

Phase I Environmental Site Assessment
NE – 24 – 29 – 01W5M
LINC: 0019163583
Mountain View County

Prepared for:

Appin Developments Inc.

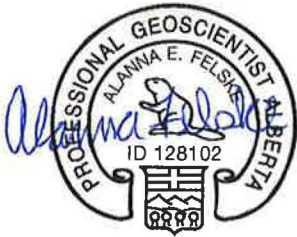
May 27, 2026

File No: 2025-2551

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Signatures

Prepared by:



05/27/26

Alanna Felske, P.Geo.
Hydrogeologist

Disclaimer

Groundwater Resources Information Technologies 3.0 Ltd. (GRIT3) has performed the work as described below and made the findings and conclusions set out in the report in a manner consistent with the level of care and skill normally exercised by members of the geological science profession practicing under similar conditions at the time the work was performed. This report presents a reasonable review of information available to GRIT3. Within the established scope, work schedule and budgetary constraints, GRIT3 accepts no responsibility for any deficiency, misstatement or inaccuracy in this report resulting from misinformation from any individuals that provided information as part of this report. GRIT3 appreciates the opportunity to present these findings on behalf of the Client. If you have any questions regarding the above report, please do not hesitate to contact the above signed.

Executive Summary

In February 2026 Groundwater Resources Information Technologies 3.0 Ltd. (GRIT3) was retained by Appin Developments Inc. to conduct a Phase I Environmental Site Assessment (ESA) at a property zoned as a combination of Agricultural (2) District (A(2)) and Aggregate Extraction / Processing District (AEP) within Mountain View County.

The Site consists of 156 acres of land within NE-24-29-01W5. A 4-acre residential lot located on the far north side of the quarter section is not part of the subject Site. The Site consists of agricultural cropland with a residence on the far east side and two historical gravel pits located within the northeast and southwest of the Site. The residential development consists of a mobile home and two garage/shop buildings. A south-north flowing creek runs through the center of the quarter section and ultimately drains into Carstairs Creek located approximately 900 metres north of the Site. The Site can be accessed from the northwest off Township Road 294 or from the east off Range Road 10.

The Site consisted of agricultural land since at least 1966. Adjacent properties consisted of agricultural land with individual farmsteads. The adjacent southern property began gravel extraction during the early 1980's with gravel extraction beginning on Site around 2000. Active gravel extraction on Site appears to have ended around 2016, with gravel extraction on the adjacent southern parcel ending around 2018. A mobile home and two garage buildings were developed on Site around 2000, likely related to staff and storage required for the gravel extraction operation.

A Site visit and review of historical air photos, land titles, Alberta Government records and water well records, did not show any evidence for on-site or off-site environmental concerns or impacts. Based on these findings, no supplementary investigation is recommended.

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[1.0] Introduction

In April 2026 Groundwater Resources Information Technologies 3.0 Ltd. (GRIT3) was retained by Appin Developments Inc. (the “Client”) to conduct a Phase I Environmental Site Assessment (ESA) at a Site zoned for a combination of Agricultural (2) District (A(2)) and Aggregate Extraction/ Processing District within Mountain View County. The property location described as:

Legal Survey Division: within part of NE – 24 – 29 – 01W5M

Land Identification Numeric Code (LINC): 0019163583

Municipal Address: 29360 Range Road 10, Crossfield AB, T0M 0S0

This property is subsequently referred to as the Subject Site or Site throughout the remainder of the report. A map showing the Site location is provided in **Appendix A, Figures 1 & 2**.

[1.1] Purpose

The purpose of a Phase I ESA is to complete a review of available historical information, conduct a Site visit to document the environmental condition of the property and to identify any actual or potential sources of contamination on Site. The investigation is typically utilized to reduce uncertainty concerning potential liabilities related to the environmental condition of the property.

A Phase I ESA does not typically involve any collection or analysis of soil or groundwater samples. No soil or groundwater samples were collected for this report.

[1.2] Scope

This Phase I ESA included a:

- review of historical records including land titles, aerial photographs, and municipal and provincial records.
- Site visit
- Interview with stakeholders
- Analysis and reporting of findings

The report is intended to provide the reader with a comprehensive understanding of the Site in relation to:

- The Site’s environmental condition and the likelihood of on-site contamination
- Identify area(s) of potential environmental concern (APECs) and associated contaminants of potential concern (CoPC) at the Site, if applicable.
- Provide the basis for any additional assessment or remedial measures at the Site.

[1.3] Regulatory Framework

The Phase I ESA was prepared using protocols which conform to the CSA Group Standard Z768-01 (R2022) and following Alberta Environment and Protected Areas (AEPA) *Environmental Site Assessment Standard* (December 2024).

[2.0] Site and Adjacent Properties

[2.1] Subject Site

The Site consists of 156 acres of land within NE-24-29-01W5. A 4-acre residential lot located on the far north side of the quarter section is not part of the subject Site. The Site consists of agricultural cropland with a residence on the far east side and two historical gravel pits located within the northeast and southwest of the Site. The residential development consists of a mobile home and two garage/shop buildings. A south-north flowing creek runs through the center of the quarter section and ultimately drains into Carstairs Creek located approximately 900 metres north of the Site. The Site can be accessed from the northwest off Township Road 294 or from the east off Range Road 10. Photographs of the Site are provided in **Appendix B**.

[2.2] Adjacent Properties

[2.2.1] North

A single residential property is located north of the Site within the same quarter section and consists of a main residential building and four outbuildings (garage, shop, storage etc).

Immediately north of the Site's northern boundary is Township Road 294, with an undivided farmstead located north of Township Road 294. The farmstead consists of agricultural land, treed areas, a residential building and four major outbuildings.

[2.2.2] East

The eastern Site property line forms the east Site boundary. Immediately east of the Site is Range Road 10, which separates the Site from the adjacent quarter section. The eastern adjacent quarter section consists of one domestic lot within the far southeast corner and a farmstead development consisting of agricultural land, a domestic building and four major outbuildings occupying the remaining land.

[2.2.3] South

The southern Site property line forms the south Site boundary. Immediately south of the Site is a quarter section which contains a single domestic lot within the far northeast corner and the remaining land consist of agricultural cropland. A historical gravel pit is located within the middle of the agricultural land. An informal driving path connects the adjacent southern agricultural land to the Site quarter section.



[2.2.4] West

The western Site property line forms the west Site boundary. Adjacent property to the west of the Site consists of a quarter section separated into a north and south parcel. The southern parcel consists of cropped agricultural land, and the northern parcel consists of a farmstead with a mobile home and five outbuildings.

[3.0] Records Review

[3.1] Surficial & Bedrock Geology

The surficial strata in the area are mapped in *Quaternary Geology, Central Alberta* (Shetsen, 1990), with the Site underlain by a fluted glacial moraine deposit consisting of an unsorted mixture of clay, silt, sand and gravel.

The underlying bedrock consists of Paleogene aged Paskapoo Formation (Prior et al. 2013). The Paskapoo Formation is a non-marine deposit that consists of fluvially deposited channel sandstones interbedded with overbank mudstones and shales. The priority target aquifers in the formation are the relatively permeable and porous sandstones, while the surrounding mud acts as a confining aquitard.

[3.2] Local Topography

The Site surface dips locally towards the creek in the centre of the Site, with the general Site area dipping towards the northeast. Surface elevation of the Site ranges from 1,023 metres above sea level (masl) to 1,037 masl. A map of the Site area with surface topography contours shown at 5 metre intervals is included in Appendix I, Figure 3.

[3.3] Aerial Photographs

A selection of aerial photographs dating from 1966 to 2023 were recovered for the Site and are summarized in **Table 1** and provided in **Appendix C**. Aerial photographs were obtained from the Government of Alberta Air Photo Library and Google Earth.

Table 1. Summary of Aerial Photograph Records

Year	Scale	Description
1966	1:31,680	The Site is part of continuous agricultural quarter section of land which is under cultivation. A meandering creek flows south to north through the middle of the Site quarter section. to south across the centre of the site. Adjacent properties to the north, east, south and west are being used for agricultural purposes with residential farmsteads appearing on quarter sections to the south and west. Gravel roadways are present along the north and east Site boundaries.



Year	Scale	Description
		A well lease pad is present to the southwest of the Site. Soil piles indicating pad development are present.
1983	1:25,000	The Site continues to be used as agricultural cropland. An access road has been developed along the western Site boundary to provide access to the adjacent southern quarter section. Quarter sections to the north and east have been developed with individual farmsteads. The adjacent southern property has soil works/gravel extraction activity, potentially related to road development, located within the northwest corner. The adjacent western property remains unchanged. The well pad to the southwest has been developed with a well head visible.
1988	1:20,000	The Site appears similar to the previous air photo, with a small stock watering pond now present within the middle of the quarter section. Adjacent properties to the north, east, south and west remain similar to the previous air photo.
1994	1:20,000	The Site remains in agricultural use with a new domestic development now present within the far north of the Site quarter section. The northern adjacent property is in agricultural use with some portions of the property used for tree farming. Adjacent to the east of the Site there is development of a domestic lot within the far southwest corner, with the remaining land continuing to be used for agricultural purposes. The property to the west continues to be used for agricultural purposes. The gravel extraction to the south of the Site does not appear to be active with evidence of vegetative reclamation. The well pad to the southwest still appears active as access roads have been cleared and maintained.
2000	1:20,000	A gravel extraction pit is present within the north half of the Site, while a smaller gravel pit present within the southwest. A dirt road has been developed from west to east through the Site quarter section to provide access to the gravel pit present on the adjacent southern quarter section. The dugout in the centre of the Site first observed in the 1988 aerial photo is now larger in size due to the

Year	Scale	Description
		road development. A mobile home has been placed on the far east side of the Site with a garage and shop building present.
2011	1:10,000	The Site and adjacent properties appear similar to the previous air photo. The well pad to the southwest appears to be in the process of reclamation or decommissioning, with the access road to the pad appearing to not be used frequently.
2023	1:10,000	The gravel extraction activities on Site have ceased. A majority of the Site continues to be used as agricultural cropland. Adjacent properties are similar to the previous air photo. The gravel extraction activities previously present on the southern adjacent property also appear to have ended.

The Site and adjacent properties have primarily been used as agricultural cropland since 1966. Gravel extraction on the adjacent southern property started in the early 1980's, with development likely for road construction. Gravel extraction operations on Site began in the late 2000's and continued until 2016, with a gravel access road developed from east-west across the Site for access to the southern property.

[3.4] Land Titles

On April 4th, 2026, personnel from GRIT3 completed a land titles search for the Site. Land title records dating back to 1972 were recovered. Records are summarized in reverse chronological order in **Table 2** and attached in **Appendix D**.

Table 2. Land Title Records

NE-24-29-01W5 excepting 4-acre subdivision
May 2009 – Present Appin Construction Ltd.
August 2007 – May 2009 Crossfield Sand & Gravel Inc.
May 2002 – August 2007 Paul J Backs
November 2001 – May 2002 Johanna Jacoba Backs
Anthony Petrus Backs & Johanna Jacoba Backs June 1991 – November 2001
NE-24-29-01W5
Anthony Petrus Backs

October 1972 – June 1991

The Site belonged to members of the Back family until 2007 when the Site was purchased by an aggregate company in August 2007. The Site was then acquired by the current owner, Appin Construction Ltd., in 2009.

[3.5] Petroleum Tank Management Association

A search of the Petroleum Tank Management Association database was conducted on November 26, 2018. Registered above ground storage tanks (ASTs) and underground storage tanks (USTs) were not identified within the Property (PTMAA 2018). A copy of the report is provided in Appendix E.

Two water ASTs were also observed on Site near the residential farmstead. Collected rainwater is stored in these ASTs used for irrigation purposes.

No USTs were not identified on Site during the visit. There was no evidence of vent lines, fill pipes, concrete slabs, etc. that could indicate the presence of other AST or UST. The potential for environmental impairment from ASTs and USTs is low.

[3.6] Government of Alberta Groundwater Well Information Database Search

A search of groundwater well records was completed through the Government of Alberta (GoA) Groundwater Information Database. There are records for two water supply wells located on Site. The Water Well Drilling Reports for the wells are attached in Appendix E and a map showing the well locations on Site is included in Appendix I, Figure 4.

The first well record, GIC Well ID 358144, indicates a well was drilled for domestic & stock purposes on March 8th, 1991. The well was drilled to a depth of 22.9 metres through surficial clay and gravel deposits and is completed within bedrock sandstone.

The second well record, GIC Well ID 2086022, indicates a well was drilled for domestic purposes on May 2nd, 2017. The well was drilled to a depth of 48.8 metres, and the lithology record shows the well was drilled through surficial clay and gravel before entering bedrock sandstone and shale deposits.

The wells were used for water supply and not for environmental monitoring purposes.

[3.7] Environmental Records Viewer – Long Term Management

The Government of Alberta Environmental Records Viewer (ERV) is a web-based tool that allows the public to view and download environmental information, including documents and data related to regulatory applications and authorizations, as well as records for Long Term

Management cases dealing with potential unauthorized releases needing management of potential contamination.

A search of the ERV tool was completed by personnel from GRIT3 on April 2nd, 2026. There were no records for unauthorized releases or long-term contamination management cases located on the Site. However, there were two records found for long-term contamination management cases on quarter sections immediately adjacent to the Site. Copies of these cases are provided in Appendix E.

The first long-term contamination management case record belongs to a former fertilizer storage facility located in SW-24-29-01W5. The record from October 2007 details a remediation plan for nitrate contaminated groundwater using an interception trench. The intercepted groundwater was then used to irrigate a nearby pasture. The source of nitrate in the groundwater was from a former fertilizer storage facility and the extent of contamination was delineated, with contamination remaining only in the upper surficial sediments (not in bedrock). As the nitrate contaminated groundwater was intercepted and used on agricultural land with crops to uptake nitrate, the environmental risk to the Site is low.

The second long-term contamination management case record is for a Temporary Soil Recycling facility located in SW-24-29-01W5. The record from April 1993, details a land farming remediation plan for soils mildly impacted by refined petroleum hydrocarbons. The contaminate soil was generated off Site from the decommissioning of service stations and bulk plant properties in the Calgary vicinity. The report highlights low permeability surficial soils that would limit migration of petroleum hydrocarbons. As the petroleum hydrocarbon contamination would have volatilized to the atmosphere during land-based remediation, environmental risk to the Site is low.

[4.0] Site Visit

On May 7, 2026, personnel from GRIT3 completed a Site visit to document the environmental condition of the Site and adjacent properties. Details of the Site inspection are included below.

[4.1] General Property Description

On the day of the Site visit the Site consisted of agricultural land, inactive gravel extraction site and a mobile home with two garages/sheds. Site access is restricted by a locked gate and fencing around the Site.

[4.1.1] Topography

The Site dips towards the creek/ravine running south-north through the Site with slopes varying across the Site from 2%-10%. Elevation ranges over 20 metres across the Site.

[4.1.2] Groundwater

Shallow groundwater flow direction in the vicinity of the Site is unknown, but groundwater towards the north-northeast following drainage of the creek into Carstairs Creek and generally topography drop towards the northeast.



[4.1.3] Surface Water, Ditches, Water Courses, Artificial Features

Surface drainage of the Site is ultimately towards the north. Due to topographic variation across the Site surface runoff on areas of higher elevations may move southward to lower elevations on the Site before entering the ravine/creek that flows northward.

[4.1.4] Wells

There are two water supply wells located on the Site. One supplies the residence on Site and the other was drilled and tested within the southwest of the property to evaluate aquifer yields under the Site as they relate to County subdivision requirements.

[4.1.5] Slumps or Depressions

There are localized depressions at the Site of historical gravel extraction activities within the north and south of the Site.

[4.1.6] Pits or Lagoons

Pits and/or lagoons were not noted at the Site during the Site visit.

[4.1.7] Bulk Storage

No bulk storage was present on Site.

[4.1.8] Stressed Vegetation

There was no evidence of stressed vegetation at the Site.

[4.1.9] Dumpsites or Landfills

Records review does not indicate the presence of dumpsites or landfills at the Site. No borrow pits were evident from the historical air photo review.

[4.1.10] Wastewater or Effluent

Industrial wastewater and/or effluent are not disposed of on to or from the Site.

[4.1.11] Easements or Right-of-Way

The current land title certificate lists a utility right of way for Rockyview Gas Co-op Ltd. and an easement over the NE quarter of Section 24 in township 29 range 1 W5 for benefit of SE-24-29-01W5.

[4.1.12] Electrical Transformers

Above ground electrical lines run diagonally from the northeast corner of the property to the rear of the residential area on Site. A transformer is present on the power pole immediately behind the farthest north garage.

[4.1.13] Housekeeping

There were areas of Site where collection of old farming materials, empty metal drums, recreational vehicles, and industrial heating/cooling units were found. There was an old excavator on Site and three trucks with missing parts. Some well maintained historical vehicles were on Site with aesthetic purposes. No garbage or loose debris were noted during the Site visit. Materials were consolidated into groupings near the residence and former gravel extraction location within the north of the Site. The Site was well maintained.

[4.1.14] Accessibility

There was no evidence of flush mounted installations at the Site.

[4.1.15] Physical Indications of Contamination

Underneath the excavator present near the northern gravel extraction site there was evidence of lubricant or grease under the front of the excavator, identified by a sheen. The area of impact was less than half a square metre, with a photo included in Appendix B. No other physical indications (spills, odour) of contamination were noted during the Site visit.

[4.1.16] Mechanical Equipment

An excavator was stored on Site.

[4.1.17] Special or Process Equipment

A metal screen for sorting gravel was present within the northern portion of the Site associated with the formal gravel extraction activity. No additional special and/or process equipment was present at the time of the Site visit.

[5.0] Interviews

An interview was conducted with Bruce McIntosh, one of the current Site owners, by personnel from GRIT3 on May 26, 2026. Questions relayed and responses received are included below:

1. How long have you lived at/operated this facility?

Response: 18 years

2. What are the main operations that occur on this site?

Response: Farming and gravel extraction

3. Do you know what the property was previously used for? Adjacent property uses?

Response: Farming for both

4. What are the chemicals/herbicides/petroleum produces used on site? Where are they stored?

Response: Herbicides used in farming but no storage of produces on Site.

5. Are you aware of any UST's located or used on the property?

Response: No.

6. Are you aware of any spills or hazardous materials activities on the property?

Response: No.

7. Do you know of any other who may have knowledge of the property? (e.g. Previous owners)

Response: No.

[6.0] Special Attention Items

[6.1] Asbestos

Asbestos is a naturally occurring group of mineral silicates that includes flexible fibrous strands. There are two main classifications of asbestos: chrysotile and amphibole asbestos. The classes are further subdivided based on mineralogical classification (Government of Alberta, 2012).

Asbestos was widely used in residential construction materials (insulation, flooring, ceilings and siding) until around 1990. The mobile home and garages on Site were developed in the early 2000's and therefore would not contain asbestos in some of the building materials.

[6.2] Polychlorinated Biphenyls (PCB's)

Polychlorinated biphenyls (PCBs) are common industrial chemicals found in transformer oil, capacitors (used as an insulating fluid), in some surface coatings/caulking (dating to the 1960s), cutting oils and ink. PCBs were never manufactured in Canada and were made illegal for import, manufacture or to sell for re-use in Canada in 1977 (Environment Canada, 2014).

