Part 2 — Technical Requirements

NRCB Natural Resources Conservation Board

Application under the *Agricultural Operation Practices Act* for a confined feeding operation, manure collection area, and/or manure storage facility(ies)

NRCB USE ONLY	Application number	Legal land description
☒ Approval ☐ Registration ☐ Authorization ☐ Amendment	LA24047	N½ 20 & S½ 29-17-26 W4M

APPLICATION DISCLOSURE

This information is collected under the authority of the *Agricultural Operation Practices Act* (AOPA), and is subject to the provisions of the *Freedom of Information and Protection of Privacy Act*. This information is public unless the NRCB grants a written request that certain sections remain private.

Any construction prior to obtaining an NRCB permit is an offence and is subject to enforcement action, including prosecution.

I, the applicant, or applicant's agent, have read and understand the statements above, and I acknowledge that the information provided in this application is true to the best of my knowledge.

Nov 19 2024
Date of signing

[redacted]
Signature

Brant Farming Co Ltd
Corporate name (if applicable)

Leonard J Gross
Print name

GENERAL INFORMATION REQUIREMENTS

Proposed facilities: list all proposed confined feeding operation facilities and their dimensions. Indicate whether any of the proposed facilities are additions to existing facilities. (attach additional pages if needed)

Proposed facilities	Dimensions (m) (length, width, and depth)
Chicken Broiler barn	380' x 120'
	(116 m x 37 m)

Existing facilities: list **ALL** existing confined feeding operation facilities and their dimensions

Existing facilities	Dimensions (m) (length, width, and depth)	NRCB USE ONLY
Chicken Layer Pullet barn	120.4m x 24.1m	
with attached manure collection area	18.3m x 9.1m	
Dry Sow barn	18.3m x 53.37m	

NRCB USE ONLY

AO Comment: CFO is currently permitted under Approval LA21061.

Part 2 — Technical Requirements

NRCB Natural Resources Conservation Board

Application under the *Agricultural Operation Practices Act* for a confined feeding operation, manure collection area, and/or manure storage facility(ies)

Existing facilities continued	Dimensions (m) (length, width, and depth)	NRCB USE ONLY
Farrow and nursery barn	18.3m x 70.15m	
Grower and finisher barn	22.8m x 70.15m	
Dairy barn	127m x 24m x 4.25m	
with manure pit	4.9m x 4.9m x 2.4m	
Calf and Close up	18.3m x 70.15m	
Macdonald barn	14m x 51.8m	
EMS (Lagoon)	112.2m 50m x 3.66m deep	
Slurry Store	30.8m x 5.8m High	
Dairy dry Corrals	60m x 65m	

Part 2 — Technical Requirements

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If a new facility is replacing an old facility, please explain what will happen to the old facility and when. ☐ N/A

The old one burned down so we want to build a new barn

AO Comment: The existing turkey barn burnt down and applicant has indicated they will not be rebuilding it. Instead, applicant has indicated they are proposing to build a chicken broiler barn adjacent to the footprint of the turkey barn.

