



## JUNE 2017 QUARTERLY ACTIVITIES REPORT

### Highlights:

#### **SEYMORE LAKE LITHIUM PROJECT, Ontario (100%-owned)**

- Strong progress with ongoing Phase 2 resource drilling program, aimed at establishing a maiden JORC Mineral Resource by September 2017.
- Multiple spodumene-bearing pegmatites intersected, including thick mineralised zones with down-hole composite widths up to 34m (SL-17-22) and assay results up to 5.4% Li<sub>2</sub>O. Initial assays included:
  - **21.0m at 1.6% Li<sub>2</sub>O from 2.60m down-hole (SL-17-03) incl. 4.8m at 2.4% Li<sub>2</sub>O and 9m at 2% Li<sub>2</sub>O;**
  - **24.0m at 1.2% Li<sub>2</sub>O from 16.93m down-hole (SL-17-01) incl. 5m at 2.3% Li<sub>2</sub>O and 2m at 3.1% Li<sub>2</sub>O**
  - **23.0m at 1.2% Li<sub>2</sub>O from 0.5m down hole (SL-17-02) incl. 0.9m at 5.4% Li<sub>2</sub>O; 4.9m at 1.6% Li<sub>2</sub>O; and 3.4m at 2.6% Li<sub>2</sub>O;**
  - **18.45m at 1.3% Li<sub>2</sub>O from 3.55m down-hole (SL-17-04) incl. 12.45m at 2% Li<sub>2</sub>O and 4m at 3% Li<sub>2</sub>O**
- Drilling continues to confirm the interpreted mineralised extensions and the presence of multiple pegmatite zones extending north-eastwards and with down-plunge continuity at North Aubry.
- Mineralisation remains open to the north, east, west and down-dip.
- Drilling is providing a greater level of geological understanding and confidence, while also steadily increasing the overall scale of the project.
- Planning underway to expand the drilling program to include the Central and South Aubry prospects.
- Pathway for potential near-term development and commercialisation established through a binding term sheet with Chinese group Yantai to fund, design and build a lithium processing facility.
- MOU executed with Whitesand First Nation Group, to support this fast-track development strategy.
- Strong results received from HLS and DMS metallurgical testwork and mineralogy.

#### **WISA LAKE LITHIUM PROJECT, Ontario (Option to own 100%)**

- Technical review underway including preparations for maiden due diligence drilling program.
- Drill rig and geological team mobilising to site to commence initial reconnaissance diamond drilling, which is expected to commence shortly to confirm mineralisation at the North Zone pegmatite and potential extensions.

#### **BOLD PROPERTIES PROJECT (COBALT-COPPER-NICKEL), Ontario (Option to own 100%)**

- Reconnaissance mapping and sampling program completed.

#### **MANITOUWADGE GRAPHITE PROJECT Ontario (100%-owned)**

- Assay results confirm the presence of consistent graphite mineralisation at the Silver Star North prospect, with the drilling encountering thick zones of up to 65.4m down-hole with grades up to 10.8% TGC.
- Further exploration planned at the Silver Birch, Silver Star and Silver Star North prospects to evaluate the potential for higher grade zones before a decision is made on a maiden JORC resource estimate.

#### **CORPORATE**

- Management changes including appointment of Brad Boyle as full-time CEO and Executive Director and Mr Robert Chataway as General Manager – Canadian Operations. Piers Lewis retired from the Board.
- Placement and SPP raises \$1.8M to fund ongoing lithium drilling programs and underpin fast-track development strategy at Seymour Lake Lithium Project.



**Figure 1.** Location of Ardiden's projects (**Bold Properties Base Metals, Wisa Lake Lithium, Seymour Lake Lithium, Root Lake Lithium, Root Bay Lithium and Manitouwadge Graphite**) in Ontario, Canada. All projects can be serviced from Thunder Bay.

## SEYMOUR LAKE LITHIUM PROJECT

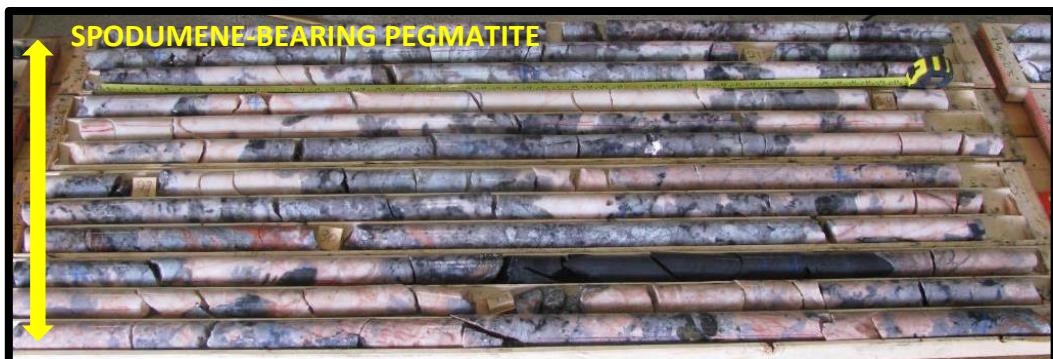
During the Quarter, Ardiden made excellent progress with the Phase 2 resource delineation diamond drilling program at its Seymour Lake Lithium Project with the 25 diamond drill holes completed to date intersecting multiple spodumene-bearing pegmatites over various widths, confirming the presence of multiple pegmatite layers at various depths.

## NORTH AUBRY PROSPECT DRILLING

All drill holes intersected multiple spodumene-bearing pegmatites over various widths, including some at or near surface, confirming the presence of multiple pegmatite layers:

- Hole SL-17-01 intersected a total of **31.74m** of spodumene-bearing sills over a total down-hole width of 111m;
- Hole SL-17-02 intersected a total of **29.39m**, (*including 24.32m zone from 0.6m down-hole*) of spodumene-bearing sills over a total down-hole width of approximately 110m;
- Hole SL-17-03 intersected a total of **25.4m** (*including 20.4m zone from 3.2m down-hole*) of spodumene-bearing sills over a total down-hole width of 111m;
- Hole SL-17-04 intersected a total of **24m**, (*including 15.5m zone from 3.5m down-hole*) of spodumene-bearing sills over a total down-hole width of approximately 110m;
- Hole SL-17-13 intersected a total of **21.04m** (*including 16.1m zone from 95m down-hole*) of spodumene-bearing sills over a total down-hole width of 121m;
- Hole SL-17-14 intersected a total of **26.11m** (*including 19.76m zone from 26.84m down-hole*) of spodumene-bearing sills over a total down-hole width of approximately 118m;
- Hole SL-17-16 intersected a total of **18.07m** (*including 11.20m zone from 41.45m down-hole*) of spodumene-bearing sills over a total down-hole width of approximately 118m; and
- Hole SL-17-19 intersected a total of **25.42m** of spodumene-bearing sills over a total down-hole width of 132m (*including a 17.94m zone from 45m down-hole*);

- Hole SL-17-22 intersected a total of **35.14m** (*including 18.06m zone from 35.90m down-hole*) of spodumene-bearing sills over a total down-hole width of 123m;
- Hole SL-17-33 intersected a continuous **19.77m** zone of spodumene-bearing sills (*from 51.84m down-hole*) over a total down-hole width of approximately 111m; and
- Hole SL-17-39 intersected a total of **16.67m** of spodumene-bearing sills (*including a 7.45m zone from 69.70m down-hole*) over a total down-hole width of approximately 153m.



**Figure 2.** Drill core from diamond drill hole SL-17-01 showing high quality spodumene mineralisation from 18.4m to 34m (the lighter coloured material in the photo is the pegmatite, while the darker material is mafic volcanic).



**Figure 3.** Drill core from diamond drill hole SL-17-03 showing high quality spodumene mineralisation from 3m to 19m (the lighter coloured material in the photo is the pegmatite, whilst the darker material is mafic volcanic).



