Multiple Year Application Field Summary

Field #	Field Name	Application Acres Available	2009				2010				2011			
			Acres	Lagoon Gallons	Barns 1-8 Tons	Barns 9-13 Tons	Acres	Lagoon Gallons	Barns 1-8 Tons	Barns 9-13 Tons	Acres	Lagoon Gallons	Barns 1-8 Tons	Barns 9-13 Tons
1	Ames South 52	49.04	49.04	1,520,620			49.04		2,126		49.04	1,501,612		
2	Baker East	37.07	37.07		1,700		37.07	1,178,194					1,002	
3	Road Bottom	19.58	19.58		816		19.58			468			466	
4	Faust Road	74.84	74.84		2,287		74.84		3,036				1,580	
5	John Liefer	31.72	31.72		1,421		31.72		732					824
7	Menard 24	20.75	20.75		908		20.75		479				752	
8	Nicholson 12	8.64	8.64	267,907			8.64			220		288,000		
9	Parler East & West	110.31	110.31		3,372		110.31		4,360				2,210	
11	Rogers 44	35.43	35.43		1,550		35.43		290	403			1,314	
12	Ruez Bottom	52.64	52.64		742	1,007	52.64		1,828			154,357		
13	Wood Bridge	10.47	10.47	158,140		84	10.47		421				233	
14	Ruez Park South 30	23.38	23.38		1,072		23.38	768,142	50				909	
16	Sievers 13	13.78	13.78		617		13.78		318				130	267
17	Tower 16	9.44	9.44		433		9.44		271				495	
19	V V & McBride	75.75	75.75		3,394		75.75		1,747				2,884	
Total Applied		**572.84**	**572.84**	**1,946,667**	**18,312**	**1,091**	**572.84**	**1,946,336**	**15,658**	**1,091**	**49.04**	**1,943,969**	**11,975**	**1,091**
Total Manure Produced				**1,946,236**	**18,596**	**1,091**		**1,946,236**	**18,596**	**1,091**		**1,946,236**	**18,596**	**1,091**
Over (under) application				**431**	**(284)**	**(0)**		**100**	**(2,938)**	**(0)**		**(2,267)**	**(6,621)**	**(0)**

Waste Application Worksheet

Westridge Dairy

Operation ID: 55078

Field # 1 | Field Name: Ames South 52 | Field Acres: 49.59 | Application Acres: 49.04

Crop Year: 2009 | Crop: Corn Silage | Yield Goal: 25 | Planned Application Acres: 49.04

	Nitrogen (N)	Phosphorus (P_2O_5)	Potassium (K_2O)	
Crop Removal per bushel	6.00	2.65	7.00	
Crop Removal(needs) /acre	150	66	175	LMFA 900.803 m) (6)
Nitrogen Credits				
Commercial Fertilizer	30	0	0	LMFA 900.803 m) (7)
Legume	40	Soybeans (Previous Crop)		LMFA 900.803 m) (7)
Manure Applications 2006	0	Mineralization Rate = 12.5 %		LMFA 900.803 m) (7)
2007	0	Mineralization Rate = 25 %		LMFA 900.803 m) (7)
2008	0	Mineralization Rate = 50 %		LMFA 900.803 m) (7)
Total Nitrogen Credits	70			LMFA 900.803 m) (7)
	Nitrogen	**Phosphorus**	**Potassium**	
Crop Needs after Credits	80	66	175	LMFA 900.803 m) (6)
Sample Results From:	*If Book: Source MWPS 18*			
Manure Source: Lagoon	4.0	3.0	4.0	
Plant Ammonia Nitrogen / 1000 gallons	2.0			
Manure Application Method	Injected			
Ammonia Loss During Application	1 %	Source: MWPS 18 Table 10-2		LMFA 900.803 m) (4)
Mineralization Rate - Application Year	0.30	Source: MWPS 18 Table 10-5		
Plant Available Nitrogen / 1000 gallons	2.58			

Application Rate Based on	Gallons/Acre	
Nitrogen	31,007.8	LMFA 900.803 m) (8)
Phosphorus	22,083.3	
Current Bray P1 Soil Test lbs/Acre	114	LMFA 900.803 l)
At Nitrogen Rate P1 Buildup Equals	3.0	
# of Apps at N rate to reach 300 P1	63	
Target Application Rate Per Acre	31,007.8 **Gallons**	Nitrogen Rate
Target Application Rate Entire Field	1,520,620 **Gallons**	

