

1a - Pigs

Operation Name:

Operation Type	Storage Type	Volatilization	Animal Numbers (Places)	N Excreted Per Herd Adjusted for Storage N Loss (lb/yr/herd)	P2O5 Excreted Per Herd Per Year (lb/yr/herd)
Gilts (Purchased)	Liquid Uncovered Earthen	30%		0	0
Boars	Liquid Uncovered Earthen	30%		0	0
Weanlings/Nursery	Liquid Uncovered Earthen	30%	8300	46168	29578
Growers/Finishers	Liquid Uncovered Earthen	30%	255	6268	3444
Sows, farrow to 6.2 kg	Liquid Uncovered Earthen	30%	1600	60074	43387
Sows, farrow to 28 kg	Liquid Uncovered Earthen	30%		0	0
Sows, farrow to finish	Liquid Uncovered Earthen	30%		0	0

Last Revised February 12, 2020

2 - Crop Rotation										
Operation Name: Enter the operation name on the livestock tab(s)										
Crop	Removal		Uptake		Yield	Units	Acreage	Removal		Uptake
	P205	N	N	Units				P205 (lb)	N (lb)	N (lb)
Alfalfa	13.8	58	58	lb/ton		ton/ac		-	-	-
Barley Grain	0.42	0.97	1.39	lb/bu	78.4	bu/ac	30	988	2281	3269
Barley Silage	11.8	34.4	34.4	lb/ton		ton/ac		-	-	-
Canola	1.04	1.93	3.19	lb/bu	36.4	bu/ac	599	22676	42081	69553
Corn Grain	0.44	0.97	1.53	lb/bu		bu/ac		-	-	-
Corn Silage	12.7	31.2	31.2	lb/ton		tons/ac		-	-	-
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	2.738	tons/ac	138	3778	12922	12922
Lentils	1.03	3.39	5.08	lb/cwt		cwt/ac		-	-	-
Oats	0.26	0.62	1.07	lb/bu	97.4	bu/ac	16	405	966	1667
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	37	bu/ac	30	932	4296	5772
Sunflower	1.1	2.8		lb/cwt		cwt/ac		-	-	-
Wheat - Spring	0.59	1.5	2.11	lb/bu	53.8	bu/ac	584	18537	47129	66295
Wheat - Winter	0.51	1.04	1.35	lb/bu		bu/ac		-	-	-
Total Acres							1397	47317	109675	159479
Estimated Average Removal/Uptake (lb/ac)								33.9	78.5	114.2
Acres in Hanover and La Broquerie										
Proportion in Hanover or La Broquerie								0%		
Additional Acres										
Crop Planned on Additional Acres										
Total Acreage							1397			
*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.									

Last revised December 18, 2017

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	46168	29578
	Growers/Finishers	6268	3444
	Sows, farrow to 5 kg	60074	43387
	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	0	0
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		112510	76409

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	112510
Phosphorus (P2O5)	76409
Crop Nutrient Use	
	lb/ac
Average Crop N Uptake	114.2
Average Crop Phosphorus (P2O5) Removal	33.9
Operation-specific Phosphorus (P2O5) Allowance	67.7
Land Available	
	1397
Land Base Required	
	acres
Acres for Nitrogen	986
Acres for Phosphorus (P2O5)	1128
Phosphorus Balance	
	acres
Acres for Phosphorus Balance (1X)	2256

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
Argentine Canola	599	36.4	Bu./Acre	MASC (Fertilizer Data Browser by RM & Soil type)
Red Spring Wheat	584	53.8	Bu./Acre	MASC (Fertilizer Data Browser by RM & Soil type)
Grass Hay	138	2.738	Tons/Acre	MASC (Fertilizer Data Browser by RM & Soil type)
Barley	30	78.4	Bu./Acre	MASC (Fertilizer Data Browser by RM & Soil type)
Soybeans	30	37.0	Bu./Acre	MASC (Fertilizer Data Browser by RM & Soil type)
Oats	16	97.4	Bu./Acre	MASC (Fertilizer Data Browser by RM & Soil type)
Total Net Acreage for Manure Application	1397			

- 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.