2001.12.87.276
Kramer, Reinder - Kramer Dairy Ltd.

Ponoka County
Central

SE-02-043-25-W4

CFO Livestock

This list of livestock for the site is for information only.

Animal Type	Animals	
Dairy - Lactating Cows Only	85	Edit Delete

Known Site Waterbodies

This is a list of known waterbodies on the site. This list will be compared to that of a facility to look for discrepencies. This list will automatically be copied to a new facility.

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Water Body Name	Water Body Type	CBW	Human Use	
Unnamed intermittent creek	Creek	☑	Little	Edit Delete

Page 1 of 1 25 Viewing 1 - 1 of 1

Known Wells

This is a listing of all water wells attached to existing facilities aggregated by name (using info from the most recent). You can add water wells to individual facilities. This list of water wells will be automatically copied to a new facility where you can edit slope, distance and something.

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Well ID	Well Sealing Method	Depth to Top of Open Interval (m)	Abandoned	
House well 98049 or 98050	No Seal/Unknown	3.70	☐	Edit Delete
Pen well 98049 or 98050	No Seal/Unknown	3.70	☐	Edit Delete
Siledge pit well 298704	Drive Shoe	25.00	☐	Edit Delete

Monitoring Wells and Borehole Logs

Facilities Monitored: No

☑ No monitoring wells # of monitoring wells: 0

☑ No borehole logs # of borehole logs: 0

Uppermost Groundwater Resources (UGR) Defaults

This is site-wide UGR data. This will be compared to that of a facility to look for discrepencies. This data will automatically be copied to a new facility.

☑ Download as PDF

Reference(s) for UGR (ie. Well I.D., borehole #'s)	98049
Depth To UGR (m)	13.70
Predominant Geology	Sandstone
Subsoil Texture	Coarse
Notes	Continuous sandstone noted in water wells 98047, 98048, 98050, 297975 and 298704

Protective Layer (PL) Defaults

This is site-wide PL data. This will be compared to that of a facility to look for discrepencies. This data will automatically be copied to a new facility.

Reference(s) for PL (ie. Well I.D., borehole #'s)	297975
Thickness Of PL (m)	
Predominant Geology	Clay till
Subsoil Texture	Medium
PL Measured From (m)	1.80
PL Measured To (m)	3.40
Notes	Clay and sand or till are noted surfacially in water wells 298704, 98047, 98048, 98049, 98050, 154215, 297975, and 298704 with this material being observed starting between 0 mbgs and 1.8 mbgs and ending at depths ranging from 3.4 mbgs to 6.7 mbgs. The above is used to be conservative.

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Infiltration Potential and Surface Runoff

This is site-wide IP data. This will be compared to that of a facility to look for discrepencies. This data will automatically be copied to a new facility.

Average Annual Precipitation (mm): 400-600

Soil Texture at surface: Medium

Attachments

These are site(CFO)-wide attachments for site air photos or other evidence.

Kramer Dairy Ltd. Corp Search.pdf (View (/Document/OpenCFODocument?ardanumber=2001.12.87.276&name=Kramer%20Dairy%20Ltd.%20Corp%20Search.pdf))
SE 2 43 25 W4M land title 19 Jun 19.pdf (View (/Document/OpenCFODocument?ardanumber=2001.12.87.276&name=SE%202%2043%2025%20W4M%20land%20title%2019%20Jun%2019.pdf))

Add file...

