



**ARDIDEN**

4 October 2017

## **MAIDEN JORC RESOURCE COMPLETED FOR SEYMOUR LAKE LITHIUM PROJECT, CANADA**

*Initial JORC resource will allow Ardiden to meet one of the key conditions of the development MOU with its Chinese strategic partner; drilling continuing to unlock project's broader potential*

### **HIGHLIGHTS:**

- **Maiden JORC compliant Mineral Resource Estimate completed for the North Aubry deposit at Seymour Lake of 1.23Mt at 1.43% Li<sub>2</sub>O containing 8.2 contained tonnes of lithium.**
- **The maiden Mineral Resource Estimate comprises:**
  - **Indicated Mineral Resource: 0.44Mt at 1.52% Li<sub>2</sub>O**
  - **Inferred Mineral Resource: 0.79Mt at 1.38% Li<sub>2</sub>O**
- **Lithium mineralisation remains open along strike and at depth.**
- **Exploration Target established for the Central and South Aubry prospect areas, covering a 1km strike of an interpreted 5km mineralised strike zone.**
- **Ardiden intends to rapidly advance Seymour Lake towards production**
- **Test work continuing to develop a suitable processing flowsheet.**

Diversified minerals explorer and developer Ardiden Limited (ASX: ADV) is pleased to announce a maiden JORC 2012 Mineral Resource estimate for the North Aubry lithium deposit, part of its 100%-owned **Seymour Lake Lithium Project** in Ontario, Canada.

The total Mineral Resource estimate comprises **1.23 million tonnes (Mt) at an average grade of 1.43% Lithium Oxide (Li<sub>2</sub>O)** classified as Inferred and Indicated Mineral Resources in accordance with the guidelines of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).

Ardiden CEO and Executive Director Brad Boyle said: *"This a great result for the Company, which sets a strong foundation for the fast-track development strategy we are pursuing in conjunction with our Chinese strategic partner Yantai. This marks the first stage of that strategy, and will allow us to meet one of the key conditions precedent under the development MOU signed with Yantai earlier this year."*

*"It is important to note that the maiden resource covers only a relatively limited strike length of the broader mineralised strike zone at Seymour Lake. It is evident from the drilling data received to date, that the recent drilling has confirmed the geological continuity at North Aubry and, together with the consistency of the lithium grades provide us with an outstanding opportunity to rapidly expand the initial resource."*

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*“Drilling is continuing to test this potential both down-plunge and the long strike at the nearby Aubry prospects. The broader potential of the project is also demonstrated by the initial Exploration Target which has been defined in conjunction with the maiden Mineral Resource estimate over the North, Central and South Aubry prospects.”*

**Table 1.** North Aubry, October 2017 Mineral Resource Estimate Table. (Note that some of the numbers may not equate fully due to the effects of rounding.)

Resource Category	Tonnes (Mt)	Grade Li <sub>2</sub> O%	Contained Tonnes of Lithium
Indicated	0.44	1.52	3.1
Inferred	0.79	1.38	5.1
<b>TOTAL</b>	<b>1.23</b>	<b>1.43</b>	<b>8.2</b>

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

*The information in this report that relates to Mineral Resource Estimate at the North Aubry deposit on Seymour Lake Lithium project is based on, and fairly represents, information and supporting documentation prepared by Mr James Ridley, who is a Member of the Australasian Institute of Mining & Metallurgy. Mr Ridley is not a full-time employee of the Company Mr Ridley is employed as a Consultant from Jorvik Resources Pty Ltd. Mr Ridley has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Mineral Resources and Ore Reserves (the JORC Code)'. Mr Ridley consents to the inclusion in this report the exploration results and the supporting information in the form and context as it appears.*

The Mineral Resource estimate was carried out by independent geological and resource consultants Jorvik Resources Pty Ltd, of Perth, Western Australia (**Jorvik**).

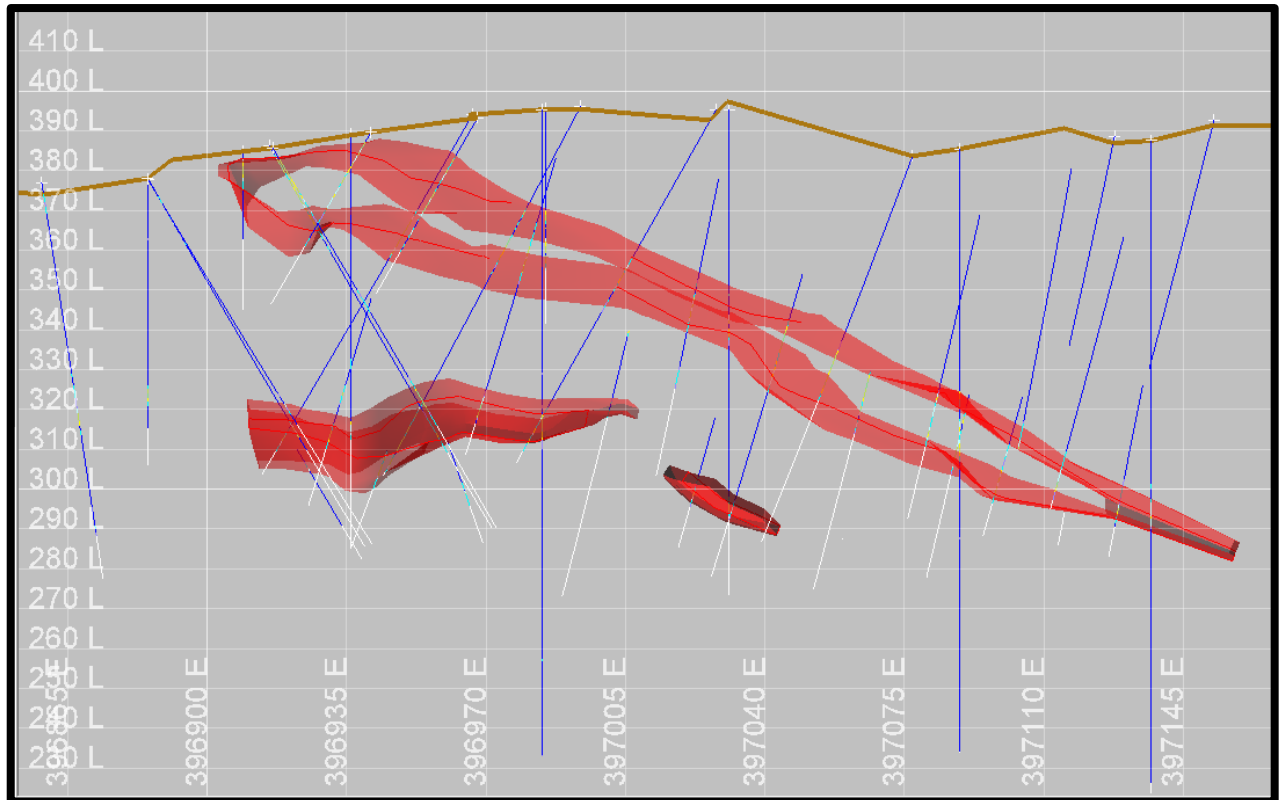
The classified Mineral Resource is significant first step in the development and the project has real potential for the definition of additional mineral resources along a 5km strike zone.

Using a block model reporting cut-off grade of 0.4% Li<sub>2</sub>O, which incorporates all internal dilution within the modelled mineralized domains, a total Mineral Resource estimate of 1.23 million tonnes is reported at an average grade of 1.43% Li<sub>2</sub>O containing 8.2 tonnes of lithium.

These results demonstrate the high quality of the North Aubry deposit. With the successful definition of the Mineral Resource estimate and the identification of multiple high grade mineralised zones which outcrop at surface, Ardiden is in a strong position to rapidly advance the North Aubry deposit towards production.

The Company confirms that about 70% of drill assays from the North Aubry drill program were used in the Mineral Resource grade estimation. The mineralised wireframes have been interpreted on the basis of logged geological observations and assay results. Where assays are still outstanding visual estimates of lithium content are applied along with lithology to constrain the mineralised widths of each domain.

During drilling Ardiden found that there was an excellent correlation of assay results to the visual estimates which supported the interpreted wireframes. The areas awaiting results are the northern and southern extents of the model.

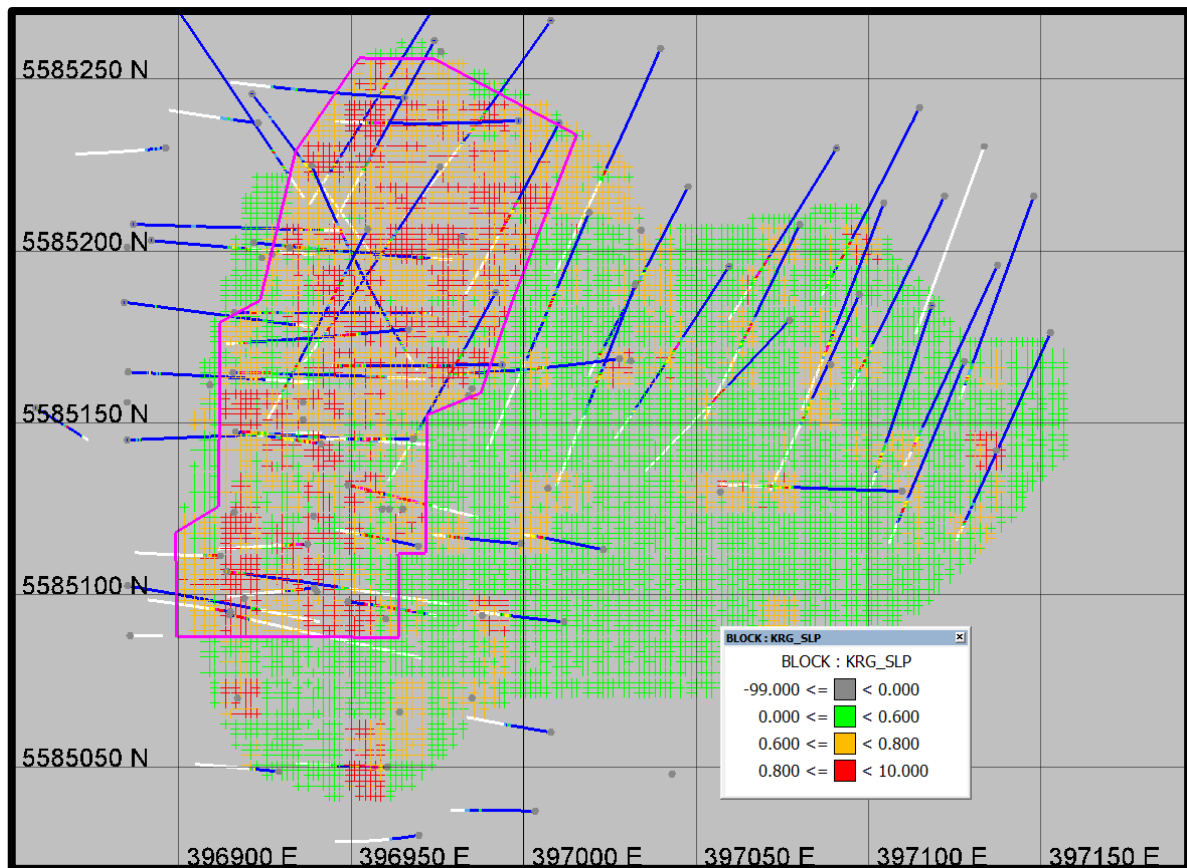


**Figure 1.** Cross Section at 5585160N at the North Aubry lithium deposit.

Data received to date have revealed the extraordinary geological continuity and consistency of grade within multiple stacked pegmatite sills of the deposit. The Company found the drilling data confirmed the geological continuity and the consistency of the lithium grades across the mineralised footprint at the North Aubry deposit.

