



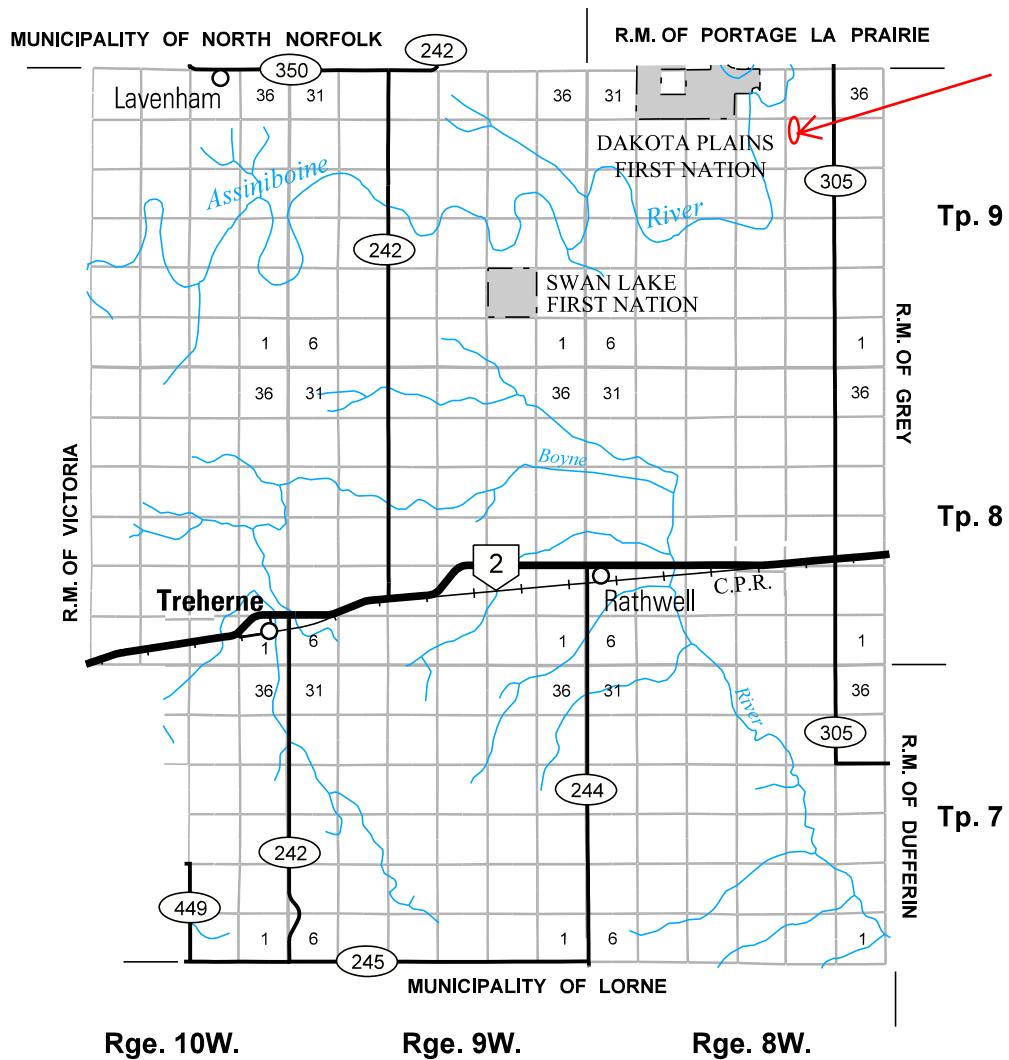
# MUNICIPALITY OF NORFOLK TREHERNE

A scale bar consisting of a horizontal line divided into five equal segments by black tick marks. The number '0' is at the left end, and the number '5' is at the right end.

**PROVINCE OF MANITOBA  
INFRASTRUCTURE  
HIGHWAY PLANNING AND DESIGN BRANCH  
GEOGRAPHIC & RECORDS MANAGEMENT SECTION  
WINNIPEG  
JANUARY 1, 2015**

## LEGEND

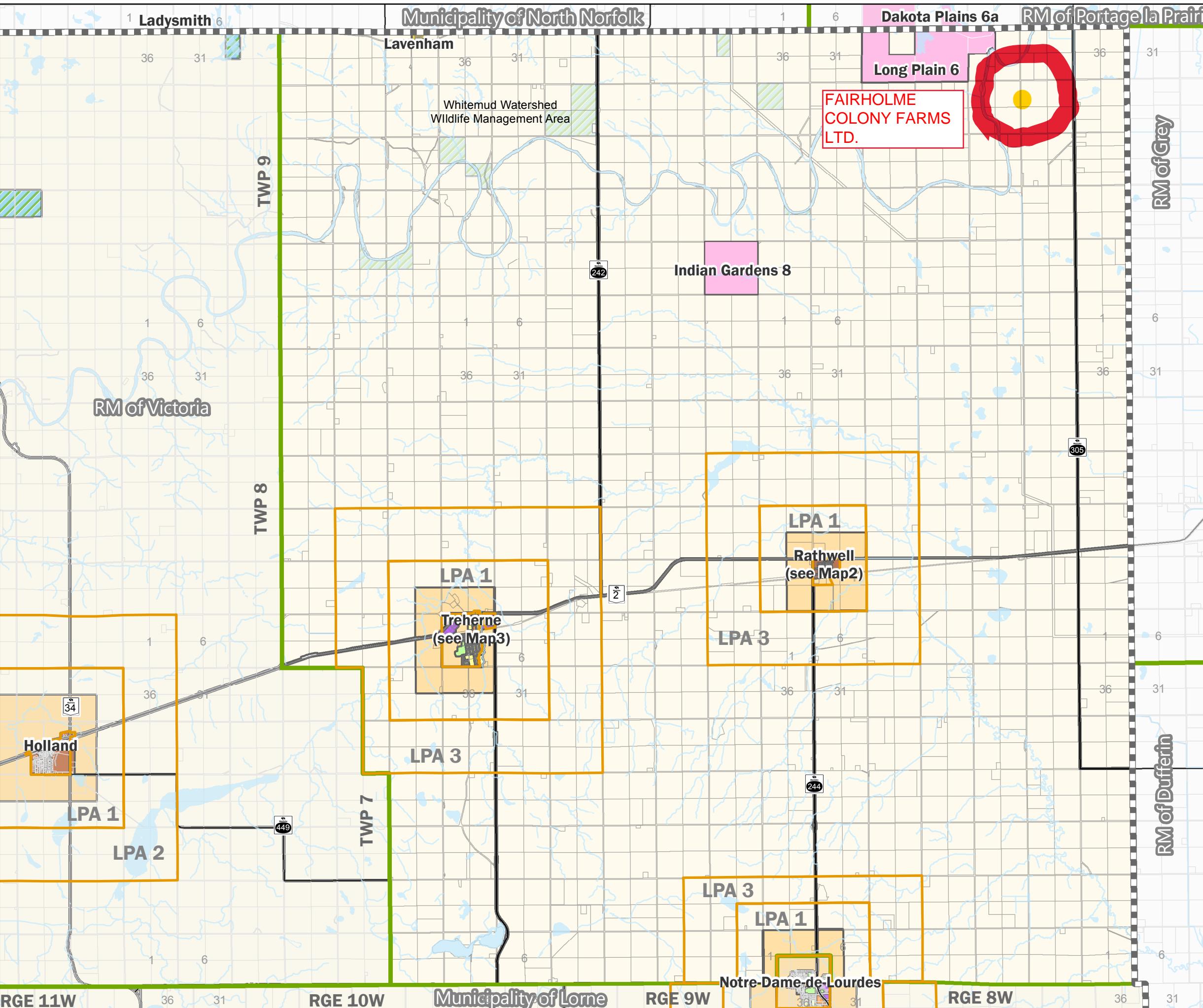
PROVINCIAL TRUNK HIGHWAYS .....  ACCESS ROADS .....  
 PROVINCIAL ROADS .....  RAILWAYS .....



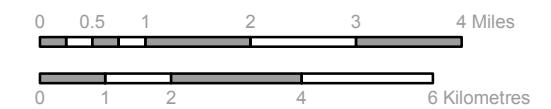
# Municipality of Norfolk Treherne

By-Law No. 2452-05  
and consolidated  
amendments

## Map 1: RM of South Norfolk

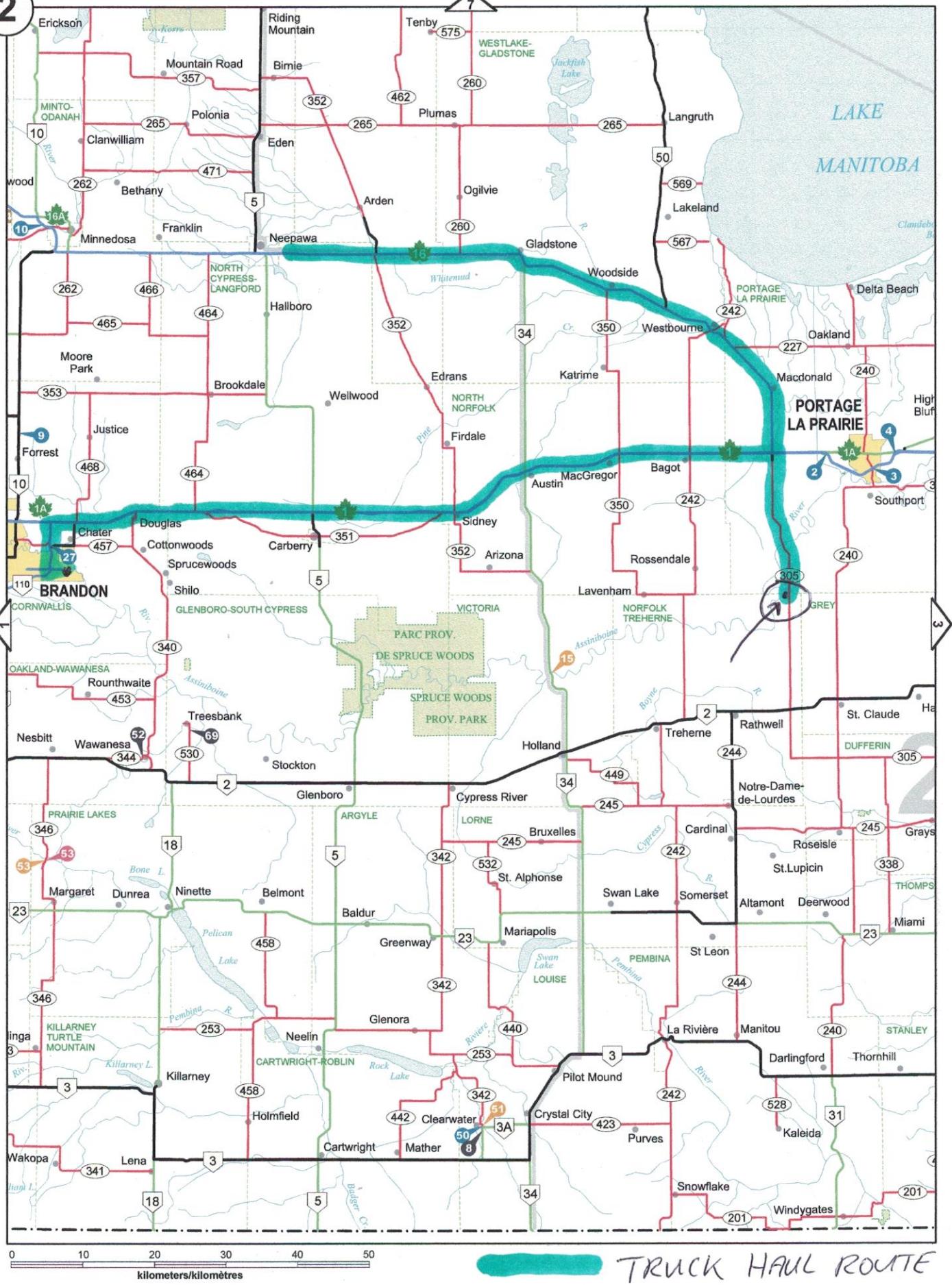


- SC PD Boundary**
- Municipal Boundary**
- Assessment Parcel**
- Water Feature**
- Wildlife Management Area (WMA)**
- IR Land**
- Livestock Policy Area (LPA)**
- ZONE**
- AG - Agricultural General Zone
  - AL - Agricultural Limited Zone
  - GD - General Development Zone
  - M - Industrial and Manufacturing Zone
  - PR - Parks and Recreation Zone
  - RR - Rural Residential Zone
  - UN - Urban Non-Residential Zone
  - UR - Urban Residential Zone
  - UR-1 - Urban Residential Zone



