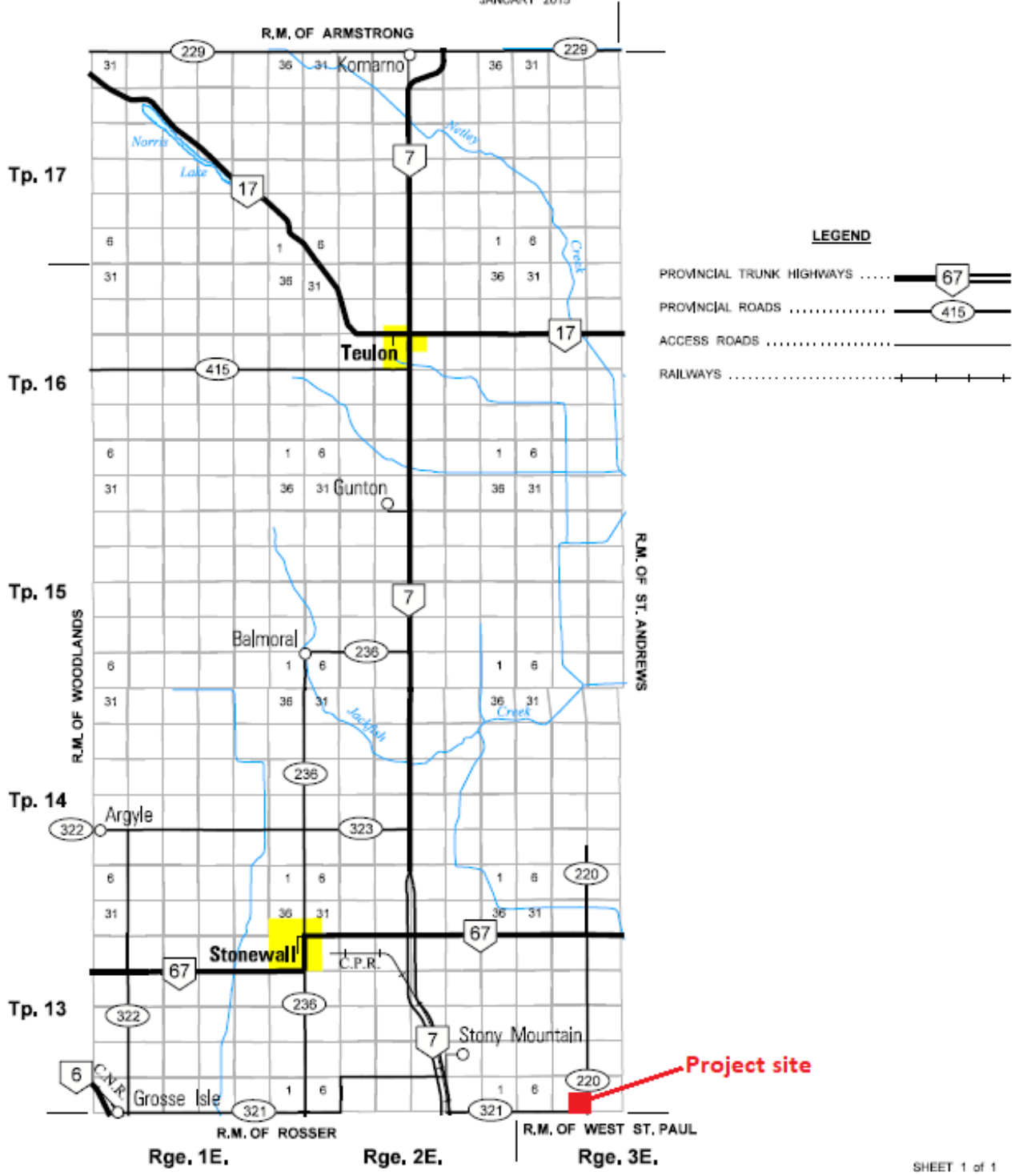
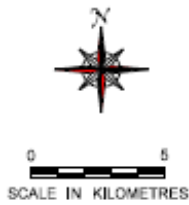


R.M. OF ROCKWOOD

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



LEGEND

- PROVINCIAL TRUNK HIGHWAYS
- PROVINCIAL ROADS
- ACCESS ROADS
- RAILWAYS

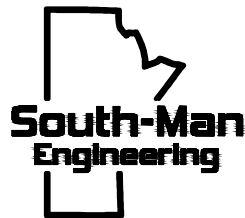


PROJECT NAME CANADA SHEEP & LAMB ROCKWOOD FARMS	BUILDING AREA N/A
SHEET TITLE SITE PLAN	DRAWN BY R. FLORES SOUTH-MAN ENGINEERING
DATE DRAWN SEPTEMBER 2017	DRAWING SCALE N.T.S.
THIS DRAWING IS THE PROPERTY OF SOUTH-MAN ENGINEERING, WINNIPEG, MANITOBA, CANADA.	
SHEET NUMBER SP-1	

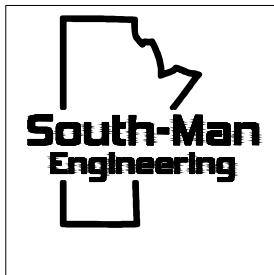


LEGEND:

- LO - LIVESTOCK OPERATIONS
- A - SPREAD FIELDS (AGREEMENT)
- R - RESIDENCE
- NR - NEAREST NEIGHBOR (APPROX 792')
- 3km NOTIFICATION AREA FOR THE PUBLIC CONDITIONAL USE HEARING



PROJECT NAME CANADA SHEEP & LAMB ROCKWOOD FARMS	BUILDING AREA N/A
SHEET TITLE LAND USE & SPREAD FIELD MAP	DRAWN BY R. FLORES SOUTH-MAN ENGINEERING
DATE DRAWN SEPTEMBER 2017	DRAWING SCALE N.T.S.
THIS DRAWING IS THE PROPERTY OF SOUTH-MAN ENGINEERING, WINNIPEG, MANITOBA, CANADA.	
SP-2	



PROJECT NAME CANADA SHEEP & LAMB ROCKWOOD FARMS	BUILDING AREA N/A
SHEET TITLE TRUCK HAUL ROUTE	DRAWN BY R. FLORES SOUTH-MAN ENGINEERING
DATE DRAWN SEPTEMBER 2017	DRAWING SCALE N.T.S.
THIS DRAWING IS THE PROPERTY OF SOUTH-MAN ENGINEERING, WINNIPEG, MANITOBA, CANADA.	
SP-3	



Desalegn Edossa
<desalegn.southmaneng@gmail.com>

Canada Sheep and Lamb - Rockwood

1 message

Friesen, Chris (SD) <Chris.Friesen@gov.mb.ca> Thu, Jun 8, 2017 at 9:07 AM
To: "desalegn.southmaneng@gmail.com" <desalegn.southmaneng@gmail.com>

Desalegn

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](tel:2049457747).

Chris Friesen
Coordinator
Manitoba Conservation Data Centre
[204-945-7747](tel:2049457747)
chris.friesen@gov.mb.ca
<http://www.manitoba.ca/conservation/cdc/>

-----Original Message-----

From:
Sent: May-30-17 3:15 PM
To: Friesen, Chris (SD)
Subject: WWW Form Submission

Below is the result of your feedback form. It was submitted by WWW Information Request () on Tuesday, May 30, 2017 at 15:15:10

DocumentID: Manitoba_Conservation

Project Title: Canada Sheep and Lamb - Rockwood

Date Needed: 2017/06/07

Name: Desalegn Edossa

Company/Organization: Soth-Man Engineering

Address: 15-1599 Dugald Rd

City: Winnipeg

Province/State: MB

Phone: (204) 6689652

Email: desalegn.southmaneng@gmail.com

Project Description: The information will be used to determine the impacts on species by a proposed livestock operation - production of 8,000 ewes (1,600 AU).

Information Requested: Would like to know if there are any species at risk or endangered in region that may be impacted by the proposed livestock operation.

Format Requested: Microsoft Word Document as email attachment.

Location: SE and NE of 5-13-3E in the RM of Rockwood

action: Submit

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 ¹	Current Animal Units	Proposed Number of Animals ²	Proposed Number of Animal Units
Dairy ³	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		-		-
	Backgrounder	0.5		-		-
	Summer pasture / replacement heifers	0.625		-		-
	Feeder cattle	0.769		-		-
Pigs	Sows - farrow to finish (234-254 lbs)	1.25		-		-
	Sows - farrow to weaning (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		-		-
	Broiler breeder pullets	0.0033		-		-
	Broiler breeder hens	0.01		-		-
Turkeys	Broilers	0.01		-		-
	Heavy Toms	0.02		-		-
	Heavy Hens	0.01		-		-
Horses	Mares	1.333		-		-
Sheep	Ewes	0.2		-		-
	Feeder lambs	0.063		-		-
Other Livestock	Type:			-		-
	Type:			-		-
Total Current:				-	Total Proposed:	-

Footnotes:

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

² Enter the total number of animals associated with the operation post construction or expansion.

³ 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.](#)



Alternate estimate of animal units (AU) for ewes:

The following conversion factors were used in consultation with MAFRD:

6 ewes = 1 AU

11 replacement ewes = 1 AU

Livestock	Existing		Proposed	
	Animal #	AU	Animal #	AU
Ewes			8000	1333
Rams				
Lambs				
Replacement ewes (Avg wt 45 kg, 11 hd/AU)	2000	182	0	0
Total		182		1333

Pig/Operation Type	Storage Type	Volatilization	Animal Numbers (Places)	Weight In (lb)
Gestating Sow	Liquid Uncovered Earthen	30%		447
Nursing Sow	Liquid Uncovered Earthen	30%		539
Nursing Litter	Liquid Uncovered Earthen	30%		3.1
Live Cull Sow	Liquid Uncovered Earthen	30%		630
Bred Gilt	Liquid Uncovered Earthen	30%		340
Gilts (Purchased)	Liquid Uncovered Earthen	30%		290
Boars (Purchased)	Liquid Uncovered Earthen	30%		270
Weanlings	Liquid Uncovered Earthen	30%		13.6
Growers/Finishers	Liquid Uncovered Earthen	30%		61.6
Sows, farrow to 6.2 kg	Liquid Uncovered Earthen	30%		n/a
Sows, farrow to 28 kg	Liquid Uncovered Earthen	30%		n/a
Sows, farrow to finish	Liquid Uncovered Earthen	30%		n/a

Last Revised April 13, 2016

Weight Out (lb)	Average Animal Wt (lb)	Days on Feed per Cycle (days)	Number of Cycles for the Place per Year (days)	Feed Consumed Per Pig Per Day (kg/day)	Protein %	N Excreted Per Herd Adjusted for Storage N (lb/yr/herd)	Phosphorus Content of Feed (DM) %	P2O5 Excreted Per Herd Per Year (lb/yr/herd)
630	539	121	3	2.3	14%	0	0.53%	0
539	539	21	15.2	6.5	20%	0	0.63%	0
13.6	8	21	15.2	0	n/a	0	n/a	0
630	630	14	26.1	2.3	14%	0	0.46%	0
447	394	121	3	2.3	14%	0	0.53%	0
340	315	28	13.0	3.2	16%	0	0.46%	0
660	465	365	1	2.5	14%	0	0.46%	0
61.6	38	52	6.9	0.7	20%	0	0.64%	0
280	171	112	3	2.8	16%	0	0.46%	0
n/a	n/a	365	1	n/a	n/a	0	n/a	0
n/a	n/a	365	1	n/a	n/a	0	n/a	0
n/a	n/a	365	1	n/a	n/a	0	n/a	0

Species	Type	Storage Type	Volatilization	Animal Numbers	Weight In (lb)
Cow Calf	Mature Cows (>2 years old)	Field Storage	40%	0	1375
Cow Calf	Bred Heifer (14 mo - 2 years)	Field Storage	40%	0	926
Cow Calf	Replacement Heifers (7 mo-14 mo)	Field Storage	40%	0	581
Cow Calf	Unweaned Calves (0-7 mo)	Field Storage	40%	0	86
Cow Calf	Bulls	Field Storage	40%	0	2100
Cow Calf	Mature Cows and Bred Heifers, plus associated livestock	Field Storage	40%	0	n/a
Feeder	Feedlot Cattle - long keep	Field Storage	40%	0	581
Feeder	Feedlot Cattle - short keep	Field Storage	40%	0	975
Feeder	Backgrounders - pasture	Field Storage	40%	0	793
Feeder	Backgrounders - confined	Field Storage	40%	0	500

Last Revised January 21, 2015

Weight Out (lb)	Average Animal Wt (lb)	Days per Cycle (Days)	Cycles per Year	Rate of Gain (lb/day)	Days Place is Occupied per Year (days)	N Excreted Per Herd Adjusted for Storage N Loss (lb N/yr/herd)	P2O5 Excreted Per Herd Per Year (lb P2O5/year)
1375	1375	365	1.0		365	0.0	0.0
1238	1082	280	1.0	1.42	280	0.0	0.0
926	754	225	1.0	1.53	225	0.0	0.0
581	334	210	1.0	2.35	210	0.0	0.0
2200	2150	365	1.0		365	0.0	0.0
n/a	n/a	n/a	n/a	n/a	n/a	0.0	0.0
1300	941	240	1.0	2.99	240	0.0	0.0
1300	1138	116	1.0	2.80	116	0.0	0.0
975	884	105	1.0	1.73	105	0.0	0.0
793	647	180	1.0	1.62	180	0.0	0.0

