NI 43-101 TECHNICAL REPORT

on the

LITHIUM BRINES of the CLEAR HILLS PROPERTY Alberta, Canada

Prepared for

PRISM Diversified Ltd.

Calgary, Alberta

Ву

EDWARD LYONS, P.GEO. (BC, QC, NL)

TEKHNE RESEARCH INC.

Victoria, BC

Effective Date 14 March 2018

Issue Date 15 April 2018

Cautionary Statements Regarding Forward Looking Information

This Technical Report contains "forward-looking information" within the meaning of Canadian securities legislation. All information contained herein that is not clearly historical in nature may constitute forward-looking information. Forward-looking information includes, without limitation, statements regarding the results of the Technical Report, including statements about the estimation of mineral reserve and resources statements, future exploration on the project, the market and future commodity prices, permitting, and the ability to finance the project.

Generally, such forward-looking information can be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved".

Forward-looking information is based on assumptions believed to be reasonable at the time such statements are made, including but not limited to, continued exploration activities, commodity prices, the estimation of initial and sustaining capital requirements, the estimation of labor and operating costs, the estimation of mineral reserves and resources, the assumption with respect to currency fluctuations, the timing and amount of future exploration and development expenditures, receipt of required regulatory approvals, the availability of necessary financing for the project, the completion of the permitting process, and such other assumptions and factors as set out herein.

Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of Prism Diversified Ltd (the Issuer) to be materially different from those expressed or implied by such forward-looking information, including but not limited to: volatile stock price; risks related to changes in commodity prices; sources and cost of power facilities; the estimation of initial and sustaining capital requirements; the estimation of labor and operating costs; the general global markets and economic conditions; the risk associated with exploration, development and operations of mineral deposits; the estimation of mineral reserves and resources; the risks associated with uninsurable risks arising during the course of exploration, development and production; risks associated with currency fluctuations; environmental risks; competition faced in securing experienced personnel; access to adequate infrastructure to support mining, processing, development and exploration activities; the risks associated with changes in the mining regulatory regime; completion of the environmental assessment process; risks related to regulatory and permitting delays; risks related to potential conflicts of interest; the reliance on key personnel; financing, capitalization and liquidity risks including the risk that the financing necessary to fund development and construction of the Project may not be available on satisfactory terms, or at all; the risk of potential dilution through the issue of common shares; the risk of litigation.

Although Tekhne Research and the Issuer have attempted to identify important factors in this Report that could cause actual results to differ materially from those contained in the forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such forward-looking information. Accordingly, readers should not place undue reliance on forward-looking information. Forward-looking information is made as of the date of this technical report, and the Issuer does not undertake to update such forward-looking information except in accordance with applicable securities laws.

CERTIFICATE OF AUTHOR

I, Edward Lyons, P.Geo., as the author of the technical report entitled "NI 43-101 Technical Report on the Lithium Brines of the Clear Hills Property, Alberta, Canada" with the effective date of 14 March 2018 and with the issue date of 15 April 2018 and prepared for PRISM Diversified Ltd. ("Issuer"), do hereby certify that:

I am currently employed as the principal Geological Consultant and Director of Tekhne Research Inc. with offices at 1067 Portage Road, Victoria, BC V8Z 1L1.

- 1) I graduated with a Bachelor of Science (Honours) degree in Geology from the University of Missouri at Rolla in 1970.
- I am a Professional Geoscientist enrolled with the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC) (Member # 122136), the Ordre des géologues du Quebec (OGQ) (Member # 701), and the Professional Engineers and Geoscientists of Newfoundland and Labrador (PEGNL) (Member # 05711).
- 3) I have worked as a geologist for a total of 45 years since my graduation from university. My experience has included exploration and technical management on base-metal sulphide deposits in Canada and Latin America for over 32 years, precious metals (Au-Ag) in Canada, Mexico, and Nevada (6 years, including as Qualified Person on the last), graphite in Canada (15 years, including acting as Qualified Person for 10 NI 43-101 reports), iron deposits in BC, QC, and NL (7 years, including acting as Qualified Person on five NI 43-101 reports. I was the author of an NI 43-101 technical report on lithium brine in Nevada in 2016 and visited several lithium sites there. All works were mainly on site.
- 4) I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association as defined in NI 43-101, and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
- 5) I am responsible for entirety of the technical report entitled "NI 43-101 Technical Report on the Lithium Brines of the Clear Hills Property, Alberta, Canada" with the issue date of 15 April 2018.
- 6) I visited the Clear Hills Property for one day on 14 March 2017 with the former Issuer's representative. The Issuer asserts that no material change on the property has occurred since the visit except increasing the area of the mineral tenures with new claims as described herein.
- 7) As of the effective date of the certificate, to the best of my knowledge, information, and belief, the Technical Report herein contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
- 8) I have no personal knowledge, as of the date of this certificate, of any material fact or material change which is not reflected in this Technical Report.
- 9) I am independent of the Issuer, PRISM Diversified Ltd., applying all the tests in section 1.5 of the NI 43-101 instrument.
- 10) My prior involvement with the Property was writing the earlier version of this Technical Report in March 2017 for an Optionor that was not issued. I have no interest or involvement in the Property, or with the Issuer, or the former Optionor.
- 11) I have read NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in accordance with that instrument and form.

Dated on 15 April 2018

< signed and sealed in the original >

Edward Lyons, P.Geo.





TABLE OF CONTENTS

Title Page

Date and Certificate of Author

Table of Contents

Illustrations

1	Summary	6
2	Introduction	8
3	Reliance on Other Experts	9
4	Property Description and Location	10
5	Accessibility, Climate, Local Resources, Infrastructure and Physiography	14
6	History	15
7	Geological Setting and Mineralization	16
8	Deposit Types	27
9	Exploration	29
10	Drilling	29
11	Sample Preparation, Analyses and Security	29
12	Data Verification	29
13	Mineral Processing and Metallurgical Testing	N/A
14	Mineral Resource Estimates	N/A
15	Mineral Reserve Estimates	N/A
16	Mining Methods	N/A
17	Recovery Methods	N/A
18	Project Infrastructure	N/A
19	Market Studies and Contracts	N/A
20	Environmental Studies, Permitting and Social or Community Impact	N/A
21	Capital and Operating Costs	N/A

22	Economic Analysis	.N/A
23	Adjacent Properties	30
24	Other Relevant Data and Information	32
25	Interpretation and Conclusions	32
26	Recommendations	33
27	References	33
	Illustrations	
Figure 1 Lo	cation of Clear Hills Property, Alberta, Canada	10
Figure 2 Te	nure map: MIM Permits & Leases, Clear Hills Property, Alberta	12
Figure 3 St	ratigraphic column Devonian	17
Figure 4 Le	duc Formation isopach thickness in central Alberta	18
Figure 5 NI	NW-SSE well-log section of Peace River Arch	19
Figure 6 Le	duc Formation isopach thickness, major structures & lithium anomalies	21
Figure 7 Sc	hematic of relations among SAZ-KIA-PRA structures	22
Figure 8 Da	wson Creek Graben Complex (DCGC) on Peace River Arch	23
Figure 9 Oi	I & gas wells in the Peace River Arch Leduc region	25
Figure 10 S	elected wells sampled for Li with Tenures	26
Figure 11 V	Vorsley gas field wells penetrating Devonian or older formations	27
Figure 12 L	ithium brine genetic model	29
Figure 13 C	Clear Hills Property with adjacent MIM licenses	31
	Tables	
Table1 Uni	ts & Abbreviations	9
	Appendix	
Appendix 1	Tenures of Minerals & Industrial Minerals (MIM) for the Clear Hills Property	35

1 SUMMARY

The Clear Hills Property is the focus of PRISM Diversified Ltd.'s ("PRISM" or "Issuer") lithium brine exploration in northwest Alberta, Canada. The Issuer's Mineral and Industrial Mineral (MIM) permits and leases are segmented into two blocks of mineral tenure, with the "Clear Hills" block including a known oolitic ironstone deposit in the northwest part of the property. That was described in detail in an NI 43-101 technical report by SRK Consulting (Canada) Inc. in 2012 under the Issuer's previous names as Ironstone Resources Ltd. and is not included in this report. The southern part of the Clear Hills block includes the majority of the Worsley gas field. Two samples of formation water in two wells returned anomalous values of 96 and 46 mg/L Li; other nearby wells, including one just off the property, have up to 76 mg/L (ppm) Li and have penetrated the favourable Devonian carbonate formations and deeper units on the north flank of the Peace River Arch (PRA). The Peace River Arch block of mineral tenure surrounds the outer limits of the PRA and is prospective for Li brines only.

As of 14 March 2018, the Alberta Mineral Rights Inquiry online shows that the Clear Hills Property has 96 Metallic and Industrial Minerals permits and leases of various sized areas based on aggregates of sections (one square mile), up to one township of 36 mi² or 9,216 ha per permit, for an area of permits totaling 770,922 ha (7,709 km²) plus four Metallic and Industrial Minerals Leases covering 5,400 ha (5.40 km²) for total property area of 776,322 ha (7,763 km²). The Issuer is registered as the sole and undivided owner of the leases and permits. The mineral rights grant the non-exclusive right to explore for metallic and industrial minerals on the surface; and in the subsurface strata, within and under the claim boundaries.

The property is accessible from several directions. Grande Prairie, AB and Fort St. John, BC are about equidistant by road from the central part of the property. Grande Prairie is the regional centre for northwest Alberta and is served by Air Canada and WestJet. From Edmonton, one follows Hwy 43 northwest to Valleyview then takes Hwy 34 to Grande Prairie. From there, one follows Alberta Hwy 2 north across the Peace River. Access to the southern part of the property is from Alberta Hwy 64 NW through Hines Creek and on to road 726 to Worsley, the nearest town. The southwestern part of the property lies northeast of Grande Prairie.

