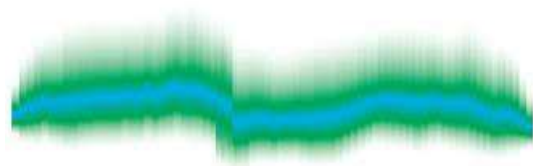


APPENDIX J

AER Compliance Dashboard

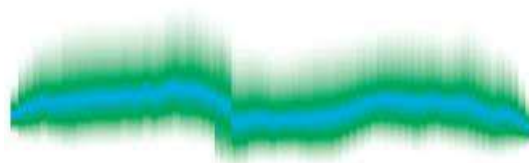


Bifrost

Environmental and Remediation Services Inc.

APPENDIX J₁

AER – HIES



Bifrost

Environmental and Remediation Services Inc.

- a reportable release of hydrocarbon or produced water that migrates off lease or on pipeline right-of-ways; or
- a seismic event of local magnitude (M_L) 4.0 or greater in the Duvernay Zone (subject to Subsurface Order No. 2) or 2.5 M_L or greater in the Brazeau area (subject to Subsurface Order No. 6) or 3.0 M_L or greater in the Red Deer area (subject to Subsurface Order No. 7).

The AER is committed to protecting public safety and the environment, and it monitors and responds to energy-related incidents 24 hours a day, 7 days a week. The AER has staff trained in emergency response, environmental protection, air quality, and investigation. These staff assist, coordinate, and support the activities of the responsible operator, as well as the local municipal authority and other provincial and federal responders to ensure a coordinated, effective response and that requirements are followed.

Data last updated 1/5/2024, 10:40:29 AM Mountain Time

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Reference No.	Incident Date	Company	Location	Operation Type	Product	Status
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Showing 0 to 0 of 0 entries (filtered from 2,625 total entries)

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Data last updated 1/5/2024, 10:40:29 AM Mountain Time

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Reference No.	Incident Date	Company	Location	Operation Type	Product	Status
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Reference No.	Incident Date	Company	Location	Operation Type	Product	Status
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	Reference No.	Incident Date	Company	Location	Operation Type	Product	Status
	20230821	2023-04-09	Repsol Oil & Gas Canada Inc.	Edson (13 km W)	Pipeline	H ₂ S; Gas Prod'n (Mrktble);	No Emergency Phase.
	20221480	2022-06-27	Repsol Oil & Gas Canada Inc.	Wainwright (31 km SE)	Pipeline	Emulsion	No Emergency Phase.
	20220320	2022-02-01	Repsol Oil & Gas Canada Inc.	Chauvin (2 km E)	Well	H ₂ S; Crude Oil; Salt/Produced Water;	No emergency phase.
	20211529	2021-07-08	Repsol Oil & Gas Canada Inc.	Wainwright (53 km SE)	Well	Emulsion	No emergency phase.
	20210510	2021-03-03	Repsol Oil & Gas Canada Inc.	Edson (12 km SW)	Pipeline	Gas Production (Raw)	No emergency phase.
	20210305	2021-02-09	Repsol Oil & Gas Canada Inc.	Edson (9 km SW)	Pipeline	Gas Production (Raw)	No emergency phase.
	20202920	2020-12-18	Repsol Oil & Gas Canada Inc.	Grande Cache (60 km NE)	Pipeline	H ₂ S	No emergency phase.
	20202834	2020-12-05	Repsol Oil & Gas Canada Inc.	Fox Creek (65 km SW)	Pipeline	Gas Production (Raw)	No emergency phase.
	20202270	2020-09-24	Repsol Oil & Gas Canada Inc.	Chauvin (3 km SW)	Pipeline	Salt/Produced Water	No emergency phase.
	20202219	2020-09-19	Repsol Oil & Gas Canada Inc.	Chauvin (11 km S)	Well	Crude Oil and Salt/Produced Water	No emergency phase.

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	20200631	2020-03-10	Repsol Oil & Gas Canada Inc.	Ribstone (5 km SE)	Well	Crude Oil and Salt/Produced Water	No emergency phase.
	20193335	2019-11-07	Repsol Oil & Gas Canada Inc.	Edson (14 km W)	Pipeline	Condensate	No emergency phase.
	20192741	2019-09-14	Repsol Oil & Gas Canada Inc.	Edson (7 km E)	Pipeline	Condensate and Produced Water Emulsion	Emergency phase over.
	20192724	2019-09-12	Repsol Oil & Gas Canada Inc.	Chauvin (7 km E)	Well	Crude Oil	No emergency phase.
	20192461	2019-08-17	Repsol Oil & Gas Canada Inc.	Consort (18 km E)	Well	Crude Oil and Salt/Produced Water	No emergency phase.
	20192037	2019-07-07	Repsol Oil & Gas Canada Inc.	Chauvin (6 km NE)	Facility	Contam.Surface Water	No emergency phase.
	20190383	2019-02-06	Repsol Oil & Gas Canada Inc.	Edson (13 km W)	Well	Crude Oil	No emergency phase.
	20190077	2019-01-07	Repsol Oil & Gas Canada Inc.	Chauvin (9 km SW)	Well	Crude Oil and Salt/Produced Water	No emergency phase.
	20183872	2018-12-28	Repsol Oil & Gas Canada Inc.	Ribstone (7 km SE)	Pipeline	Salt/Produced Water	No emergency phase
	20183408	2018-11-06	Repsol Oil & Gas Canada Inc.	Consort (30 km N)	Facility	Crude Oil	no emergency phase
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Reference No.	Incident Date	Company	Location	Operation Type	Product	Status	
	20173026	2017-09-25	Repsol Oil & Gas Canada Inc.	Edson (8 km SW)	Well	Gas Production (Raw)	No emergency phase.
	20172516	2017-08-08	Repsol Oil & Gas Canada Inc.	Ribstone (9 km SE)	Well	Salt/Produced Water	No emergency phase.
	20172365	2017-07-24	Repsol Oil & Gas Canada Inc.	Chauvin (10.5 km SW)	Facility	Crude Oil	No Emergency Phase
	20171440	2017-05-04	Repsol Oil & Gas Canada Inc.	Wainwright (45 km SE)	Pipeline	Salt/Produced Water	No emergency phase.
	20171441	2017-05-04	Repsol Oil & Gas Canada Inc.	Wainwright (45 km SE)	Pipeline	Salt/Produced Water	No emergency phase.
	20163161	2016-10-26	Repsol Oil & Gas Canada Inc.	Edgerton (3 km NW)	Pipeline	Crude Oil	No emergency phase
	20163033	2016-10-15	Repsol Oil & Gas Canada Inc.	Chauvin (1 km SW)	Facility	Crude Oil and Salt/Produced Water	No emergency phase
	20162107	2016-07-30	Repsol Oil & Gas Canada Inc.	Chauvin (7 km NE)	Pipeline	Crude Oil and Salt/Produced Water	No emergency phase.
	20162047	2016-07-24	Repsol Oil & Gas Canada Inc.	Edson (57 km S)	Pipeline	H2S	No emergency phase.
	20162035	2016-07-21	Repsol Oil & Gas Canada Inc.	Edson (8 km S)	Pipeline	Gas Production (Raw)	No emergency phase.
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	Reference No.	Incident Date	Company	Location	Operation Type	Product	Status
	20160923	2016-04-01	Repsol Oil & Gas Canada Inc.	Wainwright (23 km E)	Pipeline	Crude Oil and Salt/Produced Water	No emergency phase.
	20160741	2016-03-14	Repsol Oil & Gas Canada Inc.	Hinton (46 km N)	Pipeline	Gas Production (Raw)	No emergency phase.
	IS101	2016-01-12	Repsol Oil & Gas Inc.	Fox Creek (32 km W)	Well	N/A	No emergency phase.
	20160065	2016-01-08	Repsol Oil and Gas Inc.	Marlboro (28 km NW)	Pipeline	H2S	Emergency phase over.

Showing 31 to 34 of 34 entries (filtered from 2,625 total entries)

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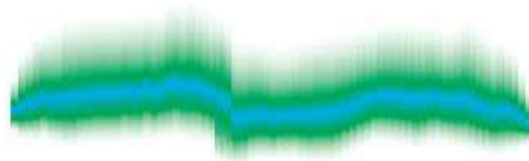
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APPENDIX J2

AER – Investigations



Bifrost

Environmental and Remediation Services Inc.

issuing enforcement action if the AER determines that the responsible parties demonstrated due diligence by making a reasonable effort to follow air rules, regulations, and requirements or if the investigation is inconclusive (there was insufficient evidence).

The status will be listed as phase 1, 2, 3, or closed as the investigation progresses. Phase 1 is when AER staff collect information and conduct a site and incident assessment. Phase 2 involves the analysis of the materials collected. Phase 3 includes the final file review and enforcement response decision. The investigation tab will be updated on a monthly basis.

Archived investigation reports [can be found on our website](#).

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Reference No.	Company	Date	Operation Type	Location	Status
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Archived investigation reports [can be found on our website](#).

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Archived investigation reports [can be found on our website](#).

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Inquiries@aer.ca

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- Private Surface Agreements Registry

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- Drilling Activity
- Well Licences Issued

Hot Topics

- Aging Infrastructure
- Methane

Activity

- Public Notice of Application
- Publication of Decision

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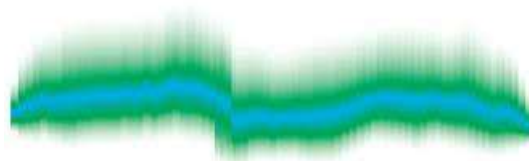
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Reference No.	Company	Date	Operation Type	Location	Status
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Reference No.	Company	AER Response	Description	Date
202109-15	Repsol Oil & Gas Canada Inc.	Decision to Cancel	Failure to meet reclamation criteria.	2021-09-29
202001-17	Repsol Oil & Gas Canada Inc.	Decision to Cancel	Failure to meet reclamation criteria.	2020-01-29
201901-82	Repsol Oil & Gas Canada Inc.	Notice of Noncompliance Pipelines	<p>Licensee responsible for a ground disturbance did not keep all pipeline warning signs or markers visible and legible for the duration of the ground disturbance or did not replace or relocate them if necessary.</p> <p>An existing pipeline within 5 m of a proposed ground disturbance was not located by hand excavation, or the hand excavation procedures are not acceptable to the licensee of the pipeline.</p> <p>Mechanical excavation equipment used within 600 mm of a pipeline, or within any distance beneath a pipeline, is not under the direct supervision of a representative of the licensee of the existing pipeline.</p>	2019-01-17
201901-75	Repsol Oil & Gas Canada Inc.	Decision to Cancel	Failure to meet reclamation criteria.	2019-01-14
201701-20	Repsol Oil & Gas Canada Inc.	Notice of Noncompliance Pipelines	Licensee is not able to demonstrate that procedures in the manuals have been implemented, or it is not operating and maintaining its pipeline systems in accordance with documented procedures.	2017-01-31
201605-35	Repsol Oil & Gas Canada Inc.	Notice of Noncompliance Pipelines	Licensee does not immediately notify the AER of a pipeline leak, a break, a test failure, or contact damage by telephoning the appropriate AER field centre.	2016-05-31
201604-25	Repsol Oil & Gas Canada Inc.	Notice of Noncompliance Pipelines	<p>Licensee does not have a manual containing procedures for pipeline operation, corrosion control, integrity management, maintenance and repair, or does not provide the manuals to the AER upon request.</p> <p>Licensee is not able to demonstrate that procedures in the manuals have been implemented, or it is not operating and maintaining its pipeline systems in accordance with documented procedures.</p> <p>An engineering assessment was not conducted to define the pipeline operating conditions and closure parameters of the emergency shutdown devices, or a record of the current assessment not maintained.</p> <p>Failure to carry out the notification requirements within the EPZ.</p>	2016-04-05
201410-24	Repsol Oil & Gas Canada Inc.	Notice of Noncompliance Pipelines	Care is not taken in the handling, transporting, stockpiling, and placing of pipe and components to prevent damage to the pipe, coating, and any lining.	2014-10-17
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APPENDIX J3

AER – Enforcement



Bifrost

Environmental and Remediation Services Inc.

Noncompliance & Enforcement

The noncompliance and enforcement tab replaces [ST108 – AER Monthly Enforcement Action Summary](#) and contains information starting from July 2014. New noncompliance or enforcement responses will be posted here within two business days of the AER issuing the response.

The responses reported here include the following:

- enforcement decisions, such as warning letters, administrative penalties, and prosecution;
- administrative sanctions (e.g., imposition of terms and conditions);
- directions of an inspector in relation to section 137(2)(c) of the *Environmental Protection and Enhancement Act*;
- orders issued to compel compliance or remediate;
- any notice of noncompliance that is related to a full or partial suspension of operations;
- suspension or cancellation of an approval; and
- cancellation of a reclamation certificate.

Compliance orders issued before July 2014 are available under the [Index of AER Orders](#).

The Compliance Dashboard summarizes data collected at different points in time and does not necessarily represent the most current information available. This summary should not be relied upon by any person intending to deal with the company or any property, assets, or interests of the company. This information is provided without warranty of any kind, and the AER disclaims any liability for losses or damages resulting from the use of or reliance on this information.

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Noncompliance & Enforcement

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Noncompliance & Enforcement

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Noncompliance & Enforcement

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Search:

Olds Golf

Print

Save

Reference No.	Company	AER Response	Description	Date
No matching records found				
<div>Search Refere</div>	<div>Search Company</div>	<div>Search AER Re</div>	<div>Search Description</div>	<div>Search Da</div>

Showing 0 to 0 of 0 entries (filtered from 3,619 total entries)

Previous

Next

Expand/Collapse All

Clear Filters

Data last updated 1/5/2024, 10:47:35 AM Mountain Time

Show entries

Search:

	Reference No.	Company	AER Response	Description	Date
	202109-15	Repsol Oil & Gas Canada Inc.	Decision to Cancel	Failure to meet reclamation criteria.	2021-09-29
	202001-17	Repsol Oil & Gas Canada Inc.	Decision to Cancel	Failure to meet reclamation criteria.	2020-01-29
	201901-82	Repsol Oil & Gas Canada Inc.	Notice of Noncompliance Pipelines	<p>Licensee responsible for a ground disturbance did not keep all pipeline warning signs or markers visible and legible for the duration of the ground disturbance or did not replace or relocate them if necessary.</p> <p>An existing pipeline within 5 m of a proposed ground disturbance was not located by hand excavation, or the hand excavation procedures are not acceptable to the licensee of the pipeline.</p> <p>Mechanical excavation equipment used within 600 mm of a pipeline, or within any distance beneath a pipeline, is not under the direct supervision of a representative of the licensee of the existing pipeline.</p>	2019-01-17
	201901-75	Repsol Oil & Gas Canada Inc.	Decision to Cancel	Failure to meet reclamation criteria.	2019-01-14
	201701-20	Repsol Oil & Gas Canada Inc.	Notice of Noncompliance Pipelines	Licensee is not able to demonstrate that procedures in the manuals have been implemented, or it is not operating and maintaining its pipeline systems in accordance with documented procedures.	2017-01-31
	201605-35	Repsol Oil & Gas Canada Inc.	Notice of Noncompliance Pipelines	Licensee does not immediately notify the AER of a pipeline leak, a break, a test failure, or contact damage by telephoning the appropriate AER field centre.	2016-05-31
	201604-25	Repsol Oil & Gas Canada Inc.	Notice of Noncompliance Pipelines	<p>Licensee does not have a manual containing procedures for pipeline operation, corrosion control, integrity management, maintenance and repair, or does not provide the manuals to the AER upon request.</p> <p>Licensee is not able to demonstrate that procedures in the manuals have been implemented, or it is not operating and maintaining its pipeline systems in accordance with documented procedures.</p> <p>An engineering assessment was not conducted to define the pipeline</p>	2016-04-05

- enforcement decisions, such as warning letters, administrative penalties, and prosecution;
- administrative sanctions (e.g., imposition of terms and conditions);
- directions of an inspector in relation to section 137(2)(c) of the *Environmental Protection and Enhancement Act*;
- orders issued to compel compliance or remediate;
- any notice of noncompliance that is related to a full or partial suspension of operations;
- suspension or cancellation of an approval; and
- cancellation of a reclamation certificate.

resulting from the use of or reliance on this information.

Compliance orders issued before July 2014 are available under the [Index of AER Orders](#).

Data last updated 1/5/2024, 10:47:35 AM Mountain Time

Show entries

Search:

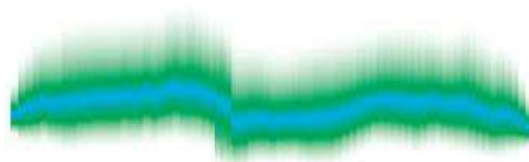
Reference No. ⬆	Company ⬆	AER Response ⬆	Description ⬆	Date ⬆
No matching records found				
<input type="button" value="Search Refere"/>	<input type="text" value="Search Company"/>	<input type="button" value="Search AER Re"/>	<input type="text" value="Search Description"/>	<input type="button" value="Search Da"/>

Showing 0 to 0 of 0 entries (filtered from 3,619 total entries)

[Previous](#) [Next](#)

APPENDIX K

FOIP Requests



Bifrost

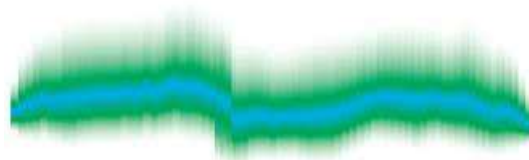
Environmental and Remediation Services Inc.

No Records

No records were recovered (the category is applicable but the records do not exist), the records were not available (the category is applicable but the records are not available), or the records category was not applicable to this particular Phase I ESA Site.

APPENDIX L

PTMAA/ASCC
Correspondence



Bifrost

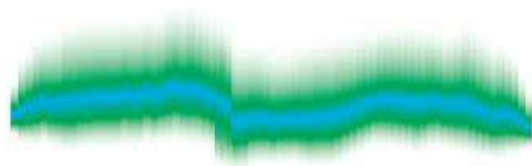
Environmental and Remediation Services Inc.

No Records

No records were recovered (the category is applicable but the records do not exist), the records were not available (the category is applicable but the records are not available), or the records category was not applicable to this particular Phase I ESA Site.

APPENDIX M

AER Abandoned Well Maps



Bifrost

Environmental and Remediation Services Inc.



Abandoned Well Map Viewer

Search...



Getting Around

Annotate Analysis

☒ Tool Labels X



Print



Help



Pan



Zoom In



Zoom Out



Full Extent



Previous Extent



Next Extent



Polygon



Rectangle



Export well to excel

Printing

Help File

Navigation Tools

Location Info

Welcome

Abandoned Well Map Viewer

The Abandoned Well Map Viewer is designed to let you browse the Abandoned Well data repository.