Type	Storage Type	Volatilization	Animal Numbers
Lactating Cows	Liquid Uncovered Earthen	30%	0
Dry Cows	Liquid Uncovered Earthen	30%	0
Calves, 0-3 months	Liquid Uncovered Earthen	30%	0
Calves, 4-13 months	Liquid Uncovered Earthen	30%	0
Replacements, >13 months	Liquid Uncovered Earthen	30%	0
Mature Cows, plus associated livestock	Liquid Uncovered Earthen	30%	0

Last revised August 20, 2014

Sheep/Operation Type	Storage Type	Volatilization	Animal Numbers	Weight In	Weight Out	Ave Weight	Days on Feed	Cycles per Year	N Excreted per Flock adjusted for Loss lb/flock/yr	P205 Excreted Per Flock lb/flock/yr
				lb	lb	lb				
Ewes	Field Storage	40%	8000	120	170	145	365	1	114297	67859
Replacement Ewes	Field Storage	40%	0	45	80	63	210	1	0	0
Rams	Field Storage	40%	100	100	200	150	365	1	1478	877
Lambs	Field Storage	40%	4558	8	45	27	70	1.4	3195	1897
Ewes, plus assoc livestock	Field Storage	40%		n/a	n/a	n/a	n/a	n/a	0	0
Feeder	Field Storage	40%	0	45	100	73	365	1	0	0

Species / Commodity	Type of Operation	Storage Type	Volatilization
Chickens	Broilers	Field Storage	40%
Chickens	Broiler Breeder Pullets	Field Storage	40%
Chickens	Broiler Breeder Hens	Field Storage	40%
Eggs	Layer Pullets	Liquid Covered	10%
Eggs	Layer Hens	Liquid Covered	10%
Eggs	Breeder Pullets	Liquid Covered	10%
Eggs	Breeder Hens	Liquid Covered	10%
Turkey	Broiler Hens (0-9 wks)	Field Storage	40%
Turkey	Hens (0-11 wks)	Field Storage	40%
Turkey	Heavy Hens (0-14 wks)	Field Storage	40%
Turkey	Light Toms (0-12 wks)	Field Storage	40%
Turkey	Toms (0-13 wks)	Field Storage	40%
Turkey	Heavy Toms (0-15 wks)	Field Storage	40%
Turkey	Breeding Hen Growers (0-30 wks)	Field Storage	40%
Turkey	Breeding Hens (30-60 wks)	Field Storage	40%
Turkey	Breeding Tom Grower (0-18 wks)	Field Storage	40%
Turkey	Breeding Tom Grower (0-30 wks)	Field Storage	40%
Turkey	Breeding Tom (30-60 wks)	Field Storage	40%

Bird Places	Weight In (lb)	Weight Out (lb)	Average Weight (lb)	Days on Feed	Cycles per Year	N Excreted Adjusted for N Loss lb/flock/yr	P2O5 Excreted lb/flock/yr
0	0.05	4.36	2.20	33	7.4	0	0
0	0.05	4.40	2.23	140	2	0	0
0	4.40	8.67	6.53	273	1	0	0
0	0.05	3.04	1.54	133	2	0	0
0	3.03	3.74	3.38	355	1	0	0
0	0.05	3.04	1.54	133	2	0	0
0	3.03	3.74	3.38	351	1	0	0
0	0.06	12.39	6.22	63	4	0	0
0	0.06	16.46	8.26	77	3.5	0	0
0	0.06	21.19	10.62	98	3	0	0
0	0.06	21.19	10.62	84	3	0	0
0	0.06	26.84	13.45	91	3	0	0
0	0.06	30.29	15.18	105	2.5	0	0
0	0.06	26.95	13.51	210	1	0	0
0	26.95	24.95	25.95	210	1	0	0
0	0.06	33.92	16.99	126	2	0	0
0	0.06	50.89	25.47	210	1	0	0
0	50.89	61.86	56.38	210	1	0	0

Crop	Removal		Uptake		Yield	Units	Acreage	Removal		Uptake
	P2O5	N	N	Units				(lb)	N	N
Alfalfa	13.8	58	58	lb/ton	2.366	ton/ac	736	24031	101000	101000
Barley Grain	0.42	0.97	1.39	lb/bu		bu/ac		-	-	-
Barley Silage	11.8	34.4	34.4	lb/ton		ton/ac		-	-	-
Canola	1.04	1.93	3.19	lb/bu		bu/ac		-	-	-
Corn Grain	0.44	0.97	1.53	lb/bu		bu/ac		-	-	-
Corn Silage	12.7	31.2	31.2	lb/ton	3.96	tons/ac	245	12322	30270	30270
Dry Edible Beans	1.39	4.17		lb/cwt		cwt/ac		-	-	-
Fababeans	1.79	5.02	8.4	lb/cwt		cwt/ac		-	-	-
Flax	0.65	2.13	2.88	lb/bu		bu/ac		-	-	-
Grass Hay	10	34.2	34.2	lb/ton		tons/ac		-	-	-
Lentils	1.03	3.39	5.08	lb/cwt		cwt/ac		-	-	-
Oats	0.26	0.62	1.07	lb/bu		bu/ac		-	-	-
Pasture (grazed)	10	34.2	34.2	lb/ton	0.5	ton/ac		-	-	-
Peas	0.69	2.34	3.06	lb/bu		bu/ac		-	-	-
Potatoes	0.09	0.32	0.57	lb/cwt		cwt/ac		-	-	-
Rye	0.45	1.06	1.67	lb/bu		bu/ac		-	-	-
Soybeans	0.84	3.87	5.2	lb/bu		bu/ac		-	-	-
Sunflower	1.1	2.8		lb/cwt		cwt/ac		-	-	-
Wheat - Spring	0.59	1.5	2.11	lb/bu		bu/ac		-	-	-
Wheat - Winter	0.51	1.04	1.35	lb/bu		bu/ac		-	-	-
Sub Total							981	36353	131270	131270
Estimated Average Removal/Uptake (lb/ac)								37.1	133.8	133.8
Additional Acres										
Crop Planned on Additional Acres										
Total Acreage							981			

Note: Additional acres include acres for which crop removal or soil data is limited or unavailable.

Last revised August 20, 2014

Species	Animal Category/Operation type	N	P2O5
		(lb/year)	(lb/year)
Pigs	Gestating Sow	0	0
	Nursing Sow	0	0
	Nursing Litter	0	0
	Live Cull Sows	0	0
	Bred Gilts	0	0
	Gilts	0	0
	Boars	0	0
	Weanlings	0	0
	Growers/finishers	0	0
	Sows, farrow to 5 kg	0	0
	Sows, farrow to 23 kg	0	0
	Sows, farrow to finish	0	0
Beef	Mature Cows (>2 years old)	0	0
	Bred Heifer (14 mo - 2 years)	0	0
	Replacement Heifers (7 mo-14 mo)	0	0
	Unweaned Calves (0-7 mo)	0	0
	Bulls	0	0
	Mature Cows and Bred Heifers, plus associated livestock	0	0
	Feedlot Cattle - long keep	0	0
	Feedlot Cattle - short keep	0	0
	Backgrounders - pasture	0	0
	Backgrounders - confined	0	0
	Dairy	Lactating cow	0
Dry cow		0	0
Calf, 0-3 months		0	0
Calf, 4-13 months		0	0
Replacements, >13 months		0	0
Mature Cows, plus assoc livestock		0	0
Sheep	Ewes	114297	67859
	Replacement Ewes	0	0
	Rams	1478	877
	Lambs	3195	1897
	Ewes, plus assoc livestock	0	0
	Feeder	0	0
Chickens	Broilers	0	0
	Broiler Breeder Pullets	0	0
	Broiler Breeder Hens	0	0
Layers	Layer Pullets	0	0
	Layer Hens	0	0
	Breeder Pullets	0	0
	Breeder Hens	0	0
Turkeys	Broiler Hens (0-9 wks)	0	0
	Hens (0-11 wks)	0	0
	Heavy Hens (0-14 wks)	0	0
	Light Toms (0-12 wks)	0	0
	Toms (0-13 wks)	0	0
	Heavy Toms (0-15 wks)	0	0
	Breeding Hen Growers (0-30 wks)	0	0
	Breeding Hens (30-60 wks)	0	0
	Breeding Tom Grower (0-18 wks)	0	0
	Breeding Tom Grower (0-30 wks)	0	0
	Breeding Tom (30-60 wks)	0	0
Total	118971	70633	

Note: Be sure all livestock species on your farm are represented in this table, not just the livestock in the proposed expansion.

Nutrients Excreted		lbs
Nitrogen		118971
P2O5		70633
Crop Nutrient Use		lb/ac
Nitrogen Uptake		133.8
P2O5 Removal		37.1
Land Base Requirements		acres
Acres for Nitrogen Uptake		889
Acres for 2 x P2O5 Removal		953
Acres for 1 x P2O5 Removal		1906

Animal Type (A)	Animal Sub-type (B)	Daily Manure Production				Production Period ² (Days) (G)	Number of Animals ³ (Capacity) (H)	Total Manure Volume (ft ³) (F x G x H)	Total Manure Volume for Semi-Solid and Liquid Manure (Imp Gal)	
		References (C)	Manure Type (D)	Default Manure Production (ft ³ /animal/day) (E)	Operation Manure Production ¹ (ft ³ /animal/day) (F)					
Dairy (milking cows ⁴ and associated livestock)	Free Stall	Table 6, pg 59, FPGs for Dairy 1995	Semi-Solid ⁵	3.5				-	0.0	
			Solid	3.4				-		
			Liquid ⁵	3.5				-	0.0	
	Tie Stall		Semi-Solid ⁵	3.6					-	0.0
			Solid	3.5					-	
			Liquid ⁵	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				-		
	Backgrounder (200 day)		Solid	0.73				-		
	Summer pasture / replacement heifers		Solid	0.85				-		
	Feeder cattle		Solid	1.1				-		
Pigs	Sows - farrow to finish (234 - 254 lbs)	MAFRI website, FPGs for Pigs 2007	Liquid	2.3				-	0.0	
	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 ² (Days)	Number of Birds ³ (Capacity)	Total Manure Volume (ft ³) (F/365xGxH)	Total Manure Volume for Semi-Solid and Liquid Manure (Imp Gal)		
			Default Manure Production (ft ³ /year/bird space)	Operation Manure Production ¹ (ft ³ /year/bird space)						
Chickens	Broilers – floor ⁶	Table 3, pg 85, FPGs for Poultry 2000		1.23				-		
	Broiler breeder hens ⁷			2.3				-		
	Broiler breeder pullets ⁶			0.99				-		
	Roasters – floor ⁶			1.16				-		
	Layers – cage ⁸			2.33				-	0.0	
	Layers – floor ⁷			1.68				-		
	Layers – solid pack ⁹							-		
	Pullets – cage ⁸			0.71				-	0.0	
	Pullets – floor ⁶			0.75				-		
	Pullets – solid pack ⁹							-		
Turkeys	Broilers ⁶	Table 3, pg 85, FPGs for Poultry 2000		2.83				-		
	Heavy toms ⁶			5.58				-		
	Heavy hens ⁶			3.32				-		

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:

- ¹ ENTER the manure production estimate for your operation. If no estimate is available, use the default value provided in column E. References for default daily and yearly manure production are provided in column C.
- ² 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 300 days.
- ³ ENTER the total number of animals or birds that the operation can hold (e.g. barn or feedlot capacity).
- ⁴ Milking cows includes all lactating and dry cows.
- ⁵ Default manure production estimates for semi-solid and liquid dairy manure include manure and washwater from the milking parlour.
- ⁶ 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/ft³
- ⁷ One-third litter floor, two-thirds slatted floor. Manure and litter removed from barn at 40% moisture content, with a density of 25 lb/ft³
- ⁸ Manure removed from barn at 90% moisture content with a density of 59 lb/ft³
- ⁹ Poultry operations using litter (solid pack) must provide an estimate of yearly manure production

This spread sheet does not account for sheep. Based on historical manure handlings, the annual manure production (feces and straw) is estimated to be 0.95 tons/ewe.

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.

