

REPORT Phase I Environmental Site Assessment Plan 1420529, Block 1, Lot 1, Chipman, Alberta

Submitted to:

Jason Vandenberg Entrec Corporation #201, 1 Carswell Street St. Albert, AB T8N 7N5



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Executive Summary

Golder Associates Ltd. (Golder) was retained by Entrec Corporation (Entrec) to conduct a Phase I Environmental Site Assessment (Phase I ESA) of the property located at Plan 1420529, Block 1, Lot 1 near Chipman, Alberta (the Site). The Site is a vacant parcel of land located within the northeast quarter of Section 24, Township 54, Range 19, West of the 4th Meridian.

The primary objective of the Phase I ESA was to identify, insofar as possible based on readily available information and without an intrusive investigation, former or current practices at the Site that may represent issues of actual or potential environmental concern. Golder understands that this assessment is required for due-diligence purposes prior to selling the property.

For the purposes of this Phase I ESA, the assessment area included the Site and surrounding properties within 250 m of the Site. Based on all the information obtained as part of this Phase I ESA, the following summary of pertinent items is provided:

- The Site has been used to store module frames, camp shacks and equipment since its development in 2013. Rust coloured staining was noted on the gravel beneath the module frames. No other surface stains were noted on the Site.
- Surrounding properties are agricultural. AEP approval records were identified for the Alberta Township Section (NE 24-54-19 W4M), in which the Site is located. These approvals are associated with the construction, operation, or reclamation of the Alberta Carbon Trunk Line Pipeline Project and the Heartland Pipeline Project.

No significant issues or areas of potential environmental concern were identified in association with current or historical land use on the Site or surrounding properties within 250 m of the Site.

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1.0 INTRODUCTION

1.1 Background and Objective

Golder Associates Ltd. (Golder) was retained by Entrec Corporation (Entrec) to conduct a Phase I Environmental Site Assessment (Phase I ESA) of the parcel of land located at Plan 1420529, Block 1, Lot 1 near Chipman, Alberta (the Site). The Site is a vacant parcel of land located within the northeast quarter of Section 24, Township 54, Range 19, West of the 4th Meridian. The location, surroundings, and layout of the Site are shown in Figure 1 –Site Plan and Surrounding Area.

The primary objective of the Phase I ESA was to identify, insofar as possible based on readily available information and without an intrusive investigation, former or current practices at the Site that may represent issues of actual or potential environmental concern. Golder understands that this assessment is required for due-diligence purposes prior to selling the property.

Authorization to proceed with this investigation was received by email from Jason Vandenberg, on July 15, 2020. This Phase I ESA report has been prepared for the use of Entrec and may not be relied upon by others without written consent from Golder.

1.2 Scope of Work

Golder's assessment was carried out in general accordance with Canadian Standards Association (CSA) Standard Z768-01, *Phase I Environmental Site Assessment* (reaffirmed 2016), and involved the following scope of work:

- reviewing readily available records to collect data on past and present activities on the Site;
- visiting the Site to observe current Site conditions and operations and further assess any potential environmental concerns identified in the records review;
- interviewing knowledgeable individual(s) to corroborate or augment the information gathered from the records review and Site visit;
- evaluating the information from the records review, Site visit, and interviews; and
- preparing a Phase I ESA report.

For the purposes of this Phase I ESA, the assessment area included the Site and surrounding properties within 250 m of the boundaries of the Site.

In preparing this Phase I ESA, Golder has applied professional judgement in considering readily available information and has relied in good faith on information provided by others. This level of effort is a method of risk reduction rather than risk elimination. This assessment included a cursory overview of the neighbouring land uses and does not constitute a complete assessment of neighbouring land uses. Further reductions in risk can be achieved through a program of intrusive testing at the Site, including sample collection and analysis.

2.0 SITE DESCRIPTION

The Site consists of a vacant rectangular parcel of land approximately 4.04 hectares (10 acres) in area located within the northeast quarter of Section 24, Township 54, Range 19, West of the 4th Meridian. The legal land description for the Site is Plan 1420529, Block 1, Lot 1. The Site is in an agricultural area southwest of Chipman, Alberta and is bordered by secondary Highway 834 to the east and Township Road 544 to the north. The Village of Chipman Land Use Bylaw No. 537-2010 indicates that the Site is zoned M-1 (Industrial District).

The Site was developed with a gravel yard in 2013 and is used by Entrec as a storage yard for equipment, module frames and camp shacks. Several sea-cans are used for equipment storage. Prior to 2013 the Site was used for agricultural purposes. The location and surroundings of the Site are shown on Figure 1.

3.0 TOPOGRAPHIC, GEOLOGIC, AND HYDROGEOLOGIC SETTING

A summary of the Site's topographic, geologic, and hydrogeologic setting in provided in Table 1. Sources of information including maps and other geologic literature are referenced in Section 8.0

Item	Details			
Grade	The Site was generally flat with a slightly higher elevation in the centre to allow runoff to flow to the perimeter of the Site. Drainage ditches were present along the north and east boundaries of the Site. Neighbouring properties were observed to be gently rolling with a slight slope to the west.			
Surficial Geology	The Alberta Geological Survey maps indicate that the surficial geology in the vicinity of the Site consists of fluted moraine soils: Glacial streamlined clay, silt and sand with minor pebbles, cobbles and boulders; terrain varies from alternating furrows and ridges to elongated smoothed hills.			
Bedrock	Based on the information obtained from the Alberta Geological Survey maps, bedrock in the vicinity of the Site consists of the Horseshoe Canyon Formation: Pale grey, fine to very fine grained, feldspathic sandstone interbedded with siltstone, bentonitic mudstone, carbonaceous mudstone, concretionary sideritic layers, and laterally continuous coal seams; includes white pedogenically altered sandstone and mudstone interval at top (formerly assigned to the Whitemud formation); nonmarine to locally marginal marine.			
Nearest Water Body	The nearest surface water body was an unnamed wetland area, located approximately 975 m east of the Site.			
Inferred Groundwater Flow Direction	Based on the Site topography, the inferred direction of shallow groundwater flow is towards the east. Buried utilities, underground structures, and septic systems can also affect local (shallow) groundwater flow conditions. Inferred groundwater flow directions are subject to confirmation with field measurements.			

Table 1: Topographic, Geologic and Hydrogeologic Setting

4.0 PROPERTY-USE INFORMATION REVIEW

4.1 Aerial Photographs

Aerial photographs of the Site and vicinity for the years 1950, 1962, 1972, 1987 and 2011 as well as Google Earth images from 2002 and 2019, were reviewed by Golder. Noteworthy findings from this review are provided in Table 2 below.

Table 2: Aerial Photographs

Year (Scale)	Site	Surrounding Properties
1950 (1:42,000)	Agricultural land.	 North: Township Road 544 is present adjacent to the northern Site boundary followed by agricultural land East: Highway 834 is present adjacent to the eastern Site boundary followed by agricultural land. South: Agricultural land. West: Agricultural land.
1962 (1:30,000)	As in 1950.	North: As in 1950. East: As in 1950. South: As in 1950. West: As in 1950.
1976 (1:25,000)	As in 1962.	North: As in 1962. East: As in 1962. South: As in 1962. West: As in 1962.
1987 (1:30,000)	As in 1976.	North: As in 1976. East: As in 1976. A dugout has been developed approximately 155 m east of the Site. South: As in 1976. West: As in 1976.
2002 (Google Earth Image)	As 1987.	North: As in 1987. East: As in 1987. South: As in 1987. West: As in 1997.
2011 (1:20,000)	As in 2002	 North: As in 2002. East: As in 2002. A farmstead has been developed approximately 215 m east of the Site. South: As in 2002. West: As in 2002.
2019 (Google Earth Image)	The Site has been developed in its current configuration as a storage yard.	North: As in 2011. East: As in 2011. South: As in 2011. West: As in 2011.

4.2 Environmental Databases

Golder contacted EcoLog Environmental Risk Information Services Ltd. (EcoLog ERIS) to search available federal, provincial and private-sector environmental databases for the Site and within 250 m of the Site boundary. No records were identified for the Site. Two well licenses were identified in the Alberta Energy Regulator Well Licence database for a property located approximately 245 m southwest of the Site. The licensee was listed as Voyager Petroleum Ltd. One water well was identified in the Alberta Water Well Database for property located approximately 240 m southwest of the Site. The well was listed as domestic use and was drilled in 1974. The complete database report is included in Appendix A.

4.3 Fire Insurance Records

Golder contacted EcoLog Environmental Risk Information Services Ltd. (EcoLog ERIS) to provide any fire insurance plans (FIPs), property underwriters' reports (PURs) and property underwriters' plans (PUPs) related to the Site and surrounding properties. Golder was informed by EcoLog ERIS that there were no records pertaining to the Site and surrounding properties. A copy of the response is provided in Appendix B.

4.4 Land Titles

Golder was not provided with a chain of title for review. The current title indicates that the Site has been registered to Entrec since July 2014. A copy of the response is provided in Appendix B.

4.5 **Previous Environmental Reports**

The following environmental report related to the Site was obtained by Golder. While a technical peer review of the report was not completed, Golder consulted the report to develop an understanding of any issues previously identified for the Site and surrounding properties.

2008 Phase 1 ESA

In 2008, Nichols Environmental (Canada) Ltd. completed a Phase I ESA for the Alberta Township Section (NE 5-53-26 W4M), in which the Site is located. At the time the assessment, the Site was undeveloped agricultural land. The environmental risk associated with the property was considered low to medium due to the presence of an abandoned/reclaimed well site. The well was located in the southwest portion of the property approximately 240 m southwest of the Site.

4.6 Regulatory Information Review

4.6.1 Abacus Datagraphics Oil and Gas

An on-line search of Abacus Datagraphics (AbaData) oil and gas database was conducted for the Site and surrounding properties. No pipelines or oil and gas wells were identified on the Site or within 250 m of the Site (AbaData 2020). A copy of the response is provided in Appendix B.

4.6.2 AEP Approval Viewer

An online search through the Alberta Environment and Parks (AEP) Approval Viewer database was conducted. No records were identified for the Site. Ten records were identified for the Alberta Township Section (NE 24-54-19 W4M), in which the Site is located (AEP 2020b). These approvals are associated with the construction, operation, or reclamation of the Alberta Carbon Trunk Line Pipeline Project and the Heartland Pipeline Project. A copy of the response is provided in Appendix B.

4.6.3 AEP Environmental Site Assessment Repository

An online search of the AEP Environmental Site Assessment Repository (ESAR) database did not identify records for the Site or for neighbouring properties within 250 m of the Site. Two well reclamation certificates were identified for properties located approximately 500 m southwest and 600 m east of the Site. A copy of the search results is provided in Appendix B.

4.6.4 AEP Freedom of Information and Privacy Protection

An online search was conducted through the AEP for *Freedom of Information and Protection of Privacy Act* (FOIPP) under the Environmental Protection and Enhancement Legislation. No records were identified for the Site. A copy of the response is provided in Appendix B.

4.6.5 AEP Groundwater Information Centre

An online search was conducted through the AEP Groundwater Information Centre database. No water wells were identified on the Site or on surrounding properties within 250 m of the Site. A copy of the water well report is provided in Appendix B.

4.6.6 Alberta Environment's Help End Landfill Pollution Database

The Alberta Environment's Help End Landfill Pollution (HELP) database and the Alberta Environment//Environmental Canada Active and Inactive Land Disposal Site database were reviewed for landfills. No landfills were identified on the Site or within 1 km of the Site.

5.0 SITE VISIT AND INTERVIEW(S)

Golder's Site Assessor visited the Site on July 29, 2020. The Site Assessor was accompanied on Site by Jason Vandenberg (the Site Representative). During the Site visit, the Site Assessor walked through and observed accessible areas of the interior and exterior of the Site, observed neighbouring properties, interviewed the Site Representative, and photographed representative Site features (Appendix C). The following table provides an overview of the Site visit (Table 3).