**Figure 4.** Drill core showing large spodumene crystals from SL-17-22.

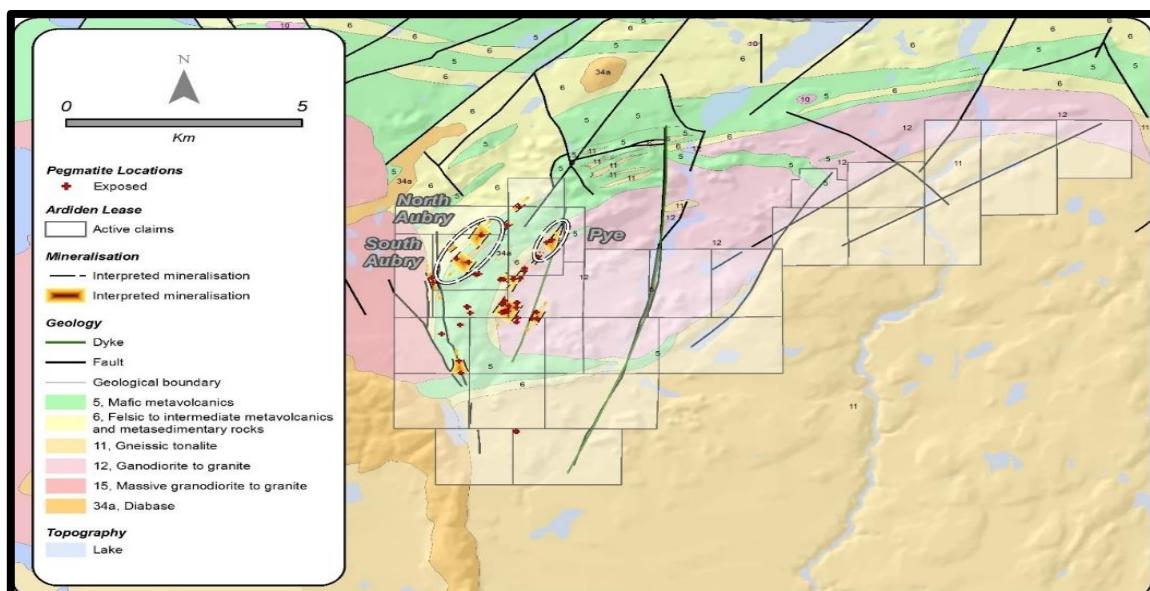
The drilling has continued to validate the northern extension of the known primary mineralised zones, extending the down-plunge continuity and confirming an extension of the secondary spodumene-bearing pegmatites at the project.

As previously advised, the current diamond drilling program is designed to target the immediate project area around the North Aubry prospect, which is located within an extensive 5km long pegmatite zone identified during the mapping and sampling campaign completed in 2016.

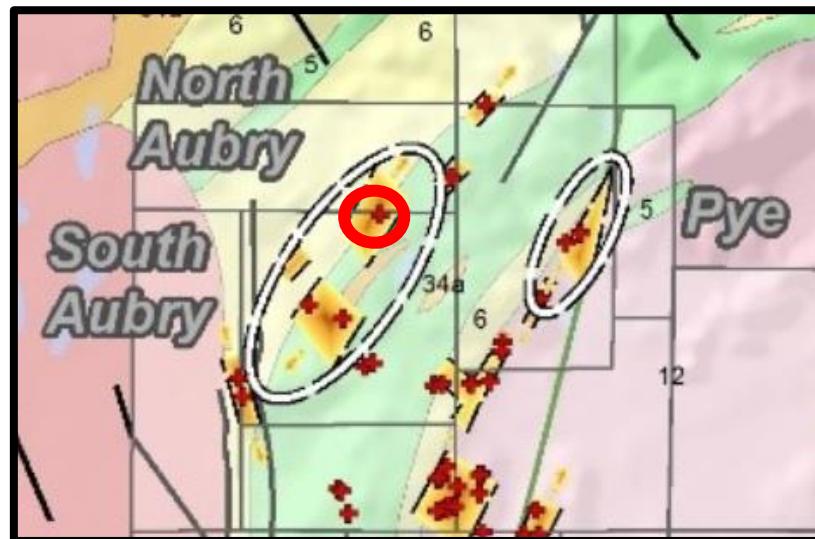
To date, the drilling program has focused on the North Aubry prospect due to the ease of access and high-quality lithium mineralisation at the prospect.

Only about 5% of the regional pegmatites have been drill-tested, and the true potential of the project is yet to be fully evaluated. Approximately 40 new pegmatite exposures have been identified along the 5km strike length, with several of these exposures hosting visible spodumene.

Figures 5 and 5A below show the significant potential of the Seymour Lake Project with the red crosses on the images identifying numerous pegmatite exposures that have not yet been fully explored or tested.



**Figure 5.** Overview map of the Seymour Lake Project claims, identifying the multiple pegmatite exposures along the 5km strike zone.



**Figure 5A.** Insert from Figure 2 image above, showing the area of North Aubry prospect drilling program highlighted by the red circle.

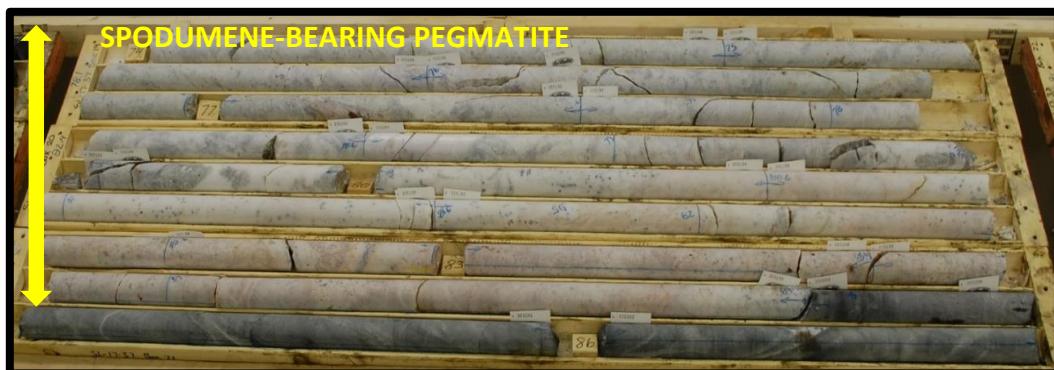
Ardiden notes that although the pegmatites at Seymour Lake can be somewhat difficult to model and predict due to the variable fluid pathways during formation, confirmation of the interpreted extensions of the spodumene-bearing pegmatites and the verification of multiple pegmatite sills in the latest drilling provides the Company with a greater level of understanding and confidence in the project, while also steadily expanding the overall scale of the project and its future resource potential.

The drill holes have continued to verify the down-plunge component of the multiple mineralised sills. The continued intersection of multiple high-quality spodumene-bearing pegmatite reinforces the potential to establish a maiden JORC 2012 Mineral Resource estimate for the Seymour Lake Project.

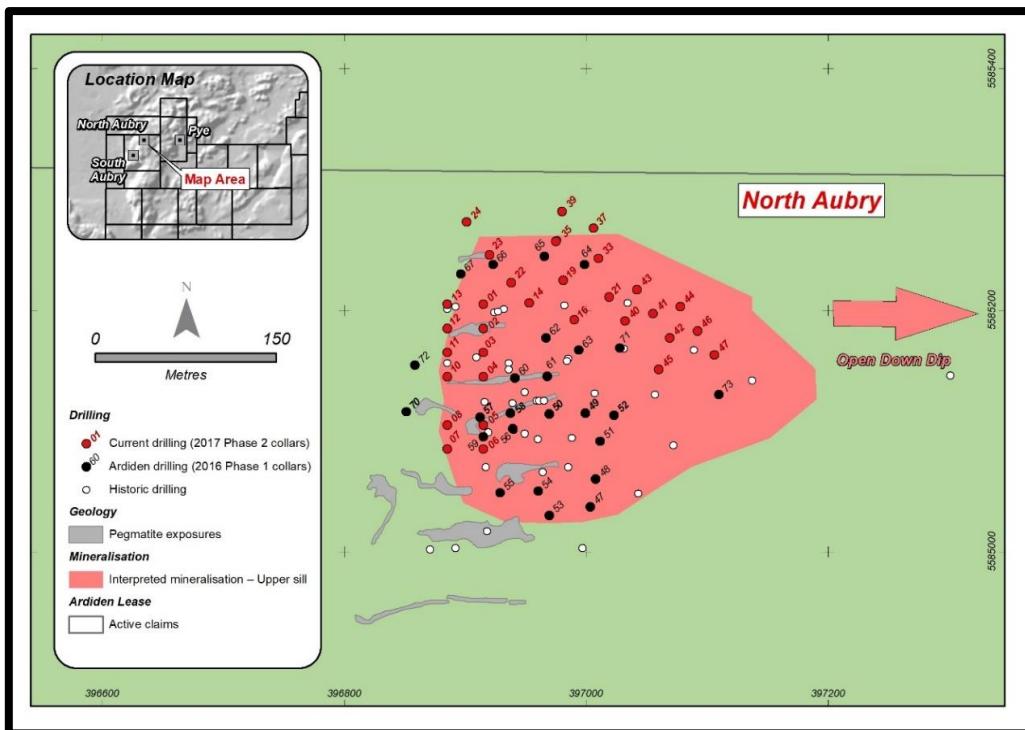
Subsequent to the end of the Quarter, Ardiden provided further updates on the Phase 2 resource drilling program on 7 and 19 July with the drilling continuing to intersect multiple spodumene-bearing pegmatites.