Construction completion date for proposed facilities Nov 30 2028

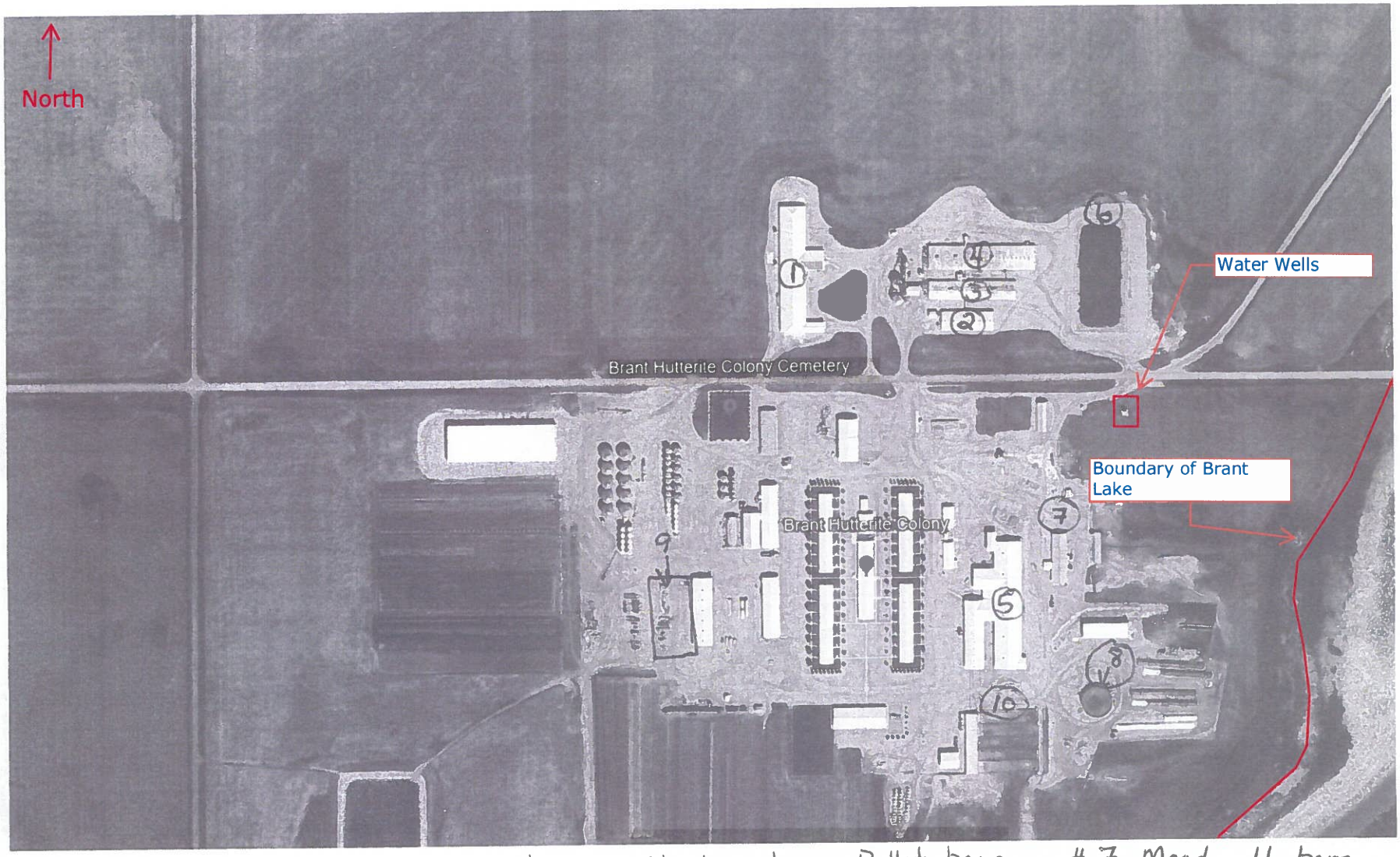
Additional information

Livestock numbers: Complete only if livestock numbers are different from what was identified in the Part 1 application. Note: if livestock numbers increase in your Part 2 application, a new Part 1 application must be submitted which may result in a loss of priority for minimum distance separation (MDS).

Livestock category and type (Available in the Schedule 2 of the Part 2 Matters Regulation)	**Permitted number**	**Proposed increase or decrease in number (if applicable)**	**Total**
Milking Cows	145	0	145
Chicken Layers	13000	0	13000
Chicken Pullets	13000	0	13000
Swine Farrow to Finish	400	0	400
Swine Feeders	3724	0	3724
Turkeys	5200	-5100	100
Ducks	700	0	700
Geese	200	0	200
Chicken Broilers	0	+40000	40000

Last updated September 11, 2023

AO Comment: Livestock numbers have not changed from Part 1 application.



1 Chicken Layer Pullet barn
2 Dry Sow barn
3 Farrow and Nursery barn
4 Grower + Finisher barn
5 Dairy Barn
6 Lagoon
7 Macdonald barn
8 Slurry Store
9 Chicken Broiler barn (Porposed)
10 Dairy dry Corrals

Part 2 — Technical Requirements

NRCB Natural Resources Conservation Board

Application under the *Agricultural Operation Practices Act* for a confined feeding operation, manure collection area, and/or manure storage facility(ies)

DECLARATION AND ACKNOWLEDGMENT OF APPLICANT CONCERNING *WATER ACT* LICENCE
issued by Alberta Environment and Protected Areas (EPA) for a confined feeding operation (CFO)
Date and sign one of the following four options

OPTION 1: Applying through the NRCB for both the AOPA permit and the *Water Act* licence

I **DO** want my water licence application coupled to my AOPA permit application.

Signed this ____day of _____, 20____. _____
Signature of Applicant or Agent

OPTION 2: Processing the AOPA permit and *Water Act* licence separately

1. I (we) acknowledge that the CFO will need a new water licence from EPA under the *Water Act* for the development or activity proposed in this AOPA application.
2. I (we) request that the NRCB process the AOPA application **independently of** EPA's processing of the CFO's application for a water licence.
3. In making this request, I (we) recognize that, if this AOPA application is granted by the NRCB, the NRCB's decision will not be considered by EPA as improving or enhancing the CFO's eligibility for a water licence under the *Water Act*.
4. I (we) acknowledge that any construction or actions to populate the CFO with livestock pursuant to an AOPA permit in the absence of a *Water Act* licence will **not** be relevant to EPA's consideration of whether to grant the *Water Act* licence application.
5. I (we) acknowledge that any such construction or livestock populating will be at the CFO's sole risk if the *Water Act* licence application is denied or if the operation of the CFO is otherwise deemed to be in violation of the *Water Act*. This risk includes being required to depopulate the CFO and/or to cease further construction, or to remove "works" or "undertakings" (as defined in the *Water Act*).
6. **AS RELEVANT:** I (we) acknowledge that the CFO is located in the South Saskatchewan River Basin and that, pursuant to the *Bow, Oldman and South Saskatchewan River Basin Water Allocation Order* [Alta. Reg. 171/2007], this basin is currently closed to new surface water allocations.
7. **Provide:** Water licence application number(s) _____

Signed this ____ day of _____, 20____. _____
Signature of Applicant or Agent

OPTION 3: Additional water licence not required

1. I (we) declare that the CFO will not need a new licence from EPA under the *Water Act* for the development or activity proposed in this AOPA application.
2. **Provide**: Water license number(s) or water conveyance agreement details _____
   File Number 10789

Signed this 19 day of Nov, 2024. [redacted]
Signature of Applicant or Agent

OPTION 4: Uncertain if *Water Act* licence is needed; acknowledgement of risk (for existing CFOs only)