## TRUCK HAUL ROUTES

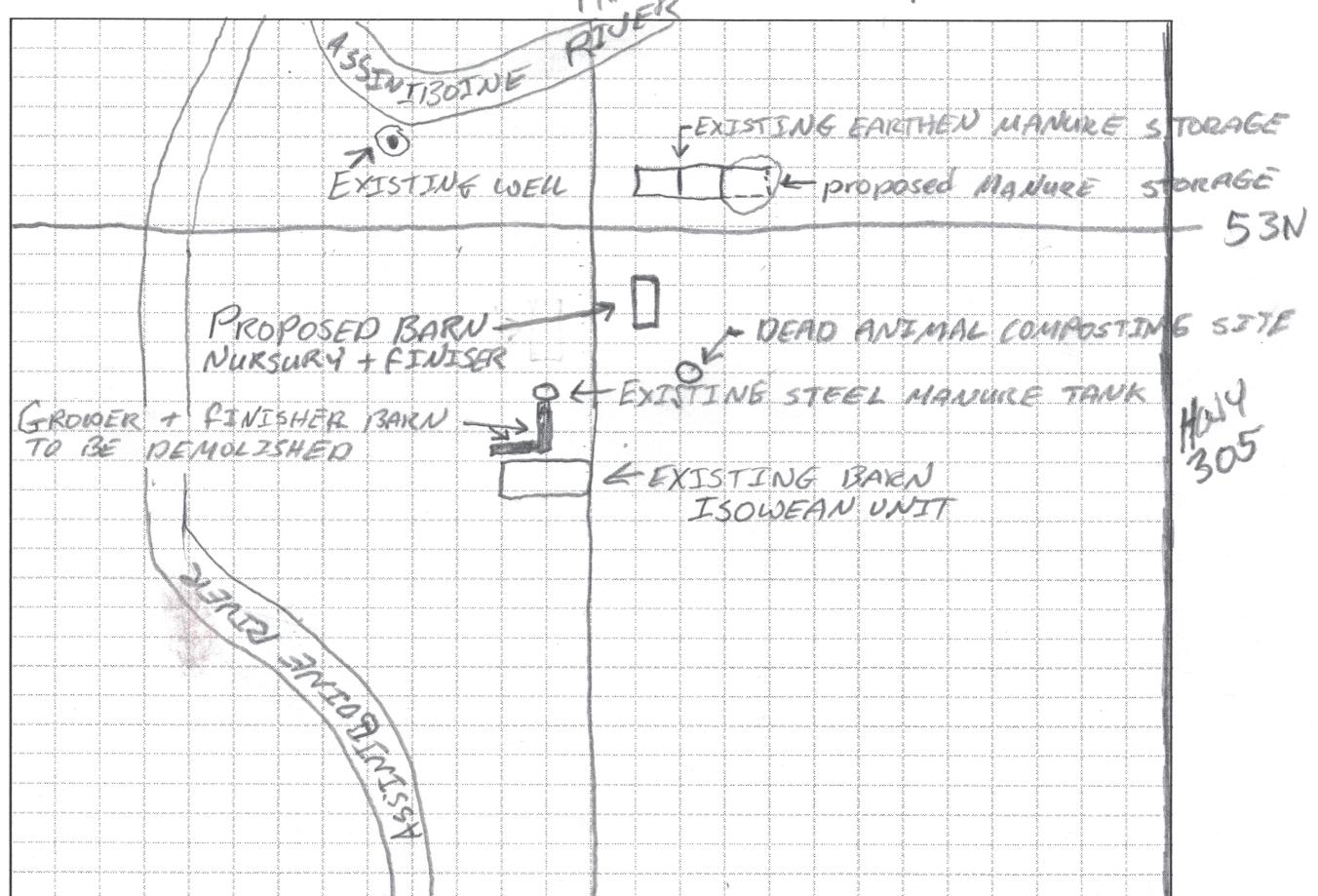
2



## TRUCK HAUL ROUTE

## PROJECT SITE PLAN GUIDE

↑  
N



### Please indicate the following:

1. Approximate distances between existing and proposed animal confinement and manure storage facilities and dwellings, shelterbelts, manure storage, water source locations, drainage patterns, water courses, bedrock outcrops, sinkholes, gravel pits, quarries, and existing and abandoned well(s) or spring(s), property lines
2. Approximate distance between proposed dead animal disposal site and water courses
3. Property dimensions
4. Municipal or provincial roads and provincial trunk highways
5. Drainage patterns
6. Scale size (Suggested scale: one square = 50 feet/15 metres)

1 square = 400 feet

Please see Project Site Plan Example for assistance.

Please include an ortho (aerial) photo of the project site.

# Animal Units Calculator

A	B	C	Current Operation		Proposed Operation	
			D	E	F	G
Operation Type	Animal Categories	Animal Units per Head	Current Number of Animals <sup>1</sup>	Current Animal Units	Proposed Number of Animals <sup>2</sup>	Proposed Number of Animal Units
Dairy <sup>3</sup>	Mature cows (lactating and dry) including associated livestock	2	-	-	-	-
	Mature cows (lactating and dry)	1.35	-	-	-	-
	Heifers (0 to 3 months)	0.16	-	-	-	-
	Heifers (4 to 13 months)	0.41	-	-	-	-
	Heifers (> 13 months)	0.87	-	-	-	-
	Bulls	1.35	-	-	-	-
	Veal calves	0.13	-	-	-	-
Beef	Beef cows including associated livestock	1.25	346	433	346	433
	Backgrounder	0.5	355	178	355	178
	Summer pasture / replacement heifers	0.625	93	58	93	58
	Feeder cattle	0.769	81	62	81	62
Pigs	Sows - farrow to finish (234-254 lbs)	1.25	600	750	1,600	2,000
	Sows - farrow to weanling (up to 11 lbs)	0.25	-	-	-	-
	Sows - farrow to nursery (51 lbs)	0.313	-	-	-	-
	Boars (artificial insemination units)	0.2	-	-	-	-
	Weanlings, Nursery (11-51 lbs)	0.033	-	-	-	-
	Growers / Finishers (51-249 lbs)	0.143	-	-	-	-
Chickens	Broilers	0.005	-	-	-	-
	Roasters	0.01	-	-	-	-
	Layers	0.0083	-	-	-	-
	Pullets	0.0033	12,500	41	12,500	41
	Broiler breeder pullets	0.0033	-	-	-	-
	Broiler breeder hens	0.01	-	-	-	-
Turkeys	Broilers	0.01	-	-	-	-
	Heavy Toms	0.02	-	-	-	-
Horses	Hens	0.01	18,500	185	18,500	185
Sheep	Ewes	0.2	-	-	-	-
	Feeder lambs	0.063	-	-	-	-
Other Livestock	Type:		-	-	-	-
	Type:		-	-	-	-
			Total Current:	1,720	Total Proposed:	2,970

**Footnotes:**

<sup>1</sup> Enter the current number of animals on the farm based on the operation's capacity (animal places) or previous Conditional Use Approval.

<sup>2</sup> Enter the total number of animals associated with the operation post construction or expansion.

<sup>3</sup> There are 2 methods for calculating animal units for dairy (Farm Practices Guidelines for Dairy Producers in Manitoba, 1995). You can enter the total number of mature cows in the milking herd under the "Mature cows (lactating and dry) including associated livestock" category and the animal units will be calculated by multiplying this number by 2. This calculation assumes 85 lactating, 15 dry, 12 heifers (0 to 3 months), 36 heifers (4 to 13 months) and 50 heifers (> 13 months) for an operation with 100 mature cows. "Associated livestock" includes all of the heifer calves and replacement heifers. Alternatively, you can enter animal numbers in the individual categories (mature cows, heifers (0 to 3 months), heifers (4 to 13 months) and heifers (> 13 months)) and they will be summed at the bottom of the table. Bulls and veal calves are always calculated separately.

[For all other livestock or operation types please inquire with the Manitoba Agriculture Contacts](#)



**CROP ROTATION TABLE**

A	B	C	D	E
Expected Crops in the Rotation	Acreage	Historical Yield	Units	Source of Yield Information
Total Net Acreage for Manure Application				

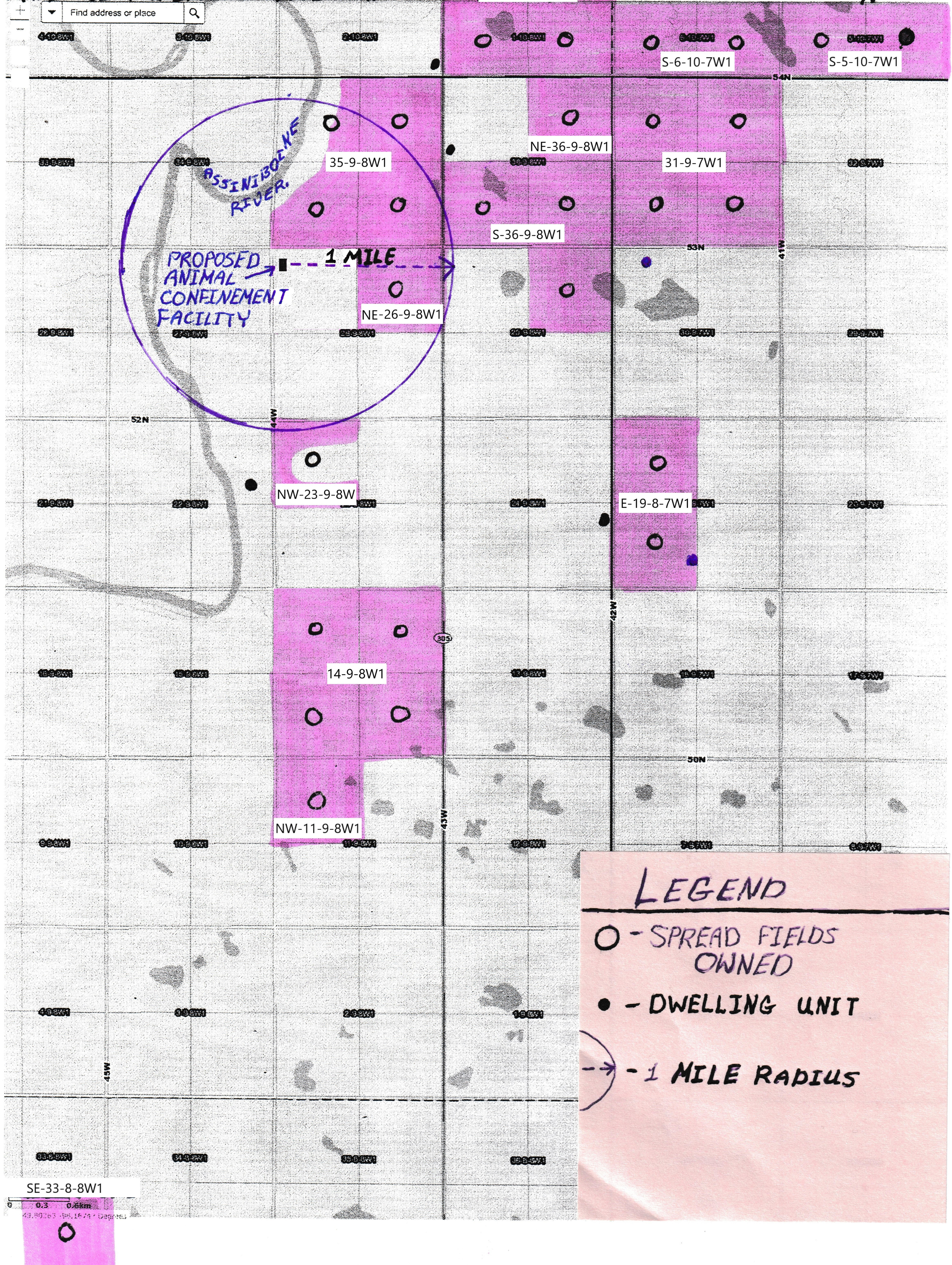
- A. List all of the crop(s) to be grown in the rotation on the acreage that will receive manure.
- B. Indicate the average acreage for each crop over the rotation. For example, if there are 720 suitable acres available for manure and approximately 40 these acres will be used to grow canola, enter 288. The total of column B should add up to Total Net Acreage for Manure Application provided in the Manure Application Field Characteristic Table.
- C. Enter the historical yield average for each crop. Long-term yield averages can be determined using MASC data (<http://www.masc.mb.ca/masc.nsf/index.html?OpenPage>) or on-farm yield records. If on-farm yield records are used, please provide copies.
- D. Enter the units for the yields provided (e.g. bu/acre, tons/acre).
- E. Enter the source of the historical yield average provided.

