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	BA24019	SE 27-61-3 W5M

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.

December 23, 2024
Date of signing

[redacted]
Signature

Tiemstra Poultry Ltd
Corporate name (if applicable)

Benjamin Tiemstra
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)
Proposed Rooster Barn	104', 62'
	32 m x 19 m

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

Existing facilities	Dimensions (m) (length, width, and depth)	NRCB USE ONLY
Barn #1	250', 42,	
Barn #2	252', 40'	
Barn #3	250', 40'	

NRCB USE ONLY

Confirmed existing CFO

Last updated September 11, 2023

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
Barn #4	278', 40'	
Barn #5	350', 62	
Barn #6	30', 62'	
Barn #9	335', 62'	

Last updated September 11, 2023

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)

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

the new rooster barn will replace our rooster pen, which will be converted into more space for our pullets.

Construction completion date for proposed facilities Dec 31, 2026

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**
Broiler Breeder Layers	34,000	0	34,000
Broiler Breeder Pullets	17,000	0	17,000

Last updated September 11, 2023

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 (We) am applying for a water licence application coupled to my AOPA permit application.

See DeBA24019

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 _____

On Town Water

Signed this 23 day of December, 202[redacted].

Signature of Applicant or Agent

Last updated September 11, 2023

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

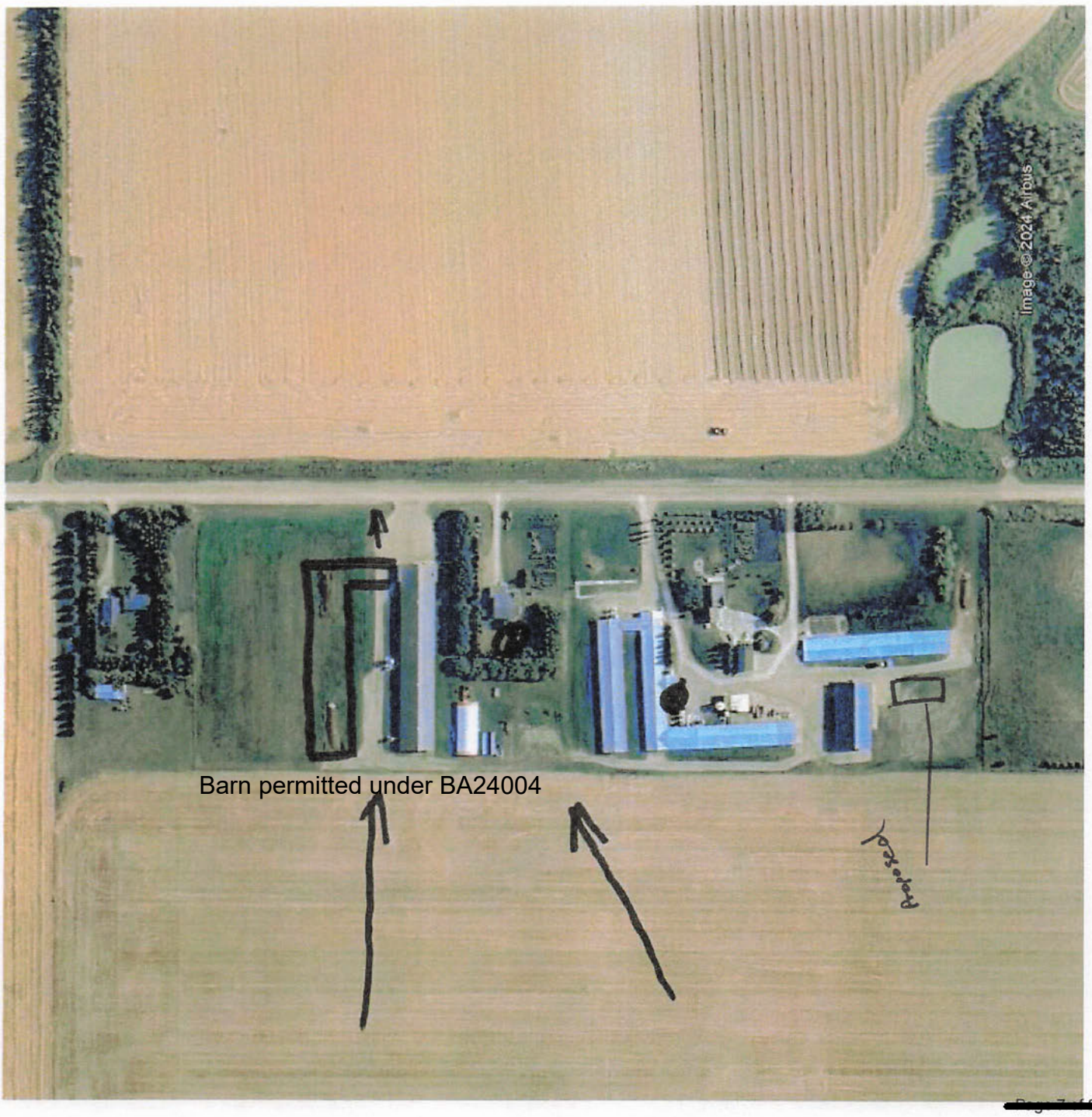
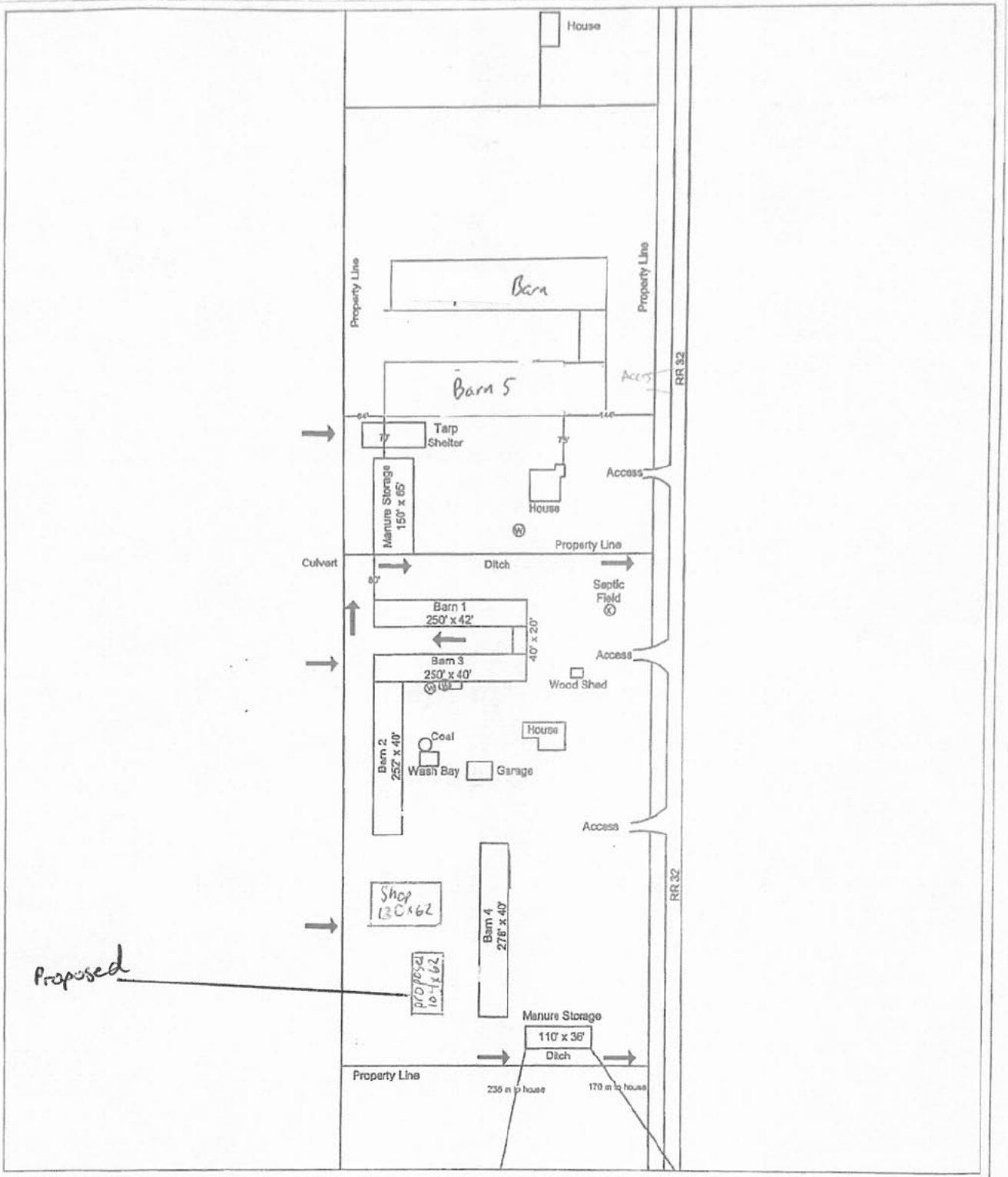


