



**ARDIDEN**

30 January 2020

## DECEMBER 2019 QUARTERLY ACTIVITIES REPORT

### HIGHLIGHTS

#### **PICKLE LAKE GOLD PROJECT – Ontario, Canada.**

- Review of historical data and drilling results at the high-grade **Pickle Lake Gold Project** in Ontario, Canada.
- Completion of an **airborne geophysical survey at the West Pickle Gold Prospect**, identifying several priority gold mineralisation targets.
- Post-reporting period, Ardiden has also announced the expansion of its landholding at the Pickle Lake Gold Project in Ontario, Canada following the signing of an **earn-in agreement with Exiro Minerals Corp** over its 'New Patricia' Gold Prospect (see ASX announcement dated 6 January 2020).
- Interest in the Pickle Lake Gold area was highlighted post-reporting period with the bid by ASX-listed AuTECO Minerals (ASX: "AUT") to earn up to 80% of the **Pickle Crow Mine** Property from owner, First Mining Gold Corp (TSX:" FF").

#### **SEYMOUR LAKE LITHIUM PROJECT – Ontario, Canada.**

- Signing of a non-binding Memorandum of Understanding (MOU) with lithium developer, **Rock Tech Lithium Inc** (TSX-V: RCK) to combine development efforts for a regional Lithium Project in Ontario.

#### **CORPORATE**

- Annual General Meeting (AGM) held on 21 November 2019 with all resolutions passed.
- Appointment of Steven Wood and Silfia Morton as Joint Company Secretaries.
- Change of Registered Office address in October 2019.

#### **CASH BALANCE at 31 December 2019**

- Total AUD Equivalent: A\$2.44m.



*Figure 1 - Geologist Haydn Daxter and Exploration Manager Dan Grabiec directing access track work to Kasagiminnis.*



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## PICKLE LAKE GOLD PROJECT

CEO Rob Longley and Ardiden staff undertook site visits to Pickle Lake and progressed stakeholder engagement with in-country Exploration Manager, Dan Grabiec. These negotiations are laying the foundation of local stakeholder relationships for the long term and will assist planning and support of the upcoming Winter drill programme.

During the period, Ardiden advanced preparations for drilling programmes and undertook airborne geophysical surveys at its **Pickle Lake Gold Project**. Work during the period also included evaluation of historical exploration drilling results dating back to 1970's at the **Dorothy-Dobie and New Patricia Gold Properties** (Figure 2). Significant high-grade drill intersections of gold from validated historical drilling will be announced next Quarter, once thoroughly verified and reported according to JORC Code guidelines.

Currently, drill access tracks to the **Kasagiminnis Gold Deposit** and employment of local community services are underway with exploration activities planned for the current Winter season, which is January, February and March, and possibly into April if weather permits. For resource drilling at **Kasagiminnis**, a minimum thickness of ice is required before moving rigs and equipment onto the frozen lake, so this will be a factor in drill rig mobilisation timing.

