



# Phase I Environmental Site Assessment

June 18, 2025

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Submitted to: Castle and Land Development Inc.  
Prepared by McElhanney

Castle ASP  
NE 22-12-27-W4M & SE,  
NE 27-12-27-W4M

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Our file: 2531-00794-00



**Your Challenge.  
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## Executive Summary

McElhanney Ltd. (McElhanney) was retained by the Castle and Land Development Inc. (the Client) to conduct a Phase I Environmental Site Assessment (Phase I ESA) for the three lots located at NE 22 & SE, NE 27-12-27-W4M, west of Claresholm, AB (the Site). A comprehensive review of historical records was completed for the Site and surrounding adjacent properties. Visual observations were made of land at and adjacent to the Site. The purpose of the Phase I ESA was to determine if any areas of potential environmental concern (APECs) were present at the Site for due diligence purposes in advance of potential development of the Site.

Historical land use of the area, dating back to the earliest available aerial photos in 1947, has been agricultural land. A farmstead was located on the northern portion of the Site since 1947, which was vacant at the time of the Site visit. Three (3) natural gas wellsites and associated pipelines are located on or adjacent to the Site, with pipelines crossing through the site on all three lots.

The Phase I ESA consisted of a desktop review of the Site and surrounding adjacent properties, a comprehensive review of available historical records, aerial photograph review, interviews, and a Site visit completed on May 22, 2025. It is McElhanney's opinion that, based on the findings of this Phase I ESA, current on and off-site activities present a potential risk of impacting environmental media at the Site, with on-Site and off-Site adjacent wellsites and pipelines being of minor environmental concern as shown on **Table A** and **Figure A**.

*Table A. Areas of Potential Environmental Concern*

| Areas of Potential Environmental Concern (APECs)                           | Description  |
|--|--|
| <p><b>APEC 1. On and Off-Site Natural Gas Wellsites and Pipelines.</b></p> | <p>Currently active wellsites and pipelines have the potential for spills and leaks to occur on Site. Older wellsites, such as the one located on the south lot of the Site, have a higher potential of environmental concern to the surrounding soil and groundwater.</p> |

No further action is recommended at this time for APEC 1 as the risk is considered low. However, should future development occur on top of or adjacent to the wellsites or pipelines, McElhanney recommends discussions be undertaken with CNRL to assess the potential for environmental contamination associated with the wellsites and pipelines.

In conclusion, this review indicated that the likelihood of environmental media being contaminated because of historical and current activities was a low potential at the Site property or adjacent properties. Further investigation is therefore not considered to be warranted at this time.

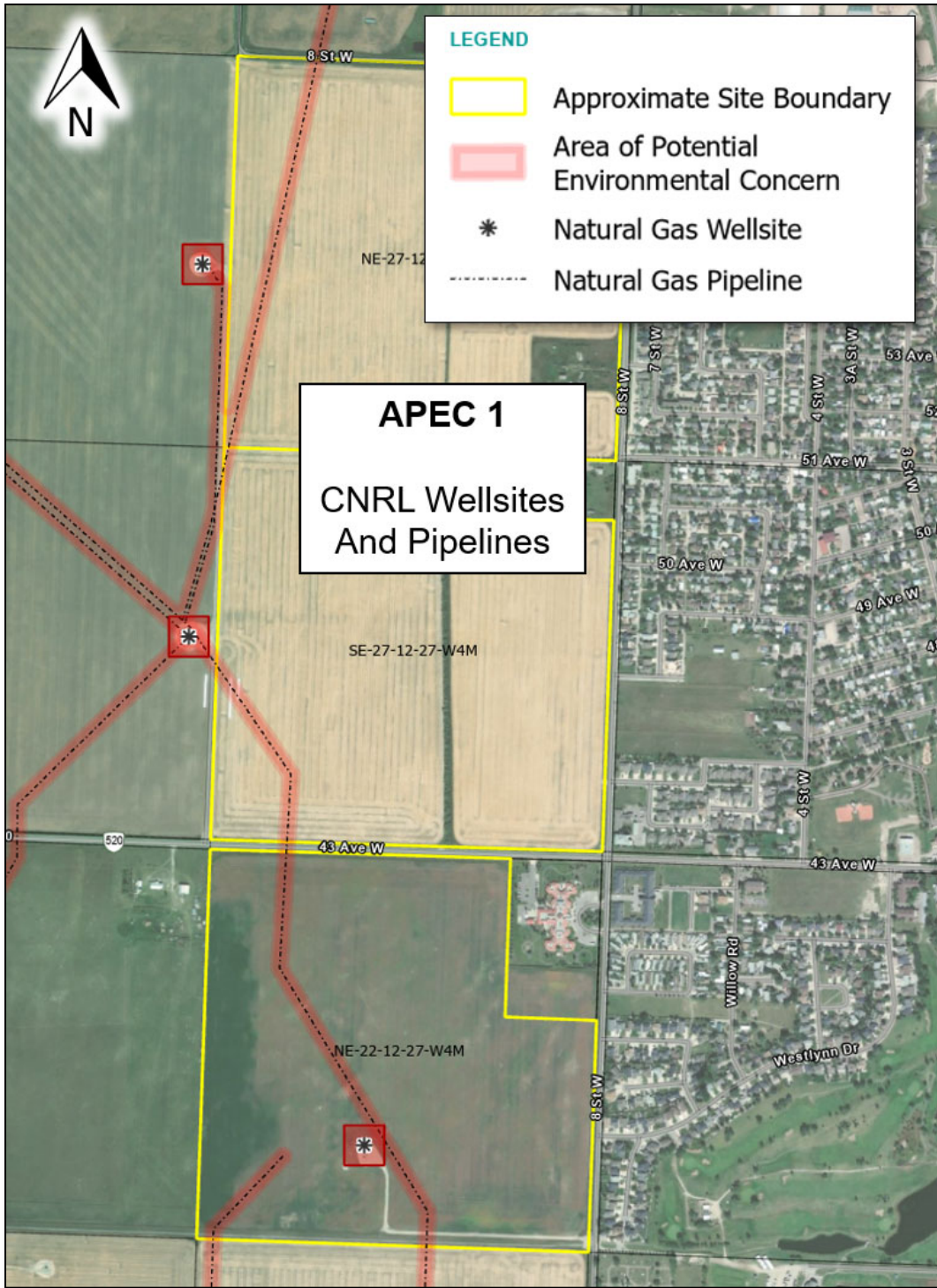


Figure A. Areas of Potential Environmental Concern.

This Executive Summary is to be read in conjunction with and is subject to the same limitations as the remainder of this report.





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# 1. Introduction

McElhanney Ltd. (McElhanney) was retained by Castle and Land Development Inc. (the Client) to conduct a Phase I Environmental Site Assessment (Phase I ESA) for the sections of land located west of Claresholm, Alberta (the “Site”) as shown in **Figure 1** and **Figure 2**. This report presents the findings of the Phase I ESA. The Site includes three separate parcels of land:

- NE-27-12-27-W5M,
- SE-27-12-27-W4M,
- NE-22-12-27-W4M.

The area under consideration for redevelopment is planned to be incorporated into the Town to support growth and economic diversification. The Town wishes to undertake this Phase I ESA for the Site as a measure of due diligence purpose to support the Area Structure Plan (ASP) and in advance of application for development permits for the Site.

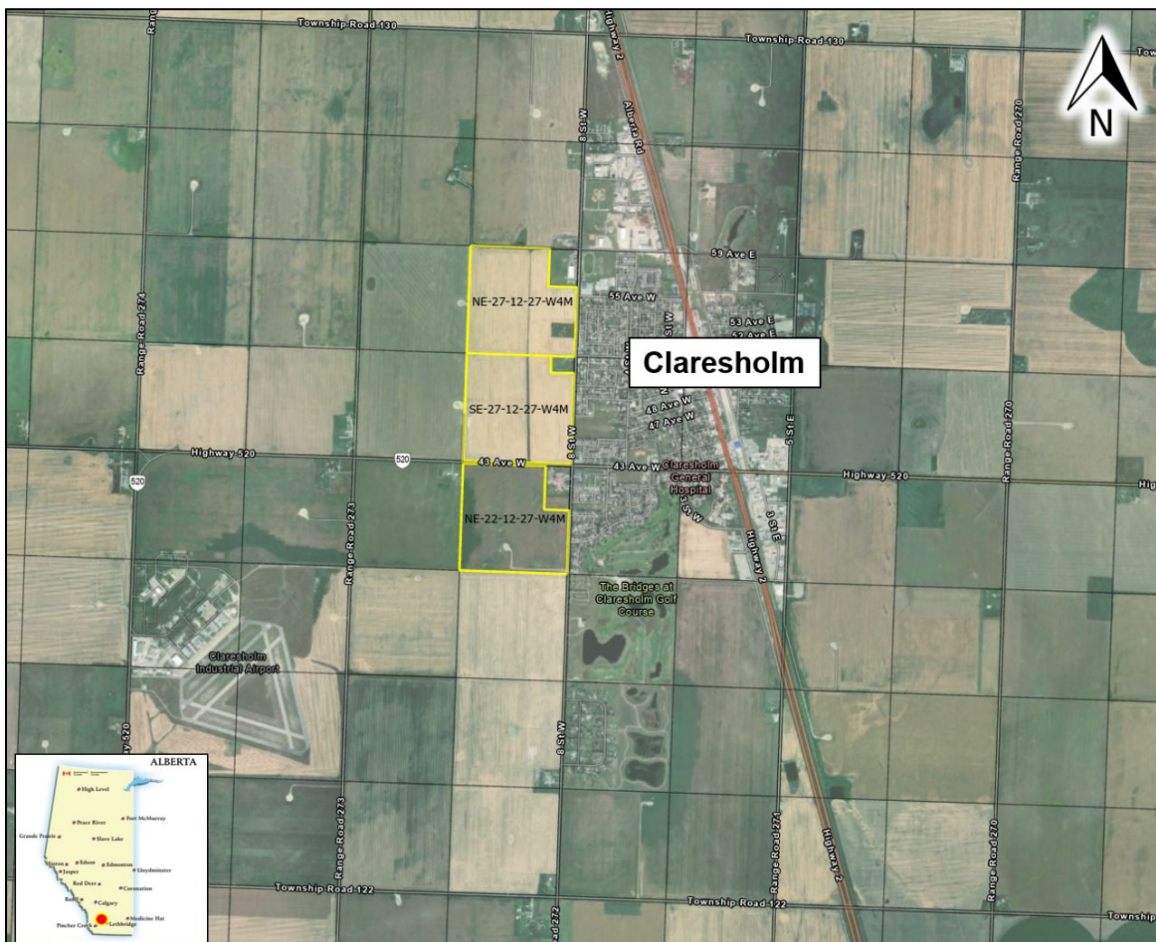


Figure 1: General Site Location (yellow outline) in the Municipal District of Willow Creek, Alberta (ESRI, 2025)



Figure 2: Site Location (yellow outline) and Surrounding Properties in the Municipal District of Willow Creek, Alberta (ESRI, 2025)



## 1.1. OBJECTIVE AND SCOPE

The objective of the Phase I ESA was to determine whether Areas of Potential Environmental Concern (APECs) are present at the Site due to current and/or historical on and off-site activities. The assessment was completed to qualitatively identify the risk of actual or potential contamination of environmental media (soil, surface water, groundwater, or soil vapour) on or adjacent to the Site.

## 1.2. METHODOLOGY

The Phase I ESA was performed in general accordance with the Canadian Standards Association (CSA) Standard Z768-01 (Reaffirmed 2022) (CSA, 2022), subject to the limitations outlined in **Section 6** of this report. In addition, the Alberta Environment and Protected Areas (AEPA) Alberta Environmental Site Assessment Standard (AEPA, 2025a) was referenced.

The following specific tasks were undertaken:

- Review of relevant records for the Site and properties bordering all extents of the Site, including: historical environmental reports; a search of relevant Provincial and Federal databases; available fire insurance maps; property and owner/operator records as available; regulatory information; previous environmental assessments and reports; title searches; and available historic aerial photographs for the Site;
- Completion of a site visit to review and document existing conditions of the Site and surrounding area;
- Interviews with individuals knowledgeable of Site conditions; and,
- Preparation of this report documenting the findings, summarizing recommendations (if any), and stating the limitations of this study.

The following rationale was applied throughout the assessment to determine whether current or historical activities represent a potential environmental concern for the Site:

- The presence of hazardous substances (including waste) storage or use on-Site;
- Indication that substances were inadequately handled or contained and a pathway to the receiving environment may be present;
- The use, storage, or handling of a substance of potential concern occurred consistently over a long period of time, or in sufficient quantities to be considered a potential concern; and,
- Off-Site land uses of concern located in close enough proximity and topographic orientation to present a potential for the migration of contamination onto the Site.

The findings contained in this Phase I ESA are partly based on information provided by others. Where possible, information obtained through interviews was cross referenced through other sources.

Sampling and laboratory analysis of environmental media (soil, groundwater, surface water, or soil vapour) was not undertaken as part of this study.



## 2. Site Description

General Site information is summarized below in **Table 1** and Site features with surrounding property information is provided on **Figure 2**. Reconnaissance photographs of the Site and surrounding properties are included in **Appendix A** with additional information in **Section 5**. Historical aerial photographs showing past land uses for the area are included in **Appendix B**. The current property owners are listed on **Table 1**. Land title information and plans are provided in **Appendix C**.

The Site is located west of Claresholm, Alberta, as shown on **Figure 2**. The Site consists of three separate lots, all used for agricultural purposes. A farmstead is located within the north lot. No onsite structures are located on the centre and south lots. The Site is zoned as an Agricultural District and Urban Reserve while the surrounding properties are zoned as Commercial, Agricultural, Industrial, and Public (Town of Claresholm, 2025). The Site is bounded by 59<sup>th</sup> Avenue to the north, 8<sup>th</sup> Street to the east, agricultural land to the west, and Kin Trail (hiking path) to the south. Each quarter section of land is roughly square in shape (800 x 800 m).

*Table 1: General Site Information*

| Civic Address                        | North  | Centre  | South   |
|--------------------------------------|--|---|---|
| <b>Title Number</b>                  | 171 162 399+4  | 221 270 039+1   | 921 097 883+1   |
| <b>Dominion Land Survey Location</b> | NE-27-12-27-W4M  | SE-27-12-27-W4M   | NE-22-12-27-W4M   |
| <b>Registered Landowner</b>          | David F. Mulholland  | David F. Mulholland   | M G Mulholland Farms Limited  |
| <b>Occupant</b>                      | Not applicable   | Not applicable  | Not applicable  |
| <b>Current Use</b>                   | Agricultural   | Agricultural  | Agricultural  |
| <b>Zoning</b>                        | Agricultural   | Agricultural  | Agricultural  |
| <b>Site Area and Dimensions</b>      | 58.63 hectares (145 acres)<br>The Site is roughly square in shape: 800 x 800 m | 61.77 hectares (152.75 acres)<br>The Site is roughly square in shape: 800 x 800 m | 55.94 hectares (138.36 acres)<br>The Site is roughly square in shape: 800 x 800 m |



### 3. Environmental Setting

Biophysical, geological and water resource information summarized in **Table 2** below, also provides information previously recorded for the Site in background documents and noted during the Phase I ESA.

*Table 2: Biophysical, Geological, and Water Resource Information*

|                                      |  |   |
|--------------------------------------|--|---|
| <b>Biophysical Setting</b>           | <b>Natural Region and Subregion</b><br>(Natural Regions Committee, 2006) | Natural Region: Grassland<br>Subregion: Mixedgrass  |
|                                      | <b>Topography</b>  | The Site and surrounding properties were observed to be relatively flat.  |
|                                      | <b>Soils</b>   | The dominant soils in the region are Dark Brown Chernozemic and Solonetzic soils. Misc. Eroded Series which contain moderately well-drained, variable- textured soils overlying Rego Dark Brown Chernozem (AGI, 2025).  |
| <b>Geological Information</b>        | <b>Site Geology / Bedrock</b>  | The Alberta Geological Survey shows the surface bedrock is from the Willow Creek Formation: grey, green, pink mudstone with calcareous concretions and friable, pale grey, generally fine-grained sandstone, thick bedded and coarse grained in upper part: nonmarine (AGS, 2013).  |
|                                      | <b>Fill Materials</b>  | No fill material was reported, and the Site appeared consistent with the surrounding landscape.   |
| <b>Surface Water and Groundwater</b> | <b>Surface Water Bodies</b>  | There is a small dugout immediately north of the Site. Bridges of Claresholm Golf Course has a constructed wetland stormwater drainage reservoir approximately 400 m southeast of the Site  |
|                                      | <b>Regional Surface Drainage</b>   | The region is relatively flat with regional surface drainage to the west of Site into the Willow Creek watershed. Willow Creek borders the Rocky Mountain Natural Region (west) and the Grassland Natural Region (east).  |
|                                      | <b>Local Surface Drainage</b>  | The town of Claresholm has a stormwater collection system within the residential area (east of the Site) and Bridges of Claresholm Golf Course (southeast of the Site) .  |
|                                      | <b>Water Wells</b>   | Two water wells were identified within 300 m of the Site (AEPA, 2025b). One well was identified within the center quarter section (SE-27-012-27-W4M). The exact location of the well is unknown; however, it is listed as a domestic use water well and it is inferred the well is located on the farmstead within the quarter section.<br><br>The second well is located near the farmstead approximately 40 m west of the Site and is also listed as a domestic-use water well. |
|                                      | <b>Hydrogeology</b>  | The inferred groundwater flow and depth at the Site is unknown based on the information reviewed.   |



## 4. Records Review

Several historical records were reviewed to assess the environmental conditions and current or historical land use activities at the Site. The following sections summarize the findings of this review.

### 4.1. AERIAL PHOTOGRAPHS

Aerial photographs were obtained through AEPA's Aerial Photographic Record System (APRS) (AEPA, 2025c) and Google Earth™ satellite imagery (ESRI, 2025). Aerial photographs were reviewed for visual signs and sources of potential environmental concern. A summary of the review is presented in **Table 3** below. Copies of the aerial photographs reviewed are provided in **Appendix B**.

Based on a review of the above-noted aerial photographs, nothing specific was observed that is suspected to result in potential environmental impacts at the Site.



Table 3: Aerial Photograph Review

| Year | Source          | Site Summary  | North Adjacent Property   | East Adjacent Property   | South Adjacent Property               | West Adjacent Property   |
|------|-----------------|---|---|--|---------------------------------------|--|
| 1947 | APRS AS0178_150 | The Site appears to have been agricultural land use with one farmstead in the northern quarter. A wind-row bisects the central quarter section. | Undeveloped farmland (agricultural).  | Town of Claresholm development, farmland (agricultural). There was an oval track near the SE-27-12-27-W4M quarter. A farmstead is present on the east side, between the northern and central quarters.                                 | Undeveloped (agricultural).           | Undeveloped (agricultural).  |
| 1967 | APRS AS0987_013 | No significant changes were apparent.   | Flooding is present in the area of the current dugout (50.034133°, -113.601557°). | The oval track was less apparent and looks faded. Otherwise, there are no other significant changes to the area. There was a pond in the southeast.  | No significant changes were apparent. | No significant changes were apparent.                              |
| 1982 | APRS AS2830_047 | No significant changes were apparent.   | No significant changes were apparent.   | The town development has spread and there is no longer an oval track visible. There is a new oval track on the northeastern side of town (50.032933°, -113.594463°). The golf course was under construction in the south part of town. | No significant changes were apparent. | No significant changes were apparent.                              |
| 1994 | APRS AS4542_113 | An oil and gas well was drilled on NE-22-12-27-W4M  | A dugout was constructed at 50.034133°, -113.601557°.                             | The public school in the northeast has been constructed (NE-27-12-27-W4M). The Willow Creek Continuing Care Centre has been constructed.   | No significant changes were apparent. | No significant changes were apparent.                              |
| 2000 | APRS AS5104_202 | A powerline is present on the west side through all three quarter-sections. A wind-row bisects the  | No significant changes were apparent.   | Town development has grown on the southern side of the boundary of SE-27-12-27-W4M.  | No significant changes were apparent. | An oil and gas well was drilled on the boundary of SE-27-12-27-W4M |



| Year | Source       | Site Summary                                  | North Adjacent Property  | East Adjacent Property                | South Adjacent Property               | West Adjacent Property  |
|------|--------------|---|--|---------------------------------------|---------------------------------------|---|
|      |              | northern quarter section.                     |  |                                       |                                       | (50.023075°, -113.607694°)  |
| 2003 | Google Earth | No significant changes were apparent.         | Dugout appears to be flooding/overflowing.   | No significant changes were apparent. | No significant changes were apparent. | New homestead established near the boundary of NE-22-12-27-W4M (50.018514°, -113.608332°)     |
| 2012 | Google Earth | No significant changes were apparent.         | A soil disturbance is visible to the northwest in the area of the current soil pile. | No significant changes were apparent. | No significant changes were apparent. | An oil and gas well was drilled on the boundary of NE-27-12-27-W4M (50.029946°, -113.607669°) |
| 2015 | Google Earth | No significant changes were apparent.         | No significant changes were apparent.  | No significant changes were apparent. | No significant changes were apparent. | No significant changes were apparent.   |
| 2023 | Google Earth | The powerline has been removed from the Site. | No significant changes were apparent.  | No significant changes were apparent. | No significant changes were apparent. | No significant changes were apparent.   |



## 4.2. PREVIOUS ENVIRONMENTAL REPORTS

No previous environmental reports are known, and no reports were provided to McElhanney for review.

## 4.3. ALBERTA LAND TITLES AND SURVEYS SPATIAL INFORMATION SYSTEM

A search was conducted of the Alberta Land Titles and Surveys Spatial Information System (Spin2) (Government of Alberta, 2025) to review land titles and registered survey plans for the Site (**Appendix C**).

Information from the land titles has been used to verify land use/owners on various parcels (the Site and neighbouring properties) throughout the report. Several numbered companies were noted as land-uses as per **Table 1** as well as several private landowners, and the Town of Claresholm. The Sites parcels of land have caveats for wellsites, and pipelines (further discussed in **Section 5.2**). No liens or other encumbrances indicating potential environmental concern were noted within the current title.

## 4.4. OPTA INFORMATION INTELLIGENCE

OPTA Information Intelligence (OPTA) was not contacted to complete a search for Fire Insurance Plans (FIPs), Inspection Reports, City Directories, and Site Plans for the Site, as the Site is rural.

## 4.5. CITY DIRECTORIES

City directory information was not obtained from OPTA, as the Site is rural.

# 5. Regulatory Information

## 5.1. LOCAL AND MUNICIPAL GOVERNMENT

Where available, information pertaining to the Site was obtained from the Town of Claresholm and Oldman River Regional Services Commission through ongoing discussions for the ASP. Information obtained is inclusive within the report.

## 5.2. ALBERTA ENERGY REGULATOR

A review of the AbaData online database (AbaData, 2025) was conducted to identify any spills, complaints, oil and gas wells, water wells, and utilities/pipelines within 300 m of the Site as provided by the Alberta Energy Regulator (AER). The AbaData search results identified the following:

- Three Canadian Natural Resources Limited (CNRL) natural gas wells, summarized in **Table 4** and shown in **Figure 3**, **Figure 4** and **Figure 5**.
- Seven natural gas pipelines originating from the three wells. All seven pipelines are still currently in operation.
- One active low pressure ATCO natural gas pipeline, running northeast through the centre lot.
- Two domestic use water wells, discussed in **Section 3**.
- One spill complaint located within 1-27-12-27-W4M. Incident notified April 3, 2013, with concerns about odours (H<sub>2</sub>S and THC) and no known cause.



Table 4. Summary of Oil and Gas Wells within 300 m of the Site.

| License No. | Owner | Location               | Fluid Type  | Year Drilled      | First Production Year | 2024 Production Volume (10 <sup>3</sup> m <sup>3</sup> ) |
|-------------|-------|------------------------|-------------|-------------------|-----------------------|--|
| 0410733     | CNRL  | 45m west of North Lot  | Natural Gas | August 1, 2009    | 2009                  | 674.8  |
| 0179069     | CNRL  | 45m west of Center Lot | Natural Gas | July 30, 1995     | 1996                  | 900.5  |
| 0141798     | CNRL  | On-Site, South Lot     | Natural Gas | November 23, 1989 | 1990                  | 610.4  |

Based on the age of some of the wellsites and proximity to the Site, the wellsites and pipeline alignments through the Site are designated as **APEC 1**. No other information was reported within 300 m of the Site. A copy of the AbaData search results is provided in **Appendix D**.



Figure 3: Site Plan Detail – North Lot (ESRI, 2025)





Figure 4: Site Plan Detail – Centre Lot (ESRI, 2025)



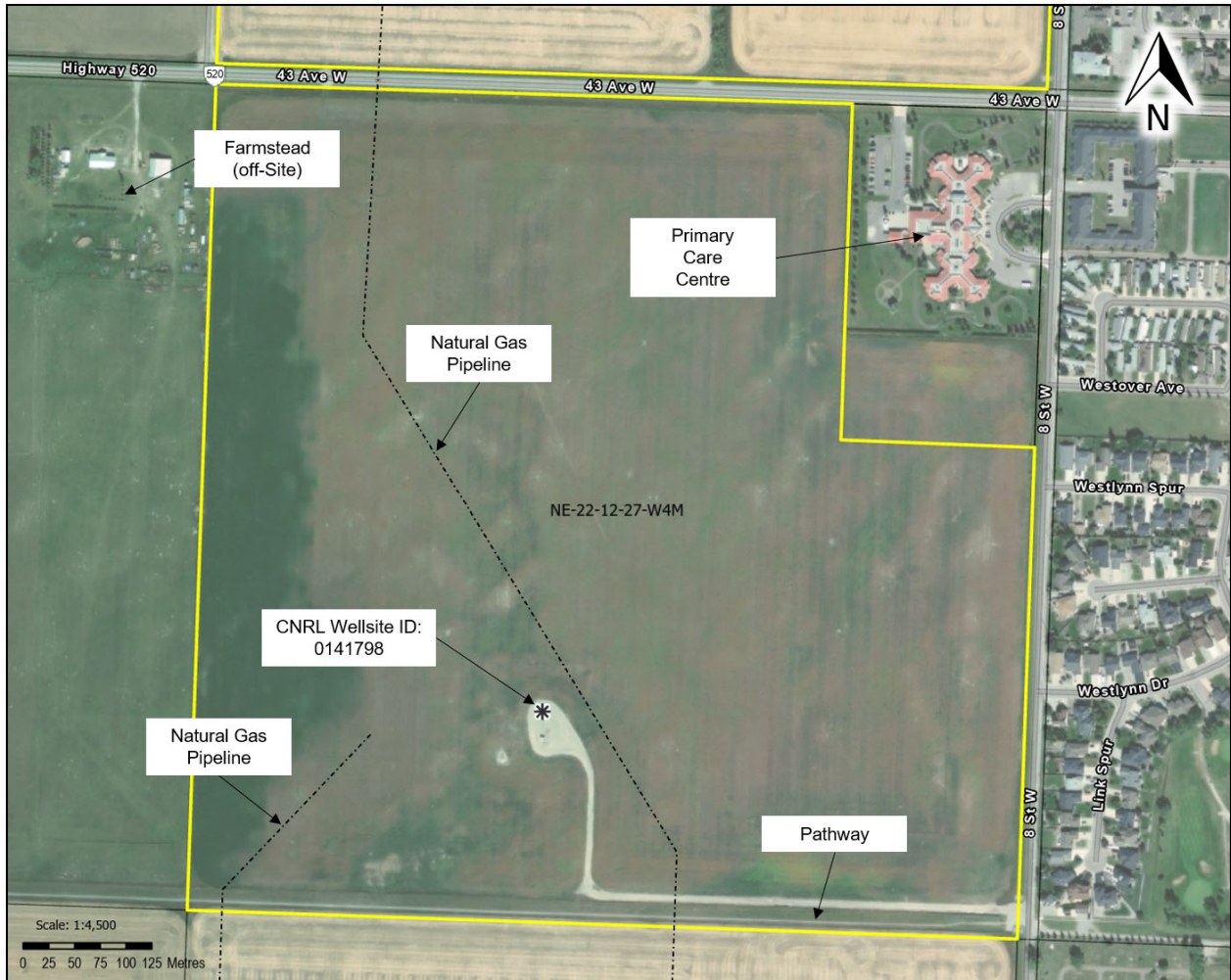


Figure 5: Site Plan Detail – South Lot (ESRI, 2025)

### 5.3. ERIS DATABASE SEARCH

Environmental Risk Information Services (ERIS, 2025) was retained to perform a 300 m radius search (from the edge of the Site) of several environmental inventories and databases. There were 9 database listings for the Site property, and 7 positive results for the surrounding properties. Details of relevant sites are provided in **Table 5**. Distances are as provided by the ERIS report.

Table 5: Summary of Sites from ERIS Search

| Database Name             | Approximate Direction / Distance from Site (m) | Details   |
|---------------------------|--|---|
| Oil and Gas Wells<br>ESAR | On Site – Centre Lot                           | Cancelled well license and reclamation certificate for a prepared wellsite (not drilled) within 1-27-12-27-W4M. Further discussed in <b>Section 5.4.2</b> . |
| Authorizations            | On-Site – South Lot                            | Claresholm Regional Raw Water Supply Line (AEPA). The approval is expired.  |



| Database Name            | Approximate Direction / Distance from Site (m) | Details   |
|--------------------------|--|---|
| Alberta Energy Regulator | On Site – South Lot                            | Well License No. 0141798 issued 1989-11-21 for a natural gas well located on the south lot. Previously discussed in <b>Section 5.2</b> .  |
| Alberta Energy Regulator | 46m west of the north lot.                     | Well License No. 0410733 issued 2009-06-01 for the natural gas well located west of the north lot. Previously discussed in <b>Section 5.2</b> .   |
| Alberta Energy Regulator | 47m west of the center lot.                    | Well License No. 179069 issued 1995-08-16 for a natural gas well. Previously discussed in <b>Section 5.2</b> .  |
| Fuel Storage Tank        | 110m east of the center lot.                   | Database listing for a 2,500 liter diesel underground storage tank that was located at the Willow Creek Auxiliary Hospital and Nursing Home, 4221 8 <sup>th</sup> Street. The UST was removed in June 2001.     |
| Fuel Storage Tank        | Unplottable                                    | Three aboveground storage tanks are located at the Claresholm Maintenance Yard, located at 273129 – Highway 520, Claresholm, AB within SW-21-12-27 W4M. This property is at least 1.6 km southwest of the Site. |
| Alberta Energy Regulator | 249m south-southwest of the south lot.         | Well License No. 362104 issued 2006-08-10 for a gas development well located southwest of the Site.   |

The wellsites were previously designated as **APEC 1**. The removed UST is not considered of significant concern to the Site due to the age of the UST (installed between 1982 and 1994 with the construction of the nursing home) and the removal date of 2001.

A copy of the ERIS search results are provided in **Appendix F**.

## 5.4. ALBERTA ENVIRONMENT AND PROTECTED AREAS

### 5.4.1. Freedom of Information and Protection of Privacy Act Request

A search was conducted through AEPA's Corporate Services, Freedom of Information and Protection of Privacy (FOIP), Records and Information Management Branch for scientific/technical information, which may include reports documenting the nature and extent of soil, ground and surface water contamination, remedial measures taken to clean-up the Site or status of the Site, and external correspondence between the submitter and AEPA pertaining to the reports.

A search of Environment and Protected Areas (EPA) record holdings did not identify any records relating to the Site.



## 5.4.2. Environmental Site Assessment Repository

A search was conducted through AEPAs Environmental Site Assessment Repository (ESAR) website (AEPAs, 2025d) for any scientific, technical and wellsite reclamation information about assessed sites throughout Alberta. The search results indicated that information was available for one location within the Project Footprint (SE-1-27-12-27-W4M) and is described in the **Section 5.4.2.1.** below.

### 5.4.2.1. Former Prepared Well Site Reclamation Certificate (on-Site in the southeastern side of SE-27-12-27-W4M)

Two documents were available for this property, a Reclamation Application (Canadian Hunter Exploration Ltd., 2000) and a Reclamation Certification Report (Canadian Hunter Exploration Ltd., 2000). The reports were completed in relation to the reclamation and certification of a former prepared wellsite (not drilled) in the 1990's, located on 1-27-12-27-W4M. The wellsite was found to be in satisfactory condition. As the wellsite was not drilled and has a Reclamation Certificate, the environmental risk from the former wellsite operations to the Site is deemed low.

## 6. Site Visit and Interview

McElhanney personnel (see **Section 9** for assessor qualifications) conducted a Site visit on May 22, 2025. The field reconnaissance was limited to visual and olfactory observations and included a walk-through of the exterior areas. The following sections summarize observations. Photographs captured during the Site investigation are presented in **Appendix A**.

### 6.1. INTERVIEW

An interview was completed with the current landowner, David Mulholland, during the site visit on May 22, 2025. Mr. Mulholland reported the following:

- The properties were utilized for farmyards and agricultural land uses.
- There were no concerns with adjacent / overlapping land uses, including the school / daycare, health facility, agricultural / farmyard properties, residential areas, or wellsites.
- He was not aware of any spills associated with the wellsites or pipelines.
- He was not aware of any spills associated with on-site agricultural equipment.

### 6.2. SITE DETAILS

At the time of the Site visit, the Site appeared to have been used as a cultivated field. The only structures located on Site were on an old farmstead, located within the north lot of the Site, across from 53<sup>rd</sup> Avenue and 8<sup>th</sup> Street intersection. The farmstead appeared to be abandoned, with the wood structures in disrepair (**Photograph 4** in **Appendix A**). Additional details are provided in **Table 6** and shown in **Figure 3, Figure 4** and **Figure 5**.



Table 6: Site Details

|   |   |
|---|---|
| <b>General Site Conditions</b>                          | The majority of the Site was used as a cultivated field.  |
| <b>Site Building(s)</b>                                 | Three wooden farmstead structures including a barn and two sheds were located within the northern lot of the Site.                              |
| <b>Approximate Year of Construction / Renovation(s)</b> | Unknown.  |
| <b>Approximate Footprint of Site Building(s)</b>        | Barn: Approximately 165 square metres (m <sup>2</sup> )<br>Shed #1: Approximately 50 m <sup>2</sup><br>Shed #2: Approximately 30 m <sup>2</sup> |
| <b>Heating/Cooling</b>                                  | None observed.  |
| <b>Services/Utilities</b>                               | None observed.  |

### 6.3. CHEMICALS AND WASTE STORAGE

During the Site visit, no chemicals, hazardous waste, non-hazardous waste, or compressed gases were observed on Site.

### 6.4. ABOVEGROUND STORAGE TANKS

The presence of aboveground storage tanks (ASTs) could pose environmental concern if leakage into surrounding soils occurs. No evidence of ASTs were observed during the Site visit.

### 6.5. UNDERGROUND STORAGE TANKS

The presence of underground storage tanks (USTs) could pose environmental concern if leakage into surrounding soils occurs. No evidence of USTs, such as vents or fill pipes, were observed on the Site or reported by the Site Representative.

### 6.6. SURFACE STAINING AND STRESSED VEGETATION

The presence of stains on road surfaces or porous media such as soil and gravel may be indicative of environmental contamination caused by leaks or spills. Stressed vegetation or an absence of vegetation may be regarded as bio-indicators for the presence of impacted environmental media. There were no visual indications of surface staining or stressed vegetation noted during the Site visit.

### 6.7. PITS, LAGOONS, WASTEWATER AND LIQUID DISCHARGES

Pits and lagoons may warrant environmental concern if they are used to collect streams of wastewater or liquid waste streams. No pits or lagoons were observed on the Site or reported by the Site Representative. No process wastewater is produced at the Site.



## 6.8. SURFACE WATER FEATURES

No water features were observed on the Site or reported by Site Representative.

## 6.9. DRAINS AND SUMPS

There were no drains or sumps observed on-Site or reported by the Site Representative.

## 6.10. MECHANICAL EQUIPMENT

No mechanical equipment was observed on the Site.

## 6.11. HAZARDOUS BUILDING MATERIALS

Hazardous materials are regulated through federal and/or provincial regulations and may represent a health concern and/or require proper handling, storage, and disposal. The wooden structures on the abandoned farmstead appeared to be unpainted wood, and the presence of hazardous building materials is unlikely.

Testing for hazardous building materials and substances was beyond the scope of this Phase I ESA. However, a hazardous materials survey could be completed for confirmation in the event of demolition. If a survey confirms the presence of any hazardous building materials, they should be removed from the Site in accordance with applicable regulations prior to commencing renovations/demolition.

## 6.12. NEIGHBOURING PROPERTIES

Neighbouring properties have the potential to impact the Site from off-site sources of contamination. Properties neighbouring the Site were observed for indications of current and/or historical land use activities that could potentially represent off-site sources of contamination. A summary of neighbouring properties and their land uses are presented in **Table 7** below.

*Table 7: Summary of Neighbouring Properties*

|  | North   | East  | South   | West  |
|--|---|---|---|---|
| <b>Land Use</b>  | Agricultural  | Residential   | Agricultural  | Agricultural  |
| <b>Operations</b>  | Agricultural fields, with farmsteads and wellsites similar to the Site. | Single Family Homes, Schools and recreational facilities. | Agricultural fields, with farmsteads and wellsites similar to the Site. | Agricultural fields, with farmsteads and wellsites similar to the Site. |
| <b>Direction with Respect to Inferred Groundwater Flow</b>   | Cross-gradient  | Cross-gradient  | Cross-gradient  | Cross-gradient  |
| <b>Visible Exterior Storage of Hazardous Materials (i.e.</b> | None observed.  | None observed.  | None observed.  | None observed.  |



|   | North  | East  | South  | West  |
|---|--|---|--|---|
| <b>chemicals, ASTs, USTs)</b>               |  |   |  |   |
| <b>Potential Environmental Significance</b> | No environmental concerns associated with the properties to the north are anticipated. | No environmental concerns associated with the properties to the east are anticipated. | No environmental concerns associated with the properties to the south are anticipated. | No environmental concerns associated with the properties to the west are anticipated. |

No indications of potential environmental impacts from the surrounding properties were identified based on visual observations.

## 7. Assessment Limitations

The Site visit was directed by aerial photo and environmental search results. Due to the size of the Site, the entire area could not be closely examined, the interior of the structures on the farmstead on Site were not investigated as part of the Site visit.