Quick Search Tasks

The links below are provided to help you zoom to an area of interest based on the Alberta Township System (ATS) or to locate a abandoned well by its well licence number.

Area of Interest

Locate Abandoned Well

Terms of Use

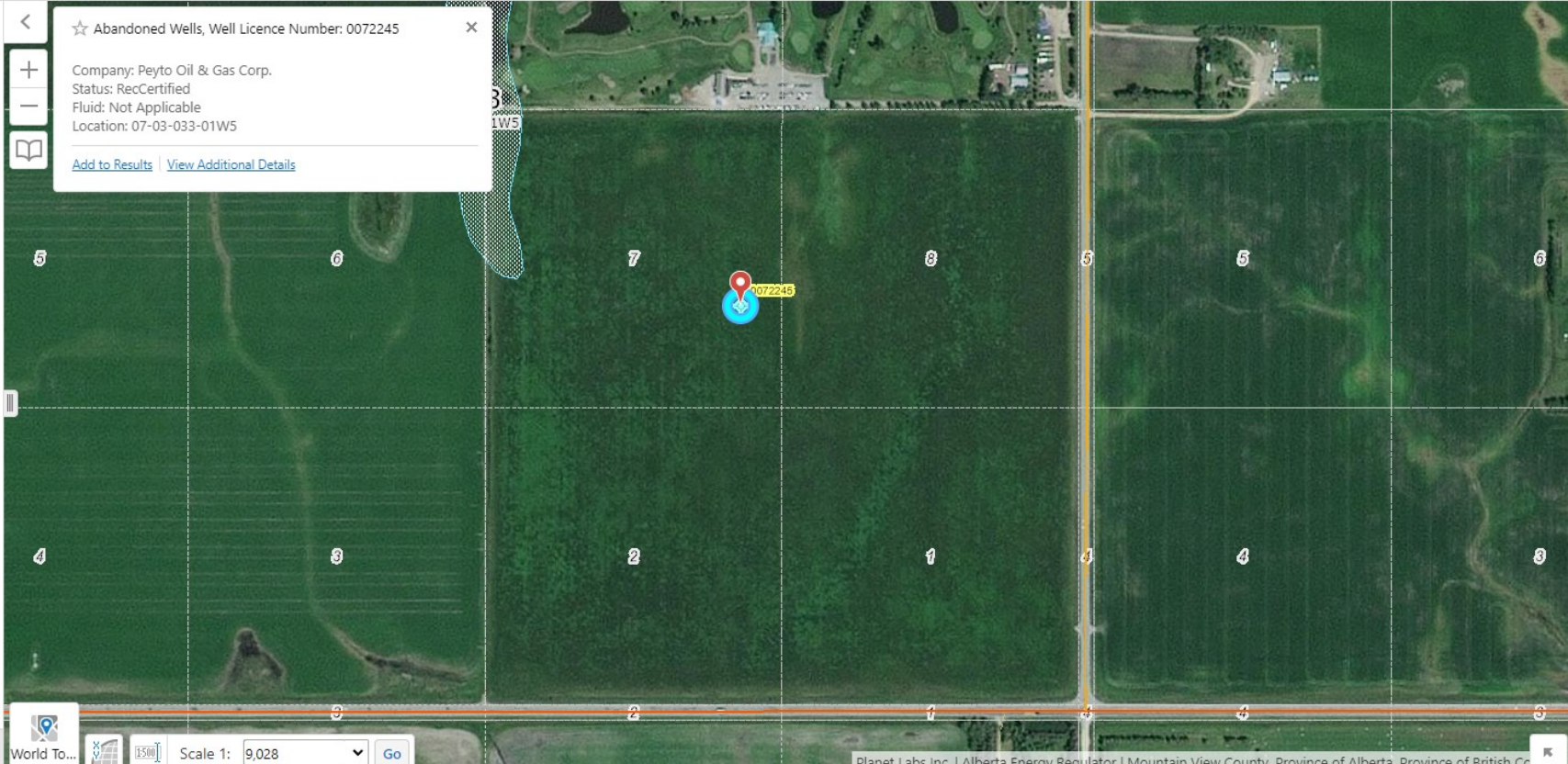
The link below provides a copy of the Terms of Use accepted by the user for access and use of this application and associated data.

Acceptance, Disclaimer and Copyright Information

☆ Abandoned Wells, Well Licence Number: 0072245

Company: Peyto Oil & Gas Corp.
Status: RecCertified
Fluid: Not Applicable
Location: 07-03-033-01W5

[Add to Results](#) [View Additional Details](#)



Welcome



Layers



Downloads



World To...



Scale 1:

9,028

Go

Planet Labs Inc. | Alberta Energy Regulator | Mountain View County, Province of Alberta, Province of British Columbia

Well Licence Number: 0072245
Current Licensee Name: Peyto Exploration & Development Corp.

Asset Report

Well Licence Number
0072245

Well Name
MARATHON CDN-SUP OLDS 7-3-33-1

Well Symbol
Abandoned

Is Well Sour
N/A

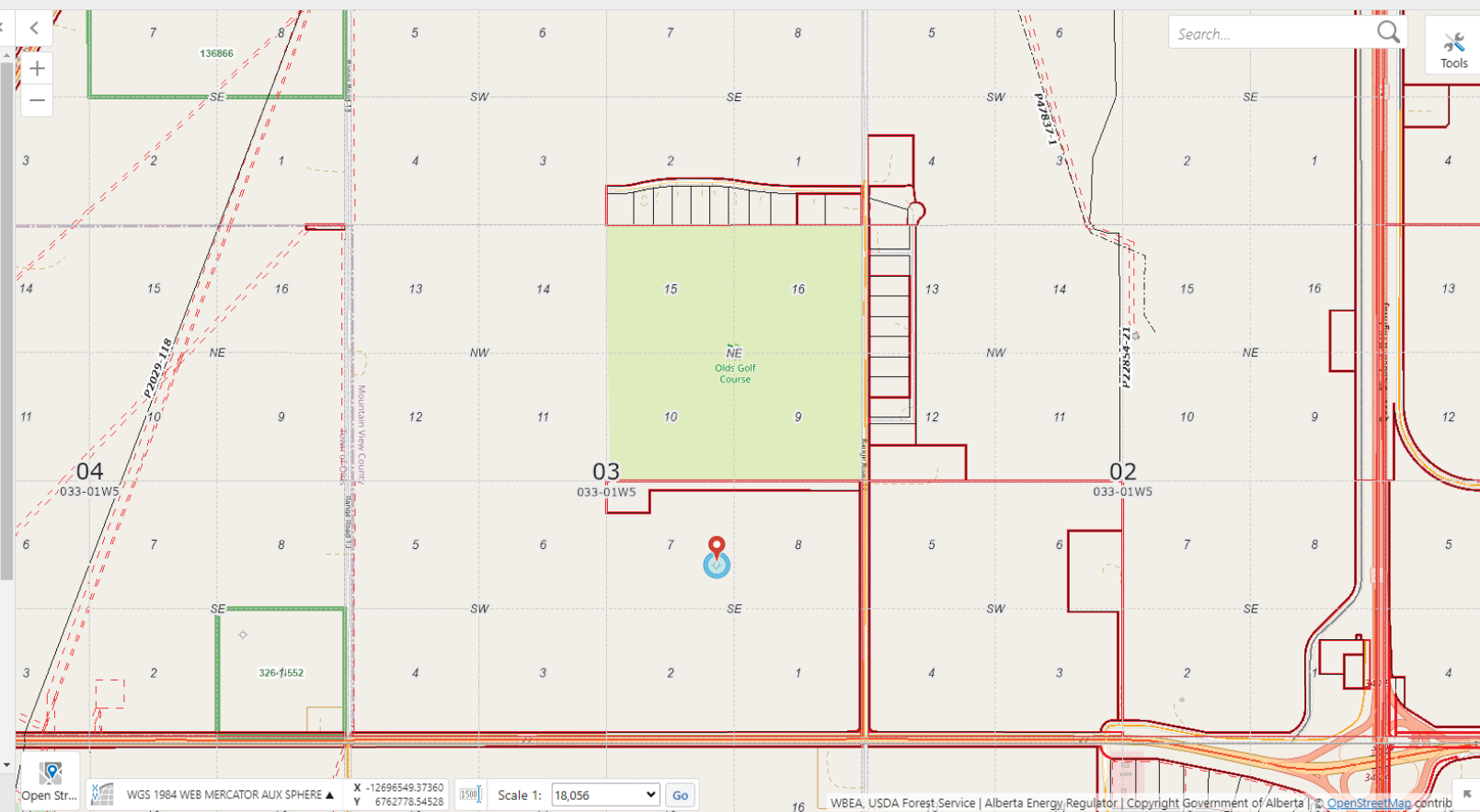
Current Licence Status
RecCertified

Current Licence Status Date
Dec 31, 1998 12:00 PM

Licence Issue Date
Oct 3, 1978 12:00 PM

Current Licensee Name
Peyto Exploration & Development Corp.

Surface Location
07-03-033-01W5





OneStop

Asset: Well Licences

Well Licence Number
0072245

Well Name
MARATHON CDN-SUP OLDS 7-3-33-1

Well Type
N/A

Well Symbol
Abandoned

Is Well Sour
N/A

Current Licence Status
RecCertified

Current Licence Status Date
Dec 31, 1998 12:00 PM

Licence Issue Date
Oct 3, 1978 12:00 PM

Current Licensee Name
Peyto Exploration & Development Corp.

Surface Location
07-03-033-01W5

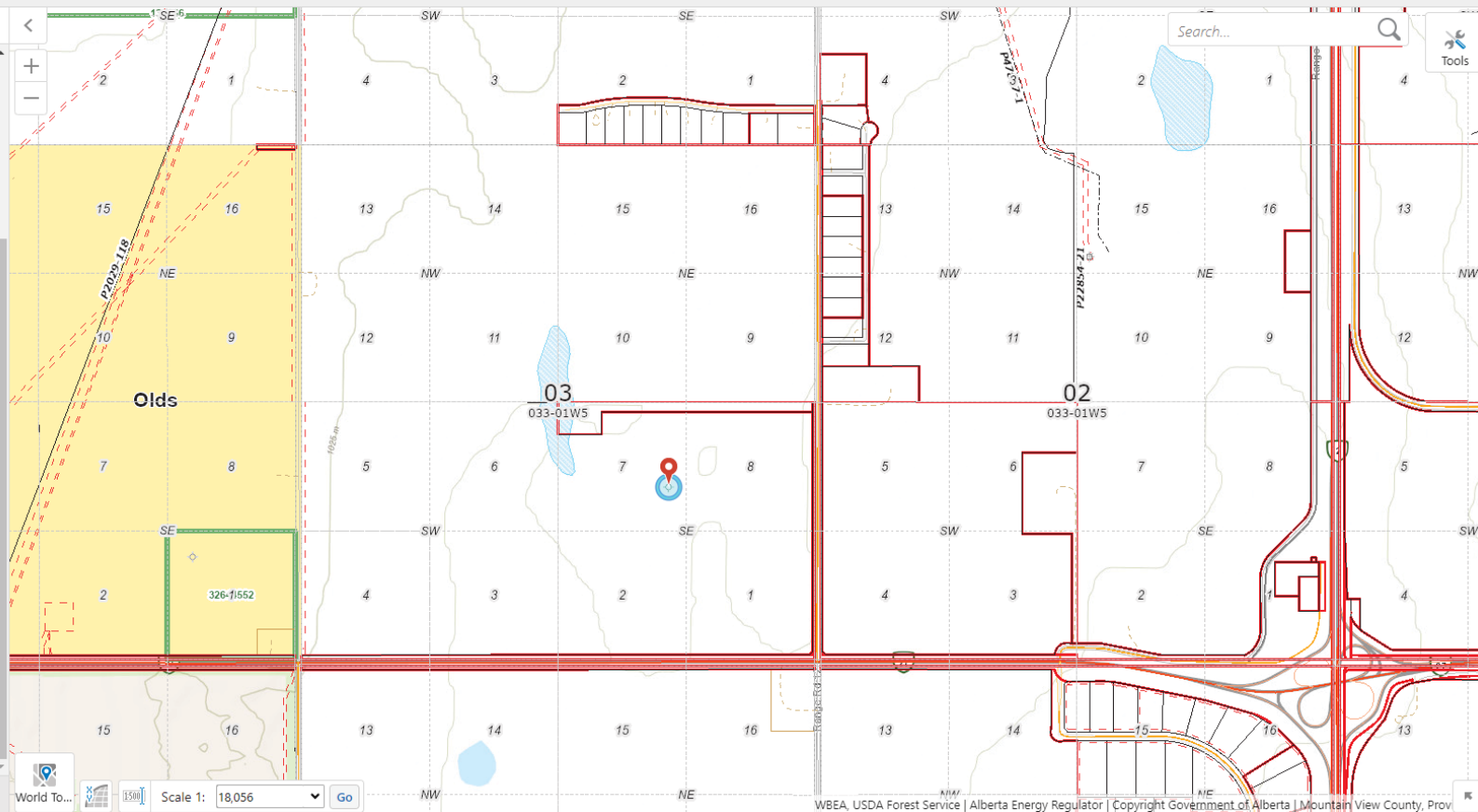
Latitude
51.8

Longitude
-114.0557

Status Fluid
Not Applicable

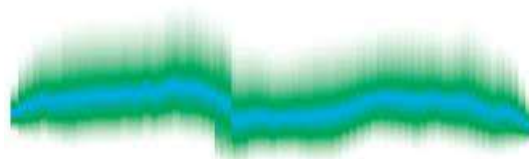
Maximum Estimated H2S
N/A

Licensee BA Id
OYA2



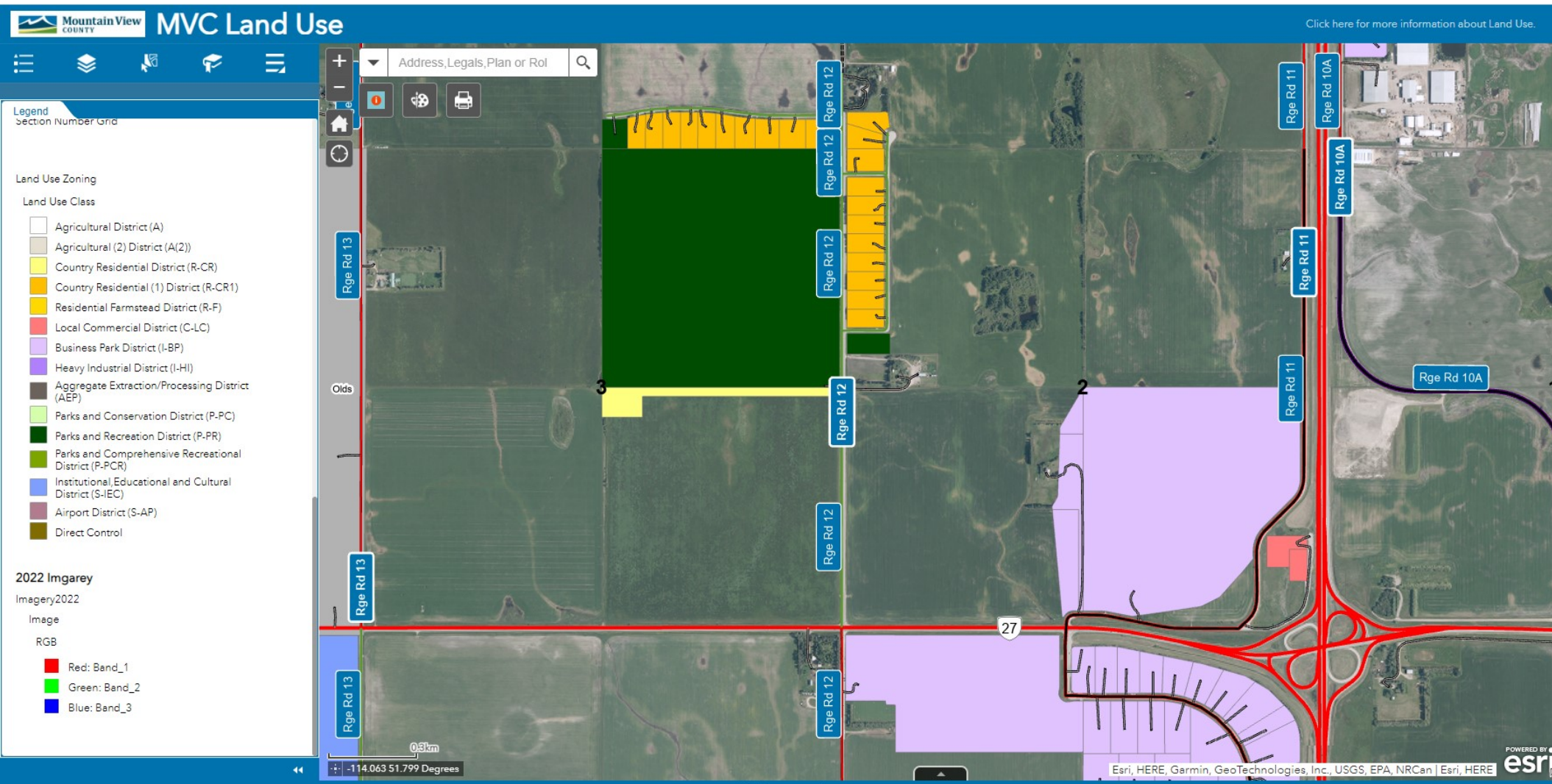
APPENDIX N

Land Use



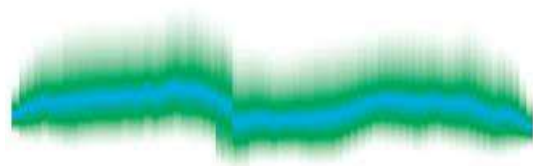
Bifrost

Environmental and Remediation Services Inc.



APPENDIX (O)

ERIS Physical Setting Report



Bifrost

Environmental and Remediation Services Inc.