	Nitrogen	Phosphorus	Potassium
Available Manure Nutrients Applied	80	93	124
Available Nutrients from all sources	150	93	124
Over (Under) application of nutrients	0	27	-51

Nitrogen Mineralization Credit for Future Years

Mineralized Nitrogen / Crop Year	Nitrogen Credit/Acre	Crop Year	Mineralization Rate	
Second Year Following Application	9	2010	50% of	0.60 /1000 gal
Third Year Following Application	5	2011	25% of	0.60 /1000 gal
Fourth Year Following Application	2	2012	12.5% of	0.60 /1000 gal

Waste Application Worksheet

Westridge Dairy

Operation ID: 55078

Field # 2 | Field Name: Baker East | Field Acres: 42.84 | Application Acres: 37.07

Crop Year: 2009 | Crop: Soybeans | Yield Goal: 44 | Planned Application Acres: 37.07

	Nitrogen N	Phosphorus P_2O_5	Potassium K_2O	
Crop Removal per bushel	3.75	0.85	1.30	
Crop Removal(needs) /acre	165	37	57	LMFA 900.803 m) (6)
Nitrogen Credits				
Commercial Fertilizer	0	0	0	LMFA 900.803 m) (7)
Legume	0			LMFA 900.803 m) (7)
Manure Applications 2006	0	Mineralization Rate = 12.5 %		LMFA 900.803 m) (7)
2007	0	Mineralization Rate = 25 %		LMFA 900.803 m) (7)
2008	0	Mineralization Rate = 50 %		LMFA 900.803 m) (7)
Total Nitrogen Credits	0			LMFA 900.803 m) (7)
	Nitrogen	**Phosphorus**	**Potassium**	
Crop Needs after Credits	165	37	57	LMFA 900.803 m) (6)
Sample Results From:	*If Book: Source MWPS 18*			
Manure Source: Solid w/sand Bedding	7.3	2.5	4.9	
Plant Ammonia Nitrogen / ton	2.5			

Manure Application Method: Broadcast Solid, incorporated within 12 hours

Ammonia Loss During Application: 3 % Source: MWPS 18 Table 10-2 — LMFA 900.803 m) (4)

Mineralization Rate - Application Year: 0.25 Source: MWPS 18 Table 10-5

Plant Available Nitrogen / ton: 3.60

Application Rate Based on	Tons/Acre	
Nitrogen	45.8	LMFA 900.803 m) (8)
Phosphorus	15.3	
Current Bray P1 Soil Test lbs/Acre	81.0	LMFA 900.803 l)
At Nitrogen Rate P1 Buildup Equals	8.3	
# of Apps at N rate to reach 300-P1	26.3	
Target Application Rate Per Acre	45.8 **Tons**	Nitrogen Rate
Target Application Rate Entire Field	1,700 **Tons**	

	Nitrogen	Phosphorus	Potassium
Available Manure Nutrients Applied	165	112	225
Available Nutrients from all sources	165	112	225
Over (Under) application of nutrients	0	75	167

Nitrogen Mineralization Credit for Future Years

Mineralized Nitrogen / Crop Year	Nitrogen Credit/Acre	Crop Year	Mineralization Rate	
Second Year Following Application	28	2010	50% of	1.22 / ton
Third Year Following Application	14	2011	25% of	1.22 / ton
Fourth Year Following Application	7	2012	12.5% of	1.22 / ton

Waste Application Worksheet

Westridge Dairy

Operation ID: 55078

Field # 3 | Field Name: Road Bottom | Field Acres: 19.58 | Application Acres: 19.58

Crop Year: 2009 | Crop: Corn Silage | Yield Goal: 25 | Planned Application Acres: 19.58

	Nitrogen N	Phosphorus P_2O_5	Potassium K_2O	
Crop Removal per bushel	6.00	2.65	7.00	
Crop Removal(needs) /acre	150	66	175	LMFA 900.803 m) (6)
Nitrogen Credits				
Commercial Fertilizer	0	0	0	LMFA 900.803 m) (7)
Legume	0	Corn Grain (Previous Crop)		LMFA 900.803 m) (7)
Manure Applications 2006	0	Mineralization Rate = 12.5 %		LMFA 900.803 m) (7)
2007	0	Mineralization Rate = 25 %		LMFA 900.803 m) (7)
2008	0	Mineralization Rate = 50 %		LMFA 900.803 m) (7)
Total Nitrogen Credits	0			LMFA 900.803 m) (7)