Table 3: Details of Site Visit

Item	Information
Site Representative	Jason Vandenberg, Chief Financial Officer
Weather during Site Visit	Sunny 25°C
Site Visit Restrictions	None.

5.1 Past Site Uses

The Site Representative stated that, to the best of his knowledge, the Site has been used as a storage yard since its development in 2013.

The Site Representative was asked whether specific activities of potential environmental concern had occurred at the Site or surrounding properties. A summary of the Site Representative's response is provided in Table 4.

Table 4: Past Uses of the Site and Neighbouring Properties

Reported Use	Details
Dry cleaning facility	None reported or observed during the Site assessment.
Industrial metal finishing, including painting or electroplating	None reported or observed during the Site assessment.
Other past industrial use	None reported and no evidence of any observed during the Site assessment.
Fuel storage	None reported and no evidence of any observed during the Site assessment.
Retail fuel outlet or vehicle service garage	None reported or observed during the Site assessment.
Landfilling or placement of fill	Gravel fill material was observed throughout the Site.
Wastewater impoundments	None reported or observed during the Site assessment.
Solid or liquid waste storage or disposal	None reported or observed during the Site assessment.
Environmental sampling, wells, or evidence of drilling	None reported and no evidence of any observed during the Site assessment.
Any other activities that may have affected the environmental condition of the Site or neighbouring properties	None reported and no evidence of any observed during the Site assessment.



5.2 Present Site Uses

At the time of the Site visit, the Site consisted of a fenced gravel covered yard used to store module frames, camp shacks, and wood storage. Five sea-cans used for equipment and parts storage were observed at the Site. Rust colour staining was observed beneath the module frames. No other surface stains were noted on the Site.

5.3 Site Buildings and Equipment

At the time of the Site visit, there were no buildings present on the Site. The Site is serviced with electricity with lighting on metal standards around the perimeter of the Site.

5.4 Chemical and Fuel Storage

At the time of the Site visit, the Site was used for equipment storage. No chemical storage was observed on Site. The Site representative indicated that empty aboveground storage tanks (ASTs) were occasionally stored at the Site. One empty AST was observed in the northwest corner of the Site. No spills or staining were reported or observed.

5.5 Waste Generation and Handling

At the time of the Site visit, the Site was used for equipment storage. No waste was generated at the Site.

5.6 Surrounding Properties

Golder observed surrounding properties from publicly accessible areas and from the Site. The area surrounding the Site is principally agricultural. Observations of the surrounding properties by the Site Assessor are provided in Table 5.

Direction (hydraulic gradient)	Assessor Findings and Comments
North (inferred cross-gradient of the Site)	Township Road 544 followed by agricultural land.
South (inferred cross-gradient of the Site)	Agricultural land.
East (inferred down-gradient of the Site)	Secondary Highway 834 followed by agricultural land. A dugout is approximately 150 m east of the Site.
West (inferred up-gradient of the Site)	Agricultural land. An industrial property is approximately 450 m west of the Site.

6.0 SPECIAL ATTENTION ITEMS

At the time of the Site visit, the Site was a gravel yard and was not developed with any infrastructure. As a result, no special attention items (i.e., polychlorinated biphenyls, asbestos, lead, ozone depleting substances, urea formaldehyde foam insulation, radon, mercury, mould, or electromagnetic radiation) were identified for the Site.

7.0 CONCLUSIONS

Based on all the information obtained as part of this Phase I ESA, the following summary of pertinent items is provided:

- The Site has been used to store module frames, camp shacks and equipment since its development in 2013. Rust coloured staining was noted on the gravel beneath the module frames. No other surface stains were noted on the Site.
- Surrounding properties are agricultural. AEP approval records were identified for the Alberta Township Section (NE 24-54-19 W4M), in which the Site is located. These approvals are associated with the construction, operation, or reclamation of the Alberta Carbon Trunk Line Pipeline Project and the Heartland Pipeline Project.

No significant issues or areas of potential environmental concern were identified in association with current or historical land use on the Site or surrounding properties within 250 m of the Site.

8.0 **REFERENCES**

Table 6: References

Source	Date
Abacus (Abacus Datagraphics Ltd.). 2020. <i>AbaData database</i> . Available at: http://www.abacusdatagraphics.com/abadata.asp.	Accessed August 2020
Alberta Environment and Parks (AEP). 2020a. AEP Approval Viewer. Available at https://avw.alberta.ca/ApprovalViewer.aspx.	Accessed August 2020
AEP. 2020b. <i>Environmental Site Assessment Repository (ESAR)</i> . Available at: http://www.environment.alberta.ca/01520.html.	Accessed August 2020
AEP. 2020c. Alberta Water Wells. Available at: http://groundwater.alberta.ca/WaterWells/d/.	Accessed August 2020
AGS (Alberta Geological Survey). 2018. Alberta Interactive Minerals Map http://ags.aer.ca/index.htm.	Accessed August 2020
AGS (Alberta Geological Survey). 2013a. <i>Surficial Geology of Alberta</i> . Alberta Energy Regulator, AER/AGS Map 601, scale 1:1 000 000.	2013
AGS. 2013b. <i>Surficial Geology of Alberta</i> . Alberta Energy Regulator, AER/AGS Map 601, scale 1:1 000 000.	2013
Canadian Standards Association (CSA). 2016. CSA Standard Z768-01 Phase I Environmental Site Assessment.	March 2016
EcoLog. 2020. Environmental Risk Information Services Ltd. (ERIS). Available at: http://www.eris.ca/.	
Google Earth, earth.google.com/web/. Accessed August 2020	2002, 2019
Government of Canada. 2020. Access to Information and Privacy Online Request. Available at: https://atip-aiprp.apps.gc.ca/atip/welcome.do.	August 2020
Nichols Environmental (Canada) Ltd. 2008. Phase I Environmental Site Assessment NE1/4 24-54-29- W4M Lamont County, Alberta. Prepared for Chipman Development Corporation and American National Insurance Company. Dated August 7, 2008	August 2008
OPTA 2020 (OPTA Information Intelligence). Accessed through <i>Environmental Risk Information Services Ltd. (ERIS)</i> . Available at: http://www.eris.ca/.	July 2020
Personal Interview(s):	
Jason Vandenberg, Personal Interview.	July 29, 2020

9.0 LIMITATIONS

This report (the Report) was prepared for the exclusive use of Entrec Corporation for the express purpose of providing advice with respect to the environmental condition of the Site. In evaluating the site, Golder has relied in good faith on information provided by others as noted in the Report. We have assumed that the information provided is factual and accurate. We accept no responsibility for any deficiency, misstatement or inaccuracy contained in this report as a result of omissions, misinterpretations or fraudulent acts of persons interviewed or contacted.

Any use which a third party makes of this Report, or any reliance on or decisions to be made based on it, are the sole responsibility of the third parties. If a third party require reliance on this Report, written authorization from Golder is required. Golder disclaims responsibility of consequential financial effects on transactions or property values, or requirements for follow-up actions and costs.

The scope and the period of Golder's assessment are described in this Report, and are subject to restrictions, assumptions, and limitations. Except as noted herein, the work was conducted in accordance with the scope of work and terms and conditions within Golder's proposal. Distances and directions noted in this report were determined using mapping data of variable accuracy and should therefore be considered approximate. Golder did not perform a complete assessment of all possible conditions or circumstances that may exist at the site referenced in the Report. Conditions may therefore exist which were not detected given the limited nature of the assessment Golder was retained to undertake with respect to the Site and additional environmental studies and actions may be required. In addition, it is recognized that the passage of time affects the information provided in the Report. Golder's opinions are based upon information considered at the time of the writing of the Report. It is understood that the services provided for in the scope of work allowed Golder to form no more than an opinion of the actual conditions at the Site at the time the site was visited and cannot be used to assess the effect of any subsequent changes in any laws, regulations, the environmental quality of the site or its surroundings. Asbestos and mould surveys were not performed. If a service is not expressly indicated, do not assume it has been provided.

The results of an assessment of this nature should in no way be construed as a warranty that the Site is free from any and all contamination from past or current practices.

10.0 CLOSURE

We trust the information presented in this report meets your current requirements. Should you have any questions or concerns, please do not hesitate to contact us.

Golder Associates Ltd.

Robert Bayn

M. Jillian Mittro

Rebecca Boyce, Dip. Tech. *Environmental Technician*

Jillian Mitton, P.Eng. *Principal, Senior Environmental Engineer*

AA/RR/tt/al

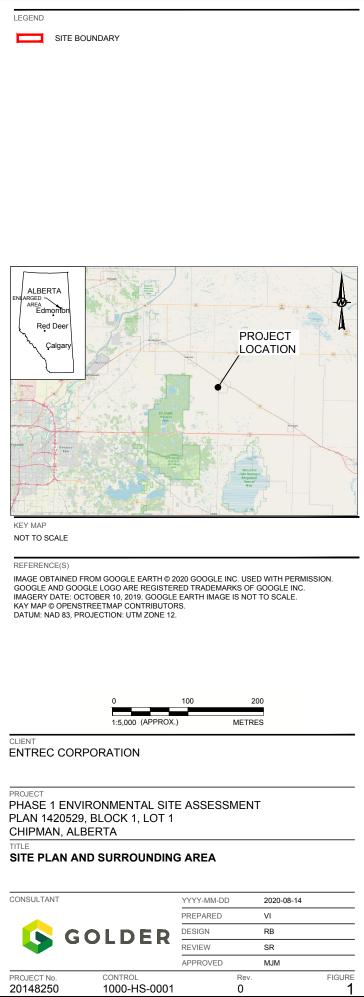
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FIGURE





FIGURE

Rev. 0

APPENDIX A

EcoLog ERIS Report



Project Property:

Project No: Report Type: Order No: Requested by: Date Completed: Phase I ESA - Entrec Phase I ESA - Entrec Chipman Chipman AB T0B 0W0 20148250 Quote - Custom-Build Your Own Report 20200722147 Golder Associates Ltd. July 27, 2020

Environmental Risk Information Services A division of Glacier Media Inc. 1.866.517.5204 | info@erisinfo.com | erisinfo.com

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Executive Summary

Property Information:

Project Property:

Project No:

Phase I ESA - Entrec Phase I ESA - Entrec Chipman Chipman AB T0B 0W0

20148250

Order Information:

Order No: Date Requested: Requested by: Report Type: 20200722147 July 22, 2020 Golder Associates Ltd. Quote - Custom-Build Your Own Report

Historical/Products:

City Directory Search Insurance Products Land Title Search CD - Subject Site plus 250m Radius Fire Insurance Maps/Inspection Reports/Site Plans Current Land Title Search

