

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

<b>Field Name:</b>	<u>Oldenburg</u>	<b>Total Acres</b>	65.7
		<b>Non-Spreadable Acres</b>	0.0
<b>Township</b>	T24N R1W	<b>Total Spreadable Acres</b>	65.7
<b>Section</b>	35		
<b>FSA Farm #</b>	4991	<b>Predominant Soil Type:</b>	86B Osco silt loam, 2-5 % slopes
<b>FSA Tract #</b>	2809	<b>P test</b>	104
<b>FSA Field #'s</b>	1	<b>K test</b>	328

**Individual Field Application & Nutrients**

Crop needs	Year	2009	2010	2011	2012	2013	2014
Crop		Silage	Beans	Silage	Beans	Silage	Beans
Yield	(bu/acre OR ton/acre)		55	20	55	20	55
N needed (lbs/ac)	lbs/ac		165	120	165	120	165
- Legume N credits	(lb/acre)		0	40	0	40	0
- Commercial fertilizer N credits	(lb/acre)						
- Manure N carryover credit **	(lb/acre)		10.2	5.1	14.2	17.2	17.7
Total N Credits	(lb/acre)		10.2	45.1	14.2	57.2	17.7
Crop N Need Minus Credits	(lb/acre)		154.9	74.9	150.8	62.8	147.3
Maintenance P needed *	(lb/acre)		46.8	52.0	46.8	52.0	46.8
Maintenance K needed *	(lb/acre)		71.5	140.0	71.5	140.0	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>Oldenburg</b>		<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>Manure Application</b>		Silage	Beans	Silage	Beans	Silage	Beans
Storage		Solid		Solid	Solid	Solid	Solid
Application Method		Incorporate		Incorporate	Incorporate	Incorporate	Incorporate
Storage/Application Method				LINE2	LINE2	LINE2	LINE2
1st Year Available N ( $Am-N * N$ <i>retention due to app method</i> ) + ( $OrgN$ $* .35$ )	(lb/1000 gal or lb/ton)			6.54	6.54	6.54	6.54
N App Rate ( $Crop\ N\ Need / 1st\ Yr\ Av\ N$ )	(lb/1000 gal or lb/ton)			11.5	23.1	9.6	22.5
P App Rate ( $Maintenance\ P / P\ in\ analysis$ )	(1000 gal/acre or ton/Acre)			10.12	9.10	10.12	9.10
Apply at Prate or Nrate?				Nrate	Nrate	Nrate	Nrate
<b>Application Rate to Use</b>	<b>(1000 gal or tons)</b>	<b>10.0</b>	<b>0.0</b>	<b>11.5</b>	<b>10.0</b>	<b>9.6</b>	<b>10.0</b>
Total application ( $App\ Rate * Spreadable\ Acres$ )	(gallons or tons)			753	657	631	657
N applied ( $1st\ Year\ AvN * App\ rate$ )	(lb/acre)			75	65	63	65
P applied ( $P\ in\ manure * App\ rate$ )	(lb/acre)			59	51	49	51
K applied ( $K\ in\ manure * App\ rate$ )	(lb/acre)			71	62	60	62
<b>Additional N Needed</b>	<b>(lb/acre)</b>		<b>155</b>	<b>0</b>	<b>85</b>	<b>0</b>	<b>82</b>
Acres Covered	(acres)		0.0	65.7	65.7	65.7	65.7

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

<b>Field Name:</b>	<u>Oldenburg South</u>	<b>Total Acres</b>	23.8
		<b>Non-Spreadable Acres</b>	0.0
<b>Township</b>	T24N R1W	<b>Total Spreadable Acres</b>	23.8
<b>Section</b>	35		
<b>FSA Farm #</b>	4991	<b>Predominant Soil Type:</b>	280C2 Fayette silt loam, 5-10% slopes, eroded
<b>FSA Tract #</b>	3018	<b>P test</b>	92
<b>FSA Field #'s</b>	1-7	<b>K test</b>	236