The Company intends to update the Mineral Resource once the remaining North Aubry drill assays results are received and analysed in the coming months. These results are expected to infill and confirm the northern and southern extents of the model.

Ardiden confirms the Mineral Resource estimate has been defined within the first 1km of the 5km strike zone, which has not been fully drill tested and remains open at depth and in all directions.

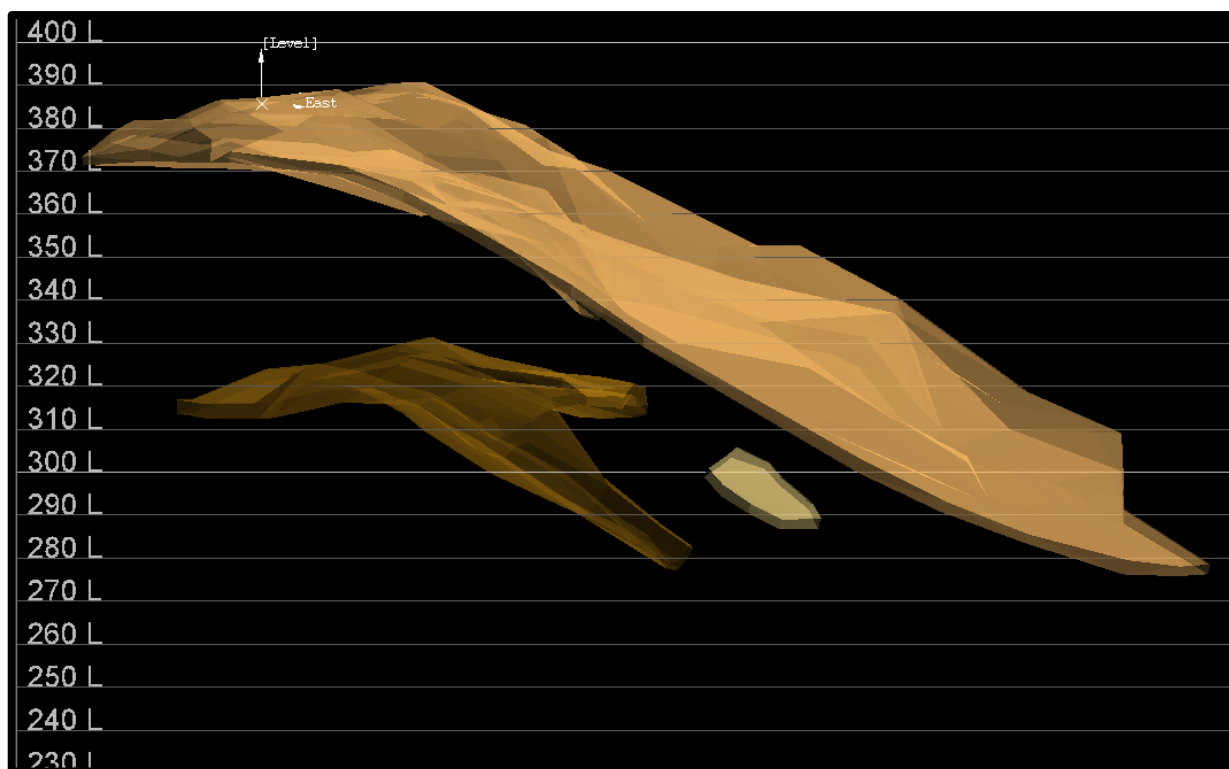


**Figure 2.** North Aubry Project, Plan view of resource classification for mineralised zone 1.

Further, the Company has yet to fully drill test the other key and highly prospective areas lying within the 5km prospective strike length mentioned previously, on the Seymour Lake project, including but not limited to the Central and South Aubry prospects. Ardiden considers that these satellite prospects may encompass additional and substantial high-grade Lithium deposits.

The North Aubry lithium pegmatite deposit comprises one large, main, sub-horizontal dome like pegmatite body, plunging north to north easterly over 225 metres and extending up to 260m down dip to the east. This main body is underlain by two smaller bodies, sub-parallel to the main body (Figure 1) This Mineral Resource estimate contains numerous high-grade lithium zones (6% Li<sub>2</sub>O) that outcrop. The North Aubry deposit is overlain by a thin horizon of overburden sediments averaging 2 metres thick. The topographic high where the deposit is located, which rises up to 20m above the surrounding plain, host most of the Mineral Resource on the western flank.

The Mineral Resource has a total vertical depth of 100 metres, beginning at the natural surface.



**Figure 3.** Oblique Section of the North Aubry lithium deposit looking North-West

## IMMEDIATE DEVELOPMENT STRATEGY

With the successful definition of the initial Mineral Resource estimate at the North Aubry deposit, Ardiden is well positioned and dedicated to the rapid development of the North Aubry deposit towards production.

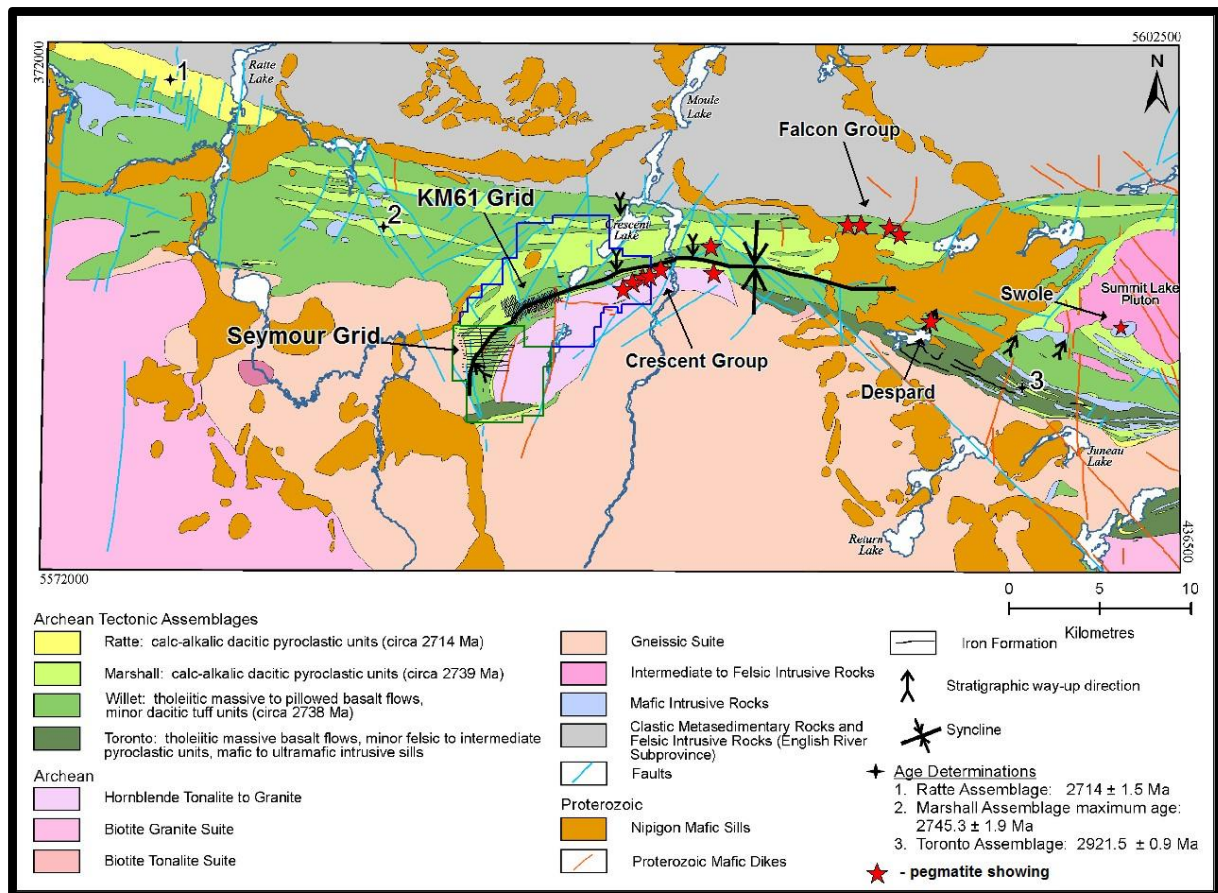
Ardiden is progressing feasibility work on North Aubry, in order to obtain a better understanding of the economics and potential of the lithium deposit. Once the feasibility work is complete, Ardiden will be better positioned to apply for mining approvals at Seymour Lake and continue to advance off-take discussions with various parties from Europe, Asia and North America.

The Company has already commenced various Feasibility Study activities including bulk sample metallurgical test work and environmental baseline study. Ardiden is currently liaising with a number of specialised mining consultants in order to advance further feasibility work at North Aubry as soon as practicable.

## MINERAL RESOURCE ESTIMATION

### Geology and Geological Interpretation

The property is located within the Caribou Lake Greenstone Belt, which trends east-northeast along the north shore of Lake Nipigon, extending eastward to the Onamon-Tashota Greenstone Belt in Western Ontario, Canada. Government mapping shows the Seymour claim area as underlain by mostly Willet Assemblage mafic volcanic-dominated rocks, with lesser units of Toronto Assemblage mafic volcanics, and minor Marshall Assemblage dacite tuffs and related sediments. The eastern part of the property is underlain by a tonalite to granodiorite pluton, thought to be the parental intrusion to the rare metal pegmatite dykes and sills exposed at both the North and South Aubry showings. All Assemblages are crosscut by felsic to mafic dykes of various ages and rock types, including the aforementioned pegmatite sills and dykes. The most volumetrically significant post-mineralization intrusive rocks are Proterozoic Nipigon mafic sills, which form the caps of the prominent “mesa-like” hills in the Lake Nipigon area.



