

4 - Land Base Summary**Operation Name:****Enter the operation name on the livestock tab(s)****Nutrients Excreted****lbs**

Nitrogen

201064

Phosphorus (P2O5)

123382

Crop Nutrient Use**lb/ac**

Average Crop N Uptake

146.2

Average Crop Phosphorus (P2O5) Removal

37.0

Operation-specific Phosphorus (P2O5) Allowance

74.0

Land Available

5829

Land Base Required**acres**

Acres for Nitrogen

1375

Acres for Phosphorus (P2O5)

1666

Phosphorus Balance**acres**

Acres for Phosphorus Balance (1X)

3333

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

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	0	0
	Sows, farrow to 23 kg	0	0
	Sows, farrow to finish	162918	94630
Beef	Mature Cows and Bred Heifers, plus associated livestock	5916	2448
	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	1872	925
Sheep	Ewes	572	339
	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	10461	6951
	Broiler Breeder Pullets	0	0
	Broiler Breeder Hens	0	0
Layers	White Layer Pullets	0	0
	White Layer Hens	18521	17508
	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)	374	580
	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
		0	0
Total		201064	123382

Note:

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

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	1.615	ton/ac		-	-	-	
Barley Grain	0.42	0.97	1.39	lb/bu	89.9	bu/ac	1203	45423	104905	150328	
Barley Silage	11.8	34.4	34.4	lb/ton		ton/ac		-	-	-	
Canola	1.04	1.93	3.19	lb/bu	38.6	bu/ac	891	35768	66378	109712	
Corn Grain	0.44	0.97	1.53	lb/bu	118.5	bu/ac	320	16685	36782	58018	
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		bu/ac		-	-	-	
Pasture (grazed)	10	34.2	34.2	lb/ton	0.5	ton/ac		-	-	-	
Peas	0.69	2.34	3.06	lb/bu	48.4	bu/ac	469	15663	53117	69461	
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	36.8	bu/ac	1178	36414	167766	225422	
Sunflower	1.1	2.8		lb/cwt		cwt/ac		-	-	-	
Wheat - Spring	0.59	1.5	2.11	lb/bu	63.2	bu/ac	1495	55746	141726	199361	
Wheat - Winter	0.51	1.04	1.35	lb/bu		bu/ac		-	-	-	
Total Acres							5556	205699	570674	812302	
Estimated Average Removal/Uptake (lb/ac)								37.0	102.7	146.2	
Acres in Hanover and La Broquerie											
Proportion in Hanover or La Broquerie							0%				
Additional Acres							273				
Crop Planned on Additional Acres							alfalfa/oats rotation				
Total Acreage							5829				
*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

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%		0	0
Growers/Finishers	Liquid Uncovered Earthen	30%		0	0
Sows, farrow to 6.2 kg	Liquid Uncovered Earthen	30%		0	0
Sows, farrow to 28 kg	Liquid Uncovered Earthen	30%		0	0
Sows, farrow to finish	Liquid Uncovered Earthen	30%	600	162918	94630

Last Revised February 12, 2020

1e - Poultry

Operation Name:

Species / Commodity	Type of Operation	Storage Type	Volatilization	Bird Places	Weight in kg	Weight out kg	Days on Feed	Cycles per Year	N Excreted Adjusted for N Loss lb/flock/yr	P2O5 Excreted lb/flock/yr
Chickens	Light Broilers	Solid Manure Shed	20%	20000	0.043	1.8	30	7	0	0
Chickens	Broilers	Field Storage	40%		0.043	2.275	35	7	10461	6951
Chickens	Broiler Breeder Pullets	Solid Manure Shed	20%		0.040	2.975	168	2	0	0
Chickens	Broiler Breeder Hens	Solid Manure Shed	20%		2.975	3.950	245	1	0	0
Eggs	White Layer Pullets	Solid Manure Shed	20%	20000	0.040	1.355	133	2	0	0
Eggs	White Layer Hens	Liquid Uncovered Earthen	30%		1.355	1.875	357	1	18521	17508
Eggs	White Breeder Pullets	Solid Manure Shed	20%		0.040	1.240	119	2	0	0
Eggs	White Breeder Hens	Solid Manure Shed	20%		1.240	1.670	350	1	0	0
Eggs	Brown Layer Pullets	Solid Manure Shed	20%		0.040	1.630	133	2	0	0
Eggs	Brown Layer Hens	Solid Manure Shed	20%		1.630	2.025	357	1	0	0
Eggs	Brown Breeder Pullets	Solid Manure Shed	20%		0.040	1.407	119	2	0	0
Eggs	Brown Breeder Hens	Solid Manure Shed	20%		1.407	1.950	350	1	0	0
Turkey	Broiler Turkey (0-9 wks)	Field Storage	40%	600	0.070	4.950	63	5	804	580
Turkey	Hen Turkey (0-11 wks)	Solid Manure Shed	20%		0.070	6.650	77	4	0	0
Turkey	Heavy Hens (0-14 wks)	Solid Manure Shed	20%		0.070	9.750	98	3	0	0
Turkey	Toms (0-14 wks)	Solid Manure Shed	20%		0.070	13.000	98	3	0	0
Turkey	Breeding Hen Growers (0-30 wks)	Solid Manure Shed	20%		0.070	12.900	210	1	0	0
Turkey	Breeding Hens (31-End of Lay)	Solid Manure Shed	20%		12.900	12.400	252	1	0	0
Turkey	Breeding Tom Grower (0-17 wks)	Solid Manure Shed	20%		0.070	15.770	119	1	0	0
Turkey	Breeding Tom Grower (17-30 wks)	Solid Manure Shed	20%		15.770	25.000	91	1	0	0
Turkey	Breeding Tom (31-End of Lay)	Solid Manure Shed	20%		25.000	28.180	252	1	0	0

Last Revised November 26, 2019

1d -Sheep

Operation Name										
Sheep/Operation Type	Storage Type	Volatilization	Animal Numbers	Weight In lb	Weight Out lb	Ave Weight lb	Days on Feed	Cycles per Year	N Excreted per Flock adjusted for Loss lb/flock/yr	P2O5 Excreted Per Flock lb/flock/yr
Ewes	Field Storage	40%	40	120	170	145	365	1	572	339
Replacement Ewes	Field Storage	40%		45	80	63	210	1	0	0
Rams	Field Storage	40%		100	200	150	365	1	0	0
Lambs	Field Storage	40%		8	45	27	70	1.4	0	0
Ewes, plus assoc livestock	Field Storage	40%		n/a	n/a	n/a	n/a	n/a	0	0
Feeder	Field Storage	40%		45	100	73	365	1	0	0

1c - Dairy**Operation Name:**

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 Earthen	30%	6	1871.6		925.2

Last Revised October 18, 2019

1b - Beef

Operation Name:

Operation Type	Animal Category	Storage Type	Volatilization	Animal Numbers	Weight In (lb)	Weight Out (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)
Cow Calf	Mature Cows and Bred Heifers, plus associated livestock	Field Storage	40%	44	n/a	n/a	n/a	n/a	n/a	n/a	5916	2448
Feeder	Feedlot Cattle - long keep	Field Storage	40%		581	1300	240	1.0	3.00	240	0	0
Feeder	Feedlot Cattle - short keep	Field Storage	40%		975	1300	116	1.0	2.80	116	0	0
Feeder	Backgrounders - pasture	Field Storage	40%		793	975	105	1.0	1.73	105	0	0
Feeder	Backgrounders - confined	Field Storage	40%		500	793	180	1.0	1.63	180	0	0

Last Revised January 21, 2015