

# RESOURCES RISING STARS CONFERENCE: CORPORATE PRESENTATION



**ARDIDEN**  
**Ltd**

ACN: 110 884 252

ASX Ticker: ADV



## A two-pronged strategy for growth in energy metals



- **LITHIUM** – Seymour Lake and Root Lake Lithium Projects
- **GRAPHITE** – Manitouwadge Flake Graphite Project

25 May 2016

# Corporate Overview

## Ardiden Ltd – Fully-Paid Ordinary as at 24 May 2016



ASX Code	ADV
Shares on Issue	698.8 million
Options on Issue (various)	Nil
Share Price	\$0.039
Market Cap @ \$0.029	A\$27 (undiluted)
3-Month Range	A\$0.022 – \$0.053

### Directors

Neil Hackett: Non Executive Director/Joint CS

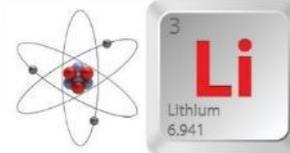
Brad Boyle: Executive Director

Piers Lewis: Non Executive Director

Major shareholders	%
Top 20 Shareholders	20
Directors/ Management	*7



**Strategy to identify and define more than 10 Million tonnes of Lithium resources in Tier-1 jurisdictions to enhance shareholder value, focusing on commodities with a strong growth outlook...**



# Targeting the supply of key ingredients for lithium-ion batteries

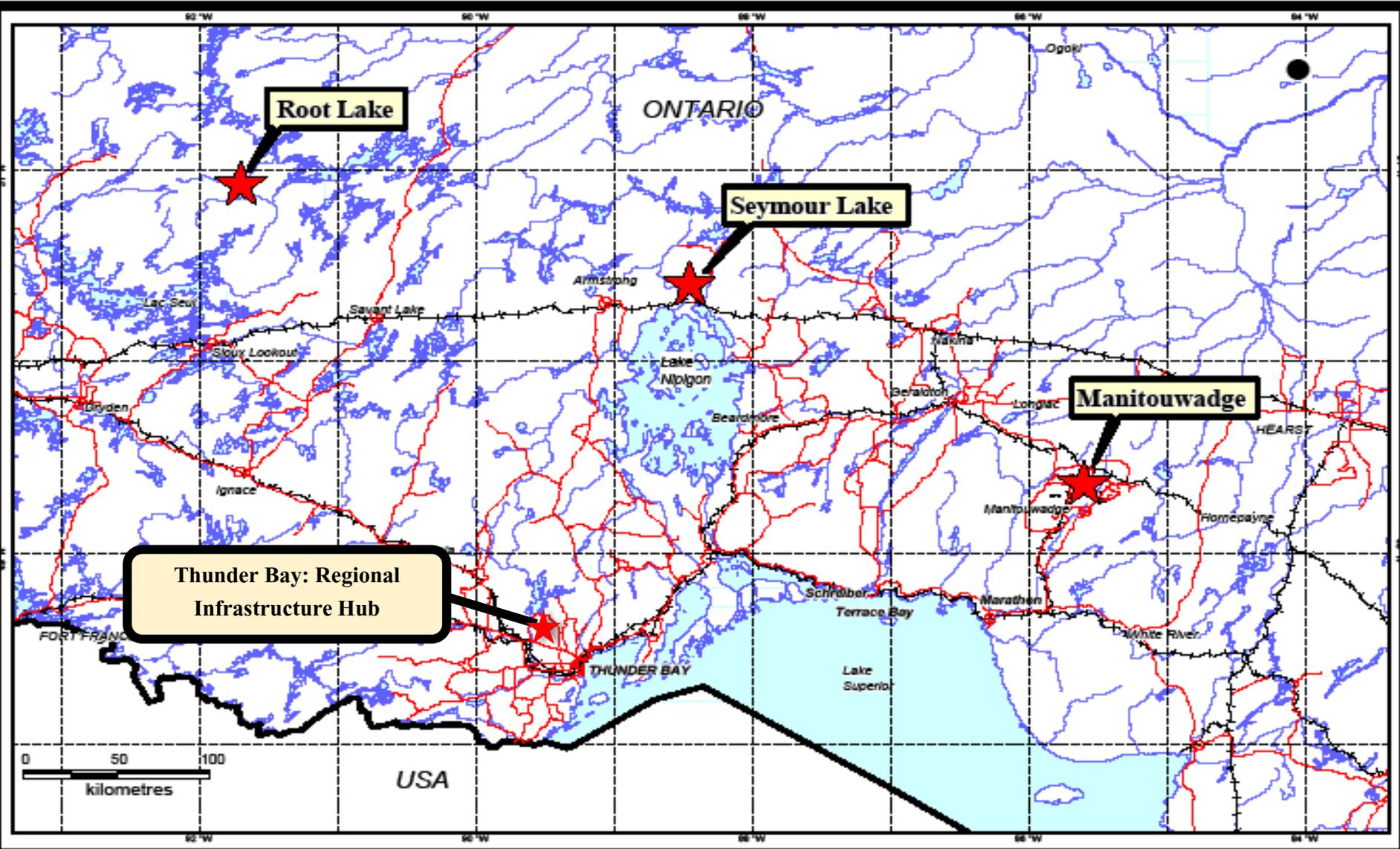
*Booming demand outlook for lithium + graphite as Li-ion battery use skyrockets*

