

**Individual Field Information****Car-Mer Dairy**

<b>Field Name:</b>	<u>Roger Peterson A</u>	<b>Total Acres</b>	41.0
		<b>Non-Spreadable Acres</b>	0.0
<b>Township</b>	T28N R1W	<b>Total Spreadable Acres</b>	41.0
<b>Section</b>	11		
<b>FSA Farm #</b>	5296	<b>Predominant Soil Type:</b>	280C2 Fayette silt loam, 5-10% slopes, eroded
<b>FSA Tract #</b>	1333	<b>P test</b>	--
<b>FSA Field #'s</b>	1-8	<b>K test</b>	--

**Individual Field Application & Nutrients**

Crop needs	Year	2009	2010	2011	2012	2013	2014
Crop		Beans	Corn	Beans	Corn	Beans	Corn
Yield	(bu/acre OR ton/acre)		190	55	190	55	190
N needed (lbs/ac)	lbs/ac		228	165	228	165	228
- Legume N credits	(lb/acre)		40	0	40	0	40
- Commercial fertilizer N credits	(lb/acre)						
- Manure N carryover credit **	(lb/acre)		0.0	16.6	17.8	25.5	22.3
Total N Credits	(lb/acre)		40.0	16.6	57.8	25.5	62.3
Crop N Need Minus Credits	(lb/acre)		188.0	148.4	170.2	139.5	165.7
Maintenance P needed *	(lb/acre)		81.7	46.8	81.7	46.8	81.7
Maintenance K needed *	(lb/acre)		53.2	71.5	53.2	71.5	53.2

\* Maintenance P & K needed are listed for calculation & uptake purposes only

\*\* Manure N carryover credit = Previous years' apps \* Org N \* Mineralization factor

<b>Car-Mer Dairy</b>							
<b>Roger Peterson A</b>		<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>Manure Application</b>		Beans	Corn	Beans	Corn	Beans	Corn
Storage			Liquid	Liquid	Liquid	Liquid	Liquid
Application Method			Inject	Inject	Inject	Inject	Inject
Storage/Application Method			LINE1	LINE1	LINE1	LINE1	LINE1
1st Year Available N ( <i>Am-N * N retention due to app method</i> ) + ( <i>OrgN * .35</i> )	(lb/1000 gal or lb/ton)		28.97	28.97	28.97	28.97	28.97
N App Rate ( <i>Crop N Need / 1st Yr Av N</i> )	(lb/1000 gal or lb/ton)		6.5	5.1	5.9	4.8	5.7
P App Rate ( <i>Maintenance P / P in analysis</i> )	(1000 gal/acre or ton/Acre)		4.37	2.50	4.37	2.50	4.37
Apply at Prate or Nrate?			Prate	Prate	Prate	Prate	Prate
<b>Application Rate to Use</b>	<b>(1000 gal or tons)</b>	<b>0.0</b>	<b>4.4</b>	<b>2.5</b>	<b>4.4</b>	<b>2.5</b>	<b>4.4</b>
Total application ( <i>App Rate * Spreadable Acres</i> )	(gallons or tons)		179,128	102,500	179,128	102,500	179,128
N applied ( <i>1st Year AvN * App rate</i> )	(lb/acre)		127	72	127	72	127
P applied ( <i>P in manure * App rate</i> )	(lb/acre)		127	47	82	47	82
K applied ( <i>K in manure * App rate</i> )	(lb/acre)		82	55	96	55	96
<b>Additional N Needed</b>	<b>(lb/acre)</b>		<b>61</b>	<b>76</b>	<b>44</b>	<b>67</b>	<b>39</b>
Acres Covered	(acres)		41.0	41.0	41.0	41.0	41.0

**Individual Field Information****Car-Mer Dairy**

<b>Field Name:</b>	<u>Roger Peterson B</u>	<b>Total Acres</b>	55.2
		<b>Non-Spreadable Acres</b>	0.0
<b>Township</b>	T28N R1W	<b>Total Spreadable Acres</b>	55.2
<b>Section</b>	11		
<b>FSA Farm #</b>	5296	<b>Predominant Soil Type:</b>	280C2 Fayette silt loam, 5-10% slopes, eroded
<b>FSA Tract #</b>	1333	<b>P test</b>	--
<b>FSA Field #'s</b>	1-8	<b>K test</b>	--

