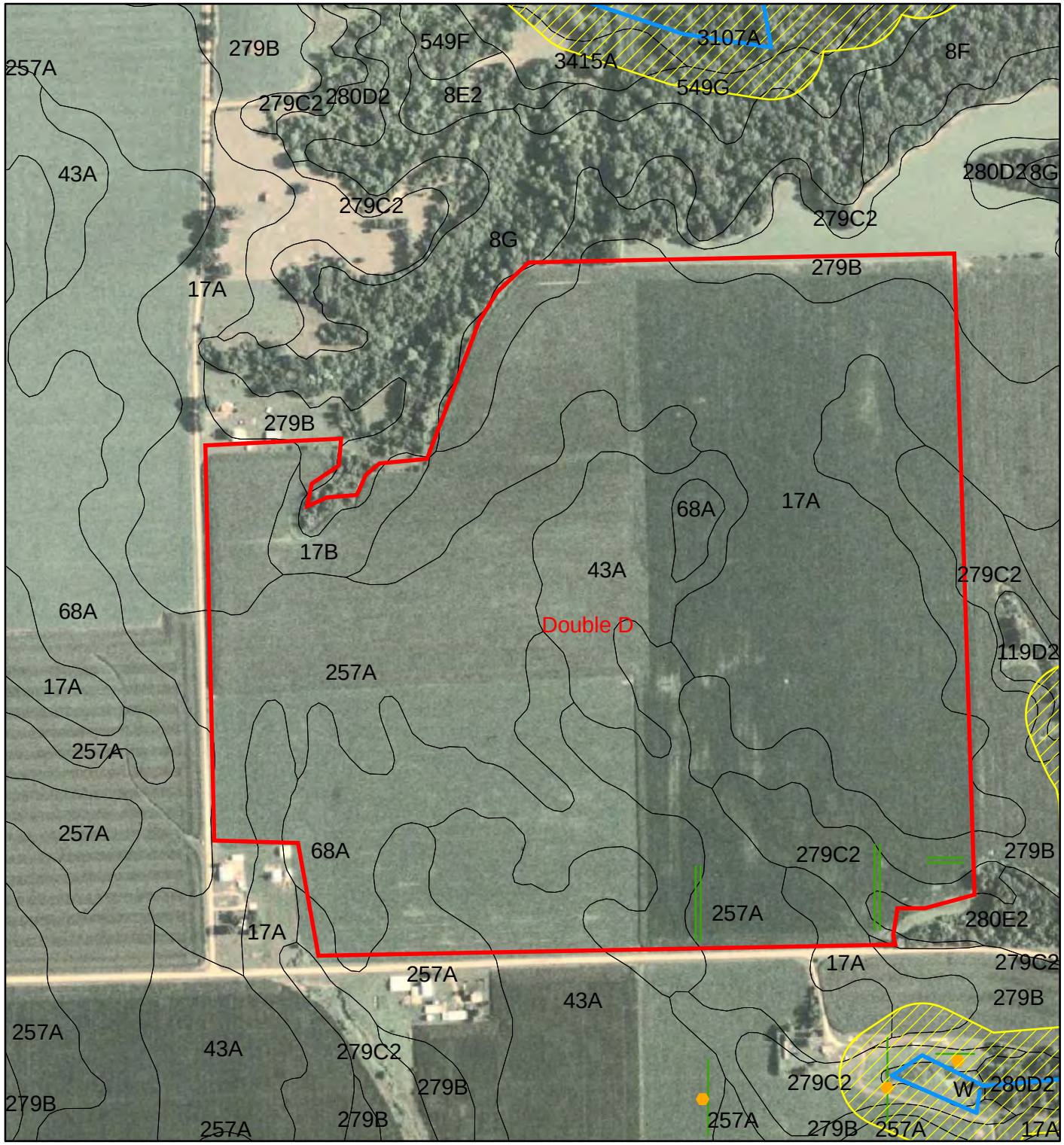
Dare Farms

Individual Fields

Soil Map



N
W E
S

Legend

