

Sure-Check™ Soil Testing 2020 - #7671 Report Date: Feb 06, 2020

Sample	Depth (in.)					Phosphorus P					Percent Base Saturation				
		Organic Matter (%)	NO3-N (ppm)	NO3-N (lbs/ac)	Mod Kel (ppm)	Bray-P1 (ppm)	Potassium K (ppm)	Sulphur SO4-S (ppm)	pH	CEC (meq/100g)	% K	% Mg	% Ca	% H	% Na
1A	0-6	4.1	6	11	14	19	149	563	8.1	30.7	1.2	24.1	66.2	0	8.8
1B	6-24	1.5	3	16	4	0	64	555	8.5	45.7	0.4	21.5	64.7	0	13.8

Sample	Depth (in.)	Mg (ppm)	Ca (ppm)	Na (ppm)	Zn (ppm)	Mn (ppm)	Fe (ppm)	Cu (ppm)	B (ppm)	Soluble Salts (ms/cm)	Saturation % P	Al (ppm)	Saturation % Al	K/Mg Ratio	Cl (ppm)	ENR	GFI
1A	0-6	888	4060	619	2.2	95	32	1.1	1.3	1.33	2	111	0	0.05	31	53	0
1B	6-24	1177	5910	1449	0	0	0	0	0	0	0	0	0	0.01	0	27	0

Optimize RX™ 2019 - #6821 Report Date: Mar 26, 2019

Sample	Depth (in.)	Organic Matter (%)	NO3-N (ppm)	NO3-N (lbs/ac)	Phosphorus P		Potassium K (ppm)	Sulphur SO4-S (ppm)	pH	CEC (meq/100g)	Percent Base Saturation				
					Mod Kel (ppm)	Bray-P1 (ppm)					% K	% Mg	% Ca	% H	% Na
1A	0-6	3.9	12	22	30	44	266	410	8	33.1	2.1	20.6	62	0	15.6
1B	6-24	2.3	8	43	6	0	156	1141	8.1	40.7	1	20.2	55.5	0	23.6
2A	0-6	4.9	14	25	45	65	246	173	7.9	30.8	2	19.2	72.4	0	6.6
2B	6-24	3.5	15	81	9	0	132	397	7.8	28.3	1.2	27	56.8	0	15.4
3A	0-6	4	11	20	17	24	173	25	7.6	21.2	2.1	20.3	76.7	0	1.2
3B	6-24	2.7	6	32	4	0	136	23	7.9	23.2	1.5	32.6	65.3	0	1
4A	0-6	3.6	8	14	18	26	272	17	7.6	22.3	3.1	17	79.4	0	0.7
4B	6-24	1.8	4	22	4	0	107	66	8.1	44.8	0.6	18.6	80.4	0	0.6

Sample	Depth (in.)	Mg (ppm)	Ca (ppm)	Na (ppm)	Zn (ppm)	Mn (ppm)	Fe (ppm)	Cu (ppm)	B (ppm)	Soluble Salts (ms/cm)	Saturation % P	Al (ppm)	Saturation % Al	K/Mg Ratio	Cl (ppm)	ENR	GFI
1A	0-6	818	4100	1184	2.5	94	39	1.7	4.3	1.53	5	196	0	0.1	19	51	0
1B	6-24	984	4520	2207	0	0	0	0	0	0	0	0	0	0.05	0	35	0
2A	0-6	709	4460	470	3.3	117	39	1.5	2.7	0.95	6	191	0	0.11	36	62	0
2B	6-24	917	3210	1000	0	0	0	0	0	0	0	0	0	0.04	0	47	0
3A	0-6	517	3250	57	2.3	120	39	1.2	1.9	0.39	11	288	0	0.1	13	52	0
3B	6-24	907	3030	56	0	0	0	0	0	0	0	0	0	0.04	0	39	0
4A	0-6	455	3550	36	2	102	38	1.5	1.7	0.34	2	271	0	0.18	10	48	0
4B	6-24	1002	7200	65	0	0	0	0	0	0	0	0	0	0.03	0	30	0