Image © 2024 Airbus
Barn permitted under BA24004



SCALE	PURPOSE	TITLE
Not to Scale	NRCB Application	Tiemstra Poultry Ltd. Site Plan SE 27-61-3-W5
DATE Dec 23/24		

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: Old barns **Proposed 1:** rooster 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	Not in flood plain
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	None known
	How many water wells are within 100 m of the manure storage facility or manure collection area?	4	4			☑ YES ☐ NO ☐ YES with exemption	None within 100 m of proposed
	What is the shortest distance from the manure collection or storage facility to a surface water body? (e.g., lake, creek, slough, seasonal)	>30M	>30M			☑ YES ☐ NO ☐ YES with exemption	138 m dugout from proposed
Groundwater information	What is the depth to the water table?		2.44M			☑ YES ☐ NO ☐ YES with exemption	Meets requirements
	What is the depth to the groundwater resource/aquifer you draw water from?	30.5	30.5			☑ YES ☐ NO ☐ YES with exemption	Confirmed ID 373442

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

Part 2 — Technical Requirements

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

NRCB USE ONLY

ENVIRONMENTAL RISK SCREENING INFORMATION

ERST for **proposed** facilities

Facility	Groundwater score	Surface water score	File number
See Decision Summary BA24019			

ERST for **existing** facilities

Facility	Groundwater score	Surface water score	File number
new layer barn	Low	Low	BA15002
manure storage pads	Low	Low	BA15002
existing barns	Low	Low	BA15002

ERST related comments:

Part 2 — Technical Requirements

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

NRCB USE ONLY

WATER WELL AND SURFACE WATER INFORMATION

Well IDs: ID 355058 ID 373441 ID 373442

ID 492545

Surface water related concerns from directly affected parties or referral agencies: ☐ YES ☑ NO

Groundwater related concerns from directly affected parties or referral agencies: ☐ YES ☑ NO

Water wells ☑ N/A

If applicable, exemption for 100 m distance requirements applied: ☐ YES ☐ NO Condition required: ☐ YES ☐ NO

Surface water ☑ N/A

If applicable, exemption for 30 m distance requirements applied: ☐ YES ☐ NO Condition required: ☐ YES ☐ NO

Water Well Exemption Screening Tool ☑ N/A

Water Well ID	Preliminary Screening Score	Secondary Screening Score	Facility

Groundwater or surface water related comments:

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 492545
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1999/03/02

Well Identification and Location

Measurement in Metric

Owner Name	Address	Town	Province	Country	Postal Code
TIEMSTRA, KEVIN	NEERLANDIA				

Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description
	SE	27	61	3	5				

Measured from Boundary of
m from
m from

GPS Coordinates in Decimal Degrees (NAD 83)
Latitude 54.301419 Longitude -114.358296
How Location Obtained
Not Verified

Elevation m
How Elevation Obtained
Not Obtained

Drilling Information

Method of Drilling
Rotary

Type of Work
New Well

Proposed Well Use
Domestic & Stock

Formation Log

Measurement in Metric

Depth from ground level (m)	Water Bearing	Lithology Description
25.91		Soft Clay
78.64		Shale
111.25		Sandstone
115.82		Shale