**Individual Field Application & Nutrients**

<b>Crop needs</b>	<b>Year</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Crop		Corn	Beans	Corn	Beans	Corn	Beans
Yield	(bu/acre OR ton/acre)		55	190	55	190	55
N needed (lbs/ac)	lbs/ac		165	228	165	228	165
- Legume N credits	(lb/acre)		0	40	0	40	0
- Commercial fertilizer N credits	(lb/acre)						
- Manure N carryover credit **	(lb/acre)		19.0	9.5	21.4	20.2	25.5
Total N Credits	(lb/acre)		19.0	49.5	21.4	60.2	25.5
Crop N Need Minus Credits	(lb/acre)		146.0	178.5	143.6	167.8	139.5
Maintenance P needed *	(lb/acre)		46.8	81.7	46.8	81.7	46.8
Maintenance K needed *	(lb/acre)		71.5	53.2	71.5	53.2	71.5

\* Maintenance P & K needed are listed for calculation & uptake purposes only

\*\* Manure N carryover credit = Previous years' apps \* Org N \* Mineralization factor

<b>Car-Mer Dairy</b>							
<b>Roger Peterson B</b>		<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>Manure Application</b>		Corn	Beans	Corn	Beans	Corn	Beans
Storage		Liquid		Liquid	Liquid	Liquid	Liquid
Application Method		Inject		Inject	Inject	Inject	Inject
Storage/Application Method		LINE1		LINE1	LINE1	LINE1	LINE1
1st Year Available N ( $Am-N * N$ <i>retention due to app method</i> ) + ( $OrgN$ $* .35$ )	(lb/1000 gal or lb/ton)			28.97	28.97	28.97	28.97
N App Rate ( $Crop\ N\ Need / 1st\ Yr\ Av\ N$ )	(lb/1000 gal or lb/ton)			6.2	5.0	5.8	4.8
P App Rate ( $Maintenance\ P / P\ in\ analysis$ )	(1000 gal/acre or ton/Acre)			4.37	2.50	4.37	2.50
Apply at Prate or Nrate?				Prate	Prate	Prate	Prate
<b>Application Rate to Use</b>	<b>(1000 gal or tons)</b>	<b>5.0</b>	<b>0.0</b>	<b>4.4</b>	<b>2.5</b>	<b>4.4</b>	<b>2.5</b>
Total application ( $App\ Rate * Spreadable\ Acres$ )	(gallons or tons)			241,168	138,000	241,168	138,000
N applied ( $1st\ Year\ AvN * App\ rate$ )	(lb/acre)			127	72	127	72
P applied ( $P\ in\ manure * App\ rate$ )	(lb/acre)			82	47	82	47
K applied ( $K\ in\ manure * App\ rate$ )	(lb/acre)			96	55	96	55
<b>Additional N Needed</b>	<b>(lb/acre)</b>		<b>146</b>	<b>52</b>	<b>71</b>	<b>41</b>	<b>67</b>
Acres Covered	(acres)		0.0	55.2	55.2	55.2	55.2

**Individual Field Information****Car-Mer Dairy**

<b>Field Name:</b>	<u>Furlong Trust A</u>	<b>Total Acres</b>	36.9
		<b>Non-Spreadable Acres</b>	0.0
<b>Township</b>	T1N R1W	<b>Total Spreadable Acres</b>	36.9
<b>Section</b>	35 & 36		
<b>FSA Farm #</b>	1456	<b>Predominant Soil Type:</b>	280C2 Fayette silt loam, 5-10% slopes, eroded
	1274		
<b>FSA Tract #</b>	1275	<b>P test</b>	33.2
	1-4		
<b>FSA Field #'s</b>	3-4	<b>K test</b>	200.8