Executive Summary: Report Summary

Database	Name	Searched	Project Property	Boundary to 0.30km	Total
AERW	Well Licenses	Y	0	2	2
AGR	Agriculture and Fisheries - Certificates of Approval	Y	0	0	0
AOGW	Alberta Oil and Gas Wells	Y	0	0	0
AUWR	Automobile Wrecking & Supplies	Y	0	0	0
CAWD	Waste Management Facilities - Certificates of	Y	0	0	0
CBL	Approval Commercial Activity Risk	Y	0	0	0
CDRY	Dry Cleaning Facilities	Y	0	0	0
CFO	Confined Feeding Operations	Y	0	0	0
CHEM	Chemical Processing Operations - Certificates of	Y	0	0	0
CNG	Approval Compressed Natural Gas Stations	Y	0	0	0
COMPOST	Compost Facilities	Y	0	0	0
CONV	Compliance and Convictions	Y	0	0	0
CTNK	Fuel Sales and Storage	Y	0	0	0
EAS	Enforcement Action Summary	Y	0	0	0
EEM	Environmental Effects Monitoring	Y	0	0	0
EHS	ERIS Historical Searches	Y	0	0	0
EIIS	Environmental Issues Inventory System	Y	0	0	0
EPST	Alberta Environment & Parks Storage Tanks	Y	0	0	0
EPWN	Environment Protection & Enhancement Act and Water Act Public Notices	Y	0	0	0
ESAR	Environmental Site Assessment Repository	Y	0	0	0
FAC	Facility List	Y	0	0	0
FCON	Federal Convictions	Y	0	0	0
FCS	Contaminated Sites on Federal Land	Y	0	0	0
FIS	AER Incidents & Spills	Y	0	0	0
FOOD	Food Processing Operations - Certificates of Approval	Y	0	0	0
FRST	Federal Identification Registry for Storage Tank Systems (FIRSTS)	Y	0	0	0
FST	PTMAA Fuel Storage Tanks	Y	0	0	0
GEN	Waste Generators Summary	Y	0	0	0
GHG	Greenhouse Gas Emissions from Large Facilities	Y	0	0	0
GPP	Gas Processing Plants	Y	0	0	0
HELP	Alberta Environment's H.E.L.P. (Help End Landfill Pollution) Program Database	Y	0	0	0
HORW	Horizontal Wells	Y	0	0	0
IAFT	Indian & Northern Affairs Fuel Tanks	Y	0	0	0
LANDFILLS	Landfill Registrations	Y	0	0	0
LDS	Identification and Verification of Active and Inactive Land Disposal Sites	Y	0	0	0

Database	Name	Searched	Project Property	Boundary to 0.30km	Total
LDSI	Land Disposal Sites on Indian Reserves	Y	0	0	0
LUM	Lumber Related Operations - Certificates of Approval	Y	0	0	0
MINE	Canadian Mine Locations	Y	0	0	0
MMB	Metals, Minerals and Building Materials Operations - Certificates of Approval	Y	0	0	0
MNR	Mineral Occurrences	Y	0	0	0
NATE	National Analysis of Trends in Emergencies System (NATES)	Y Y	0	0 0	0
NCST	PTMAA Non-Compliant Storage Tanks		0	-	0
NDFT	National Defense & Canadian Forces Fuel Tanks	Y	0	0	0
NDSP	National Defense & Canadian Forces Spills	Ŷ	0	0	0
NDWD	National Defence & Canadian Forces Waste Disposal Sites National Energy Roard Bingling Incidents	Y Y	0 0	0 0	0 0
	National Energy Board Pipeline Incidents	Y Y	0	0	
NEBP	National Energy Board Wells		-	-	0
NEES	National Environmental Emergencies System (NEES)	Y Y	0	0	0
NPCB	National PCB Inventory		0	0	0
NPRI	National Pollutant Release Inventory	Ŷ	0	0	0
OAM	Operating and Abandoned Mines	Ŷ	0	0	0
OGF	Oil and Gas Facilities - ST102 & ST50	Ŷ	0	0	0
OGWW	Oil and Gas Wells	Y	0	0	0
	Approved Oilfield Waste Management Facilities	Y	0	0	0
ORP	Alberta Orphan Wells	Y	0	0	0
PAP	Canadian Pulp and Paper	Y	0	0	0
PCFT	Parks Canada Fuel Storage Tanks	Y	0	0	0
PCG	Petrochemical, Coal and Gas Operations - Certificates of Approval Particida Pariston	Y	0	0	0
PES	Pesticide Register	Y	0	0	0
PITS	Conglomerate and Waste Management Facilities	Ŷ	0	0	0
PSP	Alberta Private Sewage Disposal Permits	Ŷ	0	0	0
ΡΤΑΡ	PTMAA Approved (Open) Permits	Ŷ	0	0	0
REC	Hazardous Waste Receivers Summary	Y	0	0	0
RST	Retail Fuel Storage Tanks	Y	0	0	0
SCT	Scott's Manufacturing Directory	Y	0	0	0
SPEC	Special Operation Classifications - Certificates of Approval	Y	0	0	0
WDS	Inventory of Waste Disposal Sites	Y	0	0	0
WSTE	Wastewater Operations	Y	0	0	0
WWIS	Alberta Water Well Information Database	Y	0	1	1
	-	Total:	0	3	3

Executive Summary: Site Report Summary - Project Property

Мар Кеу	DB	Company/Site Name	Address	Dir/Dist (m)	Elev diff (m)	Page Number

No records found in the selected databases for the project property.

Executive Summary: Site Report Summary - Surrounding Properties

Мар Кеу	DB	Company/Site Name	Address	Dir/Dist (m)	Elev Diff (m)	Page Number
<u>1</u>	WWIS		AB Well ID: 280260	SW/240.6	1.00	<u>12</u>
<u>2</u>	AERW	VOYAGER ET AL ASTOTIN 10- 24-54-19	AB Unique Well ID: 00/10-24-054-19W4/0	SW/247.6	1.00	<u>17</u>
<u>2</u>	AERW	Voyager Petroleums Ltd(0J88)	AB	SW/247.6	1.00	<u>17</u>

Executive Summary: Summary By Data Source

AERW - Well Licenses

A search of the AERW database, dated Oct 31, 2019 has found that there are 2 AERW site(s) within approximately 0.30 kilometers of the project property.

<u>Site</u>	<u>Address</u>	Distance (m)	<u>Map Key</u>
Voyager Petroleums Ltd(0J88)	AB	247.6	2
VOYAGER ET AL ASTOTIN 10-24-54- 19	AB <i>Unique Well ID</i> : 00/10-24-054-19W4/0	247.6	<u>2</u>

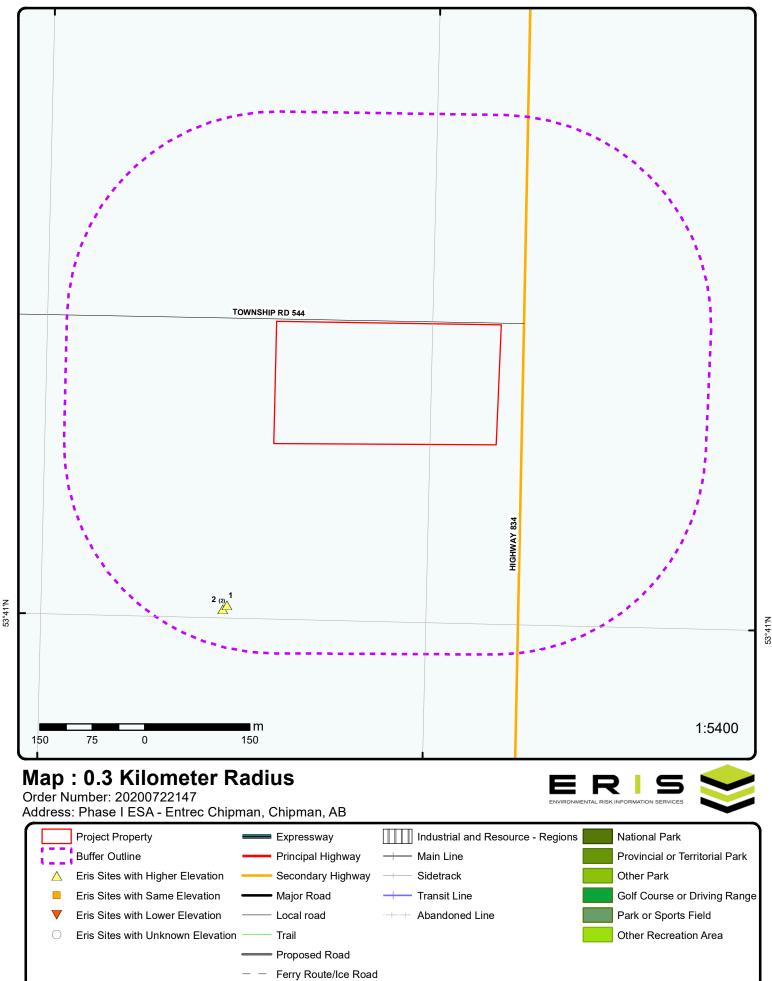
WWIS - Alberta Water Well Information Database

A search of the WWIS database, dated 1880-Apr 30, 2020 has found that there are 1 WWIS site(s) within approximately 0.30 kilometers of the project property.

<u>Site</u>	Address	<u>Distance (m)</u>	<u>Map Key</u>
	AB	240.6	1
	Well ID: 280260		

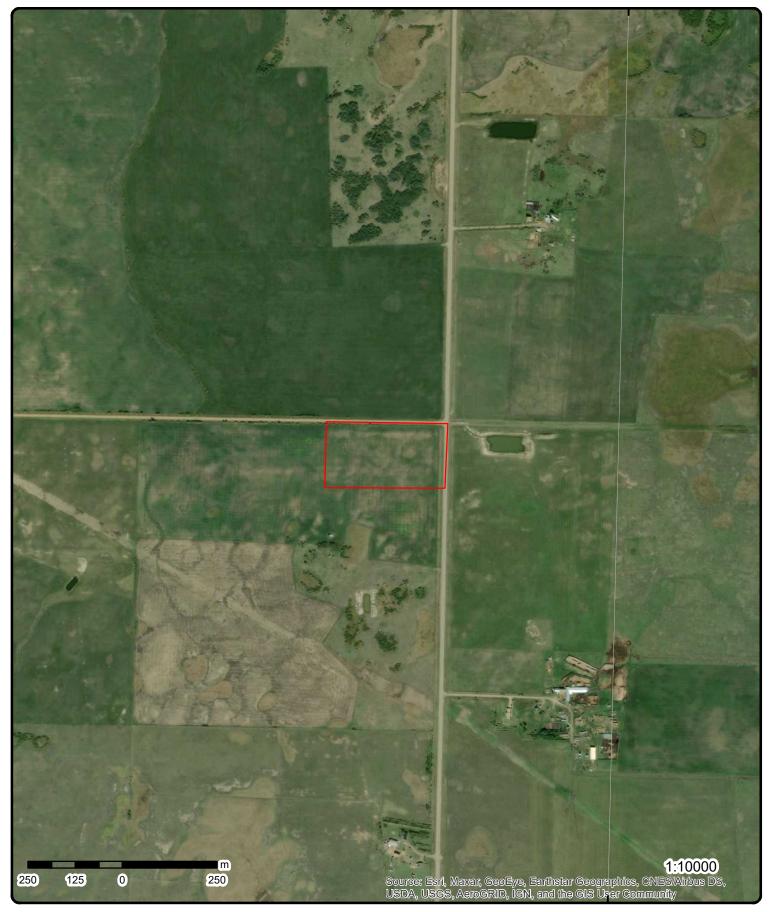


112°39'30"W



Source: © 2015 DMTI Spatial Inc.