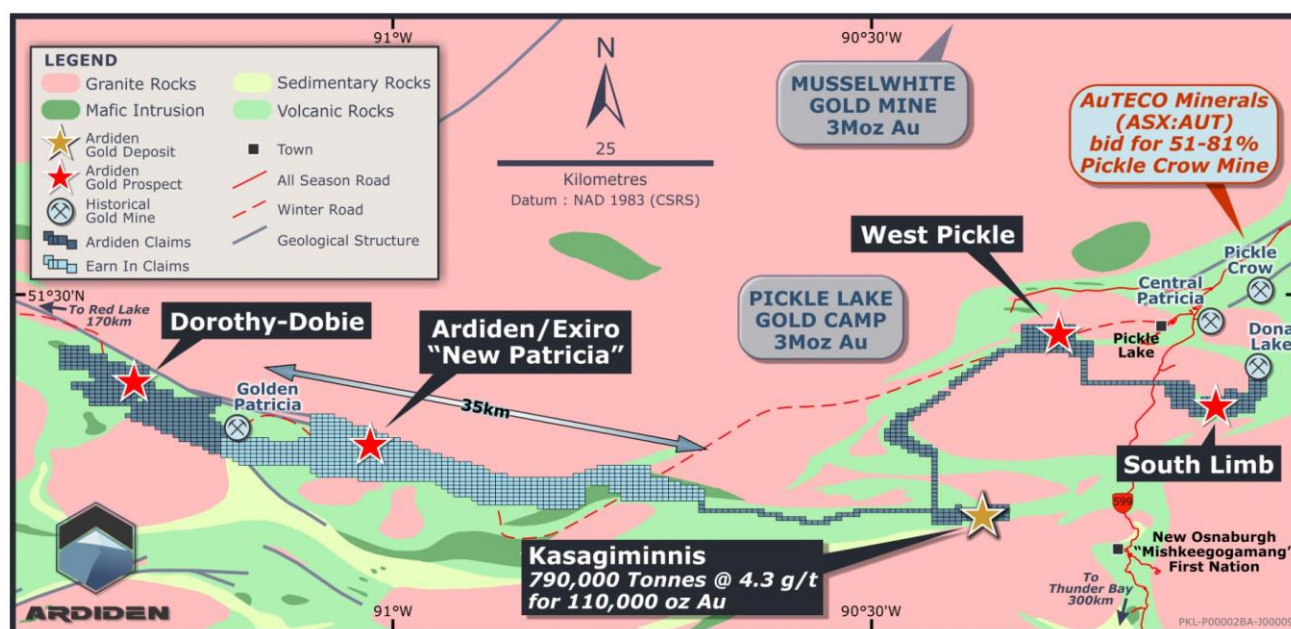


Figure 2 – Pickle Lake Gold Project.

Interest in the prospectivity of the Pickle Lake Gold area was highlighted post-reporting period with the bid by ASX-listed **AuTECO Minerals (ASX:AUT)** for between 51% to 80% of the Pickle Crow Mine Property (Figure 2) from current owner, First Mining Gold Corp (TSX:FF).

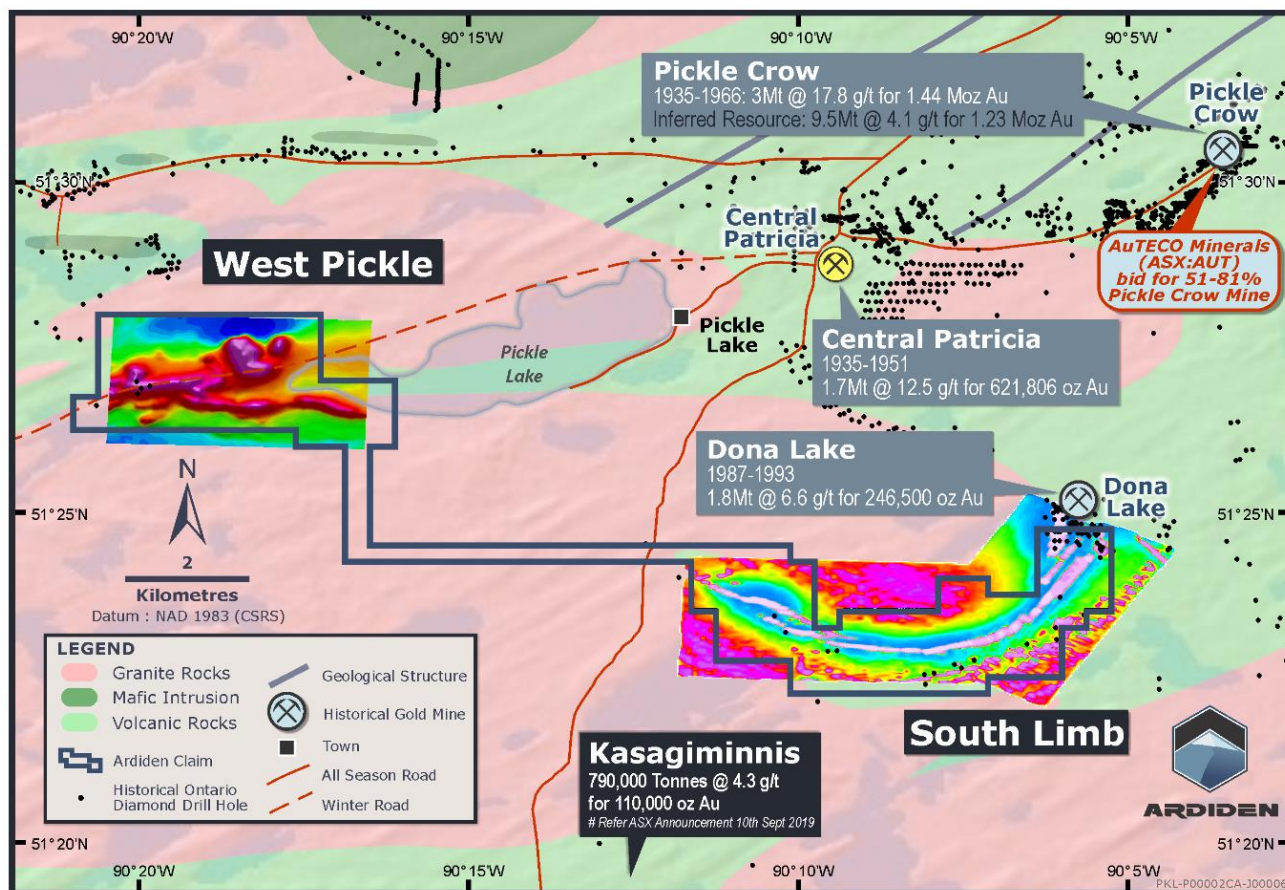
Ardiden's negotiations with the **Mishkeegogamang First Nation Group** are aiming to ensure the Company's long-term relationship and formal agreements with the Group are in place before commencing any drilling operations in the area. Ardiden's Exploration Manager is currently at Pickle Lake progressing preparations on all fronts.