	Nitrogen	Phosphorus	Potassium	
Crop Needs after Credits	150	66	175	LMFA 900.803 m) (6)
Sample Results From:	*If Book: Source MWPS 18*			
Manure Source: Solid w/sand Bedding	7.3	2.5	4.9	
Plant Ammonia Nitrogen / ton	2.5			

Manure Application Method: Broadcast Solid, incorporated within 12 hours

Ammonia Loss During Application: 3 % — Source: MWPS 18 Table 10-2 — LMFA 900.803 m) (4)

Mineralization Rate - Application Year: 0.25 — Source: MWPS 18 Table 10-5

Plant Available Nitrogen / ton: 3.60

Application Rate Based on	Tons/Acre	
Nitrogen	41.7	LMFA 900.803 m) (8)
Phosphorus	27.0	
Current Bray P1 Soil Test lbs/Acre	0	LMFA 900.803 l)
At Nitrogen Rate P1 Buildup Equals	4.0	
# of Apps at N rate to reach 300 P1	75	
Target Application Rate Per Acre	41.7	Tons — Nitrogen Rate
Target Application Rate Entire Field	816	Tons

	Nitrogen	Phosphorus	Potassium
Available Manure Nutrients Applied	150	102	204
Available Nutrients from all sources	150	102	204
Over (Under) application of nutrients	0	36	29

Nitrogen Mineralization Credit for Future Years

Mineralized Nitrogen / Crop Year	Nitrogen Credit/Acre	Crop Year	Mineralization Rate	
Second Year Following Application	25	2010	50% of	1.22 / ton
Third Year Following Application	13	2011	25% of	1.22 / ton
Fourth Year Following Application	6	2012	12.5% of	1.22 / ton

Waste Application Worksheet

Westridge Dairy

Operation ID: 55078

Field # 4 | Field Name: Faust Road | Field Acres: 74.84 | Application Acres: 74.84

Crop Year: 2009 | Crop: Corn Silage | Yield Goal: 25 | Planned Application Acres: 74.84

	Nitrogen N	Phosphorus P_2O_5	Potassium K_2O	
Crop Removal per bushel	6.00	2.65	7.00	
Crop Removal(needs) /acre	150	66	175	LMFA 900.803 m) (6)
Nitrogen Credits				
Commercial Fertilizer	0	0	0	LMFA 900.803 m) (7)
Legume	40	Soybeans (Previous Crop)		LMFA 900.803 m) (7)
Manure Applications 2006	0	Mineralization Rate = 12.5 %		LMFA 900.803 m) (7)
2007	0	Mineralization Rate = 25 %		LMFA 900.803 m) (7)
2008	0	Mineralization Rate = 50 %		LMFA 900.803 m) (7)
Total Nitrogen Credits	40			LMFA 900.803 m) (7)

	Nitrogen	Phosphorus	Potassium	
Crop Needs after Credits	110	66	175	LMFA 900.803 m) (6)
Sample Results From:	*If Book: Source MWPS 18*			
Manure Source: Solid w/sand Bedding	7.3	2.5	4.9	
Plant Ammonia Nitrogen / ton	2.5			

Manure Application Method: Broadcast Solid, incorporated within 12 hours

Ammonia Loss During Application: 3 % Source: MWPS 18 Table 10-2 — LMFA 900.803 m) (4)

Mineralization Rate - Application Year: 0.25 Source: MWPS 18 Table 10-5

Plant Available Nitrogen / ton: 3.60

Application Rate Based on	Tons/Acre	
Nitrogen	30.6	LMFA 900.803 m) (8)
Phosphorus	27.0	
Current Bray P1 Soil Test lbs/Acre	98	LMFA 900.803 l)
At Nitrogen Rate P1 Buildup Equals	1.0	
# of Apps at N rate to reach 300 P1	211	
Target Application Rate Per Acre	30.6	Tons — Nitrogen Rate
Target Application Rate Entire Field	2,287	Tons

	Nitrogen	Phosphorus	Potassium
Available Manure Nutrients Applied	110	75	150
Available Nutrients from all sources	150	75	150
Over (Under) application of nutrients	0	9	-25