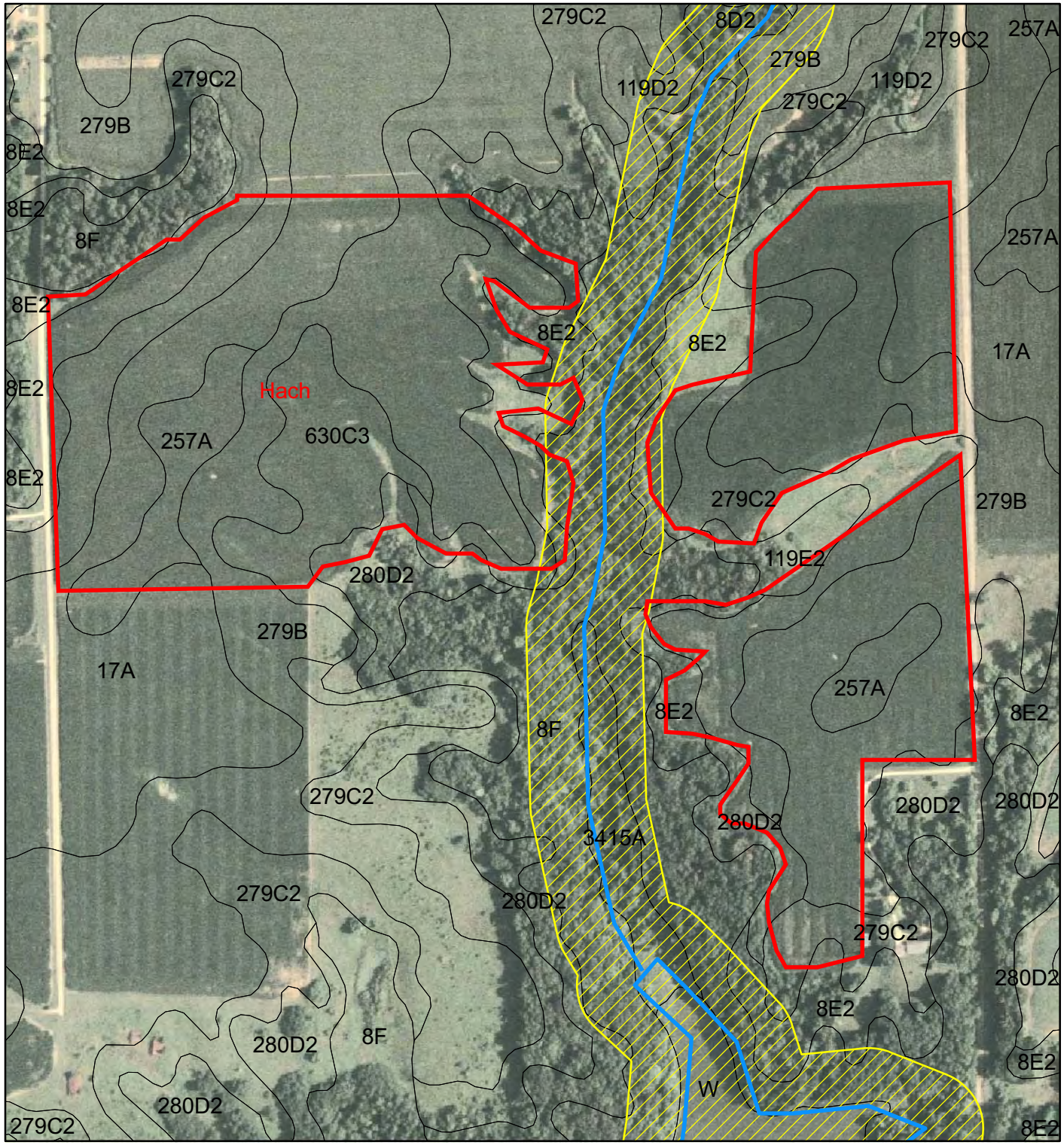
- Fields
- Water
- Water Buffer
- Well
- Well Buffer
- Tile Risers
- Existing Structures

