



# CHS Ag Services

Soil Analysis by Agvise Laboratories  
 (http://www.agvise.com)  
 Northwood: (701) 587-6010  
 Benson: (320) 843-4109

## SOIL TEST REPORT

FIELD ID **Hubbard 7 SW**  
 SAMPLE ID  
 FIELD NAME  
 COUNTY **Polk**  
 TWP **Hubbard** RANGE  
 SECTION **7** QTR **SW** ACRES **140.1**  
 PREV. CROP **Soybeans**



SUBMITTED FOR:

SUBMITTED BY: **TE2437**

**CHS-CROOKSTON  
 AG SERVICES  
 3035 HWY 75 SOUTH  
 CROOKSTON, MN**

**56716**

REF #                      BOX # **0**  
 LAB #

Date Sampled

Date Received **11/04/2015**

Date Reported **11/5/2015**

Nutrient In The Soil		Interpretation VLow Low Med High	1st Crop Choice		2nd Crop Choice		3rd Crop Choice			
				Soybeans	Corn-Grain	Wheat-Spring				
			YIELD GOAL	YIELD GOAL	YIELD GOAL					
			40 BU	160 BU	80 BU					
			SUGGESTED GUIDELINES	SUGGESTED GUIDELINES	SUGGESTED GUIDELINES					
			Broadcast/Maint.	Broadcast/Maint.	Broadcast/Maint.					
			LB/ACRE	APPLICATION	LB/ACRE	APPLICATION	LB/ACRE	APPLICATION		
Nitrate	0-6" 17 lb/ac 6-24" 9 lb/ac	*****	N ***		N 136		N 175			
Phosphorus	Olsen 7 ppm	*****	P <sub>2</sub> O <sub>5</sub> 58	Broadcast	P <sub>2</sub> O <sub>5</sub> 112	Broadcast	P <sub>2</sub> O <sub>5</sub> 97	Broadcast		
Potassium	303 ppm	*****	K <sub>2</sub> O 0		K <sub>2</sub> O 10	Band (2x2) *	K <sub>2</sub> O 10	Band (Starter) *		
Chloride		*****	Cl		Cl		Cl			
Sulfur	0-6" 120 +lb/ac 6-24" 360 +lb/ac	*****	S 0		S 0		S 0			
Boron		*****	B		B		B			
Zinc	0.97 ppm	*****	Zn 4	Broadcast	Zn 7	Broadcast	Zn 4	Broadcast (Trial)		
Iron		*****	Fe		Fe		Fe			
Manganese		*****	Mn		Mn		Mn			
Copper		*****	Cu		Cu		Cu			
Magnesium		*****	Mg		Mg		Mg			
Calcium		*****	Lime		Lime		Lime			
Sodium		*****								
Org. Matter	5.3 %	*****	Soil pH	Buffer pH	Cation Exchange Capacity	% Base Saturation (Typical Range)				
Carbonate(CCE)	2.5 %	*****				% Ca	% Mg	% K	% Na	% H
	0-6" 0.66 mmho/cm 6-24" 1.37 mmho/cm	*****	0-6 8.1							
Sol. Salts		*****	5-24 8.3							

Crop 1: Nitrogen is credited 15 lbs for the previous crop. Nitrogen credits may need to be adjusted based on local conditions. Many crops may respond to a starter application of P & K even on high soil tests. The risk of the development of iron chlorosis on soybeans on this field is moderate based on the salt and carbonate levels. Crop Removal: P2O5 = 35 K2O = 60 AGVISE Broadcast/Maintenance guidelines will build P & K test levels to the high range over several years and then maintain them. Soybeans may respond to nitrogen on fields testing less than 60 lb/ac with a limited soybean history.

Crop 2: \* Caution: Seed Placed Fertilizer Can Cause Injury \* Nitrogen is credited 30 lbs for the previous crop. Nitrogen credits may need to be adjusted based on local conditions. Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 64 K2O = 43 AGVISE Broadcast/Maintenance guidelines will build P & K test levels to the high range over several years and then maintain them.