Facilities

- EMS SE-02-043-25-W4 (425043021001)

Facility Number: 425043021001

Facility Name: EMS

Land: SE-02-043-25-W4

Building Type: Earthen Manure Storage

Facility Type: Liquid Manure Storage

Application (/Application/ViewApplication/8008): RA19016

Liner Type: Earthen Natural

Runoff Control ☑

Run-on Control ☑

Liner Thickness (m):

Condition Of Liner: Uninspectable

Slope:

Depth Below Grade: 3.6

Measured Liner HC (cm/s):

☐ Unknown

☑ Download as PDF

Year Storage Built

Months of Storage
0

Surface Water Issue ○ Yes ◉ No

Action Required
○ Yes ◉ No

☐ Berm Constructed ☐ Run-On Control ☐ Run-Off Control ☐ Pump ☐ Manure Management Plan ☐ Increase Capacity ☐ Incorporation
☐ Other

Reference(s) for UGR (ie. Well I.D., borehole #'s)
98049

Depth To UGR (m) 13.7
Predominant Geology Sandstone
Subsoil Texture Coarse ▾

Reference(s) for PL (ie. Well I.D., borehole #'s)
297975

Predominant Geology Clay till
Subsoil Texture Coarse ▾
PL Subsoil Texture differs from Site Information
Depth Below Grade
3.6
(from above)
PL Measured From (m)
3.4
PL Measured From differs from Site Information
PL Measured To (m)
13.7
PL Measured To differs from Site Information
Thickness Of PL (m)
10.1

Average Annual Precipitation (mm) 400-600 ▾
Soil Texture At Surface Coarse ▾

Surface Water Risk Profile

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○ Body of water is known to be upslope of the facility - low risk.

- ○ No water body with 800m - low risk.
- ○ Facility is located less than 1m (in elevation) above the 1 in 25 year floodplain - high risk.
- ◉ None of the Above

Horizontal Distance to Water Body

>100m

Slope of Land From Facility to Water Body

4 - < 6

Type of Yard Runoff Flow

Dispersed Flow

Vegetation Cover

<50% Vegetated

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Water Body Name	Water Body Type	Reference Point	Distance To Water Body (m)	Surface Gradient to Water Body	CBW	Human Use	Outside 800m	
Unnamed intermittent creek	Creek	northeast corner of EMS	175	Downslope	☑	Little	☐	

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Well ID	Reference Point	Distance to Well (m)	Well Sealing Method	Depth to Top of Open Interval (m)	Surface Gradient to Water Well	Comments	Abandonec	Outside 400m
House well 98049 or 98050	west side of EMS	137	No Seal/Unknown	3.70	Upslope		☐	☐
Pen well 98049 or 98050	west side of EMS	72	No Seal/Unknown	3.70	Upslope		☐	☐
Siledge pit well 298704	south side of EMS	52	Drive Shoe	25.00	Upslope		☐	☐

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Facility Livestock

Livestock Quantity 0

Manure Type

◉ Liquid ○ Solid

Annual Manure Production 0

Annual Manure Production outside Risk Assessment Ranges

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Notes

Sandstone is being used as the protective layer rather than the clay used for the other facilities as this is the only medium located between the EMS and the UGR.

Constructed ☑
Decommissioned ☐

Secondary Facility Status

This Facility is a:

☐ Secondary Ground Water Facility of

☐ Secondary Surface Water Facility of

- North pens SE-02-043-25-W4 (425043021002)

Facility Number 425043021002

Facility Name North pens

Land SE-02-043-25-W4

Building Type Feedlot

Facility Type Solid Manure Storage

Application (/Application/ViewApplication/8008) RA19016

Liner Type Earthen Natural

Runoff Control ☑
Run-on Control ☑

Liner Thickness (m)
Storage Length (m)
Storage Width (m)

Condition Of Liner Uninspectable

Storage Area (sq m)

Depth Below Grade
0

Measured Liner HC (cm/s)

☐ Unknown

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Year Storage Built

Surface Water Issue ○ Yes ◉ No

Action Required
○ Yes ◉ No

☐ Berm Constructed ☐ Run-On Control ☐ Run-Off Control ☐ Pump ☐ Manure Management Plan ☐ Increase Capacity ☐ Incorporation
☐ Other