Yield Test Summary

Measurement in Metric

Recommended Pump Rate 18.18 L/min

Test Date	Water Removal Rate (L/min)	Static Water Level (m)
1998/11/18	20.46	27.43

Well Completion

Measurement in Metric

Total Depth Drilled	Finished Well Depth	Start Date	End Date
115.82 m		1998/11/14	1998/11/18

Borehole

Diameter (cm)	From (m)	To (m)
0.00	0.00	115.82

Surface Casing (if applicable)
Steel
Size OD : 14.12 cm
Wall Thickness : 0.478 cm
Bottom at : 36.58 m

Well Casing/Liner
Plastic
Size OD : 11.43 cm
Wall Thickness : 0.635 cm
Top at : 24.38 m
Bottom at : 115.82 m

Perforations

From (m)	To (m)	Diameter or Slot Width (cm)	Slot Length (cm)	Hole or Slot Interval(cm)
79.25	109.73	0.318		7.62

Perforated by Machine

Annular Seal Driven
Placed from 0.00 m to 79.25 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
MAHAR, VERN DRILLING SERVICES

Copy of Well report provided to owner *Date approval holder signed*

Printed on 1/6/2025 11:26:14 AM

Alberta 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 492545
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1999/03/02

Well Identification and Location

Measurement in Metric

Owner Name	Address	Town	Province	Country	Postal Code
TIEMSTRA, KEVIN	NEERLANDIA				

Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description
	SE	27	61	3	5				

Measured from Boundary of
m from
m from

GPS Coordinates in Decimal Degrees (NAD 83)
Latitude 54.301419 Longitude -114.358296
How Location Obtained
Not Verified

Elevation m
How Elevation Obtained
Not Obtained

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 18.18 L/min
Recommended Pump Intake Depth (From TOC) 106.68 m

Pump Installed Yes Depth m
Type SUB Make H.P. .75
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

Additional Comments on Well

DRILLER REPORTS DISTANCE FROM TOP OF CASING TO GROUND LEVEL: 2'.

Yield Test

Taken From Ground Level
Measurement in Metric

Test Date	Start Time	Static Water Level
1998/11/18	12:00 AM	27.43 m

Method of Water Removal

Type Air
Removal Rate 20.46 L/min
Depth Withdrawn From 0.00 m

Pumping (m)	Elapsed Time Minutes:Sec	Depth to water level Recovery (m)
	0:00	115.82
	10:00	91.44
	20:00	73.15
	30:00	57.91
	40:00	45.72
	50:00	36.58
	60:00	27.43

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
MAHAR, VERN DRILLING SERVICES

Copy of Well report provided to owner Date approval holder signed

Water Well Drilling Report

View in Imperial | Export to Excel

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GOWN ID

GIC Well ID 498143
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 2001/04/24

Well Identification and Location

Measurement in Metric

Owner Name	Address	Town	Province	Country	Postal Code
OTHEUS, KURTUS	NEERLANDIA				

Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description
	SE	27	61	3	5				

Measured from Boundary of
_____ m from
_____ m from

GPS Coordinates in Decimal Degrees (NAD 83)
Latitude 54.301419 Longitude -114.358296
How Location Obtained
Not Verified

Elevation _____ m
How Elevation Obtained
Not Obtained

Drilling Information

Method of Drilling
Rotary

Proposed Well Use
Domestic & Stock

Type of Work
New Well

Formation Log

Measurement in Metric

Depth from ground level (m)	Water Bearing	Lithology Description
3.66		Soft Clay
65.84		Hard Clay
84.73		Shale
152.40		Sandstone

Yield Test Summary

Measurement in Metric

Recommended Pump Rate 36.37 L/min

Test Date	Water Removal Rate (L/min)	Static Water Level (m)
2000/07/06		28.35

Well Completion

Measurement in Metric

Total Depth Drilled	Finished Well Depth	Start Date	End Date
152.40 m		2000/07/05	2000/07/06

Borehole

Diameter (cm)	From (m)	To (m)
0.00	0.00	152.40

Surface Casing (if applicable)
Steel
Size OD : 14.12 cm
Wall Thickness : 0.478 cm
Bottom at : 12.19 m