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## WEST PICKLE GOLD PROSPECT

In November Ardiden announced the results of an airborne geophysical survey at its **West Pickle Gold Prospect** in which several priority targets for gold mineralisation were identified. The West Pickle Gold Prospect has received very little exploration attention to date, despite being situated directly along strike of the high-grade **Central Patricia** and the **Pickle Crow** gold Mine.



*Figure 3 - West Pickle and South Limb Prospect Geophysics*

The geophysical survey highlighted hidden structural discontinuities and multiple possible conduits for hydrothermal fluids at West Pickle including:

- Two large and highly conductive geophysical responses detected at West Pickle in proximity to iron formations. Strong conductors are typically associated with pyrrhotite and gold mineralisation along strike at the Central Patricia Mine.
- Multiple magnetic lows identified at West Pickle in prospective Iron Formations. Magnetic lows can indicate that gold-mineralising fluids may have altered the rock.
- The West Pickle area is structurally complex with folding and faulting discontinuities over the entire 5km strike of property, providing numerous prospective geological settings for gold mineralisation.





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## SOUTH LIMB GOLD PROSPECT

During the period, the Company also confirmed it had undertaken a review of available historical data the South Limb Gold Prospect, located immediately south of the Dona Lake Underground Gold Mine currently being assessed by TSX-V listed **Metals Creek Resources (TSX-V; MEK)**. Ardiden owns 8km of favourable geological formation directly along strike from the Dona Lake Gold Mine.

Mined between 1987 and 1993, the underground Dona Lake Mine produced more than 246,500oz gold at 6.5 g/t Au to depths of 450m below surface. However, the surface footprint of the main lode was only 130m of strike length, emphasising the importance of depth testing below any anomalous near-surface values.