**Individual Field Application & Nutrients**

<b>Crop needs</b>	<b>Year</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Crop		Beans	Corn	Beans	Corn	Beans	Corn
Yield	(bu/acre OR ton/acre)		190	55	190	55	190
N needed (lbs/ac)	lbs/ac		228	165	228	165	228
- Legume N credits	(lb/acre)		40	0	40	0	40
- Commercial fertilizer N credits	(lb/acre)						
- Manure N carryover credit **	(lb/acre)		0.0	24.7	30.8	36.0	28.2
Total N Credits	(lb/acre)		40.0	24.7	70.8	36.0	68.2
Crop N Need Minus Credits	(lb/acre)		188.0	140.3	157.2	129.0	159.8
Maintenance P needed *	(lb/acre)		81.7	46.8	81.7	46.8	81.7
Maintenance K needed *	(lb/acre)		53.2	71.5	53.2	71.5	53.2

\* Maintenance P & K needed are listed for calculation & uptake purposes only

\*\* Manure N carryover credit = Previous years' apps \* Org N \* Mineralization factor

<b>Car-Mer Dairy</b>							
<b>Furlong Trust A</b>		<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>Manure Application</b>		Beans	Corn	Beans	Corn	Beans	Corn
Storage			Liquid	Liquid	Liquid	Solid	Liquid
Application Method			Inject	Inject	Inject	Incorporate	Inject
Storage/Application Method			LINE1	LINE1	LINE1	LINE2	LINE1
1st Year Available N ( <i>Am-N * N retention due to app method</i> ) + ( <i>OrgN * .35</i> )	(lb/1000 gal or lb/ton)		28.97	28.97	28.97	6.54	28.97
N App Rate ( <i>Crop N Need / 1st Yr Av N</i> )	(lb/1000 gal or lb/ton)		6.5	4.8	5.4	19.7	5.5
P App Rate ( <i>Maintenance P / P in analysis</i> )	(1000 gal/acre or ton/Acre)		4.37	2.50	4.37	9.10	4.37
Apply at Prate or Nrate?			Nrate	Nrate	Nrate	Nrate	Nrate
<b>Application Rate to Use</b>	<b>(1000 gal or tons)</b>	<b>0.0</b>	<b>6.5</b>	<b>4.8</b>	<b>5.4</b>	<b>10.0</b>	<b>5.5</b>
Total application ( <i>App Rate * Spreadable Acres</i> )	(gallons or tons)		239,466	178,735	200,287	369	203,597
N applied ( <i>1st Year AvN * App rate</i> )	(lb/acre)		188	140	157	65	160
P applied ( <i>P in manure * App rate</i> )	(lb/acre)		188	91	102	51	103
K applied ( <i>K in manure * App rate</i> )	(lb/acre)		121	107	119	62	121
<b>Additional N Needed</b>	<b>(lb/acre)</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>64</b>	<b>0</b>
Acres Covered	(acres)		36.9	36.9	36.9	36.9	36.9

**Individual Field Information****Car-Mer Dairy**

<b>Field Name:</b>	<u>Furlong Trust B</u>	<b>Total Acres</b>	11.1
		<b>Non-Spreadable Acres</b>	0.0
<b>Township</b>	T1N R1W	<b>Total Spreadable Acres</b>	11.1
<b>Section</b>	35 & 36		
<b>FSA Farm #</b>	1456	<b>Predominant Soil Type:</b>	280C2 Fayette silt loam, 5-10% slopes, eroded
	1274		
<b>FSA Tract #</b>	1275	<b>P test</b>	33
	1-4		
<b>FSA Field #'s</b>	3-4	<b>K test</b>	200.8

**Individual Field Application & Nutrients**

<b>Crop needs</b>	<b>Year</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Crop		Corn	Beans	Corn	Beans	Corn	Beans
Yield	(bu/acre OR ton/acre)		55	190	55	190	55
N needed (lbs/ac)	lbs/ac		165	228	165	228	165
- Legume N credits	(lb/acre)		0	40	0	40	0
- Commercial fertilizer N credits	(lb/acre)						
- Manure N carryover credit **	(lb/acre)		15.2	27.3	34.7	34.5	36.4
Total N Credits	(lb/acre)		15.2	67.3	34.7	74.5	36.4
Crop N Need Minus Credits	(lb/acre)		149.8	160.7	130.3	153.5	128.6
Maintenance P needed *	(lb/acre)		46.8	81.7	46.8	81.7	46.8
Maintenance K needed *	(lb/acre)		71.5	53.2	71.5	53.2	71.5

