SITE ASSESSMENT

JUL 1 3 2015

MUNICIPAL GOVERNMENT

For Large Livestock Operation Proposals (300 Animal Units or more)

1.0 Purpose

The set up, or expansion, of a livestock operation that has 300 Animal Units or more is subject to Part 7 of The Planning Act. This includes consideration as a conditional use by the municipal council or planning district board. It also includes a review by the Technical Review Committee (TRC) appointed by the Minister of Local Government. The Technical Review Committee Regulation requires a site assessment to help the committee do its review and allow people who will be affected by the livestock operation to comment on the proposal.

2.0 Assistance

For assistance in completing the Site Assessment Form please refer to the following.

For links to resources, click on the highlighted underlined items.

For additional information on a particular item, please click on the (?) "Learn More" icon.

For definitions, click on the Glossary of Terms.

For help with mapping, contact your Community and Regional Planning Regional Office.

For additional help, contact the Technical Review Coordination Unit.

| 3.0 Description of Livestock Operation |
|---|
| Operation legal name, if other than the owner's name: |
| Rising Hope Dairy Inc. |
| (farm purchased in 2010) |
| Operation location (project site): NW 30-08-06EPM |
| Rural Municipality (RM) of Ste Anne |
| Legal description: section, township, range or river lot(s) NW 30-08-06EPM |
| Manitoba Premises Identification Number: |
| Municipal tax roll number(s): 119300000TX |
| Show the location of the operation (project site) on a location map. (See <u>Location Map</u> for example). |
| X Location Map attached |

CVO/Food Safety Knowledge Centre 545 University Crescent, Winnipeg, MB R3T 556 T 204-945-7663 F 204-945-4327 traceability@gov.mb.ca

ALVIN PLETT PO BOX 37 RR 1 Landmark, MB ROA OXO

December 12, 2012

Thank you for participating in the Manitoba Premises Identification Program.

This information will assist the province in preventing, preparing for, responding to and recovering from threats affecting animal health or food safety.

A Manitoba Premises Identification Number(s) has been assigned to the following submitted legal land description(s):

Premises Identification Number

MB1011221

MB1025105

Legal Land Location

NW 16-8-5 E1

NW 30-8-6 E1

Please keep the Manitoba Premises identification Number(s) in a secure location as it may be required for future traceability and funding programs.

Thank you for your assistance.

Whens

Dr. Wayne Lees Chief Veterinary Officer



Premises Identification Card Carte d'identification d'un site

Manitoba 🦠

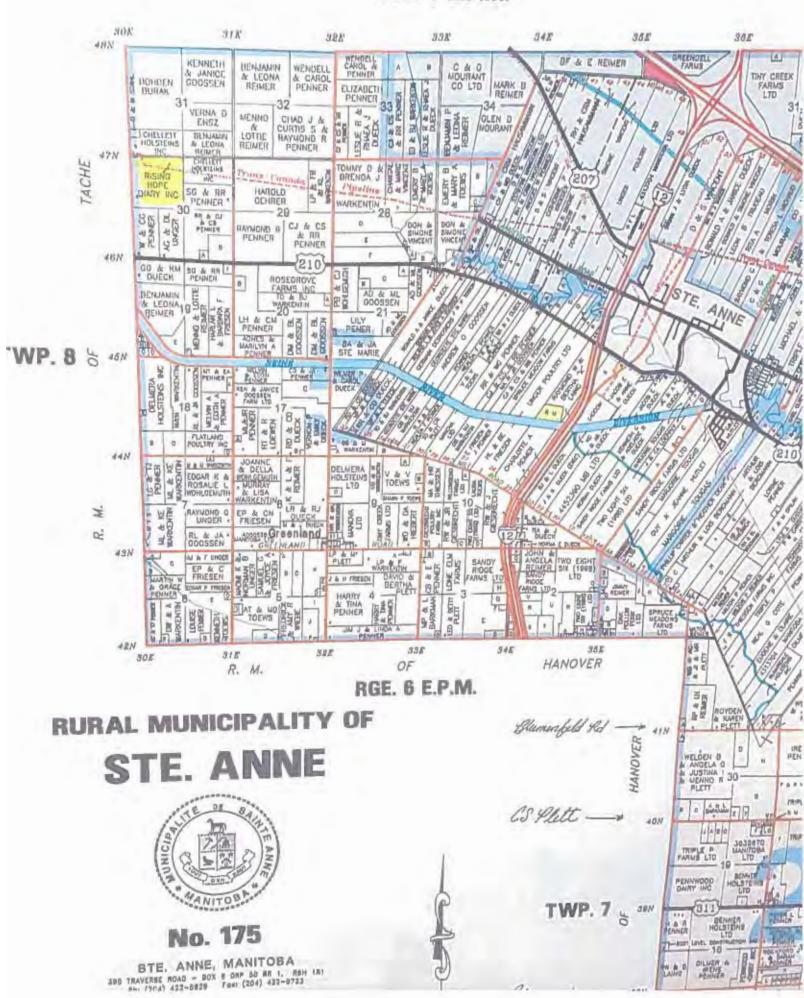
Premises ID Number

Legal Land Location

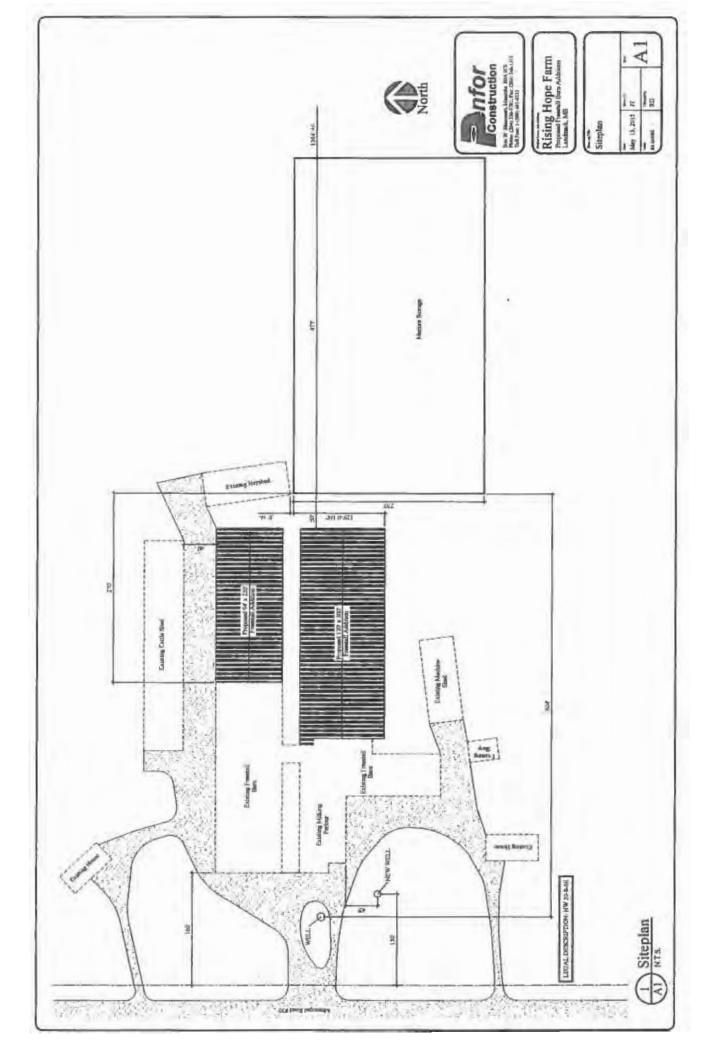
MB1011221 MB1025105 NW 16-8-5 E1 NW 30-8-6 E1

For more information please contact your local MAFRI GO Office, email traceability@gov.mb.ca or visit manitoba.ca/agriculture/pid

RGE. 6 E.P.M.



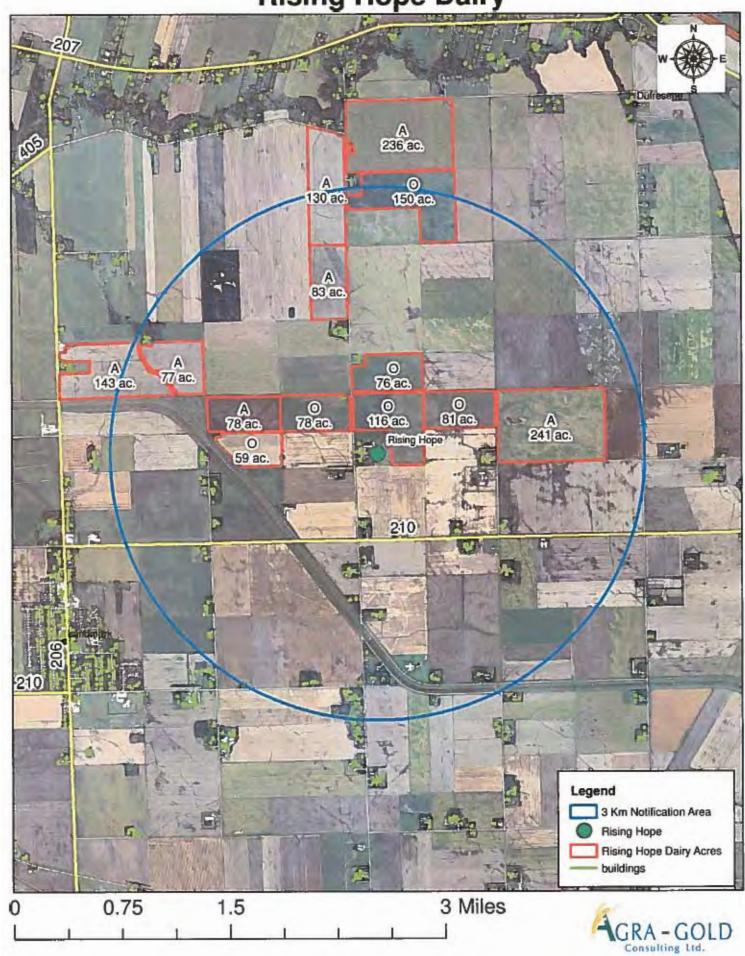
Rising Hope Area Map



Rising Hope Dairy



Rising Hope Dairy



| New operation | | |
|---|--|---|
| ■ Expansion of existing | operation | |
| | gs will be replaced or demolish ow they will be reused or expan | ned. If existing buildings will be nided. |
| will be added. Existing | barns as follows will be use | |
| 66 ft x 96 ft (parlour), 5 | 56 ft x 300 ft (heifer barn), 94 | ft x 272 ft (free stall). |
| Type of operation (Column B from Animal Units Calculation Table) | Existing number of animals (Column C from Animal | Total Animal Units (Column F from Animal Units Calculation Table) |
| 500 milking cows | Units Calculation Table) 225 | 1200 |
| plus 100 dry cows and | | |
| associated livestock | | |
| associated livestock | | |
| Animal Units Calculation 6.0 Animal Confinement F Outdoor Confined Livesto To ensure that it can be buil | acilities ck Area t in a way that the environmen | |
| Animal Units Calculation 6.0 Animal Confinement F Outdoor Confined Livesto To ensure that it can be built required for construction an Animal Units or more. Perm | acilities ck Area t in a way that the environmen | ock areas for operations with a ck Manure and Mortalities |
| Animal Units Calculation 6.0 Animal Confinement F Outdoor Confined Livesto To ensure that it can be built required for construction an Animal Units or more. Perm Management Regulation (| ck Area t in a way that the environmend expansion of confined livestoits are required by the Livesto MR 42/98), under The Environment | ock areas for operations with a ck Manure and Mortalities |
| Animal Units Calculation 6.0 Animal Confinement F Outdoor Confined Livesto To ensure that it can be built required for construction an Animal Units or more. Perm Management Regulation (| t in a way that the environment dexpansion of confined livest nits are required by the Livesto MR 42/98), under The Environment outdoor seasonal feeding are | ock areas for operations with a ck Manure and Mortalities ment Act. |

Animal Units Calculation Table

| A | В | C | D | E | F | G |
|-----------------|--|----------------------------------|--|-----------------------------|-----------------------|---------------------------------------|
| Animal Type | Type of Operation | Existing Number of Animals | Proposed Additional Number of Animals | Animal Units per Head | Total Animal Units | Annual Confinement Period (Days |
| | Mature cows (lactating and dry) including associated livestock | 225 | 375 | 2 | 1,200.00 | |
| | Mature cows (factating and dry) | | | 1.35 | H | |
| | Heifers (0 to 3 months) | | | 0.16 | - | |
| Dairy 1 | Heifers (4 to 13 months) | | | 0.41 | | |
| | Heifers (> 13 months) | | | 0.87 | | |
| | Bulls | | | 1.35 | 3 | |
| | Veal calves | | | 0.13 | | |
| | Beel cows including associated livestock | | | 1.25 | 2 | |
| Beef | Backgrounder | | | 0.5 | - 4 | |
| neer | Summer pasture / replacement heifers | | | 0.625 | | |
| | Feeder cattle | | | 0.769 | | |
| | Sows - farrow to finish (234-254 lbs) | | | 1.25 | . 4 | |
| | Sows - farrow to weanling (up to 11 lbs) | | | 0.25 | | |
| Pigs | Sows - farrow to nursery (51 lbs) | | | 0.313 | | |
| rigs | Boars (artificial insemination units) | | | 0.2 | | |
| | Weanlings, Nursery (11-51 lbs) | | | 0.033 | | |
| | Growers / Finishers (51-249 lbs) | | | 0.143 | | |
| | Broilers | 1 | | 0.005 | | - |
| | Roasters | | | 0.01 | 9 | |
| Chickens | Layers | | | 0.0083 | | |
| CHICKERS | Pullets | | | 0.0033 | | |
| | Broiler breeder pullets | | | 0.0033 | | |
| | Broiler breeder hens | | | 0.01 | | |
| | Broilers | | | 0.01 | - 2 | |
| Turkeys | Heavy Toms | | | 0.02 | - | |
| | Heavy Hens | 1 | | 0.01 | | |
| Horses | Mares | | | 1.333 | - | |
| Sheep | Ewes | | | 0.2 | | |
| Sileap | Feeder lambs | | | 0.063 | - | |
| Other Livestock | Type: | | | | | |
| Culti Liyesiocx | Type: | | | | - | |
| | | | | Total AUs | 1,200.00 | |

Footnotes:

For all other livestock or operation types please inquire with your Manitoba Agriculture, Food and Rural Initiatives GO office to determine the animal units per head. www.gov.mb.ca/agriculture/contact/agoffices.html

¹ There are 2 methods for calculating animal units for dairy (Farm Practices Guidelines for Dairy Producers in Manitoba, 1995). You can enter the total number of mature cows in the milking herd under the "Mature cows (lactating and dry) including associated livestock" category and the animal units will be calculated by multiplying this number by 2. This calculation assumes 85 lactating, 15 dry, 12 helfers (0 to 3 months), 36 helfers (4 to 13 months) and 50 helfers (> 13 months) for an operation with 100 mature cows. "Associated livestock" includes all of the helfer calves and replacement helfers. Alternatively, you can enter animal numbers in the individual categories (mature cows, helfers (0 to 3 months), helfers (4 to 13 months) and helfers (> 13 months)) and they will be summed at the bottom of the table. Bulls and yeal calves are always calculated separately.

A permit under the Livestock Manure and Mortalities Management Regulation is not required for an indoor housing area or barn unless there is a manure storage facility within the building (an under barn storage capable of storing manure for 30 days or more).

Show all existing, proposed buildings and additions to existing buildings on the project site plan. See <u>Project Site Plan example</u> and the Project <u>Site Plan Guide</u> for help creating your site plan.

X Project Site Plan attached

Rising Hope Dairy (10/23/2011)



GRA - GOLD

| 7.0 | Environ | mental | Farm | Plann | ing |
|------|---------|--------|------|-------|-----|
| **** | | 2 0 | | | |

Environmental farm planning is a voluntary, confidential self-assessment process designed to help farm managers identify the environmental strengths and weaknesses of their operations.

Do you have an Environmental Farm Plan X yes no

If so, is it current (completed within past 5 years) yes X no -completed in 2007

8.0 Water

Project Sites Unsuitable for Development

To protect water quality, the <u>Nutrient Management Regulation</u> (MR 62/2008), under *The Water Protection Act*, prohibits the set up or expansion of nutrient generating facilities in Nutrient Management Zone 4 (Agriculture Capability Class 6, 7 and unimproved organic soils) and Nutrient Buffer Zones. Nutrient generating facilities include barns, confined livestock areas and manure storage facilities.

Nutrient Buffer Zone as defined in section 3(3) of the regulation includes areas of land along water bodies such as rivers, lakes, streams and drains.

The proposed indoor housing area, barn, confined livestock area and/or manure storage facility:

will W

be located within Nutrient Management Zone 4 (Class 6, 7 and unimproved organic soils) or any Nutrient Buffer Zone.

Determine the agriculture capability class(es) of the project site, and its limitations. This information is available from Manitoba Agriculture, Food and Rural Initiatives (MAFRI) at 204-945-3869 in Winnipeg. Alternatively, operations with GIS mapping software can access information through Manitoba Land Initiative (MLI) website. In addition, information from MLI can also be viewed on Google Earth. Both the download for Google Earth and the registration for MLI are free. Click here for instructions under the MLI website.

Water Source

To be sustainable, a livestock operation must have access to a sufficient quantity and quality of water for livestock.

| Water source for operation: | | |
|-----------------------------|-------------------|--------------------------------------|
| | pipeline (public) | water co-operative |
| | proposed well | X existing well s- two west of barns |
| | river | lake |
| | dugout (dimension | ns (x x) |

If using an existing well, provide a copy of the water well log and logs for other wells on the property. Logs can be obtained from Manitoba Conservation and Water Stewardship by calling (204) 945-7418 in Winnipeg; 1-800-214-6497 toll free.

Statement of Completion

Manitoba Environmental Farm Plan

This To To Recognize That

Connie Plett

Has Successfully Completed The Environmental Farm Llanning Process In The Province Of Manitoba As Per The Approved Methodology For Manitoba

Farm Stewardship Association of Manitoba Inc.

