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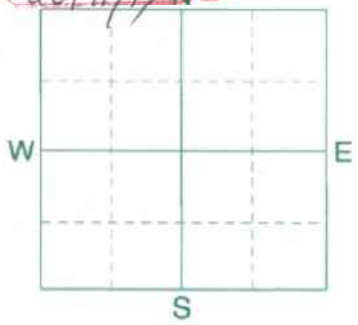
OCT 11/17

AGVISE LABORATORIES

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

SOIL TEST REPORT

FIELD ID 01 — Field # 1
SAMPLE ID
FIELD NAME
COUNTY 6E
TWP 7 RANGE
SECTION 20 QTR NE ACRES 72
PREV. CROP Wheat-Spring



SUBMITTED FOR:
Orville Doerksen Farms
Box 47A RR1
Ste. Anne, MB R5H 1R1

SUBMITTED BY: TE2728
RICHARDSON PIONEER-LANDMA
231 MAIN STREET
BOX 70
LANDMARK, MB ROA OXO

REF # 1988883 BOX # 0
LAB # NW98163

Date Sampled
Date Received 10/04/2017
Date Reported 10/11/2017

Nutrient In The Soil		Interpretation			
		VLow	Low	Med	High
0-6" 51 lb/ac 6-24" 69 lb/ac 0-24" 120 lb/ac Nitrate					
Olsen Phosphorus	42 ppm				
Potassium	482 ppm				
0-24" Chloride	884 lb/ac				
0-6" 48 lb/ac 6-24" 360 +lb/ac Sulfur					
Boron	1.6 ppm				
Zinc	2.70 ppm				
Iron	35.0 ppm				
Manganese	1.7 ppm				
Copper	2.01 ppm				
Magnesium	1945 ppm				
Calcium	6313 ppm				
Sodium	160 ppm				
Org.Matter	7.1 %				
Carbonate(CCE)	2.3 %				
0-6" 0.87 mmho/cm 6-24" 1.24 mmho/cm Sol. Salts					

1st Crop Choice		
Canola-bu		
YIELD GOAL		
40 BU		
SUGGESTED GUIDELINES		
Band		
LB/ACRE		APPLICATION
N	20	
P_2O_5	10	Band (Starter)*
K_2O	0	
Cl		Not Available
S	10	Band
B	0	
Zn	0	
Fe	0	
Mn	0	
Cu	0	
Mg	0	
Lime		

2nd Crop Choice		
Wheat-Spring		
YIELD GOAL		
60 BU		
SUGGESTED GUIDELINES		
Band/Maint.		
LB/ACRE		APPLICATION
N	42	
P_2O_5	15	Band (Starter)*
K_2O	10	Band (Starter)*
Cl	0	
S	0	
B	0	
Zn	0	
Fe	0	
Mn	0	
Cu	0	
Mg	0	
Lime		

3rd Crop Choice		
Soybeans		
YIELD GOAL		
40 BU		
SUGGESTED GUIDELINES		
Broadcast/Maint.		
LB/ACRE		APPLICATION
N	***	
P_2O_5	0	
K_2O	0	
Cl	0	
S	0	
B	0	
Zn	0	
Fe	0	
Mn	0	
Cu	0	
Mg	0	
Lime		

Soil pH	Buffer pH	Cation Exchange Capacity	% Base Saturation (Typical Range)				
			% Ca	% Mg	% K	% Na	% H
0-6" 7.6 6-24" 8.1		49.7 meq	(65-75) 63.5	(15-20) 32.6	(1-7) 2.5	(0-5) 1.4	(0-5)

General Comments: Clays/Clay Loams (CEC range = 30+) (Fine)

Crop 1: ** Chloride yield data is limited for this crop. * 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 = 36 K2O = 18 AGVISE Band guidelines will build P & K test levels to the medium range over many years.

Crop 2: * 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 = 38 K2O = 23 AGVISE Band/Maintenance guidelines will build P & K test levels to the medium range over many years and then maintain them.

Crop 3: 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.

AGVISE LABORATORIES

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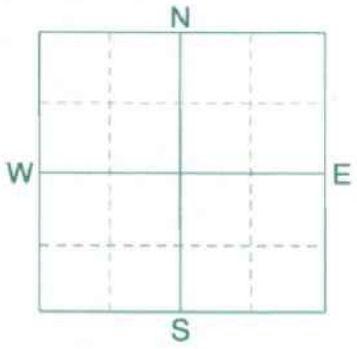
SOIL TEST REPORT

FIELD ID 02
SAMPLE ID
FIELD NAME
COUNTY 6E
TWP 7 RANGE
SECTION 20 QTR NW ACRES 76
PREV. CROP Wheat-Spring

Field # 2



SUBMITTED FOR:
Orville Doerksen Farms
Box 47A RR1
Ste. Anne, MB R5H 1R1

SUBMITTED BY: TE2728
RICHARDSON PIONEER-LANDMA
231 MAIN STREET
BOX 70
LANDMARK, MB ROA OXO

REF # 1988894 BOX # 0
LAB # NW98156

Date Sampled
Date Received 10/04/2017
Date Reported 10/11/2017

Nutrient In The Soil		Interpretation			
		VLow	Low	Med	High
Nitrate	0-6" 17 lb/ac 6-24" 33 lb/ac 0-24" 50 lb/ac		**********		
Phosphorus	Olsen 25 ppm				
Potassium	414 ppm				
Chloride	0-24" 2032 lb/ac				
Sulfur	0-6" 104 lb/ac 6-24" 360 +lb/ac				
Boron	2.3 ppm				
Zinc	1.64 ppm				
Iron	31.7 ppm				
Manganese	1.4 ppm				
Copper	2.11 ppm				
Magnesium	2406 ppm				
Calcium	6906 ppm				
Sodium	298 ppm				
Org.Matter	7.3 %				
Carbonate(CCE)	3.2 %				
Sol. Salts	0-6" 1.36 mmho/cm 6-24" 2.73 mmho/cm				

1st Crop Choice		
Canola-bu		
YIELD GOAL		
40 BU		
SUGGESTED GUIDELINES		
Band		
LB/ACRE		APPLICATION
N	90	
P_2O_5	10	Band (Starter)*
K_2O	0	
Cl		Not Available
S	10	Band
B	0	
Zn	0	
Fe	0	
Mn	0	
Cu	0	
Mg	0	
Lime		

2nd Crop Choice		
Wheat-Spring		
YIELD GOAL		
60 BU		
SUGGESTED GUIDELINES		
Band		
LB/ACRE		APPLICATION
N	112	
P_2O_5	15	Band (Starter)*
K_2O	10	Band (Starter)*
Cl	0	
S	0	
B	0	
Zn	0	
Fe	0	
Mn	0	
Cu	0	
Mg	0	
Lime		

3rd Crop Choice		
Soybeans		
YIELD GOAL		
40 BU		
SUGGESTED GUIDELINES		
Broadcast/Maint.		
LB/ACRE		APPLICATION
N	***	
P_2O_5	35	Broadcast
K_2O	0	
Cl	0	
S	0	
B	0	
Zn	0	
Fe	0	
Mn	0	
Cu	0	
Mg	0	
Lime		

Soil pH	Buffer pH	Cation Exchange Capacity	% Base Saturation (Typical Range)				
			% Ca	% Mg	% K	% Na	% H
0-6" 7.7 6-24" 8.0		56.9 meq	(65-75) 60.6	(15-20) 35.2	(1-7) 1.9	(0-5) 2.3	(0-5)

General Comments: Texture is not estimated on high pH soils.

Crop 1: ** Chloride yield data is limited for this crop. * 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 = 36 K2O = 18 AGVISE Band guidelines will build P & K test levels to the medium range over many years.

Crop 2: * 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 = 38 K2O = 23 AGVISE Band guidelines will build P & K test levels to the medium range over many years.

Crop 3: 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 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.