1,200 Feet

Frank & West
Environmental Engineers, Inc.
7226 N. State Route 29
Springfield, IL 62707
Phone: 217/487-7686
Fax: 217/487-7687

Dare Farms

Individual Fields Soil Map



N
W E
S

Legend

- Fields
- Water
- Water Buffer
- Well
- Well Buffer
- Tile Risers
- Existing Structures

1,100 Feet

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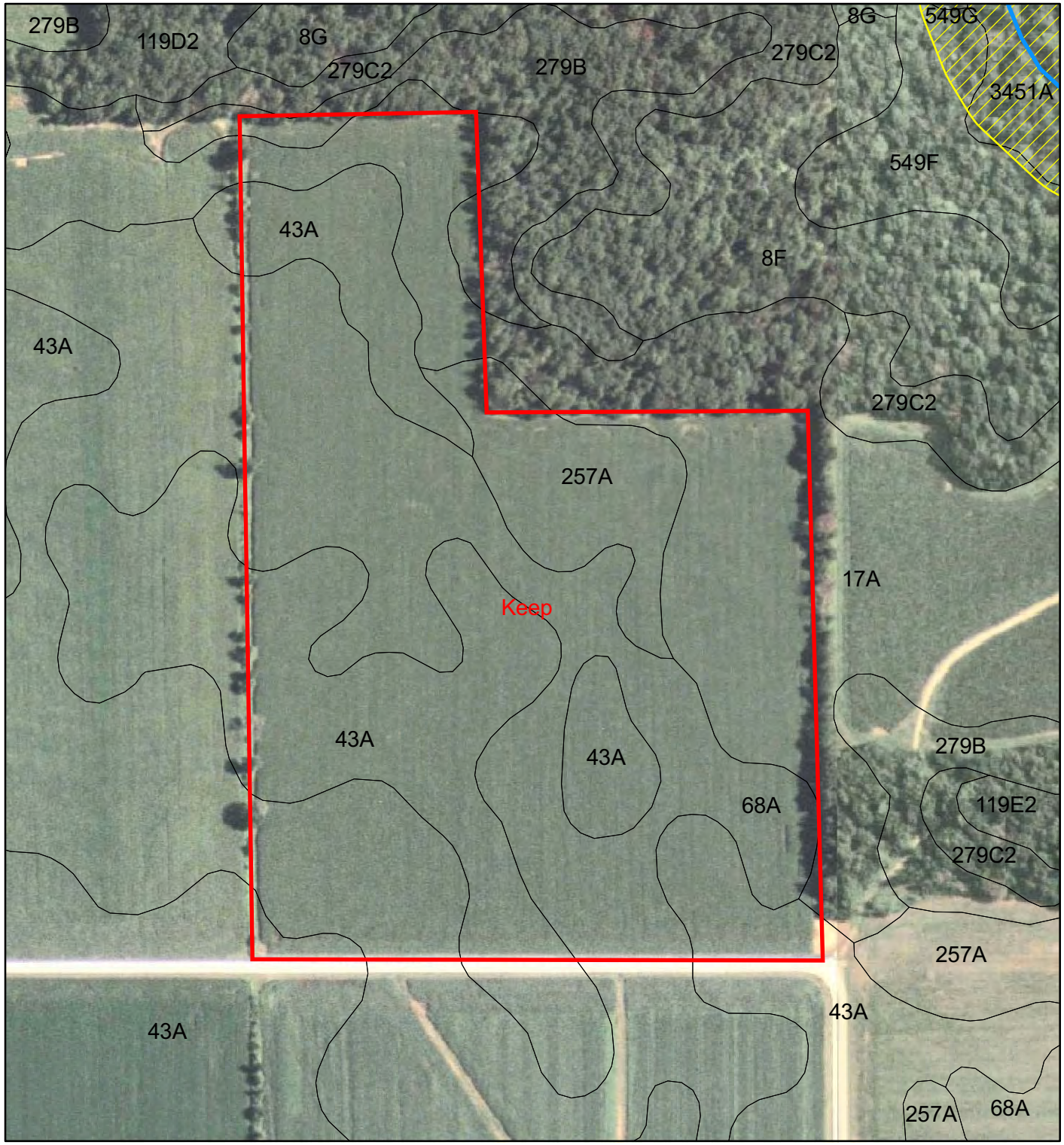

