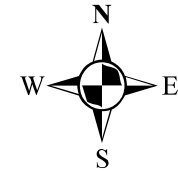


Logeman Brothers

Individual Fields

Soil Map



Legend

- Fields
- Water
- Water Buffer
- Wells
- Well Buffer
- Finisher Buildings
- Existing Land Treatment
- Waste Holding Pond

1,400

Feet

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

Individual Field Information**Logeman Brothers Farm**

Field Name: Karen/Korte Farm

Total Acres 173.5

Non-Spreadable Acres 0.7

Township T14S-R4E

Total Spreadable Acres 172.8

Section 14 & 15

FSA Farm # 2510

Predominant Soil Type: 7462A Sciotoville silt loam,

FSA Tract # 6017

P test 78.69

FSA Field #'s 1 & 2

K test 309.2

0-2% slopes, occasionally
flooded**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)		200	65	200	65	200
N needed (lbs/ac)	lbs/ac		240	0	240	0	240
- Legume N credits	(lb/acre)		40	0	40	0	40
- Commercial fertilizer N credits	(lb/acre)						
- Manure N carryover credit **	(lb/acre)		0.0	9.7	4.9	11.9	6.0
Total N Credits	(lb/acre)		40	9.7	44.9	11.9	46.0
Crop N Need Minus Credits	(lb/acre)		200	-10	195	-12	194
Maintenance P needed *	(lb/acre)		86	55.25	86	55.25	86
Maintenance K needed *	(lb/acre)		56	84.5	56	84.5	56

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

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

Logeman Brothers Farm							
Karen/Korte Farm		2009	2010	2011	2012	2013	2014
Manure Application		Beans	Corn	Beans	Corn	Beans	Corn
Storage			West Finisher		West Finisher		Overflow
Application Method			Inject		Inject		Inject
Storage/Application Method			LINE2		LINE2		LINE4
1st Year Available N (<i>Am-N * N retention due to app method</i>) + (<i>OrgN * .35</i>)	(lb/1000 gal)		14.01		14.01		14.01
N App Rate (<i>Crop N Need / 1st Yr Av N</i>)	(1000 gal/acre)		14.3		13.9		13.9
P App Rate (<i>Maintenance P / P in analysis</i>)	(1000 gal/acre)		11.32		11.32		11.32
Apply at Prate or Nrate?			Nrate		Nrate		Nrate
Application Rate to Use	(1000 gal)	0.0	14.3	0.0	13.9	0.0	13.9
Total application (<i>App Rate * Spreadable Acres</i>)	(gallons)		1,384,481		1,634,366		97,000
N applied (<i>1st Year AvN * App rate</i>)	(lb/acre)		200		195		195
P applied (<i>P in manure * App rate</i>)	(lb/acre)		109		106		106
K applied (<i>K in manure * App rate</i>)	(lb/acre)		373		364		363
Additional N Needed	(lb/acre)		0	-10	0	-12	-1
Acres Covered	(acres)		97.0	0.0	117.3	0.0	7.0