## 8. Conclusions and Recommendations

It is McElhanney’s opinion that, based on the findings of this Phase I ESA, current on and off-site activities present a potential risk of impacting environmental media at the Site, with on-Site and off-Site adjacent wellsites and pipelines being of minor environmental concern. The APECs are summarized in **Table 8** below and provided on **Figure 6**.

*Table 8: Summary of Areas of Potential Environmental Concern*

| Areas of Potential Environmental Concern (APECs)                    | Description   |
|---|---|
| <b>APEC 1. On and Off-Site Natural Gas Wellsites and Pipelines.</b> | Currently active wellsites and pipelines have the potential for spills and leaks to occur on Site. Older wellsites, such as the one located on the south lot of the Site, have a higher potential of environmental concern to the surrounding soil and groundwater. |

No further action is recommended at this time for APEC 1 as the risk is considered low. However, should future development occur on top of or adjacent to the wellsites or pipelines, McElhanney recommends discussions be undertaken with CNRL to assess the potential for environmental contamination associated with the wellsites and pipelines.

In conclusion, this review indicated that the likelihood of environmental media being contaminated because of historical and current activities was a low potential at the Site property or adjacent properties. Further investigation is therefore not considered to be warranted at this time.



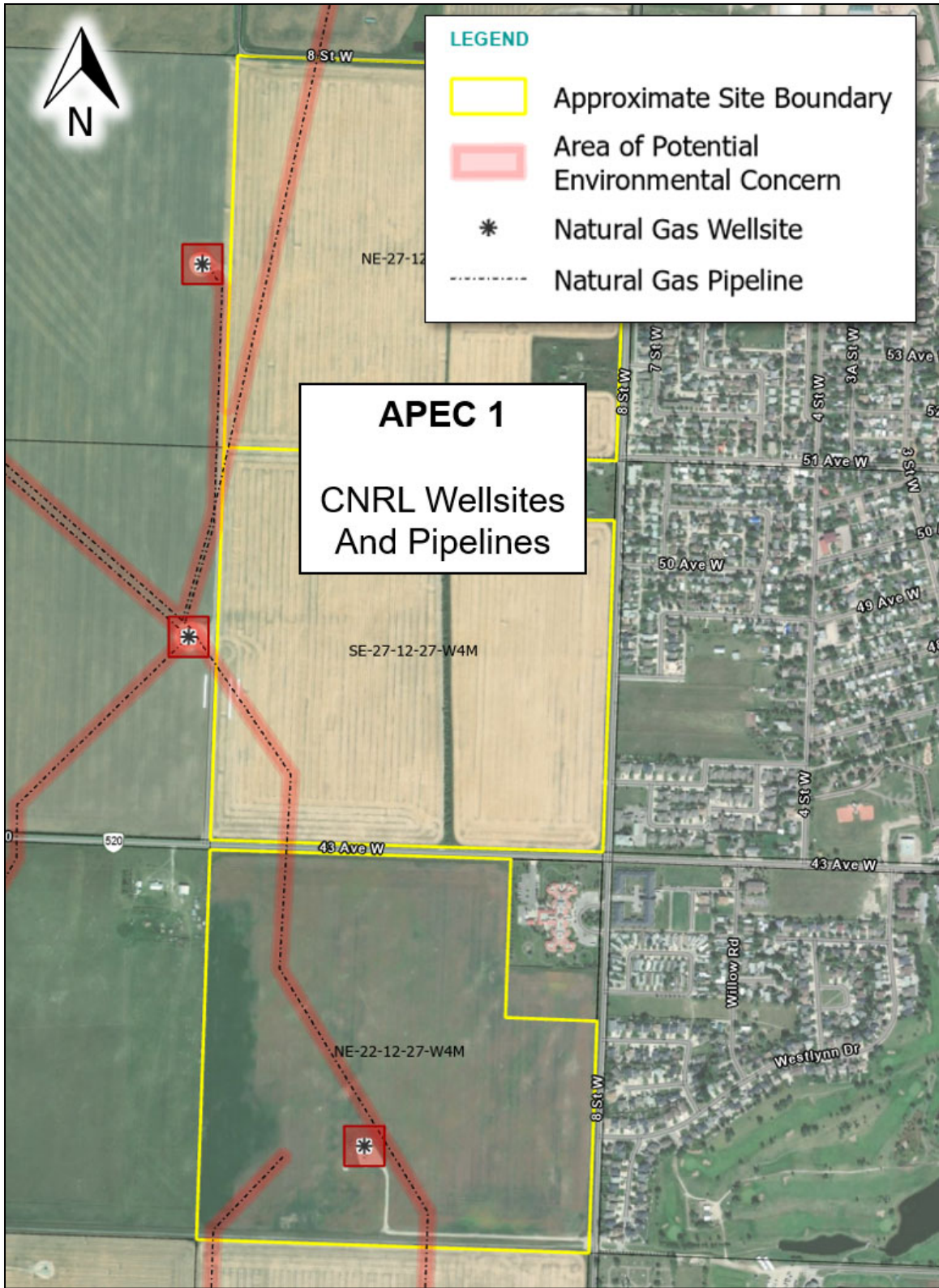


Figure 6. Areas of Potential Environmental Concern



## 9. Professional Statement

In conformance with applicable regulations, we confirm that:

- This Phase I ESA Report has been prepared in accordance with the applicable standards; and
- The undersigned have demonstrable experience in investigation of the type of contamination at the Site for which this statement applies and are familiar with the investigation carried out at the Site.

Should there be any questions regarding the information within, please do not hesitate to contact the undersigned.

Yours truly,

**MCELHANNEY LTD.**

**Prepared by**



Bailey Ferris, A.T.T  
Environmental Technologist

**Site Visit Completed and Reviewed by**



*Carolyn Wright*  
Carolyn Wright, RT.Ag.  
Project Manager - Environmental



Michael Manzi, BSc, BIT  
Environmental Technologist



## 10. Roles and Qualifications of Personnel

**Bailey Ferris, A.T.T.**, prepared the Phase I ESA report for the Site. Ms. Ferris has over 3 years of environmental consulting experience. Mrs. Ferris obtained a Diploma in Environmental Technology from the Southern Alberta Institute of Technology (SAIT) in 2021.

**Michael Manzi, BSc, BIT** prepared the Phase I ESA report for the Site. Mr. Manzi has three years environmental engineering consulting experience and two years of Geomatics / GIS experience. Mr. Manzi obtained a Bachelor of Science specializing in Environmental Science from Simon Fraser University (SFU) in 2017.

**Carolyn Wright, RT.Ag.**, reviewed the Phase I ESA prepared for the Site and completed the Site visit. Ms. Wright is an Environmental Consultant and Project Manager within the Environmental Division in the Calgary, Alberta office of McElhanney. Ms. Wright has 13 years of environmental assessment, monitoring, remediation, and project management experience in the commercial and oil and gas sectors. Ms. Wright obtained a Diploma in Environmental Technology from the Southern Alberta Institute of Technology (SAIT) in 2012.

## 11. References

- AbaData. (2025). *AbaData Database*. Retrieved from <https://www.abadata.ca/index.html>
- AEPA. (2025a). *Alberta Environmental Site Assessment Standard*. Edmonton: Land Policy and Program Branch, Lands Division, Alberta Environment and Protected Areas.
- AEPA. (2025b). *Alberta Water Well Information Database (AWWID)*. Retrieved from <https://groundwater.alberta.ca/WaterWells/d/>
- AEPA. (2025c). *Aerial Photograph Record System (APRS)*. Retrieved from <https://geospatial.alberta.ca/apps/aprs/>
- AEPA. (2025d). *Environmental Site Assessment Repository (ESAR)*. Alberta Environment and Protected Areas. Retrieved from <http://esar.alberta.ca/>
- AGI. (2025). *Alberta Soil Information Viewer*. (A. A. Forestry, Editor) Retrieved from Alberta Agriculture and Irrigation: <https://soil.agric.gov.ab.ca/agrasidviewer/>
- AGS. (2013). *Map 600. Geological Map of Alberta. Scale: 1:1,000,000*. Edmonton, AB: Alberta Geological Survey and Alberta Energy Regulator.
- Canadian Hunter Exploration Ltd. (2000). *Environmental Service Region: Canadian Hunter Exploration Ltd*. Calgary: Environmental Prairie Region.
- CSA. (2022). *CSA Z768-01: Phase I Environmental Site Assessment*. Canadian Standards Association. Toronto, Ontario: Reaffirmed 2022.
- ERIS. (2025). *Database Report, Project Property: Town of Claresholm ASP*. Environmental Risk Information Services.
- ESRI. (2025). ArcGIS Pro. Retrieved from <https://earth.google.com>.
- Government of Alberta. (2000). *Water Well Drilling Report*. Claresholm: Government of Alberta.
- Government of Alberta. (2025). *Spin2: Alberta Land Titles and Surveys Spatial Information System*. Retrieved from <https://alta.registries.gov.ab.ca/spinii/logon.aspx>
- Natural Regions Committee. (2006). *Natural Regions and Subregions of Alberta. Compiled by D.J. Downing and W.W. Pettapiece*. Government of Alberta.
- Town of Claresholm. (2025, June 2). *Land Use Districts*. Retrieved from <https://www.claresholm.ca/admin/resources/page-files/claresholm-land-use-bylaw-1525-april-2009-lud-map-amended-to-bylaw-1625.pdf>



## 12. Statement of Limitations

**Use of this Report.** This report was prepared by McElhanney Ltd. ("McElhanney") for the particular site, design objective, development and purpose (the "Project") described in this report and for the exclusive use of the client identified in this report (the "Client"). The data, interpretations and recommendations pertain to the Project and are not applicable to any other project or site location and this report may not be reproduced, used or relied upon, in whole or in part, by a party other than the Client, without the prior written consent of McElhanney. The Client may provide copies of this report to its affiliates, contractors, subcontractors and regulatory authorities for use in relation to and in connection with the Project provided that any reliance, unauthorized use, and/or decisions made based on the information contained within this report are at the sole risk of such parties. McElhanney will not be responsible for the use of this report on projects other than the Project, where this report or the contents hereof have been modified without McElhanney's consent, to the extent that the content is in the nature of an opinion, and if the report is preliminary or draft. This is a technical report and is not a legal representation or interpretation of laws, rules, regulations, or policies of governmental agencies.

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**Information from Client and Third Parties.** McElhanney has relied in good faith on information provided by the Client and third parties noted in this report and has assumed such information to be accurate, complete, reliable, non-fringing, and fit for the intended purpose without independent verification. McElhanney accepts no responsibility for any deficiency, misstatements or inaccuracy contained in this report as a result of omissions or errors in information provided by third parties or for omissions, misstatements or fraudulent acts of persons interviewed.

**Effect of Changes.** All evaluations and conclusions stated in this report are based on facts, observations, site-specific details, legislation and regulations as they existed at the time of the site assessment/report preparation. Some conditions are subject to change over time and the Client recognizes that the passage of time, natural occurrences, and direct or indirect human intervention at or near the site may substantially alter such evaluations and conclusions. Construction activities can significantly alter soil, rock and other geologic conditions on the site. McElhanney should be requested to re-evaluate the conclusions of this report and to provide amendments as required prior to any reliance upon the information presented herein upon any of the following events: a) any changes (or possible changes) as to the site, purpose, or development plans upon which this report was based, b) any changes to applicable laws subsequent to the issuance of the report, c) new information is discovered in the future during site excavations, construction, building demolition or other activities, or d) additional subsurface assessments or testing conducted by others.

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# Appendix A:

## Photographs



Photo 1: Viewing site from the north boundary, facing south.



Photo 2: Viewing the on-site farmstead on the east side of the Site, facing west.





Photo 3: Viewing the off-site farmstead near 51 Avenue on the east side of the Site, facing west.



Photo 4: Additional view of the on-site farmstead, noting wooden structures in disrepair.





Photo 5: View of the south lot of the Site from 43 Avenue, facing southeast.



Photo 6: View of soil pile on the elementary school property northeast of the Site. Facing south.









# Appendix B:

Aerial Photographs





| PROJECT   | TITLE  | LEGEND  |
|---|--|---|
| <p><b>Phase I Environmental Site Assessment</b></p> <p>Legal: 22 &amp; 27-12-27-W4M<br/>           Client: Town of Claresholm<br/>           Project #: 2531-00794-00</p> | <p><b>August 1947<br/>           Historical Aerial Photograph</b></p> <p>Source: AS 0178-150</p> | <p> Approximate Site Boundary</p> <p> <b>McElhanney</b></p> |





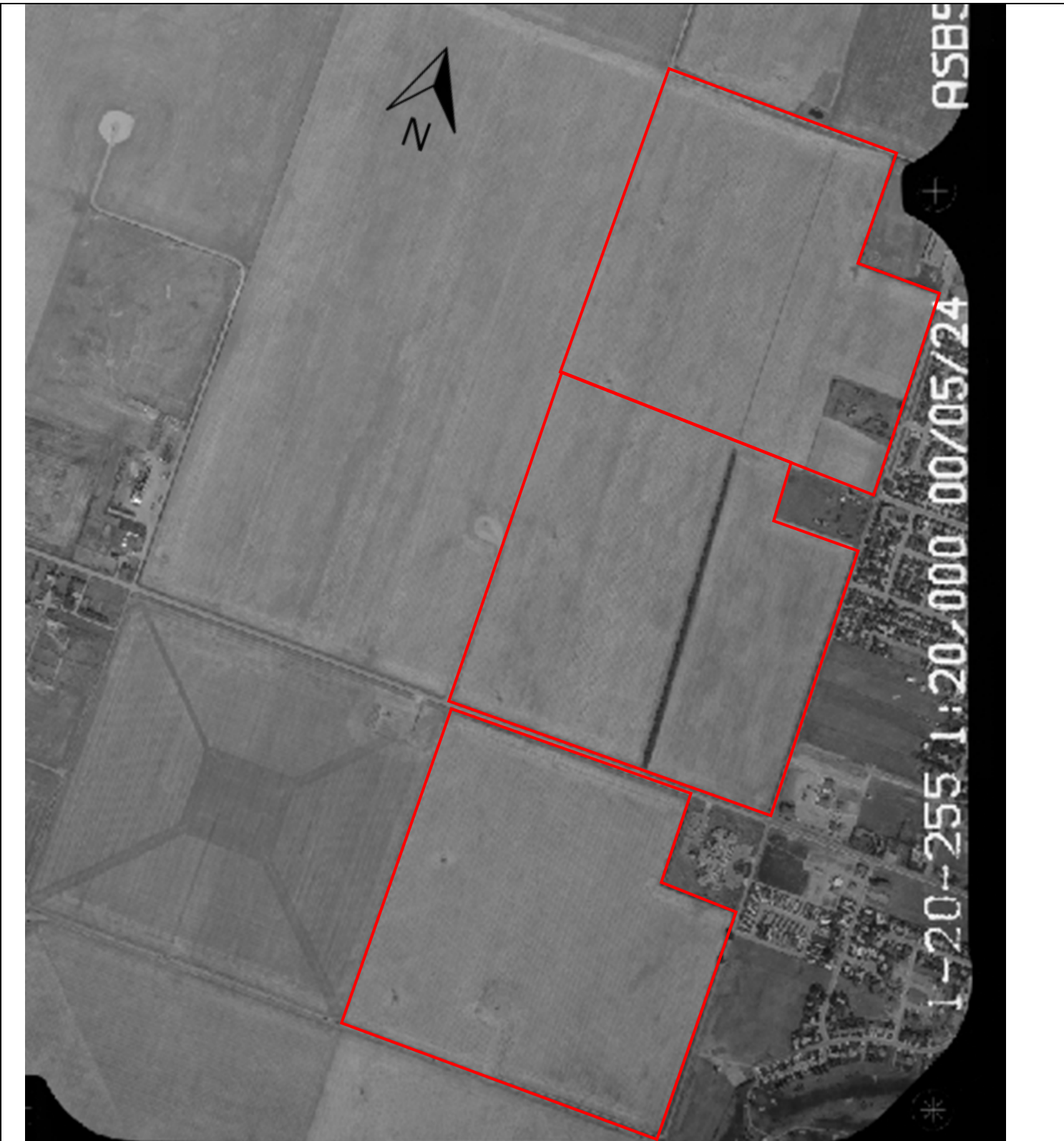
| PROJECT   | TITLE  | LEGEND  |
|---|--|---|
| <p><b>Phase I Environmental Site Assessment</b></p> <p>Legal: 22 &amp; 27-12-27-W4M<br/>           Client: Town of Claresholm<br/>           Project #: 2531-00794-00</p> | <p><b>August 1967<br/>           Historical Aerial Photograph</b></p> <p>Source: AS 0987-013</p> | <p> Approximate Site Boundary</p> <p> <b>McElhanney</b></p> |





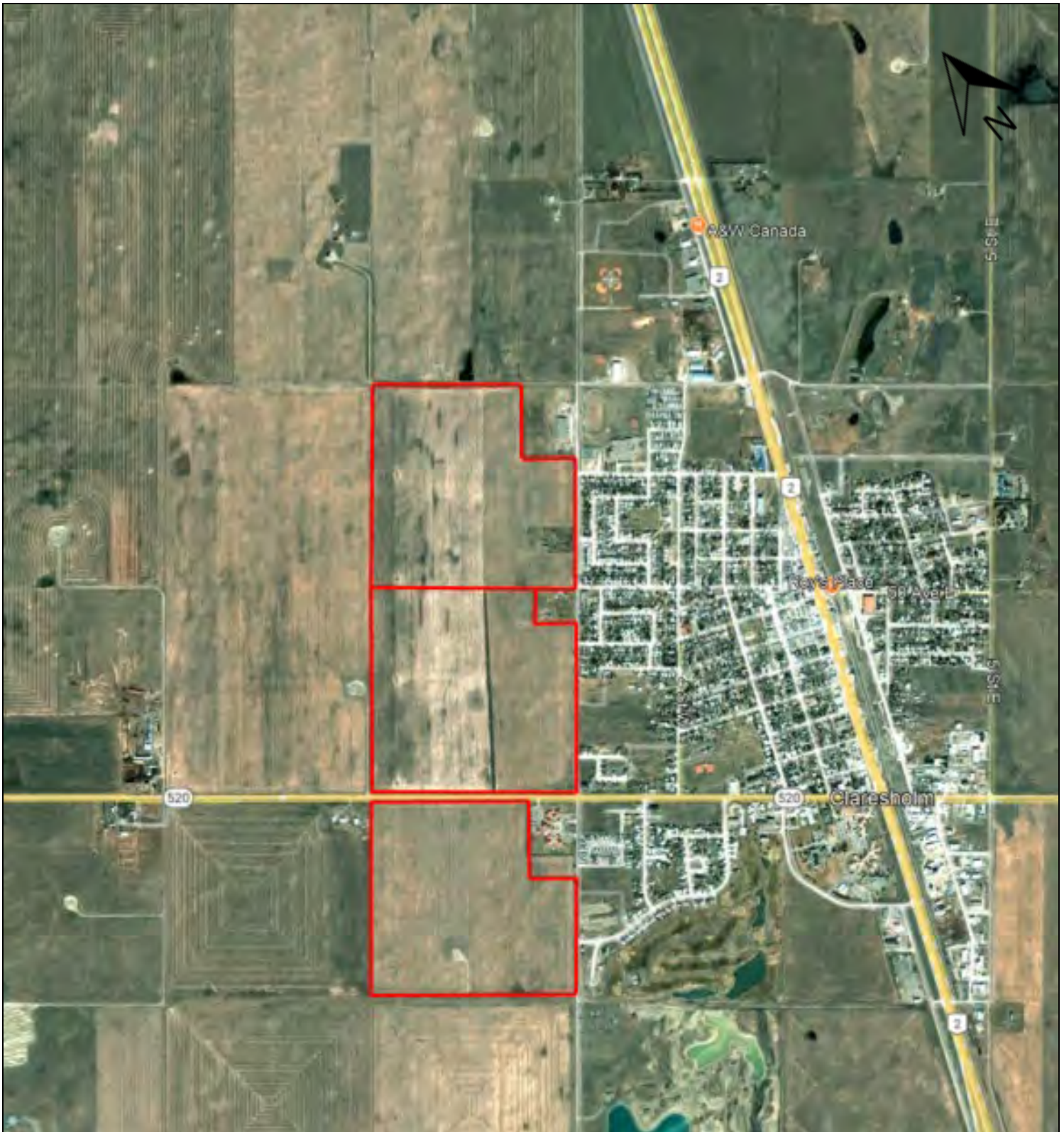
| PROJECT   | TITLE   | LEGEND  |
|---|---|---|
| <p><b>Phase I Environmental Site Assessment</b></p> <p>Legal: 22 &amp; 27-12-27-W4M<br/>           Client: Town of Claresholm<br/>           Project #: 2531-00794-00</p> | <p><b>May 1982<br/>           Historical Aerial Photograph</b></p> <p>Source: APRS<br/>           AS 2830-047</p> | <p> Approximate Site Boundary</p> <p> <b>McElhanney</b></p> |





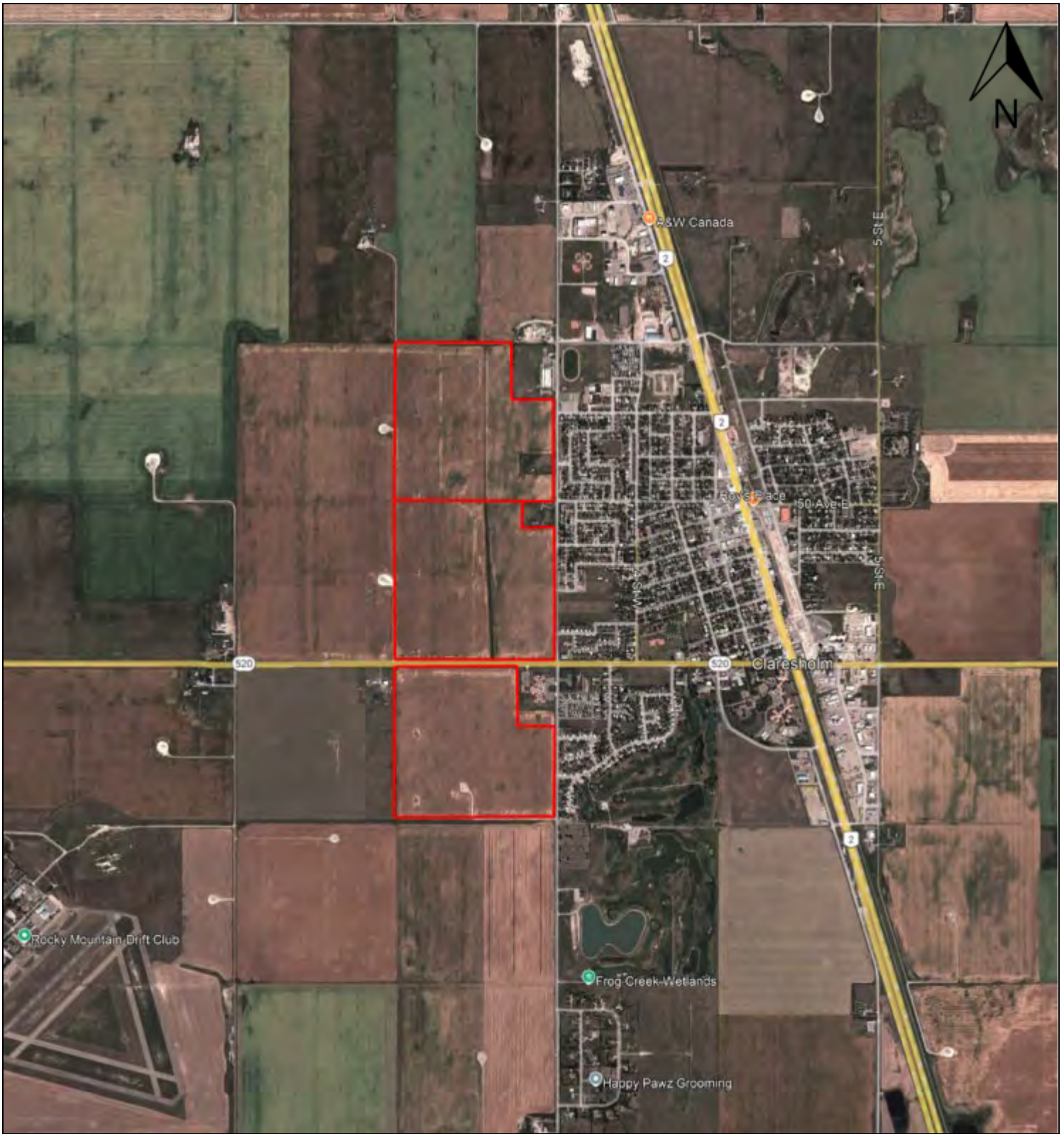
| PROJECT   | TITLE  | LEGEND  |
|---|--|---|
| <p><b>Phase I Environmental Site Assessment</b></p> <p>Legal: 22 &amp; 27-12-27-W4M<br/>           Client: Town of Claresholm<br/>           Project #: 2531-00794-00</p> | <p><b>June 1994<br/>           Historical Aerial Photograph</b></p> <p>Source: APRS<br/>           AS 4542-113</p> | <p> Approximate Site Boundary</p> <p> <b>McElhanney</b></p> |





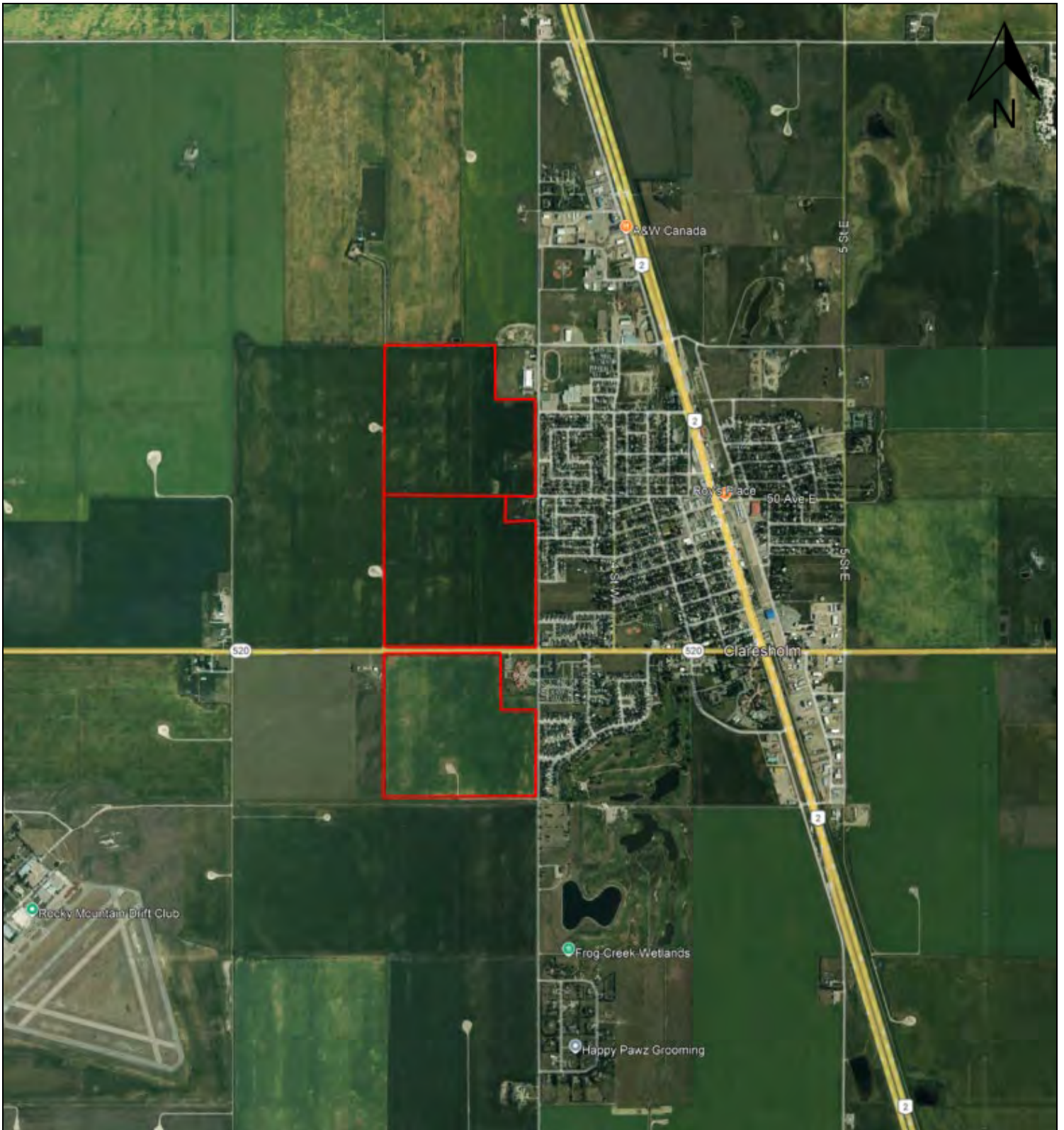
| PROJECT   | TITLE   | LEGEND  |
|---|---|---|
| <p><b>Phase I Environmental Site Assessment</b></p> <p>Legal: 22 &amp; 27-12-27-W4M<br/>           Client: Town of Claresholm<br/>           Project #: 2531-00794-00</p> | <p><b>October 2000<br/>           Historical Aerial Photograph</b></p> <p>Source: AS 5104_202</p> | <p> Approximate Site Boundary</p> <p> <b>McElhanney</b></p> |





| PROJECT  | TITLE  | LEGEND  |
|--|--|---|
| <p><b>Phase I Environmental Site Assessment</b></p> <p>Legal: 22 &amp; 27-12-27-W4M<br/>           Client: Town of Clareholm<br/>           Project #: 2531-00794-00</p> | <p><b>October 2003<br/>           Historical Aerial Photograph</b></p> <p>Source: Google Earth</p> | <p> Approximate Site Boundary</p> <p> <b>McElhanney</b></p> |





| PROJECT   | TITLE  | LEGEND  |
|---|--|---|
| <p><b>Phase I Environmental Site Assessment</b></p> <p>Legal: 22 &amp; 27-12-27-W4M<br/>           Client: Town of Claresholm<br/>           Project #: 2531-00794-00</p> | <p><b>October 2012<br/>           Historical Aerial Photograph</b></p> <p>Source: Google Earth</p> | <p> Approximate Site Boundary</p> <p> <b>McElhanney</b></p> |



| PROJECT   | TITLE  | LEGEND  |
|---|--|---|
| <p><b>Phase I Environmental Site Assessment</b></p> <p>Legal: 22 &amp; 27-12-27-W4M<br/>           Client: Town of Claresholm<br/>           Project #: 2531-00794-00</p> | <p><b>September 2015<br/>           Historical Aerial Photograph</b></p> <p>Source: Google Earth</p> | <p> Approximate Site Boundary</p> <p> <b>McElhanney</b></p> |



| PROJECT   | TITLE   | LEGEND  |
|---|---|---|
| <p><b>Phase I Environmental Site Assessment</b></p> <p>Legal: 22 &amp; 27-12-27-W4M<br/>           Client: Town of Claresholm<br/>           Project #: 2531-00794-00</p> | <p><b>July 2023<br/>           Historical Aerial Photograph</b></p> <p>Source: Google Earth</p> | <p> Approximate Site Boundary</p> <p> <b>McElhanney</b></p> |



# Appendix C:

Land Title and Survey Plan



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ENCUMBRANCES, LIENS & INTERESTS

PAGE 2

# 171 162 399 +4

## REGISTRATION

NUMBER      DATE (D/M/Y)      PARTICULARS  
-----

ALBERTA T2A7W7  
AS TO PORTION OR PLAN:7505JK  
(DATA UPDATED BY: TRANSFER OF UTILITY RIGHT  
OF WAY 021161674)  
(DATA UPDATED BY: CHANGE OF ADDRESS 091124204)

921 035 212      19/02/1992 CAVEAT  
RE : AMENDING AGREEMENT  
CAVEATOR - ALTALINK MANAGEMENT LTD.  
2611 - 3 AVE SE  
CALGARY  
ALBERTA T2A7W7  
(DATA UPDATED BY: TRANSFER OF CAVEAT  
021193420)  
(DATA UPDATED BY: CHANGE OF ADDRESS 091065868)

011 232 979      15/08/2001 UTILITY RIGHT OF WAY  
GRANTEE - CANADIAN NATURAL RESOURCES LIMITED.  
ATTN: LAND DEPARTMENT  
BOX 6926,STN D  
CALGARY  
ALBERTA T2P2G1  
"RE-ENTERED 02/07/03 BY 031221517"  
(DATA UPDATED BY: TRANSFER OF UTILITY RIGHT  
OF WAY 091204655)  
(DATA UPDATED BY: TRANSFER OF UTILITY RIGHT  
OF WAY 161004466)

031 221 707      02/07/2003 DISCHARGE OF UTILITY RIGHT OF WAY 011232979  
PARTIAL  
EXCEPT PLAN/PORTION: 0210273

171 208 598      18/09/2017 UTILITY RIGHT OF WAY  
GRANTEE - THE TOWN OF CLARESHOLM.  
AS TO PORTION OR PLAN:1711886

181 089 470      02/05/2018 UTILITY RIGHT OF WAY  
GRANTEE - THE TOWN OF CLARESHOLM.  
AS TO PORTION OR PLAN:1711886

221 270 038      01/12/2022 UTILITY RIGHT OF WAY  
GRANTEE - FORTISALBERTA INC.

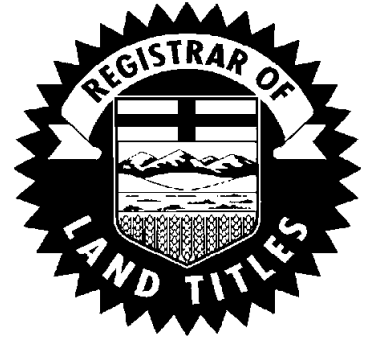
TOTAL INSTRUMENTS: 007

( CONTINUED )

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN  
ACCURATE REPRODUCTION OF THE CERTIFICATE OF  
TITLE REPRESENTED HEREIN THIS 18 DAY OF  
FEBRUARY, 2025 AT 11:51 A.M.

ORDER NUMBER: 52901244

CUSTOMER FILE NUMBER: 253100794



\*END OF CERTIFICATE\*

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SUBJECT TO WHAT IS SET OUT IN THE PARAGRAPH BELOW.

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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).



-----  
ENCUMBRANCES, LIENS & INTERESTS

PAGE 2

# 221 270 039 +1

## REGISTRATION

| NUMBER      | DATE (D/M/Y) | PARTICULARS   |
|-------------|--------------|---|
|             |              | CALGARY<br>ALBERTA T2A7W7<br>AS TO PORTION OR PLAN:7505JK<br>"75 FEET STRIP"<br>(DATA UPDATED BY: TRANSFER OF UTILITY RIGHT<br>OF WAY 021161674)<br>(DATA UPDATED BY: CHANGE OF ADDRESS 091124204)  |
| 6997KZ .    | 24/08/1971   | CAVEAT<br>CAVEATOR - CANADIAN WESTERN NATURAL GAS COMPANY<br>LIMITED.   |
| 8342LO .    | 25/01/1973   | UTILITY RIGHT OF WAY<br>GRANTEE - CANADIAN WESTERN NATURAL GAS COMPANY<br>LIMITED.<br>"20 FOOT STRIP"   |
| 921 035 214 | 19/02/1992   | CAVEAT<br>RE : AMENDING AGREEMENT<br>CAVEATOR - ALTALINK MANAGEMENT LTD.<br>2611 - 3 AVE SE<br>CALGARY<br>ALBERTA T2A7W7<br>(DATA UPDATED BY: TRANSFER OF CAVEAT<br>021193420)<br>(DATA UPDATED BY: CHANGE OF ADDRESS 091065868)  |
| 961 040 472 | 26/02/1996   | UTILITY RIGHT OF WAY<br>GRANTEE - CANADIAN NATURAL RESOURCES LIMITED.<br>ATTN: LAND DEPARTMENT<br>BOX 6926,STN D<br>CALGARY<br>ALBERTA T2P2G1<br>(DATA UPDATED BY: TRANSFER OF UTILITY RIGHT<br>OF WAY 081113127)<br>(DATA UPDATED BY: TRANSFER OF UTILITY RIGHT<br>OF WAY 091250884)<br>(DATA UPDATED BY: TRANSFER OF UTILITY RIGHT<br>OF WAY 161004132) |
| 981 160 731 | 03/06/1998   | DISCHARGE OF UTILITY RIGHT OF WAY 961040472<br>PARTIAL<br>EXCEPT PLAN/PORTION: 9710076  |
| 011 232 979 | 15/08/2001   | UTILITY RIGHT OF WAY<br>GRANTEE - CANADIAN NATURAL RESOURCES LIMITED.<br>ATTN: LAND DEPARTMENT<br>BOX 6926,STN D<br>CALGARY   |

( CONTINUED )

-----  
ENCUMBRANCES, LIENS & INTERESTS

PAGE 3

# 221 270 039 +1

REGISTRATION

NUMBER      DATE (D/M/Y)      PARTICULARS

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ALBERTA T2P2G1

"RE-ENTERED 02/07/03 BY 031221517"

(DATA UPDATED BY: TRANSFER OF UTILITY RIGHT  
OF WAY 091204655)

(DATA UPDATED BY: TRANSFER OF UTILITY RIGHT  
OF WAY 161004466)

031 221 707      02/07/2003      DISCHARGE OF UTILITY RIGHT OF WAY 011232979  
PARTIAL

EXCEPT PLAN/PORTION: 0210273

171 208 599      18/09/2017      UTILITY RIGHT OF WAY  
GRANTEE - THE TOWN OF CLARESHOLM.  
AS TO PORTION OR PLAN:1711886

181 089 468      02/05/2018      UTILITY RIGHT OF WAY  
GRANTEE - THE TOWN OF CLARESHOLM.  
AS TO PORTION OR PLAN:1711886

241 004 443      05/01/2024      CAVEAT  
RE : UTILITY RIGHT OF WAY  
CAVEATOR - FORTISALBERTA INC.  
320-17 AVE SW  
CALGARY  
ALBERTA T2S2V1  
AGENT - ROB GUNN

TOTAL INSTRUMENTS: 011

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN  
ACCURATE REPRODUCTION OF THE CERTIFICATE OF  
TITLE REPRESENTED HEREIN THIS 18 DAY OF  
FEBRUARY, 2025 AT 11:51 A.M.