Reference(s) for UGR (ie. Well I.D., borehole #'s)
98049

Depth To UGR (m) 13.7

Predominant Geology Sandstone

Subsoil Texture Coarse

Reference(s) for PL (ie. Well I.D., borehole #'s)
297975

Predominant Geology Clay till

Subsoil Texture Medium

Depth Below Grade
0
(from above)

PL Measured From (m)
1.8

PL Measured To (m)
3.4

Thickness Of PL (m)
1.6

Average Annual Precipitation (mm) 400-600

Soil Texture At Surface Medium

Surface Water Risk Profile

○ Body of water is known to be upslope of the facility - low risk.
○ No water body with 800m - low risk.
○ Facility is located less than 1m (in elevation) above the 1 in 25 year floodplain - high risk.
◉ None of the Above

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Horizontal Distance to Water Body

>100m

Slope of Land From Facility to Water Body

4 - < 6

Type of Yard Runoff Flow

Dispersed Flow

Vegetation Cover

<50% Vegetated

Page 1 of 1 25 Viewing 1 - 1 of 1

Water Body Name	Water Body Type	Reference Point	Distance To Water Body (m)	Surface Gradient to Water Body	CBW	Human Use	Outside 800m	
Unnamed intermittent creek	Creek	southeast corner	233	Downslope	☑	Little	☐	

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Well ID	Reference Point	Distance to Well (m)	Well Sealing Method	Depth to Top of Open Interval (m)	Surface Gradient to Water Well	Comments	Abandonec	Outside 400m
House well 98049 or 98050	south side of pens	58	No Seal/Unknown	3.70	Upslope		☐	☐
Pen well 98049 or 98050	south side of pens	5	No Seal/Unknown	3.70	Unknown	This well is marginally upslope of the southwest corner of the pens. To be conservative I am calling it an unknown gradient to the pens.	☐	☐
Siledge pit well 298704	south side of pens	97	Drive Shoe	25.00	Upslope		☐	☐

Page 1 of 1 25 Viewing 1 - 3 of 3

Facility Livestock

Livestock Quantity 0

Manure Type

○ Liquid ◉ Solid

Annual Manure Production 0

Annual Manure Production outside Risk Assessment Ranges

Notes

Constructed ☑

Decommissioned ☐

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Secondary Facility Status

This Facility is a:

Secondary Ground Water Facility of

Secondary Surface Water Facility of

- South pens SE-02-043-25-W4 (425043021003)

Facility Number 425043021003

Facility Name South pens

Land SE-02-043-25-W4

Building Type Feedlot

Facility Type Solid Manure Storage

Application (/Application/ViewApplication/8008) RA19016

Liner Type Earthen Natural

Runoff Control

Run-on Control

Liner Thickness (m)

Storage Length (m)

Storage Width (m)

Condition Of Liner Uninspectable

Storage Area (sq m)

Depth Below Grade

0

Measured Liner HC (cm/s)

Unknown

Year Storage Built

Surface Water Issue Yes No

Action Required

Yes No

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Berm Constructed | Run-On Control | Run-Off Control | Pump | Manure Management Plan | Increase Capacity | Incorporation
Other

Reference(s) for UGR (ie. Well I.D., borehole #'s)

98049

Depth To UGR (m) 13.7

Predominant Geology Sandstone

Subsoil Texture Coarse

Reference(s) for PL (ie. Well I.D., borehole #'s)

297975

Predominant Geology Clay till

Subsoil Texture Medium

Depth Below Grade

0

(from above)

PL Measured From (m)

1.8

PL Measured To (m)

3.4

Thickness Of PL (m)

1.6

Average Annual Precipitation (mm) 400-600

Soil Texture At Surface Medium

Surface Water Risk Profile

- Body of water is known to be upslope of the facility - low risk.
- No water body with 800m - low risk.
- Facility is located less than 1m (in elevation) above the 1 in 25 year floodplain - high risk.
- None of the Above