PCBs are a mixture of compounds based on a biphenyl structure with the location of the chlorine(s) on the structure affecting toxicity. By 2025 all PCB containing dielectric fluids and PCB containing equipment with a concentration over 50 parts-per-million (ppm) must be destroyed (PCB Regulation SOR/2008-273).

One pole mounted transformer (PMT) was observed north from the residential farmstead garage. The PMT appeared relatively new and in good condition with no apparent leaks observed.

There were seven heating-cooling units stored on Site with manufacture dates of 1992 or later. The units were constructed in the United States of America but due to their manufacturing date would not be at risk of containing PCBs.

Electrical equipment taken out of service should be checked prior to disposal and any found or suspected to contain PCBs should be handled and stored as required by Section 12 of the Alberta Environmental Protection and Enhancement Act's Waste Control Regulation.

Considering the age of the buildings and their construction in early 1990's, the potential presence of PCBs within the Site area is low.

[6.3] Lead, Mercury, and Ozone Depleting Substances

In 1976, the Hazardous Products Act restricted the content of lead in exterior paints to 0.5% by weight (GC 1985).

There are no potential ODS generating equipment located within the Site area. Considering the age of the buildings and their construction in the early 1990's, the potential presence of lead-based paints, or mercury within the Site area is low.



[6.4] Urea Formaldehyde Foam Insulation (UFFI)

UFFI is a type of foam insulation that hardens during drying and has a low density. This type of insulation was common in industrial, commercial, and older buildings constructed in the 1970s. The insulation was typically used in wall cavities and placed in small voids or cavities within the building construction (Health Canada, 2010). During curing of the insulation there is the potential for release of formaldehyde gas. Formaldehyde gas may also be released if older insulation is exposed to water.

Given that buildings on Site were constructed in early 1990's, the potential presence of UFFI within the Site area is low.

[6.5] Petroleum Products and/or Solvents

At the time of the Site visit there were no storage of solvents or petroleum products.

[6.6] Herbicides and/or Pesticides

Herbicides and/or pesticides were not noted at the Site during the investigation.

[6.7] Unidentified or Suspected Substances

No unusual substances with the potential to cause environmental concerns were identified at the Site during the investigation.

[6.8] Mold

Mold was not seen during the Site visit.

[7.0] Conclusions

Information gathered through records review and during the Site visit indicate the Site was used as agricultural cropland since at least 1966. A 4-acre domestic lot was subdivided from the Site quarter in 1991. Gravel extraction operations on the Site began in the late 2000's and continued active operation until 2016.

Properties adjacent to the Site have a similar history to the Site, consisting of largely agricultural land with farmsteads and the addition of individual subdivision lots in the 1980's – 1990's. The property to the south also was used for gravel extraction, with operation appearing from the early 1980's until approximately 2018.

Records obtained from ASCA [PTMAA], Alberta Environment, ERV, Alberta Government and Mountain View County do not suggest the potential for environmental concerns from on-site activities or activities within the surrounding area. Current and historical land use activities appear to be predominately agricultural and gravel extraction activities. No activities of significant environmental concern were identified on Site or adjacent land.

The Site visit conducted by GRIT3 did not present any items of significant environmental concern. The construction of buildings on Site occurred in the early 2000's so the potential for asbestos, PCB's, lead, ozone depleting substances, UFFI, mold contamination does not exist at the Site.



[8.0] Qualifications of Assessor

Ms. Alanna Felske is a graduate from the University of Calgary with a M.Sc. in Hydrogeology. She is a licensed member of APEGA with 7 years experience completing environmental assessments. She has also completed Phase I and Phase II Environmental Site Assessment training provided by Associated Environmental Site Assessors of Canada Inc.

[9.0] References

Alberta Environment and Protected Areas (AEPA). 2024. *Environmental Site Assessment Standard*, AEP, Land Policy Branch, Policy and Planning Division, Edmonton, Alberta.

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Alberta Government. October 2012. *Alberta Asbestos Abatement Manual*, Alberta Queen's Printer [Online], Edmonton, Alberta available at: <http://work.alberta.ca/documents/Asbestos-Abatement-Manual.pdf>

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Alberta Safety Codes Authority (ASCA) located at Suite 500, 10405 Jasper Avenue, Edmonton, Alberta, T5J 3N4

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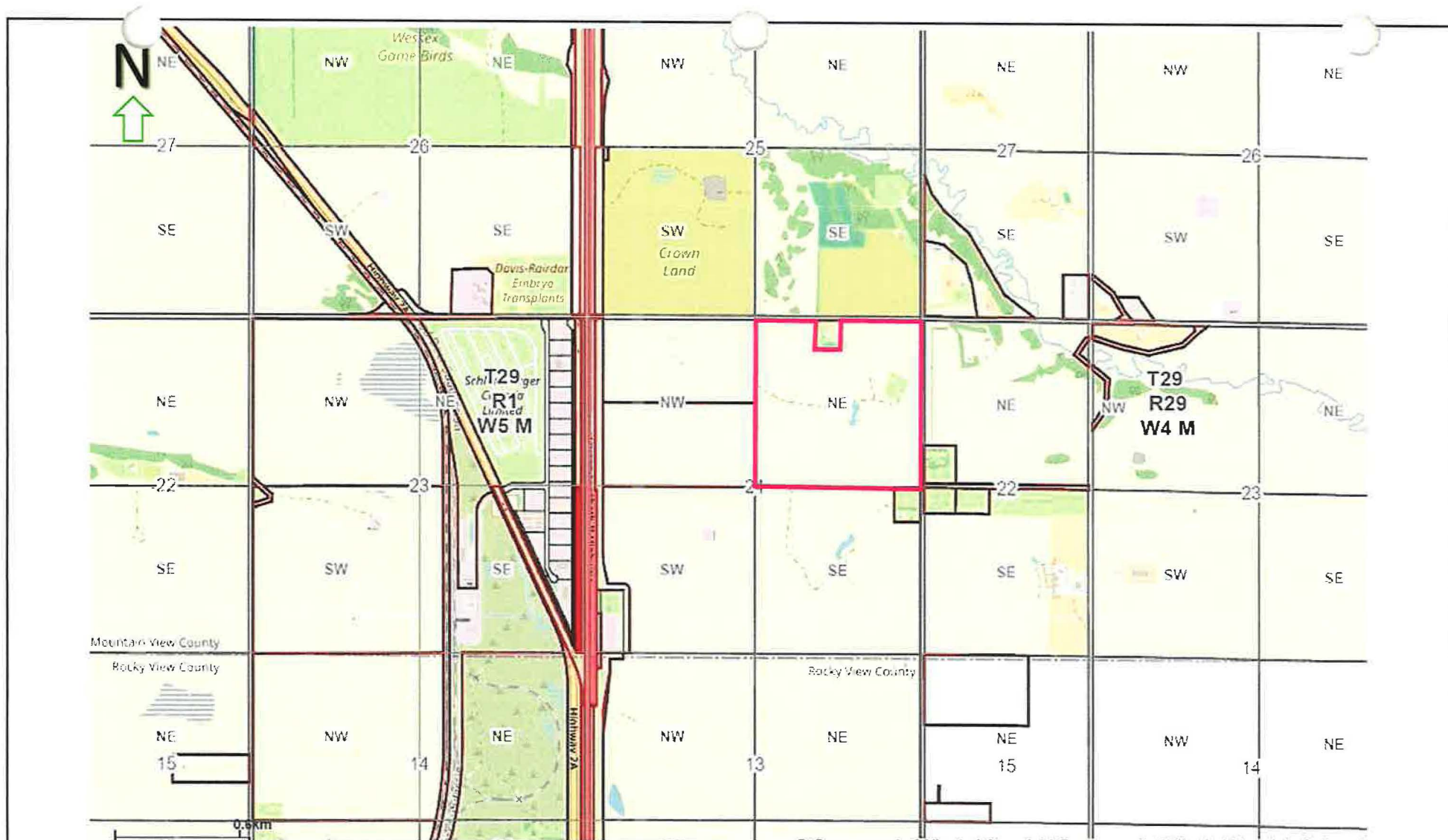
Prior, G.J., Hathway, B., Glombick, P.M., Pana, D.I., Banks, C.J., Hay, D.C., Schneider, C.L., Grobe, M., Elgr, R. and Weiss, J.A. 2013. *Bedrock Geology of Alberta*, Alberta Energy Regulator, AER/AGS Map 600, scale 1:1,000,000.



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Appendix A: Site Maps



LEGEND

Site Location

Appin Developments Ltd.



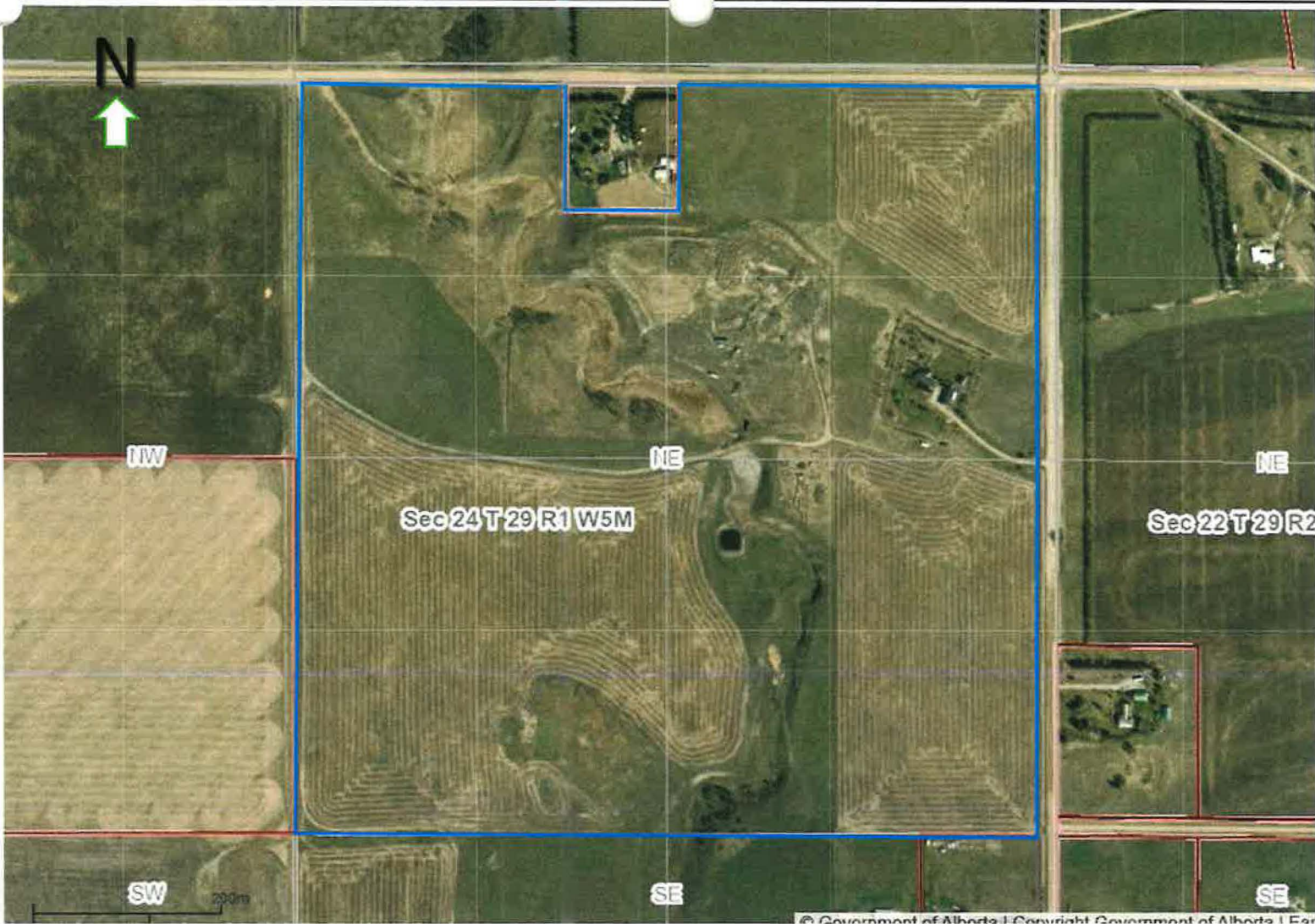
Groundwater Resources
Information Technologies 3.0 Ltd.

Site Location
NE – 24 – 29 – 01W5
LINC 0019163583
Mountain View County

Date: My 12, 2026

Project: 2026-2551

Figure 1

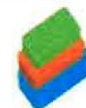


LEGEND



Site Location

Appin Developments Ltd.



Groundwater Resources
Information Technologies 3.0 Ltd.

Site Location with Aerial Imagery
NE – 24 – 29 – 01W5
LINC 0019163583
Mountain View County

Date: May 12, 2026

Project: 2026-2551

Figure 2



LEGEND



Site Location



Surface topography contour (5 metre interval)

Appin Developments Ltd.



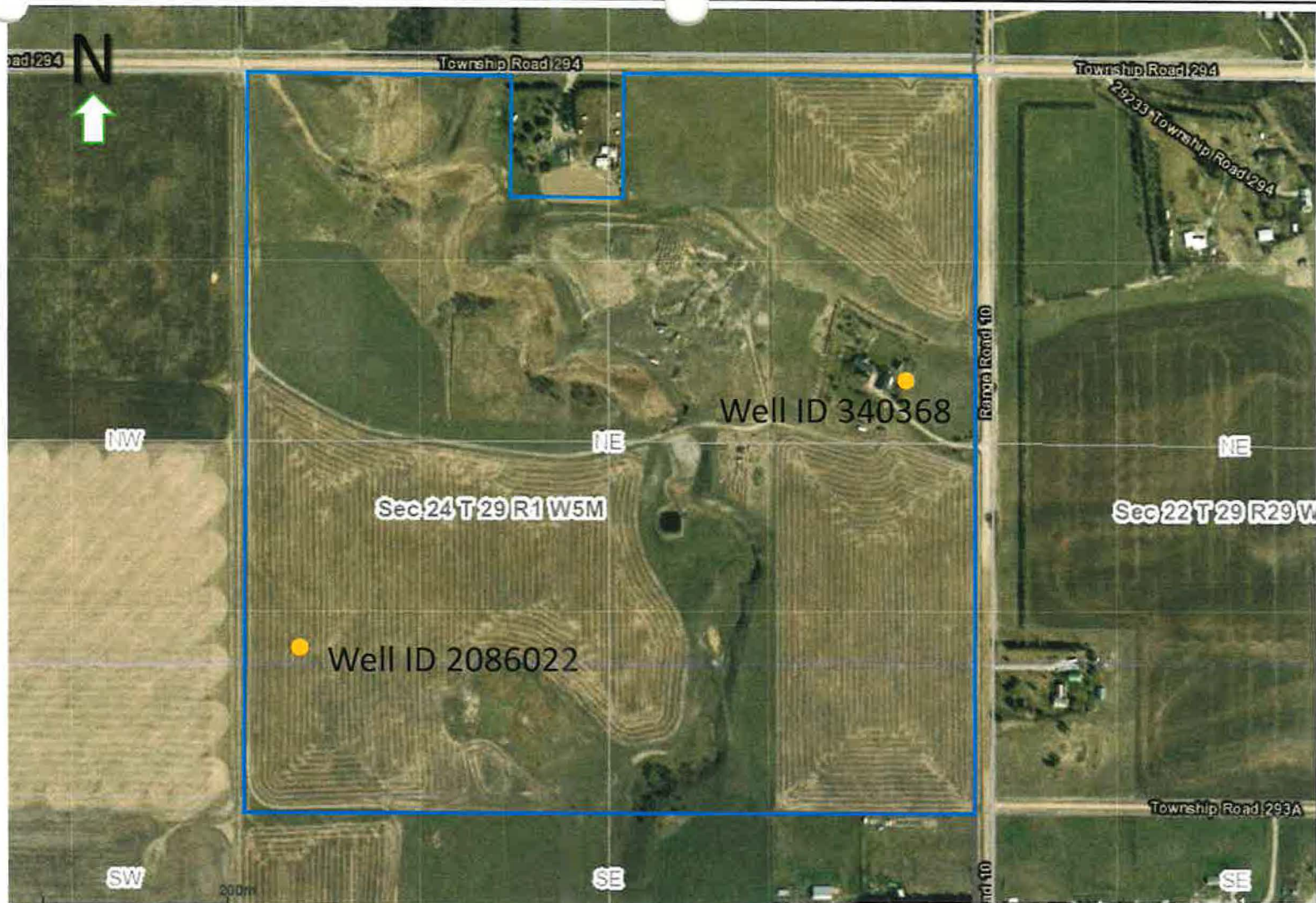
Groundwater Resources
Information Technologies 3.0 Ltd.

Surface Topography Map
NE – 24 – 29 – 01W5
LINC 0019163583
Mountain View County

Date: May 12, 2026

Project: 2026-2551

Figure 3



LEGEND



Site Location



Water Supply Well Location

Appin Developments Ltd.



Groundwater Resources
Information Technologies 3.0 Ltd.

Existing Water Supply Well Locations
NE – 24 – 29 – 01W5
LINC 0019163583
Mountain View County

Date: May 12, 2026

Project: 2026-2551

Figure 4

Appendix B: Site Photographs

Photo 1: Looking northeast towards the Site from the southwest corner of the Site. Showing cropped agricultural land with former gravel operation visible in the distance.



Photo 2: Looking south from the southwest corner of the Site towards the adjacent property. Shows the Site is fenced towards the south with land use to the south consisting of a similar agricultural cropland



Photo 3: Looking towards the adjacent western property from the southwest corner of the Site. The adjacent west property is separated from the Site by a fence and consists of similar agricultural cropland.

Photo 4: Looking north from the far northwest corner of the Site. Showing the locked northwest access point to the Site and the gravel road separating the Site from the adjacent northern agricultural property.



Photo 5: Looking southwest at the adjacent western agricultural property from the northwest corner of the Site. Showing fence line running along the boundary between the Site and adjacent western property.



Photo 6: Looking east from the northwest corner of the Site across at the Site. Shows the topography drop where the coulee/creek exits the Site and the 4-acre residential development (not part of the Site) in the background.



Photo 7: Looking south on the Site from the east-west dirt road the cuts through the coulee. The topographic low point of the Site. Water is flowing in from the south and moving north. There is no sheen on the water or excessive algal build up associated with eutrophication.



Photo 8: Looking north from the east-west road crossing the coulee at the water continuing to flow towards the north through a culvert installed under the roadway. No sheen or odours were present on the water or adjacent vegetation.



Photo 9: Just east of the coulee there is a collection of materials with burn marks, indicating a possible historical burn pit location within a depression.

Photo 10: Near photo 9 there were empty metal drums. No staining on the ground around the barrel was found during the Site investigation. Barrels were unlabeled.





Photo 11: Collection of old heating and heating/cooling units. No staining or associated liquids were found around the units.

Photo 12: Showing the information on the back of one of the heating/cooling units with the manufacturing date post 1992.