ORDER NUMBER: 52901244

CUSTOMER FILE NUMBER: 253100794



\*END OF CERTIFICATE\*

( CONTINUED )

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LAND TITLE CERTIFICATE

S  
LINC                      SHORT LEGAL                      TITLE NUMBER  
0022 307 227            4;27;12;22;NE                      921 097 883 +1

LEGAL DESCRIPTION

MERIDIAN 4 RANGE 27 TOWNSHIP 12  
SECTION 22  
QUARTER NORTH EAST  
CONTAINING 64.7 HECTARES (160 ACRES) MORE OR LESS  
EXCEPTING THEREOUT:

| PLAN                 | NUMBER  | HECTARES | ACRES |
|----------------------|---------|----------|-------|
| RAILWAY RIGHT OF WAY | RW 423  | 1.85     | 4.57  |
| ROAD WIDENING        | 7510698 | 0.838    | 2.07  |
| SUBDIVISION          | 9210773 | 6.07     | 15.0  |

EXCEPTING THEREOUT ALL MINES AND MINERALS

ESTATE: FEE SIMPLE

MUNICIPALITY: TOWN OF CLARESHOLM

REFERENCE NUMBER: 921 097 728 +1

-----  
REGISTERED OWNER(S)  
REGISTRATION      DATE (DMY)      DOCUMENT TYPE      VALUE      CONSIDERATION  
-----  
921 097 883      30/04/1992      SUBDIVISION PLAN

OWNERS

M G MULHOLLAND FARMS LIMITED.  
OF P.O. BOX 2020  
CLARESHOLM  
ALBERTA

-----  
ENCUMBRANCES, LIENS & INTERESTS  
REGISTRATION  
NUMBER      DATE (D/M/Y)      PARTICULARS  
-----  
7620KR      .      30/10/1970      UTILITY RIGHT OF WAY  
GRANTEE - ALTALINK MANAGEMENT LTD.  
2611 - 3 AVE SE

-----  
ENCUMBRANCES, LIENS & INTERESTS

PAGE 2

# 921 097 883 +1

## REGISTRATION

NUMBER DATE (D/M/Y) PARTICULARS  
-----

CALGARY

ALBERTA T2A7W7

AS TO PORTION OR PLAN:7505JK

(DATA UPDATED BY: TRANSFER OF UTILITY RIGHT  
OF WAY 021218940)

(DATA UPDATED BY: CHANGE OF ADDRESS 091134187)

881 213 119 22/11/1988 CAVEAT

RE : AMENDING AGREEMENT

CAVEATOR - ALTALINK MANAGEMENT LTD.

2611 - 3 AVE SE

CALGARY

ALBERTA T2A7W7

(DATA UPDATED BY: TRANSFER OF CAVEAT  
021183428)

(DATA UPDATED BY: CHANGE OF ADDRESS 091059580)

901 041 010 12/02/1990 CAVEAT

RE : LEASE

CAVEATOR - 2811707 CANADA LTD.

C/O RANGER OIL LIMITED

2700, 425-1 ST SW

CALGARY

ALBERTA T2P3L8

(DATA UPDATED BY: TRANSFER OF CAVEAT  
921241733)

901 122 693 15/05/1990 CAVEAT

RE : RIGHT OF WAY AGREEMENT

CAVEATOR - CANADIAN NATURAL RESOURCES LIMITED.

BOX 6926, STATION "D"

CALGARY

ALBERTA T2P2G1

(DATA UPDATED BY: TRANSFER OF CAVEAT  
931003933)

(DATA UPDATED BY: CHANGE OF NAME 041402988)

961 040 473 26/02/1996 UTILITY RIGHT OF WAY

GRANTEE - CANADIAN NATURAL RESOURCES LIMITED.

ATTN: LAND DEPARTMENT

BOX 6926, STN D

CALGARY

ALBERTA T2P2G1

(DATA UPDATED BY: TRANSFER OF UTILITY RIGHT  
OF WAY 081113127)(DATA UPDATED BY: TRANSFER OF UTILITY RIGHT  
OF WAY 091250884)(DATA UPDATED BY: TRANSFER OF UTILITY RIGHT  
OF WAY 161004132)

( CONTINUED )

-----  
ENCUMBRANCES, LIENS & INTERESTS

PAGE 3

# 921 097 883 +1

REGISTRATION

-----  
NUMBER      DATE (D/M/Y)      PARTICULARS  
-----

981 160 732      03/06/1998 DISCHARGE OF UTILITY RIGHT OF WAY 961040473  
PARTIAL  
EXCEPT PLAN/PORTION: 9710076

001 278 822      29/09/2000 UTILITY RIGHT OF WAY  
GRANTEE - ATCO GAS AND PIPELINES LTD.

171 208 597      18/09/2017 UTILITY RIGHT OF WAY  
GRANTEE - THE TOWN OF CLARESHOLM.  
AS TO PORTION OR PLAN:1711886

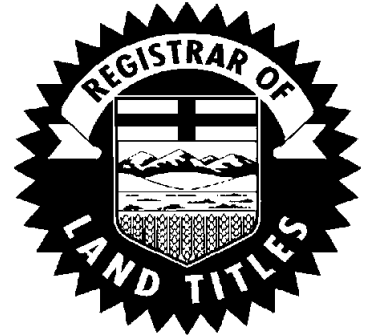
181 089 469      02/05/2018 UTILITY RIGHT OF WAY  
GRANTEE - THE TOWN OF CLARESHOLM.  
AS TO PORTION OR PLAN:1711886

TOTAL INSTRUMENTS: 009

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN  
ACCURATE REPRODUCTION OF THE CERTIFICATE OF  
TITLE REPRESENTED HEREIN THIS 18 DAY OF  
FEBRUARY, 2025 AT 11:51 A.M.

ORDER NUMBER: 52901244

CUSTOMER FILE NUMBER: 253100794



\*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).

# Appendix D:

## AbaData Database Search

## Well Annual Production Totals Report - Grouped by License #

| LICENSE # | FLUID                    | YEAR  | PRODUCTION HOURS | INJECTION HOURS | ANNUAL VOLUME | CUMULATIVE VOLUME |
|-----------|--------------------------|-------|------------------|-----------------|---------------|-------------------|
| 0141798   | Gas (10 <sup>3</sup> m3) | 1990  | 2,816            | 0               | 4,719.5       | 4,719.5           |
|           |                          | 1991  | 5,949            | 0               | 10,077.2      | 14,796.7          |
|           |                          | 1992  | 8,573            | 0               | 11,466.0      | 26,262.7          |
|           |                          | 1993  | 8,727            | 0               | 11,435.2      | 37,697.9          |
|           |                          | 1994  | 8,614            | 0               | 10,325.1      | 48,023.0          |
|           |                          | 1995  | 6,749            | 0               | 7,234.8       | 55,257.8          |
|           |                          | 1996  | 8,492            | 0               | 8,614.6       | 63,872.4          |
|           |                          | 1997  | 8,508            | 0               | 8,497.8       | 72,370.2          |
|           |                          | 1998  | 8,507            | 0               | 7,883.8       | 80,254.0          |
|           |                          | 1999  | 8,217            | 0               | 6,632.5       | 86,886.5          |
|           |                          | 2000  | 8,712            | 0               | 5,864.3       | 92,750.8          |
|           |                          | 2001  | 8,591            | 0               | 4,840.7       | 97,591.5          |
|           |                          | 2002  | 8,643            | 0               | 4,374.2       | 101,965.7         |
|           |                          | 2003  | 8,759            | 0               | 3,990.1       | 105,955.8         |
|           |                          | 2004  | 8,555            | 0               | 3,465.5       | 109,421.3         |
|           |                          | 2005  | 8,759            | 0               | 3,263.2       | 112,684.5         |
|           |                          | 2006  | 8,735            | 0               | 2,450.3       | 115,134.8         |
|           |                          | 2007  | 8,731            | 0               | 1,855.6       | 116,990.4         |
|           |                          | 2008  | 8,708            | 0               | 932.1         | 117,922.5         |
|           |                          | 2009  | 8,731            | 0               | 467.0         | 118,389.5         |
|           |                          | 2010  | 8,605            | 0               | 2,252.2       | 120,641.7         |
|           |                          | 2011  | 8,750            | 0               | 1,936.7       | 122,578.4         |
|           |                          | 2012  | 8,783            | 0               | 1,655.7       | 124,234.1         |
|           |                          | 2013  | 8,758            | 0               | 1,479.6       | 125,713.7         |
|           |                          | 2014  | 8,756            | 0               | 1,317.7       | 127,031.4         |
|           |                          | 2015  | 8,759            | 0               | 1,228.0       | 128,259.4         |
|           |                          | 2016  | 8,783            | 0               | 1,089.2       | 129,348.6         |
|           |                          | 2017  | 8,759            | 0               | 1,024.4       | 130,373.0         |
|           |                          | 2018  | 8,759            | 0               | 939.6         | 131,312.6         |
|           |                          | 2019  | 8,447            | 0               | 785.9         | 132,098.5         |
|           | 2020                     | 8,616 | 0                | 805.4           | 132,903.9     |                   |
|           | 2021                     | 8,688 | 0                | 735.5           | 133,639.4     |                   |
| 2022      | 8,663                    | 0     | 687.0            | 134,326.4       |               |                   |
| 2023      | 8,616                    | 0     | 664.0            | 134,990.4       |               |                   |
| 2024      | 8,783                    | 0     | 610.4            | 135,600.8       |               |                   |
| 2025      | 2,159                    | 0     | 144.7            | 135,745.5       |               |                   |
|           | Water (m3)               | 1990  | 2,816            | 0               | 31.1          | 31.1              |
|           |                          | 1991  | 5,949            | 0               | 25.6          | 56.7              |

| LICENSE # | FLUID                    | YEAR | PRODUCTION HOURS | INJECTION HOURS | ANNUAL VOLUME | CUMULATIVE VOLUME |
|-----------|--------------------------|------|------------------|-----------------|---------------|-------------------|
| 0141798   | Water (m3)               | 1992 | 8,573            | 0               | 43.2          | 99.9              |
|           |                          | 1993 | 8,727            | 0               | 33.6          | 133.5             |
|           |                          | 1994 | 8,614            | 0               | 21.7          | 155.2             |
|           |                          | 1995 | 6,749            | 0               | 5.6           | 160.8             |
|           |                          | 1996 | 8,492            | 0               | 12.4          | 173.2             |
|           |                          | 1997 | 8,508            | 0               | 6.4           | 179.6             |
|           |                          | 1998 | 8,507            | 0               | 67.2          | 246.8             |
|           |                          | 1999 | 8,217            | 0               | 36.8          | 283.6             |
|           |                          | 2000 | 8,712            | 0               | 28.0          | 311.6             |
|           |                          | 2001 | 8,591            | 0               | 14.8          | 326.4             |
|           |                          | 2002 | 8,643            | 0               | 13.4          | 339.8             |
|           |                          | 2003 | 8,759            | 0               | 7.8           | 347.6             |
|           |                          | 2004 | 8,555            | 0               | 12.4          | 360.0             |
|           |                          | 2005 | 8,759            | 0               | 0.1           | 360.1             |
|           |                          | 2006 | 8,735            | 0               | 0.5           | 360.6             |
|           |                          | 2007 | 8,731            | 0               | 11.3          | 371.9             |
|           |                          | 2009 | 8,731            | 0               | 6.9           | 378.8             |
|           |                          | 2010 | 8,605            | 0               | 0.6           | 379.4             |
|           |                          | 2011 | 8,750            | 0               | 3.7           | 383.1             |
| 2012      | 8,783                    | 0    | 1.5              | 384.6           |               |                   |
| 2019      | 8,447                    | 0    | 2.5              | 387.1           |               |                   |
| 0179069   | Gas (10 <sup>3</sup> m3) | 1996 | 6,049            | 0               | 10,514.1      | 10,514.1          |
|           |                          | 1997 | 8,215            | 0               | 10,420.6      | 19,398.1          |
|           |                          | 1998 | 8,594            | 0               | 12,079.8      | 33,014.5          |
|           |                          | 1999 | 8,580            | 0               | 9,351.4       | 19,573.8          |
|           |                          | 2000 | 8,616            | 0               | 8,284.0       | 27,857.8          |
|           |                          | 2001 | 8,447            | 0               | 7,509.5       | 35,367.3          |
|           |                          | 2002 | 8,708            | 0               | 6,785.8       | 42,153.1          |
|           |                          | 2003 | 8,708            | 0               | 5,808.4       | 47,961.5          |
|           |                          | 2004 | 8,735            | 0               | 5,637.5       | 53,599.0          |
|           |                          | 2005 | 8,647            | 0               | 4,968.4       | 58,567.4          |
|           |                          | 2006 | 8,703            | 0               | 4,507.2       | 63,074.6          |
|           |                          | 2007 | 8,633            | 0               | 3,854.1       | 66,928.7          |
|           |                          | 2008 | 8,534            | 0               | 3,388.5       | 70,317.2          |
|           |                          | 2009 | 8,665            | 0               | 3,024.1       | 73,341.3          |
|           |                          | 2010 | 8,666            | 0               | 2,833.0       | 76,174.3          |
|           |                          | 2011 | 8,752            | 0               | 2,401.9       | 78,576.2          |
|           |                          | 2012 | 8,687            | 0               | 2,223.3       | 80,799.5          |
|           |                          | 2013 | 8,464            | 0               | 1,976.6       | 82,776.1          |
| 2014      | 8,482                    | 0    | 1,775.6          | 84,551.7        |               |                   |
| 2015      | 8,759                    | 0    | 1,654.6          | 86,206.3        |               |                   |
| 2016      | 8,687                    | 0    | 1,493.9          | 87,700.2        |               |                   |

| LICENSE #                | FLUID                    | YEAR            | PRODUCTION HOURS | INJECTION HOURS | ANNUAL VOLUME | CUMULATIVE VOLUME |
|--------------------------|--------------------------|-----------------|------------------|-----------------|---------------|-------------------|
| 0179069                  | Gas (10 <sup>3</sup> m3) | 2017            | 8,243            | 0               | 1,459.3       | 89,159.5          |
|                          |                          | 2018            | 8,735            | 0               | 1,410.3       | 90,569.8          |
|                          |                          | 2019            | 7,727            | 0               | 1,167.1       | 91,736.9          |
|                          |                          | 2020            | 8,783            | 0               | 1,209.0       | 92,945.9          |
|                          |                          | 2021            | 8,759            | 0               | 1,092.8       | 94,038.7          |
|                          |                          | 2022            | 8,759            | 0               | 1,035.3       | 95,074.0          |
|                          |                          | 2023            | 8,759            | 0               | 987.4         | 96,061.4          |
|                          |                          | 2024            | 8,783            | 0               | 900.5         | 96,961.9          |
|                          |                          | 2025            | 2,159            | 0               | 223.7         | 97,185.6          |
|                          | Water (m3)               | 1996            | 6,049            | 0               | 23.7          | 23.7              |
|                          |                          | 1997            | 8,215            | 0               | 31.2          | 52.6              |
|                          |                          | 1998            | 8,594            | 0               | 10.6          | 65.5              |
|                          |                          | 2000            | 8,616            | 0               | 10.7          | 19.6              |
|                          |                          | 2001            | 8,447            | 0               | 5.2           | 24.8              |
|                          |                          | 2002            | 8,708            | 0               | 48.3          | 73.1              |
|                          |                          | 2003            | 8,708            | 0               | 22.2          | 95.3              |
|                          |                          | 2017            | 8,243            | 0               | 0.5           | 95.8              |
|                          | 0410733                  | Condensate (m3) | 2018             | 8,543           | 0             | 0.1               |
| Gas (10 <sup>3</sup> m3) |                          | 2009            | 726              | 0               | 580.5         | 580.5             |
|                          |                          | 2010            | 8,713            | 0               | 4,846.9       | 5,427.4           |
|                          |                          | 2011            | 8,707            | 0               | 2,747.5       | 8,174.9           |
|                          |                          | 2012            | 8,678            | 0               | 2,280.3       | 10,455.2          |
|                          |                          | 2013            | 8,580            | 0               | 1,933.8       | 12,389.0          |
|                          |                          | 2014            | 8,641            | 0               | 1,680.6       | 14,069.6          |
|                          |                          | 2015            | 8,735            | 0               | 1,472.0       | 15,541.6          |
|                          |                          | 2016            | 8,536            | 0               | 1,311.8       | 16,853.4          |
|                          |                          | 2017            | 8,243            | 0               | 1,167.1       | 18,020.5          |
|                          |                          | 2018            | 8,543            | 0               | 1,080.9       | 19,101.4          |
|                          |                          | 2019            | 8,495            | 0               | 948.1         | 20,049.5          |
|                          |                          | 2020            | 8,783            | 0               | 820.0         | 20,869.5          |
|                          |                          | 2021            | 8,759            | 0               | 807.9         | 21,677.4          |
|                          |                          | 2022            | 8,759            | 0               | 749.6         | 22,427.0          |
|                          |                          | 2023            | 8,759            | 0               | 797.7         | 23,224.7          |
|                          |                          | 2024            | 8,783            | 0               | 674.8         | 23,899.5          |
|                          |                          | 2025            | 2,159            | 0               | 163.4         | 24,062.9          |
| Water (m3)               |                          | 2009            | 726              | 0               | 21.7          | 21.7              |
|                          |                          | 2011            | 8,707            | 0               | 27.7          | 49.4              |
|                          |                          | 2012            | 8,678            | 0               | 15.8          | 65.2              |
|                          | 2013                     | 8,580           | 0                | 8.4             | 73.6          |                   |
|                          | 2014                     | 8,641           | 0                | 1.2             | 74.8          |                   |
|                          | 2015                     | 8,735           | 0                | 21.9            | 96.7          |                   |
|                          | 2016                     | 8,536           | 0                | 19.8            | 116.5         |                   |

| LICENSE # | FLUID      | YEAR | PRODUCTION HOURS | INJECTION HOURS | ANNUAL VOLUME | CUMULATIVE VOLUME |
|-----------|------------|------|------------------|-----------------|---------------|-------------------|
| 0410733   | Water (m3) | 2017 | 8,243            | 0               | 17.5          | 134.0             |
|           |            | 2018 | 8,543            | 0               | 17.4          | 151.4             |
|           |            | 2019 | 8,495            | 0               | 14.3          | 165.7             |
|           |            | 2020 | 8,783            | 0               | 12.8          | 178.5             |
|           |            | 2021 | 8,759            | 0               | 13.1          | 191.6             |
|           |            | 2022 | 8,759            | 0               | 12.3          | 203.9             |
|           |            | 2023 | 8,759            | 0               | 12.4          | 216.3             |
|           |            | 2024 | 8,783            | 0               | 11.1          | 227.4             |
|           |            | 2025 | 2,159            | 0               | 2.6           | 230.0             |

| LICENSE / LINE # | PROV | COMPANY NAME                       | LICENSE DATE | FROM LOCATION    | TO LOCATION     | LGTH (kms) | STS | SUB | H2S (mol/kmol) | OD (mm) | WT (mm) | MAT | TYPE   | GRD  |
|------------------|------|------------------------------------|--------------|------------------|-----------------|------------|-----|-----|----------------|---------|---------|-----|--------|------|
| 24762 - 1        | AB   | CANADIAN NATURAL RESOURCES LIMITED | Apr 26, 1991 | 10-22-12-27W4 WE | 6-14-12-27W4 PL | 2.83       | O   | NG  | 0              | 114.3   | 3.2     | S   | Z245.1 | 2901 |
| 24762 - 47       | AB   | CANADIAN NATURAL RESOURCES LIMITED | Dec 21, 2007 | 6-22-12-27W4 WE  | 7-22-12-27W4 PL | 0.44       | O   | NG  | 0              | 114.3   | 3.2     | S   | Z245.1 | 3592 |
| 28041 - 6        | AB   | CANADIAN NATURAL RESOURCES LIMITED | Aug 2, 1996  | 4-33-12-27W4 WE  | 3-1-12-27W4 PL  | 11         | O   | NG  | 0              | 168.3   | 3.2     | S   | Z245.1 | 2901 |
| 28041 - 9        | AB   | CANADIAN NATURAL RESOURCES LIMITED | Apr 29, 1997 | 9-21-12-27W4 WE  | 6-27-12-27W4 WE | 1.62       | O   | NG  | 0              | 88.9    | 3.2     | S   | Z245.1 | 2901 |
| 28041 - 27       | AB   | CANADIAN NATURAL RESOURCES LIMITED | Jan 11, 2002 | 9-34-12-27W4 WE  | 6-27-12-27W4 PL | 2.3        | O   | NG  | 0              | 114.3   | 3.2     | S   | Z245.1 | 3591 |
| 28041 - 43       | AB   | CANADIAN NATURAL RESOURCES LIMITED | Feb 18, 2005 | 6-27-12-27W4 PL  | 9-28-12-27W4 PL | 1.29       | O   | NG  | 0              | 114.3   | 4       | S   | Z245.1 | 3592 |
| 28041 - 102      | AB   | CANADIAN NATURAL RESOURCES LIMITED | Jun 9, 2010  | 11-27-12-27W4 WE | 6-27-12-27W4 PL | 0.79       | O   | NG  | 0              | 88.9    | 3.2     | S   | Z245.1 | 3592 |

| <b>MOP<br/>(kpa)</b> | <b>JNT</b> | <b>INTL<br/>COAT</b> | <b>STRESS<br/>LEVEL<br/>(%)</b> | <b>ENV</b> | <b>FIELD</b> |
|----------------------|------------|----------------------|---------------------------------|------------|--------------|
| 4960                 | W          | U                    | 31                              |            | EASTMONT     |
| 4960                 | W          | U                    | 25                              |            | EASTMONT     |
| 4960                 | W          | U                    | 45                              |            | EASTMONT     |
| 4960                 | W          | U                    | 24                              |            | EASTMONT     |
| 4960                 | W          | U                    | 25                              |            | EASTMONT     |
| 4960                 | W          | U                    | 20                              |            | EASTMONT     |
| 4960                 | W          | U                    | 19                              |            | EASTMONT     |

| COMPLAINTS              |               |                                |                  |                       |                             |              |           |
|-------------------------|---------------|--------------------------------|------------------|-----------------------|-----------------------------|--------------|-----------|
| INCIDENT #              | NOTIFIED DATE | LICENSEE (AT TIME OF INCIDENT) | SOURCE           | CAUSE                 | STRIKE AREA                 | FIELD CENTRE |           |
| INCIDENT DATE           | LICENSE #     | COMPLETE DATE                  | CURRENT LICENSEE | SOURCE IN COMPLIANCE? | CONCERNS                    |              |           |
| <b>01-27-012-27 W4M</b> |               |                                |                  |                       |                             |              |           |
| APR 3 2013              | 20130692      | APR 3 2013                     | UNKNOWN          |                       | UNKNOWN                     | EASTM        | MIDNAPORE |
|                         |               | APR 4 2013                     |                  |                       | ODOURS - THC   ODOURS - H2S |              |           |

# Appendix E:

## Regulatory Searches



Financial and Administrative Shared  
Services  
ATI Office  
Suite 402, Standard Life  
10405 Jasper Avenue NW  
Edmonton, Alberta T5J 4R7  
Telephone: (780) 643-6713  
Email: sartr.ati-centralintake@gov.ab.ca

June 18, 2025

Carolyn Wright  
Project Manager  
McElhanney Ltd.  
100, 402 11th Avenue SE  
Calgary, CA-AB T2G 0Y4

Dear Carolyn Wright:

**Routine Disclosure Request #: EA000-2025-R-926**

---

The following is in response to your request for routinely available records:

**Location:** NE Sec 27 Twp 12 Rge 27 W4M, SE Sec 27 Twp 12 Rge 27 W4M and NE Sec 22 Twp 12 Rge 27 W4M; Claresholm

**Time Period:** from June 02, 1773 to June 02, 2025

Records: McElhanney is conducting a Phase I ESA for a lot located within NE-27-12-27-W4M, SE-27-12-27-W4M, and NE-22-12-27-W4M, in Claresholm, Alberta. McElhanney is looking for information of any historical records of soil and groundwater contamination, spills, or environmental concerns at the site. (See site boundary attachment)

A search of Environment and Protected Areas (EPA) record holdings has not identified any records relating to the subject of your request, based on the search parameters you provided to this office, except the public records that you have already obtained off Environmental Site Assessment Repository (ESAR).

Your RD Request is now closed.

If you have any questions, please contact me at Tolulope.Adesanya@gov.ab.ca

Sincerely,

Tolulope Adesanya  
FOIP Advisor  
Serving Environment and Protected Areas  
Government of Alberta

136785

Canadian Hunter Exploration Ltd  
2000, 605 - 5th Avenue S.W.  
Calgary, Alberta T2P 3H5  
Tel: (403) 260-[user phone #]  
Fax: (403) 260-[user fax #]



# canadian hunter

## F A X C O V E R S H E E T

DATE: September 28, 2000      TIME: 8:55 AM  
 TO: CAROL TURNER      PHONE: 780-427-5764  
     AB Environment      FAX: 780-422-4192  
 FROM: Lynne Hawrelko      PHONE: 403-260-1673  
     Canadian Hunter      FAX: 403-260-1160

RE: LANDOWNER RELEASE  
RECLAMATION APPLICATION  
1-27-12-27-W4  
OUR FILE: 94-11978

|                                    |  |
|------------------------------------|--|
| ENVIRONMENTAL<br>SCIENCES DIVISION |  |
| SEP 28 2000                        |  |
|                                    |  |
|                                    |  |
|                                    |  |

Number of pages including cover sheet: 2

### Message

As per our phone conversation, attached is the referenced Release.

*cc Terry Johnson*

**RELEASE**

I **DAVID MULHOLLAND** of **CLARESHOLM**  
(print name) (Landowner or Occupant)

Request that the following items or facilities which are associated with:

LOCATION: **LSD 01 27-012-27 W4M** **CANHUNTER et al EASTMONT**

be left in there present state and condition for my use and I release

COMPANY: **CANADIAN HUNTER EXPLORATION LTD**

of any obligation and responsibility concerning the maintenance and removal of the items listed.

**ITEMS:**

1. **ROAD APPROACH**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**COMMENTS**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

THIS RELEASE IS FOR SPECIFIC ITEMS BEING LEFT IN PLACE FOR THE BENEFIT OF THE LANDOWNER AND IS BEING OBTAINED IN ORDER TO SATISFY THE WELLSITE RECLAMATION CRITERIA AND CERTIFICATION REQUIREMENTS. ALL OF THE ABOVE ITEMS ARE TO BE RETAINED BY THE LANDOWNER FOR HIS USE. THE ABOVE NAMED COMPANY IS BEING DISCHARGED FOR ANY MAINTENANCE OR RESPONSIBILITIES FOR THE ABOVE SURFACE ALTERATION.

Signature: *David Mulholland* Date: 25-Sep-2000  
(Name)

**ENVIRONNET CORPORATION**

# Fax

Name: Michael Melnyk  
 Company: EnviroNet Corporation  
 Voice Number: 256-8753 -  
 Fax Number: 701-3339  
 228 Sunrise Circle S.E.  
 Calgary, Alberta T2X 2Z7

*call  
701-3339*

Date: September 26, 2000

Total Pages: 2

Subject: Release for Approach on 1-27-12-27 W4M

Name: Terry Johnson

Company: Alberta Environment

Voice Number:

Fax Number: (403) 382-4428

*Roaks*  
 ↙

Note: Roaks have been picked and site is now equivalent to control or better. Landowner was on site and is satisfied.

*need release for approach & bats*

October 3, 2000 9:51 AM

To: Terry Johnson

From: Michael Melnyk

701-3339

Page: 2 of 2

10/02/2000 19:32

4036254774

DELTAACCOUITINGND

PAGE 01

October 2, 2000 10:16 AM

To: David Mulholland

From: Michael Melnyk

701-3339

Page: 2 of 2

**RELEASE**

I DAVID MULHOLLAND of CLARESHOLM

(print name) (Landowner or Occupant)

**Request that the following items or facilities which are associated with:**

LOCATION: LSO 01 27 - 012 - 27 W4M CANHUNTER et al EASTMONT

**be left in there present state and condition for my use and I release**

COMPANY: CANADIAN HUNTER EXPLORATION LTD

**of any obligation and responsibility concerning the maintenance and removal of the items listed.**

**ITEMS:**

1. ROAD APPROACH

2. FENCE AND GATE

**COMMENTS**

THIS RELEASE IS FOR SPECIFIC ITEMS BEING LEFT IN PLACE FOR THE BENEFIT OF THE LANDOWNER AND IS BEING OBTAINED IN ORDER TO SATISFY THE WELLSITE RECLAMATION CRITERIA AND CERTIFICATION REQUIREMENTS. ALL OF THE ABOVE ITEMS ARE TO BE RETAINED BY THE LANDOWNER FOR HIS USE. THE ABOVE NAMED COMPANY IS BEING DISCHARGED FOR ANY MAINTENANCE OR RESPONSIBILITY FOR THE ABOVE SURFACE ALTERATION.

Signature  
(Name)



Date: 02 OCT 2000

**ENVIRONET CORPORATION**

**RELEASE**

**I DAVID MULHOLLAND of CLARESHOLM**  
(print name) (Landowner or Occupant)

**Request that the following items or facilities which are associated with:**

**LOCATION LSD 01 27 - 012 - 27 W4M CANHUNTER et al EASTMONT**

**be left in there present state and condition for my use and I release**

**COMPANY CANADIAN HUNTER EXPLORATION LTD**

**of any obligation and responsibility concerning the maintenance and removal of the items listed.**

**ITEMS:**

**1. ROAD APPROACH**

**COMMENTS**

**THIS RELEASE IS FOR SPECIFIC ITEMS BEING LEFT IN PLACE FOR THE BENEFIT OF THE LANDOWNER AND IS BEING OBTAINED IN ORDER TO SATISFY THE WEBSITE RECLAMATION CRITERIA AND CERTIFICATION REQUIREMENTS ALL OF THE ABOVE ITEMS ARE TO BE RETAINED BY THE LANDOWNER FOR HIS USE. THE ABOVE NAMED COMPANY IS BEING DISCHARGED FOR ANY MAINTENANCE OR RESPONSIBILITIES FOR THE ABOVE SURFACE ALTERATION**

Signature: *[Handwritten Signature]*  
(Name)

Date: *25-SEP-2000*

**ENVIRONET CORPORATION**

## Terry Johnson

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**From:** Michael Melnyk [environet@home.com]  
**Sent:** Monday, September 25, 2000 11:47 PM  
**To:** Terry Johnson  
**Subject:** Release for Approach and Rocks



Michael G. Melnyk.vcf



Release Approach

1.PDF

Hi Terry,

I met with the landowner on site - he does not have a big concern with the rocks since I picked 20 five gallon pales full which is probably close to one cubic meter. The site is now considered to be equivalent to or better than the control for rocks. I have also included a PDF of the release. I will also fax it. Let me know if this is adequate. We will also be spraying out the round leaf mallow for Marathon. Talked to the landowner - he was going to do some spot spraying on it this fall. We will make sure that between us and the landowner that the weed problem is rectified by early summer.

Regards,

Michael



# INQUIRY REPORT

MD 26 1/4  
Survey Dec '94

Reclamation I.D. No. 136785

Inquiry Date & Time: Sept 21 '00 (1100)

OPERATOR: Canadian Hunter Exploration Ltd

LEGAL DESCRIPTION: LSD 1 SEC 27 TWP 12 RGE 27 W 4 M

## SCHEDULING

|                           | LANDOWNER  | OCCUPANT           | OPERATOR  |
|---------------------------|--|--------------------|---|
| Name<br>Address           | David F. Mulholland and<br>Elaine Mulholland<br>Box 2020<br>CLARESHOLM, Alberta T0L0T0 | NO                 | Lynne Hawrelko<br>Canadian Hunter Exploration Ltd.<br>2800, 605 - 5th Avenue S.W.<br>CALGARY, Alberta T2P 3H5 |
| Phone                     | (403) 625-4774   |                    | (403) 260-1923  |
| Date & Time Contacted     | Mailed 18 August 2000  |                    |   |
| Telephone/Personally/Mail | T    P    M  | T    P    M        | T    P    M   |
| Attend Inquiry            | YES    NO    MAYBE   | YES    NO    MAYBE | YES    NO    MAYBE  |
| Waived 5 day Notice       | YES    NO    N/A   | YES    NO    N/A   | YES    NO    N/A  |
| Improvements/Releases     | <u>Approach, Gate</u>  |                    |   |

LANDOWNER: Mr Mulholland attended, minor concern with increase in Rock, also did not sign a release for the approach & gate left for him. He will sign.

OCCUPANT: \* Consultant picked more rock & obtained a release for the approach & gate.

OPERATOR/CONSULTANT: Mike Melnyk attended for Company. Sheldon Scarpus - Practicum Student.

## INQUIRY

ATTENDEES: ( ) C&R Inspector  Local C&R Inspector  Landowner  Occupant   
Operator  Consultant  Other

RESULTS: CERTIFY  REFUSE  INQUIRY ADJOURNED  NOTICE

DOCUMENTS ISSUED: Operator: Hand Delivered  Mail  No. of Inspections 1  
Landowner: Hand Delivered  Mail   
Occupant: Hand Delivered  Mail



LEGAL DESCRIPTION: LSD 1 SEC 27 TWP 12 RGE 27 W 4 M  
 LAND USE Cult VEG. COVER Stubble WIS AGE CLASS Dec'44(80%)



|                                       |  |  |  |  |  |
|---------------------------------------|--|--|--|--|--|
| <p><i>Company Assessment Used</i></p> |  |  |  |  |  |
|                                       |  |  |  |  |  |
|                                       |  |  |  |  |  |
|                                       |  |  |  |  |  |
|                                       |  |  |  |  |  |
|                                       |  |  |  |  |  |
|                                       |  |  |  |  |  |
|                                       |  |  |  |  |  |

**EXAMPLE:**  
 23CM Si/C  
 <2, FR, N/R  
 10%(ADMIXING)  
 VEG:  
 GR/ROCK:

~~Handwritten notes~~  
 - confirm rock is coropoble or pick as necessary  
 - obtain a release for both & approach  
 - Hold till Sept 29'00 if info not provided, issue adjournment.

