

Varel Dairy, Inc.  
Fertilizer Nutrient Budget

Crop Year      2011

Soil Type		Buildup Target	
Soil Classification for Lime		C	
P Supply	Low	P	50
K Supply	Low	K	260

										K Supply		Low		K		260		Carryover Nutrients Available from Previous Applications							Manure				Previous	Commercial Fertilizer				Nutrients Available for Future Crops				
Field Name	Previous Crop	Current Crop		Maintenance Nutrient Needs			Soil Test Lbs/A			Mineralized N				Buildup Needs		Nutrients Applied			Crop N Credits	Crop	Recommendation <sup>A</sup>				Mineralized N													
		Crop	Yield Goal	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	pH	P1	K	2010	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	Lime			N	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O	2012	2013	2014	P <sub>2</sub> O <sub>5</sub>	K <sub>2</sub> O										
1	Corn Silage	Corn Silage	25	150	66	175	0.0	0	0	0	0	0	0	0				0	0.0	150	66	175				0	0											
2	Corn Silage	Corn Silage	25	150	66	175	7.1	324	1022	0	0	0	0	0				0	0.0	150	0	0				0	0											
4	Corn Silage	Corn Silage	25	150	66	175	0.0	0	0	0	0	0	0	0	150	88	175	0	0.0	0	0	0	18	9	5	22	0											
5	Corn Silage	Corn Silage	25	150	66	175	8.1	341	1757	0	0	0	0	0	113	66	133	0	0.0	37	0	0	14	7	3	0	0											
7	Corn Silage	Corn Silage	25	150	66	175	6.9	158	421	14	76	55	0	0				0	0.0	136	0	0				10	0											
8	Corn Silage	Corn Silage	25	150	66	175	6.9	121	302	0	0	0	0	0	150	142	230	0	0.0	0	0	0	14	7	4	76	55											
9	Corn Silage	Corn Silage	25	150	66	175	6.8	82	163	0	0	0	0	291	150	88	175	0	0.0	0	0	97	18	9	5	22	0											
11	Corn Silage	Corn Silage	25	150	66	175	7.4	104	273	18	22	0	0	0				0	0.0	132	0	175				0	0											
15	Corn Silage	Corn Silage	25	150	66	175	7.2	123	425	0	0	0	0	0	150	137	108	0	0.0	0	0	0	14	7	4	71	0											
16	Corn Silage	Corn Silage	25	150	66	175	0.0	0	0	14	71	0	0	0				0	0.0	136	0	175				5	0											
17	Soybeans	Corn Grain	137	164	59	38	0.0	0	0	0	0	0	0	0	124	117	191	40	0.0	0	0	0	12	6	3	58	153											
18	Corn Grain	Soybeans	46	0	39	60	0.0	0	0	13	62	58	0	0				0	0.0	0	0	2				23	0											
19	Corn Grain	Soybeans	44	0	37	57	0.0	0	0	0	0	0	0	0				0	0.0	0	37	57				0	0											
20	Corn Grain	Soybeans	45	0	38	59	0.0	0	0	0	0	0	0	0				0	0.0	0	38	59				0	0											
21	Corn Grain	Soybeans	41	0	35	53	0.0	0	0	0	0	0	0	0				0	0.0	0	35	53				0	0											
22	Corn Grain	Soybeans	47	0	40	61	0.0	0	0	0	0	0	0	0				0	0.0	0	40	61				0	0											
23	Corn Grain	Soybeans	41	0	35	53	0.0	0	0	0	0	0	0	0				0	0.0	0	35	53				0	0											
24	Corn Grain	Soybeans	41	0	35	53	0.0	0	0	0	0	0	0	0	154	145	236	0	0.0	0	0	0	14	7	4	110	183											
25	Soybeans	Corn Grain	127	152	55	36	0.0	0	0	0	0	0	0	0	112	106	172	40	0.0	0	0	0	11	5	3	51	136											
26	Soybeans	Corn Grain	131	157	56	37	0.0	0	0	0	0	0	0	0	117	111	180	40	0.0	0	0	0	11	5	3	55	143											
27	Soybeans	Corn Grain	127	152	55	36	0.0	0	0	0	0	0	0	0	112	106	172	40	0.0	0	0	0	11	5	3	51	136											
28	Corn Grain	Soybeans	46	0	39	60	0.0	0	0	0	0	0	0	0	173	163	265	0	0.0	0	0	0	16	8	4	124	205											
29	Corn Grain	Soybeans	45	0	38	59	0.0	0	0	0	0	0	0	0	169	159	259	0	0.0	0	0	0	16	8	4	121	201											
30	Corn Grain	Soybeans	45	0	38	59	0.0	0	0	12	58	151	0	0				0	0.0	0	0	0				19	92											
31	Corn Grain	Soybeans	47	0	40	61	0.0	0	0	16	90	80	0	0				0	0.0	0	0	0				50	19											
32	Corn Grain	Soybeans	46	0	39	60	0.0	0	0	12	61	159	0	0				0	0.0	0	0	0				22	99											
33	Corn Grain	Soybeans	43	0	37	56	0.0	0	0	11	55	145	0	0				0	0.0	0	0	0				19	89											
34	Corn Grain	Soybeans	46	0	39	60	0.0	0	0	12	63	164	0	0				0	0.0	0	0	0				24	104											
35	Corn Grain	Soybeans	46	0	39	60	0.0	0	0	0	0	0	0	0				0	0.0	0	39	60				0	0											
36	Corn Grain	Soybeans	48	0	41	62	0.0	0	0	0	0	0	0	0				0	0.0	0	41	62				0	0											

Footnotes:    A - Buildup application is spread out over four fertilizer applications for P<sub>2</sub>O<sub>5</sub> and K<sub>2</sub>O and one application for Lime being built to 6.5 pH.  
No phosphorus will be applied if P1 values are higher than 60, 65, and 70 for soils in the high, medium, and low phosphorus supplying regions, respectively.  
No potassium will be applied if K values are higher than 360 and 400 for the low and high cation-exchange capacity regions, respectively.