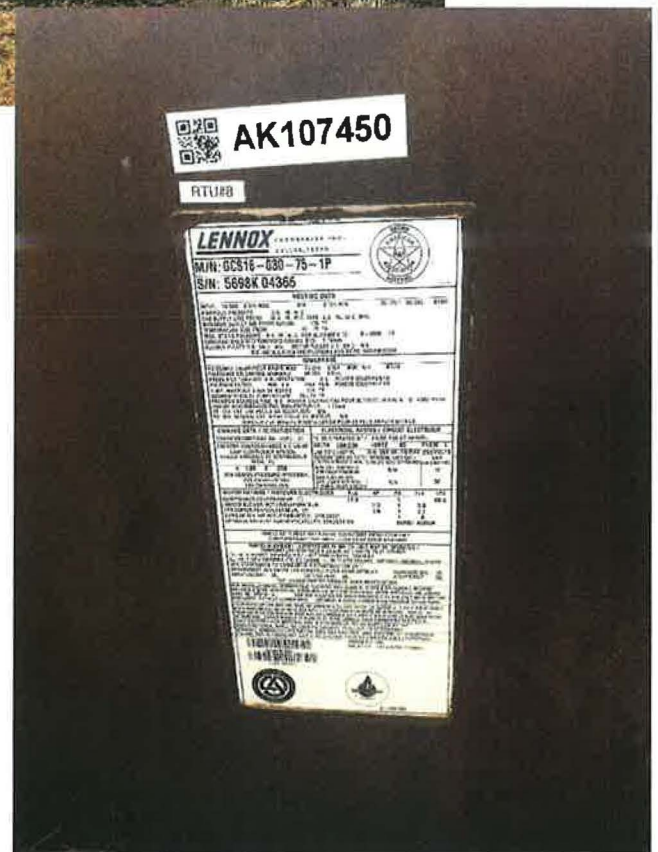




Photo 13: Looking southwest from the northern former gravel extraction site. Showing the excavator, trailer, and RV unit.

Photo 14: Ground surface under the excavator unit is relatively clean with the exception of a small spot to the front shown in Photo 15 below.





Photo 15: Below the front of the excavator there is a small area where grease/lubricant has leaked down to the ground from the excavator.



Photo 16: Gravel screen sorter present within the northern former gravel extraction area



Photo 17: Piles of rock from the former gravel operation with vegetative growth

Photo 18: Material storage shed near the former gravel extraction site in the north of the Site. Plywood construction. No chemical or liquid storage present.





Photo 19: Power pole with transformer present south of the garage near the residential home on Site.

Photo 20: Double garage building present to the east of the mobile home showing building age and construction





Photo 21: Water supply well located to the east of the mobile home and garages. Wires to connect a pump were still present in the well

Photo 22: Water storage tank behind the double door garage. No leaks or staining around the tank was present.





Photo 23: Mobile home present within the east of the Site

Photo 24: Single door garage/shed located east of the mobile home





Photo 25: Fibre glass above ground storage tank located south of the garage buildings. No leaks, stains or stressed vegetation were noted around the tank during the Site visit.



Photo 26: Looking west across the Site from the northeast corner at the above ground power line running across the northeast of the Site down towards the mobile home.



Appendix C: Aerial Photographs



Legend



Location of Subject Site



Groundwater Resources
Information Technologies 3.0 Ltd.

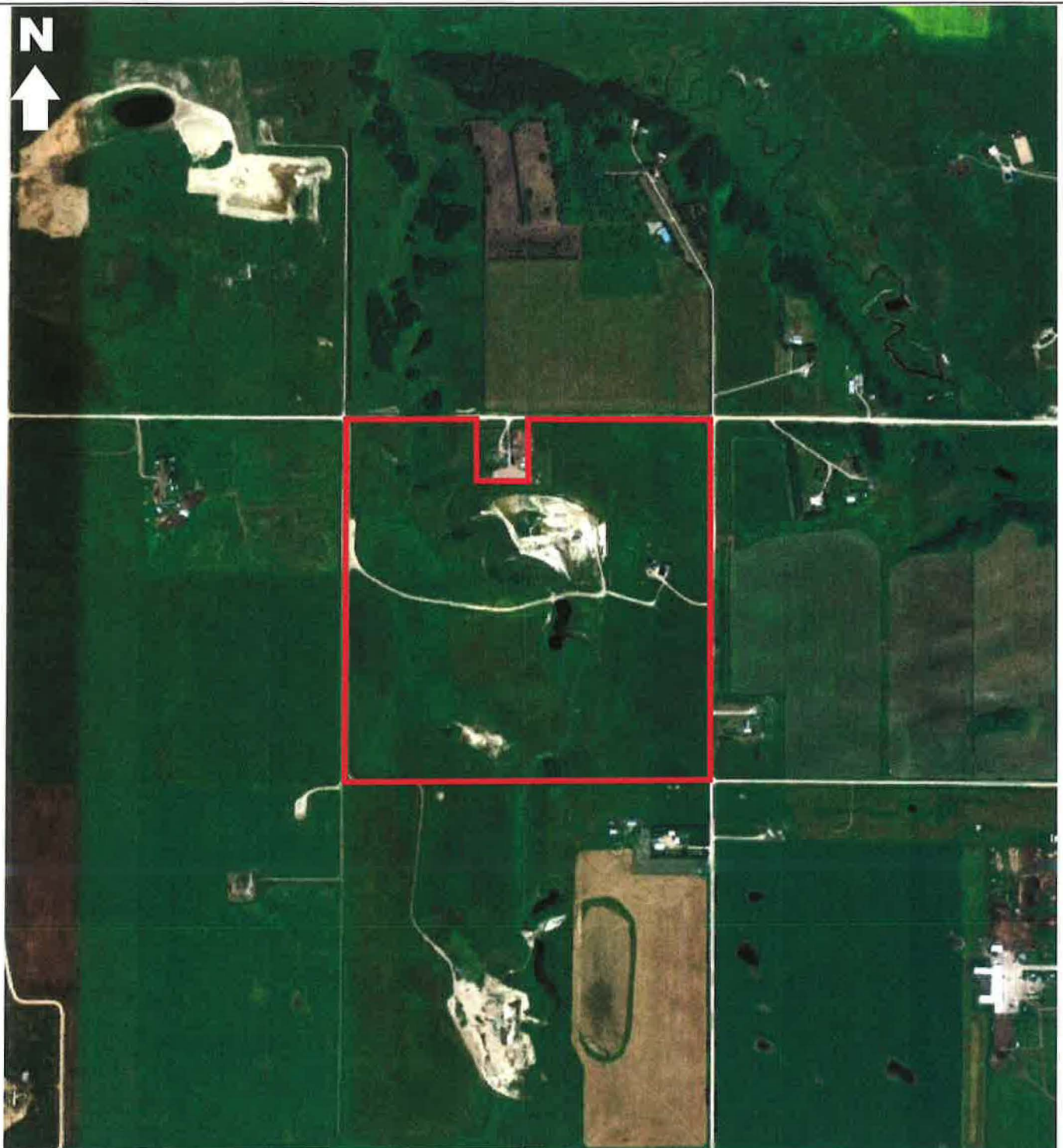
Appin Developments Ltd.

NE-24-29-1W5M - LINC 0019163583
Mountain View County
2023 Aerial Photograph (Google Earth)

Date: May 2026

Project ID: 2026 - 2551

Plate No. 7



Legend



Location of Subject Site



Groundwater Resources
Information Technologies 3.0 Ltd.

Appin Developments Ltd.

NE-24-29-1W5M - LINC 0019163583

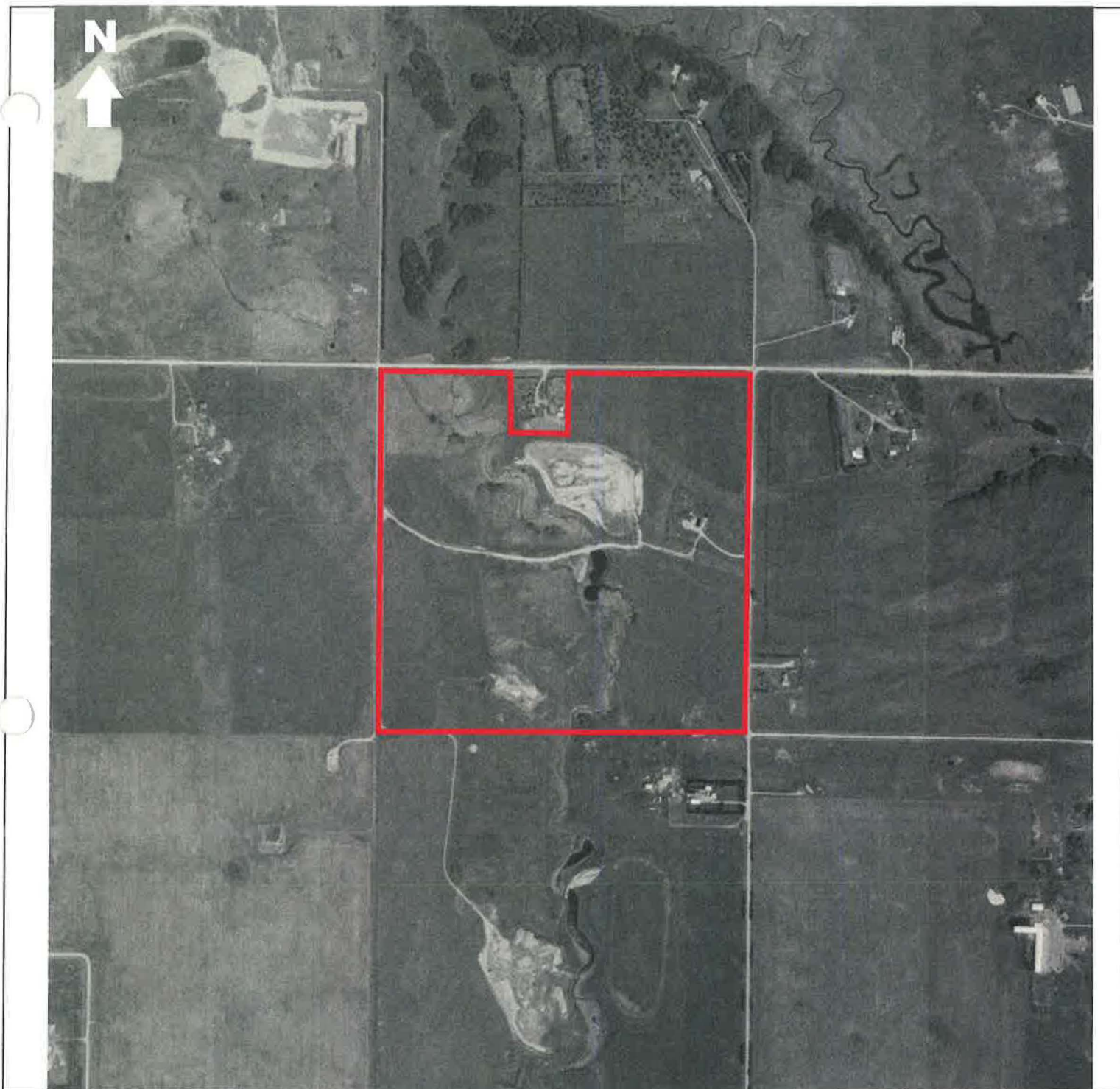
Mountain View County

2011 Aerial Photograph (Original Scale 1:20,000)

Date: May 2026

Project ID: 2026 - 2551

Plate No. 6



Legend

 Location of Subject Site



Groundwater Resources
Information Technologies 3.0 Ltd.

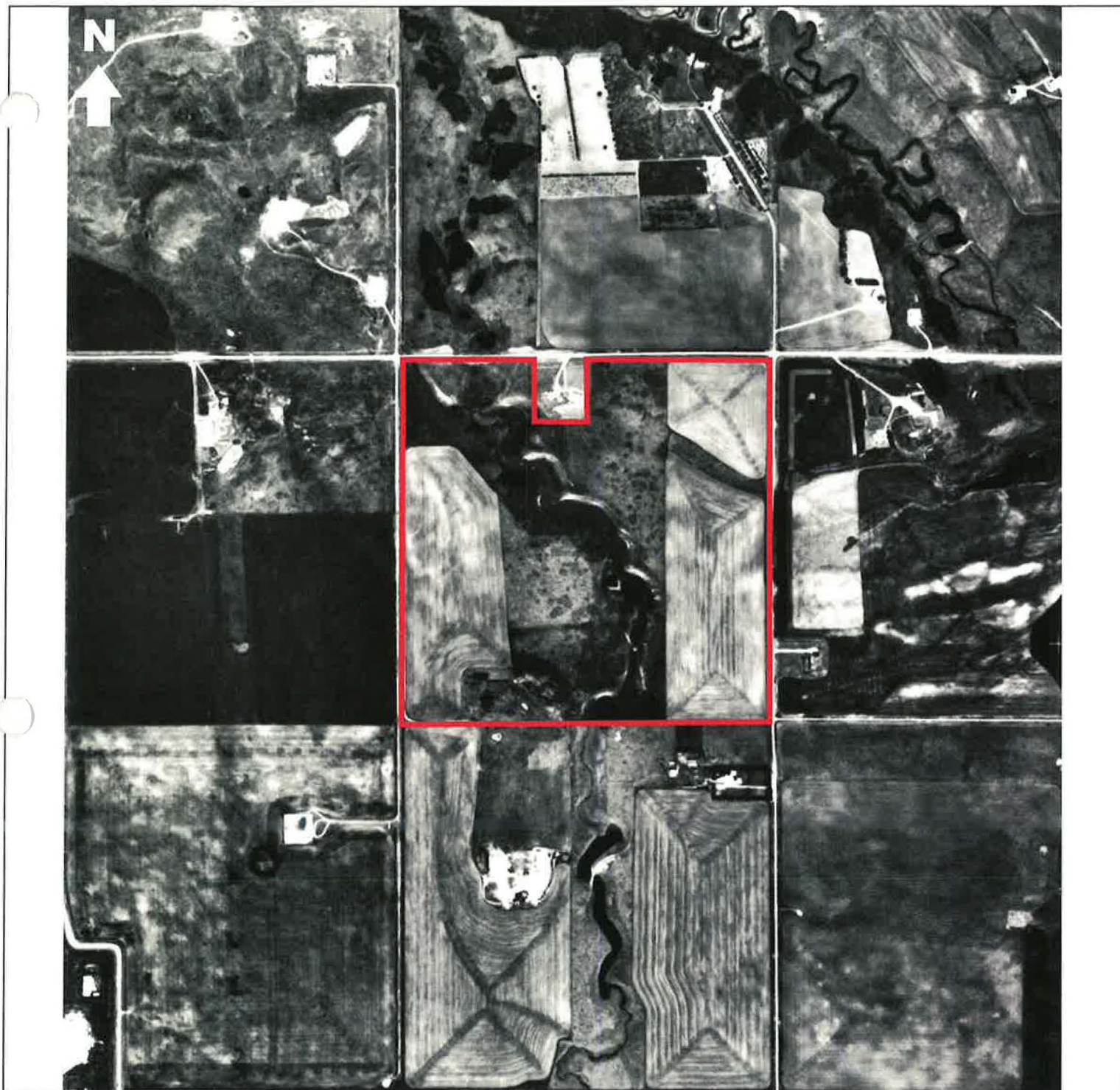
Appin Developments Ltd.

NE-24-29-1W5M - LINC 0019163583
Mountain View County
2000 Aerial Photograph (Original Scale 1:30,000)

Date: May 2026

Project ID: 2026 - 2551

Plate No. 5



Legend



Location of Subject Site



Groundwater Resources
Information Technologies 3.0 Ltd.

Appin Developments Ltd.

NE-24-29-1W5M - LINC 0019163583

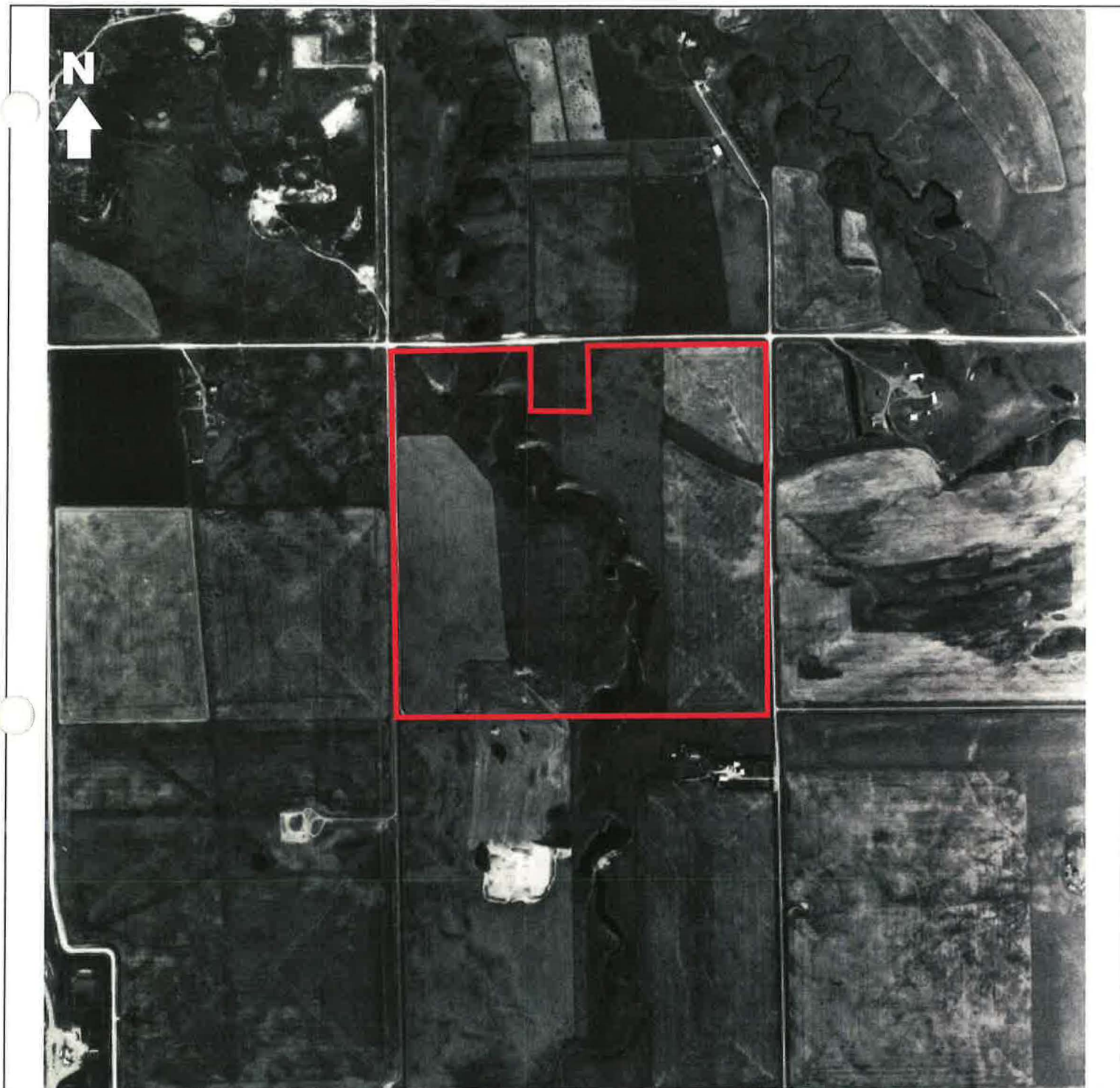
Mountain View County

1994 Aerial Photograph (Original Scale 1:20,000)

Date: May 2026

Project ID: 2026 - 2551

Plate No. 4



Legend

 Location of Subject Site



Groundwater Resources
Information Technologies 3.0 Ltd.

