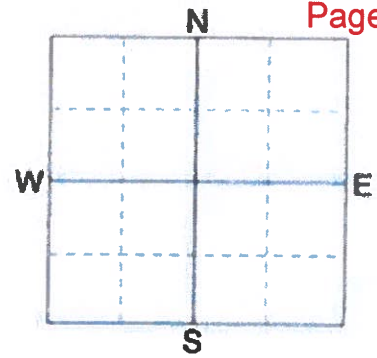




Soil Analysis by Agvise Laboratories
 (http://www.agvise.com)
 Northwood: (701) 587-6010
 Benson: (320) 843-4109

SOIL TEST REPORT

FIELD ID **Mckay Section**
 SAMPLE ID
 FIELD NAME **Mckay**
 COUNTY
 TWP **3** RANGE **15**
 SECTION **2** QTR ACRES **640**
 PREV. CROP **Barley**



SUBMITTED FOR:
Holmfield Colony
Killarney, MB **ROK 1GO**

SUBMITTED BY: SH2462
SHUR-GRO FARM-KILLARNEY
BOX 1139
KILLARNEY, MB **ROK 1GO**

REF # **2995633** BOX # **3155**
 LAB # **NW83696**

Date Sampled

Date Received **09/15/2020**

Date Reported **09/16/2020**

Nutrient In The Soil		Interpretation	1st Crop Choice		2nd Crop Choice		3rd Crop Choice			
		Low Med High	Wheat-Spring		Canola-bu		Barley			
			YIELD GOAL		YIELD GOAL		YIELD GOAL			
			70 BU		70 BU		80 BU			
			SUGGESTED GUIDELINES		SUGGESTED GUIDELINES		SUGGESTED GUIDELINES			
			Band		Broadcast		Broadcast			
			LB/ACRE	APPLICATION	LB/ACRE	APPLICATION	LB/ACRE	APPLICATION		
Nitrate	0-6" 18 lb/acre 6-24" 21 lb/acre 0-24" 39 lb/acre	.....	N	150	N	206	N	85	
Phosphorus	Olsen 12 ppm	.....	P ₂ O ₅	32 Band *	P ₂ O ₅	96 Broadcast	P ₂ O ₅	48 Broadcast	
Potassium	247 ppm	.....	K ₂ O	10 Band (Starter)*	K ₂ O	0	K ₂ O	10 Band (Starter)*	
Chloride	0-6" 14 lb/acre 6-24" 360 +lb/acre	.....	Cl	0	Cl	Not Available	Cl	0	
Sulfur	0.7 ppm	.....	S	0	S	25 Broadcast	S	10 Broadcast	
Boron	1.78 ppm	.....	B	0	B	1 Broadcast	B	0	
Zinc	36.4 ppm	.....	Zn	0	Zn	0	Zn	0	
Iron	4.3 ppm	.....	Fe	0	Fe	0	Fe	0	
Manganese	0.81 ppm	.....	Mn	0	Mn	0	Mn	0	
Copper	517 ppm	.....	Cu	0	Cu	0	Cu	0	
Magnesium	3184 ppm	.....	Mg	0	Mg	0	Mg	0	
Calcium	35 ppm	.....	Umc		Umc		Umc		
Sodium	4.8 %	Soil pH		Cation Exchange Capacity		% Base Saturation (Typical Range)			
Org.Matter	0.6 %	0-6" 7.3	Buffer pH	21.0 meq	% Ca (65-75)	% Mg (15-20)	% K (1-7)	% Na (0-5)	% H (0-5)
Carbonate(CEC)	0.33 mmho/cm 6-24" 1.4 mmho/cm	6-24" 8.0			75.7	20.5	3.0	0.7	0.0
Soil Salts										

General Comments: Medium-textured (CEC: 11-30 meq)
 Percent hydrogen is estimated from water pH, CEC corrected for exchangeable acidity.
Crop 1: *CAUTION: Seed-placed fertilizer can cause injury.* May respond to starter P & K, even on high soil tests. Crop nutrient removal: P2O5 = 44 K2O = 26 AGVISE Band guideline will build P & K test levels to the medium range over several years.
Crop 2: Limited data on crop response to chloride. May respond to starter P & K, even on high soil tests. Crop nutrient removal: P2O5 = 63 K2O = 32 AGVISE Broadcast guideline will build P & K test levels to the high range over several years.
Crop 3: *CAUTION: Seed-placed fertilizer can cause injury.* May respond to starter P & K, even on high soil tests. Crop nutrient removal: P2O5 = 38 K2O = 40 AGVISE Broadcast guideline will build P & K test levels to the high range over several years.