58 A.M. Chair

Date of Fissue: 3/6/2007

Warder Mª Fradyer

899 Number: FMB 2006/07-3299 50 AM Executive Director

Source Water Analysis Reports

| | ring analysis reports must be submitted to |
|---|--|
| Manitoba Conservation and Water Steware. | ardship for any operations of 300 Animal Units or |
| | Animal Units or more, have you submitted an or the current calendar year? 🔯 yes 🔲 no |
| Will livestock have direct access to surfa | ace water (not including dugouts)? yes no |
| If yes, identify: Name of the surface water feature: | N/A |
| List any steps that will be taken to preve | ent direct access of livestock to the water body. |
| N/A | |
| Water Requirements Protecting the interests of domestic us | ers and the environment, in addition to existing |
| licensees, is the intended purpose of th | [19] 18 [19] 1 |
| 25,000 litres (5,499 imperial gallons) p | of water sources, all operations using more than ser day must possess a Water Rights Licence ion (MR 126/87) under <i>The Water Rights Act</i> . |
| For more information on the Water Right Licensing Section at (204) 945-3983 in | its Licensing process, contact the Water Use Winnipeg; 1-800-214-6497 toll free. |
| Water Use To calculate the total water use, go to the | Water Requirement Calculation Table. |
| | imperial gallons or litres |
| Maximum annual use: 27 | acre-feet or cubic decameters |
| Water Requirement Calculation Table | e attached |
| Groundwater (Contamination Risk P | rotection) |
| Improper storage and handling of manur | e or mortalities increases the risk of contaminating |

Improper storage and handling of manure or mortalities increases the risk of contaminating groundwater. Beneficial management practices (BMP), mitigation measures and requirements for the permit process reduce this risk. Soil testing, manure management planning and proper engineering, along with construction and management of manure storage structures reduce the risk of contaminating groundwater.



LIS31889 LD 00+14/14.

| , mar 4 22 | |
|-------------------------|---|
| Name of Operation | Rising Hope Inc, |
| Mailing Address | Bx37, R.R.) Landmark |
| Location of Operation | Postal Code ROA OXO NW30-08-06 F Que See Two Rige ENVPM or River LouParish Rural Marnicipality Sto Annie |
| Name of Contact | Alvin Platt |
| Contact Numbers 30 | N-335-4980 204-371-5744 Business Residence Celiular Facaimile |
| Water Source: | 204-935-4760 |
| Well | 204-935-4760 Well location (legal description) NW30-08-06E |
| Surface water | Name of surface water |
| | Sampling location (legal description) |
| Other source | Specify (e.g. name of water cooperative) |
| Where was the water say | ple collected? (e.g. outside hydrant, house outside tap, kitchen tap) |
| Date and time of sample | collection Oct 14, 9AM |
| Comments: | WAS \$100 by Mostercard |
| | PAID |
| 1 | |

Remember to attack unalytical results!

Proprietary (confidential) information will be protected in accordance with Manitoba law.

Personal information is collected undo the authority of The Environment Act, the Unestack Manure and Marialities Management Regulation, and will be used for administration and enforcement purposes. Information collected is protected by the privacy provisions of The Freedom of Information and Protection of Privacy Act, If you have any questions, contact the Access & Privacy Confinitor, Box 85, 200 Saulteaux Crescent, Winnipeg MB ROJ JW3; 1-204-945-4170.

Check off the mitigation measures used for the existing components of the operation that may pose a risk of contamination. Also check off any measures that may be used with the proposed components for this expansion, if applicable:

| | Existing | Proposed |
|---|---------------|------------------|
| Manure is stored in a storage facility built by permit or registered by Manitoba Conservation and Water Stewardship Storage includes leachate collection | x | |
| Earthen storage has between 400 and 500 days storage Steel/concrete tank has between 250 and 500 days storage Manure storage facility meets required setbacks Field storage (solid manure) locations are changed annually Field storage meets required setbacks | | (currently) |
| All application fields are soil tested annually for nitrate-N and Olsen phosphorus | X | |
| All manure is applied according to a manure management plan Licensed commercial manure applicator is used to apply manure | | self applied |
| Abandoned wells have been properly sealed | | N/A None located |
| Other: Note: All liquid manure will be applied using a pipeline with in- | | |
| All solid manure will be applied using surface application and incorpor | ration within | 24 hours |

Building in Flood Areas

The <u>Livestock Manure and Mortalities Management Regulation</u> prohibits an operator from putting a manure storage facility within the boundaries of the 100-year flood plain elevation. <u>Manure storage facilities</u> that are constructed with protection for a flood-water level at least 0.6 meters higher than the 100-year flood water level are exempt.

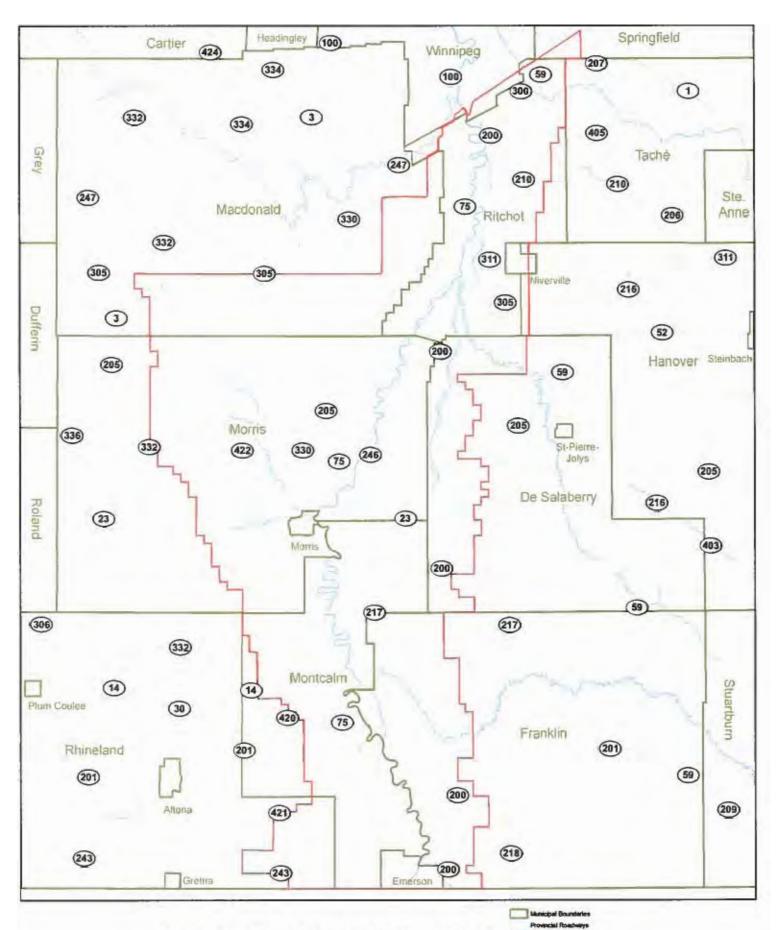
The <u>Designated Flood Area Regulation</u> under *The Water Resources Administration Act* requires a Designated Flood Area Permit before a proposed structure (such as a barn) can be built within a Designated Flood Area.

The flood protection level for structures located within a Designated Flood Area is the site specific design flood level plus freeboard, as provided by the Hydraulic Forecasting Branch of Manitoba Infrastructure and Transportation. Contact the Hydrologic Forecasting Branch at (204) 945-2121 in Winnipeg; 1-800-214-6497 toll free.

The proposed site:
is is not x

located in a Designated Flood Area: Red River Valley Designated Flood Area or Lower
Red River Designated Flood Area

Note: At the time a permit is issued, verification is needed to ensure any proposed structure(s) are located within the 100-year flood plain elevation; or at an elevation set by Manitoba Infrastructure and Transportation.



Red River Designated Flood Area



Water Requirement Calculation Table

| Livestock | Number | IG/day per animal in winter | IG/day per animal in summer | IG/day (imperial gallons per day) |
|-------------------------------|--------|-----------------------------------|-----------------------------------|---|
| Beef/Dairy/Bison | | | | |
| Feeder/heifer/steer (600 lb.) | | 5 | 9 | |
| Feeder (900 lb.) | | 7 | 12 | |
| Feeder (1250 lb.) | | 10 | 15 | |
| Cow/calf pair | | 12 | 15 | 3 |
| Dry cow | 100 | 10 | 12 | 1,200 |
| Milking cow | 500 | 25 | 30 | 15,000 |
| Bison | 1 2 11 | 8 | 10 | |
| Horses | | | | |
| Horses | | 8 | 11 | |
| Hogs | | | | |
| Sow (Farrow/wean) | | 6 | .5 | |
| Dry Sow/Boar | | | 4 | |
| Feeder | | | 3 | |
| Nursery (33 lb.) | | | 2 | - |
| Chickens | | | | |
| Broilers | | 0.0 | 035 | 15 |
| Roasters/Pullets | - | 0. | 04 | The second second |
| Layers | | 0.0 | 055 | |
| Breeders | | 0. | 07 | - E |
| Turkeys | | | | 1 42 1 3 3 |
| Turkey Growers | | 0. | 13 | |
| Turkey Heavies | | 0. | 16 | - |
| Sheep/Goats | | | | |
| Sheep/Goats | 1 | | 2 | - |
| Ewes/Does | | | 3 | 7 |
| Lambs/Kids (90 lb.) | | 1 | .6 | 2.0 |
| | | TOTAL | (IG/day) | 16,200 |

For beet, dairy, bison and horse enterprises:

Use summer numbers if appropriate for the operation. Otherwise base projections on winter values.

Always use the greater of the two values.

Enter this number on page 7 of Application Form.

Other consumption values:

Normal household consumption: 40-55 IG/day per person or (180-250 I/day/person)

Hydrant flow: 10 imperial GPM (45 l/min)

| U | nit Conversion | S |
|---------------|----------------|-------------------------------|
| Total per day | Total per year | Unit |
| 16,200 | 5,913,000 + | IG |
| 73,645 | 26,880,498 | litres |
| 0.074 | 27 | cubic decametres (dam³) |

Enter this number on page 7 of Application Form.

Conversion Factor: 1 IGPM = 4.546 Vm

Watershed Management Planning

Integrated watershed management planning is a co-operative effort by local residents, stakeholders and governments to create a long term plan to manage water and land-based activities for watersheds.

What are the names of the <u>watershed</u> and <u>sub-watershed</u> where the livestock operation and the fields identified for manure application are located?

Name of watershed(s): _______ Seine River Integrated Watershed

Name of sub-watershed(s): _______

Name of <u>Integrated Watershed Management Plan</u> for the proposed project site, if applicable: <u>Seine - Rat River Conservation District</u>

For more on Integrated Watershed Management Planning, call Watershed Planning and Programs at (204) 945-7408 in Winnipeg; 1-800-214-6497 toll free.

9.0 Manure

The <u>Livestuck Manure and Mortalities Management Regulation</u> sets requirements for the use, management and storage of livestock manure in agricultural operations, to ensure it is handled in an environmentally sound manner. For more information on this, call Manitoba Conservation and Water Stewardship at (204) 619-2230 in Winnipeg.

Improper storage, handling and/or land application of manure can contaminate water and/or cause unacceptable odours for neighbours. The following is used to assess the manure management system.

Manure Type

The type of manure generated and used by the operation influences storage, handling and land application options available.

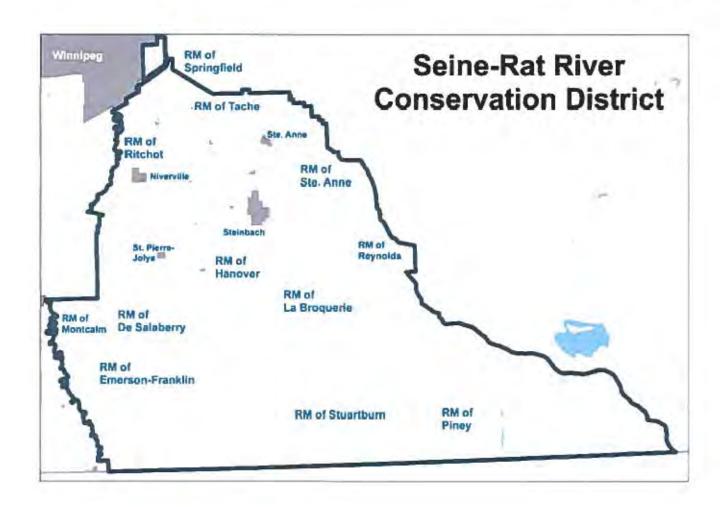
What type(s) of manure will be generated?

| X | solid | | semi-solid | X | liquid

Manure Volume or Weight

Manure production can be estimated using the Manure Production Calculator Table. The sizing of the manure storage is the responsibility of the operator and must be constructed in accordance with the <u>Livestock Manure and Mortalities Management Regulation</u>. Design and construction of a manure storage facility is dependent on the type of structure; earthen manure storage facilities must have between 400 and 500 days capacity, a steel or concrete storage tank must have between 250 and 500 days capacity. This ensures the facility has sufficient capacity eliminating the need for winter application.

What will be the total volume or weight of manure generated annually by the livestock operation? (See Manure Production Calculator Table.)

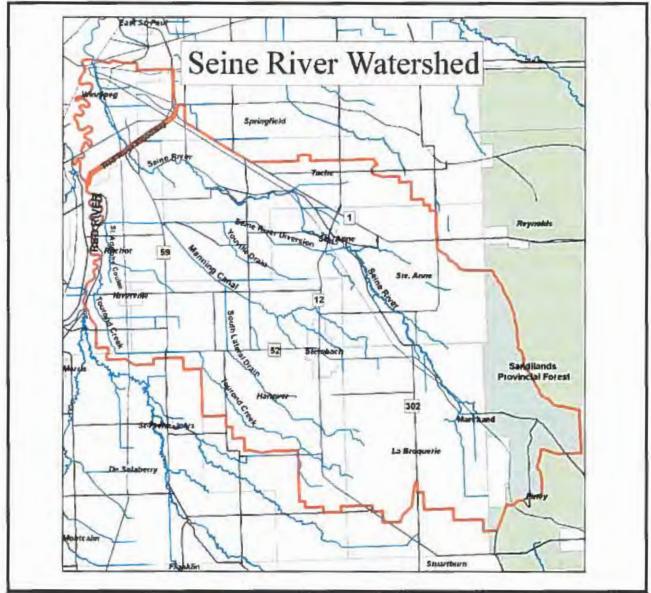


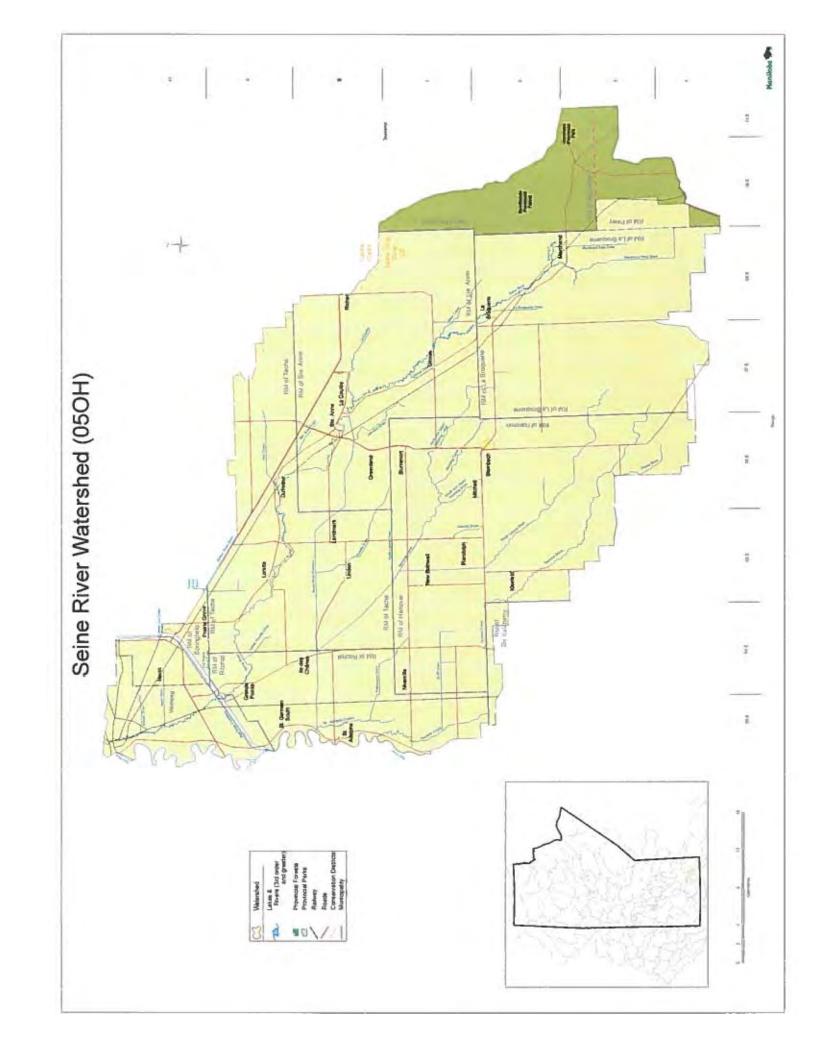
3.0 Seine River Watershed

3.1 Location and Size

Located in southeastern Manitoba, the Seine River Watershed (Figure 1) is approximately 2,509 square kilometres in size. The Seine River has its headwaters in the Sandilands Provincial Forest, near the village of Marchand. The river meanders northwest to the town of Ste. Anne where the Seine River Diversion channels a portion of the flow west to the Red River. Between Ste. Anne and the Red River, the Diversion is joined by a number of tributaries, including Youville Drain, Manning Canal and St. Adolphe Coulee. From Ste. Anne, the Seine River continues northwest, passing under the Red River Floodway through the Seine River Siphon and joins the Red River in Winnipeg.