AGVISE LABORATORIES

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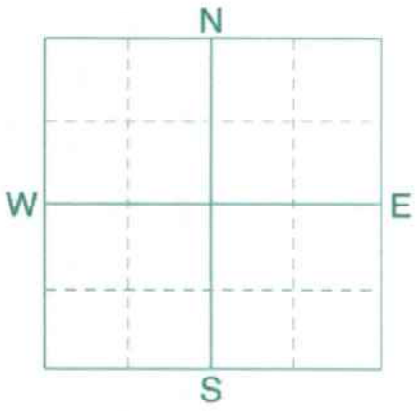
SOIL TEST REPORT

FIELD ID **03** Field # 3
SAMPLE ID
FIELD NAME
COUNTY **6E**
TWP **7** RANGE
SECTION **30** QTR **SE** ACRES **80**
PREV. CROP **Soybeans**



SUBMITTED FOR:
Orville Doerksen Farms
Box 47A RR1
Ste. Anne, MB **R5H 1R1**

SUBMITTED BY: **TE2728**
RICHARDSON PIONEER-LANDMA
231 MAIN STREET
BOX 70
LANDMARK, MB **ROA OXO**

REF # **2100157** BOX # **0**
LAB # **NW182856**

Date Sampled
Date Received **11/02/2017**
Date Reported **11/7/2017**

Nutrient In The Soil		Interpretation			
		VLow	Low	Med	High
0-6"	31 lb/ac				
6-24"	42 lb/ac				
0-24"	73 lb/ac				
Nitrate					
Olsen	42 ppm				
Phosphorus					
Potassium	647 ppm				
0-24"	1080 lb/ac				
Chloride					
0-6"	120 +lb/ac				
6-24"	360 +lb/ac				
Sulfur					
Boron	2.9 ppm				
Zinc	3.24 ppm				
Iron	32.2 ppm				
Manganese	1.6 ppm				
Copper	2.16 ppm				
Magnesium	2632 ppm				
Calcium	6850 ppm				
Sodium	208 ppm				
Org.Matter	9.0 %				
Carbonate(CCE)	1.8 %				
0-6"	1.49 mmho/cm				
6-24"	3.51 mmho/cm				
Sol. Salts					

1st Crop Choice			2nd Crop Choice			3rd Crop Choice		
Soybeans								
YIELD GOAL			YIELD GOAL			YIELD GOAL		
40 BU								
SUGGESTED GUIDELINES			SUGGESTED GUIDELINES			SUGGESTED GUIDELINES		
Band								
LB/ACRE		APPLICATION	LB/ACRE		APPLICATION	LB/ACRE		APPLICATION
N	***		N			N		
P_2O_5	10	Band (Starter)*	P_2O_5			P_2O_5		
K_2O	0		K_2O			K_2O		
Cl	0		Cl			Cl		
S	0		S			S		
B	0		B			B		
Zn	0		Zn			Zn		
Fe	0		Fe			Fe		
Mn	0		Mn			Mn		
Cu	0		Cu			Cu		
Mg	0		Mg			Mg		
Lime			Lime			Lime		

Soil pH	Buffer pH	Cation Exchange Capacity	% Base Saturation (Typical Range)				
			% Ca	% Mg	% K	% Na	% H
0-6" **7.4**		**58.7 meq**	(65-75) **58.3**	(15-20) **37.3**	(1-7) **2.8**	(0-5) **1.5**	(0-5)
6-24" **7.8**							

General Comments: Clays/Clay Loams (CEC range = 30+) (Fine)

Crop 1: * 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. The risk of the development of iron chlorosis on soybeans on this field is very high based on the salt and carbonate levels. Crop Removal: P2O5 = 35 K2O = 60 AGVISE Band guidelines will build P & K test levels to the medium range over many years.

AGVISE LABORATORIES

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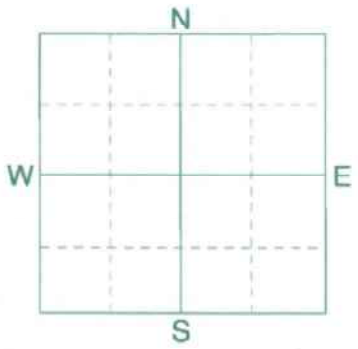
Benson: (320) 843-4109

SOIL TEST REPORT

FIELD ID 04
SAMPLE ID
FIELD NAME 04
COUNTY 6E
TWP 7 RANGE
SECTION 9 QTR NW/NE ACRES 226
PREV. CROP Canola-bu

Field # 4



SUBMITTED FOR:
Orville Doerksen Farms
Box 47A RR1
Ste. Anne, MB R5H 1R1

SUBMITTED BY: **TE2728**
RICHARDSON PIONEER-LANDMA
231 MAIN STREET
BOX 70
LANDMARK, MB ROA OXO

REF # **1988889** BOX # **0**
LAB # **NW100622**

Date Sampled
Date Received **10/05/2017**
Date Reported **10/11/2017**

Nutrient In The Soil		Interpretation			
		VLow	Low	Med	High
Nitrate 0-6"	22 lb/ac				
Nitrate 6-24"	42 lb/ac				
Nitrate 0-24"	64 lb/ac				
Phosphorus Olsen	24 ppm				
Potassium	272 ppm				
Chloride 0-24"	1084 lb/ac				
Sulfur 0-6"	118 lb/ac				
Sulfur 6-24"	360 +lb/ac				
Boron	1.4 ppm				
Zinc	1.76 ppm				
Iron	18.7 ppm				
Manganese	1.3 ppm				
Copper	1.51 ppm				
Magnesium	1980 ppm				
Calcium	5123 ppm				
Sodium	228 ppm				
Org.Matter	5.2 %				
Carbonate(CCE)	4.1 %				
Sol. Salts 0-6"	0.96 mmho/cm				
Sol. Salts 6-24"	2.01 mmho/cm				

1st Crop Choice		
Wheat-Spring		
YIELD GOAL		
60 BU		
SUGGESTED GUIDELINES		
Band		
LB/ACRE		APPLICATION
N	98	
P_2O_5	15	Band (Starter)*
K_2O	10	Band (Starter)*
Cl	0	
S	0	
B	0	
Zn	0	
Fe	0	
Mn	0	
Cu	0	
Mg	0	
Lime		

2nd Crop Choice		
Canola-bu		
YIELD GOAL		
40 BU		
SUGGESTED GUIDELINES		
Band		
LB/ACRE		APPLICATION
N	76	
P_2O_5	10	Band (Starter)*
K_2O	0	
Cl		Not Available
S	10	Band
B	0	
Zn	0	
Fe	0	
Mn	0	
Cu	0	
Mg	0	
Lime		

3rd Crop Choice		
Soybeans		
YIELD GOAL		
40 BU		
SUGGESTED GUIDELINES		
Broadcast/Maint.		
LB/ACRE		APPLICATION
N	***	
P_2O_5	35	Broadcast
K_2O	0	
Cl	0	
S	0	
B	0	
Zn	0	
Fe	0	
Mn	0	
Cu	0	
Mg	0	
Lime		

Soil pH	Buffer pH	Cation Exchange Capacity	% Base Saturation (Typical Range)				
			% Ca	% Mg	% K	% Na	% H
0-6" 8.1 6-24" 8.3		43.8 meq	(65-75) 58.5	(15-20) 37.7	(1-7) 1.6	(0-5) 2.3	(0-5)

General Comments: Texture is not estimated on high pH soils.

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: P2O5 = 38 K2O = 23 AGVISE Band guidelines will build P & K test levels to the medium range over many years.

Crop 2: ** Chloride yield data is limited for this crop. * 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 = 36 K2O = 18 AGVISE Band guidelines will build P & K test levels to the medium range over many years.

Crop 3: 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 high 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.