Report Number: C21131-10073
 Account Number: 00816

A & L Canada Laboratories Inc.

2136 Jetstream Road, London, Ontario, N5V 3P5
 Telephone: (519) 457-2575 Fax: (519) 457-2664



C21131-10073



Page 2

To: DECISIVE FARMING CORP
 BOX 730
 334 2ND STREET
 IRRICANA, AB T0M 1B0
 Attn: OPTIMIZE
 403-644-2136

For: WALDNER, BRIAN

Farm: HOLMFIELD COLONY
 Field: 12177-NE-10-3-15-W1 "TEN"

Grower Code: 2499

Reported Date: 2021-05-14 Printed Date: May 14, 2021

SOIL TEST REPORT

Page: 1 / 1

Sample Number	Legal Land Descript:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm		Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH		CEC meg/100g	Percent Base Saturations				
					Bicarb	Bray-P1				pH	Buffer		% K	% Mg	% Ca	% H	% Na
8223-12177-1A		6	15013	4.5	25 G	41 G	314 H	1059 H	5770 M	7.8		39.1	2.1	22.6	73.7	2.0	
8223-12177-1E		24	15014	2.3	5 L	6 VL	153 M	1449 H	7200 M	8.1		50.0	0.8	23.9	71.3	4.3	

Sample Number	Sulfur S		Nitrate Nitrogen NO3-N		Zinc Zn ppm	Manganese Mn ppm	Iron Fe ppm	Copper Cu ppm	Boron B ppm	Soluble Salts mmhos/cm	Saturation %P	Aluminum Al ppm	Saturation %Al	K/Mg Ratio	ENR	Chloride Cl ppm	Sodium Na ppm
	ppm	lbs/ac	ppm	lbs/ac													
8223-12177-1A	432	VH 778	36	H 65										0.09	57		176 VH
8223-12177-1E	1192	VH 6437	17	M 92										0.03	35		495 VH

W VL = VERY LOW, L = LOW, M = MEDIUM, H = HIGH, VH = VERY HIGH, G = GOOD, MA = MARGINAL, MT = MODERATE PHYTO-TOXIC, T = PHYTO-TOXIC, ST = SEVERE PHYTO-TOXIC

SOIL FERTILITY GUIDELINES (lbs/ac)

Sample Number	Previous Crop	Intended Crop	Yield Goal	Lime Tons/Acre	N	P2O5	K2O	Mg	Ca	S	Zn	Mn	Fe	Cu	B

* Recs are based on building nutrients to a level to maintain soil health. Banding and/or precision placement techniques can be utilized to increase fertilizer efficiency.
 * If this report contains soil in excess of 7500 ppm Ca it may or may not effect the calculated Cation Exchange Capacity. Excessive seed placed fertilizer can cause injury.
 The results of this report relate to the sample submitted and analyzed.
 * Crop yield is influenced by a number of factors in addition to soil fertility.
 No guarantee or warranty concerning crop performance is made by A & L.

Results Authorized By:  Ian McLachlin, Vice President

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Report Number: C21131-10071
Account Number: 00816

A & L Canada Laboratories Inc.

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C21131-10071



Page 3

To: DECISIVE FARMING CORP
BOX 730
334 2ND STREET
IRRICANA, AB T0M 1B0
Attn: OPTIMIZE
403-644-2136

For: WALDNER, BRIAN

Farm: HOLMFIELD COLONY
Field: 12173-E-33-2-15-W1 "George"

Grower Code: 2499

Reported Date: 2021-05-14 Printed Date: May 14, 2021

SOIL TEST REPORT

Page: 1 / 1

Sample Number	Legal Land Descpt:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm		Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH		CEC meq/100g	Percent Base Saturations				
					Bicarb	Bray-P1				pH	Buffer		% K	% Mg	% Ca	% H	% Na
8223-12173-1A		6	15009	4.7	27 M	43 M	366 VH	454 H	2000 L	5.4	6.6	19.6	4.8	19.3	51.1	24.3	0.6
8223-12173-1E		24	15010	1.7			131 M	796 H	4010 M	7.9		27.0	1.2	24.6	74.2		0.3