Property Information

Order Number:	23111700859p
Date Completed:	November 22, 2023
Project Number:	2023061
Project Property:	1273927 Alberta Ltd. SE-3-33-1W5M Olds AB
Coordinates:	
Latitude:	51.79878881
Longitude:	-114.05484618
UTM Northing:	5742762.38003 Metres
UTM Easting:	703070.669594 Metres
UTM Zone:	UTM Zone 11U
Elevation:	1,020.00 m
Slope Direction:	W

Property Information.....	1
Topographic Information.....	2
Hydrologic Information.....	12
Geologic Information.....	13
Soil Information.....	17
Wells and Additional Sources.....	29
Report Summary.....	31
Detail Report.....	33
Radon Information.....	51
Appendix.....	52
Liability Notice.....	55

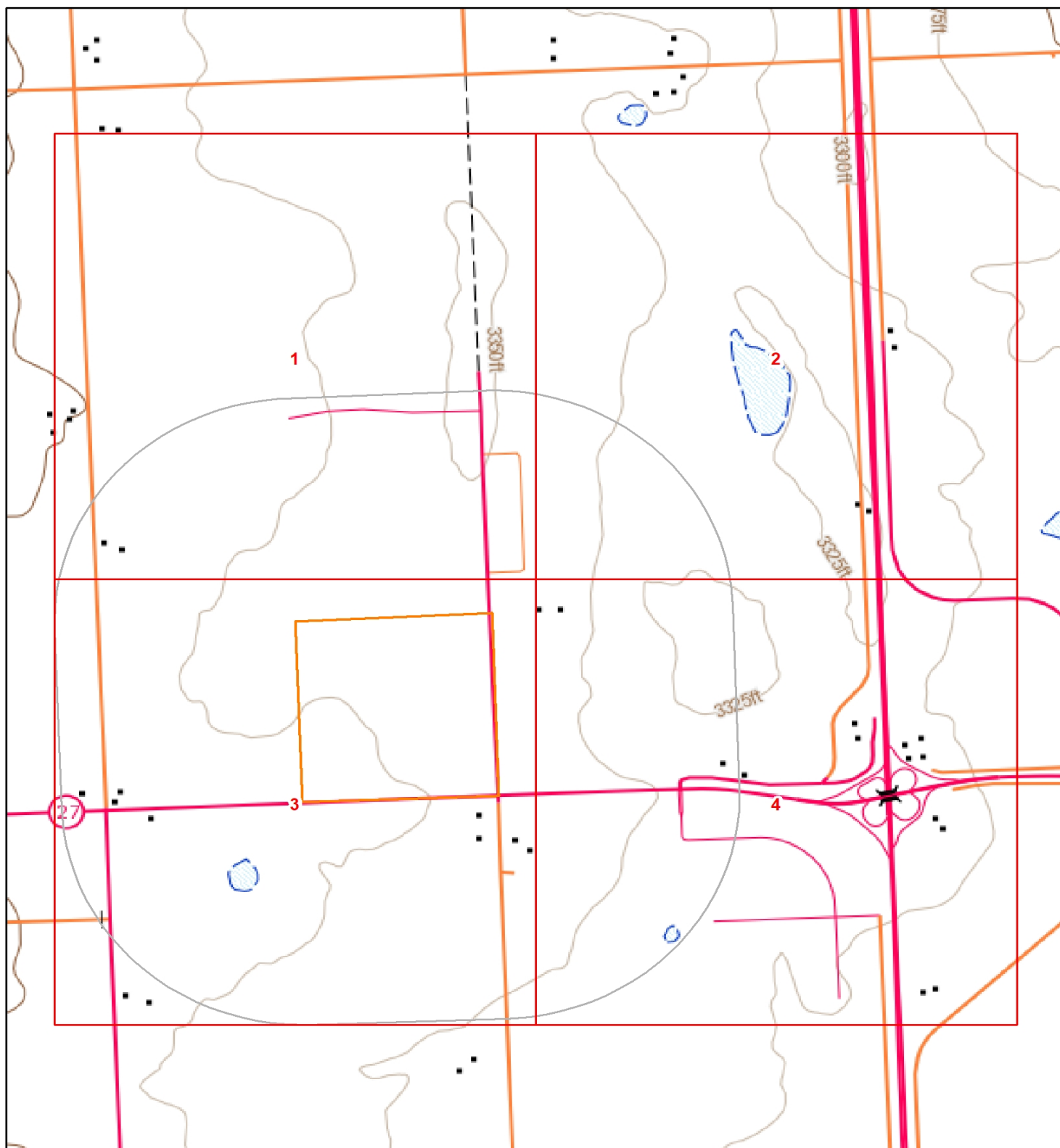
The ERIS **Physical Setting Report - PSR** provides comprehensive information about the physical setting around a site and includes a complete overview of topography as well as hydrologic, geologic and soil characteristics. The location and detailed attributes of oil and gas wells, water wells, and radon are also included for review.

The compilation of both physical characteristics of a site and additional attribute data is useful in assessing the impact of migration of contaminants and subsequent impact on soils and groundwater.

Disclaimer

This Report does not provide a full environmental evaluation for the site or adjacent properties. Please see the terms and disclaimer at the end of the Report for greater detail.

Topographic Information



Topographic Map

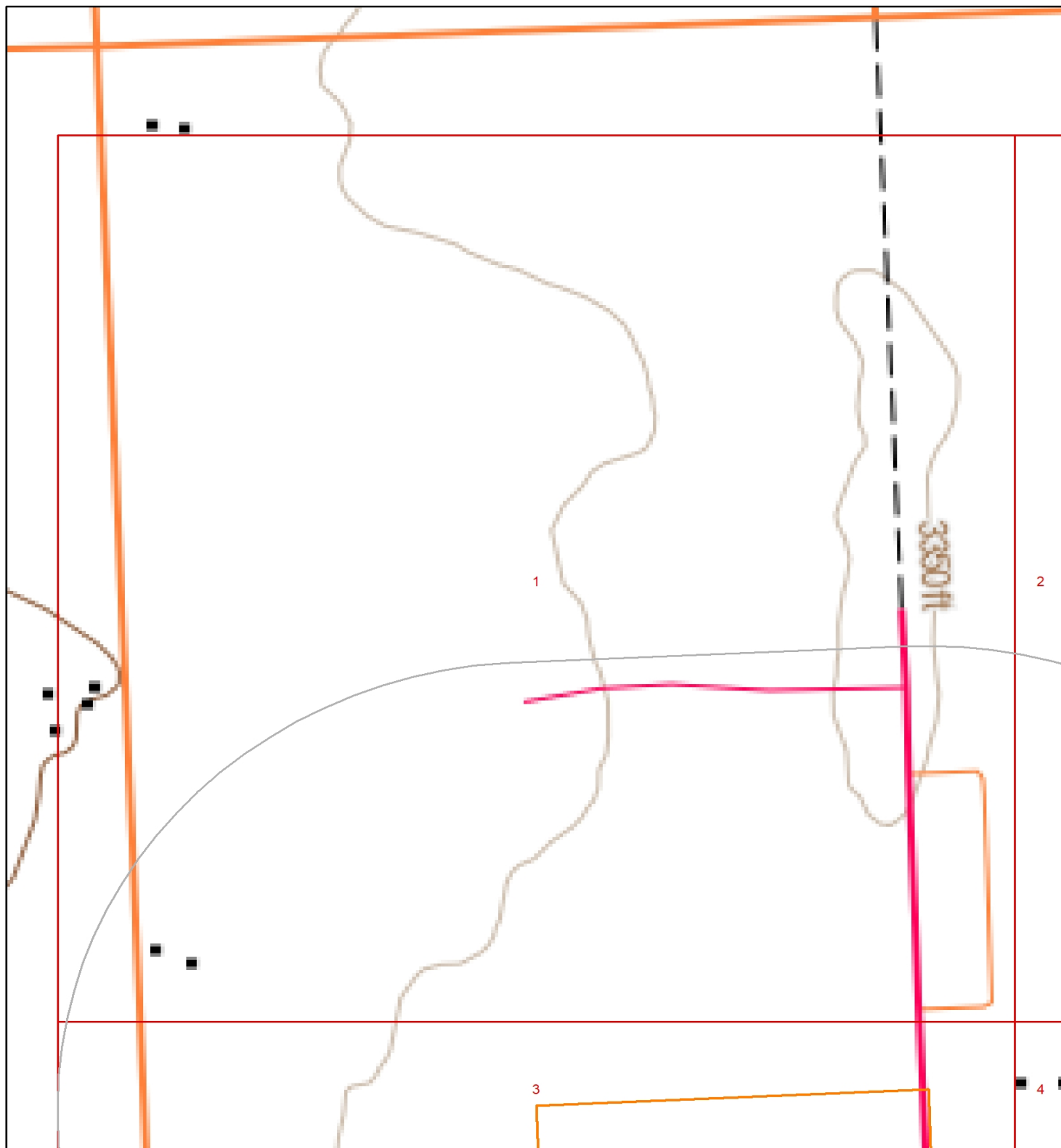
Address: SE-3-33-1W5M,Olds,AB

Data source: Toporama (1:50K) by Natural Resource Canada. Publication date: 2013-07-19

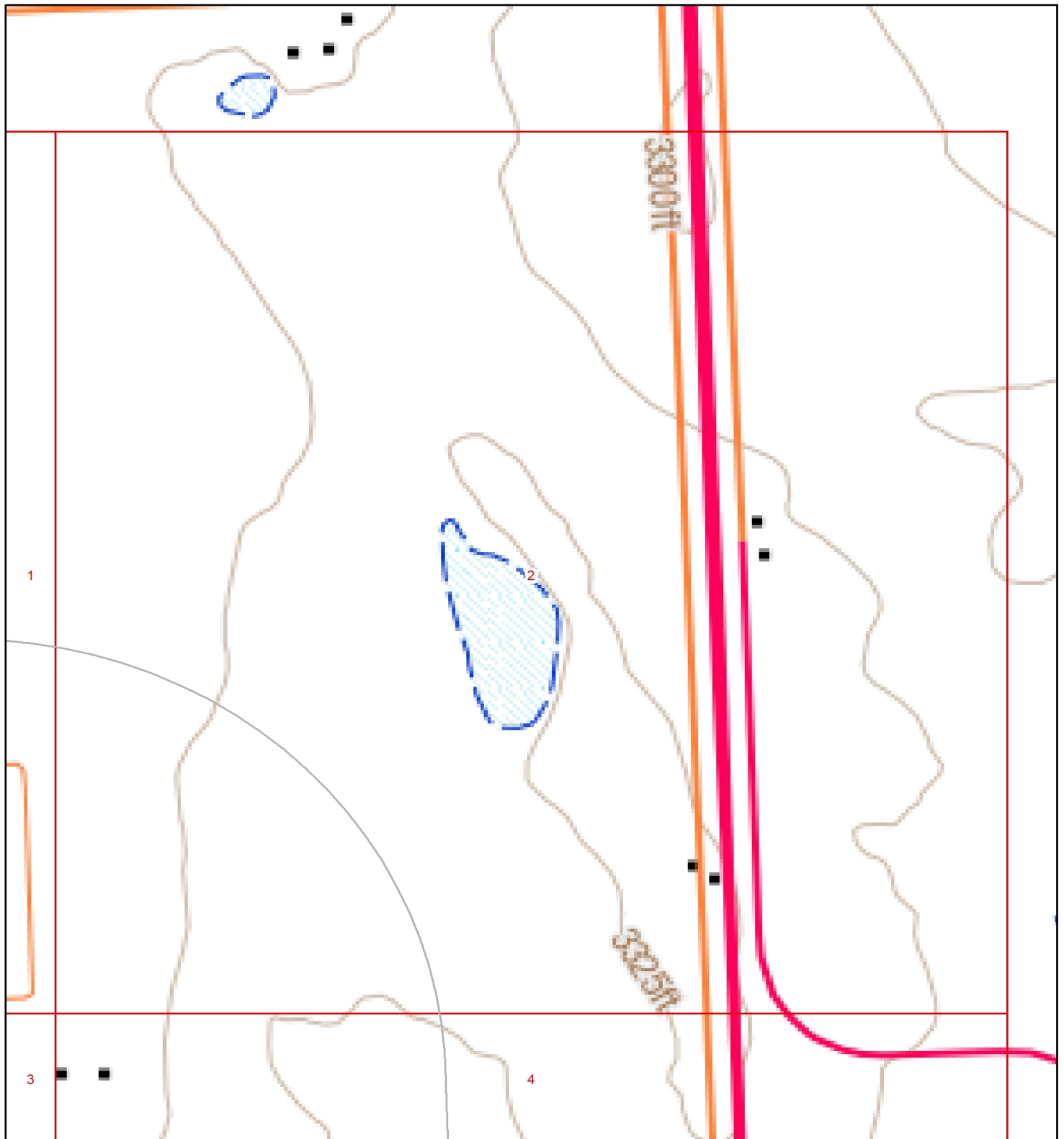
Legend available at ftp://ftp.geogratis.gc.ca/pub/nrcan_mcan/raster/toporama/doc/Toporama_en_Legend.pdf

0.4 0.2 0 0.4 0.8 KM





Topographic Map - Page 1

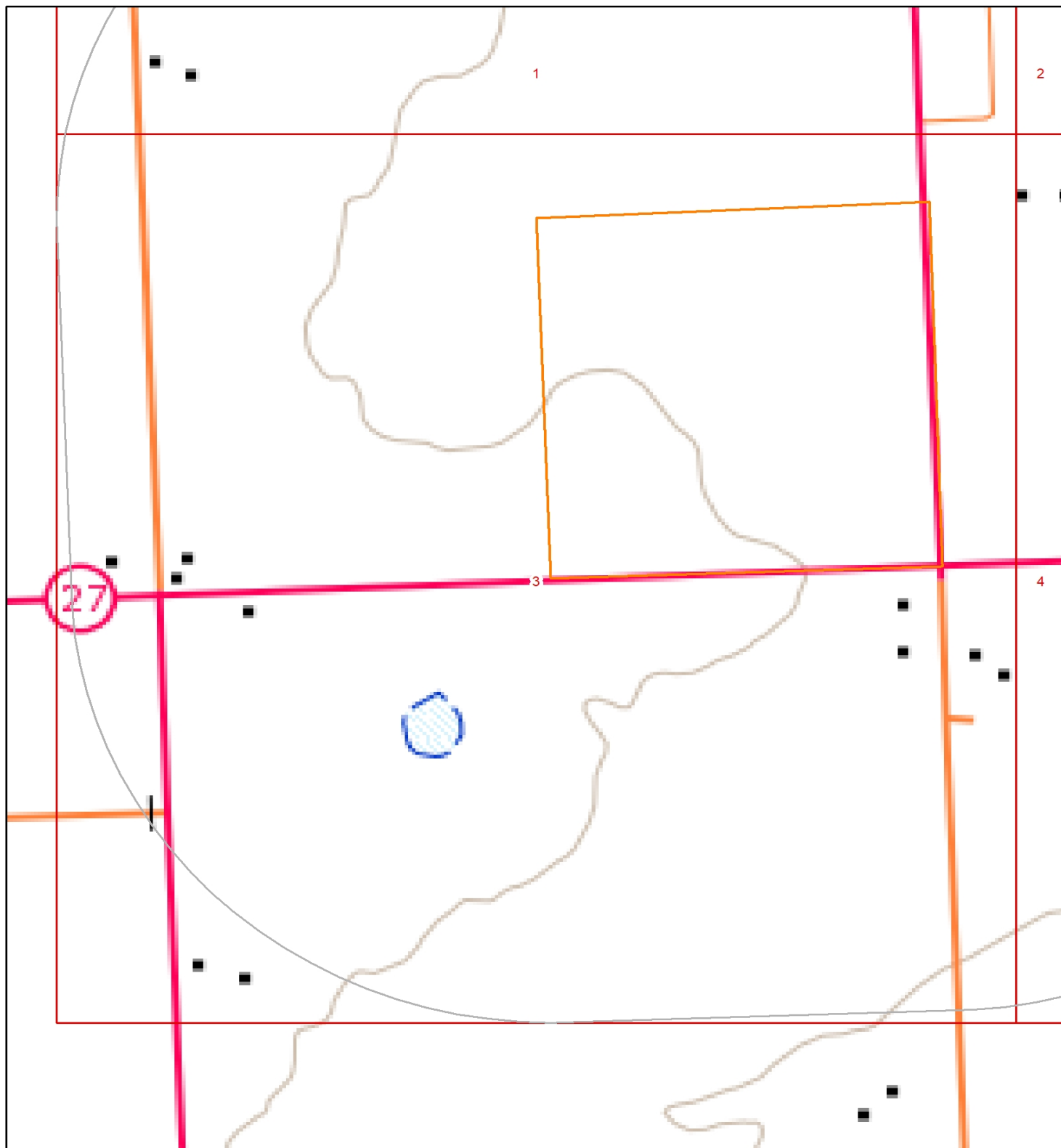


Topographic Map - Page 2

0.2 0.1 0 0.2 0.4 KM



Topographic Information

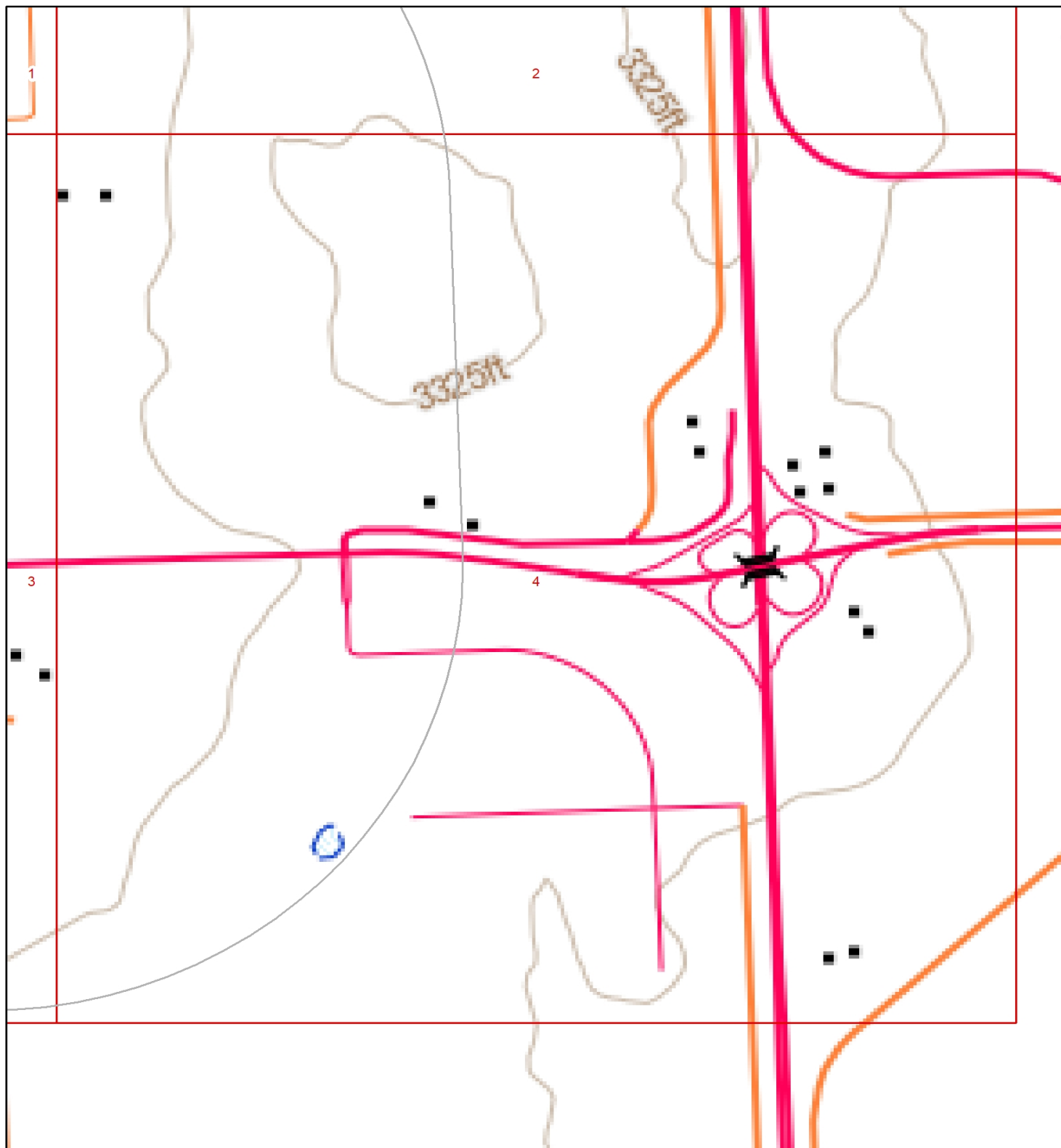


Topographic Map - Page 3



Data source: Toporama (1:50K) by Natural Resource Canada.