A further eight drill-holes (SL-17-37, SL-17-41 to SL-17-47) have been completed and logged by the geological team. The drill holes intersected multiple spodumene-bearing pegmatites over various widths, confirming the presence of multiple pegmatite layers at various depths, including:

- Hole SL-17-37, which intersected a total of **19.65m** of spodumene-bearing sills over a total down-hole width of 140m (*including a 19.45m zone from 65.50m down-hole*);
- Hole SL-17-41, which intersected a total of **17.83m** of spodumene-bearing sills (*including 8.32m from 53.53m down-hole*) over a total down-hole width of approximately 126m;
- Hole SL-17-43, which intersected a total of **19.62m** of spodumene-bearing sills over a total down-hole width of 125m (*including a 13.57m zone from 55m down-hole*); and
- Hole SL-17-44, which intersected a continuous **16.25m** zone of spodumene-bearing sills (*from 62.15m down hole*) over a total down-hole width of approximately 126m.



**Figure 6.** Drill core obtained from drill hole SL-17-37 showing the intersection of high-quality spodumene-bearing pegmatite (the lighter coloured material in the photo is the pegmatite, whilst the darker material is mafic volcanic).



**Figure 7.** Overview showing the Phase 2 drill hole locations (Red) and the pegmatite exposures at North Aubry prospect, with interpreted extensions.

## NORTH AUBRY PROSPECT ASSAY RESULTS

During the Quarter, Arididen received highly encouraging initial assay results from the first six diamond drill holes of the ongoing Phase 2 resource delineation diamond drilling program at the Seymour Lake Lithium Project. The results include **an outstanding intercept grading 5.4% lithium oxide ( $\text{Li}_2\text{O}$ )** as well as numerous strong assays which continue to support the potential to establish a maiden Mineral Resource at the North Aubry prospect.

The latest results continue to verify the presence of multiple thick zones of high-grade lithium mineralisation located either at or close to surface, with the recent drilling confirming the presence of secondary, stacked and parallel, mineralised sills in a number of holes at the North Aubry prospect.

The first batch drill core assays from the Phase 2 drill program, from drill holes SL-17-01 to SL-17-04, continue to confirm the presence of significant lithium mineralisation at various grades in all samples, with **significant assay grades of up to 5.4%  $\text{Li}_2\text{O}$**  (drill hole SL-17-02) identified. The overall average grade from all 111 drill core samples was an impressive **1.36%  $\text{Li}_2\text{O}$** .

**59%** of this batch of assays (66 of the initial 111 drill core samples) returned results greater than the 0.5%  $\text{Li}_2\text{O}$  cut-off with an average grade of **2.0%  $\text{Li}_2\text{O}$** , while **53%** (59 of 111 drill core samples) returned results greater than 1.0%  $\text{Li}_2\text{O}$  with an average grade **2.2%  $\text{Li}_2\text{O}$** . **37%** (41 of 111 drill core samples) returned results greater than 1.5%  $\text{Li}_2\text{O}$  with an average grade of **2.6%  $\text{Li}_2\text{O}$** .

The next batch of drill core assays from drill holes SL-17-05 and SL-17-06, continue to confirm the presence of significant lithium mineralisation at various grades in all samples, with **significant assay grades of up to 4.5%  $\text{Li}_2\text{O}$**  (drill-hole SL-17-06) identified. The overall average grade from all 19 drill core samples was an impressive **1.8%  $\text{Li}_2\text{O}$** .

Arididen notes that, although this is a small batch of drill core samples, **79%** of this batch of assays (15 of the 19 drill core samples) returned results greater than the 0.5%  $\text{Li}_2\text{O}$  cut-off with an average grade of **2.2%  $\text{Li}_2\text{O}$** , while **74%** (14 of 19 drill core samples) returned results greater than 1.0%  $\text{Li}_2\text{O}$  with an average grade **2.3%  $\text{Li}_2\text{O}$** . **47%** (9 of 19 drill core samples) returned results greater than 1.5%  $\text{Li}_2\text{O}$  with an average grade of **2.9%  $\text{Li}_2\text{O}$** .

## YANTAI BOT TERM SHEET

On 28 June 2017, Aridden announced that it had established a pathway for the potential near-term development and commercialisation of the Seymour Lake Lithium Project after executing a conditional binding term sheet with a leading Chinese mining equipment manufacturer to fund, design and build a lithium processing facility at the strategically located project.

The term sheet, which Aridden has executed with Yantai Jinyuan Mining Machinery Co., Ltd ("Yantai"), outlines a proposal for a design, build, operate and transfer (BOT) arrangement for a proposed Lithium Concentrate Processing Facility ("LCPF") at Seymour Lake which could fast-track the development of the project.

Due to the rapid and ongoing growth in the global demand for lithium and as result of the highly encouraging recent metallurgical test results obtained from the North Aubry prospect – which demonstrate the high-quality nature of the spodumene mineralisation at Seymour Lake – Yantai has entered into a key strategic relationship with Aridden.

Yantai is a highly experienced market leader in the production of mining and processing equipment, both within China and abroad. Subject to defining a JORC compliant Mineral Resource and, at Aridden's sole election, the two companies intend to work together to expedite the development of the Seymour Lake Lithium Project.

Aridden considers the formation of this strategic relationship to be an important milestone for the Company which creates a unique opportunity to significantly re-risk and potentially rapidly develop the Seymour Lake Project, establishing a near-term pathway to become a niche, high-grade lithium producer.

Should Aridden be able to meet the conditions of the Term Sheet and define a JORC compliant Mineral Resource in the near future, Aridden will be aiming to establish a scalable production facility at Seymour Lake with Yantai's assistance.

Under this proposal, Aridden initially intends to produce a refined amount of lithium concentrate from Seymour Lake in order to meet the output requirements of the future off-take agreement currently being sought through Yantai.

Should Aridden be successful in increasing the Mineral Resource at Seymour Lake and, subject to further off-take agreements being secured, Aridden would be in a position to scale-up the production of lithium concentrate to meet the increased demand without the need for additional substantial capital investment. In the context of current market conditions, Aridden considers the scalable approach to production to be the most appropriate and commercially responsible method.

With the assistance of Yantai and in accordance with current Term Sheet, Aridden is currently in active discussions with potential off-take partners.

Aridden considers the proposed direct investment by Yantai in providing 50% of project funding and the ongoing technical and industry support it will provide in securing a lithium off-take agreement to be a significant competitive advantage, as this strategic relationship dramatically reduces the project development risks and ideally positions the Seymour Lake Project for potential early lithium production.

## WHITESAND MOU

Subsequent to the end of the Quarter, on 6 July 2017, Aridden advised that it has executed a Memorandum of Understanding (MOU) with the Whitesand First Nation (Whitesand) in relation to the Seymour Lake Lithium Project.

The Whitesand are the traditional land owners of the area on which the Seymour Lake Lithium Project is located. Since commencing exploration activities at Seymour Lake in early 2016, Whitesand have actively assisted Aridden with drilling and exploration activities by providing heavy earthmoving equipment and field staff.

The MOU recognizes the significance of this area and the interest held by the Whitesand, including heritage and cultural rights, and provides a framework of cooperation for the exploration and potential development of mineral resources on the project.

The MOU requires that an Impact and Benefits Agreement ("IBA") must be negotiated and agreed prior to the completion of a positive Feasibility Study and before the commencement of any mine development at the project.

The prompt execution of this MOU reaffirms the active support already provided by Whitesand to Ardiden for the potential development of the Seymour Lake Lithium Project.

### **SEYMORE LAKE ACQUISITION**

Subsequent of the end of the Quarter, on 25 July 2017, Ardiden announced that it had completed the successful acquisition of 100% of the Seymour Lake Lithium Project from Stockport Exploration Inc.