MANURE APPLICATION FIELD CHARACTERISTICS TABLE

Field	A Legal Description	B Rural Municipality	C O/C/L/ A	D Total Acreage	E Setbacks, including features	F Net Acreage for Manure Application	G Agriculture Capability Class and Subclass	H Soil Phosphorus (ppm Olsen P) 0-6 inches	I Development Plan Designation	J Zoning
1	S1/2 4-13-3E	Rockwood	A	260	No feature	260	4N; 3N		BYLAW NO. 03/10: A	BYLAW NO. 17/09: AG
2	NE 1-13-2E	Rockwood	A	160	3m: Property line and watercourse	150	3N; 4N; 3NW		BYLAW NO. 03/10: A	BYLAW NO. 17/09: AG
3	N1/2 31-12-3E	West St. Paul	A	240	No feature	240	3NW; 3N		BYLAW NO. 122: AGRICULTURAL AREA 1	BYLAW NO. 2/99P: A80
4	SE 31-12-3E	West St. Paul	A	160	3m: Property line and water	150	3NW-3N		BYLAW NO. 122: AGRICULTURAL AREA 1	BYLAW NO. 2/99P: A80
5	N & S of W1/2 & E1/2 OF 20-13-3E	Rockwood	A	400	3m: Property line and water	392	3NW		BYLAW NO. 03/10: A	BYLAW NO. 17/09: AG
6	SE 24-13-3E	St. Andrews	A	135	3m: Property line, shrubs and residence	105	2W-3W		BYLAW NO. 190/08	BYLAW NO. 4066: A80
7	W1/2 19-13-3E	Rockwood	A	135	No feature	135	3NW		BYLAW NO. 03/10: A	BYLAW NO. 17/09: AG
8	SE 6-13-3E	Rockwood	A	80	No feature	80	4N		BYLAW NO. 03/10: A	BYLAW NO. 17/09: AG
9	NE 30-12-3E	West St. Paul	A	80	3m: Property line; water and shrubs	67	3NW		BYLAW NO. 122: AGRICULTURAL AREA 1	BYLAW NO. 2/99P: A80
10	ALL OF 17-13-3E	Rockwood	A	600	No feature	600	3NW; 4N-3W		BYLAW NO. 03/10: A	BYLAW NO. 17/09: AG
11	N1/2 18-13-3E	Rockwood	A	320	3m: Property line and shrubs	296	3NW		BYLAW NO. 03/10: A	BYLAW NO. 17/09: AG
12	SE 18-13-3E	Rockwood	A	80	3m: Property line	79	3NW		BYLAW NO. 03/10: A	BYLAW NO. 17/09: AG
13	NE 5-13-3E	Rockwood	A	70	No feature	70	4N		BYLAW NO. 03/10: A	BYLAW NO. 17/09: AG
14										
15										
16										
17										
18										
19										
20										

Total Net Acreage for Manure Application: 2,624

Alternate lands without soil test results

- 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).

MANURE APPLICATION FIELD CHARACTERISTICS TABLE

Field	A Legal Description	B Rural Municipality	C O/C/L/ A	D Total Acreage	E Setbacks, including features	F Net Acreage for Manure Application	G Agriculture Capability Class and Subclass	H Soil Phosphorus (ppm Olsen P) 0-6 inches	I Development Plan Designation	J Zoning
1	S1/2 of NW 5-13-3E	Rockwood	A	80	3m: Property line	78	4N	6	BYLAW NO. 03/10: A	BYLAW NO. 17/09: AG
2	S1/2 of SW 9-13-3E	Rockwood	A	80	3m: Property line and residence	78	3N; 4N; 2W	13	BYLAW NO. 03/10: A	BYLAW NO. 17/09: AG
3	SE 21-13-3E	Rockwood	A	160	3m: Property line	158	3NW	23	BYLAW NO. 03/10: A	BYLAW NO. 17/09: AG
4	N1/2 of NW 6-13-3E	Rockwood	A	85	3m: Property line and residence	83	4N	4	BYLAW NO. 03/10: A	BYLAW NO. 17/09: AG
5	NE 28-13-3E	Rockwood	A	152	3m: Property line and roadside ditch	150	3NW; 3N-5N-3N	33	BYLAW NO. 03/10: A	BYLAW NO. 17/09: AG
6	S1/2 of NW 32-12-3E	West St. Paul	A	80	3m: Property line and roadside ditch	78	2W	25	BYLAW NO. 122: AGRICULTURAL AREA 1	BYLAW NO. 2/99P: A80
7	SW 32-12-3E	West St. Paul	A	140	3m: Property line and residence	138	2W	16	BYLAW NO. 122: AGRICULTURAL AREA 1	BYLAW NO. 2/99P: A80
8	SW 33-12-3E	West St. Paul	A	155	3m: Property line and roadside ditch	153	2W; 3W	17	BYLAW NO. 122: AGRICULTURAL AREA 1	BYLAW NO. 2/99P: A80
9	S1/2 of SE 5-13-3E	Rockwood	A	65	3m: Property line	65	3N; 4N	4	BYLAW NO. 03/10: A	BYLAW NO. 17/09: AG
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

Total Net Acreage for Manure Application: 981

- 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).

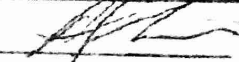
MANURE APPLICATION FIELD CHARACTERISTICS TABLE


Field	A Legal Description	B Rural Municipality	C O/C/L/ A	D Total Acreage	E Setbacks, including features	F Net Acreage for Manure Application	G Agriculture Capability Class and Subclass	H Soil Phosphorus (ppm Olsen P) 0-6 inches	I Development Plan Designation	J Zoning
1	S1/2 of NW 5-13-3E	Rockwood	A	80	3m: Property line	78	4N	6	BYLAW NO. 03/10: A	BYLAW NO. 17/09: AG
2	S1/2 of SW 9-13-3E	Rockwood	A	80	3m: Property line and residence	78	3N; 4N; 2W	13	BYLAW NO. 03/10: A	BYLAW NO. 17/09: AG
3	SE 21-13-3E	Rockwood	A	160	3m: Property line	158	3NW	23	BYLAW NO. 03/10: A	BYLAW NO. 17/09: AG
4	N1/2 of NW 6-13-3E	Rockwood	A	85	3m: Property line and residence	83	4N	4	BYLAW NO. 03/10: A	BYLAW NO. 17/09: AG
5	NE 28-13-3E	Rockwood	A	152	3m: Property line and roadside ditch	150	3NW; 3N-5N-3N	33	BYLAW NO. 03/10: A	BYLAW NO. 17/09: AG
6	S1/2 of NW 32-12-3E	West St. Paul	A	80	3m: Property line and roadside ditch	78	2W	25	BYLAW NO. 122: AGRICULTURAL AREA 1	BYLAW NO. 2/99P: A80
7	SW 32-12-3E	West St. Paul	A	140	3m: Property line and residence	138	2W	16	BYLAW NO. 122: AGRICULTURAL AREA 1	BYLAW NO. 2/99P: A80
8	SW 33-12-3E	West St. Paul	A	155	3m: Property line and roadside ditch	153	2W; 3W	17	BYLAW NO. 122: AGRICULTURAL AREA 1	BYLAW NO. 2/99P: A80
9	S1/2 of SE 5-13-3E	Rockwood	A	65	3m: Property line	65	3N; 4N	4	BYLAW NO. 03/10: A	BYLAW NO. 17/09: AG
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

Total Net Acreage for Manure Application: 981

- 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).

LIVESTOCK MANURE SPREADING AGREEMENT

Between: PATRICK SMITH  Hereafter referred to as "Livestock Operator"
Please print Signature

And: DAVID EMMY BYE  Hereafter referred to as:
Please print Signature "Landowner" or
 "Land Renter"

Date: Sept 1/17

The duration of this agreement is of 5 years, beginning at the above date.

Additional terms of this contractual agreement for agricultural inputs and Acts and regulations implicit to this agreement are presented on page 2.

Responsibilities of the Landowner or the Land Renter

Land Parcels selected as potential fields to receive manure

Field	Legal location	(Check one)		Nominal size (acres)	Area available for spreading (acres; exclusive of setbacks see p. 2)	Cropping Intentions	Preferred Application Time
		Owned	Rented				
	<u>NE5-13-3E</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>70</u>	<u>70</u>	<u>cereal/canola</u>	<u>fall</u>
	<u>SES-13-3E</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>65</u>	<u>65</u>	<u>cereal/canola</u>	<u>fall</u>

- The Landowner or Land Renter: (Check where applicable/proposed)**
- will keep this document and any other related records in his files;
 - will notify the Livestock Operator of the dates those fields will be available for spreading;
 - agrees to purchase manure nutrient at a rate of \$ _____ per 1000 gal or tonne, conditional to manure being applied with the method and time as specified below by the Livestock Operator;
 - will incorporate manure within 48 hours of broadcast applications if agreed to as part of the manure application method (below).

Responsibilities of the Livestock Operator

Field Application Details

- Time of Application: Spring Summer Fall
- Application method: Broadcast Broadcast and incorporate within 48 hours
 Injection Irrigation/sprinkler

Applicator

Livestock Operator

Custom applicator Name of applicator: TBD

Anticipated Manure Application Starting Date: Oct 2018

The Livestock Operator: (Check where applicable/proposed)

- will keep track of these records, but will not disclose them without the consent of the Landowner and the Land Renter;
- will pay all costs for soil testing and these results will be made available to both the Landowner and the Land Renter;
- will carry a manure analysis test and the results will be made available to both the Landowner and the Land Renter;
- will calculate the manure application rate for each field on the basis of (check only one):
 - the soil test recommendations for plant nitrogen requirements or
 - the soil test recommendations for plant phosphorus requirements
 - general soil fertility recommendations as per the *Soil Fertility Guide* (Manitoba Agriculture and Food) or the *Farm Practices Guidelines for Beef/Dairy/Hog/Poultry Producers in Manitoba* series
- will provide a proof of calibration for the manure spreading equipment;
- will notify the Landowner and the Land Renter of changes in anticipated dates and rates of application in volume and crop nutrient (N, P, K);
- will have a manure management plan prepared by a professional agronomist, along with field map(s) highlighting setbacks to observe;
- will provide a copy overall manure management plan to the Landowner and the Land Renter, if applicable.

LIVESTOCK MANURE SPREADING AGREEMENT

Between: PATRICK SMITH Hereafter referred to as "Livestock Operator"
Please print Signature
 And: Kelroe Farms Hereafter referred to as:
Please print Signature "Landowner" or
 "Land Renter"

Date: Sept 11/17
 The duration of this agreement is of 5 years, beginning at the above date.
Additional terms of this contractual agreement for agricultural inputs and Acts and regulations implicit to this agreement are presented on page 2.

Responsibilities of the Landowner or the Land Renter

Land Parcels selected as potential fields to receive manure

Field	Legal location	(Check one)		Nominal size (acres)	Area available for spreading (acres; exclusive of setbacks see p. 2)	Cropping Intentions	Preferred Application Time
		Owned	Rented				
	NW5-13-3E	<input checked="" type="checkbox"/>	<input type="checkbox"/>	78		CORN	Fall
	SW9-13-3E	<input checked="" type="checkbox"/>	<input type="checkbox"/>	78		CORN	"
	SE21-13-3E	<input checked="" type="checkbox"/>	<input type="checkbox"/>	158		CORN	"
	NW16-13-3E	<input checked="" type="checkbox"/>	<input type="checkbox"/>	83		CORN	"

The Landowner or Land Renter: *(Check where applicable/proposed)*

- will keep this document and any other related records in his files;
- will notify the Livestock Operator of the dates those fields will be available for spreading;
- agrees to purchase manure nutrient at a rate of \$ _____ per 1000 gal or tonne, conditional to manure being applied with the method and time as specified below by the Livestock Operator;
- will incorporate manure within 48 hours of broadcast applications if agreed to as part of the manure application method (below).

Responsibilities of the Livestock Operator

Field Application Details

- Time of Application Spring Summer Fall
 Application method Broadcast Broadcast and incorporate within 48 hours
 Injection Irrigation/sprinkler

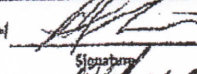
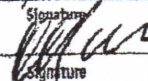
Applicator

Livestock Operator
 Custom applicator Name of applicator: TBD
 Anticipated Manure Application Starting Date: Oct 2018

The Livestock Operator: *(Check where applicable/proposed)*

- will keep track of these records, but will not disclose them without the consent of the Landowner and the Land Renter;
- will pay all costs for soil testing and these results will be made available to both the Landowner and the Land Renter;
- will carry a manure analysis test and the results will be made available to both the Landowner and the Land Renter;
- will calculate the manure application rate for each field on the basis of (check only one):
 - the soil test recommendations for plant nitrogen requirements or
 - the soil test recommendations for plant phosphorus requirements
 - general soil fertility recommendations as per the *Soil Fertility Guide (Manitoba Agriculture and Food)* or the *Form Practices Guidelines for Beef/Dairy/Hog/Poultry Producers in Manitoba* series
- will provide a proof of calibration for the manure spreading equipment;
- will notify the Landowner and the Land Renter of changes in anticipated dates and rates of application in volume and crop nutrient (N, P, K);
- will have a manure management plan prepared by a professional agronomist, along with field map(s) highlighting setbacks to observe;
- will provide a copy overall manure management plan to the Landowner and the Land Renter, if applicable.

