

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: 15-2589
 SAMPLE I.D.: Grass Hay
 Trembly's 2nd

Item	Units	As Sampled Basis	Dry Matter Basis
Moisture	%	12.33	
Dry Matter	%	87.67	
Crude Protein	%	10.93	12.47
Available Protein	%	10.37	11.83
Adjusted Crude Protein	%	10.93	12.47
A.D.F. Protein	%	.56	.64
N.D.F. Protein	%	3.49	3.98
Soluble Protein	%		
Protein Solubility	%		
Lignin	%	4.00	4.56
Acid Detergent Fiber	%	31.31	35.71
Neutral Detergent Fiber	%	55.94	63.81
NFC (Non-Fiber Carbohydrate)	%	17.23	19.65
Sugar	%		
Starch	%		
NSC = Starch + Sugar	%		
Crude Fat	%	2.51	2.86
TDN	%	54.85	62.56
NEl	Mcal/lb.	.561	.640
NEm	Mcal/lb.	.554	.632
NEg	Mcal/lb.	.324	.369
Ash	%	4.20	4.79
Lignin Insoluble Ash	%	.54	.62
Calcium (Ca)	%	.34	.39
Phosphorus (P)	%	.18	.20
Magnesium (Mg)	%	.32	.36
Potassium (K)	%	.81	.92
Sulfur (S)	%	.15	.17
Sodium (Na)	%	.092	.105
Chloride (Cl)	%		
Copper (Cu)	ppm	1	1
Manganese (Mn)	ppm	60	69
Zinc (Zn)	ppm	15	17
Iron (Fe)	ppm	29	33
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		