1. At this time, I (we) do not know whether a new water licence is needed from EPA under the *Water Act* for the development or activity proposed in this AOPA application.
2. If a new *Water Act* licence is needed, I (we) request that the NRCB process the AOPA application **independently of** EPA's processing of the CFO's application for a water licence.
3. In making this request, I (we) recognize that, if this AOPA application is granted by the NRCB, the NRCB's decision will not be considered by EPA as improving or enhancing the CFO's eligibility for a water licence under the *Water Act*.
4. I (we) acknowledge that any construction or actions to populate the CFO with additional livestock pursuant to an AOPA permit in the absence of a *Water Act* licence will **not** be relevant to EPA's consideration of whether to grant my *Water Act* licence application, if a new water licence is needed.
5. I (we) acknowledge that any such construction or livestock increase will be at the CFO's sole risk if the *Water Act* licence application is denied or if the operation of the CFO is otherwise deemed to be in violation of the *Water Act*. This risk includes being required to depopulate the CFO and/or to cease further construction, or to remove "works" or "undertakings" (as defined in the *Water Act*).
6. **AS RELEVANT:** I (we) acknowledge that the CFO is located in the South Saskatchewan River Basin and that, pursuant to the *Bow, Oldman and South Saskatchewan River Basin Water Allocation Order* [Alta. Reg. 171/2007], this basin is currently closed to new surface water allocations.
7. **Provide**: Water license number(s) or water conveyance agreement details _____

_____

Signed this ____ day of _____, 20____. _____

Signature of Applicant or Agent

Part 2 — Technical Requirements

NRCB Natural Resources Conservation Board

Application under the *Agricultural Operation Practices Act* for a confined feeding operation, manure collection area, and/or manure storage facility(ies)

GENERAL ENVIRONMENTAL INFORMATION

(complete this section for the worst case of the existing facility which is the closest to water bodies or water wells and for each of the proposed facilities)

Facility description / name *(as indicated on site plan)*

Existing: Lagoon **Proposed 1:** Broiler barn

Proposed 2: _____ **Proposed 3:** _____

Facility and environmental risk information		Facilities				NRCB USE ONLY	
		Existing	Proposed 1	Proposed 2	Proposed 3	Meets requirements	Comments
Flood plain information	What is the elevation of the floor of the lowest manure storage or collection facility above the 1:25 year flood plain or the highest known flood level?	☑ >1 m ☐ ≤ 1 m	☑ >1 m ☐ ≤ 1 m	☐ >1 m ☐ ≤ 1 m	☐ > 1 m ☐ ≤ 1 m	☐ YES ☐ NO ☐ YES with exemption	
Surface water information	How many springs are within 100 m of the manure storage facility or manure collection area?	0	0			☐ YES ☐ NO ☐ YES with exemption	
	How many water wells are within 100 m of the manure storage facility or manure collection area?	1	0			☐ YES ☐ NO ☐ YES with exemption	
	What is the shortest distance from the manure collection or storage facility to a surface water body? (e.g., lake, creek, slough, seasonal)	350m	800m			☐ YES ☐ NO ☐ YES with exemption	
Groundwater information	What is the depth to the water table?		30m			☐ YES ☐ NO ☐ YES with exemption	
	What is the depth to the groundwater resource/aquifer you draw water from?	41.15m	41.15m			☐ YES ☐ NO ☐ YES with exemption	

Additional information (attach supporting information, e.g. borehole logs, records, etc. you consider relevant to your application)

AO Comment: Applicant indicated they have only two active water wells on site, ID#'s 1610561 and 131856.

Water Well Drilling Report

View in Imperial | Export to Excel

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

GOWN ID

GIC Well ID 1610561
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 2010/01/11

Well Identification and Location

Measurement in Metric

Owner Name	Address	Town	Province	Country	Postal Code
BRANT COLONY	P.O. BOX 107	BRANT	ALBERTA	CANADA	T0L 0L0

Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description
	15	20	17	26	4				EAST WELL

Measured from Boundary of
m from
m from

GPS Coordinates in Decimal Degrees (NAD 83)
Latitude 50.455183 Longitude -113.539833

How Location Obtained
Hand held autonomous GPS 20-30m

Elevation m

How Elevation Obtained
Not Obtained

Drilling Information

Method of Drilling
Rotary - Air

Proposed Well Use
Municipal

Type of Work
New Well

Formation Log

Measurement in Metric

Depth from ground level (m)	Water Bearing	Lithology Description
13.41		Brown Sandy Clay & Rocks
16.76		Sand & Gravel
18.59		Gray Clay & Rocks
26.82		Gray Shale
27.13		Gray Sandstone
36.27		Gray Shale
41.15	Yes	Gray Sandstone
42.67		Gray Shale

Yield Test Summary

Measurement in Metric

Recommended Pump Rate 68.19 L/min

Test Date	Water Removal Rate (L/min)	Static Water Level (m)
2009/05/27	72.74	13.95
2009/05/26	95.47	13.95

Well Completion

Measurement in Metric

Total Depth Drilled	Finished Well Depth	Start Date	End Date
42.67 m	42.67 m	2009/05/25	2009/05/26

Borehole

Diameter (cm)	From (m)	To (m)
15.56	0.00	42.67

Surface Casing (if applicable)
Steel
Size OD 14.30 cm
Wall Thickness 0.559 cm
Bottom at 19.81 m

Well Casing/Liner
Plastic
Size OD 11.43 cm
Wall Thickness 0.602 cm
Top at 3.05 m
Bottom at 42.67 m

Perforations

From (m)	To (m)	Diameter or Slot Width (cm)	Slot Length (cm)	Hole or Slot Interval(cm)
36.58	41.15	0.318		17.78

Perforated by Saw

Annular Seal Bentonite Chips/Tablets
Placed from 12.19 m to 36.58 m
Amount 300.00 Pounds

Other Seals

Type	At (m)
Drive Shoe	19.81
Shale Trap	36.58

Screen Type
Size OD cm

From (m)	To (m)	Slot Size (cm)

Attachment
Top Fittings
Bottom Fittings

Pack
Type
Grain Size
Amount

Contractor Certification

Name of Journeyman responsible for drilling/construction of well
DOUG NIEMANS

Certification No
70092A

Company Name
PETER NIEMANS WATER WELL DRILLING

Copy of Well report provided to owner
Yes

Date approval holder signed
2009/06/03

Water Well Drilling Report

View in Imperial | Export to Excel

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

GIC Well ID 1610561
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 2010/01/11