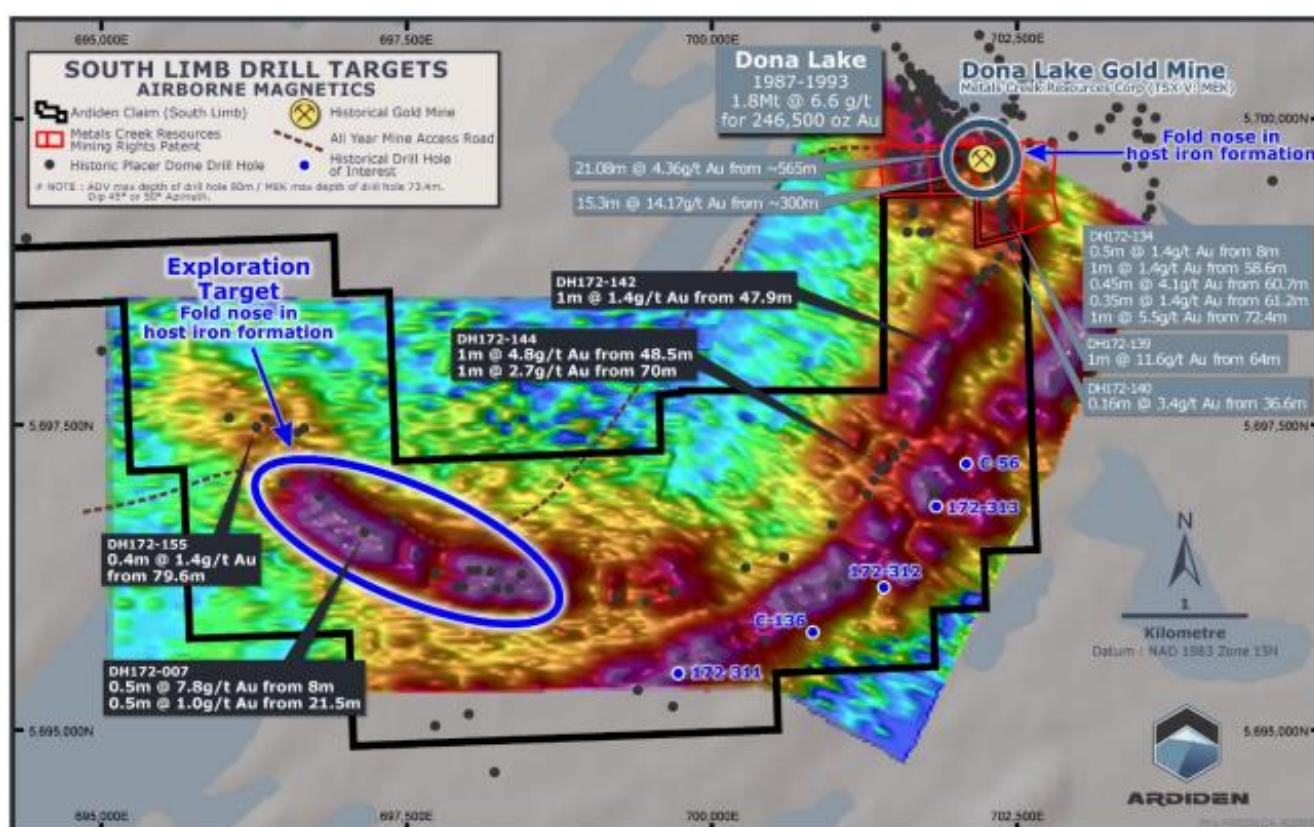


Figure 4 - Drill target areas at the South Limb Gold Prospect

From the historical data at South Limb, Ardiden has outlined multiple targets that may provide opportunities for similar deep mineralised gold systems. Drill targets are planned in a fold nose near DH 172-007 which reported **7.8g/t Au from 8m**. Drill targets are also planned on the southern iron formation to test known sulphide mineralisation.





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## LITHIUM PROJECTS

### SEYMOUR LAKE LITHIUM PROJECT (ADV: 100%)

On 15 October 2019, Ardiden announced its signing of a non-binding MOU with fellow lithium developer, **Rock Tech Inc** (TSX-V: RCK), agreeing to combine efforts to work towards the development of a Lithium Project combining hard rock Spodumene mineral resources at Ardiden's Seymour Lake and Rock Tech's Georgia Lake Lithium Projects in northwest Ontario, Canada.

This announcement followed up the Board of Ardiden's commitment to secure a Partner or Alliance for value extraction from the Company's 100%-owned Seymour Lake Lithium Project and the strategic advantages of this, and the Company's other Lithium holdings in Ontario, Canada.

Ardiden and Rock Tech will work together to develop a Project to potentially supply Spodumene Concentrate at 6-7% Li<sub>2</sub>O, initially from a combination of their two Flagship Lithium Projects; Seymour Lake and Georgia Lake.

Under the terms of the MOU, the Companies will work together to:

- Undertake Technical Collaboration for the development of optimal transportation of mined Spodumene material (DSO) from Seymour Lake to Georgia Lake.
- Design and evaluate the best suitable processing and supporting infrastructure facilities at Rock Tech's Georgia Lake Site.
- Progressively bring additional spodumene resources on-stream from other 100%-owned Ontario lithium projects.
- Develop options for joint value-adding strategies through potential development of downstream processing facilities at Thunder Bay, Ontario.

### ROOT LAKE & ROOT BAY LITHIUM PROJECTS (ADV: 100%)

No exploration activities were undertaken at the Root Lake & Root Bay Lithium Projects during the Quarter.

### WISA LAKE LITHIUM PROJECT (ADV: 100%)

No exploration activities were undertaken at the Wisa Lake Lithium Project during the Quarter.

## CORPORATE

As set out in section 6 of the Appendix 5B, \$35,000 was made in payments to related parties of the entity and their associates during the Quarter, for director's fees.

### Annual General Meeting

Ardiden held its AGM on 21 November 2019, with all resolutions presented being passed on a show of hands.

### Change of Company Secretaries

In November 2019 the Company announced the appointment of Steven Wood and Silfia Morton as Joint Company Secretaries, replacing Jessamyn Lyons in the role.