**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	Silage	Silage	Alfalfa	Alfalfa	Alfalfa
Yield	(bu/acre OR ton/acre)		20	20	10	10	10
N needed (lbs/ac)	lbs/ac		120	120	0	0	0
- Legume N credits	(lb/acre)		0	0	0	0	0
- Commercial fertilizer N credits	(lb/acre)						
- Manure N carryover credit **	(lb/acre)		0.0	16.2	24.4	12.2	6.1
Total N Credits	(lb/acre)		0.0	16.2	24.4	12.2	6.1
Crop N Need Minus Credits	(lb/acre)		120.0	103.8	-24.4	-12.2	-6.1
Maintenance P needed *	(lb/acre)		52.0	52.0	120.0	120.0	120.0
Maintenance K needed *	(lb/acre)		140.0	140.0	500.0	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>Oldenburg South</b>		<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>Manure Application</b>		Alfalfa	Silage	Silage	Alfalfa	Alfalfa	Alfalfa
Storage			Solid	Solid			
Application Method			Incorporate	Incorporate			
Storage/Application Method			LINE2	LINE2			
1st Year Available N ( $Am-N * N$ <i>retention due to app method</i> ) + ( $OrgN$ $* .35$ )	(lb/1000 gal or lb/ton)		6.54	6.54			
N App Rate ( $Crop\ N\ Need / 1st\ Yr\ Av\ N$ )	(lb/1000 gal or lb/ton)		18.4	15.9			
P App Rate ( $Maintenance\ P / P\ in\ analysis$ )	(1000 gal/acre or ton/Acre)		10.12	10.12			
Apply at Prate or Nrate?			Nrate	Nrate			
<b>Application Rate to Use</b>	<b>(1000 gal or tons)</b>	<b>0.0</b>	<b>16.0</b>	<b>16.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
Total application ( $App\ Rate * Spreadable\ Acres$ )	(gallons or tons)		381	381			
N applied ( $1st\ Year\ AvN * App\ rate$ )	(lb/acre)		105	105			
P applied ( $P\ in\ manure * App\ rate$ )	(lb/acre)		105	82			
K applied ( $K\ in\ manure * App\ rate$ )	(lb/acre)		82	100			
<b>Additional N Needed</b>	<b>(lb/acre)</b>		<b>15</b>	<b>-1</b>	<b>-24</b>	<b>-12</b>	<b>-6</b>
Acres Covered	(acres)		23.8	23.8	0.0	0.0	0.0

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

<b>Field Name:</b>	<u>Dairy Farm A</u>	<b>Total Acres</b>	63.0
		<b>Non-Spreadable Acres</b>	0.0
<b>Township</b>	T24N R1W	<b>Total Spreadable Acres</b>	63.0
<b>Section</b>	26		
<b>FSA Farm #</b>	4991	<b>Predominant Soil Type:</b>	280C2 Fayette silt loam, 5-10% slopes, eroded
<b>FSA Tract #</b>	1297	<b>P test</b>	166
<b>FSA Field #'s</b>	1,2,5	<b>K test</b>	252

**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)		15.2	21.4	10.7	5.3	26.1
Total N Credits	(lb/acre)		15.2	21.4	10.7	5.3	26.1
Crop N Need Minus Credits	(lb/acre)		104.8	-21.4	-10.7	-5.3	93.9
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>Dairy Farm A</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
Application Method		Inject	Inject			Broadcast	Inject
Storage/Application Method			LINE1			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	28.97
N App Rate ( $Crop\ N\ Need / 1st\ Yr\ Av\ N$ )	(lb/1000 gal or lb/ton)		3.6			-0.2	3.2
P App Rate ( $Maintenance\ P / P\ in\ analysis$ )	(1000 gal/acre or ton/Acre)		2.78			6.42	2.78
Apply at Prate or Nrate?			Nrate			Prate	Nrate
<b>Application Rate to Use</b>	<b>(1000 gal or tons)</b>	<b>4.0</b>	<b>3.6</b>	<b>0.0</b>	<b>0.0</b>	<b>6.4</b>	<b>3.2</b>
Total application ( $App\ Rate * Spreadable\ Acres$ )	(gallons or tons)		227,885			404,278	204,156
N applied ( $1st\ Year\ AvN * App\ rate$ )	(lb/acre)		105			161	94
P applied ( $P\ in\ manure * App\ rate$ )	(lb/acre)		105			120	61
K applied ( $K\ in\ manure * App\ rate$ )	(lb/acre)		68			141	71
<b>Additional N Needed</b>	<b>(lb/acre)</b>		<b>0</b>	<b>-21</b>	<b>-11</b>	<b>-166</b>	<b>0</b>
Acres Covered	(acres)		63.0	0.0	0.0	63.0	63.0