Topographic Map - Page 4

0.2 0.1 0 0.2 0.4 KM

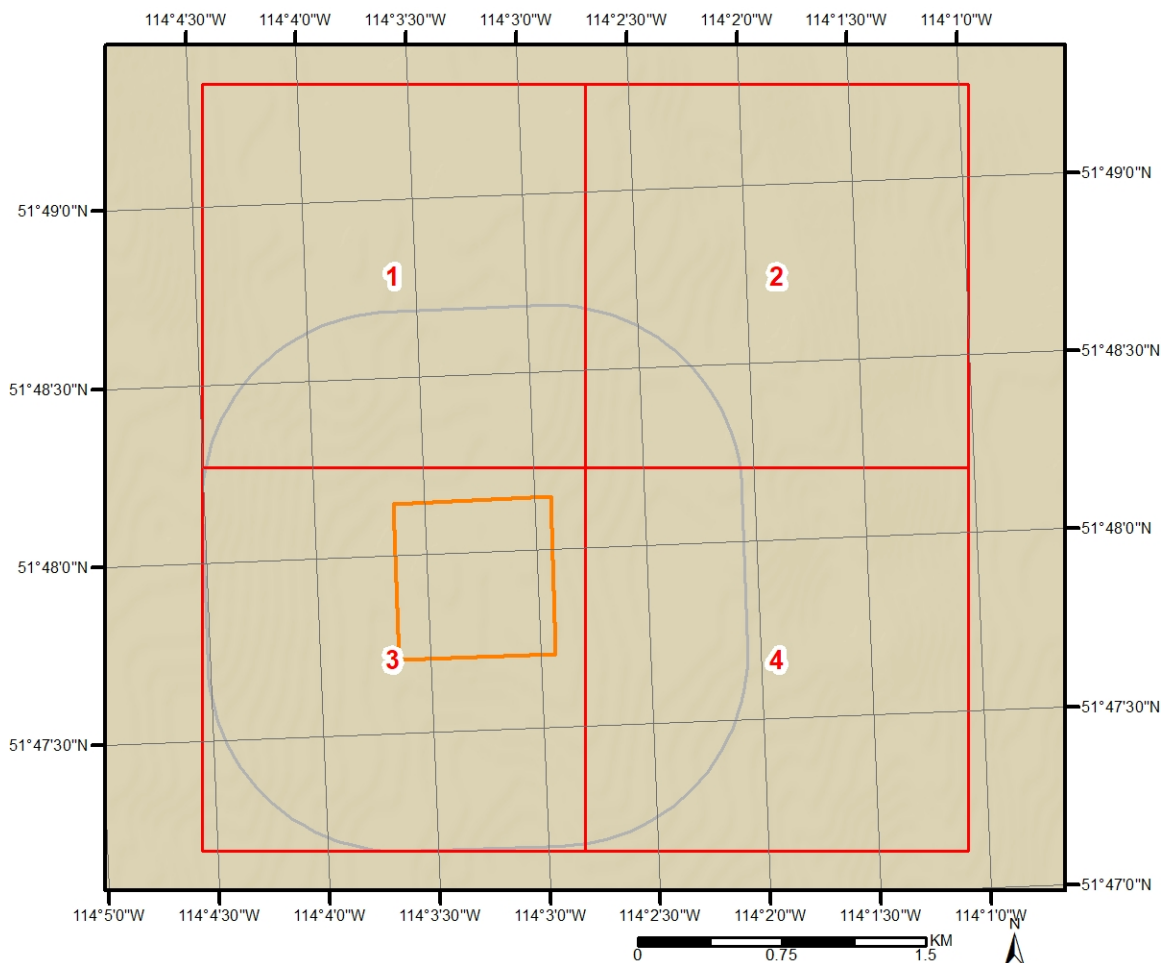


Topographic Information

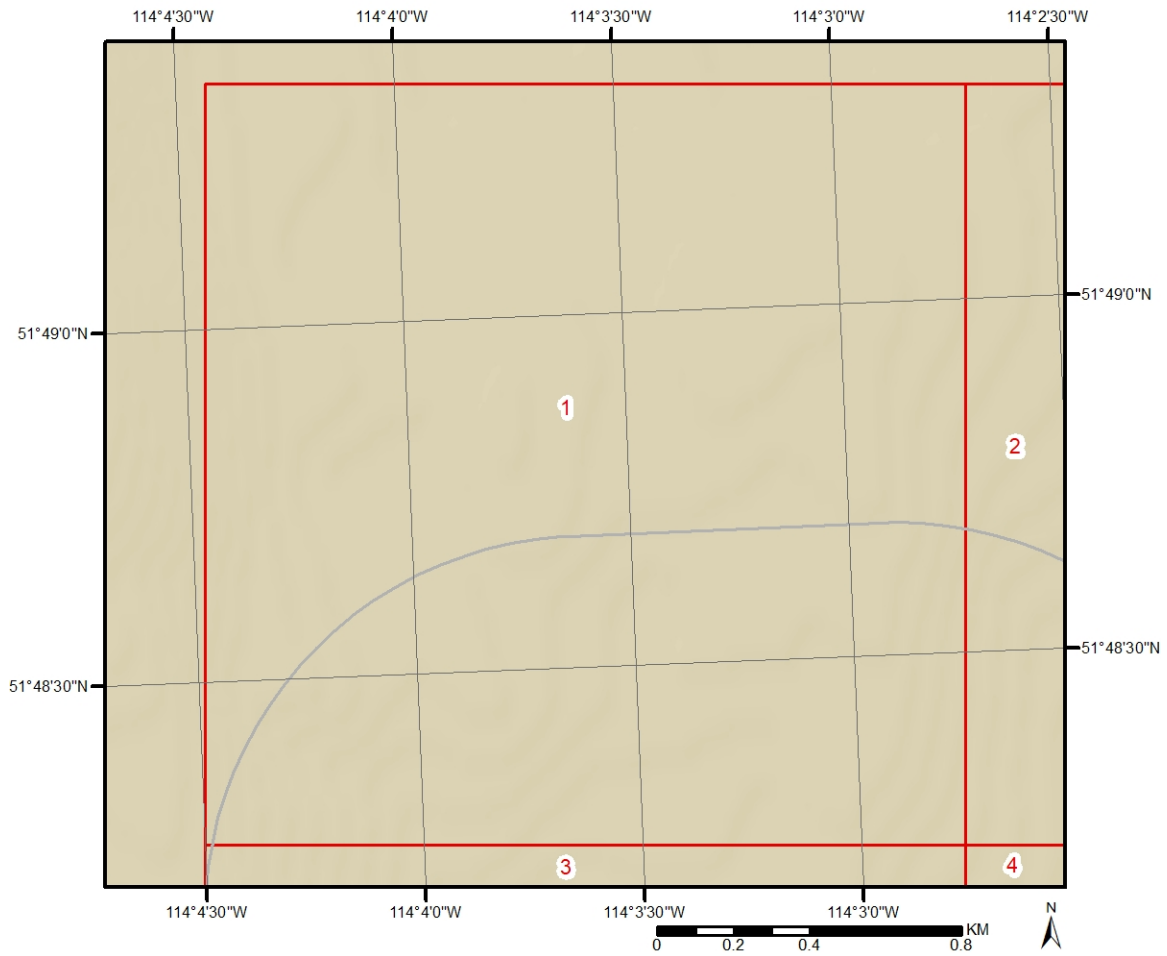
The previous topographic map(s) show general topographic information in the surrounding area of the project property, using Toporama data or a provincial source when available. Below are shaded relief map(s), derived from Digital Elevation data to depict terrain in further detail.

Topographic information at project property:

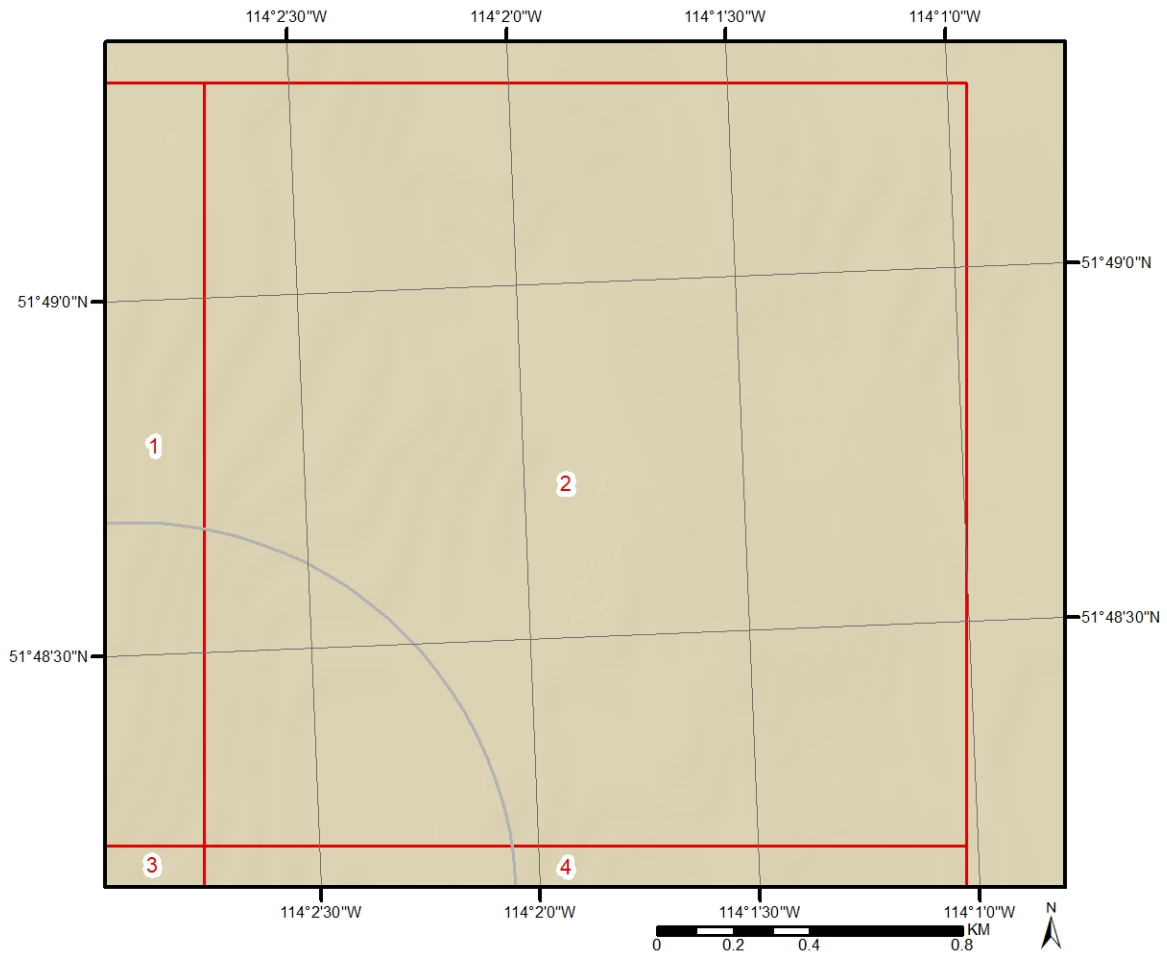
Elevation: 1,020.00 m
Slope Direction: W