LIVESTOCK MANURE SPREADING AGREEMENT

Between: PATRICK CUM  Hereafter referred to as "Livestock Operator"
 Please print Signature
 And: Kelroe Farms  Hereafter referred to as:
 Please print Signature "Landowner" or "Land Renter"

Date: Sept 11/17
 The duration of this agreement is of 5 years, beginning at the above date.
Additional terms of this contractual agreement for agricultural inputs and Acts and regulations implicit to this agreement are presented on page 2.

Responsibilities of the Landowner or the Land Renter

Land Parcels selected as potential fields to receive manure

Field	Legal location	(Check one) Owned Rented	Nominal size (acres)	Area available for spreading (acres; exclusive of setbacks see p. 2)	Cropping intentions	Preferred Application Time
	<u>N1E 28-13-3E</u>	<input checked="" type="checkbox"/> <input type="checkbox"/>		<u>150</u>	<u>CORN</u>	<u>Fall</u>
	<u>NW 32-13-3E</u>	<input checked="" type="checkbox"/> <input type="checkbox"/>		<u>28</u>	<u>CORN</u>	<u>"</u>
	<u>SW 32-13-3E</u>	<input checked="" type="checkbox"/> <input type="checkbox"/>		<u>138</u>	<u>CORN</u>	<u>"</u>
	<u>SW 33-13-3E</u>	<input checked="" type="checkbox"/> <input type="checkbox"/>		<u>153</u>	<u>CORN</u>	<u>"</u>

The Landowner or Land Renter: (Check where applicable/proposed)
 will keep this document and any other related records in his files;
 will notify the Livestock Operator of the dates those fields will be available for spreading;
 agrees to purchase manure nutrient at a rate of \$ _____ per 1000 gal or tonne, conditional to manure being applied with the method and time as specified below by the Livestock Operator;
 will incorporate manure within 48 hours of broadcast applications if agreed to as part of the manure application method (below).

Responsibilities of the Livestock Operator

Field Application Details
 Time of Application Spring Summer Fall
 Application method Broadcast Broadcast and incorporate within 48 hours
 Injection Irrigation/sprinkler

Applicator
 Livestock Operator
 Custom applicator Name of applicator: TBD

Anticipated Manure Application Starting Date: Oct 2018

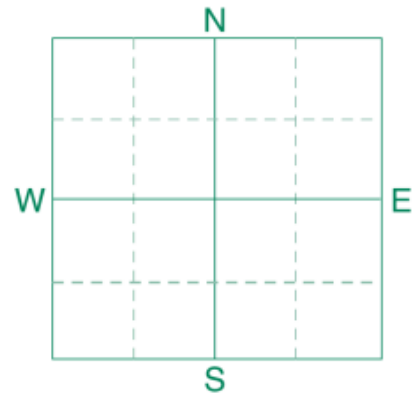
The Livestock Operator: (Check where applicable/proposed)
 will keep track of these records, but will not disclose them without the consent of the Landowner and the Land Renter;
 will pay all costs for soil testing and these results will be made available to both the Landowner and the Land Renter;
 will carry a manure analysis test and the results will be made available to both the Landowner and the Land Renter;
 will calculate the manure application rate for each field on the basis of (check only one):
 the soil test recommendations for plant nitrogen requirements or
 the soil test recommendations for plant phosphorus requirements
 general soil fertility recommendations as per the Soil Fertility Guide (Manitoba Agriculture and Food) or the Farm Practices Guidelines for Beef/Dairy/Hog/Poultry Producers in Manitoba series
 will provide a proof of calibration for the manure spreading equipment;
 will notify the Landowner and the Land Renter of changes in anticipated dates and rates of application in volume and crop nutrient (N, P, K);
 will have a manure management plan prepared by a professional agronomist, along with field map(s) highlighting setbacks to observe;
 will provide a copy overall manure management plan to the Landowner and the Land Renter, if applicable.



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

SOIL TEST REPORT

FIELD ID **NW 05-13-03E**
 SAMPLE ID
 FIELD NAME **NW 05-13-03E**
 COUNTY
 TWP RANGE
 SECTION QTR ACRES **0**
 PREV. CROP



SUBMITTED FOR:
Canada Sheep & Lamb Farms

SUBMITTED BY: **DU4426**
FOUR OAK AG SOLUTION
31119 RD 27E
BOX 131
KLEEFELD, MB **ROA 0V0**

REF # **1908806** BOX # **0**
 LAB # **NW32622**

Date Sampled **05/25/2017**

Date Received **05/31/2017**

Date Reported **5/31/2017**

Nutrient In The Soil		Interpretation				1st Crop Choice		2nd Crop Choice		3rd Crop Choice				
		VLow	Low	Med	High									
Nitrate	0-6" 2 lb/ac					Corn-Grain		Corn-Silage		Soybeans				
	6-24" 6 lb/ac	**				YIELD GOAL		YIELD GOAL		YIELD GOAL				
	0-24" 8 lb/ac					160 BU		18 Tons		50 BU				
						SUGGESTED GUIDELINES		SUGGESTED GUIDELINES		SUGGESTED GUIDELINES				
						Broadcast		Broadcast		Broadcast				
						LB/ACRE	APPLICATION	LB/ACRE	APPLICATION	LB/ACRE	APPLICATION			
Phosphorus	Olsen 6 ppm	*****				N 184		N 179		N ***				
Potassium	282 ppm	*****	*****	*****	*****	P ₂ O ₅ 117	Broadcast	P ₂ O ₅ 117	Broadcast	P ₂ O ₅ 76	Broadcast			
Chloride						K ₂ O 10	Band (2x2) *	K ₂ O 10	Band (2x2) *	K ₂ O 0				
Sulfur	0-6" 120 +lb/ac 6-24" 360 +lb/ac	*****	*****	*****	*****	Cl		Cl		Cl				
Boron						S 0		S 0		S 0				
Zinc	1.13 ppm	*****	*****	*****	*****	B		B		B				
Iron						Zn 4	Broadcast(Trial)	Zn 4	Broadcast(Trial)	Zn 0				
Manganese						Fe		Fe		Fe				
Copper	2.28 ppm	*****	*****	*****	*****	Mn		Mn		Mn				
Magnesium						Cu 0		Cu 0		Cu 0				
Calcium						Mg		Mg		Mg				
Sodium						Lime		Lime		Lime				
Org.Matter	6.5 %	*****	*****	*****	*****	Soil pH		Cation Exchange Capacity		% Base Saturation (Typical Range)				
Carbonate(CCE)						Buffer pH				% Ca	% Mg	% K	% Na	% H
Sol. Salts	0-6" 3.65 mmho/cm 6-24" 4.74 mmho/cm	*****	*****	*****	*****	0-6" 8.1								
		*****	*****	*****	*****	6-24" 8.2								

Crop 1: * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. High salt levels may decrease yields in portions of this field. Crop Removal: P2O5 = 64 K2O = 43 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.

Crop 2: * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. High salt levels may decrease yields in portions of this field. Crop Removal: P2O5 = 65 K2O = 149 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.

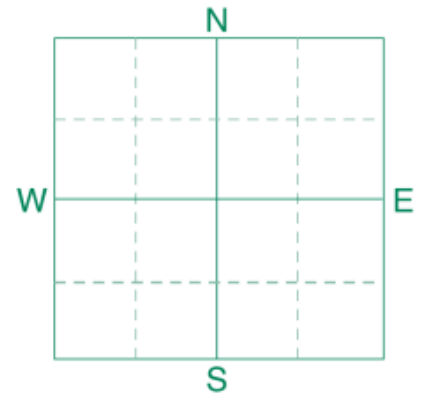
Crop 3: Many crops may respond to a starter application of P & K even on high soil tests. High salt levels may decrease yields in portions of this field. Crop Removal: P2O5 = 44 K2O = 75 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years. Soybeans may respond to nitrogen on fields testing less than 60 lb/ac with a limited soybean history.



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

SOIL TEST REPORT

FIELD ID **SW 09-13-03E**
 SAMPLE ID
 FIELD NAME **SW 09-13-03E**
 COUNTY
 TWP RANGE
 SECTION QTR ACRES **0**
 PREV. CROP



SUBMITTED FOR:
Canada Sheep & Lamb Farms

SUBMITTED BY: **DU4426**
FOUR OAK AG SOLUTION
31119 RD 27E
BOX 131
KLEEFELD, MB **ROA 0V0**

REF # **1908812** BOX # **0**
 LAB # **NW32627**

Date Sampled **05/25/2017**

Date Received **05/31/2017**

Date Reported **5/31/2017**

Nutrient In The Soil		Interpretation				1st Crop Choice			2nd Crop Choice			3rd Crop Choice				
		VLow	Low	Med	High	Corn-Grain			Corn-Silage			Soybeans				
Nitrate	0-6" 6-24"	232 lb/ac	183 lb/ac	*****				YIELD GOAL			YIELD GOAL			YIELD GOAL		
	0-24"	415 lb/ac	*****				160 BU			18 Tons			50 BU			
		*****				SUGGESTED GUIDELINES			SUGGESTED GUIDELINES			SUGGESTED GUIDELINES				
		*****				Broadcast			Broadcast			Broadcast				
		*****				LB/ACRE	APPLICATION		LB/ACRE	APPLICATION		LB/ACRE	APPLICATION			
Phosphorus	Olsen	13 ppm	*****				N	10		N	10		N	***		
Potassium		360 ppm	*****				P ₂ O ₅	77	Broadcast	P ₂ O ₅	82	Broadcast	P ₂ O ₅	48	Broadcast	
Chloride			*****				K ₂ O	10	Band (2x2) *	K ₂ O	10	Band (2x2) *	K ₂ O	0		
Sulfur	0-6" 6-24"	120 +lb/ac	360 +lb/ac	*****				Cl		Cl		Cl				
Boron			*****				S	0		S	0		S	0		
Zinc		0.71 ppm	*****				B			B			B			
Iron			*****				Zn	5	Broadcast	Zn	5	Broadcast	Zn	2	Broadcast	
Manganese			*****				Fe			Fe			Fe			
Copper		1.71 ppm	*****				Mn			Mn			Mn			
Magnesium			*****				Cu	0		Cu	0		Cu	0		
Calcium			*****				Mg			Mg			Mg			
Sodium			*****				Lime			Lime			Lime			
Org.Matter		7.1 %	*****				Soil pH			Cation Exchange Capacity			% Base Saturation (Typical Range)			
Carbonate(CCE)			*****				Buffer pH			% Ca	% Mg	% K	% Na	% H		
Sol. Salts	0-6" 6-24"	1.79 mmho/cm	1.34 mmho/cm	*****				0-6"	7.9							
				*****				6-24"	8.2							

Crop 1: * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 64 K2O = 43 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.

Crop 2: * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 65 K2O = 149 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.

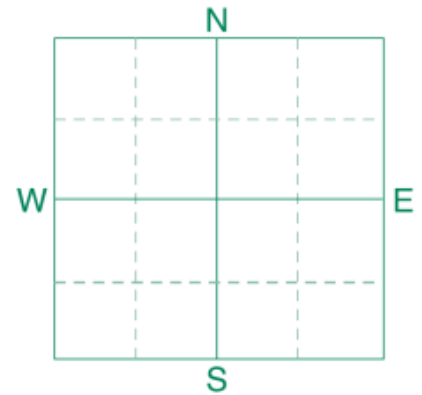
Crop 3: Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 44 K2O = 75 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.



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

SOIL TEST REPORT

FIELD ID **SE 21-13-03E**
 SAMPLE ID
 FIELD NAME **SE 21-13-03E**
 COUNTY
 TWP RANGE
 SECTION QTR ACRES **0**
 PREV. CROP



SUBMITTED FOR:
Canada Sheep & Lamb Farms

SUBMITTED BY: **DU4426**
FOUR OAK AG SOLUTION
31119 RD 27E
BOX 131
KLEEFELD, MB **ROA 0V0**

REF # **1908813** BOX # **0**
 LAB # **NW32614**

Date Sampled **05/25/2017**

Date Received **05/31/2017**

Date Reported **5/31/2017**

Nutrient In The Soil		Interpretation				1st Crop Choice		2nd Crop Choice		3rd Crop Choice				
		VLow	Low	Med	High									
Nitrate	0-6" 6-24"	*****				Corn-Grain		Corn-Silage		Soybeans				
		*****				YIELD GOAL		YIELD GOAL		YIELD GOAL				
		*****				160 BU		18 Tons		50 BU				
	0-24"	*****				SUGGESTED GUIDELINES		SUGGESTED GUIDELINES		SUGGESTED GUIDELINES				
		*****				Broadcast		Broadcast		Broadcast				
		*****				LB/ACRE	APPLICATION	LB/ACRE	APPLICATION	LB/ACRE	APPLICATION			
Phosphorus	Olsen 23 ppm	*****				N 10		N 10		N ***				
Potassium	359 ppm	*****				P ₂ O ₅ 20	Broadcast	P ₂ O ₅ 32	Broadcast	P ₂ O ₅ 0				
Chloride		*****				K ₂ O 10	Band (2x2) *	K ₂ O 10	Band (2x2) *	K ₂ O 0				
Sulfur	0-6" 6-24"	*****				Cl		Cl		Cl				
Boron		*****				S 0		S 0		S 0				
Zinc	1.16 ppm	*****				B		B		B				
Iron		*****				Zn 2	Broadcast(Trial)	Zn 2	Broadcast(Trial)	Zn 0				
Manganese		*****				Fe		Fe		Fe				
Copper	1.35 ppm	*****				Mn		Mn		Mn				
Magnesium		*****				Cu 0		Cu 0		Cu 0				
Calcium		*****				Mg		Mg		Mg				
Sodium		*****				Lime		Lime		Lime				
Org.Matter	5.3 %	*****				Soil pH		Cation Exchange Capacity		% Base Saturation (Typical Range)				
Carbonate(CCE)		*****				Buffer pH				% Ca	% Mg	% K	% Na	% H
Sol. Salts	0-6" 6-24"	*****				0-6" 8.0								
		*****				6-24" 8.2								

Crop 1: * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 64 K2O = 43 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.