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

<b>Field Name:</b>	<u>Dairy Farm B</u>	<b>Total Acres</b>	29.9
		<b>Non-Spreadable Acres</b>	0.0
<b>Township</b>	T24N R1W	<b>Total Spreadable Acres</b>	29.9
<b>Section</b>	26		
<b>FSA Farm #</b>	4991	<b>Predominant Soil Type:</b>	280C2 Fayette silt loam, 5-10% slopes, eroded
<b>FSA Tract #</b>	1297	<b>P test</b>	166
<b>FSA Field #'s</b>	1,2,5	<b>K test</b>	252

**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	Alfalfa	Alfalfa	Alfalfa	Silage	Silage
Yield	(bu/acre OR ton/acre)		10	10	10	20	20
N needed (lbs/ac)	lbs/ac		0	0	0	120	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	9.5	4.8	2.4	15.4
Total N Credits	(lb/acre)		19.0	9.5	4.8	2.4	15.4
Crop N Need Minus Credits	(lb/acre)		-19.0	-9.5	-4.8	117.6	104.6
Maintenance P needed *	(lb/acre)		120.0	120.0	120.0	52.0	52.0
Maintenance K needed *	(lb/acre)		500.0	500.0	500.0	140.0	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>Dairy Farm 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	Alfalfa	Alfalfa	Alfalfa	Silage	Silage
Storage		Liquid				Liquid	Liquid
Application Method		Inject				Inject	Inject
Storage/Application Method						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
N App Rate ( <i>Crop N Need / 1st Yr Av N</i> )	(lb/1000 gal or lb/ton)					4.1	3.6
P App Rate ( <i>Maintenance P / P in analysis</i> )	(1000 gal/acre or ton/Acre)					2.78	2.78
Apply at Prate or Nrate?						Nrate	Nrate
<b>Application Rate to Use</b>	<b>(1000 gal or tons)</b>	<b>5.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>4.1</b>	<b>3.6</b>
Total application ( <i>App Rate * Spreadable Acres</i> )	(gallons or tons)					121,401	107,918
N applied ( <i>1st Year AvN * App rate</i> )	(lb/acre)					118	105
P applied ( <i>P in manure * App rate</i> )	(lb/acre)					76	67
K applied ( <i>K in manure * App rate</i> )	(lb/acre)					89	79
<b>Additional N Needed</b>	<b>(lb/acre)</b>		<b>-19</b>	<b>-10</b>	<b>-5</b>	<b>0</b>	<b>0</b>
Acres Covered	(acres)		0.0	0.0	0.0	29.9	29.9



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

<b>Field Name:</b>	<u>Bradshaw A</u>	<b>Total Acres</b>	101.4
		<b>Non-Spreadable Acres</b>	0.0
<b>Township</b>	T24N R1W	<b>Total Spreadable Acres</b>	101.4
<b>Section</b>	26		
<b>FSA Farm #</b>	4991	<b>Predominant Soil Type:</b>	280B2 Fayette silt loam, 2-5% slopes, eroded
<b>FSA Tract #</b>	1296	<b>P test</b>	47
<b>FSA Field #'s</b>	1,8,2,10-44	<b>K test</b>	189