Sample Number	Sulfur S		Nitrate Nitrogen NO3-N		Zinc Zn ppm	Manganese Mn ppm	Iron Fe ppm	Copper Cu ppm	Boron B ppm	Soluble Salts mmhos/cm	Saturation %P	Aluminum Al ppm	Saturation %Al	K/Mg Ratio	ENR	Chloride Cl ppm	Sodium Na ppm
	ppm	lbs/ac	ppm	lbs/ac													
8223-12173-1A	17 VL	31	28 H	50	4.4 M	83 VH	72 VH	1.7 H	0.5 L	0.4 L	9 H	625	0.7 G	0.25	60	22	26 L
8223-12173-1E	10 VL	54	5 L	27										0.05	29		18 VL

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SOIL FERTILITY GUIDELINES (lbs/ac)

Sample Number	Previous Crop	Intended Crop	Yield Goal	Lime Tons/Acre	N	P2O5	K2O	Mg	Ca	S	Zn	Mn	Fe	Cu	B

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- * Crop yield is influenced by a number of factors in addition to soil fertility.
- No guarantee or warranty concerning crop performance is made by A & L.

Results Authorized By:

Ian McLachlin, Vice President

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Report Number: C21131-10072
 Account Number: 00616

A & L Canada Laboratories Inc.

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 Telephone: (519) 457-2575 Fax: (519) 457-2664



C21131-10072



Page 4

To: DECISIVE FARMING CORP
 BOX 730
 334 2ND STREET
 IRRICANA, AB T0M 1B0
 Attn: OPTIMIZE
 403-844-2136

For: WALDNER, BRIAN

Farm: HOLMFIELD COLONY
 Field: 12175-S-3-3-15-W1 "SHAW"

Grower Code: 2499

Reported Date: 2021-05-14 Printed Date: May 14, 2021

SOIL TEST REPORT

Page: 1 / 1

Sample Number	Legal Land Descpt:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm Bicarb Bray-P1	Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH Buffer	CEC meq/100g	Percent Base Saturations				
											% K	% Mg	% Ca	% H	% Na
8223-12175-1A		6	15011	3.6	8 L 11 L	198 M	678 H	5700 H	7.9	34.9	1.5	16.2	81.8	0.8	
8223-12175-1E		24	15012	1.3		73 L	1286 H	7200 M	8.2	48.1	0.4	22.3	74.9	2.7	

Sample Number	Sulfur S		Nitrate Nitrogen NO3-N		Zinc Zn ppm	Manganese Mn ppm	Iron Fe ppm	Copper Cu ppm	Boron B ppm	Soluble Salts mmhos/cm	Saturation %P	Aluminum Al ppm	Saturation %Al	K/Mg Ratio	ENR	Chloride Cl ppm	Sodium Na ppm
8223-12175-1A	135 VH	243	35 H	63	2.0 L	86 VH	33 H	1.1 M	1.3 H	0.9 M	1 VL	65	0.0 G	0.09	48	64	64 M
8223-12175-1E	718 VH	3877	6 L	32										0.02	25		304 VH

W VL = VERY LOW, L = LOW, M = MEDIUM, H = HIGH, VH = VERY HIGH, G = GOOD, MA = MARGINAL, MT = MODERATE PHYTO-TOXIC, T = PHYTO-TOXIC, ST = SEVERE PHYTO-TOXIC

SOIL FERTILITY GUIDELINES (lbs/ac)

Sample Number	Previous Crop	Intended Crop	Yield Goal	Lime Tons/Acre	N	P2O5	K2O	Mg	Ca	S	Zn	Mn	Fe	Cu	B

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- No guarantee or warranty concerning crop performance is made by A & L.

Results Authorized By:

Ian McLachlin, Vice President

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Report Number: C21131-10070
Account Number: 00616

A & L Canada Laboratories Inc.

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C21131-10070



Page 5

To: DECISIVE FARMING CORP
BOX 730
334 2ND STREET
IRRICANA, AB T0M 1B0
Attn: OPTIMIZE
403-644-2136

For: WALDNER, BRIAN

Farm: HOLMFIELD COLONY
Field: 24954-E-4-3-15-W1 "REIMER"

Grower Code: 2499

Reported Date: Printed Date: May 14, 2021

SOIL TEST REPORT

Page: 1 / 1

Sample Number	Legal Land Descpt:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm		Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH		CEC meq/100g	Percent Base Saturations				
					Bicarb	Bray-P1				pH	Buffer		% K	% Mg	% Ca	% H	% Na
8223-24954-1A		6	15007	4.7	14 L	28 L	169 H	466 H	2450 M	6.0	6.9	17.8	2.4	21.8	68.8	6.5	0.5
8223-24954-1E		24	15008	1.5			128 M	514 VH	2470 M	7.4		17.0	1.9	25.2	72.8		0.4

