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

Customer: Andy Groeschl

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

Date Reported: 07/02/2013  
 Lab Number: 13-2364  
 SAMPLE I.D.: Grass Hay  
 Groeschl 1st Crop

Item	Units	As Sampled Basis	Dry Matter Basis
Moisture	%	15.93	
Dry Matter	%	84.07	
Crude Protein	%	8.15	9.70
Available Protein	%		
Adjusted Crude Protein	%		
A.D.F. Protein	%		
N.D.F. Protein	%		
Soluble Protein	%		
Protein Solubility	%		
Lignin	%		
Acid Detergent Fiber	%	25.20	29.97
Neutral Detergent Fiber	%	43.79	52.09
NFC (Non-Fiber Carbohydrate)	%	23.88	28.41
Sugar	%		
Starch	%		
NSC = Starch + Sugar	%		
Crude Fat	%		
TDN	%	52.17	62.05
NEl	Mcal/lb.	.534	.635
NEm	Mcal/lb.	.525	.625
NEg	Mcal/lb.	.304	.362
Ash	%		
Lignin Insoluble Ash	%		
Calcium (Ca)	%	.20	.24
Phosphorus (P)	%	.21	.25
Magnesium (Mg)	%	.16	.19
Potassium (K)	%	2.26	2.69
Sulfur (S)	%		
Sodium (Na)	%	.033	.039
Chloride (Cl)	%		
Copper (Cu)	ppm	1	1
Manganese (Mn)	ppm	55	66
Zinc (Zn)	ppm	8	10
Iron (Fe)	ppm	34	41
Molybdenum (Mo)	ppm		
Aluminum (Al)	ppm		
Nitrate (NO3)	%		
pH			
RFV (Relative Feed Value)			117
Horse DE	Mcal/lb.		
Horse TDN	%		
Crude Fiber	%		
DCAD	meq./100g DM		
DCAD	meq./1 lb.DM		