**CROP ROTATION TABLE**

A	B	C	D	E
Expected Crops in the Rotation	Acreage	Historical Yield	Units	Source of Yield Information
<b>Total Net Acreage for Manure Application</b>				

- A. List all of the crop(s) to be grown in the rotation on the acreage that will receive manure.
- B. Indicate the average acreage for each crop over the rotation. For example, if there are 720 suitable acres available for manure and approximately 40 these acres will be used to grow canola, enter 288. The total of column B should add up to Total Net Acreage for Manure Application provided in the Manure Application Field Characteristic Table.
- C. Enter the historical yield average for each crop. Long-term yield averages can be determined using MASC data (<http://www.masc.mb.ca/masc.nsf/index.html?OpenPage>) or on-farm yield records. If on-farm yield records are used, please provide copies.
- D. Enter the units for the yields provided (e.g. bu/acre, tons/acre).
- E. Enter the source of the historical yield average provided.

# LAND USE AND SPREAD FIELD MAP



<b>Nutrients Excreted</b>	<b>lbs</b>
Nitrogen	539207
P2O5	291369
<b>Crop Nutrient Use</b>	<b>lb/ac</b>
Nitrogen Uptake	130.8
P2O5 Removal	36.3
<b>Land Base Requirements</b>	<b>acres</b>
Acres for Nitrogen Uptake	<b>4123</b>
Acres for 2 x P2O5 Removal	<b>4015</b>
Acres for 1 x P2O5 Removal	<b>8029</b>



## MANURE APPLICATION FIELD CHARACTERISTICS TABLE

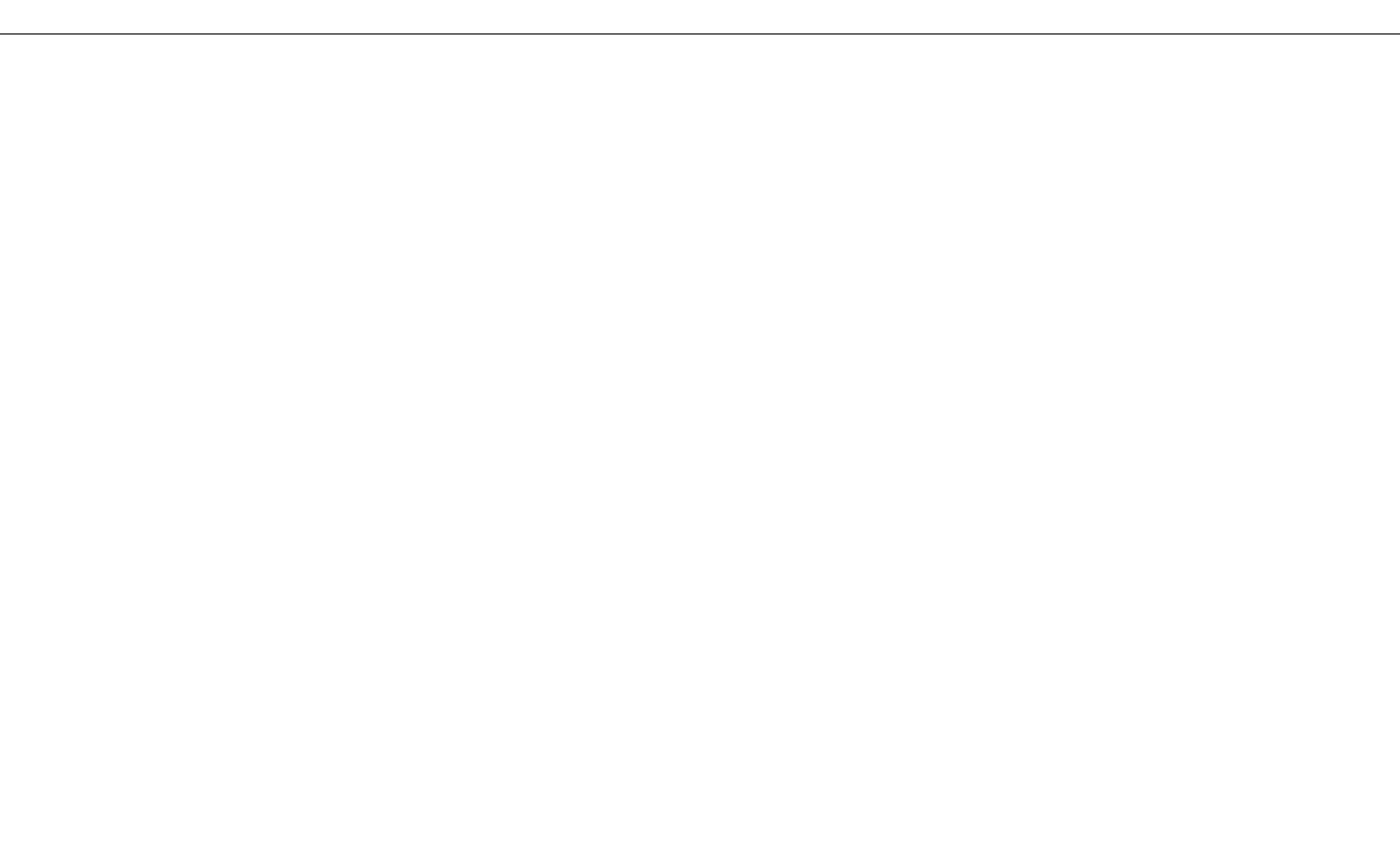
	A	B	C	D	E	F	G	H	I	J
Field	Legal Description	Rural Municipality	O/C/L/A	Total Acreage	Setbacks, including features	Net Acreage for Manure Application	Agriculture Capability Class and Subclass	Soil Phosphorus (ppm Olsen P) 0-6 inches	Development Plan Designation	Zoning
1	35-9-8W1	Norfolk Treherne	O	582.92	Assiniboine River Valley / Trees	400	1, 2W, 3, 4M, 5W & 6TE	37, 18, 22	South Central Planning District By-Law No. 3-2003	November 22 2012 By-Law 2452-05
2	NE 26-9-8W1	Norfolk Treherne	O	160	N/A	130	1, 3MW, 4M, 5W, & 6M	36, 43, 36	South Central Planning District By-Law No. 3-2003	November 22 2012 By-Law 2452-05
3	NW 14-9-8W1	Norfolk Treherne	O	160	N/A	145	5W, 4M, 3W, 6M, 3MT	10, 15	South Central Planning District By-Law No. 3-2003	November 22 2012 By-Law 2452-05
4	S 14-9-8W1	Norfolk Treherne	O	317.48	N/A	300	3W, 4M, 5W, & 6W	10, 15	South Central Planning District By-Law No. 3-2003	November 22 2012 By-Law 2452-05
5	NE 36-9-8W1	Norfolk Treherne	O	160	N/A	160	1, 2M, 3MW, 4M, & 5W	20, 30, 28	South Central Planning District By-Law No. 3-2003	November 22 2012 By-Law 2452-05
6	31-9-7W1	Grey	O	636.64	N/A	636.64	1, 2M, 3W, & 5W	30, 29	South Central Planning District By-Law No. 3-2003	November 22 2012 By-Law 2452-05
7	SW 19-9-7W1	Grey	O	147.15	N/A	147.15	1, 3MW, 4M, & 5W	15, 13, 27	The Grey-St. Claude Planning District By-Law NO. 2/99	June 18 2008 By-Law No. 5/03
8	NW 19-9-7W1	Grey	O	160	N/A	160	1 & 5W	12, 9	The Grey-St. Claude Planning District By-Law NO. 2/99	June 18 2008 By-Law No. 5/03
9	S 36-9-8W1	Norfolk Treherne	O	316.92	N/A	316.92	1, 2M, 3MW, 4M, & 5W	31, 19	South Central Planning District By-Law No. 3-2003	November 22 2012 By-Law 2452-05
10	NW 11-9-8W1	Norfolk Treherne	O	160	N/A	120	2W, 3W, 3MW, 4M, 5W, & 6W	32, 12	South Central Planning District By-Law No. 3-2003	November 22 2012 By-Law 2452-05
11	SE 33-8-8W1	Norfolk Treherne	O	160	Organic	120	3W, 3MW, 4W, 6M, 6M, O3W	16, 18, 24	South Central Planning District By-Law No. 3-2003	November 22 2012 By-Law 2452-05
12	NE 25-9-8W1	Norfolk Treherne	O	160	N/A	155	2M, 3W, 4M, 5W & 6W	27, 10	South Central Planning District By-Law No. 3-2003	November 22 2012 By-Law 2452-05
13	SW 6-10-7W1	Portage La Prairie	O	156.58	N/A	156.58	1, 2M, 3MW & 5W	32	Portage La Prairie Planning District By-Law 1-2006	May 2015 By-Law 3096
14	SE 6-10-7W1	Portage La Prairie	O	160	N/A	140	1, 3W, 4M, 5W & 6W	33	Portage La Prairie Planning District By-Law 1-2006	May 2015 By-Law 3096
15	S 5-10-7W1	Portage La Prairie	O	320	N/A	290	1, 3MW, 4M, 5W & 6W	17	Portage La Prairie Planning District By-Law 1-2006	May 2015 By-Law 3096
16	W 01-10-8W1	Portage La Prairie	O	313.72	N/A	300	1, 2M, 3W, 3MW, 5W & 6W	25, 20	Portage La Prairie Planning District By-Law 1-2006	May 2015 By-Law 3096
17	E 01-10-8W1	Portage La Prairie	O	320	N/A	320	1, 2M, 3MW, 3W, & 5W	30, 38	Portage La Prairie Planning District By-Law 1-2006	May 2015 By-Law 3096
18	NW 23-9-8W1	Norfolk Treherne	O	160	TREES	75	2MT, 3MN, 4M & 6M	36, 43, 36	South Central Planning District By-Law No. 3-2003	November 22 2012 By-Law 2452-05
19	NE 14-9-8W1	Norfolk Treherne	O	157.48	N/A	70	4M, 5W, & 6M	10, 15	South Central Planning District By-Law No. 3-2003	November 22 2012 By-Law 2452-05
20										

Total Net Acreage for Manure Application:

4142.29

Note: No acres that are classified as Class 6 soils were used to arrive at the net acreage total. Manure will not be applied to Class 6 land.

- A. Enter the legal description for each parcel of land that will receive manure: Sec, Twp, Rge or River Lot (including parish).
- B. Identify the Rural Municipality in which the parcel is located.
- C. Indicate how the land has been secured for manure application: O – Own / C-Crown / L – Lease / A – Agreement. Multiple designations may be used as appropriate (ex. C/A for Crown lands that are under a spread agreement with the producer that holds the agricultural Crown land lease).
- D. Enter the total acreage for the parcel.
- E. Enter setbacks from surface water or groundwater features that reduce the land available for manure application; include identification of type of feature (ex. 8m, Order 3 drain).
- F. Enter the net acreage available for manure application for the parcel after taking into account setbacks and excluding Class 6, 7 and unimproved organic soils.
- G. Enter the agriculture capability class and subclass ratings for the acreage available for manure application.
- H. Provide soil test results for phosphorus in ppm Olsen P for soil samples taken at the 0-6 inch depth. Soil test results must be no more than 12 months old and must be completed by an accredited soil-testing laboratory.
- I. Indicate the Development Plan and its by-law number in addition to the map designation for each field (ex. By-law #1/2008: AG).
- J. Indicate the Zoning By-law and its by-law number in addition to the zoning for each field (ex. By-law 12/2009: AG 80).