Appin Developments Ltd.

NE-24-29-1W5M - LINC 0019163583

Mountain View County

1988 Aerial Photograph (Original Scale 1:20,000)

Date: May 2026

Project ID: 2026 - 2551

Plate No. 3



Legend

 Location of Subject Site



Groundwater Resources
Information Technologies 3.0 Ltd.

Appin Developments Ltd.

NE-24-29-1W5M - LINC 0019163583

Mountain View County

1983 Aerial Photograph (Original Scale 1:25,000)

Date: May 2026

Project ID: 2026 - 2551

Plate No. 2



Legend



Location of Subject Site



Groundwater Resources
Information Technologies 3.0 Ltd.

Appin Developments Ltd.

NE-24-29-1W5M - LINC 0019163583

Mountain View County

1966 Aerial Photograph (Original Scale 1:31,680)

Date: May 2026

Project ID: 2026 - 2551

Plate No. 1



Appendix D: Land Titles



HISTORICAL LAND TITLE CERTIFICATE
TITLE CANCELLED ON JUNE 17, 1991

S	LINC	SHORT LEGAL	TITLE NUMBER
	0018 585 242	5;1;29;24;NE	174A77
	0018 585 250	5;1;29;24;SE	

LEGAL DESCRIPTION

FIRST
MERIDIAN 5 RANGE 1 TOWNSHIP 29
SECTION 24
QUARTER NORTH EAST
CONTAINING 64.7 HECTARES (160 ACRES)
MORE OR LESS
EXCEPTING THEREOUT:
PLAN NUMBER HECTARES ACRES
ROADWAY 6932 BM 0.672 1.66
EXCEPTING THEREOUT ALL MINES AND MINERALS

SECOND
MERIDIAN 5 RANGE 1 TOWNSHIP 29
SECTION 24
QUARTER SOUTH EAST
EXCEPTING THEREOUT ALL MINES AND MINERALS
AREA: 64.7 HECTARES (160 ACRES) MORE OR LESS

ESTATE: FEE SIMPLE

MUNICIPALITY: MOUNTAIN VIEW COUNTY

REGISTERED OWNER(S)				
REGISTRATION	DATE(DMY)	DOCUMENT TYPE	VALUE	CONSIDERATION
174A77	25/10/1972		\$35,334	

OWNERS:

ANTHONY PETRUS BACKS (FARMER)
OF CROSSFIELD
ALBERTA

ENCUMBRANCES, LIENS & INTERESTS

PAGE 2
174A77

REGISTRATION

NUMBER	DATE (D/M/Y)	PARTICULARS
751 042 052	07/05/1975	UTILITY RIGHT OF WAY GRANTEE - ROCKYVIEW GAS CO-OP LTD.
911 127 152	17/06/1991	CAVEAT RE : ACQUISITION OF LAND CAVEATOR - THE COUNTY OF MOUNTAIN VIEW NO. 17, BAG 100, DIDSBURY ALBERTA TOMOWO AFFECTED LAND: 5;1;29;24;NE
911 127 153	17/06/1991	SUBDIVISION PLAN 9111208 AFFECTED LAND: 5;1;29;24;NE CANCELLED AS TO PART NEW TITLE ISSUED FOR THE REMAINDER

TOTAL INSTRUMENTS: 003

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN
ACCURATE REPRODUCTION OF THE CERTIFICATE OF
TITLE REPRESENTED HEREIN THIS 23 DAY OF
NOVEMBER, 2018 AT 02:51 P.M.

ORDER NUMBER: 36304676

CUSTOMER FILE NUMBER:



END OF CERTIFICATE

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

THE ABOVE PROVISIONS DO NOT PROHIBIT THE ORIGINAL PURCHASER FROM
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PART OF THE ORIGINAL PURCHASER APPLYING PROFESSIONAL, CONSULTING
OR TECHNICAL EXPERTISE FOR THE BENEFIT OF CLIENT(S).



HISTORICAL LAND TITLE CERTIFICATE
TITLE CANCELLED ON JUNE 17, 1991

S
LINC SHORT LEGAL TITLE NUMBER
0018 585 242 5;1;29;24;NE 174A77
0018 585 250 5;1;29;24;SE

LEGAL DESCRIPTION

FIRST
MERIDIAN 5 RANGE 1 TOWNSHIP 29
SECTION 24
QUARTER NORTH EAST
CONTAINING 64.7 HECTARES (160 ACRES)
MORE OR LESS
EXCEPTING THEREOUT:
PLAN NUMBER HECTARES ACRES
ROADWAY 6932 BM 0.672 1.66
EXCEPTING THEREOUT ALL MINES AND MINERALS

SECOND
MERIDIAN 5 RANGE 1 TOWNSHIP 29
SECTION 24
QUARTER SOUTH EAST
EXCEPTING THEREOUT ALL MINES AND MINERALS
AREA: 64.7 HECTARES (160 ACRES) MORE OR LESS

ESTATE: FEE SIMPLE

MUNICIPALITY: MOUNTAIN VIEW COUNTY

REGISTRATION	DATE (DMY)	DOCUMENT	REGISTERED OWNER(S) TYPE	VALUE	CONSIDERATION
--------------	------------	----------	-----------------------------	-------	---------------

174A77	25/10/1972			\$35,334	
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OWNERS

ANTHONY PETRUS BACKS (FARMER)
OF CROSSFIELD
ALBERTA

ENCUMBRANCES, LIENS & INTERESTS

PAGE 2

174A77

REGISTRATION

NUMBER	DATE (D/M/Y)	PARTICULARS
751 042 052	07/05/1975	UTILITY RIGHT OF WAY GRANTEE - ROCKYVIEW GAS CO-OP LTD.
911 127 152	17/06/1991	CAVEAT RE : ACQUISITION OF LAND CAVEATOR - THE COUNTY OF MOUNTAIN VIEW NO. 17, BAG 100, DIDSBURY ALBERTA TOMOWO AFFECTED LAND: 5;1;29;24;NE
911 127 153	17/06/1991	SUBDIVISION PLAN 9111208 AFFECTED LAND: 5;1;29;24;NE CANCELLED AS TO PART NEW TITLE ISSUED FOR THE REMAINDER

TOTAL INSTRUMENTS: 003

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN
ACCURATE REPRODUCTION OF THE CERTIFICATE OF
TITLE REPRESENTED HEREIN THIS 23 DAY OF
NOVEMBER, 2018 AT 02:53 P.M.

ORDER NUMBER: 36304704

CUSTOMER FILE NUMBER:



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THIS ELECTRONICALLY TRANSMITTED LAND TITLES PRODUCT IS INTENDED
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OR TECHNICAL EXPERTISE FOR THE BENEFIT OF CLIENT(S).



HISTORICAL LAND TITLE CERTIFICATE
TITLE CANCELLED ON MAY 14, 2002

S
LINC SHORT LEGAL TITLE NUMBER
0019 163 583 5;1;29;24;NE 011 324 227

LEGAL DESCRIPTION

MERIDIAN 5 RANGE 1 TOWNSHIP 29
SECTION 24
QUARTER NORTH EAST
CONTAINING 64.7 HECTARES (160 ACRES)
MORE OR LESS
EXCEPTING THEREOUT:
PLAN NUMBER HECTARES ACRES
SUBDIVISION 9111208 1.67 4.13
EXCEPTING THEREOUT ALL MINES AND MINERALS

ESTATE: FEE SIMPLE

MUNICIPALITY: MOUNTAIN VIEW COUNTY

REFERENCE NUMBER: 941 327 430

REGISTERED OWNER(S)				
REGISTRATION	DATE (DMY)	DOCUMENT TYPE	VALUE	CONSIDERATION
011 324 227	01/11/2001	TRANSFER OF LAND	\$8,500	NOMINAL

OWNERS

ANTHONY PETRUS BACKS

AND

JOHANNA JACOBA BACKS

BOTH OF:

P.O. BOX 367

CROSSFIELD

ALBERTA T0M 0S0

AS JOINT TENANTS

ENCUMBRANCES, LIENS & INTERESTS

PAGE 2

011 324 227

REGISTRATION

NUMBER	DATE (D/M/Y)	PARTICULARS
751 042 052	07/05/1975	UTILITY RIGHT OF WAY GRANTEE - ROCKYVIEW GAS CO-OP LTD.
911 127 152	17/06/1991	CAVEAT RE : ACQUISITION OF LAND CAVEATOR - THE COUNTY OF MOUNTAIN VIEW NO. 17. BAG 100, DIDSBURY ALBERTA TOMOWO
941 327 431	21/12/1994	MORTGAGE MORTGAGEE - ANTHONY PETRUS BACKS MORTGAGEE - JOHANNA JACOBA BACKS BOTH OF: BOX 367 CROSSFIELD ALBERTA TOMOSO ORIGINAL PRINCIPAL AMOUNT: \$85,000
941 327 432	21/12/1994	CAVEAT RE : OPTION TO PURCHASE CAVEATOR - ANTHONY PETRUS BACKS CAVEATOR - JOHANNA JACOBA BACKS BOTH OF: P.O. BOX 367 CROSSFIELD ALBERTA TOMOSO AGENT - REGINALD J HASHIZUME
011 324 228	01/11/2001	DISCHARGE OF MORTGAGE 941327431
011 324 229	01/11/2001	DISCHARGE OF CAVEAT 941327432
021 164 615	14/05/2002	AFFIDAVIT OF SURVIVING JOINT TENANT NEW TITLE ISSUED AFFECTED PARTY: ANTHONY PETRUS BACKS

TOTAL INSTRUMENTS: 007

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN
ACCURATE REPRODUCTION OF THE CERTIFICATE OF
TITLE REPRESENTED HEREIN THIS 23 DAY OF
NOVEMBER, 2018 AT 02:53 P.M.

ORDER NUMBER: 36304704

CUSTOMER FILE NUMBER:



END OF CERTIFICATE

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OR TECHNICAL EXPERTISE FOR THE BENEFIT OF CLIENT(S).



HISTORICAL LAND TITLE CERTIFICATE
TITLE CANCELLED ON MAY 14, 2002

S
LINC SHORT LEGAL TITLE NUMBER
0019 163 583 - 5;1;29;24;NE 021 164 615

LEGAL DESCRIPTION

MERIDIAN 5 RANGE 1 TOWNSHIP 29
SECTION 24
QUARTER NORTH EAST
CONTAINING 64.7 HECTARES (160 ACRES)
MORE OR LESS
EXCEPTING THEREOUT:
PLAN NUMBER HECTARES ACRES
SUBDIVISION 9111208 1.67 4.13
EXCEPTING THEREOUT ALL MINES AND MINERALS

ESTATE: FEE SIMPLE

MUNICIPALITY: MOUNTAIN VIEW COUNTY

REFERENCE NUMBER: 011 324 227

REGISTRATION	DATE (DMY)	REGISTERED OWNER(S) DOCUMENT TYPE	VALUE	CONSIDERATION
021 164 615	14/05/2002	AFFIDAVIT OF SURVIVING JOINT TENANT		

OWNERS

JOHANNA JACOBA BACKS
OF P.O. BOX 367
CROSSFIELD
ALBERTA T0M 0S0

ENCUMBRANCES, LIENS & INTERESTS

REGISTRATION NUMBER	DATE (D/M/Y)	PARTICULARS
751 042 052	07/05/1975	UTILITY RIGHT OF WAY GRANTEE - ROCKYVIEW GAS CO-OP LTD.

(CONTINUED)

ENCUMBRANCES, LIENS & INTERESTS

PAGE 2

021 164 615

REGISTRATION
NUMBER DATE (D/M/Y) PARTICULARS

911 127 152 17/06/1991 CAVEAT
RE : ACQUISITION OF LAND
CAVEATOR - THE COUNTY OF MOUNTAIN VIEW NO. 17.
BAG 100, DIDSBURY
ALBERTA TOMOWO

021 164 616 14/05/2002 TRANSFER OF LAND
OWNERS - PAUL J BACKS
BOX 367
CROSSFIELD
ALBERTA TOMOSO
NEW TITLE ISSUED

TOTAL INSTRUMENTS: 003

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN
ACCURATE REPRODUCTION OF THE CERTIFICATE OF
TITLE REPRESENTED HEREIN THIS 23 DAY OF
NOVEMBER, 2018 AT 02:53 P.M.

ORDER NUMBER: 36304704

CUSTOMER FILE NUMBER:



END OF CERTIFICATE

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FOR THE SOLE USE OF THE ORIGINAL PURCHASER, AND NONE OTHER,
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PART OF THE ORIGINAL PURCHASER APPLYING PROFESSIONAL, CONSULTING
OR TECHNICAL EXPERTISE FOR THE BENEFIT OF CLIENT(S).



HISTORICAL LAND TITLE CERTIFICATE
TITLE CANCELLED ON AUGUST 27, 2007

S
LINC SHORT LEGAL TITLE NUMBER
0019 163 583 . 5;1;29;24;NE 021 164 616

LEGAL DESCRIPTION

MERIDIAN 5 RANGE 1 TOWNSHIP 29
SECTION 24
QUARTER NORTH EAST
CONTAINING 64.7 HECTARES (160 ACRES)
MORE OR LESS
EXCEPTING THEREOUT:
PLAN NUMBER HECTARES ACRES
SUBDIVISION 9111208 1.67 4.13
EXCEPTING THEREOUT ALL MINES AND MINERALS

ESTATE: FEE SIMPLE

MUNICIPALITY: MOUNTAIN VIEW COUNTY

REFERENCE NUMBER: 021 164 615

REGISTERED OWNER(S)				
REGISTRATION	DATE(DMY)	DOCUMENT TYPE	VALUE	CONSIDERATION
021 164 616	14/05/2002	TRANSFER OF LAND	\$85,000	\$85,000

OWNERS

PAUL J BACKS
OF BOX 367
CROSSFIELD
ALBERTA T0M 0S0

ENCUMBRANCES, LIENS & INTERESTS

REGISTRATION NUMBER	DATE (D/M/Y)	PARTICULARS
751 042 052	07/05/1975	UTILITY RIGHT OF WAY GRANTEE - ROCKYVIEW GAS CO-OP LTD.
911 127 152	17/06/1991	CAVEAT

(CONTINUED)

ENCUMBRANCES, LIENS & INTERESTS

PAGE 2
021 164 616

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

RE : ACQUISITION OF LAND
CAVEATOR - THE COUNTY OF MOUNTAIN VIEW NO. 17.
BAG 100, DIDSBURY
ALBERTA TOMOWO

031 314 632	15/09/2003	MORTGAGE MORTGAGEE - SCOTIA MORTGAGE CORPORATION. 102, 304 MAIN STREET P.O. BOX 3009 AIRDRIE ALBERTA T4B2B4 ORIGINAL PRINCIPAL AMOUNT: \$157,027
-------------	------------	--

071 037 626	24/01/2007	MORTGAGE MORTGAGEE - ALBERTA TREASURY BRANCHES. 1214 RAILWAY STREET BOX 700 CROSSFIELD ALBERTA TOMOSO ORIGINAL PRINCIPAL AMOUNT: \$221,355
-------------	------------	--

071 428 738	27/08/2007	TRANSFER OF LAND OWNERS - 1319818 ALBERTA LTD. 440, 10816 MACLEOD TRAIL SE CALGARY ALBERTA T2J5N8 NEW TITLE ISSUED
-------------	------------	---

TOTAL INSTRUMENTS: 005

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN
ACCURATE REPRODUCTION OF THE CERTIFICATE OF
TITLE REPRESENTED HEREIN THIS 23 DAY OF
NOVEMBER, 2018 AT 02:53 P.M.

ORDER NUMBER: 36304704

CUSTOMER FILE NUMBER:



END OF CERTIFICATE

(CONTINUED)

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HISTORICAL LAND TITLE CERTIFICATE
TITLE CANCELLED ON MAY 14, 2009

S
LINC SHORT LEGAL TITLE NUMBER
0019 163 583 5;1;29;24;NE 071 428 738

LEGAL DESCRIPTION

MERIDIAN 5 RANGE 1 TOWNSHIP 29
SECTION 24
QUARTER NORTH EAST
CONTAINING 64.7 HECTARES (160 ACRES)
MORE OR LESS
EXCEPTING THEREOUT:
PLAN NUMBER HECTARES ACRES
SUBDIVISION 9111208 1.67 4.13
EXCEPTING THEREOUT ALL MINES AND MINERALS

ESTATE: FEE SIMPLE

MUNICIPALITY: MOUNTAIN VIEW COUNTY

REFERENCE NUMBER: 021 164 616

REGISTERED OWNER(S)				
REGISTRATION	DATE (DMY)	DOCUMENT TYPE	VALUE	CONSIDERATION
071 428 738	27/08/2007	TRANSFER OF LAND	\$920,000	\$920,000

OWNERS

CROSSFIELD SAND & GRAVEL INC.
OF 440, 108916 MACLEOD TRAIL SE
CALGARY
ALBERTA T2J 5N8

(DATA UPDATED BY: CHANGE OF NAME 081032191)

ENCUMBRANCES, LIENS & INTERESTS

REGISTRATION		
NUMBER	DATE (D/M/Y)	PARTICULARS
751 042 052	07/05/1975	UTILITY RIGHT OF WAY GRANTEE - ROCKYVIEW GAS CO-OP LTD.
911 127 152	17/06/1991	CAVEAT

(CONTINUED)

ENCUMBRANCES, LIENS & INTERESTS

PAGE 2

071 428 738

REGISTRATION

NUMBER DATE (D/M/Y) PARTICULARS

RE : ACQUISITION OF LAND
CAVEATOR - THE COUNTY OF MOUNTAIN VIEW NO. 17.
BAG 100, DIDSBURY
ALBERTA TOMOWO

031 314 632 15/09/2003 MORTGAGE
MORTGAGEE - SCOTIA MORTGAGE CORPORATION.
102, 304 MAIN STREET
P.O. BOX 3009
AIRDRIE
ALBERTA T4B2B4
ORIGINAL PRINCIPAL AMOUNT: \$157,027

071 037 626 24/01/2007 MORTGAGE
MORTGAGEE - ALBERTA TREASURY BRANCHES.
1214 RAILWAY STREET
BOX 700
CROSSFIELD
ALBERTA TOMOSO
ORIGINAL PRINCIPAL AMOUNT: \$221,355

071 428 739 27/08/2007 MORTGAGE
MORTGAGEE - DAVID O'BRIEN
MORTGAGEE - CINDY GREIG
MORTGAGEE - D. K. DEVELOPMENTS LTD.
MORTGAGEE - ROMEO FAUCHON
MORTGAGEE - ALEX WILDE
ALL OF :
C/O INVESCO MORTGAGE INC
400, 7015 MACLEOD TRAIL S
CALGARY
ALBERTA T2H2K6
ORIGINAL PRINCIPAL AMOUNT: \$680,000

071 428 740 27/08/2007 CAVEAT
RE : ASSIGNMENT OF RENTS AND LEASES
CAVEATOR - DAVID O'BRIEN
CAVEATOR - CINDY GREIG
CAVEATOR - D. K. DEVELOPMENTS LTD.
CAVEATOR - ROMEO FAUCHON
CAVEATOR - ALEX WILDE
ALL OF :
C/O INVESCO MORTGAGE INC
400, 7015 MACLEOD TRAIL S
CALGARY
ALBERTA T2H2K6
AGENT - DARREN J TAYLOR

071 573 990 23/11/2007 DISCHARGE OF MORTGAGE 071037626

(CONTINUED)

ENCUMBRANCES, LIENS & INTERESTS

PAGE 3
071 428 738

REGISTRATION

NUMBER	DATE (D/M/Y)	PARTICULARS
071 573 991	23/11/2007	DISCHARGE OF MORTGAGE 031314632
081 032 191	23/01/2008	CHANGE OF NAME RE: CROSSFIELD SAND & GRAVEL INC. 440, 108916 MACLEOD TRAIL SE CALGARY ALBERTA T2J5N8 AFFECTS INSTRUMENT: 071428738
081 036 034	28/01/2008	EASEMENT OVER THE NE 1/4 OF SEC 24 IN TWP 29 RGE 1 W5 FOR BENEFIT OF THE SE 1/4 OF SEC 24 IN TWP 29 RGE 1 W5 PORTION AS DESCRIBED
091 131 863	14/05/2009	TRANSFER OF LAND OWNERS - APPIN CONSTRUCTION LTD. 440, 10816 MACLEOD TRAIL SE CALGARY ALBERTA T2J5N8 NEW TITLE ISSUED

TOTAL INSTRUMENTS: 011

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN
ACCURATE REPRODUCTION OF THE CERTIFICATE OF
TITLE REPRESENTED HEREIN THIS 23 DAY OF
NOVEMBER, 2018 AT 02:53 P.M.

