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FORAGE/FEEDSTUFF
 ANALYSIS REPORT

Web Site: www.holmeslab.com
 Date Reported: 08/11/2010
 Customer: Joyful Journey

Alpacas
 [A Vital Key to Today's Agriculture]

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

Lab Number: 10-5037

SAMPLE I.D.: Grass Hay
 1st Cut

Item	Units	As Sampled Basis	Dry Matter Basis	
Moisture	%	12.32		
Dry Matter	%	87.68		
Crude Protein	%	8.65	9.86	8-14
Available Protein	%			
Adjusted Crude Protein	%			
A.D.F. Protein	%			
N.D.F. Protein	%			
Soluble Protein	%			
Protein Solubility	%			
Lignin	%			
Acid Detergent Fiber	%	28.62	32.64	23-55
Neutral Detergent Fiber	%	45.97	52.43	41-78
N.D.F. (Protein Free)	%			
NFC (Non-Fiber Carbohydrate)	%	24.47	27.91	
Sugar	%			
Starch (est.)	%	3.67	4.19	
Crude Fat	%			
TDN	%	51.25	58.45	50-65
NEl	Mcal/lb.	.522	.595	
NEm	Mcal/lb.	.500	.570	.82-1.1
NEg	Mcal/lb.	.274	.312	
Ash	%			
Lignin Insoluble Ash	%			
Calcium (Ca)	%	.29	.33	.2-.85
Phosphorus (P)	%	.14	.16	.16-.40
Magnesium (Mg)	%	.20	.23	.12-.20
Potassium (K)	%	1.22	1.39	.5-.8
Sulfur (S)	%			
Sodium (Na)	%	.029	.033	
Chloride (Cl)	%			
Copper (Cu)	ppm	4	4	8-13
Manganese (Mn)	ppm	162	185	45-50
Zinc (Zn)	ppm	16	18	40-47
Iron (Fe)	ppm	41	47	50-100
Molybdenum (Mo)	ppm			
Aluminum (Al)	ppm			
Nitrate (NO3)	%			
pH				
RFV (Relative Feed Value)			113	
Horse DE	Mcal/lb.			
Horse TDN	%			
Crude Fiber	%			
DCAD	meq./100g DM			