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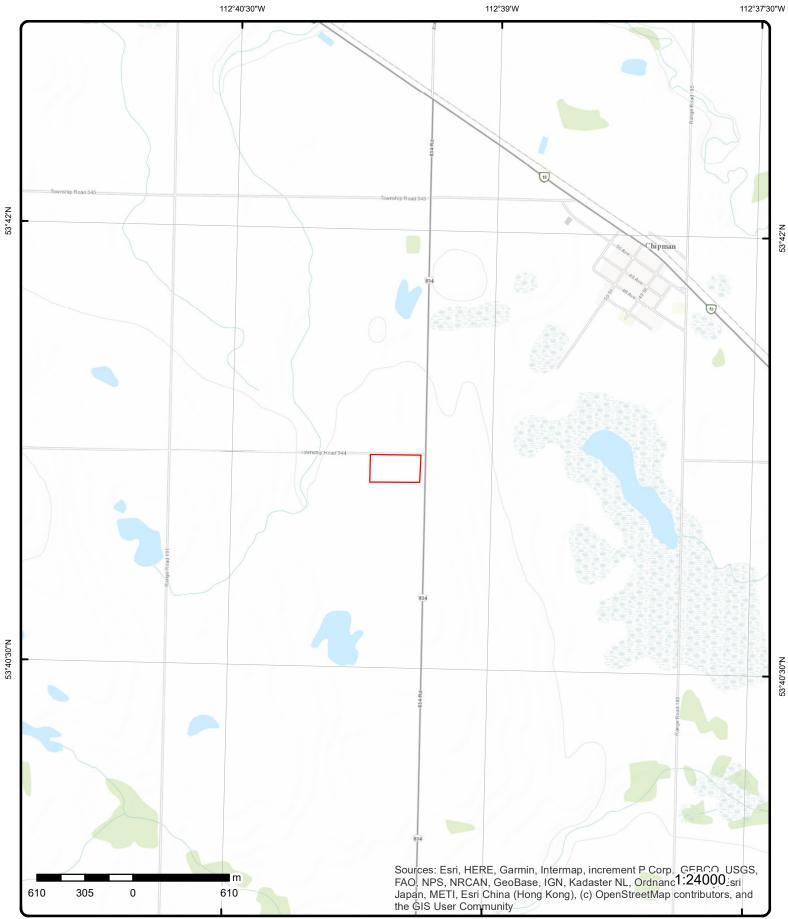
Aerial Year: 2002

Address: Phase I ESA - Entrec Chipman, Chipman, AB

Order Number: 20200722147



© ERIS Information Limited Partnership



Topographic Map

Address: Phase I ESA - Entrec Chipman, AB

Source: ESRI World Topographic Map

Order Number: 20200722147



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Detail Report

Map Key	Number Records	Direction/ Distance (m)	Elev/Diff (m)	Site		DB
<u>1</u>	1 of 1	SW/240.6	674.0 / 1.00	AB		WWI
Well ID: Driller ID: Licence No: GIC Well ID: GOA Well Ta Elevation (ft Depth (ft): Date Comple Proposed U: Lot: Block: Plan: Type of Wor Flowing Wel Date Started Water Req F Gas Present Flow Rate: Drilling Com Owner Mailin Driller Mailin	ag No:): eted: se: k: l: Per Day: t: ppany: ng Address:			Elevation Source: Method of Drilling: GPS Obtained: Boundary From: Distance North: Distance South: Distance East: Distance West: Additional Desc: Validated?: Submitted?: Location Locked?: Longitude: Latitude: LSD: Section: Township: Range: Meridian: DLS Coordinates:	Not Obtained Map Yes Yes -112.662577 53.683496 NE 24 54 19 4 NE-24-54-19-4	
Chemical Ai Chem Analy Well Report Sample No: Sample Date Analysis Da Laboratory: Water Level Aquifer: Remarks:	rsis ID: ID: e: te:	2060556 280260 7912 7/17/1974 0:00:00 9/3/1974 0:00:00 AE 40				
<u>Analysis Iter</u>	<u>ms</u>					
Chemical Ar Element Nar Element Syr Decimal Plac Value:	me: nbol:	2060556 Nitrate plus Nitrite NO2_NO3_N 4 -0.0994				
<u>Analysis Iter</u>	<u>ms</u>					
Chemical Ar Element Nar Element Syr Decimal Plac Value:	me: nbol:	2060556 Magnesium MG 4 -1.000768				

Мар Кеу	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Analysis Iten	<u>ns</u>				
Chemical An Element Nan Element Syn Decimal Plac Value:	ne: nbol:	2060556 Total Dissolved Soli TDS 0 840	ds		
<u>Analysis Iten</u>	ns				
Chemical An Element Nan Element Syn Decimal Plac Value:	ne: nbol:	2060556 Total Phosphorus TP 4 0			
<u>Analysis Iten</u>	<u>ns</u>				
Chemical An Element Nan Element Syn Decimal Plac Value:	ne: nbol:	2060556 Ion Balance IONBAL 4 0.9			
Analysis Iten	ns				
Chemical An Element Nan Element Syn Decimal Plac Value:	ne: nbol:	2060556 Electrical Conductivi EC 0 1380	ity		
<u>Analysis Iter</u>	<u>ns</u>				
Chemical An Element Nan Element Syn Decimal Plac Value:	ne: nbol:	2060556 Nitrite NO2 4 -0.0994			
Analysis Iten	ns				
Chemical An Element Nan Element Syn Decimal Plac Value:	ne: nbol:	2060556 Hydroxide OH 4 0			
Analysis Iten	<u>ns</u>				
Chemical An Element Nan Element Syn Decimal Plac Value:	ne: nbol:	2060556 Fluoride F 4 1.9			
<u>Analysis Iter</u>	ns				

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Chemical Analysis ID:

2060556

Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
Element Nam Element Sym Decimal Place	bol:	Calcium CA 4			
Value:		17.999928			
Analysis Item	<u>s</u>				
Chemical Ana		2060556			
Element Nam Element Sym		pH PH			
Decimal Place		2			
Value:		7.8			
Analysis Item	<u>s</u>				
Chemical Ana		2060556			
Element Nam		total Kjeldahl nitroge	n		
Element Sym Decimal Place		TKN 4			
Value:	-3.	0			
Analysis Item	<u>s</u>				
Chemical Ana		2060556			
Element Nam		Total Alkalinity			
Element Sym Decimal Place		ТА 4			
Value:		660			
Analysis Item	<u>s</u>				
Chemical Ana		2060556			
Element Nam Element Sym		Chloride CL			
Decimal Place		4			
Value:		103.14525			
Analysis Item	<u>'S</u>				
Chemical Ana		2060556			
Element Nam Element Sym		Sulphate SO4			
Decimal Place		4			
Value:		-10.01442			
Analysis Item	<u>s</u>				
Chemical Ana		2060556			
Element Nam Element Sym		lron FE			
Decimal Place		4			
Value:		-0.1			
<u>Analysis Item</u>	<u>s</u>				
Chemical Ana		2060556			
Element Nam		Potassium			
Element Sym Decimal Place		K 4			
		1.124			

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Analysis Items

Chemical Analysis ID:	2060556
Element Name:	Total Hardness
Element Symbol:	TH
Decimal Places:	4
Value:	47

Analysis Items

Chemical Analysis ID:	2060556
Element Name:	Bicarbonate
Element Symbol:	HCO3
Decimal Places:	4
Value:	805.079402

Analysis Items

Chemical Analysis ID:	2060556
Element Name:	Sodium
Element Symbol:	NA
Decimal Places:	4
Value:	314.0006

Well Reports

Well Report ID:	280260	Annular Seal Mat:	
Well Owner ID:	10575539	Annular Seal from:	0
Driller ID:	2533726	Annular Seal to:	0
Drill Company ID:	11110	Annular Seal Amt:	
Drill Instance ID:	8337868	Annular Seal Units:	
Drill Comp Well ID:		Drilling Method:	Unknown
Existing Well ID:		Drilling Start Dt:	
Date Received:	8/1/1975 0:00:00	Drilling End Dt:	
Type of Work:	Chemistry	Pack Type:	
Plug Date:		Pack Grain Size:	
Plug Material Type:		Pack Amount:	
Plug Mat Amount:		Pack Units:	
Plugged Units:		Loc Verify Method:	Мар
Well Use:	Domestic	Dist Casing Ground:	
Other Well Use:		Artesian Flow?:	No
Total Depth Drill:	220	Artesian Flow Rate:	
Finish Well Depth:		Gas Depth:	
Casing Material:		Encounter Gas?:	No
Casing OD:	0	Flow Ctrl Install?:	No
Casing Thickness:	0	Recommended Rate:	0
Casing Bottom:	0	Recom Intake Depth:	0
Liner Material:		Pump Installed?:	No
Liner OD:	0	Pump Install Depth:	
Liner Thickness:	0	Pump Model:	
Liner Top:	0	Pump Horsepower:	
Liner Bottom:	0	Well Disinfected?:	No
Perforation by:		Other Log:	
Screen Material:		Divert Water Src:	
Screen Size OD:	0	Divert Water Amt:	
Screen Attachment:		Diversion Dt/Time:	
Screen Top Fitting:		Is Submitted?:	Yes
Screen Bot Fitting:		Is Validated?:	Yes
Encounter Saline Water	?: No		
Saline Water Depth:			
Potability Sample Taken	17: No		

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Map Key	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site	DB
	le Sent to AENV?:	No			
Model Output Remedial Acti Flow Control I Pump Type In	t Given to Owner: Rating: ion: Description:	No			
Created by: Submitted by:					
Additional Co		ORIGINALLY NO LS	SD		
<u>Well Owners</u>					
Well Owner ID):	10575539			
Owner Name: PO Box:		KADATZ, GORDON			
Address:		CHIPMAN			
City: Postal Code:					
Province: Country:					
<u>Drillers</u>					
Driller ID:		2533726			
Last Name:		DRILLER NA			
Middle Initial: First Name:		UNKNOWN			
Journeyman N	Vo:	1			
Is Active?:		Yes			
Drilling Comp	anies				
Starting Well		1973500			
Ending Well IL Last Well ID U		1973599 1973599			
Company Nan		UNKNOWN DRILLE	R		
Street Addres		UNKNOWN			
City: Province:		UNKNOWN AB			
Country:		CA			
Postal Code:					
E-Mail: Is Active?:		gwinfo@gov.ab.ca No			
<u>Geophysical L</u>	<u>logs</u>				
Geophysical L	Log ID:	5787363			
Log Type: Log Taken?:		Gamma No			
Sent to AENV	?:	No			
Geophysical L	logs				
Geophysical L	Log ID:	5384288			
Log Type:		Electric			
Log Taken?: Sent to AENV	?:	No No			
		-			

Boreholes

Map Key	Number Records		Direction/ Distance (m	Elev/Diff) (m)	Site		DB
Borehole ID: Diameter: From: To:			485793 0 0 220				
			-				
<u>Pump Tests</u>							
Pump Test ID Test Date: Start Time: Taken from T Static Water Le End Water Remov Water Remov Removal Dep	Fop of Casin Level: evel: val Type: val Rate:	ıg:	10278463 7/17/1974 0:00:0 1/1/1900 0:00:00 No 40				
Reason for S			0				
2	1 of 2		SW/247.6	674.0 / 1.00	VOYAGER ET AL AS	TOTIN 10-24-54-19	AERW
					AB		
Unique Well I Well Status: Keylist: License No: Licence Statu Licence Date Stat Date: Well Fluid: Well Mode: Well Type: Well Structur Scheme Type Scheme Subi Bttm/Surface Fluid Short D Update: Structure Sho Licensee: Kelly Bushing (s) (KBE)	us: 2: e: e: e: besc: Desc: Desc: ort Descript	0002000 0544192 0079567 RecCert 1979-11 1979-12 N/A ABD N/A N/A N/A NOT App ABANDO Not App	2410000 -29 -08 Holes licable DNED	ıms Ltd	Agent: Operator: Field: Pool: OS Area: OS Dep: Max True Vert Depth: Ground Elevation: Surf Loc: EDCT: Rating Ev: Op Surv Prov: FD Date: Total Dep: KBE: Latitude: Longitude:	0073 0000000 0 673.8 1979-12-06 954 53.683446 -112.662668	
2	2 of 2		SW/247.6	674.0 / 1.00	Voyager Petroleums	l td(0,188)	
=	2012		011/247.0	074.07 1.00	AB	214(0000)	AERW
Unique Well I Well Status: Keylist: License No: Licence Statu Licence Date Stat Date: Well Fluid: Well Mode: Well Type: Well Structur	us: ::	0079567 RecCert 31 Dec 7	ified		Agent: Operator: Field: Pool: OS Area: OS Dep: Max True Vert Depth: Ground Elevation: Surf Loc: EDCT: Rating Ev:	673.8 10-24-054-19W4 BWL J	

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Order No: 20200722147

Мар Кеу	Number of Records	Direction/ Distance (m)	Elev/Diff (m)	Site		DB
Scheme Typ Scheme Sub Bttm/Surface Fluid Short I Mode Short I Type Short I Update: Structure Sh Licensee:	<i>it:</i> e Hole: Surface Desc: Desc:	Holes		Op Surv Prov: FD Date: Total Dep: KBE: Latitude: Longitude:	53.683446 -112.662668	
<u>Kelly Bushin</u> <u>(s) (KBE)</u>	ng Elevation Detail					
KBE:		677.5				

Unplottable Summary

Total: 0 Unplottable sites

DB

Company Name/Site Name

Address

City

Postal

Unplottable Report

No unplottable records were found that may be relevant for the search criteria.

Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. Note: Databases denoted with "*" indicates that the database will no longer be updated. See the individual database description for more information.

Well Licenses: Provincial AERW Locations of Well Licenses made available by the Alberta Energy Regulator (AER) as ST37. Includes Active, Suspended, Abandoned, Drilled and Cased Oil, Gas, Crude Bitumen well licenses, as well as Observation, Injection, Disposal, and Undefined well licences. Government Publication Date: Oct 31, 2019

Agriculture and Fisheries - Certificates of Approval: Provincial AGR This database contains approvals for processes pertaining to drying of alfalfa/forage/peat, feedlots, fish farms and feed/seed mills. Please note that, as per the source of this database, some of the geographic information may pertain to a head office or mailing address and not necessarily the site of operations to which the certificate applies. 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. Government Publication Date: 1993-2012

Provincial Alberta Oil and Gas Wells: AOGW 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.

Government Publication Date: 1883-Sept 2003*

Automobile Wrecking & Supplies:

This database provides an inventory of known locations that are involved in the scrap metal, automobile wrecking/recycling, and automobile parts & supplies industry. Information is provided on the company name, location and business type. Government Publication Date: 1999-Jan 31, 2020

Provincial Waste Management Facilities - Certificates of Approval: CAWD This database contains approvals for processes pertaining to waste management facilities (hazardous waste manifesting, waste disposal/incineration/open burning/processing/storage/treatment). Please note that, as per the source of this database, some of the geographic information may pertain to a head office or mailing address and not necessarily the site of operations to which the certificate applies. 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 guarter section only.

Government Publication Date: 1993 - Jan 2020

Commercial Activity Risk: CBL List of locations with Business Licences for the follow commercial activities: apartment building with 4 or more stories, auto-body shop, fabric cleaning, manufacturing, motor vehicle dealerships and service/repair, and salvage yard/auto wrecking. Data made available by the City of Calgary. Government Publication Date: May 31, 2020

Federal List of dry cleaning facilities made available by Environment and Climate Change Canada. Environment and Climate Change Canada's Tetrachloroethylene (Use in Dry Cleaning and Reporting Requirements) Regulations (SOR/2003-79) are intended to reduce releases of tetrachloroethylene to the environment from dry cleaning facilities.

Environment and Climate Change Canada cites the coronavirus pandemic as an explanation for delays in releasing data pursuant to requests. Government Publication Date: Jan 2004-Dec 2017

Dry Cleaning Facilities:

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AUWR

Provincial

Private

CDRY

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Confined Feeding Operations:

In 1991, the Natural Resources Conservation Board (NRCB) was created to review applications for approval of major natural resource development projects in Alberta. In January 2002, the NRCB was given the responsibility to regulate the Confined Feeding Operation industry. The Agricultural Operation Practices Act defines a confined feeding operation to be: "an activity on land that is fenced or enclosed or within buildings where livestock are confined for the purpose of growing, sustaining, finishing or breeding by means other than grazing, but does not include seasonal feeding and bedding sites." Under the AOPA regulations, all new or expanding confined feeding operations (CFOs) or manure storage facilities are required to make an application for Approval, Registration or Authorization to the NRCB before construction or expansion commences. Geographic coordinates were provided in DLS (Dominion Land Survey) format but do not contain offsets that are necessary to pinpoint a specific location. Therefore, locations will be accurate to the Quarter section only.

Government Publication Date: 2002-Apr 2020

Compressed Natural Gas Stations:

Government Publication Date: Dec 31, 2019

Government Publication Date: 1993-Mar 2020

Fuel Sales and Storage:

Enforcement Action Summary:

Chemical Processing Operations - Certificates of Approval: This database contains approvals for processes pertaining to the manufacturing and use of chemical products and pesticides. Please note that, as per

the source of this database, some of the geographic information may pertain to a head office or mailing address and not necessarily the site of operations to which the certificate applies. 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. Government Publication Date: 1993-2012

Canada has a network of public access compressed natural gas (CNG) refuelling stations. These stations dispense natural gas in compressed form at 3,000 pounds per square inch (psi), the pressure which is allowed within the current Canadian codes and standards. The majority of natural gas refuelling is located at existing retail gasoline that have a separate refuelling island for natural gas. This list of stations is made available by the Canadian Natural Gas Vehicle Alliance. Government Publication Date: Dec 2012 - Jun 2020

required to follow the requirements in the Code of Practice for Compost Facilities, which outlines the minimum requirements for the design, construction,

Compost Facilities: Provincial A list of compost facility registrations made available by Alberta Environment and Parks (AEP). Composting facilities operating under a registration are

operation, and reclamation of compost facilities that accept up to 20,000 tonnes of feedstock per year.

Provincial Compliance and Convictions: This database summarizes the penalties and convictions handed down by the Alberta courts. This database identifies companies and/or individuals that have been found guilty of environmental offenses under Alberta's Environmental Protection Legislation. Please note that, as per the source of this database, some of the geographic information may pertain to a head office or mailing address and not necessarily the site of operations to which the certificate applies. Unfortunately, from state of the data, the location that the address pertains to cannot be confirmed.

List of locations with Business Licences for fuel sales and storage. Data made available by the City of Calgary. Government Publication Date: May 31, 2020

This database maintained by the Alberta Energy Regulator (AER) - formerly the Energy Resources Conservation Board (ERCB) - summarizes high risk enforcement action 1, high risk enforcement action 2 (persistent noncompliance), high risk enforcement action 3 (failure to comply or demonstrated disregard), low risk enforcement action - global REFER and legislative/regulatory enforcement action. Fields will include licensee/company name, noncompliance event, date of enforcement, location, etc.

Government Publication Date: 2007-Feb 2020

Environmental Effects Monitoring:

The Environmental Effects Monitoring program assesses the effects of effluent from industrial or other sources on fish, fish habitat and human usage of fisheries resources. Since 1992, pulp and paper mills have been required to conduct EEM studies under the Pulp and Paper Effluent Regulations. This database provides information on the mill name, geographical location and sub-lethal toxicity data. Government Publication Date: 1992-2007*

ERIS Historical Searches: FHS ERIS has compiled a database of all environmental risk reports completed since March 1999. Available fields for this database include: site location, date of report, type of report, and search radius. As per all other databases, the ERIS database can be referenced on both the map and "Statistical Profile" page.

Government Publication Date: 1999-Apr 30, 2020

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CONV

CTNK

FAS

EEM

Provincial

Provincial

Private

Federal

Provincial

Provincial

Private

COMPOST

CFO

CHEM

CNG

Environmental Issues Inventory System:

The Environmental Issues Inventory System was developed through the implementation of the Environmental Issues and Remediation Plan. This plan was established to determine the location and severity of contaminated sites on inhabited First Nation reserves, and where necessary, to remediate those that posed a risk to health and safety; and to prevent future environmental problems. The EIIS provides information on the reserve under investigation, inventory number, name of site, environmental issue, site action (Remediation, Site Assessment), and date investigation completed. Government Publication Date: 1992-2001*

Provincial Alberta Environment & Parks Storage Tanks: EPST List of storage tanks under the purview of Alberta Environment and Parks.

Government Publication Date: Jul 31, 2016

Environment Protection & Enhancement Act and Water Act Public Notices:

A list of Public Notices of Applications, Decisions, and Revisions pertaining to applications made to Alberta Environment and Parks under the Water Act (WA) and Alberta Environment Protection and Enhancement Act (EPEA). Dominion Land Survey (DLS) locations provided by the source are subject to accuracy limitations inherent to the DLS system.

industrial sites. A site assessment does not necessarily mean a site is, or ever was, contaminated. Alberta's Environmental Site Assessment Repository

Government Publication Date: Dec 31, 2019

Environmental Site Assessment Repository: Environmental site assessments determine the quality of soil and groundwater of a site, particularly at retail gas stations and other commercial and

(ESAR) is an online, searchable database that provides scientific and technical information about assessed and/or reclaimed sites throughout Alberta. Search Alberta's ESAR using meridian, range, township, and section values at http://www.esar.alberta.ca/esarmain.aspx to gain access to reclamation certificates and/or associated files (applications, reports).

Government Publication Date: 1960-Apr 2020

Facility List: FAC This database contains a complete list of new, active and suspended facilities in Alberta including batteries, gas plants, meter stations, and other facilities. Information provided includes: facility id, facility name, operator name, sub type description, location, facility I license no, and operational status; now includes EDCT (Energy Development Category Type) type and description. Made available by the Alberta Energy Regulator (AER) formerly the Energy Resources Conservation Board (ERCB).

Government Publication Date: Up to Jun 30, 2020

Federal Convictions: **FCON** Environment Canada maintains a database referred to as the "Environmental Registry" that details prosecutions under the Canadian Environmental Protection Act (CEPA) and the Fisheries Act (FA). Information is provided on the company name, location, charge date, offence and penalty. Government Publication Date: 1988-Jun 2007*

Contaminated Sites on Federal Land: FCS The Federal Contaminated Sites Inventory includes information on known federal contaminated sites under the custodianship of departments, agencies and consolidated Crown corporations as well as those that are being or have been investigated to determine whether they have contamination arising from past use that could pose a risk to human health or the environment. The inventory also includes non-federal contaminated sites for which the Government of Canada has accepted some or all financial responsibility. It does not include sites where contamination has been caused by, and which are under the control of, enterprise Crown corporations, private individuals, firms or other levels of government. Includes fire training sites and sites at which Per- and Polyfluoroalkyl Substances (PFAS) are a concern.

Government Publication Date: Jun 2000-Apr 2020

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.

Government Publication Date: 1975-Jun 2020

Food Processing Operations - Certificates of Approval:

This database contains approvals for processes pertaining to the manufacturing of food products. Please note that, as per the source of this database, some of the geographic information may pertain to a head office or mailing address and not necessarily the site of operations to which the certificate applies. 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.

Government Publication Date: 1993-2012

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Provincial

Provincial

FOOD

FIS



FPWN

FIIS

Provincial

Provincial

Provincial

Federal

Federal

FSAR

Federal Identification Registry for Storage Tank Systems (FIRSTS):

A list of federally regulated Storage tanks from the Federal Identification Registry for Storage Tank Systems (FIRSTS). FIRSTS is Environment and Climate Change Canada's database of storage tank systems subject to the Storage Tank for Petroleum Products and Allied Petroleum Products Regulations. The main objective of the Regulations is to prevent soil and groundwater contamination from storage tank systems located on federal and aboriginal lands. Storage tank systems that do not have a valid identification number displayed in a readily visible location on or near the storage tank system may be refused product delivery.