GOWN ID

Well Identification and Location

Measurement in Metric

Owner Name	Address	Town	Province	Country	Postal Code
BRANT COLONY	P.O. BOX 107	BRANT	ALBERTA	CANADA	T0L 0L0

Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description
	15	20	17	26	4				EAST WELL

Measured from Boundary of
m from
m from

GPS Coordinates in Decimal Degrees (NAD 83)
Latitude 50.455183 Longitude -113.539833
How Location Obtained
Hand held autonomous GPS 20-30m

Elevation m
How Elevation Obtained
Not Obtained

Additional Information

Measurement in Metric

Distance From Top of Casing to Ground Level 67.01 cm
Is Artesian Flow
Rate L/min
Is Flow Control Installed
Describe

Recommended Pump Rate 68.19 L/min
Recommended Pump Intake Depth (From TOC) 36.58 m
Pump Installed
Type
Depth m
Make
H.P.
Model (Output Rating)

Did you Encounter Saline Water (>4000 ppm TDS)
Depth m
Gas
Depth m
Remedial Action Taken
Well Disinfected Upon Completion Yes
Geophysical Log Taken
Submitted to ESRD

Sample Collected for Potability Yes
Submitted to ESRD Yes

Additional Comments on Well
LITH: FROM 0' - 44 FEET' ALSO SAND STRINGERS.

Contractor Certification

Name of Journeyman responsible for drilling/construction of well
DOUG NIEMANS

Certification No
70092A

Company Name
PETER NIEMANS WATER WELL DRILLING

Copy of Well report provided to owner
Yes

Date approval holder signed
2009/06/03

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GoA Well Tag No.
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Well Identification and Location

Measurement in Metric

Owner Name	Address	Town	Province	Country	Postal Code
BRANT COLONY	P.O. BOX 107	BRANT	ALBERTA	CANADA	T0L 0L0

Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description
	15	20	17	26	4				EAST WELL

Measured from Boundary of
m from
m from

GPS Coordinates in Decimal Degrees (NAD 83)
Latitude 50.455183 Longitude -113.539833
How Location Obtained
Hand held autonomous GPS 20-30m

Elevation m
How Elevation Obtained
Not Obtained

Yield Test

Taken From Top of Casing | Measurement in Metric

Test Date 2009/05/27 | Start Time 11:00 AM | Static Water Level 13.95 m

Depth to water level

Pumping (m)	Elapsed Time Minutes:Sec	Recovery (m)
13.95	0:00	23.31
19.30	1:00	14.61
23.29	2:00	13.55
25.50	3:00	13.42
26.20	4:00	13.34
26.73	5:00	13.26
27.02	6:00	13.19
26.80	7:00	13.14
26.21	8:00	13.10
25.70	9:00	13.06
25.27	10:00	13.02
25.07	12:00	12.96
24.48	14:00	12.90
24.20	16:00	12.85
24.14	18:00	12.78
24.12	20:00	12.73
24.11	25:00	12.63
24.10	30:00	12.55
24.09	35:00	12.48
24.08	40:00	13.25
24.07	50:00	13.72
24.06	60:00	13.95
23.64	75:00	14.16
23.50	90:00	14.12
23.41	105:00	14.09
23.31	120:00	14.07

Method of Water Removal

Type Pump
Removal Rate 72.74 L/min
Depth Withdrawn From 39.62 m

If water removal period was < 2 hours, explain why

Yield Test

Taken From Top of Casing | Measurement in Metric

Test Date 2009/05/26 | Start Time 11:00 AM | Static Water Level 13.95 m

Depth to water level

Pumping (m)	Elapsed Time Minutes:Sec	Recovery (m)

Method of Water Removal

Type Air
Removal Rate 95.47 L/min
Depth Withdrawn From 42.67 m

If water removal period was < 2 hours, explain why

OPEN FLOW WITH RIG AIR FOR 2 HRS.

Water Diverted for Drilling

Water Source	Amount Taken		Diversion Date & Time
NW-21-18-28-W4	4546.09	L	2009/05/25 10:00 AM

Contractor Certification

Name of Journeyman responsible for drilling/construction of well
DOUG NIEMANS

Certification No
70092A

Company Name
PETER NIEMANS WATER WELL DRILLING

Copy of Well report provided to owner
Yes

Date approval holder signed
2009/06/03

Water Well Drilling Report

View in Imperial | Export to Excel

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GOWN ID

GIC Well ID 131856
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1973/10/19

Well Identification and Location

Measurement in Metric

Owner Name	Address	Town	Province	Country	Postal Code
HUTTERIAN BRETHREN OF BRANT	P.O. BOX 107 BRANT				

Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description
	15	20	17	26	4				

Measured from Boundary of
m from
m from

GPS Coordinates in Decimal Degrees (NAD 83)
Latitude 50.453605 Longitude -113.538254
How Location Obtained
Map

Elevation 990.60 m
How Elevation Obtained
Estimated

Drilling Information

Method of Drilling
Rotary

Proposed Well Use
Stock

Type of Work
New Well

Formation Log

Measurement in Metric

Depth from ground level (m)	Water Bearing	Lithology Description
12.19		Clay & Silt
18.29		Fine Grained Sand & Gravel
33.53		Shale
48.77		Hard Shale & Sandstone

Yield Test Summary

Measurement in Metric

Recommended Pump Rate 0.00 L/min

Test Date	Water Removal Rate (L/min)	Static Water Level (m)
1979/09/01	45.46	6.71