- Recent Option Agreements to acquire the advanced **Seymour Lake and Root Lake Lithium Projects** in Ontario, Canada:
  - *Current and historical diamond drilling – confirmed potential for high-quality lithium (spodumene) mineralisation*
  - *Due diligence underway at including drilling limited drilling programs both projects, subject to results Ardiden to acquire 100% of projects*
- Exploring and developing the 100%-owned **Manitouwadge Graphite Project** in Ontario, Canada:
  - *3,000m of diamond core drilling completed by Ardiden to date*
  - *Outstanding graphite flake size distribution and metallurgical characteristics*
- **Lithium and graphite** both key components of lithium-ion batteries:
  - *Lithium used as the cathode and graphite as the anode*
  - *Transformational growth predicted in lithium-ion battery use*



# Project Locations

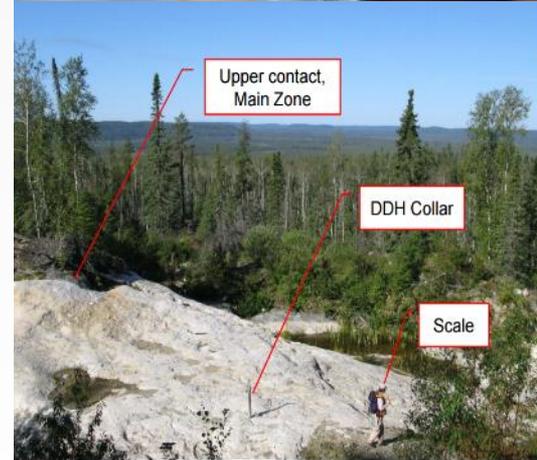
*Established Tier-1 mining district, surrounded by major mining deposits*



# Seymour Lake Lithium Project

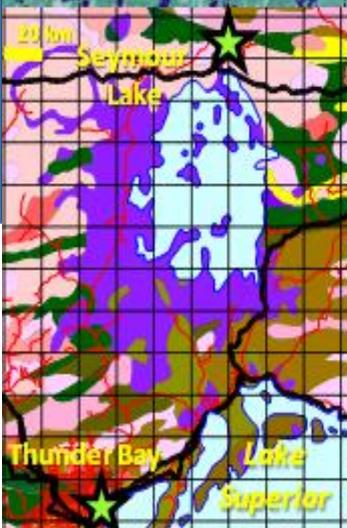
*Exceptional Lithium grades confirmed...*

- Option Agreements signed in January 2016, for potential 100% acquisition of projects
- Project acquisitions obtained through cost effective series of staged payments
- Historical trenching, sampling and **4000m** of diamond drilling – confirmed potential for high-quality spodumene-bearing pegmatite structures which outcrop, containing multiple zones of lithium.
- Limited Due Diligence diamond drilling program completed at North Aubry prospect in April 2016.
- Encouraging assay results obtained from DD drilling program.
- Potential for tantalite and beryllium as by-products/credits, both of which are currently valued at ~US\$500/kg.



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# Regional Location and Infrastructure