Government Publication Date: May 31, 2018

PTMAA Fuel Storage Tanks: **FST** List of active tank sites, sites with tanks temporarily out of service, and sites at which tanks have been removed from the ground. Information in this database was collected according to Alberta Regulation AR 291/95 Storage Tank System Management and to AR 52/98 Fire Code which was formerly the Alberta Fire Code Regulation, 1992 (AR 204/92). This information was received from the Petroleum Tank Management Association of Alberta (PTMAA) which has regulated Storage Tanks since 1994. Government Publication Date: 1985-Mar 2020

Under Alberta's Waste Control Regulation, Alta. Reg. 192/96, a generator is a person who consigns hazardous waste for storage, transport, treatment or disposal. As of 2007, Alberta Environment no longer provides detailed information on each waste generator, such as approval number, class, and class description.

Government Publication Date: 1993-Aug 2018

Government Publication Date: 2013-Dec 2017

Waste Generators Summary:

Greenhouse Gas Emissions from Large Facilities:

Gas Processing Plants:

Horizontal Wells:

dioxide equivalents (kt CO2 eq).

Alberta, with information such as location, names of plant, facility type, operator name, facility license, design capacities, etc. Government Publication Date: Oct 2016-Oct 31, 2019

The H.E.L.P. Data Tracking and Management Control System was created to provide tracking and management capabilities of industrial landfills in Alberta for the Department of Environment. Detailed information including company name, location, type of landfill, priority, score, status, use and much

Alberta Environment's H.E.L.P. (Help End Landfill Pollution) Program Database:

more is included in this database. Government Publication Date: June 1988*

HORW Defined as drilling directionally at a wellbore inclination angle exceeding 85 degrees, horizontal drilling can help increase resource recovery while minimizing surface impact. Recent improvements in the technology 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. Data includes: well locations (LE,LS,SE,TWP,RG,M,E), licence numbers, well names, Business Associate (BA) codes, licensee abbreviations, spud dates, final drilling dates, total depth, true vertical depth, and last updated dates. Made available by the Alberta Energy Regulator (AER) - formerly the Energy Resources Conservation Board (ERCB).

Government Publication Date: Mar 2015-Feb 29, 2020

Indian & Northern Affairs Fuel Tanks:

The Department of Indian & Northern Affairs Canada (INAC) maintains an inventory of aboveground & underground fuel storage tanks located on both federal and crown land. Our inventory provides information on the reserve name, location, facility type, site/facility name, tank type, material & ID number, tank contents & capacity, and date of tank installation. Government Publication Date: 1950-Aug 2003*

A list of landfill registrations made available by Alberta Environment and Parks (AEP). Landfills operating under a registration are required to follow the requirements in the Code of Practice for Landfills, which outlines the minimum requirements for the construction, operation and reclamation of landfills that accept 10,000 tonnes or less per year of non-hazardous and inert waste.

Government Publication Date: Mar 31, 2020

Landfill Registrations:

24

Federal List of greenhouse gas emissions from large facilities made available by Environment Canada. Greenhouse gas emissions in kilotonnes of carbon

The Alberta Energy Regulator (AER) - formerly the ERCB (Energy Resources Conservation Board) - has an inventory of all Gas Processing Plants in

Provincial

Provincial

Federal

Provincial

LANDFILLS

IAFT

Federal

Provincial

Provincial

Provincial

FRST

GPP

HELP

GEN

GHG

Identification and Verification of Active and Inactive Land Disposal Sites:

Government Publication Date: Oct 1982*

Government Publication Date: Oct 1982*

as potential priority 1 sites.

Land Disposal Sites on Indian Reserves:

Lumber Related Operations - Certificates of Approval:

This database contains approvals for processes pertaining to the manufacturing of wood products, pulp and paper including the associated water treatment processes. Please note that, as per the source of this database, some of the geographic information may pertain to a head office or mailing address and not necessarily the site of operations to which the certificate applies. 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. Government Publication Date: 1993-2012

In late 1981, Environment Canada and Alberta Environment initiated a project to identify and verify land disposal sites in the province of Alberta. This database specifically identifies land disposal sites on Indian Reserves. Information on each site is limited to: location, band, size and general comments.

In late 1981, Environment Canada and Alberta Environment initiated a project to identify and verify land disposal sites in the province of Alberta. A point scoring system was used to classify the sites into potential priority 1, priority 2 or priority 3 groups on the basis of the type of waste received at the sites and the site environment. Sites that, according to available information, may pose a hazard to public health and safety or the environment are classified

Canadian Mine Locations: MINF This information is collected from the Canadian & American Mines Handbook. The Mines database is a national database that provides over 290 listings on mines (listed as public companies) dealing primarily with precious metals and hard rocks. Listed are mines that are currently in operation, closed, suspended, or are still being developed (advanced projects). Their locations are provided as geographic coordinates (x, y and/or longitude, latitude). As of 2002, data pertaining to Canadian smelters and refineries has been appended to this database. Government Publication Date: 1998-2009*

Metals, Minerals and Building Materials Operations - Certificates of Approval: MMB This database contains approvals for processes pertaining to the manufacturing of building materials, metals, and mineral products. Please note that, as per the source of this database, some of the geographic information may pertain to a head office or mailing address and not necessarily the site of operations to which the certificate applies. 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. Government Publication Date: 1993-2012

Mineral Occurrences:

Government Publication Date: 1993-2003*

National Analysis of Trends in Emergencies System (NATES):

In 1974 Environment Canada established the National Analysis of Trends in Emergencies System (NATES) database, for the voluntary reporting of significant spill incidents. The data was to be used to assist in directing the work of the emergencies program. NATES ran from 1974 to 1994. Extensive information is available within this database including company names, place where the spill occurred, date of spill, cause, reason and source of spill, damage incurred, and amount, concentration, and volume of materials released.

Government Publication Date: 1974-1994*

PTMAA Non-Compliant Storage Tanks:

or the owners have not made the annual registration application or paid the necessary registration fees. Some tank owners have installed tanks without a permit. This source contains information on facilities which have tanks that have ceased to be registered or have never been registered. It is maintained and updated by the Petroleum Tank Management Association of Alberta (PTMAA). Government Publication Date: Sep 2016-May 31, 2020

National Defense & Canadian Forces Fuel Tanks:

The Department of National Defense and the Canadian Forces maintains an inventory of all aboveground & underground fuel storage tanks located on DND lands. Our inventory provides information on the base name, location, tank type & capacity, tank contents, tank class, date of tank installation, date tank last used, and status of tank as of May 2001. This database will no longer be updated due to the new National Security protocols which have prohibited any release of this database.

Government Publication Date: Up to May 2001*

Provincial

Provincial

Federal

I DS

LDSI

LUM

Provincial

MNR

NATE

NCST

NDFT

The AMDO (Alberta Mineral Deposits and Occurrences) application was created by the Minerals and Coal Geoscience Section of the Alberta Geological Survey as a database for mineral deposits in Alberta in the early 1990s. This is a one time inventory and will not be updated.

The Alberta Fire Code requires that storage tanks be registered. Tanks may not be registered because they do not meet minimum equipment standards

Provincial

Provincial

Private

Provincial

Federal

erisinfo.com | Environmental Risk Information Services

Oil and Gas Facilities - ST102 & ST50: OGF List of batteries, gas plants, meter stations, and other facilities in the province of Alberta, made available as ST102 (Parts A and B) and ST50 (B) by the Alberta Energy Regulator (AER).

NFFS In 2000, the Emergencies program implemented NEES, a reporting system for spills of hazardous substances. For the most part, this system only captured data from the Atlantic Provinces, some from Quebec and Ontario and a portion from British Columbia. Data for Alberta, Saskatchewan, Manitoba and the Territories was not captured. However, NEES is also a repository for previous Environment Canada spill datasets. NEES is composed of the historic datasets ' or Trends ' which dates from approximately 1974 to present. NEES Trends is a compilation of historic databases, which were merged and includes data from NATES (National Analysis of Trends in Emergencies System), ARTS (Atlantic Regional Trends System), and NEES. In 2001, the Emergencies Program determined that variations in reporting regimes and requirements between federal and provincial agencies made national spill reporting and trend analysis difficult to achieve. As a consequence, the department has focused efforts on capturing data on spills of substances which fall under its legislative authority only (CEPA and FA). As such, the NEES database will be decommissioned in December

National Environmental Emergencies System (NEES): Federal

Government Publication Date: 2008-Mar 31, 2020

National Energy Board Pipeline Incidents: Federal NEBI

our inventory provides information on the base name, location, type of waste received, area of site, depth of site, year site opened/closed and status.

Locations of pipeline incidents from 2008 to present, made available by the Canada Energy Regulator (CER) - previously the National Energy Board (NEB). Includes incidents reported under the Onshore Pipeline Regulations and the Processing Plant Regulations related to pipelines under federal jurisdiction, does not include incident data related to pipelines under provincial or territorial jurisdiction.

Federal National Energy Board Wells: NEBP 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.

Government Publication Date: 1920-Feb 2003*

2004. Government Publication Date: 1974-2003*

Environment Canada's National PCB inventory includes information on in-use PCB containing equipment in Canada including federal, provincial and private facilities. Federal out-of-service PCB containing equipment and PCB waste owned by the federal government or by federally regulated industries such as airlines, railway companies, broadcasting companies, telephone and telecommunications companies, pipeline companies, etc. are also listed. Although it is not Environment Canada's mandate to collect data on non-federal PCB waste, the National PCB inventory includes some information on provincial and private PCB waste and storage sites. Some addresses provided may be Head Office addresses and are not necessarily the location of where the waste is being used or stored. Government Publication Date: 1988-2008*

National Pollutant Release Inventory: Environment Canada has defined the National Pollutant Release Inventory ("NPRI") as a federal government initiative designed to collect

This data is based on the 2001 edition (revised in 2003), published by the Alberta Energy and Utilities Board (EUB) now the Alberta Energy Regulator (AER). It was a one time inventory of Operating and Abandoned Coal Mines in Alberta. In 1905, Alberta began to catalogue coal mines by assigning a unique number to each operation. This database will provide information on location, mine #, mine name, mine company, life span, amount of coal produced, depth, thickness and other important information concerning the mine. Government Publication Date: 2001, 2003*

Government Publication Date: Jun 30, 2020

NDSP The Department of National Defense and the Canadian Forces maintains an inventory of spills to land and water. All spill sites have been classified under the "Transportation of Dangerous Goods Act - 1992". Our inventory provides information on the facility name, location, spill ID #, spill date, type

The Department of National Defence and the Canadian Forces maintains an inventory of waste disposal sites located on DND lands. Where available,

Federal

Provincial

Provincial

National Defense & Canadian Forces Spills:

Government Publication Date: Mar 1999-Apr 2018

National Defence & Canadian Forces Waste Disposal Sites:

of spill, as well as the quantity of substance spilled & recovered.

Government Publication Date: 2001-Apr 2007*

National PCB Inventory:

comprehensive national data regarding releases to air, water, or land, and waste transfers for recycling for more than 300 listed substances. Government Publication Date: 1993-May 2017

Operating and Abandoned Mines:

Federal

Federal

NDWD

NPCB

NPRI

OAM

Federal

permits within the jurisdiction of Alberta Municipal Affairs. Government Publication Date: 2003-2013

Conglomerate and Waste Management Facilities: Provincial

This database contains approvals for processes pertaining to the use of gravel pits, and pits, and clav pits. Please note that, as per the source of this database, some of the geographic information may pertain to a head office or mailing address and not necessarily the site of operations to which the certificate applies. 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. Government Publication Date: 1993-2012

Provincial Alberta Private Sewage Disposal Permits: PSP These permits are private sewage disposal permits that have been issued to owners and contractors. They would include various types of installations including holding tanks, septic tanks, packaged treatment plants, sand filters, fields, mounds, lagoons and open discharges. In 2003 Alberta Municipal Affairs started collecting information and issuing permits using an electronic permitting system. These records include all private sewage disposal

Canadian Pulp and Paper:

and the products that they produce.