Nitrogen Mineralization Credit for Future Years

Mineralized Nitrogen / Crop Year	Nitrogen Credit/Acre	Crop Year	Mineralization Rate	
Second Year Following Application	19	2010	50% of	1.22 / ton
Third Year Following Application	9	2011	25% of	1.22 / ton
Fourth Year Following Application	5	2012	12.5% of	1.22 / ton

Waste Application Worksheet

Westridge Dairy

Operation ID: 55078

Field # 5 | Field Name: John Liefer | Field Acres: 50.63 | Application Acres: 31.72

Crop Year: 2009 | Crop: Soybeans | Yield Goal: 43 | Planned Application Acres: 31.72

	Nitrogen N	Phosphorus P_2O_5	Potassium K_2O	
Crop Removal per bushel	3.75	0.85	1.30	
Crop Removal(needs) /acre	161	37	56	LMFA 900.803 m) (6)
Nitrogen Credits				
Commercial Fertilizer	0	0	0	LMFA 900.803 m) (7)
Legume	0			LMFA 900.803 m) (7)
Manure Applications 2006	0	Mineralization Rate = 12.5 %		LMFA 900.803 m) (7)
2007	0	Mineralization Rate = 25 %		LMFA 900.803 m) (7)
2008	0	Mineralization Rate = 50 %		LMFA 900.803 m) (7)
Total Nitrogen Credits	0			LMFA 900.803 m) (7)
	Nitrogen	**Phosphorus**	**Potassium**	
Crop Needs after Credits	161	37	56	LMFA 900.803 m) (6)
Sample Results From:	*If Book: Source MWPS 18*			
Manure Source: Solid w/sand Bedding	7.3	2.5	4.9	
Plant Ammonia Nitrogen / ton	2.5			

Manure Application Method: Broadcast Solid, incorporated within 12 hours

Ammonia Loss During Application: 3 % Source: MWPS 18 Table 10-2 — LMFA 900.803 m) (4)

Mineralization Rate - Application Year: 0.25 Source: MWPS 18 Table 10-5

Plant Available Nitrogen / ton: 3.60

Application Rate Based on	Tons/Acre	
Nitrogen	44.8	LMFA 900.803 m) (8)
Phosphorus	14.9	
Current Bray P1 Soil Test lbs/Acre	148.0	LMFA 900.803 l)
At Nitrogen Rate P1 Buildup Equals	8.1	
# of Apps at N rate to reach 300-P1	18.7	
Target Application Rate Per Acre	44.8 **Tons**	Nitrogen Rate
Target Application Rate Entire Field	1,421 **Tons**	

	Nitrogen	Phosphorus	Potassium
Available Manure Nutrients Applied	161	110	220
Available Nutrients from all sources	161	110	220
Over (Under) application of nutrients	0	73	164

Nitrogen Mineralization Credit for Future Years

Mineralized Nitrogen / Crop Year	Nitrogen Credit/Acre	Crop Year	Mineralization Rate
Second Year Following Application	27	2010	50% of 1.22 / ton
Third Year Following Application	14	2011	25% of 1.22 / ton
Fourth Year Following Application	7	2012	12.5% of 1.22 / ton

Waste Application Worksheet

Westridge Dairy

Operation ID: 55078

Field # 7 | Field Name: Menard 24 | Field Acres: 20.75 | Application Acres: 20.75

Crop Year: 2009 | Crop: Soybeans | Yield Goal: 42 | Planned Application Acres: 20.75

	Nitrogen N	Phosphorus P_2O_5	Potassium K_2O	
Crop Removal per bushel	3.75	0.85	1.30	
Crop Removal(needs) /acre	158	36	55	LMFA 900.803 m) (6)
Nitrogen Credits				
Commercial Fertilizer	0	0	0	LMFA 900.803 m) (7)
Legume	0	Corn Silage (Previous Crop)		LMFA 900.803 m) (7)
Manure Applications 2006	0	Mineralization Rate = 12.5 %		LMFA 900.803 m) (7)
2007	0	Mineralization Rate = 25 %		LMFA 900.803 m) (7)
2008	0	Mineralization Rate = 50 %		LMFA 900.803 m) (7)
Total Nitrogen Credits	0			LMFA 900.803 m) (7)
	Nitrogen	**Phosphorus**	**Potassium**	
Crop Needs after Credits	158	36	55	LMFA 900.803 m) (6)
Sample Results From:	*If Book: Source MWPS 18*			
Manure Source: Solid w/sand Bedding	7.3	2.5	4.9	
Plant Ammonia Nitrogen / ton	2.5			