The Peace River agricultural region crosses the two trends of tenures on the property. The farming areas are flat and the boreal forest is generally gently rolling, forest covered hills with moderate to steep valley slopes and flatter valleys and tops. It appears to be a glacial peneplain dissected by post-glacio-fluvial uplift and erosion. Elevations range from about 700 m on the prairies, lakes and river valleys mainly in the southwest to about 1,100 m on the flat hill tops on the northeastern part of the property. The nearest towns with major industrial support are Grande Prairie AB and Fort St. John, BC, which are loci for the petroleum industry as well as logging. Smaller towns in the farming areas north of Hwy 64 and along Hwy 35 provide local labour and small-scale repairs and industrial services as well as local knowledge of the conditions of terrane, access, and weather. Several power grids pass near and across the property, although more isolated fringe areas to the north have lower voltages through the local grid on the southern and eastern borders of the property that serve the gas wells and farmers.

The nearest towns with major industrial support are Grande Prairie, AB and Fort St. John, BC, which are loci for the petroleum industry as well as forestry logging. Smaller towns in the farming areas north of Hwy 64 and along Hwy 2 and 35 provide local labour and small-scale repairs and industrial services as well as local knowledge of the terrain, access, and weather conditions. Water is available from small lakes and streams in the area of work. Use is subject to restrictions placed on exploration permits.

Historically, the mineral potential of the property has been the oolitic ironstone deposits discovered in 1924. The Issuer has done the most work from 2007 to present. The results up to 2012 are reported in the SRK (2012) NI 43-101 resource estimate. The only mineral resource estimate made on the property was for the





ironstone deposits and is reported under Section 6 – History. It is not discussed further in this report.

Petroleum development as gas and oil wells within the Devonian age carbonate reservoirs has been the main activity that can support commercial lithium development. A number of gas wells in the Worsley gas field permit access to testing formation waters for Li from the favourable Leduc and underlying formations. Much information about the sedimentary geology is available through the Alberta Geological Survey.

The regional and property geology were formed as the interplay between the reactivation of ancient crustal structures to form uplifts and basins in the early to late Phanerozoic basin formation. The Peace River Arch arose in the Late Cambrian. The Granite Wash and Early Devonian sandstone formed aprons of siliciclastic beds on the flanks of the PRA. In the Late Devonian, extensive reef complexes with carbonate clastics built up over a seven million year period around the PRA and in many other places across central Alberta as the Leduc Formation and the Swan Hills complex with related carbonate clastic units. These are the prolific petroleum fields and have a number of wells with anomalously high lithium concentrations in brine formation water. The PRA eventually was covered by basinal clastic sediment in the Late Devonian and carbonate formation ceased.

The usual models for lithium brines invoke either geothermal springs in volcanic complexes or the evaporative salars of Chile and Nevada. These do not account for the sizeable volumes of oilfield brines with elevated Li values. The oilfield brines globally show no correlation with the components of these models. Research has indicated that Li can be slowly leached from aquifers and interactions with minerals as the brines concentrate in oilfield reservoirs. The reaction of cations in the brines with limestone in the presence of heated water can form dolomite and increase porosity while removing non-lithium elements from the brine. The particular geology of the Leduc reefs especially around the PRA combined with cross-cutting faults as geothermal water conduits appears to be a sensible model.

Development of the Clear Hills Property is an early-stage project with respect to lithium at this time. The geological risks including: mapping the presence of treatable grades of Li in brine, and their continuity and connections to establish a reservoir of sufficient size and grade.

Other risks can include: access to existing wells and associated process water, well-water reinjection, and processing; permits for surface rights for production, sourcing effective lithium extraction technology, access to adequate power and other infrastructure requirements for commercial development. Although the geological risks are considered low in the Alberta resource development jurisdiction, commercial development of a lithium direct extraction technology does present a potential risk. No other environmental, social, or community risks are foreseen.

The recommended work program consists of two phases with further works dependent on achieving positive results. The two-fold approach is to develop a viable lithium resource and to access or develop the direct-extraction process technology required for future extraction and processing of lithium. Phase 1 would focus on developing the geological and brine knowledge to support a PEA Resource Estimate followed by the development of a commercially viable lithium direct-extraction technology. Successful results as supported in the PEA would lead the second phase of pre-feasibility development. The total program to successful pilot plant demonstration of the lithium direct-extraction technology and a NI 43-101 Prefeasibility Study would be CAD\$ 1,875,000, exclusive of taxes and government R & D grants.

2 INTRODUCTION

2.1 Issuer

The Issuer of this report is PRISM Diversified Ltd., located at #200, 6125 – 11th Street SE, Calgary, Alberta, Canada. It is a private company with over 300 shareholders and is a reporting issuer with the securities commission.

2.2 Term of Reference

The Issuer engaged the services of the author on 15 December 2017 to write an independent NI 43-101 Technical Report on the expanded Clear Hills Property in northwestern Alberta, Canada as part of its on-going disclosure. The report was originally commissioned by an optionee in early 2017 as part of a qualifying transaction under the Toronto Stock Exchange – Venture regulations; that option lapsed. The Issuer, who was previously the Optionor, and the former optionee agreed to permit the Issuer to acquire the report with technical updates to include the acquisition by permit staking of a substantial area of the lithium brine bearing Devonian and underlying reservoirs east and southwest of the original property. The registry of these tenures listed in the Issuer's January 2018 name-change to PRISM Diversified Ltd. was posted on the Alberta mineral titles database in mid-March 2018.

2.3 Sources of Information

The Clear Hills Property has had no exploration targeting lithium brine potential outside of data derived from oil and gas well formation waters by the Alberta government as regional evaluation of lithium brine potential in and near petroleum pools.

The author reviewed documents made available by the Issuer to the author in March, 2017, as well as independent data research of public databases for current tenures of Metallic and Industrial Minerals (MIM) in Alberta, as well as publications relating to the regional geology and lithium mineralisation.

The historical and scientific sources are publications listed under References herein. They include regional geological, geochemical, and geophysical surveys done by the Alberta Geological Survey and the Geological Survey of Canada, as well as a series of studies on industrial minerals and lithium potential in formation waters in Alberta. The author relied on the relevant sections of the Atlas of the Western Canada Sedimentary Basin (AWCSB) and other technical information as referenced in Section 27 for details of the Central Sedimentary Basin geology.

The author visited the property and several wells identified by Eccles and Jean (2010) with high Li in formation waters around Worsely, AB for one day on 14 March 2017. The Issuer's representative showed the author the location of the gas well reported in the chemical analyses reported in Eccles et al., (2010) in the Worsely Gas Field. No outcrop was observed due to thick overburden. Since the lithium brine occurs in petroleum well waters originating in limestone reefal and platform carbonate formations at depth, no outcrop or surface indications of lithium mineralisation was expected. The visited wells were verified as being on the Clear Hills tenures. The author has not visited the newer tenures. Given the quality of geodetic data for the well locations and limits of the tenures on a common UTM NAD 83 coordinate system, the author is of the opinion that a second site visit would not add to the quality of the location data already used herein nor would any surface expression of Li be visible.



2.4 Units and Abbreviations

Units of measurement in this report are quoted in the metric system. Assay and analytical results are quoted in parts per million (ppm). Other acronyms and abbreviations are listed below in Table 1.

Table 1 Units and abbreviations

AGS Alberta Geological Survey

ASL Above Sea level °C degrees Celsius

cm centimeter = 0.3937 inch
core diamond drill core
DLS Dominion Land Survey
Fm Formation (stratigraphic)
Ga billion years old = 1,000 Ma
GIS Geographic Information System

Gp Group (stratigraphic)

GPS Global Positioning System satellite-based navigation system

GSC Geological Survey of Canada

ha hectare = 2.471 acres

ICP/MS Inductively Coupled Plasma Mass Spectrometry analytical technique

IP Induced-Polarization geophysical surveying method

kg kilogram = 2.205 pounds km kilometer = 0.6214 mile Kv kilovolt = 1000 volts

Li lithium

Ma million years old

μm micron = one millionth of a meter

m meter = 3.2808 feet (1,000 meters = 1 kilometer) mg/L microgram per liter = part per million (ppm)

MIM Metallic and Industrial Mineral (category of mineral rights in Alberta)

NTS National Topographic System maps
ppm parts per million (1 ppm = 1 g/t = 1 mg/L)
ppb parts per billion (1,000 ppb = 1 ppm)

rge range (land survey) = westerly subdivision of six one-mile units from a longitudinal meridian

sect section (land survey) = $1 \text{ mi}^2 = 288 \text{ ha}$

twp township (area) = 36 mi² = 6 by 6 sections = 9,216 ha; (land survey) the northerly subdivision of

six one-mile units from a latitudinal baseline

3 RELIANCE ON OTHER EXPERTS

The author relied on data from the Issuer and the Alberta Mineral Rights Inquiry online reports reviewed on 13 March 2018 for the current Metallic and Industrial Minerals tenure titles. The information about the Issuer's Interest was provided by the Issuer as public communications and legal documents regarding the restructuring and change of name to PRISM Diversified Ltd. No separate legal opinion was sought. No other expert information was used.





4 PROPERTY LOCATION AND DESCRIPTION

4.1 Location



(modified by author Mar 2018)

Fig. 1 Location of Clear Hills Property, Alberta, Canada



The Clear Hills Lithium Property, located in Clear Hills County, AB, is oriented to two segments forming a horseshoe shape with the lower segment starting about 10 km northeast of Grande Prairie and extending about 190 km further northeast, where it turns sharply to form the second segment that extends about 220 km to the west-northwest through the Worsely oilfield to the British Columbia border towards Fort St John, BC. The total strike length of the tenures is about 410 km along the thickest part of the productive Leduc Formation carbonate reservoirs. Both cities are regional centers for the area in the south central part of Clear Hills County, Alberta. The property covers most of the east half of NTS Sheet 84D and west half of 84E (1:250,000 scale). The tenures lie in Counties of Grande Prairie, Birch Hills, Northern Lights, and Clear Hills, and in the Municipal District of Peace.