Ardiden is preparing to apply to the Ministry of Northern Development and Mines (MNDM) to convert a number of the key unpatented mining claims at the Seymour Lake Project into Mining Leases.

Once Ardiden defines the initial maiden JORC 2012 Lithium Mineral Resource at the North Aubry prospect and the Mining Leases are approved by the MNDM, Ardiden will be able to advance discussions with its strategic Chinese partner, Yantai Jinyuan Mining Machinery Co., Ltd ("Yantai") and other potential off-take partners.

The Company is investigating options to commence an environmental baseline survey at North Aubry and to undertake feasibility reviews for the potential development of the Seymour Lake Lithium Project.

### **BULK SAMPLE**

Subsequent to the end of the Quarter, on 27 July 2017, Ardiden announced that a bulk sample of approximately three tonnes had been obtained from the North Aubry prospect at the Seymour Lake Lithium Project.

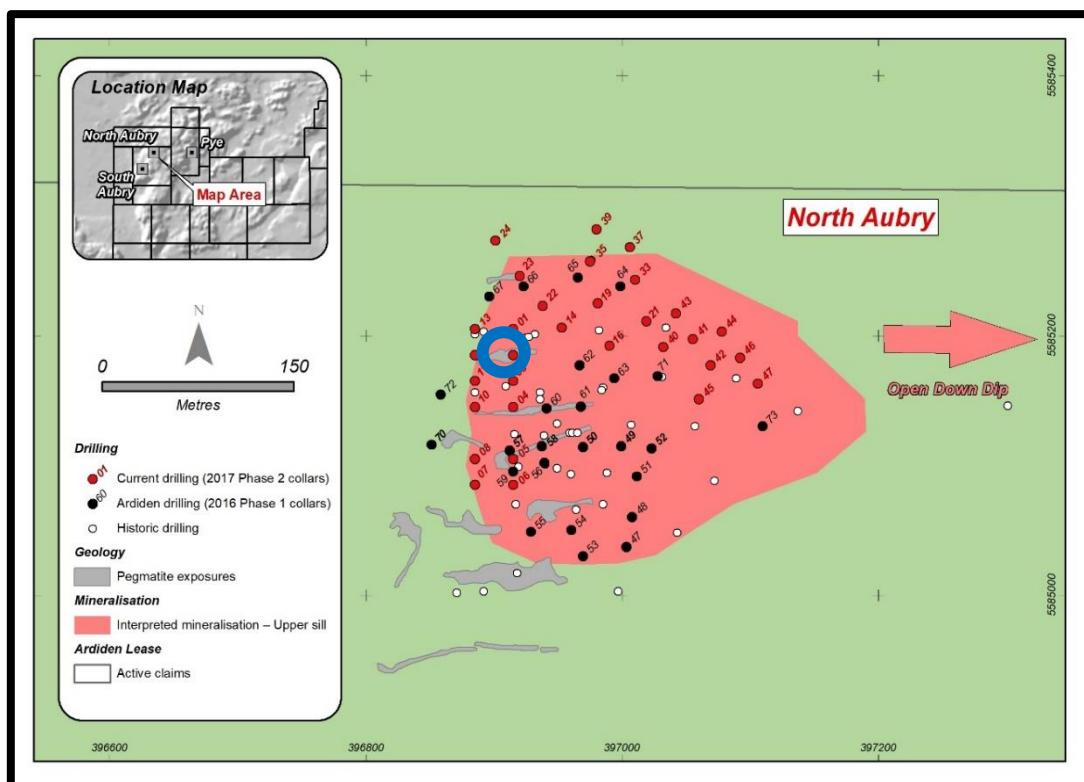
The representative bulk sample was collected from a pegmatite exposure at the North Aubry prospect and is currently being transported to China for analysis and processing by the Company's strategic partner, Yantai Jinyuan Mining Machinery Co., Ltd ("Yantai").



**Figure 8.** Excavator and truck collecting the bulk sample from North Aubry prospect.



**Figure 9.** Bulk sample of Spodumene bearing pegmatite obtained from the North Aubry prospect. Highlighted in the image are the large high quality Spodumene crystals.



**Figure 10.** Overview showing the Phase 2 drill hole locations (Red) and the pegmatite exposures at North Aubry prospect, with interpreted extensions. Highlighted in the blue circle is approximate sample location for the bulk sample, which was taken at 5585185N, 3969000E.

The testwork program to be completed by Yantai will assist Aridden in the overall design of the lithium processing facility and to obtain a better understanding of how Seymour Lake spodumene performs in larger-scale processing and will provide guidance on the potential of the project feasibility.

The metallurgical testwork program will allow Aridden to investigate the lithium recovery and various extraction process options including gravity, flotation and magnetic separation processes to develop an optimum process flowsheet for the project.

The collection and testing of bulk samples is another important step forward to better understand the potential commercial viability of the Seymour Lake Lithium Project and represents a key advancement to the next stage of development.

### STAKEHOLDER ENGAGEMENT

Aridden also confirms that, with full ownership of the Seymour Lake Lithium Project secured, a strategy and development meeting with representatives from key stakeholders, including Whitesand First Nation, Yantai and MDNM, has been scheduled for late August 2017.

This will be the first of many stakeholder engagement meetings, which Aridden believes will facilitate a clear and rapid development pathway for the Seymour Lake Lithium Project.

### MINERALOGY TESTWORK

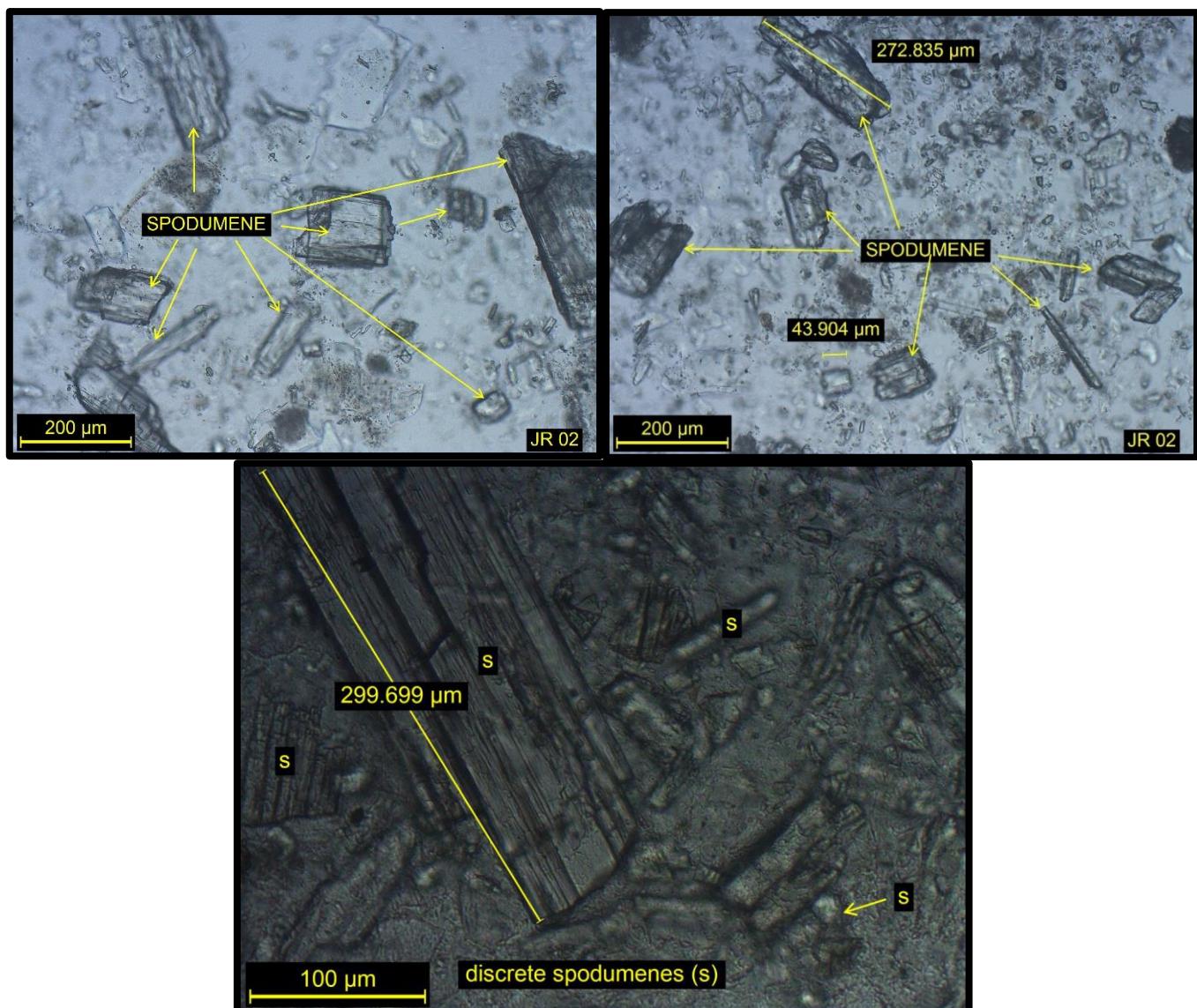
On 12 April 2017, Aridden advised that it has received further encouraging testwork results from Independent Metallurgical Operations (IMO), based in Perth, Western Australia, for ore samples from Seymour Lake Lithium Project.