Well Completion

Measurement in Metric

Total Depth Drilled	Finished Well Depth	Start Date	End Date
48.77 m			1973/09/01

Borehole

Diameter (cm)	From (m)	To (m)
0.00	0.00	48.77

Surface Casing (if applicable)
Steel
Size OD 15.24 cm
Wall Thickness 0.000 cm
Bottom at 21.34 m

Well Casing/Liner
Steel
Size OD 12.70 cm
Wall Thickness 0.000 cm
Top at 0.00 m
Bottom at 48.77 m

Perforations

From (m)	To (m)	Diameter or Slot Width (cm)	Slot Length (cm)	Hole or Slot Interval(cm)
36.58	48.77	0.000		0.00

Perforated by Unknown

Annular Seal Driven
Placed from 0.00 m to 0.00 m
Amount

Other Seals

Type	At (m)

Screen Type
Size OD 0.00 cm

From (m)	To (m)	Slot Size (cm)

Attachment
Top Fittings Bottom Fittings

Pack
Type Grain Size
Amount

Contractor Certification

Name of Journeyman responsible for drilling/construction of well
UNKNOWN NA DRILLER

Certification No
1

Company Name
TRANS PROVINCIAL DRILLING LTD.

Copy of Well report provided to owner Date approval holder signed

Water Well Drilling Report

View in Imperial | Export to Excel

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

GIC Well ID 131856
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1973/10/19

GOWN ID

Well Identification and Location

Measurement in Metric

Owner Name	Address	Town	Province	Country	Postal Code
HUTTERIAN BRETHREN OF BRANT	P.O. BOX 107 BRANT				

Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description
	15	20	17	26	4				

Measured from Boundary of
m from
m from

GPS Coordinates in Decimal Degrees (NAD 83)
Latitude 50.453605 Longitude -113.538254
How Location Obtained: Map

Elevation 990.60 m
How Elevation Obtained: Estimated

Additional Information

Measurement in Metric

Distance From Top of Casing to Ground Level: cm
Is Artesian Flow:
Rate: L/min
Is Flow Control Installed:
Describe:

Recommended Pump Rate: 0.00 L/min
Recommended Pump Intake Depth (From TOC): 0.00 m
Pump Installed:
Depth: m
Type:
Make:
H.P.:
Model (Output Rating):

Did you Encounter Saline Water (>4000 ppm TDS):
Depth: m
Gas:
Depth: m
Well Disinfected Upon Completion:
Geophysical Log Taken:
Remedial Action Taken
Submitted to ESRD
Sample Collected for Potability:
Submitted to ESRD: Yes
Additional Comments on Well

Yield Test

Taken From Ground Level
Depth to water level

Measurement in Metric

Test Date	Start Time	Static Water Level
1979/09/01	12:00 AM	6.71 m

Pumping (m)	Elapsed Time Minutes:Sec	Recovery (m)

Method of Water Removal

Type:
Removal Rate: 45.46 L/min
Depth Withdrawn From: 0.00 m

If water removal period was < 2 hours, explain why

Water Diverted for Drilling

Water Source	Amount Taken	Diversion Date & Time
	L	

Contractor Certification

Name of Journeyman responsible for drilling/construction of well: UNKNOWN NA DRILLER
Certification No: 1
Company Name: TRANS PROVINCIAL DRILLING LTD.
Copy of Well report provided to owner
Date approval holder signed

Part 2 — Technical Requirements

NRCB Natural Resources Conservation Board

Application under the *Agricultural Operation Practices Act* for a confined feeding operation, manure collection area, and/or manure storage facility(ies)

DISTANCE OF ANY MANURE STORAGE FACILITY (EXISTING OR PROPOSED) TO NEIGHBOURING RESIDENCES

			NRCB USE ONLY				
Neighbour name(s)	**Legal land description**	**Distance (m)**	**Zoning (LUB) category**	**MDS category (1-4)**	**Distance (m)**	**Waiver attached (if required)**	**Meets regulations**
D. McDonald	NW-30-17-26-4	2415					
T. Irwin	NE-16-17-26-4	2818					
River Cross Ranch	SW-19-17-26-4	2415					
Steve & Lind Fink	NW-22-17-26-4	2818					
Rod Dixon	NW-08-17-26-4	3218					

LAND BASE FOR MANURE AND COMPOST APPLICATION (complete only if an increase in livestock or manure production will occur)

				NRCB USE ONLY	
Name of land owner(s)*	**Legal land description**	**Usable area** (ha)**	**Soil zone *****	**Usable area (ha)**	**Agreement attached (if required)**
H.B of Brant	Sec 29-17-26-4	580	Dark Brown		
H.B of Brant	NE-30-17-26-4	160	Dark Brown		
H.B of Brant	E½-32-17-26-4	320	Dark Brown		
H.B of Brant	E½-33-17-26-4	320	Dark Brown		
H.B of Brant	W½-34-17-26-4	320	Dark Brown		
			Total		

* If you are **not** the registered landowner, you must attach copies of land use agreements signed by all landowners.