Crop 3: \* Caution: Seed Placed Fertilizer Can Cause Injury \* Nitrogen is credited 15 lbs for the previous crop. Nitrogen credits may need to be adjusted based on local conditions. Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 50 K2O = 30 AGVISE Broadcast/Maintenance guidelines will build P & K test levels to the high range over several years and then maintain them.



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## SOIL TEST REPORT

FIELD ID AN0802  
 SAMPLE ID  
 FIELD NAME  
 COUNTY POLK  
 TWP ANDOVER RANGE  
 SECTION 8 QTR NW-SW ACRES 186  
 PREV. CROP Potatoes



SUBMITTED FOR:

56716

SUBMITTED BY: TE2437

CHS-CROOKSTON  
 AG SERVICES  
 3035 HWY 75 SOUTH  
 CROOKSTON, MN

56716

REF # BOX # 0  
 LAB #

Date Sampled

Date Received 10/21/2015

Date Reported 10/22/2015

Nutrient In The Soil		Interpretation	1st Crop Choice		2nd Crop Choice		3rd Crop Choice						
		VLow Low Med High	Wheat-Spring		Soybeans		Corn-Grain						
			YIELD GOAL		YIELD GOAL		YIELD GOAL						
			85 BU		50 BU		180 BU						
			SUGGESTED GUIDELINES		SUGGESTED GUIDELINES		SUGGESTED GUIDELINES						
			Broadcast/Maint.		Broadcast/Maint.		Broadcast/Maint.						
			LB/ACRE	APPLICATION	LB/ACRE	APPLICATION	LB/ACRE	APPLICATION					
Nitrate	0-6" 29 lb/ac 6-24" 45 lb/ac		N 156		N ***		N 142						
Phosphorus	Olsen 8 ppm		P <sub>2</sub> O <sub>5</sub> 97	Broadcast	P <sub>2</sub> O <sub>5</sub> 68	Broadcast	P <sub>2</sub> O <sub>5</sub> 119	Broadcast					
Potassium	264 ppm		K <sub>2</sub> O 10	Band (Starter)*	K <sub>2</sub> O 0		K <sub>2</sub> O 10	Band (2x2) *					
Chloride			Cl		Cl		Cl						
Sulfur	0-6" 76 lb/ac 6-24" 42 lb/ac		S 0		S 0		S 0						
Boron			B		B		B						
Zinc	1.22 ppm		Zn 0		Zn 0		Zn 4	Broadcast					
Iron			Fe		Fe		Fe						
Manganese			Mn		Mn		Mn						
Copper			Cu		Cu		Cu						
Magnesium			Mg		Mg		Mg						
Calcium			Lime		Lime		Lime						
Sodium													
Org. Matter	1.9 %		Soil pH		Buffer pH		Cation Exchange Capacity		% Base Saturation (Typical Range)				
Carbonate (CCE)	9.8 %								% Ca	% Mg	% K	% Na	% H
			0-6" 8.2		5-24" 8.7								
Sol. Salts	0-6" 0.67 mmho/cm 6-24" 0.41 mmho/cm												

Crop 1: \* 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: P<sub>2</sub>O<sub>5</sub> = 53 K<sub>2</sub>O = 12. A GVISE Broadcast/Maintenance guidelines will build P & K test levels to the high range over several years and then maintain them.

Crop 2: Many crops may respond to a starter application of P & K even on high soil tests. The risk of the development of iron chlorosis on soybeans on this field is very high based on the soil and carbonate levels. Crop Removal: P<sub>2</sub>O<sub>5</sub> = 44 K<sub>2</sub>O = 75. A GVISE Broadcast/Maintenance guidelines will build P & K test levels to the high range over several years and then maintain them.

Crop 3: \* 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: P<sub>2</sub>O<sub>5</sub> = 72 K<sub>2</sub>O = 49. A GVISE Broadcast/Maintenance guidelines will build P & K test levels to the high range over several years and then maintain them.