Animal Type (A)	Animal Sub-type (B)	Daily Manure Production				Production Period <sup>2</sup> (Days) (G)	Number of Animals <sup>3</sup> (Capacity) (H)	Total Manure Volume (ft <sup>3</sup> ) (FxGxH)	Total Manure Volume for Semi-Solid and Liquid Manure (Imp Gal)	
		References (C)	Manure Type (D)	Default Manure Production (ft <sup>3</sup> /animal/day) (E)	Operation Manure Production <sup>1</sup> (ft <sup>3</sup> /animal/day) (F)					
Dairy (milking cows <sup>4</sup> and associated livestock)	Free Stall	Table 6, pg 59, FPGs for Dairy 1995	Semi-Solid <sup>5</sup>	3.5				-	0.0	
			Solid	3.4				-		
			Liquid <sup>5</sup>	3.5				-	0.0	
	Tie Stall		Semi-Solid <sup>5</sup>	3.6				-	0.0	
			Solid	3.5				-		
			Liquid <sup>5</sup>	3.6				-	0.0	
	Loose Housing		Solid	3.0				-		
	Milking Parlour Manure and Washwater		Liquid	0.5				-		
Beef	Beef cows including associated livestock	pg 117, FPGs for Hogs 1998	Solid	1.2	1.2	365.00	346	151,548.00		
	Backgrounder (200 day)		Solid	0.73	0.73	365.00	355	94,589.75		
	Summer pasture / replacement heifers		Solid	0.85	0.85	365.00	93	28,853.25		
	Feeder cattle		Solid	1.1	1.1	365.00	81	32,521.50		
Pigs	Sows - farrow to finish (234 - 254 lbs)	MAFRI website, FPGs for Pigs 2007	Liquid	2.3	2.3	400.00	1,600	1,472,000.00	9,170,560.0	
	Sows - farrow to wean (up to 11 lbs)		Liquid	0.8				-	0.0	
	Sows - farrow to nursery (51 lbs)		Liquid	1				-	0.0	
	Weanlings, Nursery (11 - 51 lbs)		Liquid	0.1				-	0.0	
	Grower / Finisher (51 - 249 lbs)		Liquid	0.25				-	0.0	
Animal Type	Type of Operation		Yearly Manure Production			Production Period <sup>2</sup> (Days)	Number of Birds <sup>3</sup> (Capacity)	Total Manure Volume (ft <sup>3</sup> ) (F/365xGxH)	Total Manure Volume for Semi-Solid and Liquid Manure (Imp Gal)	
			Default Manure Production (ft <sup>3</sup> /year/bird space)		Operation Manure Production <sup>1</sup> (ft <sup>3</sup> /year/bird space)					
Chickens	Broilers – floor <sup>6</sup>	Table 3, pg 85, FPGs for Poultry 2000	1.23					-		
	Broiler breeder hens <sup>7</sup>		2.3					-		
	Broiler breeder pullets <sup>6</sup>		0.99					-		
	Roasters – floor <sup>6</sup>		1.16					-		
	Layers – cage <sup>8</sup>		2.33					-	0.0	
	Layers – floor <sup>7</sup>		1.68					-		
	Layers – solid pack <sup>9</sup>							-		
	Pullets – cage <sup>8</sup>		0.71		0.71	150	12,500	3,647	22,722.4	
	Pullets – floor <sup>6</sup>		0.75					-		
Turkeys	Pullets – solid pack <sup>9</sup>							-		
	Broilers <sup>6</sup>	Table 3, pg 85, FPGs for Poultry 2000	2.83					-		
	Heavy toms <sup>6</sup>		5.58					-		
	Heavy hens <sup>6</sup>		3.32		3.32	270	18,500	45,434		

Sizing of a manure storage facility in accordance with all requirements of the *Livestock Manure and Mortalities Management Regulation* (M.R. 42/98) is the responsibility of the operator.

#### Instructions and footnotes:

- <sup>1</sup> ENTER the manure production estimate for your operation. If no estimate is available, use the default value provided in column C. References for default daily and yearly manure production are provided in column C.
- <sup>2</sup> ENTER the number of days worth of manure that will be produced. For earthen manure storage facilities the minimum storage requirement is 400 days. For steel and concrete manure storage facilities the minimum storage requirement is 180 days.
- <sup>3</sup> ENTER the total number of animals or birds that the operation can hold (e.g. barn or feedlot capacity).
- <sup>4</sup> Milking cows includes all lactating and dry cows.
- <sup>5</sup> Default manure production estimates for semi-solid and liquid dairy manure include manure and washwater from the milking parlour.
- <sup>6</sup> 2 inches of wood shavings or 4 inches of straw placed on floor. Manure and litter removed from barn at 25% moisture content, with a density of 20 lb/ft<sup>3</sup>
- <sup>7</sup> One-third litter floor, two-thirds slatted floor. Manure and litter removed from barn at 40% moisture content, with a density of 25 lb/ft<sup>3</sup>
- <sup>8</sup> Manure removed from barn at 90% moisture content with a density of 59 lb/ft<sup>3</sup>
- <sup>9</sup> Poultry operations using litter (solid pack) must provide an estimate of yearly manure production

## Existing and Proposed Manure Storage Facility Dimension Table

If applicable, indicate the dimensions of any existing manure storage facility (MSF) that will be used to store manure from the proposed project:

CELL	Existing Manure Storage Facility Dimensions						Storage Capacity (days)	
	Width	Length	Depth	Height (Above Grade)	Slope (H:L)			
					Inside	Outside		
Primary	N/A ft	N/A ft	N/A ft	N/A ft	N/A	N/A	N/A	
Secondary	N/A ft	N/A ft	N/A ft	N/A ft	N/A	N/A	N/A	
Tertiary	N/A ft	N/A ft	N/A ft	N/A ft	N/A	N/A	N/A	
Circular Tank		Diameter	Height	Depth (Above Grade)				
		108 ft	27 ft	27 ft				

Permit/Registration # LM-682



CELL	Existing Manure Storage Facility Dimensions						Storage Capacity (days)	
	Width	Length	Depth	Height (Above Grade)	Slope (H:L)			
					Inside	Outside		
Primary	302 ft	278 ft	18 ft	4 ft	1:5	1:4	N/A	
Secondary	302 ft	261 ft	17 ft	3 ft	1:5	1:4	500 Combined	
Tertiary	N/A ft	N/A ft	N/A ft	N/A ft	N/A	N/A	N/A	
Circular Tank		Diameter	Height	Depth				
		N/A ft	N/A ft	N/A ft				

Permit/Registration # \_\_\_\_\_ LM-0714\_\_\_\_\_



If available, indicate the dimensions of any proposed manure storage facility (MSF) that will be used to store manure from the proposed project:

CELL	Proposed Manure Storage Facility Dimensions						Storage Capacity (days)	
	Width	Length	Depth	Height (Above Grade)	Slope (H:L)			
					Inside	Outside		
Primary	N/A ft	N/A ft	N/A ft	N/A ft	N/A	N/A	N/A	
Secondary	N/A ft	N/A ft	N/A ft	N/A ft	N/A	N/A	N/A	
Tertiary	302 ft	465 ft	15 ft	3 ft	4:1	4:1	450	
Circular Tank	Diameter	Height	Depth					
	N/A ft	N/A ft	N/A ft					

The construction, modification or expansion of any manure storage structure requires a permit from Manitoba Sustainable Development as per the *Livestock Manure and Mortalities Management Regulation (M.R. 42/98)*.





Mon 2018-03-12 9:41 AM

Friesen, Chris (SD) <Chris.Friesen@gov.mb.ca>

RE: Conservation Review

To  'Fairholme Hogbarn'

ⓘ You replied to this message on 2018-03-12 9:41 AM.

204-945-7747

[chris.friesen@gov.mb.ca](mailto:chris.friesen@gov.mb.ca)

<http://www.manitoba.ca/sd/cdc/>

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**From:** Fairholme Hogbarn [mailto:[hogs@fh.hbni.net](mailto:hogs@fh.hbni.net)]

**Sent:** March-12-18 9:40 AM

**To:** Friesen, Chris (SD) <[Chris.Friesen@gov.mb.ca](mailto:Chris.Friesen@gov.mb.ca)>

**Subject:** RE: Conservation Review

Good morning Chris,

I was just about to contact yourself in regards to this.

Due to technicalities we have decided to move the proposed area for the Confined animal facility. We are now submitting our proposal based on a different quarter section albeit only 500 meters away, but all the same, this puts it into a different quarter section.

To be thorough in this matter I think we need to look at this new location in regards to conservation concerns as well?

The new proposed legal land location is NW-26-9-8W1.

Can you please advise?

Thank you,

Christopher Maendel

em: [hogs@fh.hbni.net](mailto:hogs@fh.hbni.net)

Fairholme Colony

Box 550

R1N 3B9

Manitoba, CA

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**From:** Friesen, Chris (SD) <[Chris.Friesen@gov.mb.ca](mailto:Chris.Friesen@gov.mb.ca)>

**Sent:** March 12, 2018 9:28 AM

**To:** 'hogs@fh.hbni.net' <[hogs@fh.hbni.net](mailto:hogs@fh.hbni.net)>

**Subject:** RE: Conservation Review

Christopher

Thank you for your information request. I completed a search of the Manitoba Conservation Data Centre's rare species database and found no occurrences at this time for your area of interest.

The information provided in this letter is based on existing data known to the Manitoba Conservation Data Centre at the time of the request. These data are dependent on the research and observations of CDC staff and others who have shared their data, and reflect our current state of knowledge. **An absence of data in any particular geographic area does not necessarily mean that species or ecological communities of concern are not present;** in many areas, comprehensive surveys have never been completed. Therefore, this information should be regarded neither as a final statement on the occurrence of any species of concern, nor as a substitute for on-site surveys for species as part of environmental assessments.

Because the Manitoba CDC's Biotics database is continually updated and because information requests are evaluated by type of action, any given response is only appropriate for its respective request. Please contact the Manitoba CDC for an update on this natural heritage information if more than six months pass before it is utilized.

Third party requests for products wholly or partially derived from Biotics must be approved by the Manitoba CDC before information is released. Once approved, the primary user will identify the Manitoba CDC as data contributors on any map or publication using Biotics data, as follows as: Data developed by the Manitoba Conservation Data Centre; Wildlife & Fisheries Branch, Manitoba Sustainable Development.

**This letter is for information purposes only - it does not constitute consent or approval of the proposed project or activity, nor does it negate the need for any permits or approvals required by the Province of Manitoba.**

We would be interested in receiving a copy of the results of any field surveys that you may undertake, to update our database with the most current knowledge of the area.

If you have any questions or require further information please contact me directly at (204) 945-7747.

Chris Friesen  
Coordinator  
Manitoba Conservation Data Centre  
204-945-7747  
[chris.friesen@gov.mb.ca](mailto:chris.friesen@gov.mb.ca)  
<http://www.manitoba.ca/sd/cdc/>

---

**From:** [hogs@fh.hbni.net](mailto:hogs@fh.hbni.net) [mailto:[hogs@fh.hbni.net](mailto:hogs@fh.hbni.net)]

**Sent:** February-26-18 7:26 PM

**To:** Friesen, Chris (SD) <[Chris.Friesen@gov.mb.ca](mailto:Chris.Friesen@gov.mb.ca)>

**Subject:** Conservation Review

Good evening,

I received your contact info from Clay Socka @ Manitoba Agriculture.

We are in the process of completing a Technical Review in regards to a Confined Animal Facility. This operation is located on the Quarter NE-27-9-8W1 in the RM of Treherne - Norfolk.

We will need a Conservation Data Center Report in regards to this matter as part of our Technical Review.

Your help in this matter would be very much appreciated.

If you need any further information in regards to this, please contact myself. Email is usually the best method of communication.

Thanks,

Christopher Maendel

em: [hogs@fh.hbni.net](mailto:hogs@fh.hbni.net)

Fairholme Colony

Box 550

R1N 3B9

Manitoba, CA

## Tax Roll Numbers

# Water Requirement Calculation Table

Livestock	Number	IG/day per animal in winter	IG/day per animal in summer	IG/day (Imperial gallons per day)
<b>Beef/Dairy/Bison *</b>				
Feeder/heifer/steer (600 lb.)	355	5	9	3,195
Feeder (900 lb.)	93	7	12	1,116
Feeder (1250 lb.)	81	10	15	1,215
Cow/calf pair	346	12	15	5,190
Dry milking cow **		10	12	-
Lactating cow **		25	30	-
Bison		8	10	-
<b>Horses</b>				
Horses	10	8	11	110
<b>Hogs</b>				
Sow (Farrow/wean)	340	6.5		2,210
Dry Sow/Boar	1,260	4		5,040
Feeder	12,800	3		38,400
Nursery (33 lb.)	4,000	2		8,000
<b>Chickens</b>				
Broilers		0.035		-
Roasters/Pullets	12,500	0.04		500
Layers		0.055		-
Breeders		0.07		-
<b>Turkeys</b>				
Turkey Growers		0.13		-
Turkey Heavies	18,500	0.16		2,960
<b>Sheep/Goats</b>				
Sheep/Goats		2		-
Ewes/Does		3		-
Lambs/Kids (90 lb.)		1.6		-
***			<b>TOTAL (IG/day)</b>	<b>67,936</b>
***			<b>TOTAL with 10% wash water</b>	<b>74,730</b>

\*\*\* 10% of the total is added to allow for wash water

\* For beet, dairy, bison and horse enterprises:  
Use summer numbers if appropriate for the operation.  
Otherwise base projections on winter values.  
Always use the greater of the two values.

\*\* For intensive Dairy operations, please use the Dairy Barn Water Requirement Estimator found on separate sheet.

Enter this number on page 7 of Application Form.

Unit Conversions		
Total per day	Total per year	Unit
74,730	27,276,304	IG
308,837	112,725,525	litres
0.309	113	cubic decametres (dam <sup>3</sup> )

Enter this number on page 7 of Application Form.