The mineralogy testwork results from the lithium-bearing spodumene samples provided to IMO confirm that the spodumene particles are well liberated at relatively coarse sizes with some of the spodumene particles measured to be excess of 600 $\mu$ .

Examination and XRD/SEM testing of a thin section of the North Aubry drill core sample has confirmed only traces amounts of deleterious minerals, which could affect the recovery of the lithium concentrate from the spodumene ore. Table 1 below shows the mineral composition present in the thin section of the North Aubry drill core sample.

**Table 1.** Mineral Composition of Lithium bearing sample (M221 JR002 -500)

<b>SPODUMENE</b>	<b>34%</b>
<b>ALBITE</b>	<b>21%</b>
<b>QUARTZ</b>	<b>25%</b>
<b>“MUSCOVITE”</b>	<b>10%</b>
<b>POTASH FELDSPAR</b>	<b>6%</b>
<b>APATITE</b>	<b>1%</b>
<b>ORES</b>	<b>TRACE</b>



**Figure 11.** Images of coarse spodumene partials from thin section sample M221 JR002 -500

As previously reported by Arididen on 9 February 2017, Lab HLS tests produced a 7.73% Li<sub>2</sub>O concentrate. Empirically, pure spodumene is considered to be 8.03% Li<sub>2</sub>O, indicating that Arididen's lithium concentrate is very close to the pure form. The production of the lithium concentrate using the HLS tests at such a high grade is well over the industry standard of 6% Li<sub>2</sub>O, as required by most lithium end-users.

These initial mineralogy results are considered to be very encouraging, confirming that low amounts of deleterious minerals are present in the sample and reaffirming the initial outcomes identified in the HLS tests.

Subject to further confirmation from additional metallurgical test work, the report indicates that the spodumene in this fine fraction can potentially be upgraded to a saleable product by flotation at a relatively coarse particle size.

Arididen confirms that as these are only the preliminary tests and further work is required to define the process flowsheet to produce the final lithium concentrate.

The Company is continuing to investigate various extraction process options including gravity, flotation and magnetic separation processes to develop the optimum process flowsheet for the project.

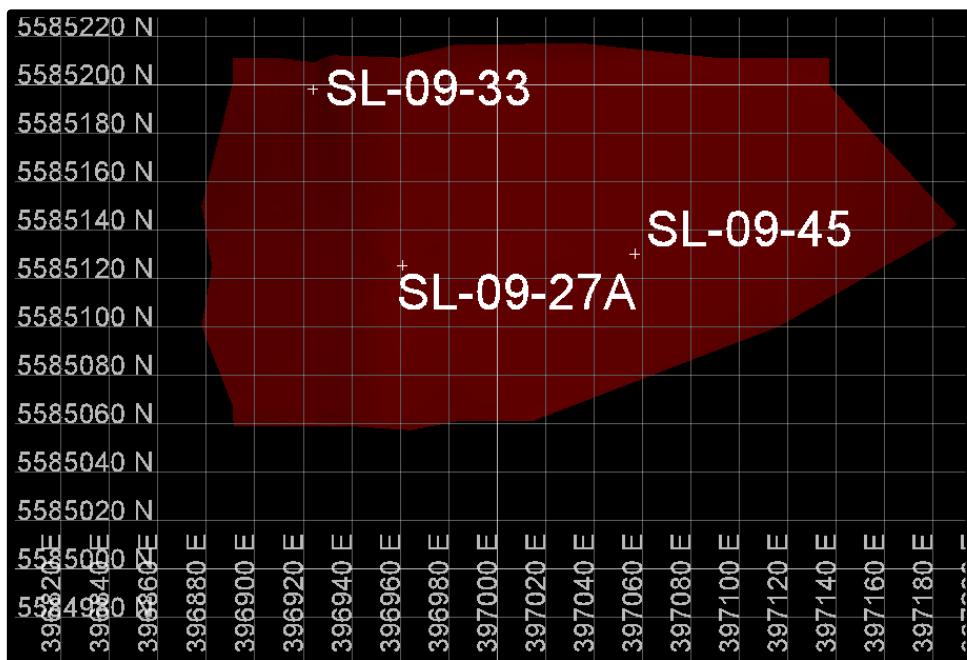
## HLS METALLURGICAL TESTWORK

On 26 April 2017, Aridien announced additional highly encouraging metallurgical testwork results for a composite bulk sample obtained from the North Aubry prospect at the Seymour Lake Lithium Project.

The Heavy Liquid Separation (HLS) testwork results from the latest composite spodumene sample provided to IMO, have again indicated that the spodumene particles are well liberated at a relatively coarse particle size.

Aridien considers these latest HLS test results to be extremely encouraging, having replicated the earlier metallurgical results, demonstrating the ability to produce very high-grade lithium concentrate, with grades of up to **7.23% Li<sub>2</sub>O** achieved.

The composite spodumene sample was obtained by combining drill core from three separate locations across the North Aubry Prospect. See Figure 5



**Figure 12.** Overview showing the drill hole locations at North Aubry prospect at the Seymour Lake Lithium Project.

These additional tests were undertaken to verify and expand on the original Seymour Lake metallurgical test results which were announced by Aridien on 9 February 2017, where concentrate grades of up to **7.73% Li<sub>2</sub>O** were obtained.

## DMS METALLURGICAL TESTWORK

On 23 June 2017, Aridien advised that it had received further highly encouraging metallurgical testwork results from Independent Metallurgical Operations (IMO), for a composite bulk sample obtained from the North Aubry prospect at the Seymour Lake Lithium Project.

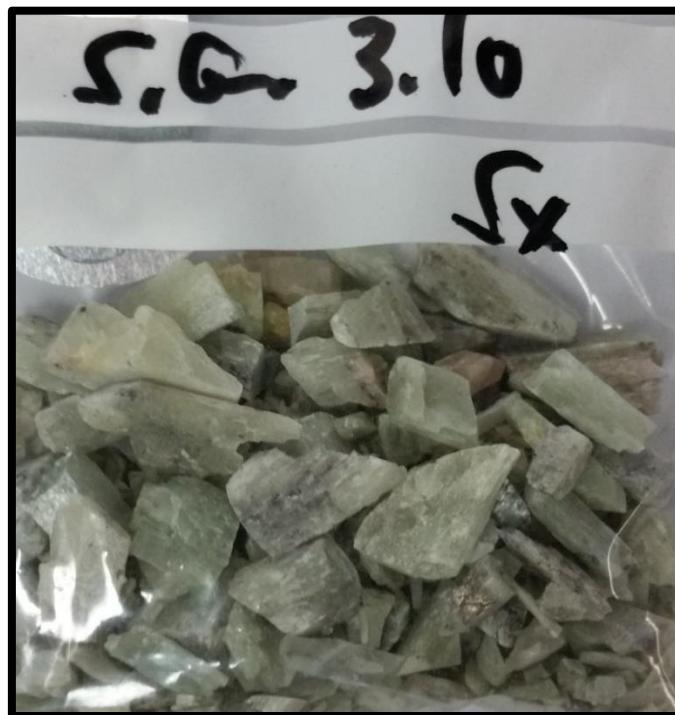
The lab Dense Media Separation (DMS) tests conducted at a specific gravity of 2.80 produced an overall concentrate grade of 5.97% Li<sub>2</sub>O with recovery of 90.8%.

The initial testing of the spodumene ore used a very coarse crush size of 9.5mm which produced a concentrate of 6.43% Li<sub>2</sub>O, with a recovery of over 75%. Aridien notes that the recovery was lower than expected due to a portion of the spodumene crystals being misplaced, as the lab Dense Media Cyclone had difficulty managing the coarse crush size.