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Following his re-election as Non-Executive Chairman at the Company's AGM, Neil Hackett also stepped down as Joint Company Secretary. The Board thanks Jessamyn Lyons for her services as Joint Company Secretary.

### **Acuity Facility**

On 20 December 2019 the Company announced it had entered into a Controlled Placement Agreement ("CPA") with Acuity Capital. The CPA provides ADV with up to \$2 million of standby equity capital over the coming 25-month period. Importantly, ADV retains full control of all aspects of the placement process: having sole discretion as to whether or not to utilise the CPA, the quantum of issued shares, the minimum issue price of shares and the timing of each placement tranche (if any). There are no requirements on ADV to utilise the CPA and ADV may terminate the CPA at any time, without cost or penalty. Acuity Capital and the CPA do not place any restrictions at any time on ADV raising capital through other methods. If ADV does decide to utilise the CPA, ADV is able to set a floor price (at its sole discretion) and the final issue price will be calculated as the greater of that floor price set by ADV and a 10% discount to a Volume Weighted Average Price (VWAP) over a period of ADV's choosing (again at the sole discretion of ADV). As collateral for the CPA, ADV has agreed to place 88m shares from its LR7.1 capacity, at nil consideration to Acuity Capital (Collateral Shares) but may, at any time, cancel the CPA and buy back the Collateral Shares for no consideration (subject to shareholder approval).

### **Change of Registered Office**

On 4 October 2019, the Company announced a change of its Registered Office and Principle Place of Business (in accordance with Listing Rule 3.14) to:

Level 1, 34 Colin Street  
WEST PERTH WA 6005

The Company's new phone number is 08 9322 7600.

### **Cash Position**

The Company's cash balance at 31 December 2019 is set out below:

**Total                      A\$2.44m**

This information is authorised for ASX release by Rob Longley (CEO) and Neil Hackett (Non-Executive Chairman).

### **ENDS**

For further information:

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### **Forward Looking Statement**

*This announcement may contain some references to forecasts, estimates, assumptions and other forward-looking statements. Although the company believes that its expectations, estimates and forecast outcomes are based on reasonable assumptions, it can give no assurance that they will be achieved. They may be affected by a variety of variables and changes in underlying assumptions that are subject to risk factors associated with the nature of the business, which could cause actual results to differ materially from those expressed herein. All references to dollars (\$) and cents in this presentation are to Australian currency, unless otherwise stated. Investors should make and rely upon their own enquires and assessments before deciding to acquire or deal in the Company's securities.*

### **About Ardiden Ltd**

*Ardiden Limited (ASX: ADV) is an exploration company possessing an asset portfolio of projects located in the established mining jurisdiction of Ontario, Canada.*

### **GOLD:**

*The **Pickle Lake Gold Properties** are located within the prolific gold-producing Meen-Dempster Greenstone Belt of the Uchi Geological Sub-province of the Superior Craton, near the township of Pickle Lake. The Properties consists of four separate gold projects offering both advanced development opportunities, namely the Kasagiminnis Gold Deposit, the Dorothy-Dobie/ Tonsil prospects; and early stage exploration prospects West Pickle and South Limb.*

***Post reporting period and in January 20120**, 'Ardiden announces that it has expanded its landholding at the Pickle Lake Gold Project in Ontario, Canada, signing an earn-in agreement with **Exiro Minerals Corp** over its '**New Patricia**' Gold Prospect. New Patricia extends over 30km of prospective geological setting directly along strike from the Golden Patricia Gold Mine (previously operated by Barrick Gold) and adjoins Ardiden's Dorothy-Dobie Gold Prospect*

***Kasagiminnis Deposit Gold Resources** - The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Mr Robin Longley, a Member of the Australian Institute of Geoscientists, and Mrs Christine Standing, a Member of the Australian Institute of Geoscientists and a Member of the Australasian Institute of Mining and Metallurgy. Mr Longley is a full-time employee of Ardiden Limited. Mrs Standing is employed by Optiro Pty Ltd and is a consultant to Ardiden. Mr Longley and Mrs Standing have sufficient experience which is relevant to the style of mineralisation and type of deposit and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Longley and Mrs Standing consent to the inclusion in this report of the matters based on this information in the form and context in which it appears.*