Manure Application Method: Broadcast Solid, incorporated within 12 hours

Ammonia Loss During Application: 3 % Source: MWPS 18 Table 10-2 — LMFA 900.803 m) (4)

Mineralization Rate - Application Year: 0.25 Source: MWPS 18 Table 10-5

Plant Available Nitrogen / ton: 3.60

Application Rate Based on	**Tons/Acre**	
Nitrogen	43.8	LMFA 900.803 m) (8)
Phosphorus	14.6	
Current Bray P1 Soil Test lbs/Acre	0	LMFA 900.803 l)
At Nitrogen Rate P1 Buildup Equals	7.9	
# of Apps at N rate to reach 300 P1	38	
Target Application Rate Per Acre	43.8 **Tons**	Nitrogen Rate
Target Application Rate Entire Field	908 **Tons**	

	Nitrogen	Phosphorus	Potassium
Available Manure Nutrients Applied	158	107	214
Available Nutrients from all sources	158	107	214
Over (Under) application of nutrients	0	72	160

Nitrogen Mineralization Credit for Future Years

Mineralized Nitrogen / Crop Year	Nitrogen Credit/Acre	Crop Year	Mineralization Rate
Second Year Following Application	27	2010	50% of 1.22 / ton
Third Year Following Application	13	2011	25% of 1.22 / ton
Fourth Year Following Application	7	2012	12.5% of 1.22 / ton

Waste Application Worksheet

Westridge Dairy

Operation ID: 55078

Field # 8 | Field Name: Nicholson 12 | Field Acres: 11.55 | Application Acres: 8.64

Crop Year: 2009 | Crop: Corn Silage | Yield Goal: 25 | Planned Application Acres: 8.64

	Nitrogen N	Phosphorus P_2O_5	Potassium K_2O	
Crop Removal per bushel	6.00	2.65	7.00	
Crop Removal(needs) /acre	150	66	175	LMFA 900.803 m) (6)
Nitrogen Credits				
Commercial Fertilizer	30	0	0	LMFA 900.803 m) (7)
Legume	40	Soybeans (Previous Crop)		LMFA 900.803 m) (7)
Manure Applications 2006	0	Mineralization Rate = 12.5 %		LMFA 900.803 m) (7)
2007	0	Mineralization Rate = 25 %		LMFA 900.803 m) (7)
2008	0	Mineralization Rate = 50 %		LMFA 900.803 m) (7)
Total Nitrogen Credits	70			LMFA 900.803 m) (7)

	Nitrogen	Phosphorus	Potassium	
Crop Needs after Credits	80	66	175	LMFA 900.803 m) (6)
Sample Results From:	*If Book: Source MWPS 18*			
Manure Source: Lagoon	4.0	3.0	4.0	
Plant Ammonia Nitrogen / 1000 gallons	2.0			
Manure Application Method	Injected			
Ammonia Loss During Application	1 %	Source: MWPS 18 Table 10-2		LMFA 900.803 m) (4)
Mineralization Rate - Application Year	0.30	Source: MWPS 18 Table 10-5		
Plant Available Nitrogen / 1000 gallons	2.58			

	Gallons/Acre		
Application Rate Based on			LMFA 900.803 m) (8)
Nitrogen	31,007.8		
Phosphorus	22,083.3		
Current Bray P1 Soil Test lbs/Acre	51		LMFA 900.803 l)
At Nitrogen Rate P1 Buildup Equals	3.0		
# of Apps at N rate to reach 300 P1	84		
Target Application Rate Per Acre	31,007.8	**Gallons**	Nitrogen Rate
Target Application Rate Entire Field	267,907	**Gallons**	

	Nitrogen	Phosphorus	Potassium
Available Manure Nutrients Applied	80	93	124
Available Nutrients from all sources	150	93	124
Over (Under) application of nutrients	0	27	-51

Nitrogen Mineralization Credit for Future Years

Mineralized Nitrogen / Crop Year	Nitrogen Credit/Acre	Crop Year	Mineralization Rate
Second Year Following Application	9	2010	50% of 0.60 /1000 gal
Third Year Following Application	5	2011	25% of 0.60 /1000 gal
Fourth Year Following Application	2	2012	12.5% of 0.60 /1000 gal