Figure 1 - Seine River Watershed





| | | | | ssociated livestock however will be stored and handled separately. |
|--------------------------------------|--|---|---|---|
| | liquid volume;_ | 689,850 cu f | 1 | solid weight: approx 1932 tons/year @ 35 lb/cu ft |
| be handled as a applied. By using | tiquid and stored in the EM: | 5. Manure from 60 i | dry cows as well as | attached Note: Manure from the milking cows as well as from 40 dry cows will from the helfers and calves will be handled as a solid and placed in a field storage until land a have overestimated liquid manure production by approximately 1/3 as only manure from the |
| | Manure Storage | Type and | Capacity | cows will be placed in the EMS. |
| | The type of stora storage facility o | | | ct the capacity requirements for the manure |
| | What type of ma | nure storag | e facility wi | Il be used by the operation? |
| | under-barn co | - | | |
| | steel tank(s) | The second second | ield storage | |
| | | | | d/or proposed manure storage facilities, if Manure Storage Facility Dimensions Table.) |
| | The second secon | | Action Contracts | ge Facility Dimensions Table attached ure storage period will be reduced to approx 260 days. |
| | Odour Control | Measures (r | roject site) | |
| | Barns and manua | re storage fac e covers and | cilities can b | e significant sources of livestock odours. The use can reduce this, particularly for neighbours in the |
| | What odour cont | | s are you pla | nning to use? |
| | Type of cover: | | ust over in stora | age reducing odours |
| | | | | |
| | Shelterbelt plant | ing: X yes | no | X existing shelterbelt |
| | Other measures (| | | row shelterbelt north and south of yard If from west properly line. |
| | Manure Treatm | ent | | |
| | expansion, or co number of anima another environ | nstruction o al units for p mentally so | f a manure s pigs, unless t und treatme | or must not issue a permit for the modification, storage facility accommodating an increase in the the manure is treated using anaerobic digestion or ent that is similar to or better than anaerobic vation and Water Stewardship. |
| | Does your propo treatment for ma | | naerobic dig | estion or another environmentally sound |
| | yes | X no | | not applicable |

| | | | Dally M | Dally Manura Production | | | | | Total Manura Volume |
|--|--|-------------------|--------------------|--|---|---------------------------------------|---------------------------------|---|--|
| Animal Type (A) | Animal Sub-type (B) | References (C) | Manure Type (D) | Default Manure Production (n³/animal/day) (E) | Operation Manure Production ((R ² /animat/day) (F) | (G) | (H) | Total Menure Volume (ft ³) (FxGxH) | for Semi-Solid and Liquid Manure (Imp Gal) |
| | | | Semi-Sord 3 | 36 | | | | | 0.0 |
| | Fine Stall | | Solid | 3.4 | | | | | |
| Section of the second | | Table in an En | Liquid 5 | 3.5 | 3,5 | 365 | 540 | 880,850.00 | A.297,765.5 |
| Dairy (missing cows | | FDCs for Dairy | Servi-Solid 1 | 3.6 | | | | 145 | 0.0 |
| livertock) | Tie Staff | 1895 | Salid | 3.5 | | | | | |
| - Constitution of the Cons | | | Liquid | 3.6 | | | | | 0.0 |
| | Loose Housing (Dry Cows) | | Solid | 3.0 | 3.0 | 365 | 09 | 85,700.00 | |
| | Milking Perfour Menure and Washwater | | Liquid | 90 | | | | | |
| | Beef cows including associated livestock | | Solid | 1.2 | | | | 7. | |
| ,,,,, | Backgrounder (200 day) | pg 117, FPGe for | Solid | 0.73 | | | | * | |
| 500 | 800 lb yearing replacement duity heliers | Hogs 1998 | Sold | 0.85 | 0.85 | 365 | 250 | 77,582.50 | |
| | 400 ib dsiry calves | | Sold | 0.5 | 0.5 | 365 | 250 | 45,525.00 | |
| | Sows - fortow to linish (234 - 254 lbs) | | Liquid | 2,3 | | | | | 0.0 |
| | Sows - fartow to ween (up to 11 lbs) | MAFRI websile. | Liquid | 0.8 | | | | | 00 |
| Pigs | Saws - farrow to numery (51 lbs) | FPGs for Pigs | Liquid | , | | | | 7 | 00 |
| | Weanings, Nursery (11 - 51 lbs) | 2002 | Liquid | 0.1 | | | | IV. | 00 |
| | Grower / Finisher (51 - 249 lbs) | | Liquid | 0.25 | | | | | 0.0 |
| | | | | Yearly Manure Production | uction | | | Total Manura | Total Manure Votume |
| Animal Type | Type of Operation | | Default Man | Default Manure Production (R ²)vearibled space) | Operation Manura Production | Production Period ⁷ (Days) | Number of Birds ((Capacity) | Volume (PT) (F7365xGxH) | for Semi-Solid and Liquid Manura (Imp Gal) |
| | | | | | (ft*/year/bird space) | | | 0.0 | Contract of the Contract of th |
| | Brollers - floor * | | | 1,23 | | | | 3 | |
| | Broller breeder hims." | | | 2.3 | | | | * | |
| | Broiler breader pullets * | | | 66 D | | | | | |
| | Rosstera - Noor 6 | ***** | | 1,16 | | | | + | |
| Chickens | Layers - cage " | EPGs for Boulley | | 2.33 | | | | | 00 |
| * | Layers - Roor | 2000 | | 1.68 | | | | | |
| | Layers - solid pack " | | | | | | | t | |
| | Puliets - cage * | | | 0.71 | | | | | 00 |
| | Pullets - floor 6 | | | 0.75 | | | | | |
| | Pullets – solld pack * | | | | | | | | |
| | Srollers * | Table 3, pg 85, | | 2.83 | | | | | |
| Turkeys | Heavy torus " | FPGs for Poultry | | 5.58 | | | | 1 | |
| | Heavy hens | 2000 | | 3.32 | | | | | |

Staing of a manure storage facility in accordance with all requirements of the Livestock Manure and Mortalities Monogement Regulation (M.R. 42/98) is the responsibility of the operator,

Instructions and footnotes:

ENTER the manure production estimate for your operation. If no estimate is available, use the default value provided in column E. References for default daily and yearly manure production are provided in column C.

PENTER the number of days worth of manure that will be produced. For earthen manure storage facilities the minimum storage requirement is 400 days. For steel and concrete manure storage facilities the minimum storage requirement is 250.

**ENTER the total number of animats or birts that the operation can hold (a.g. barn or feedlot capacity).

^{*} Milking cows includes all lacialing and dry cows.

Default menure production estimates for sorni-sofid and liquid deiry menure include menure and washwater from the mitting periour.

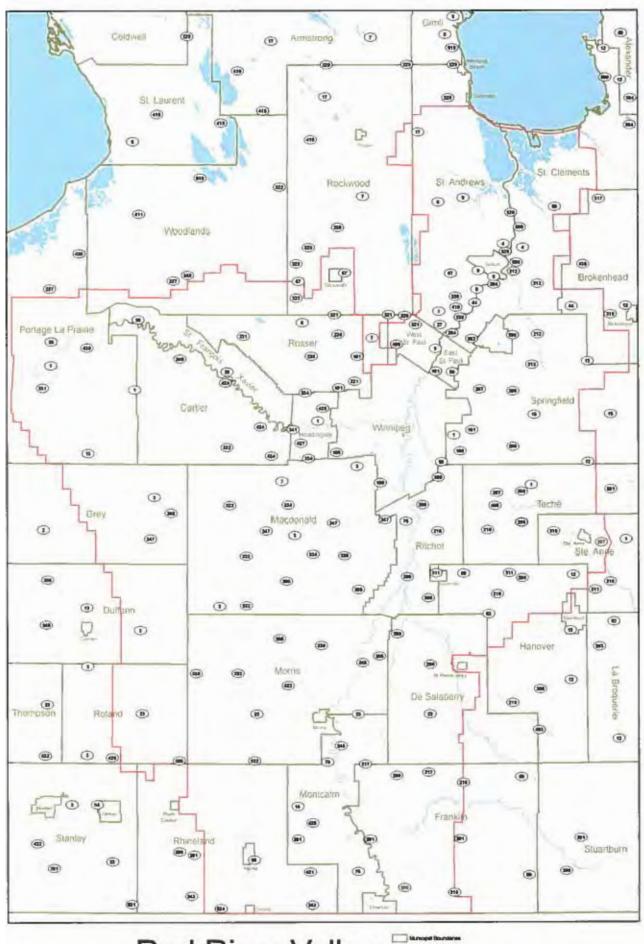
^{*2} inches of wood shavings or 4 indres of straw placed on floor. Manure and litter removed from barn at 25% molsture content, with a density of 20 lb/ht.*
Tone-third litter floor, two-thirds slatted floor. Manure and litter removed from barn at 40% moisture content, with a density of 25 lb/ht.

^{*}Manure removed from barn at 90% moisture content with a density of 59 lb/h*

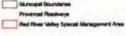
^{*} Poultry operations using litter (solid pack) must provide an estimate of yearly manure production

| If yes, please describe |
|---|
| Manure Application Method |
| The <u>Livestock Manure and Mortalities Management Regulation</u> requires the registration of annual manure management plans for new or expanding operations with 300 Animal Units or more. |
| Does the operation currently file an annual Manure Management Plan with Manitoba Conservation and Water Stewardship? (For operations with 300 Animal Units or more, only) Yes |
| Manure application methods and the season in which manure is applied affect odour, nutrient availability, crop response, land base requirements and the risk of water contamination. |
| Proposed application method: - all liquid manure will be injected into the soil ☐ broadcast ☐ broadcast and incorporation within 48 hours ☐ injection |
| The <u>Livestock Manure and Mortalities Management Regulation</u> prohibits the application of manure from November 10 of one year to April 10 of the following year (winter application). |
| Time of year for application: spring summer fall |
| The <u>Livestock Manure and Mortalities Management Regulation</u> puts restrictions on fall application of manure in the Red River Valley Special Management Area. |
| The proposed spread fields: are X are not in the Red River Valley Special Management Area. |
| Land Available for Manure Application The land available for manure application includes all suitable land (owned, leased or under agreement) that is available to the operation for manure application. |

Under the Livestock Manure and Mortalities Management Regulation and the Nutrient Management Regulation, application of nutrients is not permitted on Agriculture Capability Class 6, 7 and unimproved organic soils (Nutrient Management Zone 4) and within Nutrient Buffer Zones.



Red River Valley Special Management Area Monitobo 🗪





Areas of a field that are Class 6, 7, unimproved organic soils (Nutrient Management Zone 4) or areas within the nutrient buffer zones are considered unsuitable for manure application. In addition, fields with 60 parts per million (ppm) Olsen phosphorus (P) in the top six inches (15 centimetres) of soil cannot be included in the land base calculation.

Nutrients cannot be applied within the Nutrient Buffer Zones as outlined in the Nutrient Management Regulation (62/2008) and illustrated in the <u>Setback Requirements From Water Features Table</u>.

| Has the setback area for all water features | been | observed | and | excluded | from | land |
|---|------|----------|-----|----------|------|------|
| base calculations for this operation? | | | | | | |

| Y | yes | no | 3 |
|---|-----|----|---|

Client: Alvin Plett
Location: Landmark, MB
Date: 07-May-13

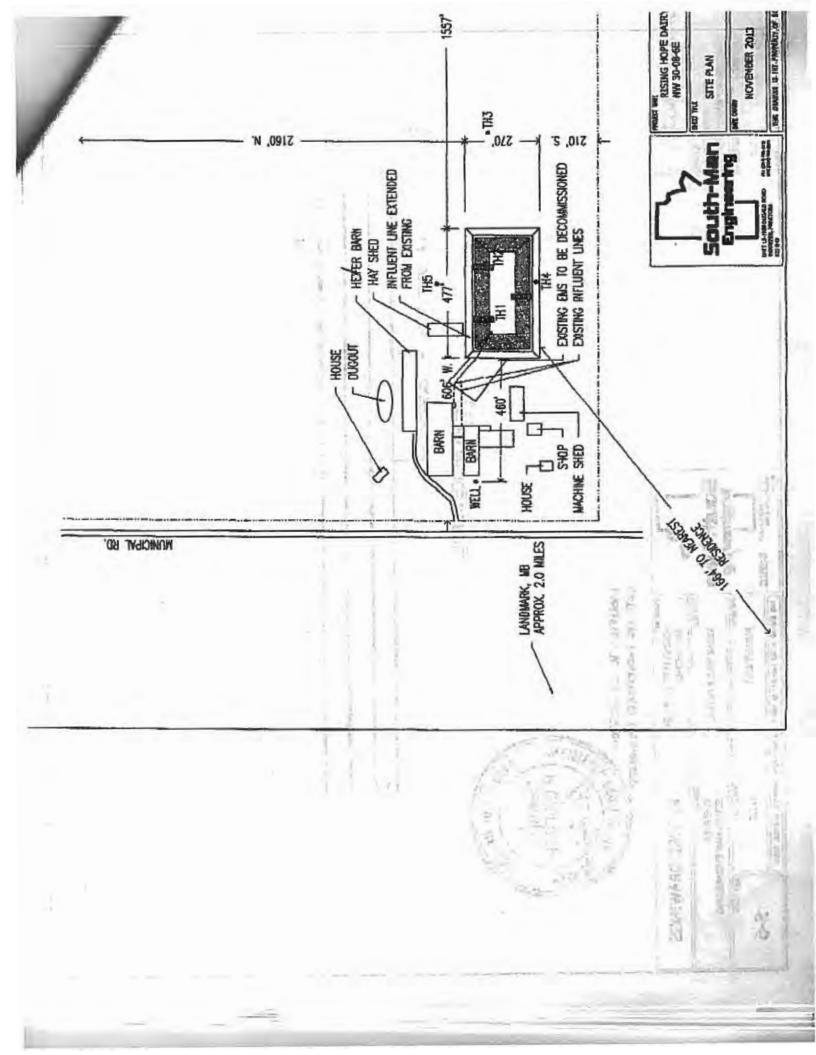
Earthen Manure Storage Worksheet - Balanced Cut/Fill In-Situ

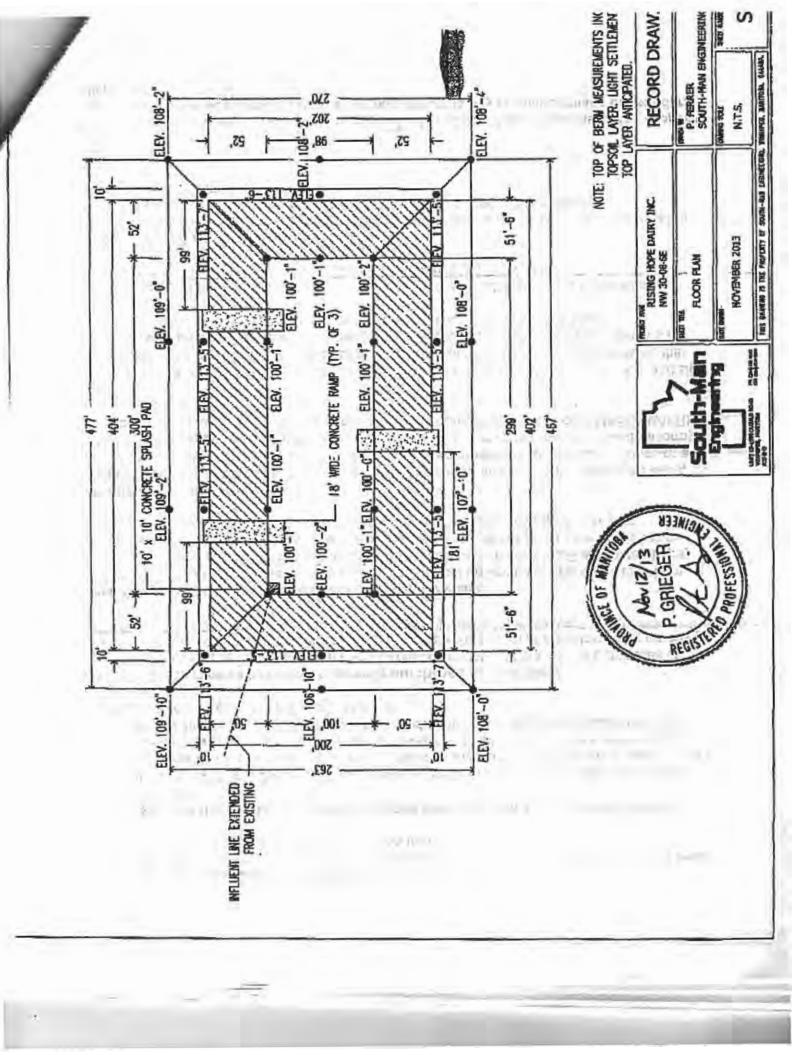
| Cell #1 | | | | |
|---------------------|--------|-----------------------------------|-----------------|--------|
| Length, ft | 410 | | 410 | |
| Width, ft | 200 | | 200 | |
| Depth, ft | 13 | | 13 | |
| Cut Depth | 7.75 | | 7.75 | |
| Freeboard, ft | 2 | | 11.5 | |
| FIII Height | 5.25 | | 5.25 | |
| Interior Slope | 4 | | 4 | |
| Exterior Slope | 5 | | 5 | |
| Sem Width | 10 | | 10 | |
| Bottom Width | 196 | | 96 | |
| Bottom Length | 308 | | 308 | |
| Top Area | 82000 | | 82000 | |
| Bottom Area | 29376 | | 29376 | |
| Design Surface Area | 72496 | | 34344 | |
| Total Volume | 095309 | | 695309 | |
| Design Volume | 542740 | Storage volume lideses bottom | 47742 Available | 494999 |
| Cut Area | 58144 | 1.5' of sludge and liquids unable | 58144 | |
| Cut-Volume | 332558 | to be removed with typical pumps | 332950 | |
| Fill Skinkage, % | 30 | and the second second | 30 | |
| Fill Volume | 314806 | | 314606 | |
| | | | | |

Manure Production Calculations

| Livestock Description | Animal Fa | Manure Production | Storage Period (days) | | Total (cu ft) |
|-----------------------|-----------|----------------------|-----------------------|-------|------------------|
| Dairy | 225 | (cu Wday) | | 500 | 494999 |
| | | (27.46 Imp gal/cow) | | ,,,,, | 10,000 |
| | | | | | 40,4000 CTO T-4 |







Use the Manure Application Field Characteristics Table to determine the following:

Total suitable area available for manure application

1548 acres

X Manure Application Field Characteristics Table attached

Copies of soil test reports that are no more than 12 months old must also be included with this submission.