ORDER NUMBER: 36304704

CUSTOMER FILE NUMBER:



END OF CERTIFICATE

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

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



LAND TITLE CERTIFICATE

S

LINE SHORT LEGAL
0019 163 583 5;1;29;24;NE

TITLE NUMBER
091 131 863

LEGAL DESCRIPTION

MERIDIAN 5 RANGE 1 TOWNSHIP 29
SECTION 24
QUARTER NORTH EAST
CONTAINING 64.7 HECTARES (160 ACRES)
MORE OR LESS
EXCEPTING THEREOUT:
PLAN NUMBER HECTARES ACRES
SUBDIVISION 9111208 1.67 4.13
EXCEPTING THEREOUT ALL MINES AND MINERALS

ESTATE: FEE SIMPLE

MUNICIPALITY: MOUNTAIN VIEW COUNTY

REFERENCE NUMBER: 071 428 738

REGISTERED OWNER(S)				
REGISTRATION	DATE(DMY)	DOCUMENT TYPE	VALUE	CONSIDERATION
091 131 863	14/05/2009	TRANSFER OF LAND	\$960,000	\$960,000

OWNERS

APPIN CONSTRUCTION LTD.
OF 440, 10816 MACLEOD TRAIL SE
CALGARY
ALBERTA T2J 5N8

ENCUMBRANCES, LIENS & INTERESTS

REGISTRATION		
NUMBER	DATE (D/M/Y)	PARTICULARS
751 042 052	07/05/1975	UTILITY RIGHT OF WAY GRANTEE - ROCKYVIEW GAS CO-OP LTD.
911 127 152	17/06/1991	CAVEAT

(CONTINUED)

ENCUMBRANCES, LIENS & INTERESTS

PAGE 2

091 131 863

REGISTRATION

NUMBER DATE (D/M/Y) PARTICULARS

RE : ACQUISITION OF LAND
CAVEATOR - THE COUNTY OF MOUNTAIN VIEW NO. 17.
BAG 100, DIDSBURY
ALBERTA TOMOWO

081 036 034 28/01/2008 EASEMENT
OVER THE NE 1/4 OF SEC 24 IN TWP 29 RGE 1 W5
FOR BENEFIT OF
THE SE 1/4 OF SEC 24 IN TWP 29 RGE 1 W5
PORTION AS DESCRIBED

091 131 864 14/05/2009 MORTGAGE
MORTGAGEE - AGRICULTURE FINANCIAL SERVICES
CORPORATION.
4910 52 ST, BOX 5000 STN. MAIN
CAMROSE
ALBERTA T4V4E8
ORIGINAL PRINCIPAL AMOUNT: \$1,264,000

091 191 569 07/07/2009 NOTICE OF SECURITY INTEREST
RE : FIXTURES
IN FAVOUR OF - AGRICULTURE FINANCIAL SERVICES
CORPORATION.
4910 52 STREET, PO BOX 500 STN MAIN
CAMROSE
ALBERTA T4V4E8
DEBTOR - APPIN CONSTRUCTION LTD.
440, 10816 MACLEOD TRAIL SE
CALGARY
ALBERTA T2J5N8
AMOUNT: \$1,264,000
EXPIRES: 2015/05/11

091 388 899 23/12/2009 MORTGAGE
MORTGAGEE - YAREK BARTOSZ
MORTGAGEE - LISA MCINTOSH
BOTH OF:
440, 10816 MACLEOD TRAIL SE
CALGARY
ALBERTA T2J5N8
ORIGINAL PRINCIPAL AMOUNT: \$150,000

181 071 992 09/04/2018 TAX NOTIFICATION
BY - MOUNTAIN VIEW COUNTY.
P.O. BAG 100
DIDSBURY, ALBERTA
TOMOWO

TOTAL INSTRUMENTS: 007

(CONTINUED)

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN
ACCURATE REPRODUCTION OF THE CERTIFICATE OF
TITLE REPRESENTED HEREIN THIS 23 DAY OF
NOVEMBER, 2018 AT 02:51 P.M.

ORDER NUMBER: 36304676

CUSTOMER FILE NUMBER:



END OF CERTIFICATE

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PART OF THE ORIGINAL PURCHASER APPLYING PROFESSIONAL, CONSULTING
OR TECHNICAL EXPERTISE FOR THE BENEFIT OF CLIENT(S).

ENCUMBRANCES, LIENS & INTERESTS

PAGE 4

091 131 863

REGISTRATION

NUMBER DATE (D/M/Y) PARTICULARS

DIDSBURY, ALBERTA
TOMOWO

161 217 441 14/09/2016 DISCHARGE OF TAX NOTIFICATION 151102299

181 071 992 09/04/2018 TAX NOTIFICATION
BY -- MOUNTAIN VIEW COUNTY.
P.O. BAG 100
DIDSBURY, ALBERTA
TOMOWO

TOTAL INSTRUMENTS: 018

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN
ACCURATE REPRODUCTION OF THE CERTIFICATE OF
TITLE REPRESENTED HEREIN THIS 23 DAY OF
NOVEMBER, 2018 AT 02:51 P.M.

ORDER NUMBER: 36304676

CUSTOMER FILE NUMBER:



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OR TECHNICAL EXPERTISE FOR THE BENEFIT OF CLIENT(S).



HISTORICAL LAND TITLE CERTIFICATE
CURRENT TITLE WITH HISTORICAL DATA

S
LINE: SHORT LEGAL TITLE NUMBER
0019 163 583 . 5;1;29;24;NE 091 131 863

LEGAL DESCRIPTION

MERIDIAN 5 RANGE 1 TOWNSHIP 29
SECTION 24
QUARTER NORTH EAST
CONTAINING 64.7 HECTARES (160 ACRES)
MORE OR LESS
EXCEPTING THEREOUT:
PLAN NUMBER HECTARES ACRES
SUBDIVISION 9111208 1.67 4.13
EXCEPTING THEREOUT ALL MINES AND MINERALS

ESTATE: FEE SIMPLE

MUNICIPALITY: MOUNTAIN VIEW COUNTY

REFERENCE NUMBER: 071 428 738

REGISTERED OWNER(S)				
REGISTRATION	DATE (DMY)	DOCUMENT TYPE	VALUE	CONSIDERATION
091 131 863	14/05/2009	TRANSFER OF LAND	\$960,000	\$960,000

OWNERS

APPIN CONSTRUCTION LTD.
OF 440, 10816 MACLEOD TRAIL SE
CALGARY
ALBERTA T2J 5N8

ENCUMBRANCES, LIENS & INTERESTS

REGISTRATION	DATE (D/M/Y)	PARTICULARS
751 042 052	07/05/1975	UTILITY RIGHT OF WAY GRANTEE - ROCKYVIEW GAS CO-OP LTD.
911 127 152	17/06/1991	CAVEAT

(CONTINUED)

P.O. BOX 367
CROSSFIELD
ALBERTA
AS JOINT TENANTS

ENCUMBRANCES, LIENS & INTERESTS

REGISTRATION

NUMBER	DATE (D/M/Y)	PARTICULARS
751 042 052	07/05/1975	UTILITY RIGHT OF WAY GRANTEE - ROCKYVIEW GAS CO-OP LTD.
911 127 152	17/06/1991	CAVEAT RE : ACQUISITION OF LAND CAVEATOR - THE COUNTY OF MOUNTAIN VIEW NO. 17. BAG 100, DIDSBURY ALBERTA TOMOWO AFFECTED LAND: 5;1;29;24;NE
911 163 225	25/07/1991	NOTIFICATION - RD ABAND & CONSOL NEW TITLE ISSUED AFFECTED LAND: 5;1;29;24;NE

TOTAL INSTRUMENTS: 003

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN
ACCURATE REPRODUCTION OF THE CERTIFICATE OF
TITLE REPRESENTED HEREIN THIS 23 DAY OF
NOVEMBER, 2018 AT 02:53 P.M.

ORDER NUMBER: 36304704

CUSTOMER FILE NUMBER:



END OF CERTIFICATE

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OR TECHNICAL EXPERTISE FOR THE BENEFIT OF CLIENT(S).



HISTORICAL LAND TITLE CERTIFICATE
TITLE CANCELLED ON DECEMBER 21, 1994

S	LINE	SHORT LEGAL	TITLE NUMBER
	0019 163 583	5;1;29;24;NE	911 163 225
	0018 585 250	5;1;29;24;SE	

LEGAL DESCRIPTION

FIRST
MERIDIAN 5 RANGE 1 TOWNSHIP 29
SECTION 24
QUARTER NORTH EAST
CONTAINING 64.7 HECTARES (160 ACRES)
MORE OR LESS
EXCEPTING THEREOUT:

PLAN	NUMBER	HECTARES	ACRES
SUBDIVISION	9111208	1.67	4.13

EXCEPTING THEREOUT ALL MINES AND MINERALS

SECOND
MERIDIAN 5 RANGE 1 TOWNSHIP 29
SECTION 24
QUARTER SOUTH EAST
EXCEPTING THEREOUT ALL MINES AND MINERALS
AREA: 64.7 HECTARES (160 ACRES) MORE OR LESS

ESTATE: FEE SIMPLE

MUNICIPALITY: MOUNTAIN VIEW COUNTY

REFERENCE NUMBER: 911 146 671

REGISTERED OWNER(S)				
REGISTRATION	DATE(DMY)	DOCUMENT TYPE	VALUE	CONSIDERATION
911 163 225	25/07/1991	NOTIFICATION - RD ABAND & CONSOL		

OWNERS

ANTHONY PETRUS BACKS

AND

JOHANNA JACOBA BACKS

(CONTINUED)

BOTH OF:
P.O. BOX 367
CROSSFIELD
ALBERTA
AS JOINT TENANTS

ENCUMBRANCES, LIENS & INTERESTS

REGISTRATION NUMBER	DATE (D/M/Y)	PARTICULARS
751 042 052	07/05/1975	UTILITY RIGHT OF WAY GRANTEE - ROCKYVIEW GAS CO-OP LTD.
911 127 152	17/06/1991	CAVEAT RE : ACQUISITION OF LAND CAVEATOR - THE COUNTY OF MOUNTAIN VIEW NO. 17. BAG 100, DIDSBURY ALBERTA TOMOWO AFFECTED LAND: 5;1;29;24;NE
941 327 258	21/12/1994	SEPARATION - LINGS NEW TITLE ISSUED

TOTAL INSTRUMENTS: 003

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN
ACCURATE REPRODUCTION OF THE CERTIFICATE OF
TITLE REPRESENTED HEREIN THIS 23 DAY OF
NOVEMBER, 2018 AT 02:53 P.M.

ORDER NUMBER: 36304704

CUSTOMER FILE NUMBER:



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OR TECHNICAL EXPERTISE FOR THE BENEFIT OF CLIENT(S).



HISTORICAL LAND TITLE CERTIFICATE
TITLE CANCELLED ON DECEMBER 21, 1994

S
LINE SHORT LEGAL TITLE NUMBER
0019 163 583 5;1;29;24;NE 941 327 258

LEGAL DESCRIPTION

MERIDIAN 5 RANGE 1 TOWNSHIP 29
SECTION 24
QUARTER NORTH EAST
CONTAINING 64.7 HECTARES (160 ACRES)
MORE OR LESS
EXCEPTING THEREOUT:
PLAN NUMBER HECTARES ACRES
SUBDIVISION 9111208 1.67 4.13
EXCEPTING THEREOUT ALL MINES AND MINERALS

ESTATE: FEE SIMPLE

MUNICIPALITY: MOUNTAIN VIEW COUNTY

REFERENCE NUMBER: 911 163 225

REGISTERED OWNER(S)				
REGISTRATION	DATE (DMY)	DOCUMENT TYPE	VALUE	CONSIDERATION
941 327 258	21/12/1994	SEPARATION - LINGS		

OWNERS

ANTHONY PETRUS BACKS

AND
JOHANNA JACOBA BACKS
BOTH OF:
P.O. BOX 367
CROSSFIELD
ALBERTA
AS JOINT TENANTS

ENCUMBRANCES, LIENS & INTERESTS

PAGE 2

941 327 258

REGISTRATION

NUMBER	DATE (D/M/Y)	PARTICULARS
751 042 052	07/05/1975	UTILITY RIGHT OF WAY GRANTEE - ROCKYVIEW GAS CO-OP LTD.
911 127 152	17/06/1991	CAVEAT RE : ACQUISITION OF LAND CAVEATOR - THE COUNTY OF MOUNTAIN VIEW NO. 17. BAG 100, DIDSBURY ALBERTA TOMOWO
941 327 430	21/12/1994	TRANSFER OF LAND OWNERS - PAUL JEFFERY BACKS OWNERS - DAWN MARIE BACKS BOTH OF: P.O. BOX 16 CROSSFIELD ALBERTA TOMOSO AS JOINT TENANTS NEW TITLE ISSUED

TOTAL INSTRUMENTS: 003

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN
ACCURATE REPRODUCTION OF THE CERTIFICATE OF
TITLE REPRESENTED HEREIN THIS 23 DAY OF
NOVEMBER, 2018 AT 02:53 P.M.

ORDER NUMBER: 36304704

CUSTOMER FILE NUMBER:



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OR TECHNICAL EXPERTISE FOR THE BENEFIT OF CLIENT(S).



LAND TITLE CERTIFICATE

S
LINC SHORT LEGAL TITLE NUMBER
0019 163 583 5;1;29;24;NE 091 131 863

LEGAL DESCRIPTION

MERIDIAN 5 RANGE 1 TOWNSHIP 29
SECTION 24
QUARTER NORTH EAST
CONTAINING 64.7 HECTARES (160 ACRES)
MORE OR LESS
EXCEPTING THEREOUT:
PLAN NUMBER HECTARES ACRES
SUBDIVISION 9111208 1.67 4.13
EXCEPTING THEREOUT ALL MINES AND MINERALS

ESTATE: FEE SIMPLE

MUNICIPALITY: MOUNTAIN VIEW COUNTY

REFERENCE NUMBER: 071 428 738

REGISTERED OWNER(S)				
REGISTRATION	DATE (DMY)	DOCUMENT TYPE	VALUE	CONSIDERATION
091 131 863	14/05/2009	TRANSFER OF LAND	\$960,000	\$960,000

OWNERS

APPIN CONSTRUCTION LTD.
OF 440, 10816 MACLEOD TRAIL SE
CALGARY
ALBERTA T2J 5N8

ENCUMBRANCES, LIENS & INTERESTS

REGISTRATION	DATE (D/M/Y)	PARTICULARS
751 042 052	07/05/1975	UTILITY RIGHT OF WAY GRANTEE - ROCKYVIEW GAS CO-OP LTD.
911 127 152	17/06/1991	CAVEAT

(CONTINUED)

ENCUMBRANCES, LIENS & INTERESTS

PAGE 2

091 131 863

REGISTRATION

NUMBER DATE (D/M/Y) PARTICULARS

RE : ACQUISITION OF LAND
CAVEATOR - THE COUNTY OF MOUNTAIN VIEW NO. 17.
BAG 100, DIDSBURY
ALBERTA TOMOWO

091 036 034 28/01/2008 EASEMENT
OVER THE NE 1/4 OF SEC 24 IN TWP 29 RGE 1 W5
FOR BENEFIT OF
THE SE 1/4 OF SEC 24 IN TWP 29 RGE 1 W5
PORTION AS DESCRIBED

091 131 864 14/05/2009 MORTGAGE
MORTGAGEE - AGRICULTURE FINANCIAL SERVICES
CORPORATION.
4910 52 ST, BOX 5000 STN. MAIN
CAMROSE
ALBERTA T4V4E8
ORIGINAL PRINCIPAL AMOUNT: \$1,264,000

091 191 569 07/07/2009 NOTICE OF SECURITY INTEREST
RE : FIXTURES
IN FAVOUR OF - AGRICULTURE FINANCIAL SERVICES
CORPORATION.
4910 52 STREET, PO BOX 500 STN MAIN
CAMROSE
ALBERTA T4V4E8
DEBTOR - APPIN CONSTRUCTION LTD.
440, 10816 MACLEOD TRAIL SE
CALGARY
ALBERTA T2J5N8
AMOUNT: \$1,264,000
EXPIRES: 2015/05/11

091 388 899 23/12/2009 MORTGAGE
MORTGAGEE - YAREK BARTOSZ
MORTGAGEE - LISA MCINTOSH
BOTH OF:
440, 10816 MACLEOD TRAIL SE
CALGARY
ALBERTA T2J5N8
ORIGINAL PRINCIPAL AMOUNT: \$150,000

181 071 992 09/04/2018 TAX NOTIFICATION
BY - MOUNTAIN VIEW COUNTY.
P.O. BAG 100
DIDSBURY, ALBERTA
TOMOWO

TOTAL INSTRUMENTS: 007

(CONTINUED)

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN
ACCURATE REPRODUCTION OF THE CERTIFICATE OF
TITLE REPRESENTED HEREIN THIS 23 DAY OF
NOVEMBER, 2018 AT 02:51 P.M.

ORDER NUMBER: 36304676

CUSTOMER FILE NUMBER:



END OF CERTIFICATE

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OR TECHNICAL EXPERTISE FOR THE BENEFIT OF CLIENT(S).