**Figure 4.** Regional Geology, at Seymour Lake including the North Aubry Lithium Resource

Locally, in outcrop and trench exposures the pegmatites are of two general varieties; the first pegmatite is white, and is composed of k-spar, lesser albite, quartz and muscovite and is medium to very coarse grained (megacrystic).

The other pegmatite is orange-red, medium to very coarse grained with k-spar and lesser quartz and muscovite. Both pegmatites can contain spodumene, beryl and tantalite with more secondary hematite alteration noted in the orange variety, which helps impart its distinct colouration. The bulk of the pegmatites occur as horizontal sills which are often connected by a lesser volume of vertical dikes.

The mafic volcanics are cross cut by at least two generations of shears and/or faults. The main shears dip sub-vertically, and trend north, northeast and east. A prominent set of sub-horizontal step-faults are exposed on a few steep-sided outcrops, and these appear to form the main locus of pegmatite emplacement, especially in proximity to the shears, which also host thin pegmatite dykes. The general broad antiform-synform structure of the pegmatites may be due to dip undulations in the step-faults, or possibility to post-pegmatite folding.

The most prominent alteration found in the mafic volcanics is epidote-calcite-quartz, usually associated with pillowed units which show some degree of strain.

The pegmatites vary in width and are generally comprised quartz-albite- muscovite-spodumene in varying amounts. Late-stage albitisation in the central part of the main outcrop area has resulted in fine- grained, banded, sugary pegmatites with visible fine-grained, disseminated tantalite. A thin hornfels characterised by needle hornblende crystals is often observed in adjacent country rocks to the pegmatite intrusives. Tantalite



generally occurs as fine disseminated crystals commonly associated with fine-grained albite zones, or as coarse crystals associated with cleavelandite.

The geological model developed is based on lithological logging of pegmatites within a mafic host, with occasional cross cutting minor pegmatitic dykes.

### **Drilling Techniques**

Drilling supporting the Mineral Resource is diamond core drilling (DD). The North Aubry deposit database includes 124 diamond drill holes for 11,240 of drilling. The Mineral Resource is based on assay data from 87 DD holes for 8,053 metres of drilling

Drilling has been mostly angled to achieve the most representative intersections through mineralisation, though some historical drilling was vertical. Drilling within the resource area has typically been conducted on a 30m by 30m grid.

### **Sampling Techniques**

Channel sampling assays (historical and Arviden) were considered for the reporting of the Exploration Target. Sampling was undertaken by Arviden on known exposures, and through mechanical excavation to expose bedrock immediately beneath the shallow soil cover. Figures 9, 10 and 11 present the georeferenced mapping of the trenches and known exposures.

### **Historical Drilling prior to Arviden ownership in Support of Mineral Resource Estimate**

DD core was typically sampled on 1m intervals across zones of interpreted mineralisation

### **Arviden drilling in Support of Mineral Resource Estimate**

DD core was typically continuously sampled at 1m intervals from the collar to the 10m past the end of mineralisation. Where required by changes in lithology, mineralisation or alteration, core samples may be shorter or longer than the typical 1m. Core was cut into half with one half sent for analysis and the other half stored in the core library at the project site.

### **Sample Analysis Method**

All samples (historical and Arviden) were analysed by Actlabs in Thunder Bay, Ontario Canada a SCC (Standards Council of Canada) accredited laboratory. The assay technique used for all Arviden sampling was FUS-Na202 with a 0.01% detection limit. The assay technique is considered to be robust.

Quality control procedures included the insertion of certified standards and blanks into the sample stream. Standards and duplicates were submitted in varying frequency throughout the exploration campaign and internal laboratory standards, duplicates and replicates are used for verification.

### **Resource Estimation Methodology**

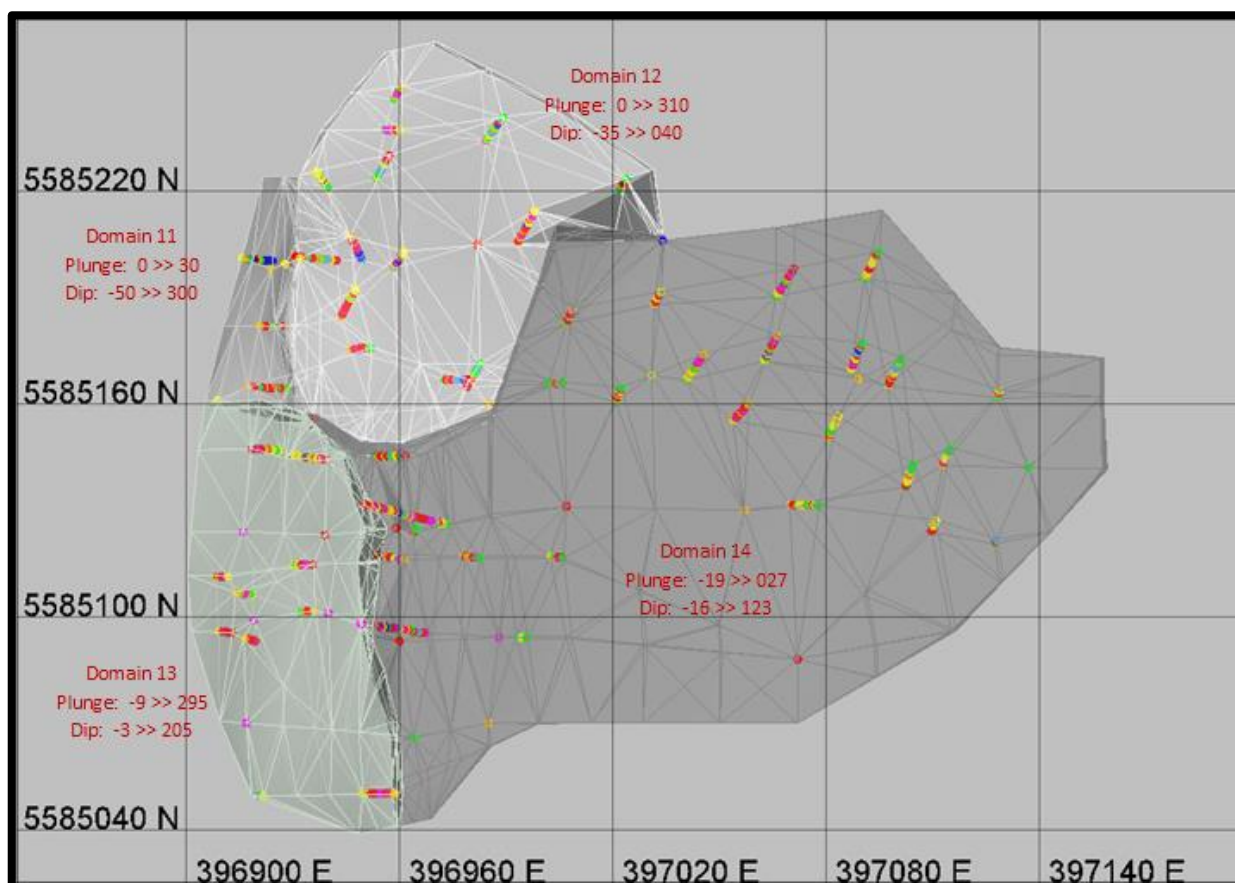
Block model construction was completed using 12mE x 12mN x 2mRL size parent blocks, and sub-blocking to a minimum of 3mE x 3mN x 0.5mRL. The parent block size approximates half the average drill spacing in the region of closer spaced drilling (central west) and the minimum sub-block size was chosen to enable accurate representation of the wireframe volumes with the block model. Samples were composited to 1m intervals weighted by bulk density based on assessment of the raw drill hole sample intervals and positive correlation evident between Li<sub>2</sub>O grades and bulk density. No high-grade cuts were used for Li<sub>2</sub>O based on statistical review of the composite grade data.

The following linear regression based on Li<sub>2</sub>O grades and bulk density measurements for 72 core samples of pegmatite was used to calculate bulk density values for all samples prior to compositing.

$$\text{Bulk Density} = 0.0684 * \text{Li}_2\text{O} + 2.6626$$

Li<sub>2</sub>O grades and the insitu bulk density for the main mineralised zones were interpolated using ordinary kriging. The structural domains of each mineralised zone were estimated separately using soft boundaries between the structural domains. A two-search pass strategy was employed, with successive searches using more relaxed parameters for selection of input composite data, and a greater search radius. Blocks within the southern structural domain of the lower zone and the small mineralised zone located down dip were estimated using the inverse distance cubed algorithm due to the sparsity of data for these domains.

The resource model was validated both visually and statistically prior to final reporting.