** Available manure spreading area (excluding setback areas from residences, common bodies of water, water wells, etc. as identified in Agdex 096-5 Manure Spreading Regulations)

*** Brown, dark brown, black, grey wooded, or irrigated

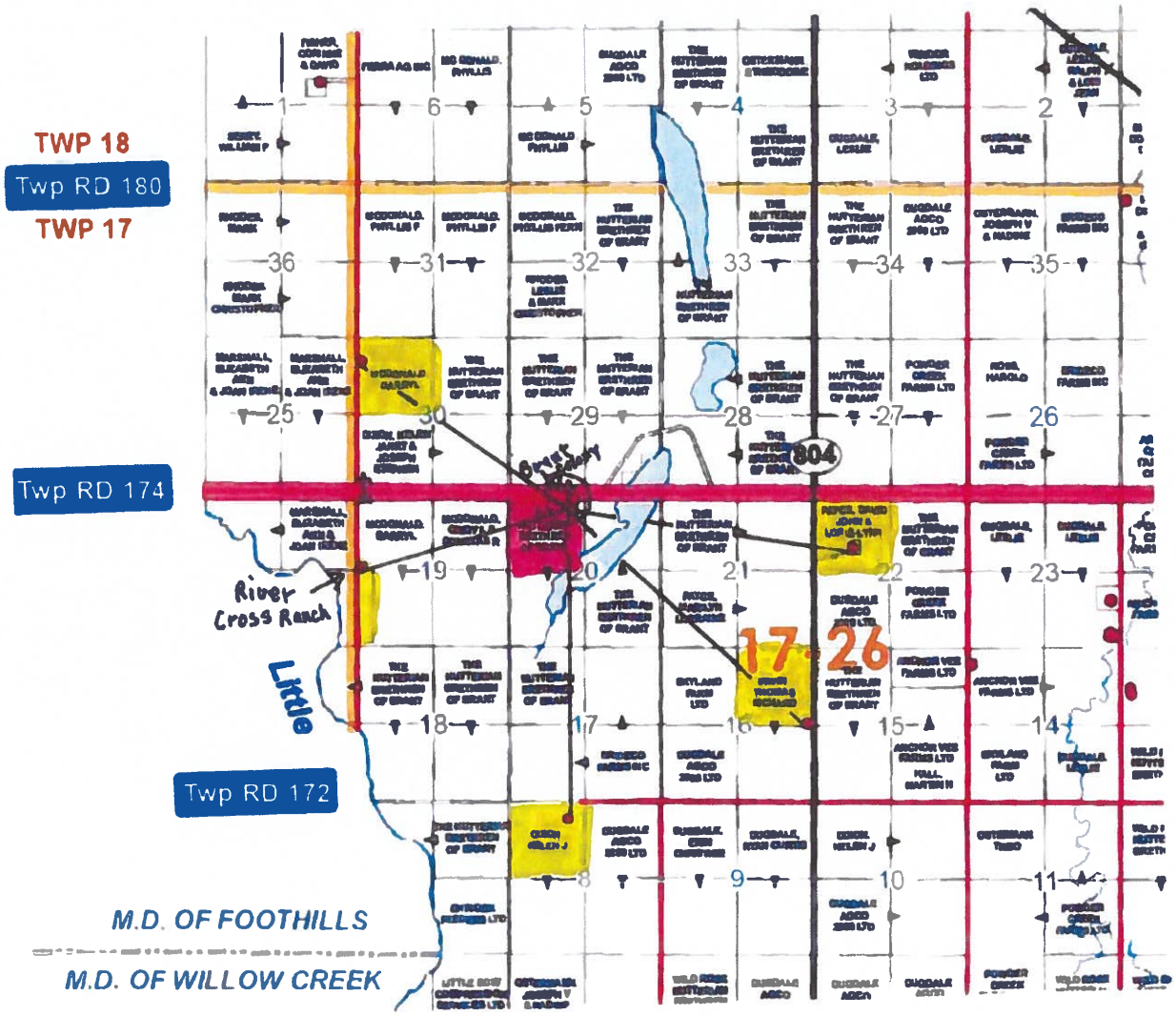
Additional information (attach any additional information as required)

Land Base For Manure Application Cont.

W½-27-17-26-W4 = 320 acres.

NE-22-17-26-W4 = 160 acres

NW-4-18-26-W4 = 160 acres



To Neighbouring Residences

NORTH

D. McDonald = 2,415 m.

T. Irwin = 2,818 m.

River Cross Ranch = 2,415 m.

Steve & Linda Fink = 2,818 m.

~~Helen J.~~ Dixon = 3,218 m.