Optimize RX™ 2019 - #6821 Report Date: Mar 26, 2019

Sample	Depth (in.)	Organic Matter (%)	NO3-N (ppm)	NO3-N (lbs/ac)	Phosphorus P		Potassium K (ppm)	Sulphur SO4-S (ppm)	pH	CEC (meq/100g)	Percent Base Saturation				
					Mod Kel (ppm)	Bray-P1 (ppm)					% K	% Mg	% Ca	% H	% Na
1A	0-6	3.7	8	14	24	34	250	1635	7.9	49.1	1.3	24.5	52	0	22.6
1B	6-24	2.3	5	27	6	0	160	3082	8.2	50	0.6	20.4	55.1	0	24.1
2A	0-6	3.6	11	20	31	45	201	508	7.8	41.8	1.2	30.3	62.5	0	6.4
2B	6-24	1.9	2	11	3	0	120	470	8	50	0.5	36.8	59	0	4.2
3A	0-6	4.2	12	22	23	33	144	55	8.1	37.4	1	46.5	50.7	0	2.5
3B	6-24	2.8	5	27	7	0	115	46	8.2	45.2	0.7	35.7	62.6	0	1.5
4A	0-6	3.9	13	23	30	43	212	22	7.7	22.6	2.4	22.8	73.1	0	2
4B	6-24	1.9	6	32	4	0	120	36	8.4	44.7	0.7	16.7	80.6	0	2.3
5A	0-6	3.8	10	18	12	18	283	52	7.6	31.5	2.3	14.8	81.5	0	1.6
5B	6-24	2.3	7	38	6	0	128	50	8.1	45.5	0.7	19.3	79.1	0	1.1

Sample	Depth (in.)	Mg (ppm)	Ca (ppm)	Na (ppm)	Zn (ppm)	Mn (ppm)	Fe (ppm)	Cu (ppm)	B (ppm)	Soluble Salts (ms/cm)	Saturation % P	Al (ppm)	Saturation % Al	K/Mg Ratio	Cl (ppm)	ENR	GFI
1A	0-6	1441	5100	2548	2.2	113	37	1.7	3.2	2.93	4	142	0	0.06	20	49	0
1B	6-24	1602	7200	3614	0	0	0	0	0	0	0	0	0	0.03	0	35	0
2A	0-6	1518	5230	613	2	122	36	1.4	2.5	1.35	5	83	0	0.04	26	48	0
2B	6-24	2699	7200	585	0	0	0	0	0	0	0	0	0	0.01	0	31	0
3A	0-6	2085	3790	214	2.3	141	39	1.6	4.4	0.58	4	142	0	0.02	15	54	0
3B	6-24	1935	5660	155	0	0	0	0	0	0	0	0	0	0.02	0	40	0
4A	0-6	618	3300	104	2.4	123	42	1.3	2.2	0.42	21	260	0	0.1	17	51	0
4B	6-24	894	7200	236	0	0	0	0	0	0	0	0	0	0.04	0	31	0
5A	0-6	560	5140	117	1.7	102	35	1.2	1.5	0.55	1	110	0	0.15	15	50	0
5B	6-24	1054	7200	115	0	0	0	0	0	0	0	0	0	0.03	0	35	0

Optimize RX™ 2019 - #6821 Report Date: Mar 27, 2019

Sample	Depth (in.)	Organic Matter (%)	NO3-N (ppm)	NO3-N (lbs/ac)	Phosphorus P		Potassium K (ppm)	Sulphur SO4-S (ppm)	pH	CEC (meq/100g)	Percent Base Saturation				
					Mod Kel (ppm)	Bray-P1 (ppm)					% K	% Mg	% Ca	% H	% Na
1A	0-6	4.2	15	27	52	86	450	71	7.8	37.6	3.1	20.6	73.9	0	2.6
1B	6-24	4.6	16	86	34	0	219	218	7.8	29.9	1.9	20.7	73	0	4.6
2A	0-6	3.7	10	18	16	23	164	156	7.8	22.7	1.9	22.8	67.8	0	7.9
2B	6-24	1.9	5	27	4	0	127	224	8.2	30.7	1.1	25.4	59.6	0	14.3
3A	0-6	2.2	8	14	11	15	250	68	8	45.9	1.4	18.1	78.4	0	2.3
3B	6-24	1	4	22	2	0	146	116	8.9	50	0.7	28.7	64.7	0	6.3
4A	0-6	3.5	8	14	9	13	232	12	7.3	18.4	3.2	21.5	74.6	0	1
4B	6-24	2.1	5	27	5	0	130	22	7.6	23.8	1.4	21.4	76.3	0	1.2