X Soil test reports for the required area for manure application attached.

Land Required for Manure Application

Long term, land base requirements for manure application are calculated based on estimates of the quantity of nutrients (nitrogen and phosphorus) excreted by livestock and the removal of nutrients by the proposed crops.

Phosphorus

The quantity of phosphorus excreted by the livestock depends on the type, number and size of livestock, the quantity and availability of phosphorus fed to the livestock and the amount retained by the livestock.

The removal of phosphorus by crops depends on the crops grown and the historical crop yield averages. (See the Crop Rotation Table).

The Livestock Manure and Mortalities Management Regulation requires that "sufficient land is available to the operator to implement an appropriate manure management plan" before Manitoba Conservation and Water Stewardship will issue a permit for a manure storage facility.

"Certain Areas" are defined by the Livestock Manure and Mortalities Management Regulation (M.R. 42/98) as areas where the amount of phosphorus in the manure produced annually by livestock in an area of not less than 93.24 km² is greater than two times the annual crop removal rate of P₂O₅ in that area. Currently the rural municipalities of Hanover and La Broquerie are considered to be "certain areas".

A livestock operation is considered to be located within a "certain area" if any part of the operation is located within the "certain area". This may include, but not limited to, barn(s), confined livestock area(s), field storage location(s), manure storage facility(ies), and/or spread filed(s).

| 1 | 5 |
|--|---|
| In "certain areas" it is Manitoba Conservation and Water Stewardship policy to consider a manure storage facility permit if the operation shows it has access to sufficient suitable land to apply manure at a rate equivalent to one times the crop removal rate of phosphorus. | |
| Is the livestock operation located in "certain areas"? yes X no | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
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| | |
| | |
| | |

In areas which are not considered to be "certain areas", Manitoba Conservation and Water Stewardship may issue a manure storage facility permit, if the operation shows it has access to sufficient suitable land to apply manure at a rate equivalent to two times the crop removal rate of phosphorus.

For more information on obtaining a manure storage facility permit, please contact Manitoba Conservation and Water Stewardship, Environmental Approvals branch at (204) 945-5081.

Use the <u>Land Base Calculator</u> to calculate the minimum area required for manure application.

| Total minimum area required for manure application at two times crop removal, for operations outside of Hanover and La Broquerie | 1206 acres |
|--|------------|
| Total minimum area required for manure application at one times crop removal, for operations within Hanover and La Broquerie AND | 2412 acres |
| For the long-term sustainability of operations outside of Hanover and La Broquerie | |

For more information on completing land base calculations, call Manitoba Agriculture, Food and Rural Initiatives (MAFRI) at (204) 945-3869 in Winnipeg.

X Land Base Calculator attached

Land Base Requirement Summary

By comparing the land available for manure application with the land required for manure application, state whether sufficient suitable land for manure application:

| n |
|---|
| |

MANURE APPLICATION FIELD CHARACTERISTICS TABLE

| | | | | | 1548 | Total Net Acreage for | | | | | |
|--------------------------|---------------------------------|--|--------------------------|--|--|---------------------------------|-------|-------|----------|-------------------|-------|
| | | | | | | | | | | | 8 |
| | | | | | | | | | | | 9 |
| | | | | | | | | | | | 18 |
| | | 650 | | | | | | | | | 17 |
| | | | | | | | | | | | 16. |
| | | | | | | | - | | | | 15 |
| | | | | | | | | | | | 14 |
| | | | | | | | | | | | 13 |
| Agriculture General Zone | General Agricultural Area | 63 | 24 | 3w | 130 | | 130 | A | Tache | EE1-8-5e | 12 |
| Agriculture General Zone | General Agricultural Area | 3 | 37 | 3w | 63 | | 83 | A | Tache | NEE36-8-5e | 11 |
| Agriculture Zone | Rural Agricultural Area | 15 | 40 | 3w | 241 | | 241 | A | Ste Anne | NW29-8-6e | 10 |
| Agriculture General Zone | General Agricultural Area | 6 | 30 | 344 | 78 | | 78 | A | Tache | NNW25-8-5e | 60 |
| Agriculture General Zone | General Agricultural Area | 7 | 47 | 3w | 236 | trees | 238 | A | Tache | NW6-9-69 | 8 |
| Agriculture General Zone | General Agricultural Area | 9 | 38 | 3w | 220 | Dwelling, well, yard, drain | 244 | × | Tache | S35-8-5e | 7 |
| Agriculture General Zone | General Agricultural Area | E) | 20 | 344 | 150 | Dwelling, well | 161 | 0 | Tache | S1/2 6-9-6e | 9 |
| Agriculture General Zone | General Agricultural Area | 10 | 51 | 34 | 59 | | 59 | 0 | Tache | NW25-8-5e (south) | un |
| Agriculture General Zone | General Agricultural Area | 23 | 13 | 344 | 78 | | 78 | 0 | Tache | NNE25-8-5e | 4 |
| Agriculture Zone | Rural Agricultural Area | 38 | 36 | 300 | 76 | Dwelling, well | 80 | 0 | Ste Anne | SSW31-8-6e | m |
| Agriculture Zone | Rural Agricultural Area | 2 | 20 | 344 | 81 | | 81 | 0 | Ste Anne | NE30-8-6a (north) | 2 |
| Agriculture Zone | Rural Agricultural Area | 44 | 113 | 34 | 114 | Dwelling, well | 156 | 0 | Ste Anne | NW30-8-6e | - |
| Zaning | Development Plan Designation | Soll Phosphorus (ppm Oisen P) 0-6 Inches | (1b/acre) 0-24 inches | Agriculture Capability Class and Subclass | Net Acreage for Manure Application | Setbacks, Including features | Total | OVLVA | Rural | Legal Description | Flord |
| × | , | | x | 9 | eL. | w w | 0 | U | 0 | A | |

Enter the legal description for each percet of land that will receive manure; Sec., Twp, Rge or River Lot (Including parish).

Manura Application:

(dentity the Rural Municipality in which the parcel is located.

Indicate how the land has been secured for manure application: O – Own / L – Lease / A – Agreement

Enter the total acreage for the parcel.

Enter setbacks from surface water or groundwater features that reduce the land available for manure application, include Identification of type of feature (e.g. Bm., Order 3 drain). Enter the net long-term acreage available for manure application for the parcel after taking into account aetbacks and excluding Class 6, 7 and unimproved organic soles.

Enter the agriculture capability class and subclass ratings for the acreage available for manure application.

Provide soil test results for nitrate-N in folac at the 0-24 inch depth. Soil test results must be no more than 12 months old and must be completed by an accredited soil-testing laboratory. Provide soil test results for phosphorus pam Olsen P at 0-8 inch depth. Soil test results must be no more than 12 months old and must be completed by an accredited soil-testing laboratory. Please indicate the Development Plan and its by-law number in addition to the zoning for each field. KECOMPOIT-JE

| Species | Animal Category/Operation type | (lb/year) | P2O5 (lb/year) |
|----------|---|------------|-------------------|
| Pigs | Gestating Sow | (m) Year) | O O |
| | Nursing Sow | 0 | 0 |
| | Gilts | 0 | 0 |
| | Boars | 0 | 0 |
| | Sows, farrow to 5 kg | 0 | 0 |
| | Sows, farrow to 23 kg | 0 | 0 |
| | Sows, farrow to finish | 0 | 0 |
| | Weanlings | 0 | 0 |
| | Growers/finishers | 0 | 0 |
| Beef | Mature Cows (>2 years old) | 0 | 8 |
| Deei | Bred Heifer (14 mo - 2 years) | 0 | 0 |
| | Replacement Heifers (7 mo-14 mo) | 0 | 0 |
| | | 0 | 0 |
| | Unweaned Calves (0-7 mo) Bulls | 0 | 0 |
| | | 0 | |
| | Mature Cows and Bred Heifers, plus associated livestock | 200 | 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 |
| | 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 | 156772 | 86619 |
| Sheep | Ewes | 0 | 8 |
| | Replacement Ewes | 0 | 0 |
| | Rams | 0 | 0 |
| | Lambs | 0 | 0 |
| | Ewes, plus assoc livestock | 0 | 0 |
| | Feeder | 0 | 0 |
| Chickens | Brollers | 0 | 0 |
| | Broller Breeder Pullets | 0 | 0 |
| | Broiler Breeder Hens | 0 | 0 |
| Layers | Layer Pullets | 0 | 0 |
| | Layer Hens | 0 | 0 |
| | Breeder Pullets | 0 | D |
| | Breeder Hens | 0 | 0 |
| Turkeys | Broiler Hens (0-9 wks) | 0 | 0 |
| | Hens (0-11 wks) | 0 | D |
| | Heavy Hens (0-14 wks) | 0 | 0 |
| | Light Toms (0-12 wks) | 0 | 0 |
| | Toms (0-13 wks) | 0 | 0 |
| | Heavy Toms (0-15 wks) | 0 | 0 |
| | Breeding Hen Growers (0-30 wks) | 0 | 0 |
| | Breeding Hens (30-60 wks) | 0 | 0 |
| | Breeding Tom Grower (0-18 wks) | 0 | 0 |
| | Breeding Tom Grower (0-30 wks) | 0 | 0 |
| | Breeding Tom (30-60 wks) | 0 | 0 |
| | Total | | 86619 |

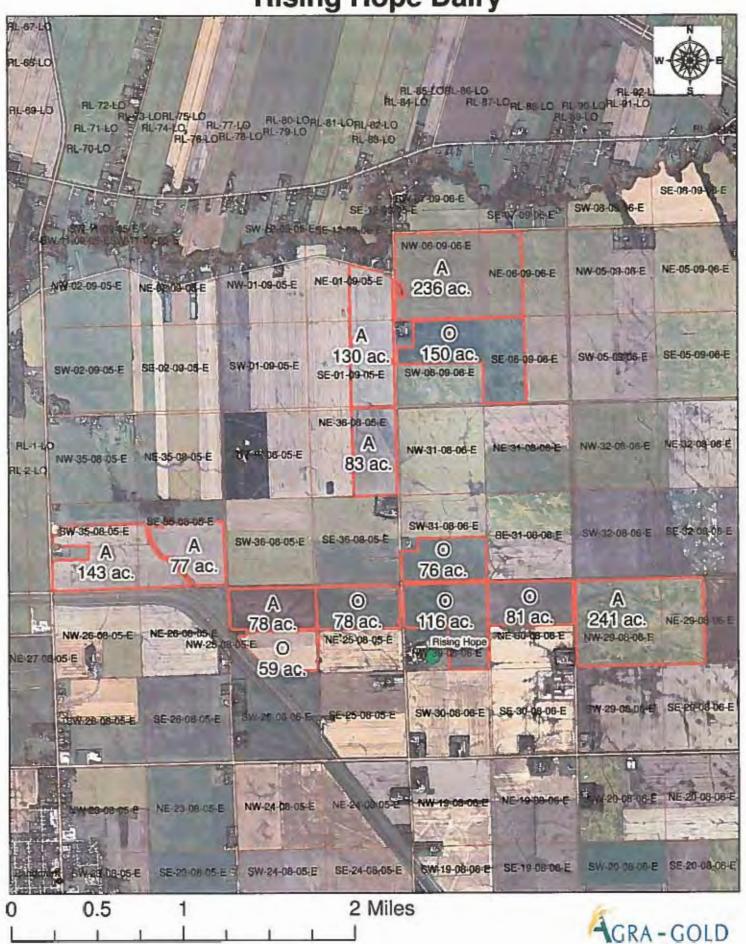
Note: Be sure all livestock species on your farm are represented in this table. Not just the proposed expansion.

| Nutrients Excreted | lbs |
|----------------------------|--------|
| Nitrogen | 156772 |
| P205 | 86619 |
| Crop Nutrient Use | lb/ac |
| Nitrogen Uptake | 131.3 |
| P2O5 Removal | 35.9 |
| Land Base Requirements | acres |
| Acres Available | 1548 |
| Acres for Nitrogen Uptake | 1194 |
| Acres for 2 x P2O5 Removal | 1206 |
| Acres for 1 x P2O5 Removal | 2412 |

Dry Cows Calves, 0-3 months Mature Cows, plus associated livestock Replacements, >13 months Lactating Cows Calves, 4-13 months Type Liquid Uncovered Earthurn Liquid Uncovered Earthern Liquid Uncovered Earthers Liquid Unequalled Earthen Storage Type Volatilization Numbers 30% 30% Animal 00000 Weight in (b) 1400 1440 90 275 810 Average
n Weight Out Animal Wit
(lb) (lb)
11440 11420
11440 11440
2775 183
810 543
1250 1030 Days on Feed per Cycle (days) 365 365 365 365 365 Number of Cycles per Year N Excreted
Per Hard
Adjusted for
Storage N
Loss
(tblyrherd) 158772 00000 P2OS
Excretad
por Herd
Per Year
(Ib)yrherd
0
0
0 86619

Last revised August 20, 2014

Rising Hope Dairy



CROP ROTATION TABLE

| A | 0 | C | D | m |
|--------------------------------|---------|------------------|---------|-----------------------------|
| Expected Crops in the Rotation | Acreage | Historical Yield | Units | Source of Yield Information |
| Spring Wheat | 127 | 45.2 | Bu/ac | Crop Insurance |
| Canola | 153 | 27.6 | Bu/ac | Crop Insurance |
| Oats | 154 | 86.8 | Bulac | Crop insurance |
| Grain Corn | 337 | 93.2 | Bu/ac | Crop insurance |
| W Wheat | 185 | 74.2 | Bu/ac | Crop Insurance |
| Soybeans | 158 | 30.7 | Bulac | Crop insurance |
| Alfalfa | 311 | 3.179 | Tonslac | Crop Insurance |
| Silage Corn | 125 | 10.576 wet basis | Tons/ac | Crop insurance |

1548 acres

- ø > List all of the crop(s) to be grown in the rotation on the acreage that will receive manure.

 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.
- 0 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.
- im io Enter the units for the yields provided (e.g. bu/acre, tons/acre). Enter the source of the historical yield average provided.

| | Rem | oval | Uptake | | | | | Ren | lavor | Uptake |
|------------------|------|------|--------|--------|--------|-----------|---------|--------------|-----------|-----------|
| Сгор | P205 | N | N | Units | Yield | Units | Acreage | P2O5 (lb) | N (lb) | N (Ib) |
| Alfalfa | 13.8 | 58 | 58 | 1b/ton | 3,179 | ton/ac | 311 | 13644 | 57849 | 57343 |
| 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 | 27.6 | bu/ac | 153 | 4392 | 8150 | 13471 |
| Corn Grain | 0.44 | 0.97 | 1.53 | lb/bu | 93.2 | bu/ac | 337 | 13820 | 30466 | 48055 |
| Corn Silage | 12.7 | 31.2 | 31.2 | lb/ton | 3.7016 | tons/ac | 124 | 5829 | 14321 | 14321 |
| Dry Edible Beans | 1.39 | 4.17 | | 1b/cwt | | cwt/ac | | 1 | - | |
| Fababeans | 1.79 | 5.02 | 8.4 | lb/cwt | | cwt/ac | | - | - | - |
| Flax | 0.65 | 2.13 | 2.88 | lb/bu | | bu/ac | | 4 | - | |
| 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 | 86.8 | bu/ac | 154 | 3475 | 8288 | 14383 |
| Pasture (grazed) | 10 | 34.2 | 34.2 | lb/ton | 0.5 | ton/ac | | - | - | - |
| Peas | 0.69 | 2.34 | 3.06 | lb/bu | | bu/ac | | 4 | - | 12 |
| Potatoes | 0.09 | 0.32 | 0.57 | lb/cwt | | cwt/ac | | - | 2 | - |
| Rye | 0.45 | 1.06 | 1.67 | lb/bu | | bu/ac | | | - | - |
| Soybeans | 0.84 | 3.87 | 5.2 | lb/bu | 30.7 | bu/ac | 158 | 4075 | 18772 | 25223 |
| Sunflower | 1.1 | 2.8 | | lb/cwt | | cwt/ac | | - | - | 1000 |
| Wheat - Spring | 0.59 | 1.5 | 2.11 | 1b/bu | 45.2 | bu/ac | 125 | 3360 | 8543 | 12017 |
| Wheat - Winter | 0.51 | 1.04 | 1.35 | lb/bu | 74.2 | bu/ac | 185 | 7001 | 14276 | 18531 |
| | | | | | | Sub Total | 1548 | 55595 | 160158 | 203263 |

Estimated Average Removal/Uptake (lb/ac)

Additional Acres

35.9

103.5

1313

Crop Planned on Additional Acres

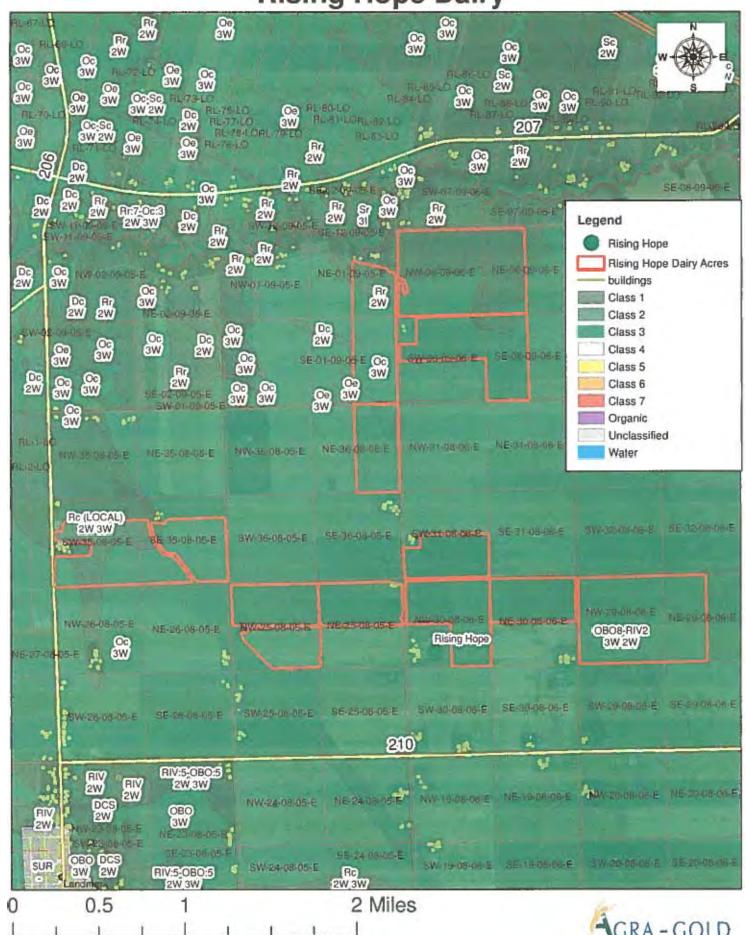
Total Suitable Acres Available for Manure 1548

Additional acres include acres that are suitable and available for manure application but are seeded to crops that are not included in the table. Include the crop to be grown in the row below.