**ACCESS**  
 REFER TO  
 SURVEY PLAN ( )

**CRITERIA:** Pass (✓) Fail (code)  
 A/ Landscape ✓ B/ Soil Quantity ✓ C/ Soil Quality ✓  
 D/ Profile ✓ E/ Vegetation ✓ F/ Contamination ✓

**COMMENTS:** Reclamation meets criteria

*Johnson*  
 INSPECTOR

T. JOHNSON  
 PRINT NAME

# ENVIRONET CORPORATION - 5 X 5 GRID

3/4

|  |                                 |                   |                               |  |   |                                 |                                |  |                                |                   |                      |
|--|---------------------------------|-------------------|-------------------------------|--|---|---------------------------------|--------------------------------|--|--------------------------------|-------------------|----------------------|
|  | 17<br>NON<br>60<br>Fair<br>CNW1 | 10%<br>80%<br>CN1 |                               | 25<br>NON<br>60<br>Poor<br>CN11          | 5%<br>12 A/B<br>SL<br>FL2<br>65%<br>N/A | 25<br>NON<br>60<br>Fair<br>CN20 | 80%<br>80%<br>CN21             |  | Shelterbelt<br>CNE21           |                   |                      |
|  | 30<br>NON<br>60<br>Fair<br>CW1  | 15%<br>80%<br>S1  | 22<br>NON<br>60<br>F-P<br>S10 | 35%<br>65%<br>S10                        | 18<br>NON<br>80<br>Good<br>S11          | 15%<br>80%<br>S11               | 16<br>NON<br>80<br>Good<br>S20 | 15%<br>85%<br>S20                        | 24<br>NON<br>80<br>Good<br>S21 | 15%<br>80%<br>S21 | Shelterbelt<br>CE21  |
|  | 25<br>NON<br>60<br>Fair<br>CW2  | 20%<br>80%<br>S2  | 14<br>NON<br>80<br>Good<br>S9 | 11 A/B<br>15%<br>SL<br>FL2<br>90%<br>N/A | 20<br>NON<br>80<br>Good<br>S12          | 15%<br>80%<br>S12               | 17<br>NON<br>80<br>Good<br>S19 | 12 A/B<br>15%<br>SL<br>FL2<br>90%<br>N/A | 21<br>NON<br>75<br>F-G<br>S22  | 15%<br>75%<br>S22 | Shelterbelt<br>CE22  |
| 12 A/B<br>SL<br>10% Ad<br>FL2<br>PP<br>N/A<br>SO | 13<br>NON<br>70<br>F-G<br>CW3   | 30%<br>80%<br>S3  | 20<br>NON<br>60<br>Poor<br>S8 | 11 A/B<br>15%<br>SL<br>FL2<br>20%<br>N/A | 14<br>NON<br>70<br>Poor<br>S13          | 15%<br>20%<br>S13               | 16<br>NON<br>70<br>Poor<br>S18 | 10 A/B<br>15%<br>SL<br>FL2<br>20%<br>N/A | 24<br>NON<br>80<br>Good<br>S23 | 15%<br>80%<br>S23 | Shelterbelt<br>CE23  |
|  | 30<br>NON<br>90<br>Good<br>CW4  | 20%<br>90%<br>S4  | 25<br>NON<br>75<br>Fair<br>S7 | 15%<br>65%<br>S7                         | 11<br>NON<br>70<br>F-G<br>S14           | 10%<br>70%<br>S14               | 20<br>NON<br>75<br>F-G<br>S17  | 15 A/B<br>15%<br>SL<br>FL2<br>65%<br>N/A | 18<br>NON<br>75<br>Good<br>S24 | 10%<br>80%<br>S24 | Shelterbelt<br>CE24  |
|  | 55<br>Poor<br>CW5               | 60%<br>85%<br>S5  | 70<br>Good<br>S6              | 75<br>Good<br>S6                         | 80<br>F-G<br>S15                        | 75%<br>S15                      | 80<br>Good<br>S16              | 80%<br>S16                               | 75<br>Good<br>S25              | 80%<br>S25        | Shelterbelt<br>CE25  |
|  | 55<br>Poor<br>CSW5              | 50%<br>NON<br>NON | 75<br>Good<br>CS6             | 85%<br>NON<br>NON                        | 70<br>F-G<br>CS15                       | 80%<br>NON<br>NON               | 75<br>Good<br>CS16             | 80%<br>NON<br>NON                        | 75<br>Good<br>CS25             | 80%<br>NON<br>NON | Shelterbelt<br>CSE25 |
|  | 16<br>Poor<br>CSW5              | 15%<br>NON<br>NON | 20<br>Good<br>CS6             | 10%<br>NON<br>NON                        | 70<br>F-G<br>CS15                       | 80%<br>NON<br>NON               | 20<br>Good<br>CS16             | 10%<br>NON<br>NON                        | 20<br>Good<br>CS25             | 10%<br>NON<br>NON | Shelterbelt<br>CSE25 |

Access Road

LOCATION: **LSD 01 27 - 012 - 27 W4M** DATE: **07-Feb-97** Soils  
CanHunter et al Eastmont 09-Aug-97 Vegetation

Legend ↑  
**TS** ADMIX  
 Profile  
**Height** Density  
 Vigor S20

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SOIL PROFILE  
 RESTRICTIONS: **SR.** - Slightly restrictive - the profile is well fractured &/or roots are penetrating aggregates - **PASS**  
**MR.** - Moderately restrictive - tight fractures &/or roots having some difficulty penetrating - **PASS or FAILURE**  
**XR.** - Extremely restrictive - little or no fractures, very tight, minimal root penetration - **FAILURE** 23-Jul-00

4/4

**ENVIRONET CORPORATION - ACCESS ROAD**

**ACCESS ROAD ASSESSMENT**

**WELLSITE**

|                                    |                      |                               |                      |      |
|------------------------------------|----------------------|-------------------------------|----------------------|------|
| <b>26</b><br>W. Side<br>NON<br>100 | 10%<br>SL-SIL<br>50% | <b>28</b><br>16.6<br>SR<br>80 | 10%<br>SL-SIL<br>90% | 50m  |
| <b>23</b><br>W. Side<br>NON<br>100 | 10%<br>SL-SIL<br>90% | <b>24</b><br>14.7<br>SR<br>80 | 10%<br>SL-SIL<br>85% | 150m |
| <b>27</b><br>W. Side<br>NON<br>75  | 10%<br>SL-SIL<br>95% | <b>31</b><br>17.3<br>SR<br>70 | 10%<br>SL-SIL<br>90% | 250m |

LOCATION:

**LSD 01 27 - 012 - 27 W4M**

CanHunter et al Eastmont

DATE: **07-Feb-97** Soils  
**09-Aug-97** Vegetation

**SOIL PROFILE RESTRICTIONS:**

- SR.** Slightly restrictive - the profile is well fractured &/or roots are penetrating aggregates - **PASS**
- MR.** Moderately restrictive - tight fractures &/or roots having some difficulty penetrating - **PASS or FAILURE**
- XR.** Extremely restrictive - little or no fractures, very tight, minimal root penetration - **FAILURE**

Legend

|           |       |           |         |
|-----------|-------|-----------|---------|
| <b>TS</b> | ADMIX | <b>TS</b> | ADMIX   |
| SIDE      | TEX.  | MRD       | TEX.    |
| Profile   |       | Profile   |         |
| HEIGHT    | 0%    | HEIGHT    | DENSITY |
| Vigor     | CR1   | Vigor     | R1      |

N ↓

Distance from Start

23-Jul-00



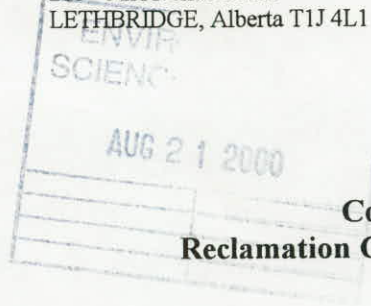
136 785

Environmental Service  
Prairie Region

2nd Floor, Provincial Building  
200 - 5th Avenue South  
LETHBRIDGE, Alberta T1J 4L1

Telephone: (403) 381-5490  
Fax: (403) 382-4109

August 18, 2000



**Application #:**  
**Company File #:**  
**Reclamation Certification #:**

David F. Mulholland and Elaine Mulholland  
Box 2020  
CLARESHOLM, Alberta T0L 0T0

Dear Mr. Mulholland and Ms. Mulholland:

**RE: Reclamation Certificate Request**  
**Canhunter et al Eastmont 1-27-12-27 Well**  
**SE Sec. 27 Tp. 012 Rge. 27 W4M**

In response to a request from Canadian Hunter Exploration Ltd., a reclamation inquiry will be held at the above location on 21 September 2000 at approximately 10:00 a.m. to determine if reclamation meets the criteria as specified in the "*Reclamation Criteria for Well Sites and Associated Facilities*".

This notice is being given pursuant to the Environmental Protection and Enhancement Act, Conservation and Reclamation Regulation 115-93 and amendments up to and including Alberta Regulation 167/96, Section 8.

Please contact the undersigned at 381-5490 if you have any concerns. In case of inclement weather, the inquiry will be rescheduled.

Yours truly,

Terry Johnson  
Conservation and Reclamation Inspector

cc: Canadian Hunter Exploration Ltd.  
Environet Corporation  
**Environmental Science – Edmonton**

Attachment - pamphlet



# canadian hunter



July 25, 2000

VIA COURIER

Alberta Environmental Protection  
Land Reclamation Division  
4th Floor, 9820 - 106 Street  
Edmonton, Alberta  
T5K 2J6

Attention: Carol Turner

Dear Ms. Turner:

Re: **Requests for Reclamation Certificates**

Further to you fax responses of July 7 and 11, 2000, in which you requested detailed site and vegetation reports, enclosed are fully completed copies of the following reclamation applications. Please discard copies forwarded earlier and attach these to the copies of coloured plans.

| <u>Well Location</u> | <u>Lands Affected</u> | <u>Land Owner</u>              | <u>Our Files(s)</u> |
|----------------------|-----------------------|--------------------------------|---------------------|
| 6-21-27-16-W4        | SW 21-27-16-W4        | Alberta Municipal Affairs      | 275-7223            |
| 7-15-14-27-W4        | SE 15-14-27-W4        | Linda Mildred Nordlund         | 269-50156           |
| 1-27-12-27-W4        | SE 27-12-27-W4        | David and Elaine<br>Mulholland | 94-11978            |
| 10-35-28-3-W5        | NE 35-28-3-W5         | Harley and Richard Walsh       | 326-11324           |

If you have any questions about the information packages or if more information is required, please contact Scott Clay at 403-260-1923.

Yours truly

CANADIAN HUNTER EXPLORATION LTD.

  
Lynne Hawrelko  
Senior Land Administrator - Surface  
Tel: 403-260-1673  
E-Mail: lynne.hawrelko@chel.com

Encl:

JUL 26 8 56 AM '00  
RESOURCES DIV  
ENVIRONMENTAL  
HALL 1001

USER ID : EN0050  
DATE: 2000-06-14  
REQUEST ID: R0074638  
CUST. REF.: 1-27-12-27-W4

LAND TITLE SEARCH

PAGE: 1

S  
LINC SHORT LEGAL  
0026 353 771 4;27;12;27;SE

TITLE NUMBER  
951 062 749

LEGAL DESCRIPTION

THE SOUTH EAST QUARTER OF SECTION TWENTY SEVEN (27)  
TOWNSHIP TWELVE (12)  
RANGE TWENTY SEVEN (27)  
WEST OF THE FOURTH MERIDIAN  
CONTAINING 64.7 HECTARES (160 ACRES) MORE OR LESS  
EXCEPTING THEREOUT :  
PLAN NUMBER HECTARES ACRES MORE OR LESS  
WATERLINE 5721HU 0.813 2.01  
EXCEPTING THEREOUT ALL MINES AND MINERALS  
AND THE RIGHT TO WORK THE SAME

ESTATE: FEE SIMPLE

MUNICIPALITY: TOWN OF CLARESHOLM

D.C.T. ISSUED: YES

REFERENCE NUMBER: 901 053 866

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REGISTERED OWNER(S)

REGISTRATION DATE(Y-M-D) DOCUMENT TYPE  
VALUE CONSIDERATION

---

951 062 749 1995-03-16 AMENDMENT-LEGAL DESCRIPTION

OWNERS

DAVID F MULHOLLAND (FARMER)  
OF CLARESHOLM  
ALBERTA

ELAINE MULHOLLAND (FARMER)  
OF CLARESHOLM  
ALBERTA  
AS JOINT TENANTS

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ENCUMBRANCES, LIENS & INTERESTS

REGISTRATION DATE  
NUMBER (Y-M-D) PARTICULARS

---

177KY . 1970-09-22 UTILITY RIGHT OF WAY

GRANTEE - CALGARY POWER LTD.  
AS TO PORTION OR PLAN: 7505JK  
"75 FEET STRIP "

6997KZ . 1971-08-24 CAVEAT  
CAVEATOR - CANADIAN WESTERN NATURAL GAS COMPANY LIMITED.

8342LO . 1973-01-25 UTILITY RIGHT OF WAY  
GRANTEE - CANADIAN WESTERN NATURAL GAS COMPANY LIMITED.

5

CUST. REF.: 1-27-12-27-W4

"20 FOOT STRIP "

921 035 214 1992-02-19 CAVEAT  
RE : AMENDING AGREEMENT  
CAVEATOR - TRANSALTA UTILITIES CORPORATION.  
BOX 1900, CALGARY  
ALBERTA  
AGENT - BERT VIK

951 064 886 1995-03-20 CAVEAT  
RE : SURFACE LEASE  
CAVEATOR - CANADIAN HUNTER EXPLORATION LTD..  
2000, 605-5 AVE SW  
CALGARY  
ALBERTA T2P3H5  
AGENT - CAROLYN SCHONEBERG

961 040 472 1996-02-26 UTILITY RIGHT OF WAY  
GRANTEE - CANADIAN HUNTER EXPLORATION LTD..

981 160 731 1998-06-03 PARTIAL  
DISCHARGE OF UTILITY RIGHT OF WAY 961040472  
EXCEPT PLAN/PORTION: 9710076

\*\*\* END OF TITLE - 951 062 749 TOTAL INSTRUMENTS: 7 \*\*\*

\*\*\* END OF REPORT \*\*\*

# CANADIAN HUNTER EXPLORATION LTD. WELLSITE RECLAMATION CRITERIA APPLICATION

|                               |               |                      |            |
|-------------------------------|---------------|----------------------|------------|
| <b>I. General Information</b> | <b>LSD 01</b> | <b>27 - 012 - 27</b> | <b>W4M</b> |
|-------------------------------|---------------|----------------------|------------|

**Applicant: Canadian Hunter Exploration Ltd.**

**Address:** 2800, 605 - 5TH Avenue S.W.  
CALGARY, AB. T2P 3H5

**Phone Number:** (403) 260-1923

Public Land  Crown Disposition No.  
Private Land  County/MD/ID/ISA MD 26  
Company File No.: 94-11978  
Applicant is EUB Licensee/Approval Holder?  Yes  No

**Agent/Consultant:** ENVIRONET CORPORATION  
228 SUNRISE CIRCLE S.E.  
CALGARY, AB. T2X 2Z7  
(403) 256-8753

**E-Mail:** environet@home.com

If No, explain: Wellsite was built - not drilled & abandoned  
EUB Well/Battery Name: CanHunter et al Eastmont  
EUB Unique Well/Facility Identifier(s): 100/01-27-012-27-W4/00  
EUB License No(s): Well was not licensed.

Complete Surface Legal Land Description(s): lease, access road, facility)

**Landowner Name:** David & Elaine Mulholland

**Address:** Box 2020  
Claresholm, AB. T0L 0T0

**Phone Number:** (403) 625-4774

Oil Wellsite  Gas Wellsite  
 D & A Wellsite  Disposal Well  
 Prepared Wellsite (Not Drilled)  
 Other EUB Facility  Battery

**Occupant:** Yes  No

**Associated Facilities (must be certified)**

**Name:**  
**Address:**

Campsite  Borrow Site  
 Access Road  Remote Sump  
 Log deck/storage (Green Area)  
 Other (Describe)

**Phone Number:**

|                                       |
|---------------------------------------|
| <b>II. Other Information Required</b> |
|---------------------------------------|

1. Private Land: Have you performed a final inspection in the presence of the landowner/occupant:  Yes  No  
Public Land: Have you performed a final inspection in the presence of the occupant:  Yes  No

Date of final inspection: **03-Aug-98**

2. Landowner/Occupant Comments: Mrs. Mulholland indicated that they no longer use the access along the shelterbelt and she was not aware of any problems on the site.

3. Have you provided the landowner/occupant a copy of this application?  Yes  No If No, state reason

4. For public land, have all disposition conditions been met?  Yes  No If No, state reason

5. Indicate the company representative we should contact for information to complete the application; notify of the reclamation inquiry; and give any Conservation & Reclamation Notices to.

**Name:** Scott Clay **Phone Number:** (403) 260-1923 **Fax Number:** (403) 260-1882

**Address, if different than Applicant above:**

**E-Mail Address:** scott.clay@chel.com

**Note:** Material hand delivered by the Inspector to any operator representative in the field will be deemed to have been delivered to the operator on that date.

### III. Site History

CanHunter et al Eastmont

LSD 01

27 - 012 - 27

W4M

1. Survey Date: 09-Dec-94
2. Construction Date: 30-Jan-94 to 4-Feb-94
- Ground Conditions: Wet  Dry   
Frozen  Unknown
3. Pre Construction Assessment Done:  
Yes  No
4. Sump Backfill Date: N/A
- Ground Conditions: Wet  Dry   
Frozen  Unknown
- Sump Location:  
On-Lease  Remote  None   
Unknown  Tanks
- Remote sump location:  
Drilling Mud (type, volume): N/A Prepared not Drilled N/A m<sup>3</sup>  
Waste Disposal Method: N/A Prepared not Drilled  
Disposal Location: N/A Prepared not Drilled
5. Site Recontour Date: June-95
- Ground Conditions: Wet  Dry   
Frozen  Unknown
6. Access Disturbed: Yes  No   
Access Developed: Yes  No   
If Yes: Refer to comments  
Low Profile  High Profile  Pit Run   
Crush  Unknown
7. Seeding Date: ANNUAL CROPS  
Attach species mis list (if available).
8. Contaminant remediation work done: Yes  No   
If yes, provide information on types of substances, and the dates and nature of the remediation work:
9. Herbicides / Sterilants: Provide details of chemicals used, dates, rates of applications, and remedial action: None Used
10. Fertilizers: Identify types and rates: None Used  
Date Last Used:
11. Soil Amendments: Identify types, amounts, rates, date(s) of application and method of incorporation: None Used  
Approved by Landowner: Yes  No
12. Brush Disposal Method / Location: None
13. Underground Facilities Removed (storage tanks, pipelines, etc.):  
Yes  No  N/A   
If No, explain.
14. Water Supply Well Drilled on Lease:  Yes  No  
If Yes, supply the driller's name and address
15. Concrete, gravel or debris buried on site:  
Yes  No   
If Yes, what material is buried?  
and, at what depth: metres.  
Attach written acceptance from all registered landowners.
16. Facilities or Features (e.g., water well, access road, wellpad, fences, others) to remain in place: Yes  No   
Attach releases from all registered landowners for all facilities or features to remain.
17. Facilities are Stable and Non Hazardous:  
Yes  No  N/A
18. Is this well part of an oil production site with an Environmental Protection and Enhancement Act approval under Division 3 of the Activities Designation Regulation?  
Yes  No   
If yes, have you complied with all conditions of the approval?  
Yes  No  N/A

#### COMMENTS

##### 6. Minimal disturbance at approach - Existing Approach was Upgraded

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# IV. Site Data

CanHunter et al Eastmont

LSD 01

27 - 012 - 27

W4M

Michael Melnyk & Adam Way  
Person Who Conducted Assessment

EnviroNet Corporation  
Company

Date Assessment Conducted:

Soils: 07-Feb-97

Vegetation: 09-Aug-97 03-Aug-98

1. Land Use Category: Cultivated  Grassland  Forested (white)  Forested (green)  Peat
2. Construction Period: Pre-1983  1983-1994  1994 and Later   
Site Two Lifted? Yes  No
3. Management Plan Goals Achieved? Yes  No  N/A
4. Access Road Length: < 100 m  > 100 m  No Disturbance  Refer to comments
5. Meets Landscape Criteria? (if No, highlight in the Detailed Site Assessment Report and provide justification for accepting the site):

| Parameter        | Lease                               |                          | Access                              |                          |                                     |                          | Other Site Type (Please Identify) |                          |                          |                          |
|------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|-------------------------------------|--------------------------|-----------------------------------|--------------------------|--------------------------|--------------------------|
|                  | Yes                                 | No                       | Yes                                 | No                       | Yes                                 | No                       | Yes                               | No                       | Yes                      | No                       |
| Drainage         | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Erosion          | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Contour          | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Stability        | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Gravel and Rocks | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Debris           | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Plant Health     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Bare Areas       | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

6. Surface Soil Quantity: (provide details in the Detailed Site Assessment Report)  
Meets Criteria: Lease: Yes  No  Access: Yes  No  Other Site Type: Yes  No   
If No, highlight in the Detailed Site Assessment Report and provide justification for accepting the site.

7. Surface Soil Quality Criteria: (provide details in the Detailed Site Assessment Report)  
Meets Criteria: Lease: Yes  No  Access: Yes  No  Other Site Type: Yes  No   
If No, highlight in the Detailed Site Assessment Report and provide justification for accepting the site.

8. Loss of Organic Matter Content (% admixing): Target 30%  40%  N/A   
Control Dominant Class: 0-10%  >10-20%  >20-30%  >30-40%  >40-50%  >50%   
Site Dominant Class: 0-10%  >10-20%  >20-30%  >30-40%  >40-50%  >50%

## COMMENTS

Access road along shelterbelt used by landowner.

**IV. Site Data** con't      **CanHunter et al Eastmont**      **LSD 01**      **27 - 012 - 27**      **W4M**

9. **Soil Profile Assessment:** (provide details in the Detailed Site Assessment Report)

Meets Criteria:      Lease: Yes  No       Access: Yes  No       Other Site Type: Yes  No

10. **Vegetation Criteria:** (provide details in the Detailed Site Assessment Report)

Site Crop / Vegetation Type:      Annual Cereal Crops

Control Crop / Vegetation Type:      Annual Cereal Crops

Meets Criteria:      Lease: Yes  No       Access: Yes  No       Other Site Type: Yes  No

If No, highlight in the Detailed Site Assessment Report and provide justification for accepting this site.

**COMMENTS**

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\_\_\_\_\_

**V. DECLARATION**

**DECLARATION** The declaration must be signed by a representative of the licensed operator.

I Scott Clay of Canadian Hunter Exploration Ltd.  
(print name) (licensed operator)

Certify that, to the best of my knowledge, all the above information is accurate and that all other conditions described in the document ( Reclamation Criteria for Wellsites and Associated Facilities ) have been met, and that there are no other soil chemical or physical conditions that resulted from the licensed operator's use of this land that may adversely affect soil or vegetation or ground water on or near the site described above.

Signature: \_\_\_\_\_ Position: Construction Superintendent Date: 07.25.00  
(name)

# ENVIRONET CORPORATION - RECLAMATION ASSESSMENT

| SAMPLE POINT | SOIL DEPTHS |    |    | TEXTURAL CLASS | AGGREGATE SIZE cm | AGGREGATE STRENGTH | % GRAVEL % ROCKS | ADMIXTURE TYPE B / C | SOIL PROFILE RESTRICTIONS |                | VEGETATION |           |       |
|--------------|-------------|----|----|----------------|-------------------|--------------------|------------------|----------------------|---------------------------|----------------|------------|-----------|-------|
|              | A           | B  | C  |                |                   |                    |                  |                      | SEVERITY                  | DEPTH-INTERVAL | HEIGHT CM  | DENSITY % | VIGOR |
| S1           | 30          | 50 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1 % G&R        | 15%                  | NON                       |                | 60         | 80%       | Fair  |
| S2           | 25          | 50 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1 % G&R        | 20%                  | NON                       |                | 60         | 80%       | Fair  |
| S3           | 35          | 50 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1 % G&R        | 20%                  | NON                       |                | 60         | 20%       | Poor  |
| S4           | 30          | 50 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1 % G&R        | 20%                  | NON                       |                | 90         | 90%       | Good  |
| S5           | 21          | 40 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1 % G&R        | 15%                  | NON                       |                | 70         | 85%       | Good  |
| S6           | 20          | ~  | 50 | SL-SIL         | < 2               | FRIABLE            | < 1 % G&R        | 40%                  | NON                       |                | 75         | 85%       | Good  |
| S7           | 25          | 50 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1 % G&R        | 15%                  | NON                       |                | 75         | 65%       | Fair  |
| S8           | 20          | 40 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1 % G&R        | 15%                  | NON                       |                | 60         | 20%       | Poor  |
| S9           | 14          | 35 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1 % G&R        | 15%                  | NON                       |                | 80         | 90%       | Good  |
| S10          | 22          | 50 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1 % G&R        | 35%                  | NON                       |                | 60         | 65%       | F-P   |
| S11          | 18          | 38 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1 % G&R        | 15%                  | NON                       |                | 80         | 80%       | Good  |
| S12          | 20          | 42 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1 % G&R        | 15%                  | NON                       |                | 80         | 80%       | Good  |
| S13          | 14          | 40 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1 % G&R        | 15%                  | NON                       |                | 70         | 20%       | Poor  |
| S14          | 11          | 28 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1 % G&R        | 10%                  | NON                       |                | 70         | 70%       | F-G   |
| S15          | 19          | 50 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1 % G&R        | 10%                  | NON                       |                | 80         | 75%       | F-G   |
| S16          | 14          | 45 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1 % G&R        | 15%                  | NON                       |                | 80         | 80%       | Good  |
| S17          | 20          | 40 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1 % G&R        | 15%                  | NON                       |                | 75         | 65%       | F-G   |
| S18          | 16          | 36 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1 % G&R        | 15%                  | NON                       |                | 70         | 20%       | Poor  |
| S19          | 17          | 45 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1 % G&R        | 15%                  | NON                       |                | 80         | 90%       | Good  |
| S20          | 16          | 45 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1 % G&R        | 15%                  | NON                       |                | 80         | 85%       | Good  |
| S21          | 24          | 50 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1 % G&R        | 15%                  | NON                       |                | 80         | 80%       | Good  |
| S22          | 21          | 50 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1 % G&R        | 15%                  | NON                       |                | 75         | 75%       | F-G   |
| S23          | 24          | 30 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1 % G&R        | 15%                  | NON                       |                | 80         | 80%       | Good  |
| S24          | 18          | 37 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1 % G&R        | 10%                  | NON                       |                | 75         | 80%       | Good  |
| S25          | 22          | 50 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1 % G&R        | 10%                  | NON                       |                | 75         | 80%       | Good  |
| ARD          | 20.6        | 43 | 50 |                |                   |                    |                  | 17%                  | Control                   | 65             | 74         | 70%       |       |

LOCATION: **LSD 01** **27 - 012 - 27** **W4M** CanHunter et al Eastmont DATE: **07-Feb-97** Soils

09-Aug-97 Vegetation

COMMENTS: The overall topsoil on this site has increased by 2cm while the admixing has gone up by 4% over the control values.  
 This site was prepared and never drilled. The access road for the site was on an existing trail. Upon completion of reclamation on the site the access road and wellsite was  
 subsoil ( Fall '96 ) using a paratill subsoiler. It is the opinion of the assessor that this site meets the reclamation criteria and that the variability and poor growth  
 found in certain areas of the site is due to Climatic reasons and is not a result of the reclamation on the site. Several Vegetation assessments have been done.

| CONTROL PARAMETERS |          |
|--------------------|----------|
| ACD                | 18.5 cm. |
| RRD .8             | 14.8 cm. |
| MRD .8             | 11.8 cm. |
| MRD .4             | 5.9 cm.  |
| VARIABILITY        |          |
| SITE               | 11 35    |
| CONF               | 13 25    |

ASSESSOR: MICHAEL G MELNYK ENVIRONET CORPORATION SIGNATURE: \_\_\_\_\_ 23-JUL-00

# ENVIRONET CORPORATION - RECLAMATION ASSESSMENT

| CONTROL SITES SOIL QUANTITY & QUALITY |             |    |    |                |                   |                    |                  |                      |                       | SOIL PROFILE                |                              |           | VEGETATION |       |  |
|---------------------------------------|-------------|----|----|----------------|-------------------|--------------------|------------------|----------------------|-----------------------|-----------------------------|------------------------------|-----------|------------|-------|--|
| SAMPLE POINT                          | SOIL DEPTHS |    |    | TEXTURAL CLASS | AGGREGATE SIZE cm | AGGREGATE STRENGTH | % GRAVEL % ROCKS | ADMIXTURE TYPE B / C | SOIL PROFILE SEVERITY | RESTRICTIONS DEPTH-INTERVAL | TYPE: AERATION ROOT or WATER | HEIGHT CM | DENSITY %  | VIGOR |  |
|                                       | A           | B  | C  |                |                   |                    |                  |                      |                       |                             |                              |           |            |       |  |
| CN1                                   | 17          | 27 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1% G&R         | 10%                  | NON                   |                             |                              | 60        | 80%        | Fair  |  |
| CNW1                                  |             |    |    |                |                   |                    |                  |                      |                       |                             |                              |           |            |       |  |
| CW1                                   |             |    |    |                |                   |                    |                  |                      |                       |                             |                              |           |            |       |  |
| CW2                                   |             |    |    |                |                   |                    |                  |                      |                       |                             |                              | 55        | 40%        | Poor  |  |
| CW3                                   | 13          | ~  | 50 | SL-SIL         | < 2               | FRIABLE            | < 1% G&R         | 30%                  | NON                   |                             |                              | 70        | 80%        | F-G   |  |
| CW4                                   |             |    |    |                |                   |                    |                  |                      |                       |                             |                              | 70        | 90%        | Good  |  |
| CW5                                   |             |    |    |                |                   |                    |                  |                      |                       |                             |                              | 55        | 60%        | Poor  |  |
| CSW5                                  | 16          | ~  | 50 | SL-SIL         | < 2               | FRIABLE            | < 1% G&R         | 15%                  | NON                   |                             |                              | 55        | 50%        | Poor  |  |
| CSS                                   |             |    |    |                |                   |                    |                  |                      |                       |                             |                              |           |            |       |  |
| CS6                                   | 20          | 45 | 50 | SL-SIL         | < 2               | FRIABLE            | < 1% G&R         | 10%                  | NON                   |                             |                              | 75        | 85%        | Good  |  |
| CN10                                  |             |    |    |                |                   |                    |                  |                      |                       |                             |                              | 60        | 65%        | Poor  |  |
| CN11                                  | 25          | 50 |    | SL-SIL         | < 2               | FRIABLE            | < 1% G&R         | 5%                   | NON                   |                             |                              | 60        | 65%        | Poor  |  |
| CS15                                  |             |    |    |                |                   |                    |                  |                      |                       |                             |                              | 70        | 80%        | F-G   |  |
| CS16                                  | 20          | 50 |    | SL-SIL         | < 2               | FRIABLE            | < 1% G&R         | 10%                  | NON                   |                             |                              | 75        | 80%        | Good  |  |
| CN20                                  |             |    |    |                |                   |                    |                  |                      |                       |                             |                              | 60        | 80%        | Fair  |  |
| CN21                                  |             |    |    |                |                   |                    |                  |                      |                       |                             |                              | 75        | 80%        | Good  |  |
| CNE21                                 |             |    |    |                |                   |                    |                  |                      |                       |                             |                              |           |            |       |  |
| CE21                                  |             |    |    |                |                   |                    |                  |                      |                       |                             |                              |           |            |       |  |
| CE22                                  |             |    |    |                |                   |                    |                  |                      |                       |                             |                              |           |            |       |  |
| CE23                                  |             |    |    |                |                   |                    |                  |                      |                       |                             |                              |           |            |       |  |
| CE24                                  |             |    |    |                |                   |                    |                  |                      |                       |                             |                              |           |            |       |  |
| CE25                                  |             |    |    |                |                   |                    |                  |                      |                       |                             |                              |           |            |       |  |
| CS25                                  |             |    |    |                |                   |                    |                  |                      |                       |                             |                              |           |            |       |  |
| CSE25                                 |             |    |    |                |                   |                    |                  |                      |                       |                             |                              |           |            |       |  |
| ACD                                   | 18.5        | 43 | 50 |                |                   |                    |                  | 13%                  |                       |                             |                              | 65        | 72%        |       |  |

Control Variability: 13 to 25

LOCATION: **LSD 01**    **27 - 012 - 27**    **W4M**    CanHunter et al Eastmont

DATE: **07-Feb-97**    Soils

COMMENTS:    **09-Aug-97**    Vegetation

|        |      |
|--------|------|
| RRD .8 | 14.8 |
| MRD .8 | 11.8 |
| MRD .4 | 5.9  |

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# ENVIRONET CORPORATION - 5 X 5 GRID

|                                 |                                  |                                 |                                   |                                  |                                  |  |  |  |             |
|---------------------------------|----------------------------------|---------------------------------|-----------------------------------|----------------------------------|----------------------------------|--|--|--|-------------|
|                                 | <b>17</b> 10%                    |                                 | <b>25</b> 5%                      |                                  |                                  |  |  |  | Shelterbelt |
| CNW1                            | NON<br><b>60</b> 80%<br>Fair CN1 | <b>60</b> 65%<br>Poor CN10      | NON<br><b>60</b> 65%<br>Poor CN11 | <b>60</b> 80%<br>Fair CN20       | <b>75</b> 80%<br>Good CN21       |  |  |  | CNE21       |
|                                 | <b>30</b> 15%                    | <b>22</b> 35%                   | <b>18</b> 15%                     | <b>16</b> 15%                    | <b>24</b> 15%                    |  |  |  | Shelterbelt |
| CW1                             | NON<br><b>60</b> 80%<br>Fair S1  | NON<br><b>60</b> 65%<br>F-P S10 | NON<br><b>80</b> 80%<br>Good S11  | NON<br><b>80</b> 85%<br>Good S20 | NON<br><b>80</b> 80%<br>Good S21 |  |  |  | CE21        |
|                                 | <b>25</b> 20%                    | <b>14</b> 15%                   | <b>20</b> 15%                     | <b>17</b> 15%                    | <b>21</b> 15%                    |  |  |  | Shelterbelt |
| <b>55</b> 40%<br>Poor CW2       | NON<br><b>60</b> 80%<br>Fair S2  | NON<br><b>80</b> 90%<br>Good S9 | NON<br><b>80</b> 80%<br>Good S12  | NON<br><b>80</b> 90%<br>Good S19 | NON<br><b>75</b> 75%<br>F-G S22  |  |  |  | CE22        |
| <b>13</b> 30%                   | <b>35</b> 20%                    | <b>20</b> 15%                   | <b>14</b> 15%                     | <b>16</b> 15%                    | <b>24</b> 15%                    |  |  |  | Shelterbelt |
| NON<br><b>70</b> 80%<br>F-G CW3 | NON<br><b>60</b> 20%<br>Poor S3  | NON<br><b>60</b> 20%<br>Poor S8 | NON<br><b>70</b> 20%<br>Poor S13  | NON<br><b>70</b> 20%<br>Poor S18 | NON<br><b>80</b> 80%<br>Good S23 |  |  |  | CE23        |
|                                 | <b>30</b> 20%                    | <b>25</b> 15%                   | <b>11</b> 10%                     | <b>20</b> 15%                    | <b>18</b> 10%                    |  |  |  | Shelterbelt |
| <b>70</b> 90%<br>Good CW4       | NON<br><b>90</b> 90%<br>Good S4  | NON<br><b>75</b> 65%<br>Fair S7 | NON<br><b>70</b> 70%<br>F-G S14   | NON<br><b>75</b> 65%<br>F-G S17  | NON<br><b>75</b> 80%<br>Good S24 |  |  |  | CE24        |
|                                 | <b>21</b> 15%                    | <b>20</b> 40%                   | <b>19</b> 10%                     | <b>14</b> 15%                    | <b>22</b> 10%                    |  |  |  | Shelterbelt |
| <b>55</b> 60%<br>Poor CW5       | NON<br><b>70</b> 85%<br>Good S5  | NON<br><b>75</b> 85%<br>Good S6 | NON<br><b>80</b> 75%<br>F-G S15   | NON<br><b>80</b> 80%<br>Good S16 | NON<br><b>75</b> 80%<br>Good S25 |  |  |  | CE25        |
| Poor CSW5                       |                                  | Good CS6                        | F-G CS15                          | Good CS16                        |                                  |  |  |  | CSE25       |
| <b>55</b> 50%<br>NON            |                                  | <b>75</b> 85%<br>NON            | <b>70</b> 80%                     | <b>75</b> 80%<br>NON             |                                  |  |  |  | Shelterbelt |
| <b>16</b> 15%                   |                                  | <b>20</b> 10%                   |                                   | <b>20</b> 10%                    |                                  |  |  |  |             |

**Access Road**

LOCATION: **LSD 01 27 - 012 - 27 W4M**

DATE: **07-Feb-97**

Soils

CanHunter et al Eastmont

09-Aug-97

Vegetation

Legend



|               |         |
|---------------|---------|
| <b>TS</b>     | ADMIX   |
| Profile       |         |
| <b>Height</b> | Density |
| Vigor         | S20     |

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SOIL PROFILE

RESTRICTIONS: **SR.** - Slightly restrictive - the profile is well fractured &/or roots are penetrating aggregates - **PASS**

**MR.** - Moderately restrictive - tight fractures &/or roots having some difficulty penetrating - **PASS or FAILURE**

**XR.** - Extremely restrictive - little or no fractures, very tight, minimal root penetration - **FAILURE**

23-Jul-00

# ENVIRONET CORPORATION - ACCESS ROAD

## ACCESS ROAD ASSESSMENT

## WELLSITE

|           |                             |                      |           |                     |      |
|-----------|-----------------------------|----------------------|-----------|---------------------|------|
| <b>26</b> | 10%<br>W.Side<br>NON<br>100 | 10%<br>SL-SIL<br>50% | <b>28</b> | 10%<br>SL-SIL<br>R1 | 50m  |
| <b>23</b> | 10%<br>W.Side<br>NON<br>100 | 10%<br>SL-SIL<br>90% | <b>24</b> | 10%<br>SL-SIL<br>R2 | 150m |
| <b>27</b> | 10%<br>W.Side<br>NON<br>75  | 10%<br>SL-SIL<br>95% | <b>31</b> | 10%<br>SL-SIL<br>R3 | 250m |

|  |  |  |  |  |
|--|--|--|--|--|
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

LOCATION:

**LSD 01 27 - 012 - 27 W4M**

CanHunter et al Eastmont

DATE: **07-Feb-97** Soils

**09-Aug-97** Vegetation

### SOIL PROFILE RESTRICTIONS:

- SR.** Slightly restrictive - the profile is well fractured &/or roots are penetrating aggregates - **PASS**
- MR.** Moderately restrictive - tight fractures &/or roots having some difficulty penetrating - **PASS or FAILURE**
- XR.** Extremely restrictive - little or no fractures, very tight, minimal root penetration - **FAILURE**

Legend



|           |       |           |         |
|-----------|-------|-----------|---------|
| <b>TS</b> | ADMIX | <b>TS</b> | ADMIX   |
| SIDE      | TEX.  | MIRD      | TEX.    |
| Profile   |       | Profile   |         |
| HEIGHT    | 0%    | HEIGHT    | DENSITY |
| Vigor     | CR1   | Vigor     | R1      |

Distance from Start

23-Jul-00

# ENVIRONET CORPORATION - VEGETATION ASSESSMENT

## WELL SITE

| SAMPLE POINT | HEIGHT cm | DENSITY % | VIGOR |
|--------------|-----------|-----------|-------|
| S1           | 85        | 100%      | GOOD  |
| S2           | 80        | 85%       | GOOD  |
| S3           | 60        | 70%       | FAIR  |
| S4           | 55        | 65%       | FAIR  |
| S5           | 80        | 85%       | GOOD  |
| S6           | 80        | 85%       | GOOD  |
| S7           | 85        | 85%       | GOOD  |
| S8           | 90        | 90%       | GOOD  |
| S9           | 90        | 90%       | GOOD  |
| S10          | 90        | 95%       | GOOD  |
| S11          | 95        | 95%       | GOOD  |
| S12          | 90        | 90%       | GOOD  |
| S13          | 70        | 60%       | FAIR  |
| S14          | 70        | 75%       | FAIR  |
| S15          | 80        | 85%       | GOOD  |
| S16          | 85        | 90%       | GOOD  |
| S17          | 80        | 80%       | GOOD  |
| S18          | 60        | 75%       | FAIR  |
| S19          | 85        | 85%       | GOOD  |
| S20          | 90        | 95%       | GOOD  |
| S21          | 75        | 90%       | GOOD  |
| S22          | 95        | 90%       | GOOD  |
| S23          | 90        | 80%       | GOOD  |
| S24          | 95        | 90%       | GOOD  |
| S25          | 80        | 85%       | GOOD  |

## CONTROL

| SAMPLE POINT | HEIGHT cm | DENSITY % | VIGOR |
|--------------|-----------|-----------|-------|
| CN1          | 90        | 100%      | GOOD  |
| CNW1         | 90        | 100%      | GOOD  |
| CW1          | 85        | 90%       | GOOD  |
| CW2          | 90        | 90%       | GOOD  |
| CW3          | 85        | 90%       | GOOD  |
| CW4          | 85        | 95%       | GOOD  |
| CW5          | 85        | 95%       | GOOD  |
| CSW5         | 95        | 100%      | GOOD  |
| CS5          | 90        | 90%       | GOOD  |
| CS6          | 95        | 95%       | GOOD  |
| CN10         | 95        | 100%      | GOOD  |
| CN11         | 95        | 100%      | GOOD  |
| CS15         | 90        | 95%       | GOOD  |
| CS16         | 95        | 95%       | GOOD  |
| CN20         | 90        | 95%       | GOOD  |
| CN21         | 80        | 95%       | GOOD  |
| CNE21        | 80        | 85%       | GOOD  |
| CE22         | 90        | 85%       | GOOD  |
| CE23         | 85        | 85%       | GOOD  |
| CE24         | 80        | 80%       | GOOD  |
| CE25         | 80        | 85%       | GOOD  |
| CS25         |           |           |       |
| CSE25        |           |           |       |