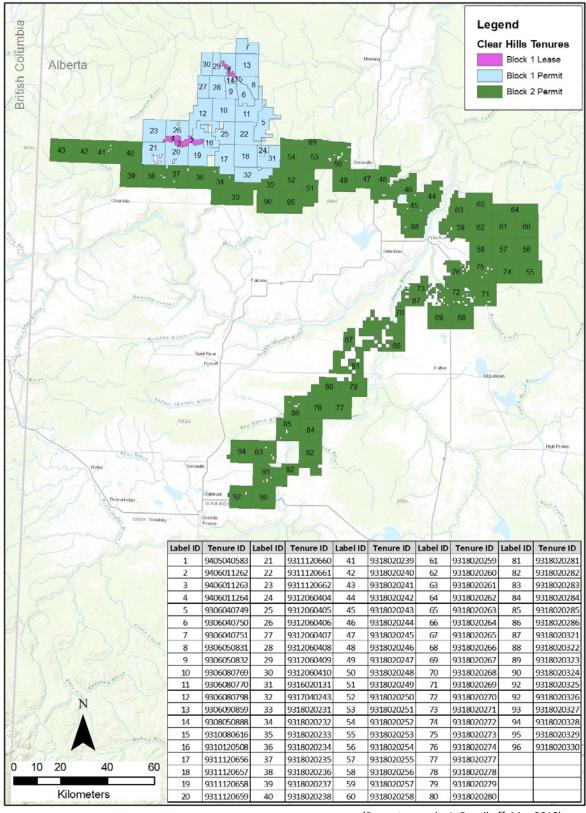
4.2 Property Description and Ownership

As of 14 March 2018, the Alberta Mineral Rights Inquiry online shows that the Clear Hills Property has 96 Metallic and Industrial Minerals Permits in two Blocks ("Clear Hills" and "Peace River Arch") of various sized areas based on aggregates of sections (one square mile), up to one township of 36 mi² or 9,216 ha per permit, for an area of permits totaling 770,922 ha (7709 km²) plus four Metallic and Industrial Minerals Leases covering 5,400 ha (5.40 km²) for total property area of 776 322 ha (7763 km²). The Issuer is registered as the sole and undivided owner of the leases and permits listed in Appendix 1.

The mineral rights apply to minerals hosted in the bedrock on the surface and in the subsurface strata, within and directly beneath the claim boundaries. The on-line staking procedure means that the claim cells are located by the *metes and bounds* system of the Dominion Land Survey (DLS) system, and thus there is no chance for overstaking (duplication of title) or fractional unclaimed areas. No monuments are placed in the field.

A Metallic and Industrial Minerals (MIM) permit grants the exclusive right to explore for Alberta-owned metallic and industrial minerals in a specified location. Other jurisdictions in Canada use the term "mineral claim" for this type of agreement. A permit can be held for up to 14 years, and is not renewable. While there is no annual rent, the permit holder is required to conduct exploration work and must report that work every two years. The expiry dates are listed in Appendix 1 and the plan of tenures is shown in Figure 2.

A Metallic and Industrial Minerals (MIM) lease grants the exclusive right to develop and mine Alberta-owned metallic and industrial minerals in a specified location. The term of a lease is 15 years, and it may be renewed. Annual rent must be paid. Royalties must be paid if any mineral production takes place on the lease. For metallic minerals, the royalty is 1% of the gross mine-mouth revenue before payout; after payout, the royalty is the greater of 1% of the gross mine-mouth revenue and 12% of the net revenue.



(Property map by L. Poznikoff, Mar 2018)

Figure 2 Tenure Map: MIM Permits & Leases: Clear Hills Property, Alberta



4.3 Issuer's Interest

The 96 MIM tenures listed in Appendix 1 are registered solely in the name of the Issuer.

The Block 1 or Clear Hills MIMs retains a 2% Net Smelter Return (NSR) to Kenneth Richardson and James Stapleton upon commencement of commercial production as well as established Alberta royalties. Block 2 or Peace Arch MIMs have no third-party royalties.

The Issuer will manage the exploration and development works.

4.4 Environmental Liabilities

Some permits in the North Whitemud River area lie within the designated "Caribou Zone" and requires submission of a "Caribou Plan" to Alberta Environment and Parks for summer and fall work. The initial areas of proposed work are located south of the Caribou Zone. No other known environmental liabilities or special restraints associated with the Property. Access to the caribou zones in forested areas is restricted and monitored by forestry officers to protect sensitive eco-systems. Much of the recent tenures made in late 2017 cover a mixture of agricultural and woodlot lands and lie outside the caribou protection zones. The Issuer should verify in detail the possible presence of such zones before starting field work permit applications.

4.5 Permitting

No exploration work permits exist or are under application at the date of this report. Permits are required for drilling and are easily obtainable from the Energy Ministry of the Alberta Government.

4.6 Social or Community Impacts

The enlarged holdings are adjacent to several small farming towns and settlements in the Peace River region. The regional centre of Grande Prairie, AB is about 10 km southwest of the southernmost tenures the Property. These mainly lie south of the southern border of the property in the agricultural lands of the Peace River region.

The only recorded First Nations area is the Clear Hills Indian Reserve (IR) 152C, which lies immediately south and adjacent to the property about 15 km east of Worsley, adjacent to farming lands; it is six sections in area. The Clear Hills Indian Reservation now belongs to the Horse Lake IR. The lands are considered to lie within the traditional hunting and gathering lands of the Horse Lake First Nation (north of Grande Prairie) and the Duncan's First Nation (southeast of Fairview).

Alberta has signed Treaty 8 with its First Nations setting out a process for consultations on traditional hunting and gathering lands. The process is generally far less restrictive to potential resource developers than in other jurisdictions.

4.7 Other Risks

There are low to moderate risks associated with executing the technical program recommended in this report. Water and space for future development are available on and around the Property. No other environmental, social, or community risks are foreseen.





5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

5.1 Accessibility

The property is accessible from several directions. Grande Prairie, AB and Fort St. John, BC are about equidistant by road from the central part of the property. Grande Prairie is the regional centre for northwest Alberta and is served by Air Canada and WestJet. From Edmonton, one follows Hwy 43 northwest to Valleyview then takes Hwy 34 to Grande Prairie. From there, one follows Alberta Hwy 2 north across the Peace River. Access to the southern part of the property is from Alberta Hwy 64 NW through Hines Creek and on to road 726 to Worsley, the nearest town. The southwestern part of the property lies northeast of Grande Prairie.

For access from British Columbia, flights from Vancouver service Fort St. John, BC. The all-weather Hwy 103 (Cecil Lake Road) goes east and changes to Hwy 64 in Alberta about 105 km to the turnoff to Hwy 726 which goes 10 km north to Worsley. Likewise, Grande Prairie receives scheduled daily air service on Air Canada and Westjet. Numerous provincial highways connect the claims area with the major cities, like Edmonton, and numerous secondary paved and farming roads provide local access. The extended history of petroleum extraction has developed tertiary road access as well.

5.2 Climate and Vegetation

The northern boreal forest region that encompasses most of the property receives an extreme range of weather conditions throughout the year. Summers, from June to September, are short with variably dry to wet with local storms, which may give heavy rainfall. Humidity ranges from very dry to quite humid. Temperatures can reach 30°C with dry winds. Lightning from thunderstorms is a frequent cause of forest fires, which are a normal hazard in any 20-year period. Autumn is quite changeable with abrupt shifts from almost summery conditions to frost and back in 48 hours. As the autumn progresses, colder days are more frequent, and snow may start as early as late September, but more commonly, snow stays on the ground after mid-November. Winter is cold with very short days and temperatures can reach -40°C. Snow may come in storms with 30 cm snowfalls. Spring is the opposite of autumn in the variability of daily temperatures and precipitation. It lasts from April to June. However, frost as well as above freezing temperatures may occur in any month of the year. Except for the occasional heavy snowfall, extraction operations would not be affected by the climate.

The vegetation is typical boreal to sub-boreal forest. Black spruce and poplars are the common larger trees with willow, tamarack, and alder as shrubs. Understory plants include Labrador tea and grasses especially along streams and swamps. Various mosses and lichens are common especially on sandy glacio-fluvial soils. Valleys are typically steep-sided, swampy watercourses with meandering ox-bow sloughs and frequent flooding during rainstorms. Muskeg often fills shallow undulations in the topography.

Much of the land on the tenures is human-modified as woodlots and agricultural land.

5.3 Local Resources and Infrastructure

The nearest towns with major industrial support are Grande Prairie, AB and Fort St. John, BC, which are loci for the petroleum industry as well as forestry logging. Smaller towns in the farming areas north of Hwy 64 and along Hwy 2 and 35 provide local labour and small-scale repairs and industrial services as well as local knowledge of the terrain, access, and weather conditions.

Several power grids pass near and across the property, although more isolated fringe areas to the north have lower voltages through the local grid on the southern and eastern borders of the property that serve the gas wells and farmers.





Water is available from small lakes and streams in the area of work. Use is subject to restrictions placed on exploration permits.

5.4 Physiography

The property lies just north and west of the Peace River agricultural region. The farming areas are flat and the boreal forest is generally gently rolling, forest covered hills with moderate to steep valley slopes and flatter valleys and tops. It appears to be a glacial peneplain dissected by post-glacio-fluvial uplift and erosion. Elevations range from about 700 m on the prairies, lakes and river valleys mainly in the southwest to about 1,100 m on the flat hill tops on the northeastern part of the property.

6 HISTORY

The major mineral exploration and development work on the property has focused on the oolitic ironstone deposits located on the northwest trending outcrops of the Bad Heart Formation on the northern part of the Clear Hills Block. The geology tested ranges from outcrops to very shallow depths amenable for open pit mining. The ironstone was noted in 1924 and received exploration interest, including the development of process methods and metallurgical testing in the mid-1950s through mid-1960s. Core drilling from 1950 to early 2006 totaled 342 holes with 12,405 m length (SRK, 2012).

With the resurging interest in iron ore, the Issuer acquired leases and permits over the favourable geology in 2007. From 2008-2012, it drilled 230 holes for 15,544 m length. The results of the drilling through 2011 were summarised in a NI 43-101 format mineral resource estimate report by SRK Consulting (Canada) for the Issuer in 2012 (SRK, 2012). It reported an Indicated Resource of 557.64 MT with 33.30% Fe, 24.37% SiO₂, 0.20 V₂O₅, 4.98% Al₂O₃, and 0.60% P plus an Inferred Resource of 94.66 MT containing 34.11% Fe and 26.19% SiO₂ (SRK, 2012). Ironstone has continued metallurgical process development through 2016 (Alberta CMD, 2017). The Issuer worked with Hatch Associates of Mississauga, ON to develop a proprietary hydrometallurgical process to extract iron, which is precipitated to elemental Fe and a vanadium solute suitable for vanadium extraction.