**Figure 5.** North Aubry lithium deposit, Plan view of mineralised domain 1 sub-divided orientation domain regions.



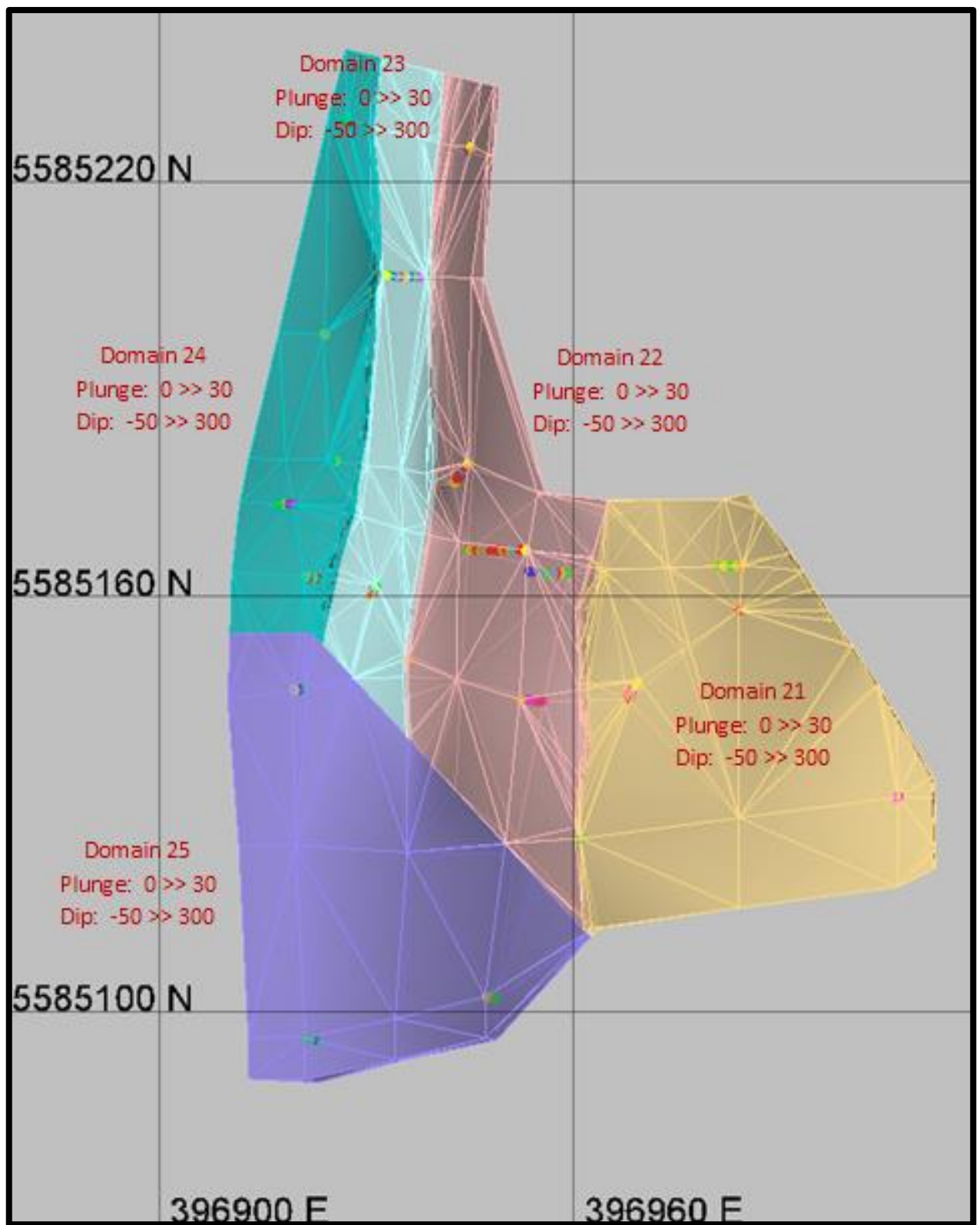


Figure 6. North Aubry Project, Plan view of mineralised domain 2 sub-divided orientation domain regions.

### Cut-off Grades

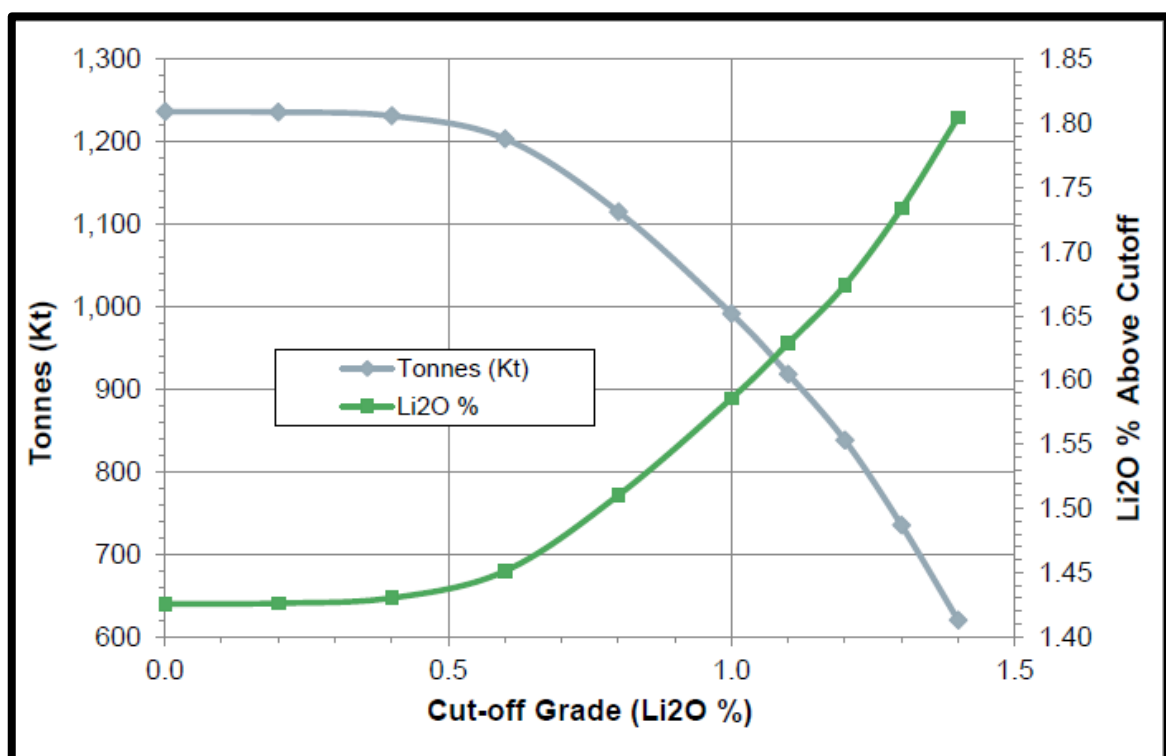
The pegmatite wireframes were generated using logged pegmatite lithologies and a minimum downhole width of 2m.

The Mineral Resource is reported using a 0.4% Li<sub>2</sub>O cut-off which approximates a conservative cut-off grade used for potential open pit mining as determined from preliminary and indicative modelling.

### Mineral Resource Classification

The Mineral Resource has been classified in the Indicated and Inferred categories, taking into consideration numerous factors including drill holes spacing, estimation quality statistics (kriging slope of regression), number of informing samples, average distance to informing samples in comparison to the semivariogram model ranges, and overall coherence and continuity of the modelled mineralisation wireframes.

A grade tonnage curve (all classes of resource is presented as Figure 7).



**Figure 7.** Mineral Resource Estimate Grade Tonnage Curve (all resource classes combined).

## Eventual Economic Extraction

The North Aubry pegmatite deposit has not previously been mined for any mineral. Consideration of the results of metallurgical test work, which was announced on 9 February 2017 (*"Seymour Lake: Preliminary Test Work Shows Potential to Produce High-Grade Lithium Concentrate Grading Up To 7.73% Li<sub>2</sub>O"*), was given in determining the potential for eventual economic extraction of the estimated resource. The Heavy Liquid Separation (HLS) test work produced lithium concentrate up to 7.73% Li<sub>2</sub>O with minimal gangue minerals. These results were supported by the ASX announcement on 26 April 2017 (*"Seymour Lake: Additional Metallurgical Test Work Confirms Ability to Produce Exceptionally High-Grade Lithium Concentrate"*). The second round of HLS test work produced lithium concentrate up to 7.23% Li<sub>2</sub>O.

The economic potential was supported by ASX announcement on 23 June 2017 (*"Seymour Lake: DMS Metallurgical Test Work Continues to Produce High-Grade Lithium Concentrate"*). The DMS test work indicates that lithium concentrates of up to 6.43% Li<sub>2</sub>O can be produced from Dense Media Separation techniques, achieving a recovery of up to 91% at a very coarse crush size of 9.5 mm.

Further, consideration was made with the ASX announcement dated 31 August 2017 (*"Flotation Test Work Produces High-Grade Lithium Concentrate"*). Test work indicates that lithium concentrates of up to 6.16% Li<sub>2</sub>O can be produced from a single stage flotation, achieving a recovery of up to 76% at a coarse grind size of 150 microns. Variability test work is currently underway with a range of samples from across the North Aubry resource area, and a suitable processing flowsheet will be developed further for this project.

The North Aubry Mineral Resource daylights at surface and extends to a depth of around 100m below natural surface level. Preliminary and indicative modelling suggests traditional open pit mining methods could be utilised, with the nearby trans-Canada railway providing a suitable transport solution for concentrate exports.

## EXPLORATION TARGET FOR NORTH, CENTRAL AND SOUTH AUBRY

Ardiden estimates a combined Exploration Target range of approximately **3Mt to 5Mt at 1.2%Li<sub>2</sub>O to 1.6%Li<sub>2</sub>O** for the two prospect areas of **Central** and **South Aubry**, as well as extensions to North Aubry. The potential quantity and grade is conceptual in nature, and there has been insufficient exploration to estimate a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource.

The Exploration Target has been reported in accordance with the JORC Code, 2012 Edition on a qualitative basis taking into consideration numerous factors including regional and local context, data support, surface mapping and sampling and historical data. All factors that have been considered have been included in Appendix 1.

The Exploration Target is conceptual in nature and should not be construed as a Mineral Resource that may or may not be defined as a result of further drilling and sampling.

### Competent Person's Statement

*The information in this report that relates to Data and Exploration Target at the North, Central and South Aubry on Seymour Lake Lithium project is based on, and fairly represents, information and supporting documentation prepared by Ms Karen Lloyd, who is a Fellow of the Australasian Institute of Mining & Metallurgy. Ms Lloyd is not a full-time employee of the Company Ms Lloyd is employed as a Consultant from Jorvik Resources Pty Ltd. Ms Lloyd has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Mineral Resources and Ore Reserves (the JORC Code)'. Ms Lloyd consents to the inclusion in this report the exploration results and the supporting information in the form and context as it appears.*