AGVISE LABORATORIES

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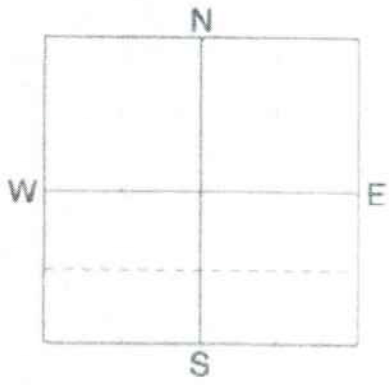
Benson: (320) 843-4109

SOIL TEST REPORT

FIELD ID **05** Field # 5
SAMPLE ID
FIELD NAME
COUNTY **4E**
TWP **7** RANGE
SECTION **26** QTR **SW** ACRES **150**
PREV. CROP **Soybeans**



SUBMITTED FOR:
Orville Doerksen Farms
Box 47A RR1
Ste. Anne, MB R5H 1R1

SUBMITTED BY: **TE2728**
RICHARDSON PIONEER-LANDMA
231 MAIN STREET
BOX 70
LANDMARK, MB ROA OXO

REF # **2007624** BOX # **0**
LAB # **NW218930**

Date Sampled | Date Received **12/14/2017** | Date Reported **12/14/2017**

Nutrient In The Soil		Interpretation (VLow / Low / Med / High)
Nitrate 0-6"	40 lb/ac	
Nitrate 6-24"	21 lb/ac	
Nitrate 0-24"	61 lb/ac	
Phosphorus Olsen	20 ppm	
Potassium	386 ppm	
Chloride 0-24"	124 lb/ac	
Sulfur 0-6"	32 lb/ac	
Sulfur 6-24"	78 lb/ac	
Boron	2.1 ppm	
Zinc	4.48 ppm	
Iron	14.1 ppm	
Manganese	2.2 ppm	
Copper	1.48 ppm	
Magnesium	1243 ppm	
Calcium	5908 ppm	
Sodium	58 ppm	
Org Matter	5.6 %	
Carbonate(CCE)	7.6 %	
Soil Salts 0-6"	0.56 mmho/cm	
Soil Salts 6-24"	0.56 mmho/cm	

1st Crop Choice		
Canola-Bu		
YIELD GOAL		
40 BU		
SUGGESTED GUIDELINES		
Band		
LB/ACRE		APPLICATION
N	64	
P_2O_5	10	Band (Starter)*
K_2O	0	
Cl		Not Available
S	10	Band
B	0	
Zn	0	
Fe	0	
Mn	0	
Cu	0	
Mg	0	
Lime		

2nd Crop Choice		
YIELD GOAL		
SUGGESTED GUIDELINES		
LB/ACRE		APPLICATION
N		
P_2O_5		
K_2O		
Cl		
S		
B		
Zn		
Fe		
Mn		
Cu		
Mg		
Lime		

3rd Crop Choice		
YIELD GOAL		
SUGGESTED GUIDELINES		
LB/ACRE		APPLICATION
N		
P_2O_5		
K_2O		
Cl		
S		
B		
Zn		
Fe		
Mn		
Cu		
Mg		
Lime		

Soil pH	Buffer pH	Cation Exchange Capacity	% Base Saturation (Typical Range)				
			% Ca	% Mg	% K	% Na	% H
0-6" **8.1** 6-24" **8.5**		**41.1 meq**	(65-75) **71.8**	(15-20) **25.2**	(1-7) **2.4**	(0-5) **0.6**	(0-5)

General Comments: Texture is not estimated on high pH soils.

Crop 1: ** Chloride yield data is limited for this crop. * 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 = 36 K2O = 18 AGVISE Band guidelines will build P & K test levels to the medium range over many years.

AGVISE LABORATORIES

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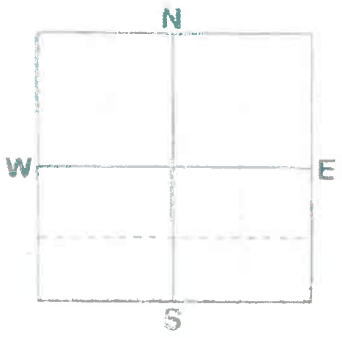
SOIL TEST REPORT

FIELD ID 06
SAMPLE ID Field # 6
FIELD NAME
COUNTY 6E
TWP 7 RANGE
SECTION [redacted] 20 QTR SW ACRES 130
PREV. CROP Wheat-Spring



SUBMITTED FOR:
Orville Doerksen Farms
Box 47A RR1
Ste. Anne, MB R5H 1R1

SUBMITTED BY: TE2728
RICHARDSON PIONEER-LANDMA
231 MAIN STREET
BOX 70
LANDMARK, MB ROA OXO

REF # 1988892 BOX # 0
LAB # NW100620

Date Sampled
Date Received 10/05/2017
Date Reported 10/11/2017

Nutrient In The Soil		Interpretation			
		VLow	Low	Med	High
0-6" 17 lb/ac 6-24" 27 lb/ac 0-24" 44 lb/ac Nitrate		**********			
Olsen Phosphorus	39 ppm	**********	**********	**********	**********
Potassium	456 ppm	**********	**********	**********	**********
0-24" Chloride	724 lb/ac	**********	**********	**********	**********
0-6" 26 lb/ac 6-24" 360 +lb/ac Sulfur		**********	**********	**********	**********
Boron	1.2 ppm	**********	**********	**********	
Zinc	2.64 ppm	**********	**********	**********	**********
Iron	47.2 ppm	**********	**********	**********	**********
Manganese	1.7 ppm	**********	**********	**********	
Copper	2.4 ppm	**********	**********	**********	**********
Magnesium	2226 ppm	**********	**********	**********	**********
Calcium	5832 ppm	**********	**********	**********	**********
Sodium	170 ppm	**********	**********	**********	**********
Org.Matter	6.2 %	**********	**********	**********	**********
Carbonate(CCE)	2.0 %	**********	**********		
0-6" 0.97 mmho/cm 6-24" 2.75 mmho/cm Sol. Salts		**********	**********	**********	**********

1st Crop Choice		
Canola-bu		
YIELD GOAL		
40 BU		
SUGGESTED GUIDELINES		
Band		
LB/ACRE		APPLICATION
N	96	
P_2O_5	10	Band (Starter)*
K_2O	0	
Cl		Not Available
S	15	Band
B	0	
Zn	0	
Fe	0	
Mn	0	
Cu	0	
Mg	0	
Lime		

2nd Crop Choice		
Wheat-Spring		
YIELD GOAL		
60 BU		
SUGGESTED GUIDELINES		
Band		
LB/ACRE		APPLICATION
N	118	
P_2O_5	15	Band (Starter)*
K_2O	10	Band (Starter)*
Cl	0	
S	0	
B	0	
Zn	0	
Fe	0	
Mn	0	
Cu	0	
Mg	0	
Lime		

3rd Crop Choice		
Soybeans		
YIELD GOAL		
40 BU		
SUGGESTED GUIDELINES		
Broadcast/Maint.		
LB/ACRE		APPLICATION
N	***	
P_2O_5	35	Broadcast
K_2O	0	
Cl	0	
S	10	Broadcast (Trial)
B	0	
Zn	0	
Fe	0	
Mn	0	
Cu	0	
Mg	0	
Lime		

Soil pH	Buffer pH	Cation Exchange Capacity	% Base Saturation (Typical Range)				
			% Ca	% Mg	% K	% Na	% H
0-6" 7.5 6-24" 7.8		49.6 meq	(65-75) 58.8	(15-20) 37.4	(1-7) 2.4	(0-5) 1.5	(0-5)

General Comments: Clays/Clay Loams (CEC range = 30+) (Fine)

Crop 1: ** Chloride yield data is limited for this crop. * 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 = 36 K2O = 18 AGVISE Band guidelines will build P & K test levels to the medium range over many years.

Crop 2: * 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 = 38 K2O = 23 AGVISE Band guidelines will build P & K test levels to the medium range over many years.

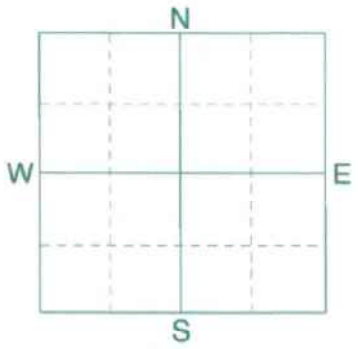
Crop 3: Many crops may respond to a starter application of P & K even on high soil tests. The risk of the development of iron chlorosis on soybeans on this field is moderate based on the salt and carbonate levels. Crop Removal: P2O5 = 35 K2O = 60 AGVISE Broadcast/Maintenance guidelines will build P & 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.