Apart from the indicated resource, the reader is cautioned that the quality and grade of the inferred resource are uncertain in nature and there has not been sufficient exploration to define them as an indicated or measured resource. It is uncertain that further exploration will result in upgrading them to an indicated or measured resource category. Furthermore, mineral resources that are not mineral reserves do not have demonstrated economic viability.

The Issuer increased its holdings on the Clear Hills property in 2010-12 to extend its oolitic ironstone holdings by acquiring Metallic and Industrial Minerals permits and leases, mainly to the west and southwest of its original iron/vanadium mineral tenure.

In 2013, the Alberta Geological Survey released data it had developed for selected well waters for lithium since 2010. The results have been released online (Eccles and Jean, 2010). Several wells on and adjacent to the original Clear Hills Property returned anomalous Li values, prompting the company to significantly increase its mineral tenure holdings. The Issuer has done no exploration work for lithium to date beyond data compilation and preliminary lithium direct-extraction tests. In January 2018, the Issuer, as Ironstone Resources Ltd., changed its corporate name to PRISM Diversified Ltd. to better reflect the new management goals for the Clear Hills Project.





7 GEOLOLOGICAL SETTING & MINERALISATION

7.1 Regional Geological Setting

7.1.1 Regional Stratigraphy

The region around the Clear Hills Property includes geology ranging from the Precambrian through the Pleistocene. The Bad Heart Formation onlitic ironstone deposits in the Clear Hills Block, described in detail in the NI 43-101 technical report (SRK, 2012), occur in Upper Cretaceous shallow sea sedimentary formations. This geology will not be discussed further in this report since there have been no material changes since the SRK report (SRK, 2012). The lithium potential lies in the carbonate formations from Middle to Late Devonian and underlying basal clastics. These geological relations are described in this report.

The property lies on the northern and southeast flanks of the Peace River Arch (PRA), a prominent geological basement uplift that runs from the Rocky Mountains near Dawson Creek, BC east-northeast across Alberta and into the Canadian Shield Precambrian basement exposed in northeast Alberta, where it forms the boundary between two Proterozoic terranes. It is believed to have started in the Late Proterozoic or in the Early Cambrian where embayments on the northern and eastern boundaries coincide with the trend of the PRA development. O'Connell (1994) noted that the embayment continued as a deep basin as the Arch was evolving. From the Early Cambrian until the Late Devonian when the Wabamun Group clastics completely buried it, the PRA was a prominent topographic linear high that controlled the sedimentation from the several seas that deposited carbonates and clastic sediments. Figure 3 shows the general stratigraphic relationships of the Lower to Upper Devonian across the northwest plains area of Alberta.

The PRA also controlled the formation of fringing reefs of the Devonian Leduc Formation, a significant petroleum reservoir in Alberta. Figure 4 shows the Leduc Formation isopach values for Alberta (Switzer, et al., 1994). Figure 5 shows a section based on well records, again illustrating the relatively narrow width of the Leduc Fm and other units closely associated with the uplift and erosion of the PRA. The thickest areas of the Leduc lie along the steep north flank of the PRA as well as dipping more shallowly to southeast of the PRA. The shallower basin topography developed thick Leduc-age reefs and carbonate clastic bedded deposits throughout central and southern Alberta on localized topographic high areas, as well. Switzer et al. (1994) estimated, based on their references, that about 300 Leduc-age reef complexes developed and three stages based on fauna could be traced over 1,200 km in Alberta. The overlying Nisku Formation carbonates of the Winterburn Group frequently developed over or near the older Leduc reefs and added to the petroliferous sources. The diachronous relations of the Leduc Formation with other Upper Devonian formations in the Woodbend and, Winterburn Groups are shown in Figure 5. The structure of the PRA is asymmetrical with a steeply sloping northern flank and a gentler dipping southeastern slope that extends toward the Swan Hills region some 170 km away. Switzer et al. (1994) interpreted the form as arising from more rapid subsidence north of PRA. The Leduc Fm is deposited proximal to the PRA fringes in curvilinear units over 500 km in length.

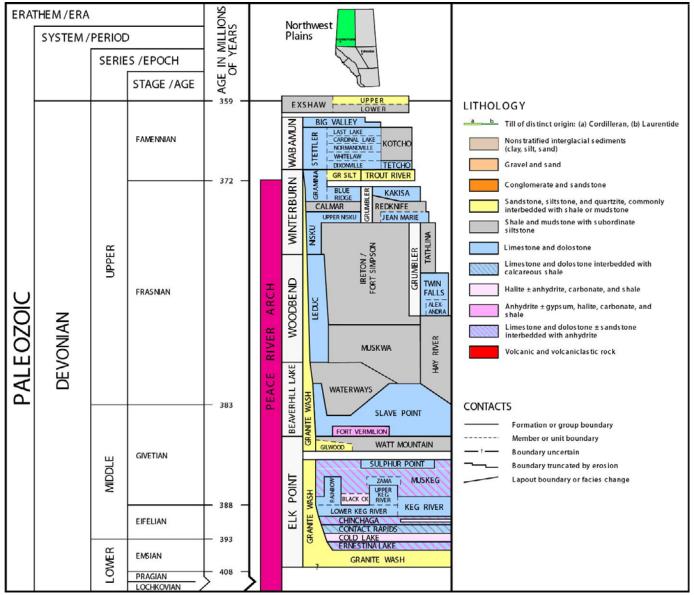
The current Issuer tenures cover the thickest isopach (thickness) of the fringing Leduc Formation reefs and associated sediments. The model is that the Leduc Fm, as a major porous reef complex, has the capacity to conduct and concentrate potentially high-Li brines from a very large volume of source rocks. The Woodend Group/Leduc FM are shown on Figure 3 is schematic section. Figure 4 shows the thicker (dark blue) portion of the Leduc Fm with the present tenures covering significant portions of that zone.

Germane to the lithium deposition and more proximal to the PRA, the detailed stratigraphy starts with the Granite Wash, a diachronous, lithostratigraphic clastic unit derived from the erosion of the PRA as arkosic





sandstone, arkose, siltstone, and shale deposited as fluvial-deltaic complexes from the erosion of metasedimentary and granitic Precambrian rocks of the uplifted arch. It also infilled grabens and topographic lows on the surface of the Arch. The material was shed into other clastic units developing from the east and southeast through Middle to Late Devonian. Ages are not directly available for the Granite Wash deposits except by correlation with interfingering units with fossils or dateable minerals (O'Connell, 1994). The Middle Devonian Elk Point Group is interbedded with Granite Wash at the base of the PRA.



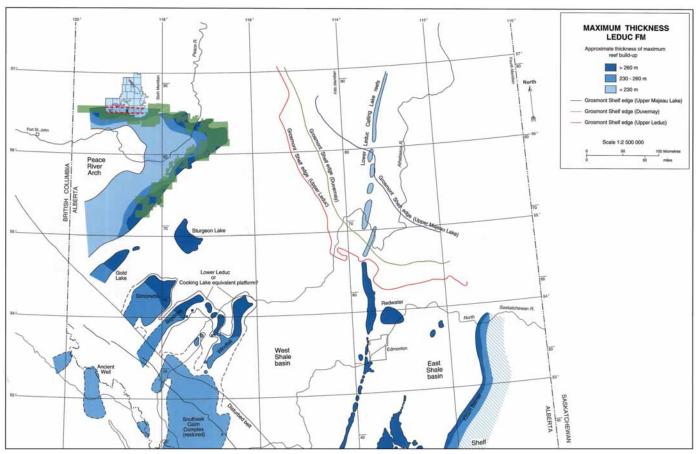
(modified from Alberta Geological.Survey Table of Formations, 2015)

Figure 3 Stratigraphic column – Devonian Period

The regression continued into the start of the Beaverhill Lake Group, which forms the Swan Hills Complex, with evaporites and platform carbonates being deposited. Afterwards, the basin east of the PRA subsided episodically and transgressional basinal clastics covered the reef complexes. A major regressive episode gave rise to a major excursion of the initial major Granite Wash deposition starting with the Watt Mountain



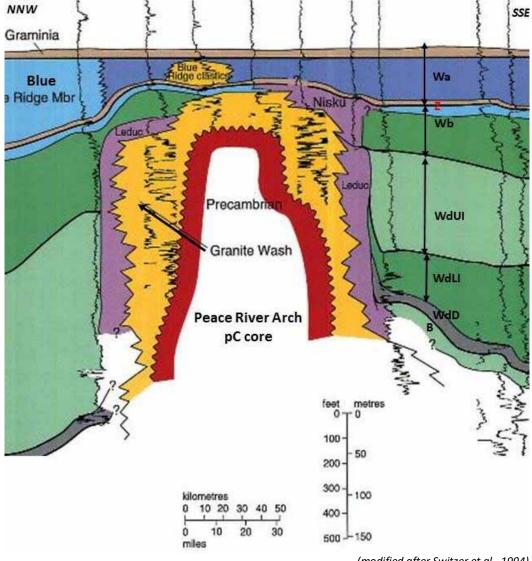
Formation (shale) and ending with the Gilwood Member (sandstone) that flank the PRA. In the Gilwood Member, the distribution of Granite Wash siliciclastics varied from generally continuous and interconnected deltaic complexes in to the south-southeast to more isolated equivalents along the eastern extension of the Arch. The northern flank had a steeper slope and the outwash was confined to thick, laterally discontinuous deltaic channels.



(modified after Switzer et al., 1994)

Figure 4 Devonian Leduc Formation – depositional thickness (isopach) zones in central Alberta with PRISM tenures (green)

At the start of the Upper Devonian Woodbend Formation, carbonate platform sedimentation of the Majeau Formation-Cooking Lake Formation complex was widespread in the flanking basins. Leduc Formation reefs and reefal clastics started forming but were checked by on-going deltaic clastics of Granite Wash from the PRA inboard of the reef substrate. The reefs continued to grow upwards in a delicate balance with sea-level changes over in the seven million years of the Late Devonian. With periodic sea-level transgressions and regressions on the outboard sides of the PRA, the reefs built out or shrank over available substrate material but, overall, the tendency was for essentially vertical growth over most of the extent of the Woodbend Group's deposition (see figure 5). These reefs have three major subdivisions based on faunal evidence which can be correlated throughout southwestern and central Alberta (Switzer, et al., 1994). Leduc carbonates were active during the coeval deposition of the Beaverhill Lake Group and the middle to late formations of the Woodbend Group. They ceased when fine clastic sediments and a strong sea-level increase deposited mud and fine clastics over the reefs and even over the PRA crest. An unconformity separates the Woodbend Group from the Upper-Middle Devonian Winterburn Group.