## Basis for Exploration Target

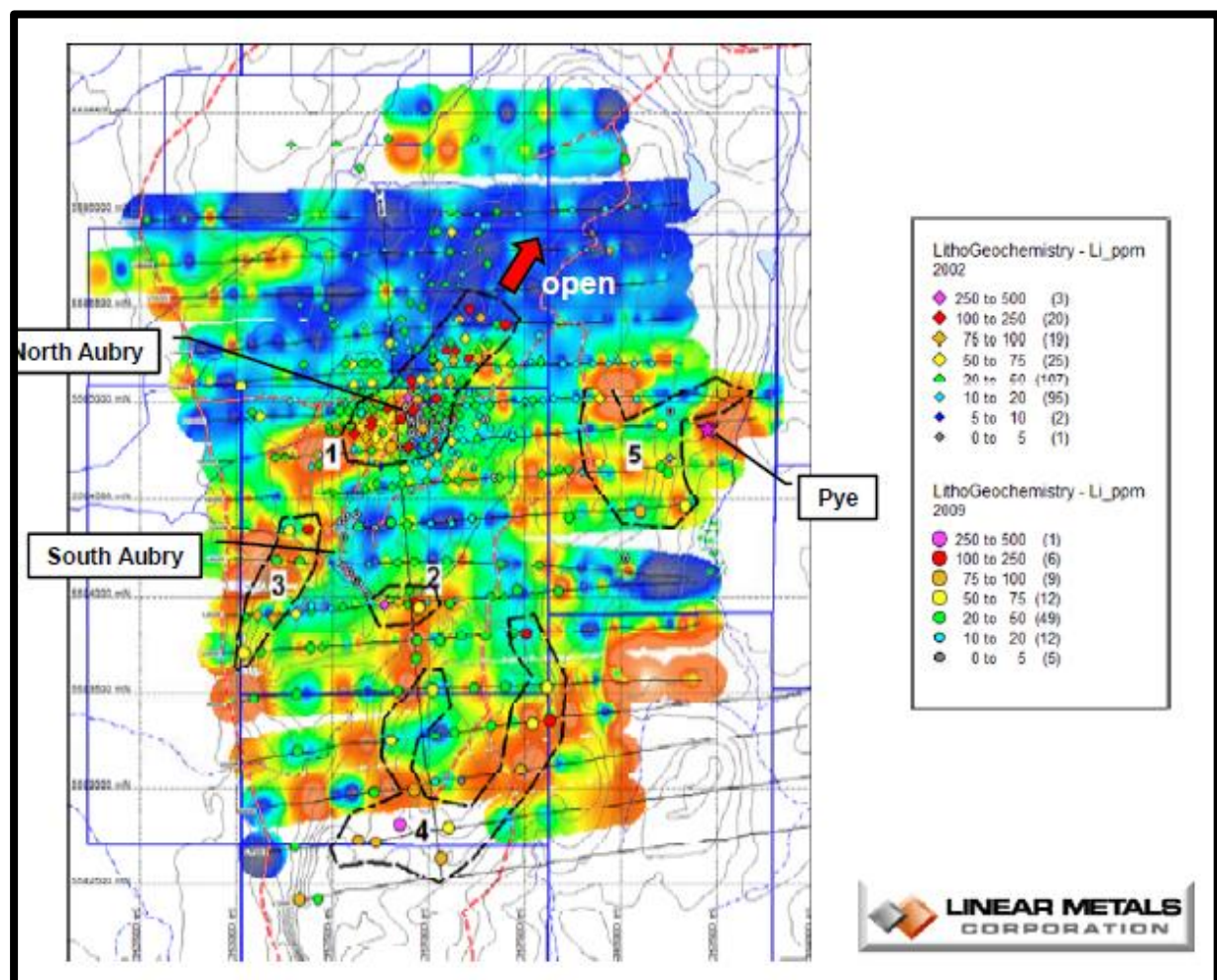
Extensive historical data collection, for academic and prospective purposes, has allowed an extensive assessment of the geology of the Seymour Lake project.

In 2002, Linear Resources undertook some surface work, including expansion of pre-existing trenches and lithogeochemical sampling, and drilled 1866 m in 32 holes. This work is publicly available at the website of the Ontario Geologic Survey as AFRI# 52I08NW2004.

In 2008, in an effort to advance the property, 200 metre spaced grid lines at Seymour were refreshed and an Enzyme Leach soil survey undertaken at a 50-metre sample spacing along the lines. A total of approximately 640 samples were collected, which successfully indicated several potential areas of additional pegmatite-hosted lithium-tantalum-beryllium mineralization, both close to the known occurrences and at kilometric distances from them.

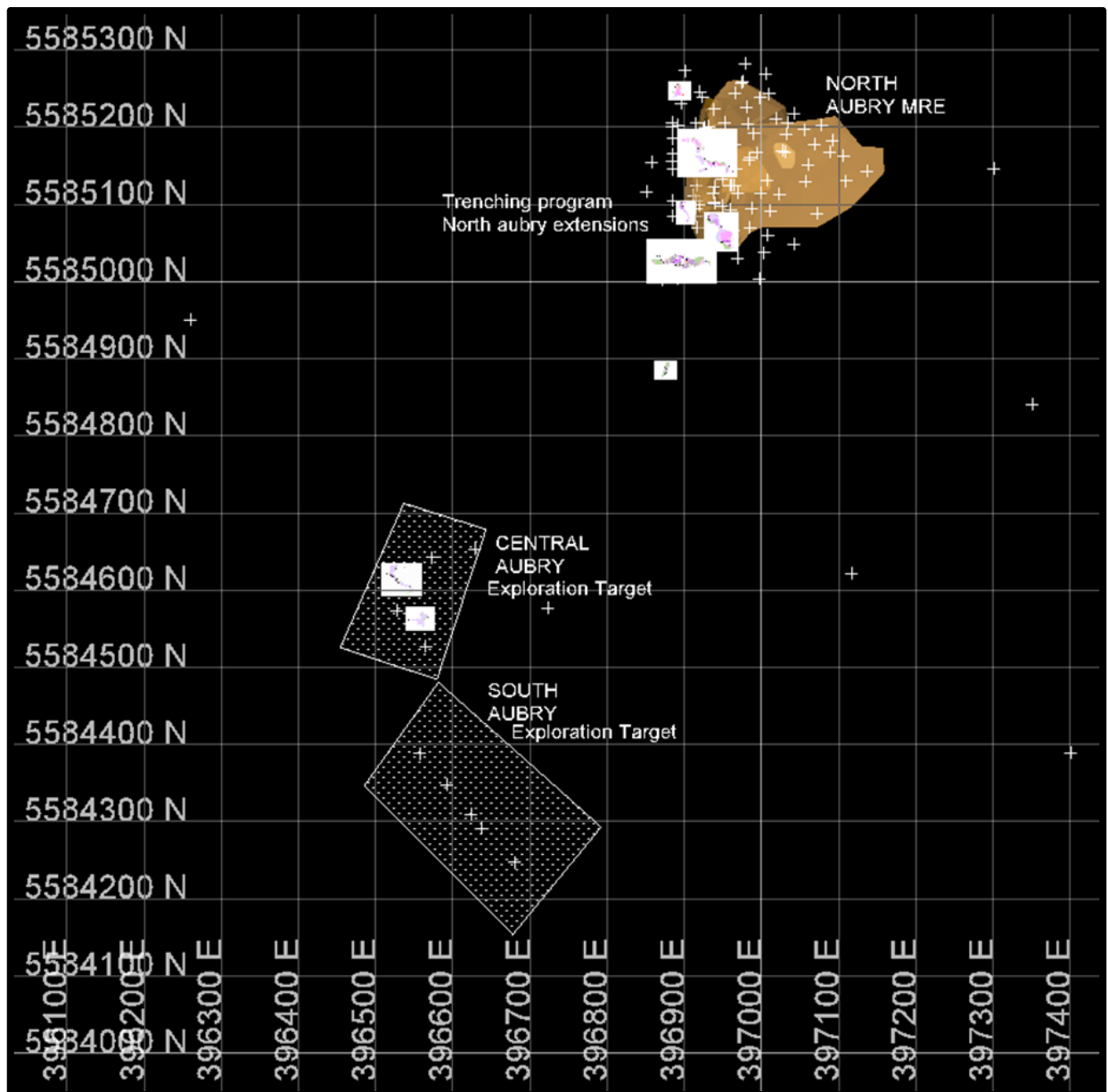
In 2009, concurrent with the drilling, Linear crews extended the grid to the south, and mapping, prospecting, lithogeochemical sampling, and extensions to the Enzyme Leach soil survey were completed.

Although the 2009 drilling did not clarify the exact relationship between the Enzyme Leach soil anomaly profiles and patterns to the distribution of pegmatite lenses, the samples do show a very large area of anomalous lithium responses, both close to and at kilometric distances from the known showings, this strongly indicates that there must be additional undiscovered pegmatite sources within the grid area. Several reconnaissance lines completed well to the south of the current grid also returned anomalous lithium, and need to be followed up. Till sampling in this area by the OGS also detected strongly anomalous lithium, further supporting the Enzyme Leach soil anomalies.



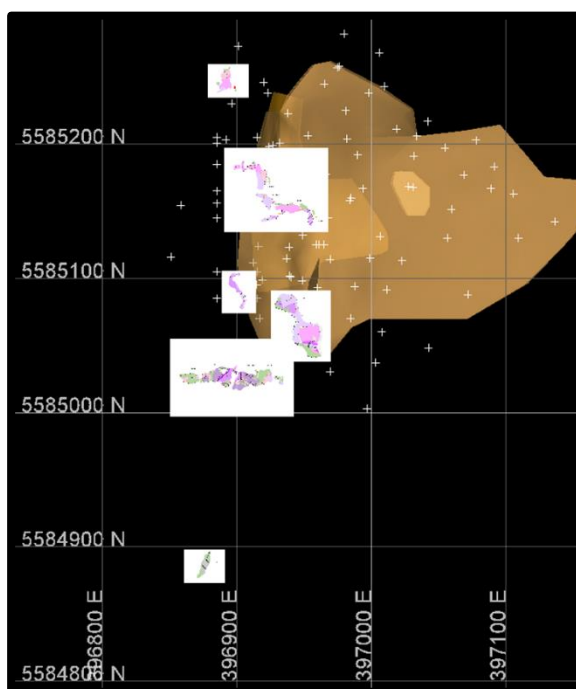
By combining the 2002 and 2009 sample sets, lithogeochemical sampling of the supracrustal rocks (i.e. mafic volcanic, not pegmatites), both “fresh” and sheared or altered, also indicate at least five significant untested areas of very strong lithium enrichment (complimented by anomalous rubidium and caesium) located immediately SE of the South Aubry showing, where an approximately 200 m long anomaly suggests there are significant extension of the sills in this direction. Furthermore, a third anomaly, approximately 800 m long is located to the west of the South Aubry, suggesting excellent potential for the subsurface extension of the Lower horizon and even the Main horizon if the geometry flexes over to a westward dip.

The Central Aubry prospect is located approximately 500m south of the North Aubry prospect and about 200m north of the South Aubry prospect and is comprised of two main exposures. Arden mapping of the Central Aubry prospect shows strong presence of spodumene mineralisation over the majority of the exposures surface.