## ACCESS

| SAMPLE POINT | HEIGHT cm | DENSITY % | VIGOR | MVH Side | MVD Distance |
|--------------|-----------|-----------|-------|----------|--------------|
| R1           | 75        | 65%       | FAIR  | 72       | 76%          |
| CR1          | 90        | 95%       | GOOD  | West     | 50M          |
| R2           | 85        | 85%       | GOOD  | 72       | 72%          |
| CR2          | 90        | 90%       | GOOD  | West     | 100M         |
| R3           | 85        | 90%       | GOOD  | 72       | 76%          |
| CR3          | 90        | 95%       | GOOD  | West     | 150M         |
| R4           | 80        | 80%       | FAIR  | 72       | 72%          |
| CR4          | 90        | 90%       | GOOD  | West     | 200M         |
| R5           | 65        | 65%       | FAIR  | 60       | 68%          |
| CR5          | 75        | 85%       | FAIR  | West     | 250M         |
| R6           |           |           |       |          |              |
| CR6          |           |           |       |          |              |
| R7           |           |           |       |          |              |
| CR7          |           |           |       |          |              |
| R8           |           |           |       |          |              |
| CR8          |           |           |       |          |              |
| R9           |           |           |       |          |              |
| CR9          |           |           |       |          |              |
| R10          |           |           |       |          |              |
| CR10         |           |           |       |          |              |
| R11          |           |           |       |          |              |
| CR11         |           |           |       |          |              |

DATES:

21-Jul-98

Vegetation

07-Feb-97

Soils

LOCATION:

LSD 01

27-012-27

W 4 M

Canhunter et al Eastmont

| VEGETATION COMPARISON |           | HEIGHT VARIABILITY cm   |                 | MVH          |     | Extreme variability in crop height and density was found on and off the site. Both the control and the site had areas in the crop which failed to meet the minimum requirements. The variability is likely due climatic and soil conditions which has resulted in crop variability. |
|-----------------------|-----------|-------------------------|-----------------|--------------|-----|---|
| CONTROL               | WELL SITE | MINIMUM                 | MAXIMUM AVERAGE | % OF CONTROL | MVD |   |
| 80                    | 95        | 88                      |                 | 92%          | 74% |   |
| 55                    | 95        | 81                      |                 |              |     |   |
| DENSITY VARIABILITY % |           | MINIMUM MAXIMUM AVERAGE |                 | % OF CONTROL |     |   |
| CONTROL               |           | 80% 100%                |                 | 93%          |     |   |
| WELL SITE             |           | 60% 100%                |                 | 85%          |     |   |
|                       |           |                         |                 | 91%          |     |   |

ASSESSOR:

MICHAEL G. MELNYK

ENVIRONET CORPORATION

SIGNATURE:

23-Jul-00

**ENVIRONET CORPORATION - 5 X 5 GRID**

|      |      |      |      |      |      |      |      |      |      |      |      |       |     |
|------|------|------|------|------|------|------|------|------|------|------|------|-------|-----|
| 90   | 100% | 90   | 100% | 95   | 100% | 95   | 100% | 90   | 95%  | 80   | 95%  |       |     |
| GOOD |      | GOOD |      | GOOD |      | GOOD |      | GOOD |      | GOOD |      |       |     |
|      | CNW1 |      | CN1  |      | CN10 |      | CN11 |      | CN20 |      | CN21 | CNE21 |     |
| 85   | 90%  | 85   | 100% | 90   | 95%  | 95   | 95%  | 90   | 95%  | 75   | 90%  | 80    | 85% |
| GOOD |      | GOOD |      | GOOD |      | GOOD |      | GOOD |      | GOOD |      | GOOD  |     |
|      | CW1  |      | S1   |      | S10  |      | S11  |      | S20  |      | S21  | CE21  |     |
| 90   | 90%  | 80   | 85%  | 90   | 90%  | 90   | 90%  | 85   | 85%  | 95   | 90%  | 90    | 85% |
| GOOD |      | GOOD |      | GOOD |      | GOOD |      | GOOD |      | GOOD |      | GOOD  |     |
|      | CW2  |      | S2   |      | S9   |      | S12  |      | S19  |      | S22  | CE22  |     |
| 85   | 90%  | 60   | 70%  | 90   | 90%  | 70   | 60%  | 60   | 75%  | 90   | 80%  | 85    | 85% |
| GOOD |      | FAIR |      | GOOD |      | FAIR |      | FAIR |      | GOOD |      | GOOD  |     |
|      | CW3  |      | S3   |      | S8   |      | S13  |      | S18  |      | S23  | CE23  |     |
| 85   | 95%  | 55   | 65%  | 85   | 85%  | 70   | 75%  | 80   | 80%  | 95   | 90%  | 80    | 80% |
| GOOD |      | FAIR |      | GOOD |      | FAIR |      | GOOD |      | GOOD |      | GOOD  |     |
|      | CW4  |      | S4   |      | S7   |      | S14  |      | S17  |      | S24  | CE24  |     |
| 85   | 95%  | 80   | 85%  | 80   | 85%  | 80   | 85%  | 85   | 90%  | 80   | 85%  | 80    | 85% |
| GOOD |      | GOOD |      | GOOD |      | GOOD |      | GOOD |      | GOOD |      | GOOD  |     |
|      | CW5  |      | S5   |      | S6   |      | S15  |      | S16  |      | S25  | CE25  |     |
|      | CSW5 |      | CS5  |      | CS6  |      | CS15 |      | CS16 |      | CS25 | CSE25 |     |
| 95   | 100% | 90   | 90%  | 95   | 95%  | 90   | 95%  | 95   | 95%  |      |      |       |     |
|      |      | GOOD |      | GOOD |      | GOOD |      | GOOD |      |      |      |       |     |

COMMENTS:

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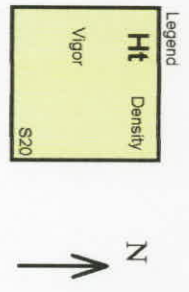
LOCATION: LSD 01 27 - 012 - 27 W 4 M

Canhunter et al Eastmont

DATE: 21-Jul-98 07-Feb-97 Vegetation  
Soils

COMMENTS:

**ACCESS ROAD** Growth on the access was generally poorer on than off. This is expected since the landowner uses the access road which travels along the shelterbelt. Another reason for poor vegetation on the access is the effect of the shelterbelt on moisture and exposure time.



23-Jul-00

# ENVIRONET CORPORATION - RECLAMATION ASSESSMENT

## ACCESS ROAD ASSESSMENT

## WELLSITE

|                                   |            |           |            |
|-----------------------------------|------------|-----------|------------|
| <b>90</b><br>West<br>50M<br>GOOD  | <b>95%</b> | <b>75</b> | <b>65%</b> |
|                                   | CR1        | 72.0      | 76%        |
| <b>90</b><br>West<br>100M<br>GOOD | <b>90%</b> | <b>85</b> | <b>85%</b> |
|                                   | CR2        | 72.0      | 72%        |
| <b>90</b><br>West<br>150M<br>GOOD | <b>95%</b> | <b>85</b> | <b>90%</b> |
|                                   | CR3        | GOOD      | R3         |
| <b>90</b><br>West<br>200M<br>GOOD | <b>90%</b> | <b>80</b> | <b>80%</b> |
|                                   | CR4        | FAIR      | R4         |
| <b>75</b><br>West<br>250M<br>FAIR | <b>85%</b> | <b>65</b> | <b>65%</b> |
|                                   | CR5        | FAIR      | R5         |

|  |  |
|--|--|
|  |  |
|  |  |
|  |  |
|  |  |

LOCATION:

**LSD 01 27 - 012 - 27 W 4 M**

Canhunter et al Eastmont

DATE: **21-Jul-98** Vegetation

**07-Feb-97** Soils

**SOIL PROFILE RESTRICTIONS:**

- SR.** Slightly restrictive - the profile is well fractured &/or roots are penetrating aggregates - **PASS**
- MR.** Moderately restrictive - tight fractures &/or roots having some difficulty penetrating - **PASS or FAILURE**
- XR.** Extremely restrictive - little or no fractures, very tight, minimal root penetration - **FAILURE**

Legend

|                     |         |            |         |
|---------------------|---------|------------|---------|
| <b>Ht.</b>          | DENSITY | <b>Ht.</b> | DENSITY |
| SIDE                |         | MVH        | MVD     |
| Distance from Start |         |            |         |
| VIGOR               |         |            |         |
| CR1                 |         | R1         |         |





Environmental Service  
Prairie Region

2nd Floor, Provincial Building  
200 - 5th Avenue South  
LETHBRIDGE, Alberta  
T1J 4L1

Telephone: (403) 381-5490  
Fax: (403) 382-4109

October 11, 2000

Lynne Hawrelko  
Canadian Hunter Exploration Ltd.  
2800, 605 - 5<sup>th</sup> Avenue S.W.  
CALGARY, Alberta T2P 3H5

Dear Mr. Hawrelko:

RE: Canhunter et al Eastmont 1-27-12-27 well  
SE Sec. 27 Tp. 012 Rge. 27 W4M  
File No.: 94-11978

An inquiry was held on this location and enclosed for your records is a copy of the Reclamation Certificate.

If you have any concerns, please contact me at (403) 381-5490.

Sincerely

Terry Johnson  
Conservation and Reclamation Inspector

cc: David F. Mulholland and Elaine Mulholland  
Environet Corporation

**RECLAMATION CERTIFICATE NO. 00136785-00-00**

This reclamation certificate is issued pursuant to section 123 of the Environmental Protection and Enhancement Act, following an inquiry on

September 21, 2000 (Date)

This certifies that the surface of the land held by Canadian Hunter Exploration Ltd. within SE Sec. 27 Tp. 012 Rge. 27 W4M

in connection with or incidental to CANHUNTER ET AL EASTMONT 1-27-12-27 WELL, as shown outlined in yellow on the attached plan, complies with the conservation and reclamation requirements of Part 5 of the Act.

Issued this 04 day of October, 2000

  
Inspector(s)

Operator/Agent:

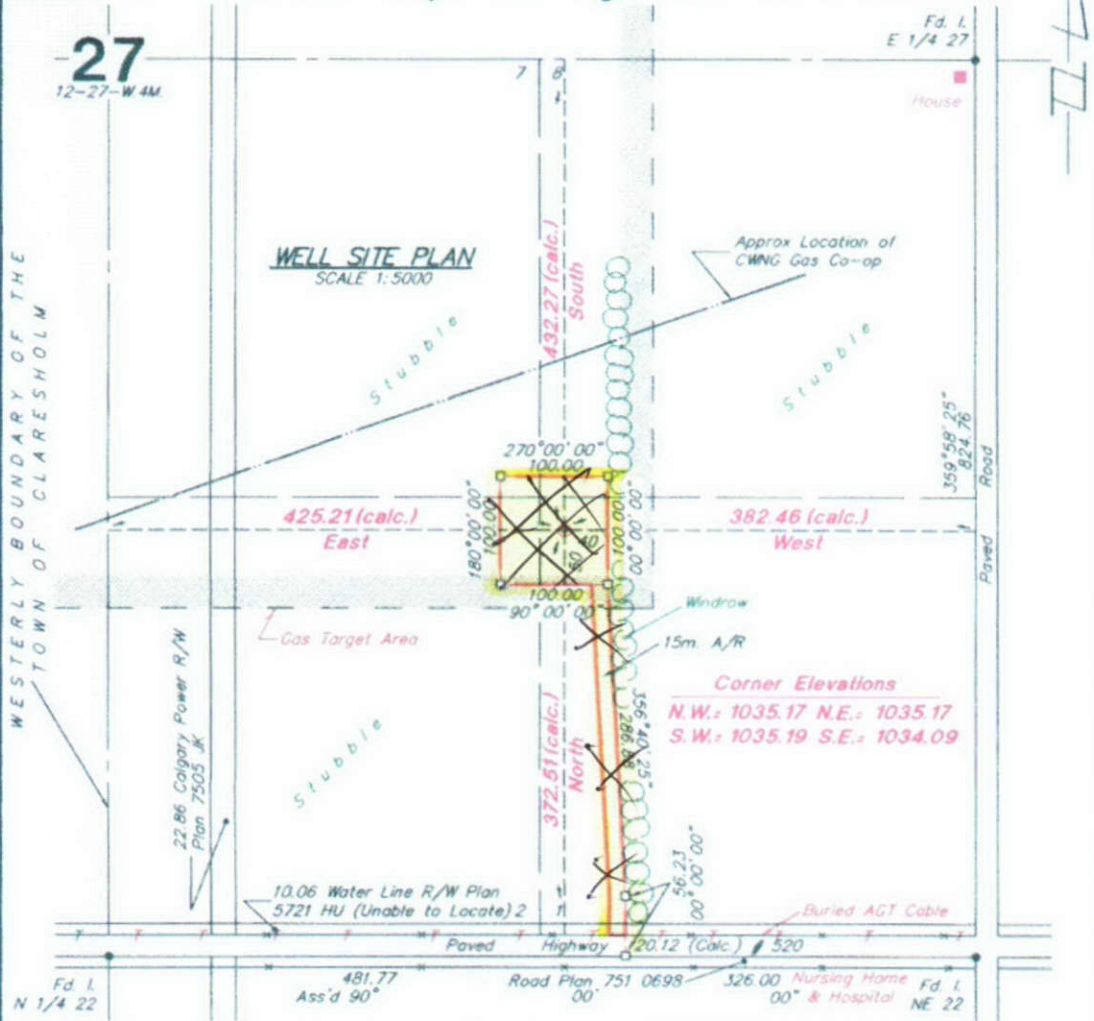
Canadian Hunter Exploration Ltd.  
2800 605 5 AVE SW  
Calgary, Alberta  
T2P 3H5

Owners/Occupants:

David Mulholland  
Elaine Mulholland

BEST COPY AVAILABLE

Plan Showing Survey of  
**CANHUNTER ET AL EASTMONT 1-27-12-27**  
 Well Site and Access Road  
 in  
 L.S. 1 Sec. 27 Twp. 12 Rge. 27 W. 4 M.



I, Anthony Mellon, A.L.S. certify that the survey represented by this plan is correct and true to the best of my knowledge and was completed on the 21st day of December, 1994.

Anthony Mellon  
 Alberta Land Surveyor  
Bill S. Ly  
 Witness

  
 CALGARY-234-7599  
 EDMONTON-481-3399



ELEVATION ON GROUND AT WELL LOCATION = 1034.58

CO-ORDINATES:  
 --- 372.51 m. N. of S. Bdy } Sec. 27  
 --- 382.46 m. W. of E. Bdy }

AREAS:

|                            | HECTARES | ACRES |
|----------------------------|----------|-------|
| Well Site =                | 1.000    | 2.47  |
| A/R Within Plan 5721 HU =  | 0.015    | 0.04  |
| A/R Without Plan 5721 HU = | 0.469    | 1.16  |
| Total =                    | 1.484    | 3.67  |

- The Proposed Well is:
- |   |                                     |                                     |
|---|-------------------------------------|-------------------------------------|
| - At least 1.5 km. from the corporate limits of a City, Town or Village                   | YES                                 | NO                                  |
| - Outside any potential Coal Development Area   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| - At least 100 m. from any surface improvements and at least 40 m. from any surveyed road | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| - At least 5.0 km. from a Lighted Aerodrome   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| - At least 1.6 km. from an Unlighted Aerodrome  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

OPERATOR:  
**CANADIAN HUNTER EXPLORATION LTD.**

Datum: ASCM #154328 (Elev = 1032.116)  
 Survey marks found shown thus: ●  
 Iron Spikes placed shown thus: ▲  
 Wooden Stakes placed shown thus: □  
 Portions referred to outlined thus: ———

Distances are in metres.

|                  |                   |
|------------------|-------------------|
| Revision: 1      | Strike Name       |
| Date: Dec. 13/94 | Job No: 94-0838-C |

# Appendix F:

## ERIS Database Search



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# DATABASE REPORT

**Project Property:** *Claresholm ASP - Phase I ESA  
Claresholm ASP - Phase I ESA  
Claresholm AB*

**Project No:** *253110079400*

**Report Type:** *AB Standard Report Plus - Quote*

**Order No:** *25031800453*

**Requested by:** *McElhanney Ltd.*

**Date Completed:** *March 21, 2025*

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# Executive Summary

## **Property Information:**

**Project Property:** *Claresholm ASP - Phase I ESA  
Claresholm ASP - Phase I ESA Claresholm AB*

**Project No:** *253110079400*

## **Order Information:**

**Order No:** *25031800453*

**Date Requested:** *March 18, 2025*

**Requested by:** *McElhanney Ltd.*

**Report Type:** *AB Standard Report Plus - Quote*

## **Historical/Products:**

**ERIS Xplorer** [\*ERIS Xplorer\*](#)

## Executive Summary: Report Summary

| <i>Database</i> | <i>Name</i>   | <i>Searched</i> | <i>Project Property</i> | <i>Boundary to 0.30km</i> | <i>Total</i> |
|-----------------|---|-----------------|-------------------------|---------------------------|--------------|
| AERW            | Well Licenses   | Y               | 4                       | 4                         | 8            |
| AGR             | Agriculture and Fisheries - Certificates of Approval                  | Y               | 0                       | 0                         | 0            |
| AOGW            | Alberta Oil and Gas Wells   | Y               | 0                       | 0                         | 0            |
| AUTH            | Authorizations  | Y               | 1                       | 0                         | 1            |
| AUWR            | Automobile Wrecking & Supplies  | Y               | 0                       | 0                         | 0            |
| CAWD            | Waste Management Facilities - Certificates of Approval                | Y               | 0                       | 0                         | 0            |
| CBL             | Commercial Activity Risk - City of Calgary Business Licenses          | 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 Approval             | Y               | 0                       | 0                         | 0            |
| CHM             | Chemical Register   | Y               | 0                       | 0                         | 0            |
| CMPS            | Compost Facilities  | Y               | 0                       | 0                         | 0            |
| CNG             | Compressed Natural Gas Stations                                       | Y               | 0                       | 0                         | 0            |
| CONV            | Compliance and Convictions  | Y               | 0                       | 0                         | 0            |
| CTNK            | Fuel Sales and Storage  | Y               | 0                       | 0                         | 0            |
| DRWD            | Approved Oilfield Waste Management Facilities                         | Y               | 0                       | 0                         | 0            |
| EAS             | Enforcement Action Summary  | Y               | 0                       | 0                         | 0            |
| EBL             | Commercial Activity Risk - City of Edmonton Business Licenses         | Y               | 0                       | 0                         | 0            |
| ECMP            | Environmental Compliance Prosecutions                                 | 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               | 1                       | 0                         | 1            |
| ETNK            | Edmonton Vehicle Fueling Stations                                     | 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               | 1                       | 0                         | 1            |
| 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             | Fuel Storage Tanks  | Y               | 0                       | 2                         | 2            |
| GEN             | Waste Generators Summary  | Y               | 0                       | 0                         | 0            |
| GHG             | Greenhouse Gas Emissions from Large Facilities                        | Y               | 0                       | 0                         | 0            |

| <b>Database</b> | <b>Name</b>   | <b>Searched</b> | <b>Project Property</b> | <b>Boundary to 0.30km</b> | <b>Total</b> |
|-----------------|---|-----------------|-------------------------|---------------------------|--------------|
| 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            |
| LDS             | Identification and Verification of Active and Inactive Land Disposal Sites    | Y               | 0                       | 0                         | 0            |
| LDSI            | Land Disposal Sites on Indian Reserves  | Y               | 0                       | 0                         | 0            |
| LNDF            | Landfill Registrations  | 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               | 0                       | 0                         | 0            |
| NCST            | PTMAA Non-Compliant Storage Tanks   | Y               | 0                       | 0                         | 0            |
| NDFT            | National Defense & Canadian Forces Fuel Tanks                                 | Y               | 0                       | 0                         | 0            |
| NDSP            | National Defense & Canadian Forces Spills                                     | Y               | 0                       | 0                         | 0            |
| NDWD            | National Defence & Canadian Forces Waste Disposal Sites                       | Y               | 0                       | 0                         | 0            |
| NEBI            | National Energy Board Pipeline Incidents                                      | Y               | 0                       | 0                         | 0            |
| NEBP            | National Energy Board Wells   | Y               | 0                       | 0                         | 0            |
| NEES            | National Environmental Emergencies System (NEES)                              | Y               | 0                       | 0                         | 0            |
| NPCB            | National PCB Inventory  | Y               | 0                       | 0                         | 0            |
| NPR2            | National Pollutant Release Inventory  | Y               | 0                       | 0                         | 0            |
| NPRI            | National Pollutant Release Inventory - Historic                               | Y               | 0                       | 0                         | 0            |
| OAM             | Operating and Abandoned Mines   | Y               | 0                       | 0                         | 0            |
| OGF             | Oil and Gas Facilities - ST102 & ST50   | Y               | 0                       | 0                         | 0            |
| OGWW            | Oil and Gas Wells   | Y               | 3                       | 2                         | 5            |
| ORD             | Enforcement Orders  | 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             | Y               | 0                       | 0                         | 0            |
| PES             | Pesticide Register  | Y               | 0                       | 0                         | 0            |
| PFCH            | NPRI Reporters - PFAS Substances  | Y               | 0                       | 0                         | 0            |
| PFHA            | Potential PFAS Handlers from NPRI   | Y               | 0                       | 0                         | 0            |
| PITS            | Conglomerate and Waste Management Facilities                                  | Y               | 0                       | 0                         | 0            |
| PSP             | Alberta Private Sewage Disposal Permits                                       | Y               | 0                       | 0                         | 0            |
| PTAP            | PTMAA Approved (Open) Permits   | Y               | 0                       | 0                         | 0            |
| REC             | Hazardous Waste Receivers Summary   | Y               | 0                       | 0                         | 0            |
| RECY            | Alberta Recyclers   | Y               | 0                       | 0                         | 0            |
| RST             | Retail Fuel Storage Tanks   | Y               | 0                       | 0                         | 0            |

| <i>Database</i> | <i>Name</i>   | <i>Searched</i> | <i>Project<br/>Property</i> | <i>Boundary<br/>to 0.30km</i> | <i>Total</i> |    |
|-----------------|---|-----------------|-----------------------------|-------------------------------|--------------|----|
| SCT             | <i>Scott's Manufacturing Directory</i>                              | Y               | 0                           | 0                             | 0            |    |
| SPEC            | <i>Special Operation Classifications - Certificates of Approval</i> | Y               | 0                           | 0                             | 0            |    |
| WDS             | <i>Inventory of Waste Disposal Sites</i>                            | Y               | 0                           | 0                             | 0            |    |
| WSTE            | <i>Wastewater Operations</i>  | Y               | 0                           | 0                             | 0            |    |
| WWIS            | <i>Alberta Water Well Information Database</i>                      | Y               | 1                           | 1                             | 2            |    |
| <hr/>           |   |                 | <b>Total:</b>               | 11                            | 9            | 20 |

## Executive Summary: Site Report Summary - Project Property

| <b>Map Key</b>    | <b>DB</b> | <b>Company/Site Name</b>            | <b>Address</b>                                       | <b>Dir/Dist (m)</b> | <b>Elev diff (m)</b> | <b>Page Number</b> |
|-------------------|-----------|-------------------------------------|--|---------------------|----------------------|--------------------|
| <a href="#">1</a> | WWIS      |                                     | AB<br><br><i>Well ID:</i> 140543                     | ENE/0.0             | 0.00                 | <a href="#">16</a> |
| <a href="#">2</a> | ESAR      | Reclamation                         | 1-27-12-27-4<br>AB                                   | ESE/0.0             | -2.00                | <a href="#">20</a> |
| <a href="#">3</a> | FIS       | UNKNOWN                             | AB   | ESE/0.0             | -2.00                | <a href="#">21</a> |
| <a href="#">4</a> | OGWW      | CANADIAN HUNTER<br>EXPLORATION LTD. | AB<br><br><i>Licence ID:</i> 175685                  | ESE/0.0             | -3.00                | <a href="#">22</a> |
| <a href="#">5</a> | AERW      | CNRL EASTM 9-27-12-27               | AB<br><br><i>Unique Well ID:</i> 00/09-27-012-27W4/0 | NNE/0.0             | 1.00                 | <a href="#">22</a> |
| <a href="#">5</a> | AERW      | CNRL EASTM 9-27-12-27               | AB<br><br><i>Unique Well ID:</i> 00/09-27-012-27W4/2 | NNE/0.0             | 1.00                 | <a href="#">23</a> |
| <a href="#">6</a> | OGWW      | ConocoPhillips Canada (BRC)<br>Ltd. | AB<br><br><i>Licence ID:</i> 410733                  | NE/0.0              | 0.00                 | <a href="#">23</a> |
| <a href="#">7</a> | AUTH      | Town of Claresholm                  | 4;27;12;22;NE<br>AB                                  | S/0.0               | -3.00                | <a href="#">24</a> |

| <b>Map Key</b> | <b>DB</b> | <b>Company/Site Name</b>                    | <b>Address</b> | <b>Dir/Dist (m)</b> | <b>Elev diff (m)</b> | <b>Page Number</b>                         |
|----------------|-----------|---|----------------|---------------------|----------------------|--|
| <u>8</u>       | AERW      | RANGER ET AL<br>MONTGOMERY 10-22-12-27      | AB             | S/0.0               | -5.00                | <u>24</u>                                  |
|                |           |   |                |                     |                      | <i>Unique Well ID:</i> 00/10-22-012-27W4/0 |
| <u>8</u>       | AERW      | Canadian Natural Resources<br>Limited(0HE9) | AB             | S/0.0               | -5.00                | <u>24</u>                                  |
| <u>9</u>       | OGWW      | MLC OIL & GAS LTD.                          | AB             | S/0.0               | -6.00                | <u>25</u>                                  |
|                |           |   |                |                     |                      | <i>Licence ID:</i> 141798                  |

## Executive Summary: Site Report Summary - Surrounding Properties

| <b>Map Key</b>     | <b>DB</b> | <b>Company/Site Name</b>                  | <b>Address</b>                                   | <b>Dir/Dist (m)</b> | <b>Elev Diff (m)</b> | <b>Page Number</b> |
|--------------------|-----------|---|--|---------------------|----------------------|--------------------|
| <a href="#">10</a> | WWIS      |   | AB<br><b>Well ID:</b> 294009                     | WSW/33.5            | -2.95                | <a href="#">25</a> |
| <a href="#">11</a> | AERW      | CNRL EASTM 6-27-12-27                     | AB<br><b>Unique Well ID:</b> 00/06-27-012-27W4/2 | W/46.7              | 0.12                 | <a href="#">31</a> |
| <a href="#">11</a> | AERW      | CNRL EASTM 6-27-12-27                     | AB<br><b>Unique Well ID:</b> 00/06-27-012-27W4/0 | W/46.7              | 0.12                 | <a href="#">32</a> |
| <a href="#">11</a> | AERW      | Canadian Natural Resources Limited(OHE9)  | AB   | W/46.7              | 0.12                 | <a href="#">32</a> |
| <a href="#">12</a> | AERW      | Canadian Natural Resources Limited(OHE9)  | AB   | NW/47.0             | 4.00                 | <a href="#">33</a> |
| <a href="#">13</a> | FST       | WILLOW CREEK AUX. HOSPITAL & NURSING HOME | 4221-8 STR. W CLARESHOLM TOWN (P) AB             | SE/109.7            | -4.00                | <a href="#">33</a> |
| <a href="#">14</a> | OGWW      | CANADIAN HUNTER EXPLORATION LTD.          | AB<br><b>Licence ID:</b> 179069                  | WNW/113.7           | -0.02                | <a href="#">34</a> |
| <a href="#">15</a> | FST       | WILLOW CREEK AUX. HOSPITAL & NURSING HOME | 4221-8 STREET WEST CLARESHOLM AB AB              | SE/114.5            | -4.00                | <a href="#">34</a> |
| <a href="#">16</a> | OGWW      | Burlington Resources Canada (Hunter) Ltd. | AB<br><b>Licence ID:</b> 362104                  | SSW/249.3           | -11.00               | <a href="#">35</a> |

# Executive Summary: Summary By Data Source

## **AERW - Well Licenses**

A search of the AERW database, dated Dec 2024 has found that there are 8 AERW site(s) within approximately 0.30 kilometers of the project property.

| <b>Site</b>                               | <b>Address</b>                                   | <b>Distance (m)</b> | <b>Map Key</b>            |
|---|--|---------------------|---------------------------|
| CNRL EASTM 9-27-12-27                     | AB<br><i>Unique Well ID: 00/09-27-012-27W4/0</i> | 0.0                 | <a href="#"><u>5</u></a>  |
| CNRL EASTM 9-27-12-27                     | AB<br><i>Unique Well ID: 00/09-27-012-27W4/2</i> | 0.0                 | <a href="#"><u>5</u></a>  |
| RANGER ET AL MONTGOMERY 10-22-12-27       | AB<br><i>Unique Well ID: 00/10-22-012-27W4/0</i> | 0.0                 | <a href="#"><u>8</u></a>  |
| Canadian Natural Resources Limited (OHE9) | AB   | 0.0                 | <a href="#"><u>8</u></a>  |
| Canadian Natural Resources Limited (OHE9) | AB   | 46.7                | <a href="#"><u>11</u></a> |
| CNRL EASTM 6-27-12-27                     | AB<br><i>Unique Well ID: 00/06-27-012-27W4/0</i> | 46.7                | <a href="#"><u>11</u></a> |
| CNRL EASTM 6-27-12-27                     | AB<br><i>Unique Well ID: 00/06-27-012-27W4/2</i> | 46.7                | <a href="#"><u>11</u></a> |
| Canadian Natural Resources Limited (OHE9) | AB   | 47.0                | <a href="#"><u>12</u></a> |

## **AUTH - Authorizations**

A search of the AUTH database, dated Sep 2024 has found that there are 1 AUTH site(s) within approximately 0.30 kilometers of the

project property.

| <u>Site</u>        | <u>Address</u>      | <u>Distance (m)</u> | <u>Map Key</u>    |
|--------------------|---------------------|---------------------|-------------------|
| Town of Claresholm | 4;27;12;22;NE<br>AB | 0.0                 | <a href="#">7</a> |

### **ESAR - Environmental Site Assessment Repository**

A search of the ESAR database, dated 1960-Nov 2024 has found that there are 1 ESAR site(s) within approximately 0.30 kilometers of the project property.

| <u>Site</u> | <u>Address</u>     | <u>Distance (m)</u> | <u>Map Key</u>    |
|-------------|--------------------|---------------------|-------------------|
| Reclamation | 1-27-12-27-4<br>AB | 0.0                 | <a href="#">2</a> |

### **FIS - AER Incidents & Spills**

A search of the FIS database, dated 1975 - Dec 2024 has found that there are 1 FIS site(s) within approximately 0.30 kilometers of the project property.

| <u>Site</u> | <u>Address</u> | <u>Distance (m)</u> | <u>Map Key</u>    |
|-------------|----------------|---------------------|-------------------|
| UNKNOWN     | AB             | 0.0                 | <a href="#">3</a> |

### **FST - Fuel Storage Tanks**

A search of the FST database, dated 1985-Sep 2024 has found that there are 2 FST site(s) within approximately 0.30 kilometers of the project property.

| <u>Site</u>                               | <u>Address</u>                          | <u>Distance (m)</u> | <u>Map Key</u>     |
|---|---|---------------------|--------------------|
| WILLOW CREEK AUX. HOSPITAL & NURSING HOME | 4221-8 STR. W<br>CLARESHOLM TOWN (P) AB | 109.7               | <a href="#">13</a> |
| WILLOW CREEK AUX. HOSPITAL & NURSING HOME | 4221-8 STREET WEST CLARESHOLM AB<br>AB  | 114.5               | <a href="#">15</a> |

### **OGWW - Oil and Gas Wells**

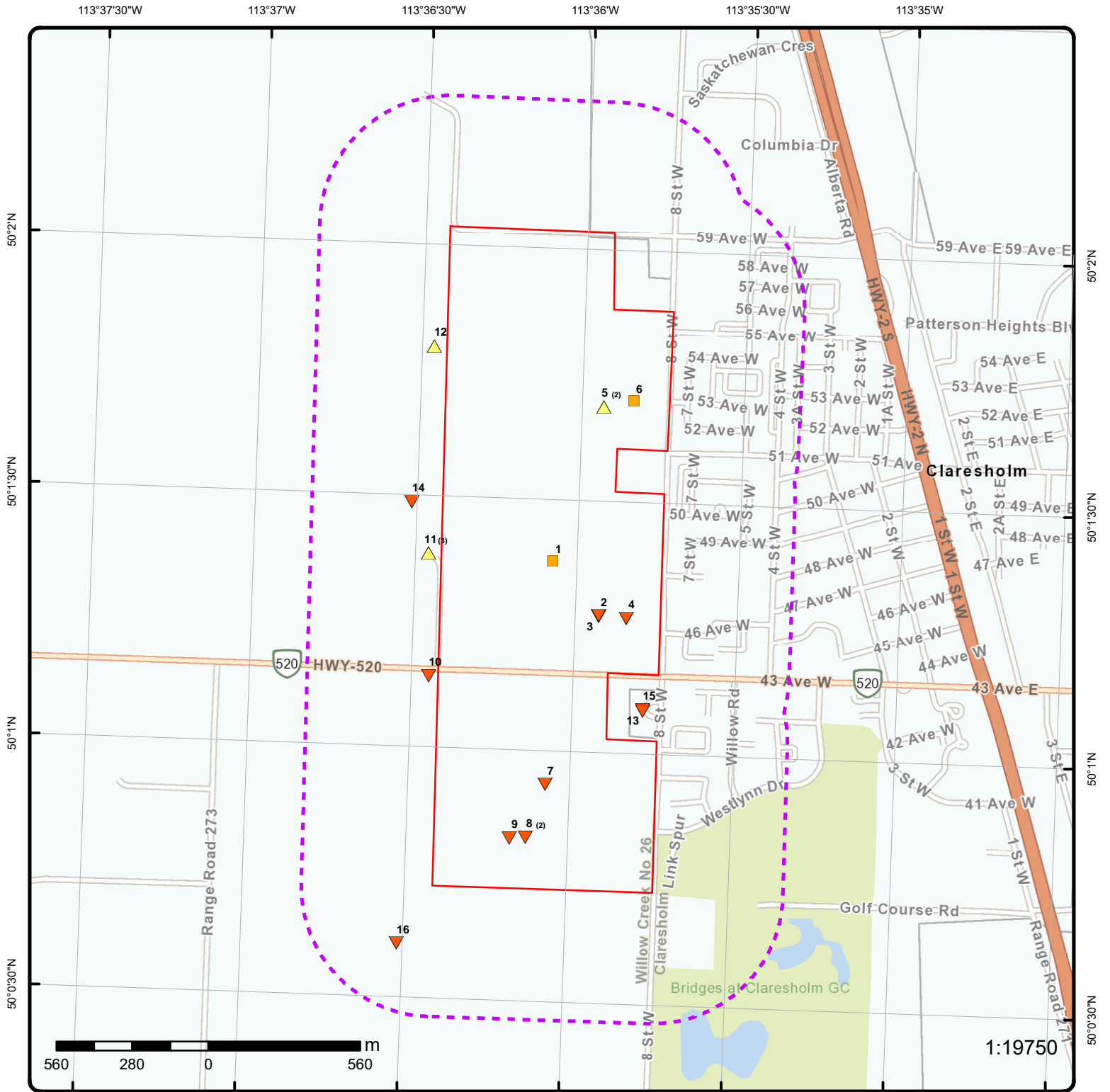
A search of the OGWW database, dated 1988-May 31, 2024 has found that there are 5 OGWW site(s) within approximately 0.30 kilometers of the project property.

| <u>Site</u>                               | <u>Address</u>                  | <u>Distance (m)</u> | <u>Map Key</u>            |
|---|---------------------------------|---------------------|---------------------------|
| CANADIAN HUNTER EXPLORATION LTD.          | AB<br><i>Licence ID: 175685</i> | 0.0                 | <a href="#"><u>4</u></a>  |
| ConocoPhillips Canada (BRC) Ltd.          | AB<br><i>Licence ID: 410733</i> | 0.0                 | <a href="#"><u>6</u></a>  |
| MLC OIL & GAS LTD.                        | AB<br><i>Licence ID: 141798</i> | 0.0                 | <a href="#"><u>9</u></a>  |
| CANADIAN HUNTER EXPLORATION LTD.          | AB<br><i>Licence ID: 179069</i> | 113.7               | <a href="#"><u>14</u></a> |
| Burlington Resources Canada (Hunter) Ltd. | AB<br><i>Licence ID: 362104</i> | 249.3               | <a href="#"><u>16</u></a> |

### **WWIS - Alberta Water Well Information Database**

A search of the WWIS database, dated 1880-Jul 31, 2024 has found that there are 2 WWIS site(s) within approximately 0.30 kilometers of the project property.

| <u>Site</u> | <u>Address</u>               | <u>Distance (m)</u> | <u>Map Key</u>            |
|-------------|------------------------------|---------------------|---------------------------|
|             | AB<br><i>Well ID: 140543</i> | 0.0                 | <a href="#"><u>1</u></a>  |
|             | AB<br><i>Well ID: 294009</i> | 33.5                | <a href="#"><u>10</u></a> |



### Map: 0.3 Kilometer Radius

Order Number: 25031800453  
 Address: Claresholm ASP - Phase I ESA, Claresholm, AB