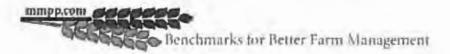
Last revised August 20, 2014

Note:

Rising Hope Dairy



Consulting Ltd.



MMPP Fertilizer Data Browser

(Vertilizer Chery Help)

Save Raw Dala

New Search

Search Summary

Your selected search:

Region(s) Selected: HANOVER, STE. ANNE, TACHE

Crop(s) Selected: ALFALFA

Soil Zone(s) Selected: SOIL TYPE E

Period Selected: 2005 to 2014

This search returned 15 records from the MASC database, summarized below:

Total Acres:

1,857 acres

Yield per Acre:

3.179 Tons / acre (2.885 tonnes / ucre)

Fertilizer Applied per Acre (actual product):

Nitrogen:

17.1 lbs / acre

(0,008 tonnes / acre)

Phosphorus:

38.2 lbs / acre

(0.017 tonnes / acre)

Potassium:

11.3 lbs / acre

(0.005 tonnes / acre)

Sulfur:

0.9 lbs / acre

(0.000 tonnes / acre)

View Raw Data

Save Raw Data

New Search

Canada



Manitoba



MMPP Fertilizer Data Browser

(Frytilizer Durey Help)

Save Raw Data

New Search

Search Summary

Your selected search

Region(s) Selected: HANOVER, STE. ANNE, TACHE

Crop(s) Selected: OATS

Soil Zone(s) Selected: SOIL TYPE E

Period Selected: 2005 to 2014

This search returned 28 records from the MASC database, summarized below:

Total Acres:

76,037 acres

Yield per Acre:

86.8 Bushels / acre (1.338 tonnes / acre)

Fertilizer Applied per Acre (actual product):

Nitrogen:

74.9 lbs / nere

(0.034 tonnes / acre)

Phosphorus:

27.9 lbs / acre

(0.013 tonnes / acre)

Potassium:

2.7 lbs / acre

(0.001 tonnes / acre)

Sulfur:

2.7 lbs / acre

(0.001 tormes / acre)

View Raw Data

Save Raw Data

New Search

Canada



Maniloba 97



MMPP Fertilizer Data Browser

(Fertilizer Query Help)

Save Raw Data

New Search

Search Summary

Your selected search:

Region(s) Selected: HANOVER, STE. ANNE, TACHE

Crop(s) Selected: GRAIN CORN

Soil Zone(s) Scleeted: SOIL TYPE E

Period Selected: 2005 to 2014

This search returned 27 records from the MASC database, summarized below:

Total Acres:

21,190 acres

Yield per Acre:

93.2 Bushels / acre (2.367 tonnes / acre)

Fertilizer Applied per Acre (actual product);

Nitrogen:

117.0 lbs / acre

(0.053 tonnes / acre)

Phosphorus:

25,3 lbs / acre

(0.011 tonnes / acre)

Potassium:

3.9 lbs / acre

(0.002 tonnes / acre)

Sulfur.

1.0 lbs / acre

(0.000 tonnes / acre)

View Ruw Data

Save Raw Dala

New Search







MMPP Fertilizer Data Browser

(Kerillizer Query Help)

Save Raw Data

New Search

Search Summary

Your selected search:

Region(s) Selected: HANOVER, STE ANNE, TACHE

Crep(s) Selected: SILAGE CORN

Soil Zone(s) Selected: SOIL TYPE E

Period Selected: 2005 to 2014

This search returned 17 records from the MASC database, summarized below:

Total Acres:

1,810 acres

Yield per Acre:

10.576 Tons / acre (9.597 tonnes / acre)

Fertilizer Applied per Acre (actual product):

Nitrogen:

92.6 lbs / acre

(0.042 tonnes / acre)

Phosphorus:

25.0 lbs / acre

(0.011 tonnes / acre)

Potassium:

12.6 lbs / acre

(0.006 tonnes / acre)

Sulfur:

0.1 lbs / acre

(0.000 tonnes / acre)

View Raw Data

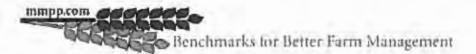
Save Raw Dala

New Search

Canada



Maniloba 98



MMPP Fertilizer Data Browser

(Fertilizer Query Help)

Save Raw Data New Search

Search Summary

Your selected search!

Region(s) Selected: HANOVER, STE. ANNE, TACHE

Crop(s) Selected: SOYBEANS

Soil Zone(s) Selected: SOIL TYPE E

Period Sciented: 2005 to 2014

This search returned 27 records from the MASC database, summarized below:

Total Acres:

30,698 acres

Yield per Acre:

30.7 Bushels / acre (0.836 (onnes / acre)

Fertilizer Applied per Acre (actual product):

Nitrogen:

9.9 lbs / acre

(0.004 tonnes / acre)

Phosphorus:

22.8 lbs / acre

(0.010 tonnes / acre)

Potassium:

0.8 lbs / acre

(0.000 tonnes / acre)

Sulfur:

3.6 lbs / acre

(0.002 tonnes / acre)

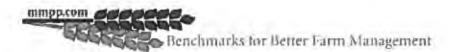
View Raw Data

Save Raw Data

New Search







MMPP Fertilizer Data Browser

(Fertilizer Query Help)

Save Raw Data

New Search

Search Summary

Your selected search:

Regian(s) Selected: HANOVER, STE. ANNE, TACHE

Crop(s) Selected: RED SPRING WHEAT

Soil Zone(s) Selected: SOIL TYPE E

Period Selected: 2005 to 2014

This search returned 28 records from the MASC database, summarized below:

Total Acres:

61,614 acres

Yield per Acre:

45.2 Bushels / acre (1.231 tonnes / acre)

Fertilizer Applied per Acre (actual product):

Nitrogen:

94.1 lbs / acre

(0.043 tonnes / acre)

Phosphorus:

30.5 lbs / acre

(0.014 tonnes / acre)

Potassium:

3.4 lbs / acre

(0.002 tonnes / acre)

Sulfur:

3.5 lbs / acre

(0.002 (onnes / acre)

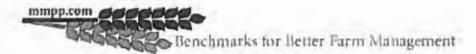
View Raw Data

Save Raw Data

New Search







MMPP Fertilizer Data Browser

(Fertilizer Query Help)

Save Raw Data New Search

Search Summary

Your selected search:

Region(s) Selected: HANOVER, STE. ANNE, TACHE

Crop(s) Selected: WINTER WHEAT

Soil Zone(s) Selected: SOIL TYPE E

Period Selected: 2005 to 2014

This search returned 23 records from the MASC database, summarized below:

Total Acres:

30,759 acres

Yield per Acre;

74.2 Bushels / acre (2.019 tonnes / acre)

Fertilizer Applied per Acre (actual product):

Nitrogen:

109.7 lbs / acre

(0,050 tonnes / aere)

Phosphorus:

22.4 lbs / acre

(0.010 tonnes / acre)

Potassium:

1.7 lbs / acre

(0.001 tonnes / acre)

Sulfur

L4 lbs / acre

(0.001 tonnes / acre)

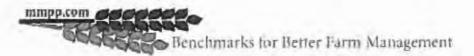
View Raw Data

Save Raw Data

New Search







MMPP Fertilizer Data Browser

(Fertilizer Query Help)

Save Raw Data

New Search

Search Summary

Your selected search:

Region(s) Selected: HANOVER, STE ANNE, TACHE

Crop(s) Selected ARGENTINE CANOLA

Soil Zone(s) Selected SOIL TYPE E

Period Selected: 2005 to 2014

This search returned 29 records from the MASC database, summarized below:

Total Acres:

123,447 acres

Yield per Acre

27.6 Bushels / acre (0.626 tonnes / acre)

Fertilizer Applied per Acre (actual product):

Nitrogen:

107.9 lbs / acre

(0.049 tonnes / acre)

Phosphorus:

28.4 lbs / acre

(0.013 tonnes / acre)

Potassium:

2.0 lbs / acre

(0.001 tonnes / acre)

Sulfur

11.0 lbs / acre

(0.005 tonnes / acre)

View Raw Data

Save Raw Data

New Search







Benchmarks for Better Farm Management

Web address: http://www.minpp.com/minpp.nsf/immpp_browser_variety.html

MMPP Variety Yield Data Browser

(Variety Query Help)

Save Raw Data New Search

Search Summary

Your selected search:

Region(s) Selected HANOVER, STE ANNE, TACHE

Crop(a) Sciented ARGENTINE CANOLA

Variety(e) Selected All

Period Selected 2004 to 2014

summarized below: This search returned 553 records from the MASC database,

Sum of Farm Varieties

Total Acres 2,328 farms

396,967 acres

29.5 Bushels / acre (0.670 tonnes / acre)

Vield per Acre

View Raw Data

Save Raw Data New Search







SOIL TEST REPORT

Z

Soil Analysis by Agvise Laboratories (http://www.agvise.com) Northwood: (701) 587-6010 Benson: (320) 843-4109

SAMPLE ID FIELD NAME Alotta TWP COUNTY (N) NE25-8-Se RANGE ACRES 78

SECTION QTR

EL1911 5 co

m

Rising Hope Dairy

SUBMITTED FOR:

Date Sampled 04/08/2015

CLIFF LOEWEN BLUMENORT, MB BOX 156 ROA OCO

Date Received 04/10/2015

Date Reported 4/13/2015

SUBMITTED BY:

PREV. CRUP Grass/Altalia

LAB # REF # WW17990 1168870 BOX # 9

| | (233)stenses | out with | Secum | Calcium | Magnesium | Casser | Mangenees | Zinc | Berge | Suther | | Calesta | Pelassiam | Ptospherus | | NIE-SEE | | | | | 1000 |
|---|---------------|-----------------------------------|-------|---------|-----------|--------|-----------|------|-------|---------|-------------|-------------|-----------|------------|-------------|---------|----------------------|--------|------------|---------------|----------------------|
| 0-24" | | 1 | | | | | | | | 200 | 0-6 | | | | Ohan | | 0-24" | | - | | UPSAUDIN |
| 0.83 mmho/cm | | | | | | | | | | 96/0100 | 110 Hit DEL | | soo ppm | | 11 ppm | | 13 th/ac | | 3 8b/ac | | Nutrient in The Soil |
| *************************************** | | | L | | | | | - | | | - | | | | | | | 7 | | H | other. |
| | H | H | + | H | | 1 | + | ł | H | | | | - | | H | | | | | 10 | Interpretation |
| 1 | | İ | | | | | İ | t | | | | | | t | | | | | | Ā | mon |
| 0.4. 7.9 | | 1 | Lime | ž | č. | 3 | 70 | 2:1 | | ın | 0 | * 50 | PyOs | 2 | vAltra | | succ | | | | |
| ₽ 10 | | | | | | | | | | 0 | | 0 | a | 47 | LBYACRE | 2 | CHIST | ٠ | THE | Grass | 6 |
| | said evenings | | | | | | | | | | | | | | APPLICATION | Band | SUGGESTED GUIDELINES | 4 Tons | MEID GOYT | Grass/Alfalts | Tal CLOB CHOICE |
| | | Cat | | | | | - | | | | | | | | NOT | | Ē. | | | 100 | ā |
| | Capacity | Cation Exchange | Uma | ž | ņ | Ma | 2 | Zn | U | in | ū | Kyo | \$DC4 | × | LB/ACRE | | SUGG | | | | |
| | * | ange | | | | | | | | | | | | | CRE | | ESTED | | ATELO | | 5 |
| | 46 Ca | * 5 | | | | | | | | | | | | | APPLICATION | | SUGGESTED QUIDELINES | | ATELD GOVE | | Tue Flob cuerca |
| | 14 PM | 185 DB1 | | | | | | | | | L | | | | NOIT | | ũ | | , | | 'n |
| _ | 34 W BM 9/8 | beratio | 1 | No | 5 | 7 | 7 | Zn | 0 | an | 0 | 250 | PyOs | 2 | 1 | | Suc | | | | i. |
| | _ | ME) IN | | | | | | | | | | | | | LB/ACRE | | GESTE | 0 | AIR. | | 5 |
| | No No | % Base Saturation (Typical Range) | | | | | | | | | Г | | | | Her | | SUGGESTED GUIDELINES | 0 | ATELD CONT | | and clob cume |
| | # 9/4 | ange) | | | | | | | | | | | | | APPLICATION | | SANTIA | | | | 3788 |

Crop 1: * Cauthon: Seed Pieced Pertiller Can Cause Injury * Many crops may respond to a starfar application of P & et even on high soll tests. Crop Removal: P2DE = 4D e2D = 152 A 6VISE Sand quidelines will build P & K (set levels to the medium range over many years.



(http://www.agvise.com) Northwood: (701) 587-6010 Benson: (320) 843-4109

TWP

SOIL TEST REPORT

SAMPLE ID FIELD 10 7928 FIELD NAME Aletta

COUNTY SECTION WHO SO BENNY

SUBMITTED BY: PREV. CROP Corn-Grain QTR ACRES 116 ELIGII 8

CO Z m

Rising Hope Dairy SUBMITTED FOR:

Date Sampled 04/08/2015

CLIFF LOEWEN BLUMENORT, MB BOX 156

ROA GCO A SE

Date Received 04/10/2015

Date Reported 4/13/2015

1168867 BOX #

NW17992

| Sal Salis | Carpontesicos | Org. Mattar | Bedlum | Calciam | Nagnesium | Capper | Manganasa | iran | Dinc | Berren | | Chlorida | | Petanahum | Physipheres | | Reference | | | | | 1000 |
|--------------|---------------|-----------------------------------|---|-----------|------------|--------|-----------|------|----------|--------|---|----------|------------|-----------|-------------|-------------|-----------|----------------------|---|----------------------|-------------------|----------------------|
| 6-24 | | | | | | | | | | | 6-24 | | | | Disen | | | 0-24" | | 500 | | trient in |
| D,87 mmha/cm | | 8.1 % | as ppm | Paga cccr | under Occi | | | | 3.66 ppm | | 30 lb/ac 54 lb/ac | | | 518 ppm | 44 ppm | | | 113 lb/ac | | 77 lb/sc 36 lb/sc | | Nutrient In The Soil |
| | | | *************************************** | | | | | | | | *************************************** | | | - | | | | | *************************************** | | Cathorny Care and | Interpretation |
| 0-E' 7,9 | and und | | Lin. | Z | 5 | 3 | 7 | Zn | | · | 1 2 | KJO | 10% | • | 22 | | | 546 | Ė | | | 48 |
| 7.9 | | | | 0 | | Г | Г | 0 | | | | 0 | 10 | | | LB/ACRE | | GESTE | 25 | MIL | Car | St Cre |
| | and minne | | | | | | | | | Band | | | (Starter)* | Band | | APPLICATION | Sand | SUGGESTED GUTOELINES | BU | TWC9 CTRIA | Cansia-bu | 1st Crop Choice |
| 48.9 mag | Capacity | Cation Exchange | Une | Prig | 5 | Mile | 2 | Zn | 0 | | 0 | Kyo | * POP | 9 | Z | 100 | | 900 | | | | |
| 20 | city | change | 2 | | | | | | 1 | 1 | - | | | | | LB/ACRE | | GRETE | | TELLA | | and Cre |
| 73.9 | ₩ Ca | W Bas | | | | | | | 1 | | | | | | | APPLICATION | | SUGGESTED GUIDELINES | | ATEL SOAL | | 2nd Crop Chaice |
| 115-10) | W. Mg | o Sotur | Unid | 2 | 5 | Pag | 70 | 1 | | U | 0 | 75 | tota | | | | | 100 | | | | |
| 3.7 | St. X | T) nobe | 100 | ē | | 2 | .0 | In | 9 | | 12 | Kyo | Og. | | z | TB/ACRE | | SUGGEST | | Ti. | | 3rd C |
| 0.8 | # Na | % Base Saturation (Typical Range) | | | - | | | | - | + | + | | | - | | 200 | | SUGGESTED GUIDELINES | | ATELD GOVE | | 3rd Crop Choice |
| (5:5) | * H | inge) | | | | | | | | | | | | | | APPLICATION | | SHITTE | | | | oice |

Se). Salts
General Commends: Taxilure is not estimisted on high pH soils.
Crop 1; " Coording Reed Placed Perfilles can Cause Injury " Hang crops may respond to a starter application of P & K even on high soil tests. Crop Removat: P205 = 30 x20 = 13 AGVTSC band guidelines will build P is K test levels to the medium range over many years.