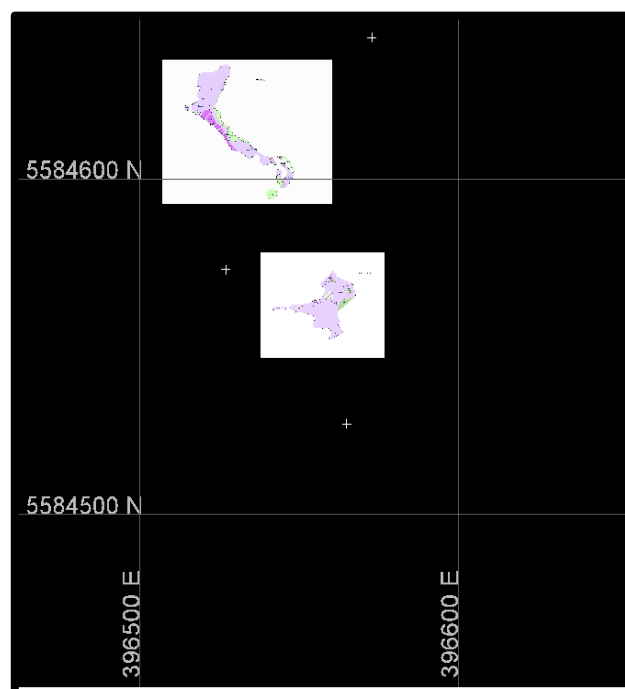


**Figure 2.** Plan View of Seymour Lake Exploration Target with North Aubry Mineral Resource Estimate





**Figure 3.** Surface mapping around North Aubry resource area.



**Figure 4.** Surface mapping at the Central and South Aubry prospects.

### **BASIS OF GRADE AND TONNAGE RANGE DETERMINATION**

The assumed average grade ranges (of 1.2% to 1.6% Li<sub>2</sub>O) of the Exploration Target was largely based on benchmarking the mineral assemblages seen in the surface exposures with those logged during diamond drilling at North Aubry and the results of the Arden trenching and rock chip sample program which was last as reported to the ASX on 21 September 2016)

The Exploration Target has been reported in accordance with the JORC Code, 2012 Edition on a qualitative basis and taking into consideration numerous factors including regional and local context, data support, surface mapping and sampling and historical data All factors that have been considered have been included in Appendix 1.

### **PROPOSED EXPLORATION ACTIVITIES DESIGNED TO TEST VALIDITY OF THE EXPLORATION TARGET**

Arden is currently designing a further Diamond drill programs over the North, Central and South Aubry prospects that will be undertaken over the next 12 months, to confirm parts of the estimated Exploration Targets. It is anticipated that this drilling will provide the necessary data to estimate a Mineral Resource for parts of these three prospects by late 2018.

### **CONCLUSIONS**

The definition of the maiden Mineral Resource estimate for Lithium at North Aubry demonstrates the true world class potential and the overall prospectivity of the Seymour Lake project, to host both multiple high-grade lithium deposits.

Arden now looks to rapidly expand and advance the North Aubry deposit in order to commence lithium production as soon as practicable.



The Company looks forward to providing further updates as they come to hand.

**THIS ANNOUNCEMENT EFFECTIVELY CEASES THE TRADING HALT REQUESTED BY THE COMPANY ON 2 OCTOBER 2017. THE COMPANY IS NOT AWARE OF ANY REASON WHY THE ASX WOULD NOT ALLOW TRADING TO RECOMMENCE IMMEDIATELY.**

**ENDS**

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**About Ardiden Ltd**

Ardiden Limited (ASX: ADV) is an emerging international diversified exploration and development company possessing a mature multi-element asset portfolio, with a near term development pipeline, focused quality 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 Wisa Lake Lithium project 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 Pickle Lake Gold Properties (under option to acquire 100%) are located within the prolific gold-producing Meen-Dempster Greenstone Belt of the Uchi Geological Sub-province of the Canadian Shield, in close proximity to several of the Company's existing projects and to the regional mining centre of Thunder Bay. The Properties consists of four separate gold properties offering both advanced development opportunities and early stage exploration. Over 25,000m of historical diamond drilling completed across the Pickle Lake Gold Properties, confirming the potential for multiple extensive gold mineralised zones at both Dorothy-Dobie Lake and Kasagiminnis Lake, with gold mineralisation remaining open along strike and at depth.

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 Ardiden 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 test work 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 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 facilities) and local contractors and suppliers.

#### **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.

## Table 1: Seymour Lake Lithium Project (Claim Title 1245661)

### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li><i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></li> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li><i>In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<ul style="list-style-type: none"> <li>Sampling data considered in the Exploration Target includes grab samples and continuous channel samples from natural exposures and trenched areas.</li> <li>Sampling data considered in the resource estimate was derived from diamond drilling completed by Ardiden in 2016-2017 and historical diamond drilling completed by previous project owners</li> <li>Diamond Core was split using a hydraulic splitter (Ardiden) or manually (historical) along a plane perpendicular to the foliation within the host rock</li> <li>No procedural sampling documentation is available for the historical drilling or sampling</li> </ul> <p><u>Ardiden Channel Sampling:</u></p> <ul style="list-style-type: none"> <li>Continuous channel sampling along natural and trenched exposures using angle grinders</li> <li>Standard sample intervals averaged 1 m.</li> <li>The sample preparation and assaying techniques are industry standard and appropriate for this type of mineralisation.</li> </ul> <p><u>Ardiden drilling:</u></p> <ul style="list-style-type: none"> <li>Bagging of the half core samples was supervised by a geologist to ensure there are no numbering mix-ups.</li> <li>One tag from a triple tag book was inserted in the core tray in the position of the sample interval.</li> <li>Standard sample intervals averaged 1 m.</li> <li>Sampling continued through intervening barren rock (if less than 10m width) where multiple Pegmatite zones</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>were intersected</p> <ul style="list-style-type: none"> <li>The sample preparation and assaying techniques are industry standard and appropriate for this type of mineralisation.</li> </ul>
<i>Drilling techniques</i>	<ul style="list-style-type: none"> <li><i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is orientated and if so, by what method, etc).</i></li> </ul>	<ul style="list-style-type: none"> <li>All drilling was Diamond wireline core drilling.</li> <li>The drill core size is CHD 76, core diameter is 43.5 millimeters</li> <li>Drillholes were orientated using the Reflex ACT II RD core orientation tool</li> <li>All historical drillholes were vertical</li> </ul>
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li><i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></li> </ul>	<ul style="list-style-type: none"> <li>The sample interval of core was measured and recorded along with a description and incorporated in the completed drill logs.</li> <li>Core within the mineralised zone tended to be uniform and competent so loss was minimal and samples represent the true nature of the mineralisation</li> <li>No relationship between sample recovery and grade is evident.</li> </ul>
<i>Logging</i>	<ul style="list-style-type: none"> <li><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></li> <li><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li><i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>Samples represent half the core width, and are logged in qualitative detail and data collected is suitable to support appropriate Exploration Targets and Mineral Resource estimation</li> <li>Routine core and trench photography support the logging.</li> <li>All trenches and the all core from drilling is logged</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> </ul>	<ul style="list-style-type: none"> <li>Core is split in half using a pressure hydraulic splitter (historical drill core was split manually) with the remaining half retained in the core tray.</li> <li>Chips from channel sampling were collected using an angle grinder along surveyed channels</li> <li>Mineralisation is massive and relatively uniform so</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p>assay samples closely represent the in situ material.</p> <ul style="list-style-type: none"> <li>• Samples were taken on an average of 1 meter intervals and were determined to be appropriate for the mineralised material being sampled</li> </ul>
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li>• <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All samples (historical and Ardiden) were analysed by Actlabs in Thunder Bay, Ontario Canada a SCC (Standards Council of Canada) accredited laboratory.</li> <li>• The assay technique was FUS-Na202 with a 0.01% detection limit</li> <li>• Quality control procedures included the insertion of certified standards and blanks into the sample stream.</li> </ul>
<i>verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill logs and sample information is documented and stored digitally in field laptop units and backed up on the Ardiden server.</li> </ul>
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>• <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li>• <i>Specification of the grid system used.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill hole collar positions were located with handheld WAAS enabled handheld GPS units set for recording UTM NAD83 Zone 16N projection coordinates and drilled collars were picked up using a Trimble DGPS. Historical drill collars, trenches and natural exposures</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<p>were using a Trimble DGPS</p> <ul style="list-style-type: none"> <li>Drillholes were orientated using the Reflex ACT II RD core orientation tool.</li> <li>Historical drillholes were vertical.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>Core samples of the mineralised zone were taken at approximately 1 meter intervals and deemed appropriate to represent the in situ nature of the mineralization.</li> <li>No sample compositing</li> <li>data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li><i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drill hole locations were designed to intercept the mineralised zone as close to true width as possible to avoid sampling bias.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>Samples were secured and delivered to the assay lab under chain of custody controls by the Caracle Creek Consulting group</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>Karen Lloyd of Jorvik Resources undertook a month long field excursion to the project site during July 2017 to observe and audit sampling procedures and practices, and to supervise the extraction of a bulk sample for metallurgical testwork. A site visit was also made to ACTLABS in Thunder Bay. The results of the audit</li> </ul>



Criteria	JORC Code explanation	Commentary
		indicate a suitable sampling and data collection procedure.

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li><i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></li> <li><i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</i></li> </ul>	<ul style="list-style-type: none"> <li>All claims in the Seymour Lake Lithium project are in good standing and these include claims 1245661 1245648 1245662 1245664 1245646, which are 100% owned by Stockport Exploration Inc. Ardiden has exercised option to acquire 100% ownership of the project claims.</li> <li>Ardiden staked and owns additional claims around the project including claims:  4270593, 4270594, 4270595, 4270596, 4270597, 4270598, 4279875, 4279876, 4279877, 4279878, 4279879, 4279880, 4279881, 4279882, 4279883, 4279884, 4279885, 4279886, 4279887, 4279888, 4279889, 4279890, 4279891, 4279869, 4279870, 4279871, 4279872, 4279873 and 4279874</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>Other parties have not appraised the exploration carried out to date</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>Seymour Lake area pegmatites have been classified as belonging to the Complex-type, Spodumene-subtype. Mineralization is dominated by spodumene (Li), with lesser tantalite(Ta) hosted in a series of sub parallel pegmatite structures</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material</i></li> </ul>	<ul style="list-style-type: none"> <li>This information is attached as Addendum to this Table</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>drill holes:</i></p> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> <ul style="list-style-type: none"> <li>● <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i></li> </ul>	
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>● <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li>● <i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></li> <li>● <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>● With the homogeneity of the mineralised material, sample intervals for the most part were kept at one metre intervals</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>● <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>● <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>● <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg ‘down hole length, true width not known’).</i></li> </ul>	<ul style="list-style-type: none"> <li>● Mineralised zones were determined to be shallow dipping and drill holes were drilled vertically so that mineralised drill intercepts represented close to true widths minimizing any bias in reporting of results.</li> </ul>
<i>diagrams</i>	<ul style="list-style-type: none"> <li>● <i>Appropriate maps and sections (with scales) and</i></li> </ul>	<ul style="list-style-type: none"> <li>● See Figure 6 for the location of the drill hole collars and</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	Figure 2 for a typical oblique section, which demonstrates the geometry of the mineralisation
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>• <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No comprehensive report has been completed to date to include the latest Ardiden exploration results.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>• <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All meaningful and material data is reported</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Refer to text within the report.</li> </ul>

## Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in the preceding section also apply to this section)