AGVISE LABORATORIES

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

SOIL TEST REPORT

FIELD ID **07** Field # 7
SAMPLE ID
FIELD NAME
COUNTY **5E**
TWP **7** RANGE
SECTION **30** QTR **NE** ACRES **120**
PREV. CROP **Wheat-Spring**



SUBMITTED FOR:
Orville Doerksen Farms
Box 47A RR1
Ste. Anne, MB R5H 1R1

SUBMITTED BY: **TE2728**
RICHARDSON PIONEER-LANDMA
231 MAIN STREET
BOX 70
LANDMARK, MB ROA OXO

REF # **1988898** BOX # **0**
LAB # **NW98158**

Date Sampled
Date Received **10/04/2017**
Date Reported **10/11/2017**

Nutrient In The Soil		Interpretation			
		VLow	Low	Med	High
Nitrate 0-6"	6 lb/ac				
Nitrate 6-24"	6 lb/ac	**			
Nitrate 0-24"	12 lb/ac				
Phosphorus Olsen	8 ppm	******	******		
Potassium	453 ppm	******	******	******	******
Chloride 0-24"	440 lb/ac	******	******	******	******
Sulfur 0-6"	50 lb/ac	******	******	******	******
Sulfur 6-24"	312 lb/ac	******	******	******	******
Boron	2.5 ppm	******	******	******	******
Zinc	0.73 ppm	******	******	**	
Iron	15.8 ppm	******	******	******	******
Manganese	1.6 ppm	******	******	****	
Copper	1.53 ppm	******	******	******	**
Magnesium	2096 ppm	******	******	******	******
Calcium	6553 ppm	******	******	******	******
Sodium	133 ppm	******	******	******	**
Org.Matter	5.8 %	******	******	******	******
Carbonate(CCE)	5.2 %	******	******	******	
Sol. Salts 0-6"	0.57 mmho/cm	******	******		
Sol. Salts 6-24"	1.05 mmho/cm	******	******	******	**

1st Crop Choice		
Canola-bu		
YIELD GOAL		
40 BU		
SUGGESTED GUIDELINES		
Band		
LB/ACRE		APPLICATION
N	128	
P_2O_5	34	Band *
K_2O	0	
Cl		Not Available
S	10	Band
B	0	
Zn	3	Band (Trial)
Fe	0	
Mn	0	
Cu	0	
Mg	0	
Lime		

2nd Crop Choice		
Wheat-Spring		
YIELD GOAL		
60 BU		
SUGGESTED GUIDELINES		
Band		
LB/ACRE		APPLICATION
N	150	
P_2O_5	35	Band *
K_2O	10	Band (Starter)*
Cl	0	
S	0	
B	0	
Zn	3	Band (Trial)
Fe	0	
Mn	0	
Cu	0	
Mg	0	
Lime		

3rd Crop Choice		
Soybeans		
YIELD GOAL		
40 BU		
SUGGESTED GUIDELINES		
Broadcast/Maint.		
LB/ACRE		APPLICATION
N	***	
P_2O_5	54	Broadcast
K_2O	0	
Cl	0	
S	0	
B	0	
Zn	4	Broadcast
Fe	0	
Mn	0	
Cu	0	
Mg	0	
Lime		

Soil pH	Buffer pH	Cation Exchange Capacity	% Base Saturation (Typical Range)				
			% Ca	% Mg	% K	% Na	% H
0-6" 8.3 6-24" 8.5		52.0 meq	(65-75) 63.0	(15-20) 33.6	(1-7) 2.2	(0-5) 1.1	(0-5)

General Comments: Texture is not estimated on high pH soils.

Crop 1: ** Chloride yield data is limited for this crop. * 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 = 36 K2O = 18 AGVISE Band guidelines will build P & K test levels to the medium range over many years.

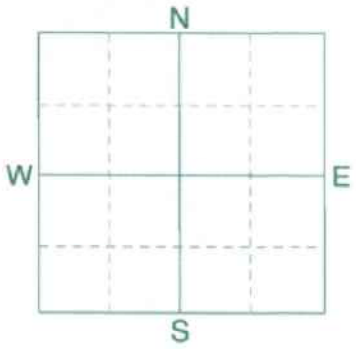
Crop 2: * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 38 K2O = 23 AGVISE Band guidelines will build P & K test levels to the medium range over many years.

Crop 3: 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 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.

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

SOIL TEST REPORT

FIELD ID **08** — Field # 8
SAMPLE ID
FIELD NAME
COUNTY **6E**
TWP **7** RANGE
SECTION **28** QTR **SW** ACRES **122**
PREV. CROP **Wheat-Spring**



SUBMITTED FOR:
Orville Doerksen Farms
Box 47A RR1
Ste. Anne, MB **R5H 1R1**

SUBMITTED BY: **TE2728**
RICHARDSON PIONEER-LANDMA
231 MAIN STREET
BOX 70
LANDMARK, MB **ROA OXO**

REF # **1988900** BOX # **0**
LAB # **NW98155**

Date Sampled
Date Received **10/04/2017**
Date Reported **10/11/2017**

Nutrient In The Soil		Interpretation			
		VLow	Low	Med	High
0-6" 16 lb/ac 6-24" 45 lb/ac 0-24" 61 lb/ac Nitrate		******	******		
Olsen Phosphorus	26 ppm	******	******	******	******
Potassium	203 ppm	******	******	******	******
0-24" Chloride	212 lb/ac	******	******	******	******
0-6" 66 lb/ac 6-24" 360 +lb/ac Sulfur		******	******	******	******
Boron	1.5 ppm	******	******	******	****
Zinc	1.50 ppm	******	******	**********	***
Iron	18.6 ppm	******	******	******	******
Manganese	1.3 ppm	******	********	**	
Copper	1.15 ppm	******	**********	******	
Magnesium	1059 ppm	******	******	******	******
Calcium	5973 ppm	******	******	******	******
Sodium	51 ppm	********	**		
Org.Matter	4.4 %	******	**********	******	
Carbonate(CCE)	11.8 %	******	******	******	******
0-6" 0.59 mmho/cm 6-24" 1.0 mmho/cm Sol. Salts		******	********	**	

1st Crop Choice		
Canola-bu		
YIELD GOAL		
40 BU		
SUGGESTED GUIDELINES		
Band		
LB/ACRE		APPLICATION
N	79	
P_2O_5	10	Band (Starter)*
K_2O	0	
Cl		Not Available
S	10	Band
B	0	
Zn	0	
Fe	0	
Mn	0	
Cu	0	
Mg	0	
Lime		

2nd Crop Choice		
Wheat-Spring		
YIELD GOAL		
60 BU		
SUGGESTED GUIDELINES		
Band		
LB/ACRE		APPLICATION
N	101	
P_2O_5	15	Band (Starter)*
K_2O	10	Band (Starter)*
Cl	0	
S	0	
B	0	
Zn	0	
Fe	0	
Mn	0	
Cu	0	
Mg	0	
Lime		

3rd Crop Choice		
Soybeans		
YIELD GOAL		
40 BU		
SUGGESTED GUIDELINES		
Broadcast/Maint.		
LB/ACRE		APPLICATION
N	***	
P_2O_5	35	Broadcast
K_2O	60	Broadcast
Cl	0	
S	0	
B	0	
Zn	0	
Fe	0	
Mn	0	
Cu	0	
Mg	0	
Lime		

Soil pH	Buffer pH	Cation Exchange Capacity	% Base Saturation (Typical Range)				
			% Ca	% Mg	% K	% Na	% H
0-6" 8.0 6-24" 8.3		39.4 meq	(65-75) 75.7	(15-20) 22.4	(1-7) 1.3	(0-5) 0.6	(0-5)

General Comments: Texture is not estimated on high pH soils.

Crop 1: ** Chloride yield data is limited for this crop. * 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 = 36 K2O = 18 AGVISE Band guidelines will build P & K test levels to the medium range over many years.

Crop 2: * 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 = 38 K2O = 23 AGVISE Band guidelines will build P & K test levels to the medium range over many years.

Crop 3: 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 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.