FIELD ID 7921 + 7922 SOIL TEST REPORT

COUNTY FIELD NAME Alatta SAMPLE ID

SW35-8-Se RANGE

dMA

(http://www.agvse.com) Northwood: (701) 587-6010 Benson: (320) 843-4109

SECTION QTR

PREV. CROP Saybeans ACRES 220

SUBMITTED BY: EL1911

5 S Z m

Date Sampled 04/08/2015

Rising Hope Dairy

SUBMITTED FOR:

BLUMENORT, MB BOX 156 CLIFF LOEWEN

ROA OCO CAB #

Date Received 04/10/2015

Date Reported 4/13/2015

NW17994 1168864 BOX #

| Sel. Salie | Carbanate(CCE) | Drg.Hatter | Sedun | Calcium | Maghapilum. | Capper | ******** | lies | Tine | Beren | Sulfur | | Colonia | - Partie State | Phesphanus | | Metrata | | | | | Nut |
|---|----------------|------------------------------------|---------|---|-------------|--------|----------|-------------|--------------|-------|----------|-----|---------|-------------------------------|------------|-------------|---------|----------------------|----|----------------------|-------------------|----------------------|
| 100 | Ĩ | | | | | | | | | | 6-24 | 0.0 | | | | Olasz | | 0-24" | | 0-14 | | rient an |
| 0.67 mmho/cm | | 5.1 % | 46 ppm | 7103 ppm | 1882 ppm | | | _ | O. A.S. DOWN | | 36 lb/sc | | | 371 ppm | | å pam | | 38 lb/ac | | 24 lb/sc 15 lb/sc | | Nutrient in The Soil |
| *************************************** | | | | *************************************** | | | | | | | | | | | | | | | - | | Ball (All) (L.s.) | Interpretation |
| S-4" 7.9 | and most | | Limited | 140 | 2 | HI | 2 | 60 | 1 | - | in | 0 | K20 | 104 | 10 | 1,81 | | STAN | 13 | | | 11 |
| 1 16 | | _ | | | | | Г | | | | 17 | | 0 | 52 | 138 | TH/ACRE | | DESTE | 23 | Alen | Can | at Cra |
| | muser pro | | | | | | Ī | Canal Canal | | | Bend | | | Band * | | APPLICATION | Band | SUGGESTED GUIDBLINES | DU | ATETO GOVT | Canola-bu | 1st Crap Choice |
| 49. | P | Cation | - | - | | | 1/2 | + | | | 7-1 | 723 | - | .p | | 3 | | | | | | E |
| 49.9 meg | Capacity | Cation Exchange | Uma | Mar. | C. | Ha | 7 | - | | DS . | U) | ō | KyO | P ₂ Q ₈ | N | LB/ACRE | | SUGGESTER | | THE | | 2nd Cre |
| 71.1 71.1 | 9% Ca | We Bas | | | | | | | 1 | | | | | | | APPLICATION | | SUGGESTED GUEDBLINES | | ATELD CONT | | 2nd Crop Choice |
| 26.0 | No Ng | a Satu | - | 110 | | 100 | - | | + | | | | | - | | B | | lin. | | | | |
| 1-ti- | 34 % E | We Baso Saturation (Typical Range) | 2 | E | 0 | Ma | 2 | 1 | * | CR . | SO. | 0 | NAO. | P ₂ O ₃ | Z | LIN/ACRE | | SUGGESTED GUIDELINES | | ផ | | 3rd C |
| 9-41 | 0 % Na | ypical P | | - | H | + | + | + | + | | - | H | | H | - | 335 | | LED GUIL | | ABD GOVE | | 3rd Crop Choice |
| (A-4) | H W G | lange) | | | | | | | | | | | | | | APPLICATION | | SELINES | | - | | loice |

Sal. Salts

Seneral Commental Technic is not estimated on high pit salts.

Crop 1.* Caviliani Seed Pieced Pentiliser Can Causa Injury * Mirrogan is usedled 15 lbs for the previous crop. Altrogen credits may read to be adjusted based on local conditions. Many crops may respond to a starger application of P is K avan on high salt tests. Crop harmons if P205 = 50 K20 = 25 ABVISS Band guidelines will build P is X in salt tests to the medium range over many years.



FIELD ID 7923 SOIL TEST REPORT

Z

SAMPLE ID

HWP ALMINGS FIELD NAME Alotto NW25-8-Se RANGE

SURPRINCE SCHOOL SALES 3 QTR ACRES 78

SECTION

Benson: (320) 843-4109

SUBMITTED BY: EL1911

8 CD m

Rising Hope Dairy

SUBMITTED FOR:

Date Sampled 04/08/2015

Witchin.

D-24"

30 lb/ac

SUGGESTED GUIDELINES

SUGGESTED GUIDELINES

SUGGESTED GUIDELINES

Band

APPLICATION

IB/ACRE

APPLICATION

LS/ACRE

WDELY STRAKY

0-24-

18 1b/ac

TYON GTRIA Canola-bu

JUNE GOAL 63

MELD GOAL 0

55

Dist.

Interpretation

1st Crop Choice

2nd Crop Choice

3rd Crop Choice

satisties.

373 ppm

P201

ż o

Band .

Pote

Pople

2

KyQ.

Ω

2

3 0

z LE/ACRE

148

8

Ofeen

a ppm

0-0-6"

8 (b/ac

17

Band

UI

0,48 ppen

Band (Trial)

BLUMENORT, MB CLIFF LOEWEN BOX 156 ROA OCO

Date Received 04/10/2015

Date Reported 4/13/2015

LAB #

W17995 1168865 BOX # 0

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(BBB) stenedus

9 00

9.76 mmhe/cm

8.78 'A-0

52.1 meg Capacity

23,4

14-11

0.4

1

Soll pH

Buffer pH

Cation Exchange

% CB % Ng % K % Na % H % Base Saturation (Typical Range) Magnestan

7757 ppm 1467 ppm

42 ppm

Line

5

Lime F.

5 # 7 20 .

2 2 3 2 S. in.

3 ē

a

弄 8 20 100 in 0

5.3 %

Cres 31 - Curlioni Seed Placed Perfilter Can Genes Tojury * 981ropen is aredited \$8 list of this province Crop. Nitrojen credits may need to be adjusted based on local conditions. Namy Crops may respect to a starter application of P & X aven on high soll tests. Crop hannousli 9305 × 38 M30 × 32 AGV150 is not guidelines will build P & K test levels to the medium range over many years.



(http://www.agvise.com) Northwood: (701) 587-6010 Benson: (320) 843-4109

dM.

(8)

SECTION

SOIL TEST REPORT

Z

SAMPLE ID FIELD ID 7924

COUNTY FIELD NAME Aletta NW25-8-50 RANGE

PREV. CROP Soybeans QTR. ACRES 59

116171

8 S m

Rising Hope Dairy

Date Sampled 04/08/2015

SUBMITTED FOR: SUBMITTED BY:

BLUMEWORT, MB BOX 156 CLIFF LOEWEN ROA OCO

Date Received 04/10/2015

Date Reported 4/13/2015

LAB W B8641WM 1168866 BOX # 0

| Sal Salts | Carbentre(CCE) | Dry Matter | Bedum | Calcium | Magnestum | Espper : | Manganese | Iree | 2012 | Barne | Bullber | | Chiarida | The state of the s | distriction of | | Siterate | | | | | E |
|--------------|----------------|-----------------------------------|--------|---|-----------|----------|-----------|------------|--------------|-------|---------|----------|------------------|--|----------------|-------------|----------|----------------------|------|----------------------|-----------|----------------------|
| 6-24 | ¢ | | | | | | | | | | 8-68 | 0-6 | | | | Olean | | 0-24" | u | 5-24° | | trient In |
| 0.88 mmho/cm | | 5.7 % | 38 ppm | 7498 ppm | 1276 ppm | | | - | 0.64 pgm | | 28/0104 | 24 lb/ac | | wed acc | | 10 ppm | | \$1 lb/se | | 27 lb/ac 24 lb/ac | | Nutrient In The Sail |
| | | - | i | * | | 1 | | | | | | | | | | | | | I | | H | Int |
| | | - | H | ŀ | | | 4 | | | | _ | | | | | | | _ | i | | V. | Interpretation |
| -i-i | + | - | H | *************************************** | | | | | | | | | | | + | | - | | - | | | ation |
| 6-24-8-3 | 300 | - | Line | 76 | E | 7 | ra ra | | 4 | 130 | to . | 0 | куо | PJOI | - 2 | 6 | | S | | | | |
| 1 6 | Soil pri | | | 0 | | | r | | 4 | | 15 | | 0 | 41 | 127 | LE/ACRE | | daesn | 12 | TIY | 0 | Ist Cr |
| | ourser pro | | | | | | | And deline | Band (Triat) | | Band | | | Bend * | | APPLICATION | Band | SUGGESTED GATOELINES | ne s | ALEITO GOVT | Canola-bu | 1st Crop Choice |
| * | 0 | Catto | _ | | | L | L | 1 | - | | _ | | | | | NOT | | 5 | | | | - |
| 49.2 meq | Capacity | Cation Exchange | Linne | H | 5 | 3 | 2 | - | 20 | 9 | ın | ū | K ₁ O | P ₂ Cl ₈ | 2 | LIN/ACRE | | SHORESTED GUIDBLINES | | BIA | | 2nd Cr |
| 76.3 | W.Ca | | | | | | r | t | 1 | | | | | - | | Theev | | adine a | 18 | ATELD GOYF | | 2nd Crop Chaice |
| | 8 | % Base Saturation (Typical Range) | | | | | | | | | | | | | | APPLICATION | | SANIT | | | | bice |
| 21.6 | By We | aturatio | - Lime | No. | 0 | Mn | 2 | 100 | 70 | | in: | ū | K40 | P ₂ O ₃ | 2 | E | | Suc | | | | List Control |
| 1.6 | 25 PK | dAL) ue | | | | | | T | Ť | 1 | | | | | Ī | LEL/ACRE | | GESTE | | THE | | rd Cre |
| (B+5) | No Na | ical Ra | | | | | T | 1 | Ī | | | | | | | Tiddy | | SHOORSTED GRIDBINES | | ALEID GOVE | | 3rd Crap Choice |
| 19-61 | H % | 19gc) | | | | | | | | | | | | | | APPLICATION | | STATE | | | | oice |

General Commendal Texture is not estimated on high pit solls.

Crop 1: * Caption; Seed Pisced Partitiser Con Causa Injury * Nitropen to credited 15 lbs for the previous crop. Nitropen credits may need to be adjusted based on iccultons, Many crops may respond to a stard or policition of P & K even on high soll tests. Crop Ramoval: P305 = 50 K30 = 23 AGVISC Band guidelines will build P a K rest levels to the medium range over many years.



Soil Analysis by Agvise Laboratories (http://www.agvise.com) Northwood: (701) 587-5010 Benson: (320) 843-4109

SOIL TEST REPORT

Z

SAMPLE ID 7927 FIELD NAME Aletta COUNTY

dML NOTION SW31-8-6e RANGE (2) QTR

PREV, CROP Grass/Alfalfa

SUBMITTED BY: ACRES 76 EL1911 8

S m

Rising Hope Dairy SUBMITTED FOR:

Date Sampled 04/08/2015

CLIFF LOEWEN BLUMENORT, MB BOX 156 ROA OCO

Date Received 04/10/2015

Date Reported 4/13/2015

AB # 1168871 BOX # 0

| Sal. Salis | Property of the last | Comments | Sedium | Calcium | Hagnesium | Capper | Manganesa | Total | Seesen | Salfur | | Chleride: | - | Physipherus | | N IOTHER | | | | | Nun |
|--------------|----------------------|-----------------------------------|--------|---------|-----------|--------|-----------|-------|--------|--------------|----------|-----------|--------------------------|-------------|-------------|----------|----------------------|------|------------|---------------|----------------------|
| 6-24- | - 1 | | 1 | | | | 1 | ļ | | 97.50 | 9 | | | | Olaso | | 0-24" | | 100 | | dentain |
| 0.89 mmho/cm | | | | | | | | | | 90 (8) 80 | 18 lb/ac | | 434 ppm | | 36 ppm | | 36 lb/ec | | 28/48 BI | | Nutrient In The Soll |
| II | | | | | | | | | | | | | ************************ | | - | | | - | | F | Title |
| H | | + | + | H | H | - | 1 | | + | | 1 | | | | | - | - | - | | 0 | Interpretation |
| -1-1 | T | 1 | t | 1 | | | 1 | 1 | t | | | | - | | | - | | | = | Ü | neite |
| 0-4 8.0 | 9 | Soll pH | Lime | Z | e e | P 5 | 7 | Zn | ъ | sn. | 0 | × × | P201 | × | 150 | | Suc | | | | |
| 2 6 | - | | | | | | | | | UN | | 0 | 0 | 4 | LE/ACRE | | DESTE | | Alth | Gran | st Cr |
| | 1 | Buffer pH | | | Г | | | | | Band (Trial) | | | | | APPLICATION | Band | SUGGESTED GUIDELINES | Tons | ALED GOVE | Grass/Alfalfa | 1st Crap Choice |
| | | Cat | | | | | | | | rial) | | | - | | NOLL | | Saw | | | | ň |
| | Capacity | Cation Exchange | Lime | No | £ | 3 | 74 | Zn | 0 | un | 0 | K50 | NO ^E d | 2 | LB/ACRE | | SUGGESTED GUIDELINES | | × | n | 2nd |
| _ | | 90 | H | _ | | | | | _ | | | | | _ | | | TED GI | 0 | ALEID GOYF | | Crap |
| | ** | % Ba | | | | | | | | | | | | | APPLICATION | | Inagh | | DAL | | 2nd Crop Chaire |
| | Nº Mg | se Set | | | | | | | | | | | | | MOL | | Ü | | | | E |
| _ | S SE B | uration | - | 8 | Ç | 3 | 7 | 24 | ţa. | in | 0 | of a | 104 | 2 | LB/ACRE | | Supp | | | | 31 |
| | | (Typi | | | | | | | | | | | | | CILE | | ested | a | DHIA | | d Cro |
| | No No | % Base Seturation (Typical Range) | | | | | | | | | | | | | APPLI | | SUGGESTED GUIDELINES | | ATELD GOVE | | 3rd Crop Choice |
| | £ 3 | (age | | | | | | | | | | | | | APPLICATION | | SHALL | | | | ice |

Crep 1: "Counton; Saed Placed Perfidier Can Causa Injury " Many creps may respond to a starfer application of P B K even on high solitasts, Crep Removati P205 a 40 K2D = 397 A0VISE Sand publishes will build P B K test krests to the medium range over many years.



SOIL TEST REPORT

FIELD ID 7917

SAMPLE ID COUNTY FIELD NAME Aletta

NW6-9-60 RANGE

TWP

SECTION QTR

Benson: (320) 843-4109

PREV. CHOP Soybeans SUBMITTED BY: ACRES 236 EL1911

٤ Z S m

Rising Hope Dairy SUBMITTED FOR:

Date Sampled 04/08/2015

CLIFF LOEWEN BLUMENORT, MB BOX 156

ROA OCO LAB #

Date Received 04/10/2015

Date Reported 4/13/2015

1168863 DOX # NW18002 •

| Sel. Salts | (233) stansder3 | Organism | Sadiani | Entelum | Magnesium | Capper | Manganese. | Tren | Zine | Betten | Suhir | | Chlurida | Patacalant | Photoheral | | Mittaba | | | | | No |
|----------------|-----------------|---|------------|----------|---|--------|------------|------|---|--------|----------|----------|----------|------------|------------|-------------|---------|----------------------|----|----------------------|-------------------|----------------------|
| 6-24" | | | | | | | | | | | 9-24 | 0.0 | | | 1000 | Olsen | | 0-24" | 2 | 0.00 | | trient in |
| 0.81 mmho/cm | | 6,2 % | 48 ppm | 7385 ppm | 1758 ppm | | | | 1.84 ppm | | 48 10/90 | 14 lb/ac | | 407 ppm | | 7 ppin | | 47 lb/sc | | 29 lb/ec 18 lb/ec | | Nutrient In The Soil |
| - | | *************************************** | | | *************************************** | | | | *************************************** | | | | | | | | | | | | The second second | Interpretation |
| 8-E' 7.8 | ind time | | Lime | ě | 2 | Ma | 2 | 1 | 24 | | VI. | 0 | g | P204 | × | 1.8/A | | Suga | | | | 15 |
| 0 4 | - | | | 0 | 1 | | | | 0 | | 17 | | 0 | 80 | 1111 | 13/ACRE | Band | SESTED | 53 | CHECK | Cane | t Cro |
| | and emission | | | | | | Ī | I | | | Band | | | Band . | | APPLICATION | Pur | SUGGESTED GUIDELINES | BU | ALEITO COVE | Canola-bu | 1st Grap Chaice |
| 52. | Cal. | Catton | | | | | - | | | | 797 | | × | v | | los: | | Marie C | | | | |
| 52.8 meq | Capacity | Cation Exchange | Unite | H | 5 | Hn | 2 | | 2.0 | 9 | un | 0 | K30 | 104 | 26 | LB/ACRE | | SUGGESTE | 0 | TELY. | | 2nd Cr |
| (8.75) 68.9 | % Ca | % Bad | | | | | Ī | Ì | | | | | | | | WOLLYSTAM | | SUGGESTED GUIDEUNES | | ALEED GOYF | | 2nd Crop Choice |
| 27.7 | BM 94. | e Satur | E | 12 | | 100 | 1 | | 5.1 | 130 | | | * | 0 | | 80 | | 700 | | | | |
| 2,0 | ** | % Base Saturation (Typical Range) | - February | Z | -0 | Mil | 1 | | 20 | 3 | in | ū | 450 | 40°4 | 2 | LB/ACRE | | SUGGESTED GUIDBLINES | | HIL | | 3rd Crop Chaice |
| 0.4 | W 140 | pical R | | | r | - | Ť | + | | | | | | | | Appl | | D GUED | 0 | AIRD GOVE | | op Ch |
| 10-5) | # H | (ogni | | | | | 1 | | | | | | | | | APPLICATION | | STAKES | | | | oice |

Sea, Salts

General Commental Chay (Chy Looms (CEC range * 30+) (Pine)

General Commental Chay (Chy Looms (CEC range * 30+) (Pine)

Crop 1: * Cardiner See of Piccof Partificar Con Causa Injury * Miragan Landited 15 the Far the previous crop, Miragan crefits may need to be adjusted based on local Conditions, Many crops may respond to a starter application of P & K even on high and tests, Crop Namural P203 x 50 (20 x 33 A 0) 756 band Suid-sines will build P & K test styles to the medium range over many years.