Criteria	JORC Code explanation	Commentary
Database integrity	<i>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</i>	<ul style="list-style-type: none"> <li>• Exploration data logging is completed into MS Excel templates using standard logging codes on laptop computers.</li> <li>• Jorvik has compiled a central drill hole database from digital drill logs, laboratory analytical reports and other digital data sources containing historical data using MS Access.</li> </ul>
	<i>Data validation procedures used.</i>	<ul style="list-style-type: none"> <li>• Data were validated for internal database integrity as part of the database compilation process completed by Jorvik. This includes logical integrity checks for data beyond the hole depth maximum, and overlapping from-to errors within interval</li> </ul>
Site visits	<i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i>	<ul style="list-style-type: none"> <li>• Karen Lloyd of Jorvik resources has visited site and reviewed the drilling, sample collection, and logging data collection procedures, along with conducting a review of the site geology.</li> <li>• The outcome of the site visits (broadly) were that data has been collected in a manner that supports reporting a Mineral Resource estimate in accordance with the JORC Code, and controls to the mineralisation are well-</li> </ul>
	<i>If no site visits have been undertaken indicate why this is the case.</i>	<ul style="list-style-type: none"> <li>• A site visit was undertaken as above</li> </ul>
Geological interpretation	<i>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</i>	<ul style="list-style-type: none"> <li>• The geological interpretation has been derived from a combination of geological logging of pegmatites within dominantly mafic to intermediate volcanic host rocks, and geochemical assay data. The deposit geology is well understood and is reflected in the generally moderate to high confidence in both the mineralisation and geological interpretations.</li> </ul>

	<i>Nature of the data used and of any assumptions made.</i>	<ul style="list-style-type: none"> <li>• The input data used for geological modelling has been derived from the qualitative and quantitative logging of lithology and mineralogy, and geochemical composition of samples returned from diamond drilling.</li> <li>• Mineralised pegmatite was interpreted and wireframe modelled using a 0.2% Li<sub>2</sub>O cutoff grade. This was validated against logging of lithology and spodumene with the majority of logged pegmatite captured within the modelled mineralized pegmatite extents. Intersections of mafic to intermediate volcanic rocks dominate outside the pegmatite wireframes.</li> <li>•</li> </ul>
	<i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i>	<ul style="list-style-type: none"> <li>• The geological model developed has a solid lithological basis, and is controlled by the presence of visually distinct pegmatite within drillholes. Pegmatite structures have been modelled as predominantly low angle / sub-horizontal structures on the basis of a high density of input drillhole data and confirmation of the interpretation on the basis of mapping. The data do not readily lend themselves to alternative interpretations, and it is unlikely that such alternatives would yield a more geologically</li> </ul>
	<i>The use of geology in guiding and controlling Mineral Resource estimation.</i>	<ul style="list-style-type: none"> <li>• The model developed for mineralisation is geologically driven; controlled by the presence or absence of pegmatite.</li> </ul>
	<i>The factors affecting continuity both of grade and geology.</i>	<ul style="list-style-type: none"> <li>• Geological continuity is controlled by the preference for fractionated pegmatitic fluids to follow preferential structural pathways through the host rocks (an intercalated pile of mafic to intermediate volcanics. Grade within this pegmatite is controlled by numerous factors such as fluid residence time, degree of fluid fractionation and pegmatite thickness</li> </ul>

<i>Dimensions</i>	<i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i>	<ul style="list-style-type: none"> <li>The North Aubry Mineral Resource is comprised of three zones of pegmatite lithium mineralization. The main dome like pegmatite body, which ranges from 2m to 20m thick (15m average) extends from surface 225m down plunge at 0 to -35 degrees towards the N-NE (to 70m depth), and 265m down dip at 0 to -25 degrees (to 100m depth) to the east. Two smaller sub-parallel zones are located 30-40m below the main zone with the larger zone ranging from 2m to 10m thick (6m average), extending 150m down plunge to the north from 60m to 115m below surface and extending from 25m to 100m across plunge (sub-horizontal undulating mineralization) to the east. The smallest zone which averages 3m thick is located 25m down dip (35 degrees east) from the second zone and has dimensions of 35m to the NW and 25m to the SE. The deepest portions of the resource (100m below surface) are located at the northern and eastern limits of the deposit.</li> </ul>
<i>Estimation and modelling techniques</i>	<i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i>	<ul style="list-style-type: none"> <li>The North Aubry Mineral Resource was estimated using predominantly ordinary kriging to estimate Li<sub>2</sub>O grades and bulk density into a 3-D block model using Vulcan software.</li> <li>Block model construction was completed with 12mE x 12mN x 2mRL size parent blocks, and sub-blocking to a minimum of 3mE x 3mN x 0.5mRL. The parent block size approximates half the average drill spacing in the region of closer spaced drilling (central west) and the minimum sub-block size was chosen to enable accurate representation of the wireframe volumes with the block model.</li> <li>Samples were composited to 1m intervals weighted by bulk density based on assessment of the raw drill hole sample intervals and positive correlation evident between Li<sub>2</sub>O grades and bulk density within the pegmatite units.</li> </ul>



		<p>No high grade cuts were used for Li<sub>2</sub>O based on statistical review of the composite grade data. The following linear regression</p> <ul style="list-style-type: none"> <li>• The two largest mineralized zones were subdivided into structural domains reflecting variations in the pegmatite geometry, with the upper main zone subdivided into four domains and the lower main zone into five domains.</li> <li>• Experimental variography was generated and modelled separately for each of the upper zone structural domains but was combined for the lower zone domains due to the relative sparsity of data. Generally low relative nugget effects (0.1 to 0.2) were modelled followed by two spherical structures representing the non-nugget variance for each variography dataset. Short range structures typically less than or equal to 20m dominate the non-nugget variance in the plane of the pegmatite bodies, followed by longer overall ranges from 15 to 80m. Azimuth and plunge angles of greatest continuity vary significantly amongst the upper main zone domains reflecting the influence N- NE and NW trending structural influences. Overall average first and second spherical structure ranges are evident at 20m and 45m.</li> <li>• All statistical and variography analyses and were completed Supervisor software.</li> <li>• Li<sub>2</sub>O grades and insitu bulk density for the upper and lower main mineralised zones were interpolated using ordinary kriging. The structural domains of each zone were estimated separately using soft boundaries. A two search pass strategy was employed, with the second pass using more relaxed parameters for selection of input composite data, and greater search radii. Blocks within the southern structural domain of the lower zone and the small lower zone located down dip were estimated using the inverse distance cubed algorithm due to the sparsity</li> </ul>
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		<p>of data for these domains.</p> <ul style="list-style-type: none"> <li>• Bulk density was estimated as a carrier variable to Li2O for all domains due to correlation evident between pegmatite Li2O grades and bulk density.</li> <li>• All geological modelling and grade estimation was completed using Vulcan software.</li> <li>• The resource model was validated both visually and statistically prior to final reporting.</li> </ul>
	<i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of</i>	<ul style="list-style-type: none"> <li>• No check estimates are available for the current Mineral Resource.</li> </ul>
	<i>The assumptions made regarding recovery of by- products.</i>	<ul style="list-style-type: none"> <li>• No recovery of any potential economic by-products has been considered in the resource estimate.</li> </ul>
	<i>Estimation of deleterious elements or other non- grade variables of economic significance (eg. sulphur for acid mine drainage characterisation).</i>	<ul style="list-style-type: none"> <li>• No deleterious elements have been identified or estimated.</li> </ul>
	<i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i>	<ul style="list-style-type: none"> <li>• Kriging Neighbourhood Analysis (KNA) was conducted using Vulcan software to determine an appropriate parent block size and search parameters for estimation.</li> <li>• 3-D block model construction was completed using 12mE x 12mN x 2mRL size parent blocks, and sub-blocking to a minimum of 3mE x 3mN x 0.5mRL. The parent block size approximates half the average drill spacing in the region of closer spaced drilling (central west) and the minimum sub-block size was chosen to enable accurate representation of the wireframe volumes with the block model.</li> <li>• A standardized search strategy was employed with an initial estimation pass chosen using search radii corresponding closely to the overall variogram ranges for each structural domain, a minimum of 12 samples and a maximum of 32 to complete an estimate. A second</li> </ul>

		estimation pass was employed to estimate blocks not estimated in the first pass using double the initial search radii and a reduced minimum of 4 samples to complete an estimate.
	<i>Any assumptions behind modelling of selective mining units.</i>	<ul style="list-style-type: none"> <li>No selective mining unit estimation has been conducted as part of the current study.</li> </ul>
	<i>Any assumptions about correlation between variables.</i>	<ul style="list-style-type: none"> <li>The two variables under consideration; Li<sub>2</sub>O and bulk density are clearly correlated based on statistical analysis of the available laboratory Li<sub>2</sub>O and bulk density analyses of 72 mineralized pegmatite samples. The following linear regression formula based on this data were used to calculate in situ bulk density values for all samples prior to compositing the drill hole Li<sub>2</sub>O assay data to 1m intervals weighted by bulk density. Both Li<sub>2</sub>O and bulk density were estimated into the resource block model using exactly the same search and variogram model parameters.</li> </ul>
	<i>Description of how the geological interpretation was used to control the resource estimates.</i>	<ul style="list-style-type: none"> <li>The nature of the lithium mineralisation is such that the definition of the mineralized pegmatite host also adequately defines the lithological boundaries. Structural domains of the main upper and lower mineralized zones have been defined to control the local estimation of Li<sub>2</sub>O grades and bulk density based on variations in the orientation of the pegmatite bodies.</li> </ul>
	<i>Discussion of basis for using or not using grade cutting or capping.</i>	<ul style="list-style-type: none"> <li>The statistical characteristics of the Li<sub>2</sub>O assay data for the raw drill hole samples and 1m downhole composites of the assay data have been statistically assessed. Low coefficients of variation (less than 1) are reported for all three mineralized zones with detailed analysis of probability plots of the data indicating no upper cuts of the Li<sub>2</sub>O composites data used for input to resource grade estimation is required.</li> </ul>

	<i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i>	<ul style="list-style-type: none"> <li>• The results of the Li<sub>2</sub>O estimate into the block model for North Aubry were validated visually and statistically. Estimated block grades were compared visually in section, plan and 3-D against the corresponding input data values. Additionally, swath plots of the input data and block estimates were generated and compared in three orthogonal orientations (northing, easting and RL).</li> </ul>
<i>Moisture</i>	<i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i>	<ul style="list-style-type: none"> <li>• Tonnages are reported on a dry basis.</li> </ul>
<i>Cut-off parameters</i>	<i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	<ul style="list-style-type: none"> <li>• Modelling of mineralisation for the resource was based on a combination of pegmatite lithological logging and a notional 0.2% Li<sub>2</sub>O cutoff applied to the drill hole assay data.</li> <li>• The Mineral Resource is reported using a 0.4% Li<sub>2</sub>O cut-off which approximates a conservative cut-off grade used for potential open pit mining as determined from preliminary pit optimisations.</li> </ul>
<i>Mining factors or assumptions</i>	<i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i>	<ul style="list-style-type: none"> <li>• The methods used to design and populate the North Aubry Mineral Resource block model were defined under the assumption that the deposit is likely to be mined via open pit methods.</li> </ul>