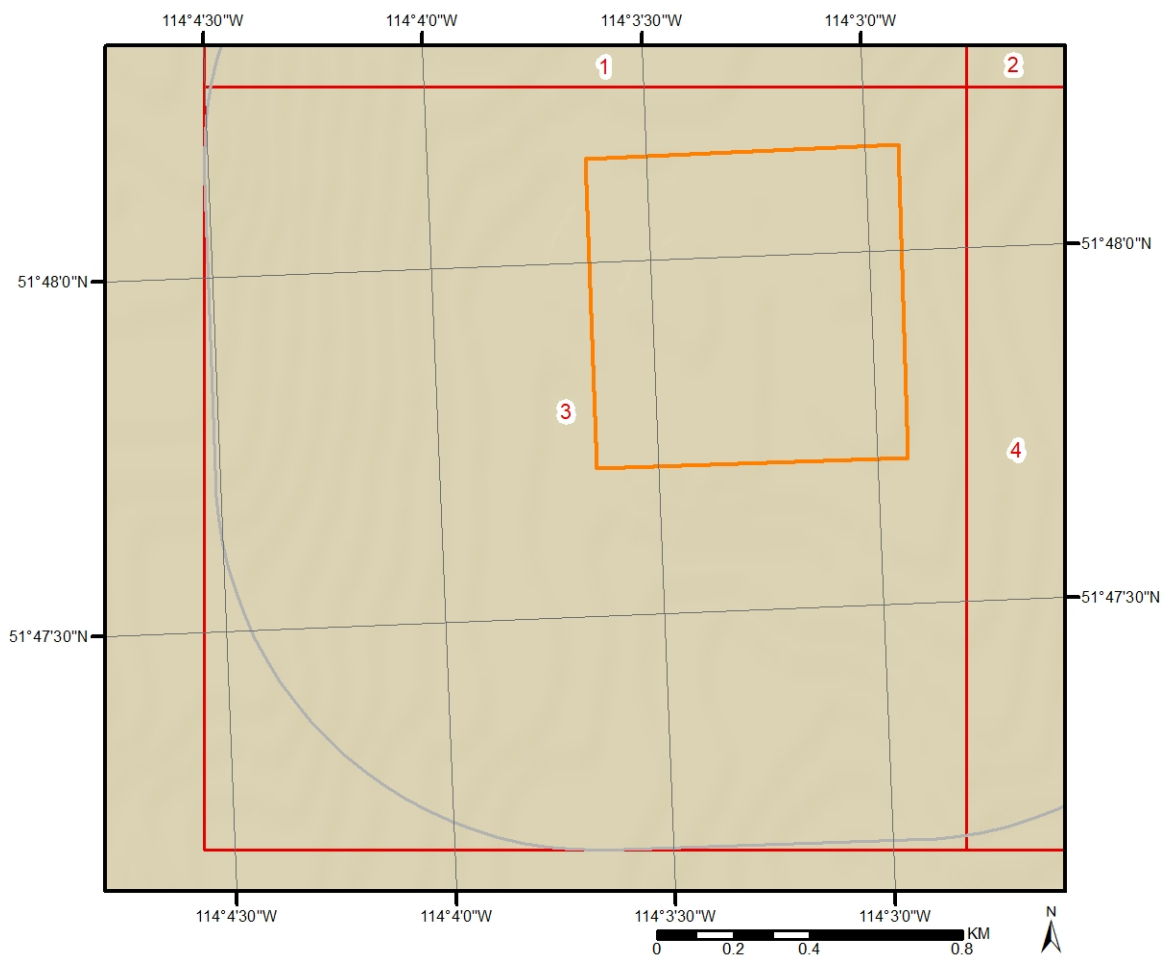
Topographic Information



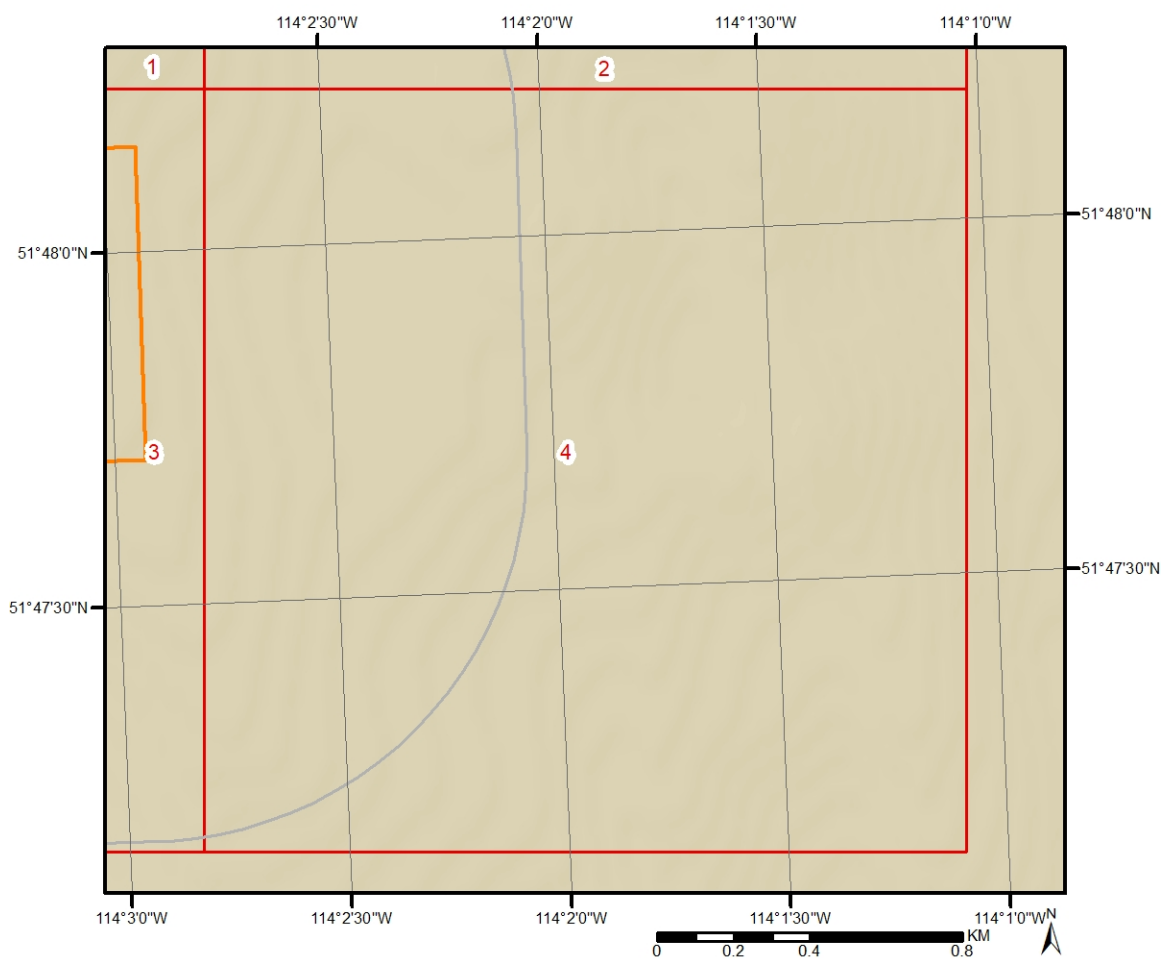
Topographic Information



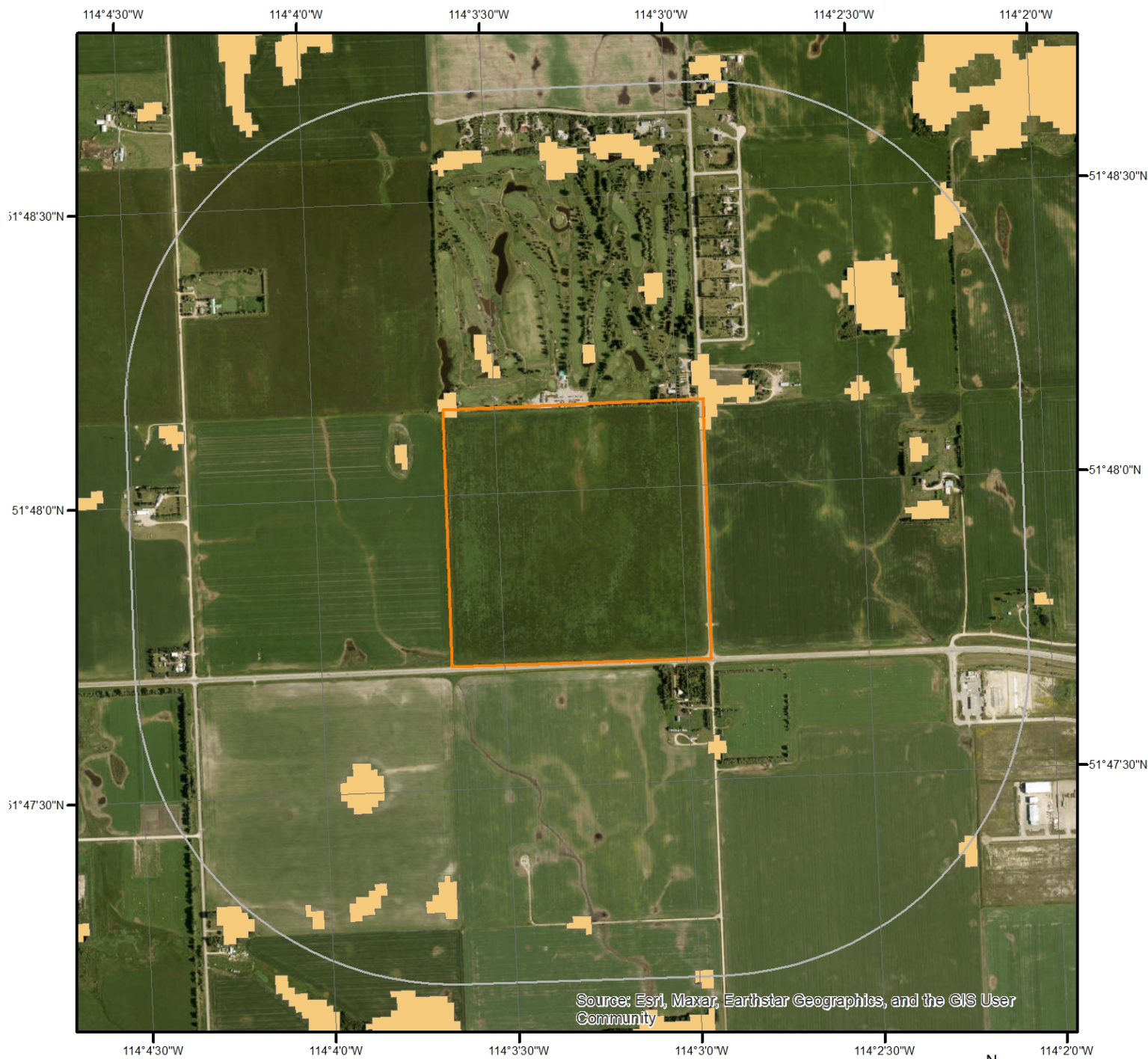
Topographic Information



Topographic Information




Hydrologic Information



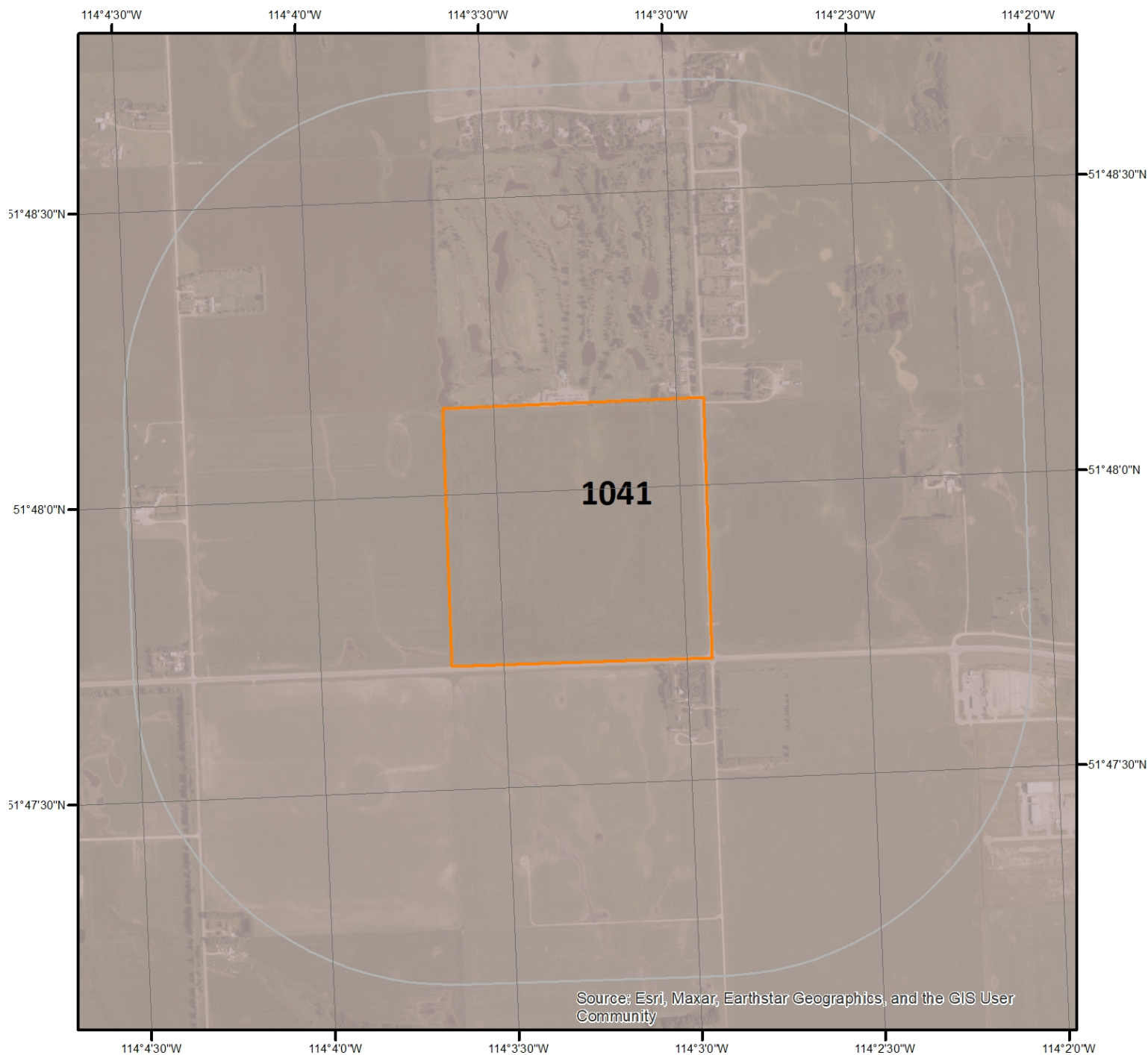
Wetland

This map shows wetland existence. Data coverage is shown to the right. Gray indicates no data available in the area.

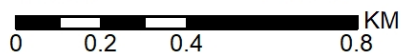
 Marsh



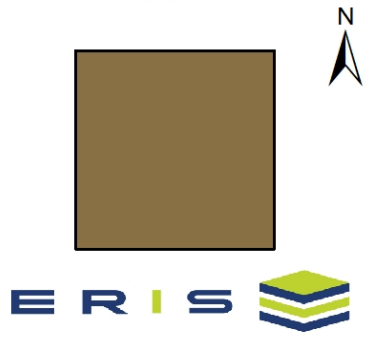
Geologic Information



Bedrock Geology



This map shows bedrock geologic units in the area. Please refer to the report for detailed descriptions. Data coverage is shown to the right. Gray indicates no data available in the area.



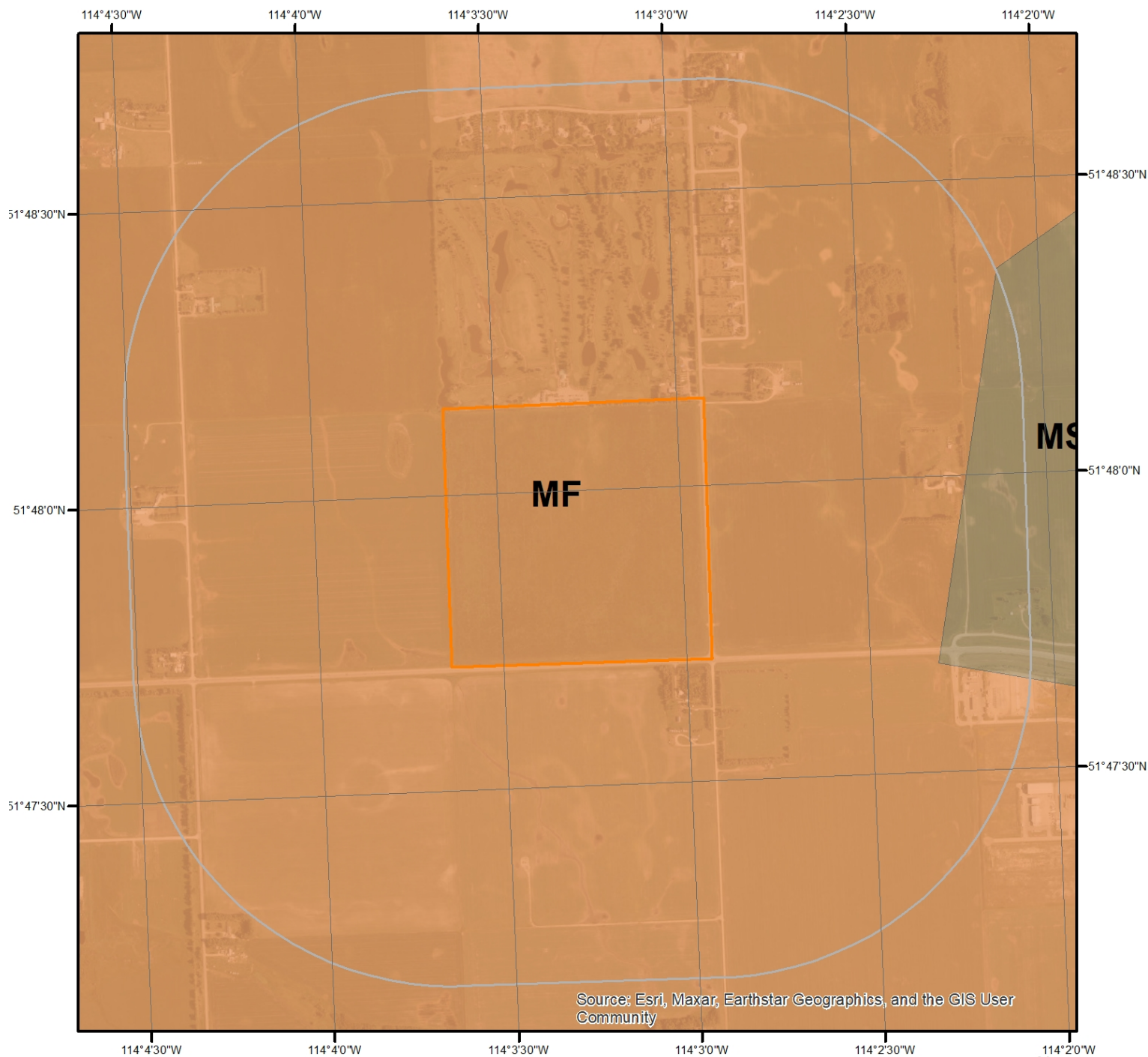
Geologic Information

Detailed bedrock geology information about each unit within the search radius is provided below.

Unit ID 1041

Unit Name:	Paskapoo Formation
Lithology:	Sandstone, siltstone, and mudstone
Environment:	Alluvial
Age:	Paleogene
Geological Regions:	Plains

Geologic Information



Surficial Geology

This map shows surficial geology labels in the area. Please refer to the report for detailed descriptions. Data coverage is shown to the right. Gray indicates no data available in the area.



Geologic Information

Detailed surficial geology information about each unit within the search radius is provided below.

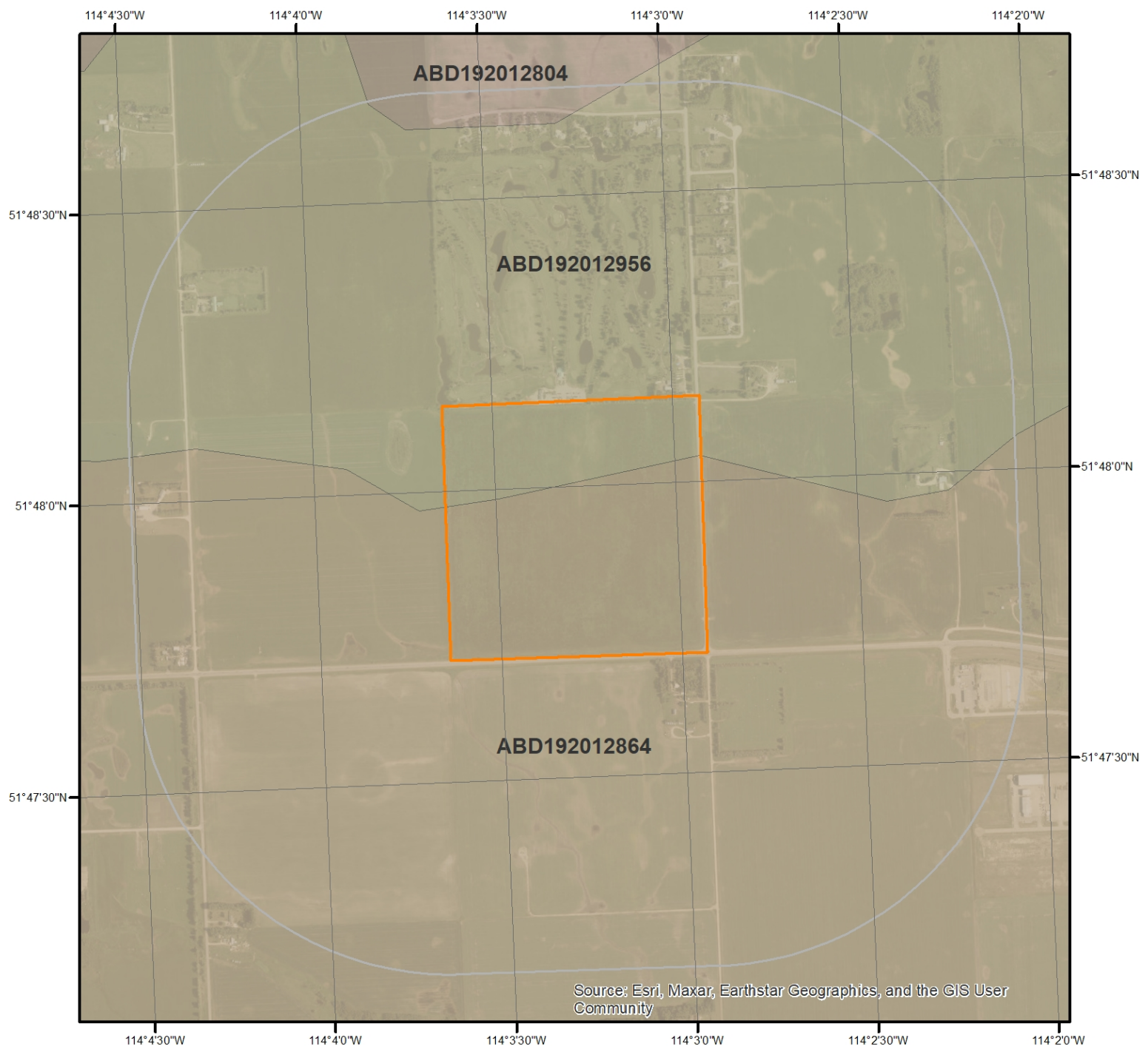
Unit ID MF

Unit Name:	Fluted moraine
Unit Description:	Glacially streamlined sediments, mainly till. Terrain varies from alternating furrows and ridges to nearly equidimensional smoothed hills; all landforms parallel the local ice flow direction; includes flutes, drumlins and drumlinoids.
Texture:	Sediment is mainly till may locally include stratified glaciolacustrine and/or glaciofluvial sediments.
Age:	Pleistocene

Unit ID MS

Unit Name:	Stagnant Ice Moraine
Unit Description:	Sediments resulting from the collapse and slumping of englacial and supraglacial debris in response to the melting of buried stagnant ice near the glacial margin. Characterized by low to high-relief hummocky topography.
Texture:	Sediment is mainly till but locally includes stratified glaciolacustrine or glaciofluvial sediments.
Age:	Pleistocene

Soil Information



Soil Map

This map shows soil units around the target property. Please refer to the report for detailed soil descriptions.