Conversion Factor: 1 IGPM = 4.546 l/m

Report Number: C17249-10091  
Account Number: 00506

# A & L Canada Laboratories Inc.

2136 Jetstream Road, London, Ontario, N6V 3P5  
Telephone: (519) 457-2575 Fax: (519) 457-2664



To: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARRBERRY MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

For: FAIRHOLME COLONY FARMS LTD (BILLING  
(204) 834-3820  
(204) 834-3912  
Grower Code: 48233

Field: 15 Great divide west

SLJ-6-10-7-W1

Reported Date: Printed Date: Sep 8, 2017

## SOIL TEST REPORT

Sample Number	Legal Land Descpt:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm Bicarb	Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH	CEC Buffer meq/100g	Percent Base Saturations
1-A	48233	6	30328	2.9	32	60	425	4010	8.2	24.1	1.7 14.7 83.1 0.7
1-B	48233	12	30329					7200			
1-C	48233	24	30330					7200			

W

## SOIL FERTILITY GUIDELINES (lbs/ac)

Sample Number	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.  
A & L Canada Laboratories Inc. is accredited by the Standards Council of Canada for specific tests as listed on www.scc.ca and by the Canadian Association for Laboratory Accreditation as listed on www.calqa.ca

Results Authorized By:

Ian McLachlin, Vice President

Page: 1 / 1

Report Number: C17249-10090  
Account Number: 00506

# A & L Canada Laboratories Inc.

2136 Jetstream Road, London, Ontario, N6V 3P5  
Telephone: (519) 457-2575 Fax: (519) 457-2664



To: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

For: FAIRHOLME COLONY FARMS LTD (BILLING  
(204) 834-3820  
(204) 834-3912  
Grower Code: 48232

Field: 14 Great divide east  
*SE-6-10-7-W1*

## SOIL TEST REPORT

Reported Date: Printed Date: Sep 8, 2017

Sample Number	Legal Land Descpt:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm Bicarb	Potassium K ppm Bray-P1	Magnesium Mg ppm	Calcium Ca ppm	pH	Buffer pH meg/100g	CEC	Percent Base Saturations
1-A	48232	6	30325	4.0	33	55	142	450	5140	8.1	29.9	1.2 12.5 86.0
1-B	48232	12	30326					7200				0.4
1-C	48232	24	30327					7200				33

Sample Number	Sulfur ppm	Nitrate Nitrogen ppm	Zn Mn ppm	Fe Cu ppm	B Mo ppm	Mo Caco3 ppm	EC mmhos/cm	%P	Al ppm	%Al	K/Mg Ratio	GFI	NH4N ppm	Chloride Cl ppm	Na ppm
1-A	54	5	9.8	52	65	1.1	1.8	0.10	0.5	4	27	0.0	0.10	51	28
1-B	67	3					0.7		0.6						40
1-C	45	4					0.4		0.5						33

## SOIL FERTILITY GUIDELINES (lbs/ac)

Sample Number	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.  
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\* 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.

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Results Authorized By:

Ian McLachlin, Vice President

# A & L Canada Laboratories Inc.



Report Number: C17328-10095  
Account Number: 00506

To: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0  
Attr: PHIL PARKER  
204-834-3912

C17328-10095  
C17328-10095

For: FAIRHOLME COLONY FARMS LTD (BILLING  
(204) 834-3820  
(204) 834-3912  
Grower Code: 48252

Field: 36 Phyllis south

SE - 36 - 9 - 8 - W1

## SOIL TEST REPORT

Printed Date: Nov 28, 2017

Page: 1 / 2

Sample Number	Legal Land Descpt:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm Bicarb	Potassium ppm Bray-P1	Magnesium Mg ppm	Calcium Ca ppm	pH	Buffer meq/100g	CEC	Percent Base Saturations % Na
1-A	48252	6	82186	1.7	31	48	150	235	7.3	13.9	2.8	14.1 82.7
1-B	48252	12	82187					3000				0.6
1-C	48252	24	82188					7200				
1-A	48252	6	82189	3.4	19	36	85	485	4090	7.9	24.8	0.9 16.3 82.3
Sample Number	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	%P	Al ppm	K/Mg Ratio	NH4N ppm
1-A	20	6	3.7	55	82	0.5	0.3	0.10	0.3	4	71	0.0 0.20
1-B	28	8					0.4		0.4			18 20
1-C	42	4					0.3		0.5			21 23
1-A	69	9	3.6	37	64	0.5	1.3	0.10	0.5	3	22	0.0 0.06

## SOIL FERTILITY GUIDELINES (lbs/acre)

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

Recomendations 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.  
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.

Guarantee or warranty concerning crop performance is made by A & L.

A & L Canada Laboratories Inc. is accredited by the Standards Council of Canada for specific tests as listed on www.scc.ca and by the Canadian Association for Laboratory Accreditation as listed on www.calac.ca

Results Authorized By:

Ian McLachlin, Vice President

Page: 1 / 2

# A & L Canada laboratories Inc.



Report Number: C17328-10095  
Account Number: 00506

To: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

C17328-10095

For: FAIRHOLME COLONY FARMS LTD (BILLING  
(204) 834-3820  
(204) 834-3912  
Grower Code: 48252

2136 Jetstream Road, London, Ontario, N6V 3P5  
Telephone: (519) 457-2575 Fax: (519) 457-2664

Field: 36 Phyllis south  
*SE-36-9-8-w1*

## SOIL TEST REPORT

Printed Date: Nov 28, 2017

Page: 2 / 2

Sample Number	Legal Land Descript:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm Bicarb	Potassium K ppm Bray-P1	Magnesium Mg ppm	Calcium Ca ppm	pH	Buffer meq/100g	CEC	Percent Base Saturations % Mg % Ca % H % Na
1-B	48252	12	82190						7200			
1-C	48252	24	82191						7200			

Sample Number	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	EC	Al ppm	% Al	K/Mg Ratio	GFI	NH4N ppm	Na ppm
1-B	61	6				0.5	0.1		0.6					42	
1-C	40	4				0.5	0.1		0.5					27	

## SOIL FERTILITY GUIDELINES (lbs/ac)

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

Results 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.  
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.  
Guarantee or warranty concerning crop performance is made by A & L.  
A & L Canada Laboratories Inc. is accredited by the Standards Council of Canada for specific tests as listed on [www.scc.ca](http://www.scc.ca) and by the Canadian Association for Laboratory Accreditation as listed on [www.cal.ca](http://www.cal.ca).

Results Authorized By:

Ian McLachlin, Vice President

# A & L Canada Laboratories Inc.



Report Number: C17249-10089  
Account Number: 00506

To: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY MB R0K 0H0

Attn: PHIL PARKER  
204-834-3812

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

C17249-10089

For: FAIRHOLME COLONY FARMS LTD (BILLING

(204) 834-3820  
(204) 834-3912

Grower Code: 48231

Field: 13 Van Meer wes:  
**S-5-10-7-WI**

## SOIL TEST REPORT

Reported Date: Sep 8, 2017 Printed Date: Sep 8, 2017

Page: 1 / 1

Sample Number	Legal Land Descpt:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm Bicarb	Bray-P <sub>1</sub>	Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH	Buffer meq/100g	CEC	Percent Base Saturations % Na
A 48231		6	30322	4.0	17	22	123	955	7200	8.2	44.4	0.7	17.9 81.0 0.6
B 48231		12	30323						7200				
C 48231		24	30324						7200				

Sample Number	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> ppm	mmhos/cm	%P	Al ppm	%Al	K/Mg Ratio	NH4N ppm	Chloride Cl ppm	Na ppm
A 50	12	3.3	47	45	0.5	1.5	0.10	0.6	0.6	2	6	0.0	0.04	49	100	58
B 64	3					0.7		0.6								67
C 44	2					0.2		0.5								51

## SOIL FERTILITY GUIDELINES (lbs/ac)

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

These 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.  
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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.  
Guarantee or warranty concerning crop performance is made by A & L.

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Results Authorized By:

Ian McLachlin, Vice President

# A & L Canada Laboratories Inc.

Report ID: C17265-10213  
Account Number: 00506

To: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

For: FAIRHOLME COLONY FARMS LTD (BILLING)  
(204) 834-3820  
(204) 834-3912  
Grower Code: 163238

Field: 41 Henderson

SE - 33-8-8-w1

Printed Date: Sep 26, 2017

## SOIL TEST REPORT

Sample Number	Legal Land Descpt:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm	Potassium ppm	Magnesium ppm	Calcium ppm	pH Buffer meq/100g	CEC	Percent Base Saturations
Sample Number	Legal Land Descpt:	Depth	Lab Number	Bicarb	Bray-P1	K ppm	Mg ppm	Ca ppm	pH	Buffer meq/100g	% K % Mg % Ca % H % Na
1-A	163238	6	48033	2.5	16	23	77	510	2530	7.5	17.1
1-B	163238	12	48034						2700		1.2
1-C	163238	24	48035						4550		24.8
1-A	163238	6	48036	5.6	18	33	148	670	3350	7.6	73.9
Sample Number	Sample Number	Depth	Lab Number	B	Mo	EC	%P	Al ppm	K/Mg Ratio	GFI	NH4N ppm
1-A	14	3	2.9	57	64	0.5	0.10	0.2	2	68	0.0
1-B	13	10				0.4		0.3		0.05	44
1-C	9	3				0.2		0.3			10
1-A	144	32	5.5	36	82	0.6	0.10	0.8	3	46	0.0
Sample Number	Crop	Yield Goal	Lime Tons/Acre	N	P2O5	K2O	Mg	Ca	S	Zn	Mn Fe Cu B

Page: 1 / 3

## SOIL FERTILITY GUIDELINES (lbs/lac)

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

Tests 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.  
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.

Guarantee or warranty concerning crop performance is made by A & L.

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Results Authorized By:

Ian McLachlin, Vice President

# A & L Canada laboratories Inc.



Report Number: C17265-10213  
Account Number: 00506

To: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

C17265-10213

2136 Jetstream Road, London, Ontario, N5V 3P5

Telephone: (519) 457-2664

Field: 41 Henderson  
SE - 33-8-8-W1

For: FAIRHOLME COLONY FARMS LTD BILLING

(204) 834-3820

(204) 834-3912

Grower Code: 163238

## SOIL TEST REPORT

Printed Date: Sep 26, 2017

Page: 2 / 3

Sample Number	Legal Land Descript:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm Bicarb	Phosphorus - P ppm Bray-P1	Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH	CEC Buffer meq/l/100g	Percent Base Saturation % Mg % Ca % H % Na
1-B	163238	12	48037						4160			
1-C	163238	24	48038						7200			
1-A	163238	6	48039	3.8	24	33	159	655	4700	7.3	29.6	1.4 18.4 79.4 1.0
1-B	163238	12	48040						7200			
Sample Number	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	EC	Al ppm	% Al	K/Mg Ratio
1-B	54	19			0.5			0.6				
1-C	44	7			0.3			0.5				
1-A	66	4.8	51	54	0.5	1.2	0.10	0.8		3	11	0.0 0.08 51
1-B	38	24			0.8			0.6				

## SOIL FERTILITY GUIDELINES (lbs/acre)

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

Results 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.  
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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.  
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Results Authorized By:

Ian McLachlin, Vice President

# A & L Canada Laboratories Inc.



Report Number: C17265-10213  
Account Number: 00506

To: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

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

For: FAIRHOLME COLONY FARMS LTD (BILLING

(204) 834-3820  
(204) 834-3912  
Grower Code: 163238

Field: 41 Henderson

SE-33-8-8-W1

## SOIL TEST REPORT

Printed Date: Sep 26, 2017

Sample Number	Legal Land Descpt:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm	Potassium Bray-P1	Magnesium Ca/Mg ppm	Calcium Ca ppm	pH	CEC Buffer meq/100g	Percent Base Saturations % K	% Mg	% Ca	% H	% Na
1-C	163238	24	48041					7200							

## SOIL FERTILITY GUIDELINES (lbs/acre)

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

Results 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.  
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.