A second stage of DMS tests produced an overall concentrate grade of 5.97% Li<sub>2</sub>O with a recovery of 90.8% at a crushing size of 3.35mm. This staged crushing reduced the 0.5 mm material produced, therefore removing the requirement for additional processing.

The Company notes that the coarse spodumene concentrate implies reduced processing costs and will create a greater variety of potential applications, which in turn should attract premium prices from potential end-users, which may improve the project economic value.

A comparison between the previous Heavy Liquid Separation (HLS) testwork conducted by IMO on these spodumene samples and this round of DMS testwork, found that the HLS test was conducted at a similar specific gravity of 2.70 and with a crush size of less than 3.35 mm. The HLS achieved a concentrate grade of 5.88% Li<sub>2</sub>O and with a recovery of 83.0%, which is comparable to the results achieved with the DMS testwork.



**Figure 13.** Sample of coarse lithium concentrate (Spodumene) created with DMS at the specific gravity of 3.10.

IMO also noted the significant presence of micas in the spodumene concentrate sample at the coarse crushing size of 9.5mm. Arididen will undertake additional testwork on the micas to better understanding of the material and whether this material could improve the Li<sub>2</sub>O recovery and concentrate grade.

The lab DMS testwork results from the drill core samples provided to IMO indicate that the spodumene particles are well liberated at various coarse particle sizes. An additional, more comprehensive phase of testwork is currently being undertaken on a broad range of ore samples with a range of head grades, which have been taken from multiple sampling locations at the project. These tests will assist Arididen to identify the options around the most appropriate process flow design to recover Li<sub>2</sub>O from the spodumene ore at the Seymour Lake project.

Arididen considers the recently reported results from the laboratory DMS tests to be extremely encouraging, having replicated similar results to those obtained from the earlier HLS metallurgical tests, announced on 9 February 2017, which demonstrated the ability to produce very high-grade lithium concentrate with grades of up to **7.73% Li<sub>2</sub>O**.

Arididen confirms that the laboratory DMS tests have provided further supporting data to assist in the determination of the physical properties of the samples and characterisation for process flow design and Li<sub>2</sub>O recovery.

The DMS tests were conducted on composite drill core samples obtained from diamond drill holes SL-09-33, SL-09-27A and SL-09-45 which were crushed to 100% passing 9.5mm, 6.7mm and 3.35mm.

Ardiden notes these are highly encouraging results for preliminary DMS assessments. Metallurgical domaining of the deposit will be investigated in future test work programs.

The next phase of the metallurgical testwork program will allow Aridden to investigate the lithium recovery and to test the suitability of other process design options including gravity, flotation and magnetic separation.

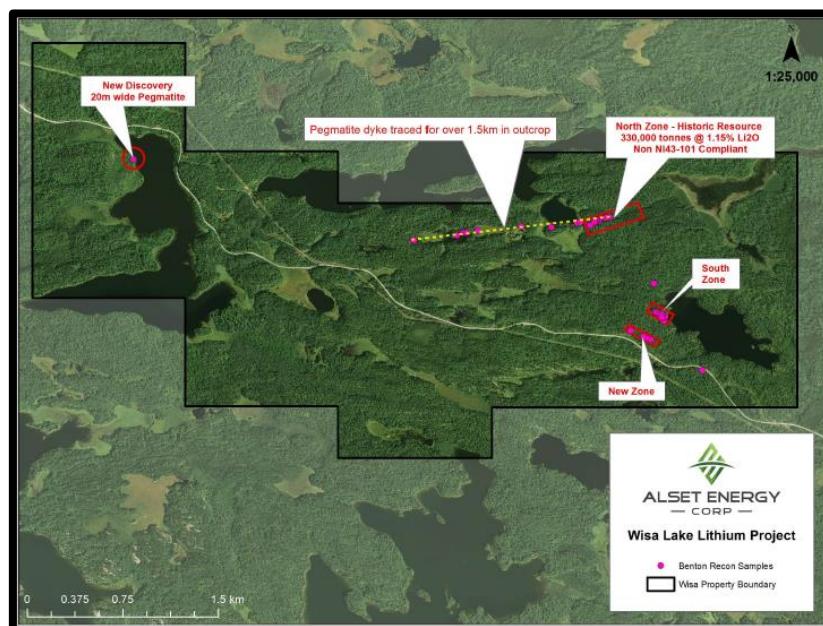
## CONCLUSIONS

With full control of the Seymour Lake Lithium Project now secured, the continued rapid development of the North Aubry prospect towards development and production remains Aridden's foremost priority.

Ardiden is now fully-funded to continue to rapidly progress the maiden JORC 2012 Mineral Resource drilling program at the Seymour Lake Lithium Project and, combined with the other projects will create a diverse exploration and development pipeline of Lithium projects, ranging from early exploration stage to more advanced resource development. Thus, creating a better long-term potential for Aridden to define multiple lithium resources in strategic locations which are positioned near established infrastructure and creating direct access into growing key markets.

## WISA LAKE LITHIUM PROJECT

During the Quarter, Aridden undertook a detailed technical review of the Wisa Lake Lithium Project, commenced stakeholder engagement and began preparations for maiden drilling program.



**Figure 14.** Overview map of historical exploration at the Wisa Lake Lithium Project as reported by Alset Minerals Corp. in April 2016.

The Wisa Lake Project has extensive spodumene (lithium ore)-bearing pegmatites, over 1,700m of historical diamond drilling and a known lithium mineralisation zone.

The Wisa Lake Lithium Project consists of five claims (1,200 hectares) and covers known occurrences of multiple spodumene-bearing pegmatite zones.

In 1956, Lexindin Gold Mines Ltd. completed a total of 20 drill-holes (backpack and AQ-sized core) over a strike length of 335m and to a depth of approximately 65m, to identify the Wisa Lake pegmatites. The most easterly hole intersected a pegmatite with a true width of 6.4m containing an estimated 20% of the lithium-bearing mineral spodumene, suggesting that the mineralization is open at depth and to the east. (*Lexindin Gold Mines Ltd., Manager's Report, 1958; Ontario Geological Survey, Open File Report 6285, Report of Activities 2012*).

### **North Zone Pegmatite**

The North Zone pegmatite, which was traced through surface exposures by Alset personnel for nearly 1.5km of strike length and was defined by historical drilling over a strike length of 335m. The historical drill logs from Lexindin Gold Mines Ltd report, show that the lithium mineralisation is open to the east and at depth and future drilling could substantially expand the historical resource.

### **South Zone Pegmatite**

The South Zone pegmatite was also drilled in the 1950s, but not to the extent of the North Zone. This area of interest appears to have the highest spodumene content discovered on the property, with **6.38% Li<sub>2</sub>O** reported from a grab sample, and will be a key focus of the company's exploration and due diligence review.

### **New Pegmatite Dykes**

Additionally, Alset discovered further spodumene-bearing dykes during their April 2016 exploration program. One dyke was located 100m south of the South Zone pegmatite and a further pegmatite exposure was mapped approximately 3km to the west of the historical lithium mineralisation in the North Zone pegmatite (refer Figure 17 above).



**Figure 15.** Examples of white and green spodumene crystals from the North zone (left) in the South zone (right) pegmatites.

Ardiden confirms it has the required permit from the Ministry of Northern Development and Mines (MNDM) to drill and trench on the project, which will allow Ardiden to undertake the exploration diamond drilling program in order to obtain a better understanding of the known pegmatites and the influence of the surrounding structures which will help to define the Wisa Lake Lithium Project's potential.

Due to some unforeseen lengthy delays with Alset, stakeholder engagement with the Lac la Croix First Nation was hindered, resulting in a delay in gaining site access which impacted on Ardiden's ability to complete the drilling program.

Ardiden commenced stakeholder engagement and has already established a working relationship with the Lac la Croix First Nation community. The community is now actively assisting Ardiden with drilling and exploration activities by providing access to heavy earthmoving equipment, workers, community infrastructure and facilities.

Subsequent to the end of the Quarter, on 28 July 2017, Aridden announced that a drilling team and rig had been sourced and engaged to undertake an initial five-hole reconnaissance diamond drilling program, which is set to commence shortly.

The drilling rig and geological team had mobilised to site at Wisa Lake, with drilling expected to be underway at site in the next few days, to undertake an initial limited reconnaissance exploration drilling program.