Soil Information

Detailed soil information about each unit within the search radius is provided below.

Alberta Detailed Soil Survey (DSS3)

Polygon ID: ABD192012804

Component

Component ID:	ABD19201280401	Slope Steepness(%):	2
Soil Name ID:	ABATL~~~~~A	Slope Length(m):	225
Component No:	1		
Occupied by Component (%)	40		
Surface Stoniness Class:	Slightly stony		

Soil Name

Soil Name:	ANTLER
Kind of Surface Material:	Mineral
Soil Drainage Class:	Well drained
Water Table Characteristics:	Never
Parent Material 1, 2, 3:	Moderately Fine; Not Applicable; Not Applicable
Mode of Deposition 1, 2, 3:	Till (Morainal); Not Applicable; Not Applicable
Parent Material Chemical Property:	Moderately / Very Strongly Calcareous; Not Applicable; Not Applicable
Layer Restricting Root Growth:	No root restricting layer
Type of Root-Restricting Layer:	n/a

Soil Layer

Layer No:	1	Very Fine Sand(%):	9
Horizon:	Ap	Total Sand(%):	25
Depth(cm):	0-20	Total Silt(%):	45
pH in Calc Chloride:	5.7	Total Clay(%):	30
Saturated Hydraulic Conductivity(cm/h):	10	Organic Carbon(%):	4
Electrical conductivity (dS/m):	0		
Layer No:	2	Very Fine Sand(%):	9
Horizon:	Bm	Total Sand(%):	25
Depth(cm):	20-60	Total Silt(%):	45
pH in Calc Chloride:	6.3	Total Clay(%):	30

Soil Information

Saturated Hydraulic Conductivity(cm/h):	10	Organic Carbon(%):	1.3
Electrical conductivity (dS/m):	0		
Layer No:	3	Very Fine Sand(%):	11
Horizon:	Ck	Total Sand(%):	30
Depth(cm):	60-75	Total Silt(%):	50
pH in Calc Chloride:	7.7	Total Clay(%):	20
Saturated Hydraulic Conductivity(cm/h):	3	Organic Carbon(%):	0
Electrical conductivity (dS/m):	0		
Layer No:	4	Very Fine Sand(%):	8
Horizon:	Ck	Total Sand(%):	20
Depth(cm):	75-100	Total Silt(%):	50
pH in Calc Chloride:	7.6	Total Clay(%):	30
Saturated Hydraulic Conductivity(cm/h):	1	Organic Carbon(%):	0
Electrical conductivity (dS/m):	0		

Component

Component ID:	ABD19201280402	Slope Steepness(%):	3
Soil Name ID:	ABDDY~~~~~A	Slope Length(m):	115
Component No:	2		
Occupied by Component (%)	40		
Surface Stoniness Class:	Slightly stony		

Soil Name

Soil Name:	DIDSBURY
Kind of Surface Material:	Mineral
Soil Drainage Class:	Well drained
Water Table Characteristics:	Never
Parent Material 1, 2, 3:	Moderately Fine; Not Applicable; Not Applicable
Mode of Deposition 1, 2, 3:	Till (Morainal); Not Applicable; Not Applicable
Parent Material Chemical Property:	Moderately / Very Strongly Calcareous; Not Applicable; Not Applicable
Layer Restricting Root Growth:	No root restricting layer
Type of Root-Restricting Layer:	n/a

Soil Layer

Soil Information

Layer No:	1	Very Fine Sand(%):	11
Horizon:	Ap	Total Sand(%):	39
Depth(cm):	0-18	Total Silt(%):	36
pH in Calc Chloride:	7.3	Total Clay(%):	25
Saturated Hydraulic Conductivity(cm/h):	10	Organic Carbon(%):	4
Electrical conductivity (dS/m):	0		

Layer No:	2	Very Fine Sand(%):	11
Horizon:	Ah	Total Sand(%):	39
Depth(cm):	18-22	Total Silt(%):	36
pH in Calc Chloride:	7.3	Total Clay(%):	25
Saturated Hydraulic Conductivity(cm/h):	30	Organic Carbon(%):	7
Electrical conductivity (dS/m):	0		

Layer No:	3	Very Fine Sand(%):	11
Horizon:	Ah	Total Sand(%):	35
Depth(cm):	22-60	Total Silt(%):	40
pH in Calc Chloride:	8.2	Total Clay(%):	25
Saturated Hydraulic Conductivity(cm/h):	30	Organic Carbon(%):	5
Electrical conductivity (dS/m):	0		

Layer No:	4	Very Fine Sand(%):	12
Horizon:	Bm	Total Sand(%):	40
Depth(cm):	60-90	Total Silt(%):	40
pH in Calc Chloride:	8.2	Total Clay(%):	20
Saturated Hydraulic Conductivity(cm/h):	10	Organic Carbon(%):	1
Electrical conductivity (dS/m):	0		

Layer No:	5	Very Fine Sand(%):	12
Horizon:	Ck	Total Sand(%):	40
Depth(cm):	90-100	Total Silt(%):	30
pH in Calc Chloride:	8.2	Total Clay(%):	30
Saturated Hydraulic Conductivity(cm/h):	1	Organic Carbon(%):	0
Electrical conductivity (dS/m):	0		

Component

Component ID:	ABD19201280403	Slope Steepness(%):	2
Soil Name ID:	ABLPN~~~~~N	Slope Length(m):	50
Component No:	3		

Soil Information

Occupied by Component 20
(%):
Surface Stoniness Slightly stony
Class:

Soil Name

Soil Name: LONEPINE
Kind of Surface Material: Mineral
Soil Drainage Class: Well drained
Water Table Never
Charateristics:
Parent Material 1, 2, 3: Medium; Moderately Fine; Not Applicable
Mode of Deposition 1, 2, 3: Glaciolacustrine; Till (Morainal); Not Applicable
Parent Material Chemical Property: Moderately / Very Strongly Calcareous; Undifferentiated; Not Applicable
Layer Restricting Root Growth: No root restricting layer
Type of Root-Restricting Layer: n/a

Soil Layer

Layer No:	1	Very Fine Sand(%):	3
Horizon:	Ah	Total Sand(%):	43
Depth(cm):	0-35	Total Silt(%):	39
pH in Calc Chloride:	6.5	Total Clay(%):	18
Saturated Hydraulic Conductivity(cm/h):	30	Organic Carbon(%):	5.2
Electrical conductivity (dS/m):	0		

Layer No:	2	Very Fine Sand(%):	4
Horizon:	Bm	Total Sand(%):	51
Depth(cm):	35-56	Total Silt(%):	29
pH in Calc Chloride:	6.5	Total Clay(%):	20
Saturated Hydraulic Conductivity(cm/h):	10	Organic Carbon(%):	0.4
Electrical conductivity (dS/m):	0		

Layer No:	3	Very Fine Sand(%):	3
Horizon:	Bm	Total Sand(%):	42
Depth(cm):	56-81	Total Silt(%):	37
pH in Calc Chloride:	6.7	Total Clay(%):	21
Saturated Hydraulic Conductivity(cm/h):	10	Organic Carbon(%):	0.6
Electrical conductivity (dS/m):	0		

Layer No:	4	Very Fine Sand(%):	2
-----------	---	--------------------	---

Soil Information

Horizon:	Ck	Total Sand(%):	18
Depth(cm):	81-91	Total Silt(%):	56
pH in Calc Chloride:	7.3	Total Clay(%):	26
Saturated Hydraulic Conductivity(cm/h):	3	Organic Carbon(%):	0
Electrical conductivity (dS/m):	0		
Layer No:	5	Very Fine Sand(%):	10
Horizon:	Ck	Total Sand(%):	35
Depth(cm):	91-120	Total Silt(%):	30
pH in Calc Chloride:	7.4	Total Clay(%):	35
Saturated Hydraulic Conductivity(cm/h):	1	Organic Carbon(%):	0
Electrical conductivity (dS/m):	0		

Polygon ID: ABD192012864

Component

Component ID:	ABD19201286401	Slope Steepness(%):	3
Soil Name ID:	ABATL~~~~~A	Slope Length(m):	175
Component No:	1		
Occupied by Component (%)	50		
Surface Stoniness Class:	Slightly stony		

Soil Name

Soil Name:	ANTLER
Kind of Surface Material:	Mineral
Soil Drainage Class:	Well drained
Water Table Characteristics:	Never
Parent Material 1, 2, 3:	Moderately Fine; Not Applicable; Not Applicable
Mode of Deposition 1, 2, 3:	Till (Morainal); Not Applicable; Not Applicable
Parent Material Chemical Property:	Moderately / Very Strongly Calcareous; Not Applicable; Not Applicable
Layer Restricting Root Growth:	No root restricting layer
Type of Root-Restricting Layer:	n/a

Soil Layer

Layer No:	1	Very Fine Sand(%):	9
-----------	---	--------------------	---

Soil Information

Horizon:	Ap	Total Sand(%):	25
Depth(cm):	0-20	Total Silt(%):	45
pH in Calc Chloride:	5.7	Total Clay(%):	30
Saturated Hydraulic Conductivity(cm/h):	10	Organic Carbon(%):	4
Electrical conductivity (dS/m):	0		
Layer No:	2	Very Fine Sand(%):	9
Horizon:	Bm	Total Sand(%):	25
Depth(cm):	20-60	Total Silt(%):	45
pH in Calc Chloride:	6.3	Total Clay(%):	30
Saturated Hydraulic Conductivity(cm/h):	10	Organic Carbon(%):	1.3
Electrical conductivity (dS/m):	0		
Layer No:	3	Very Fine Sand(%):	11
Horizon:	Ck	Total Sand(%):	30
Depth(cm):	60-75	Total Silt(%):	50
pH in Calc Chloride:	7.7	Total Clay(%):	20
Saturated Hydraulic Conductivity(cm/h):	3	Organic Carbon(%):	0
Electrical conductivity (dS/m):	0		
Layer No:	4	Very Fine Sand(%):	8
Horizon:	Ck	Total Sand(%):	20
Depth(cm):	75-100	Total Silt(%):	50
pH in Calc Chloride:	7.6	Total Clay(%):	30
Saturated Hydraulic Conductivity(cm/h):	1	Organic Carbon(%):	0
Electrical conductivity (dS/m):	0		

Component

Component ID:	ABD19201286402	Slope Steepness(%):	3
Soil Name ID:	ABLPN~~~~~N	Slope Length(m):	165
Component No:	2		
Occupied by Component (%)	50		
Surface Stoniness Class:	Slightly stony		

Soil Name

Soil Name:	LONEPINE
Kind of Surface Material:	Mineral
Soil Drainage Class:	Well drained

Soil Information

Water Table	Never
Charateristics:	
Parent Material 1, 2, 3:	Medium; Moderately Fine; Not Applicable
Mode of Deposition 1, 2, 3:	Glaciolacustrine; Till (Morainal); Not Applicable
Parent Material Chemical Property:	Moderately / Very Strongly Calcareous; Undifferentiated; Not Applicable
Layer Restricting Root Growth:	No root restricting layer
Type of Root-Restricting Layer:	n/a

Soil Layer

Layer No:	1	Very Fine Sand(%):	3
Horizon:	Ah	Total Sand(%):	43
Depth(cm):	0-35	Total Silt(%):	39
pH in Calc Chloride:	6.5	Total Clay(%):	18
Saturated Hydraulic Conductivity(cm/h):	30	Organic Carbon(%):	5.2
Electrical conductivity (dS/m):	0		
Layer No:	2	Very Fine Sand(%):	4
Horizon:	Bm	Total Sand(%):	51
Depth(cm):	35-56	Total Silt(%):	29
pH in Calc Chloride:	6.5	Total Clay(%):	20
Saturated Hydraulic Conductivity(cm/h):	10	Organic Carbon(%):	0.4
Electrical conductivity (dS/m):	0		
Layer No:	3	Very Fine Sand(%):	3
Horizon:	Bm	Total Sand(%):	42
Depth(cm):	56-81	Total Silt(%):	37
pH in Calc Chloride:	6.7	Total Clay(%):	21
Saturated Hydraulic Conductivity(cm/h):	10	Organic Carbon(%):	0.6
Electrical conductivity (dS/m):	0		
Layer No:	4	Very Fine Sand(%):	2
Horizon:	Ck	Total Sand(%):	18
Depth(cm):	81-91	Total Silt(%):	56
pH in Calc Chloride:	7.3	Total Clay(%):	26
Saturated Hydraulic Conductivity(cm/h):	3	Organic Carbon(%):	0
Electrical conductivity (dS/m):	0		
Layer No:	5	Very Fine Sand(%):	10
Horizon:	Ck	Total Sand(%):	35
Depth(cm):	91-120	Total Silt(%):	30

Soil Information

pH in Calc Chloride:	7.4	Total Clay(%):	35
Saturated Hydraulic Conductivity(cm/h):	1	Organic Carbon(%):	0
Electrical conductivity (dS/m):	0		

Polygon ID: ABD192012956

Component

Component ID:	ABD19201295601	Slope Steepness(%):	3
Soil Name ID:	ABATL~~~~~A	Slope Length(m):	225
Component No:	1		
Occupied by Component (%):	60		
Surface Stoniness Class:	Slightly stony		

Soil Name

Soil Name:	ANTLER
Kind of Surface Material:	Mineral
Soil Drainage Class:	Well drained
Water Table Characteristics:	Never
Parent Material 1, 2, 3:	Moderately Fine; Not Applicable; Not Applicable
Mode of Deposition 1, 2, 3:	Till (Morainal); Not Applicable; Not Applicable
Parent Material Chemical Property:	Moderately / Very Strongly Calcareous; Not Applicable; Not Applicable
Layer Restricting Root Growth:	No root restricting layer
Type of Root-Restricting Layer:	n/a

Soil Layer

Layer No:	1	Very Fine Sand(%):	9
Horizon:	Ap	Total Sand(%):	25
Depth(cm):	0-20	Total Silt(%):	45
pH in Calc Chloride:	5.7	Total Clay(%):	30
Saturated Hydraulic Conductivity(cm/h):	10	Organic Carbon(%):	4
Electrical conductivity (dS/m):	0		
Layer No:	2	Very Fine Sand(%):	9
Horizon:	Bm	Total Sand(%):	25
Depth(cm):	20-60	Total Silt(%):	45

Soil Information

pH in Calc Chloride:	6.3	Total Clay(%):	30
Saturated Hydraulic Conductivity(cm/h):	10	Organic Carbon(%):	1.3
Electrical conductivity (dS/m):	0		
Layer No:	3	Very Fine Sand(%):	11
Horizon:	Ck	Total Sand(%):	30
Depth(cm):	60-75	Total Silt(%):	50
pH in Calc Chloride:	7.7	Total Clay(%):	20
Saturated Hydraulic Conductivity(cm/h):	3	Organic Carbon(%):	0
Electrical conductivity (dS/m):	0		
Layer No:	4	Very Fine Sand(%):	8
Horizon:	Ck	Total Sand(%):	20
Depth(cm):	75-100	Total Silt(%):	50
pH in Calc Chloride:	7.6	Total Clay(%):	30
Saturated Hydraulic Conductivity(cm/h):	1	Organic Carbon(%):	0
Electrical conductivity (dS/m):	0		

Component

Component ID:	ABD19201295602	Slope Steepness(%):	3
Soil Name ID:	ABDDY~~~~~A	Slope Length(m):	115
Component No:	2		
Occupied by Component (%):	20		
Surface Stoniness Class:	Slightly stony		

Soil Name

Soil Name:	DIDSBURY
Kind of Surface Material:	Mineral
Soil Drainage Class:	Well drained
Water Table Characteristics:	Never
Parent Material 1, 2, 3:	Moderately Fine; Not Applicable; Not Applicable
Mode of Deposition 1, 2, 3:	Till (Morainal); Not Applicable; Not Applicable
Parent Material Chemical Property:	Moderately / Very Strongly Calcareous; Not Applicable; Not Applicable
Layer Restricting Root Growth:	No root restricting layer
Type of Root-Restricting Layer:	n/a

Soil Information

Soil Layer

Layer No:	1	Very Fine Sand(%):	11
Horizon:	Ap	Total Sand(%):	39
Depth(cm):	0-18	Total Silt(%):	36
pH in Calc Chloride:	7.3	Total Clay(%):	25
Saturated Hydraulic Conductivity(cm/h):	10	Organic Carbon(%):	4
Electrical conductivity (dS/m):	0		
Layer No:	2	Very Fine Sand(%):	11
Horizon:	Ah	Total Sand(%):	39
Depth(cm):	18-22	Total Silt(%):	36
pH in Calc Chloride:	7.3	Total Clay(%):	25
Saturated Hydraulic Conductivity(cm/h):	30	Organic Carbon(%):	7
Electrical conductivity (dS/m):	0		
Layer No:	3	Very Fine Sand(%):	11
Horizon:	Ah	Total Sand(%):	35
Depth(cm):	22-60	Total Silt(%):	40
pH in Calc Chloride:	8.2	Total Clay(%):	25
Saturated Hydraulic Conductivity(cm/h):	30	Organic Carbon(%):	5
Electrical conductivity (dS/m):	0		
Layer No:	4	Very Fine Sand(%):	12
Horizon:	Bm	Total Sand(%):	40
Depth(cm):	60-90	Total Silt(%):	40
pH in Calc Chloride:	8.2	Total Clay(%):	20
Saturated Hydraulic Conductivity(cm/h):	10	Organic Carbon(%):	1
Electrical conductivity (dS/m):	0		
Layer No:	5	Very Fine Sand(%):	12
Horizon:	Ck	Total Sand(%):	40
Depth(cm):	90-100	Total Silt(%):	30
pH in Calc Chloride:	8.2	Total Clay(%):	30
Saturated Hydraulic Conductivity(cm/h):	1	Organic Carbon(%):	0
Electrical conductivity (dS/m):	0		

Component

Component ID:	ABD19201295603	Slope Steepness(%):	0.5
Soil Name ID:	ABZGW~~~~~N	Slope Length(m):	25

Soil Information

Component No: 3
Occupied by Component (%): 20
Surface Stoniness Class: Slightly stony

Soil Name

Soil Name: MISC.GLEYSOL
Kind of Surface Material: Mineral
Soil Drainage Class: Poorly drained
Water Table Charateristics: Unspecified period
Parent Material 1, 2, 3: Undifferentiated; Not Applicable; Not Applicable
Mode of Deposition 1, 2, 3: Undifferentiated mineral; Not Applicable; Not Applicable
Parent Material Chemical Property: Undifferentiated; Not Applicable; Not Applicable
Layer Restricting Root Growth: No root restricting layer
Type of Root-Restricting Layer: n/a