Crop 2: * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 65 K2O = 149 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.

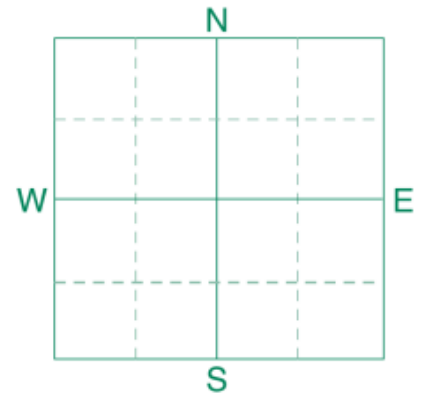
Crop 3: Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 44 K2O = 75 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.



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

SOIL TEST REPORT

FIELD ID **NW 06-13-03E**
 SAMPLE ID
 FIELD NAME **NW 06-13-03E**
 COUNTY
 TWP RANGE
 SECTION QTR ACRES **0**
 PREV. CROP



SUBMITTED FOR:
Canada Sheep & Lamb Farms

SUBMITTED BY: **DU4426**
FOUR OAK AG SOLUTION
31119 RD 27E
BOX 131
KLEEFELD, MB **ROA 0V0**

REF # **1908814** BOX # **0**
 LAB # **NW32629**

Date Sampled **05/25/2017**

Date Received **05/31/2017**

Date Reported **5/31/2017**

Nutrient In The Soil		Interpretation				1st Crop Choice		2nd Crop Choice		3rd Crop Choice			
		VLow	Low	Med	High								
Nitrate	0-6" 6-24"	6 lb/ac 9 lb/ac				Corn-Grain		Corn-Silage		Soybeans			
	0-24"	15 lb/ac	***			YIELD GOAL 160 BU		YIELD GOAL 18 Tons		YIELD GOAL 50 BU			
						SUGGESTED GUIDELINES Broadcast		SUGGESTED GUIDELINES Broadcast		SUGGESTED GUIDELINES Broadcast			
						LB/ACRE	APPLICATION	LB/ACRE	APPLICATION	LB/ACRE	APPLICATION		
	Olsen Phosphorus	4 ppm	*****			N 177		N 172		N ***			
Potassium	308 ppm	*****	*****	*****	P ₂ O ₅ 129	Broadcast	P ₂ O ₅ 127	Broadcast	P ₂ O ₅ 84	Broadcast			
Chloride					K ₂ O 10	Band (2x2) *	K ₂ O 10	Band (2x2) *	K ₂ O 0				
Sulfur	0-6" 6-24"	120 +lb/ac 360 +lb/ac	*****	*****	Cl		Cl		Cl				
Boron					S 0		S 0		S 0				
Zinc	0.57 ppm	*****			B		B		B				
Iron					Zn 8	Broadcast	Zn 8	Broadcast	Zn 4	Broadcast			
Manganese					Fe		Fe		Fe				
Copper	1.92 ppm	*****			Mn		Mn		Mn				
Magnesium					Cu 0		Cu 0		Cu 0				
Calcium					Mg		Mg		Mg				
Sodium					Lime		Lime		Lime				
Org.Matter	5.7 %	*****			Soil pH		Cation Exchange Capacity		% Base Saturation (Typical Range)				
Carbonate(CCE)					Buffer pH				% Ca	% Mg	% K	% Na	% H
Sol. Salts	0-6" 6-24"	2.24 mmho/cm 2.51 mmho/cm	*****	*****	0-6" 8.0								
					6-24" 8.2								

Crop 1: * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. High salt levels may decrease yields in portions of this field. Crop Removal: P2O5 = 64 K2O = 43 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.

Crop 2: * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. High salt levels may decrease yields in portions of this field. Crop Removal: P2O5 = 65 K2O = 149 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.

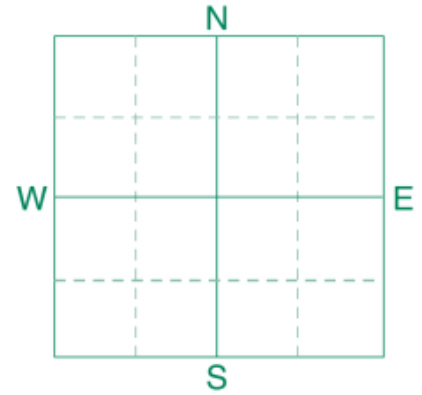
Crop 3: Many crops may respond to a starter application of P & K even on high soil tests. High salt levels may decrease yields in portions of this field. Crop Removal: P2O5 = 44 K2O = 75 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years. Soybeans may respond to nitrogen on fields testing less than 60 lb/ac with a limited soybean history.



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

SOIL TEST REPORT

FIELD ID **NE 28-13-03E**
 SAMPLE ID
 FIELD NAME **NE 28-13-03E**
 COUNTY
 TWP RANGE
 SECTION QTR ACRES **0**
 PREV. CROP



SUBMITTED FOR:
Canada Sheep & Lamb Farms

SUBMITTED BY: **DU4426**
FOUR OAK AG SOLUTION
31119 RD 27E
BOX 131
KLEEFELD, MB **ROA 0V0**

REF # **1908815** BOX # **0**
 LAB # **NW32609**

Date Sampled **05/25/2017**

Date Received **05/31/2017**

Date Reported **5/31/2017**

Nutrient In The Soil		Interpretation				1st Crop Choice			2nd Crop Choice			3rd Crop Choice		
		VLow	Low	Med	High	Corn-Grain			Corn-Silage			Soybeans		
Nitrate	0-6" 6-24"	208 lb/ac 132 lb/ac	*****	*****	*****	YIELD GOAL			YIELD GOAL			YIELD GOAL		
	0-24"					340 lb/ac	*****	*****	*****	160 BU	18 Tons	50 BU		
SUGGESTED GUIDELINES		*****			SUGGESTED GUIDELINES			SUGGESTED GUIDELINES			SUGGESTED GUIDELINES			
Broadcast		*****			Broadcast			Broadcast			Broadcast			
LB/ACRE APPLICATION		*****			LB/ACRE		APPLICATION	LB/ACRE		APPLICATION	LB/ACRE		APPLICATION	
Phosphorus	Olsen 33 ppm	*****			N	10		N	10		N	***		
Potassium	324 ppm	*****			P ₂ O ₅	15	Band (2x2) *	P ₂ O ₅	15	Band (2x2) *	P ₂ O ₅	0		
Chloride		*****			K ₂ O	10	Band (2x2) *	K ₂ O	10	Band (2x2) *	K ₂ O	0		
Sulfur	0-6" 6-24"	120 +lb/ac 360 +lb/ac	*****			Cl		Cl		Cl				
Boron			*****			S	0	S	0	S	0			
Zinc	2.99 ppm		*****			B		B		B				
Iron			*****			Zn	0	Zn	0	Zn	0			
Manganese			*****			Fe		Fe		Fe				
Copper	1.68 ppm		*****			Mn		Mn		Mn				
Magnesium			*****			Cu	0	Cu	0	Cu	0			
Calcium			*****			Mg		Mg		Mg				
Sodium			*****			Lime		Lime		Lime				
Org.Matter	16.3 %	*****			Soil pH		Buffer pH	Cation Exchange Capacity		% Base Saturation (Typical Range)				
Carbonate(CCE)		*****						% Ca	% Mg	% K	% Na	% H		
Sol. Salts	0-6" 6-24"	1.78 mmho/cm 2.72 mmho/cm	*****			0-6" 7.7								
			*****			6-24" 8.1								

Crop 1: * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 64 K2O = 43 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.

Crop 2: * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 65 K2O = 149 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.

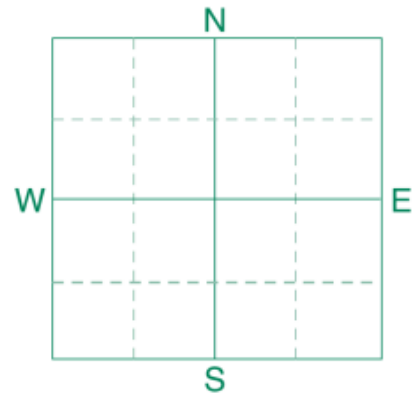
Crop 3: Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 44 K2O = 75 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.



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

SOIL TEST REPORT

FIELD ID **NE 04-13-03E**
 SAMPLE ID
 FIELD NAME **NE 04-13-03E**
 COUNTY
 TWP RANGE
 SECTION QTR ACRES **0**
 PREV. CROP



SUBMITTED FOR:
Canada Sheep & Lamb Farms

SUBMITTED BY: **DU4426**
FOUR OAK AG SOLUTION
31119 RD 27E
BOX 131
KLEEFELD, MB **ROA 0V0**

REF # **1908817** BOX # **0**
 LAB # **NW32625**

Date Sampled **05/25/2017**

Date Received **05/31/2017**

Date Reported **5/31/2017**

Nutrient In The Soil		Interpretation				1st Crop Choice			2nd Crop Choice			3rd Crop Choice			
		VLow	Low	Med	High	Corn-Grain			Corn-Silage			Soybeans			
Nitrate	0-6" 6-24"	****				YIELD GOAL 160 BU			YIELD GOAL 18 Tons			YIELD GOAL 50 BU			
	0-24"					SUGGESTED GUIDELINES Broadcast			SUGGESTED GUIDELINES Broadcast			SUGGESTED GUIDELINES Broadcast			
Olsen Phosphorus	4 ppm	*****				LB/ACRE	APPLICATION	LB/ACRE	APPLICATION	LB/ACRE	APPLICATION	LB/ACRE	APPLICATION		
Potassium	321 ppm	*****				N 174		N 169		N ***					
Chloride						P2O5 129	Broadcast	P2O5 127	Broadcast	P2O5 84	Broadcast				
Sulfur	0-6" 6-24"	*****				K2O 10	Band (2x2) *	K2O 10	Band (2x2) *	K2O 0					
Boron						Cl		Cl		Cl					
Zinc	0.67 ppm	*****				S 0		S 0		S 0					
Iron						B		B		B					
Manganese						Zn 7	Broadcast	Zn 7	Broadcast	Zn 4	Broadcast				
Copper	1.98 ppm	*****				Fe		Fe		Fe					
Magnesium						Mn		Mn		Mn					
Calcium						Cu 0		Cu 0		Cu 0					
Sodium						Mg		Mg		Mg					
Org.Matter	6.1 %	*****				Lime		Lime		Lime					
Carbonate(CCE)						Soil pH	Buffer pH	Cation Exchange Capacity			% Base Saturation (Typical Range)				
Sol. Salts	0-6" 6-24"	*****						% Ca	% Mg	% K	% Na	% H			
						0-6" 8.2									
						6-24" 8.3									

Crop 1: * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 64 K2O = 43 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.

Crop 2: * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 65 K2O = 149 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.

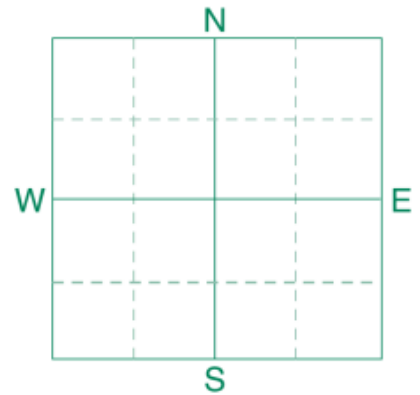
Crop 3: Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 44 K2O = 75 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years. Soybeans may respond to nitrogen on fields testing less than 60 lb/ac with a limited soybean history.