### BOLD PROPERTIES COBALT-COPPER-NICKEL PROJECT

On 30 May 2017, Aridden advised that it was preparing to commence the initial due diligence phase of field mapping and sampling at the prospective **early-stage Bold Properties Cobalt-Copper-Nickel Project**, which it secured recently under option in the established mining jurisdiction of Ontario, Canada.

Aridden confirmed that the geological teams had mobilised to site to the Bold Properties Project, with initial mapping and sampling completed during the quarter.

The initial focus of this due diligence phase of the program was to map and sample around the historical sample locations on the various prospects and to obtain a better understanding of its potential to host cobalt-copper-nickel mineralisation.

The results from this program will be used to validate historical drilling and sampling results. All data collected will be included in any future resource models.

#### Bold Property Project

The Bold Properties Project is an attractive early-stage exploration opportunity with several sulphide zones identified by historical exploration which returned encouraging cobalt, copper and nickel values from limited reconnaissance drilling and sampling data.

The Bold Property Project is strategically located close to existing good infrastructure, with excellent access to the growing energy storage and Electric Vehicle (EV) markets and EV manufacturers in Detroit (*General Motors, Ford Motor Company and Fiat Chrysler Automobiles US*) and California (*Tesla*).

The Bold Property Project is located approximately 50km north-east of the town of Mine Centre in Ontario, Canada. The property is connected to Highway 11 (Trans-Canada), which is located 25km south via an all-weather road. It is less than 3 hours' drive from Thunder Bay, a leading regional mining jurisdiction in Ontario with key local infrastructure including a skilled mining workforce and excellent local logistics and infrastructure. It has strong potential to provide a high-quality product to supply growing North American demand and export markets.

The Bold Property Project consists of four claims (1,024 hectares) and covers a number of anomalous sulphide zones. In 1992, Hexagon Gold (Ontario) Ltd. completed a total of 17 drill holes in multiple locations on and around the Bold Property Project at various depths of up to 428m down-hole.

The nine grab samples that were collected by Hexagon in 1992 returned encouraging grades of up to **0.33% cobalt, 5.54% copper and 0.73% nickel**, confirming the significant exploration potential; however, Aridden confirms that very little work has been completed since then.

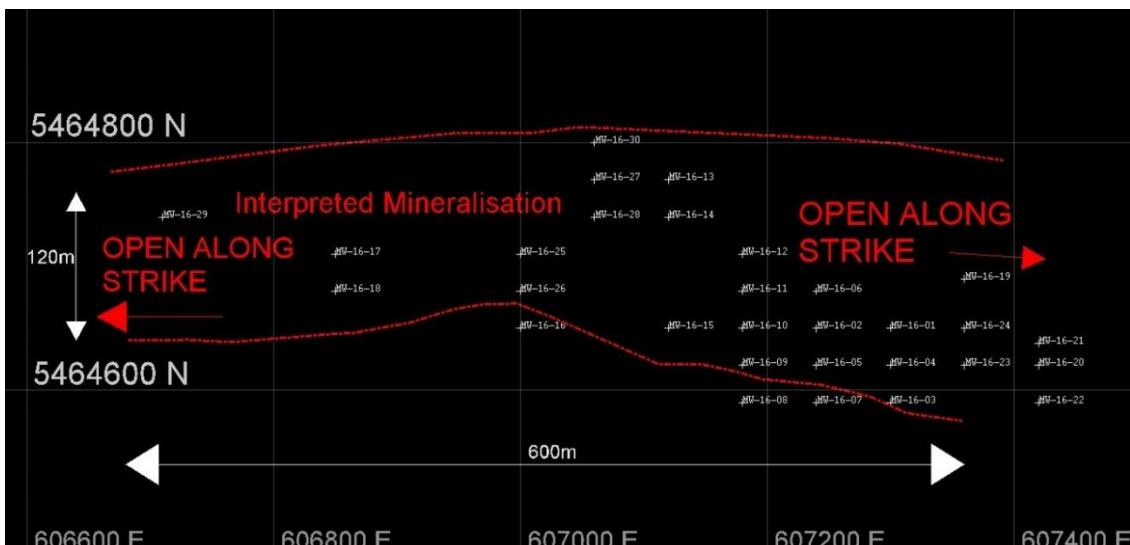
Aridden expects to receive assays results shortly for samples obtained during the limited reconnaissance mapping program. Once results have been obtained and reconciled, Aridden will provide an update to the market.

## MANITOUDAGE GRAPHITE PROJECT

On 24 April 2017, Aridien advised that it has received the final assay results from the last 16 drill holes from the completed diamond drilling program at the Silver Star North prospect at the Manitouwadge Graphite Project.

The results included several thick zones of constant graphite mineralisation, as well as several narrower higher grade zones within the overall mineralised envelope including a best intercept of **10.8% TGC** (in drill-hole MW-16-19).

The results, from drill holes MW-16-15, MW-16-17, MW-16-19 – MW-16-21, MW-16-23 - MW-16-26, MW-16-28 - MW-16-30, have confirmed the presence of consistent graphite mineralisation throughout the Silver Star North prospect, with average graphite grades from the various mineralised zones ranging from 1.36% to 3.82% TGC.



**Figure 16.** Overview of the drill-hole locations at Manitouwadge Graphite Project.

## Next Steps

While the drilling intersected thick zones of graphite mineralisation where expected at Manitouwadge project, the average graphite assay grade reported is below the level that would likely be suitable to underpin the estimation of a viable graphite resource estimate at this stage.

Aridien will now undertake a geological review of the drilling results and will commence further exploration at the Silver Birch, Silver Star and Silver Star North prospects with the aim of defining additional graphite prospects along the anomalous zones at the Manitouwadge project, which could host higher grade mineralisation for inclusion in a future Mineral Resource estimate.

Accordingly, the Company has decided to defer the calculation of a maiden JORC resource for the Manitouwadge Project. Aridien will provide further information on planned upcoming exploration activities once it has completed a full review of the drilling results and other exploration opportunities across the broader project.

## CORPORATE

### MANAGEMENT CHANGES

On 12 April 2017, Aridien advised that Executive Director **Mr Brad Boyle** had been appointed as full-time CEO and Executive Director of Aridien while experienced Canadian-based geologist **Mr Robert Chataway** had been appointed as General Manager – Canadian Operations to oversee in-country operations.

The Company also advised that long-serving Director **Mr Piers Lewis** has advised his intention to retire from the Board due to his growing commitments and work-load with other ASX-listed companies and his corporate advisory practice.

## CAPITAL RAISING

On 5 June 2017, Aridden announced that it has raised A\$600,000 through a share placement to key sophisticated investors in Australia and internationally (the “Placement”), with strong support received from existing major shareholders.

Further Aridden announced a Share Purchase Plan (SPP), providing eligible shareholders to purchase additional shares in Aridden at an issue price of 1.5 cents per share. This price equates to a 11.8% discount to the last traded price of 1.7 cents (30/05/17) and an 9.3% discount to the VWAP for the last 5 trading days. Shareholders who are recorded on the share register as at 2 June 2017 with a registered address in either Australia or New Zealand were eligible to participate in the SPP.

Subsequent to the end of the Quarter, on 11 July 2017, Aridden announced the Share Purchase Plan (“SPP”) offered to existing shareholders closed on 7<sup>th</sup> July 2017.

Aridden confirmed the SPP obtained strong shareholder support with total bids in the SPP of just over \$1,000,000 were received.

Aridden verified on 17 July 2017, that all shares issued under the SPP had been allotted. Aridden was pleased to confirm a total of just under \$1.8 million was raised.

The Company confirms Aridden Directors participated in both the June 2017 Placement and the subsequent SPP, the results of such greatly exceeded expectations and positions Aridden to continue to add value across the Company’s project portfolio.

## END

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### About Aridden Ltd

Aridden Limited (ASX: ADV) is an emerging international strategic metals company which is focused on the exploration, evaluation and development of multiple projects located in the established mining jurisdiction of Ontario, Canada.

The 100%-owned Seymour Lake Lithium Project comprises 7,019 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 6.0% Li<sub>2</sub>O. These high-grade pegmatite structures have been defined over a 5km strike length.

The 100%-owned Root Lake Lithium Project 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 Root Bay lithium project is strategically located approximately 5km to the east of the recently acquired Root Lake Lithium Project and consists of three claim areas, totalling 720 hectares. The project was staked by Aridden as part of its regional exploration focus in and around the Root Bay spodumene-bearing pegmatite.