(modified after Switzer et al., 1994)

Figure 5 NNW-SSE well-log based section of Peace River Arch
Stratigraphy units: **B** = Beaverhill Lake Gp; **WdD** = Woodbend-Duvernay Fm; **WdLI** = Woodbend Lower Ireton Fm; **WdUI** = Woodbend Upper Ireton Fm; **Wb** = Winterburn Gp; **Z** = Z horizon marker; **Wa** = Wabamun Gp

At the close of Leduc development, the reefs remained as subtle topographic highs and new deposition of reef and carbonate sediment complexes resumed on them as the Nisku Formation of the Winterburn Group. The reefs were generally thinner and had more clastic sediment entrained in the carbonate than in the Leduc. Near the PRA, they are almost continuous to the upper Leduc contact and are also petroliferous. Carbonate deposition ended in Middle-Late Devonian at the widespread unconformity that forms the base of the Graminia Formation of the Winterburn Group. By the end of the Devonian, the PRA was no longer emergent and marine shelf conditions extended throughout the Western Cratonic platform



7.1.2 Regional Structures

Three major structures have affected the PRA region over an extended geological time. The oldest is the Snowbird Anomaly Zone (SAZ), also known as the Snowbird Tectonic Zone (STZ), that cuts across Alberta just south of the Swan Hills area (see figure 6). The SAZ is a broad NE-SW tectonic zone of multiple ductile faults that extends some 2,800 km from the Cordilleran across Alberta into the Canadian Shield to Hudson Bay, separating the Hearne and Rea Cratons (Berman, et al., 2007). It is part of a pattern with a number of smaller scale parallel tectonic events in Alberta and appears to be part of a larger scale series of parallel ductile fault zones, such as the Great Slave Lake Tectonic Belt and others in the US as far south as central Colorado. The age of the SAZ appears to be 1.9 Ga and is part of the accretionary phase of the Hudsonian orogeny. It likely has been reactivated a number of times. It is possible that the SAZ started before 1.9 Ga or arose from reactivation of isolated pre-existing structures.

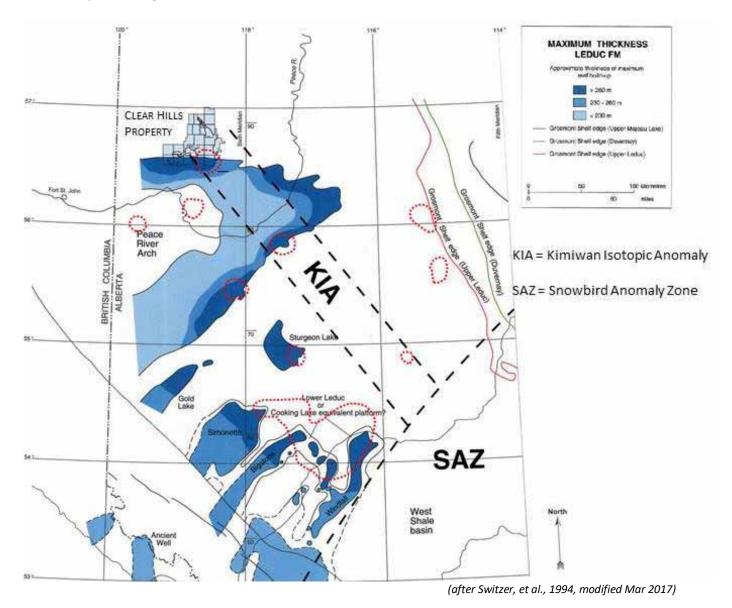


Figure 6 Leduc Formation isopach thickness, major structures & lithium anomalies (dotted red areas)



The Kimiwan Isotopic Anomaly (KIA) is a smaller-scale feature that starts at 57.3°N and trends across the PRA south-southeast to 54.4°N, where it is truncated by the reactivated SAZ. It is characterized by a light oxygen isotope ($<6~\delta^{18}O$ SMOW). The lighter oxygen has been interpreted by Chacko, et al. (1995) as derived from surficial waters circulating into metamorphic crustal rocks along an early extensional precursor of the Cordilleran mobile megabelt to the west. Age-dating returned ages around 1.760 Ga. High pressure and temperature minerals underwent retrograde metamorphism to upper greenschist facies and were used for age-dating by Chacko et al. (1995). Figure 7 shows a schematic relationship between the SAZ and KIA south of the PRA.

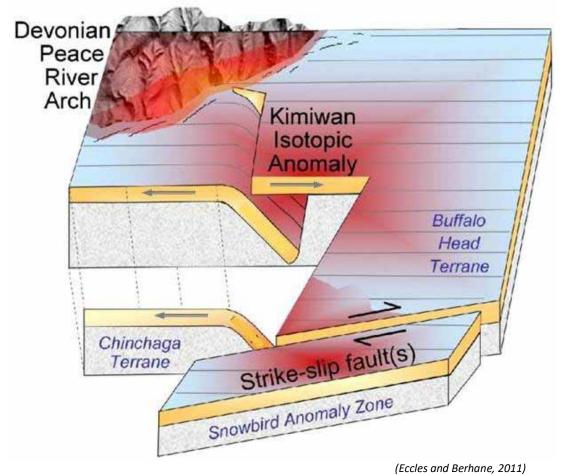


Figure 7 Schematic of relations among the SAZ-KIA-PRA structures

The youngest major regional structure is the Dawson Creek Graben Complex (DCGC). It was the result of a long-lived episode of extension resulting in the formation of grabens that are several orders of magnitude greater in size than the grabens formed during the initial uplift of the arch. The Early Carboniferous uplift occurred over a broad region but was not a part of PRA tectonics. The period of active graben formation was followed by a long, relatively passive interval marked by local subsidence during the Permian, Triassic, and Jurassic. The grabens were infilled initially with Granite Wash type siliciclastics and then finer-grained sediments derived from the exhumed PRA and later subsidence (O'Connell, 1994). The extensional graben faults displaced the Leduc fringing reefs by what appears to be mainly vertical movement (see figure 8). These faults could have localized fluids associated with lithium brines and petroleum.

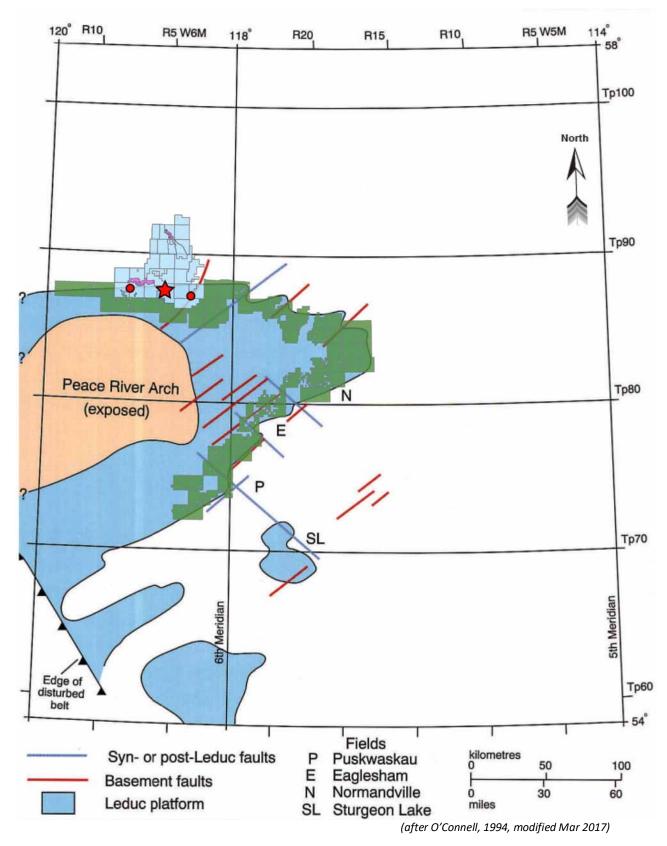


Figure 8 Dawson Creek Graben Complex (DCGC) on the Peace River Arch



7.2 Property Geology

7.2.1 Stratigraphy

The primary stratigraphy of interest for the lithium potential on the Clear Hills Property covers the Leduc fringing reefs and Swan Hills carbonates on the north flank of the PRA. The isopach values of the Leduc Formation rapidly thicken across the southern part of the property and appear to pinch out quickly to the north. Whether the apparently rapid pinch-out is due to faulting or limits in geological data that tested the Leduc is unclear. The north limit of the Leduc isopach data coincides with the Worsley gas field, a moderately prolific producer. The eastern 60% of the field underlies the Clear Hills Property.

7.2.2 Structure

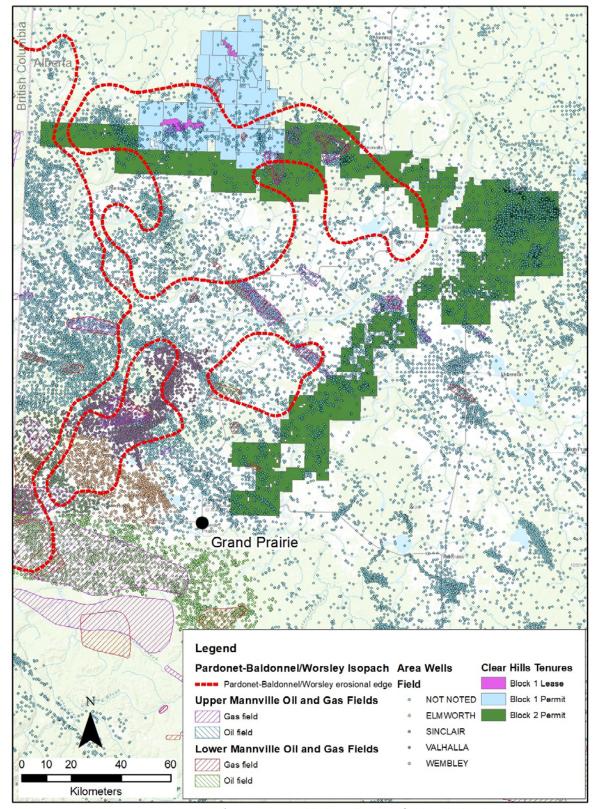
No significant large-scale folding has affected the sedimentary rocks outboard of the PRA. The regional trends discussed above affect the PRA Devonian geometry across the southern part, particularly the KIA structure which appears to have down-dropped the eastern end of the PRA and preserved some of the Leduc reef units from erosion (see figure 6). As seen in figure 8, the northernmost subordinate graben fault, the Hines Creek Graben, lies just south of the property and fault splays arcing north of the graben intersect the west side of the KIA where the well with 76 mg/L Li was measured (Eccles and Jean, 2010). The graben faults may have been conduits for Li-rich brines as discussed in the model in Section 8

7.2.3 Metamorphism

The metamorphic grade in the Phanerozoic formations around the property shows only burial induration and diagenesis at low temperature and pressure.

