

1c - Dairy

Operation Name:

[Redacted]

Type	Storage Type	Volatilization	Animal Numbers	N Excreted Per Herd Adjusted for Storage N Loss (lb N/yr/herd)	P2O5 Excreted Per Herd Per Year (lb P2O5/year)
Mature Cows, plus associated livestock	Liquid Uncovered Steel/Concrete	20%	400	142594.9	61678.2

Last Revised October 18, 2019

2 - Crop Rotation

Operation Name:

Enter the operation name on the livestock tab(s)

Crop	Removal		Uptake		Yield	Units	Acreage	Removal		Uptake
	P2O5	N	N	Units				P2O5 (lb)	N (lb)	N (lb)
Alfalfa	13.8	58	58	lb/ton	2.496	ton/ac	200	6889	28954	28954
Barley Grain	0.42	0.97	1.39	lb/bu		bu/ac		-	-	-
Barley Silage	11.8	34.4	34.4	lb/ton	2.026	ton/ac	100	2391	6969	6969
Canola	1.04	1.93	3.19	lb/bu	37.4	bu/ac	133	5173	9600	15868
Corn Grain	0.44	0.97	1.53	lb/bu	109.8	bu/ac	133	6425	14165	22343
Corn Silage	12.7	31.2	31.2	lb/ton	4.398	tons/ac	346	19326	47477	47477
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	88.2	bu/ac	133	3050	7273	12552
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	51.2	bu/ac	133	4018	10214	14368
Wheat - Winter	0.51	1.04	1.35	lb/bu		bu/ac		-	-	-
Total Acres							1178	47272	124653	148531
Estimated Average Removal/Uptake (lb/ac)								40.1	105.8	126.1
Acres in Hanover and La Broquerie										
Proportion in Hanover or La Broquerie								0%		
Additional Acres										
Crop Planned on Additional Acres										
Total Acreage							1178			
*Notes:	Enter the number of acres that are in the RM's of Hanover or La Broquerie in cell H26. Additional acres include acres for which crop removal or soil data is limited or unavailable.									

3 - Farm Excretion

Operation Name: Enter the operation name on the livestock tab(s)

Species	Animal Category/Operation type	N (lb/year)	P205 (lb/year)
Pigs	Boars	0	0
	Weanlings/Nursery	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 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	0
	Lactating First Calf Heifer	0	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	142595	61678
Sheep	Ewes	0	0
	Replacement Ewes	0	0
	Rams	0	0
	Lambs	0	0
	Ewes, plus assoc livestock	0	0
	Feeder	0	0
Chickens	Light Broilers	0	0
	Broilers	0	0
	Broiler Breeder Pullets	0	0
	Broiler Breeder Hens	0	0
Layers	White Layer Pullets	0	0
	White Layer Hens	0	0
	White Breeder Pullets	0	0
	White Breeder Hens	0	0
	Brown Layer Pullets	0	0
	Brown Layer Hens	0	0
	Brown Breeder Pullets	0	0
	Brown Breeder Hens	0	0
Turkeys	Broiler Turkey (0-9 wks)	0	0
	Hen Turkey (0-11 wks)	0	0
	Heavy Hens (0-14 wks)	0	0
	Toms (0-14 wks)	0	0
	Breeding Hen Growers (0-30 wks)	0	0
	Breeding Hens (31-End of Lay)	0	0
	Breeding Tom Grower (0-17 wks)	0	0
	Breeding Tom Grower (17-30 wks)	0	0
	Breeding Tom (31-End of Lay)	0	0
Total		142595	61678

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

4 - Land Base Summary

Operation Name: Enter the operation name on the livestock tab(s)

Nutrients Excreted		lbs
Nitrogen		142595
Phosphorus (P2O5)		61678
Crop Nutrient Use		lb/ac
Average Crop N Uptake		126.1
Average Crop Phosphorus (P2O5) Removal		40.1
Operation-specific Phosphorus (P2O5) Allowance		80.3
Land Available		1178
Land Base Required		acres
Acres for Nitrogen		1131
Acres for Phosphorus (P2O5)		769
Phosphorus Balance		acres
Acres for Phosphorus Balance (1X)		1537

Note: For lands located in Hanover and/or La Broquerie, the acres required for phosphorus are based on phosphorus balance (1X). For other lands, the acres required for phosphorus are based on twice crop phosphorus removal (2X). Land requirements for operations with lands inside and outside Hanover and/or La Broquerie are based on a weighted average.

Last revised November 26, 2019

CROP ROTATION TABLE

A	B	C	D	E
Expected Crops in the Rotation	Acreage	Historical Yield	Units	Source of Yield Information
Alfalfa	200	2.496	Tons/Acre	MASC (Yield Data Browser by RM's / soil type)
Green Feed	100	2.026	Tons/Acre	MASC (Yield Data Browser by RM's / soil type)
Silage Corn	346	4.398 (dry)	Tons/Acre	MASC (Yield Data Browser by RM's / soil type)
Canola	133	37.4	Bu./Acre	MASC (Yield Data Browser by RM's / soil type)
Grain Corn	133	109.8	Bu./Acre	MASC (Yield Data Browser by RM's / soil type)
Oats	133	88.2	Bu./Acre	MASC (Yield Data Browser by RM's / soil type)
Red Spring Wheat	133	51.2	Bu./Acre	MASC (Yield Data Browser by RM's / soil type)
Total Net Acreage for Manure Application	1178			

- 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.