CUMBERLAND VALLEY ANALYTICAL SERVICES



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

Farm:	MIKS TREYD	Copies to: LAB NOVA LLC
Desc:	COMPOUND FEED AMINOPAK	
Submitter:	NOVA, LABORATORY	
Account:	NOVA LABORATORY	

Lab ID:	31666 116
Sampled:	12/23/2021
Arrived:	01/25/2022
Completed:	02/17/2022
Reported:	02/25/2022

Rumen and Intestinal Digestibility Assay of Protein (Multi-Step Protein Evaluation)

DRY MATTER Residue after oven drying		% DM 91
PROTEIN	% (as received)	% (dm basis)
Protein as nitrogen x 6.25 from Leco nitrogen combustion analysis	50.7	55.7
SOLUBLE PROTEIN	% CP	% DM
1 hour water solubility, filtered on 1.5 micron filter, as-received particle size	27.3	15.2
RUMEN DEGRADABLE PROTEIN	% СР	% DM
Total protein less rumen undegradable protein recovered on filter	40.3	22.5
RUMEN UNDEGRADABLE PROTEIN	% CP	% DM
16 hour incubation in rumen fluid from high group TMR, as-received particle size recovered on filter	59.7	33.2
INTESTINAL DIGESTED PROTEIN	% СР	% DM
Protein that is rumen undegradable but digested in pepsin for 1 hour, then in trypsin, chymotrypsin, amylase, and lipase for 24 hours, as-received particle size	35.8	19.9
As percentage of Rumen Undegradable Protein 59.9%		
TOTAL TRACT DIGESTED PROTEIN	% СР	% DM
Total protein less intestinal undigested residue recovered by 1.5 micron filter	76.1	42.4
TOTAL TRACT UNDIGESTED PROTEIN	% CP	% DM
Intestinal undigested residue, recovered on 1.5 micron filter	23.9	13.3

Analysis performed by procedure of D. A. Ross and M. E. Van Amburgh. Exception is that determination of rumen undegradable protein is on material recovered by filter, not freeze drying. This may underestimate rumen undegradable protein by not capturing material, soluble or in suspension, in rumen fluid on some protein sources.



Cumberland Valley Analytical Services, Inc.



N/2