Rod

Name Brant Farming Co Ltd
Address
Legal Land
Location

MDS Spreadsheet based on 2006 AOPA Regulations

Category of Livestock	Type of Livestock	Factor A	Technology Factor	MU	LSU Factor	Number of Animals	LSU
Feedlot Animals	Beef Cows/Finishers (900+ lbs)	0.700	0.700	0.910	0.4459		-
	Beef Feeders (450 - 900 lbs)	0.700	0.700	0.500	0.2450		-
	Beef Feeder Calves (<550 lbs)	0.700	0.700	0.275	0.1348		-
	Horses - PMU	0.650	0.700	1.000	0.4550		-
	Horses - Feeders > 750 lbs	0.650	0.700	1.000	0.4550		-
	Horses - Foals < 750 lbs	0.650	0.700	0.300	0.1365		-
	Mules	0.600	0.700	1.000	0.4200		-
	Donkeys	0.600	0.700	0.670	0.2814		-
	Bison	0.600	0.700	1.000	0.4200		-
							-
Dairy (*count lactating cows only)	Free Stall – Lactating Cows with all associated dries, heifers, and calves*	0.800	1.100	2.000	1.7600	145	255.2
	Free Stall – Lactating Cows with Dry Cows only*	0.800	1.100	1.640	1.4432		-
	Free Stall – Lactating Cows only	0.800	1.100	1.400	1.2320		-
	Tie Stall – Lactating Cows only	0.800	1.000	1.400	1.1200		-
	Loose Housing – Lactating Cows only	0.800	1.000	1.400	1.1200		-
	Dry Cow	0.800	0.700	1.000	0.5600		-
	Replacements – Bred Heifers (Breeding to Calving)	0.800	0.700	0.875	0.4900		-
	Replacements - Growing Heifers (350 lbs to breeding)	0.800	0.700	0.525	0.2940		-
	Calves (< 350 lbs)	0.800	0.700	0.200	0.1120		-
							-
Swine Liquid (*count sows only)	Farrow to finish *	2.000	1.100	1.780	3.9160		1,566.4
	Farrow to wean *	2.000	1.100	0.670	1.4740		-
	Farrow only *	2.000	1.100	0.530	1.1660		-
	Feeders/Boars	2.000	1.100	0.200	0.4400		1,638.6
	Growers/Roasters	2.000	1.100	0.118	0.2600		-
	Weaners	2.000	1.100	0.055	0.1210		-
							-
Swine Solid (*Count sows only)	Farrow to finish *	2.000	0.800	1.780	2.8480		-
	Farrow to wean *	2.000	0.800	0.670	1.0720		-
	Farrow only *	2.000	0.800	0.530	0.8480		-
	Feeders/Boars	2.000	0.800	0.200	0.3200		-
	Growers/Roasters	2.000	0.800	0.118	0.1888		-
	Weaners	2.000	0.800	0.055	0.0880		-
							-
Poultry	Chicken - Breeders - Solid	1.000	0.700	0.010	0.0070		-
	Chicken - Layers - Liquid (includes associated pullets)	2.000	1.100	0.008	0.0176		-
	Chicken - Layers - (Belt Cage)	2.000	0.700	0.008	0.0112	13,000	145.6
	Chicken - Layers - (Deep Pit)	2.000	0.700	0.008	0.0112		-
	Chicken - Pullets/Broilers	1.000	0.700	0.002	0.0014	53,000	74.2
	Turkey - Toms/Breeders	1.000	0.700	0.020	0.0140		-
	Turkey - Hens (light)	1.000	0.700	0.013	0.0091		-
	Turkey - Broilers	1.000	0.700	0.010	0.0070	100	0.7
	Ducks	1.000	0.700	0.010	0.0070	700	4.9
	Geese	1.000	0.700	0.020	0.0140	200	2.8
							-
Sheep and Goats	Sheep - Ewes/Rams	0.600	0.700	0.200	0.0840		-
	Sheep - Ewes with lambs	0.600	0.700	0.250	0.1050		-
	Sheep - Lambs	0.600	0.700	0.050	0.0210		-
	Sheep - Feeders	0.600	0.700	0.100	0.0420		-
	Goats - Meat/Milk (per Ewe)	0.700	0.700	0.170	0.0833		-
	Goats - Nannies/Billies	0.700	0.700	0.140	0.0686		-
	Goats - Feeders	0.700	0.700	0.077	0.0377		-
							-
Cervid	Elk	0.600	0.700	0.600	0.2520		-
	Deer	0.600	0.700	0.200	0.0840		-
							-
Wild Boar	Feeders	2.000	0.800	0.140	0.2240		-
	Sow (farrowing)	2.000	0.800	0.371	0.5936		-
							-
					Total		3,688.4

For New Operations

Dispersion Factor 1

Category	Odour Objective	Distance Feet	Distance Metres
1	41.04	2,698	822
2	54.72	3,598	1,097
3	68.4	4,497	1,371
4	109.44	7,195	2,193

For Expanding Operations

Dispersion Factor 1
Expansion Factor 0.77

Category	Odour Objective	Distance Feet	Distance Metres
1	41.04	2,078	633
2	54.72	2,770	844
3	68.40	3,463	1,055
4	109.44	5,540	1,689