Dare Farms

Individual Fields Soil Map

N
W E
S

Legend

- Fields
- Water
- Water Buffer
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- Well Buffer
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- Existing Structures

710 Feet

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Individual Field Information

Dare Farms

Field Name:	Double D	**Total Acres**	115.0
		Non-Spreadable Acres	0.0
Township	Orion	**Total Spreadable Acres**	115.0
Section	17 & 18		
FSA Farm #	2190	**Predominant Soil Type:**	279B Rozetta silt loam, 2-5% slopes
FSA Tract #	3275	**P test**	63
FSA Field #'s	2	**K test**	205

Individual Field Application & Nutrients

Crop needs	**Year**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Crop		Corn	Corn	Corn	Corn	Corn	Corn
Yield	(bu/acre OR ton/acre)		175	175	175	175	175
N needed (lbs/ac)	lbs/ac		210	210	210	210	210
- Legume N credits	(lb/acre)		0	0	0	0	0
- Commercial fertilizer N credits	(lb/acre)						
- Manure N carryover credit **	(lb/acre)		14.2	7.1	22.4	11.2	23.6
Total N Credits	(lb/acre)		14.2	7.1	22.4	11.2	23.6
Crop N Need Minus Credits	(lb/acre)		196	203	188	199	186
Maintenance P needed *	(lb/acre)		75.25	75.25	75.25	75.25	75.25
Maintenance K needed *	(lb/acre)		49	49	49	49	49

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

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

Dare Farms							
Double D		**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Manure Application		Corn	Corn	Corn	Corn	Corn	Corn
Storage		Liquid		Liquid		Liquid	Liquid
Application Method		Inject		Inject		Inject	Inject
Storage/Application Method		LINE1		LINE1		LINE1	LINE1
1st Year Available N *(Am-N * N retention due to app method) + (OrgN * .35)*	(lb/1000 gal)			11.84		11.84	11.84
N App Rate *(Crop N Need / 1st Yr Av N)*	(1000 gal/acre)			17.1		16.8	15.7
P App Rate *(Maintenance P / P in analysis)*	(1000 gal/acre)			4.95		4.95	4.95
Apply at Prate or Nrate?				Nrate		Nrate	Nrate
Application Rate to Use	**(1000 gal)**	**6.0**	**0.0**	**8.0**	**0.0**	**8.0**	**8.0**
Total application *(App Rate * Spreadable Acres)*	(gallons)			920,000		920,000	920,000
N applied *(1st Year AvN * App rate)*	(lb/acre)			95		95	95
P applied *(P in manure * App rate)*	(lb/acre)			122		122	122
K applied *(K in manure * App rate)*	(lb/acre)			151		151	151
Additional N Needed	**(lb/acre)**		**196**	**108**	**188**	**104**	**92**
Acres Covered	(acres)		0.0	115.0	0.0	115.0	115.0

Individual Field Information

Dare Farms

Field Name:	Hach	**Total Acres**	96.3
		Non-Spreadable Acres	1.7
Township	Orion	**Total Spreadable Acres**	94.6
Section	18		
FSA Farm #	6769	**Predominant Soil Type:**	279B Rozetta silt loam, 2-5% slopes
FSA Tract #	3282	**P test**	39
FSA Field #'s	1-4	**K test**	167

Individual Field Application & Nutrients

Crop needs	**Year**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Crop		Corn	Corn	Corn	Corn	Corn	Corn
Yield	(bu/acre OR ton/acre)		200	200	200	200	200
N needed (lbs/ac)	lbs/ac		240	240	240	240	240
- 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	44.9	59.0	29.5
Total N Credits	(lb/acre)		0	0.0	44.9	59.0	29.5
Crop N Need Minus Credits	(lb/acre)		240	240	195	181	211
Maintenance P needed *	(lb/acre)		86	86	86	86	86
Maintenance K needed *	(lb/acre)		56	56	56	56	56