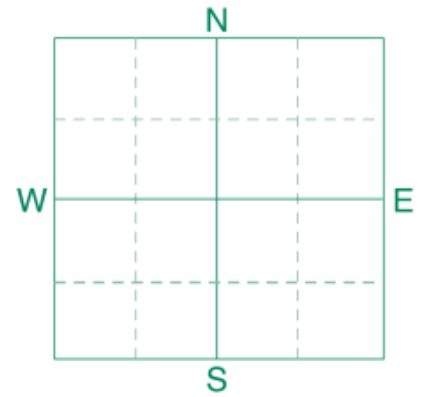
Sample	Depth (in.)	Mg (ppm)	Ca (ppm)	Na (ppm)	Zn (ppm)	Mn (ppm)	Fe (ppm)	Cu (ppm)	B (ppm)	Soluble Salts (ms/cm)	Saturation % P	Al (ppm)	Saturation % Al	K/Mg Ratio	Cl (ppm)	ENR	GFI
1A	0-6	932	5560	229	3.2	107	43	2.2	2.6	0.66	6	75	0	0.14	40	54	0
1B	6-24	744	4370	320	0	0	0	0	0	0	0	0	0	0.09	0	59	0
2A	0-6	621	3080	414	2.6	129	41	1.4	2.1	0.82	12	258	0	0.08	15	49	0
2B	6-24	936	3660	1013	0	0	0	0	0	0	0	0	0	0.04	0	31	0
3A	0-6	998	7200	246	1.3	13	31	1.2	1.5	0.7	1	15	0	0.08	9	34	0
3B	6-24	1914	7200	809	0	0	0	0	0	0	0	0	0	0.02	0	22	0
4A	0-6	473	2740	43	1.7	103	40	1.1	1	0.29	7	257	0	0.15	11	47	0
4B	6-24	610	3630	66	0	0	0	0	0	0	0	0	0	0.07	0	33	0



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

### SOIL TEST REPORT

FIELD ID **NH 30-5-21**  
 SAMPLE ID  
 FIELD NAME **Elgin Half**  
 COUNTY  
 TWP **5** RANGE **21**  
 SECTION **30** QTR **NH** ACRES **280**  
 PREV. CROP **Oats-Peas**



**SUBMITTED FOR:**  
**Rourke Farms**  
**Box 144**  
**Minto, ROK 1M0**

**SUBMITTED BY: PE4110**  
**PEMBINA COOP-MINTO**  
**210 S RAILWAY AVE**  
**BOX 143**  
**MINTO, MB ROK 1M0**

REF # **2706054** BOX # **1200**  
 LAB # **NW134805**

Date Sampled \_\_\_\_\_ Date Received **11/07/2019** Date Reported **2/20/2020**

Nutrient In The Soil		Interpretation				1st Crop Choice			2nd Crop Choice			3rd Crop Choice			
		VLow	Low	Med	High	Peas-Field			Peas-Field			Peas-Field			
Nitrate	0-6" 14 lb/ac	*****				YIELD GOAL			YIELD GOAL			YIELD GOAL			
	6-24" 12 lb/ac					40 BU			40 BU			40 BU			
	0-24" 26 lb/ac					SUGGESTED GUIDELINES			SUGGESTED GUIDELINES			SUGGESTED GUIDELINES			
						Band			Band			Band			
						LB/ACRE	APPLICATION		LB/ACRE	APPLICATION		LB/ACRE	APPLICATION		
Phosphorus	Olsen 19 ppm	*****	*****	*****	*****	N	16		N	16		N	16		
Potassium	298 ppm	*****	*****	*****	*****	P2O5	13	Band *	P2O5	13	Band *	P2O5	13	Band *	
Chloride	0-24" 12 lb/ac	*****				K2O	0		K2O	0		K2O	0		
Sulfur	0-6" 38 lb/ac	*****				Cl		Not Available	Cl		Not Available	Cl		Not Available	
	6-24" 84 lb/ac	*****				S	0		S	0		S	0		
Boron	1.2 ppm	*****				B	0		B	0		B	0		
Zinc	0.49 ppm	*****				Zn	0		Zn	0		Zn	0		
Iron	10.2 ppm	*****				Fe	0		Fe	0		Fe	0		
Manganese	3.0 ppm	*****				Mn	0		Mn	0		Mn	0		
Copper	0.48 ppm	*****				Cu	0		Cu	0		Cu	0		
Magnesium	502 ppm	*****				Mg	0		Mg	0		Mg	0		
Calcium	5650 ppm	*****				Lime			Lime			Lime			
Sodium	36 ppm	*****													
Org.Matter	3.9 %	*****													
Carbonate(CCE)	3.6 %	*****													
Sol. Salts	0-6" 0.34 mmho/cm	*****				Soil pH	Buffer pH		Cation Exchange Capacity		% Base Saturation (Typical Range)				
	6-24" 0.31 mmho/cm	*****				0-6" 8.0			33.4 meq		% Ca	% Mg	% K	% Na	% H
						6-24" 8.3					(65-75)	(15-20)	(1-7)	(0-5)	(0-5)
											84.7	12.5	2.3	0.5	0.0