\* Maintenance P & K needed are listed for calculation & uptake purposes only

\*\* Manure N carryover credit = Previous years' apps \* Org N \* Mineralization factor

<b>Car-Mer Dairy</b>							
<b>Furlong Trust B</b>		<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>Manure Application</b>		Corn	Beans	Corn	Beans	Corn	Beans
Storage		Liquid	Liquid	Liquid	Liquid	Liquid	Liquid
Application Method		Inject	Inject	Inject	Inject	Inject	Inject
Storage/Application Method		LINE1	LINE1	LINE1	LINE1	LINE1	LINE1
1st Year Available N ( $Am-N * N$ <i>retention due to app method</i> ) + ( $OrgN$ $* .35$ )	(lb/1000 gal or lb/ton)		28.97	28.97	28.97	28.97	28.97
N App Rate ( $Crop\ N\ Need / 1st\ Yr\ Av\ N$ )	(lb/1000 gal or lb/ton)		5.2	5.5	4.5	5.3	4.4
P App Rate ( $Maintenance\ P / P\ in\ analysis$ )	(1000 gal/acre or ton/Acre)		2.50	4.37	2.50	4.37	2.50
Apply at Prate or Nrate?			Nrate	Nrate	Nrate	Nrate	Nrate
<b>Application Rate to Use</b>	<b>(1000 gal or tons)</b>	<b>4.0</b>	<b>5.2</b>	<b>5.5</b>	<b>4.5</b>	<b>5.3</b>	<b>4.4</b>
Total application ( $App\ Rate * Spreadable\ Acres$ )	(gallons or tons)		57,393	61,586	49,913	58,828	49,261
N applied ( $1st\ Year\ AvN * App\ rate$ )	(lb/acre)		150	161	130	154	129
P applied ( $P\ in\ manure * App\ rate$ )	(lb/acre)		150	104	84	99	83
K applied ( $K\ in\ manure * App\ rate$ )	(lb/acre)		97	122	99	117	98
<b>Additional N Needed</b>	<b>(lb/acre)</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Acres Covered	(acres)		11.1	11.1	11.1	11.1	11.1



**Individual Field Information****Car-Mer Dairy**

<b>Field Name:</b>	<u>Glassons A</u>	<b>Total Acres</b>	40.1
		<b>Non-Spreadable Acres</b>	0.0
<b>Township</b>	T24N R1W	<b>Total Spreadable Acres</b>	40.1
<b>Section</b>	23		
<b>FSA Farm #</b>	5542	<b>Predominant Soil Type:</b>	280B2 Fayette silt loam, 2-5% slopes, eroded
<b>FSA Tract #</b>	3389	<b>P test</b>	44
<b>FSA Field #'s</b>	1	<b>K test</b>	132

**Individual Field Application & Nutrients**

<b>Crop needs</b>	<b>Year</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Crop		Corn	Beans	Alfalfa	Alfalfa	Alfalfa	Corn
Yield	(bu/acre OR ton/acre)		55	10	10	10	180
N needed (lbs/ac)	lbs/ac		165	0	0	0	216
- Legume N credits	(lb/acre)		0	40	0	0	0
- Commercial fertilizer N credits	(lb/acre)						
- Manure N carryover credit **	(lb/acre)		19.0	28.7	38.7	19.4	32.9
Total N Credits	(lb/acre)		19.0	68.7	38.7	19.4	32.9
Crop N Need Minus Credits	(lb/acre)		146.0	-68.7	-38.7	-19.4	183.1
Maintenance P needed *	(lb/acre)		46.8	120.0	120.0	120.0	77.4
Maintenance K needed *	(lb/acre)		71.5	500.0	500.0	500.0	50.4

\* Maintenance P & K needed are listed for calculation & uptake purposes only

\*\* Manure N carryover credit = Previous years' apps \* Org N \* Mineralization factor