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

SOIL TEST REPORT

FIELD ID **SE 05-13-03E**
 SAMPLE ID
 FIELD NAME **SE 05-13-03E**
 COUNTY
 TWP RANGE
 SECTION QTR ACRES **0**
 PREV. CROP



SUBMITTED FOR:
Canada Sheep & Lamb Farms

SUBMITTED BY: **DU4426**
FOUR OAK AG SOLUTION
31119 RD 27E
BOX 131
KLEEFELD, MB **ROA 0V0**

REF # **1908818** BOX # **0**
 LAB # **NW32617**

Date Sampled **05/25/2017**

Date Received **05/31/2017**

Date Reported **5/31/2017**

Nutrient In The Soil		Interpretation				1st Crop Choice			2nd Crop Choice			3rd Crop Choice					
		VLow	Low	Med	High	Corn-Grain			Corn-Silage			Soybeans					
Nitrate	0-6" 6-24"	4 lb/ac 6 lb/ac					YIELD GOAL			YIELD GOAL			YIELD GOAL				
	0-24"	10 lb/ac	**				160 BU			18 Tons			50 BU				
							SUGGESTED GUIDELINES			SUGGESTED GUIDELINES			SUGGESTED GUIDELINES				
							Broadcast			Broadcast			Broadcast				
							LB/ACRE	APPLICATION		LB/ACRE	APPLICATION		LB/ACRE	APPLICATION			
Phosphorus	Olsen	4 ppm	*****				N	182		N	177		N	***			
Potassium		287 ppm	*****	*****	*****		P ₂ O ₅	129	Broadcast	P ₂ O ₅	127	Broadcast	P ₂ O ₅	84	Broadcast		
Chloride							K ₂ O	10	Band (2x2) *	K ₂ O	10	Band (2x2) *	K ₂ O	0			
Sulfur	0-6" 6-24"	120 +lb/ac 360 +lb/ac	*****	*****	*****		Cl			Cl			Cl				
Boron							S	0		S	0		S	0			
Zinc		0.77 ppm	*****	*****	*****		B			B			B				
Iron							Zn	5	Broadcast	Zn	5	Broadcast	Zn	2	Broadcast		
Manganese							Fe			Fe			Fe				
Copper		1.93 ppm	*****	*****	*****		Mn			Mn			Mn				
Magnesium							Cu	0		Cu	0		Cu	0			
Calcium							Mg			Mg			Mg				
Sodium							Lime			Lime			Lime				
Org.Matter		4.9 %	*****	*****	*****		Soil pH			Cation Exchange Capacity			% Base Saturation (Typical Range)				
Carbonate(CCE)							Buffer pH			Capacity			% Ca	% Mg	% K	% Na	% H
Sol. Salts	0-6" 6-24"	4.12 mmho/cm 4.8 mmho/cm	*****	*****	*****		0-6" 8.0										
							6-24" 8.2										

Crop 1: * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. High salt levels may decrease yields in portions of this field. Crop Removal: P2O5 = 64 K2O = 43 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.

Crop 2: * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. High salt levels may decrease yields in portions of this field. Crop Removal: P2O5 = 65 K2O = 149 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.

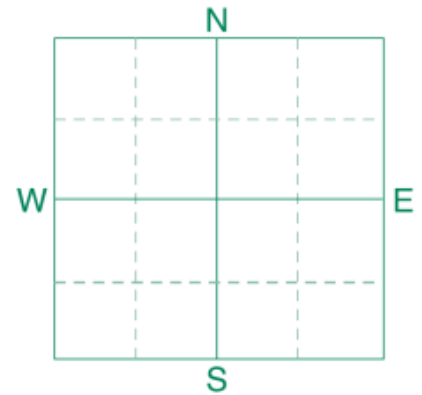
Crop 3: Many crops may respond to a starter application of P & K even on high soil tests. High salt levels may decrease yields in portions of this field. Crop Removal: P2O5 = 44 K2O = 75 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years. Soybeans may respond to nitrogen on fields testing less than 60 lb/ac with a limited soybean history.



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

SOIL TEST REPORT

FIELD ID **NW 32-12-03E**
 SAMPLE ID
 FIELD NAME **NW 32-12-03E**
 COUNTY
 TWP RANGE
 SECTION QTR ACRES **0**
 PREV. CROP



SUBMITTED FOR:
Canada Sheep & Lamb Farms

SUBMITTED BY: **DU4426**
FOUR OAK AG SOLUTION
31119 RD 27E
BOX 131
KLEEFELD, MB **ROA 0V0**

REF # **1908819** BOX # **0**
 LAB # **NW32628**

Date Sampled **05/25/2017**

Date Received **05/31/2017**

Date Reported **5/31/2017**

Nutrient In The Soil		Interpretation				1st Crop Choice		2nd Crop Choice		3rd Crop Choice				
		VLow	Low	Med	High									
Nitrate	0-6" 6-24"	88 lb/ac 81 lb/ac					Corn-Grain	Corn-Silage	Soybeans					
							YIELD GOAL	YIELD GOAL	YIELD GOAL					
							160 BU	18 Tons	50 BU					
	0-24"	169 lb/ac					SUGGESTED GUIDELINES	SUGGESTED GUIDELINES	SUGGESTED GUIDELINES					
							Broadcast	Broadcast	Broadcast					
						LB/ACRE	APPLICATION	LB/ACRE	APPLICATION	LB/ACRE	APPLICATION			
Phosphorus	Olsen	25 ppm					N 23	N 18	N ***					
Potassium		290 ppm					P ₂ O ₅ 15	P ₂ O ₅ 22	P ₂ O ₅ 0					
Chloride							K ₂ O 10	K ₂ O 10	K ₂ O 0					
Sulfur	0-6" 6-24"	120 +lb/ac 360 +lb/ac					Cl	Cl	Cl					
Boron							S 0	S 0	S 0					
Zinc		2.10 ppm					B	B	B					
Iron							Zn 0	Zn 0	Zn 0					
Manganese							Fe	Fe	Fe					
Copper		2.02 ppm					Mn	Mn	Mn					
Magnesium							Cu 0	Cu 0	Cu 0					
Calcium							Mg	Mg	Mg					
Sodium							Lime	Lime	Lime					
Org.Matter		6.8 %												
Carbonate(CCE)														
							Soil pH	Buffer pH	Cation Exchange Capacity		% Base Saturation (Typical Range)			
										% Ca	% Mg	% K	% Na	% H
Sol. Salts	0-6" 6-24"	2.03 mmho/cm 2.01 mmho/cm					0-6" 8.0 6-24" 8.3							

Crop 1: * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. High salt levels may decrease yields in portions of this field. Crop Removal: P2O5 = 64 K2O = 43 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.

Crop 2: * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. High salt levels may decrease yields in portions of this field. Crop Removal: P2O5 = 65 K2O = 149 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.

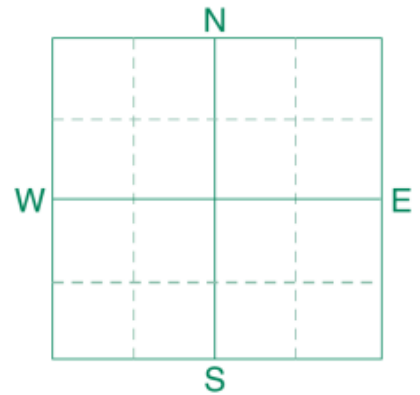
Crop 3: Many crops may respond to a starter application of P & K even on high soil tests. High salt levels may decrease yields in portions of this field. Crop Removal: P2O5 = 44 K2O = 75 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.



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

SOIL TEST REPORT

FIELD ID **SW 32-12-03E**
 SAMPLE ID
 FIELD NAME **SW 32-12-03E**
 COUNTY
 TWP RANGE
 SECTION QTR ACRES **0**
 PREV. CROP



SUBMITTED FOR:
Canada Sheep & Lamb Farms

SUBMITTED BY: **DU4426**
FOUR OAK AG SOLUTION
31119 RD 27E
BOX 131
KLEEFELD, MB **ROA 0V0**

REF # **1908820** BOX # **0**
 LAB # **NW32607**

Date Sampled **05/25/2017**

Date Received **05/31/2017**

Date Reported **5/31/2017**

Nutrient In The Soil		Interpretation				1st Crop Choice		2nd Crop Choice		3rd Crop Choice				
		VLow	Low	Med	High									
Nitrate	0-6" 6-24"	93 lb/ac 84 lb/ac					Corn-Grain		Corn-Silage		Soybeans			
							YIELD GOAL		YIELD GOAL		YIELD GOAL			
	0-24"	177 lb/ac					160 BU		18 Tons		50 BU			
							SUGGESTED GUIDELINES		SUGGESTED GUIDELINES		SUGGESTED GUIDELINES			
							Broadcast		Broadcast		Broadcast			
							LB/ACRE	APPLICATION	LB/ACRE	APPLICATION	LB/ACRE	APPLICATION		
Phosphorus	Olsen	16 ppm					N	15	N	10	N	***		
Potassium		302 ppm					P ₂ O ₅	60 Broadcast	P ₂ O ₅	67 Broadcast	P ₂ O ₅	36 Broadcast		
Chloride							K ₂ O	10 Band (2x2) *	K ₂ O	10 Band (2x2) *	K ₂ O	0		
Sulfur	0-6" 6-24"	120 +lb/ac 360 +lb/ac					Cl		Cl		Cl			
Boron							S	0	S	0	S	0		
Zinc		1.45 ppm					B		B		B			
Iron							Zn	4 Broadcast(Trial)	Zn	4 Broadcast(Trial)	Zn	0		
Manganese							Fe		Fe		Fe			
Copper		1.54 ppm					Mn		Mn		Mn			
Magnesium							Cu	0	Cu	0	Cu	0		
Calcium							Mg		Mg		Mg			
Sodium							Lime		Lime		Lime			
Org.Matter		6.3 %					Soil pH		Cation Exchange Capacity		% Base Saturation (Typical Range)			
Carbonate(CCE)							Buffer pH			% Ca	% Mg	% K	% Na	% H
Sol. Salts	0-6" 6-24"	1.06 mmho/cm 1.57 mmho/cm					0-6" 8.2							
							6-24" 8.4							

Crop 1: * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 64 K2O = 43 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.

Crop 2: * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 65 K2O = 149 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.

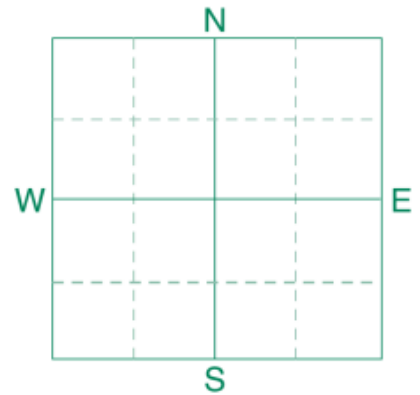
Crop 3: Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 44 K2O = 75 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.



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

SOIL TEST REPORT

FIELD ID **SW 33-12-03E**
 SAMPLE ID
 FIELD NAME **SW 33-12-03E**
 COUNTY
 TWP RANGE
 SECTION QTR ACRES **0**
 PREV. CROP



SUBMITTED FOR:
Canada Sheep & Lamb Farms

SUBMITTED BY: **DU4426**
FOUR OAK AG SOLUTION
31119 RD 27E
BOX 131
KLEEFELD, MB **ROA 0V0**

REF # **1908821** BOX # **0**
 LAB # **NW32612**

Date Sampled **05/25/2017**

Date Received **05/31/2017**

Date Reported **5/31/2017**

Nutrient In The Soil		Interpretation				1st Crop Choice		2nd Crop Choice		3rd Crop Choice				
		VLow	Low	Med	High									
Nitrate	0-6" 6-24"	*****				Corn-Grain		Corn-Silage		Soybeans				
		*****				YIELD GOAL		YIELD GOAL		YIELD GOAL				
	0-24"	*****				160 BU		18 Tons		50 BU				
		*****				SUGGESTED GUIDELINES		SUGGESTED GUIDELINES		SUGGESTED GUIDELINES				
Phosphorus	Olsen 17 ppm	*****				Broadcast		Broadcast		Broadcast				
	Potassium 339 ppm	*****				LB/ACRE	APPLICATION	LB/ACRE	APPLICATION	LB/ACRE	APPLICATION			
Sulfur	0-6" 6-24"	*****				N 10		N 10		N ***				
		*****				P ₂ O ₅ 54	Broadcast	P ₂ O ₅ 62	Broadcast	P ₂ O ₅ 32	Broadcast			
Zinc	1.02 ppm	*****				K ₂ O 10	Band (2x2) *	K ₂ O 10	Band (2x2) *	K ₂ O 0				
		*****				Cl		Cl		Cl				
Iron	1.77 ppm	*****				S 0		S 0		S 0				
		*****				B		B		B				
Manganese		*****				Zn 2	Broadcast(Trial)	Zn 2	Broadcast(Trial)	Zn 0				
		*****				Fe		Fe		Fe				
Copper		*****				Mn		Mn		Mn				
		*****				Cu 0		Cu 0		Cu 0				
Magnesium		*****				Mg		Mg		Mg				
		*****				Lime		Lime		Lime				
Calcium		*****				Soil pH		Cation Exchange Capacity		% Base Saturation (Typical Range)				
		*****				Buffer pH				% Ca	% Mg	% K	% Na	% H
Sodium		*****				0-6" 7.8								
		*****				6-24" 8.4								
Org.Matter	6.2 %	*****												

Carbonate(CCE)		*****												

Sol. Salts	0-6" 6-24"	*****												

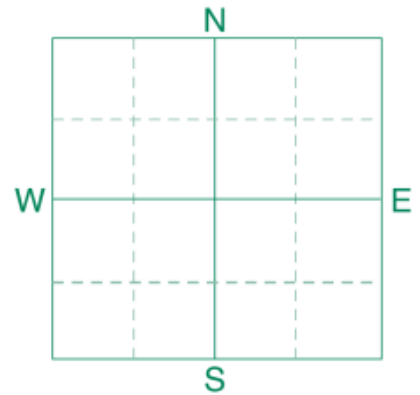
Crop 1: * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 64 K2O = 43 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.
Crop 2: * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 65 K2O = 149 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.
Crop 3: Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 44 K2O = 75 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.