Initial observations of the exposed pegmatite are characterized by coarse white albite, grey quartz and pale grey-green spodumene crystals up to 10cm long.

The 100%-owned Manitouwadge Flake Graphite Project covers an area 5,300 Ha and has a 20km strike length of EM anomalies with graphite prospectivity. Previous preliminary metallurgical testwork indicated that up to 80% of the graphite at Manitouwadge is high value jumbo or large flake graphite. Testwork also indicated that simple, gravity and flotation beneficiation can produce graphite purity levels of up to 96.8% for jumbo flake and 96.8% for large flake. With the proven caustic bake process, ultra-high purity (>99.95%) graphite can be produced. The graphite can also be processed into high value expandable graphite, high quality graphene and graphene oxide.

The Wisa Lake Lithium project (under option to acquire 100%) is located 80km east of Fort Frances, in Ontario, Canada and only 8km north of the Minnesota/US border. The property is connected to Highway 11 (Trans-Canada), which is located 65km north via an all-weather road that crosses the centre of the project. The Wisa Lake Lithium Project consists of five claims (1,200 hectares) and covers the historical drilling location of the North Zone. Ardiden is aiming to commence a limited drill program to drill test and verify the historical lithium results.

The Bold Properties project (under option to acquire 100%) is located approximately 50km north-east of the town of Mine Centre in Ontario, Canada. The property is connected to Highway 11 (Trans-Canada), which is located 25km south via an all-weather road. The Bold Property Project consists of four claims (1,024 hectares) and covers a number of anomalous sulphide zones. In 1992, Hexagon Gold (Ontario) Ltd. completed a total of 17 drill holes in multiple locations on and around the Bold Property Project at various depths of up to 428m down-hole. The nine grab samples that were collected by Hexagon in 1992 returned encouraging grades of up to 0.33% cobalt, 5.54% copper and 0.73% nickel, confirming the significant exploration potential.

All projects located in an established mining province, with good access to infrastructure (road, rail, power, phone and port facilitates) and local contractors and suppliers.

### **Competent Person's Statement**

The information in this report that relates to exploration results on the Seymour Lake project is extracted from the reports entitled ASX Release "Bulk Sampling Completed at Seymour Lake Lithium Project" created 27 July 2017, ASX Release "Ardiden Acquires 100% of Seymour Lake Lithium Project" created 25 July 2017, ASX Release "Continued Drilling Success at Seymour Lake" created 20 July 2017, ASX Release "Drilling Hits More Thick Spodumene-Bearing Pegmatite Zones" created 7 July 2017, ASX release "Ardiden Signs MOU With Whitesand First Nation" created 6 July 2017, ASX Release "Term Sheet to Fund, Design and Build Lithium Facility" created 28 June 2017, ASX Release "DMS Testwork Produces High-Grade Lithium Concentrate" created 23 June 2017, ASX Release "Expanded Spodumene-Bearing Pegmatite Zones at Seymour Lake" created 15 June 2017, ASX Release "Further Impressive High-Grade Lithium Hits at Seymour Lake", created 5 June 2017, ASX Release "More Thick Zones of Spodumene-Bearing Pegmatite at Seymour" created 30 May 2017, ASX Release "Thick High-Grade Lithium Hits at Seymour Lake" created 22 May 2017, ASX Release "Drilling Continues to Hit Thick Zones of Spodumene" created 17 May 2017, ASX Release "Seymour Drilling Intersects More Thick Zones of Spodumene" created 27 April 2017, ASX Release "Seymour Lake Produces Exceptional Grade Lithium Concentrate" created 26 April 2017, ASX Release "Multiple Spodumene Bearing Pegmatite Intercepts at Seymour" created 13 April 2017, ASX Release "Encouraging Mineralogy Testwork From Seymour Lake" created 12 April 2017, ASX Release "Ardiden Hits Spodumene-Bearing Pegmatites at Seymour Lake" created 10 April 2017 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.

The information in this report that relates to exploration results on the Manitouwadge project is extracted from the reports entitled ASX Release "Final Assay Results for Manitouwadge Graphite Project, Canada" created 24 April 2017 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.

The information in this report that relates to exploration results on the Wisa Lake project is extracted from the reports entitled ASX Release "Maiden Exploration Drilling to Commence at Wisa Lake", created 27 July 2017 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.

The information in this report that relates to exploration results on the Bold Properties project is extracted from the reports entitled ASX Release "Mapping and Exploration to Commence at Bold Properties" created 30 May 2017 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 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.

## TENEMENT SCHEDULE

**Seymour Lake Lithium Project:**

CRESCENT LAKE AREA	1245661	100%
CRESCENT LAKE AREA	1245646	100%
CRESCENT LAKE AREA	1245648	100%
CRESCENT LAKE AREA	1245662	100%
CRESCENT LAKE AREA	1245664	100%
CRESCENT LAKE AREA	4270593	100%
CRESCENT LAKE AREA	4270594	100%
CRESCENT LAKE AREA	4270595	100%
CRESCENT LAKE AREA	4270596	100%
CRESCENT LAKE AREA	4270597	100%
CRESCENT LAKE AREA	4270598	100%
CRESCENT LAKE AREA	4279875	100%
CRESCENT LAKE AREA	4279876	100%
CRESCENT LAKE AREA	4279877	100%
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CRESCENT LAKE AREA	4279890	100%
CRESCENT LAKE AREA	4279891	100%
FERLAND STATION AREA	4279869	100%
FERLAND STATION AREA	4279870	100%
FERLAND STATION AREA	4279871	100%
FERLAND STATION AREA	4279872	100%
FERLAND STATION AREA	4279873	100%
FERLAND STATION AREA	4279874	100%

**Manitouwadge Graphite Project:**

OLIE LAKE AREA	4268932	100%
OLIE LAKE AREA	4268933	100%
OLIE LAKE AREA	4268935	100%
THOMAS LAKE AREA	4268934	100%
FLANDERS LAKE AREA	4279125	100%
OLIE LAKE AREA	4279101	100%
OLIE LAKE AREA	4279121	100%
OLIE LAKE AREA	4279124	100%
EVEREST LAKE AREA	4274285	100%
EVEREST LAKE AREA	4274286	100%
EVEREST LAKE AREA	4274287	100%
FLANDERS LAKE AREA	4271613	100%
FLANDERS LAKE AREA	4271624	100%
FLANDERS LAKE AREA	4279611	100%
OLIE LAKE AREA	4274282	100%
OLIE LAKE AREA	4274283	100%
OLIE LAKE AREA	4274284	100%
OLIE LAKE AREA	4275721	100%
EVEREST LAKE AREA	4274288	100%
FLANDERS LAKE AREA	4274289	100%
OLIE LAKE AREA	4268975	100%
OLIE LAKE AREA	4268976	100%
FLANDERS	4279892	100%

**Root Lake Lithium Project:**

ROOT LAKE AREA (RL)	4283915	100%
ROOT LAKE AREA (RL)	4283916	100%
ROOT LAKE AREA (RL)	4283917	100%
ROOT LAKE	36778	100%
ROOT LAKE	36779	100%
ROOT LAKE	36780	100%
ROOT LAKE	36781	100%
ROOT LAKE	36782	100%
ROOT LAKE	36783	100%
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ROOT LAKE	37158	100%
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ROOT LAKE	37160	100%
ROOT LAKE	38095	100%
ROOT LAKE	38096	100%
ROOT LAKE	38097	100%
ROOT LAKE	38098	100%
ROOT LAKE	38099	100%

**Root Bay Lithium Project:**

ROOT LAKE AREA (PAT) (G-2189)	4282603	100%
ROOT LAKE AREA (PAT) (G-2189)	4282604	100%
ROOT LAKE AREA (PAT) (G-2189)	4282605	100%

**Wisa Lake Lithium Project:**

WOLSELY LAKE AREA	4279506	Due Diligence Review
WOLSELY LAKE AREA	4279507	Due Diligence Review
REDHORSE LAKE AREA	4279508	Due Diligence Review
WOLSELY LAKE AREA	4279509	Due Diligence Review
WOLSELY LAKE AREA	4279511	Due Diligence Review

**Bold Properties Project:**

CROWROCK LAKE AREA	04281148	Due Diligence Review
MANION LAKE AREA	04281147	Due Diligence Review
SANDBEACH LAKE AREA (KEN)	4279524	Due Diligence Review
SANDBEACH LAKE AREA (KEN)	4279525	Due Diligence Review