<b>Car-Mer Dairy</b>							
<b>Glassons A</b>		<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>Manure Application</b>		Corn	Beans	Alfalfa	Alfalfa	Alfalfa	Corn
Storage		Liquid	Liquid	Liquid		Liquid	Liquid
Application Method		Inject	Inject	Broadcast		Broadcast	Inject
Storage/Application Method		LINE1	LINE1	LINE3		LINE3	LINE1
1st Year Available N ( $Am-N * N$ <i>retention due to app method</i> ) + ( $OrgN$ $* .35$ )	(lb/1000 gal or lb/ton)		28.97	25.05		25.05	28.97
N App Rate ( $Crop\ N\ Need / 1st\ Yr\ Av\ N$ )	(lb/1000 gal or lb/ton)		5.0	-2.7		-0.8	6.3
P App Rate ( $Maintenance\ P / P\ in\ analysis$ )	(1000 gal/acre or ton/Acre)		2.50	6.42		6.42	4.14
Apply at Prate or Nrate?			Nrate	Prate		Prate	Nrate
<b>Application Rate to Use</b>	<b>(1000 gal or tons)</b>	<b>5.0</b>	<b>5.0</b>	<b>6.4</b>	<b>0.0</b>	<b>6.4</b>	<b>6.3</b>
Total application ( $App\ Rate * Spreadable\ Acres$ )	(gallons or tons)		202,076	257,326		257,326	253,451
N applied ( $1st\ Year\ AvN * App\ rate$ )	(lb/acre)		146	161		161	183
P applied ( $P\ in\ manure * App\ rate$ )	(lb/acre)		146	120		120	118
K applied ( $K\ in\ manure * App\ rate$ )	(lb/acre)		94	141		141	139
<b>Additional N Needed</b>	<b>(lb/acre)</b>		<b>0</b>	<b>-229</b>	<b>-39</b>	<b>-180</b>	<b>0</b>
Acres Covered	(acres)		40.1	40.1	0.0	40.1	40.1

**Individual Field Information****Car-Mer Dairy**

<b>Field Name:</b>	<u>Glassons B</u>	<b>Total Acres</b>	22.0
		<b>Non-Spreadable Acres</b>	0.0
<b>Township</b>	T24N R1W	<b>Total Spreadable Acres</b>	22.0
<b>Section</b>	23		
<b>FSA Farm #</b>	5542	<b>Predominant Soil Type:</b>	280B2 Fayette silt loam, 2-5% slopes, eroded
<b>FSA Tract #</b>	3389	<b>P test</b>	44
<b>FSA Field #'s</b>	2	<b>K test</b>	132

**Individual Field Application & Nutrients**

<b>Crop needs</b>	<b>Year</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Crop		Alfalfa	Corn	Corn	Beans	Alfalfa	Alfalfa
Yield	(bu/acre OR ton/acre)		180	180	55	10	10
N needed (lbs/ac)	lbs/ac		216	216	165	0	0
- Legume N credits	(lb/acre)		0	0	0	40	0
- Commercial fertilizer N credits	(lb/acre)						
- Manure N carryover credit **	(lb/acre)		0.0	28.4	38.8	36.0	18.0
Total N Credits	(lb/acre)		0.0	28.4	38.8	76.0	18.0
Crop N Need Minus Credits	(lb/acre)		216.0	187.6	126.2	-76.0	-18.0
Maintenance P needed *	(lb/acre)		77.4	77.4	46.8	120.0	120.0
Maintenance K needed *	(lb/acre)		50.4	50.4	71.5	500.0	500.0

\* Maintenance P & K needed are listed for calculation & uptake purposes only

\*\* Manure N carryover credit = Previous years' apps \* Org N \* Mineralization factor