7.2.4 Alteration & Mineralization

The Li-rich brines on and near the property are believed to be associated with dolomitized Woodbend and Beaverhill Lake carbonates. The Issuer does not have detailed data for the wells at the date of the report. Figure 9 shows the wells listed on the Alberta government database, but it is unknown how many of these may also contain Li. Many of the wells have not penetrated the Devonian formations. A more accurate picture of potentially Li-bearing formation waters would focus on the wells that have penetrated Devonian units. Eccles and Jean (2010) and Eccles and Berhane, (2011) show Li data in selected wells shown in Figure 10. The Worsely gas field wells shown in figure 11 are those which are known to have penetrated the Leduc or older Devonian formations, based on government records. A number of other Li-rich wells lie along the southeast Peace River Arch tenures group, too. It is possible to purchase well data in Alberta. More Li data may be available than was used by Eccles et al.

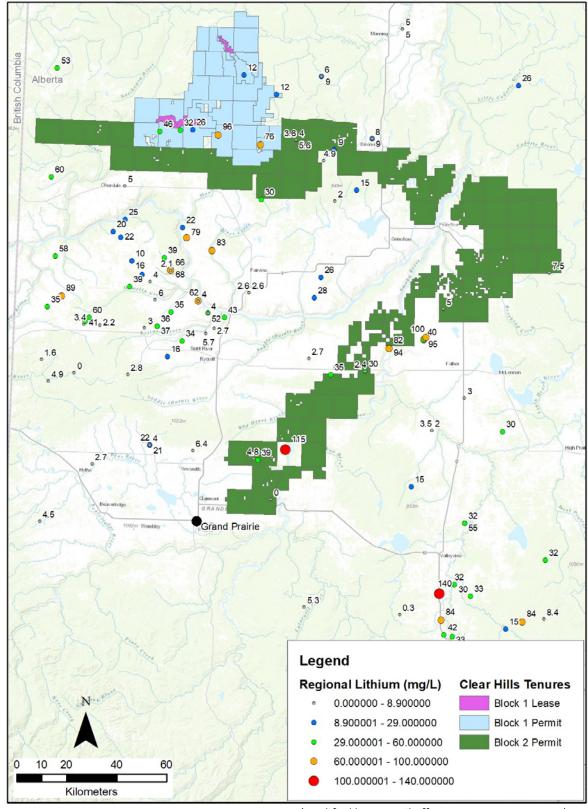


(Tenure area added to Alberta oilfleld wells database, Mar 2018

Figure 9 Oil & gas wells in the Peace River Arch – Leduc regions, Alberta







(modified by L Poznikoff from Eccles and Jean, 2010)

Figure 10 Selected wells with Li data and tenures





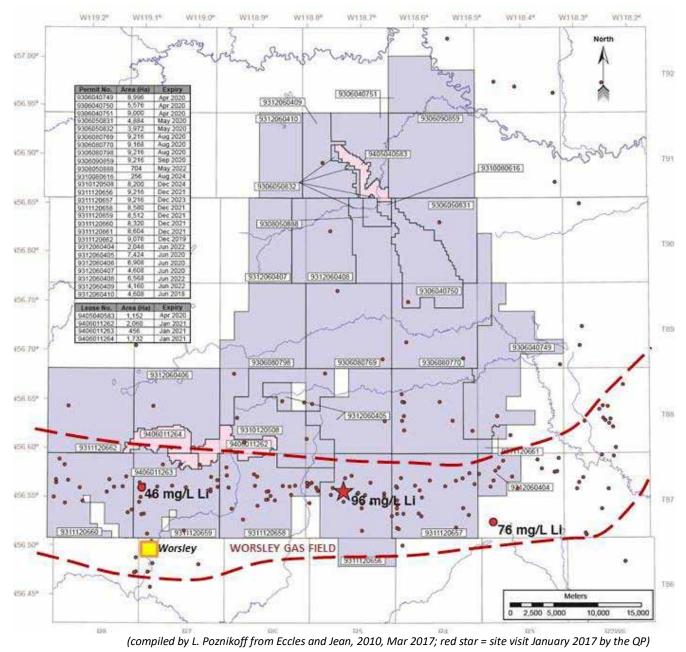


Figure 11 Worsley gas field wells penetrating Devonian or older formations

8 DEPOSIT TYPE

Lithium occurs in lithophilic crystalline igneous and metasedimentary rocks and in transported deposits such as salt flats (*salars*), reservoir brines, and clay deposits, all at relatively low bulk Li concentrations. Over 145 minerals contain at least 0.002% Li and 45 with >2% Li (Eccles and Berhane, 2011). Lithium is more highly soluble than most other cations in aqueous media, such as calcium, magnesium, boron, iodine, bromine, and chlorine,. Thus, slow development of liberated Li cations can become concentrated after the fractionation of less soluble cations to form economic deposits. However, it first must be liberated from primary Li-bearing minerals, such as spodumene, petalite, amblygonite and in minor amounts in feldpsars and micas by





weathering. The primary host rock is granitic pegmatites, which are already fractionated from the initial granitic melt with relatively high water levels. Volcanic rocks, especially the more felsic varieties, contain trace Li.

The movement of Li in transported environments is more variable and less definite. Three general deposit types, ranked in order of current Li production, are: geothermal springs associated with volcanic rocks that mix with seawater or basinal water in salars and extensional basin sediments; magnesium- and lithium-rich clays, such as hectorite, can form "hardrock" deposits and are known in the southwestern US, including Clayton Valley, NV; and in certain oilfield brines with modest to high Li concentrations. The latter group has a large and untapped potential for lithium due to the volume of the reservoirs available.

The source for Li in oil-field brines is not well understood. Models invoke sources such as the recycling and concentration of older Li-rich deposits, mixing with existing subsurface brine; weathering of volcanic or granitic basement rock; and fluids derived from hydrothermal springs associated with volcanic or deep-seated groundwater circulation through porous sediments. None of these models have been viable in the identification of processes active in Li enrichment in oilfield formation water. Chan et al. (2002) used Li isotopes to trace Li enrichment inf oilfield brines. They concluded that the original seawater gained isotopically lighter Li during diagenetic reactions between the brine and basin sediments. The parent brine with elevated Li was formed. Continued epigenetic reactions with the aquifer rocks enriched the brines further. No evaporative processes were required.

In the Leduc and Swan Hill carbonates, the requirements for a plumbing system to direct initial seawaters to depth to cross-cutting faults to subhorizontal porous aquifers was in place along the PRA fringe. Lithium would be extracted by the heated groundwater from reactions with the Granite Wash siliciclastic and Gilwood Member sandstone aquifers. Reactivated faults of the KIA and the Dawson Creek Graben post-Early Carboniferous conducted the enriched warm brines toward the porous carbonates where the water entered into the reservoirs. Reactions in the limestone by magnesium in the brine formed dolomite in broad vertical envelopes, while more channelised flow in steep faults could generate hydrothermal dolomite, thereby reducing the Mg level in the brines. The increased porosity of the dolomitised limestone would enhance storage capacity for both brines and petroleum. Movement along the Dawson Creek graben faults may have lead to more localised reservoirs in non-reefal carbonate formations as well. Figure 12 shows a schematic model of the process. The interaction between steep cross-cutting faults, porous clastics and reefs and confining clastic sediments, i.e., shale, would be fairly common in oilfield basins and in basin and range type restricted basins, as typically seen in Nevada.

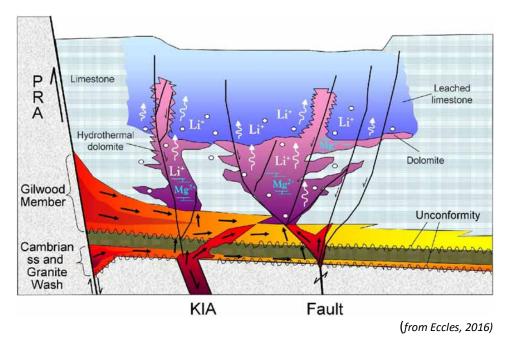


Figure 12 Lithium brine genetic model

9 EXPLORATION

No exploration has been done by the Issuer. Exploration information done by the Issuer is discussed in Section 6 - History.

10 DRILLING

As of the report date, the Issuer has not undertaken any drilling on the Clear Hills property with respect to lithium potential. The Issuer drilled the ironstone deposit on the northeast part of the property as discussed in Section 6 – History; that work has been reported and is not associated with the scope of this report.

11 SAMPLE PREPARATION, ANALYSES, AND SECURITY

One well water sample was drawn by the Issuer in early 2017 to test for Li recovery using a proprietary process as of the date of this report. The field QA/QC procedures were not documented, and the sampler did not follow post-collection treatments usually done for water samples. The result was a lower value than derived by Eccles and Jean (2010) for this source and likely may not be representative of the actual Li value. Future water sampling should be based on recommendations and protocols made by a laboratory with demonstrated water analysis experience.

12 DATA VERIFICATION

The Issuer did not undertake any sampling as part of its due diligence. Eccles and Jean (2010) noted that the samples were donated by various petroleum companies and that there were few records of QA/QC practices during sample collection and handling. They re-analysed the samples in two well-known laboratories. They cautioned that the reader must consider these data as accurate as they are represented.

