FEED AND FORAGE REPORT

DAIRYLAND LABORATORIES, INC.
Arcadia, WI 54612
Telephone 608-323-2123

Report date: 4/ 6/2011
Sample number: 025165

ACCOUNT # 1769 (0)

TO:
FarmTek
1440 Field of Dreams Way
Dyersville , IA 52040

SAMPLED FOR: FARMTEK

PRODUCT: red wheat fodder (6 - DM1)

RESULTS:	Moisture	75.93%	
	Dry Matter	24.07%	
		DRY BASIS:	
	Crude Protein	15.97%	
	aN D F	19.07%	(w/ Na2SO3)
	Fat	2.51%	
	Ash	2.72%	
	Calcium	0.11%	0.50 g/lb
	Phosphorus	0.54%	2.45 g/lb
	Magnesium	0.25%	1.13 g/lb
	Potassium	0.50%	2.27 g/lb
CALCS:	T.D.N. - OARDC	76.92%	
	N.F.C.	59.73%	
	N.E.L. - OARDC	80.21	Mcal/cwt
	N.E.- G. - OARDC	55.66	Mcal/cwt
	N.E.- M. - OARDC	84.44	Mcal/cwt

		Protein			Fiber			Minerals							E	
FEEDSTUFF	DM %	CP %	Bypass %	EE %	CF %	ADF %	NDF %	Ash %	Ca %	P %	K %	Cl %	S %	Zn ppm	TDN %	NE
Sorghum, silage	32	9	32	2.8	27	37	56	7	0.47	0.21	1.6	0.45	0.13	30	59	0.5
Sorghum, grain (milo), ground	89	10	58	3.2	3	6	19	2	0.04	0.31	0.4	0.10	0.14	18	82	0.8
Sorghum, grain (milo), flaked	85	10	62	3.2	3	6	20	2	0.04	0.28	0.4	0.10	0.14	18	88	0.9
Soybean hay	89	15	—	2.2	35	40	55	8	1.29	0.30	1.1	0.15	0.24	24	52	0.5
Soybean straw	88	5	—	1.4	44	54	70	6	1.59	0.06	0.6	—	0.26	—	42	0.4
Soybeans, whole, full fat	88	40	30	19.4	8	11	15	5	0.27	0.64	2.0	0.03	0.34	53	93	1.0
Soybean flakes, hulls	91	14	30	2.5	35	47	63	5	0.60	0.22	1.4	0.02	0.12	46	77	0.8
Soybean meal, solvent, 44% protein	91	51	38	2.0	5	11	13	7	0.40	0.73	2.4	0.07	0.46	62	84	0.9
Soybean meal, solvent, 49% protein	91	55	30	1.2	3	6	10	6	0.28	0.70	2.2	0.08	0.42	61	87	0.9
Soybean mill feed	90	15	—	2.0	36	46	—	6	0.49	0.18	1.7	—	0.07	—	51	0.5
Sudangrass, fresh, immature	18	17	—	3.9	23	29	55	9	0.46	0.36	2.0	—	0.11	—	70	0.7
Sudangrass, hay	89	10	—	1.8	36	41	62	10	0.50	0.24	2.2	0.80	0.12	30	57	0.5
Sudangrass, silage	31	11	—	3.1	30	41	61	10	0.58	0.27	2.4	0.52	0.16	34	58	0.5
Sunflower meal, solvent	92	47	27	3.1	11	19	35	8	0.44	0.94	1.2	0.15	0.33	50	65	0.6
Sunflower meal with hulls	91	32	40	1.4	27	—	—	7	0.40	1.03	1.0	—	0.30	100	57	0.5
Sunflower hulls	90	4	—	2.2	25	63	—	3	0.00	0.11	—	—	—	—	40	0.4
Sugar cane bagasse	91	1	—	0.7	49	59	86	3	0.90	0.29	0.5	—	0.10	—	36	0.3
Timothy, fresh, pre-bloom	26	11	20	3.8	31	36	62	7	0.40	0.28	1.9	0.57	0.17	24	64	0.6
Timothy, hay, early bloom	88	12	25	2.6	32	41	63	6	0.58	0.26	1.9	0.51	0.21	—	59	0.5
Timothy, hay, full bloom	88	8	38	2.5	33	44	68	5	0.43	0.20	1.6	0.62	0.13	20	57	0.5
Timothy, silage	34	10	25	3.4	34	45	70	7	0.50	0.27	1.7	—	0.15	—	59	0.5
Tomato pomace, dried	92	23	—	10.6	26	50	55	6	0.43	0.59	3.6	—	—	—	64	0.6
Triticale, hay	90	10	—	—	34	41	69	—	0.30	0.26	2.3	—	—	25	56	0.5
Triticale, silage	35	14	—	3.6	30	39	56	—	0.58	0.34	2.7	—	0.28	36	58	0.5
Triticale, grain	89	14	25	2.4	4	5	22	2	0.07	0.39	0.5	—	0.17	37	85	0.9
Turnip tops, purple	18	16	—	2.6	10	13	—	13	3.20	0.31	3.0	1.80	0.27	—	69	0.7
Turnip roots	9	12	0	1.5	11	34	44	8	0.70	0.34	3.2	0.65	0.43	40	86	0.9
Urea, 46% N	99	288	0	0.0	0	0	0	0	0.00	0.00	0.0	—	0.00	0	0	0.0
Vetch	89	17	—	1.2	30	33	48	8	1.25	0.34	2.4	—	0.13	—	59	0.5
Wheat, fresh, pasture	21	18	—	4.0	18	30	52	14	0.34	0.35	3.0	0.67	0.22	—	69	0.7
Wheat, hay	90	10	25	2.0	29	36	65	7	0.25	0.23	1.6	0.50	0.18	23	57	0.5
Wheat silage	33	12	50	3.8	28	37	63	8	0.38	0.28	2.0	0.50	0.21	27	60	0.6
Wheat straw	91	3	70	1.5	43	58	82	8	0.16	0.05	1.3	0.32	0.16	6	44	0.4
Wheat, straw, ammoniated	85	9	25	1.5	40	55	76	9	0.15	0.05	1.3	—	0.16	6	50	0.5
Wheat, grain	89	14	25	2.5	3	4	12	2	0.05	0.42	0.5	0.09	0.16	42	88	0.9
Wheat, grain, hard	89	14	—	2.0	3	6	15	2	0.05	0.43	0.5	—	0.16	45	88	0.9
Wheat, grain, soft	89	12	—	2.0	3	4	14	2	0.06	0.40	0.4	—	0.15	30	88	0.9
Wheat, grain, flaked	85	14	29	2.0	3	4	13	2	0.04	0.39	0.4	—	0.17	42	89	0.9
Wheat, grain, sprouted	86	12	18	2.0	3	4	13	2	0.04	0.36	0.4	—	0.17	45	88	0.9
Wheat, bran	89	17	30	4.8	11	13	49	7	0.13	1.30	1.4	0.05	0.24	90	70	0.7
Wheat, middlings	89	19	24	4.6	7	12	37	5	0.14	1.04	1.2	0.05	0.21	90	82	0.8
Wheat millrun	90	17	28	4.7	9	11	40	6	0.11	1.09	1.4	—	0.28	—	75	0.7
Wheat shorts	89	20	25	5.4	7	7	30	5	0.10	0.95	1.1	0.08	0.20	118	80	0.8
Wheatgrass, crested, fresh, early bloom	37	11	—	1.6	26	—	—	7	0.46	0.32	2.4	—	—	—	60	0.6
Wheatgrass, crested, fresh, full bloom	50	10	—	1.6	33	36	—	7	0.39	0.28	2.1	—	—	—	55	0.5
Wheatgrass, crested, hay	92	11	—	2.4	33	36	—	7	0.33	0.20	2.0	—	—	32	54	0.5
Whey, dried	94	14	20	1.0	0	0	0	9	1.00	0.90	1.4	1.20	0.90	10	82	0.8