Seymour Lake  
Ta-Li-Rb-Cs

KM61  
Mo-Cu-Ag

Jackfish All-  
Weather Road

Armstrong

CN Railway

Ferland Station

Highway 527

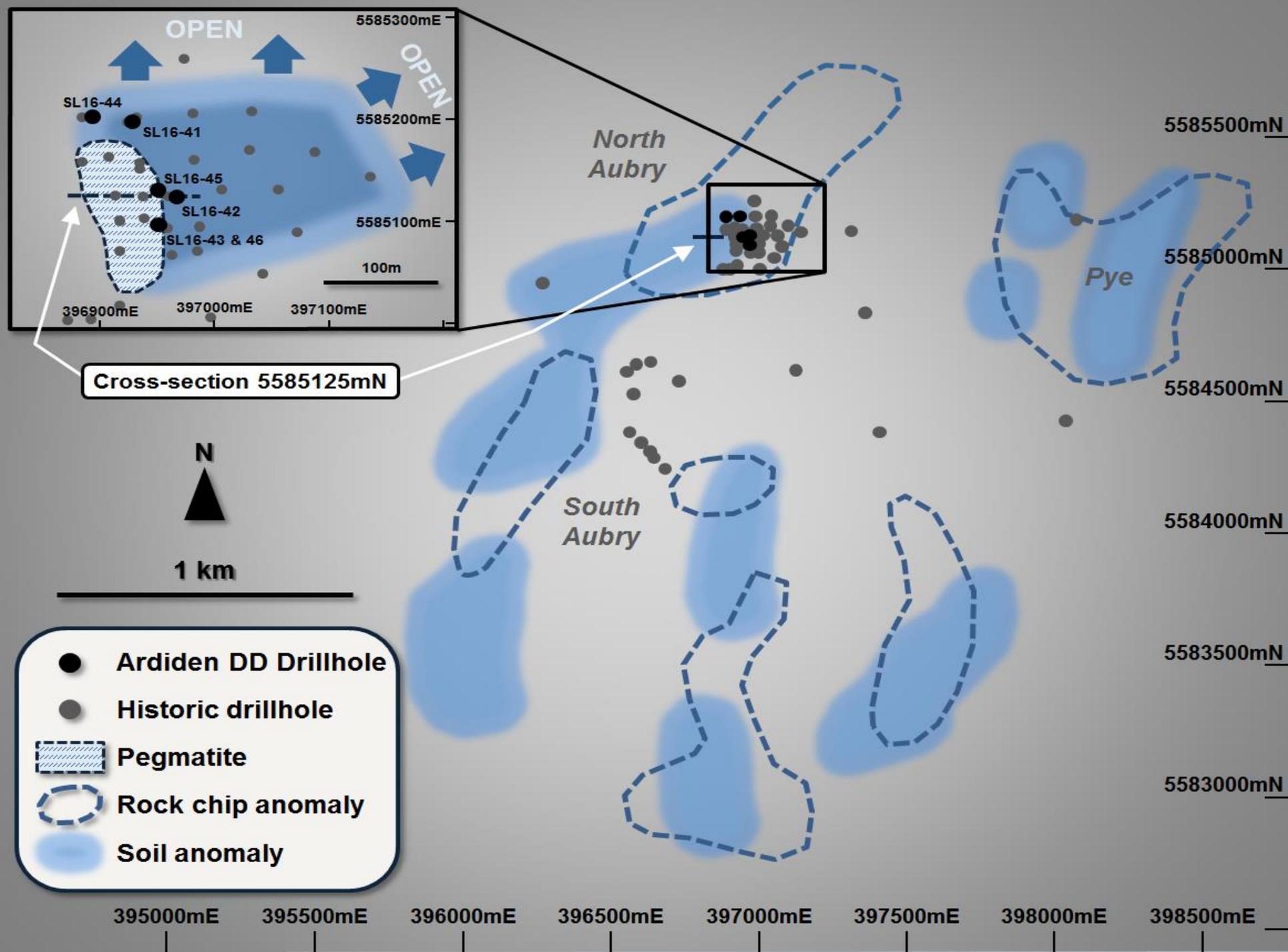
Lake Nipigon

★ - Proposed Hydroplants (2013)