12.1 Opinion of Adequacy



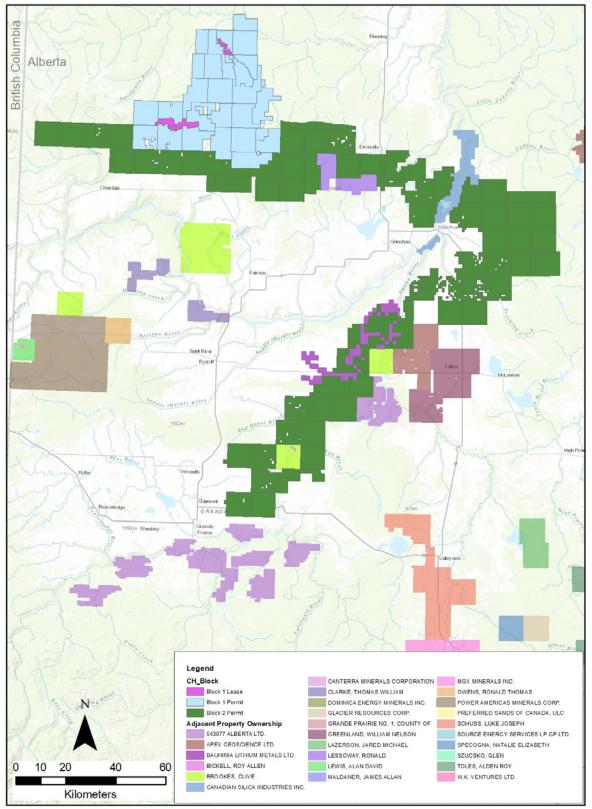


In the author's opinion, the quality of the data was sufficient for the basic prospection level of work. The author strongly recommends that any future sampling, handling, shipping, security, and analyses should follow written and auditable QA/QC procedures made by a reputable water analysis laboratory for the Issuer.

ITEMS 13 THROUGH 22 ARE NOT APPLICABLE IN THIS REPORT.

23 ADJACENT PROPERTIES

Two separate blocks of Metallic and Industrial Mineral (MIM) permits lies adjacent to the southeast corner of the Clear Hills property (see figure 13).



(data by L. Poznikoff from Alberta Mineral Rights Interactive Map online 13 March 2018)

Figure 13 Clear Hills Property and adjacent MIM licenses



24 OTHER RELEVANT DATA AND INFORMATION

There are no additional data or material information known to the author about the subject property as of the issue date of this report.

25 INTERPRETATION AND CONCLUSIONS

25.1 Interpretation

The lithium geology on the Clear Hills Property is focused on the steeply dipping and rapidly thickening Devonian Leduc and underlying Beaverhill Lake Formations on the north flank of the Peace River Arch with additional interest on the eastern flanks of the PRA. The Worsley gas field, which lies inside the southern property boundary, has a number of wells that reportedly reached into the Upper Devonian Leduc Formation and Beaverhill Lake Group carbonate rocks. These are the favourable horizons for Li-bearing brines throughout west-central Alberta. Three wells reported Li in brine from 46 to 96 mg/L. There are more widely spaced deep wells lying on the north-dipping slope of the PRA as well. The Leduc Formation often lies deeper than 2,000 m below surface and has isopach thicknesses exceeding 260 m.

In the author's experience, the proposed model presented in this report seems sensible, given the geological history of sedimentation and diagenesis combined with the absence of more dynamic volcanic hot spring sources or evaporative concentration at surface salars in arid conditions. The post-Carboniferous depth of the formations would have been sufficient to heat groundwater to low geothermal levels and the known distribution of the porous Granite Wash and Gilwood Member sandstone, combined with the presence of reactivated Proterozoic Kimiwan Isotopic Anomaly and the Carboniferous Dawson Creek Graben faults supports the potential for fluid flow across the subhorizontal sedimentary strata. Well logging reportedly shows evidence of various types of magnesium metasomatism of Woodbend (Leduc) and Beaverhill Lake carbonates (dolomitisation) ranging from intense hydrothermal areas to broad low-temperature carbonate recrystallisation with increased porosity and permeability.

25.2 Conclusions

The Li brine potential of the Clear Hills geology shows potential which can only be developed by focused technical, geological, geophysical, and reservoir engineering works in order to focus on reservoir definition and investment in suitable lithium brine direct-extraction process development.

25.3 Risks

The Clear Hills Property is an early-stage project with respect to lithium at this time. There is a risk that future development may not identify adequate Devonian reservoirs from which to source lithium. The risks are the normal geological ones including: the presence of treatable grades of Li in brine, their continuity and connections to establish a reservoir of sufficient size and grade, and accessing or developing the technical processing methods to produce a marketable product.

Other risks can include: access to existing wells or drilling new ones and the associated process water, well-water reinjection, and processing; permits for surface rights for production, sourcing effective lithium extraction technology, access to adequate power and other infrastructure requirements for commercial development. Although the production risks are considered low in the Alberta resource development jurisdiction, commercial development of a lithium direct extraction technology does present a potential risk. No other environmental, social, or community risks are foreseen.





26 RECOMMENDATIONS

The author recommends a two-phase work program with further works dependent on results. The approach is two-fold: to develop a viable lithium resource and to develop the concentration technology required for future extraction and processing. Phase 1 would focus on developing the geological and brine knowledge to support a PEA Resource Estimate as well as develop brine concentration technology. The Issuer is evaluating several processes, including one that can derive lithium products directly from brine. Successful results as supported in the PEA would lead to Phase 2 development. The total program to successful pilot plant demonstration of the pre-concentration technology and a Prefeasibility Study NI 43-101 would be CAD\$ 1,875,000, exclusive of taxes and government R&D grants.

Phase 1 (\$ 925,000)

		Total	\$ 925,000
7	G & A and Contingency		\$ 250,000
6	Resource estimation for PEA NI 43-101		\$ 150,000
5	Brine concentration technology development for PEA		\$ 75,000
4	Preliminary lithium carbonate refining process flow sheet development		\$ 100,000
3	Well testing & water sampling		\$ 100,000
2	Reservoir characterisation Woodbend and Beaverhill Lake reservoirs in the region		\$ 100,000
1	Geological and geophysical mapping		\$ 150,000

Proposed Phase 2 works would focus more on development and scale-up of the lithium direct-extraction process as well as engaging stakeholders and undertaking environmental assessment.

Phase 2 (\$ 950,000)

1.	Continue brine direct-extraction process design and scale-up	\$ 100,000
2.	Demonstration Pilot Plant equipment & tests	\$ 375,000
3.	Stakeholder consultations and environmental assessment	\$ 75,000
4.	NI 43-101 to PFS	\$ 150,000
5.	G & A and Contingency	<u>\$ 250,000</u>
		Total \$ 950,000

27 REFERENCES

Alberta Geological Survey, 2015. Table of Formations (available online http://www.ags.gov.ab.ca/publications/

AWCSB, 1994 to 2017. Atlas of Western Canadian Sedimentary Basin: online URL: ags.aer.ca/publications/ atlas-of-western-canada-sedimentary-basin.htm

Bachu, S, Yuan, LP, and Brulotte, M, 1995. Industrial mineral estimates of Alberta formation waters: Alberta Research Council, Albert Geol Surv, OFR 1995-01, 65p.

Berman, PG, Davis, WJ, and Pehrsson, S, 2007. Collisional Snowbird tectonic zone resurrected: Growth of Laurentia during the 1.9 Ga accretionary phase of the Hudsonian orogeny; Geology (GSA), 35:10, pp 911-914.

Chacko, T, King, R, Muehlenbachs, K, and Burwash, RA, 1995. The Kimiwan Isotopic Anomaly, a low ¹⁸O zone in the





Precambrian basement of Alberta: constraints on the timing of ¹⁸O depletion from K-Ar and Rb-Sr data *in* Alberta Basement Transects (GM Ross, ed.), Lithoprobe Rept 47, pp 335-339.

Chan, LH, Starinsky, A, and Katz, A, 2002. The behaviour of lithium and its isotopes in oilfield brines: Geochimica et Cosmochimica Acta, 66:4, pp 615-623.

Eccles, DR, 2016. Turning brine into wine: a geological introduction to lithium-rich oilfield brine in west-central Alberta: Canadian International Minerals Inc. presentation by Apex Geoscience Ltd, 52p.

Eccles, DR, Berhane, H, McAleenan, C, Long, and Huff, GF, 2010. Geological considerations for lithium-rich Devonian oilfield waters in the Swan Hills area of west-central Alberta: Int'l Workshop: Geology of Rare Metals, Victoria, BC Nov 9-10, 2010, p 51-54.

Eccles, DR and Berhane, H, 2011. Geological Introduction to lithium-rich formation water with the emphasis on the Fox Creek area of west-central Alberta (NTS 83F and 83K): : Alberta Energy Conservation Board, ERCB/AGS, OFR 2011-10, 28p.

Eccles, DR and Jean, GM, 2010. Lithium groundwater and formation water geochemical data: Alberta Energy Conservation Board, ERCB/AGS, Digital Dataset 2010-0001 (tabular data, tabular delimited format), URL: www.ags.gov.ab.ca/publications/abstracts/DIG_2010_0001.html [April 2011].

Halbertsma, HL, 1994. Devonian Wabamun Group; in Geological Atlas of the Western Canada Sedimentary Basin, G.D. Mossop and I. Shetsen (comp.), Canadian Society of Petroleum Geologists and Alberta Research Council, URL http://ags.aer.ca/publications/chapter-11-devonian-wabamun-group.htm, [20 Mar 2017].

Hitchon, B, Bachu, S, Underschultz, JR, and Yuan, LP, 1995. Industrial mineral potential of Alberta formation waters: Alberta Research Council, Alberta Geol Surv, Bull 62, 92p.

Hitchon, B, Underschultz, JR, and Bachu, S, 1993. Industrial mineral potential of Alberta formation waters: Albert Energy OFR 93-15, 92p.

O'Connell, S.C. (1994): Geological history of the Peace River Arch; in Geological Atlas of the Western Canada Sedimentary Basin, G.D. Mossop and I. Shetsen (comp.), Canadian Society of Petroleum Geologists and Alberta Research Council, URL http://ags.aer.ca/publications/chapter-28-geological-history-of-the-peace-river-arch.htm, [20 Mar 2017].

