

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 Groeschel

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

Date Reported: 09/23/2015
 Lab Number: 15-3390
 SAMPLE I.D.: Grass Hay
 Trembly S.-3rd-Orch.

Item	Units	As Sampled Basis	Dry Matter Basis
Moisture	%	12.40	
Dry Matter	%	87.60	
Crude Protein	%	10.14	11.57
Available Protein	%	9.57	10.93
Adjusted Crude Protein	%	10.14	11.57
A.D.F. Protein	%	.56	.64
N.D.F. Protein	%	3.57	4.08
Soluble Protein	%		
Protein Solubility	%		
Lignin	%	3.06	3.49
Acid Detergent Fiber	%	30.74	35.09
Neutral Detergent Fiber	%	52.31	59.72
NFC (Non-Fiber Carbohydrate)	%	20.48	23.38
Sugar	%		
Starch	%		
NSC = Starch + Sugar	%		
Crude Fat	%	2.77	3.16
TDN	%	56.89	64.94
NEl	Mcal/lb.	.584	.667
NEm	Mcal/lb.	.584	.667
NEg	Mcal/lb.	.350	.400
Ash	%	5.05	5.77
Lignin Insoluble Ash	%	.18	.21
Calcium (Ca)	%	.39	.44
Phosphorus (P)	%	.23	.26
Magnesium (Mg)	%	.35	.40
Potassium (K)	%	1.10	1.26
Sulfur (S)	%	.34	.39
Sodium (Na)	%	.084	.096
Chloride (Cl)	%		
Copper (Cu)	ppm	4	4
Manganese (Mn)	ppm	104	119
Zinc (Zn)	ppm	13	15
Iron (Fe)	ppm	30	34
Molybdenum (Mo)	ppm		
Aluminum (Al)	ppm		
Nitrate (NO3)	%		Negative
pH			
RFV (Relative Feed Value)			96
Horse DE	Mcal/lb.		
Horse TDN	%		
Crude Fiber	%		
DCAD	meq./100g DM		
DCAD	meq./1 lb.DM		