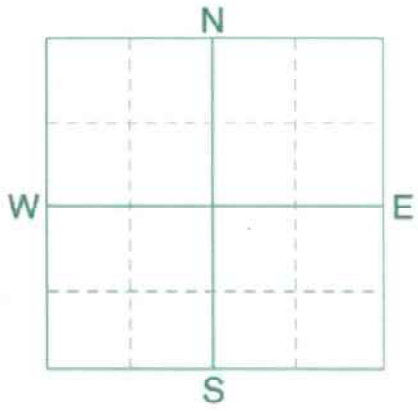
AGVISE LABORATORIES

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

SOIL TEST REPORT

FIELD ID **09**
SAMPLE ID
FIELD NAME
COUNTY **6E**
TWP **7** RANGE
SECTION **19** QTR **SE** ACRES **75**
PREV. CROP **Soybeans**

Field # 9



SUBMITTED FOR:
Orville Doerksen Farms
Box 47A RR1
Ste. Anne, MB R5H 1R1

SUBMITTED BY: **TE2728**
RICHARDSON PIONEER-LANDMA
231 MAIN STREET
BOX 70
LANDMARK, MB ROA OXO

REF # **2100173** BOX # **0**
LAB # **NW182858**

Date Sampled
Date Received **11/02/2017**
Date Reported **11/7/2017**

Nutrient In The Soil		Interpretation			
		VLow	Low	Med	High
0-6"	29 lb/ac				
6-24"	36 lb/ac				
0-24"	65 lb/ac				
Nitrate					
Olsen	42 ppm				
Phosphorus					
Potassium	586 ppm				
0-24"	1256 lb/ac				
Chloride					
0-6"	120 +lb/ac				
6-24"	360 +lb/ac				
Sulfur					
Boron	2.0 ppm				
Zinc	2.51 ppm				
Iron	33.2 ppm				
Manganese	1.2 ppm				
Copper	2.75 ppm				
Magnesium	2761 ppm				
Calcium	9554 ppm				
Sodium	261 ppm				
Org.Matter	7.2 %				
Carbonate(CCE)	2.0 %				
0-6"	2.97 mmho/cm				
6-24"	1.6 mmho/cm				
Sol. Salts					

1st Crop Choice			2nd Crop Choice			3rd Crop Choice		
Soybeans								
YIELD GOAL			YIELD GOAL			YIELD GOAL		
40 BU								
SUGGESTED GUIDELINES			SUGGESTED GUIDELINES			SUGGESTED GUIDELINES		
Band								
LB/ACRE		APPLICATION	LB/ACRE		APPLICATION	LB/ACRE		APPLICATION
N	***		N			N		
P_2O_5	10	Band (Starter)*	P_2O_5			P_2O_5		
K_2O	0		K_2O			K_2O		
Cl	0		Cl			Cl		
S	0		S			S		
B	0		B			B		
Zn	0		Zn			Zn		
Fe	0		Fe			Fe		
Mn	0		Mn			Mn		
Cu	0		Cu			Cu		
Mg	0		Mg			Mg		
Lime			Lime			Lime		

Soil pH	Buffer pH	Cation Exchange Capacity	% Base Saturation (Typical Range)				
			% Ca	% Mg	% K	% Na	% H
0-6" **7.2**		**73.4 meq**	(65-75) **65.1**	(15-20) **31.3**	(1-7) **2.0**	(0-5) **1.5**	(0-5)
6-24" **7.8**							

General Comments: Clays/Clay Loams (CEC range = 30+) (Fine)

Crop 1: * 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. High salt levels may decrease yields in portions of this field. The risk of the development of iron chlorosis on soybeans on this field is very high based on the salt and carbonate levels. Crop Removal: P2O5 = 35 K2O = 60 AGVISE Band guidelines will build P & K test levels to the medium range over many years.

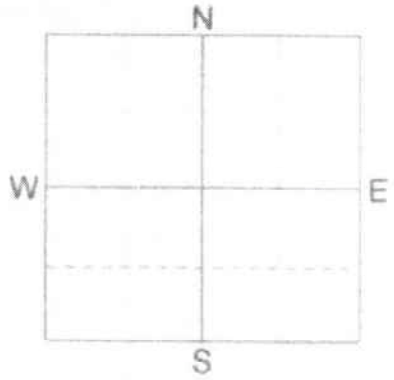
AGVISE LABORATORIES

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

SOIL TEST REPORT

FIELD ID **10**
SAMPLE ID
FIELD NAME
COUNTY **5E**
TWP **7** RANGE
SECTION **12** QTR **NW** ACRES **53**
PREV. CROP **Soybeans**

Field # 10



SUBMITTED FOR:
Orville Doerksen Farms
Box 47A RR1
Ste. Anne, MB **R5H 1R1**

SUBMITTED BY: **TE2728**
RICHARDSON PIONEER-LANDMA
231 MAIN STREET
BOX 70
LANDMARK, MB **ROA OXO**

REF # **2175867** BOX # **0**
LAB # **NW218927**

Date Sampled
Date Received **12/14/2017**
Date Reported **12/14/2017**

Nutrient In The Soil		Interpretation	1st Crop Choice			2nd Crop Choice			3rd Crop Choice		
		VLow Low Med High	Wheat-Spring			Canola-bu					
			YIELD GOAL			YIELD GOAL			YIELD GOAL		
			60 BU			45 BU					
			SUGGESTED GUIDELINES			SUGGESTED GUIDELINES			SUGGESTED GUIDELINES		
			Band			Band					
			LB/ACRE	APPLICATION		LB/ACRE	APPLICATION		LB/ACRE	APPLICATION	
0-6"	68 lb/ac		N	13		N	9		N		
6-24"	66 lb/ac		P_2O_5	15	Band (Starter)*	P_2O_5	11	Band *	P_2O_5		
0-24" Nitrate	134 lb/ac		K_2O	10	Band (Starter)*	K_2O	0		K_2O		
Olsen Phosphorus	20 ppm		Cl	0		Cl		Not Available	Cl		
Potassium	342 ppm		S	0		S	10	Band	S		
0-24" Chloride	2728 lb/ac		B	0		B	0		B		
0-6"	120 +lb/ac		Zn	0		Zn	0		Zn		
6-24" Sulfur	360 +lb/ac		Fe	0		Fe	0		Fe		
Boron	7.7 ppm		Mn	0		Mn	0		Mn		
Zinc	2.31 ppm		Cu	0		Cu	0		Cu		
Iron	15.6 ppm		Mg	0		Mg	0		Mg		
Manganese	2.1 ppm		Lime			Lime			Lime		
Copper	1.49 ppm										
Magnesium	2465 ppm										
Calcium	5614 ppm										
Sodium	829 ppm										
Org.Matter	8.0 %										
Carbonate(CCE)	12.1 %										
0-6"	1.92 mmho/cm										
6-24" Sol. Salts	2.39 mmho/cm										

Soil pH	Buffer pH	Cation Exchange Capacity	% Base Saturation (Typical Range)				
			% Ca	% Mg	% K	% Na	% H
0-6" **8.1** 6-24" **8.5**		**53.1 meq**	(65-75) **52.9**	(15-20) **38.7**	(1-7) **1.7**	(0-5) **6.8**	(0-5)

General Comments: Texture is not estimated on high pH soils.
Moderate sodium levels may cause soil dispersion, poor water movement and reduced yields.

Crop 1: * 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. High salt levels may decrease yields in portions of this field. Crop Removal: P2O5 = 38 K2O = 23 AGVISE Band guidelines will build P & K test levels to the medium range over many years.

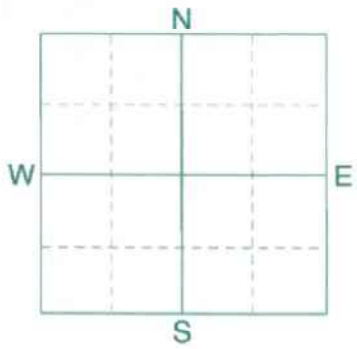
Crop 2: ** Chloride yield data is limited for this crop. * Caution: Seed Placed Fertilizer Can Cause Injury * Nitrogen is credited 15 lbs for the previous crop. Nitrogen credits may need to be adjusted based on local conditions. Many crops may respond to a starter application of P & K even on high soil tests. High salt levels may decrease yields in portions of this field. Crop Removal: P2O5 = 41 K2O = 20 AGVISE Band guidelines will build P & K test levels to the medium range over many years.