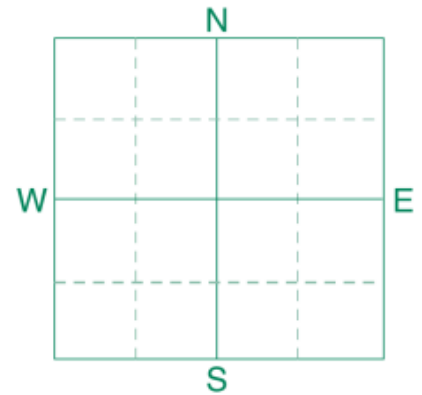
**General Comments:** Texture is not estimated on high pH soils.  
**Crop 1:** \*\* Chloride yield data is limited for this crop. \* Caution: Seed Placed Fertilizer Can Cause Injury \* Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 28 K2O = 29 AGVISE 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 = 28 K2O = 29 AGVISE Band guidelines will build P & K test levels to the medium range over many years.  
**Crop 3:** \*\* 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 = 28 K2O = 29 AGVISE Band guidelines will build P & K test levels to the medium range over many years.



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## SOIL TEST REPORT

FIELD ID **NH 13-5-22**  
 SAMPLE ID  
 FIELD NAME **Elgin Section North**  
 COUNTY  
 TWP **5** RANGE **22**  
 SECTION **13** QTR **NH** ACRES **310**  
 PREV. CROP **Soybeans**



**SUBMITTED FOR:**  
**Rourke Farms**  
**Box 144**  
**Minto, ROK 1M0**

**SUBMITTED BY: PE4110**  
**PEMBINA COOP-MINTO**  
**210 S RAILWAY AVE**  
**BOX 143**  
**MINTO, MB ROK 1M0**

REF # **2817374** BOX # **1761**  
 LAB # **NW164973**

Date Sampled

Date Received **11/26/2019**

Date Reported **2/20/2020**

Nutrient In The Soil		Interpretation				1st Crop Choice			2nd Crop Choice			3rd Crop Choice		
		VLow	Low	Med	High	Peas-Field			Peas-Field			Peas-Field		
Nitrate	0-6" 4 lb/ac	**				YIELD GOAL			YIELD GOAL			YIELD GOAL		
	6-24" 6 lb/ac					40 BU			40 BU			40 BU		
	0-24" 10 lb/ac					SUGGESTED GUIDELINES			SUGGESTED GUIDELINES			SUGGESTED GUIDELINES		
						Band			Band			Band		
						LB/ACRE	APPLICATION	LB/ACRE	APPLICATION	LB/ACRE	APPLICATION			
Phosphorus	Olsen 5 ppm	*****				N	26		N	26		N	26	
Potassium	221 ppm	*****				P2O5	31	Band *	P2O5	31	Band *	P2O5	31	Band *
Chloride	0-24" 16 lb/ac	*****				K2O	0		K2O	0		K2O	0	
Sulfur	0-6" 120 +lb/ac	*****				Cl		Not Available	Cl		Not Available	Cl		Not Available
	6-24" 360 +lb/ac	*****				S	0		S	0		S	0	
Boron	1.0 ppm	*****				B	0		B	0		B	0	
Zinc	0.51 ppm	*****				Zn	0		Zn	0		Zn	0	
Iron	9.7 ppm	*****				Fe	0		Fe	0		Fe	0	
Manganese	3.8 ppm	*****				Mn	0		Mn	0		Mn	0	
Copper	0.55 ppm	*****				Cu	0		Cu	0		Cu	0	
Magnesium	491 ppm	*****				Mg	0		Mg	0		Mg	0	
Calcium	6093 ppm	*****				Lime			Lime			Lime		
Sodium	37 ppm	*****				Soil pH			Cation Exchange Capacity			% Base Saturation (Typical Range)		
Org.Matter	4.1 %	*****				Buffer pH				% Ca	% Mg	% K	% Na	% H
Carbonate(CCE)	2.6 %	*****				0-6" 7.7	35.3 meq			(65-75)	(15-20)	(1-7)	(0-5)	(0-5)
Sol. Salts	0-6" 1.57 mmho/cm	*****				6-24" 8.0				86.3	11.6	1.6	0.5	0.0

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 = 28 K2O = 29 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 = 28 K2O = 29 AGVISE Band guidelines will build P & K test levels to the medium range over many years.