Well Casing/Liner
Plastic
Size OD : 11.43 cm
Wall Thickness : 0.635 cm
Top at : 6.10 m
Bottom at : 152.40 m

Perforations

From (m)	To (m)	Diameter or Slot Width (cm)	Slot Length (cm)	Hole or Slot Interval(cm)
85.34	152.40	0.318		7.62

Perforated by Machine

Annular Seal Driven
Placed from 0.00 m to 85.34 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
MAHAR, VERN DRILLING SERVICES

Copy of Well report provided to owner Date approval holder signed

Water Well Drilling Report

View in Imperial | Export to Excel

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GOWN ID

GIC Well ID 498143
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 2001/04/24

Well Identification and Location

Measurement in Metric

Owner Name	Address	Town	Province	Country	Postal Code
OTHEUS, KURTUS	NEERLANDIA				

Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description
	SE	27	61	3	5				

Measured from Boundary of
m from
m from

GPS Coordinates in Decimal Degrees (NAD 83)
Latitude 54.301419 Longitude -114.358296
How Location Obtained
Not Verified

Elevation m
How Elevation Obtained
Not Obtained

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 36.37 L/min
Recommended Pump Intake Depth (From TOC) 109.73 m
Pump Installed Yes
Type SUB
Depth m
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

Additional Comments on Well

DRILLER REPORTS DISTANCE FROM TO OF CASING TO GROUND LEVEL: 2'.

Yield Test

Measurement in Metric

Test Date	Start Time	Static Water Level
2000/07/06	12:00 AM	28.35 m

Method of Water Removal

Type Air
Removal Rate L/min
Depth Withdrawn From 152.40 m

If water removal period was < 2 hours, explain why

Taken From Ground Level
Depth to water level

Pumping (m)	Elapsed Time Minutes:Sec	Recovery (m)
	0:00	152.40
	16:00	91.44
	20:00	76.81
	25:00	61.87
	30:00	48.16
	35:00	30.18
	40:00	28.35

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
MAHAR, VERN DRILLING SERVICES

Copy of Well report provided to owner
Date approval holder signed

Water Well Drilling Report

View in Imperial | Export to Excel

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GOWN ID

GIC Well ID 355058
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1989/01/17

Well Identification and Location

Measurement in Metric

Owner Name	Address	Town	Province	Country	Postal Code
TIEMSTRA POULTRY	P.O. BOX 122 NEERLANDIA				T0G 1R0

Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description
	SE	27	61	3	5				

Measured from Boundary of
m from
m from

GPS Coordinates in Decimal Degrees (NAD 83)
Latitude 54.301419 Longitude -114.358296
How Location Obtained
Map

Elevation m
How Elevation Obtained
Not Obtained

Drilling Information

Method of Drilling
Rotary

Proposed Well Use
Domestic & Stock

Type of Work
New Well

Formation Log

Measurement in Metric

Depth from ground level (m)	Water Bearing	Lithology Description
25.91		Sandy Clay
50.29		Shale
52.43		Sandstone
64.31		Shale
74.98	Yes	Water Bearing Sandstone
80.77		Shale
82.60	Yes	Water Bearing Sandstone
90.22		Shale
103.63	Yes	Water Bearing Sandstone

Yield Test Summary

Measurement in Metric

Recommended Pump Rate 45.46 L/min

Test Date	Water Removal Rate (L/min)	Static Water Level (m)
1988/11/17	45.46	21.64

Well Completion

Measurement in Metric

Total Depth Drilled	Finished Well Depth	Start Date	End Date
103.63 m		1988/11/16	1988/11/17

Borehole

Diameter (cm)	From (m)	To (m)
0.00	0.00	103.63

Surface Casing (if applicable)
Steel
Size OD : 14.12 cm
Wall Thickness : 0.478 cm
Bottom at : 30.48 m

Well Casing/Liner
Plastic
Size OD : 11.43 cm
Wall Thickness : 0.635 cm
Top at : 25.91 m
Bottom at : 103.63 m

Perforations

From (m)	To (m)	Diameter or Slot Width (cm)	Slot Length (cm)	Hole or Slot Interval(cm)
60.96	103.63	0.318		7.62