Waste Application Worksheet

Westridge Dairy

Operation ID: 55078

Field # 9 | Field Name: Parler East & West | Field Acres: 110.31 | Application Acres: 110.31

Crop Year: 2009 | Crop: Corn Silage | Yield Goal: 25 | Planned Application Acres: 110.31

	Nitrogen (N)	Phosphorus (P_2O_5)	Potassium (K_2O)	
Crop Removal per bushel	6.00	2.65	7.00	
Crop Removal(needs) /acre	150	66	175	LMFA 900.803 m) (6)
Nitrogen Credits				
Commercial Fertilizer	0	0	0	LMFA 900.803 m) (7)
Legume	40	Soybeans (Previous Crop)		LMFA 900.803 m) (7)
Manure Applications 2006	0	Mineralization Rate = 12.5 %		LMFA 900.803 m) (7)
2007	0	Mineralization Rate = 25 %		LMFA 900.803 m) (7)
2008	0	Mineralization Rate = 50 %		LMFA 900.803 m) (7)
Total Nitrogen Credits	40			LMFA 900.803 m) (7)
	Nitrogen	**Phosphorus**	**Potassium**	
Crop Needs after Credits	110	66	175	LMFA 900.803 m) (6)
Sample Results From:	*If Book: Source MWPS 18*			
Manure Source: Solid w/sand Bedding	7.3	2.5	4.9	
Plant Ammonia Nitrogen / ton	2.5			

Manure Application Method: Broadcast Solid, incorporated within 12 hours

Ammonia Loss During Application: 3 % — Source: MWPS 18 Table 10-2 — LMFA 900.803 m) (4)

Mineralization Rate - Application Year: 0.25 — Source: MWPS 18 Table 10-5

Plant Available Nitrogen / ton: 3.60

Application Rate Based on	Tons/Acre	
Nitrogen	30.6	LMFA 900.803 m) (8)
Phosphorus	27.0	
Current Bray P1 Soil Test lbs/Acre	226	LMFA 900.803 l)
At Nitrogen Rate P1 Buildup Equals	1.0	
# of Apps at N rate to reach 300 P1	77	
Target Application Rate Per Acre	30.6 **Tons**	Nitrogen Rate
Target Application Rate Entire Field	3,372 **Tons**	

	Nitrogen	Phosphorus	Potassium
Available Manure Nutrients Applied	110	75	150
Available Nutrients from all sources	150	75	150
Over (Under) application of nutrients	0	9	-25

Nitrogen Mineralization Credit for Future Years

Mineralized Nitrogen / Crop Year	Nitrogen Credit/Acre	Crop Year	Mineralization Rate	
Second Year Following Application	19	2010	50% of	1.22 / ton
Third Year Following Application	9	2011	25% of	1.22 / ton
Fourth Year Following Application	5	2012	12.5% of	1.22 / ton

Waste Application Worksheet

Westridge Dairy

Operation ID: 55078

Field # 11 | Field Name: Rogers 44 | Field Acres: 35.43 | Application Acres: 35.43

Crop Year: 2009 | Crop: Soybeans | Yield Goal: 42 | Planned Application Acres: 35.43

	Nitrogen (N)	Phosphorus (P_2O_5)	Potassium (K_2O)	
Crop Removal per bushel	3.75	0.85	1.30	
Crop Removal(needs) /acre	158	36	55	LMFA 900.803 m) (6)
Nitrogen Credits				
Commercial Fertilizer	0	0	0	LMFA 900.803 m) (7)
Legume	0	Corn Grain (Previous Crop)		LMFA 900.803 m) (7)
Manure Applications 2006	0	Mineralization Rate = 12.5 %		LMFA 900.803 m) (7)
2007	0	Mineralization Rate = 25 %		LMFA 900.803 m) (7)
2008	0	Mineralization Rate = 50 %		LMFA 900.803 m) (7)
Total Nitrogen Credits	0			LMFA 900.803 m) (7)
	Nitrogen	**Phosphorus**	**Potassium**	
Crop Needs after Credits	158	36	55	LMFA 900.803 m) (6)
Sample Results From:	*If Book: Source MWPS 18*			
Manure Source: Solid w/sand Bedding	7.3	2.5	4.9	
Plant Ammonia Nitrogen / ton	2.5			