AGVISE LABORATORIES

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

SOIL TEST REPORT

FIELD ID **11** Field # 11
SAMPLE ID
FIELD NAME
COUNTY **6E**
TWP **7** RANGE
SECTION **9** QTR **SW** ACRES **75**
PREV. CROP **Canola-bu**



SUBMITTED FOR:
Orville Doerksen Farms
Box 47A RR1
Ste. Anne, MB R5H 1R1

SUBMITTED BY: **TE2728**
RICHARDSON PIONEER-LANDMA
231 MAIN STREET
BOX 70
LANDMARK, MB ROA OXO

REF # **1988911** BOX # **0**
LAB # **NW100623**

Date Sampled
Date Received **10/05/2017**
Date Reported **10/11/2017**

Nutrient In The Soil		Interpretation			
		VLow	Low	Med	High
Nitrate	0-6" 24 lb/ac 6-24" 48 lb/ac 0-24" 72 lb/ac				
Phosphorus	Olsen 10 ppm				
Potassium	191 ppm				
Chloride	0-24" 1848 lb/ac				
Sulfur	0-6" 120 +lb/ac 6-24" 360 +lb/ac				
Boron	2.1 ppm				
Zinc	0.70 ppm				
Iron	14.1 ppm				
Manganese	1.2 ppm				
Copper	1.3 ppm				
Magnesium	2162 ppm				
Calcium	5928 ppm				
Sodium	416 ppm				
Org. Matter	4.7 %				
Carbonate(CCE)	8.7 %				
Sol. Salts	0-6" 1.42 mmho/cm 6-24" 2.01 mmho/cm				

1st Crop Choice		
Wheat-Spring		
YIELD GOAL		
60 BU		
SUGGESTED GUIDELINES		
Band		
LB/ACRE		APPLICATION
N	90	
P_2O_5	31	Band *
K_2O	10	Band (Starter)*
Cl	0	
S	0	
B	0	
Zn	3	Band (Trial)
Fe	0	
Mn	0	
Cu	0	
Mg	0	
Lime		

2nd Crop Choice		
Canola-bu		
YIELD GOAL		
40 BU		
SUGGESTED GUIDELINES		
Band		
LB/ACRE		APPLICATION
N	68	
P_2O_5	30	Band *
K_2O	0	
Cl		Not Available
S	10	Band
B	0	
Zn	3	Band (Trial)
Fe	0	
Mn	0	
Cu	0	
Mg	0	
Lime		

3rd Crop Choice		
Soybeans		
YIELD GOAL		
40 BU		
SUGGESTED GUIDELINES		
Broadcast/Maint.		
LB/ACRE		APPLICATION
N	***	
P_2O_5	48	Broadcast
K_2O	60	Broadcast
Cl	0	
S	0	
B	0	
Zn	4	Broadcast
Fe	0	
Mn	0	
Cu	0	
Mg	0	
Lime		

Soil pH	Buffer pH	Cation Exchange Capacity	% Base Saturation (Typical Range)				
			% Ca	% Mg	% K	% Na	% H
0-6" 8.3 6-24" 8.5		50.0 meq	(65-75) 59.3	(15-20) 36.1	(1-7) 1.0	(0-5) 3.6	(0-5)

General Comments: Texture is not estimated on high pH soils.

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: P2O5 = 38 K2O = 23 AGVISE Band guidelines will build P & K test levels to the medium range over many years.

Crop 2: ** Chloride yield data is limited for this crop. * 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 = 36 K2O = 18 AGVISE Band guidelines will build P & K test levels to the medium range over many years.

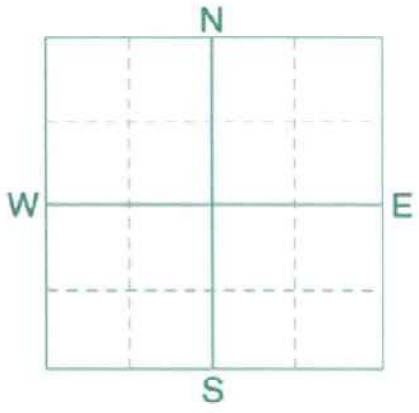
Crop 3: Many crops may respond to a starter application of P & K even on high soil tests. The risk of the development of iron chlorosis on soybeans on this field is extreme based on the salt and carbonate levels. Crop Removal: P2O5 = 35 K2O = 60 AGVISE Broadcast/Maintenance guidelines will build P & K test levels to the high range over several years and then maintain them.

AGVISE LABORATORIES

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

SOIL TEST REPORT

FIELD ID **12** Field # 12
SAMPLE ID
FIELD NAME
COUNTY **5E**
TWP **7** RANGE
SECTION **25** QTR **SW** ACRES **154**
PREV. CROP **Soybeans**



SUBMITTED FOR:
Orville Doerksen Farms
Box 47A RR1
Ste. Anne, MB **R5H 1R1**

SUBMITTED BY: **TE2728**
RICHARDSON PIONEER-LANDMA
231 MAIN STREET
BOX 70
LANDMARK, MB **ROA OXO**

REF # **2100177** BOX # **0**
LAB # **NW182752**

Date Sampled
Date Received **11/02/2017**
Date Reported **11/7/2017**

Nutrient In The Soil		Interpretation			
		VLow	Low	Med	High
Nitrate	0-6" 28 lb/ac 6-24" 24 lb/ac 0-24" 52 lb/ac				
Phosphorus	Olsen 25 ppm				
Potassium	333 ppm				
Chloride	0-24" 2560 lb/ac				
Sulfur	0-6" 120 +lb/ac 6-24" 360 +lb/ac				
Boron	3.0 ppm				
Zinc	2.17 ppm				
Iron	19.0 ppm				
Manganese	1.2 ppm				
Copper	2.0 ppm				
Magnesium	1985 ppm				
Calcium	9742 ppm				
Sodium	410 ppm				
Org.Matter	7.0 %				
Carbonate(CCE)	3.9 %				
Sol. Salts	0-6" 3.2 mmho/cm 6-24" 3.96 mmho/cm				

1st Crop Choice			2nd Crop Choice			3rd Crop Choice		
Soybeans								
YIELD GOAL			YIELD GOAL			YIELD GOAL		
40 BU								
SUGGESTED GUIDELINES			SUGGESTED GUIDELINES			SUGGESTED GUIDELINES		
Band								
LB/ACRE		APPLICATION	LB/ACRE		APPLICATION	LB/ACRE		APPLICATION
N	***		N			N		
P_2O_5	10	Band (Starter)*	P_2O_5			P_2O_5		
K_2O	0		K_2O			K_2O		
Cl	0		Cl			Cl		
S	0		S			S		
B	0		B			B		
Zn	0		Zn			Zn		
Fe	0		Fe			Fe		
Mn	0		Mn			Mn		
Cu	0		Cu			Cu		
Mg	0		Mg			Mg		
Lime			Lime			Lime		

Soil pH	Buffer pH	Cation Exchange Capacity	% Base Saturation (Typical Range)				
			% Ca	% Mg	% K	% Na	% H
0-6" **7.5** 6-24" **7.8**		**67.9 meq**	(65-75) **71.8**	(15-20) **24.4**	(1-7) **1.3**	(0-5) **2.6**	(0-5)

General Comments: Clays/Clay Loams (CEC range = 30+) (Fine)

Crop 1: * 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. High salt levels may decrease yields in portions of this field. The risk of the development of iron chlorosis on soybeans on this field is very high based on the salt and carbonate levels. Crop Removal: P2O5 = 35 K2O = 60 AGVISE Band guidelines will build P & K test levels to the medium range over many years. Soybeans may respond to nitrogen on fields testing less than 60 lb/ac with a limited soybean history.