Soil Layer

Layer No:	1	Very Fine Sand(%):	12
Horizon:	Ah	Total Sand(%):	40
Depth(cm):	0-20	Total Silt(%):	40
pH in Calc Chloride:	6.5	Total Clay(%):	20
Saturated Hydraulic Conductivity(cm/h):	30	Organic Carbon(%):	5
Electrical conductivity (dS/m):	0		

Layer No:	2	Very Fine Sand(%):	11
Horizon:	Bg	Total Sand(%):	40
Depth(cm):	20-50	Total Silt(%):	30
pH in Calc Chloride:	6.5	Total Clay(%):	30
Saturated Hydraulic Conductivity(cm/h):	10	Organic Carbon(%):	2
Electrical conductivity (dS/m):	0		

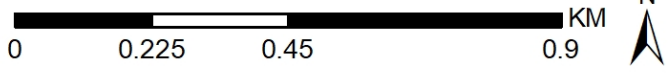
Layer No:	3	Very Fine Sand(%):	11
Horizon:	Ckg	Total Sand(%):	40
Depth(cm):	50-100	Total Silt(%):	30
pH in Calc Chloride:	7	Total Clay(%):	30
Saturated Hydraulic Conductivity(cm/h):	1	Organic Carbon(%):	1
Electrical conductivity (dS/m):	0		

Wells and Additional Sources



Wells & Additional Sources

- | | | |
|------------------|--------|------------------------------|
| Project Property | Buffer | Sites with Higher Elevation |
| Buffer | Buffer | Sites with Same Elevation |
| Buffer | Buffer | Sites with Lower Elevation |
| Buffer | Buffer | Sites with Unknown Elevation |
| Buffer | Buffer | World Imagery |
| Buffer | Buffer | |
| Buffer | Buffer | |
| Buffer | Buffer | |



Wells and Additional Sources



Wells & Additional Sources - Page 1

- ▲ Sites with Higher Elevation
- Sites with Same Elevation
- ▼ Sites with Lower Elevation
- Sites with Unknown Elevation



Wells and Additional Sources Summary

Federal Sources

National Energy Board Wells

Map Key	ID	Distance (m)	Direction
No records found			

Provincial Sources

AER Incidents & Spills

Map Key	ID	Distance (m)	Direction
No records found			

Alberta Oil and Gas Wells

Map Key	ID	Distance (m)	Direction
No records found			

Alberta Orphan Wells

Map Key	ID	Distance (m)	Direction
No records found			

Alberta Water Well Information Database

Map Key	Well ID	Distance (m)	Direction
3	416138	0.	-
3	416139	0.	-
4	409796	219.4	SSE

Approved Oilfield Waste Management Facilities

Map Key	ID	Distance (m)	Direction
No records found			

Groundwater Well Network

Map Key	ID	Distance (m)	Direction
No records found			

Horizontal Wells

Map Key	ID	Distance (m)	Direction
No records found			

Wells and Additional Sources Summary

Oil and Gas Facilities - ST102 & ST50

Map Key	ID	Distance (m)	Direction
	No records found		

Well Licenses

Map Key	Unique Well ID	Distance (m)	Direction
2	00/07-03-033-01W5/0	0.	-
2		0.	-

Private Sources

Oil and Gas Wells

Map Key	ID	Distance (m)	Direction
	No records found		

Wells and Additional Sources Detail Report

Alberta Water Well Information Database

Map Key	Direction	Distance (km)	Distance (m)	Elevation (m)	DB
3	-	0.00	0.00	1,021.00	WWIS

Well ID:	416138	Elevation Source:	Estimated
Driller ID:	24254	Method of Drilling:	
Licence No:		GPS Obtained:	Not Verified
GIC Well ID:	416138	Boundary From:	
GOA Well Tag No:		Distance North:	
Elevation (ft):	3340.00000000	Distance South:	
Depth (ft):		Distance East:	
Date Completed:		Distance West:	
Proposed Use:		Additional Desc:	
Lot:		Validated?:	TRUE
Block:		Submitted?:	TRUE
Plan:		Location Locked?:	TRUE
Type of Work:		Longitude:	-114.05786400
Flowing Well:		Latitude:	51.80054300
Date Started:		LSD:	7
Water Req Per Day:		Section:	3
Gas Present:		Township:	33
Oil Present:		Range:	1
Flow Rate:		Meridian:	5
Drilling Company:		DLS Coordinates:	7-3-33-1-5
Owner Mailing Address:			
Driller Mailing Address:			

Well Report ID:	416138	Annular Seal Mat:	Formation Packer
Well Owner ID:	10685845	Annular Seal from:	0.00
Driller ID:	2533726	Annular Seal to:	120.00
Drill Company ID:	24254	Annular Seal Amt:	
Drill Instance ID:	8335154	Annular Seal Units:	
Drill Comp Well ID:		Drilling Method:	Rotary
Existing Well ID:		Drilling Start Dt:	1978/11/13
Date Received:	1978/12/11	Drilling End Dt:	1978/11/13
Type of Work:	New Well	Pack Type:	
Plug Date:		Pack Grain Size:	
Plug Material Type:		Pack Amount:	
Plug Mat Amount:		Pack Units:	
Plugged Units:		Loc Verify Method:	Not Verified
Well Use:	Industrial	Dist Casing Ground:	
Other Well Use:		Artesian Flow?:	FALSE
Total Depth Drill:	142.00	Artesian Flow Rate:	
Finish Well Depth:		Gas Depth:	

Wells and Additional Sources Detail Report

Casing Material:	Steel	Encounter Gas?:	FALSE
Casing OD:	4.50	Flow Ctrl Install?:	FALSE
Casing Thickness:	0.00	Recommended Rate:	0.00
Casing Bottom:	142.00	Recom Intake Depth:	0.00
Liner Material:		Pump Installed?:	TRUE
Liner OD:	0.00	Pump Install Depth:	
Liner Thickness:	0.00	Pump Model:	
Liner Top:	0.00	Pump Horsepower:	3
Liner Bottom:	0.00	Well Disinfected?:	FALSE
Perforation by:		Other Log:	
Screen Material:		Divert Water Src:	
Screen Size OD:	0.00	Divert Water Amt:	
Screen Attachment:		Diversion Dt/Time:	
Screen Top Fitting:		Is Submitted?:	TRUE
Screen Bot Fitting:		Is Validated?:	TRUE
Encounter Saline Water?:	FALSE		
Saline Water Depth:			
Potability Sample Taken?:	FALSE		
Potable Sample Sent to AENV?:	FALSE		
Approval Holder Sign Date:			
Drilling Report Given to Owner:	FALSE		
Model Output Rating:			
Remedial Action:			
Flow Control Description:			
Pump Type Installed:	SUB		
Created by:			
Submitted by:			
Additional Comments:	DRILLER STATES WATER IS SOFT.		

Well Owner ID: 10685845
 Owner Name: CANADIAN SUPERIOR
 PO Box:
 Address:
 City:
 Postal Code:
 Province:
 Country:

Driller ID: 2533726
 Last Name: DRILLER
 Middle Initial: NA
 First Name: UNKNOWN
 Journeyman No: 1
 Is Active?: TRUE

Wells and Additional Sources Detail Report

Starting Well ID: 2059200
Ending Well ID: 2059299
Last Well ID Used: 2059205
Company Name: ALL RITE DRILLING LTD.
Street Address: 7819 - 50 AVENUE
City: RED DEER
Province: AB
Country: AB
Postal Code:
E-Mail: gwinfo@gov.ab.ca
Is Active?: TRUE

Geophysical Log ID: 5921481
Log Type: Gamma
Log Taken?: FALSE
Sent to AENV?: FALSE

Geophysical Log ID: 5518406
Log Type: Electric
Log Taken?: FALSE
Sent to AENV?: FALSE

Borehole ID: 621294
Diameter: 0.000000
From: 0.000000
To: 142.000000

Depth: 80.000000
Water Bearing: FALSE
Colour:
Description:
Material: Clay

Depth: 135.000000
Water Bearing: FALSE
Colour:
Description:
Material: Coal

Wells and Additional Sources Detail Report

Depth: 130.000000
 Water Bearing: FALSE
 Colour:
 Description:
 Material: Shale

Depth: 142.000000
 Water Bearing: FALSE
 Colour:
 Description:
 Material: Shale

Pump Test ID: 10348602
 Test Date: 1978/11/13
 Start Time: 1900/01/12
 Taken from Top of Casing: FALSE
 Static Water Level: 90.00
 End Water Level:
 Water Removal Type: Pump
 Water Removal Rate: 20.00
 Removal Depth from: 0.00
 Reason for Short Test:

Map Key	Direction	Distance (km)	Distance (m)	Elevation (m)	DB
3	-	0.00	0.00	1,021.00	WWIS

Well ID:	416139	Elevation Source:	Estimated
Driller ID:	24254	Method of Drilling:	
Licence No:		GPS Obtained:	Not Verified
GIC Well ID:	416139	Boundary From:	
GOA Well Tag No:		Distance North:	
Elevation (ft):	3335.00000000	Distance South:	
Depth (ft):		Distance East:	
Date Completed:		Distance West:	
Proposed Use:		Additional Desc:	
Lot:		Validated?:	TRUE
Block:		Submitted?:	TRUE
Plan:		Location Locked?:	TRUE
Type of Work:		Longitude:	-114.05786400
Flowing Well:		Latitude:	51.80054300
Date Started:		LSD:	7
Water Req Per Day:		Section:	3
Gas Present:		Township:	33
Oil Present:		Range:	1

Wells and Additional Sources Detail Report

Flow Rate:		Meridian:	5
Drilling Company:		DLS Coordinates:	7-3-33-1-5
Owner Mailing Address:			
Driller Mailing Address:			
Well Report ID:	416139	Annular Seal Mat:	Formation Packer
Well Owner ID:	10685846	Annular Seal from:	0.00
Driller ID:	2533726	Annular Seal to:	120.00
Drill Company ID:	24254	Annular Seal Amt:	
Drill Instance ID:	8335154	Annular Seal Units:	
Drill Comp Well ID:		Drilling Method:	Rotary
Existing Well ID:		Drilling Start Dt:	1978/11/14
Date Received:	1978/12/11	Drilling End Dt:	1978/11/14
Type of Work:	New Well-Decommissioned	Pack Type:	
Plug Date:	1978/12/14	Pack Grain Size:	
Plug Material Type:	Cement	Pack Amount:	
Plug Mat Amount:		Pack Units:	
Plugged Units:		Loc Verify Method:	Not Verified
Well Use:	Industrial	Dist Casing Ground:	
Other Well Use:		Artesian Flow?:	FALSE
Total Depth Drill:	142.00	Artesian Flow Rate:	
Finish Well Depth:		Gas Depth:	
Casing Material:		Encounter Gas?:	FALSE
Casing OD:	0.00	Flow Ctrl Install?:	FALSE
Casing Thickness:	0.00	Recommended Rate:	0.00
Casing Bottom:	0.00	Recom Intake Depth:	0.00
Liner Material:	Steel	Pump Installed?:	TRUE
Liner OD:	4.50	Pump Install Depth:	
Liner Thickness:	0.00	Pump Model:	
Liner Top:	0.00	Pump Horsepower:	3
Liner Bottom:	142.00	Well Disinfected?:	FALSE
Perforation by:	Torch	Other Log:	
Screen Material:		Divert Water Src:	
Screen Size OD:	0.00	Divert Water Amt:	
Screen Attachment:		Diversion Dt/Time:	
Screen Top Fitting:		Is Submitted?:	TRUE
Screen Bot Fitting:		Is Validated?:	TRUE
Encounter Saline Water?:	FALSE		
Saline Water Depth:			
Potability Sample Taken?:	FALSE		
Potable Sample Sent to AENV?:	FALSE		
Approval Holder Sign Date:			
Drilling Report Given to Owner:	FALSE		
Model Output Rating:			
Remedial Action:			

Wells and Additional Sources Detail Report

Flow Control Description:

Pump Type Installed: SUB
Created by:
Submitted by:
Additional Comments: DRILLER STATES WATER IS SOFT.

Well Owner ID: 10685846
Owner Name: CANADIAN SUPERIOR
PO Box:
Address:
City:
Postal Code:
Province:
Country:

Driller ID: 2533726
Last Name: DRILLER
Middle Initial: NA
First Name: UNKNOWN
Journeyman No: 1
Is Active?: TRUE

Starting Well ID: 2059200
Ending Well ID: 2059299
Last Well ID Used: 2059205
Company Name: ALL RITE DRILLING LTD.
Street Address: 7819 - 50 AVENUE
City: RED DEER
Province: AB
Country: AB
Postal Code:
E-Mail: gwinfo@gov.ab.ca
Is Active?: TRUE

Perforation ID: 4190363
From: 120.000000
To: 140.000000
Diameter: 0.000000
Interval: 0.000000

Geophysical Log ID: 5921482
Log Type: Gamma

Wells and Additional Sources Detail Report

Log Taken?: FALSE
Sent to AENV?: FALSE

Geophysical Log ID: 5518407
Log Type: Electric
Log Taken?: FALSE
Sent to AENV?: FALSE

Borehole ID: 621295
Diameter: 0.000000
From: 0.000000
To: 142.000000

Depth: 65.000000
Water Bearing: FALSE
Colour:
Description:
Material: Clay

Depth: 80.000000
Water Bearing: FALSE
Colour:
Description:
Material: Siltstone

Depth: 138.000000
Water Bearing: FALSE
Colour:
Description:
Material: Sandstone

Depth: 132.000000
Water Bearing: FALSE
Colour:
Description:
Material: Shale

Depth: 118.000000
Water Bearing: FALSE
Colour:

Wells and Additional Sources Detail Report

Description:

Material: Siltstone

Depth: 142.000000

Water Bearing: FALSE

Colour:

Description:

Material: Siltstone

Depth: 110.000000

Water Bearing: FALSE

Colour:

Description:

Material: Shale

Pump Test ID: 10348603

Test Date: 1978/11/14

Start Time: 1900/01/12

Taken from Top of Casing: FALSE

Static Water Level: 80.00

End Water Level:

Water Removal Type: Pump

Water Removal Rate: 20.00

Removal Depth from: 0.00

Reason for Short Test:

Map Key	Direction	Distance (km)	Distance (m)	Elevation (m)	DB
4	SSE	0.22	219.40	1,018.00	WWIS

Well ID: 409796

Driller ID: 24288

Licence No:

GIC Well ID: 409796

GOA Well Tag No:

Elevation (ft): 3350.00000000

Depth (ft):

Date Completed:

Proposed Use:

Lot:

Block:

Plan:

Type of Work:

Flowing Well:

Elevation Source: Estimated

Method of Drilling:

GPS Obtained: Map

Boundary From:

Distance North:

Distance South:

Distance East:

Distance West:

Additional Desc:

Validated?: TRUE

Submitted?: TRUE

Location Locked?: TRUE

Longitude: -114.05203000

Latitude: 51.79313300

Wells and Additional Sources Detail Report

Date Started:	LSD:	16
Water Req Per Day:	Section:	34
Gas Present:	Township:	32
Oil Present:	Range:	1
Flow Rate:	Meridian:	5
Drilling Company:	DLS Coordinates:	16-34-32-1-5
Owner Mailing Address:		
Driller Mailing Address:		

Chem Analysis ID: 2086207
Well Report ID: 409796
Sample No: 1809
Sample Date:
Analysis Date: 1979/02/26
Laboratory: AE
Water Level: 90.000000
Aquifer:
Remarks:

Element Name: Sulphate
Element Symbol: SO4
Decimal Places: 4
Value: 1174.707820

Element Name: Total Hardness
Element Symbol: TH
Decimal Places: 4
Value: 419.000000

Element Name: total Kjeldahl nitrogen
Element Symbol: TKN
Decimal Places: 4
Value: 0.000000

Element Name: Calcium
Element Symbol: CA
Decimal Places: 4
Value: 100.999596

Element Name: Potassium
Element Symbol: K

Wells and Additional Sources Detail Report

Decimal Places: 4
Value: 5.116000

Element Name: Hydroxide
Element Symbol: OH
Decimal Places: 4
Value: 0.000000

Element Name: Electrical Conductivity
Element Symbol: EC
Decimal Places: 0
Value: 2980.000000

Element Name: Magnesium
Element Symbol: MG
Decimal Places: 4
Value: 40.033152

Element Name: Sodium
Element Symbol: NA
Decimal Places: 4
Value: 545.001100

Element Name: Nitrite
Element Symbol: NO2
Decimal Places: 4
Value: -0.050400

Element Name: Total Alkalinity
Element Symbol: TA
Decimal Places: 4
Value: 398.000000

Element Name: Nitrate plus Nitrite
Element Symbol: NO2_NO3_N
Decimal Places: 4
Value: 0.459200

Element Name: Total Phosphorus

Wells and Additional Sources Detail Report

Element Symbol: TP
Decimal Places: 4
Value: 0.000000

Element Name: Ion Balance
Element Symbol: IONBAL
Decimal Places: 4
Value: 0.990000

Element Name: Silica
Element Symbol: SIO2
Decimal Places: 4
Value: 6.400000

Element Name: Chloride
Element Symbol: CL
Decimal Places: 4
Value: 4.004400

Element Name: Iron
Element Symbol: FE
Decimal Places: 4
Value: 0.160000

Element Name: Total Dissolved Solids
Element Symbol: TDS
Decimal Places: 0
Value: 2109.000000

Element Name: Fluoride
Element Symbol: F
Decimal Places: 4
Value: 0.420000

Element Name: pH
Element Symbol: PH
Decimal Places: 2
Value: 8.100000

Wells and Additional Sources Detail Report

Element Name: Bicarbonate
 Element Symbol: HCO3
 Decimal Places: 4
 Value: 485.046853