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A & L Canada Laboratories Inc. is accredited by the Standards Council of Canada for specific tests as listed on www.scc.ca and by the Canadian Association for Laboratory Accreditation as listed on www.cal.ca

Results Authorized By:

Ian McLachlin, Vice President

Page: 3 / 3

# A & L Canada Laboratories Inc.



Report Number: C17265-10212  
Account Number: 00506

To: AGRI-TREND AGROLOGY  
BCX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

2136 Jetstream Road, London, Ontario, N5V 3P5

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

For: FAIRHOLME COLONY FARMS LTD (BILLING

(204) 334-3820

(204) 334-3912

Grower Code: 48248

Field: 32 Haywood S new land

SW - 19-9-7-W1

## SOIL TEST REPORT

Printed Date: Sep 26, 2017

Page: 1 / 3

Sample Number	Legal Land Descpt:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm		Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH pH	Buffer mg/100g	CEC	Percent Base Saturation				
					Bicarb	Bray-P1							% Na	% K	% Mg	% Ca	
0000-1-A	48248	6	48024	3.7	15	25	46	595	5190	8.0	31.2	0.4	15.9	83.2	0.7		
0000-1-B	48248	12	48025						7200								
0000-1-C	48248	24	48026						7200								
0000-1-A	48248	6	48027	3.4	13	18	48	590	7200	8.0	41.1	0.3	12.0	87.6	0.3		
Sample Number	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	%P	EC	Al ppm	%Al	K/Mg Ratio	GFI	NH4N ppm	Chloride Cl ppm	Na ppm
0000-1-A	56	4	1.9	48	47	0.5	1.3	0.10	2.5	0.5	2	44	0.0	0.03	47	33	50
0000-1-B	67	4					0.4			0.6							55
0000-1-C	31	1					0.1			0.4							24
0000-1-A	32	6	1.9	37	48	0.3	0.9	0.10	3.2	0.5	1	13	0.0	0.03	48	27	29

## SOIL FERTILITY GUIDELINES (lbs/ac)

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

Results 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.  
Drop yield is influenced by a number of factors in addition to soil fertility.

Guarantee or warranty concerning crop performance is made by A & L.

A & L Canada Laboratories Inc. is accredited by the Standards Council of Canada for specific tests as listed on [www.scc.ca](http://www.scc.ca) and by the Canadian Association for Laboratory Accreditation as listed on [www.calqa.ca](http://www.calqa.ca)

Results Authorized By:

Ian McLachlin, Vice President

# A & L Canada Laboratories Inc.

Report No.: C17265-10212  
Account Number: 00506



To: AGRITREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

For: FAIRHOLME COLONY FARMS LTD (BILLING  
2136 Jetstream Road, London, Ontario N5V 3P5  
Telephone: (519) 457-2575 Fax: (519) 457-2664

Field: 32 Haywood S new land  
*SW - 19 - 9 - 7 - W1*

Printed Date: Sep 26, 2017

## SOIL TEST REPORT

Page: 2 / 3

Sample Number	Legal Land Descpt:	Lab Number	Depth	Organic Matter	Phosphorus - P ppm Bicarb	Bray-P1 K ppm	Potassium Mg ppm	Magnesium Ca ppm	Calcium Mg ppm	pH Buffer med/100g	CEC % K	Percent Base Saturation % Mg % Ca % H % Na		
0000-1-B 482448		12	48028							7200				
0000-1-C 482448		24	48029							7200				
0000-1-A 482448		6	48030	2.3	27	42	54	200	2280	7.1	14.6	0.9 11.4 78.0 8.9 0.7		
0000-1-B 482448		12	48031						2640					
Sample Number	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	EC	Al ppm	K/Mg Ratio	NH4N ppm	Chloride Cl ppm	Na ppm
0000-1-B	28	4			0.3				0.5					24
0000-1-C	20	2			0.1				0.4					21
0000-1-A	20	5	2.9	49	60	0.5	0.6	0.10	0.3	3	112	0.0	0.08	56
0000-1-B	34	9			0.3				0.4					32

## SOIL FERTILITY GUIDELINES (lbs/ac)

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

Results 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.  
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Results Authorized By:

Ian McLachlin, Vice President

# A & L Canada Laboratories Inc.



Report Number: C17265-10212

Account Number: 00506

C17265-10212

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

To: AGRITREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

For: FAIRHOLME COLONY FARMS LTD (BILLING  
(204) 834-3820  
(204) 834-3912  
Grower Code: 48248

## SOIL TEST REPORT

Printed Date: Sep 26, 2017

Page: 3 / 3

Sample Number	Legal Land Descpt:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm Bicarb	Potassium ppm Bray-P1	Magnesium ppm Mg ppm	Calcium ppm Ca ppm	pH pH	CEC Buffer med/100g	Percent Base Saturation % K % Mg % Ca % H % Na
0000-1-C 48248		24	48032								5910

Sample Number	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm <sup>2</sup>	EC	%P	Al ppm	%Al	K/Mg Ratio	GFI	NH4N ppm	Na ppm
0000-1-C 14	7						0.2		0.4							23

## SOIL FERTILITY GUIDELINES (lbs/ac)

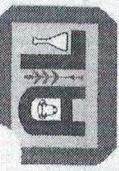
Sample Number	Crop	Yield Goal	Lime Tons/Acre	N	P2O5	K2O	Mg	Ca	S	Zn	Mn	Fe	Cu	B

Results 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.  
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 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.  
 A&L Canada Laboratories Inc. is accredited by the Standards Council of Canada for specific tests as listed on [www.scc.ca](http://www.scc.ca) and by the Canadian Association for Laboratory Accreditation as listed on [www.calac.ca](http://www.calac.ca).

Results Authorized By:

Ian McLachlin, Vice President

Canadian Association for Laboratory Accreditation



## A & L Canada Laboratories Inc.

REPORT NUMBER: C17265-10212  
ACCOUNT NUMBER: 005006

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

## REPORT OF ANALYSIS

TO: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0

FIELD: 32 Haywood S new land

DATE RECEIVED: 2017-09-22  
DATE REPORTED: 2017-09-26  
PAGE: 1 / 1

RE: Fairholme Colony Farms Ltd (Billing  
Account)  
(204) 834-3820  
(204) 834-3912

Attn: PHIL PARKER

AB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
3024	1.0000-1-A	Calcium Carbonate	2.5	%	Calcimeter
3027	2.0000-1-A	Calcium Carbonate	3.2	%	Calcimeter



C17265-10212

Results Authorized By:

A&L Canada is a laboratory accredited by Standards Council of Canada / CAEAL and OMAF

# A & L Canada Laboratories Inc.



Report Number: C17276-10496  
Account Number: 00506

To: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

C17276-10496

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

To: FAIRHOLME COLONY FARMS LTD (BILLING  
(204) 834-3820  
(204) 834-3912  
Grower Code: 48244

Field: 11 Mile piece N

NW-1-10-8-W1

## SOIL TEST REPORT

Reported Date: Printed Date: Oct 5, 2017

Sample Number	Legal Land Descpt:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm		Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH Buffer meq/100g	CEC	Percent Base Saturations					
					Bicarb	Bray-P1						% K	% Ca	% H	% Na		
1-A	48244	6	62059	1.5	25	38	139	185	1710	7.2	11.0	3.2	14.0	77.8	4.6	0.3	
1-B	48244	12	62060						1720								
1-C	48244	24	62061						3460								
1-A	48244	6	62062	2.5	20	31	128	370	4600	8.2	26.5	1.2	11.7	86.9	0.3		
Sample Number	Surfut Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	%P	EC	Al ppm	%AI	K/Mg Ratio	GFI	NH4N ppm	Chloride Cl ppm	Na ppm
1-A	7	3	5.1	27	56	0.7	0.1	0.10	0.2	3	94	0.0	0.23	68	8	8	
1-B	9	2					0.1		0.2								
1-C	10	2					0.1		0.2								
1-A	20	3	5.0	68	45	0.8	0.6	0.10	0.3	2	28	0.0	0.10	55	9	19	

## SOIL FERTILITY GUIDELINES (lbs/acre)

Sample Number	Crop	Yield Goal	Lime Tons/Acre	N P2O <sub>5</sub> K <sub>2</sub> O	Mg Ca S Zn Mn Fe Cu B	Soil Fertility Guidelines (lbs/acre)		
						Alum	Ammonium Sulfate	Ammonium Nitrate

lecs 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.  
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.  
Guarantee or warranty concerning crop performance is made by A & L.

A & L Canada Laboratories Inc. is accredited by the Standards Council of Canada for specific tests as listed on [www.scc.ca](http://www.scc.ca) and by the Canadian Association for Laboratory Accreditation as listed on [www.cal.ca.ca](http://www.cal.ca.ca)

Results Authorized By:

Ian McLachlin, Vice President

Page: 1 / 2

# A & L Canada Laboratories Inc.



Report .ber: C17276-10496  
Account Number: 00506

To: AGRITREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

C17276-10496

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

Attn: 111 Mile piece N  
NW - 1 - 10 - 8 - W1

Printed Date: Oct 5, 2017

## SOIL TEST REPORT

Page: 2 / 2

Sample Number	Legal Land Descpt:	Lab Number	Depth	Organic Matter	Phosphorous - P ppm	Potassium Bray-P1	Magnesium Mg ppm	Calcium Ca ppm	pH	CEC	Percent Base Saturation
1-B	48244	12	62063	Bicarb	K ppm				Buffer pH	meq/100g	% K % Mg % Ca % H % Na
1-C	48244	24	62064						7200		7200

Sample Number	Sulfur ppm	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	EC	Al ppm	% Al	K/Mg Ratio	GFI	NH4N ppm	Na ppm
1-B	29	3					0.3				0.5					33
1-C	34	2					0.1				0.5					40

## SOIL FERTILITY GUIDELINES (lbs/ac)

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

Results 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.  
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Results Authorized By:

Ian McLachlin, Vice President



# A & L Canada Laboratories Inc.



Report No: C17290-10264  
Account Number: 005006

To: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CABERRY, MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

C17290-10264

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

For: FAIRHOLME COLONY FARMS LTD (BILLING

(204) 834-3820  
(204) 834-3912

Grower Code: 83249

Field: 40 South Pasture  
*NW-11-9-8-W1*

## SOIL TEST REPORT

Printed Date: Oct 19, 2017

Sample Number	Legal Land Descpt:	Lab Number	Depth	Organic Matter	Phosphorus - P ppm Bicarb	Potassium K ppm Bray-P1	Magnesium Mg ppm	Calcium Ca ppm	pH	CEC meq/100g	Percent Base Saturations % Mg % K % Ca % H % Na
1-B	83249	12	86472						7200		
1-C	83249	24	86473						7200		

Sample Number	Sulfur ppm	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	%P	EC ppm	Al ppm	K/Mg Ratio	GFI	NH4N ppm	Na ppm
1-B	102	2						0.4		0.6						58
1-C	101	3						0.1		0.6						46

## SOIL FERTILITY GUIDELINES (lbs/ac)

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

These 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.  
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Guarantee or warranty concerning crop performance is made by A & L.

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Results Authorized By:

Ian McLachlin, Vice President

Page: 2 / 2

# A & L Canada Laboratories Inc.

Report Number: C17290-10263  
Account Number: 00506

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



C17290-10263

To: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3812

For: FAIRHOLME COLONY FARMS LTD (BILLING  
(204) 834-3820  
(204) 834-3912

Grower Code: 48242

S-14-9-8-W1

Reported Date: Printed Date: Oct 19, 2017

## SOIL TEST REPORT

Page: 1 / 2

Mpile imber	Legal Land Descpt:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm Bicarb	Potassium K ppm Bray-P1	Magnesium Mg ppm	Calcium Ca ppm	pH Buffer meq/100g	CEC	Percent Base Saturations % K % Mg % Ca % H % Na						
0000-1-A	48242	6	86461	2.5	10	15	76	515	7200	8.0	40.6 0.5 10.6 88.7 0.3						
0000-1-B	48242	12	86462						7200								
0000-1-C	48242	24	86463						7200								
0000-1-A	48242	6	86464	4.2	15	21	140	845	7200	7.9	43.5 0.8 16.2 82.7 0.5						
Mpile imber	Nitrate ppm	Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	%P cm	AI ppm	%Al ppm	K/Mg Ratio	GFI	NH4N ppm	Chloride Cl ppm	Na ppm
0000-1-A	37	4	2.0	36	43	0.3	0.8	0.10	0.5	1	8	0.0	0.05	47	35	32	
0000-1-B	56	2					0.5		0.5							48	
0000-1-C	46	1					0.2		0.5							39	
0000-1-A	157	3	3.4	38	63	0.3	1.7	0.10	0.7	2	8	0.0	0.05	50	37	47	

## SOIL FERTILITY GUIDELINES (lbs/ac)

Mpile imber	Crop	Yield Goal	Lime Tons/Acre	N	P2O5	K2O	Mg	Ca	S	Zn	Mn	Fe	Cu	B

Results 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.  
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Results Authorized By:

Ian McLachlin, Vice President

# A & L Canada Laboratories Inc.

Report # : C17290-10263  
Account Number: 00506

To: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

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



C17290-10263

For: FAIRHOLME COLONY FARMS LTD (BILLING

(204) 834-3820  
(204) 834-3912  
Grower Code: 48242

Field: 24 Johnny James

5-14-9-8-w1

## SOIL TEST REPORT

Printed Date: Oct 19, 2017

Sample Number	Legal Land Descpt:	Lab Number	Depth	Organic Matter	Phosphorus - P ppm	Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH	CEC	Percent Base Saturation
0000-1-B	48242	12	86465	Bicarb	Bray-P1						
0000-1-C	48242	24	86466								