NDF alters surface area availability to fiber-digesting rumen microorganisms; therefore, lignin may be added to future tables.

Minerals: Values are shown for only certain minerals. Calcium (Ca) and phosphorus (P) are important minerals to consider in feeding situations. Potassium (K) becomes important as the level of concentrate increases or when non-protein nitrogen is substituted for intact protein in the diet. Sulfur (S) also becomes more important as the level of non-protein nitrogen increases. Zinc (Zn) is shown because it is less variable and is more generally near a deficiency level in cattle and sheep rations. Chlorine (Cl) has been added to the table because of increased interest in its role in dairy cattle diets and also diet acid-base relationships.

Several other minerals could logically be included in the table. The level of many eral practical importance in cattle and sheep feeding is the vitamin A value (vitamin A and carotene) in feeds which depends largely on maturity and conditions at harvest, and the length and conditions of storage. Therefore, it is probably unwise to rely entirely on harvested feeds as a source of vitamin A value. Where roughages are being fed that contain good green color or are being fed as immature fresh forages (e.g. pasture), there will probably be sufficient vitamin A value to meet the animals' requirements.

Energy: Four measures of the energy value of feeds are shown in the table. TDN is shown because there are more determined TDN values for feeds and because this has become a standard system for expressing the energy value of feeds for cattle and sheep. There are several technical problems with TDN, however. As already mentioned, the digest- California net energy system. The main reason for this is the improved predictability of results depending on whether feed energy is being used for maintenance (NE_m), growth (NE_g) or lactation (NE_l). The major problem in using these NE values is predicting feed intake and, therefore, the proportion of feed that will be used for maintenance or growth. Some use only the NE_g values, but it should be obvious that this suffers the equal but opposite criticism mentioned for TDN; NE_g will overestimate the feeding value of concentrates relative to roughages. Others use the average of the two NE values, but this would be true only for cattle or sheep eating twice their maintenance requirement.

The most accurate way to use these NE values to formulate diets would be to use the NE_m value plus a multiplier times the NE_g value all divided by one plus the is required.

NE_l values are also values have actually NE_l values are simi except for very high ar

Future table change

A table of feed c value only if it is re contains the feeds c the data are updated tional values. I wel and compositional table useful to the cat ing industry.

When sending co please adequately c indicate the DM or and whether analytic on an as-fed or DM one sample of a feeds the number of sampl