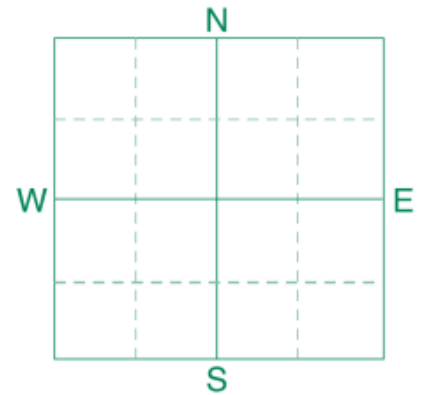
Crop 3: \*\* Chloride yield data is limited for this crop. \* Caution: Seed Placed Fertilizer Can Cause Injury \* Nitrogen is credited 15 lbs for the previous crop. Nitrogen credits may need to be adjusted based on local conditions. Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 28 K2O = 29 AGVISE Band guidelines will build P & K test levels to the medium range over many years.



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## SOIL TEST REPORT

FIELD ID **SH 13-5-22**  
 SAMPLE ID  
 FIELD NAME **Elgin Section South**  
 COUNTY  
 TWP **5** RANGE **22**  
 SECTION **13** QTR **SH** ACRES **315**  
 PREV. CROP **Chickpeas**



### SUBMITTED FOR:

**Rourke Farms**  
**Box 144**

**Minto, ROK 1M0**

### SUBMITTED BY: PE4110

**PEMBINA COOP-MINTO**  
**210 S RAILWAY AVE**  
**BOX 143**

**MINTO, MB ROK 1M0**

REF # **2817376** BOX # **1761**  
 LAB # **NW164974**

Date Sampled

Date Received **11/26/2019**

Date Reported **2/20/2020**

Nutrient In The Soil		Interpretation				1st Crop Choice			2nd Crop Choice			3rd Crop Choice			
		VLow	Low	Med	High	Peas-Field			Peas-Field			Peas-Field			
Nitrate	0-6" 6-24"	5 lb/ac 3 lb/ac				YIELD GOAL			YIELD GOAL			YIELD GOAL			
	0-24"	8 lb/ac	**			40 BU			40 BU			40 BU			
						SUGGESTED GUIDELINES			SUGGESTED GUIDELINES			SUGGESTED GUIDELINES			
						Band			Band			Band			
						LB/ACRE	APPLICATION		LB/ACRE	APPLICATION		LB/ACRE	APPLICATION		
Phosphorus	Olsen	5 ppm	*****			N	25		N	25		N	25		
Potassium		215 ppm	*****			P2O5	31	Band *	P2O5	31	Band *	P2O5	31	Band *	
Chloride	0-24"	12 lb/ac	*****			K2O	0		K2O	0		K2O	0		
Sulfur	0-6" 6-24"	20 lb/ac 42 lb/ac	*****			Cl		Not Available	Cl		Not Available	Cl		Not Available	
Boron		1.2 ppm	*****			S	5	Band (Trial)	S	5	Band (Trial)	S	5	Band (Trial)	
Zinc		0.57 ppm	*****			B	0		B	0		B	0		
Iron		17.3 ppm	*****			Zn	0		Zn	0		Zn	0		
Manganese		3.2 ppm	*****			Fe	0		Fe	0		Fe	0		
Copper		0.64 ppm	*****			Mn	0		Mn	0		Mn	0		
Magnesium		451 ppm	*****			Cu	0		Cu	0		Cu	0		
Calcium		6211 ppm	*****			Mg	0		Mg	0		Mg	0		
Sodium		20 ppm	***			Lime			Lime			Lime			
Org.Matter		4.2 %	*****			Soil pH			Cation Exchange Capacity			% Base Saturation (Typical Range)			
Carbonate(CCE)		4.5 %	*****			Buffer pH					% Ca	% Mg	% K	% Na	% H
Sol. Salts	0-6" 6-24"	0.3 mmho/cm 0.28 mmho/cm	*****			0-6" 8.0 6-24" 8.3			35.5 meq		(65-75) 87.6	(15-20) 10.6	(1-7) 1.6	(0-5) 0.2	(0-5) 0.0

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 10 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 = 28 K2O = 29 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 10 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 = 28 K2O = 29 AGVISE Band guidelines will build P & K test levels to the medium range over many years.

Crop 3: \*\* Chloride yield data is limited for this crop. \* Caution: Seed Placed Fertilizer Can Cause Injury \* Nitrogen is credited 10 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 = 28 K2O = 29 AGVISE Band guidelines will build P & K test levels to the medium range over many years.