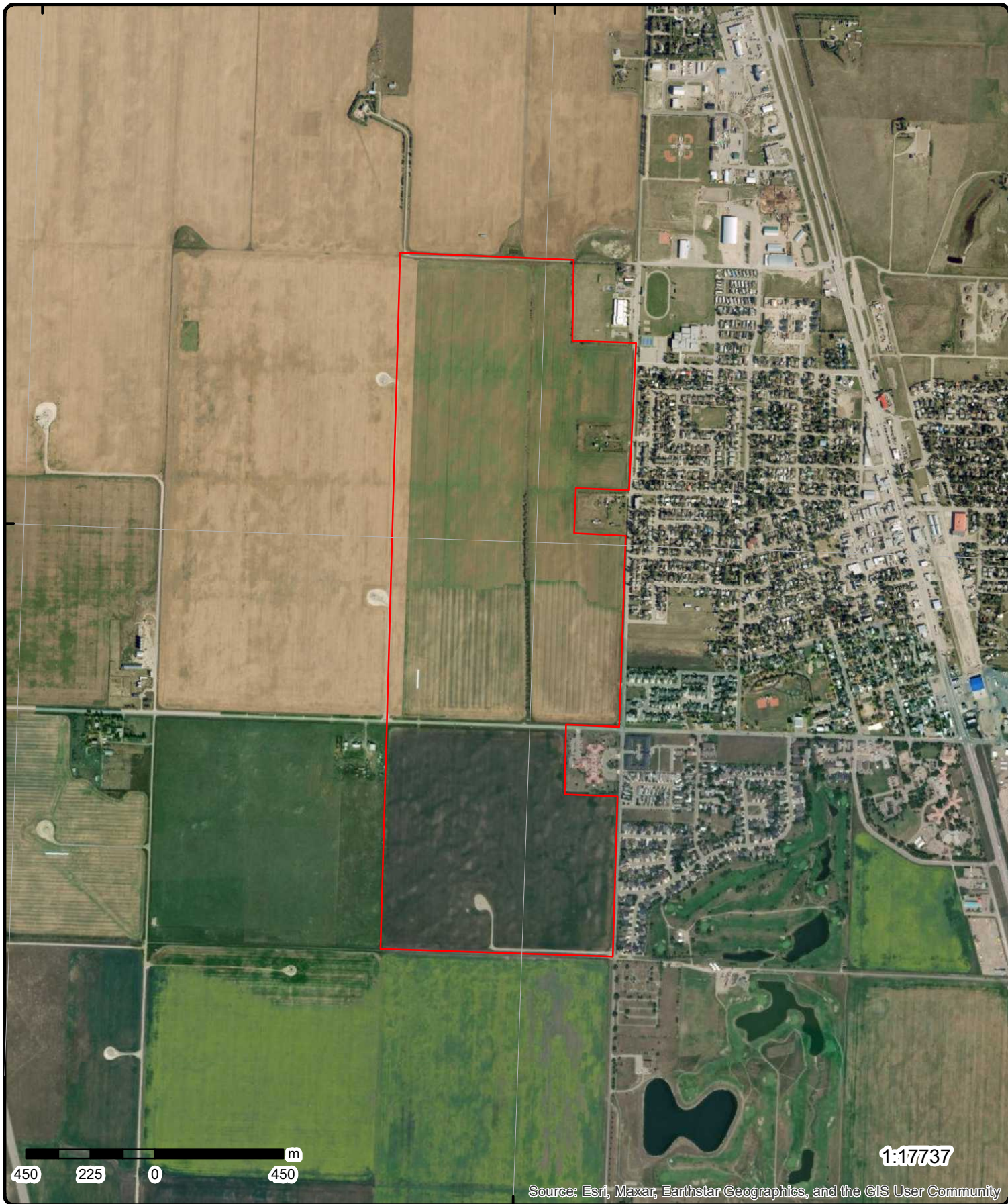
|                                   |                                    |                    |                        |
|-----------------------------------|------------------------------------|--------------------|------------------------|
| Project Property                  | Freeways; Highways                 | Beach              | Shopping & Sports Area |
| Buffer Outline                    | Traffic Circle; Ramp               | Airport            | University/College     |
| Eris Sites with Higher Elevation  | Major Arterial; Minor Arterial     | Industrial Area    | Cemetery; Golf Course  |
| Eris Sites with Same Elevation    | Local Road                         | Military Base      | Parkt (National)       |
| Eris Sites with Lower Elevation   | Service Road; Traffic Circle; Ramp | Aircraft Roads     | Park (City/County)     |
| Eris Sites with Unknown Elevation | Rail                               | Native Reservation |                        |
|                                   |                                    | Hospital           |                        |

113°37'30"W

113°36"W

50°1'30"N

50°1'30"N



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

**Aerial** Year: 2022

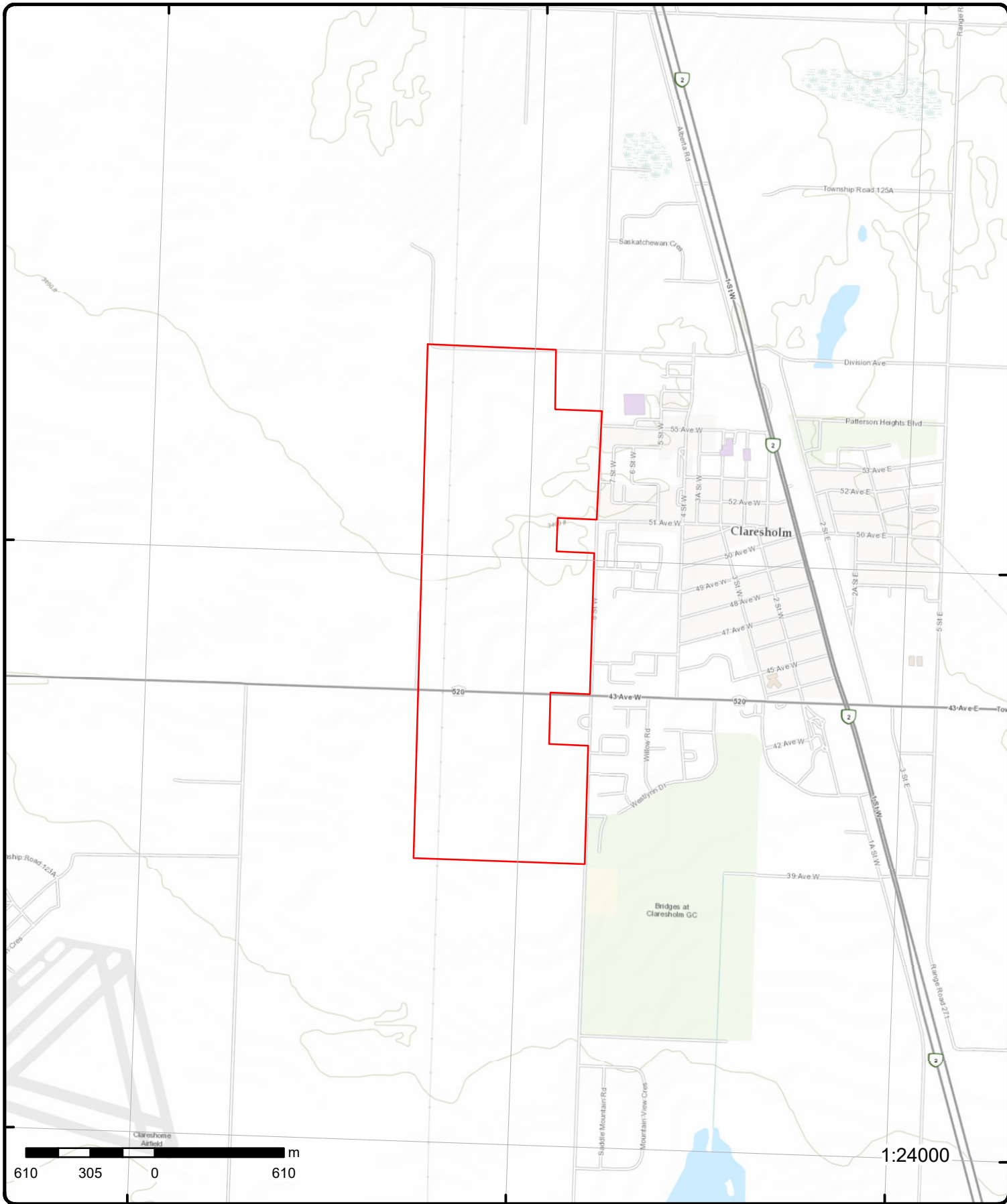
Order Number: 25031800453

**Address: Claresholm ASP - Phase I ESA, Claresholm, AB**



Source: ESRI World Imagery

© ERIS Information Limited Partnership



# Topographic Map

Order Number: 25031800453

Address: Claresholm ASP - Phase I ESA, AB



Source: ESRI World Topographic Map

© ERIS Information Limited Partnership

# Detail Report

| Map Key   | Number of Records | Direction/<br>Distance (m)   | Elev/Diff<br>(m) | Site | DB   |
|---|-------------------|--|------------------|------|------|
| <u>1</u>  | 1 of 1            | ENE/0.0  | 1,035.0 / 0.00   | AB   | WWIS |
| <b>Well ID:</b> 140543<br><b>Driller ID:</b> 11110<br><b>Licence No:</b><br><b>GIC Well ID:</b> 140543<br><b>GOA Well Tag No:</b><br><b>Elevation (ft):</b><br><b>Depth (ft):</b><br><b>Date Completed:</b><br><b>Proposed Use:</b><br><b>Lot:</b><br><b>Block:</b><br><b>Plan:</b><br><b>Type of Work:</b><br><b>Flowing Well:</b><br><b>Date Started:</b><br><b>Water Req Per Day:</b><br><b>Gas Present:</b><br><b>Oil Present:</b><br><b>Flow Rate:</b><br><b>Drilling Company:</b><br><b>Owner Mailing Address:</b><br><b>Driller Mailing Address:</b> |                   | <b>Elevation Source:</b> Not Obtained<br><b>Method of Drilling:</b><br><b>GPS Obtained:</b> Not Verified<br><b>Boundary From:</b><br><b>Distance North:</b><br><b>Distance South:</b><br><b>Distance East:</b><br><b>Distance West:</b><br><b>Additional Desc:</b><br><b>Validated?:</b> TRUE<br><b>Submitted?:</b> TRUE<br><b>Location Locked?:</b> TRUE<br><b>Longitude:</b> -113.60118600<br><b>Latitude:</b> 50.02296600<br><b>LSD:</b> SE<br><b>Section:</b> 27<br><b>Township:</b> 12<br><b>Range:</b> 27<br><b>Meridian:</b> 4<br><b>DLS Coordinates:</b> SE-27-12-27-4 |                  |      |      |

**Chemical Analysis**

**Chem Analysis ID:** 2005818  
**Well Report ID:** 140543  
**Sample No:** 14019-W  
**Sample Date:**  
**Analysis Date:** 1985/01/09  
**Laboratory:** VG  
**Water Level:**  
**Aquifer:**  
**Remarks:**

**Analysis Items**

**Element Name:** Sodium  
**Element Symbol:** NA  
**Decimal Places:** 4  
**Value:** 530.000500

**Analysis Items**

**Element Name:** Ion Balance  
**Element Symbol:** IONBAL  
**Decimal Places:** 4  
**Value:** 1.040000

**Analysis Items**

| <i>Map Key</i>               | <i>Number of Records</i> | <i>Direction/ Distance (m)</i> | <i>Elev/Diff (m)</i> | <i>Site</i> | <i>DB</i> |
|------------------------------|--------------------------|--------------------------------|----------------------|-------------|-----------|
| <b>Element Name:</b>         |                          | Total Alkalinity               |                      |             |           |
| <b>Element Symbol:</b>       |                          | TA                             |                      |             |           |
| <b>Decimal Places:</b>       |                          | 4                              |                      |             |           |
| <b>Value:</b>                |                          | 215.000000                     |                      |             |           |
| <b><u>Analysis Items</u></b> |                          |                                |                      |             |           |
| <b>Element Name:</b>         |                          | total Kjeldahl nitrogen        |                      |             |           |
| <b>Element Symbol:</b>       |                          | TKN                            |                      |             |           |
| <b>Decimal Places:</b>       |                          | 4                              |                      |             |           |
| <b>Value:</b>                |                          | 0.000000                       |                      |             |           |
| <b><u>Analysis Items</u></b> |                          |                                |                      |             |           |
| <b>Element Name:</b>         |                          | Iron                           |                      |             |           |
| <b>Element Symbol:</b>       |                          | FE                             |                      |             |           |
| <b>Decimal Places:</b>       |                          | 4                              |                      |             |           |
| <b>Value:</b>                |                          | -0.020000                      |                      |             |           |
| <b><u>Analysis Items</u></b> |                          |                                |                      |             |           |
| <b>Element Name:</b>         |                          | Total Phosphorus               |                      |             |           |
| <b>Element Symbol:</b>       |                          | TP                             |                      |             |           |
| <b>Decimal Places:</b>       |                          | 4                              |                      |             |           |
| <b>Value:</b>                |                          | 0.000000                       |                      |             |           |
| <b><u>Analysis Items</u></b> |                          |                                |                      |             |           |
| <b>Element Name:</b>         |                          | Magnesium                      |                      |             |           |
| <b>Element Symbol:</b>       |                          | MG                             |                      |             |           |
| <b>Decimal Places:</b>       |                          | 4                              |                      |             |           |
| <b>Value:</b>                |                          | 2.001536                       |                      |             |           |
| <b><u>Analysis Items</u></b> |                          |                                |                      |             |           |
| <b>Element Name:</b>         |                          | Chloride                       |                      |             |           |
| <b>Element Symbol:</b>       |                          | CL                             |                      |             |           |
| <b>Decimal Places:</b>       |                          | 4                              |                      |             |           |
| <b>Value:</b>                |                          | 20.029100                      |                      |             |           |
| <b><u>Analysis Items</u></b> |                          |                                |                      |             |           |
| <b>Element Name:</b>         |                          | pH                             |                      |             |           |
| <b>Element Symbol:</b>       |                          | PH                             |                      |             |           |
| <b>Decimal Places:</b>       |                          | 2                              |                      |             |           |
| <b>Value:</b>                |                          | 8.300000                       |                      |             |           |
| <b><u>Analysis Items</u></b> |                          |                                |                      |             |           |
| <b>Element Name:</b>         |                          | Potassium                      |                      |             |           |
| <b>Element Symbol:</b>       |                          | K                              |                      |             |           |
| <b>Decimal Places:</b>       |                          | 4                              |                      |             |           |
| <b>Value:</b>                |                          | 1.124000                       |                      |             |           |
| <b><u>Analysis Items</u></b> |                          |                                |                      |             |           |
| <b>Element Name:</b>         |                          | Silica                         |                      |             |           |
| <b>Element Symbol:</b>       |                          | SIO2                           |                      |             |           |

| <b>Map Key</b>               | <b>Number of Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|------------------------------|--------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b>Decimal Places:</b>       |                          | 4                                  |                          |             |           |
| <b>Value:</b>                |                          | 6.000000                           |                          |             |           |
| <b><u>Analysis Items</u></b> |                          |                                    |                          |             |           |
| <b>Element Name:</b>         |                          | Electrical Conductivity            |                          |             |           |
| <b>Element Symbol:</b>       |                          | EC                                 |                          |             |           |
| <b>Decimal Places:</b>       |                          | 0                                  |                          |             |           |
| <b>Value:</b>                |                          | 2370.000000                        |                          |             |           |
| <b><u>Analysis Items</u></b> |                          |                                    |                          |             |           |
| <b>Element Name:</b>         |                          | Total Hardness                     |                          |             |           |
| <b>Element Symbol:</b>       |                          | TH                                 |                          |             |           |
| <b>Decimal Places:</b>       |                          | 4                                  |                          |             |           |
| <b>Value:</b>                |                          | 38.000000                          |                          |             |           |
| <b><u>Analysis Items</u></b> |                          |                                    |                          |             |           |
| <b>Element Name:</b>         |                          | Total Dissolved Solids             |                          |             |           |
| <b>Element Symbol:</b>       |                          | TDS                                |                          |             |           |
| <b>Decimal Places:</b>       |                          | 0                                  |                          |             |           |
| <b>Value:</b>                |                          | 1564.000000                        |                          |             |           |
| <b><u>Analysis Items</u></b> |                          |                                    |                          |             |           |
| <b>Element Name:</b>         |                          | Calcium                            |                          |             |           |
| <b>Element Symbol:</b>       |                          | CA                                 |                          |             |           |
| <b>Decimal Places:</b>       |                          | 4                                  |                          |             |           |
| <b>Value:</b>                |                          | 11.999952                          |                          |             |           |
| <b><u>Analysis Items</u></b> |                          |                                    |                          |             |           |
| <b>Element Name:</b>         |                          | Nitrite                            |                          |             |           |
| <b>Element Symbol:</b>       |                          | NO2                                |                          |             |           |
| <b>Decimal Places:</b>       |                          | 4                                  |                          |             |           |
| <b>Value:</b>                |                          | 0.079800                           |                          |             |           |
| <b><u>Analysis Items</u></b> |                          |                                    |                          |             |           |
| <b>Element Name:</b>         |                          | Bicarbonate                        |                          |             |           |
| <b>Element Symbol:</b>       |                          | HCO3                               |                          |             |           |
| <b>Decimal Places:</b>       |                          | 4                                  |                          |             |           |
| <b>Value:</b>                |                          | 262.027336                         |                          |             |           |
| <b><u>Analysis Items</u></b> |                          |                                    |                          |             |           |
| <b>Element Name:</b>         |                          | Hydroxide                          |                          |             |           |
| <b>Element Symbol:</b>       |                          | OH                                 |                          |             |           |
| <b>Decimal Places:</b>       |                          | 4                                  |                          |             |           |
| <b>Value:</b>                |                          | 0.000000                           |                          |             |           |
| <b><u>Analysis Items</u></b> |                          |                                    |                          |             |           |
| <b>Element Name:</b>         |                          | Nitrate plus Nitrite               |                          |             |           |
| <b>Element Symbol:</b>       |                          | NO2_NO3_N                          |                          |             |           |
| <b>Decimal Places:</b>       |                          | 4                                  |                          |             |           |
| <b>Value:</b>                |                          | 0.099400                           |                          |             |           |

**Analysis Items**

**Element Name:** Sulphate  
**Element Symbol:** SO4  
**Decimal Places:** 4  
**Value:** 871.268970

**Analysis Items**

**Element Name:** Fluoride  
**Element Symbol:** F  
**Decimal Places:** 4  
**Value:** 1.190000

**Well Reports**

|  |            |                            |              |
|--|------------|----------------------------|--------------|
| <b>Well Report ID:</b>                 | 140543     | <b>Annular Seal Mat:</b>   |              |
| <b>Well Owner ID:</b>                  | 10482939   | <b>Annular Seal from:</b>  | 0.00         |
| <b>Driller ID:</b>                     | 2533726    | <b>Annular Seal to:</b>    | 0.00         |
| <b>Drill Company ID:</b>               | 11110      | <b>Annular Seal Amt:</b>   |              |
| <b>Drill Instance ID:</b>              | 8337868    | <b>Annular Seal Units:</b> |              |
| <b>Drill Comp Well ID:</b>             |            | <b>Drilling Method:</b>    | Drilled      |
| <b>Existing Well ID:</b>               |            | <b>Drilling Start Dt:</b>  |              |
| <b>Date Received:</b>                  | 1984/12/14 | <b>Drilling End Dt:</b>    |              |
| <b>Type of Work:</b>                   | Chemistry  | <b>Pack Type:</b>          |              |
| <b>Plug Date:</b>                      |            | <b>Pack Grain Size:</b>    |              |
| <b>Plug Material Type:</b>             |            | <b>Pack Amount:</b>        |              |
| <b>Plug Mat Amount:</b>                |            | <b>Pack Units:</b>         |              |
| <b>Plugged Units:</b>                  |            | <b>Loc Verify Method:</b>  | Not Verified |
| <b>Well Use:</b>                       | Domestic   | <b>Dist Casing Ground:</b> |              |
| <b>Other Well Use:</b>                 |            | <b>Artesian Flow?:</b>     | FALSE        |
| <b>Total Depth Drill:</b>              | 100.00     | <b>Artesian Flow Rate:</b> |              |
| <b>Finish Well Depth:</b>              |            | <b>Gas Depth:</b>          |              |
| <b>Casing Material:</b>                |            | <b>Encounter Gas?:</b>     | FALSE        |
| <b>Casing OD:</b>                      | 0.00       | <b>Flow Ctrl Install?:</b> | FALSE        |
| <b>Casing Thickness:</b>               | 0.00       | <b>Recommended Rate:</b>   |              |
| <b>Casing Bottom:</b>                  | 0.00       | <b>Recom Intake Depth:</b> |              |
| <b>Liner Material:</b>                 |            | <b>Pump Installed?:</b>    | FALSE        |
| <b>Liner OD:</b>                       | 0.00       | <b>Pump Install Depth:</b> |              |
| <b>Liner Thickness:</b>                | 0.00       | <b>Pump Model:</b>         |              |
| <b>Liner Top:</b>                      | 0.00       | <b>Pump Horsepower:</b>    |              |
| <b>Liner Bottom:</b>                   | 0.00       | <b>Well Disinfected?:</b>  | FALSE        |
| <b>Perforation by:</b>                 |            | <b>Other Log:</b>          |              |
| <b>Screen Material:</b>                |            | <b>Divert Water Src:</b>   |              |
| <b>Screen Size OD:</b>                 | 0.00       | <b>Divert Water Amt:</b>   |              |
| <b>Screen Attachment:</b>              |            | <b>Diversion Dt/Time:</b>  |              |
| <b>Screen Top Fitting:</b>             |            | <b>Is Submitted?:</b>      | TRUE         |
| <b>Screen Bot Fitting:</b>             |            | <b>Is Validated?:</b>      | TRUE         |
| <b>Encounter Saline Water?:</b>        | FALSE      |                            |              |
| <b>Saline Water Depth:</b>             |            |                            |              |
| <b>Potability Sample Taken?:</b>       | FALSE      |                            |              |
| <b>Potable Sample Sent to AENV?:</b>   | FALSE      |                            |              |
| <b>Approval Holder Sign Date:</b>      |            |                            |              |
| <b>Drilling Report Given to Owner:</b> | FALSE      |                            |              |
| <b>Model Output Rating:</b>            |            |                            |              |
| <b>Remedial Action:</b>                |            |                            |              |
| <b>Flow Control Description:</b>       |            |                            |              |
| <b>Pump Type Installed:</b>            |            |                            |              |
| <b>Created by:</b>                     |            |                            |              |
| <b>Submitted by:</b>                   |            |                            |              |
| <b>Additional Comments:</b>            |            |                            |              |

| Map Key                          | Number of Records | Direction/<br>Distance (m) | Elev/Diff<br>(m)      | Site                                       | DB             |
|----------------------------------|-------------------|----------------------------|-----------------------|--|----------------|
| <b><u>Well Owners</u></b>        |                   |                            |                       |  |                |
| <b>Well Owner ID:</b>            |                   | 10482939                   |                       |  |                |
| <b>Owner Name:</b>               |                   | GUNDERSON, LORI            |                       |  |                |
| <b>PO Box:</b>                   |                   | 33                         |                       |  |                |
| <b>Address:</b>                  |                   | CLARESHOLM                 |                       |  |                |
| <b>City:</b>                     |                   |                            |                       |  |                |
| <b>Postal Code:</b>              |                   | TOL 0T0                    |                       |  |                |
| <b>Province:</b>                 |                   |                            |                       |  |                |
| <b>Country:</b>                  |                   |                            |                       |  |                |
| <b><u>Drillers</u></b>           |                   |                            |                       |  |                |
| <b>Driller ID:</b>               |                   | 2533726                    |                       |  |                |
| <b>Last Name:</b>                |                   | DRILLER                    |                       |  |                |
| <b>Middle Initial:</b>           |                   | NA                         |                       |  |                |
| <b>First Name:</b>               |                   | UNKNOWN                    |                       |  |                |
| <b>Journeyman No:</b>            |                   | 1                          |                       |  |                |
| <b>Is Active?:</b>               |                   | TRUE                       |                       |  |                |
| <b><u>Drilling Companies</u></b> |                   |                            |                       |  |                |
| <b>Starting Well ID:</b>         |                   | 1973500                    |                       |  |                |
| <b>Ending Well ID:</b>           |                   | 1973599                    |                       |  |                |
| <b>Last Well ID Used:</b>        |                   | 1973599                    |                       |  |                |
| <b>Company Name:</b>             |                   | UNKNOWN DRILLER            |                       |  |                |
| <b>Street Address:</b>           |                   | UNKNOWN                    |                       |  |                |
| <b>City:</b>                     |                   | UNKNOWN                    |                       |  |                |
| <b>Province:</b>                 |                   | AB                         |                       |  |                |
| <b>Country:</b>                  |                   | CA                         |                       |  |                |
| <b>Postal Code:</b>              |                   |                            |                       |  |                |
| <b>E-Mail:</b>                   |                   | gwinfo@gov.ab.ca           |                       |  |                |
| <b>Is Active?:</b>               |                   | FALSE                      |                       |  |                |
| <b><u>Geophysical Logs</u></b>   |                   |                            |                       |  |                |
| <b>Geophysical Log ID:</b>       |                   | 5470277                    |                       |  |                |
| <b>Log Type:</b>                 |                   | Electric                   |                       |  |                |
| <b>Log Taken?:</b>               |                   | FALSE                      |                       |  |                |
| <b>Sent to AENV?:</b>            |                   | FALSE                      |                       |  |                |
| <b><u>Geophysical Logs</u></b>   |                   |                            |                       |  |                |
| <b>Geophysical Log ID:</b>       |                   | 5873352                    |                       |  |                |
| <b>Log Type:</b>                 |                   | Gamma                      |                       |  |                |
| <b>Log Taken?:</b>               |                   | FALSE                      |                       |  |                |
| <b>Sent to AENV?:</b>            |                   | FALSE                      |                       |  |                |
| <b><u>Boreholes</u></b>          |                   |                            |                       |  |                |
| <b>Borehole ID:</b>              |                   | 571765                     |                       |  |                |
| <b>Diameter:</b>                 |                   | 0.000000                   |                       |  |                |
| <b>From:</b>                     |                   | 0.000000                   |                       |  |                |
| <b>To:</b>                       |                   | 100.000000                 |                       |  |                |
| <b>2</b>                         | 1 of 1            | <b>ESE/0.0</b>             | <b>1,033.0/ -2.00</b> | <b>Reclamation<br/>1-27-12-27-4<br/>AB</b> | <b>ESAR</b>    |
| <b>ESA ID:</b>                   | 2635573           |                            |                       | <b>10tm Point Coord:</b>                   | 100338,5539710 |
| <b>ESRD File:</b>                | 00136785          |                            |                       | <b>Extracted Dnld Dt:</b>                  | 2024-Oct-25    |

| Map Key   | Number of Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site | DB |
|---|-------------------|----------------------------|------------------|------|----|
| <b>File Classification:</b> REC   |                   |                            |                  |      |    |
| <b>Name:</b> Reclamation  |                   |                            |                  |      |    |
| <b>Operation Name:</b> Reclamation  |                   |                            |                  |      |    |
| <b>Map Link:</b> https://www.esar.alberta.ca/esarmap.aspx?esaid=2635573                         |                   |                            |                  |      |    |
| <b>ESAR Link:</b> http://www.esar.alberta.ca/esarmain.aspx?esaid=00136785                       |                   |                            |                  |      |    |
| <b>LLD:</b> 4;27;12;27;SE;1   |                   |                            |                  |      |    |
| <b>LINC:</b>  |                   |                            |                  |      |    |
| <b>A10tm Point Coordinates:</b> 100338,5539710  |                   |                            |                  |      |    |
| <b><u>Document Detail</u></b>   |                   |                            |                  |      |    |
| <b>Doc Desc:</b> Reclamation Application Documentation-CANHUNTER ET AL EASTMONT 1-27-12-27 WELL |                   |                            |                  |      |    |
| <b>Doc Date:</b> 7/27/2009  |                   |                            |                  |      |    |
| <b><u>Document Detail</u></b>   |                   |                            |                  |      |    |
| <b>Doc Desc:</b> Reclamation Certificate Documentation-CANHUNTER ET AL EASTMONT 1-27-12-27 WELL |                   |                            |                  |      |    |
| <b>Doc Date:</b> 7/27/2009  |                   |                            |                  |      |    |

| <u>3</u>                      | 1 of 1         | ESE/0.0 | 1,033.0 / -2.00 | UNKNOWN                    | FIS    |
|-------------------------------|----------------|---------|-----------------|----------------------------|--------|
| <b>AB</b>                     |                |         |                 |                            |        |
| <b>Incident No:</b>           | 20130692       |         |                 | <b>Concern Type 1:</b>     | H2S    |
| <b>Incident Type:</b>         | Complaint      |         |                 | <b>Concern Category 2:</b> | Odours |
| <b>Incident Date:</b>         | 03 Apr 2013    |         |                 | <b>Concern Type 2:</b>     | THC    |
| <b>Location:</b>              | 01-27-012-27W4 |         |                 | <b>Concern Category 3:</b> |        |
| <b>Licence No:</b>            |                |         |                 | <b>Concern Type 3:</b>     |        |
| <b>Licence Type:</b>          |                |         |                 | <b>Concern Category 4:</b> |        |
| <b>Notification Date:</b>     | 03 Apr 2013    |         |                 | <b>Concern Type 4:</b>     |        |
| <b>Complete Date:</b>         | 04 Apr 2013    |         |                 | <b>Concern Category 5:</b> |        |
| <b>Source:</b>                |                |         |                 | <b>Concern Type 5:</b>     |        |
| <b>Cause Category:</b>        | Unknown        |         |                 | <b>Subst Released 1:</b>   |        |
| <b>Cause Type:</b>            | Unknown        |         |                 | <b>Volume Released 1:</b>  |        |
| <b>Failure Type:</b>          |                |         |                 | <b>Volume Recovered 1:</b> |        |
| <b>Strike Area:</b>           | EASTM          |         |                 | <b>Volume Unit 1:</b>      |        |
| <b>Field Centre:</b>          | Midnapore      |         |                 | <b>Subst Released 2:</b>   |        |
| <b>Licencee ID:</b>           |                |         |                 | <b>Volume Released 2:</b>  |        |
| <b>Injury Count:</b>          |                |         |                 | <b>Volume Recovered 2:</b> |        |
| <b>Fatality Count:</b>        |                |         |                 | <b>Volume Unit 2:</b>      |        |
| <b>Jurisdiction:</b>          |                |         |                 | <b>Subst Released 3:</b>   |        |
| <b>Release Off Site:</b>      |                |         |                 | <b>Volume Released 3:</b>  |        |
| <b>Sensitive Area:</b>        |                |         |                 | <b>Volume Recovered 3:</b> |        |
| <b>Cleanup Date:</b>          |                |         |                 | <b>Volume Unit 3:</b>      |        |
| <b>Compliance:</b>            |                |         |                 | <b>Subst Released 4:</b>   |        |
| <b>Quarter:</b>               | 01             |         |                 | <b>Volume Released 4:</b>  |        |
| <b>LSD:</b>                   | 1              |         |                 | <b>Volume Recovered 4:</b> |        |
| <b>Section:</b>               | 27             |         |                 | <b>Volume Unit 4:</b>      |        |
| <b>Township:</b>              | 12             |         |                 | <b>Concern Category 6:</b> |        |
| <b>Range:</b>                 | 27             |         |                 | <b>Concern Type 6:</b>     |        |
| <b>Meridian:</b>              | 4              |         |                 | <b>Concern Category 7:</b> |        |
| <b>Pipeline Lic Ln No:</b>    |                |         |                 | <b>Concern Type 7:</b>     |        |
| <b>Pipe Damage Type:</b>      |                |         |                 | <b>Subst Released 5:</b>   |        |
| <b>Pipe Test Failure:</b>     |                |         |                 | <b>Volume Released 5:</b>  |        |
| <b>Pipe Grade:</b>            |                |         |                 | <b>Volume Recovered 5:</b> |        |
| <b>Pipe O/S Diam (mm):</b>    |                |         |                 | <b>Volume Unit 5:</b>      |        |
| <b>Pub Evacuato Count:</b>    |                |         |                 | <b>Subst Released 6:</b>   |        |
| <b>Public Afft:</b>           |                |         |                 | <b>Volume Released 6:</b>  |        |
| <b>Environment Afft:</b>      |                |         |                 | <b>Volume Recovered 6:</b> |        |
| <b>CSU File No:</b>           |                |         |                 | <b>Volume Unit 6:</b>      |        |
| <b>CIC Reference No:</b>      |                |         |                 | <b>Subst Released 7:</b>   |        |
| <b>Jurisdiction Category:</b> |                |         |                 | <b>Volume Released 7:</b>  |        |
| <b>Point Y SHP:</b>           | 50.021182      |         |                 | <b>Volume Recovered 7:</b> |        |

| Map Key   | Number of Records     | Direction/<br>Distance (m)     | Elev/Diff<br>(m) | Site           | DB |
|---|-----------------------|--------------------------------|------------------|----------------|----|
| Point X SHP:<br>Concern Category 1:<br>Area Afft:<br>Wildlife Livestk Afft:<br>Pipe Wall Thick (mm):<br>Pipeline Lic Segm ID:<br>Review Closure Type:<br>Review Closure Type Desc:<br>Concern Type: | -113.598749<br>Odours |                                |                  | Volume Unit 7: |    |
|   |                       | (1)Odours: H2S; (2)Odours: THC |                  |                |    |

| <u>4</u>        | 1 of 1                        | ESE/0.0 | 1,032.0 / -3.00 | CANADIAN HUNTER EXPLORATION LTD. | OGWW    |
|-----------------|-------------------------------|---------|-----------------|----------------------------------|---------|
| <b>AB</b>       |                               |         |                 |                                  |         |
| Licence ID:     | 175685                        |         |                 | Ground Elevation:                | 1034.60 |
| Field ID:       | EASTMONT                      |         |                 | Total Depth (ft):                | 0.00    |
| Area ID:        | EASTMONT                      |         |                 | LSD:                             | 1       |
| Rig ID:         |                               |         |                 | Section:                         | 27      |
| Rig Released:   |                               |         |                 | Township:                        | 12      |
| Well Name:      | CANHUNTER EASTMONT 1-27-12-27 |         |                 | Range:                           | 27      |
| Status Code:    |                               |         |                 | Meridian:                        | 4       |
| Well Status:    | cancelled licence             |         |                 | Latitude:                        |         |
| Class Code:     |                               |         |                 | Longitude:                       |         |
| Well Class:     | DEVELOPMENT WELL              |         |                 | Projected Zone:                  | SWIFT   |
| Well Type Code: |                               |         |                 | Quarter:                         |         |
| Well Type:      |                               |         |                 | Unit:                            |         |
| Status Date:    | 96/05/09                      |         |                 | Block:                           |         |
| Drill Date:     |                               |         |                 | Quad:                            |         |
| Licence Date:   | 95/02/03                      |         |                 | Map:                             |         |
| Well Year:      | 96                            |         |                 | Sheet:                           |         |
| Surveyor:       | ALL-WEST SURVEYS (1982) LTD.  |         |                 | Province:                        |         |
| Contractor:     |                               |         |                 |                                  |         |
| Deglong:        |                               |         |                 |                                  |         |
| Minlong:        |                               |         |                 |                                  |         |
| Seclong:        |                               |         |                 |                                  |         |
| Deglat:         |                               |         |                 |                                  |         |
| Minlat:         |                               |         |                 |                                  |         |
| Seclat:         |                               |         |                 |                                  |         |

| <u>5</u>                     | 1 of 2                             | NNE/0.0 | 1,036.0 / 1.00 | CNRL EASTM 9-27-12-27 | AERW        |
|------------------------------|------------------------------------|---------|----------------|-----------------------|-------------|
| <b>AB</b>                    |                                    |         |                |                       |             |
| Unique Well ID:              | 00/09-27-012-27W4/0                |         |                | Agent:                |             |
| Well Status:                 | 0211000000                         |         |                | Operator:             | OHE9        |
| Keylist:                     | 0124272709000                      |         |                | Field:                | 1322        |
| License No:                  | 0410733                            |         |                | Pool:                 | 0800560     |
| Licence Status:              | Issued                             |         |                | OS Area:              |             |
| Licence Date:                | 2009-06-01                         |         |                | OS Dep:               | 0000000     |
| Stat Date:                   | 2011-03-25                         |         |                | Max True Vert Depth:  | 2326.26     |
| Well Fluid:                  | GAS                                |         |                | Ground Elevation:     | 1038.9      |
| Well Mode:                   | PUMP                               |         |                | Surf Loc:             |             |
| Well Type:                   | N/A                                |         |                | EDCT:                 |             |
| Well Structure:              | N/A                                |         |                | Rating Ev:            |             |
| Scheme Type:                 |                                    |         |                | Op Surv Prov:         |             |
| Scheme Subt:                 |                                    |         |                | FD Date:              | 2009-08-09  |
| Bttm/Surface Hole:           | Bottom Holes                       |         |                | Total Dep:            | 2465.0      |
| Fluid Short Desc:            | GAS                                |         |                | KBE:                  |             |
| Mode Short Desc:             | PUMPING                            |         |                | Latitude:             | 50.028139   |
| Type Short Desc:             | Not Applicable                     |         |                | Longitude:            | -113.598827 |
| Update:                      |                                    |         |                |                       |             |
| Structure Short Description: | Not Applicable                     |         |                |                       |             |
| Licensee:                    | Canadian Natural Resources Limited |         |                |                       |             |

| Map Key | Number of Records | Direction/ Distance (m) | Elev/Diff (m) | Site | DB |
|---------|-------------------|-------------------------|---------------|------|----|
|---------|-------------------|-------------------------|---------------|------|----|

**Kelly Bushing Elevation Detail (s) (KBE)**

KBE: 1043.3

|          |        |         |                |                       |      |
|----------|--------|---------|----------------|-----------------------|------|
| <u>5</u> | 2 of 2 | NNE/0.0 | 1,036.0 / 1.00 | CNRL EASTM 9-27-12-27 | AERW |
|----------|--------|---------|----------------|-----------------------|------|