Perforated by Machine

Annular Seal Driven
Placed from 0.00 m to 30.48 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 0.00

Contractor Certification

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

Certification No
1

Company Name
MAHAR, VERN DRILLING SERVICES

Copy of Well report provided to owner Date approval holder signed

Alberta Water Well Drilling Report

View in Imperial | Export to Excel

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GOWN ID

GIC Well ID 355058
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1989/01/17

Well Identification and Location

Measurement in Metric

Owner Name	Address	Town	Province	Country	Postal Code
TIEMSTRA POULTRY	P.O. BOX 122 NEERLANDIA				T0G 1R0

Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description
	SE	27	61	3	5				

Measured from Boundary of
m from
m from

GPS Coordinates in Decimal Degrees (NAD 83)
Latitude 54.301419 Longitude -114.358296
How Location Obtained
Map

Elevation m
How Elevation Obtained
Not Obtained

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 45.46 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
Submitted to ESRD

Remedial Action Taken

Sample Collected for Potability
Submitted to ESRD

Additional Comments on Well

Yield Test

Taken From Ground Level
Measurement in Metric

Test Date	Start Time	Static Water Level	Depth to water level: Pumping (m)	Elapsed Time Minutes:Sec	Recovery (m)
1988/11/17	12:00 AM	21.64 m			

Method of Water Removal

Type Air
Removal Rate 45.46 L/min
Depth Withdrawn From 60.96 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
MAHAR, VERN DRILLING SERVICES

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.

GOWN ID

GIC Well ID 373442
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1979/03/19

Well Identification and Location

Measurement in Metric

Owner Name	Address	Town	Province	Country	Postal Code
TIEMSTRA, CLARENCE	P.O. BOX 34 NEERLANDIA				

Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description
	1	27	61	3	5				

Measured from Boundary of
m from
m from

GPS Coordinates in Decimal Degrees (NAD 83)
Latitude 54.299611 Longitude -114.355205
How Location Obtained: Map

Elevation 644.65 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
4.57		Yellow Clay
30.48		Blue Shale
39.62		Gray Sandstone
54.86		Blue Shale
64.01		Gray Sandstone
65.53		Brown Shale
71.63		Gray Sandstone
76.20		Light Gray Shale
82.30		Gray Sandstone

Yield Test Summary

Measurement in Metric

Recommended Pump Rate 9.09 L/min

Test Date	Water Removal Rate (L/min)	Static Water Level (m)
1978/11/05	9.09	21.34

Well Completion

Measurement in Metric

Total Depth Drilled	Finished Well Depth	Start Date	End Date
82.30 m		1978/11/03	1979/11/05

Borehole

Diameter (cm)	From (m)	To (m)
0.00	0.00	82.30

Surface Casing (if applicable)
Plastic
Size OD : 16.81 cm
Wall Thickness : 0.000 cm
Bottom at : 32.61 m

Well Casing/Liner
Plastic
Size OD : 11.43 cm
Wall Thickness : 0.635 cm
Top at : 0.00 m
Bottom at : 82.30 m

Perforations

From (m)	To (m)	Diameter or Slot Width (cm)	Slot Length (cm)	Hole or Slot Interval(cm)

Perforated by Unknown

Annular Seal
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
MEASURES, CLARK DRILLING

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 373442
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1979/03/19

GOWN ID

Well Identification and Location

Measurement in Metric

Owner Name	Address	Town	Province	Country	Postal Code
TIEMSTRA, CLARENCE	P.O. BOX 34 NEERLANDIA				

Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description
	1	27	61	3	5				

Measured from Boundary of
m from
m from

GPS Coordinates in Decimal Degrees (NAD 83)
Latitude 54.299611 Longitude -114.355205
How Location Obtained
Map

Elevation 644.65 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 9.09 L/min
Recommended Pump Intake Depth (From TOC) 73.15 m

Pump Installed Yes Depth m
Type SUB 230V Make 26 STG H.P. .75
Model (Output Rating)

Did you Encounter Saline Water (>4000 ppm TDS) Depth m
Gas Depth m

Well Disinfected Upon Completion
Geophysical Log Taken
Submitted to ESRD

Remedial Action Taken

Sample Collected for Potability
Submitted to ESRD Yes

Additional Comments on Well

Yield Test

Taken From Ground Level
Measurement in Metric

Test Date	Start Time	Static Water Level
1978/11/05	12:00 AM	21.34 m

Depth to water level

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

Method of Water Removal
Type Air
Removal Rate 9.09 L/min
Depth Withdrawn From 60.96 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
MEASURES, CLARK DRILLING

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.

