

Annual Water Quality Management Report Water Quality Sub-Area (Demonstration Field Only)



Operator Name: _____
 C/O: _____
 Address: _____
 _____ Zip: _____

Irrigation Well Registration Number: _____
 Total Acres of Cropland Irrigated with above Well: _____
 Demonstration Field Legal Description: _____

Cropping Information from 2007 Crop Year

Crop(s) Planted in 2007 _____ Actual Nitrogen Applied _____ lbs./per acre
 Irrigation Scheduling Method used _____ Actual Yield _____ bushels per acre
 Inches of Water Applied _____ (Estimate) Chemical(s) Used _____
 Beginning Flow Meter Reading _____ (If equipped) Did you use a split application (Sidedress)? Yes or No
 Ending Flow Meter Reading _____ (If equipped) Did you use a nitrification inhibitor? Yes or No

Line **Soil Samples Information for 2008 Crop Year** Sample No. 1 Sample No. 2 Sample No. 3 Sample No. 4

1	Soil Sample Identification Number from 2007-08 Soil Sample				
2	Acres Represented per Sample (No more than 40 acres per sample)				
3	Crop to be planted in Crop Year 2008				
4	Yield Goal(Past 5 year average + 5% recommended)				
5	"Approved" Soil Lab Nitrogen Recommended Application				
6	Irrigation Water Nitrate Result (ppm) (use 5 ppm as default number, if not known)				
7	Pounds of Nitrogen Available from the irrigation water Formula: (Line 6) x (0.23) x (in. of water applied) = lb of nitrogen/acre				
8	Nitrogen Available from past crop (lbs/acre) (Table 1 on back of sheet if lab has not taken this credit)				
9	Nitrogen Available from Manure (Table 2 on back of sheet)				
10	Nitrogen Fertilizer Needed (lbs./acre) (Line 5 minus Line 7, Line 8 and Line 9)				

I certify that to the best of my knowledge the above information is accurate and correct.

Signature

Date

Instructions on back

Table 1 Estimated apparent N contribution from legumes

Legume Crop	Nitrogen fertilizer reduction (lb./acre)	
	Medium & fine textured soils	Sandy soils
Soybean	45	45
Alfalfa (70-100% stand, > 4 plants/ft ²)	150	100
Alfalfa (30-69% stand, > 1.5-4 plants/ft ²)	120	70
Alfalfa (0-29% stand, < 1.5 plants/ft ²)	90	40
Sweet clover and red clover	80% of credit allowed for alfalfa	

Table 2 Estimated N contribution from manures and other waste materials for the first crop after application

Dry Materials	Lb N/ton	Liquid Materials	Lb N/1000 gal
Beef feedlot manure	4-5	Swine – liquid pit	10-15
Dairy manure	3	Swine – lagoon	2-5
Sheep manure	5	Beef – liquid pit	10-12
Poultry manure	12-17	Beef- lagoon	1-2
Composted beef feedlot manure	10-14	Dairy – liquid pit	7-8
Sewage sludge	2-3	Dairy- lagoon	1-2
Horse manure	3	Cheese whey	1-2

**Reports must be filled out on or before April 1, 2008 and mailed to Little Blue NRD
PO Box 100
Davenport, NE 68335**

If you are growing a crop that is not utilizing nitrogen fertilizer, soil sampling is not required (i.e. Soybeans, Alfalfa), but you still need to fill out this report and sign.

Do not forget to send your soil sample to the LBNRD office, with this report, for the 2006 crop year.

Equation 1 Determining nitrogen fertilizer needs for corn if no laboratory recommendation (University of Nebraska formula)

$$\text{Nitrogen fertilizer needed (lb/acre)} = 35 + (1.2 \times \text{EY}) - (8 \times \text{average nitrate ppm}) - (0.14 \times \text{EY} \times \text{OM}) - (\text{other credits})$$

- EY is Expected Yield (Use the number from Line 5)
- OM is the percent Organic Matter determined from a surface soil sample. This number is on your soil sampling results. (Do not use greater than 3 percent OM.)
- Other credits are nitrogen from legumes, manure, other organic wastes and irrigation water. (These credits have been calculated on line 10)

Instructions for Filing Annual Nitrogen Management Report

- Line 1 – “Soil Sample Identification Number” will be provided by the testing laboratory.
- Line 2 – “Acres Represented...” is the number of acres sampled on demonstration field. (*4 samples minimum on a 160 acre field*)
- Line 3 – “Crop Planted” list the crop(s) that will be grown on demonstration field for the upcoming crop year.
- Line 4 – “Yield Goal” is a reasonable yield goal using a five year yield average and adding five percent.
- Line 5 – “Soil Laboratory Recommendations” would be the lab recommendation from soil sample results.
- Line 6 – “Irrigation Water Nitrate Results” the LBNRD might have the results or you can sample on your own. (*Use 5 ppm if unknown*)
- Line 7 – “Pounds of Nitrogen Available from the Irrigation Water” use the following formula. (Line 5) x (0.23) x (in. of water applied) = lb of nitrogen/acre.
- Line 8 – “Nitrogen Available from Past Crop” is zero unless the previous crop was a legume. See Table 1.
- Line 9 – “Nitrogen Available from Manure” estimated nitrogen contribution from manure and other waste materials obtained from Table 2.
- Line 10 – “Nitrogen Fertilizer needed” is obtained by taking all the credits and subtracting from Lab Recommendations.