Sample Number	Sulfur ppm	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	EC	Al ppm	% Al	K/Mg Ratio	GFI	NH4N ppm	Na ppm
0000-1-B	1185	3						1.0		1.5						73
0000-1-C	246	5						0.2		0.8						45

## SOIL FERTILITY GUIDELINES (lbs/acre)

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

Soil test results 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.  
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Page: 2 / 2

Results Authorized By:

Ian McLachlin, Vice President

# A & L Canada Laboratories Inc.



Report Number: C17328-10094  
Account Number: 00506

To: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

C17328-10094

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

For: FAIRHOLME COLONY FARMS LTD (BILLING  
(204) 834-3820  
(204) 834-3912  
Grower Code: 48245

Field: 30 Taylor

31-9-7-W1

## SOIL TEST REPORT

Printed Date:

Nov 28, 2017

Page: 1 / 2

Sample Number	Legal Land Descpt:	Depth	Lab Number	Organic Matter	Phosphorous - P ppm	Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH	Buffer mg/100g	CEC	Percent Base Saturation
1-A	48245	6	82180	2.8	30	59	154	655	5490	7.8	33.4	12 16.4 82.3 0.4
1-B	48245	12	82181						7200			
1-C	48245	24	82182						7200			
1-A	48245	6	82183	3.5	29	44	146	535	7200	7.7	40.9	0.9 10.9 88.0 0.3
Sample Number	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	%P	Al ppm	%AI	K/Mg Ratio
1-A	23	9	6.0	63	41	0.9	1.5	0.10	0.4	5	16	0.0 0.07 49
1-B	25	7					0.5		0.5			47 31
1-C	22	5					0.1		0.4			36
1-A	18	13	6.1	55	33	0.5	1.8	0.10	0.5	3	13	0.0 0.08 51

## SOIL FERTILITY GUIDELINES (lbs/ac)

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

Results 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.  
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A & L Canada Laboratories Inc. is accredited by the Standards Council of Canada for specific tests as listed on www.scc.ca and by the Canadian Association for Laboratory Accreditation as listed on www.cal.ca.ca

Results Authorized By:

Ian McLachlin, Vice President

# A & L Canada Laboratories Inc.



Report #ber:C17328-10094  
Account Number: 005006

2136 Jetstream Road, London, Ontario, N6V 3P5  
Telephone: (519) 457-2575 Fax: (519) 457-2664

To: AGRI-TREND AGRICULTURE  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

Field: 30 Taylor  
*31-9-7-w1*

For: FAIRHOLME COLONY FARMS LTD (BILLING

(204) 834-3820  
(204) 834-3912  
Grower Code: 48245

## SOIL TEST REPORT

Printed Date: Nov 28, 2017

Page: 2 / 2

Sample Number	Legal Land Descpt:	Depth	Lab Number	Organic Matter	Phosphorous - P ppm Bicarb	Potassium K ppm Bray-P1	Magnesium Mg ppm	Calcium Ca ppm	pH	CEC Buffer med/100g	Percent Base Saturations % K % Mg % Ca % H % Na
1-B	48245	12	82184						7200		
1-C	48245	24	82185						7200		

Sample Number	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	EC	Al ppm	K/Mg Ratio	GFI	NH4N ppm	Na ppm
1-B	23	13				1.0			0.5					34
1-C	25	9				0.1			0.5					33

## SOIL FERTILITY GUIDELINES (lbs/ac)

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

Results 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.  
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the results of this report relate to the sample submitted and analyzed.

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A & L Canada Laboratories Inc. is accredited by the Standards Council of Canada for specific tests as listed on [www.scc.ca](http://www.scc.ca) and by the Canadian Association for Laboratory Accreditation as listed on [www.cal.ca.ca](http://www.cal.ca.ca)

Results Authorized By: *[Signature]* Ian McLachlin, Vice President

Report Number: C17265-10214  
Account Number: 00506

# A & L Canada Laboratories Inc.

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

To: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

Sampled Date: Printed Date: Sep 26, 2017

## SOIL TEST REPORT

Page: 1 / 3

Sample Number	Legal Land Descpt:	Lab Number	Depth	Organic Matter	Phosphorus - P ppm	Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH	CEC meq/100g	% K	% Mg	% Ca	% H	% Na	
1-A	48243	6	48043	3.2	20	31	119	770	7200	7.9	42.8	0.7	15.0	84.1	0.4	
1-B	48243	12	48044						7200							
1-C	48243	24	48045						7200							
1-A	48243	6	48046	3.0	30	58	96	545	3760	8.0	23.7	1.0	19.2	79.4	0.7	
Sample Number	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	%P	Al ppm	%AI	K/Mg Ratio	GFI	NH4N ppm	Chloride Cl ppm	Na ppm
1-A	77	7	4.9	61	43	0.8	1.1	0.10	3.7	0.6	2	8	0.0	0.05	48	24
1-B	122	4														
1-C	112	1														
1-A	56	4	5.9	65	50	1.0	1.3	0.10	2.7	0.4	5	60	0.0	0.05	45	38
Sample Number	Crop	Yield Goal	Lime Tons/Acre	N	P2O5	K2O	Mg	Ca	S	Zn	Mn	Fe	Cu	B		

## SOIL FERTILITY GUIDELINES (lbs/ac)

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

These 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

A & L Canada Laboratories Inc. is accredited by the Standards Council of Canada for specific tests as listed on [www.scc.ca](http://www.scc.ca) and by the Canadian Association for Laboratory Accreditation as listed on [www.cal.ca](http://www.cal.ca)

Report Number: C17265-10214  
Account Number: 00506

# A & L Canada Laboratories Inc.



2136 Jetstream Road, London, Ontario, N5V 3P5  
Telephone: (519) 457-2864

To: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

For: FAIRHOLME COLONY FARMS LTD (BILLING  
(204) 834-3820  
(204) 834-3912  
Grower Code: 48243

Field: 25 Phyllis North  
**NE-36-9-8-W1**

Reported Date: Printed Date: Sep 26, 2017

## SOIL TEST REPORT

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 pH	CEC Buffer meq/100g	Percent Base Saturations % K % Mg % Ca % H % Na
1-B	48243	12	48047						4440		
1-C	48243	24	48048						5530		
1-A	48243	6	48049	3.3	28	54	174	395	4340	7.8	25.5 1.7 12.9 85.1 0.4
1-B	48243	12	48050						7200		
Sample Number	Sulfur ppm	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	%P	Al ppm %AI K/Mg Ratio GFI NH4N ppm Cl ppm Na ppm
1-B	79	3				0.7			0.5		42
1-C	45	1				0.3			0.4		35
1-A	67	5	6.2	69	42	0.9	1.3	0.10	2.5	0.5 4 36 0.0 0.13 55 18	23
1-B	182	4				0.5			0.8		39

## SOIL FERTILITY GUIDELINES (lbs/ac)

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

Recomendations 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.  
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Results Authorized By:   
Ian McLachlin, Vice President

Page: 2 / 3

Report .ber: C17265-10214  
Account Number: 00506

# A & L Canada Laboratories Inc.



To: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

Report Date: Printed Date: Sep 26, 2017  
For: FAIRHOLME COLONY FARMS LTD (BILLING  
(204) 834-3820  
(204) 834-3912  
Grower Code: 48243

Field: 25 Phyllis North

NE-36-9-8-W1

## SOIL TEST REPORT

Page: 3 / 3

Sample Number	Legal Land Descpt:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm	Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH	CEC	Percent Base Saturations
1-C	48243	24	48051	Bicarb	Bray-P1	7200					

Sample Number	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaC <sub>3</sub> mmhos/cm	%P	EC cm	AI ppm	K/Mg Ratio	GFI	NH4N ppm	Na ppm
1-C	155	1			0.3				0.7					54	

## SOIL FERTILITY GUIDELINES (lbs/acre)

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

Results 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.  
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Results Authorized By:

Ian McLachlin, Vice President



## A & L Canada Laboratories Inc.

REPORT NUMBER: C17265-10214  
ACCOUNT NUMBER: 00506

2136 Leestream Rd, London, Ontario, N6V 3P5  
Telephone: (519) 457-2575 Fax: (519) 457-2864

## REPORT OF ANALYSIS

TO: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0

FIELD: 25 Phyllis North  
*NE-36-9-8-W1*

RE: Fairholme Colony Farms Ltd (Billing  
Account)  
(204) 834-3820  
(204) 834-3912  
00506-A938287

Attn: PHIL PARKER

AB NO.	SAMPLE ID	ANALYSIS	RESULT	UNIT	METHOD
3043	1-1-A	Calcium Carbonate	3.7	%	Calcimeter
3046	2-1-A	Calcium Carbonate	2.7	%	Calcimeter
3049	3-1-A	Calcium Carbonate	2.5	%	Calcimeter



C17265-10214

Results Authorized By:

A&L Canada is a laboratory accredited by Standards Council of Canada / CAEAL and OMAF

# A & L Canada Laboratories Inc.



Report Number: C17276-10497  
Account Number: 00506

2136 Jetstream Road, London, Ontario, N6V 3P5  
Telephone: (519) 457-2664

To: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

For: FAIRHOLME COLONY FARMS LTD (BILLING  
(204) 834-3820  
(204) 834-3912  
Grower Code: 48249

Field: 33 Haywood N new land  
NW - 19 - 9 - 7 - W1

Field: 33 Haywood N new land

Reported Date: Printed Date: Oct 5, 2017

## SOIL TEST REPORT

Sample Number	Legal Land Descpt:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm Bray-P1 Bicarb	Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH	Buffer pH	me/100g	CEC	Percent Base Saturation					
1-A	48249	6	62065	3.6	12	18	71	450	4.700	7.9	27.5	0.7	13.7 85.6 0.3					
1-B	48249	12	62066															
1-C	48249	24	62067															
1-A	48249	6	62068	2.8	9	12	63	300	2300	7.0								
Sample Number	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	%P	EC	Al ppm	%AI	K/Mg Ratio	GFI	NH4N ppm	Chloride ppm	Na Cl ppm	ppm
1-A	32	2	2.9	49	47	0.6	0.9	0.10	0.4	1	43	0.0	0.05	46			10	19
1-B	646	2					0.5		1.1								20	
1-C	467	1					0.1		1.0								22	
1-A	54	3	1.7	33	43	0.7	0.3	0.10	0.4	1	81	0.0	0.07	61			10	15

## SOIL FERTILITY GUIDELINES (lbs/acre)

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

Results 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.  
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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.  
Guarantee or warranty concerning crop performance is made by A & L.

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Results Authorized By:

Ian McLachlin, Vice President

# A & L Canada Laboratories Inc.

Report No.: C17276-10497  
Account Number: 00506

To: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

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

For: FAIRHOLME COLONY FARMS LTD (BILLING  
(204) 834-3820  
(204) 834-3912  
Grower Code: 48249

Field: 33 Haywood N new land  
NW - 19 - 9 - 7 - W1

Reported Date: Printed Date: Oct 5, 2017

## SOIL TEST REPORT

Page: 2 / 2

Sample Number	Legal Land Descpt:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm Bicarb	Potassium K ppm Bray-P1	Magnesium Mg ppm	Calcium Ca ppm	pH Buffer meq/100g	CEC meq/100g	Percent Base Saturations % K % Mg % Ca % H % Na
1-B	48249	12	62069						3070		
1-C	48249	24	62070						7200		

Sample Number	Sulfur ppm	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	EC mmhos/cm	Al ppm	% Al	K/Mg Ratio	GFI	NH4N ppm	Na ppm
1-B	19	2						0.2			0.3					15
1-C	53	2						0.2			0.5					25

## SOIL FERTILITY GUIDELINES (lbs/ac)

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

CECs 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.  
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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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# A & L Canada Laboratories Inc.