Parks Canada Fuel Storage Tanks:

Government Publication Date: 1999, 2002, 2004, 2005, 2009-2014

Canadian Heritage maintains an inventory of known fuel storage tanks operated by Parks Canada, in both National Parks and at National Historic Sites. The database details information on site name, location, tank install/removal date, capacity, fuel type, facility type, tank design and owner/operator. Government Publication Date: 1920-Jan 2005*

This information is part of the Pulp and Paper Canada Directory. The Directory provides a comprehensive listing of the locations of pulp and paper mills

Petrochemical, Coal and Gas Operations - Certificates of Approval:

This database contains approvals for processes pertaining to petroleum, coal, and oil and gas processing. Please note that, as per the source of this database, some of the geographic information may pertain to a head office or mailing address and not necessarily the site of operations to which the

certificate applies. 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. Government Publication Date: 1993-2012

Pesticide Register:

PES This is a list of Registered Pesticide Vendors in Alberta (retail and wholesale). The pesticide vendor list is comprised of vendors who have both audited AWSA pesticide storage facilities as part of their operation, and those vendors that do not have an audited AWSA pesticide storage facilities. Nonaudited retail and wholesale vendors may be selling products that are not covered by the AWSA program, or may be utilizing external AWSA pesticide warehouses. Registration numbers and expiry dates are identified for each operation. If a registration number is not present, the operation's vendor

Government Publication Date: 1998-Aug 2015

registration is in the process of renewal.

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. Government Publication Date: Jan 2007-Dec 31, 2019

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).

Government Publication Date: Jul 2019 Provincial Alberta Orphan Wells:

ORP 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, and reclamation. Legacy wells under long term care and custody are excluded. Please note that the OWA Orphan List also includes

Approved Oilfield Waste Management Facilities:

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.

Government Publication Date: 1988-May 31, 2020

Oil and Gas Wells:

Private The Nickle's Energy Group (publisher of the Daily Oil Bulletin) collects information on drilling activity including operator and well statistics. The well

OGWW

Provincial **OILFIELD WASTE**

Private

Federal

PCFT

PAP

PCG

PITS

Provincial

Provincial



Order No: 20200722147

PTMAA Approved (Open) Permits:

Hazardous Waste Receivers Summary:

register the waste receiving facility. This database represents receivers of regulated wastes under Alberta's Waste Control Regulation, Alta. Reg. 192/96. As of 2007, Alberta Environment no longer provides detailed information on each waste receiver, such as approval number, class, and class

Retail Fuel Storage Tanks:

or propane storage tanks. Government Publication Date: 1999-Jan 31, 2020

Scott's Directories is a data bank containing information on over 200,000 manufacturers across Canada. Even though Scott's listings are voluntary, it is the most comprehensive database of Canadian manufacturers available. Information concerning a company's address, plant size, and main products are included in this database.

Special Operation Classifications - Certificates of Approval: SPEC This database contains approvals for processes pertaining to classifications listed as special operations (i.e. locations owned/operated by municipalities, operations that involve the presence of pesticides). Please note that, as per the source of this database, some of the geographic information may pertain to a head office or mailing address and not necessarily the site of operations to which the certificate applies. 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,

This one time inventory is a compilation of information collected from each region and pertains to active, regulated waste disposal sites within the province of Alberta. In the past, waste disposal sites were registered with both regional and health offices. That process was dissolved and regional landfills were developed. There is no central source of this information. 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.

This database contains approvals for processes pertaining to wastewater treatment systems. Please note that, as per the source of this database, some of the geographic information may pertain to a head office or mailing address and not necessarily the site of operations to which the certificate applies. 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.

Government Publication Date: 1993-2012

Government Publication Date: 1998*

Alberta Water Well Information Database:

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.

Government Publication Date: 1880-Apr 30, 2020

28

The Petroleum Tank Management Association of Alberta maintains a list of open permits it has issued within its jurisdiction. Prior to installing, removing, or altering tanks, storage tanks owners must receive approval in the form of a permit from the Authority Having Jurisdiction (in this case, PTMAA).

Government Publication Date: Apr 2016-Apr 30, 2020

description.

Government Publication Date: 1993-Aug 2018

This database includes an inventory of retail fuel outlet locations (including marinas) that have on their property gasoline, oil, waste oil, natural gas and /

Scott's Manufacturing Directory:

Government Publication Date: 1992-Mar 2011*

locations will be accurate to the guarter section only.

Government Publication Date: 1993-2012

Inventory of Waste Disposal Sites:

Wastewater Operations:

Private

Provincial

Private

Provincial

Provincial

Provincial A waste receiving location is any site or facility to which waste is transferred through a waste carrier. A receiver of regulated waste is required to

Private

SCT

PTAP

REC

RST

WDS

WSTE

WWIS



Definitions

Database Descriptions: This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

Detail Report: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

Distance: The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

Direction: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

Elevation: The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

Executive Summary: This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

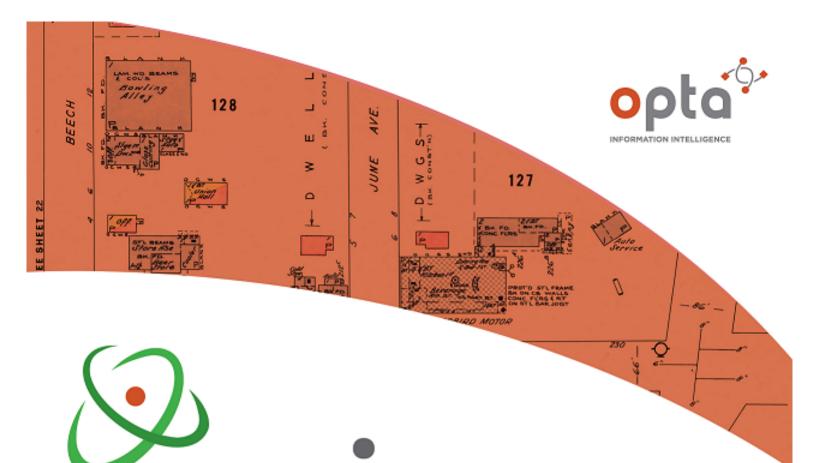
<u>Map Key:</u> The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

<u>Unplottables:</u> These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

APPENDIX B

Regulatory Responses



enviroscan

An SCM Company

175 Commerce Valley Drive W Markham, Ontario L3T 7Z3

T: 905-882-6300 W: www.optaintel.ca

Report Completed By:

Sunita

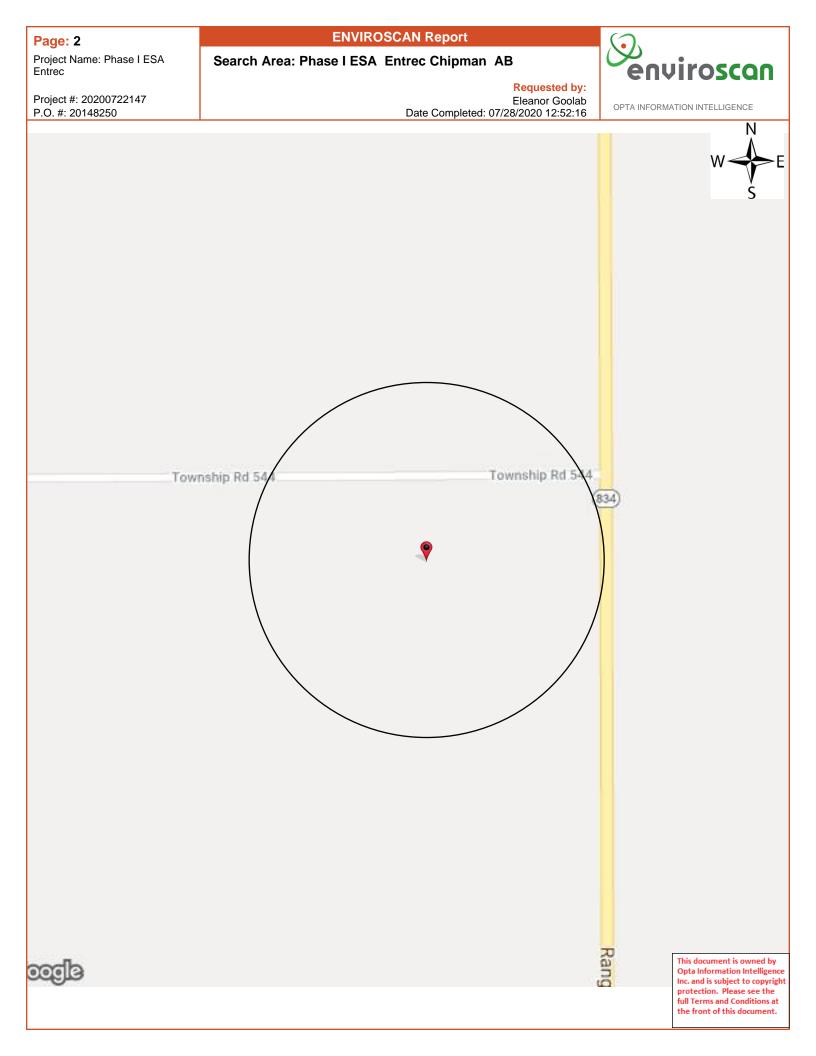
Site Address:

Phase I ESA Entrec Chipman AB Project No:

20200722147 Opta Order ID: Requested by: Eleanor Goolab ERIS

Date Completed: 7/28/2020 12:52:16 PM

75995



Project #: 20200722147 P.O. #: 20148250 **ENVIROSCAN** Report

Opta Historical Environmental Services Enviroscan Terms and Conditions Requested by:



OPTA INFORMATION INTELLIGENCE

Eleanor Goolab

Date Completed: 07/28/2020 12:52:16

Opta Historical Environmental Services Enviroscan [™] Terms and Conditions

Report

The documents (hereinafter referred to as the "Documents") to be released as part of the report (hereinafter referred to as the "Report") to be delivered to the purchaser as set out above are documents in Opta's records relating to the described property (hereinafter referred to as the "Property"). Opta makes no representations or warranties respecting the Documents whatsoever, including, without limitation, with respect to the completeness, accuracy or usefulness of the Documents, and does not represent or warrant that these are the only plans and reports prepared in association with the Property or in Opta's possession at the time of Report delivery to the purchaser. The Documents are current as of the date(s) indicated on them. Interpretation of the Documents, if any, is by inference based upon the information which is apparent and obvious on the face of the Documents only. Opta does not represent, warrant or guarantee that interpretations other than those referred to do not exist from other sources. The Report will be prepared for use by the purchaser of the services as shown above hereof only.

Disclaimer

Opta disclaims responsibility for any losses or damages of any kind whatsoever, whether consequential or other, however caused, incurred or suffered, arising directly or indirectly as a result of the services (which services include, but are not limited to, the preparation of the Report provided hereunder), including but not limited to, any losses or damages arising directly or indirectly from any breach of contract, fundamental or otherwise, from reliance on Opta Reports or from any tortious acts or omissions of Opta's agents, employees or representatives.

Entire Agreement

The parties hereto acknowledge and agree to be bound by the terms and conditions hereof. The request form constitutes the entire agreement between the parties pertaining to the subject matter hereof and supersedes all prior and contemporaneous agreements, negotiations and discussions, whether oral or written, and there are no representations or warranties, or other agreements between the parties in connection with the subject matter hereof except as specifically set forth herein. No supplement, modification, waiver, or termination of the request shall be binding, unless confirmed in writing by the parties hereto.

Governing Document

In the event of any conflicts or inconsistencies between the provisions hereof and the Reports, the rights and obligations of the parties shall be deemed to be governed by the request form, which shall be the paramount document.

