HOLMES LABORATORY, INC. FORAGE/FEEDSTUFF

 3559 U.S. 62 ANALYSIS REPORT

 Millersburg, Ohio 44654 Web site: www.holmeslab.com

 Phone:(330)893-2933 Date Reported: 07/08/2009

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 Customer: Joyful Journey Alpacas

 [A Vital Key to Todays Agriculture] Lab Number: 09-2417

 SAMPLE I.D.:Grass Hay

 Joyful Journey Alpacas, LLC Orchard Grass

 13920 W. State Rd. 77

 Hayward, WI 54843

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 Item Units As Sampled Basis Dry Matter Basis

 Moisture % 16.85

 Dry Matter % 83.15

 Crude Protein % 9.15 11.00

 Available Protein % 8.39 10.09

 Adjusted Crude Protein % 9.15 11.00

 A.D.F. Protein % .76 .91

 N.D.F. Protein % 2.11 2.54

 Soluble Protein %

 Degraded Protein %

 Protein Solubility %

 Protein Degradability %

 Lignin % 2.79 3.35

 Acid Detergent Fiber % 21.34 25.66

 Neutral Detergent Fiber % 32.00 38.48

 N.D.F.(Protein Free) % 29.88 35.94

 NFC (Non-Fiber Carbohydrate) % 34.32 41.27

 Sugar %

 Starch (est.) % 5.15 6.19

 Crude Fat % 2.57 3.09

 TDN % 56.78 68.29

 NEl Mcal/lb. .585 .704

 NEm Mcal/lb. .595 .716

 NEg Mcal/lb. .369 .444

 Ash % 6.54 7.86

 Lignin Insoluble Ash % 1.74 2.09

 Calcium (Ca) % .28 .34

 Phosphorus (P) % .22 .26

 Magnesium (Mg) % .17 .20

 Potassium (K) % 1.78 2.14

 Sulfur (S) % .12 .15

 Sodium (Na) % .015 .018

 Chloride (Cl) %

 Copper (Cu) ppm 6 7

 Manganese (Mn) ppm 80 96

 Zinc (Zn) ppm 11 13

 Iron (Fe) ppm 54 65

 Molybdenum (Mo) ppm

 Aluminum (Al) ppm

 Nitrate (NO3) % Negative

 pH

 RFV (Relative Feed Value) 167

 Horse DE Mcal/lb.

 Horse TDN %

 Crude Fiber %

 DCAD meq./100g DM

 DCAD meq./1 lb.DM

 National Forage Testing Association Certified