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

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

Dare Farms							
Hach		**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Manure Application		Corn	Corn	Corn	Corn	Corn	Corn
Storage				Solid	Solid		Solid
Application Method				Incorporate	Incorporate		Incorporate
Storage/Application Method				LINE2	LINE2		LINE2
1st Year Available N *(Am-N * N retention due to app method) + (OrgN * .35)*	(lb/1000 gal or lb/ton)			12.15	12.15		12.15
N App Rate *(Crop N Need / 1st Yr Av N)*	(1000 gal/acre or ton/acre)			19.8	16.1		17.3
P App Rate *(Maintenance P / P in analysis)*	(1000 gal/acre or ton/acre)			4.78	4.78		4.78
Apply at Prate or Nrate?				Nrate	Nrate		Nrate
Application Rate to Use	**(1000 gal or Ton)**	**0.0**	**0.0**	**19.8**	**16.1**	**0.0**	**17.3**
Total application *(App Rate * Spreadable Acres)*	(gallons or Tons)			1,869	1,519		1,639
N applied *(1st Year AvN * App rate)*	(lb/acre)			240	195		211
P applied *(P in manure * App rate)*	(lb/acre)			356	289		312
K applied *(K in manure * App rate)*	(lb/acre)			514	417		450
Additional N Needed	**(lb/acre)**		**240**	**0**	**0**	**181**	**0**
Acres Covered	(acres)		0.0	94.6	94.6	0.0	94.6

Individual Field Information

Dare Farms

Field Name:	Keep	**Total Acres**	50.0
		Non-Spreadable Acres	0.0
Township	Canton	**Total Spreadable Acres**	50.0
Section	1		
FSA Farm #	7041	**Predominant Soil Type:**	43A Ipava silt loam, 0-2% slope
FSA Tract #	29636	**P test**	38
FSA Field #'s	1	**K test**	238

Individual Field Application & Nutrients

Crop needs	**Year**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Crop		Corn	Corn	Corn	Corn	Corn	Corn
Yield	(bu/acre OR ton/acre)		200	200	200	200	200
N needed (lbs/ac)	lbs/ac		240	240	240	240	240
- 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	44.9	41.4	20.7
Total N Credits	(lb/acre)		0	0.0	44.9	41.4	20.7
Crop N Need Minus Credits	(lb/acre)		240	240	195	199	219
Maintenance P needed *	(lb/acre)		86	86	86	86	86
Maintenance K needed *	(lb/acre)		56	56	56	56	56

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

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

Dare Farms							
Keep		**2008**	**2009**	**2010**	**2011**	**2012**	**2013**
Manure Application		Corn	Corn	Corn	Corn	Corn	Corn
Storage				Solid	Liquid		Solid
Application Method				Incorporate	Inject		Incorporate
Storage/Application Method				LINE2	LINE1		LINE2
1st Year Available N *(Am-N * N retention due to app method) + (OrgN * .35)*	(lb/1000 gal or lb/ton)			12.15	11.84		12.15
N App Rate *(Crop N Need / 1st Yr Av N)*	(1000 gal/acre or ton/acre)			19.8	16.5		18.1
P App Rate *(Maintenance P / P in analysis)*	(1000 gal/acre or ton/acre)			4.78	5.65		4.78
Apply at Prate or Nrate?				Nrate	Nrate		Nrate
Application Rate to Use	**(1000 gal or Ton)**	**0.0**	**0.0**	**19.8**	**8.0**	**0.0**	**18.1**
Total application *(App Rate * Spreadable Acres)*	(gallons or Tons)			987	399,680		902
N applied *(1st Year AvN * App rate)*	(lb/acre)			240	95		219
P applied *(P in manure * App rate)*	(lb/acre)			356	122		325
K applied *(K in manure * App rate)*	(lb/acre)			514	151		469
Additional N Needed	**(lb/acre)**		**240**	**0**	**100**	**199**	**0**
Acres Covered	(acres)		0.0	50.0	50.0	0.0	50.0