AB

|                                     |                                    |                             |             |
|-------------------------------------|------------------------------------|-----------------------------|-------------|
| <b>Unique Well ID:</b>              | 00/09-27-012-27W4/2                | <b>Agent:</b>               |             |
| <b>Well Status:</b>                 | 0000000500                         | <b>Operator:</b>            |             |
| <b>Keylist:</b>                     | 0124272709002                      | <b>Field:</b>               | 1322        |
| <b>License No:</b>                  | 0410733                            | <b>Pool:</b>                | 0800560     |
| <b>Licence Status:</b>              | Issued                             | <b>OS Area:</b>             |             |
| <b>Licence Date:</b>                | 2009-06-01                         | <b>OS Dep:</b>              | 0000000     |
| <b>Stat Date:</b>                   | 2009-12-03                         | <b>Max True Vert Depth:</b> | 2326.26     |
| <b>Well Fluid:</b>                  | N/A                                | <b>Ground Elevation:</b>    | 1038.9      |
| <b>Well Mode:</b>                   | N/A                                | <b>Surf Loc:</b>            |             |
| <b>Well Type:</b>                   | N/A                                | <b>EDCT:</b>                |             |
| <b>Well Structure:</b>              | COMMUN                             | <b>Rating Ev:</b>           |             |
| <b>Scheme Type:</b>                 |                                    | <b>Op Surv Prov:</b>        |             |
| <b>Scheme Subt:</b>                 |                                    | <b>FD Date:</b>             | 2009-08-09  |
| <b>Bttm/Surface Hole:</b>           | Bottom Holes                       | <b>Total Dep:</b>           | 2465.0      |
| <b>Fluid Short Desc:</b>            | Not Applicable                     | <b>KBE:</b>                 |             |
| <b>Mode Short Desc:</b>             | Not Applicable                     | <b>Latitude:</b>            | 50.028139   |
| <b>Type Short Desc:</b>             | Not Applicable                     | <b>Longitude:</b>           | -113.598827 |
| <b>Update:</b>                      |                                    |                             |             |
| <b>Structure Short Description:</b> | Not Applicable                     |                             |             |
| <b>Licensee:</b>                    | Canadian Natural Resources Limited |                             |             |

**Kelly Bushing Elevation Detail (s) (KBE)**

KBE: 1043.3

|          |        |        |                |                                  |      |
|----------|--------|--------|----------------|----------------------------------|------|
| <u>6</u> | 1 of 1 | NE/0.0 | 1,035.0 / 0.00 | ConocoPhillips Canada (BRC) Ltd. | OGWW |
|----------|--------|--------|----------------|----------------------------------|------|

AB

|                        |   |                          |             |
|------------------------|---|--------------------------|-------------|
| <b>Licence ID:</b>     | 410733                                  | <b>Ground Elevation:</b> | 1038.90     |
| <b>Field ID:</b>       | Eastmont                                | <b>Total Depth (ft):</b> | 2465.00     |
| <b>Area ID:</b>        | Eastmont                                | <b>LSD:</b>              | 9           |
| <b>Rig ID:</b>         | 106                                     | <b>Section:</b>          | 27          |
| <b>Rig Released:</b>   | Aug 09, 2009                            | <b>Township:</b>         | 12          |
| <b>Well Name:</b>      | COP BRC ET AL 100DD EASTM 9-27-12-27    | <b>Range:</b>            | 27          |
| <b>Status Code:</b>    |   | <b>Meridian:</b>         | 4           |
| <b>Well Status:</b>    | GAS                                     | <b>Latitude:</b>         |             |
| <b>Class Code:</b>     |   | <b>Longitude:</b>        |             |
| <b>Well Class:</b>     | DEVELOPMENT WELL                        | <b>Projected Zone:</b>   | Sunburst Sd |
| <b>Well Type Code:</b> |   | <b>Quarter:</b>          |             |
| <b>Well Type:</b>      | DIRECTIONAL                             | <b>Unit:</b>             |             |
| <b>Status Date:</b>    | Jan 04, 2010                            | <b>Block:</b>            |             |
| <b>Drill Date:</b>     | Aug 01, 2009                            | <b>Quad:</b>             |             |
| <b>Licence Date:</b>   | Jun 01, 2009                            | <b>Map:</b>              |             |
| <b>Well Year:</b>      |   | <b>Sheet:</b>            |             |
| <b>Surveyor:</b>       |   | <b>Province:</b>         |             |
| <b>Contractor:</b>     | Precision Drilling, a division of PDCLP |                          |             |
| <b>Deglong:</b>        |   |                          |             |
| <b>Minlong:</b>        |   |                          |             |
| <b>Seclong:</b>        |   |                          |             |
| <b>Deglat:</b>         |   |                          |             |

| Map Key                     | Number of Records | Direction/<br>Distance (m)   | Elev/Diff<br>(m) | Site                                      | DB          |
|-----------------------------|-------------------|--|------------------|---|-------------|
| <b>Minlat:</b>              |                   |  |                  |   |             |
| <b>Seclat:</b>              |                   |  |                  |   |             |
| <u>7</u>                    | 1 of 1            | S/0.0  | 1,032.0 / -3.00  | Town of Claresholm<br>4;27;12;22;NE<br>AB | <b>AUTH</b> |
| <b>Legal Land Location:</b> |                   | NE 22-012-27-W4  |                  |   |             |
| <b>Document Title:</b>      |                   | Document 00243085-00-00 CLARESHOLM REGIONAL RAW WATER SUPPLY LINE is held by Town of Claresholm, under the provisions of the Environmental Protection & Enhancement Act. This Approval is currently expired and renewable. |                  |   |             |
| <b>Document Url:</b>        |                   | https://aww.alberta.ca/pdf/00243085-00-00.pdf  |                  |   |             |

|  |        |                                    |                 |   |             |
|--|--------|------------------------------------|-----------------|---|-------------|
| <u>8</u>                                     | 1 of 2 | S/0.0                              | 1,030.0 / -5.00 | RANGER ET AL MONTGOMERY 10-22-12-27<br>AB | <b>AERW</b> |
| <b>Unique Well ID:</b>                       |        | 00/10-22-012-27W4/0                |                 | <b>Agent:</b>                             |             |
| <b>Well Status:</b>                          |        | 0211000000                         |                 | <b>Operator:</b> OHE9                     |             |
| <b>Keylist:</b>                              |        | 0124272210000                      |                 | <b>Field:</b> 1322                        |             |
| <b>License No:</b>                           |        | 0141798                            |                 | <b>Pool:</b> 0800560                      |             |
| <b>Licence Status:</b>                       |        | Issued                             |                 | <b>OS Area:</b>                           |             |
| <b>Licence Date:</b>                         |        | 1989-11-21                         |                 | <b>OS Dep:</b> 0000000                    |             |
| <b>Stat Date:</b>                            |        | 2018-01-01                         |                 | <b>Max True Vert Depth:</b> 0.0           |             |
| <b>Well Fluid:</b>                           |        | GAS                                |                 | <b>Ground Elevation:</b> 1031.6           |             |
| <b>Well Mode:</b>                            |        | PUMP                               |                 | <b>Surf Loc:</b>                          |             |
| <b>Well Type:</b>                            |        | N/A                                |                 | <b>EDCT:</b>                              |             |
| <b>Well Structure:</b>                       |        | N/A                                |                 | <b>Rating Ev:</b>                         |             |
| <b>Scheme Type:</b>                          |        |                                    |                 | <b>Op Surv Prov:</b>                      |             |
| <b>Scheme Subt:</b>                          |        |                                    |                 | <b>FD Date:</b> 1989-12-07                |             |
| <b>Bttm/Surface Hole:</b>                    |        | Bottom Holes                       |                 | <b>Total Dep:</b> 2330.0                  |             |
| <b>Fluid Short Desc:</b>                     |        | GAS                                |                 | <b>KBE:</b>                               |             |
| <b>Mode Short Desc:</b>                      |        | PUMPING                            |                 | <b>Latitude:</b> 50.013772                |             |
| <b>Type Short Desc:</b>                      |        | Not Applicable                     |                 | <b>Longitude:</b> -113.602131             |             |
| <b>Update:</b>                               |        |                                    |                 |   |             |
| <b>Structure Short Description:</b>          |        | Not Applicable                     |                 |   |             |
| <b>Licensee:</b>                             |        | Canadian Natural Resources Limited |                 |   |             |
| <b><u>Kelly Bushing Elevation Detail</u></b> |        |                                    |                 |   |             |
| <b><u>(s) (KBE)</u></b>                      |        |                                    |                 |   |             |
| <b>KBE:</b>                                  |        | 1036.9                             |                 |   |             |

|                        |        |             |                 |  |             |
|------------------------|--------|-------------|-----------------|--|-------------|
| <u>8</u>               | 2 of 2 | S/0.0       | 1,030.0 / -5.00 | Canadian Natural Resources Limited(OHE9)<br>AB | <b>AERW</b> |
| <b>Unique Well ID:</b> |        |             |                 | <b>Agent:</b>                                  |             |
| <b>Well Status:</b>    |        |             |                 | <b>Operator:</b>                               |             |
| <b>Keylist:</b>        |        |             |                 | <b>Field:</b>                                  |             |
| <b>License No:</b>     |        | 0141798     |                 | <b>Pool:</b>                                   |             |
| <b>Licence Status:</b> |        | Issued      |                 | <b>OS Area:</b>                                |             |
| <b>Licence Date:</b>   |        | 21 Nov 1989 |                 | <b>OS Dep:</b>                                 |             |
| <b>Stat Date:</b>      |        |             |                 | <b>Max True Vert Depth:</b>                    |             |
| <b>Well Fluid:</b>     |        |             |                 | <b>Ground Elevation:</b> 1031.6                |             |
| <b>Well Mode:</b>      |        |             |                 | <b>Surf Loc:</b> 10-22-012-27W4                |             |
| <b>Well Type:</b>      |        |             |                 | <b>EDCT:</b> BWL                               |             |
| <b>Well Structure:</b> |        |             |                 | <b>Rating Ev:</b> J                            |             |
| <b>Scheme Type:</b>    |        |             |                 | <b>Op Surv Prov:</b>                           |             |
| <b>Scheme Subt:</b>    |        |             |                 | <b>FD Date:</b>                                |             |

| Map Key                                      | Number of Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site              | DB          |
|--|-------------------|----------------------------|------------------|-------------------|-------------|
| <b>Btm/Surface Hole:</b>                     | Surface Holes     |                            |                  | <b>Total Dep:</b> |             |
| <b>Fluid Short Desc:</b>                     |                   |                            |                  | <b>KBE:</b>       |             |
| <b>Mode Short Desc:</b>                      |                   |                            |                  | <b>Latitude:</b>  | 50.013772   |
| <b>Type Short Desc:</b>                      |                   |                            |                  | <b>Longitude:</b> | -113.602131 |
| <b>Update:</b>                               |                   |                            |                  |                   |             |
| <b>Structure Short Description:</b>          |                   |                            |                  |                   |             |
| <b>Licensee:</b>                             |                   |                            |                  |                   |             |
| <b><u>Kelly Bushing Elevation Detail</u></b> |                   |                            |                  |                   |             |
| <b><u>(s) (KBE)</u></b>                      |                   |                            |                  |                   |             |
| <b>KBE:</b>                                  |                   | 1036.9                     |                  |                   |             |

|                        |                                  |       |                 |                          |           |
|------------------------|----------------------------------|-------|-----------------|--------------------------|-----------|
| <a href="#">9</a>      | 1 of 1                           | S/0.0 | 1,029.0 / -6.00 | MLC OIL & GAS LTD.       | OGWW      |
| <b>AB</b>              |                                  |       |                 |                          |           |
| <b>Licence ID:</b>     | 141798                           |       |                 | <b>Ground Elevation:</b> | 1031.60   |
| <b>Field ID:</b>       | UNDEFINED                        |       |                 | <b>Total Depth (ft):</b> | 2330.00   |
| <b>Area ID:</b>        | MONTGOMERY                       |       |                 | <b>LSD:</b>              | 10        |
| <b>Rig ID:</b>         | 2                                |       |                 | <b>Section:</b>          | 22        |
| <b>Rig Released:</b>   | 89/12/14                         |       |                 | <b>Township:</b>         | 12        |
| <b>Well Name:</b>      | MLC ET AL MONTGOMERY 10-22-12-27 |       |                 | <b>Range:</b>            | 27        |
| <b>Status Code:</b>    |                                  |       |                 | <b>Meridian:</b>         | 4         |
| <b>Well Status:</b>    | gas well                         |       |                 | <b>Latitude:</b>         |           |
| <b>Class Code:</b>     |                                  |       |                 | <b>Longitude:</b>        |           |
| <b>Well Class:</b>     | OUTPOST                          |       |                 | <b>Projected Zone:</b>   | MANNVILLE |
| <b>Well Type Code:</b> |                                  |       |                 | <b>Quarter:</b>          |           |
| <b>Well Type:</b>      |                                  |       |                 | <b>Unit:</b>             |           |
| <b>Status Date:</b>    | 89/12/30                         |       |                 | <b>Block:</b>            |           |
| <b>Drill Date:</b>     | 89/11/23                         |       |                 | <b>Quad:</b>             |           |
| <b>Licence Date:</b>   | 89/11/22                         |       |                 | <b>Map:</b>              |           |
| <b>Well Year:</b>      | 89                               |       |                 | <b>Sheet:</b>            |           |
| <b>Surveyor:</b>       | MIDWEST SURVEYS & SERVICES LTD.  |       |                 | <b>Province:</b>         |           |
| <b>Contractor:</b>     | PHELPS                           |       |                 |                          |           |
| <b>Deglong:</b>        |                                  |       |                 |                          |           |
| <b>Minlong:</b>        |                                  |       |                 |                          |           |
| <b>Seclong:</b>        |                                  |       |                 |                          |           |
| <b>Deglat:</b>         |                                  |       |                 |                          |           |
| <b>Minlat:</b>         |                                  |       |                 |                          |           |
| <b>Seclat:</b>         |                                  |       |                 |                          |           |

|                           |        |          |                 |                            |               |
|---------------------------|--------|----------|-----------------|----------------------------|---------------|
| <a href="#">10</a>        | 1 of 1 | WSW/33.5 | 1,032.1 / -2.95 | AB                         | WWIS          |
| <b>Well ID:</b>           | 294009 |          |                 | <b>Elevation Source:</b>   | Not Obtained  |
| <b>Driller ID:</b>        | 24256  |          |                 | <b>Method of Drilling:</b> |               |
| <b>Licence No:</b>        |        |          |                 | <b>GPS Obtained:</b>       | Not Verified  |
| <b>GIC Well ID:</b>       | 294009 |          |                 | <b>Boundary From:</b>      |               |
| <b>GOA Well Tag No:</b>   |        |          |                 | <b>Distance North:</b>     | 57.000000     |
| <b>Elevation (ft):</b>    |        |          |                 | <b>Distance South:</b>     |               |
| <b>Depth (ft):</b>        |        |          |                 | <b>Distance East:</b>      | 134.000000    |
| <b>Date Completed:</b>    |        |          |                 | <b>Distance West:</b>      |               |
| <b>Proposed Use:</b>      |        |          |                 | <b>Additional Desc:</b>    |               |
| <b>Lot:</b>               |        |          |                 | <b>Validated?:</b>         | TRUE          |
| <b>Block:</b>             |        |          |                 | <b>Submitted?:</b>         | TRUE          |
| <b>Plan:</b>              |        |          |                 | <b>Location Locked?:</b>   | TRUE          |
| <b>Type of Work:</b>      |        |          |                 | <b>Longitude:</b>          | -113.60736900 |
| <b>Flowing Well:</b>      |        |          |                 | <b>Latitude:</b>           | 50.01901200   |
| <b>Date Started:</b>      |        |          |                 | <b>LSD:</b>                | 14            |
| <b>Water Req Per Day:</b> |        |          |                 | <b>Section:</b>            | 22            |
| <b>Gas Present:</b>       |        |          |                 | <b>Township:</b>           | 12            |

| Map Key                                | Number of Records | Direction/<br>Distance (m)  | Elev/Diff<br>(m) | Site                       | DB                 |
|--|-------------------|---|------------------|----------------------------|--------------------|
| <b>Oil Present:</b>                    |                   |   |                  | <b>Range:</b>              | 27                 |
| <b>Flow Rate:</b>                      |                   |   |                  | <b>Meridian:</b>           | 4                  |
| <b>Drilling Company:</b>               |                   |   |                  | <b>DLS Coordinates:</b>    | 14-22-12-27-4      |
| <b>Owner Mailing Address:</b>          |                   |   |                  |                            |                    |
| <b>Driller Mailing Address:</b>        |                   |   |                  |                            |                    |
| <b><u>Well Reports</u></b>             |                   |   |                  |                            |                    |
| <b>Well Report ID:</b>                 | 294009            |   |                  | <b>Annular Seal Mat:</b>   | Driven & Bentonite |
| <b>Well Owner ID:</b>                  | 10611965          |   |                  | <b>Annular Seal from:</b>  | 36.00              |
| <b>Driller ID:</b>                     | 2533726           |   |                  | <b>Annular Seal to:</b>    | 39.00              |
| <b>Drill Company ID:</b>               | 24256             |   |                  | <b>Annular Seal Amt:</b>   |                    |
| <b>Drill Instance ID:</b>              | 8335574           |   |                  | <b>Annular Seal Units:</b> |                    |
| <b>Drill Comp Well ID:</b>             |                   |   |                  | <b>Drilling Method:</b>    | Rotary             |
| <b>Existing Well ID:</b>               |                   |   |                  | <b>Drilling Start Dt:</b>  | 2000/05/22         |
| <b>Date Received:</b>                  | 2000/06/13        |   |                  | <b>Drilling End Dt:</b>    | 2000/05/24         |
| <b>Type of Work:</b>                   | New Well          |   |                  | <b>Pack Type:</b>          | Artificial         |
| <b>Plug Date:</b>                      |                   |   |                  | <b>Pack Grain Size:</b>    | .125               |
| <b>Plug Material Type:</b>             |                   |   |                  | <b>Pack Amount:</b>        | 6.00               |
| <b>Plug Mat Amount:</b>                |                   |   |                  | <b>Pack Units:</b>         | Bags               |
| <b>Plugged Units:</b>                  |                   |   |                  | <b>Loc Verify Method:</b>  | Not Verified       |
| <b>Well Use:</b>                       | Domestic          |   |                  | <b>Dist Casing Ground:</b> |                    |
| <b>Other Well Use:</b>                 |                   |   |                  | <b>Artesian Flow?:</b>     | FALSE              |
| <b>Total Depth Drill:</b>              | 130.00            |   |                  | <b>Artesian Flow Rate:</b> |                    |
| <b>Finish Well Depth:</b>              |                   |   |                  | <b>Gas Depth:</b>          |                    |
| <b>Casing Material:</b>                | Steel             |   |                  | <b>Encounter Gas?:</b>     | FALSE              |
| <b>Casing OD:</b>                      | 6.62              |   |                  | <b>Flow Ctrl Install?:</b> | FALSE              |
| <b>Casing Thickness:</b>               | 0.19              |   |                  | <b>Recommended Rate:</b>   | 5.00               |
| <b>Casing Bottom:</b>                  | 39.00             |   |                  | <b>Recom Intake Depth:</b> | 120.00             |
| <b>Liner Material:</b>                 | Plastic           |   |                  | <b>Pump Installed?:</b>    | FALSE              |
| <b>Liner OD:</b>                       | 5.00              |   |                  | <b>Pump Install Depth:</b> |                    |
| <b>Liner Thickness:</b>                | 0.25              |   |                  | <b>Pump Model:</b>         |                    |
| <b>Liner Top:</b>                      | 10.00             |   |                  | <b>Pump Horsepower:</b>    |                    |
| <b>Liner Bottom:</b>                   | 130.00            |   |                  | <b>Well Disinfected?:</b>  | FALSE              |
| <b>Perforation by:</b>                 | Machine           |   |                  | <b>Other Log:</b>          |                    |
| <b>Screen Material:</b>                |                   |   |                  | <b>Divert Water Src:</b>   |                    |
| <b>Screen Size OD:</b>                 | 0.00              |   |                  | <b>Divert Water Amt:</b>   |                    |
| <b>Screen Attachment:</b>              |                   |   |                  | <b>Diversion Dt/Time:</b>  |                    |
| <b>Screen Top Fitting:</b>             |                   |   |                  | <b>Is Submitted?:</b>      | TRUE               |
| <b>Screen Bot Fitting:</b>             |                   |   |                  | <b>Is Validated?:</b>      | TRUE               |
| <b>Encounter Saline Water?:</b>        | FALSE             |   |                  |                            |                    |
| <b>Saline Water Depth:</b>             |                   |   |                  |                            |                    |
| <b>Potability Sample Taken?:</b>       | FALSE             |   |                  |                            |                    |
| <b>Potable Sample Sent to AENV?:</b>   | FALSE             |   |                  |                            |                    |
| <b>Approval Holder Sign Date:</b>      |                   |   |                  |                            |                    |
| <b>Drilling Report Given to Owner:</b> | FALSE             |   |                  |                            |                    |
| <b>Model Output Rating:</b>            |                   |   |                  |                            |                    |
| <b>Remedial Action:</b>                |                   |   |                  |                            |                    |
| <b>Flow Control Description:</b>       |                   |   |                  |                            |                    |
| <b>Pump Type Installed:</b>            |                   |   |                  |                            |                    |
| <b>Created by:</b>                     |                   |   |                  |                            |                    |
| <b>Submitted by:</b>                   |                   |   |                  |                            |                    |
| <b>Additional Comments:</b>            |                   | DRILLER REPORTS DISTANCE FROM TOP OF CASING TO GROUND LEVEL: 16". |                  |                            |                    |

**Well Owners**

**Well Owner ID:** 10611965  
**Owner Name:** ROTHE, ROB  
**PO Box:** 2650  
**Address:** CLARESHOLM  
**City:**  
**Postal Code:** T0L 0T0  
**Province:**  
**Country:**

| <i>Map Key</i>                   | <i>Number of Records</i> | <i>Direction/ Distance (m)</i> | <i>Elev/Diff (m)</i> | <i>Site</i> | <i>DB</i> |
|----------------------------------|--------------------------|--------------------------------|----------------------|-------------|-----------|
| <b><u>Drillers</u></b>           |                          |                                |                      |             |           |
| <b>Driller ID:</b>               |                          | 2533726                        |                      |             |           |
| <b>Last Name:</b>                |                          | DRILLER                        |                      |             |           |
| <b>Middle Initial:</b>           |                          | NA                             |                      |             |           |
| <b>First Name:</b>               |                          | UNKNOWN                        |                      |             |           |
| <b>Journeyman No:</b>            |                          | 1                              |                      |             |           |
| <b>Is Active?:</b>               |                          | TRUE                           |                      |             |           |
| <b><u>Drilling Companies</u></b> |                          |                                |                      |             |           |
| <b>Starting Well ID:</b>         |                          | 1765000                        |                      |             |           |
| <b>Ending Well ID:</b>           |                          | 1769999                        |                      |             |           |
| <b>Last Well ID Used:</b>        |                          | 1765014                        |                      |             |           |
| <b>Company Name:</b>             |                          | TRANS PROVINCIAL DRILLING LTD. |                      |             |           |
| <b>Street Address:</b>           |                          | BOX 758                        |                      |             |           |
| <b>City:</b>                     |                          | CLARESHOLM                     |                      |             |           |
| <b>Province:</b>                 |                          | AB                             |                      |             |           |
| <b>Country:</b>                  |                          | CA                             |                      |             |           |
| <b>Postal Code:</b>              |                          | TOL 0T0                        |                      |             |           |
| <b>E-Mail:</b>                   |                          | gwinfo@gov.ab.ca               |                      |             |           |
| <b>Is Active?:</b>               |                          | TRUE                           |                      |             |           |
| <b><u>Perforations</u></b>       |                          |                                |                      |             |           |
| <b>Perforation ID:</b>           |                          | 4179151                        |                      |             |           |
| <b>From:</b>                     |                          | 70.000000                      |                      |             |           |
| <b>To:</b>                       |                          | 130.000000                     |                      |             |           |
| <b>Diameter:</b>                 |                          | 0.020000                       |                      |             |           |
| <b>Interval:</b>                 |                          | 3.000000                       |                      |             |           |
| <b><u>Geophysical Logs</u></b>   |                          |                                |                      |             |           |
| <b>Geophysical Log ID:</b>       |                          | 5894091                        |                      |             |           |
| <b>Log Type:</b>                 |                          | Gamma                          |                      |             |           |
| <b>Log Taken?:</b>               |                          | FALSE                          |                      |             |           |
| <b>Sent to AENV?:</b>            |                          | FALSE                          |                      |             |           |
| <b><u>Geophysical Logs</u></b>   |                          |                                |                      |             |           |
| <b>Geophysical Log ID:</b>       |                          | 5491016                        |                      |             |           |
| <b>Log Type:</b>                 |                          | Electric                       |                      |             |           |
| <b>Log Taken?:</b>               |                          | FALSE                          |                      |             |           |
| <b>Sent to AENV?:</b>            |                          | FALSE                          |                      |             |           |
| <b><u>Boreholes</u></b>          |                          |                                |                      |             |           |
| <b>Borehole ID:</b>              |                          | 592865                         |                      |             |           |
| <b>Diameter:</b>                 |                          | 0.000000                       |                      |             |           |
| <b>From:</b>                     |                          | 0.000000                       |                      |             |           |
| <b>To:</b>                       |                          | 130.000000                     |                      |             |           |
| <b><u>Lithologies</u></b>        |                          |                                |                      |             |           |
| <b>Depth:</b>                    |                          | 85.000000                      |                      |             |           |
| <b>Water Bearing:</b>            |                          | FALSE                          |                      |             |           |
| <b>Colour:</b>                   |                          |                                |                      |             |           |
| <b>Description:</b>              |                          | Shattered                      |                      |             |           |
| <b>Material:</b>                 |                          | Sandstone                      |                      |             |           |

| <i>Map Key</i>                   | <i>Number of Records</i> | <i>Direction/ Distance (m)</i> | <i>Elev/Diff (m)</i> | <i>Site</i> | <i>DB</i> |
|----------------------------------|--------------------------|--------------------------------|----------------------|-------------|-----------|
| <b><u>Lithologies</u></b>        |                          |                                |                      |             |           |
| <b>Depth:</b>                    |                          |                                | 60.000000            |             |           |
| <b>Water Bearing:</b>            |                          |                                | FALSE                |             |           |
| <b>Colour:</b>                   |                          |                                |                      |             |           |
| <b>Description:</b>              |                          |                                |                      |             |           |
| <b>Material:</b>                 |                          |                                | Clay                 |             |           |
| <b><u>Lithologies</u></b>        |                          |                                |                      |             |           |
| <b>Depth:</b>                    |                          |                                | 130.000000           |             |           |
| <b>Water Bearing:</b>            |                          |                                | FALSE                |             |           |
| <b>Colour:</b>                   |                          |                                |                      |             |           |
| <b>Description:</b>              |                          |                                |                      |             |           |
| <b>Material:</b>                 |                          |                                | Shale & Sandstone    |             |           |
| <b><u>Lithologies</u></b>        |                          |                                |                      |             |           |
| <b>Depth:</b>                    |                          |                                | 82.000000            |             |           |
| <b>Water Bearing:</b>            |                          |                                | FALSE                |             |           |
| <b>Colour:</b>                   |                          |                                |                      |             |           |
| <b>Description:</b>              |                          |                                |                      |             |           |
| <b>Material:</b>                 |                          |                                | Shale                |             |           |
| <b><u>Lithologies</u></b>        |                          |                                |                      |             |           |
| <b>Depth:</b>                    |                          |                                | 18.000000            |             |           |
| <b>Water Bearing:</b>            |                          |                                | FALSE                |             |           |
| <b>Colour:</b>                   |                          |                                |                      |             |           |
| <b>Description:</b>              |                          |                                | Sandy                |             |           |
| <b>Material:</b>                 |                          |                                | Clay & Rocks         |             |           |
| <b><u>Pump Tests</u></b>         |                          |                                |                      |             |           |
| <b>Pump Test ID:</b>             |                          |                                | 10300459             |             |           |
| <b>Test Date:</b>                |                          |                                | 2000/05/25           |             |           |
| <b>Start Time:</b>               |                          |                                | 1900/01/12           |             |           |
| <b>Taken from Top of Casing:</b> |                          |                                | FALSE                |             |           |
| <b>Static Water Level:</b>       |                          |                                | 17.30                |             |           |
| <b>End Water Level:</b>          |                          |                                | 58.00                |             |           |
| <b>Water Removal Type:</b>       |                          |                                | Pump                 |             |           |
| <b>Water Removal Rate:</b>       |                          |                                | 5.00                 |             |           |
| <b>Removal Depth from:</b>       |                          |                                | 120.00               |             |           |
| <b>Reason for Short Test:</b>    |                          |                                |                      |             |           |
| <b><u>Pump Test Items</u></b>    |                          |                                |                      |             |           |
| <b>Pump Test Item ID:</b>        |                          |                                | 7917280              |             |           |
| <b>Minutes:</b>                  |                          |                                | 30.00                |             |           |
| <b>Pumping Depth:</b>            |                          |                                | 38.000000            |             |           |
| <b>Recovery Depth:</b>           |                          |                                | 23.000000            |             |           |
| <b><u>Pump Test Items</u></b>    |                          |                                |                      |             |           |
| <b>Pump Test Item ID:</b>        |                          |                                | 7917271              |             |           |
| <b>Minutes:</b>                  |                          |                                | 7.00                 |             |           |
| <b>Pumping Depth:</b>            |                          |                                | 28.500000            |             |           |
| <b>Recovery Depth:</b>           |                          |                                | 36.330000            |             |           |

| <b>Map Key</b>                | <b>Number of Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|-------------------------------|--------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b><u>Pump Test Items</u></b> |                          |                                    |                          |             |           |
| <b>Pump Test Item ID:</b>     |                          |                                    | 7917279                  |             |           |
| <b>Minutes:</b>               |                          |                                    | 25.00                    |             |           |
| <b>Pumping Depth:</b>         |                          |                                    | 37.080000                |             |           |
| <b>Recovery Depth:</b>        |                          |                                    | 24.500000                |             |           |
| <b><u>Pump Test Items</u></b> |                          |                                    |                          |             |           |
| <b>Pump Test Item ID:</b>     |                          |                                    | 7917266                  |             |           |
| <b>Minutes:</b>               |                          |                                    | 2.00                     |             |           |
| <b>Pumping Depth:</b>         |                          |                                    | 23.000000                |             |           |
| <b>Recovery Depth:</b>        |                          |                                    | 50.420000                |             |           |
| <b><u>Pump Test Items</u></b> |                          |                                    |                          |             |           |
| <b>Pump Test Item ID:</b>     |                          |                                    | 7917272                  |             |           |
| <b>Minutes:</b>               |                          |                                    | 8.00                     |             |           |
| <b>Pumping Depth:</b>         |                          |                                    | 29.250000                |             |           |
| <b>Recovery Depth:</b>        |                          |                                    | 35.000000                |             |           |
| <b><u>Pump Test Items</u></b> |                          |                                    |                          |             |           |
| <b>Pump Test Item ID:</b>     |                          |                                    | 7917273                  |             |           |
| <b>Minutes:</b>               |                          |                                    | 9.00                     |             |           |
| <b>Pumping Depth:</b>         |                          |                                    | 30.000000                |             |           |
| <b>Recovery Depth:</b>        |                          |                                    | 34.000000                |             |           |
| <b><u>Pump Test Items</u></b> |                          |                                    |                          |             |           |
| <b>Pump Test Item ID:</b>     |                          |                                    | 7917276                  |             |           |
| <b>Minutes:</b>               |                          |                                    | 14.00                    |             |           |
| <b>Pumping Depth:</b>         |                          |                                    | 32.670000                |             |           |
| <b>Recovery Depth:</b>        |                          |                                    | 30.420000                |             |           |
| <b><u>Pump Test Items</u></b> |                          |                                    |                          |             |           |
| <b>Pump Test Item ID:</b>     |                          |                                    | 7917283                  |             |           |
| <b>Minutes:</b>               |                          |                                    | 50.00                    |             |           |
| <b>Pumping Depth:</b>         |                          |                                    | 40.500000                |             |           |
| <b>Recovery Depth:</b>        |                          |                                    | 20.250000                |             |           |
| <b><u>Pump Test Items</u></b> |                          |                                    |                          |             |           |
| <b>Pump Test Item ID:</b>     |                          |                                    | 7917288                  |             |           |
| <b>Minutes:</b>               |                          |                                    | 120.00                   |             |           |
| <b>Pumping Depth:</b>         |                          |                                    | 58.500000                |             |           |
| <b>Recovery Depth:</b>        |                          |                                    | 17.670000                |             |           |
| <b><u>Pump Test Items</u></b> |                          |                                    |                          |             |           |
| <b>Pump Test Item ID:</b>     |                          |                                    | 7917265                  |             |           |
| <b>Minutes:</b>               |                          |                                    | 1.00                     |             |           |
| <b>Pumping Depth:</b>         |                          |                                    | 20.670000                |             |           |
| <b>Recovery Depth:</b>        |                          |                                    | 54.500000                |             |           |
| <b><u>Pump Test Items</u></b> |                          |                                    |                          |             |           |

| <b>Map Key</b>                | <b>Number of Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b> | <b>DB</b> |
|-------------------------------|--------------------------|------------------------------------|--------------------------|-------------|-----------|
| <b>Pump Test Item ID:</b>     |                          | 7917268                            |                          |             |           |
| <b>Minutes:</b>               |                          | 4.00                               |                          |             |           |
| <b>Pumping Depth:</b>         |                          | 25.750000                          |                          |             |           |
| <b>Recovery Depth:</b>        |                          | 43.750000                          |                          |             |           |
| <b><u>Pump Test Items</u></b> |                          |                                    |                          |             |           |
| <b>Pump Test Item ID:</b>     |                          | 7917270                            |                          |             |           |
| <b>Minutes:</b>               |                          | 6.00                               |                          |             |           |
| <b>Pumping Depth:</b>         |                          | 27.670000                          |                          |             |           |
| <b>Recovery Depth:</b>        |                          | 39.250000                          |                          |             |           |
| <b><u>Pump Test Items</u></b> |                          |                                    |                          |             |           |
| <b>Pump Test Item ID:</b>     |                          | 7917282                            |                          |             |           |
| <b>Minutes:</b>               |                          | 40.00                              |                          |             |           |
| <b>Pumping Depth:</b>         |                          | 39.580000                          |                          |             |           |
| <b>Recovery Depth:</b>        |                          | 21.170000                          |                          |             |           |
| <b><u>Pump Test Items</u></b> |                          |                                    |                          |             |           |
| <b>Pump Test Item ID:</b>     |                          | 7917275                            |                          |             |           |
| <b>Minutes:</b>               |                          | 12.00                              |                          |             |           |
| <b>Pumping Depth:</b>         |                          | 31.670000                          |                          |             |           |
| <b>Recovery Depth:</b>        |                          | 31.670000                          |                          |             |           |
| <b><u>Pump Test Items</u></b> |                          |                                    |                          |             |           |
| <b>Pump Test Item ID:</b>     |                          | 7917278                            |                          |             |           |
| <b>Minutes:</b>               |                          | 20.00                              |                          |             |           |
| <b>Pumping Depth:</b>         |                          | 35.500000                          |                          |             |           |
| <b>Recovery Depth:</b>        |                          | 26.670000                          |                          |             |           |
| <b><u>Pump Test Items</u></b> |                          |                                    |                          |             |           |
| <b>Pump Test Item ID:</b>     |                          | 7917284                            |                          |             |           |
| <b>Minutes:</b>               |                          | 60.00                              |                          |             |           |
| <b>Pumping Depth:</b>         |                          | 41.500000                          |                          |             |           |
| <b>Recovery Depth:</b>        |                          | 19.670000                          |                          |             |           |
| <b><u>Pump Test Items</u></b> |                          |                                    |                          |             |           |
| <b>Pump Test Item ID:</b>     |                          | 7917264                            |                          |             |           |
| <b>Minutes:</b>               |                          | 0.00                               |                          |             |           |
| <b>Pumping Depth:</b>         |                          | 17.250000                          |                          |             |           |
| <b>Recovery Depth:</b>        |                          | 58.500000                          |                          |             |           |
| <b><u>Pump Test Items</u></b> |                          |                                    |                          |             |           |
| <b>Pump Test Item ID:</b>     |                          | 7917267                            |                          |             |           |
| <b>Minutes:</b>               |                          | 3.00                               |                          |             |           |
| <b>Pumping Depth:</b>         |                          | 24.500000                          |                          |             |           |
| <b>Recovery Depth:</b>        |                          | 47.000000                          |                          |             |           |
| <b><u>Pump Test Items</u></b> |                          |                                    |                          |             |           |
| <b>Pump Test Item ID:</b>     |                          | 7917269                            |                          |             |           |
| <b>Minutes:</b>               |                          | 5.00                               |                          |             |           |
| <b>Pumping Depth:</b>         |                          | 26.670000                          |                          |             |           |

| Map Key                       | Number of Records | Direction/<br>Distance (m) | Elev/Diff<br>(m) | Site | DB |
|-------------------------------|-------------------|----------------------------|------------------|------|----|
| <b>Recovery Depth:</b>        |                   | 41.330000                  |                  |      |    |
| <b><u>Pump Test Items</u></b> |                   |                            |                  |      |    |
| <b>Pump Test Item ID:</b>     |                   | 7917274                    |                  |      |    |
| <b>Minutes:</b>               |                   | 10.00                      |                  |      |    |
| <b>Pumping Depth:</b>         |                   | 30.500000                  |                  |      |    |
| <b>Recovery Depth:</b>        |                   | 33.080000                  |                  |      |    |
| <b><u>Pump Test Items</u></b> |                   |                            |                  |      |    |
| <b>Pump Test Item ID:</b>     |                   | 7917287                    |                  |      |    |
| <b>Minutes:</b>               |                   | 105.00                     |                  |      |    |
| <b>Pumping Depth:</b>         |                   | 53.250000                  |                  |      |    |
| <b>Recovery Depth:</b>        |                   | 18.330000                  |                  |      |    |
| <b><u>Pump Test Items</u></b> |                   |                            |                  |      |    |
| <b>Pump Test Item ID:</b>     |                   | 7917277                    |                  |      |    |
| <b>Minutes:</b>               |                   | 16.00                      |                  |      |    |
| <b>Pumping Depth:</b>         |                   | 33.580000                  |                  |      |    |
| <b>Recovery Depth:</b>        |                   | 29.080000                  |                  |      |    |
| <b><u>Pump Test Items</u></b> |                   |                            |                  |      |    |
| <b>Pump Test Item ID:</b>     |                   | 7917286                    |                  |      |    |
| <b>Minutes:</b>               |                   | 90.00                      |                  |      |    |
| <b>Pumping Depth:</b>         |                   | 42.750000                  |                  |      |    |
| <b>Recovery Depth:</b>        |                   | 18.670000                  |                  |      |    |
| <b><u>Pump Test Items</u></b> |                   |                            |                  |      |    |
| <b>Pump Test Item ID:</b>     |                   | 7917281                    |                  |      |    |
| <b>Minutes:</b>               |                   | 35.00                      |                  |      |    |
| <b>Pumping Depth:</b>         |                   | 39.000000                  |                  |      |    |
| <b>Recovery Depth:</b>        |                   | 21.750000                  |                  |      |    |
| <b><u>Pump Test Items</u></b> |                   |                            |                  |      |    |
| <b>Pump Test Item ID:</b>     |                   | 7917285                    |                  |      |    |
| <b>Minutes:</b>               |                   | 75.00                      |                  |      |    |
| <b>Pumping Depth:</b>         |                   | 42.170000                  |                  |      |    |
| <b>Recovery Depth:</b>        |                   | 19.250000                  |                  |      |    |