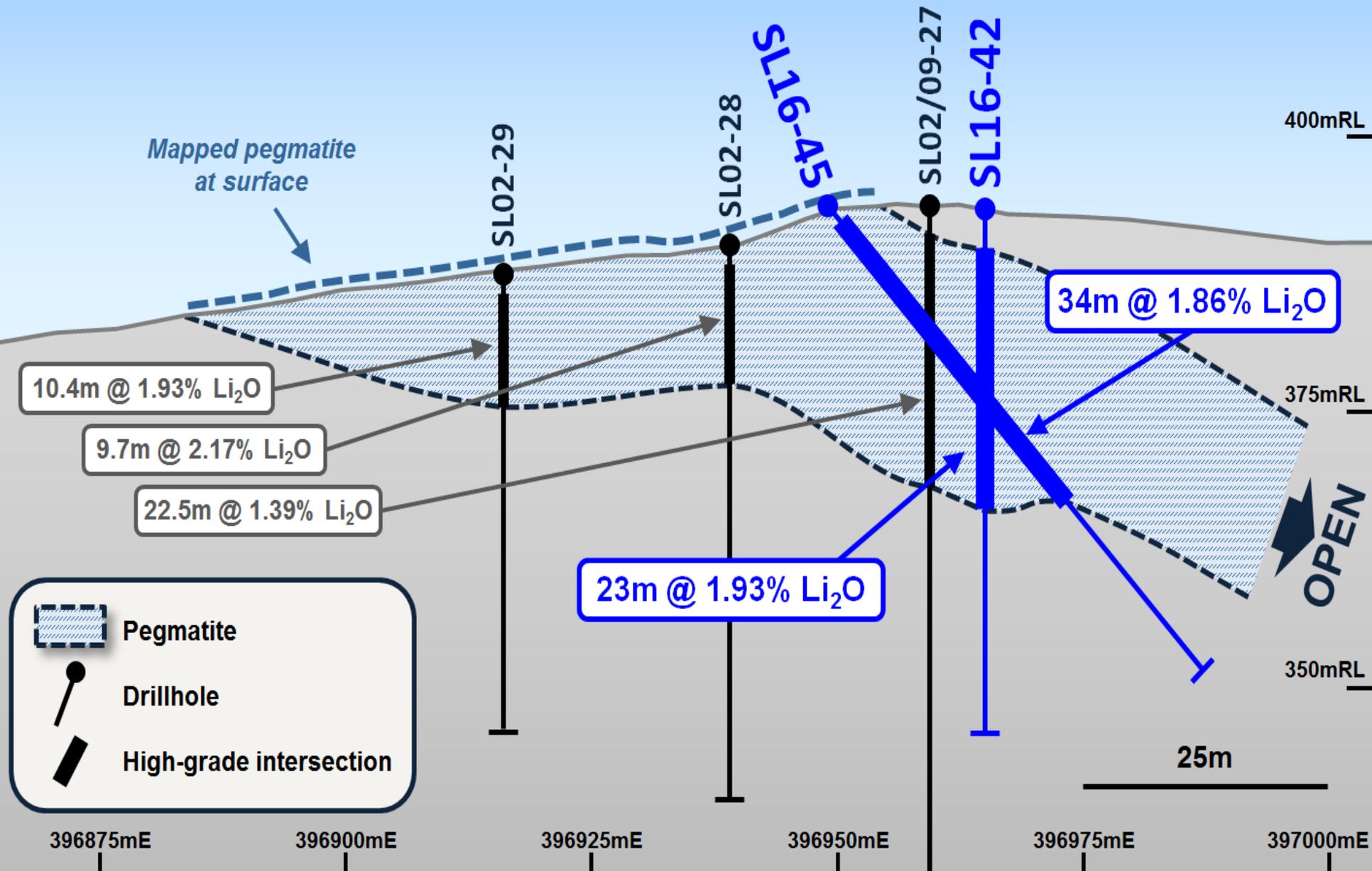
# Seymour Lake Due Diligence Review....

- Due Diligence technical review almost complete
- All drill core samples from the recent diamond drilling program have now been analysed with outstanding grades of up to **5.4% lithium oxide (Li<sub>2</sub>O)** identified.
- Numerous high-grade lithium zones identified close to surface.
- Significant grades of Li<sub>2</sub>O returned in all 150 drill core samples with 30% returning results greater than 2.0% Li<sub>2</sub>O.
- Drill hole SL-16-45 intersected an impressive 35.5 metre mineralised zone with a Weighted Average Grade of 1.8% Li<sub>2</sub>O
- A total of 147.2m of Spodumene was identified from 281 drilled metres with a remarkable Weighted Average Grade of **1.46% Li<sub>2</sub>O**. Significant intersections included:
  - 13m at 2.3% Li<sub>2</sub>O from 20m down-hole (SL-16-42)
  - 11.2m at 2.7% Li<sub>2</sub>O from 2.8m down-hole (SL-16-43)
  - 14m at 1.8% Li<sub>2</sub>O from 1.5m down-hole and 12m at 2.6% Li<sub>2</sub>O from 18.5m down-hole (SL-16-45)