Horizontal Distance to Water Body

>100m

Slope of Land From Facility to Water Body

4 - < 6

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Type of Yard Runoff Flow

Dispersed Flow

Vegetation Cover

<50% Vegetated

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Water Body Name	Water Body Type	Reference Point	Distance To Water Body (m)	Surface Gradient to Water Body	CBW	Human Use	Outside 800m	
Unnamed intermittent creek	Creek	east side	224	Downslope	☑	Little	☐	

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Well ID	Reference Point	Distance to Well (m)	Well Sealing Method	Depth to Top of Open Interval (m)	Surface Gradient to Water Well	Comments	Abandonec	Outside 400m
House well 98049 or 98050	north side of pens	69	No Seal/Unknown	3.70	Unknown	I was unable to determine if this well is at the same elevation as the house or not while I was onsite. Despite this, the drive way into the farm and the tree line long the east side of it would act as something of a berm between the two.	☐	☐
Pen well 98049 or 98050	north side of pens	158	No Seal/Unknown	3.70	Upslope		☐	☐
Siledge pit well 298704	north side of pens	21	Drive Shoe	25.00	Downslope		☐	☐

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Facility Livestock

Livestock Quantity 0

Manure Type

○ Liquid ◉ Solid

Annual Manure Production 0

Annual Manure Production outside Risk Assessment Ranges

Notes

The lay of the land between the south pens and the siledge pit well should direct runoff away from this well. To make sure this is the case I am going to include a condition in the permit requiring this to be the case.

Constructed ☑

Decommissioned ☐

Secondary Facility Status

This Facility is a:

☑ Download as PDF

Secondary Ground Water Facility of

Secondary Surface Water Facility of

- Calf lean to SE-02-043-25-W4 (425043021004)

Facility Number 425043021004

Facility Name Calf lean to

Land SE-02-043-25-W4

Building Type Barn

Facility Type Solid Manure Storage

Application (/Application/ViewApplication/8008) RA19016

Liner Type Concrete

Runoff Control

Run-on Control

Liner Thickness (m)

Storage Length (m)

Storage Width (m)

Condition Of Liner Uninspectable

Storage Area (sq m)

Depth Below Grade

0

Measured Liner HC (cm/s)

Unknown

Year Storage Built

Surface Water Issue Yes No

Action Required

Yes No

Berm Constructed Run-On Control Run-Off Control Pump Manure Management Plan Increase Capacity Incorporation

Other

Download as PDF

Reference(s) for UGR (ie. Well I.D., borehole #'s)

98049

Depth To UGR (m) 13.7

Predominant Geology Sandstone

Subsoil Texture Coarse

Reference(s) for PL (ie. Well I.D., borehole #'s)

297975

Predominant Geology Clay till

Subsoil Texture Medium

Depth Below Grade

0

(from above)

PL Measured From (m)

1.8

PL Measured To (m)

3.4

Thickness Of PL (m)

1.6

Average Annual Precipitation (mm) 400-600

Soil Texture At Surface Medium

Surface Water Risk Profile

- Body of water is known to be upslope of the facility - low risk.
- No water body with 800m - low risk.
- Facility is located less than 1m (in elevation) above the 1 in 25 year floodplain - high risk.
- None of the Above

Horizontal Distance to Water Body

>100m

Slope of Land From Facility to Water Body

4 - < 6

Type of Yard Runoff Flow

Dispersed Flow

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Vegetation Cover

<50% Vegetated

Page 1 of 1 25 Viewing 1 - 1 of 1

Water Body Name	Water Body Type	Reference Point	Distance To Water Body (m)	Surface Gradient to Water Body	CBW	Human Use	Outside 800m	
Unnamed intermittent creek	Creek	east side	215	Downslope	☑	Little	☐	