AGVISE LABORATORIES

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

SOIL TEST REPORT

FIELD ID 13 Field # 13
SAMPLE ID D5XX-SKAX
FIELD NAME
COUNTY 6E
TWP 7 RANGE
SECTION 25 QTR NW ACRES 090
PREV. CROP

N / W / E / S

SUBMITTED FOR:
ORVILLE DOERKSEN

SUBMITTED BY: TE2698
RICHARDSON PIONEER-STEINB
34 PIONEER ROAD
STEINBACH, MB R5G 1W4

REF # 11518450 BOX # 0
LAB # NW132461

Date Sampled
Date Received 10/17/2017
Date Reported 10/26/2017

Nutrient In The Soil		Interpretation			
		VLow	Low	Med	High
Nitrate	0-6" 23 lb/ac 6-24" 24 lb/ac 0-24" 47 lb/ac	**********			
Phosphorus	Olsen 7 ppm	**********			
Potassium	315 ppm	**********	**********	**********	**********
Chloride					
Sulfur	0-6" 120 +lb/ac 6-24" 360 +lb/ac	**********	**********	**********	**********
Boron					
Zinc	0.85 ppm	**********	**********	******	
Iron					
Manganese					
Copper	1.91 ppm	**********	**********	**********	**********
Magnesium					
Calcium					
Sodium					
Org.Matter	6.5 %	**********	**********	**********	**********
Carbonate(CCE)					
Sol. Salts	0-6" 2.46 mmho/cm 6-24" 4.44 mmho/cm	**********	**********	**********	**********

1st Crop Choice			2nd Crop Choice			3rd Crop Choice		
YIELD GOAL			YIELD GOAL			YIELD GOAL		
SUGGESTED GUIDELINES			SUGGESTED GUIDELINES			SUGGESTED GUIDELINES		
LB/ACRE		APPLICATION	LB/ACRE		APPLICATION	LB/ACRE		APPLICATION
N			N			N		
P_2O_5			P_2O_5			P_2O_5		
K_2O			K_2O			K_2O		
Cl			Cl			Cl		
S			S			S		
B			B			B		
Zn			Zn			Zn		
Fe			Fe			Fe		
Mn			Mn			Mn		
Cu			Cu			Cu		
Mg			Mg			Mg		
Lime			Lime			Lime		

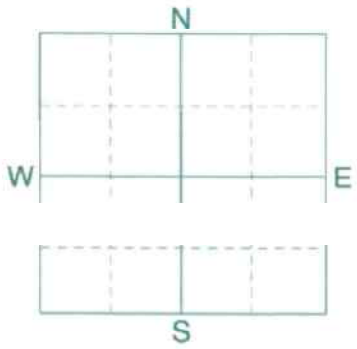
Soil pH	Buffer pH	Cation Exchange Capacity	% Base Saturation (Typical Range)				
			% Ca	% Mg	% K	% Na	% H
0-6" 7.9 6-24" 8.0							

AGVISE LABORATORIES

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

SOIL TEST REPORT

FIELD ID **14** Field # 14&17
SAMPLE ID **D8NT-PYGH**
FIELD NAME
COUNTY
TWP RANGE SWSE 30-7-6e
PREV. CROP Acres - 90



SUBMITTED FOR:
ORVILLE DOERKSEN

SUBMITTED BY: **TE2698**
RICHARDSON PIONEER-STEINB
34 PIONEER ROAD
STEINBACH, MB R5G 1W4

REF # **11518449** BOX # **0**
LAB # **NW132463**

Date Sampled | Date Received **10/17/2017** | Date Reported **10/26/2017**

Nutrient In The Soil		Interpretation			
		VLow	Low	Med	High
0-6" 6-24" Nitrate	12 lb/ac 18 lb/ac	******			
0-24" Nitrate	30 lb/ac				
Olsen Phosphorus	17 ppm	******	******	******	******
Potassium	342 ppm	******	******	******	******
Chloride					
0-6" 6-24" Sulfur	120 +lb/ac 360 +lb/ac	******	******	******	******
Boron					
Zinc	1.02 ppm	******	******	******	
Iron					
Manganese					
Copper	2.44 ppm	******	******	******	******
Magnesium					
Calcium					
Sodium					
Org.Matter	5.1 %	******	******	******	******
Carbonate(CCE)					
0-6" 6-24" Sol. Salts	1.91 mmho/cm 2.4 mmho/cm	******	******	******	******

1st Crop Choice			2nd Crop Choice			3rd Crop Choice		
YIELD GOAL			YIELD GOAL			YIELD GOAL		
SUGGESTED GUIDELINES			SUGGESTED GUIDELINES			SUGGESTED GUIDELINES		
	LB/ACRE	APPLICATION		LB/ACRE	APPLICATION		LB/ACRE	APPLICATION
N			N			N		
P_2O_5			P_2O_5			P_2O_5		
K_2O			K_2O			K_2O		
Cl			Cl			Cl		
S			S			S		
B			B			B		
Zn			Zn			Zn		
Fe			Fe			Fe		
Mn			Mn			Mn		
Cu			Cu			Cu		
Mg			Mg			Mg		
Lime			Lime			Lime		

Soil pH	Buffer pH	Cation Exchange Capacity	% Base Saturation (Typical Range)				
			% Ca	% Mg	% K	% Na	% H
0-6" 7.2 6-24" 8.0							

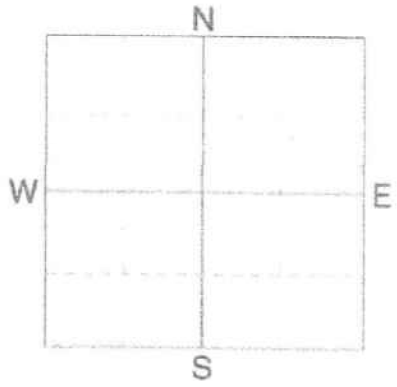
T·A·C
TONE AG CONSULTING

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

SOIL TEST REPORT

FIELD ID ~~BH-14~~ 15
SAMPLE ID
FIELD NAME
COUNTY **6E**
TWP **7** RANGE
SECTION **19** QTR **ENE** ACRES **73**
PREV. CROP **Corn-Silage**

Field # 15



SUBMITTED FOR:
Braunsdale Holsteins Ltd
Greg Braun 346-3534
Box 8
Blumnort, R0A 0C0

SUBMITTED BY: **TO0533**
TONE AG CONSULTING LTD.
31022 RAT RIVER RD
PO BOX 333
ST PIERRE JOLYS, MB R0A 1V0

REF # **2094607** BOX # **0**
LAB # **NW148824**

Date Sampled **10/18/2017** Date Received **10/20/2017** Date Reported **10/25/2017**

Nutrient In The Soil		Interpretation (Very Low / Low / Med / High)
Nitrate	0-6" 43 lb/ac 6-24" 33 lb/ac 0-24" 76 lb/ac	
Phosphorus	Olsen 55 ppm	
Potassium	584 ppm	
Chloride		
Sulfur	0-6" 60 lb/ac 6-24" 348 lb/ac	
Boron		
Zinc	4.19 ppm	
Iron		
Manganese		
Copper	3.01 ppm	
Magnesium		
Calcium		
Sodium		
Org.Matter	9.2 %	
Carbonate(CCE)		
Sol. Salts	0-6" 1.15 mmho/cm 6-24" 1.38 mmho/cm	

1st Crop Choice		
Corn-Silage		
YIELD GOAL		
15 Tons		
SUGGESTED GUIDELINES		
Band/Maint.		
LB/ACRE		APPLICATION
N	80	
P_2O_5	15	Band (2x2) *
K_2O	10	Band (2x2) *
Cl		
S	0	
B		
Zn	0	
Fe		
Mn		
Cu	0	
Mg		
Lime		

2nd Crop Choice		
Alfalfa		
YIELD GOAL		
5 Tons		
SUGGESTED GUIDELINES		
Band/Maint.		
LB/ACRE		APPLICATION
N	0	
P_2O_5	15	Band (Starter)*
K_2O	15	Band (Starter)*
Cl		
S	0	
B		
Zn	0	
Fe		
Mn		
Cu	0	
Mg		
Lime		

3rd Crop Choice		
YIELD GOAL		
SUGGESTED GUIDELINES		
LB/ACRE		APPLICATION
N		
P_2O_5		
K_2O		
Cl		
S		
B		
Zn		
Fe		
Mn		
Cu		
Mg		
Lime		

Soil pH	Buffer pH	Cation Exchange Capacity	% Base Saturation (Typical Range)				
			% Ca	% Mg	% K	% Na	% H
0-6" 7.4 6-24" 8.0							

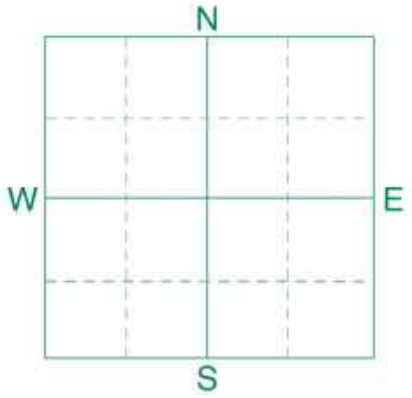
Crop 1: * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 54 K2O = 125 AGVISE Band/Maintenance guidelines will build P & K test levels to the medium range over many years and then maintain them.