(http://www.agvise.com) Northwood: (701) 587-6010 Benson: (320) 843-4109

SOIL TEST REPORT

SAMPLE ID FIELD NAME Alatta COUNTY

TWP SECTION PREV. CROP Wheat-Spring NW29-8-66 RANGE

SUBMITTED BY: ACRES 241 EL1911

5 Z CD m

Date Sampled 04/08/2015

Rising Hope Dairy

SUBMITTED FOR:

CLIFF LOEWEN BLUMENORT, MB BOX 156

ROA DCD

Date Received 04/10/2015

Date Reported 4/13/2015

LAB # NW17986 1168868 BOX # 0

| Set. Esite | CarbonandCCE | Drg.Matter | Indon | Saletom | Magnesium | Capper | Hanganase | Zimt Zimt | Bairper | Sutter | | Chlanda | Patansiam | Phespherus | | Mitrella | | | | | Natio |
|-----------------------------|--------------|---|--------|----------|-----------|---------|-----------|-----------|---------|------------|----------|---------|-----------|------------|-------------|----------|----------------------|------|-------------|-------------------|----------------------|
| 6-24 | Ĭ | | | | | | | 1 | | 914 | 9 | | | | Die | | 0-24" | | 0.0 | | lent In |
| 0.72 mmho/cm 0.8 mmho/cm | | 7.4 % | 35 ppm | 8251 ppm | 1221 ppm | | | 1,04 ppm | | 197 (8) 40 | 30 (b/ac | | 375 ppm | 7 | 15 ppm | | 40 lb/sc | | 25 lb/ac | | Nutrient In The Soil |
| | | *************************************** | - | | | | | | | | | | | | | | | I | | Sep (1912) [1913] | Interpretation |
| 0-4" 8,0 6-24" 8.2 | Sol | - | Lima | 140 | 2 | 3 | 2 | Zn | , | so. | 0 | R40 | P201 | z | 5 | | 20 | | | 7 | |
| 26 | Soil pH | | | 0 | | | | 0 | | 5 | | 0 | 26 | 153 | LB/ACRE | | GEST | 55 | TEL | Ca | st Cr |
| | Buffer pH | | | | | | | | | Band | | | Band - | | APPLICATION | Band | SUGGESTED GLIDELINES | De o | ATELD GOVE | Canola-bu | 1st Crop Choice |
| 52.5 meq | Capacity | Cation Exchange | Ume | F | Cu | Pen | 2 | Zn | 9 | in | 0 | × yo | P3O1 | × | LB/ACRE | | SUGGESTED | 0 | THE | | 2nd Cro |
| 78.5 | % Ca | % Base Saturation (Typical Range) | | | | | | | | | | | | | APPLICATION | | SUGGESTED GUIDELINES | | ALERO GOVT. | | 2nd Crop Choice |
| 18-201 | 26H 9/2 | Satura | Lime | 76 | c c | Pin Pin | 7 | ZM | | in | 0 | Kyo | PyOs | 2 | 95 | | us. | | | | |
| 1.7) | % K | don (T) | ā | - | 100 | - | - | - | | | - | | 2 | | LB/ACRE | 1 | JGGESTI | | AIR | - | 3rd Cr |
| (L-0) | % NB | pical Ru | | | | | - | r | | | | | | | Appl | 1 | SUGGESTED GUIDELINES | 8 | ALEID GOVE | | 3rd Crop Choice |
| (9-1) | H % | inge) | | | | | | | | | | | | | APPLICATION | | STAKES | | | | oice |

Set. Felts

General Comments: Texture is not extinate do nigh pil sols.

General Comments: Texture is not extinate do night pil sols.

Crep 1: * Custion: Seed Picced Pertilizer Cus Causa Injury * Many crops may respend to a starter application of P & K even on high solf (ests. Crop Removal) P305 # 80

K30 = 23 A 0/128 Send guidelines will build P & K tast levels to the medium range over many years.



Northwood: (701) 587-6010 Banson: (320) 843-4109 (http://www.agvise.com)

SOIL TEST REPORT

FIELD NAME SAMPLE ID FIELD ID Jones Do ALMINDO RANGE

8 z m

SUBMITTED FOR: SECTION & TWP 231 WALN STREET SUBMITTED BY: TE2728
NICHANDSON PIONEER-LANDMA

Alvins Crops

Date Sampled

LANDMARK, NB ROA OXO

REF #

921259 NW28981

XOE

0

Data Received 06/23/2014

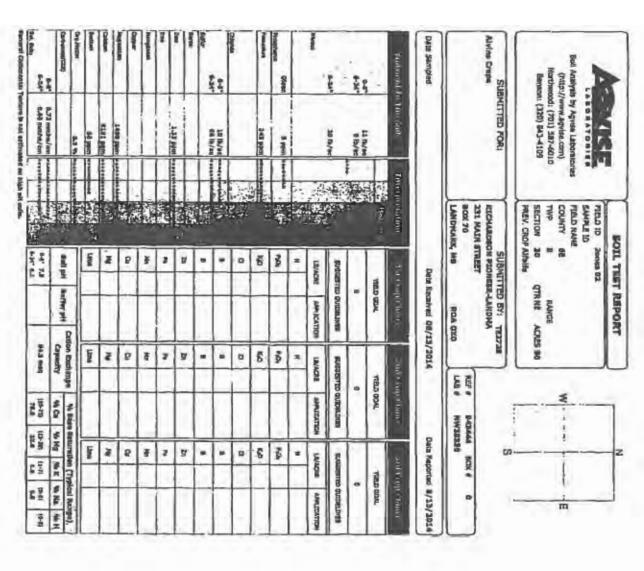
Date Reported 11/5/2014

QTRISW ACRES 150 S

| | 1 | | 1 | 0 | 1 | | | 1 | 1 | 1 | | | | | | 1 | | | | | Mutt |
|--------------|-------------|--------------|--------|-------------|----------|-----|---|--------------|----|--------------|----------|--------------------|------------|--------|-----------|---------|-----------------------|---------|----------|-------------------|--|
| × | Ø | ļ | | | | | | Į | | 16 | | | Щ | 7 | | | 0.34 | 1 | 2 | ۹ | OF BEST |
| 0.86 mmho/cm | | 8.1.96 | 47 ppm | 75.8.3 ppen | 1864 ppm | | | 8,74 ppm | | an inter- | 13 10/84 | | - 268 pp.s | andd c | | | 38 (d) 0E | 34/41 4 | 21 fb/sc | | Nutrient In the Soil |
| 1 | | | | | | | | | | | 1 | | | | N N | | | 1 | | often poly to the | nata interestation |
| 04° 2.0 | 1 | 200 | 1 | 7 | P | 8 | 医 | D. | 0 | - | B | 6 | 10 | | | M | 11 | | 1 | | - |
| 5 | | | | | | | | и | Ţ, | 4 | | = | = | 0 | H | 1 | | | | ı | 10.00 |
| | No. or Con. | | | | - | | | Band (Trial) | | Band (Trial) | | Sand (Starter)* | Bend * | | The sales | and/med | The state of the same | 5 | The same | 1 | Same differ atte |
| 33.6 maq | Common | Care Se moon | clm+ | Die | 9 | 9 | B | | | | a | 5 | - A | - | 1000 | | l | | | | No. of Contract of |
| (15-75) | California. | 0 | | | | | - | | | | | | | | January . | | | | | | Continue of other continues |
| (15-20) | Ma Ph.) | STATE | Una | 110 | 12 | | 2 | 15 | 1 | | | 6 | 8 | | E S | | | E) | | | |
| (4-1) | 5 | C. Lucian | | - | - | 100 | | 3 | | * | | Ъ | - | M | 6,1 | | N | | | | The street |
| | 10.00 | 1 | - | | - | - | | - | | - | | | - | | 2000 | | u | T | | | The party of the second |
| (0-5) | | g a | 1 | | | | | | | | | | | | 8 | | 6.6 | | | | |

Scores! Comments: Texture is not entirected on high pet artis.

Crap 1: Caudion; Bend Please Metfillar Can Cause Tripuy - Mitropen is credited 23 list for the previous crap. Nitropen credits may made to be adjusted based on faced conditions, Marry crops range responsible to a starture application of P a K even on high soil tests. Crap Ramoved: P205 = 48 K2D = 200 Ad77282 Saint/Switzenzons published by the credition of the conditions will be the conditions of





(http://www.agvica.com) Northwood: (701) 587-6010 Senson: (320) 643-4109

MB

LANDMARK, MB

Data Received 19/10/2014

ROA GXO

REF #

9E986MN 979434 BOX #

0

Data Reported 10/14/2014

Date Sampled

Jason Goossen

SUBMITTED BY: YE2728
RICHARDSON PIONEER-LANDNA
231 MAIN STREET

SUBMITTED FOR:

Soli Analysis by Agvisa Laligraturies

TWP COUNTY SAMPLE ID FIELD ID Jim North SECTION 1 FIELD NAMEJim North

SOIL TEST REPORT

PREV. CROP Wheat-Winter QTR.NE/SEACRES 130 PANGE SE

| F | 8 | |
|-----|---|---|
| 100 | | z |
| | m | |

| Nutrient In The Soil | The Soil | Interpretation | Asi Ci | 1st Grap Choice | | 2nd Crop Choice | | d Cro | 3rd Crop Chaica | 8 |
|--|--------------|---|----------|----------------------|-----------------|----------------------|------------------------------------|----------|---------------------|--------|
| | | | a a | ATTO BOAT | DEBIT | TYON DIELL | | 至 | TYON O'HEA | |
| 9-34" | 9 lb/ac | | | 0 | D | | | 0 | | |
| 200 | 74 11.74 | | SAMSET | SAMESTICO CATORCINES | | SOMETHING OTHER DEPO | - BLAC | HESTER . | REPORTED CHISTOPHEE | HEE |
| No. | 20 100 00 | | TIVACINE | APPLICATION | ON LIVACILL | Антисктон | | TANGLA | WHITCHTHAN | BOULY. |
| | | | # | | = | | = | | | |
| Cleen Cleen | 3 ppin | | 10. | | 20 | | 20 | | | |
| Paladers | made att | | 60 | | ×0 | | No. | | | |
| 0-247 | 4å Br/ac | | a | | D | | a | | | |
| D-4° | 111 (p/sc | *************************************** | स | | in | | in. | | | |
| F-14- | 90 10/40 | *************************************** | T. | | = | | o | | | |
| Dente | 1.7 ppm | *************************************** | 72 | 1 | , in | | 7 | | | 1 |
| Dec | andd bero | ************ | | - | 1 | - | Ì | Ī | 1 | 1 |
| arter. | 35.7 ppm | | 10 | - | 2 | 1 | ī | | | 1 |
| - Section of the Control of the Cont | 1.4 ppm | | Mu | | - PRIN | | 3 | | | |
| Copper | undd tart | | 5 | Ì | 8 | | 2 | | 1 | |
| September 1 | 1381 ppm | | | 1 | Ī | 1 | 1 | | i | 1 |
| Castives | 7499 ppm | | 70 | | D)4 | | Mg | Г | | |
| Southern | 70 ppm | | - Series | | Use | | time: | | | |
| Chill Matter | 4,5 % | | | | Pallin Bookson | No Elean | M. Base Saturation (Typical Bande) | Two I | E San | del |
| Centerment(CCE) | 7.6 % | | Soil pH | Buffer pH | Appedit advanta | # 02 | Det 96 | E K | 45.10 | 第三 |
| 375 | 3.87 mmho/cm | *************************************** | 0.6" 0.0 | | BALT FLEE | - | _ | 1.07 | 10.51 | (0-5) |



General Comments: Texture is not extimeted on high pit soils.



Sall Analysis by Agvise Lebarntorius (http://www.agvise.com) Northwood: (701) 587-6010 Benson: (320) 843-4109

MB

LANDMARK, MB

Date Received 10/10/2014

ROA OXO

LAB #

NW98602 979438 BOX #

Date Reported 10/31/2014

Date Sampled

Jason Goossen

SUBMITTED FOR:

SOIL TEST REPORT

FIELD NAME Stwick! South

COUNTY PREV. CROP Wheat-Winter **WAL** SECTION 36 QTRINE ACRES 80 RANGE SE

RICHARDSON PIONEER-LANDMA
231 MAIN STREET SUBMITTED BY: TE2728

| Ī | ¥ | |
|-----|-----|--|
| cn- | | |
| | | |
| | ITT | |

| Nutrient In The Soil | n The Soll | Interpretation | 184 C | 1st Crop Choice | 2nd Cro | 2nd Crop Choice | Sed | 3rd Crap Choice | olca |
|----------------------|--------------|---|-----------|---------------------|-----------------|--|----------------------------|--------------------|--------|
| | | | 15 | ALTER OTHER | reta | News GESTA | | THOSE OF TAN | - |
| 8-34° | 18 lb/sc | | | 0 | | | | 0 | |
| B-34" | 37 85 / 20 | | Striving. | TO ALETED GAIDETNEE | Busterins | जनामका साम्यान | FEATS | висирять оцивеннея | ELIP |
| Allega | | | TRYACHE | MEDICATION | #CN/CD | метропи | MENN'TH H | ME APPLICATION | 6 |
| | | | * | | * | | 11 | - | |
| Presidentes Olaves | 2 ppen | | 0.4 | | 70 | | na. | + | |
| Printerior | methol BOE. | | 2 | | ** | | K. 0 | + | - |
| p.M. | az ib/ac | | 0 | | 0 | | a | + | |
| Cliffe die | | | | | | 1 | I | - | |
| | 26 lb/sc | | th. | | t/A | | 41 | | |
| Diartia | 24/41 86 | | U | | 0 | | a | | |
| Busin | mdd C1 | *************************************** | 9 | | 94 | | 4 | + | |
| De. | m.da ppm | 131116443334 | 1 | | 5 | ľ | - | 1 | |
| leter. | | | 100 | | 7 | | 7 | | |
| Highligaries | andd 8.1 | *************************************** | Him | | 7 | | ALS. | | |
| Casper | 1, all ppm | *************************************** | 5 | 1 | Q. | | 2 | + | |
| Mag waters | 1463 ppni | ************* | | | 1 | | 1 | Ļ | 1 |
| Cwison | 744R ppm | | Fig | | 2 | | 45 | _ | |
| Salum | 48 ppm | - | and i | | Balay | | Line | - | |
| Og Hutter | 4.7 % | Section of Section 1 | | | | N. B. | | | |
| Cartacoute(III') | 10.6 % | | Soll pH | Buller pH | Cation Dechange | N 10 10 10 10 10 10 10 10 10 10 10 10 10 | ALCO AN MO LIP M. AP NO AP | K % No | H 96 H |
| Data Brade | 0.48 mmho/cm | | 0-4° 8.0 | | \$2.7 msq | - | - | - | (0.0) |

Oundral Commette: Texture is not estimated on high pH salts.

Long-Term Environmental Sustainability

The Government of Manitoba has included phosphorus as a nutrient by which applications of manure, synthetic fertilizer and municipal waste sludge to agricultural lands may be limited.

Over the short-term for fields with low phosphorus, regulations allow manure to be applied to meet the nitrogen requirements of the crop. This often results in over-application of phosphorus and a build-up of phosphorus in soils. When soil test phosphorus levels reach 60 ppm Olsen P, manure application rates must consider how much phosphorus will be removed in the harvested portion of the crop. At 60 to 119 ppm Olsen P, the amount of phosphorus that can be applied cannot exceed twice (two times) what the crop can remove in order to slow the build-up of soil phosphorus. Once soil test phosphorus levels reach 120 ppm Olsen P, applications of phosphorus are restricted to no more than what the crop can remove (one times) in order to stop further soil test phosphorus build-up. At 180 ppm Olsen P, no additional phosphorus may be applied.

It should be noted that soil-test phosphorus levels of 60 ppm Olsen P or greater are agronomically very high and at these levels most crops will not benefit from additional phosphorus beyond starter phosphorus. As phosphorus levels build up in soils, the concentration of phosphorus in runoff increases.

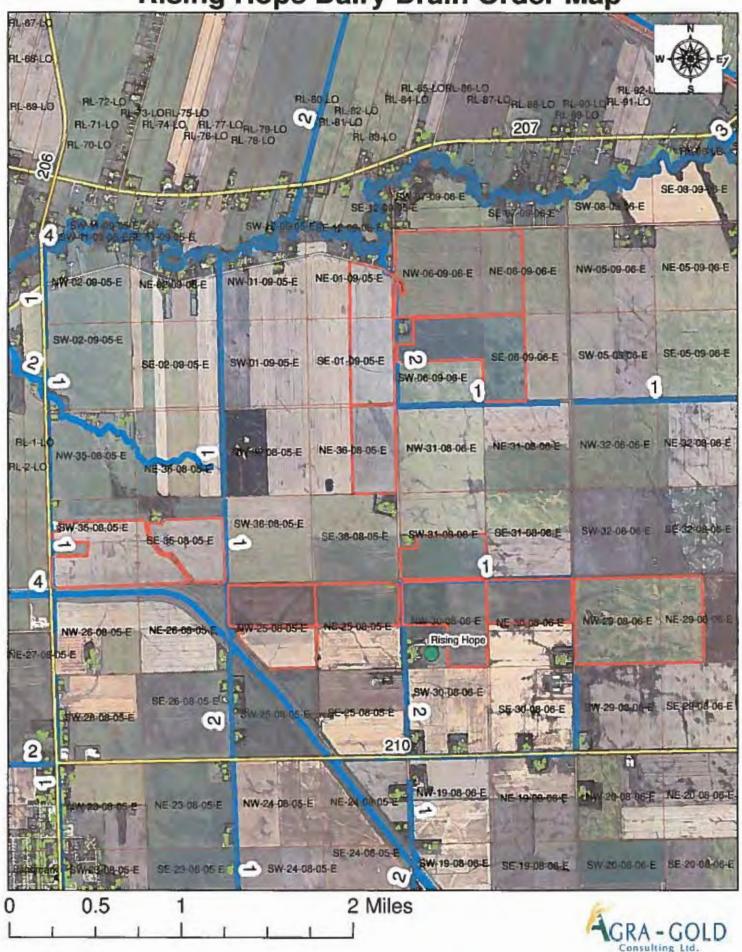
Therefore, to remain environmentally sustainable over a long-term planning horizon of 25 years or more, phosphorus applications from applied manure and other nutrient sources such as commercial fertilizers must be balanced with crop removal to avoid further build-up in soils. Consequently, sufficient land must be available in relatively close proximity to the operation to balance phosphorus applications with crop phosphorus removals (one times) so that manure treatment and export of phosphorus from the region is not required.