11

1 of 3

W/46.7

1,035.1 / 0.12

CNRL EASTM 6-27-12-27

AERW

AB

**Unique Well ID:** 00/06-27-012-27W4/2  
**Well Status:** 0000000500  
**Keylist:** 0124272706002  
**License No:** 0179069  
**Licence Status:** Amended  
**Licence Date:** 1995-07-05  
**Stat Date:** 1998-05-01  
**Well Fluid:** N/A  
**Well Mode:** N/A  
**Well Type:** N/A  
**Well Structure:** COMMUN  
**Scheme Type:**

**Agent:**  
**Operator:**  
**Field:** 1322  
**Pool:** 0800560  
**OS Area:**  
**OS Dep:** 0000000  
**Max True Vert Depth:** 0.0  
**Ground Elevation:** 1034.7  
**Surf Loc:**  
**EDCT:**  
**Rating Ev:**  
**Op Surv Prov:**

| Map Key  | Number of Records                  | Direction/ Distance (m) | Elev/Diff (m) | Site              | DB          |
|--|------------------------------------|-------------------------|---------------|-------------------|-------------|
| <b>Scheme Subt:</b>                                    |                                    |                         |               | <b>FD Date:</b>   | 1995-08-12  |
| <b>Bttm/Surface Hole:</b>                              | Bottom Holes                       |                         |               | <b>Total Dep:</b> | 2355.0      |
| <b>Fluid Short Desc:</b>                               | Not Applicable                     |                         |               | <b>KBE:</b>       |             |
| <b>Mode Short Desc:</b>                                | Not Applicable                     |                         |               | <b>Latitude:</b>  | 50.02309    |
| <b>Type Short Desc:</b>                                | Not Applicable                     |                         |               | <b>Longitude:</b> | -113.607598 |
| <b>Update:</b>   |                                    |                         |               |                   |             |
| <b>Structure Short Description:</b>                    | Not Applicable                     |                         |               |                   |             |
| <b>Licensee:</b>                                       | Canadian Natural Resources Limited |                         |               |                   |             |
| <b><u>Kelly Bushing Elevation Detail (s) (KBE)</u></b> |                                    |                         |               |                   |             |
| <b>KBE:</b>  | 1039.6                             |                         |               |                   |             |

|  |                                    |        |                |                             |             |
|--|------------------------------------|--------|----------------|-----------------------------|-------------|
| <u>11</u>  | 2 of 3                             | W/46.7 | 1,035.1 / 0.12 | CNRL EASTM 6-27-12-27       | AERW        |
| <b>AB</b>  |                                    |        |                |                             |             |
| <b>Unique Well ID:</b>                                 | 00/06-27-012-27W4/0                |        |                | <b>Agent:</b>               |             |
| <b>Well Status:</b>                                    | 0211000000                         |        |                | <b>Operator:</b>            | OHE9        |
| <b>Keylist:</b>  | 0124272706000                      |        |                | <b>Field:</b>               | 1322        |
| <b>License No:</b>                                     | 0179069                            |        |                | <b>Pool:</b>                | 0800560     |
| <b>Licence Status:</b>                                 | Amended                            |        |                | <b>OS Area:</b>             |             |
| <b>Licence Date:</b>                                   | 1995-07-05                         |        |                | <b>OS Dep:</b>              | 0000000     |
| <b>Stat Date:</b>                                      | 2007-08-01                         |        |                | <b>Max True Vert Depth:</b> | 0.0         |
| <b>Well Fluid:</b>                                     | GAS                                |        |                | <b>Ground Elevation:</b>    | 1034.7      |
| <b>Well Mode:</b>                                      | PUMP                               |        |                | <b>Surf Loc:</b>            |             |
| <b>Well Type:</b>                                      | N/A                                |        |                | <b>EDCT:</b>                |             |
| <b>Well Structure:</b>                                 | N/A                                |        |                | <b>Rating Ev:</b>           |             |
| <b>Scheme Type:</b>                                    |                                    |        |                | <b>Op Surv Prov:</b>        |             |
| <b>Scheme Subt:</b>                                    |                                    |        |                | <b>FD Date:</b>             | 1995-08-12  |
| <b>Bttm/Surface Hole:</b>                              | Bottom Holes                       |        |                | <b>Total Dep:</b>           | 2355.0      |
| <b>Fluid Short Desc:</b>                               | GAS                                |        |                | <b>KBE:</b>                 |             |
| <b>Mode Short Desc:</b>                                | PUMPING                            |        |                | <b>Latitude:</b>            | 50.02309    |
| <b>Type Short Desc:</b>                                | Not Applicable                     |        |                | <b>Longitude:</b>           | -113.607598 |
| <b>Update:</b>   |                                    |        |                |                             |             |
| <b>Structure Short Description:</b>                    | Not Applicable                     |        |                |                             |             |
| <b>Licensee:</b>                                       | Canadian Natural Resources Limited |        |                |                             |             |
| <b><u>Kelly Bushing Elevation Detail (s) (KBE)</u></b> |                                    |        |                |                             |             |
| <b>KBE:</b>  | 1039.6                             |        |                |                             |             |

|                           |               |        |                |  |                |
|---------------------------|---------------|--------|----------------|--|----------------|
| <u>11</u>                 | 3 of 3        | W/46.7 | 1,035.1 / 0.12 | Canadian Natural Resources Limited(OHE9) | AERW           |
| <b>AB</b>                 |               |        |                |  |                |
| <b>Unique Well ID:</b>    |               |        |                | <b>Agent:</b>                            |                |
| <b>Well Status:</b>       |               |        |                | <b>Operator:</b>                         |                |
| <b>Keylist:</b>           |               |        |                | <b>Field:</b>                            |                |
| <b>License No:</b>        | 0179069       |        |                | <b>Pool:</b>                             |                |
| <b>Licence Status:</b>    | Amended       |        |                | <b>OS Area:</b>                          |                |
| <b>Licence Date:</b>      | 25 Jun 1996   |        |                | <b>OS Dep:</b>                           |                |
| <b>Stat Date:</b>         |               |        |                | <b>Max True Vert Depth:</b>              |                |
| <b>Well Fluid:</b>        |               |        |                | <b>Ground Elevation:</b>                 | 1034.7         |
| <b>Well Mode:</b>         |               |        |                | <b>Surf Loc:</b>                         | 06-27-012-27W4 |
| <b>Well Type:</b>         |               |        |                | <b>EDCT:</b>                             | BWL            |
| <b>Well Structure:</b>    |               |        |                | <b>Rating Ev:</b>                        | J              |
| <b>Scheme Type:</b>       |               |        |                | <b>Op Surv Prov:</b>                     |                |
| <b>Scheme Subt:</b>       |               |        |                | <b>FD Date:</b>                          |                |
| <b>Bttm/Surface Hole:</b> | Surface Holes |        |                | <b>Total Dep:</b>                        |                |
| <b>Fluid Short Desc:</b>  |               |        |                | <b>KBE:</b>                              |                |

| Map Key  | Number of Records | Direction/ Distance (m) | Elev/Diff (m) | Site              | DB          |
|--|-------------------|-------------------------|---------------|-------------------|-------------|
| <b>Mode Short Desc:</b>                                    |                   |                         |               | <b>Latitude:</b>  | 50.02309    |
| <b>Type Short Desc:</b>                                    |                   |                         |               | <b>Longitude:</b> | -113.607598 |
| <b>Update:</b>   |                   |                         |               |                   |             |
| <b>Structure Short Description:</b>                        |                   |                         |               |                   |             |
| <b>Licensee:</b>   |                   |                         |               |                   |             |
| <br><b><u>Kelly Bushing Elevation Detail (s) (KBE)</u></b> |                   |                         |               |                   |             |
| <b>KBE:</b>  |                   | 1039.6                  |               |                   |             |

|                                     |               |         |                |  |      |
|-------------------------------------|---------------|---------|----------------|--|------|
| <u>12</u>                           | 1 of 1        | NW/47.0 | 1,039.0 / 4.00 | Canadian Natural Resources Limited(OHE9) | AERW |
| <b>AB</b>                           |               |         |                |  |      |
| <b>Unique Well ID:</b>              |               |         |                | <b>Agent:</b>                            |      |
| <b>Well Status:</b>                 |               |         |                | <b>Operator:</b>                         |      |
| <b>Keylist:</b>                     |               |         |                | <b>Field:</b>                            |      |
| <b>License No:</b>                  | 0410733       |         |                | <b>Pool:</b>                             |      |
| <b>Licence Status:</b>              | Issued        |         |                | <b>OS Area:</b>                          |      |
| <b>Licence Date:</b>                | 01 Jun 2009   |         |                | <b>OS Dep:</b>                           |      |
| <b>Stat Date:</b>                   |               |         |                | <b>Max True Vert Depth:</b>              |      |
| <b>Well Fluid:</b>                  |               |         |                | <b>Ground Elevation:</b>                 |      |
| <b>Well Mode:</b>                   |               |         |                | 1038.9                                   |      |
| <b>Well Type:</b>                   |               |         |                | <b>Surf Loc:</b>                         |      |
| <b>Well Structure:</b>              |               |         |                | 11-27-012-27W4                           |      |
| <b>Scheme Type:</b>                 |               |         |                | <b>EDCT:</b>                             |      |
| <b>Scheme Subt:</b>                 |               |         |                | 140                                      |      |
| <b>Bttm/Surface Hole:</b>           | Surface Holes |         |                | <b>Rating Ev:</b>                        |      |
| <b>Fluid Short Desc:</b>            |               |         |                | J  |      |
| <b>Mode Short Desc:</b>             |               |         |                | <b>Op Surv Prov:</b>                     |      |
| <b>Type Short Desc:</b>             |               |         |                | <b>FD Date:</b>                          |      |
| <b>Update:</b>                      |               |         |                | <b>Total Dep:</b>                        |      |
| <b>Structure Short Description:</b> |               |         |                | <b>KBE:</b>                              |      |
| <b>Licensee:</b>                    |               |         |                | <b>Latitude:</b>                         |      |
|                                     |               |         |                | 50.029957                                |      |
|                                     |               |         |                | <b>Longitude:</b>                        |      |
|                                     |               |         |                | -113.607676                              |      |

|  |  |        |  |  |  |
|--|--|--------|--|--|--|
| <b><u>Kelly Bushing Elevation Detail (s) (KBE)</u></b> |  |        |  |  |  |
| <b>KBE:</b>  |  | 1043.3 |  |  |  |

|                           |                         |          |                 |  |                       |
|---------------------------|-------------------------|----------|-----------------|--|-----------------------|
| <u>13</u>                 | 1 of 1                  | SE/109.7 | 1,031.0 / -4.00 | WILLOW CREEK AUX. HOSPITAL & NURSING HOME<br>4221-8 STR. W<br>CLARESHOLM TOWN (P) AB | FST                   |
| <b>Site No:</b>           | 5703                    |          |                 | <b>Dt Form Rcvd:</b>   | 1999/07/22            |
| <b>Tank No:</b>           | 1                       |          |                 | <b>Date Removed:</b>   | 200106                |
| <b>No of Tanks:</b>       |                         |          |                 | <b>Removal Reason:</b>   | No Longer Required    |
| <b>Tank Type:</b>         | Underground             |          |                 | <b>Located 200m:</b>   | NO                    |
| <b>Tank Status:</b>       |                         |          |                 | <b>Located 500m:</b>   | NO                    |
| <b>Site Status:</b>       |                         |          |                 | <b>DLS Coord:</b>  |                       |
| <b>Date Last Used:</b>    |                         |          |                 | <b>Lot:</b>  | 1                     |
| <b>UST/AST:</b>           |                         |          |                 | <b>Block:</b>  | 1                     |
| <b>Contents:</b>          | Diesel                  |          |                 | <b>Plan:</b>   | 9210773               |
| <b>Other Contents:</b>    |                         |          |                 | <b>Municipality:</b>   |                       |
| <b>Capacity:</b>          | 2,500 litres (550 gal.) |          |                 | <b>Postal:</b>   |                       |
| <b>Other Capacity:</b>    |                         |          |                 | <b>Facility 1:</b>   |                       |
| <b>UST Secondary:</b>     | Unknown                 |          |                 | <b>Facility 2:</b>   |                       |
| <b>AST Secondary:</b>     |                         |          |                 | <b>Facility 3:</b>   |                       |
| <b>Overfill Preventn:</b> | Liquid - Tight Fill Box |          |                 | <b>Facility 4:</b>   | Provincial Government |
| <b>Class:</b>             |                         |          |                 |  |                       |
| <b>LLD:</b>               |                         |          |                 |  |                       |

| Map Key                          | Number of Records                   | Direction/<br>Distance (m)   | Elev/Diff<br>(m) | Site   | DB   |
|----------------------------------|-------------------------------------|--|------------------|--|------|
| <b>Spill Containment:</b>        |                                     | Liquid - Tight Fill Box; Liquid / Vapour Tight Couplings On Fill Pipes |                  |  |      |
| <b>Owner Address:</b>            |                                     |  |                  |  |      |
| <b>Tanks Information:</b>        |                                     |  |                  |  |      |
| <b>Tank Status by Site Name:</b> |                                     |  |                  |  |      |
| <a href="#">14</a>               | 1 of 1                              | WNW/113.7  | 1,035.0 / -0.02  | CANADIAN HUNTER EXPLORATION LTD.<br><br>AB   | OGWW |
| <b>Licence ID:</b>               | 179069                              | <b>Ground Elevation:</b>   | 1034.70          |  |      |
| <b>Field ID:</b>                 | EASTMONT                            | <b>Total Depth (ft):</b>   | 2355.00          |  |      |
| <b>Area ID:</b>                  | EASTMONT                            | <b>LSD:</b>  | 6                |  |      |
| <b>Rig ID:</b>                   | 5                                   | <b>Section:</b>  | 27               |  |      |
| <b>Rig Released:</b>             | 95/08/16                            | <b>Township:</b>   | 12               |  |      |
| <b>Well Name:</b>                | CANHUNTER ET AL EASTMONT 6-27-12-27 | <b>Range:</b>  | 27               |  |      |
| <b>Status Code:</b>              |                                     | <b>Meridian:</b>   | 4                |  |      |
| <b>Well Status:</b>              | gas well                            | <b>Latitude:</b>   |                  |  |      |
| <b>Class Code:</b>               |                                     | <b>Longitude:</b>  |                  |  |      |
| <b>Well Class:</b>               | DEVELOPMENT WELL                    | <b>Projected Zone:</b>   | RIERDON          |  |      |
| <b>Well Type Code:</b>           |                                     | <b>Quarter:</b>  |                  |  |      |
| <b>Well Type:</b>                |                                     | <b>Unit:</b>   |                  |  |      |
| <b>Status Date:</b>              | 95/10/31                            | <b>Block:</b>  |                  |  |      |
| <b>Drill Date:</b>               | 95/07/30                            | <b>Quad:</b>   |                  |  |      |
| <b>Licence Date:</b>             | 95/07/06                            | <b>Map:</b>  |                  |  |      |
| <b>Well Year:</b>                | 95                                  | <b>Sheet:</b>  |                  |  |      |
| <b>Surveyor:</b>                 | ALL-WEST SURVEYS (1982) LTD.        | <b>Province:</b>   |                  |  |      |
| <b>Contractor:</b>               | PRECISION D                         |  |                  |  |      |
| <b>Deglong:</b>                  |                                     |  |                  |  |      |
| <b>Minlong:</b>                  |                                     |  |                  |  |      |
| <b>Seclong:</b>                  |                                     |  |                  |  |      |
| <b>Deglat:</b>                   |                                     |  |                  |  |      |
| <b>Minlat:</b>                   |                                     |  |                  |  |      |
| <b>Seclat:</b>                   |                                     |  |                  |  |      |
| <a href="#">15</a>               | 1 of 1                              | SE/114.5   | 1,031.0 / -4.00  | WILLOW CREEK AUX. HOSPITAL & NURSING<br>HOME<br>4221-8 STREET WEST CLARESHOLM AB<br>AB | FST  |
| <b>Site No:</b>                  | 5703                                | <b>Dt Form Rcvd:</b>   |                  |  |      |
| <b>Tank No:</b>                  |                                     | <b>Date Removed:</b>   |                  |  |      |
| <b>No of Tanks:</b>              |                                     | <b>Removal Reason:</b>   |                  |  |      |
| <b>Tank Type:</b>                |                                     | <b>Located 200m:</b>   |                  |  |      |
| <b>Tank Status:</b>              |                                     | <b>Located 500m:</b>   |                  |  |      |
| <b>Site Status:</b>              | Decommissioned                      | <b>DLS Coord:</b>  |                  |  |      |
| <b>Date Last Used:</b>           |                                     | <b>Lot:</b>  |                  |  |      |
| <b>UST/AST:</b>                  | 0 / 0                               | <b>Block:</b>  |                  |  |      |
| <b>Contents:</b>                 |                                     | <b>Plan:</b>   |                  |  |      |
| <b>Other Contents:</b>           |                                     | <b>Municipality:</b>   |                  |  |      |
| <b>Capacity:</b>                 |                                     | <b>Postal:</b>   |                  |  |      |
| <b>Other Capacity:</b>           |                                     | <b>Facility 1:</b>   |                  |  |      |
| <b>UST Secondary:</b>            |                                     | <b>Facility 2:</b>   |                  |  |      |
| <b>AST Secondary:</b>            |                                     | <b>Facility 3:</b>   |                  |  |      |
| <b>Overfill Preventn:</b>        |                                     | <b>Facility 4:</b>   |                  |  |      |
| <b>Class:</b>                    |                                     |  |                  |  |      |
| <b>LLD:</b>                      | Lot 1 Block 1 Plan 9210773          |  |                  |  |      |
| <b>Spill Containment:</b>        |                                     |  |                  |  |      |
| <b>Owner Address:</b>            |                                     |  |                  |  |      |
| <b>Tanks Information:</b>        |                                     |  |                  |  |      |
| <b>Tank Status by Site Name:</b> |                                     |  |                  |  |      |

| <b>Map Key</b> | <b>Number of Records</b> | <b>Direction/<br/>Distance (m)</b> | <b>Elev/Diff<br/>(m)</b> | <b>Site</b>                               | <b>DB</b> |
|----------------|--------------------------|------------------------------------|--------------------------|---|-----------|
| <u>16</u>      | 1 of 1                   | SSW/249.3                          | 1,024.0 / -11.00         | Burlington Resources Canada (Hunter) Ltd. | OGWW      |

**AB**

|                        |                                       |                          |            |
|------------------------|---------------------------------------|--------------------------|------------|
| <b>Licence ID:</b>     | 362104                                | <b>Ground Elevation:</b> | 1022.60    |
| <b>Field ID:</b>       | Eastmont                              | <b>Total Depth (ft):</b> | 2346.00    |
| <b>Area ID:</b>        | Eastmont                              | <b>LSD:</b>              | 6          |
| <b>Rig ID:</b>         | 296                                   | <b>Section:</b>          | 22         |
| <b>Rig Released:</b>   | 10/8/2006                             | <b>Township:</b>         | 12         |
| <b>Well Name:</b>      | BRC HTR ET AL EASTM 6-22-12-27        | <b>Range:</b>            | 27         |
| <b>Status Code:</b>    |                                       | <b>Meridian:</b>         | 4          |
| <b>Well Status:</b>    | GAS                                   | <b>Latitude:</b>         |            |
| <b>Class Code:</b>     |                                       | <b>Longitude:</b>        |            |
| <b>Well Class:</b>     | DEVELOPMENT WELL                      | <b>Projected Zone:</b>   | Cutbank Ss |
| <b>Well Type Code:</b> |                                       | <b>Quarter:</b>          |            |
| <b>Well Type:</b>      | REGULAR (VERTICAL)                    | <b>Unit:</b>             |            |
| <b>Status Date:</b>    | 1/18/2007                             | <b>Block:</b>            |            |
| <b>Drill Date:</b>     | 9/30/2006                             | <b>Quad:</b>             |            |
| <b>Licence Date:</b>   | 8/23/2006                             | <b>Map:</b>              |            |
| <b>Well Year:</b>      |                                       | <b>Sheet:</b>            |            |
| <b>Surveyor:</b>       |                                       | <b>Province:</b>         |            |
| <b>Contractor:</b>     | Precision Drilling, A Division Of PDC |                          |            |
| <b>Deglong:</b>        |                                       |                          |            |
| <b>Minlong:</b>        |                                       |                          |            |
| <b>Seclong:</b>        |                                       |                          |            |
| <b>Deglat:</b>         |                                       |                          |            |
| <b>Minlat:</b>         |                                       |                          |            |
| <b>Seclat:</b>         |                                       |                          |            |

# Unplottable Summary

Total: 1 Unplottable sites

| DB  | Company Name/Site Name                                   | Address                                   | City | Postal |
|-----|--|---|------|--------|
| FST | M.D. OF WILLOW CREEK -<br>CLARESHOLM MAINTENANCE<br>YARD | 273129-SECONDARY HWY 520 CLARESHOLM<br>AB | AB   |        |

# Unplottable Report

**Site:** M.D. OF WILLOW CREEK - CLARESHOLM MAINTENANCE YARD  
273129-SECONDARY HWY 520 CLARESHOLM AB AB

**Database:**  
FST

|                                  |  |                        |  |
|----------------------------------|--|------------------------|--|
| <b>Site No:</b>                  | 8775   | <b>Dt Form Rcvd:</b>   |  |
| <b>Tank No:</b>                  |  | <b>Date Removed:</b>   |  |
| <b>No of Tanks:</b>              |  | <b>Removal Reason:</b> |  |
| <b>Tank Type:</b>                |  | <b>Located 200m:</b>   |  |
| <b>Tank Status:</b>              |  | <b>Located 500m:</b>   |  |
| <b>Site Status:</b>              | Active   | <b>DLS Coord:</b>      |  |
| <b>Date Last Used:</b>           |  | <b>Lot:</b>            |  |
| <b>UST/AST:</b>                  | 0 / 3  | <b>Block:</b>          |  |
| <b>Contents:</b>                 |  | <b>Plan:</b>           |  |
| <b>Other Contents:</b>           |  | <b>Municipality:</b>   |  |
| <b>Capacity:</b>                 |  | <b>Postal:</b>         |  |
| <b>Other Capacity:</b>           |  | <b>Facility 1:</b>     |  |
| <b>UST Secondary:</b>            |  | <b>Facility 2:</b>     |  |
| <b>AST Secondary:</b>            |  | <b>Facility 3:</b>     |  |
| <b>Overfill Preventn:</b>        |  | <b>Facility 4:</b>     |  |
| <b>Class:</b>                    |  |                        |  |
| <b>LLD:</b>                      | SW 1/4 Of Sec. 21 TWP 12 Rge 27 West of Mer 4<br>Lot 10 Block 7 Plan 0610415 |                        |  |
| <b>Spill Containment:</b>        |  |                        |  |
| <b>Owner Address:</b>            |  |                        |  |
| <b>Tanks Information:</b>        |  |                        |  |
| <b>Tank Status by Site Name:</b> |  |                        |  |

# 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: Dec 2024**

## **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**

## **Alberta Oil and Gas Wells:**

Provincial [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\***

## **Authorizations:**

Provincial [AUTH](#)

Locations associated with Water Act and Environmental Protection and Enhancement Act (EPEA) documents issued by Alberta Environment and Parks (AEP). Includes approvals, licences, registrations, authorizations, permits, and certificates. This list is made available by the Alberta Environment and Parks (AEP).

**Government Publication Date: Sep 2024**

## **Automobile Wrecking & Supplies:**

Private [AUWR](#)

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-Apr 30, 2024**

## **Waste Management Facilities - Certificates of Approval:**

Provincial [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 quarter section only.

**Government Publication Date: 1993 - May 2024**

## **Commercial Activity Risk - City of Calgary Business Licenses:**

Provincial [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: Oct 31, 2024**

## **Dry Cleaning Facilities:**

Federal [CDRY](#)

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.

**Government Publication Date: Jan 2004-Dec 2022**

**Confined Feeding Operations:**

Provincial CFO

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-Sep 2024**

**Chemical Processing Operations - Certificates of Approval:**

Provincial CHEM

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**

**Chemical Register:**

Private CHM

This database includes a listing of locations of facilities within the Province or Territory that either manufacture and/or distributes chemicals.

**Government Publication Date: 1999-Apr 30, 2024**

**Compost Facilities:**

Provincial CMPS

A list of compost facility registrations made available by Alberta Environment and Parks (AEP). Composting facilities operating under a registration are required to follow the requirements in the Code of Practice for Compost Facilities, which outlines the minimum requirements for the design, construction, operation, and reclamation of compost facilities that accept up to 20,000 tonnes of feedstock per year.

**Government Publication Date: Dec 31, 2019**

**Compressed Natural Gas Stations:**

Private CNG

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 -May 2024**

**Compliance and Convictions:**

Provincial CONV

This listing of enforcement actions under the Alberta Environment and Protected Areas' current legislation is maintained by the Government of Alberta. 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.

**Government Publication Date: 1993-Dec 2022**

**Fuel Sales and Storage:**

Provincial CTNK

List of locations with Business Licences for fuel sales and storage. Data made available by the City of Calgary.

**Government Publication Date: Oct 31, 2024**

**Approved Oilfield Waste Management Facilities:**

Provincial DRWD

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

**Government Publication Date: Aug 2024**

**Enforcement Action Summary:**

Provincial EAS

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, non-compliance event, date of enforcement, location, etc.

**Government Publication Date: 2007-Feb 2024**

**Commercial Activity Risk - City of Edmonton Business Licenses:**

Provincial [EBL](#)

List of locations with Business Licenses for the follow commercial activities: cannabis processing or cultivation, construction vehicle and equipment sales/rentals, livestock operation, general industrial, and vehicle repair. Data is made available by the City of Edmonton.

**Government Publication Date: Jul 31, 2024**

**Environmental Compliance Prosecutions:**

Provincial [ECMP](#)

A list of concluded prosecutions made under environmental legislation. Listing made available by the Government of Alberta. This is not a complete and comprehensive list of environmental compliance outcomes: in Alberta, enforcement tools include warning letters, violation tickets, administrative penalties and orders, in addition to prosecutions.

**Government Publication Date: Sep 30, 2024**

**Environmental Effects Monitoring:**

Federal [EEM](#)

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:**

Private [EHS](#)

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-Aug 31, 2024**

**Environmental Issues Inventory System:**

Federal [EIS](#)

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 EIS 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\***

**Alberta Environment & Parks Storage Tanks:**

Provincial [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:**

Provincial [EPWN](#)

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.

**Government Publication Date: Sep 30, 2022**

**Environmental Site Assessment Repository:**

Provincial [ESAR](#)

Environmental site assessments determine the quality of soil and groundwater of a site, particularly at retail gas stations and other commercial and industrial sites. A site assessment does not necessarily mean a site is, or ever was, contaminated. Alberta's Environmental Site Assessment Repository (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-Nov 2024**

**Edmonton Vehicle Fueling Stations:**

Provincial [ETNK](#)

A list of sites that have a City of Edmonton business license for Vehicle Fueling Stations. Listing is made available by the City of Edmonton.

**Government Publication Date: Jul 31, 2024**

**Facility List:**

Provincial [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 Dec 31, 2024**

|  |            |             |
|--|------------|-------------|
| <b><u>Federal Convictions:</u></b>   | Federal    | <b>FCON</b> |
| 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.  |            |             |
| <b>Government Publication Date: 1988-Jun 2007*</b>   |            |             |
| <b><u>Contaminated Sites on Federal Land:</u></b>  | Federal    | <b>FCS</b>  |
| 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. |            |             |
| <b>Government Publication Date: Jun 2000-Nov 2024</b>  |            |             |
| <b><u>AER Incidents &amp; Spills:</u></b>  | Provincial | <b>FIS</b>  |
| 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.   |            |             |
| <b>Government Publication Date: 1975 - Dec 2024</b>  |            |             |
| <b><u>Food Processing Operations - Certificates of Approval:</u></b>   | Provincial | <b>FOOD</b> |
| 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.   |            |             |
| <b>Government Publication Date: 1993-2012</b>  |            |             |
| <b><u>Federal Identification Registry for Storage Tank Systems (FIRSTS):</u></b>   | Federal    | <b>FRST</b> |
| 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.   |            |             |
| <b>Government Publication Date: Oct 31, 2021</b>   |            |             |
| <b><u>Fuel Storage Tanks:</u></b>  | Provincial | <b>FST</b>  |
| List of tank sites in unaccredited areas of the province. This includes active tank sites, sites with tanks temporarily out of service, and sites where tanks have been removed from the ground. The information in this database was collected according to Alberta Regulation AR 291/95 Storage Tank System Management and AR 52/98 Fire Code, which was formerly the Alberta Fire Code Regulation, 1992 (AR 204/92). The Petroleum Tank Management Association of Alberta (PTMAA) regulated storage tanks in unaccredited areas of Alberta from 1994 until June 2020, at which point the Safety Codes Council assumed responsibility for services related to storage tank management.   |            |             |
| <b>Government Publication Date: 1985-Sep 2024</b>  |            |             |
| <b><u>Waste Generators Summary:</u></b>  | Provincial | <b>GEN</b>  |
| List of hazardous waste generators registered with Alberta Environment and Protected Areas (previously Alberta Environment and Parks). 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, the Government of Alberta no longer provides detailed information on each waste generator, such as approval number, class, and class description. Address information includes head office as well as operational locations, thus locations may or may not coincide with the physical location of the waste-generating activity.   |            |             |
| <b>Government Publication Date: 1993-Oct 2023</b>  |            |             |
| <b><u>Greenhouse Gas Emissions from Large Facilities:</u></b>  | Federal    | <b>GHG</b>  |
| List of greenhouse gas emissions from large facilities made available by Environment Canada. Greenhouse gas emissions in kilotonnes of carbon dioxide equivalents (kt CO2 eq).   |            |             |
| <b>Government Publication Date: 2013-Apr 2024</b>  |            |             |
| <b><u>Gas Processing Plants:</u></b>   | Provincial | <b>GPP</b>  |
| The Alberta Energy Regulator (AER) - formerly the ERCB (Energy Resources Conservation Board) - has an inventory of all Gas Processing Plants in Alberta, with information such as location, names of plant, facility type, operator name, facility license, design capacities, etc.  |            |             |
| <b>Government Publication Date: Oct 2016-Dec 31, 2024</b>  |            |             |

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

Provincial [HELP](#)

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 more is included in this database.

**Government Publication Date: June 1988\***

**Horizontal Wells:**

Provincial [HORW](#)

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

**Government Publication Date: Mar 2015-Aug 31, 2024**

**Indian & Northern Affairs Fuel Tanks:**

Federal [IAFT](#)

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\***

**Identification and Verification of Active and Inactive Land Disposal Sites:**

Provincial [LDS](#)

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 as potential priority 1 sites.

**Government Publication Date: Oct 1982\***

**Land Disposal Sites on Indian Reserves:**

Provincial [LDSI](#)

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.

**Government Publication Date: Oct 1982\***

**Landfill Registrations:**

Provincial [LNDF](#)

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**

**Lumber Related Operations - Certificates of Approval:**

Provincial [LUM](#)

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**

**Canadian Mine Locations:**

Private [MINE](#)

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:**

Provincial [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:**

Provincial [MNR](#)

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.

**Government Publication Date: 1993-2003\***

**National Analysis of Trends in Emergencies System (NATES):**

Federal [NATE](#)

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:**

Provincial [NCST](#)

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

Federal [NDFT](#)

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\***

**National Defense & Canadian Forces Spills:**

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

**Government Publication Date: Mar 1999-Nov 2023**

**National Defence & Canadian Forces Waste Disposal Sites:**

Federal [NDWD](#)

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

**Government Publication Date: 2001-Apr 2007\***

**National Energy Board Pipeline Incidents:**

Federal [NEBI](#)

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.

**Government Publication Date: 2008-Dec 31, 2024**

**National Energy Board Wells:**

Federal [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\***

**National Environmental Emergencies System (NEES):**

Federal [NEES](#)

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 2004.

**Government Publication Date: 1974-2003\***

**National PCB Inventory:**

Federal

[NPCB](#)

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:**

Federal

[NPR2](#)

The National Pollutant Release Inventory (NPRI) is Canada's public inventory of pollutant releases (to air, water and land), disposals, and transfers for recycling. The inventory, managed by Environment and Climate Change Canada, tracks over 300 substances. Under the authority of the Canadian Environmental Protection Act (CEPA), owners or operators of facilities that meet published reporting requirements are required to report to the NPRI.

**Government Publication Date: Feb 2024**

**National Pollutant Release Inventory - Historic:**

Federal

[NPRI](#)

Environment Canada has defined the National Pollutant Release Inventory ("NPRI") as a federal government initiative designed to collect comprehensive national data regarding releases to air, water, or land, and waste transfers for recycling for more than 300 listed substances. This data holds historic records; current records are found in NPR2.

**Government Publication Date: 1993-May 2017**

**Operating and Abandoned Mines:**

Provincial

[OAM](#)

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\***

**Oil and Gas Facilities - ST102 & ST50:**

Provincial

[OGF](#)

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

**Government Publication Date: Dec 31, 2024**

**Oil and Gas Wells:**

Private

[OGWW](#)

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

**Government Publication Date: 1988-May 31, 2024**

**Enforcement Orders:**

Provincial

[ORD](#)

List of enforcement orders issued by Alberta Environment and Parks (AEP). AEP encourages compliance with environmental legislation. When individuals, companies, or municipalities fail to comply with legislation, the department has several options to ensure compliance. This listing, made available by the Alberta Government, includes Compliance Orders, Enforcement Orders, Environmental Protection Orders, Orders to Vacate, and Water Management Orders.

**Government Publication Date: Dec 31, 2024**

**Alberta Orphan Wells:**

Provincial

[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 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-Feb 29, 2024**

**Canadian Pulp and Paper:**

Private

[PAP](#)

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 and the products that they produce.

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

**Parks Canada Fuel Storage Tanks:**

Federal

PCFT

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\***

**Petrochemical, Coal and Gas Operations - Certificates of Approval:**

Provincial

PCG

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:**

Provincial

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. Non-audited 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 registration is in the process of renewal.

**Government Publication Date: 1998-Aug 2015**

**NPRI Reporters - PFAS Substances:**

Federal

PFCH

The National Pollutant Release Inventory (NPRI) is Canada's public inventory of releases, disposals, and transfers, tracking over 320 pollutants. Per- and polyfluoroalkyl substances (PFAS) are a group of over 4,700 human-made substances for which adverse environmental and health effects have been observed. This listing of PFAS substance reporters includes those NPRI facilities that reported substances that are found in either: a) the Comprehensive Global Database of PFASs compiled by the Organisation for Economic Co-operation and Development (OECD), b) the US Environmental Protection Agency (US EPA) Master List of PFAS Substances, c) the US EPA list of PFAS chemicals without explicit structures, or d) the US EPA list of PFAS structures (encompassing the largest set of structures having sufficient levels of fluorination to potentially impart PFAS-type properties).

**Government Publication Date: Feb 2024**

**Potential PFAS Handlers from NPRI:**

Federal

PFHA

The National Pollutant Release Inventory (NPRI) is Canada's public inventory of releases, disposals, and transfers, tracking over 320 pollutants. Per- and polyfluoroalkyl substances (PFAS) are a group of over 4,700 human-made substances for which adverse environmental and health effects have been observed. This list of potential PFAS handlers includes those NPRI facilities that reported business activity (NAICS code) included in the US Environmental Protection Agency (US EPA) list of Potential PFAS-Handling Industry Sectors, further described as operating in industry sectors where literature reviews indicate that PFAS may be handled and/or released. Inclusion of a facility in this listing does not indicate that PFAS are being manufactured, processed, used, or released by the facility - these are facilities that potentially handle PFAS based on their industrial profile.

**Government Publication Date: Feb 2024**

**Conglomerate and Waste Management Facilities:**

Provincial

PITS

This database contains approvals for processes pertaining to the use of gravel pits, sand pits, and clay 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**

**Alberta Private Sewage Disposal Permits:**

Provincial

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 permits within the jurisdiction of Alberta Municipal Affairs.

**Government Publication Date: 2003-2013**

**PTMAA Approved (Open) Permits:**

Provincial

PTAP

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**

**Hazardous Waste Receivers Summary:**

Provincial

[REC](#)

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 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 description.

**Government Publication Date: 1993-Aug 2018**

**Alberta Recyclers:**

Provincial

[RECY](#)

List of Alberta Recyclers under the following recycling programs: electronics processors, paint processors, tire processors, and used oil processors. Listing made available by the Alberta Recycling Management Authority (ARMA).

**Government Publication Date: Oct 2023**

**Retail Fuel Storage Tanks:**

Private

[RST](#)

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

**Government Publication Date: 1999-Apr 30, 2024**

**Scott's Manufacturing Directory:**

Private

[SCT](#)

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.

**Government Publication Date: 1992-Mar 2011\***

**Special Operation Classifications - Certificates of Approval:**

Provincial

[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, locations will be accurate to the quarter section only.

**Government Publication Date: 1993-2012**

**Inventory of Waste Disposal Sites:**

Private

[WDS](#)

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.

**Government Publication Date: 1998\***

**Wastewater Operations:**

Provincial

[WSTE](#)

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**

**Alberta Water Well Information Database:**

Provincial

[WWIS](#)

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

**Government Publication Date: 1880-Jul 31, 2024**

# 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.

**Map Key:** 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.'

**Unplottables:** 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.

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