HISTORICAL LAND TITLE CERTIFICATE
TITLE CANCELLED ON JULY 25, 1991

S
LINC SHORT LEGAL TITLE NUMBER
0018 667 071 . 5;1;29;24;NE 911 146 671
0018 585 250 5;1;29;24;SE

LEGAL DESCRIPTION

FIRST
MERIDIAN 5 RANGE 1 TOWNSHIP 29
SECTION 24
QUARTER NORTH EAST
CONTAINING 64.7 HECTARES (160 ACRES)
MORE OR LESS

EXCEPTING THEREOUT:

PLAN	NUMBER	HECTARES	ACRES
ROADWAY	6932 BM	0.672	1.66
SUBDIVISION	9111208	1.67	4.13

EXCEPTING THEREOUT ALL MINES AND MINERALS

SECOND
MERIDIAN 5 RANGE 1 TOWNSHIP 29
SECTION 24
QUARTER SOUTH EAST
EXCEPTING THEREOUT ALL MINES AND MINERALS
AREA: 64.7 HECTARES (160 ACRES) MORE OR LESS

ESTATE: FEE SIMPLE

MUNICIPALITY: MOUNTAIN VIEW COUNTY

REFERENCE NUMBER: 911 127 153 +1

REGISTERED OWNER(S)				
REGISTRATION	DATE(DMY)	DOCUMENT TYPE	VALUE	CONSIDERATION
911 146 671	09/07/1991	TRANSFER OF LAND	\$200,000	SEE INSTRUMENT

OWNERS

ANTHONY PETRUS BACKS

AND

JOHANNA JACOBA BACKS

BOTH OF:

(CONTINUED)

P.O. BOX 367
CROSSFIELD
ALBERTA
AS JOINT TENANTS

ENCUMBRANCES, LIENS & INTERESTS

REGISTRATION .

NUMBER	DATE (D/M/Y)	PARTICULARS
751 042 052	07/05/1975	UTILITY RIGHT OF WAY GRANTEE - ROCKYVIEW GAS CO-OP LTD.
911 127 152	17/06/1991	CAVEAT RE : ACQUISITION OF LAND CAVEATOR - THE COUNTY OF MOUNTAIN VIEW NO. 17, BAG 100, DIDSBURY ALBERTA TOMOWO AFFECTED LAND: 5;1;29;24;NE
911 163 225	25/07/1991	NOTIFICATION - RD ABAND & CONSOL NEW TITLE ISSUED AFFECTED LAND: 5;1;29;24;NE

TOTAL INSTRUMENTS: 003

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN
ACCURATE REPRODUCTION OF THE CERTIFICATE OF
TITLE REPRESENTED HEREIN THIS 23 DAY OF
NOVEMBER, 2018 AT 02:53 P.M.

ORDER NUMBER: 36304704

CUSTOMER FILE NUMBER:



END OF CERTIFICATE

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OR TECHNICAL EXPERTISE FOR THE BENEFIT OF CLIENT(S).



HISTORICAL LAND TITLE CERTIFICATE
TITLE CANCELLED ON DECEMBER 21, 1994

S	LINC	SHORT LEGAL	TITLE NUMBER
	0019 163 583	5;1;29;24;NE	911 163 225
	0018 585 250	5;1;29;24;SE	

LEGAL DESCRIPTION

FIRST
MERIDIAN 5 RANGE 1 TOWNSHIP 29
SECTION 24
QUARTER NORTH EAST
CONTAINING 64.7 HECTARES (160 ACRES)
MORE OR LESS
EXCEPTING THEREOUT:

PLAN	NUMBER	HECTARES	ACRES
SUBDIVISION	9111208	1.67	4.13

EXCEPTING THEREOUT ALL MINES AND MINERALS

SECOND
MERIDIAN 5 RANGE 1 TOWNSHIP 29
SECTION 24
QUARTER SOUTH EAST
EXCEPTING THEREOUT ALL MINES AND MINERALS
AREA: 64.7 HECTARES (160 ACRES) MORE OR LESS

ESTATE: FEE SIMPLE

MUNICIPALITY: MOUNTAIN VIEW COUNTY

REFERENCE NUMBER: 911 146 671

REGISTERED OWNER(S)				
REGISTRATION	DATE(DMY)	DOCUMENT TYPE	VALUE	CONSIDERATION
911 163 225	25/07/1991	NOTIFICATION - RD ABAND & CONSOL		

OWNERS

ANTHONY PETRUS BACKS

AND

JOHANNA JACOBA BACKS

(CONTINUED)

BOTH OF:
P.O. BOX 367
CROSSFIELD
ALBERTA
AS JOINT TENANTS

ENCUMBRANCES, LIENS & INTERESTS

REGISTRATION

NUMBER	DATE (D/M/Y)	PARTICULARS
751 042 052	07/05/1975	UTILITY RIGHT OF WAY GRANTEE - ROCKYVIEW GAS CO-OP LTD.
911 127 152	17/06/1991	CAVEAT RE : ACQUISITION OF LAND CAVEATOR - THE COUNTY OF MOUNTAIN VIEW NO. 17. BAG 100, DIDSBURY ALBERTA TOMOWO AFFECTED LAND: 5;1;29;24;NE
941 327 258	21/12/1994	SEPARATION - LINCS NEW TITLE ISSUED

TOTAL INSTRUMENTS: 003

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN
ACCURATE REPRODUCTION OF THE CERTIFICATE OF
TITLE REPRESENTED HEREIN THIS 23 DAY OF
NOVEMBER, 2018 AT 02:53 P.M.

ORDER NUMBER: 36304704

CUSTOMER FILE NUMBER:



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OR TECHNICAL EXPERTISE FOR THE BENEFIT OF CLIENT(S) .



HISTORICAL LAND TITLE CERTIFICATE
TITLE CANCELLED ON DECEMBER 21, 1994

S
LINC SHORT LEGAL TITLE NUMBER
0019 163 583 . 5;1;29;24;NE 941 327 258

LEGAL DESCRIPTION

MERIDIAN 5 RANGE 1 TOWNSHIP 29
SECTION 24
QUARTER NORTH EAST
CONTAINING 64.7 HECTARES (160 ACRES)
MORE OR LESS
EXCEPTING THEREOUT:
PLAN NUMBER HECTARES ACRES
SUBDIVISION 9111208 1.67 4.13
EXCEPTING THEREOUT ALL MINES AND MINERALS

ESTATE: FEE SIMPLE

MUNICIPALITY: MOUNTAIN VIEW COUNTY

REFERENCE NUMBER: 911 163 225

REGISTERED OWNER(S)				
REGISTRATION	DATE(DMY)	DOCUMENT TYPE	VALUE	CONSIDERATION
941 327 258	21/12/1994	SEPARATION - LINC		

OWNERS

ANTHONY PETRUS BACKS

AND

JOHANNA JACOBA BACKS

BOTH OF:

P.O. BOX 367

CROSSFIELD

ALBERTA

AS JOINT TENANTS

ENCUMBRANCES, LIENS & INTERESTS

PAGE 2
941 327 258

REGISTRATION

NUMBER	DATE (D/M/Y)	PARTICULARS
751 042 052	07/05/1975	UTILITY RIGHT OF WAY GRANTEE - ROCKYVIEW GAS CO-OP LTD.
911 127 152	17/06/1991	CAVEAT RE : ACQUISITION OF LAND CAVEATOR - THE COUNTY OF MOUNTAIN VIEW NO. 17. BAG 100, DIDSBURY ALBERTA TOMOWO
941 327 430	21/12/1994	TRANSFER OF LAND OWNERS - PAUL JEFFERY BACKS OWNERS - DAWN MARIE BACKS BOTH OF: P.O. BOX 16 CROSSFIELD ALBERTA TOMOSO AS JOINT TENANTS NEW TITLE ISSUED

TOTAL INSTRUMENTS: 003

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN
ACCURATE REPRODUCTION OF THE CERTIFICATE OF
TITLE REPRESENTED HEREIN THIS 23 DAY OF
NOVEMBER, 2018 AT 02:53 P.M.

ORDER NUMBER: 36304704

CUSTOMER FILE NUMBER:



END OF CERTIFICATE

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OR TECHNICAL EXPERTISE FOR THE BENEFIT OF CLIENT(S).



HISTORICAL LAND TITLE CERTIFICATE
TITLE CANCELLED ON NOVEMBER 01, 2001

S
LINC SHORT LEGAL TITLE NUMBER
0019 163 583 . 5;1;29;24;NE 941 327 430

LEGAL DESCRIPTION

MERIDIAN 5 RANGE 1 TOWNSHIP 29
SECTION 24
QUARTER NORTH EAST
CONTAINING 64.7 HECTARES (160 ACRES)
MORE OR LESS
EXCEPTING THEREOUT:
PLAN NUMBER HECTARES ACRES
SUBDIVISION 9111208 1.67 4.13
EXCEPTING THEREOUT ALL MINES AND MINERALS

ESTATE: FEE SIMPLE

MUNICIPALITY: MOUNTAIN VIEW COUNTY

REFERENCE NUMBER: 941 327 258

REGISTERED OWNER(S)				
REGISTRATION	DATE (DMY)	DOCUMENT TYPE	VALUE	CONSIDERATION
941 327 430	21/12/1994	TRANSFER OF LAND	\$85,000	\$85,000

OWNERS

PAUL JEFFERY BACKS

AND

DAWN MARIE BACKS

BOTH OF:

P.O. BOX 16

CROSSFIELD

ALBERTA T0M 0S0

AS JOINT TENANTS

ENCUMBRANCES, LIENS & INTERESTS

PAGE 2

941 327 430

REGISTRATION

NUMBER DATE (D/M/Y) PARTICULARS

751 042 052 07/05/1975 UTILITY RIGHT OF WAY
GRANTEE - ROCKYVIEW GAS CO-OP LTD.

911 127 152 17/06/1991 CAVEAT
RE : ACQUISITION OF LAND
CAVEATOR - THE COUNTY OF MOUNTAIN VIEW NO. 17.
BAG 100, DIDSBURY
ALBERTA TOMOWO

941 327 431 21/12/1994 MORTGAGE
MORTGAGEE - ANTHONY PETRUS BACKS
MORTGAGEE - JOHANNA JACOBA BACKS
BOTH OF:
BOX 367
CROSSFIELD
ALBERTA TOMOSO
ORIGINAL PRINCIPAL AMOUNT: \$85,000

941 327 432 21/12/1994 CAVEAT
RE : OPTION TO PURCHASE
CAVEATOR - ANTHONY PETRUS BACKS
CAVEATOR - JOHANNA JACOBA BACKS
BOTH OF:
P.O. BOX 367
CROSSFIELD
ALBERTA TOMOSO
AGENT - REGINALD J HASHIZUME

011 324 227 01/11/2001 TRANSFER OF LAND
OWNERS - ANTHONY PETRUS BACKS
OWNERS - JOHANNA JACOBA BACKS
BOTH OF:
P.O. BOX 367
CROSSFIELD
ALBERTA TOMOSO
AS JOINT TENANTS
NEW TITLE ISSUED

TOTAL INSTRUMENTS: 005

(CONTINUED)

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NOVEMBER, 2018 AT 02:53 P.M.

ORDER NUMBER: 36304704

CUSTOMER FILE NUMBER:



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HISTORICAL LAND TITLE CERTIFICATE
TITLE CANCELLED ON JULY 09, 1991

S
LINC SHORT LEGAL TITLE NUMBER
0018 667 071 . 5;1;29;24;NE 911 127 153 +1
0018 585 250 5;1;29;24;SE

LEGAL DESCRIPTION

FIRST
MERIDIAN 5 RANGE 1 TOWNSHIP 29
SECTION 24
QUARTER NORTH EAST
CONTAINING 64.7 HECTARES (160 ACRES)
MORE OR LESS

EXCEPTING THEREOUT:

PLAN	NUMBER	HECTARES	ACRES
ROADWAY	6932 BM	0.672	1.66
SUBDIVISION	9111208	1.67	4.13

EXCEPTING THEREOUT ALL MINES AND MINERALS

SECOND
MERIDIAN 5 RANGE 1 TOWNSHIP 29
SECTION 24
QUARTER SOUTH EAST
EXCEPTING THEREOUT ALL MINES AND MINERALS
AREA: 64.7 HECTARES (160 ACRES) MORE OR LESS

ESTATE: FEE SIMPLE

MUNICIPALITY: MOUNTAIN VIEW COUNTY

REFERENCE NUMBER: 174A77

REGISTERED OWNER(S)				
REGISTRATION	DATE(DMY)	DOCUMENT TYPE	VALUE	CONSIDERATION

911 127 153 17/06/1991 SUBDIVISION PLAN

OWNERS

ANTHONY PETRUS BACKS (FARMER)
OF CROSSFIELD
ALBERTA

(CONTINUED)

ENCUMBRANCES, LIENS & INTERESTS

PAGE 2

911 127 153 +1

REGISTRATION

NUMBER DATE (D/M/Y) PARTICULARS

751 042 052 07/05/1975 UTILITY RIGHT OF WAY
GRANTEE - ROCKYVIEW GAS CO-OP LTD.

911 127 152 17/06/1991 CAVEAT
RE : ACQUISITION OF LAND
CAVEATOR - THE COUNTY OF MOUNTAIN VIEW NO. 17.
BAG 100, DIDSBURY
ALBERTA TOMOWO
AFFECTED LAND: 5;1;29;24;NE

911 146 671 09/07/1991 TRANSFER OF LAND
OWNERS - ANTHONY PETRUS BACKS
OWNERS - JOHANNA JACOBA BACKS
BOTH OF:
P.O. BOX 367
CROSSFIELD
ALBERTA
AS JOINT TENANTS
NEW TITLE ISSUED

TOTAL INSTRUMENTS: 003

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OR TECHNICAL EXPERTISE FOR THE BENEFIT OF CLIENT(S).



Appendix E: Municipal and Provincial Records

29 October 2007

File # SCD01595

Mr. Martin Klinger
Director Environment, Health and Safety
Viterra Inc.
2625 Victoria Avenue
Regina, Saskatchewan S4T 7T9

Dear Mr. Klinger:

**Re: Groundwater Interception Trench at the Viterra Former Fertilizer Storage Facility,
Crossfield, Alberta SW 24-29-1 W5M**

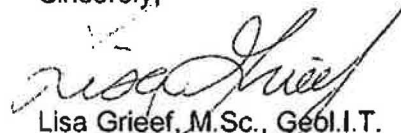
Thank you for notifying Alberta Environment of the contaminant situation and remediation initiatives at the Crossfield Former Fertilizer Storage Facility. From the information that Stantec has provided we understand that nitrate contamination in soil and groundwater has been delineated in the unconsolidated sediments at the site. You intend to control the source and lateral transport of nitrate contaminated groundwater in sediments by installing a downgradient interception trench and sump. The collected water will be pumped and spread on a nearby pasture.

We support these intentions and expect that:

- there will be no adverse effect to the environment by spreading on the nearby pasture;
- vertical delineation of contaminants of potential concern will be conducted at the site;
- an ongoing groundwater monitoring program will be implemented to ensure that any surface water bodies and domestic use aquifers are not being impacted and to confirm that remedial objectives have been achieved;
- if the volume of water pumped exceeds 1250 m³/yr, you will require an approval under the Water Act;
- existing and future assessment and remediation progress reports will be submitted to Alberta Environment.

If you have any questions or would like to discuss this letter, please call Lisa Grief at 403 297-5919.

Sincerely,


Lisa Grief, M.Sc., Geol.I.T.
Hydrogeologist
Southern Region, Calgary

cc: Allen Jobson, Stantec

Petro-Canada Products

P.O. Box 2844
Calgary, Alberta T2P 3E3
Telephone (403) 296-8000
Telex 03-825753

Produits Petro-Canada

C.P. 2844
Calgary (Alberta) T2P 3E3
Téléphone (403) 296-8000
Télex 03-825753



April 15, 1993



Mount View Health Unit
Box 117
Didsbury, Alberta
T0M 0W0

Attention: Mathew Green, Environmental Health Officer

Dear Sir

Re: Temporary Soil Recycling Application
SW 1/4 24-29-1-W5
Crossfield, Alberta

Please find attached our application for the above mentioned Temporary Soil Recycling Facility. Through previous discussions, we understand that you support land treatment as an appropriate technique for cleaning up lightly impacted soils from petroleum marketing sites.

Specifically, we feel that our Wessex (Crossfield) site is an excellent one to conduct such an activity. The subsurface contains many meters of low permeability silty clay, the groundwater is sufficiently deep and the existing zoning of this somewhat isolated location is highway commercial.

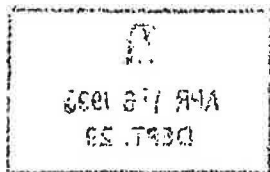
As indicated earlier, Don Wyrostock of Alberta Environment has visited the site and supports it as a suitable candidate for soil recycling.

The frost is now almost out of the ground and we are anxious to begin the clean-up and revitalization of a number of our Calgary area marketing properties. In addition, our "window of opportunity" for land treatment is a short one, coinciding with the limited growing/construction season.

For these reasons, we would appreciate your early review of this application. If you require any clarification or additional information please contact me in Calgary at 296-6445 (Fax 296-3059).

R E (Rick) Merryfield
Environmental and Safety Advisor
Alberta Business Area

cc D Wyrostock, Alberta Environment, Lethbridge
C. Graham, Clifton Associates, Calgary
G. Chow/R. Clark/S. Shandruk/P. Morris, Petro-Canada



PROPOSED TEMPORARY SOIL RECYCLING FACILITY
(LAND TREATMENT)

WESSEX SITE (CROSSFIELD), ALBERTA

PETRO-CANADA

FILE CG240

13 APRIL 1993

Prepared for: Petro-Canada

Prepared by: Clifton Associates Ltd.

Distribution: Petro-Canada Products - 10 copies
Clifton Associates Ltd. - 1 copy

Effective April 1, 2005

Available for Routine Disclosure
Per: Ministerial Order 23/2004

Reviewed by: W. J. J. J.

Date: 12 Feb 2007

Privileged & Confidential

CLIFTON ASSOCIATES LTD.

EXECUTIVE SUMMARY

Petro-Canada proposes to temporarily use their closed Wessex service station site for a one year period to treat and recycle soils that are mildly impacted with refined petroleum hydrocarbons. The soils in question will be generated from the decommissioning and revitalization of service stations and bulk plant properties in the Calgary vicinity. This report is intended to provide the necessary information to facilitate approval of Petro-Canada's land treatment application by Alberta Environment and the Mount View Health Unit.

The property is owned by Petro-Canada, and is located adjacent to the east side of Highway No. 2 northbound, 3.2 km (2 miles) north of the Crossfield exit overpass. This 3.35 hectare parcel of land is within the County of Mountain View, immediately north of its boundary with the Municipal District of Rocky View.

Facilities associated with the operation of the former service station and restaurant will be decommissioned. The treatment area will be stripped of topsoil and bermed, leaving a base of low permeability silty clay. The hydrocarbon impacted soil will be spread and tilled, with the hydrocarbon levels in the soils reduced over time through aeration and natural biodegradation.