Name	Brant Farming Co Ltd	
Address		0
Legal Land Location		0

Landbase Requirements (hectares) based on 2006 AOPA requirements

Category of Livestock	Type of Livestock	Number of Animals	Dark Brown & Brown (ha)	Grey Wooded (ha)	Black (ha)	Irrigated (ha)
Feedlot Animals	Cows/Finishers (900+ lbs)	0.0	0.0	0.0	0.0	0.0
	Feeders (450 - 900 lbs)	0.0	0.0	0.0	0.0	0.0
	Feeder Calves (<550 lbs)	0.0	0.0	0.0	0.0	0.0
	Horses - PMU	0.0	0.0	0.0	0.0	0.0
	Horses - Feeders > 750 lbs	0.0	0.0	0.0	0.0	0.0
	Horses - Foals < 750 lbs	0.0	0.0	0.0	0.0	0.0
	Mules	0.0	0.0	0.0	0.0	0.0
	Donkeys	0.0	0.0	0.0	0.0	0.0
	Bison	0.0	0.0	0.0	0.0	0.0
		0.0				
Dairy (*count lactating cows only)	Free Stall – Lactating Cows with all associated dries, heifers, and calves*	145.0	215.3	179.4	134.6	107.6
	Free Stall – Lactating Cows with Dry Cows only *	0.0	0.0	0.0	0.0	0.0
	Free Stall – Lactating Cows only*	0.0	0.0	0.0	0.0	0.0
	Tie Stall – Lactating Cows only	0.0	0.0	0.0	0.0	0.0
	Loose Housing – Lactating Cows only	0.0	0.0	0.0	0.0	0.0
	Dry Cow (Solid manure)	0.0	0.0	0.0	0.0	0.0
	Dry Cow (Liquid manure)	0.0	0.0	0.0	0.0	0.0
	Replacements – Bred Heifers (Breeding to Calving)	0.0	0.0	0.0	0.0	0.0
	Replacements - Growing Heifers (350 lbs to breeding)	0.0	0.0	0.0	0.0	0.0
	Calves (< 350 lbs)	0.0	0.0	0.0	0.0	0.0
		0.0				
Swine Liquid (*count sows only)	Farrow to finish *	400.0	267.4	222.8	167.1	133.7
	Farrow to wean *	0.0	0.0	0.0	0.0	0.0
	Farrow only *	0.0	0.0	0.0	0.0	0.0
	Feeders/Boars	3724.0	268.1	223.4	167.6	134.1
	Growers/Roasters	0.0	0.0	0.0	0.0	0.0
	Weaners	0.0	0.0	0.0	0.0	0.0
		0.0				
Swine Solid (*Count sows only)	Farrow to finish *	0.0	0.0	0.0	0.0	0.0
	Farrow to wean *	0.0	0.0	0.0	0.0	0.0
	Farrow only *	0.0	0.0	0.0	0.0	0.0
	Feeders/Boars	0.0	0.0	0.0	0.0	0.0
	Growers/Roasters	0.0	0.0	0.0	0.0	0.0
	Weaners	0.0	0.0	0.0	0.0	0.0
		0.0				
Poultry	Chicken - Breeders - Solid	0.0	0.0	0.0	0.0	0.0
	Chicken - Layers - Liquid (includes associated pullets)	0.0	0.0	0.0	0.0	0.0
	Chicken - Layers - (Belt Cage)	13000.0	71.5	59.8	44.2	36.4
	Chicken - Layers - (Deep Pit)	0.0	0.0	0.0	0.0	0.0
	Chicken - Pullets/Broilers	53000.0	172.3	143.6	107.6	86.4
	Turkey - Toms/Breeders	0.0	0.0	0.0	0.0	0.0
	Turkey - Hens (light)	0.0	0.0	0.0	0.0	0.0
	Turkey - Broilers	100.0	0.5	0.4	0.3	0.3
	Ducks	700.0	1.1	0.9	0.7	0.6
	Geese	200.0	0.6	0.5	0.4	0.3
		0.0				
Goats and Sheep	Sheep - Ewes/Rams	0.0	0.0	0.0	0.0	0.0
	Sheep - Ewes with lambs	0.0	0.0	0.0	0.0	0.0
	Sheep - Lambs	0.0	0.0	0.0	0.0	0.0
	Sheep - Feeders	0.0	0.0	0.0	0.0	0.0
	Goats - Meat/Milk (per Ewe)	0.0	0.0	0.0	0.0	0.0
	Goats - Nannies/Billies	0.0	0.0	0.0	0.0	0.0
	Goats - Feeders	0.0	0.0	0.0	0.0	0.0
		0.0				
Cervid	Elk	0.0	0.0	0.0	0.0	0.0
	Deer	0.0	0.0	0.0	0.0	0.0
		0.0				
Wild Boar	Feeders	0.0	0.0	0.0	0.0	0.0
	Sow (farrowing)	0.0	0.0	0.0	0.0	0.0
		0.0				
	Total Hectares		997	830.9	622.5	499.3
	Total Acres		2,463	2053.2	1538.1	1233.7

Part 2 — Technical Requirements

NRCB Natural Resources Conservation Board

Application under the *Agricultural Operation Practices Act* for a confined feeding operation, manure collection area and/or manure storage facility(ies)

SOLID MANURE, COMPOST, & COMPOSTING MATERIALS: Barns, feedlots, & storage facilities - Concrete liner

*(complete a copy of this section for **EACH** barn, feedlot, and storage facility for solid manure, composting materials, or compost with a concrete liner)*

Facility description / name *(as indicated on site plan)* **1.** Chicken Broiler barn

2. _____

Manure storage capacity

	Length (m)	Width (m)	Depth below grade to the bottom of the liner (m)	**NRCB USE ONLY** Estimated storage capacity (m^3)
1.	116m	37 m		
2.				
			TOTAL CAPACITY	

☑ I plan to use a short-term solid manure storage (STMS) as part of my manure storage and handling plan for this CFO. The AOPA requirements for STMS are set out in the NRCB Short-Term Solid Manure Storage Requirements Fact Sheet.

Surface water control systems

Describe the run-on and runoff control system

Barn is under roof No runoff

Liner protection

Describe how the physical integrity of the liner will be maintained

Seal crack with Sikaflex

NRCB USE ONLY

Requirements met: ☐ YES ☐ NO

Last updated February 26, 2021

Part 2 — Technical Requirements

NRCB Natural Resources Conservation Board

Application under the *Agricultural Operation Practices Act* for a confined feeding operation, manure collection area and/or manure storage facility(ies)

SOLID MANURE, COMPOST, & COMPOSTING MATERIALS: Barns, feedlots, & storage facilities - Concrete liner (cont.)

Concrete liner details

Concrete thickness	Method of sulphate protection:
6 inches	Type 50
Concrete strength	**Concrete reinforcement size and spacing**
30 mpa	10mm rebar on 12" spacing

Concrete requirements can be found in Technical Guideline Agdex 096-93
Guideline minimums:
Solid manure: 25MPa (D)
Solid manure (wet): 30MPa (C)
Method of sulphate protection:
Type 50 or Type 10 with fly ash or equivalent

NRCB USE ONLY

Requirements met:	☐ YES ☐ NO
Condition required:	☐ YES ☐ NO
Report attached:	☐ YES ☐ NO

Additional information *(attach as required)*

NRCB USE ONLY

Nine month manure storage volume requirements met ☐ YES ☐ YES With STMS ☐ NO

Depth to water table: _____ Requirements met: ☐ YES ☐ NO

Depth to Uppermost groundwater resource: _____ Requirements met: ☐ YES ☐ NO

ERST completed: ☐ see ERST page for details

Surface water control systems

Requirements met: ☐ YES ☐ NO Details/comments:

Concrete liner details

Leakage detection system required: ☐ YES ☐ NO If yes, please explain why.