**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	Alfalfa	Alfalfa	Corn	Corn	Alfalfa
Yield	(bu/acre OR ton/acre)		10	10	180	180	10
N needed (lbs/ac)	lbs/ac		0	0	216	216	0
- Legume N credits	(lb/acre)		0	0	0	0	0
- Commercial fertilizer N credits	(lb/acre)						
- Manure N carryover credit **	(lb/acre)		0.0	0.0	24.4	37.4	42.1
Total N Credits	(lb/acre)		0.0	0.0	24.4	37.4	42.1
Crop N Need Minus Credits	(lb/acre)		0.0	0.0	191.6	178.6	-42.1
Maintenance P needed *	(lb/acre)		120.0	120.0	77.4	77.4	120.0
Maintenance K needed *	(lb/acre)		500.0	500.0	50.4	50.4	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>Bradshaw 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	Alfalfa	Corn	Corn	Alfalfa
Storage				Liquid	Liquid	Liquid	Liquid
Application Method				Broadcast	Inject	Inject	Broadcast
Storage/Application Method				LINE3	LINE1	LINE1	LINE3
1st Year Available N ( <i>Am-N * N retention due to app method</i> ) + ( <i>OrgN * .35</i> )	(lb/1000 gal or lb/ton)			25.05	28.97	28.97	25.05
N App Rate ( <i>Crop N Need / 1st Yr Av N</i> )	(lb/1000 gal or lb/ton)			0.0	6.6	6.2	-1.7
P App Rate ( <i>Maintenance P / P in analysis</i> )	(1000 gal/acre or ton/Acre)			6.42	4.14	4.14	6.42
Apply at Prate or Nrate?				Prate	Nrate	Nrate	Prate
<b>Application Rate to Use</b>	<b>(1000 gal or tons)</b>	<b>0.0</b>	<b>0.0</b>	<b>6.4</b>	<b>6.6</b>	<b>6.2</b>	<b>6.4</b>
Total application ( <i>App Rate * Spreadable Acres</i> )	(gallons or tons)			650,695	670,635	625,310	650,695
N applied ( <i>1st Year AvN * App rate</i> )	(lb/acre)			161	192	179	161
P applied ( <i>P in manure * App rate</i> )	(lb/acre)			120	124	115	120
K applied ( <i>K in manure * App rate</i> )	(lb/acre)			141	146	136	141
<b>Additional N Needed</b>	<b>(lb/acre)</b>		<b>0</b>	<b>-161</b>	<b>0</b>	<b>0</b>	<b>-203</b>
Acres Covered	(acres)		0.0	101.4	101.4	101.4	101.4

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

<b>Field Name:</b>	<u>Bradshaw B</u>	<b>Total Acres</b>	43.5
		<b>Non-Spreadable Acres</b>	0.0
<b>Township</b>	T24N R1W	<b>Total Spreadable Acres</b>	43.5
<b>Section</b>	26		
<b>FSA Farm #</b>	4991	<b>Predominant Soil Type:</b>	280B2 Fayette silt loam, 2-5% slopes, eroded
<b>FSA Tract #</b>	1296	<b>P test</b>	47.4
<b>FSA Field #'s</b>	1,8,2,10-44	<b>K test</b>	188.6

**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	Alfalfa	Corn	Corn	Alfalfa	Alfalfa
Yield	(bu/acre OR ton/acre)		10	180	180	10	10
N needed (lbs/ac)	lbs/ac		0	216	216	0	0
- Legume N credits	(lb/acre)		0	0	0	0	0
- Commercial fertilizer N credits	(lb/acre)						
- Manure N carryover credit **	(lb/acre)		0.0	0.0	28.4	38.8	43.8
Total N Credits	(lb/acre)		0.0	0.0	28.4	38.8	43.8
Crop N Need Minus Credits	(lb/acre)		0.0	216.0	187.6	-38.8	-43.8
Maintenance P needed *	(lb/acre)		120.0	77.4	77.4	120.0	120.0
Maintenance K needed *	(lb/acre)		500.0	50.4	50.4	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>Bradshaw 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	Alfalfa	Corn	Corn	Alfalfa	Alfalfa
Storage				Liquid	Liquid	Liquid	
Application Method				Inject	Inject	Broadcast	
Storage/Application Method				LINE1	LINE1	LINE3	
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	25.05	
N App Rate ( <i>Crop N Need / 1st Yr Av N</i> )	(lb/1000 gal or lb/ton)			7.5	6.5	-1.5	
P App Rate ( <i>Maintenance P / P in analysis</i> )	(1000 gal/acre or ton/Acre)			4.14	4.14	6.42	
Apply at Prate or Nrate?				Nrate	Nrate	Prate	
<b>Application Rate to Use</b>	<b>(1000 gal or tons)</b>	<b>0.0</b>	<b>0.0</b>	<b>7.5</b>	<b>6.5</b>	<b>6.4</b>	<b>0.0</b>
Total application ( <i>App Rate * Spreadable Acres</i> )	(gallons or tons)			324,341	281,766	279,144	
N applied ( <i>1st Year AvN * App rate</i> )	(lb/acre)			216	188	161	
P applied ( <i>P in manure * App rate</i> )	(lb/acre)			139	121	120	
K applied ( <i>K in manure * App rate</i> )	(lb/acre)			164	143	141	
<b>Additional N Needed</b>	<b>(lb/acre)</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>-200</b>	<b>-44</b>
Acres Covered	(acres)		0.0	43.5	43.5	43.5	0.0