<i>Metallurgical factors or assumptions</i>	<i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i>	<ul style="list-style-type: none"> <li>• The material targeted for extraction predominantly comprises the mineral spodumene, for which metallurgical processing methods are well established. No specific detail regarding metallurgical assumptions have been applied in the estimation the current Mineral Resource, however at the current level of detail available, the Competent Person believes with sufficient confidence that metallurgical concerns will not pose any significant impediment to eventual economic extraction.</li> </ul>
<i>Environmental factors or assumptions</i>	<i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported</i>	<ul style="list-style-type: none"> <li>• No assumptions have been made regarding waste products, however it is reasonable to assume the creation and storage of waste products on site will not be of concern for future mining activities.</li> </ul>
<i>Bulk density</i>	<i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i>	<ul style="list-style-type: none"> <li>• Dry bulk density measurements have routinely been collected by the primary laboratory of mineralized and waste core samples (NQ) at a frequency of 1 in 10 from the exploration diamond drilling completed in 2016 and 2017. Check bulk density measurements from this drilling have also been completed on site at a rate of two per drill hole.</li> <li>• The bulk density measurements used for estimation have been collected using strictly controlled laboratory procedures.</li> <li>• The core samples from North Aubry contain little to no</li> </ul>

		<p>porosity or pore space.</p> <ul style="list-style-type: none"> <li>• The Competent Person considers the values chosen to be suitably representative.</li> </ul>
	<i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i>	<ul style="list-style-type: none"> <li>• As above</li> </ul>
	<i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i>	<ul style="list-style-type: none"> <li>• Correlation between Li<sub>2</sub>O grade and bulk density is clearly evident based on correlation and regression analysis of assay and bulk density determinations completed for 72 analytical samples of pegmatite samples. A linear regression was fitted to the compared dataset which reported an R<sup>2</sup> value of 0.75. Based on this moderate to strong correlation, the following corresponding linear regression was used to calculate bulk density values for all mineralized samples within the drill hole database.</li> <li>• Bulk_Density = 0.0684*Li<sub>2</sub>O + 2.6626</li> <li>• The calculated bulk density values were subsequently used as input to estimation of bulk density into the resource block model.</li> </ul>
<i>Classification</i>	<i>The basis for the classification of the Mineral Resources into varying confidence categories.</i>	<ul style="list-style-type: none"> <li>• The Mineral Resource has been classified as Indicated and Inferred using both qualitative and quantitative parameters; taking into consideration the reliability of the input data, drillhole spacing, estimation quality statistics relative to the modelled variography, and overall coherence and continuity of the modelled mineralisation wireframes.</li> <li>• Kriging slope of regression was used as the primary means to define the spatial extents of the Indicated Resource (slope &gt; 0.6) within the mineralized upper pegmatite sill. All other estimated blocks within the upper and lower pegmatite sills were classified as an Inferred Resource.</li> </ul>



	<i>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i>	<ul style="list-style-type: none"> <li>• The exploration data has been determined to have been collected to industry accepted standards, with the results of the recent drilling strongly supporting the historical data.</li> <li>• The classification reflects areas of lower and higher geological confidence in mineralised domain continuity based on the intersecting drill sample data numbers, spacing and orientation. Overall mineralisation trends are reasonably consistent within the various lithology types over numerous drill sections.</li> </ul>
	<i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i>	<ul style="list-style-type: none"> <li>• The Mineral Resource estimate appropriately reflects the Competent Person's views of the deposit.</li> </ul>
<i>Audits or reviews</i>	<i>The results of any audits or reviews of Mineral Resource estimates.</i>	<ul style="list-style-type: none"> <li>• Internal audits were completed by Jorvik which verified the technical inputs, methodology, parameters and results of the estimate.</li> <li>• The current model has not been audited by an independent third party</li> </ul>
<i>Discussion of relative accuracy/ confidence</i>	<i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i>	<ul style="list-style-type: none"> <li>• The Mineral Resource accuracy is communicated through the classification assigned to the deposit. The Mineral Resource estimate has been classified in accordance with the JORC Code, 2012 Edition using both qualitative and quantitative parameters. Kriging slope of regression was used as the primary means to define the spatial extents of the Indicated Resource (slope &gt; 0.6) within the upper pegmatite sill. All other estimated blocks within the upper and lower pegmatite sills were classified as an Inferred Resource. The remaining factors that have been considered have been adequately communicated in Section 1 and Section 3 of this Table.</li> </ul>

	<i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i>	<ul style="list-style-type: none"> <li>• The Mineral Resource statement relates to a global estimate of in-situ tonnes and grade.</li> </ul>
	<i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i>	<ul style="list-style-type: none"> <li>• No historical mining has been undertaken at North Aubry and therefore no comparison with the current resource estimate has been made.</li> </ul>

**Drill collar Information to Support Section 2 “Drillhole Information”**

HoleID	UTM_East	UTM_North	RL_USE	Depth	Dip	Azimuth
SL02-02	396982	5585204	396	72	-90	0
SL02-03	396985	5585160	395	54	-90	0
SL02-04	396988	5585094	396	47	-90	0
SL02-05	396985	5585070	394	39	-90	0
SL02-07	397034	5585206	395	93	-90	0
SL02-08	396932	5585201	389	30	-90	0
SL02-09	396936	5585156	389	30	-90	0
SL02-14	396919	5585099	385	18	-90	0
SL02-15	396940	5585101	387	24	-90	0
SL02-16	396909	5585161	385	40	-90	0
SL02-26	396917	5585070	385	50	-90	0
SL02-27	396959	5585125	394	50	-90	0
SL02-28	396939	5585123	387	50	-90	0
SL02-29	396916	5585124	385	42	-90	0
SL02-30	396960	5585093	393	42	-90	0
SL02-31	396964	5585066	393	42	-90	0
SL-09-27A	396961	5585125	395	95	-90	0
SL-09-33	396924	5585198	388	114	-90	0
SL-09-34	397137	5585142	388	164	-90	0
SL-09-3A	396984	5585158	395	104	-90	0
SL-09-43	397031	5585168	395	122	-90	0
SL-09-44	397007	5585131	397	198	-90	0
SL-09-45	397057	5585130	393	126	-90	0
SL-09-46	397089	5585167	385	152	-90	0
SL-09-47	397072	5585088	392	131	-90	0
SL-09-9A	396936	5585151	389	104	-90	0
SL-16-41	396927	5585199	388	45	-87	67
SL-16-42	396965	5585125	396	47	-87	213
SL-16-43	396949	5585098	390	27	-87	90
SL-16-44	396892	5585203	378	66	-45	95
SL-16-45	396949	5585132	391	57	-47	104
SL-16-46	396949	5585098	390	39	-48	97
SL-16-49	396999	5585115	399	52	-60	275
SL-16-50	396969	5585114	398	50	-61	282
SL-16-51	397012	5585092	397	50	-60	276
SL-16-52	397023	5585113	393	48	-61	282
SL-16-54	396960	5585050	392	51	-59	271
SL-16-55	396929	5585049	389	50	-61	276
SL-16-56	396939	5585102	387	51	-60	264
SL-16-57	396912	5585111	383	50	-60	271
SL-16-58	396937	5585115	386	51	-59	267

HoleID	UTM_East	UTM_North	RL_USE	Depth	Dip	Azimuth
SL-16-59	396915	5585095	384	49	-61	279
SL-16-60	396941	5585144	390	50	-60	278
SL-16-61	396968	5585145	393	51	-60	270
SL-16-62	396967	5585177	394	105	-60	264
SL-16-63	396994	5585167	396	105	-62	270
SL-16-64	396998	5585238	395	102	-59	267
SL-16-71	397028	5585169	395	102	-60	262
SL-16-73	397110	5585130	383	102	-59	272
SL-17-01	396922	5585202	387	111	-59	96
SL-17-02	396916	5585182	386	110	-59	90
SL-17-03	396916	5585165	386	111	-60	91
SL-17-04	396916	5585148	386	111	-59	94
SL-17-05	396914	5585107	386	131	-61	98
SL-17-06	396915	5585094	385	111	-59	103
SL-17-08	396885	5585103	378	111	-60	100
SL-17-10	396885	5585145	378	108	-59	87
SL-17-11	396885	5585165	378	107	-60	93
SL-17-12	396884	5585185	377	110	-61	97
SL-17-13	396887	5585208	377	121	-61	92
SL-17-14	396955	5585206	396	118	-59	207
SL-17-16	396992	5585188	398	120	-59	209
SL-17-19	396976	5585224	397	132	-59	213
SL-17-21	397019	5585211	396	144	-59	203
SL-17-22	396938	5585225	389	123	-58	157
SL-17-23	396921	5585246	386	114	-60	143
SL-17-24	396896	5585275	377	140	-60	146
SL-17-33	397010	5585237	394	111	-60	208
SL-17-35	396974	5585261	393	111	-58	208
SL-17-36	397040	5585259	385	144	-61	203
SL-17-37	397008	5585267	389	140	-60	215
SL-17-39	396979	5585279	390	153	-61	211
SL-17-40	397032	5585190	397	126	-61	201
SL-17-41	397060	5585196	389	126	-62	213
SL-17-42	397077	5585180	384	123	-61	223
SL-17-43	397048	5585219	393	125	-60	207
SL-17-44	397080	5585208	383	126	-60	206
SL-17-45	397104	5585214	384	125	-59	201
SL-17-46	397122	5585216	387	117	-58	206
SL-17-47	397097	5585187	383	126	-61	204
SL-17-48	397118	5585184	388	114	-60	198
SL-17-49	397137	5585196	392	120	-58	205
SL-17-50	397128	5585168	389	114	-61	202

HoleID	UTM_East	UTM_North	RL_USE	Depth	Dip	Azimuth
SL-17-51	397153	5585176	393	123	-58	204
SL-17-53	397091	5585230	385	114	-59	211
SL-17-56	397115	5585242	391	124	-61	207
SL-17-58	397148	5585216	392	126	-62	200

Number of Holes utilised in Mineral Resource Estimate: 87

Total Meterage used in Mineral Resource Estimate: 8,053