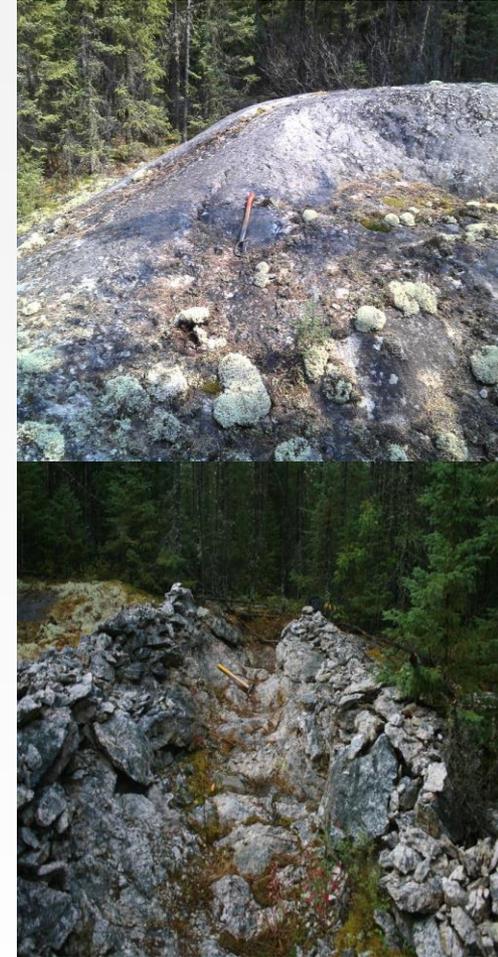
# CROSS-SECTION 5585125mN



# Root Lake Lithium Project

## *Outcropping Pegmatite confirmed...*

- Option Agreement signed in February 2016, for potential 100% acquisition of projects
- Project acquisitions obtained through cost effective series of staged payments
- Historical trenching, sampling and diamond drilling – confirmed potential for high-quality spodumene-bearing pegmatite structures which outcrop, containing multiple zones of lithium.
- Lithium anticipated to be in tight supply over the next decade as the demand for lithium-ion batteries undergoes transformational growth
- Highly complementary and synergistic to Manitouwadge Project,
  - *Seymour Lake and Root Lake projects can be developed by Ardiden's existing Ontario-based team*
  - *All projects located within a few hours from key infrastructure hub at Thunder Bay*