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

<b>Field Name:</b>	<u>Liebfried</u>	<b>Total Acres</b>	35.3
		<b>Non-Spreadable Acres</b>	0.0
<b>Township</b>	T1N R1W	<b>Total Spreadable Acres</b>	35.3
<b>Section</b>	36		
<b>FSA Farm #</b>	4991	<b>Predominant Soil Type:</b>	280C2 Fayette silt loam, 5-10% slopes, eroded
<b>FSA Tract #</b>	4242	<b>P test</b>	55.6
<b>FSA Field #'s</b>	1-3	<b>K test</b>	188.6

**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	180	55	180	55
N needed (lbs/ac)	lbs/ac		165	216	165	216	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	26.6	28.5	32.4
Total N Credits	(lb/acre)		19.0	49.5	26.6	68.5	32.4
Crop N Need Minus Credits	(lb/acre)		146.0	166.5	138.4	147.5	132.6
Maintenance P needed *	(lb/acre)		46.8	77.4	46.8	77.4	46.8
Maintenance K needed *	(lb/acre)		71.5	50.4	71.5	50.4	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>Liebfried</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	Solid	Liquid	Liquid
Application Method		Inject		Inject	Incorporate	Inject	Inject
Storage/Application Method		LINE1		LINE1	LINE2	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	6.54	28.97	28.97
N App Rate ( $Crop\ N\ Need / 1st\ Yr\ Av\ N$ )	(lb/1000 gal or lb/ton)			5.7	21.2	5.1	4.6
P App Rate ( $Maintenance\ P / P\ in\ analysis$ )	(1000 gal/acre or ton/Acre)			4.14	9.10	4.14	2.50
Apply at Prate or Nrate?				Nrate	Nrate	Nrate	Nrate
<b>Application Rate to Use</b>	<b>(1000 gal or tons)</b>	<b>5.0</b>	<b>0.0</b>	<b>5.7</b>	<b>15.0</b>	<b>5.1</b>	<b>4.5</b>
Total application ( $App\ Rate * Spreadable\ Acres$ )	(gallons or tons)			202,876	530	179,696	158,850
N applied ( $1st\ Year\ AvN * App\ rate$ )	(lb/acre)			166	98	147	130
P applied ( $P\ in\ manure * App\ rate$ )	(lb/acre)			107	77	95	84
K applied ( $K\ in\ manure * App\ rate$ )	(lb/acre)			126	93	112	99
<b>Additional N Needed</b>	<b>(lb/acre)</b>		<b>146</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>2</b>
Acres Covered	(acres)		0.0	35.3	35.3	35.3	35.3

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

<b>Field Name:</b>	<u>Joe Spangloli A</u>	<b>Total Acres</b>	71.3
		<b>Non-Spreadable Acres</b>	0.0
<b>Township</b>	T24N R1W	<b>Total Spreadable Acres</b>	71.3
<b>Section</b>	26 & 35		
<b>FSA Farm #</b>	4984	<b>Predominant Soil Type:</b>	279C2 Rozetta silt loam, 5-10% slopes, eroded
<b>FSA Tract #</b>	1292	<b>P test</b>	72
<b>FSA Field #'s</b>	1-23	<b>K test</b>	208