### **LITHIUM:**

*The **Seymour Lake Lithium Project**, 100% owned by Ardiden, contains the North Aubry Lithium Deposit, the South/central Aubry Lithium Deposit, the Pye Lithium Prospect and several areas in which pegmatites have been discovered but require additional testing. Ardiden's work has focussed upon evaluating the potential of the spodumene mineralisation at the North Aubry Lithium Deposit, both in terms of the scale and grade of the mineralisation and also the processing characteristics of the mineralisation. Preliminary metallurgical testing has confirmed the potential to produce a high-quality spodumene concentrate from the North Aubry mineralisation and exploration has confirmed that the grade of mineralisation is significant. The Seymour Lake Lithium Project is adjacent to the trans-Canadian railway with direct access to Ferland Train Station.*

***Seymour Lake Lithium Resources** - The information in this announcement that relates to the Mineral Resource Estimate and the Exploration Target adjacent to the North Aubry Mineral Resource is based on, and fairly represents, information and supporting geological information and documentation that has been prepared by Mr Philip Alan Jones, an*





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independent consulting geologist whom is a Member of the AusIMM and a Member of the AIG. Mr Jones is a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (the JORC Code). He has more than five years of experience that is relevant to the style of mineralisation and type of deposit described in the announcement and in particular the completion of Mineral Resource Estimates. Mr Jones consents to the inclusion of the information in this report in the form and context in which it appears.

**The Root Lake Lithium Project**, 100% owned by Ardiden, is about 25km south southwest of the settlement of Slate Falls. It contains spodumene-bearing pegmatites that have been determined to be at least 500m long. Historical work has confirmed significant grades, e.g. up to 5.10% Li<sub>2</sub>O. The Root Bay Lithium Project (also 100% owned by Ardiden) is strategically located approximately 5km to the east of the Root Lake Lithium Project and consists of three claim areas and was staked by Ardiden as part of its regional exploration focus in and around the Root Bay spodumene-bearing pegmatite. The presence of spodumene-bearing pegmatites in the project has been confirmed.

**The Wisa Lake Lithium Project** (100% owned by Ardiden) is located 80km east of Fort Frances, in Ontario, Canada and only 8km north of the Minnesota/USA border. An all-weather road connects the project to Highway 11 (the Trans-Canada Highway), which is located 65km north of the project. Several spodumene-bearing pegmatites are known to outcrop within the project, with some historical drilling having been completed.

**The Rock Tech Georgia Lake Lithium Project** – In October 2019, Ardiden announced it has signed a non-binding Memorandum of Understanding (MOU) with nearby Lithium developer, Rock Tech Lithium Inc (TSX-V: RCK). The Companies have agreed to combine efforts to work towards developing a Lithium Project that combines hard rock Spodumene mineral resources at Ardiden's Seymour Lake and at Rock Tech's Georgia Lake Lithium Projects in northwest Ontario, Canada. The Projects have multiple beneficial synergies with the deposits being located proximal to railway, power supply and close to the regional mining and shipping centre at Thunder Bay.

The Georgia Lake lithium project is a lithium-rich pegmatite vein deposit with measured and indicated resources of 6.58 million tonnes grading 1.01% Li<sub>2</sub>O in addition to inferred resources of 6.72 million tonnes grading 1.16% Li<sub>2</sub>O.

**Georgia Lake Lithium Project Infrastructure** - The Georgia Lake lithium project has best-in-class infrastructure. The main resource zone is just 5 kilometres from the Trans-Canada Highway with a series of logging roads providing year-round access to all areas of the property. Furthermore, just 5 kilometres to the east is an existing 115 kV transmission line providing a grid connection. The neighbouring towns of Beardmore and Nipigon provide ample housing, personnel and supplies. The world-class mining hub of Thunder Bay, less than two hours by car, provides access to the Port of Thunder Bay, the Thunder Bay International Airport and all needed exploration, engineering and mining professionals.

**Rock Tech Qualified Person's Statement – Georgia Lake Lithium Project:**

A Report titled "NI43-101 Technical Report and Mineral Resource Estimation - Georgia Lake Lithium Property, Beardmore, Ontario, Canada", with an effective date of April 18, 2018 and a submission date of June, 26, 2018, was prepared and signed by the following Qualified Persons; DMT GmbH & Co. KG, Essen, Germany, Karl Rudolf Stephan Peters who is a member of the European Federation of Geologists EurGeol 787. The report can be downloaded from the Rock Tech website at <https://rocktechlithium.com/regulatory-filings/>

**For more information including modelling parameters and details, the ASX announcements pertaining to Exploration Results and Mineral Resources are available from the Company's website: [www.ardiden.com.au](http://www.ardiden.com.au)**