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

SOIL TEST REPORT

FIELD ID **NW 33-12-03E**
 SAMPLE ID
 FIELD NAME **NW 33-12-03E**
 COUNTY
 TWP RANGE
 SECTION QTR ACRES **0**
 PREV. CROP



SUBMITTED FOR:
Canada Sheep & Lamb Farms

SUBMITTED BY: **DU4426**
FOUR OAK AG SOLUTION
31119 RD 27E
BOX 131
KLEEFELD, MB **ROA 0V0**

REF # **1908822** BOX # **0**
 LAB # **NW32618**

Date Sampled **05/25/2017**

Date Received **05/31/2017**

Date Reported **5/31/2017**

Nutrient In The Soil		Interpretation				1st Crop Choice			2nd Crop Choice			3rd Crop Choice					
		VLow	Low	Med	High	Corn-Grain			Corn-Silage			Soybeans					
Nitrate	0-6" 6-24"	172 lb/ac 105 lb/ac					YIELD GOAL			YIELD GOAL			YIELD GOAL				
	0-24"	277 lb/ac					160 BU			18 Tons			50 BU				
							SUGGESTED GUIDELINES			SUGGESTED GUIDELINES			SUGGESTED GUIDELINES				
							Broadcast			Broadcast			Broadcast				
							LB/ACRE	APPLICATION		LB/ACRE	APPLICATION		LB/ACRE	APPLICATION			
Phosphorus	Olsen	51 ppm					N	10		N	10		N	***			
Potassium		589 ppm					P ₂ O ₅	15	Band (2x2) *	P ₂ O ₅	15	Band (2x2) *	P ₂ O ₅	0			
Chloride							K ₂ O	10	Band (2x2) *	K ₂ O	10	Band (2x2) *	K ₂ O	0			
Sulfur	0-6" 6-24"	32 lb/ac 102 lb/ac					Cl			Cl			Cl				
Boron							S	0		S	0		S	0			
Zinc		2.49 ppm					B			B			B				
Iron							Zn	0		Zn	0		Zn	0			
Manganese							Fe			Fe			Fe				
Copper		1.83 ppm					Mn			Mn			Mn				
Magnesium							Cu	0		Cu	0		Cu	0			
Calcium							Mg			Mg			Mg				
Sodium							Lime			Lime			Lime				
Org.Matter		6.0 %					Soil pH			Cation Exchange Capacity			% Base Saturation (Typical Range)				
Carbonate(CCE)							Buffer pH			Capacity			% Ca	% Mg	% K	% Na	% H
Sol. Salts	0-6" 6-24"	0.77 mmho/cm 0.56 mmho/cm					0-6" 7.9										
							6-24" 8.3										

Crop 1: * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 64 K2O = 43 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.
Crop 2: * Caution: Seed Placed Fertilizer Can Cause Injury * Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 65 K2O = 149 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.
Crop 3: Many crops may respond to a starter application of P & K even on high soil tests. Crop Removal: P2O5 = 44 K2O = 75 AGVISE Broadcast guidelines will build P & K test levels to the high range over several years.

Water Requirement Calculation Table

Livestock	Number	IG/day per animal in winter	IG/day per animal in summer	IG/day (Imperial gallons per day)
Beef/Dairy/Bison *				
Feeder/heifer/steer (600 lb.)		5	9	-
Feeder (900 lb.)		7	12	-
Feeder (1250 lb.)		10	15	-
Cow/calf pair		12	15	-
Dry milking cow **		10	12	-
Lactating cow **		25	30	-
Bison		8	10	-
Horses				
Horses		8	11	-
Hogs				
Sow (Farrow/wean)		6.5		-
Dry Sow/Boar		4		-
Feeder		3		-
Nursery (33 lb.)		2		-
Chickens				
Broilers		0.035		-
Roasters/Pullets		0.04		-
Layers		0.055		-
Breeders		0.07		-
Turkeys				
Turkey Growers		0.13		-
Turkey Heavies		0.16		-
Sheep/Goats				
Sheep/Goats	100	2		200
Ewes/Does	8,000	3		24,000
Lambs/Kids (90 lb.)	4,558	1.6		7,293
TOTAL (IG/day)				31,493
*** TOTAL with 10% wash water				34,642

* For beef, 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.

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

Other consumption:
Normal household consumption:
60-75 IG/day per person or
(272-340 l/day/person)

Enter this number on page 7 of Application Form.

Enter this number on page 7 of Application Form.

Unit Conversions		
Total per day	Total per year	Unit
34,642	12,644,330	IG
		litres
		cubic decametres (dam ³)

Conversion Factor: 1 IGPM = 4.546 l/m

LOCATION: 5-13-3E

Well_PID: 32083
Owner: G SMITH
Driller: Ford Drilling Ltd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 632419.768
UTMY: 5548197.34
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1977 Oct 26

WELL LOG

From (ft.)	To (ft.)	Log
0	27.0	CLAY
27.0	41.0	TILL
41.0	76.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	43.0	casing	4.00			INSERT	
GALVANIZED							
43.0	76.0	open hole	3.90				
0	0	casing grout					

Top of Casing: ft. below ground

PUMPING TEST

Date:
Flowing Rate: 30.0 Imp. gallons/minute
Water level before pumping: ft. below ground
Pumping level at end of test: 5.0 ft. below ground
Test duration: 1 hours, 30 minutes
Water temperature: ?? degrees F

LOCATION: 5-13-3E

Well_PID: 14263
Owner: R BYLE
Driller: PRUDEN DRILLING CO. LTD.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 632419.768
UTMY: 5548197.34
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1970 Jan 08

WELL LOG

From (ft.)	To (ft.)	Log
0	7.0	BASEMENT
7.0	32.0	DARK CLAY
32.0	36.0	GREY SILT
36.0	45.0	GREY SANDY CLAY, GRAVEL
45.0	49.0	LAYER OF LIMESTONE
49.0	55.0	GRAVEL
55.0	77.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	55.0	casing	4.00				
55.0	77.0	open hole					

Top of Casing: ft. below ground

PUMPING TEST

Date: 1970 Jan 08
Pumping Rate: 30.0 Imp. gallons/minute
Water level before pumping: 2.6 ft. above ground
Pumping level at end of test: 17.0 ft. below ground
Test duration: 20 hours, minutes
Water temperature: ?? degrees F

REMARKS

190 FT W OF PR #220, GROUND LEVEL ELEV EST 760

LOCATION: NE5-13-3E

Well_PID: 153131
Owner: NOT REPORTED
Driller: UNKNOWN
Well Name:
Well Use: PRODUCTION
Water Use:
UTMX: 632886
UTMY: 5548124
Accuracy XY: 4 FAIR [350M-1KM] [WITHIN SECTION]
UTMZ: 232
Accuracy Z: 4 FAIR - Shuttle at Centroid
Date Completed: 1998 Jan 01

No well log data for this well.

No construction data for this well.

Top of Casing: 0.0

No pump test data for this well.

REMARKS

1998 GSC GRASBY SO4 STUDY, DATE IS INACCURATE, WELL LOG UNAVAILABLE

LOCATION: NE5-13-3E

Well_PID: 66274
Owner: B BARSKE
Driller: Stonewall Drilling
Well Name: UMA-314
Well Use: RECHARGE
Water Use: Air Conditioning
UTMX: 632811.372
UTMY: 5548617.16
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1989 Apr 27

WELL LOG

From (ft.)	To (ft.)	Log
0	31.0	CLAY
31.0	34.0	TILL
34.0	41.0	FRACTURED LIMESTONE
41.0	94.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	44.0	casing	4.20			INSERT	
GALVANIZED							
44.0	94.9	open hole	4.00				
44.0	12.0	casing grout					CEMENT

Top of Casing: 1.5 ft. below ground

PUMPING TEST

Date: 1989 Apr 27
Pumping Rate: 15.0 Imp. gallons/minute
Water level before pumping: 4.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: hours, 35 minutes
Water temperature: ?? degrees F

REMARKS

S.W. CORNER DEPRez RD. + BLACKDALE RD. JAN.1993, GAMMA + CALIPER
LOGGED. R.N.BETCHER.

LOCATION: SE5-13-3E

Well_PID: 66285
Owner: MARINSH CONST
Driller: Stonewall Drilling
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 632832.192
UTMY: 5547803.57
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1989 Mar 13

WELL LOG

From (ft.)	To (ft.)	Log
0	1.0	TILL
1.0	63.0	RED ROCK
63.0	131.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	63.0	casing	4.20			INSERT	
GALVANIZED							
63.0	131.9	open hole	4.00				

Top of Casing: 1.5 ft. below ground

PUMPING TEST

Date: 1989 Mar 13
Pumping Rate: 40.0 Imp. gallons/minute
Water level before pumping: 26.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: hours, minutes
Water temperature: ?? degrees F

LOCATION: SE5-13-3E

Well_PID: 25646
Owner: R BYLE
Driller: Ford Drilling Ltd.
Well Name:
Well Use: PRODUCTION
Water Use: Livestock
UTMX: 632832.192
UTMY: 5547803.57
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1975 Aug 12

WELL LOG

From (ft.)	To (ft.)	Log
0	26.0	CLAY
26.0	34.0	TILL
34.0	41.0	GRAVEL, WATER IN IT
41.0	76.0	LIMESTONE SOME WATER AT 52 MORE AT 74

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	45.0	casing	4.00				
GALVANIZED							
45.0	76.0	open hole	4.00				

Top of Casing: ft. below ground

PUMPING TEST

Date:
Pumping Rate: 25.0 Imp. gallons/minute
Water level before pumping: 2.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: 1 hours, 30 minutes
Water temperature: ?? degrees F

LOCATION: SE5-13-3E

Well_PID: 33054
Owner: R BYLE
Driller: AQUARIUS WELL DRILLING
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 632832.192
UTMY: 5547803.57
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1978 Sep 23

WELL LOG

From (ft.)	To (ft.)	Log
0	24.0	CLAY
24.0	38.0	HARDPAN
38.0	41.0	BROKEN LIMESTONE
41.0	55.0	WHITE& YELLOW LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	42.0	casing	4.25				
GALVANIZED							
42.0	55.0	open hole			4.00		

Top of Casing: ft. below ground

PUMPING TEST

Date:
Flowing Rate: 25.0 Imp. gallons/minute
Water level before pumping: ft. below ground
Pumping level at end of test: 2.0 ft. below ground
Test duration: 1 hours, minutes
Water temperature: ?? degrees F

LOCATION: SE5-13-3E

Well_PID: 66286
Owner: MARINSH CONST
Driller: Stonewall Drilling
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 632832.192
UTMY: 5547803.57
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1989 Mar 13

WELL LOG

From (ft.)	To (ft.)	Log
0	4.0	TILL
4.0	77.0	SOFT RED ROCK
77.0	140.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	77.0	casing	4.20			INSERT	
GALVANIZED							
77.0	140.9	open hole	4.00				

Top of Casing: 1.5 ft. above ground

PUMPING TEST

Date: 1989 Mar 13
Pumping Rate: 20.0 Imp. gallons/minute
Water level before pumping: 36.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: hours, minutes
Water temperature: ?? degrees F




MMPP - Fertilizer Data Browser

Select Municipalities or MASC Risk Areas

Tip: Click or touch the 'X' (at right) in these tip balloons to hide them permanently. ✕

Tip: Click or touch the button below to select Municipalities or MASC Risk Areas. ✕

Municipalities

Tip: Click or touch in the select boxes (below) to select at least one item from each list. Click or touch the  icon to clear all selected items. ✕

ROCKWOOD



Select Crop(s)

ALFALFA/GRASS MIX.



Select Soil Type(s)

SOIL TYPE E



🔍 Search for Soil Types... ✕

Warning

Charts will not be displayed when only one Soil Type is selected. Fertilizer Application Data table will still be displayed.

SOIL TYPE A

SOIL TYPE B

SOIL TYPE C

SOIL TYPE D

Select Year Range

1993 1998 2003 2008 2012

to

Search Summary

10 records returned

38 farm varieties grown on **2,590.0** acres

Average Yield

2.313 Tonnes (**2.549** Tons) per acre

Average Fertilizer Application

Nitrogen: **34.4** lbs per acre

Phosphorus: **29.5** lbs per acre


Potassium: **15.0** lbs per acre

Sulphur: **7.8** lbs per acre

Summary includes aggregate data from 'below minimum tolerance' records

Fertilizer Usage Data

'Below Minimum Tolerance' records contain data from fewer than 3 producers or 500 acres, marked as such to retain producer anonymity. Data from these records is included in the Search Summary totals.