<b>Car-Mer Dairy</b>							
<b>Glassons B</b>		<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>Manure Application</b>		Alfalfa	Corn	Corn	Beans	Alfalfa	Alfalfa
Storage			Liquid	Liquid	Liquid		Liquid
Application Method			Inject	Inject	Inject		Broadcast
Storage/Application Method			LINE1	LINE1	LINE1		LINE3
1st Year Available N ( $Am-N * N$ <i>retention due to app method</i> ) + ( $OrgN$ $* .35$ )	(lb/1000 gal or lb/ton)		28.97	28.97	28.97		25.05
N App Rate ( $Crop\ N\ Need / 1st\ Yr\ Av\ N$ )	(lb/1000 gal or lb/ton)		7.5	6.5	4.4		-0.7
P App Rate ( $Maintenance\ P / P\ in\ analysis$ )	(1000 gal/acre or ton/Acre)		4.14	4.14	2.50		6.42
Apply at Prate or Nrate?			Nrate	Nrate	Nrate		Prate
<b>Application Rate to Use</b>	<b>(1000 gal or tons)</b>	<b>0.0</b>	<b>7.5</b>	<b>6.5</b>	<b>4.4</b>	<b>0.0</b>	<b>6.4</b>
Total application ( $App\ Rate * Spreadable\ Acres$ )	(gallons or tons)		164,035	142,502	95,832		141,176
N applied ( $1st\ Year\ AvN * App\ rate$ )	(lb/acre)		216	188	126		161
P applied ( $P\ in\ manure * App\ rate$ )	(lb/acre)		216	121	81		120
K applied ( $K\ in\ manure * App\ rate$ )	(lb/acre)		139	143	96		141
<b>Additional N Needed</b>	<b>(lb/acre)</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>-76</b>	<b>-179</b>
Acres Covered	(acres)		22.0	22.0	22.0	0.0	22.0

**Individual Field Information****Car-Mer Dairy**

<b>Field Name:</b>	<u>Speaker A</u>	<b>Total Acres</b>	28.2
		<b>Non-Spreadable Acres</b>	0.0
<b>Township</b>	T24N R1W	<b>Total Spreadable Acres</b>	28.2
<b>Section</b>	36		
<b>FSA Farm #</b>	4991	<b>Predominant Soil Type:</b>	280D2 Fayette silt oam, 10-
<b>FSA Tract #</b>	1301	<b>P test</b>	124
<b>FSA Field #'s</b>	1-5,9,11	<b>K test</b>	258

**Individual Field Application & Nutrients**

Crop needs	Year	2009	2010	2011	2012	2013	2014
Crop		Alfalfa	Alfalfa	Silage	Silage	Alfalfa	Alfalfa
Yield	(bu/acre OR ton/acre)		10	20	20	10	10
N needed (lbs/ac)	lbs/ac		0	120	120	0	0
- Legume N credits	(lb/acre)		0	0	0	0	0
- Commercial fertilizer N credits	(lb/acre)						
- Manure N carryover credit **	(lb/acre)		19.0	33.9	28.3	26.2	11.9
Total N Credits	(lb/acre)		19.0	33.9	28.3	26.2	11.9
Crop N Need Minus Credits	(lb/acre)		-19.0	86.1	91.7	-26.2	-11.9
Maintenance P needed *	(lb/acre)		120.0	52.0	52.0	120.0	120.0
Maintenance K needed *	(lb/acre)		500.0	140.0	140.0	500.0	500.0

\* Maintenance P & K needed are listed for calculation & uptake purposes only

\*\* Manure N carryover credit = Previous years' apps \* Org N \* Mineralization factor

<b>Car-Mer Dairy</b>							
<b>Speaker A</b>		<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>Manure Application</b>		Alfalfa	Alfalfa	Silage	Silage	Alfalfa	Alfalfa
Storage			Liquid	Liquid	Liquid		Liquid
Application Method			Broadcast	Inject	Inject		Broadcast
Storage/Application Method			LINE3	LINE1	LINE1		LINE3
1st Year Available N ( $Am-N * N$ <i>retention due to app method</i> ) + ( $OrgN$ $* .35$ )	(lb/1000 gal or lb/ton)		25.05	28.97	28.97		25.05
N App Rate ( $Crop\ N\ Need / 1st\ Yr\ Av\ N$ )	(lb/1000 gal or lb/ton)		-0.8	3.0	3.2		-0.5
P App Rate ( $Maintenance\ P / P\ in\ analysis$ )	(1000 gal/acre or ton/Acre)		6.42	2.78	2.78		6.42
Apply at Prate or Nrate?			Prate	Nrate	Nrate		Prate
<b>Application Rate to Use</b>	<b>(1000 gal or tons)</b>	<b>5.0</b>	<b>6.4</b>	<b>3.0</b>	<b>3.2</b>	<b>0.0</b>	<b>6.4</b>
Total application ( $App\ Rate * Spreadable\ Acres$ )	(gallons or tons)		180,963	83,804	89,307		180,963
N applied ( $1st\ Year\ AvN * App\ rate$ )	(lb/acre)		161	86	92		161
P applied ( $P\ in\ manure * App\ rate$ )	(lb/acre)		161	56	59		120
K applied ( $K\ in\ manure * App\ rate$ )	(lb/acre)		120	65	70		141
<b>Additional N Needed</b>	<b>(lb/acre)</b>		<b>-180</b>	<b>0</b>	<b>0</b>	<b>-26</b>	<b>-173</b>
Acres Covered	(acres)		28.2	28.2	28.2	0.0	28.2