**Individual Field Application & Nutrients**

Crop needs	Year	2009	2010	2011	2012	2013	2014
Crop		Alfalfa	Alfalfa	Corn	Corn	Alfalfa	Alfalfa
Yield	(bu/acre OR ton/acre)		10	160	160	10	10
N needed (lbs/ac)	lbs/ac		0	192	192	0	0
- Legume N credits	(lb/acre)		0	0	0	0	0
- Commercial fertilizer N credits	(lb/acre)						
- Manure N carryover credit **	(lb/acre)		0.0	0.0	25.2	34.5	41.7
Total N Credits	(lb/acre)		0.0	0.0	25.2	34.5	41.7
Crop N Need Minus Credits	(lb/acre)		0.0	192.0	166.8	-34.5	-41.7
Maintenance P needed *	(lb/acre)		120.0	68.8	68.8	120.0	120.0
Maintenance K needed *	(lb/acre)		500.0	44.8	44.8	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>Joe Spangloli 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	Corn	Corn	Alfalfa	Alfalfa
Storage				Liquid	Liquid	Liquid	
Application Method				Inject	Inject	Broadcast	
Storage/Application Method				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	25.05	
N App Rate ( $Crop\ N\ Need / 1st\ Yr\ Av\ N$ )	(lb/1000 gal or lb/ton)			6.6	5.8	-1.4	
P App Rate ( $Maintenance\ P / P\ in\ analysis$ )	(1000 gal/acre or ton/Acre)			3.68	3.68	6.42	
Apply at Prate or Nrate?				Nrate	Nrate	Prate	
<b>Application Rate to Use</b>	<b>(1000 gal or tons)</b>	<b>0.0</b>	<b>0.0</b>	<b>6.6</b>	<b>5.8</b>	<b>6.4</b>	<b>0.0</b>
Total application ( $App\ Rate * Spreadable\ Acres$ )	(gallons or tons)			472,552	410,521	457,540	
N applied ( $1st\ Year\ AvN * App\ rate$ )	(lb/acre)			192	167	161	
P applied ( $P\ in\ manure * App\ rate$ )	(lb/acre)			124	108	120	
K applied ( $K\ in\ manure * App\ rate$ )	(lb/acre)			146	127	141	
<b>Additional N Needed</b>	<b>(lb/acre)</b>		<b>0</b>	<b>0</b>	<b>0</b>	<b>-195</b>	<b>-42</b>
Acres Covered	(acres)		0.0	71.3	71.3	71.3	0.0



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

<b>Field Name:</b>	<u>Joe Spangloli B</u>	<b>Total Acres</b>	71.3
		<b>Non-Spreadable Acres</b>	0.0
<b>Township</b>	T24N R1W	<b>Total Spreadable Acres</b>	71.3
<b>Section</b>	26 & 35		
<b>FSA Farm #</b>	4984	<b>Predominant Soil Type:</b>	279C2 Rozetta silt loam, 5-10% slopes, eroded
<b>FSA Tract #</b>	1292	<b>P test</b>	72
<b>FSA Field #'s</b>	1-23	<b>K test</b>	208

**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	Corn	Alfalfa	Alfalfa	Alfalfa	Corn
Yield	(bu/acre OR ton/acre)		160	10	10	10	160
N needed (lbs/ac)	lbs/ac		192	0	0	0	192
- Legume N credits	(lb/acre)		0	0	0	0	0
- Commercial fertilizer N credits	(lb/acre)						
- Manure N carryover credit **	(lb/acre)		19.0	32.2	16.1	32.5	15.0
Total N Credits	(lb/acre)		19.0	32.2	16.1	32.5	15.0
Crop N Need Minus Credits	(lb/acre)		173.0	-32.2	-16.1	-32.5	177.0
Maintenance P needed *	(lb/acre)		68.8	120.0	120.0	120.0	68.8
Maintenance K needed *	(lb/acre)		44.8	500.0	500.0	500.0	44.8

\* 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>Joe Spangloli 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	Corn	Alfalfa	Alfalfa	Alfalfa	Corn
Storage		Liquid	Liquid		Liquid		Liquid
Application Method		Inject	Inject		Broadcast		Inject
Storage/Application Method		LINE1	LINE1		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		28.97
N App Rate ( $Crop\ N\ Need / 1st\ Yr\ Av\ N$ )	(lb/1000 gal or lb/ton)		6.0		-0.6		6.1
P App Rate ( $Maintenance\ P / P\ in\ analysis$ )	(1000 gal/acre or ton/Acre)		3.68		6.42		3.68
Apply at Prate or Nrate?			Nrate		Prate		Nrate
<b>Application Rate to Use</b>	<b>(1000 gal or tons)</b>	<b>5.0</b>	<b>6.0</b>	<b>0.0</b>	<b>6.4</b>	<b>0.0</b>	<b>6.1</b>
Total application ( $App\ Rate * Spreadable\ Acres$ )	(gallons or tons)		425,755		457,540		435,536
N applied ( $1st\ Year\ AvN * App\ rate$ )	(lb/acre)		173		161		177
P applied ( $P\ in\ manure * App\ rate$ )	(lb/acre)		173		120		114
K applied ( $K\ in\ manure * App\ rate$ )	(lb/acre)		112		141		134
<b>Additional N Needed</b>	<b>(lb/acre)</b>		<b>0</b>	<b>-32</b>	<b>-177</b>	<b>-32</b>	<b>0</b>
Acres Covered	(acres)		71.3	0.0	71.3	0.0	71.3