Well Report ID:	409796	Annular Seal Mat:	Driven
Well Owner ID:	10688327	Annular Seal from:	0.00
Driller ID:	2533726	Annular Seal to:	39.00
Drill Company ID:	24288	Annular Seal Amt:	
Drill Instance ID:	8335238	Annular Seal Units:	
Drill Comp Well ID:		Drilling Method:	Combination
Existing Well ID:		Drilling Start Dt:	
Date Received:	1979/06/12	Drilling End Dt:	1978/12/12
Type of Work:	New Well	Pack Type:	
Plug Date:		Pack Grain Size:	
Plug Material Type:		Pack Amount:	
Plug Mat Amount:		Pack Units:	
Plugged Units:		Loc Verify Method:	Map
Well Use:	Domestic & Stock	Dist Casing Ground:	
Other Well Use:		Artesian Flow?:	FALSE
Total Depth Drill:	135.00	Artesian Flow Rate:	
Finish Well Depth:		Gas Depth:	
Casing Material:	Steel	Encounter Gas?:	FALSE
Casing OD:	5.56	Flow Ctrl Install?:	FALSE
Casing Thickness:	0.19	Recommended Rate:	0.00
Casing Bottom:	39.00	Recom Intake Depth:	125.00
Liner Material:	Steel	Pump Installed?:	FALSE
Liner OD:	4.56	Pump Install Depth:	
Liner Thickness:	0.14	Pump Model:	
Liner Top:	0.00	Pump Horsepower:	
Liner Bottom:	135.00	Well Disinfected?:	FALSE
Perforation by:	Torch	Other Log:	
Screen Material:		Divert Water Src:	
Screen Size OD:	0.00	Divert Water Amt:	
Screen Attachment:		Diversion Dt/Time:	
Screen Top Fitting:		Is Submitted?:	TRUE
Screen Bot Fitting:		Is Validated?:	TRUE
Encounter Saline Water?:	FALSE		
Saline Water Depth:			
Potability Sample Taken?:	FALSE		
Potable Sample Sent to AENV?:	FALSE		
Approval Holder Sign Date:			
Drilling Report Given to Owner:	FALSE		
Model Output Rating:			
Remedial Action:			

Wells and Additional Sources Detail Report

Flow Control Description:

Pump Type Installed:

Created by:

Submitted by:

Additional Comments:

Well Owner ID: 10688327
Owner Name: ALEXANDER, R.M./ JOYCE K.
PO Box: 699
Address: OLDS
City:
Postal Code: T0M 1P0
Province:
Country:

Driller ID: 2533726
Last Name: DRILLER
Middle Initial: NA
First Name: UNKNOWN
Journeyman No: 1
Is Active?: TRUE

Starting Well ID: 1245000
Ending Well ID: 1249999
Last Well ID Used: 1245342
Company Name: DOERING DRILLING LTD.
Street Address: BOX 4028
City: OLDS
Province: AB
Country: CA
Postal Code: T4H 1P6
E-Mail: GWINFO@GOV.AB.CA
Is Active?: FALSE

Perforation ID: 4192466
From: 95.000000
To: 135.000000
Diameter: 0.125000
Interval: 6.000000

Geophysical Log ID: 5927450
Log Type: Gamma

Wells and Additional Sources Detail Report

Log Taken?: FALSE
Sent to AENV?: FALSE

Geophysical Log ID: 5524375
Log Type: Electric
Log Taken?: FALSE
Sent to AENV?: FALSE

Borehole ID: 626354
Diameter: 0.000000
From: 0.000000
To: 135.000000

Depth: 76.000000
Water Bearing: FALSE
Colour: Gray
Description:
Material: Till & Rocks

Depth: 116.000000
Water Bearing: FALSE
Colour:
Description: Fine Grained
Material: Sandstone

Depth: 96.000000
Water Bearing: FALSE
Colour:
Description: Fine Grained
Material: Sandstone

Depth: 109.000000
Water Bearing: FALSE
Colour: Black
Description: Carbonaceous
Material: Shale

Depth: 20.000000
Water Bearing: FALSE
Colour: Brown

Wells and Additional Sources Detail Report

Description:

Material: Till

Depth: 104.000000

Water Bearing: FALSE

Colour:

Description:

Material: Coal

Depth: 135.000000

Water Bearing: FALSE

Colour:

Description:

Material: Shale & Sandstone

Depth: 31.000000

Water Bearing: FALSE

Colour: Gray

Description: Sandy

Material: Till

Depth: 89.000000

Water Bearing: FALSE

Colour: Gray

Description:

Material: Shale

Depth: 102.000000

Water Bearing: FALSE

Colour: Gray

Description:

Material: Shale

Pump Test ID: 10350290

Test Date: 1978/12/12

Start Time: 1900/01/12

Taken from Top of Casing: FALSE

Static Water Level: 0.00

End Water Level:

Water Removal Type: Bailer

Water Removal Rate: 15.00

Wells and Additional Sources Detail Report

Removal Depth from: 0.00

Reason for Short Test:

General Well File

Map Key	Direction	Distance (km)	Distance (m)	Elevation (m)	DB
1	-	0.00	0.00	1,020.00	OGW

UWI:	100070303301W500	Survey System:	DLS
Licence No:	0072245	Surf Location:	07-03-033-01-W5
Last Production:		Surf Township:	033
Well Type:	Not Applicable	Surf Meridian:	W5
Well Profile:	Vertical	Surf Range:	01
Current Status:	Abandoned	Surf Section:	03
Status Date:	1979-01-05	Surf LSD:	07
Status Source:	AER	Surf Longitude:	-114.055749
Spud Date:	1978-11-25	Surf Latitude:	51.799975
Final Drill Date:	1978-12-29	Surf Twp Range:	033-01-W5
Rig Release Date:	NULL	Surf Quarter Unit:	Not Applicable
Ground Elevation:	1018.8	Surf Unit:	Not Applicable
KB Elevation:	1025.8	Surf Block:	Not Applicable
Total Depth:	2780	Surf NTS Map Sheet:	Not Applicable
Lahee Class:	New Pool Wildcat	Surf Series:	Not Applicable
TVD:	2780	Surf Area:	Not Applicable
Confidntl Rel Date:	NULL	Surf Sheet:	Not Applicable
Abandon Date:	1979-01-05	Surf Quarter Sec:	SE
Surf Abandon Date:	1979-01-05	BH Location:	07-03-033-01-W5
Formation:	Unspecified	BH Township Range:	033-01-W5
Field:	Garrington	BH Quarter Unit:	Not Applicable
Pool:	Unspecified	BH Unit:	Not Applicable
OS Area:	Not Applicable	BH Block:	Not Applicable
OS Deposit:	Not Applicable	BH NTS Map Sheet:	Not Applicable
Licence Date:	1978-10-03	BH Series:	Not Applicable
Confidential:	Non-Confidential	BH Area:	Not Applicable
Surface Owner:	Unspecified	BH Sheet:	Not Applicable
Drilling Contractor:	Unspecified	BH Quarter Section:	SE
Days Drilling:	34	BH Longitude:	-114.055749
Drill m/day:	81.76	BH Latitude:	51.799975
Province:	Alberta	BH Township:	033
Projected Depth:	NULL	BH Meridian:	W5
Completion Date:	NULL	BH Range:	01
Agent:	Unspecified	BH Section:	03
Unit ID:	NULL	BH LSD:	07
Unit Flag:	No	Municipality:	NULL
Regulatory Agency:	AER	PSAC Area Code:	AB3
Unit Name:	NULL	PSAC Area Name:	Southeastern Alberta
Well Name:	MARATHON CDN-SUP OLDS 7-3-33-1		
Current Operator:	No Current Operator		

Wells and Additional Sources Detail Report

Curr Op Parent Name: Unspecified
 Licensee: Repsol Oil & Gas Canada Inc.
 Lic Parent Co Name: Repsol

Well Stat Date: 19781003 Type Status: Not Applicable
 Fluid Status: Not Applicable Structure Status: Not Applicable
 Mode Status: Not Applicable
 Well Stat Code: 00000000

Well Stat Date: 19790105 Type Status: Not Applicable
 Fluid Status: Not Applicable Structure Status: Not Applicable
 Mode Status: ABANDONED
 Well Stat Code: 00020000

Obs No: 01 Casing Steel Process:
 Casing Date: 00000000 Gas Yield Strength: 000
 Casing Desc: SURFACE Shoe Set Depth: 00556.00
 Casing Size: 0244.5 Liner Top Depth: 00000.00
 Casing Density: 0000.0

DST Test No: 01 DST Company: HISTORICAL
 DST Test: Drill Stem Test DST Stat Press: 001137
 DST Test Sub: Reverse-Circulation DST Fin Flow Press: 000761
 DST Date: 19790101 Valve Open Time: 0090
 DST Fluid: Mud Gas Surface Time: 0000
 DST Fluid Recovrd: 00000.70 Max Gas Flow: 00000.0
 DST Fluid Units: M3 Fin Gas Flow: 00000.0
 Record Depth: 1914.00 Oil Surface Time: 0000
 DST Misrun Flag: 1 Max Oil Flow: 00000.0
 DST Misrun Desc: Mechanically Good Wtr Surface Time: 0000
 Intrvl Top: 01925.00 Max Wtr Flow: 00000.0
 DST Intrvl Base: 01980.00 Pipe Int Diam: 00097.2
 Cushion Type Desc: None Cushion Length: 00000.0

Well Licenses

Map Key	Direction	Distance (km)	Distance (m)	Elevation (m)	DB
2	-	0.00	0.00	1,020.00	AERW

Unique Well ID: 00/07-03-033-01W5/0 Agent:
 Well Status: 0002000000 Operator:
 Keylist: 0335010307000 Field: 0405
 License No: 0072245 Pool: 0000000
 Licence Status: RecCertified OS Area:
 Licence Date: 1978-10-03 OS Dep: 0000000

Wells and Additional Sources Detail Report

Stat Date:	1979-01-05	Max True Vert Depth:	0.0
Well Fluid:	N/A	Ground Elevation:	1018.8
Well Mode:	ABD	Surf Loc:	
Well Type:	N/A	EDCT:	
Well Structure:	N/A	Rating Ev:	
Scheme Type:		Op Surv Prov:	
Scheme Subt:		FD Date:	1978-12-29
Bttm/Surface Hole:	Bottom Holes	Total Dep:	2780.0
Fluid Short Desc:	Not Applicable	KBE:	
Mode Short Desc:	ABANDONED	Latitude:	51.8
Type Short Desc:	Not Applicable	Longitude:	-114.056
Update:			
Structure Short Description:	Not Applicable		
Licensee:	Repsol Oil & Gas Canada Inc.		

KBE: 1025.8

Map Key	Direction	Distance (km)	Distance (m)	Elevation (m)	DB
2	-	0.00	0.00	1,020.00	AERW

Unique Well ID:	Agent:
Well Status:	Operator:
Keylist:	Field:
License No: 0072245	Pool:
Licence Status: RecCertified	OS Area:
Licence Date: 31 Dec 1998	OS Dep:
Stat Date:	Max True Vert Depth:
Well Fluid:	Ground Elevation: 1018.8
Well Mode:	Surf Loc: 07-03-033-01W5
Well Type:	EDCT: BWL
Well Structure:	Rating Ev: J
Scheme Type:	Op Surv Prov:
Scheme Subt:	FD Date:
Bttm/Surface Hole: Surface Holes	Total Dep:
Fluid Short Desc:	KBE:
Mode Short Desc:	Latitude: 51.8
Type Short Desc:	Longitude: -114.056
Update:	
Structure Short Description:	
Licensee:	

KBE: 1025.8

Radon Information

Detailed radon information for the project property is provided below.

Radon Zone Information

ID:	144850	Radon Rank:	HIGH
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Health Canada Radon Information

Health Region:	4824
Health Region Name:	David Thompson Regional Health Authority
Province or Territory:	AB
Number Homes in Survey:	107
% Below 200 Bq/m3:	92.5
% Above 200 Bq/m3:	7.5
200 to 600 Bq/m3:	7.5
% Above 600 Bq/m3:	0

Federal Sources

Bedrock Geology of Canada

The Geological Map of Canada is scaled at 1:5,000,000. This map is created by Geological Survey of Canada and published by Natural Resources Canada.

BEDROCK GEOLOGY

Health Canada Radon Information

This source is the results from the Cross-Canada Survey of Radon Concentrations in Homes, a two-year study conducted by Health Canada's National Radon Program. The aims of this study were to obtain an estimate of the proportion of the Canadian population living in homes with radon gas levels above the guideline of 200 Bq/m³, to identify previously unknown areas where radon gas exposure may constitute a health risk, and to build, over time, a map of indoor radon gas exposure levels across Canada.

RADON

National Energy Board Wells

The NEBW database contains information on onshore & offshore oil and gas wells that are outside provincial jurisdiction(s) and are thereby regulated by the National Energy Board. Data is provided regarding the operator, well name, well ID No./UWI, status, classification, well depth, spud and release date.

NEBP

Soil Landscapes of Canada (SLC)

Major characteristics of soil and land such as surface form, slope, water table depth, permafrost and lakes.

SLC

Surficial Geology of Canada

This map contains information on surficial materials and associated landforms left by the retreat of the last glaciers and non glacial environments. It is based on compilation of existing maps. This data was authored by the Geological Survey of Canada and published by Natural Resources Canada.

SURFICIAL GEOLOGY

Toporama

Toporama covers the entire area of Canada's landmass and provides topographic, geo-referenced, and symbolic information in a raster format at 1:50,000 scale. This is a digital topographic reference product made available by Natural Resources Canada (NRCan).

TOPORAMA

Provincial Sources

AER Incidents & Spills

Received from the Alberta Energy Regulator (AER) - formerly the ERCB (Energy Resources Conservation Board) and EUB (Energy Utilities Board) - this database, which used to be called EISL (Environmental Information System Listing), contains reported environmental incidents beginning in 1975. Descriptions include noise infractions, air quality emissions, oil spills and failures for pipelines, wells, plants, and batteries. Some geographic coordinates have been provided in ATS (Alberta Township Survey system) format but do not contain offsets that are necessary to pinpoint a specific location. Therefore, locations will be accurate to the quarter section only.

FIS

Alberta Detailed Soil Survey (DSS3)

Soil surveys have been published for most of the agricultural areas, and many surrounding areas, across Canada. Data from these surveys comprise the most detailed soil inventory information in the National Soil DataBase. Data is made available by Agriculture and Agri-Food Canada

SOIL SURVEY

Alberta Oil and Gas Wells

The Alberta Energy Utilities Board - now the Alberta Energy Regulator (AER) - maintained a database of oil and gas wells drilled in the province of Alberta. The database contains information on well name, licensee name, license number, location, status, total well depth and date of final drilling. Please note that this database will not be updated, information on wells drilled after September 2003 can be found in the Oil and Gas Wells (OGW) database under the 'Private Source Database' section.

AOGW

Alberta Orphan Wells

The Orphan Well Association (OWA) maintains lists of properties designated as orphan by the Alberta Energy Regulator (AER). Includes the location, well ID, licensee name and license number of orphan wells, sites, and facilities that have been identified for the purpose of abandonment, suspension, decommission,

ORP

Appendix

and reclamation. Legacy wells under long term care and custody are excluded. Please note that the OWA Orphan List also includes properties with production information from the AER. The OWA makes no representation, warranties, or guarantees, expressed or implied, for the fitness of the data with respect to its use.

Alberta Water Well Information Database

WWIS

List of wells in the Alberta Water Well Information Database made available by Alberta Environment and Parks, containing approximately 500,000 records with nearly 5,000 drilling reports added annually. Some geographic coordinates have been provided in ATS (Alberta Township Survey system) format but do not contain offsets that are necessary to pinpoint a specific location; some locations will be accurate to the quarter section only. The Province of Alberta advises that the data may not be fully checked, and disclaims all responsibility for its accuracy. This data was previously collected from the Groundwater Information Center of the Natural Resource Service.

Approved Oilfield Waste Management Facilities

DRWD

A list of approved first and third party oilfield waste management facilities. First-party receivers can only accept upstream oilfield waste generated by one oil and gas company, but can come from various sites. Third-party receivers can accept upstream oilfield waste from various sites and various generators. This data is made available by the Alberta Energy Regulator (AER).

Bedrock Geology of Alberta

BEDROCK GEOLOGY

This dataset represents the compilation of existing geological maps and original geological mapping by Alberta Geological Survey (AGS) staff. Mapping in support of the dataset included field observations and creating three-dimensional models of subsurface stratigraphy based on the interpretation of geophysical logs from oil and gas wells. Each three-dimensional formation surface was projected to a model of the bedrock surface, and the intersection formed the first approximation of the position of the geological contact at the base of the surficial deposits. This data is made available by Alberta Geological Survey.

General Well File

OGW

Wells from the General Well File made available by the Alberta Energy Regulator (AER).

Groundwater Well Network

GROUNDWATER

Groundwater level, chemical analysis and water quality data from monitoring wells that are part of the Groundwater Observation Well Network (GOWN).

Horizontal Wells

HORW

A horizontal well is created by drilling the lower part of the wellbore parallel to the zone of interest. These wells must be drilled directionally at an angle exceeding 80 degrees. Horizontal drilling can help increase resource recovery while minimizing surface impacts. While horizontal drilling has been used for decades, technological improvements have made it possible to combine horizontal drilling with hydraulic fracturing to help coax oil and natural gas out of tight rock. Today, more than half of western Canada's wells are being drilled horizontally. Horizontal well list includes: well location, licence number, well name, licensee name, final drilling date, total depth, and true vertical depth. List is made available by the Alberta Energy Regulator (AER) - formerly the Energy Resources Conservation Board (ERCB).

Oil and Gas Facilities - ST102 & ST50

OGF

This list of batteries, gas plants, meter stations, and other facilities in the province of Alberta, made available as Reports ST102 (Parts A and B) and ST50 (A and B), is provided by the Alberta Energy Regulator (AER).

Pipeline Installations

PIPELINE INSTALL

Pipeline installations associated with a pipeline licence in the approved oil and gas pipelines in Alberta made available by the Alberta Energy Regulator (AER). There may be line segments associated with the pipeline installation licence or it may be a standalone installation on a licence.

Surficial Geology of Alberta

SURFICIAL GEOLOGY

This dataset, made available by Alberta Geological Survey, is a compilation of existing surficial map information for Alberta, edited for mapping continuity and generalized to make it suitable for presentation and use at 1:1,000,000 scale. It is the dataset used to create Alberta Geological Survey Map 601: Surficial Geology of Alberta.

Well Licenses

AERW

Locations of Well Licenses made available by the Alberta Energy Regulator (AER) as ST37. Includes

Appendix

Active, Suspended, Abandoned, Drilled and Cased Oil, Gas, Crude Bitumen well licenses, as well as Observation, Injection, Disposal, and Undefined well licences.

Wetlands of Alberta

WETLAND

The Alberta Merged Wetland Inventory depicts wetlands within the province of Alberta for the period 1998 to 2015 classified to the Canadian Wetland Classification System (CWCS) at the major class level: marsh, bog, fen, swamp, and open water. This database is made available by Alberta Environment and Parks.

Private Sources

Oil and Gas Wells

OGWW

The Nickle's Energy Group (publisher of the Daily Oil Bulletin) collects information on drilling activity including operator and well statistics. The well information database includes name, location, class, status and depth. The main Nickle's database is updated on a daily basis, however, this database is updated on a monthly basis. More information is available at www.nickles.com.

Radon Zone Information

RADON

The Radon Potential Map is developed by Radon Environmental Management Corporation. Its objective was to illustrate the relative variation of radon risk across the country, and in 2011 it published its first geologic Radon Potential Map of Canada.

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