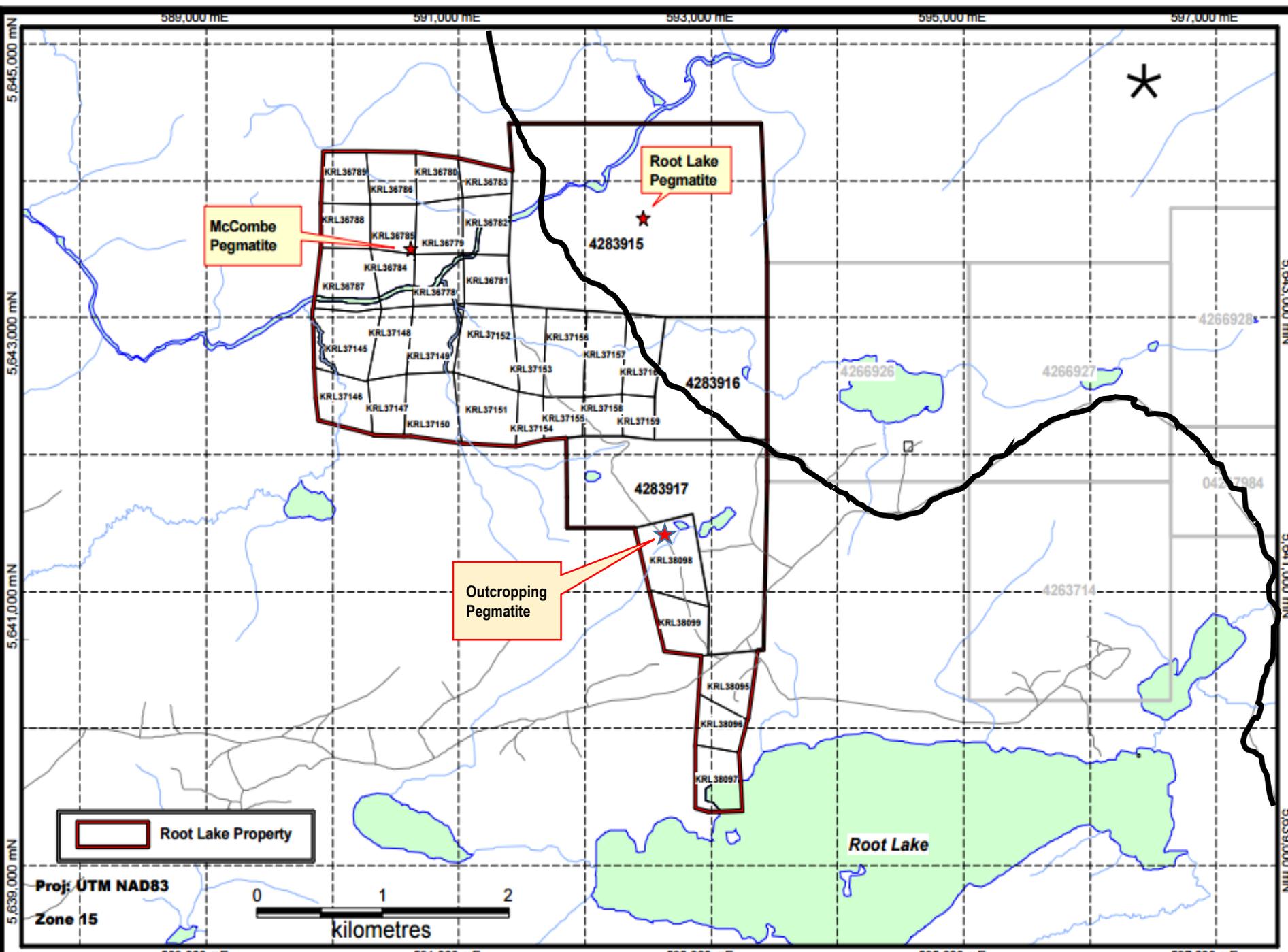


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# Historic Results

- The McCombe pegmatite has over 10,000m of historical diamond drilling which has confirmed the potential for high-quality spodumene mineralisation. Key features of the McCombe pegmatite include:
  - *The McCombe Pegmatite, comprising two main outcropping spodumene-bearing dykes, has been traced on surface for a **strike length of 550m** with widths up to 19m;*
  - *Capital Lithium Mines Ltd. reported a historical **McCombe deposit of 2.3Mt of Li<sub>2</sub>O grading 1.3%** (not JORC or NI 43-101 compliant). This deposit was established over less than 5% of the Root Lake Project area*
- The Root Lake pegmatite lies 2km to the east and along strike from the McCombe pegmatite. Key features of the Root Lake pegmatite include:
  - *Historical diamond drilling indicated spodumene (lithium)-bearing pegmatites with widths of up to 17m;*
  - *Trenching by Consolidated Morrison Exploration outlined an outcropping pegmatite dyke over several hundred metres long and up to 9.14m wide, from which channel sampling returned grades of up to 3% Li<sub>2</sub>O over 9.14m;*
  - *Subsequent diamond drilling traced the dyke for ~**1200m** (to the west, towards and along strike with the McCombe dyke) and the pegmatite remains open at depth and along strike;*
  - *Due diligence on historical trenches in 2009 verified the existence of significant lithium mineralization including a trench with 4.43% Li<sub>2</sub>O recorded over 5m;*
  - *Grab samples graded up to 5.10% Li<sub>2</sub>O*





McCombe  
Pegmatite

Root Lake  
Pegmatite

Outcropping  
Pegmatite

Root Lake Property

Proj: UTM NAD83  
Zone 15



Root Lake

# Root Lake Due Diligence Review....

- Maiden diamond drilling program completed at Root Lake lithium
- All 8 drill holes intersected the spodumene-bearing pegmatite structures
- Initial logging shows numerous spodumene-bearing pegmatite with zones near surface and true widths of up to 14m and mineralisation continuity confirmed for 69m down dip
- 162 drill core samples now sent to Actlabs in Thunder Bay
- Drill testing to validate historic lithium deposit at McCombe Pegmatite
- Review aims to define the main spodumene-bearing pegmatite structures, laying the foundations for potential future resource delineation:
  - Review identifies an **additional pegmatite structure** south of current pegmatite structures
  - Ongoing analysis of the current and historical data, confirms limited mapping and exploration completed on project
  - All pegmatite structures and are yet to be fully defined and remain **open in all directions**
  - Ardiden has the opportunity to dramatically expand the known lithium mineralisation zones





6

9

12

15

18

21

# Manitouwadge Graphite Project

## *Emerging flake graphite opportunity*

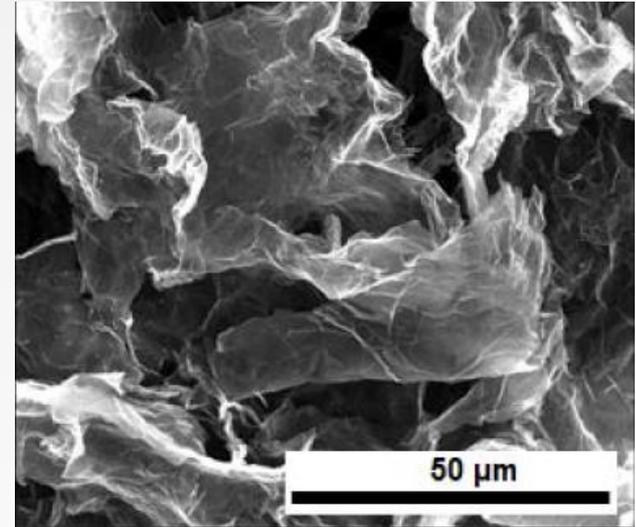
- Outstanding results from drilling completed to date:
  - *High quality graphite coincident with strong EM anomalies confirmed over **10km** strike length – further 9.3km of strike yet to be tested*
  - *Widths of up to 41.6m (true width ~30m) of graphitic gneiss*
  - *Graphite grades up to **16.8%** Total Graphitic Carbon intersected*
  - *Drilling to date suggests up to 80% of graphite is premium-priced jumbo/large flake size, flake sizes up to **4,200** microns identified*
  - *Simple, low-cost gravity and flotation beneficiation yields up to **96.8%** purity for jumbo and large flake*
- Located in an established mining province, with good access to infrastructure (road, rail, power, phone and port facilitates) and local contractors and suppliers



