	18.71	22.13
Sugar	%		
Starch	%		
NSC = Starch + Sugar	%		
Crude Fat	%		
TDN	%	49.86	58.99
NEl	Mcal/lb.	.508	.601
NEm	Mcal/lb.	.489	.579
NEg	Mcal/lb.	.270	.320
Ash	%		
Lignin Insoluble Ash	%		
Calcium (Ca)	%	.15	.18
Phosphorus (P)	%	.20	.24
Magnesium (Mg)	%	.14	.17
Potassium (K)	%	1.95	2.31
Sulfur (S)	%		
Sodium (Na)	%	.024	.028
Chloride (Cl)	%		
Copper (Cu)	ppm	6	7
Manganese (Mn)	ppm	108	128
Zinc (Zn)	ppm	13	15
Iron (Fe)	ppm	28	33
Molybdenum (Mo)	ppm		
Aluminum (Al)	ppm		
Nitrate (NO3)	%		
pH			
RFV (Relative Feed Value)			105
Horse DE	Mcal/lb.		
Horse TDN	%		
Crude Fiber	%		
DCAD	meq./100g DM		
DCAD	meq./1 lb.DM		