Tip: Click or touch a column header to sort. On a desktop computer, hold and click  a second column header to do a secondary sort.

Year	Muni	Crop	Soil	Farms	Acres	Yield/acre (metric)	Yield/acre (imperial)	Nitrogen (lbs)	Phosphorus (lbs)	Potassium (lbs)	Sulphur (lbs)
2007	Rockwood	Alfalfa/Grass Mix.	E			*** Below Minimum Tolerance ***					
2008	Rockwood	Alfalfa/Grass Mix.	E			*** Below Minimum Tolerance ***					

Year	Muni	Crop	Soil	Farms	Acres	Yield/acre (metric)	Yield/acre (imperial)	Nitrogen (lbs)	Phosphorus (lbs)	Potassium (lbs)	Sulphur (lbs)
2009	Rockwood	Alfalfa/Grass Mix.	E			*** Below Minimum Tolerance ***					
2010	Rockwood	Alfalfa/Grass Mix.	E			*** Below Minimum Tolerance ***					
2011	Rockwood	Alfalfa/Grass Mix.	E			*** Below Minimum Tolerance ***					
2012	Rockwood	Alfalfa/Grass Mix.	E			*** Below Minimum Tolerance ***					
2013	Rockwood	Alfalfa/Grass Mix.	E			*** Below Minimum Tolerance ***					
2014	Rockwood	Alfalfa/Grass Mix.	E			*** Below Minimum Tolerance ***					
2016	Rockwood	Alfalfa/Grass Mix.	E	9	672.0	2.551 Tonnes	2.812 Tons	27.4	33.4	8.0	7.5
2015	Rockwood	Alfalfa/Grass Mix.	E	7	543.0	1.943 Tonnes	2.141 Tons	34.0	21.9	5.3	4.3

Copyright © 2017 Manitoba Agricultural Services Corporation. All rights reserved.




MMPP - Fertilizer Data Browser

Select Municipalities or MASC Risk Areas

Tip: Click or touch the 'X' (at right) in these tip balloons to hide them permanently. ✕

Tip: Click or touch the button below to select Municipalities or MASC Risk Areas. ✕

Municipalities

Tip: Click or touch in the select boxes (below) to select at least one item from each list. Click or touch the  icon to clear all selected items. ✕

ROCKWOOD



Select Crop(s)

ALFALFA/GRASS MIX.



Select Soil Type(s)

4 selected



Select Year Range



1993

1998

2003

2008

2012

to

Search Summary

31 records returned

69 farm varieties grown on **5,581.0** acres

Average Yield

2.091 Tonnes (**2.305** Tons) per acre

Average Fertilizer Application

Nitrogen: **24.8** lbs per acre

Phosphorus: **42.9** lbs per acre


Potassium: **9.8** lbs per acre

Sulphur: **4.2** lbs per acre

Summary includes aggregate data from 'below minimum tolerance' records

Fertilizer Usage Data

'Below Minimum Tolerance' records contain data from fewer than 3 producers or 500 acres, marked as such to retain producer anonymity. Data from these records is included in the Search Summary totals.

Tip: Click or touch a column header to sort. On a desktop computer, hold and click  a second column header to do a secondary sort.

Year	Muni	Crop	Soil	Farms	Acres	Yield/acre (metric)	Yield/acre (imperial)	Nitrogen (lbs)	Phosphorus (lbs)	Potassium (lbs)	Sulphur (lbs)
2007	Rockwood	Alfalfa/Grass Mix.	F			*** Below Minimum Tolerance ***					
2007	Rockwood	Alfalfa/Grass Mix.	G			*** Below Minimum Tolerance ***					

Year	Muni	Crop	Soil	Farms	Acres	Yield/acre (metric)	Yield/acre (imperial)	Nitrogen (lbs)	Phosphorus (lbs)	Potassium (lbs)	Sulphur (lbs)
2007	Rockwood	Alfalfa/Grass Mix.	H								
						*** Below Minimum Tolerance ***					
2007	Rockwood	Alfalfa/Grass Mix.	I								
						*** Below Minimum Tolerance ***					
2008	Rockwood	Alfalfa/Grass Mix.	F								
						*** Below Minimum Tolerance ***					
2008	Rockwood	Alfalfa/Grass Mix.	G								
						*** Below Minimum Tolerance ***					
2008	Rockwood	Alfalfa/Grass Mix.	H								
						*** Below Minimum Tolerance ***					
2008	Rockwood	Alfalfa/Grass Mix.	I								
						*** Below Minimum Tolerance ***					
2009	Rockwood	Alfalfa/Grass Mix.	F								
						*** Below Minimum Tolerance ***					
2009	Rockwood	Alfalfa/Grass Mix.	G								
						*** Below Minimum Tolerance ***					
2009	Rockwood	Alfalfa/Grass Mix.	H								
						*** Below Minimum Tolerance ***					
2010	Rockwood	Alfalfa/Grass Mix.	F								
						*** Below Minimum Tolerance ***					
2010	Rockwood	Alfalfa/Grass Mix.	G								
						*** Below Minimum Tolerance ***					
2010	Rockwood	Alfalfa/Grass Mix.	H								
						*** Below Minimum Tolerance ***					
2011	Rockwood	Alfalfa/Grass Mix.	F								
						*** Below Minimum Tolerance ***					
2011	Rockwood	Alfalfa/Grass Mix.	G								
						*** Below Minimum Tolerance ***					
2011	Rockwood	Alfalfa/Grass Mix.	H								
						*** Below Minimum Tolerance ***					
2012	Rockwood	Alfalfa/Grass Mix.	F								
						*** Below Minimum Tolerance ***					
2012	Rockwood	Alfalfa/Grass Mix.	G								
						*** Below Minimum Tolerance ***					
2012	Rockwood	Alfalfa/Grass Mix.	H								
						*** Below Minimum Tolerance ***					
2013	Rockwood	Alfalfa/Grass Mix.	F								
						*** Below Minimum Tolerance ***					

Year	Muni	Crop	Soil	Farms	Acres	Yield/acre (metric)	Yield/acre (imperial)	Nitrogen (lbs)	Phosphorus (lbs)	Potassium (lbs)	Sulphur (lbs)
2013	Rockwood	Alfalfa/Grass Mix.	G								
						*** Below Minimum Tolerance ***					
2013	Rockwood	Alfalfa/Grass Mix.	H								
						*** Below Minimum Tolerance ***					
2014	Rockwood	Alfalfa/Grass Mix.	F								
						*** Below Minimum Tolerance ***					
2014	Rockwood	Alfalfa/Grass Mix.	G								
						*** Below Minimum Tolerance ***					
2014	Rockwood	Alfalfa/Grass Mix.	H								
						*** Below Minimum Tolerance ***					
2015	Rockwood	Alfalfa/Grass Mix.	F								
						*** Below Minimum Tolerance ***					
2015	Rockwood	Alfalfa/Grass Mix.	H								
						*** Below Minimum Tolerance ***					
2016	Rockwood	Alfalfa/Grass Mix.	F								
						*** Below Minimum Tolerance ***					
2016	Rockwood	Alfalfa/Grass Mix.	G								
						*** Below Minimum Tolerance ***					
2016	Rockwood	Alfalfa/Grass Mix.	H								
						*** Below Minimum Tolerance ***					

Copyright © 2017 Manitoba Agricultural Services Corporation. All rights reserved.




MMPP - Fertilizer Data Browser

Select Municipalities or MASC Risk Areas

Tip: Click or touch the 'X' (at right) in these tip balloons to hide them permanently. ✕

Tip: Click or touch the button below to select Municipalities or MASC Risk Areas. ✕

Municipalities

Tip: Click or touch in the select boxes (below) to select at least one item from each ✕ list. Click or touch the  icon to clear all selected items.

ROCKWOOD



Select Crop(s)

SILAGE CORN



Select Soil Type(s)

SOIL TYPE E



Warning

Charts unavailable when only one Soil Type is selected. Fertilizer Application Data table will still be displayed.

Select Year Range

1993 1998 2003 2008 2012

to

Search Summary

9 records returned

19 farm varieties grown on **1,693.0** acres

Average Yield

14.398 Tonnes (**15.866** Tons) per acre

Average Fertilizer Application

Nitrogen: **134.7** lbs per acre

Phosphorus: **34.5** lbs per acre


Potassium: **32.6** lbs per acre

Sulphur: **5.5** lbs per acre

Summary includes aggregate data from 'below minimum tolerance' records

Fertilizer Usage Data

'Below Minimum Tolerance' records contain data from fewer than 3 producers or 500 acres, marked as such to retain producer anonymity. Data from these records is included in the Search Summary totals.

Tip: Click or touch a column header to sort. On a desktop computer, hold and click  a second column header to do a secondary sort.

Year	Muni	Crop	Soil	Farms	Acres	Yield/acre (metric)	Yield/acre (imperial)	Nitrogen (lbs)	Phosphorus (lbs)	Potassium (lbs)	Sulphur (lbs)
2007	Rockwood	Silage Corn	E			*** Below Minimum Tolerance ***					
2008	Rockwood	Silage Corn	E			*** Below Minimum Tolerance ***					

Year	Muni	Crop	Soil	Farms	Acres	Yield/acre (metric)	Yield/acre (imperial)	Nitrogen (lbs)	Phosphor (lbs)	Potassium (lbs)	Sulphur (lbs)
2009	Rockwood	Silage Corn	E			*** Below Minimum Tolerance ***					
2011	Rockwood	Silage Corn	E			*** Below Minimum Tolerance ***					
2012	Rockwood	Silage Corn	E			*** Below Minimum Tolerance ***					
2013	Rockwood	Silage Corn	E			*** Below Minimum Tolerance ***					
2014	Rockwood	Silage Corn	E			*** Below Minimum Tolerance ***					
2015	Rockwood	Silage Corn	E			*** Below Minimum Tolerance ***					
2016	Rockwood	Silage Corn	E			*** Below Minimum Tolerance ***					

Copyright © 2017 Manitoba Agricultural Services Corporation. All rights reserved.




MMPP - Fertilizer Data Browser

Select Municipalities or MASC Risk Areas

Tip: Click or touch the 'X' (at right) in these tip balloons to hide them permanently. ✕

Tip: Click or touch the button below to select Municipalities or MASC Risk Areas. ✕

Municipalities

Tip: Click or touch in the select boxes (below) to select at least one item from each list. Click or touch the  icon to clear all selected items. ✕

ROCKWOOD



Select Crop(s)

SILAGE CORN



Select Soil Type(s)

4 selected



Select Year Range



1993

1998

2003

2008

2012

to

Search Summary

14 records returned

20 farm varieties grown on **788.0** acres

Average Yield

8.893 Tonnes (**9.801** Tons) per acre

Average Fertilizer Application

Nitrogen: **125.8** lbs per acre

Phosphorus: **44.8** lbs per acre


Potassium: **31.4** lbs per acre

Sulphur: **12.9** lbs per acre

Summary includes aggregate data from 'below minimum tolerance' records

Fertilizer Usage Data

'Below Minimum Tolerance' records contain data from fewer than 3 producers or 500 acres, marked as such to retain producer anonymity. Data from these records is included in the Search Summary totals.

Tip: Click or touch a column header to sort. On a desktop computer, hold and click  a second column header to do a secondary sort.

Year	Muni	Crop	Soil	Farms	Acres	Yield/acre (metric)	Yield/acre (imperial)	Nitrogen (lbs)	Phosphorus (lbs)	Potassium (lbs)	Sulphur (lbs)
2007	Rockwood	Silage Corn	F			*** Below Minimum Tolerance ***					
2007	Rockwood	Silage Corn	G			*** Below Minimum Tolerance ***					

Year	Muni	Crop	Soil	Farms	Acres	Yield/acre (metric)	Yield/acre (imperial)	Nitrogen (lbs)	Phosphorus (lbs)	Potassium (lbs)	Sulphur (lbs)
2007	Rockwood	Silage Corn	H								*** Below Minimum Tolerance ***
2008	Rockwood	Silage Corn	F								*** Below Minimum Tolerance ***
2008	Rockwood	Silage Corn	H								*** Below Minimum Tolerance ***
2009	Rockwood	Silage Corn	F								*** Below Minimum Tolerance ***
2009	Rockwood	Silage Corn	H								*** Below Minimum Tolerance ***
2010	Rockwood	Silage Corn	F								*** Below Minimum Tolerance ***
2010	Rockwood	Silage Corn	G								*** Below Minimum Tolerance ***
2010	Rockwood	Silage Corn	H								*** Below Minimum Tolerance ***
2012	Rockwood	Silage Corn	H								*** Below Minimum Tolerance ***
2014	Rockwood	Silage Corn	H								*** Below Minimum Tolerance ***
2015	Rockwood	Silage Corn	G								*** Below Minimum Tolerance ***
2016	Rockwood	Silage Corn	G								*** Below Minimum Tolerance ***

Copyright © 2017 Manitoba Agricultural Services Corporation. All rights reserved.