Report #er: C17276-10495  
Account Number: 00506



To: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

C17276-10495  
C17276-10495

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

For: FAIRHOLME COLONY FARMS LTD (BILLING  
(204) 834-3820  
(204) 834-3912  
Grower Code: 88192

Field: philippe

NE - 25-9-8-W1

Reported Date: Printed Date: Oct 5, 2017

## SOIL TEST REPORT

Page: 1 / 2

Sample Number	Legal Land Descript:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm Bicarb	Potassium K ppm Bray-P1	Magnesium Mg ppm	Calcium Ca ppm	pH Buffer meg/100g	CEC % Mg	Percent Base Saturations % Ca	% H	% Na	
00000-1-A	88192	6	62052	1.4	27	48	85	130	1460	7.0	9.9	2.2	10.9	
00000-1-B	88192	12	62053						1710			73.7	12.9	
00000-1-C	88192	24	62054						7200				0.3	
00000-1-A	88192	6	62055	3.1	10	12	94	655	7200	8.3	41.7	0.6	13.1	
Sample Number	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	%P	Al ppm	%AI	K/Mg Ratio	NH4N ppm	Chloride Na Cl ppm
00000-1-A	7	2	1.8	63	95	0.5	0.1	0.10	0.2	30	204	0.0	0.20	73
00000-1-B	6	1												6
00000-1-C	20	2												7
00000-1-A	19	4	3.0	46	34	0.4	0.7	0.10	0.4	1	8	0.0	0.05	48
														11
														25

## SOIL FERTILITY GUIDELINES (lbs/ac)

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

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Guarantee or warranty concerning crop performance is made by A & L.

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Results Authorized By:

Ian McLachlin, Vice President

# A & L Canada Laboratories Inc.



Report Number: C17276-10495  
Account Number: 00506

To: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

C17276-10495

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

Printed Date: Oct 5, 2017

For: FAIRHOLME COLONY FARMS LTD (BILLING

(204) 834-3820  
(204) 834-3912  
Grower Code: 88192

Field: philippe

NE - 25-9-8-w1

## SOIL TEST REPORT

Page: 2 / 2

Sample Number	Legal Land Descript:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm Bicarb	Potassium K ppm Bray-P1	Magnesium Mg ppm	Calcium Ca ppm	pH	CEC Buffer meq/100g	Percent Base Saturations % K % Mg % Ca % H % Na
0000-1-B 88192		12	62056						7200		
0000-1-C 88192		24	62057						7200		

Sample Number	Sulfur ppm	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	%P	EC ppm	AI ppm	%AI	K/Mg Ratio	GFI	NH4N ppm	Na ppm
0000-1-B	22	3				0.3				0.4							21
0000-1-C	27	2				0.1				0.4							23

## SOIL FERTILITY GUIDELINES (lbs/ac)

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

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Crop performance is made by A & L.

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Results Authorized By:

Ian McLachlin, Vice President

# A & L Canada Laboratories Inc.



Report Number: C17290-10265  
Account Number: 00506

To: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

C17290-10265

For: FAIRHOLME COLONY FARMS LTD (BILLING  
(204) 834-3820  
(204) 834-3912

Grower Code: 108694

Field: 09 mile piece N  
**NE-1-10-8-W1**

Printed Date: Oct 19, 2017

## SOIL TEST REPORT

Page: 1 / 2

Sample Number	Legal Land Descpt:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm		Magnesium Mg ppm	Calcium Ca ppm	pH Buffer med/100g	CEC	Percent Base Saturations				
					Bicarb	Bray-P1					% K	% Mg	% Na		
1-A	108694	6	86474	2.6	30	61	180	530	4020	8.0	25.0	1.8	17.6	80.3	
1-B	108694	12	86475						7200					0.5	
1-C	108694	24	86476						7200						
1-A	108694	6	86477	2.0	38	80	202	260	1630	6.8	6.9	12.1	4.3	17.9	
													67.5	9.7	
													0.6		
Sample Number	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	EC	Al ppm	% Al	K/Mg Ratio	GFI	NH4N ppm	Chloride Cl ppm
1-A	20	3	8.0	85	52	1.0	0.8	0.10	0.3	5	41	0.0	0.10	52	16
1-B	37	3					0.5		0.5						28
1-C	35	1					0.2		0.5						63
1-A	11	6	5.2	65	83	0.7	0.3	0.10	0.2	8	177	0.0	0.24	79	51
															51
															17

## SOIL FERTILITY GUIDELINES (lbs/ac)

Sample Number	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

www.calab.ca

Report Number: C17290-10265  
Account Number: 00506

# A & L Canada Laboratories Inc.

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



To: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

For: FAIRHOLME COLONY FARMS LTD (BILLING  
(204) 834-3820  
(204) 834-3912  
Grower Code: 108694

Field: 09 mile piece N

NE-1-10-8-w1

Reported Date: Printed Date: Oct 19, 2017

## SOIL TEST REPORT

Sample Number	Legal Land Descpt:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm	Potassium ppm	Magnesium Mg ppm	Calcium Ca ppm	pH	CEC	Percent Base Saturations
1-B	108694	12	86478	Bicarb	Bray-P1	K ppm	Mg ppm	Ca ppm	pH	Buffer meq/100g	% Mg % Ca % H % Na
1-C	108694	24	86479						4.370		

Sample Number	Sulfur ppm	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	%P	EC	Al ppm	%Al	K/Mg Ratio	GFI	NH4N ppm	
1-B	22	5									0.4						35
1-C	12	3									0.2						33

## SOIL FERTILITY GUIDELINES (lbs/acre)

Sample Number	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

Page: 2 / 2

Report Number: C17303-10521  
Account Number: 00506

# A & L Canada Laboratories Inc.

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

To: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

For: FAIRHOLME COLONY FARMS LTD (BILLING  
(204) 834-3820  
(204) 834-3912  
Grower Code: 48240

Field: 22 Orchard west  
**NW-26-9-8-W1**

Reported Date: Printed Date: Nov 1, 2017

## SOIL TEST REPORT

Sample Number	Legal Land Descpt:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm Bray-P1 Bicarb	Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH Buffer	CEC meq/100g	% K % Mg % Ca % H % Na
1-A	48240	6	31943	1.4	63	178	122	140	2100	6.5	13.2
1-B	48240	12	31944					1410	6.9	2.4	8.8
1-C	48240	24	31945					810	6.9	79.3	8.9
1-A	48240	6	31946	1.5	50	101	48	70	870	7.4	0.6
Sample Number	Sulfur ppm	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	%P ppm	Al % Al
1-A	10	11	13.9	55	98	2.6	0.2	0.10	0.3	14	181
1-B	10	5				0.2	0.3	0.2	0.2	14	0.1
1-C	5	7				0.1	0.1	0.2	0.2	8	0.27
1-A	11	13	5.6	30	68	0.9	0.2	0.10	0.2	100	0.0
										60	0.21
										22	0.22
										16	

## SOIL FERTILITY GUIDELINES (lbs/acre)

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

Recoms 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.  
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A & L Canada Laboratories Inc. guarantees or warranty concerning crop performance is made by A & L.

A & L Canada Laboratories Inc. is accredited by the Standards Council of Canada for specific tests as listed on www.scc.ca

Results Authorized By:   
Ian McLachlin, Vice President

Accredited by the Canadian Association for Laboratory Accreditation as listed on www.cal.ca

Report Number: C17303-10521  
Account Number: 00506

# A & L Canada Laboratories Inc.

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



To: AGRI-TREND AGROLOGY  
BOX 741  
13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

For: FAIRHOLME COLONY FARMS LTD (BILLING  
(204) 834-3820  
(204) 834-3912  
Grower Code: 48240

Field: 22 Orchard west

NW - 26-9-8-W1

## SOIL TEST REPORT

Printed Date: Nov 1, 2017

Sample Number	Legal Land Descrip:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm Bray-P1 Bicarb	Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH Buffer meg/100g	CEC meq/100g	Percent Base Saturations % K % Mg % Ca % H % Na
1-B	48240	12	31947						1120		
1-C	48240	24	31948						2050		
1-A	48240	6	31949	3.1	46	107	91	265	2890	7.8	17.0
1-B	48240	12	31950						7200		84.8
Sample Number	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	%P	Al ppm	%Al
1-B	10	6			0.1		0.1		0.2		
1-C	9	8			0.1		0.1		0.2		
1-A	35	8	7.7	34	1.1	0.6	0.10		0.4	8	25
1-B	31	1			0.3		0.3		0.4		

## SOIL FERTILITY GUIDELINES (lbs/acre)

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

These guidelines 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.  
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Results Authorized By:   
Ian McLachlin, Vice President

Page: 2 / 3

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Grower Code: 48240

Field: 22 Orchard west

NW - 26 - 9 - 8 - W1

Reported Date: Printed Date: Nov 1, 2017

Sample Number	Legal Land Descrip:	Depth Number	Lab Number	Organic Matter	Phosphorus - P ppm Bicarb Bray-P1	Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH	CEC Buffer meq/100g	Percent Base Saturations % K % Mg % Ca % H % Na
1-C	48240	24	31951								

## SOIL TEST REPORT

Page: 3 / 3

Sample Number	Sulfur ppm	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	%P	EC	Al ppm	%AI	K/Mg Ratio	GFI	NH4N ppm	Na ppm
1-C	26	2				0.1				0.4							37

## SOIL FERTILITY GUIDELINES (lbs/ac)

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

Recomendations 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.  
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Ian McLachlin, Vice President  


Report #er: C17314-10405  
Account Number: 00506

# A & L Canada Laboratories Inc.



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To: AGRI-TREND AGROLOGY  
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13 ROBBIES DRIVE  
CARBERRY, MB R0K 0H0  
Attn: PHIL PARKER  
204-834-3912

For: FAIRHOLME

Grower Code: 48236

Field: 18  
S-35-9-8-W1

Reported Date: 2017-11-15 Printed Date: Nov 21, 2017

## SOIL TEST REPORT

Page: 1 / 3

Sample Number	Legal Land Descpt:	Depth	Lab Number	Organic Matter	Phosphorus - P ppm Bray-P1 Bicarb	Potassium K ppm	Magnesium Mg ppm	Calcium Ca ppm	pH	Buffer mg/100g	CEC	Percent Base Saturations % H % Ca % K % Mg
DNE 1-A	18	6	61957	0.8	37	78	96	175	1280	7.1	9.0	2.7 16.2 71.1 8.9
DNE 1-B	18	12	61958						1290			
DNE 1-C	18	24	61959						1710			
DNE 2-A	18	6	61960	2.8	18	32	80	965	7200	7.9	44.5	0.5 18.1 80.9 0.8
Sample Number	Sulfur ppm	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	%P	EC	Al ppm %AI K/Mg Ratio GFI NHAN ppm Chloride Na Cl ppm ppm
DNE 1-A	23	11	6.1	54	65	0.8	0.4	0.10	0.3	7	113	0.0 0.17 64 32 23
DNE 1-B	20	6				0.3			0.2			
DNE 1-C	15	4				0.2			0.2			
DNE 2-A	86	4	6.9	45	40	0.6	1.1	0.10	0.6	3	10	0.0 0.03 44 52 20

## SOIL FERTILITY GUIDELINES (lbs/acre)

Sample Number	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

Report Number: C17314-10405  
Account Number: 00506

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Attn: PHIL PARKER  
204-834-3912

For: FAIRHOLME

Grower Code: 48236

Field: 18  
*S-35-9-8-w1*

Report Date: 2017-11-15 Printed Date: Nov 21, 2017

## SOIL TEST REPORT

Page: 2 / 3

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 % Mg % K % Ca % H % Na					
DNE 2-B	18	12	61961						7200							
DNE 2-C	18	24	61962						7200	3.0						
DNE 3-A	18	6	61963	3.0	22	40	83	635	7200	7.8	41.7					
DNE 3-B	18	12	61964						7200	0.5	12.7 86.3 0.6					
Sample Number	Sulfur ppm	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	%P	Al ppm	K/Mg Ratio	GFI	NH4N ppm	Chloride Cl ppm	Na ppm
DNE 2-B	88	2							0.4	0.6						
DNE 2-C	88	1							0.2	0.6						
DNE 3-A	94	18	5.8	64	67	0.7	1.1	0.10		0.7	3	5	0.0	0.04	49	52
DNE 3-B	75	13						0.4		0.7						53

## SOIL FERTILITY GUIDELINES (lbs/acre)

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

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Results Authorized By: *[Signature]*

Ian McLachlin, Vice President

# A & L Canada Laboratories Inc.



Report Number: C17314-10405

Account Number: 005006

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For: FAIRHOLME  
Field: 18

Grower Code: 4B236

5-35-9-8-WJ

Report Date: 2017-11-15 Printed Date: Nov 21, 2017

## SOIL TEST REPORT

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 Buffer meq/100g	Percent Base Saturation % Mg % K % Ca % H % Na
DNE 3-C 18	DNE 3-C	24	61965									7200

Sample Number	Sulfur ppm	Nitrate Nitrogen ppm	Zn ppm	Mn ppm	Fe ppm	Cu ppm	B ppm	Mo ppm	CaCO <sub>3</sub> mmhos/cm	%P	Al ppm	K/Mg Ratio	GFI	NH4N ppm	Na ppm
DNE 3-C 61		9					0.2			0.6					35

## SOIL FERTILITY GUIDELINES (lbs/ac)

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

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