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Well ID	Reference Point	Distance to Well (m)	Well Sealing Method	Depth to Top of Open Interval (m)	Surface Gradient to Water Well	Comments	Abandonec	Outside 400m
House well 98049 or 98050	north side of lean to	80	No Seal/Unknown	3.70	Unknown	I was unable to determine if this well is at the same elevation as the house or not while I was onsite. Despite this, the drive way into the farm and the tree line long the east side of it would act as something of a berm between the two.	☐	☐
Pen well 98049 or 98050	north side of lean to	156	No Seal/Unknown	3.70	Upslope		☐	☐
Siledge pit well 298704	north side of lean to	5	Drive Shoe	25.00	Downslope		☐	☐

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Facility Livestock

Livestock Quantity 0

Manure Type
○ Liquid ◉ Solid

Annual Manure Production 0
Annual Manure Production outside Risk Assessment Ranges

Notes

Constructed ☐
Decommissioned ☐

Secondary Facility Status

This Facility is a:

☐ Secondary Ground Water Facility of

☑ Download as PDF

Secondary Surface Water Facility of

- Dairy barn SE-02-043-25-W4 (425043021005)

Facility Number 425043021005

Facility Name Dairy barn

Land SE-02-043-25-W4

Building Type Barn

Facility Type Liquid Manure Storage

Application (/Application/ViewApplication/8008) RA19016

Liner Type Concrete

Runoff Control

Run-on Control

Liner Thickness (m)

Condition Of Liner Uninspectable

Slope

Depth Below Grade
2.4

Measured Liner HC (cm/s)
Unknown

Year Storage Built

Months of Storage
0

Surface Water Issue Yes No

Action Required
Yes No

Berm Constructed Run-On Control Run-Off Control Pump Manure Management Plan Increase Capacity Incorporation
Other

Reference(s) for UGR (ie. Well I.D., borehole #'s)
98049

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Depth To UGR (m) 13.7

Predominant Geology Sandstone

Subsoil Texture Coarse

Reference(s) for PL (ie. Well I.D., borehole #'s)

297975

Predominant Geology Clay till

Subsoil Texture Medium

Depth Below Grade

2.4

(from above)

PL Measured From (m)

1.8

PL Measured To (m)

3.4

Thickness Of PL (m)

1

Average Annual Precipitation (mm) 400-600

Soil Texture At Surface Medium

Surface Water Risk Profile

- ○ Body of water is known to be upslope of the facility - low risk.
- ○ No water body with 800m - low risk.
- ○ Facility is located less than 1m (in elevation) above the 1 in 25 year floodplain - high risk.
- ◉ None of the Above

Horizontal Distance to Water Body

>100m

Slope of Land From Facility to Water Body

4 - < 6

Type of Yard Runoff Flow

Dispersed Flow

Vegetation Cover

<50% Vegetated

Page 1 of 1 25 Viewing 1 - 1 of 1

Water Body Name	Water Body Type	Reference Point	Distance To Water Body (m)	Surface Gradient to Water Body	CBW	Human Use	Outside 800m	

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Unnamed intermittent creek	Creek	east side of proposed addition	171	Downslope	☑	Little	☐		E D

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Well ID	Reference Point	Distance to Well (m)	Well Sealing Method	Depth to Top of Open Interval (m)	Surface Gradient to Water Well	Comments	Abandonec	Outside 400m	
House well 98049 or 98050	northeast corener of western portion of the existing barn	122	No Seal/Unknown	3.70	Upslope		☐	☐	
Pen well 98049 or 98050	southeast corenr of western portion of the existing barn	46	No Seal/Unknown	3.70	Upslope		☐	☐	
Siledge pit well 298704	southeast corenr of southern portion of the existing barn	14	Drive Shoe	25.00	Upslope		☐	☐	

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Facility Livestock

Livestock Quantity 0

Manure Type
◉ Liquid ○ Solid

Annual Manure Production 0
Annual Manure Production outside Risk Assessment Ranges

Notes

Constructed ☐
Decommissioned ☐

Secondary Facility Status

This Facility is a:

☐ Secondary Ground Water Facility of

☐ Secondary Surface Water Facility of

Add Facility

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