GOWN ID

GIC Well ID 373441
GoA Well Tag No.
Drilling Company Well ID
Date Report Received

Well Identification and Location

Measurement in Metric

Owner Name	Address	Town	Province	Country	Postal Code
TIEMSTRA, CLARENCE	P.O. BOX 34 NEERLANDIA				

Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description
	1	27	61	3	5				

Measured from Boundary of
m from
m from

GPS Coordinates in Decimal Degrees (NAD 83)
Latitude 54.299611 Longitude -114.355205
How Location Obtained
Map

Elevation 644.65 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
6.10		Yellow Clay
39.62		Blue Shale
51.82		Gray Sandstone
54.86		Blue Shale
64.01		Gray Sandstone

Yield Test Summary

Measurement in Metric

Recommended Pump Rate 4.55 L/min

Test Date	Water Removal Rate (L/min)	Static Water Level (m)
1977/07/25	6.82	14.94

Well Completion

Measurement in Metric

Total Depth Drilled	Finished Well Depth	Start Date	End Date
64.01 m		1977/07/21	1977/07/25

Borehole

Diameter (cm)	From (m)	To (m)
0.00	0.00	64.01

Surface Casing (if applicable)
Galvanized Steel
Size OD : 11.68 cm
Wall Thickness : 0.358 cm
Bottom at : 40.54 m

Well Casing/Liner
Plastic
Size OD : 7.62 cm
Wall Thickness : 0.635 cm
Top at : 0.00 m
Bottom at : 64.01 m

Perforations

From (m)	To (m)	Diameter or Slot Width (cm)	Slot Length (cm)	Hole or Slot Interval(cm)
39.62	64.01	0.635		0.64

Perforated by Machine

Annular Seal
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
MEASURES, CLARK DRILLING

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.

GOWN ID

GIC Well ID 373441
GoA Well Tag No.
Drilling Company Well ID
Date Report Received

Well Identification and Location

Measurement in Metric

Owner Name	Address	Town	Province	Country	Postal Code
TIEMSTRA, CLARENCE	P.O. BOX 34 NEERLANDIA				

Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description
	1	27	61	3	5				

Measured from Boundary of
m from
m from

GPS Coordinates in Decimal Degrees (NAD 83)
Latitude 54.299611 Longitude -114.355205
How Location Obtained
Map

Elevation 644.65 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 4.55 L/min
Recommended Pump Intake Depth (From TOC) 36.58 m

Pump Installed Yes Depth m
Type SUB 220V Make 13 STG H.P. .5
Model (Output Rating)

Did you Encounter Saline Water (>4000 ppm TDS) Depth m
Gas Depth m

Well Disinfected Upon Completion
Geophysical Log Taken
Submitted to ESRD

Remedial Action Taken

Sample Collected for Potability Submitted to ESRD

Additional Comments on Well

Yield Test

Taken From Ground Level
Measurement in Metric

Test Date	Start Time	Static Water Level	Depth to water level Pumping (m)	Elapsed Time Minutes:Sec	Recovery (m)
1977/07/25	12:00 AM	14.94 m			

Method of Water Removal

Type Air
Removal Rate 6.82 L/min
Depth Withdrawn From 42.67 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
MEASURES, CLARK DRILLING

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**
Ron & Charlene Hamoen	Lot 3 SE-27-61-3-W5	235M	Ag	Cat 1	235 m		Yes*
Keith Piers	SW-26-61-3-W5	170M	Ag	Cat 1	170 m		Yes*
Elton Wierenga	NE-22-61-3-W5	801M	Ag	Cat 1	791 m		Yes
Adam Wierenga	NE-22-61-3-W5	996	Ag	Cat 1	982 m		Yes
Henk Wierenga	NW-23-61-3-W5	738	Ag	Cat 1	731 m		Yes

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)**
Tiemstra Poultry Ltd	SE-7-62-3-5	62.72			
Tiemstra Poultry Ltd	NE-23-60-3-5	54.63	Grey		
Tiemstra Poultry Ltd	SW-8-62-3-5				
Not required as application is for authorization					
			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)

*MDS requirement waived under Section 3(5)(c)(ii) See Decision Summary BA24019.

