

HOLMES LABORATORY INC.
 3559 US 62
 Millersburg, OH 44654
 Phone (330) 893-2933
 E-mail: holmeslabinfo@wifi7.com

FORAGE/FEEDSTUFF
 ANALYSIS REPORT
 [A Vital Key to Today's Agriculture]
 www.holmeslab.com
 Test Performed: 9W

Customer: Joyful Journey

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

Date Reported: 07/24/2012
 Lab Number: 12-3050
 SAMPLE I.D.: Grass Hay
 Wiley-2nd Cut

Item	Units	As Sampled	Basis	Dry Matter Basis
Moisture	%	13.83		
Dry Matter	%	86.17		
Crude Protein	%	9.73		11.29
Available Protein	%	8.82		10.24
Adjusted Crude Protein	%	9.73		11.29
A.D.F. Protein	%	.90		1.05
N.D.F. Protein	%	3.58		4.15
Soluble Protein	%			
Protein Solubility	%			
Lignin	%	7.16		8.31
Acid Detergent Fiber	%	30.80		35.74
Neutral Detergent Fiber	%	49.39		57.32
N.D.F.(Protein Free)	%	45.82		53.17
NFC (Non-Fiber Carbohydrate)	%	20.81		24.15
Sugar	%	.40		.47
Starch	%	4.18		4.85
NSC = Starch + Sugar	%	4.58		5.32
Crude Fat	%	2.83		3.29
TDN	%	48.55		56.34
NEl	Mcal/lb.	.492		.571
NEm	Mcal/lb.	.464		.538
NEg	Mcal/lb.	.244		.283
Ash	%	6.56		7.61
Lignin Insoluble Ash	%	.53		.62
Calcium (Ca)	%	.31		.36
Phosphorus (P)	%	.24		.28
Magnesium (Mg)	%	.28		.32
Potassium (K)	%	1.53		1.78
Sulfur (S)	%	.19		.22
Sodium (Na)	%	.025		.029
Chloride (Cl)	%			
Copper (Cu)	ppm	5		6
Manganese (Mn)	ppm	53		61
Zinc (Zn)	ppm	13		15
Iron (Fe)	ppm	42		49
Molybdenum (Mo)	ppm			
Aluminum (Al)	ppm			
Nitrate (NO3)	%			Negative
pH				
RFV (Relative Feed Value)				99
Horse DE	Mcal/lb.			
Horse TDN	%			
Crude Fiber	%			
DCAD	meq./100g DM			
DCAD	meq./1 lb.DM			