Crop 2: * 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 = 50 K2O = 250 AGVISE Band/Maintenance guidelines will build P & K test levels to the medium range over many years and then maintain them.

SOIL TEST REPORT

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

FIELD ID **YARD**
SAMPLE ID Field # 16
FIELD NAME
COUNTY **6**
TWP **7** RANGE
SECTION **19** QTR **NWNE** ACRES **90**
PREV. CROP **Soybeans**



SUBMITTED FOR:
ERNIE GOERTZEN

BOX 51
STE ANNE, MB **R5H 1R1**

SUBMITTED BY: **TE3016**
PATERSON GRAIN-STEINBACH
385 PTH 12N
STEINBACH, MB **R5G 1V1**

REF # **18753447** BOX # **0**
LAB # **NW191276**

Date Sampled | Date Received **11/07/2017** | Date Reported **6/19/2019**

Nutrient In The Soil		Interpretation			
		VLow	Low	Med	High
0-6" 6-24"	16 lb/ac 15 lb/ac	******			
0-24'' Nitrate	31 lb/ac				
Olsen Phosphorus	52 ppm	******	******	******	******
Potassium	708 ppm	******	******	******	******
0-24'' Chloride	4716 lb/ac	******	******	******	******
0-6" 6-24" Sulfur	120 +lb/ac 360 +lb/ac	******	******	******	******
Boron	2.1 ppm	******	******	******	******
Zinc	2.84 ppm	******	******	******	******
Iron	42.5 ppm	******	******	******	******
Manganese	1.7 ppm	******	******	****	
Copper	2.82 ppm	******	******	******	***
Magnesium	2135 ppm	******	******	******	******
Calcium	6216 ppm	******	******	******	******
Sodium	241 ppm	******	******	******	******
Org.Matter	8.9 %	******	******	******	******
Carbonate(CCE)	1.4 %	*******			
0-6" 6-24" Sol. Salts	1.51 mmho/cm 3.12 mmho/cm	******	******	******	****
		******	******	******	******

1st Crop Choice			2nd Crop Choice			3rd Crop Choice		
Canola-bu			Wheat-Spring			Oats		
YIELD GOAL			YIELD GOAL			YIELD GOAL		
40 BU			50 BU			120 BU		
SUGGESTED GUIDELINES			SUGGESTED GUIDELINES			SUGGESTED GUIDELINES		
Band			Band			Band		
LB/ACRE		APPLICATION	LB/ACRE		APPLICATION	LB/ACRE		APPLICATION
N	94		N	89		N	74	
P_2O_5	10	Band (Starter)*	P_2O_5	15	Band (Starter)*	P_2O_5	15	Band (Starter)*
K_2O	0		K_2O	10	Band (Starter)*	K_2O	10	Band (Starter)*
Cl		Not Available	Cl	0		Cl	0	
S	10	Band	S	0		S	0	
B	0		B	0		B	0	
Zn	0		Zn	0		Zn	0	
Fe	0		Fe	0		Fe	0	
Mn	0		Mn	0		Mn	0	
Cu	0		Cu	0		Cu	0	
Mg	0		Mg	0		Mg	0	
Lime			Lime			Lime		

Soil pH	Buffer pH	Cation Exchange Capacity	% Base Saturation (Typical Range)				
			% Ca	% Mg	% K	% Na	% H
0-6" **7.5** 6-24" **7.8**		**51.7 meq**	(65-75) **60.1**	(15-20) **34.4**	(1-7) **3.5**	(0-5) **2.0**	(0-5) **0.0**

General Comments: Clays/Clay Loams (CEC range = 30+) (Fine)

Crop 1: ** Chloride yield data is limited for this crop. * 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 = 36 K2O = 18 AGVISE Band guidelines will build P & K test levels to the medium range over many years.

Crop 2: * 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 = 31 K2O = 19 AGVISE Band guidelines will build P & K test levels to the medium range over many years.

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 = 30 K2O = 23 AGVISE Band guidelines will build P & K test levels to the medium range over many years.

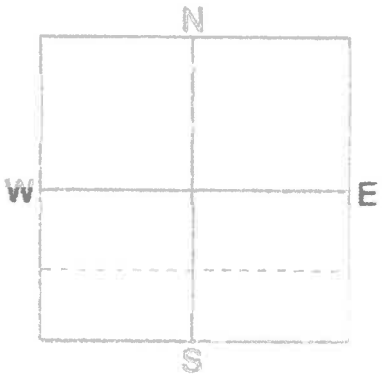
Field # 18 and 19

AGVISE LABORATORIES

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

SOIL TEST REPORT

FIELD ID 11 Section 2
SAMPLE ID 1
FIELD NAME Section 2
COUNTY 6
TWP 9 RANGE
SECTION 2 QTR NESE ACRES 255
PREV. CROP Soybeans



SUBMITTED FOR:
Reimark Farms
Box 31 RR1
Steinbach, MB R5G 1L9

SUBMITTED BY: TE2728
RICHARDSON PIONEER-LANDMA
231 MAIN STREET
BOX 70
LANDMARK, MB ROA OXO

REF # 2178009 BOX # 0
LAB # NW219805

Date Sampled
Date Received 12/14/2017
Date Reported 12/27/2017

Nutrient In The Soil		Interpretation	1st Crop Choice			2nd Crop Choice			3rd Crop Choice		
		Very Low Low Med High	Wheat-Spring			Canola-bu			Soybeans		
			YIELD GOAL			YIELD GOAL			YIELD GOAL		
			60 BU			45 BU			40 BU		
			SUGGESTED GUIDELINES			SUGGESTED GUIDELINES			SUGGESTED GUIDELINES		
			Band			Band/Maint.			Broadcast/Maint.		
			LB/ACRE		APPLICATION	LB/ACRE		APPLICATION	LB/ACRE		APPLICATION
0-6"	48 lb/ac		N	69		N	65		N	***	
6-24"	30 lb/ac										
0-24" Nitrate	78 lb/ac										
Olsen Phosphorus	17 ppm		P_2O_5	17	Band *	P_2O_5	41	Band *	P_2O_5	35	Broadcast
Potassium	349 ppm		K_2O	10	Band (Starter)*	K_2O	0		K_2O	0	
0-24" Chloride	48 lb/ac		Cl	0		Cl		Not Available	Cl	0	
0-6"	36 lb/ac										
6-24" Sulfur	360 +lb/ac		S	0		S	15	Band	S	0	
Boron	1.2 ppm		B	0		B	0		B	0	
Zinc	1.67 ppm		Zn	0		Zn	0		Zn	0	
Iron	62.8 ppm		Fe	0		Fe	0		Fe	0	
Manganese	2.8 ppm		Mn	0		Mn	0		Mn	0	
Copper	2.01 ppm		Cu	0		Cu	0		Cu	0	
Magnesium	2494 ppm		Mg	0		Mg	0		Mg	0	
Calcium	4817 ppm		Lime			Lime			Lime		
Sodium	85 ppm										
Org.Matter	8.5 %										
Carbonate(CCE)	1.1 %										
0-6"	0.93 mmho/cm										
6-24" Sol. Salts	1.29 mmho/cm										

Soil pH	Buffer pH	Cation Exchange Capacity	% Base Saturation (Typical Range)				
			% Ca	% Mg	% K	% Na	% H
0-6" 7.0 6-24" 8.0		46.1 meq	(65-75) 52.2	(15-20) 45.1	(1-7) 1.9	(0-5) 0.8	(0-5)

General Comments: Clays/Clay Loams (CEC range = 30+) (Fine)

Crop 1: * 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 = 38 K2O = 23 AGVISE Band guidelines will build P & K test levels to the medium range over many years.

Crop 2: ** Chloride yield data is limited for this crop. * 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 = 45 K2O = 20 AGVISE Band/Maintenance guidelines will build P & K test levels to the medium range over many years and then maintain them.

Crop 3: 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.