

Logeman Brothers Farm
Recommended Application Rates

<u>Crop</u>	<u>Yield</u>	<u>Crop Rotation</u>	<u>Application Method</u>	<u>Manure Source</u>	<u>N rate</u> 1000 gal/acre	<u>P rate</u> 1000 gal/acre
Corn	200	Following Corn	Irrigate	Nursery	127.0	107.5
Corn	200	Following Beans	Irrigate	Nursery	105.8	107.5
Soybeans	60	Following Corn	Irrigate	Nursery	- -	63.8
Grass Hay	7	Continuous Hay	Irrigate	Nursery	79.9	105.0
Corn	200	Following Corn	Irrigate	East Finisher	87.9	53.8
Corn	200	Following Beans	Irrigate	East Finisher	73.3	53.8
Soybeans	60	Following Corn	Irrigate	East Finisher	- -	31.9
Grass Hay	7	Continuous Hay	Irrigate	East Finisher	54.9	52.5
Corn	200	Following Corn	Inject	West Finisher	17.1	11.3
Corn	200	Following Beans	Inject	West Finisher	14.3	11.3
Soybeans	60	Following Corn	Inject	West Finisher	- -	6.7
Grass Hay	7	Continuous Hay	Inject	West Finisher	10.7	11.1

These application rates reflect the volume of manure needed to provide the listed crop with required nutrients. These rates may exceed the actual volume that can be applied with out creating runoff issues. In the case of irrigated manure the listed rates indicate the total amount of manure that can be applied annually.

These recommended rates are based on the stated yields and crops, and assumes fields have NO recent manure applications (no N credits from manure application). These are estimates only, and can be used as guides when climate or other factors exist that require deviations from planned manure applications. Previous applications would require that these application rates be decreased from present estimates.

$N \text{ available 1st year} = (Am-N * App \text{ Method Efficiency}) + (OrgN * .35)$

Previous manure applications should be given N credits =

$(App \text{ rate (in 1,000 gal)} * Org \text{ N (per 1,000 gal)} * Mineralization \text{ Factor}) / 2$

Mineralization Factors: Year 1= .35, Year 2 = .175, Year 3 = .0875, Year 4 = 0.04

Efficiency of Application = Liquid, Broadcast = 0.80, Solid, Broadcast = 0.75, Aerway = 0.90, Liquid Inject = 0.98