Part 2 — Technical Requirements

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

NRCB USE ONLY

MINIMUM DISTANCE SEPARATION

Methods used to determine distance (if applicable): Google earth

Margin of error (if applicable): n/a

Requirements (m): Category 1: 313 m Category 2: 418 m Category 3: 522 m Category 4: 835 m

Technology factor: ☐ YES ☑ NO

Expansion factor: ☐ YES ☑ NO

MDS related concerns from directly affected parties or referral agencies: ☐ YES ☑ NO

The proposed barn will be built within the existing footprint of the CFO, and away from the closest residences, without encroaching outside the MDS circle established under Approval BA24004. There will be no increase in livestock numbers or annual manure production therefore, according to section 3(5)(c)(ii) of the Standard and Administration Regulation, an Authorization can be issued even if the application does not meet the MDS.

LAND BASE FOR MANURE AND COMPOST APPLICATION

Land base required: N/A not for an increase in permitted livestock

Land base listed: _____

Area not suitable: _____

Available area _____ Requirement met: ☐ YES ☐ NO

Land spreading agreements required: ☐ YES ☐ NO

Manure management plan: ☐ YES ☐ NO If yes, plan is attached: ☐

PLANS

Submitted and attached construction plans: ☑ YES ☐ NO

Submitted aerial photos: ☑ YES ☐ NO

Submitted photos: ☐ YES ☑ NO

GRANDFATHERING

Already completed: ☑ YES ☐ NO ☐ N/A

If already completed, see Approval BA15002

Part 2 — Technical Requirements

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

NRCB USE ONLY

ALL SIGNATURES IN FILE ☑ YES ☐ NO

DATES OF APPROVAL OFFICER SITE VISITS

January 10, 2025	

CORRESPONDENCE WITH MUNICIPALITIES AND REFERRAL AGENCIES

Date deeming letters sent: January 7, 2025

Municipality: County of Barrhead

☑ letter sent ☑ response received ☑ written/email ☐ verbal ☐ no comments received

Alberta Health Services: N/A

☐ letter sent ☐ response received ☐ written/email ☐ verbal ☐ no comments received

Alberta Environment and Parks: ☐ N/A

☑ letter sent ☐ response received ☐ written/email ☐ verbal ☑ no comments received

Alberta Transportation: ☑ N/A

☐ letter sent ☐ response received ☐ written/email ☐ verbal ☐ no comments received

Alberta Regulatory Services: ☑ N/A

☐ letter sent ☐ response received ☐ written/email ☐ verbal ☐ no comments received

Other: Apex Utilities ☐ N/A

☑ letter sent ☑ response received ☑ written/email ☐ verbal ☐ no comments received

Other: _____ ☐ N/A

☐ letter sent ☐ response received ☐ written/email ☐ verbal ☐ no comments received

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. New 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.	104'	62'	0	
2.				
			TOTAL CAPACITY	solid manure storage pads and STMS available.

☐ 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

Under Roof and direct flow from site

Liner protection

Describe how the physical integrity of the liner will be maintained

Monitor for cracks and repair if needed

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 5"	Method of sulphate protection: type 50 or equivalent
Concrete strength 25mpa	Concrete reinforcement size and spacing 15" O/C 10mm

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: >2 m Requirements met: ☑ YES ☐ NO

Depth to Uppermost groundwater resource: 30.5 m Requirements met: ☑ YES ☐ NO

ERST completed: ☑ see ERST page for details

Surface water control systems

Requirements met: ☑ YES ☐ NO Details/comments:

Concrete liner details

Applicant to provide documentation confirming concrete information.

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

Last updated February 26, 2021