



CUMBERLAND VALLEY ANALYTICAL SERVICES

Laboratory services for agriculture ... from the field to the feed bunk.

Type: BYPRODUCT, MISC
Farm: HOLLYWICK FARMS LLC
Desc: BARLEY 050913 (WHEAT GRAS)

Regression: OH
Cutting #: 1
Copies to:

Lab ID: 14709 148
Sampled: 05/09/2013
Arrived: 05/15/2013
Completed: 05/20/2013
Reported: 05/20/2013

HOLLYWICK FARMS LLC

CHEMISTRY ANALYSIS RESULTS

Moisture 85.5
 Dry Matter 14.5

PROTEINS

	% SP	% CP	% DM
Crude Protein			22.2
Adjusted Protein			22.2
Soluble Protein		66.5	14.8
Ammonia (NPN)			
ADF Protein (ADICP)		3.1	0.68
NDF Protein (NDICP)		7.1	1.59
NDR Protein (NDRCP)			
Rumen Degr. Protein			
Rumen Deg. CP (Strep.G)			

FIBER

	% NDF	% DM
ADF	48.1	14.9
NDF		30.9
aNDFom		
NDR (NDF w/o sulfite)		
peNDF		
Crude Fiber		
Lignin	8.03	2.49
NDF Digestibility (12 hr)		
NDF Digestibility (24 hr)		
NDF Digestibility (30 hr)		
NDF Digestibility (48 hr)		
NDF Digestibility (240 hr)		
Indigestible NDF		

CARBOHYDRATES

	% Starch	% NFC	% DM
Silage Acids			
Ethanol Soluble CHO (Sugar)		66.9	28.8
Water soluble CHO (Sugar)			
Starch		32.0	13.8
Soluble Fiber			
Starch Digestibility (7 hr)			
Fatty Acids, Total (%DM)			
Crude Fat			2.76
Acid Hydrolysis Fat			

MINERALS

Ash (%DM)	2.65
Calcium (%DM)	0.26
Phosphorus (%DM)	0.43
Magnesium (%DM)	0.24
Potassium (%DM)	0.40
Sulfur (%DM)	0.26
Sodium (%DM)	0.043
Chloride (%DM)	0.29
Iron (PPM)	81
Manganese (PPM)	43
Zinc (PPM)	38
Copper (PPM)	4
Molybdenum (PPM)	
Selenium (PPM)	
Nitrate Ion (%DM)	0.02

FERMENTATION

pH
 Total VFA
 Lactic Acid (%DM)
 Lactic as % of Total VFA
 Acetic Acid (%DM)
 Propionic Acid (%DM)
 Butyric Acid (%DM)
 Isobutyric Acid (%DM)
 Titratable Acidity (meq/100gm)
 1, 2 Propanediol (%DM)

1-Propanol (%DM)
 Methanol (%DM)
 Ethanol (%DM)
 2-Butanol (%DM)
 Methyl Acetate (%DM)
 Propyl Acetate (%DM)
 Ethyl Lactate (%DM)
 Propyl Lactate (%DM)

QUALITATIVE

Mold Count (col/gm)
 Yeast Count (col/gm)
 Corn Silage Processing Score
 Particle Size (Penn State)
 - Particles greater than 0.75"
 - Particles from 0.31" to 0.75"
 - Particles less than 0.31"

ENERGY & INDEX CALCULATIONS

TDN (%DM)	76.5
Net Energy Lactation (mcal/lb)	0.80
Net Energy Maintenance (mcal/lb)	0.83
Net Energy Gain (mcal/lb)	0.55
NDF Dig. Rate (Kd, %HR, Van Amburgh)	
NDF Dig. Rate (Kd, %HR, Mertens)	
Starch Dig. Rate (Kd, %HR, Mertens)	
Relative Feed Value (RFV)	
Relative Feed Quality (RFQ)	
Milk per Ton (lbs/ton)	
Dig. Organic Matter Index (lbs/ton)	
Non Fiber Carbohydrates (%DM)	43.0
Non Structural Carbohydrates (%DM)	42.6
DCAD (meq/100gdm)	-12.1