Manure Application Method: Broadcast Solid, incorporated within 12 hours

Ammonia Loss During Application: 3 % Source: MWPS 18 Table 10-2 — LMFA 900.803 m) (4)

Mineralization Rate - Application Year: 0.25 Source: MWPS 18 Table 10-5

Plant Available Nitrogen / ton: 3.60

Application Rate Based on	Tons/Acre	
Nitrogen	43.8	LMFA 900.803 m) (8)
Phosphorus	14.6	
Current Bray P1 Soil Test lbs/Acre	0	LMFA 900.803 l)
At Nitrogen Rate P1 Buildup Equals	7.9	
# of Apps at N rate to reach 300 P1	38	

Target Application Rate Per Acre: 43.8 **Tons** Nitrogen Rate

Target Application Rate Entire Field: 1,550 **Tons**

	Nitrogen	Phosphorus	Potassium
Available Manure Nutrients Applied	158	107	214
Available Nutrients from all sources	158	107	214
Over (Under) application of nutrients	0	72	160

Nitrogen Mineralization Credit for Future Years

Mineralized Nitrogen / Crop Year	Nitrogen Credit/Acre	Crop Year	Mineralization Rate
Second Year Following Application	27	2010	50% of 1.22 / ton
Third Year Following Application	13	2011	25% of 1.22 / ton
Fourth Year Following Application	7	2012	12.5% of 1.22 / ton

Waste Application Worksheet

Westridge Dairy

Operation ID: 55078

Field # 11 | Field Name: Rogers 44 | Field Acres: 35.43 | Application Acres: 35.43

Crop Year: 2010 | Crop: Corn Grain | Yield Goal: 129 | Planned Application Acres: 11.87

	Nitrogen N	Phosphorus P_2O_5	Potassium K_2O	
Crop Removal per bushel	1.20	0.43	0.28	
Crop Removal(needs) /acre	155	55	36	LMFA 900.803 m) (6)
Nitrogen Credits				
Commercial Fertilizer	0	0	0	LMFA 900.803 m) (7)
Legume	40	Soybeans (Previous Crop)		LMFA 900.803 m) (7)
Manure Applications 2007	0	Mineralization Rate = 12.5 %		LMFA 900.803 m) (7)
2008	0	Mineralization Rate = 25 %		LMFA 900.803 m) (7)
2009	27	Mineralization Rate = 50 %		LMFA 900.803 m) (7)
Total Nitrogen Credits	67			LMFA 900.803 m) (7)

	Nitrogen	Phosphorus	Potassium	
Crop Needs after Credits	88	55	36	LMFA 900.803 m) (6)
Sample Results From:	*If Book: Source MWPS 18*			
Manure Source: Solid w/sand Bedding	7.3	2.5	4.9	
Plant Ammonia Nitrogen / ton	2.5			
Manure Application Method	Broadcast Solid, incorporated within 12 hours			
Ammonia Loss During Application	3 % Source: MWPS 18 Table 10-2			LMFA 900.803 m) (4)
Mineralization Rate - Application Year	0.25 Source: MWPS 18 Table 10-5			
Plant Available Nitrogen / ton	3.60			

Application Rate Based on	**Tons/Acre**	LMFA 900.803 m) (8)
Nitrogen	24.4	
Phosphorus	22.6	
Current Bray P1 Soil Test lbs/Acre	0	LMFA 900.803 l)
At Nitrogen Rate P1 Buildup Equals	0.5	
# of Apps at N rate to reach 300 P1	628	
Target Application Rate Per Acre	24.4 **Tons**	Nitrogen Rate
Target Application Rate Entire Field	290 **Tons**	

	Nitrogen	Phosphorus	Potassium
Available Manure Nutrients Applied	88	60	120
Available Nutrients from all sources	155	60	120
Over (Under) application of nutrients	0	4	83

Nitrogen Mineralization Credit for Future Years

Mineralized Nitrogen / Crop Year	Nitrogen Credit/Acre	Crop Year	Mineralization Rate
Second Year Following Application	15	2011	50% of 1.22 / ton
Third Year Following Application	7	2012	25% of 1.22 / ton
Fourth Year Following Application	4	2013	12.5% of 1.22 / ton