Sample Number	Sulfur S		Nitrate Nitrogen NO3-N		Zinc Zn ppm	Manganese Mn ppm	Iron Fe ppm	Copper Cu ppm	Boron B ppm	Soluble Salts mmhos/cm	Saturation %P	Aluminum Al ppm	Saturation %Al	K/Mg Ratio	ENR	Chloride Cl ppm	Sodium Na ppm
	ppm	lbs/ac	ppm	lbs/ac													
8223-24954-1A	15 VL	27	31 H	56	3.0 M	62 VH	79 VH	1.2 H	0.6 M	0.5 L	9 H	390	0.2 G	0.11	60	16	22 L
8223-24954-1E	8 VL	43	3 VL	16										0.08	27		14 L

W VL = VERY LOW, L = LOW, M = MEDIUM, H = HIGH, VH = VERY HIGH, G = GOOD, MA = MARGINAL, MT = MODERATE PHYTO-TOXIC, T = PHYTO-TOXIC, ST = SEVERE PHYTO-TOXIC

SOIL FERTILITY GUIDELINES (lbs/ac)

Sample Number	Previous Crop	Intended Crop	Yield Goal	Lime Tons/Acre	N	P2O5	K2O	Mg	Ca	S	Zn	Mn	Fe	Cu	B

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Results Authorized By:  Ian McLachlin, Vice President

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Report Number: C21131-10074
Account Number: 00616

A & L Canada Laboratories Inc.

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C21131-10074



Page 6

Farm: HOLMFIELD COLONY
Field: 12166-E-32,W-33-2-15-W1 "RAMSEY SECTION"

To: DECISIVE FARMING CORP
BOX 730
334 2ND STREET
IRRICANA, AB T0M 1B0
Attn: OPTIMIZE
403-844-2136

For: WALDNER, BRIAN

Grower Code: 2499

Reported Date: 2021-05-14 Printed Date: May 14, 2021

SOIL TEST REPORT

Page: 1 / 1

Sample Number	Legal Land Descpt:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm Bicarb Bray-P1	Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH	CEC meq/100g	Percent Base Saturations				
											% K	% Mg	% Ca	% H	% Na
8223-12166-1A		6	15015	6.0	24 M 37 M	326 VH	553 H	3940 H	7.4	25.3	3.3	18.2	78.0		0.7
8223-12166-1E		24	15016	3.5		173 M	708 H	5650 H	8.1	34.6	1.3	17.1	81.7		0.2
8223-12166-2A		6	15017	5.7	11 L 14 VL	146 M	639 H	3240 M	7.7	22.0	1.7	24.2	73.6		0.9
8223-12166-2E		24	15018	2.7		112 M	959 VH	3170 M	8.0	24.1	1.2	33.1	65.7		0.4

Sample Number	Sulfur S ppm	Nitrate Nitrogen NO3-N ppm	Zinc Zn ppm	Manganese Mn ppm	Iron Fe ppm	Copper Cu ppm	Boron B ppm	Soluble Salts mmhos/cm	Saturation %P	Aluminum Al ppm	Saturation %Al	K/Mg Ratio	ENR	Chloride Cl ppm	Sodium Na ppm
8223-12166-1A	87 VH 157	18 M 32	5.6 H	118 VH	37 H	2.2 H	1.1 M	0.6 L	3 L	265	0.0 G	0.18	73	22	41 M
8223-12166-1E	12 VL 65	6 L 32										0.08	47		15 VL
8223-12166-2A	10 VL 18	30 H 54	2.8 L	134 VH	38 H	1.4 H	1.0 M	0.5 L	5 M	341	0.0 G	0.07	70	14	45 M
8223-12166-2E	34 VL 184	13 M 70										0.04	39		24 L

W VL = VERY LOW, L = LOW, M = MEDIUM, H = HIGH, VH = VERY HIGH, G = GOOD, MA = MARGINAL, MT = MODERATE PHYTO-TOXIC, T = PHYTO-TOXIC, ST = SEVERE PHYTO-TOXIC

SOIL FERTILITY GUIDELINES (lbs/ac)

Sample Number	Previous Crop	Intended Crop	Yield Goal	Lime Tons/Acre	N	P2O5	K2O	Mg	Ca	S	Zn	Mn	Fe	Cu	B

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- * No guarantee or warranty concerning crop performance is made by A & L.

Results Authorized By:  Ian McLachlin, Vice President

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