There are several alternatives being considered for disposal of treated soil. The soil may be recycled to Petro-Canada or other commercial sites, may be used as landfill cover material, or may be used to improve the grade of this Wessex property or another nearby Petro-Canada surplus property to the south.

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EXECUTIVE SUMMARY

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DRAWINGS

Drawing No. CG182-1 Site Location Plan
Drawing No. CG182-2 Site Plan
Drawing No. CG182-3 Facilities Location Plan

1.0 INTRODUCTION

Petro-Canada proposes to temporarily use their closed Wessex service station site for a one year period to treat and recycle soils that are mildly impacted with refined petroleum hydrocarbons. The soils in question will be generated from the decommissioning and revitalization of service stations and bulk plant properties in the Calgary vicinity.

The property is owned by Petro-Canada, and is located in the southwest portion of the SW 1/4 of Sec 24-29-1-W5M. It is located adjacent to the east side of Highway No. 2 northbound, 3.2 km (2 miles) north of the Crossfield exit overpass as shown on the Site Location Plan, Drawing CG240-1. This 3.35 hectare parcel of land is within the County of Mountain View, immediately north of its boundary with the Municipal District of Rocky View.

The treatment area will be stripped of topsoil and bermed, leaving a base of low permeability silty clay. The hydrocarbon impacted soil will be spread and tilled, with the hydrocarbon levels in the soils reduced over time through aeration and natural biodegradation. This process has been used at many Alberta landfills to treat soils containing hydrocarbons for subsequent use as cover material. Petro-Canada has already successfully used the land treatment process at a number of marketing sites in Alberta over the last several years.

This report is intended to provide the necessary information to facilitate approval of Petro-Canada's land treatment application by Alberta Environment and the Mount View Health Unit.

2.0 SITE CHARACTERISTICS

2.1 Geography and Surface Drainage

The parcel of land is rectangular in shape and measures 109.95 m east-west by 304.78 m north-south. A general layout of the site is presented on the Site Plan, Drawing No. CG240-2.

The regional geology is classified as draped moraine, with low permeability silty clay glacial till of uneven thickness overlying bedrock. The regional terrain is classified as flat to undulating, reflecting the topography of the underlying bedrock and other deposits. The site is on a wide, flat NW-SE trending ridge. There is a small easterly flowing creek located 500 m south which turns north and runs 1,500 m east of the site. This creek drains north into Carstairs Creek, which in turn drains into the Rosebud River approximately 20 km to the SSE. Regional surface drainage is to the east-northeast.

The natural relief across the site is generally less than 2.0 m, although there are berms and ditches in the northern third of the property associated with construction of an on-site lagoon. Surface drainage appears to be towards the ditches associated with the highway and service road surrounding the site. The ditches drain 500 m southward into the small creek identified above.

There is an asphalt surface cover in the area of the service station buildings. With the exception of the lagoon, associated with the former restaurant and service station, the remainder of the site is currently grass covered.

22. Surrounding Land Use and Roads

The Petro-Canada property is zoned as Highway Commercial. The surrounding land use in all directions is farming and grassland. The nearest farm residences are 500 to the south on the east side of Highway No. 2 and approximately 700 m to the north on the west side of that highway.

The site is bound on the west by Highway No. 2 northbound. Entrance to the site from the highway is by way of a long paved access road which allows vehicles to exit at highway speed before decelerating.

A good quality graveled service road runs adjacent to the east side of Highway No. 2, its primary purpose being to limit direct access of rural roads to the major highway. This service road detours around the subject site, bounding its south, east and north property lines.

Rural gravel roads intersect this service road at locations 1.6 km (1.0 mile) south and north of the site. There is no through road along the section line immediately south of the site. The next nearest north-south road is located 1.6 km (1.0 mile) to the east; however that road is discontinuous.

Most of the truck traffic entering the site will be from the south. Traffic will exit Highway No. 2 northbound via the long, paved access ramp. Southbound traffic leaving the site will travel 3.2 km (2.0 miles) south on the service road which parallels the highway to the Crossfield overpass, and subsequently gain access to Highway No. 2 southbound.

2.3 On-Site Facilities

The service station was closed in early 1993, and is proposed for decommissioning during May 1993. The facilities on this property consist of:

- A permanent building and several adjacent trailers which housed a restaurant, a gas bar and associated offices;
- One underground tank nest with four 46,000 L gasoline and diesel fiberglass tanks;
- Two pump islands, with pumps already removed;
- A deep water well with steel casing and an older shallow water well with concrete cribbing located northeast and east of the buildings, respectively;
- Two concrete cribbings for access to septic tanks associated with an abandoned septic field;
- A 55 m square sewage lagoon located in the northern third of the site; and,
- A buried 100 mm diameter sewer line, several manholes and a lift station to move sewage from the restaurant/service station to the sewage lagoon.

The location of the facilities is shown on Drawing No. CG240-3. Petro-Canada proposes to decommission/remove the buildings, underground tanks, the water

Three bore holes were completed as monitoring wells. The wells were screened through much of the clay till interval, and penetrated approximately 0.5 into the surface of the underlying bedrock. Groundwater monitoring in late January encountered water at depths ranging from 2.4 m to 3.0 m below ground surface, with an apparent gradient towards the northeast. Subsequent groundwater in early April encountered groundwater at depths ranging from 2.5 m to 2.8 m, with a negligible gradient.

The wells were purged during the April monitoring program. Groundwater level recovery was fairly rapid, indicative of the fact that the wells penetrated into the sandstone bedrock.

A groundwater sample was recovered from one of the wells and submitted for analytical laboratory testing. Test results showed non-detectable concentrations of petroleum hydrocarbon constituents and lead. The measured concentration of phenols was greater than the draft Alberta M.U.S.T. guidelines criteria. Because the concentrations of all other test constituents were non-detectable, the high phenol concentration may be indicative of a high natural background concentration.

There are 17 recorded groundwater well installation records within 1500 m of the site. This includes records from two 1/4 sections in every direction around the site. The completion record for the deep cased well on the subject site indicates that it is completed in interbedded sandstone and shale bedrock at a depth of 58 m and that the depth to water was 36 m below ground surface. Based on the driller's reports the wells in this area are generally screened in the bedrock beginning at an average depth of 22 m. One well located more than a full 1/4 section to the west (upgradient) was screened in sandstone bedrock commencing at a depth of 2.4 m.

As there are no farm buildings within approximately 500 m of the site, and as all wells (with the exception of one a great distance to the west) are screened at a considerable depth below ground surface, there should be no potential impact to the neighbouring wells or the groundwater directly beneath the site. ?

3.0 TREATMENT SITE PREPARATION

3.1 Decommissioning of Site Facilities

As stated in Section 2.3 of this report, Petro-Canada proposes to decommission and remove the buildings and facilities on this site.

The underground petroleum storage tanks, product distribution lines and associated granular material will be excavated and the excavation backfilled with clean compacted clay soil. The concrete cribbings associated with the shallow well and the septic tank, and the manholes associated with the sewer line to the lagoon will be removed, and the holes backfilled with either a compacted soil or a suitable soil-bentonite mixture.

The three existing monitoring wells, located within the proposed treatment area, will also be removed.

The sewage lagoon located in the northern third of the property cannot be decommissioned and backfilled until the late spring or summer. The contents of the lagoon will be sampled and tested in accordance with guidelines provided by Standards and Approvals, Alberta Environment. Once test results are satisfactory, water will be released into the adjacent ditches in a controlled fashion in accordance with Alberta Environment. Subsequently, the lagoon will be backfilled by the "squeeze off" method, in which the sludge is displaced to the ground surface for spreading and drying. All methods and procedures proposed have been recommended by Standards and Approvals, Alberta Environment.

3.2 Base Preparation and Construction of Perimeter Berms

The topsoil will be stripped from the site and pushed to the perimeter to form berms. It is estimated that an average 150 mm topsoil will be stripped and a 1.5 m high perimeter berm constructed. The exterior toe of the perimeter berm will be approximately 2 m inside the site property lines. In the unlikely event that unsuitable soil conditions are encountered locally, removal and/or scarifying and compaction of that area may be required.

The berm will be lower and gently ramped at several locations near the southwest corner of the site to allow for truck access.

3.3 Extent and Staging of the Treatment Areas

It is proposed that subsequent to the removal of the buildings, underground tanks and wells, the southern two thirds (2/3) of the site will be prepared as described in section 3.2 above. This would provide a treatment area of approximately 18,500 m². This portion of the site will then be ready to receive and treat hydrocarbon impacted soils.

The sewage lagoon will be emptied, decommissioned and backfilled as previously stated. Subsequent to successful completion of that work, the northern third may also be used for soil treatment. This would provide a total treatment area of approximately 26,500 m².

4.0 SOIL TREATMENT OPERATIONS

A full suite of draft Alberta M.U.S.T. Guidelines analytical tests for soil with petroleum hydrocarbons will be conducted for each Petro-Canada source location. The hydrocarbon impacted soils will be hauled to the site in trucks. Upon entering the bermed site area the soils will either be placed directly over the treatment area or unloaded into a temporary untreated soil stockpile. After placement the soils will be spread to a uniform thickness, not exceeding 700 mm. The upper 300 mm to 400 mm of soil will be tilled and bladed with suitable farm or commercial implements. The frequency of the tilling will be governed by the weather conditions, the concentration and type of hydrocarbons in the soil, and the composition and moisture content of the soil.

Upon completion of treatment and confirmatory laboratory tests, the treated soils will either be removed from the treatment area or temporarily stockpiled. Every effort will be made to coordinate the importing and exporting of soils in order that double handling is minimized, and in order that treated material is available for backhaul.

The site should be able to accomodate between 5,000 m³ and 8,000 m³ of soil, based on a 300 mm treatment soil thickness. The land treatment site will be operated during the warm months, typically from April through early November.

A grid post marker system will be installed along the boundaries of the treatment area. Accurate location, date and equipment type/operator records will be kept for the placement, spreading, tilling, testing and removal of soils. These records will provide the data required to learn from operational experience, and to ensure that treated, partially treated and untreated soils are not mixed together in error.

5.0 SOIL TESTING TO CONFIRM TREATMENT

Soil remediation will be monitored using a combustible vapour analyzer as a screening tool. Final confirmatory testing will be conducted by a certified laboratory. Testing will conform with or exceed the guidelines presented in a draft Information Manual "Bioremediation of Petroleum Contaminated Soils at Regional Landfill Sites in Alberta" presented by O'Connor Associates Environmental Inc. in December 1992.

6.0 DISPOSAL OF TREATED SOILS

There are several alternatives being considered for disposal of treated soil. The soil may be recycled to Petro-Canada or other commercial sites, may be used as landfill cover material, or may be used to improve the grade of this Wessex property or another nearby Petro-Canada surplus property to the south.

7.0 TREATMENT SITE CLOSURE AND RECLAMATION

The proposed treatment site is temporary and intended for a one year operation. Following completion of the last treatment cycle, the native and imported soils will be tested in accordance with Alberta Environment requirements. The site will be re-graded to conform with the natural landscape. This could included the placement of some of the treated soil. Subsequent to site grading, the

wells and the sewer manholes prior to spreading hydrocarbon impacted soil on the site. The sewage lagoon will be emptied, decommissioned and "squeezed off" after spring thaw allows, in accordance with guidelines provided by Standards and Approvals, Alberta Environment.

24 Subsurface Soil Conditions

The geology maps for the area indicate approximately 5.0 m of draped moraine glacial till overlying sandstone bedrock of the Paskapoo Formation. The glacial tills are clay with silt and some gravel, and occasional discontinuous sand stringers and lenses.

Six bore holes have recently been drilled for Petro-Canada by Seacor Environmental Engineering, Inc. in paved areas around the service station tank nest and pump islands to determine if those soils had been impacted by petroleum hydrocarbons. The soil stratigraphy encountered was silty clay glacial till overlying sandstone bedrock at an average depth of 5.0 m.

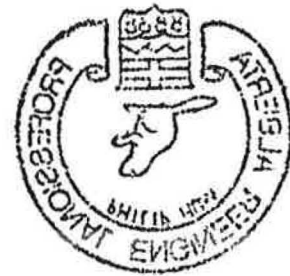
Field screening with a combustible vapour analyzer and subsequent analytical laboratory testing of four soil samples indicates that the soils are within Level II of the draft Alberta M.U.S.T. guidelines for petroleum hydrocarbon constituents, lead and phenols.

Test pits will be excavated in other areas of the property after spring thaw in order to confirm the expected uniform presence of clay till soils of low permeability.

25 Groundwater Conditions

The groundwater table in the area is generally encountered in a perched condition within the clay tills at depths of 2 m to 6 m below ground surface. A deeper water table is encountered within the sandstone bedrock at depth in excess of 30 m. The regional groundwater gradient is eastward towards Carstairs Creek and the Rosebud River valley.

GEORGE AND COMPANY LTD.
 THE ASSOCIATION OF PROFESSIONAL ENGINEERS
 PERMIT NUMBER: 6 4853
 Date _____
 Signature _____
 CITELON ASSOCIATES LTD.
 PERMIT TO PRACTICE





Clifton Associates Ltd.

CONSULTING ENGINEERS

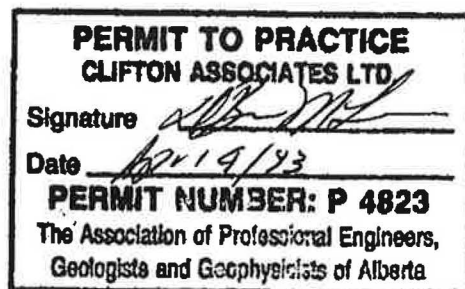
DRAWINGS

topsoil stockpiled in the perimeter berms will be placed, and the surface will be seeded.

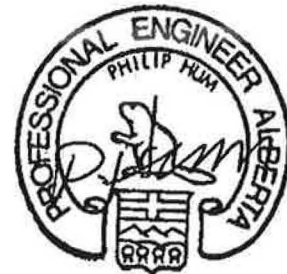
8.0 CLOSURE

The information and recommendations presented herein is based on our understanding of the site conditions from a subsurface investigation and a literature search, and our understanding of the nature and purpose of the proposed soil treatment activities. Test pits will be excavated across the site after the 1993 spring thaw in order to confirm the design assumptions, which are currently based on a site investigation adjacent to the service station facilities. Should the purpose of the facility be modified at any time during the design, construction or operation phases, or should subsurface soil or groundwater conditions other than those reported here be encountered, Clifton Associates Ltd. should be notified in order that the recommendations may be re-evaluated.

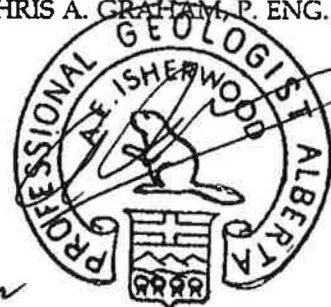
CLIFTON ASSOCIATES LTD.



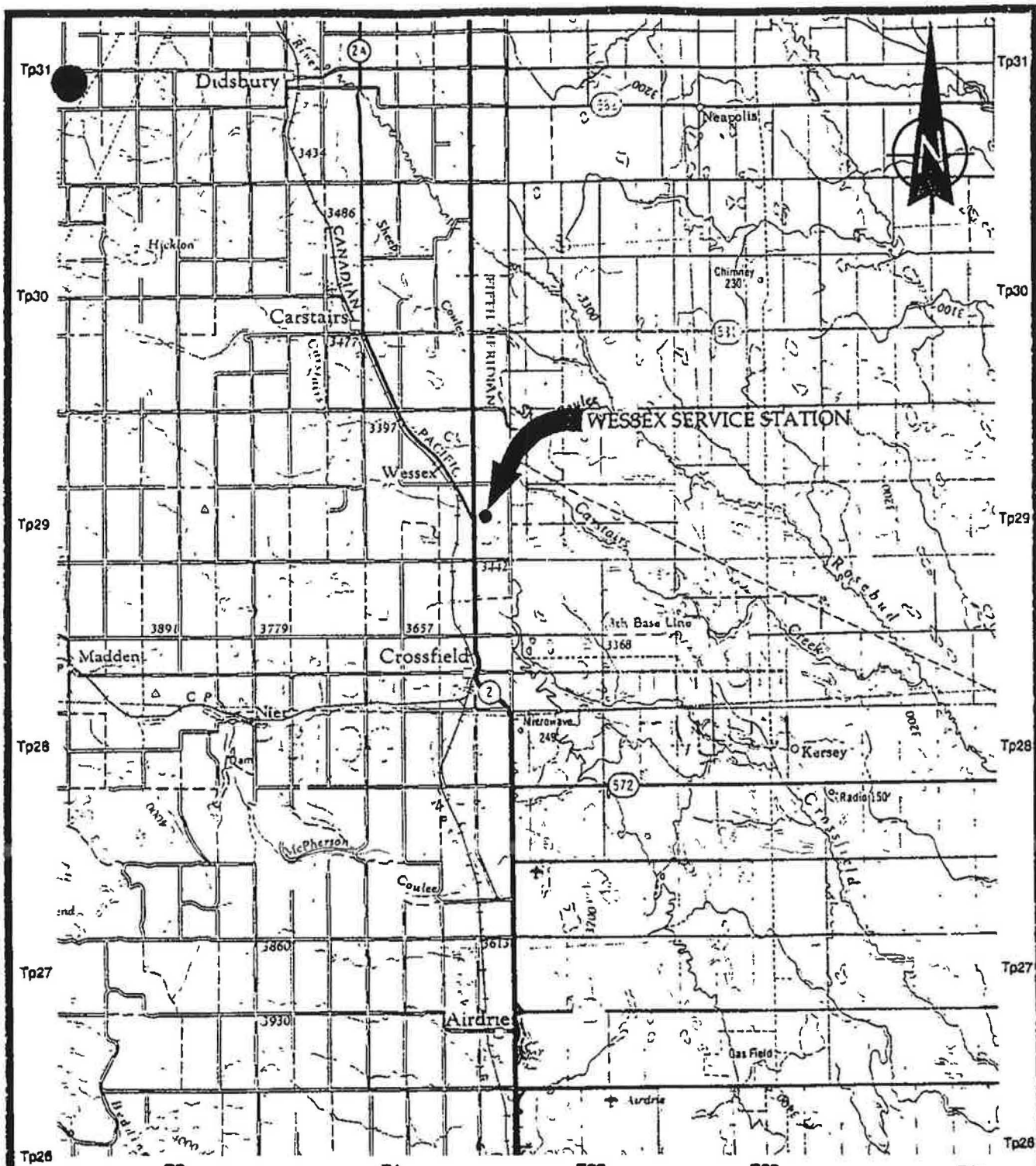
Association of Professional Engineers,
Geologists and Geophysicists of Alberta
Permit to Practice P4823



for CHRIS A. GRAHAM, P. ENG.



per DAVID D. KENT, P. ENG.