■ I acknowledge that up to ______ 2412 acres _____ acres/hectares (one times crop removal from table above) may be required for the long term environmental sustainability of the operation.

Surface Water Map



Rising Hope Dairy Drain Order Map



10.0 Mortalities (Dead Animal) Disposal

| | nure and Mortalities Management Regulation sets requirements for ent and storage of livestock mortalities in agricultural operations. It help |
|------------------------|--|
| | ortalities are handled in an environmentally sound manner. Winter posted mortalities is prohibited. |
| Type of disposal: | rendering rendering |
| | x composting |
| | incineration (in approved incinerator only) |
| Mass Mortalities | |
| A plan for mas | ss mortalities is in place. |
| What steps will be | taken in the case of mass mortalities? |
| Burial is first option | on considered, second option transport to Brady Landfill and |
| third option comp | ost on site. |
| | |
| | |
| 11.0 Project Site l | Description: Land Use Planning Considerations |

Development Plan and Zoning Bylaw

The Planning District or Municipal Development Plan and Zoning By-law adopted under <u>The Planning Act</u>, set policy and regulations for the use and development of land. A proposed livestock operation must comply with the requirements of this bylaw. In the absence of a By-law, the <u>Provincial Planning Regulation</u> under <u>The Planning Act</u> applies.

For assistance contact your Community and Regional Planning Regional Office.

Development Plan

Every Development Plan must contain a livestock operation policy (LOP) that identifies areas where new or expanded livestock operations may be allowed. It must also set general standards for the location and setback of livestock operations. Identifying the Development Plan's land use designation and policies (for the planning district or municipality that affect the site) will help confirm the project site's compliance. The Development Plan designations for the spread fields (if something other than agricultural) will indicate the potential loss of the fields in the future due to possible development.

| Name of Planning District | RM of Ste Anne |
|--|--|
| Development Plan by-law number | 13-2007 |
| Land use designation of project site | Rural Agricultural Area |
| Livestock operation policies – quote supportive policy numbers | RM of Ste Anne Developement Plan Sections 5.1.1.2 & 5.1.1.4 |
| Other Development Plan policies – quote supportive policy numbers | |
| Non-supportive Development Plan policies | |

| X The Development Plan livestock operation | policies support the size and location of the |
|--|---|
| proposed operation. | |

The Development Plan designations support the long term use of the proposed spread fields.

Zoning By-law

Identifying the zoning for the project site, the proposed spread fields and the related zoning provisions, helps determine the project's compliance and the minimum separation distances needed between the operation and property boundaries and other natural features and land uses. The zoning bylaw contains specific regulations that govern location and setback of livestock operations.

What are the minimum project site requirements stated in the Zoning By-law?

| | Project site dimensions | Minimum zoning bylaw site requirements |
|----------------------------|-------------------------|--|
| Minimum site area | 147.34 acres | 80 acres |
| Minimum site width | 1000 ft | as determined by council |
| Minimum front yard | | as determined by council |
| Minimum side and rear yard | | as determined by council |

If any project (front, side or rear) yard site dimensions are less than the Zoning By-law minimum, a Variation Order from the Municipality will be required.

Separation Distances (Zoning Bylaw or Provincial Planning Regulation)

Using the proposed size of the operation (see <u>Animal Units Calculation Table</u>) and the type of animal housing and manure storage facility, complete the following table.

Indicate the distance from:

- a. earthen manure storage facility or b. feedlot and
- c. animal confinement facility or d. non-earthen manure storage facility...

| to the following land use features (if applicable) | separation required in zoning by Provincia Regulation | law or I Planning | If land use feature separation dista | ure is less than the minimum nce |
|---|---|----------------------|---------------------------------------|--|
| | X a. □ b. | X c. ☐ d. | Provide actual distance | Provide location or name of feature (e.g. Red River) |
| Residence/ dwelling | 1968 ft | 984 ft | 1280 ft | to nearest residence |
| Designated area (non- agricultural) | 7874 ft | 5249 ft | 8640 ft | rural residential area to south of site |
| Surface water | | | >2.25 miles to the north of yard site | Seine River |
| Surface watercourse | 330 ft | | approx 650 ft | to Rd 30 ditch west of yard |
| Crown land | | | greater than 1 mile | no Crown Land in area |
| Wildlife Management Area | | | greater than 1 mile | none in area |
| Livestock operation | | | approx 3/4 mile | Goosen poultry |
| Other significant features/land uses | | | approx 5000 ft | Seine River Diversion to south west |

If Crown Lands are located within one mile, provide coding. Information can be obtained from the Interdepartmental Operations Crown Lands Plans through the <u>Manitoba</u>
<u>Legislative Library</u> or contact Manitoba Conservation and Water Stewardship at (204) 619-2230.

If undesignated Crown Lands will be used for manure spreading purposes, including the laying of pipe or clearing activity, and use will require a Crown Lands General Permit disposition for the use and access of the subject Crown Lands Parcel(s).

In cases where minimum separation distances are not stated in the Zoning By-law or Development Plan, the minimum separation distances in the Provincial Planning Regulation apply.

Note: If any separation distance is less than the zoning by-law minimum, a Variation Order will be required from the Municipality.

Setback Distances (Livestock Manure and Mortalities Management Regulation) Using the following table to indicate the distance from:

| Feature | Structure | Minimum setback distance required | Provide actual distance (m) | Provide location or name of feature (e.g. Red River) | |
|------------------------------|-------------------------|--|--------------------------------------|--|--|
| | Manure storage facility | 100 m | 480 ft | well | |
| Surface watercourse, | Field storage | 100 m varies, 100 m + | | well and ditch along municipal Rd 30 west of yard | |
| sinkhole, spring, or well | Composing site | 100 m | N/A | No composting done on site composted at Alleta Holsleins | |
| | Confined livestock area | 100 m | N/A | All livestock held in confinement barn | |
| Property Line | Manure storage facility | 100 m | 100 m | As indicated in EMS permit | |
| | Composing site | 100 m | N/A | No composting done on site composted at Alleta Holsteins | |
| | Confined livestock area | 100 m | N/A | All livestock held in confinement barn | |

If any setback distances have not been met, please provide explanation below:

Show: a) location of the project site, location and ownership of spread fields and b) land uses and significant features including dwellings (i) within a 1 mile radius of the project site and (ii) within and adjacent to each spread field on a Land Use & Spread Field Map. (See Land Use & Spread Field Map Example).

12.0 Truck Haul Routes and Access Points

One consideration with new or expanding livestock operations is the potential impact on existing public roads (municipal and provincial), access and the need for improvements or mitigation. Complete the following table.

| | Estimated Average Number of times per day accessing | | Access from PTH/PR onto site will mainly require a Left or Right Hand Turn Please check one | | | Access onto PTH/PR from site will mainly require a Left or Right Hand Turn Please check one | | | | |
|---|---|--------------------|---|-------|-------------------------|--|--------------------------------------|-------|-------------------------|-------|
| Vehicle Type Provincial Trunk Highway (PTH) | Trunk | Provincial Road | Provincial Trunk Highway (PTH) | | Provincial Road (PR) | | Provincial Trunk Highway (PTH) | | Provincial Road (PR) | |
| | | (PR) | LEFT | RIGHT | LEFT | RIGHT | LEFT | RIGHT | LEFT | RIGHT |
| Truck | 2-3 | 2-3 | | x | | × | × | | x | |
| Tractor Trailer | 1 | 1 | | х | | х | Х | | x | |
| Other - Specify | 7 - 37 | | | | | | | | | |

Note: Milk truck will come once per day. Sileage trucks during the summer will haul on municipal roads from the fields. Feed truck average two times per week.

Identify what roads and access points will be used for the proposed operation? (See Truck Haul Routes and Access Points Man for an example).

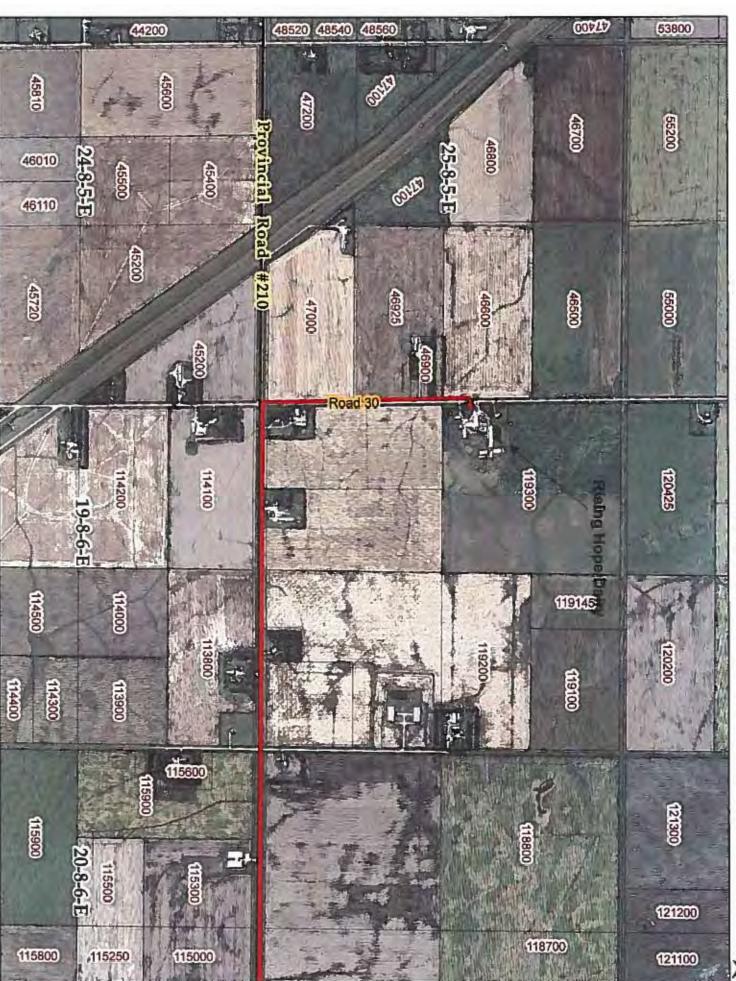
For help with mapping, contact your Community and Regional Planning Regional Office.

X Truck Haul Routes and Access Points Map attached

13.0 Conservation Data Centre Report

A Conservation Data Centre Report must be requested and the response attached to this site assessment. The request may be submitted electronically at: www.gov.mb.ca/conservation/ede

| Were rare | species identified | in the Conservation | Data Centre Report? |
|-----------|--------------------|---------------------|---------------------|
| Yes | | | |
| X No | | | |



| 14.0 | Sup | porting | Document | s |
|------|-----|---------|----------|---|
|------|-----|---------|----------|---|

| Check off the supporting documents included in this submission: |
|---|
| X Contact Information and Privacy and Publication Notice |
| Location Map (shows proposed project within rural municipality) |
| Animal Units Calculation Table |
| X Water Requirement Calculation Table |
| Manure Production Calculator Table |
| X Existing and Proposed Manure Storage Facility Dimensions Tables |
| (if applicable) |
| Manure Application Field Characteristics Table |
| X Crop Rotation Table |
| Recent manure application field soil sample results (Nitrate- N lb/ac at 0-6 and 6-24 inch depths, Phosphorus – ppm at 0-6 inch depth) |
| X Land Base Calculator |
| ☒ Project Site Plan (proposed operation showing current and proposed structures) |
| X Land Use and Spread Field Map (location and ownership of operation, spread fields, location and distance to non-agricultural uses, development plan designation, zoning for project site and spread fields) |
| Truck Haul Routes and Access Points Map (with routes and access points on municipal/provincial roads and/or provincial trunk highways) |
| X Response from the Conservation Data Centre |
| Other, please specify: |
| |
| 15.0 Declaration |
| I do hereby verify that the information contained in the Site Assessment and all required Supporting Documents is accurate and complete to my knowledge Date: |

Gary Plohman

From:

Friesen, Chris (CWS) < Chris.Friesen@gov.mb.ca>

Sent: To: April-21-15 8:50 AM 'Gary Plohman'

Subject:

RE: rising hope dairy tro

Gary

Thank you for your information request. I completed a search of the Manitoba Conservation Data Centre's rare species database and found no occurrences at this time for your area of interest.

The information provided in this letter is based on existing data known to the Manitoba Conservation Data Centre at the time of the request. These data are dependent on the research and observations of CDC staff and others who have shared their data, and reflect our current state of knowledge. An absence of data in any particular geographic area does not necessarily mean that species or ecological communities of concern are not present; in many areas, comprehensive surveys have never been completed. Therefore, this information should be regarded neither as a final statement on the occurrence of any species of concern, nor as a substitute for on-site surveys for species as part of environmental assessments.

Because the Manitoba CDC's Biotics database is continually updated and because information requests are evaluated by type of action, any given response is only appropriate for its respective request. Please contact the Manitoba CDC for an update on this natural heritage information if more than six months pass before it is utilized.

Third party requests for products wholly or partially derived from Biotics must be approved by the Manitoba CDC before information is released. Once approved, the primary user will identify the Manitoba CDC as data contributors on any map or publication using Biotics data, as follows as: Data developed by the Manitoba Conservation Data Centre; Wildlife Branch, Manitoba Conservation and Water Stewardship.

This letter is for information purposes only - it does not constitute consent or approval of the proposed project or activity, nor does it negate the need for any permits or approvals required by the Province of Manitoba.

We would be interested in receiving a copy of the results of any field surveys that you may undertake, to update our database with the most current knowledge of the area.

If you have any questions or require further information please contact me directly at (204) 945-7747.

Chris Friesen
Coordinator
Manitoba Conservation Data Centre
204-945-7747
chris friesen@gov.mb.ca
http://www.gov.mb.ca/conservation/cdc/

From: Gary Plohman [mailto:srossing@mymts.net]

Sent: April-16-15 11:53 AM To: Friesen, Chris (CWS)

Subject: re: rising hope dairy tro

Good morning Chris

Attached is a table as well as a map summarizing the manure spread acres for the proposed expansion to Rising Hope Dairy in the RM of Ste Anne at NW 30-08-06E. We are looking for information regarding the existence of rare plant species in the area for his technical review.

Thanks for your assistance.

Gary Plohman, P. Eng

| Landowner: 2-FOUR MANAGEM | ENT GRP. INC. |
|---|--|
| Address: 1389 NIAKWA RD. 6 6.396. MB. R28 373 | |
| Has the following fields available for n | nanure application |
| Legal Description SW35 8 5E SE 35 8 5E SE 35 8 5E SW35 8 5E | Acres 38.67 38.30 25.60 62.35 |
| Livestock Operator: Region Hope: | Dany FAX 355-4760 Del FAX 355-4760 Plett |
| Landowner signature: | Date: Qec 8/89 |
| Livestock Operator signature: | |
| - | Date: |

| Landowner: Jason & Lynn Goossen | |
|--|-------------------|
| Address: Box 931 RRI Sie. Hone, UB RSH IRI | |
| Has the following fields available for ma | nure application. |
| Legal Description AE-36-8-5E E-1-8-5E | Acres 80 130 |
| | |
| | |
| Livestock Operator: Rising Hope Dairy NW 30 - 8 - 6 | 5E |
| | 5E |
| NW 30 - 8 - 6 per: Alvin Ple | SE ett |

| Address: GOX 22 | GRP1 ME | | | |
|--|---|------------------|----------------|------|
| Has the following fields av | | nure application | | |
| Legal Description | | Acres | AL. | - |
| Account of the same of the sam | · | | -1 | - |
| 1010 29-8-6 | 62 | 160 | | |
| | | _ | | |
| | | | | |
| ivestock Operator: Ris | ing Hos | e Daine | Inc | |
| andowner signature: | ing Hop. W 30-8-6 per: Alvin Plet | E Dairy | | 1.15 |
| andowner signature: | In | e Dairy | | 1.15 |
| andowner signature: | | Date: | 12/3 | 12 |
| andowner signature: | In | Date: | 12/3 | 12 |
| andowner signature: | | Date: | 12/3 New/7/ | 15 |

| Address: Ber 137- A RRZL LORETTE, M | | |
|---|---|---------------------------------|
| Has the following fields a | | ure application. |
| Legal Description AUG 6-9-6 F WE 6-9-6 E | - | Acres 157 80 |
| | - | |
| | | |
| Livestock Operator: Risi | ing Hope Dairy In NW 30 - 8 - 6E per: Alvin Plett | |
| Landowner signature: | well hy hoods | Date: Masch 27/6013 |
| Livestock Operator signat | in Ill | Date: 9116429 |
| **Note: If you sign up for Acre in the next 3 years. | r manure, we offe | er you either manure or \$15 pe |

| Landowner: LOREN P WARKENTIN | |
|--|------------------------------|
| Address: BOK 121 STE ANNE MB RSH 1R1 | |
| Has the following fields available for manure a | pplication. |
| Legal Description NU-25-7-5-5 | Acres 80 |
| | |
| | |
| Livestock Operator: Rising Hope Dairy Inc. NW 30 - 8 - 6E per: Alvin Plett | |
| Landowner signature: | Date: March 16, 2015 |
| Livestock Operator signature: | |
| allin Hell | Date: 10 an 16, 2015 |
| **Note: If you sign up for manure, we offer you Acre in the next 3 years. | ou either manure or \$15 per |