Law

This agreement shall be governed by and construed in accordance with the laws of the Province of Ontario and the laws of Canada applicable therein.



175 Commerce Valley Drive W

Markham, Ontario

L3T 7Z3

T: 905.882.6300

Toll Free: 905.882.6300

F: 905.882.6300

An SCM Company

www.optaintel.ca

Page: 4 Project Name: Phase I ESA Entrec ENVIROSCAN Report

No Records Found

Project #: 20200722147 P.O. #: 20148250 Requested by: Eleanor Goolab Date Completed: 07/28/2020 12:52:16 9. enviroscan

OPTA INFORMATION INTELLIGENCE

No Records Found

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LAND TITLE CERTIFICATE

S									
LINC			TITLE NUMBER						
0036 035 476	1420529;	1;1	142 216 268						
LEGAL DESCRIPTION									
PLAN 1420529									
BLOCK 1									
LOT 1									
EXCEPTING THEREOUT ALL MINES AND MINERALS									
AREA: 4.05 HECTARES (10.01 ACRES) MORE OR LESS									
,,,,,,,									
ESTATE: FEE SIMPLE									
ATS REFERENCE: 4;19;54;24;NE									
MUNICIPALITY: VILLAGE OF CHIPMAN									
REFERENCE NUMBER: 142 030 151									
NEFENERCE NUMBER. 142 030 131									
		REGISTERED OWNER (S)							
REGISTRATION	DATE (DMY)	DOCUMENT TYPE VALUE	CONSIDERATION						
140 016 060	10/07/2014	TRANSFER OF LAND \$400,400	\$400_400						
142 210 200	10/0//2014	TRANSFER OF LAND \$400,400	\$400,400						
OWNERS									
OWNERS									
ENTREC CORPORA	ATION.								
OF 26420 TOWNS	SHIP RD 531	A							
ACHESON									
ALBERTA T7X 5A3									
ENCUMBRANCES, LIENS & INTERESTS									
REGISTRATION									
	DATE (D/M/Y) PARTICULARS							
020 000 207	14/00/1002	UNIT THY DIGUN OF DAY							
932 280 321	14/09/1993	UTILITY RIGHT OF WAY							
		GRANTEE - LAMCO GAS CO-OP LTD.							
102 404 534	17/11/2010	CAVEAT							
	,, 2010	RE : RIGHT OF WAY AGREEMENT							
		CAVEATOR - WOLF CARBON SOLUTIONS	INC.						
		2100, 444-5 AVE SW							
		CALGARY							

(CONTINUED)

ENCUMBRANCES, LIENS & INTERESTS

PAGE 2 # 142 216 268

REGISTRATION

NUMBER DATE (D/M/Y) PARTICULARS

ALBERTA T2P2T8 (DATA UPDATED BY: TRANSFER OF CAVEAT 182255623)

142 030 138 27/01/2014 CAVEAT RE : DEVELOPMENT AGREEMENT PURSUANT TO MUNICIPAL GOVERNMENT ACT CAVEATOR - THE VILLAGE OF CHIPMAN. P.O. BOX 176 CHIPMAN ALBERTA TOBOWO

TOTAL INSTRUMENTS: 003

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN ACCURATE REPRODUCTION OF THE CERTIFICATE OF TITLE REPRESENTED HEREIN THIS 24 DAY OF JULY, 2020 AT 01:11 P.M.

ORDER NUMBER: 39791094

CUSTOMER FILE NUMBER:



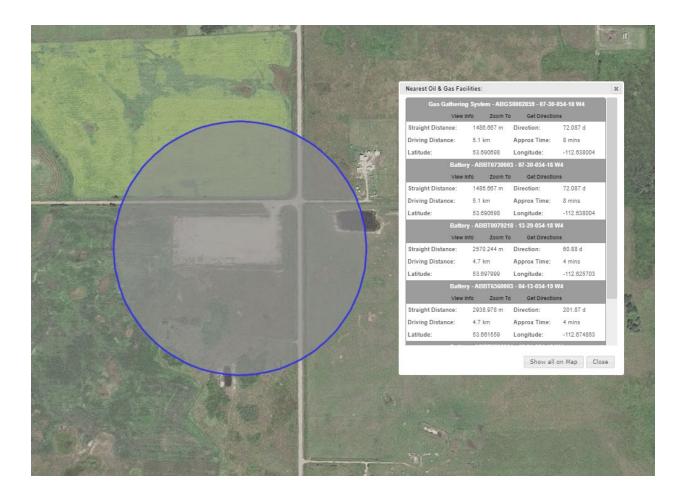
END OF CERTIFICATE

THIS ELECTRONICALLY TRANSMITTED LAND TITLES PRODUCT IS INTENDED FOR THE SOLE USE OF THE ORIGINAL PURCHASER, AND NONE OTHER, SUBJECT TO WHAT IS SET OUT IN THE PARAGRAPH BELOW.

THE ABOVE PROVISIONS DO NOT PROHIBIT THE ORIGINAL PURCHASER FROM INCLUDING THIS UNMODIFIED PRODUCT IN ANY REPORT, OPINION, APPRAISAL OR OTHER ADVICE PREPARED BY THE ORIGINAL PURCHASER AS PART OF THE ORIGINAL PURCHASER APPLYING PROFESSIONAL, CONSULTING OR TECHNICAL EXPERTISE FOR THE BENEFIT OF CLIENT(S).









Authoriza	ation Viewer	Traditional Agriculture Regis	stration Viewer	Public Notices Viewer	Help		
Authorization Viewer -							
Search Results							
	The Search Used the Following Values:						
		Legal Land Location: Act / Document Type:	NE 24-054-19-V Water Act. EPE/				
		Show Inactive Authorizat	ions: Yes	-			
-		based on the search criteria will be disp or viewing or downloading. Please click		will appear next to the Authoriza			
Result(s)		Clear &	Return				
		85-00-00 CHIPMAN/PIPELINE/ALLIAN Vater Act. This Approval is currently exp		held by Alliance Pipeline Ltd., un	der the		
Co	onocoPhillips Ca	29-00-00 VOYAGER ET AL ASTOTIN I anada Resources Corp DO NOT USE incement Act. This Reclamation Certific	(DUPLICAT, under th	e provisions of the Environmental	1		
X		076-00-00 ALBERTA CARBON TRUNK ns of the Environmental Protection & El			utions Inc		
Sc 💦		076-00-01 ALBERTA CARBON TRUNK der the provisions of the Environmental					
Sc Sc		076-00-02 ALBERTA CARBON TRUNK der the provisions of the Environmental					
W AND	Document 00253976-00-03 ALBERTA CARBON TRUNK LINE PIPELINE PROJECT - SECOND EXTENSION is held by Wolf Carbon Solutions Inc., under the provisions of the <i>Environmental Protection & Enhancement Act</i> . This Approval is currently renewed.						
is is	Document 00253976-01-00 ALBERTA CARBON TRUNK LINE PIPELINE PROJECT - FINAL CLEANUP, RECLAMATION is held by Wolf Carbon Solutions Inc., under the provisions of the <i>Environmental Protection & Enhancement Act.</i> This Approval is currently issued as of Feb. 05, 2020 and expires on Jan. 31, 2025.						
X	Document 00337470-00-00 HEARTLAND PIPELINE PROJECT is held by Heartland Pipeline GP Ltd., under the provisions of the <i>Environmental Protection & Enhancement Act</i> . This Approval is currently renewed.						
A l	Document 00337470-00-01 HEARTLAND PIPELINE PROJECT - EXTENSION is held by Heartland Pipeline GP Ltd., under the provisions of the Environmental Protection & Enhancement Act. This Approval is currently renewed.						
pro		170-01-00 HEARTLAND PIPELINE PRO Environmental Protection & Enhanceme 1, 2025.					

Environmental Site Assessment Repository



Site: NO records are available for the Site.

Surrounding properties (withing 250 m): Three properties were identified.

- 1. Voyager Et Al Astotin LK 10-24-54-19 Well and Access Road: immediately southwest of the Site boundary 2 records.
- Voyager Et Al Astotin LK 14-19-54-18 Well and Access Road: ~50 m west of the Site boundary 2 records.
- 3. Voyager Et Al Astotin LK 8-25-54-19 Well and Access Road: ~50 m north of the Site boundary 2 records.

Truong, Trisha

From:Boyce, RebeccaSent:August 10, 2020 3:25 PMTo:Rajajayavel, SaiSubject:FW: [E20-G-0926] Closure Letter No Records Available on ESAR - Cont.Site

NOTE: This email chain appears to contain email from outside Golder

Hi

Here is the FOIP response.

Rebecca Boyce

GOLDER

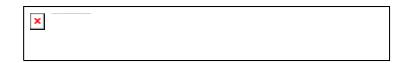
Environmental Technician

16820 107 Avenue, Edmonton, Alberta, Canada T5P 4C3 T: +1 780 483 3499 | D: +1 (780) 930-4498 | C: +1 (780) 983-7289 | <u>golder.com</u> <u>LinkedIn</u> | <u>Facebook</u> | <u>Twitter</u>

K Work Safe, Home Safe

From: jennifer.rampling@gov.ab.ca <jennifer.rampling@gov.ab.ca>
Sent: August 7, 2020 11:45 AM
To: Boyce, Rebecca <Rebecca_Boyce@golder.com>
Subject: [E20-G-0926] Closure Letter No Records Available on ESAR - Cont.Site

EXTERNAL EMAIL



Environment & Parks and Agriculture & Forestry FOIP Office 10th Floor, 9Triple8 Jasper, 9888 Jasper Avenue NW Edmonton, Alberta, T5J 5C6 Telephone: 780-427-4429 www.alberta.ca

August 7, 2020

Ms. Rebecca Boyce Golder Associates 16820-107 Avenue Edmonton, Alberta T5P 4C3

FOIP Request #: E20-G-0926 Order Number: FOIP-2020-7286

Dear Ms. Boyce:

Re: Freedom of Information and Protection of Privacy Act Request for records pertaining to the property located at ⊺ownship Road 544 and Highway 834, Chipman

The following is in response to your request of July 27, 2020 for access under the Freedom of Information and Protection of Privacy Act to the following subject records:

Location: Plan 1420529 Block 1 Lot 1; Township Road 544 and Highway 834, Chipman

<u>Name(s):</u> Entrec Corporation

Time Frame: January 1, 1980 to July 27, 2020

<u>Records:</u> Environmental assessments and compliance reports and approvals.

A search of Alberta Environment & Parks record holdings has not identified any records relating to the subject of your request, based on the search parameters you provided to this office.

If you have any questions or concerns about the processing of your FOIP request, please write to the above address or call me at 780-644-0889, so that we can look at ways to address these issues. If, however, we are unable to resolve your concerns, under section 65(1) of the Freedom of Information and Protection of Privacy Act, you may ask the Information and Privacy Commissioner to review this decision. To request a review, you must complete and deliver a Request for Review form within 60 days from the date of this notice to the Commissioner at 410, 9925 – 109 Street, Edmonton, Alberta, T5K 2J8. The form is available under the Resources tab on the Commissioner's website <u>www.oipc.ab.ca</u> or you can call 1-888-878-4044 to request a copy of the form.

If you request a review, please provide the Commissioner with a copy of your original request, any letters of clarification, a copy of this letter and the reason why you are requesting a review.

If you have any questions or concerns, please write or call me at **780-644-0889**.

Yours truly,

Ayo Ogedengbe Access and Privacy Advisor



APPENDIX C

Site Photographs



Photo 1: View of the Site facing west.



Photo 2: Empty AST stored in the northwest corner of the Site.



Photo 3: View of module frames stored on the Site.



Photo 4: Rust staining beneath the module frames..



Photo 5: View of seacans and shacks stored on Site.



Photo 6: View of the Site facing northwest.



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