**BEST COPY
AVAILABLE**

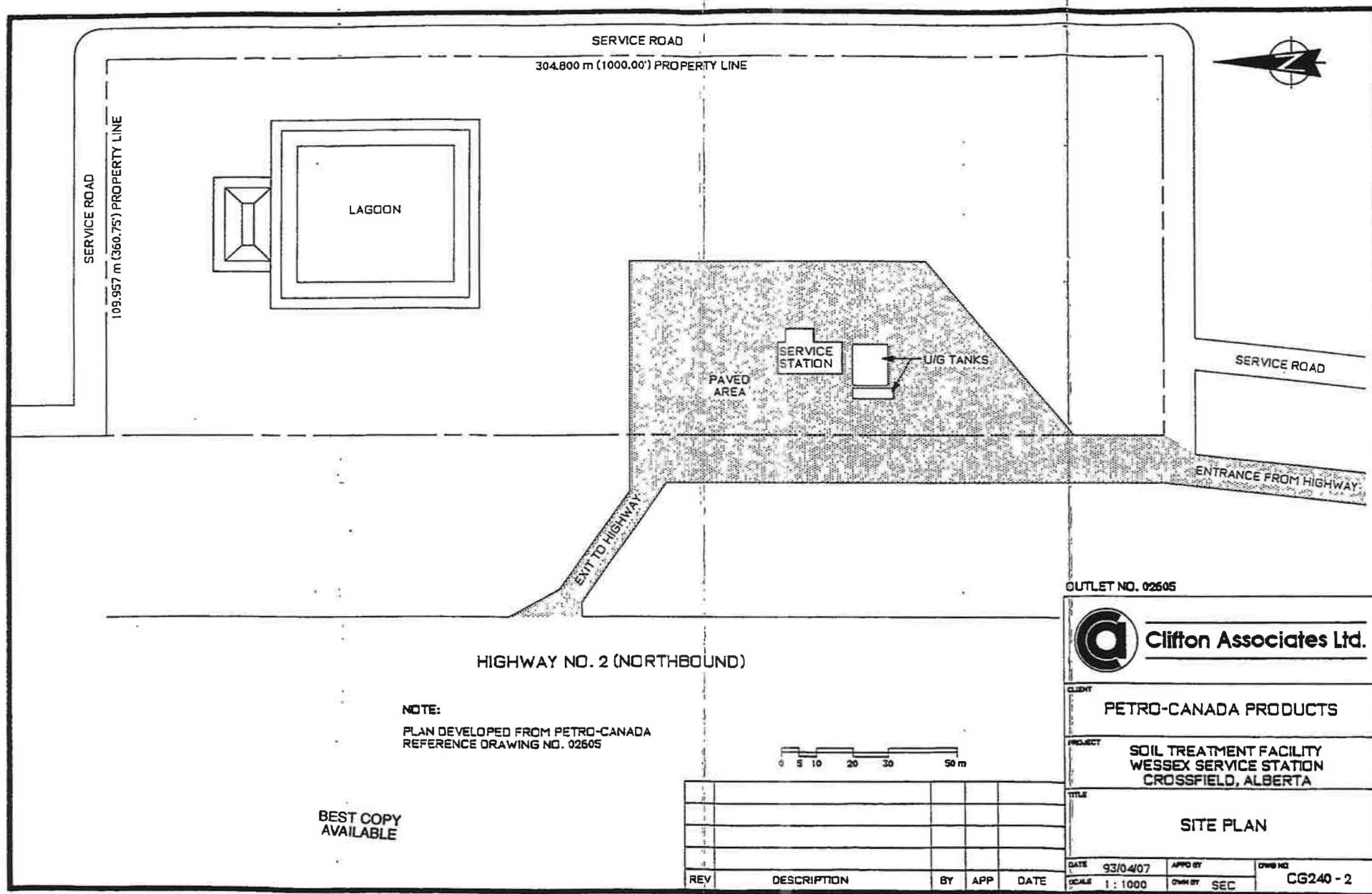


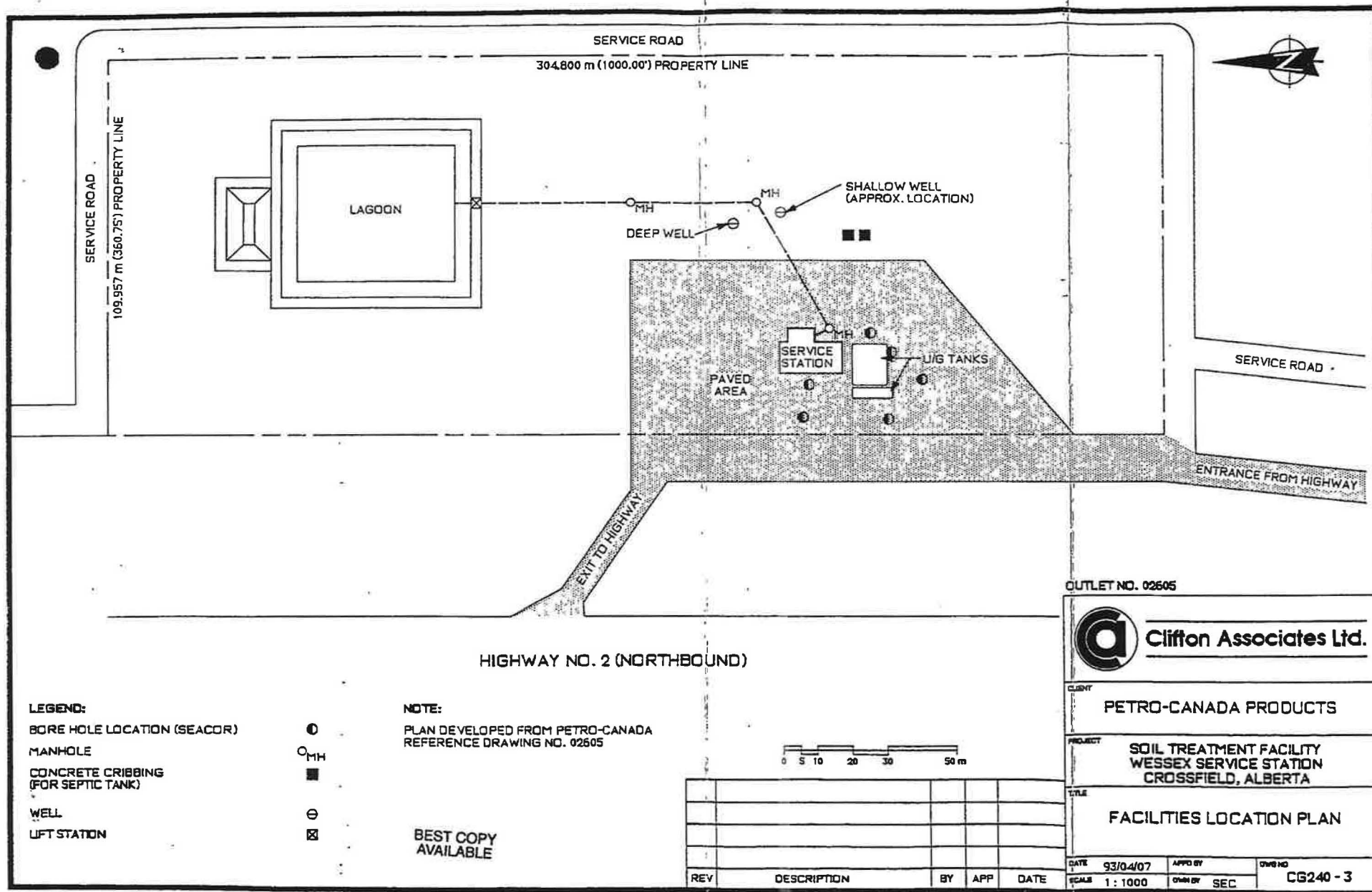
DATE	93/04/07	DRAWN BY	SEC	APPROVED BY	SCALE	1 : 250 000	DRAWING NO	CG240 - 1
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Clifton Associates Ltd.

CLIENT	PETRO-CANADA PRODUCTS
PROJECT	SOIL TREATMENT FACILITY CROSSFIELD, ALBERTA
TITLE	SITE LOCATION PLAN





OUTLET NO. 02505



Clifton Associates Ltd.

CLIENT

PETRO-CANADA PRODUCTS

PROJECT

**SOIL TREATMENT FACILITY
WESSEX SERVICE STATION
CROSSFIELD, ALBERTA**

TITLE

FACILITIES LOCATION PLAN

DATE

93/04/07

APPRO BY

DATE

01/01/07

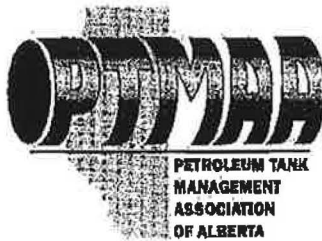
CG240 - 3

SCALE

1 : 1000

OWN BY

SEC



Petroleum Tank Management
Association of Alberta

Suite 980, 10303 Jasper Avenue
Edmonton, Alberta T5J 3N6
PH: (780)425-8265 or 1-866-222-8265
FAX: (780)425-4722

November 28, 2018

Lajos Varga
Ghostpine Environmental Services Ltd
111, 10699 - 46 Street SE
Calgary, AB
T2C 5C2

Dear Lajos Varga:

As per your request, the PTMAA has checked the registration of active tank sites and inventory of abandoned tank sites and there are no records for the property with the legal land description:

NE 24-29-1-W5, Crossfield

Please note that both databases are not complete. The main limitation of these databases is that they only include information reported through registration or a survey of abandoned sites completed in 1992 and should not be considered as a comprehensive inventory of all past or present storage tank sites. The PTMAA cannot guarantee that tanks do not or have not existed at this location. Information in the databases is based on information supplied by the owner and the PTMAA cannot guarantee its accuracy. Information on storage tanks or on past or present contaminant investigations may be filed with the local Fire Department or Alberta Environment.

Yours truly,

Gennie Jacobsen
PTMAA



Water Well Drilling Report

View in Imperial Export to Excel

GIC Well ID 358144
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1991/07/09

GOWN ID

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Well Identification and Location										Measurement in Metric	
Owner Name		Address			Town		Province		Country	Postal Code	
BACKS, TONY		P.O. BOX 367 CROSSFIELD								TOM 0S0	
Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description		
	NE	24	29	1	5						
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)						
_____ m from					Latitude 51.500126 Longitude -114.007651					Elevation _____ m	
_____ m from					How Location Obtained					How Elevation Obtained	
					Map					Not Obtained	

Drilling Information	Type of Work
Method of Drilling	New Well
Combination	
Proposed Well Use	
Domestic & Stock	

Formation Log	Measurement in Metric
Depth from ground level (m)	Lithology Description
0.30	Black Topsoil
1.52	Clay
2.13	Gravel
13.72	Clay & Rocks
14.33	Gray Sandstone
17.07	Brown Coarse Grained Sandstone
22.86	Gray Clay

Yield Test Summary	Measurement in Metric	
Recommended Pump Rate	0.00 L/min	
Test Date	Water Removal Rate (L/min)	Static Water Level (m)
1991/03/08	113.65	9.48

Well Completion	Measurement in Metric			
Total Depth Drilled	Finished Well Depth	Start Date	End Date	
22.86 m		1991/03/04	1991/03/08	
Borehole				
Diameter (cm)	From (m)	To (m)		
0.00	0.00	22.86		
Surface Casing (if applicable)		Well Casing/Liner		
Steel		Plastic		
Size OD :	16.81 cm	Size OD :	12.55 cm	
Wall Thickness :	0.478 cm	Wall Thickness :	0.660 cm	
Bottom at :	14.02 m	Top at :	10.67 m	
		Bottom at :	22.86 m	
Perforations				
From (m)	To (m)	Diameter or Slot Width (cm)	Slot Length (cm)	Hole or Slot Interval (cm)
10.67	22.86	0.157		25.40
Perforated by Machine				
Annular Seal Drive Shoe				
Placed from 0.00 m to 3.05 m				
Amount				
Other Seals				
Type At (m)				
Screen Type				
Size OD : 0.00 cm				
From (m) To (m) Slot Size (cm)				
Attachment				
Top Fittings Bottom Fittings				
Pack				
Type Grain Size				
Amount 0.00				

Contractor Certification	Certification No
Name of Journeyman responsible for drilling/construction of well	1
UNKNOWN NA DRILLER	
Company Name	Copy of Well report provided to owner Date approval holder signed
TAKS & SONS DRILLING LTD.	



Water Well Drilling Report

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

View in Imperial **Export to Excel**

GIC Well ID 358144
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1991/07/09

GOWN ID

Well Identification and Location										Measurement in Metric	
Owner Name	Address			Town		Province		Country	Postal Code		
BACKS, TONY	P.O. BOX 367 CROSSFIELD								TOM 0S0		
Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description		
	NE	24	29	1	5						
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)						
_____ m from					Latitude 51.500126 Longitude -114.007651					Elevation _____ m	
_____ m from					How Location Obtained					How Elevation Obtained	
					Map					Not Obtained	

Additional Information										Measurement in Metric
Distance From Top of Casing to Ground Level _____ cm										
Is Artesian Flow _____										
Rate _____ L/min										
Is Flow Control Installed _____										
Describe _____										
Recommended Pump Rate _____ 0.00 L/min										
Pump Installed _____										Depth _____ m
Recommended Pump Intake Depth (From TOC) _____ 0.00 m										Type _____
										Make _____ H.P. _____
										Model (Output Rating) _____
Did you Encounter Saline Water (>4000 ppm TDS) _____										Depth _____ m
Well Disinfected Upon Completion _____										
Gas _____										Depth _____ m
Geophysical Log Taken _____										
Remedial Action Taken _____										Submitted to ESRD _____
Sample Collected for Potability _____										Submitted to ESRD _____
Additional Comments on Well _____										

Yield Test			Taken From Ground Level	Measurement in Metric
			Depth to water level	
Test Date	Start Time	Static Water Level	Pumping (m)	Elapsed Time
1991/03/08	12:00 AM	9.48 m		Minutes:Sec
			Recovery (m)	
Method of Water Removal				
Type Pump _____				
Removal Rate 113.65 L/min				
Depth Withdrawn From 21.34 m				
If water removal period was < 2 hours, explain why _____				

Water Diverted for Drilling		
Water Source	Amount Taken	Diversion Date & Time
	L	

Contractor Certification	
Name of Journeyman responsible for drilling/construction of well	Certification No
UNKNOWN NA DRILLER	1
Company Name	Copy of Well report provided to owner
TAKS & SONS DRILLING LTD.	Date approval holder signed



Water Well Drilling Report

View in Imperial Export to Excel

GIC Well ID 2086022
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 2017/05/25

GOWN ID

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Well Identification and Location										Measurement in Metric
Owner Name		Address			Town		Province		Country	Postal Code
MCLOUGHLIN, MAURICE		2 RIVER HEIGHTS CRES			COCHRANE		ALBERTA		CANADA	T4S 0J3
Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description	
10		24	29	1	5					
Measured from Boundary of						GPS Coordinates in Decimal Degrees (NAD 83)				
m from						Latitude 51.498120 Longitude -114.012550			Elevation 1250.59 m	
m from						How Location Obtained			How Elevation Obtained	
						Hand held autonomous GPS 20-30m			Hand held autonomous GPS 20-30m	

Drilling Information	
Method of Drilling Rotary - Air	Type of Work New Well
Proposed Well Use Domestic	

Formation Log		Measurement in Metric
Depth from ground level (m)	Water Bearing	Lithology Description
7.32		Brown Sand & Gravel
14.02		Brown Sandy Clay
16.46		Gray Shale
18.59		Gray Sandstone
24.99		Gray Shale
39.01		Blue Gray Shale
46.94	Yes	Gray Sandstone
48.77		Gray Shale

Yield Test Summary			Measurement in Metric
Recommended Pump Rate 45.46 L/min			
Test Date	Water Removal Rate (L/min)	Static Water Level (m)	
2017/05/02	109.11	21.95	

Well Completion				Measurement in Metric
Total Depth Drilled	Finished Well Depth	Start Date	End Date	
48.77 m	48.77 m	2017/05/02	2017/05/02	

Borehole		
Diameter (cm)	From (m)	To (m)
15.88	0.00	17.68
12.70	17.68	48.77

Surface Casing (if applicable)		Well Casing/Liner	
Steel		Plastic	
Size OD :	14.13 cm	Size OD :	10.16 cm
Wall Thickness :	0.478 cm	Wall Thickness :	0.544 cm
Bottom at :	17.68 m	Top at :	12.19 m
		Bottom at :	48.77 m

Perforations				
From (m)	To (m)	Diameter or Slot Width (cm)	Slot Length (cm)	Hole or Slot Interval (cm)
42.67	45.72	1.270	30.48	

Perforated by Drill

Annular Seal Bentonite Chips/Tablets
Placed from 0.00 m to 17.68 m
Amount 800.00 Pounds

Other Seals

Type	At (m)
Drive Shoe	17.68

Screen Type

Size OD : cm

From (m)	To (m)	Slot Size (cm)

Attachment

Top Fittings Bottom Fittings

Pack

Type Grain Size

Amount

Contractor Certification	
Name of Journeyman responsible for drilling/construction of well TYLER WALTER	Certification No 187905A
Company Name BLACK DOG DRILLING & ENV SERV. LTD.	Copy of Well report provided to owner Yes
	Date approval holder signed 2017/05/02



Water Well Drilling Report

View in Imperial **Export to Excel**

GIC Well ID 2086022
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 2017/05/25

GOWN ID

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

Well Identification and Location										Measurement in Metric
Owner Name	Address		Town		Province		Country		Postal Code	
MCLOUGHLIN, MAURICE	2 RIVER HEIGHTS CRES		COCHRANE		ALBERTA		CANADA		T4S 0J3	
Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description	
	10	24	29	1	5					
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)					
_____ m from					Latitude 51.498120 Longitude -114.012550					Elevation 1250.59 m
_____ m from					How Location Obtained					How Elevation Obtained
					Hand held autonomous GPS 20-30m					Hand held autonomous GPS 20-30m

Additional Information				Measurement in Metric
Distance From Top of Casing to Ground Level 60.96 cm				
Is Artesian Flow		Is Flow Control Installed		
Rate _____ L/min		Describe _____		
Recommended Pump Rate 45.46 L/min		Pump Installed _____		Depth _____ m
Recommended Pump Intake Depth (From TOC) 39.62 m		Type _____		Make _____ H.P. _____
				Model (Output Rating) _____
Did you Encounter Saline Water (>4000 ppm TDS) _____		Depth _____ m		Well Disinfected Upon Completion Yes _____
Gas _____		Depth _____ m		Geophysical Log Taken _____
Remedial Action Taken _____				Submitted to ESRD _____
Additional Comments on Well _____		Sample Collected for Potability _____		Submitted to ESRD _____

Yield Test			Taken From Top of Casing	Measurement in Metric
			Depth to water level	
Test Date	Start Time	Static Water Level	Pumping (m)	Elapsed Time
2017/05/02	3:00 PM	21.95 m		Minutes:Sec
Recovery (m)				
Method of Water Removal				
Type AIR				
Removal Rate 109.11 L/min				
Depth Withdrawn From 48.77 m				
If water removal period was < 2 hours, explain why				

Water Diverted for Drilling		
Water Source	Amount Taken	Diversion Date & Time
SHOP	9092.18 L	2017/05/02 7:00 AM

Contractor Certification	
Name of Journeyman responsible for drilling/construction of well	Certification No
TYLER WALTER	187905A
Company Name	Copy of Well report provided to owner
BLACK DOG DRILLING & ENV SERV. LTD.	Yes
	Date approval holder signed
	2017/05/02