# Outstanding Graphene and Expandable Potential

*A 'wonder material' with almost unlimited applications*

- Successful testwork confirms the graphite is expandable and graphene can be extracted from Manitouwadge ore using a number of different methods
- Graphene quality described as “outstanding” and comparable with synthetic graphene routes
- Thermal and electrochemical extraction methods most promising, both producing high-quality graphene
- Both extraction methods are rapid and scalable without the need for toxic chemicals, however further testing is required
- Graphene has significant application as an additive in manufacturing:
  - *Addition of a small amount of graphene can impart exponential increases in strength and/or conductivity, facilitating production of stronger, lighter, more energy efficient products*
- Major volume markets include carbon fibre composites, energy storage (batteries), anticorrosion coating and paints, conductive inks, plastics, alloys and building materials



*Graphene extracted from Manitouwadge graphite*

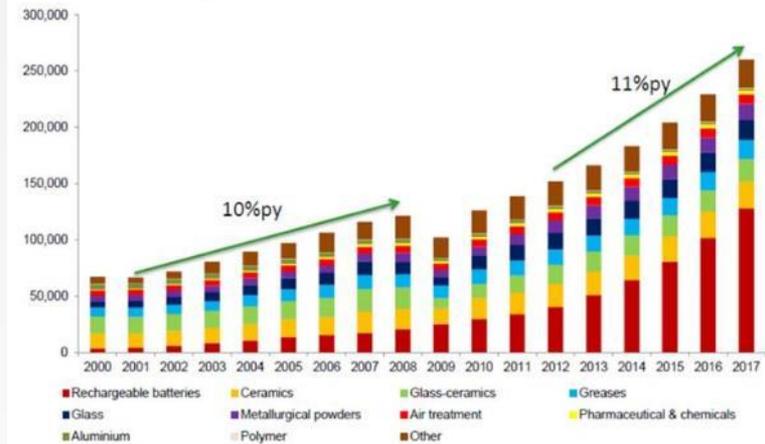
***“Graphene has potential in the 21st century to be what steel was to the 19th century and plastic was to the 20th century” - Paydirt November 2014 issue***

# Green power storage – a major market

*Ardiden project's strategically located to key industry participants*

- Demand for graphite and lithium across the globe is being driven upwards by green technology – lithium ion batteries used in electric car batteries, smart phones/ tablets and home and industrial storage
- California-based electric car manufacturer, Tesla, has recently launched a home storage battery – Powerwall
  - *Tesla's 2016 production of its lithium-based Powerwall sold out in August 2015*
- Tesla has said it will aim to source raw materials locally in North America to reduce its environmental footprint
- Manitowadge, Seymour Lake and Root Lake are located in close proximity to the large American and Asian markets, exciting potential opportunities for Ardiden

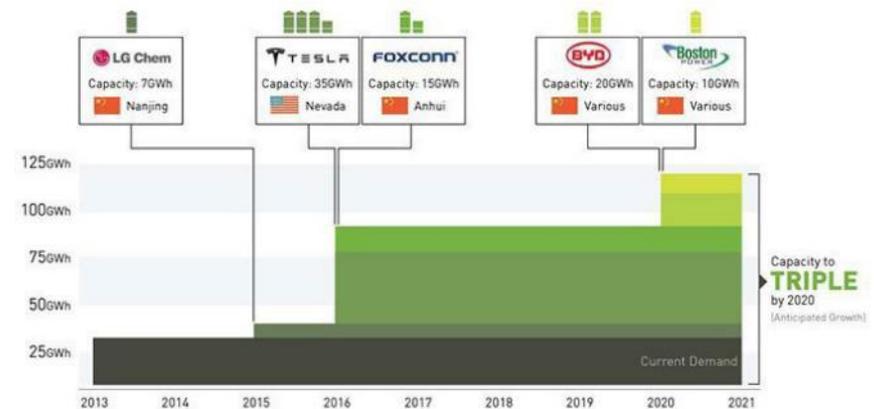
Exhibit 3: World Consumption of Lithium by End-Use



Source: Lithium Market Outlook 2017, Roskill Information

## THE LITHIUM-ION BATTERY MEGAFABRIES ARE COMING

Production capacity of lithium-ion batteries is anticipated to more than triple by 2020



\*Benchmark estimates, not all data disclosed by companies \*\*Instant planned capacity stated for graphical purposes, slower ramp up expected

