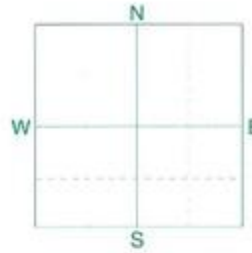




Soil Analysis by Agvise Laboratories
 Northwood: (701) 587-6010
 Benson: (320) 843-4109

SOIL TEST REPORT

FIELD ID
 SAMPLE ID
 FIELD NAME
 COUNTY **LOGAN**
 TWP
 SECTION QTR ACRES **0**
 PREV. CROP



SUBMITTED FOR:

RICHARD GROSS
NAPOLEON, ND 58561

SUBMITTED BY: **FA0450**

CENTRAL DAKOTA FRONTIER-N
94 BROADWAY
PO BOX 300
NAPOLEON, ND 58561

REF # **12486708** BOX # **0**
 LAB # **NW201406**

Date Sampled

Date Received **11/29/2012**

Date Reported **12/4/2012**

Nutrient In The Soil		Interpretation	1st Crop Choice		2nd Crop Choice		3rd Crop Choice		
		Low Med High							
Nitrate	0-6" 33 lb/ac	*****	Corn-Grain	Sunflower	Wheat-Spring	YIELD GOAL			
			120 BU	2000 LBS	40 BU	SUGGESTED GUIDELINES			
			Band/Maint.	Band/Maint.	Band/Maint.	LB/ACRE APPLICATION			
			N 81	N 37	N 45	P ₂ O ₅ 52 Band *			
Phosphorus	Olsen 5 ppm	*****	P ₂ O ₅ 24 Band *	P ₂ O ₅ 27 Band *	K ₂ O 10 Band (2x2) *				
Potassium	343 ppm	*****	K ₂ O 0	K ₂ O 10 Band (Starter) *	Cl Not Available				
Chloride	0-6" 11 lb/ac	****	Cl Not Available	Cl Not Available	S 5 Band (Trial)				
	0-6" 30 lb/ac	*****	S 5 Band (Trial)	S 5 Band (Trial)	B 0				
Sulfur	0.6 ppm	*****	B 0	B 1 Broadcast	Zn 0				
Boron	0.68 ppm	*****	Zn 0	Zn 2 Band (Trial)	Fe 0				
Zinc	16.5 ppm	*****	Fe 0	Fe 0	Mn 0				
Iron	7.2 ppm	*****	Mn 0	Mn 0	Cu 0				
Manganese	0.62 ppm	*****	Cu 0	Cu 1 Band (Trial)	Mg 0				
Copper	468 ppm	*****	Mg 0	Mg 0	Lime				
Magnesium	2941 ppm	*****	Lime	Lime	Soil pH Buffer pH Cation Exchange Capacity				
Calcium	23 ppm	***			% Base Saturation (Typical Range)				
Sodium	4.4 %	*****			% Ca	% Mg	% K	% Na	% H
Org. Matter	0.0 %	*****			(65-75)	(15-20)	(1-7)	(0-5)	(0-5)
Carbonate (CCE)	0.41 mmho/cm	*****	0-6" 7.4	19.6 meq	75.1	19.9	4.5	0.5	
Sol. Salts									

General Comments: Coarse Loams (CEC range = 11 to 20) (Medium)

Crop 1: ** Chloride yield data is limited for this crop. Soil Nitrogen level is estimated at 63 lbs/acre. * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 48 K2O = 32 AGVISE Band/Maintenance guidelines will build P & K test levels to the medium range over many years and then maintain them.

Crop 2: ** Chloride yield data is limited for this crop. Soil Nitrogen level is estimated at 63 lbs/acre. * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 18 K2O = 22 AGVISE Band/Maintenance guidelines will build P & K test levels to the medium range over many years and then maintain them.

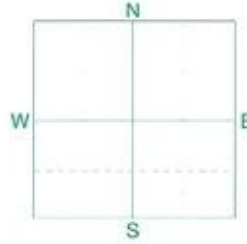
Crop 3: 39 lbs of 0-6-60 = 18 lbs of Chloride" Soil Nitrogen level is estimated at 63 lbs/acre. * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 25 K2O = 15 AGVISE Band/Maintenance guidelines will build P & K test levels to the medium range over many years and then maintain them.



Soil Analysis by **Agvise Laboratories**
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 Benson: (320) 843-4109

SOIL TEST REPORT

FIELD ID
 SAMPLE ID
 FIELD NAME
 COUNTY **LOGAN**
 TWP
 SECTION QTR ACRES **0**
 PREV. CROP



SUBMITTED FOR:
RICHARD GROSS
NAPOLEON, ND 58561

SUBMITTED BY: **FA0450**
CENTRAL DAKOTA FRONTIER-N
94 BROADWAY
PO BOX 300
NAPOLEON, ND 58561

REF # **13491469** BOX # **0**
 LAB # **NW33540**

Date Sampled **06/24/2012** Date Received **06/27/2012** Date Reported **12/10/2012**

Nutrient In The Soil		Interpretation	1st Crop Choice	2nd Crop Choice	3rd Crop Choice
Nitrate	0-6" 39 lb/ac	*****	<input type="text"/>	<input type="text"/>	<input type="text"/>
			YIELD GOAL	YIELD GOAL	YIELD GOAL
			<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/>
			SUGGESTED GUIDELINES	SUGGESTED GUIDELINES	SUGGESTED GUIDELINES
			<input type="text"/>	<input type="text"/>	<input type="text"/>
Phosphorus	Olsen 7 ppm	*****	LB/ACRE APPLICATION	LB/ACRE APPLICATION	LB/ACRE APPLICATION
Potassium	424 ppm	*****	N	N	N
Chloride	0-6" 5 lb/ac	**	P ₂ O ₅	P ₂ O ₅	P ₂ O ₅
			K ₂ O	K ₂ O	K ₂ O
Sulfur	0-6" 16 lb/ac	*****	Cl	Cl	Cl
			S	S	S
Boron	0.6 ppm	*****	B	B	B
Zinc	0.80 ppm	*****	Zn	Zn	Zn
Iron	17.9 ppm	*****	Fe	Fe	Fe
Manganese	10.2 ppm	*****	Mn	Mn	Mn
Copper	0.73 ppm	*****	Cu	Cu	Cu
Magnesium	445 ppm	*****	Mg	Mg	Mg
Calcium	2780 ppm	*****	Lime	Lime	Lime
Sodium	17 ppm	**			
Org. Matter	5.1 %	*****			
Carbonate(CCE)	0.2 %	*			
Sol. Salts	0-6" 0.31 mmho/cm	*****	Soil pH	Buffer pH	Cation Exchange Capacity
			0-6" 6.9		18.8 meq
			% Base Saturation (Typical Range)		
			% Ca	% Mg	% K
			(65-75)	(15-20)	(1-7)
			74.1	19.8	5.8
			% Na	% H	
			(0-5)	(0-5)	
			0.4		

General Comments: Coarse Loams (CEC range = 11 to 20) (Medium)