Oldale, HS, Munday, RJ, Ma, K, and Meijer-Dress, NC, 1994: Devonian Beaverhill Lake Group; in Geological Atlas of the Western Canada Sedimentary Basin, G.D. Mossop and I. Shetsen (comp.), Canadian Society of Petroleum Geologists and Alberta Research Council, URL http://ags.aer.ca/publications/chapter-11-devonian-beaverhill-lake-group.htm, [20 Mar 2017].

SRK Consulting (Canada) Inc., 2012. Technical report on the Rambling Creek-North Whitemud River oolitic ironstone deposit, Clear Hills, Alberta: Ni 43-101 Tech Rept for Ironstone Resources Ltd., 95p (resource estimate).

Switzer, SB, Holland, WG, Christie, DS, Graf, GC, Hedinger, AS, McAuley, RJ, Wierzbicki, RA, and Packard, JJ, 1994: Devonian Woodbend-Winterburn strata; in Geological Atlas of the Western Canada Sedimentary Basin, G.D. Mossop and I. Shetsen (comp.), Canadian Society of Petroleum Geologists and Alberta Research Council, URL http://ags.aer.ca/publications/chapter-12-devonian-woodbend-winterburn-strata.htm, [20 Mar 2017].

Underschultz, JR, Yuan, LP, Bachu, S, Cotterill, DK, and Hitchon, B, 1994. Industrial mineral potential of Albert formation waters: Alberta Energy OFR 94-13, 77p.



APPENDIX 1

TENURES of MINERAL & INDUSTRIAL METALS (MIM) – CLEAR HILLS PROPERTY, ALBERTA

PRISM Diversified Inc. is the 100% owner of the leases and permits listed below

Map Ref	Clear Hills Block	Tenure No.	Received Date	Expiry Date	Area (Ha)
1	Block 1 Lease	9405040583	2005-04-12	2020-04-12	1152.0
2	Block 1 Lease	9406011262	2006-01-23	2021-01-23	2060.0
3	Block 1 Lease	9406011263	2006-01-23	2021-01-23	456.0
4	Block 1 Lease	9406011264	2006-01-23	2021-01-23	1732.0
5	Block 1 Permit	9306040749	2006-04-05	2020-04-05	8996.0
6	Block 1 Permit	9306040750	2006-04-05	2020-04-05	5576.0
7	Block 1 Permit	9306040751	2006-04-05	2020-04-05	9000.0
8	Block 1 Permit	9306050831	2006-05-15	2020-05-12	4884.0
9	Block 1 Permit	9306050832	2006-05-15	2020-05-16	3972.0
10	Block 1 Permit	9306080769	2006-08-01	2020-08-01	9216.0
11	Block 1 Permit	9306080770	2006-08-01	2020-08-01	9168.0
12	Block 1 Permit	9306080798	2006-08-22	2020-08-22	9216.0
13	Block 1 Permit	9306090859	2006-09-25	2020-09-25	9216.0
14	Block 1 Permit	9308050888	2008-05-26	2022-05-26	704.0
15	Block 1 Permit	9310080616	2010-08-18	2024-08-18	256.0
16	Block 1 Permit	9310120508	2010-12-02	2024-12-02	8200.0
17	Block 1 Permit	9311120656	2011-12-19	2025-12-19	9216.0
18	Block 1 Permit	9311120657	2011-12-19	2025-12-19	9216.0
19	Block 1 Permit	9311120658	2011-12-19	2025-12-19	8580.0
20	Block 1 Permit	9311120659	2011-12-19	2025-12-19	8512.0
21	Block 1 Permit	9311120660	2011-12-19	2025-12-19	8320.0
22	Block 1 Permit	9311120661	2011-12-19	2025-12-19	8604.0
23	Block 1 Permit	9311120662	2011-12-19	2025-12-19	9076.0
24	Block 1 Permit	9312060404	2012-06-28	2026-06-28	2048.0
25	Block 1 Permit	9312060405	2012-06-28	2026-06-28	7424.0
26	Block 1 Permit	9312060406	2012-06-28	2026-06-28	6908.0
27	Block 1 Permit	9312060407	2012-06-28	2026-06-28	4608.0
28	Block 1 Permit	9312060408	2012-06-28	2026-06-28	6568.0
29	Block 1 Permit	9312060409	2012-06-28	2026-06-28	4160.0
30	Block 1 Permit	9312060410	2012-06-28	2026-06-28	4608.0
31	Block 1 Permit	9316020131	2016-02-12	2030-02-12	7136.0
32	Block 1 Permit	9317040243	2017-04-03	2031-04-03	9017.0
33	Block 2 Permit	9318020231	2018-02-05	2032-02-05	9216.0
34	Block 2 Permit	9318020232	2018-02-05	2032-02-05	9088.0
35	Block 2 Permit	9318020233	2018-02-05	2032-02-05	9216.0
36	Block 2 Permit	9318020234	2018-02-05	2032-02-05	9216.0
37	Block 2 Permit	9318020235	2018-02-05	2032-02-05	8896.0
38	Block 2 Permit	9318020236	2018-02-05	2032-02-05	9024.0
39	Block 2 Permit	9318020237	2018-02-05	2032-02-05	9216.0
40	Block 2 Permit	9318020238	2018-02-05	2032-02-05	9216.0
41	Block 2 Permit	9318020239	2018-02-05	2032-02-05	9028.0
42	Block 2 Permit	9318020240	2018-02-05	2032-02-05	9216.0
43	Block 2 Permit	9318020241	2018-02-05	2032-02-05	9216.0
44	Block 2 Permit	9318020242	2018-02-05	2032-02-05	9008.0
45	Block 2 Permit	9318020243	2018-02-05	2032-02-05	8256.0

Map Ref	Clear Hills Block	Tenure No.	Received Date	Expiry Date	Area (Ha)
46	Block 2 Permit	9318020244	2018-02-05	2032-02-05	8256.0
47	Block 2 Permit	9318020245	2018-02-05	2032-02-05	9216.0
48	Block 2 Permit	9318020246	2018-02-05	2032-02-05	9216.0
49	Block 2 Permit	9318020247	2018-02-05	2032-02-05	9216.0
50	Block 2 Permit	9318020248	2018-02-05	2032-02-05	9071.7
51	Block 2 Permit	9318020249	2018-02-05	2032-02-05	9216.0
52	Block 2 Permit	9318020250	2018-02-05	2032-02-05	9216.0
53	Block 2 Permit	9318020251	2018-02-05	2032-02-05	9216.0
54	Block 2 Permit	9318020252	2018-02-05	2032-02-05	9216.0
55	Block 2 Permit	9318020253	2018-02-05	2032-02-05	9216.0
56	Block 2 Permit	9318020254	2018-02-05	2032-02-05	9216.0
57	Block 2 Permit	9318020255	2018-02-05	2032-02-05	9216.0
58	Block 2 Permit	9318020256	2018-02-05	2032-02-05	9216.0
59	Block 2 Permit	9318020257	2018-02-05	2032-02-05	9216.0
60	Block 2 Permit	9318020258	2018-02-05	2032-02-05	9216.0
61	Block 2 Permit	9318020259	2018-02-05	2032-02-05	9216.0
62	Block 2 Permit	9318020260	2018-02-05	2032-02-05	9216.0
63	Block 2 Permit	9318020261	2018-02-05	2032-02-05	9216.0
64	Block 2 Permit	9318020262	2018-02-05	2032-02-05	9216.
65	Block 2 Permit	9318020263	2018-02-05	2032-02-05	9216.0
66	Block 2 Permit	9318020264	2018-02-05	2032-02-05	9216.0
67	Block 2 Permit	9318020265	2018-02-05	2032-02-05	9216.0
68	Block 2 Permit	9318020266	2018-02-05	2032-02-05	9216.0
69	Block 2 Permit	9318020267	2018-02-05	2032-02-05	9216.
70	Block 2 Permit	9318020268	2018-02-05	2032-02-05	9216.
71	Block 2 Permit	9318020269	2018-02-05	2032-02-05	8706.
72	Block 2 Permit	9318020270	2018-02-05	2032-02-05	9152.
73	Block 2 Permit	9318020271	2018-02-05	2032-02-05	8896.
74	Block 2 Permit	9318020272	2018-02-05	2032-02-05	9216.0
75	Block 2 Permit	9318020273	2018-02-05	2032-02-05	8896.
76	Block 2 Permit	9318020274	2018-02-05	2032-02-05	9216.0
77	Block 2 Permit	9318020277	2018-02-05	2032-02-05	9216.0
78	Block 2 Permit	9318020278	2018-02-05	2032-02-05	8622.0
79	Block 2 Permit	9318020279	2018-02-05	2032-02-05	9216.0
80	Block 2 Permit	9318020280	2018-02-05	2032-02-05	8723.0
81	Block 2 Permit	9318020281	2018-02-05	2032-02-05	9216.0
82	Block 2 Permit	9318020282	2018-02-05	2032-02-05	9216.0
83	Block 2 Permit	9318020283	2018-02-05	2032-02-05	9216.0
84	Block 2 Permit	9318020284	2018-02-05	2032-02-05	9216.0
85	Block 2 Permit	9318020285	2018-02-05	2032-02-05	8979.0
86	Block 2 Permit	9318020286	2018-02-05	2032-02-05	8896.0
87	Block 2 Permit	9318020321	2018-02-22	2032-02-22	6528.0
88	Block 2 Permit	9318020322	2018-02-22	2032-02-22	9184.0
89	Block 2 Permit	9318020323	2018-02-22	2032-02-22	7178.2
90	Block 2 Permit	9318020324	2018-02-22	2032-02-22	9200.0

Map Ref	Clear Hills Block	Tenure No.	Received Date	Expiry Date	Area (Ha)
92	Block 2 Permit	9318020325	2018-02-22	2032-02-22	9216.0
92	Block 2 Permit	9318020326	2018-02-22	2032-02-22	8640.0
93	Block 2 Permit	9318020327	2018-02-22	2032-02-22	9216.0
94	Block 2 Permit	9318020328	2018-02-22	2032-02-22	9216.0
95	Block 2 Permit	9318020329	2018-02-22	2032-02-22	9216.0
96	Block 2 Permit	9318020330	2018-02-22	2032-02-22	9216.0

Total Area (ha) 776,321.7