# Summary – Why Invest in Ardiden

*An exciting new phase of growth*

- Completion of due diligence on highly prospective new lithium projects
- Strong new asset portfolio focused on the supply of materials to the rapidly growing lithium-ion battery market
- Potential acquisition of further project areas/acreage with strong geological potential
- Commodities with strong market fundamentals and growth outlook
- Projects located in Tier One mining jurisdictions, with great access and infrastructure and strong support from First Nations and Ontario Government
- Further results from drilling and metallurgical testwork from Root Lake, Seymour Lake and Manitouwadge throughout 2016, leading to strong upcoming news flow with near-term catalysts for share price growth
- Strong board and management team

***Strategy to identify and define more than 10 Million tonnes of Lithium resources in Tier-1 jurisdictions to enhance shareholder value, focusing on commodities with a strong growth outlook...***



# Contact Details

## For further information:

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### Media:

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Mobile: 0419 929 046

### About Ardiden

The Seymour Lake Lithium Project (under option to acquire 100%) is located in Ontario, Canada. The project comprises 912 Ha of mining claims and has over 4,000m of historic drilling. Mineralisation is hosted in extensive outcropping spodumene-bearing pegmatite structures with widths up to 26.13m and grades of up to 2.386% Li<sub>2</sub>O. In addition, tantalum and beryllium grades of up to 1,180 ppm (Ta<sub>2</sub>O<sub>5</sub>) and 1,270ppm (BeO) respectively were intersected.

The Root Lake Lithium Project (under option to acquire 100%) is located in Ontario, Canada. The project comprises 1,013 Ha of mining claims and has over 10,000m of historic drilling. Mineralisation is hosted in extensive outcropping spodumene-bearing pegmatite structures with widths up to 19m and grades of up to 5.10% Li<sub>2</sub>O. In addition, tantalum grades of up to 380 ppm were intersected.

The 100%-owned Manitouwadge Jumbo Flake Graphite Project is located in Ontario, Canada. The Project area is 5,300 Ha and has a 20km strike length of EM anomalies with graphite prospectivity and is being subject to systematic exploration to determine areas that have potential to be a near-term development opportunity.

Metallurgical testwork has indicated that up to 80% of the graphite is high value jumbo or large flake graphite. Testwork has also indicated that simple, low-cost gravity and flotation beneficiation techniques can result in graphite purity levels of up to 96.8% for jumbo flake and 96.8% for large flake. Testing using the proven caustic bake process was able to produce ultra-high purity (>99.95%) graphite. The graphite can also be processed into high value expandable graphite and produces a high quality graphene and graphene oxide.

*The information in this report has been reviewed by Mr Paul Nielsen who is a member of the Association of Professional Geoscientists of Ontario. Mr Nielsen has more than five years relevant exploration experience, and qualifies 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 Nielsen consents to the inclusion of the information in this report in the form and context in which it appears.*



# Disclaimer

## Competent Person Statement

The information in this presentation that relates to Exploration Results is based on information reviewed by Dr Dennis Arne who is a Registered Professional Geoscientist of the Australian Institute of Geoscientists, and a Professional Geoscientist registered in the provinces of British Columbia and Ontario, Canada. Dr Arne is a Principal Consultant to CSA Global, has a minimum of five years relevant exploration experience, and qualifies as a Competent Person as defined in the 2012 edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Dr. Arne consents to the inclusion of the information in this report in the form and context in which it appears.

The information in this presentation that relates to Exploration Results on the Manitouwadge Graphite, Seymour Lake and Root Lake projects is extracted from the reports entitled ASX Release “Ardiden Intersects Thick Zones of Pegmatite in Maiden Drilling at Root Lake Lithium Project, Canada” created 25 May 2016, ASX Release “Seymour Lake Lithium Project: Exceptional Grades of up to 5.4% Lithium Oxide From Maiden Drill Program” created 5 May 2016, ASX Release “Drilling Underway at Seymour Lake Lithium Project, Canada” created 2 March 2016, ASX Release “Canadian Lithium Portfolio Expands Further with Acquisition of Advanced Root Lake Project” created 10 February 2016, ASX Release “Ardiden Secures Advanced Lithium Project in Canada” created 6 January 2016, ASX Release “Highly Successful Drilling Program Completed at Manitouwadge” created 5 January 2016, ASX Release “Excellent Metallurgical Test Results and Drilling Update” created 25 November 2015, ASX Release “Expandable Graphite Confirmed” 5 October 2015, ASX Release “Outstanding Test Results Confirm Ultra High Purity Graphite From Canadian Project”, created 2 July 2015, ASX Release “Promising Graphene Results from Ardiden’s Canadian Graphite Project” created 13 May 2015 and is available to view on [www.ardiden.com.au](http://www.ardiden.com.au). The reports were issued in accordance with the 2012 Edition of the JORC Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcement.

## Forward Looking Statements

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.

