

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% | 250 | 7955 | 4396 |
| Boars | Liquid Uncovered Earthen | 30% | | 0 | 0 |
| Weanlings/Nursery | Liquid Uncovered Earthen | 30% | | 0 | 0 |
| Growers/Finishers | Liquid Uncovered Earthen | 30% | | 0 | 0 |
| Sows, farrow to 6.2 kg | Liquid Uncovered Earthen | 30% | 4500 | 168959 | 122025 |
| 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

September 2023

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 | | ton/ac | | - | - | - |
| 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 | 44.4 | bu/ac | 825 | 38095 | 70696 | 116850 |
| 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 | | tons/ac | | - | - | - |
| Lentils | 1.03 | 3.39 | 5.08 | lb/cwt | | cwt/ac | | - | - | - |
| Oats | 0.26 | 0.62 | 1.07 | lb/bu | 124.4 | bu/ac | 583 | 18857 | 44966 | 77602 |
| 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 | 34.3 | bu/ac | 583 | 16797 | 77388 | 103984 |
| Sunflower | 1.1 | 2.8 | | lb/cwt | | cwt/ac | | - | - | - |
| Wheat - Spring | 0.59 | 1.5 | 2.11 | lb/bu | 63.1 | bu/ac | 825 | 30714 | 78086 | 109841 |
| Wheat - Winter | 0.51 | 1.04 | 1.35 | lb/bu | | bu/ac | | - | - | - |
| Total Acres | | | | | | | 2816 | 104463 | 271136 | 408277 |
| Estimated Average Removal/Uptake (lb/ac) | | | | | | | | 37.1 | 96.3 | 145.0 |
| Acres in Hanover and La Broquerie | | | | | | | | | | |
| Proportion in Hanover or La Broquerie | | | | | | | 0% | | | |
| Additional Acres | | | | | | | | | | |
| Crop Planned on Additional Acres | | | | | | | | | | |
| Total Acreage | | | | | | | 2816 | | | |
| *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) | P2O5 (lb/year) |
|-----------------|---|----------------|-------------------|
| Pigs | Boars | 0 | 0 |
| | Weanlings/Nursery | 0 | 0 |
| | Growers/Finishers | 0 | 0 |
| | Sows, farrow to 5 kg | 168959 | 122025 |
| | 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 | | 176915 | 126421 |

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 | | 176915 |
| Phosphorus (P2O5) | | 126421 |
| Crop Nutrient Use | | lb/ac |
| Average Crop N Uptake | | 145.0 |
| Average Crop Phosphorus (P2O5) Removal | | 37.1 |
| Operation-specific Phosphorus (P2O5) Allowance | | 74.2 |
| Land Available | | 2816 |
| Land Base Required | | acres |
| Acres for Nitrogen | | 1220 |
| Acres for Phosphorus (P2O5) | | 1704 |
| Phosphorus Balance | | acres |
| Acres for Phosphorus Balance (1X) | | 3408 |

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 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| 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.