**Individual Field Information****Car-Mer Dairy**

<b>Field Name:</b>	<u>Speaker B</u>	<b>Total Acres</b>	55.4
		<b>Non-Spreadable Acres</b>	0.0
<b>Township</b>	T24N R1W	<b>Total Spreadable Acres</b>	55.4
<b>Section</b>	36		
<b>FSA Farm #</b>	4991	<b>Predominant Soil Type:</b>	280D2 Fayette silt oam, 10-18% slopes, eroded
<b>FSA Tract #</b>	1301	<b>P test</b>	124
<b>FSA Field #'s</b>	1-5,9,11	<b>K test</b>	258

**Individual Field Application & Nutrients**

<b>Crop needs</b>	<b>Year</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
Crop		Silage	Silage	Alfalfa	Alfalfa	Alfalfa	Silage
Yield	(bu/acre OR ton/acre)		20	10	10	10	20
N needed (lbs/ac)	lbs/ac		120	0	0	0	120
- Legume N credits	(lb/acre)		0	0	0	0	0
- Commercial fertilizer N credits	(lb/acre)						
- Manure N carryover credit **	(lb/acre)		19.0	22.8	35.8	17.9	32.2
Total N Credits	(lb/acre)		19.0	22.8	35.8	17.9	32.2
Crop N Need Minus Credits	(lb/acre)		101.0	-22.8	-35.8	-17.9	87.8
Maintenance P needed *	(lb/acre)		52.0	120.0	120.0	120.0	52.0
Maintenance K needed *	(lb/acre)		140.0	500.0	500.0	500.0	140.0

\* Maintenance P & K needed are listed for calculation & uptake purposes only

\*\* Manure N carryover credit = Previous years' apps \* Org N \* Mineralization factor

<b>Car-Mer Dairy</b>							
<b>Speaker B</b>		<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>Manure Application</b>		Silage	Silage	Alfalfa	Alfalfa	Alfalfa	Silage
Storage		Liquid	Liquid	Liquid		Liquid	Liquid
Application Method		Inject	Inject	Broadcast		Broadcast	Inject
Storage/Application Method		LINE1	LINE1	LINE3		LINE3	LINE1
1st Year Available N ( $Am-N * N$ <i>retention due to app method</i> ) + ( $OrgN$ $* .35$ )	(lb/1000 gal or lb/ton)		28.97	25.05		25.05	28.97
N App Rate ( $Crop\ N\ Need / 1st\ Yr\ Av\ N$ )	(lb/1000 gal or lb/ton)		3.5	-0.9		-0.7	3.0
P App Rate ( $Maintenance\ P / P\ in\ analysis$ )	(1000 gal/acre or ton/Acre)		2.78	6.42		6.42	2.78
Apply at Prate or Nrate?			Nrate	Prate		Prate	Nrate
<b>Application Rate to Use</b>	<b>(1000 gal or tons)</b>	<b>5.0</b>	<b>3.5</b>	<b>6.4</b>	<b>0.0</b>	<b>6.4</b>	<b>3.0</b>
Total application ( $App\ Rate * Spreadable\ Acres$ )	(gallons or tons)		193,122	355,508		355,508	167,981
N applied ( $1st\ Year\ AvN * App\ rate$ )	(lb/acre)		101	161		161	88
P applied ( $P\ in\ manure * App\ rate$ )	(lb/acre)		101	120		120	57
K applied ( $K\ in\ manure * App\ rate$ )	(lb/acre)		65	141		141	67
<b>Additional N Needed</b>	<b>(lb/acre)</b>		<b>0</b>	<b>-183</b>	<b>-36</b>	<b>-179</b>	<b>0</b>
Acres Covered	(acres)		55.4	55.4	0.0	55.4	55.4