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**ARDIDEN**

## MULTIPLE THICK HIGH-GRADE LITHIUM INTERCEPTS AT CENTRAL AUBRY CONTINUES TO INCREASE POTENTIAL AT SEYMOUR LAKE

*Assays of up to 3.29% Li<sub>2</sub>O highlight the continued expansion potential of Seymour Lake with high quality Lithium mineralisation intercepted*

### HIGHLIGHTS:

- Strong assay results received from the first round of diamond drill holes completed in the 2018 exploration expansion drilling program at its 100%-owned Seymour Lake Lithium Project in Ontario, Canada
- Results confirm consistency and continuity of mineralisation within the Central and South Aubry pegmatite structures, with significant thick lithium mineralised intercepts up to 40.70m at 1.08% Li<sub>2</sub>O (from 70.10m down hole in SA-18-07)
- Results also confirm the presence of multiple pegmatite zones extending north-eastwards with down-plunge continuity from Central and South Aubry, with mineralisation remaining open to the north, east, west and down-dip
- Drilling confirms many of the structures interpreted from the GPR survey are pegmatites and have been offset by numerous faults
- Latest drilling results continue to provide Ardiden with a greater level of understanding and confidence in the continuity of the mineralisation, while also steadily increasing the overall scale of the Seymour Lake project
- The first round of the diamond drilling program is close to completion as the Ardiden geological team prepare to start the large-scale field mapping program on 100 new target areas, across Seymour Lake
- The drilling results, GPR data and mapping of the new target areas will assist Ardiden in the planning and preparation for the next phase of the Seymour Lake exploration expansion drilling program, due to commence after the completion of the due diligence drill program at the Pickle Lake which is expected to begin shortly

Ardiden Limited (ASX: ADV) is pleased to advise that recent diamond drilling has confirmed multiple high-grade zones of lithium mineralisation at the South Aubry prospect, part of its 100%-owned Seymour Lake Lithium Project in Ontario, Canada.

The latest assay results include **impressive high-grade intercepts grading up to 3.29% lithium oxide (Li<sub>2</sub>O)** (SA-18-07), and numerous other strong assays, continuing to support the expansion potential of the Seymour Lake project.

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## SUMMARY

Ardiden has received the assay results for the first seven diamond drill holes in the exploration expansion drilling program. Assay results from diamond drill holes SA-18-01, SA-18-02, SA-18-07 and SA-18-08 have been reported (refer Tables 1 and 2).

The mineralisation remains open to the North, East and down-dip from both the Central and South Aubry prospects, and further drilling will allow the company to determine the size, grade and continuity of lithium mineralisation identified within these pegmatite units.

Further, exploration will be undertaken during the next phase of the exploration expansion drilling program which will continue to focus on the Aubry and Pye pegmatite swarms. Results from this phase of the expansion drilling program will assist Ardiden to better understand how the Aubry pegmatite structures relate to each other, which will then lead to an advanced understanding of the overall pegmatite swarm and the expansion potential of the project.

The 2018 expansion drilling program was designed to test the continuity of the pegmatites exposed at surface at the Central and South Aubry prospects and to obtain a better understanding of their potential relationship to the surrounding pegmatite structures.

In addition, some drill-holes were completed to test anomalous zones and structures revealed through the historical litho-geochemical soil results and the completion of a Ground Penetrating Radar (GPR) survey. The drilling results have confirmed that many of the structures interpreted from the GPR survey are indeed pegmatites and suggests that GPR surveys will be of use in the design and planning of follow-up drilling programs at Seymour Lake.

The first round of the 2018 diamond drilling program has also demonstrated that many of the pegmatites may have been offset or influenced by the presence of numerous faults, with their down-dip continuation displaced sufficiently, such that the pegmatite intersections achieved by many drill-holes may not match expectations.

Almost all of the first seven diamond drill-holes intersected various thicknesses of pegmatites, with the best results achieved to-date deriving from drill-holes SA-18-01 and SA-18-07; additional assay results are pending for the next round of drill holes and will be reported as soon as they have been received and formally analysed.

Drill-hole SA-18-07 at the Central Aubry prospect intersected pegmatite sills from **73.0m to 108.80m**, an intersection of **35.80m\*** at a weighted average grade of **1.17% Li<sub>2</sub>O**. This includes a 4.0m of internal dilution by two separate inclusions of the basaltic host-rock within the pegmatite. The spodumene within this pegmatite is unaltered and within this zoned, complex pegmatite there were intervals comprised of up to 50% visible spodumene within the drill core.

Drill-hole SA-18-01 at the South Aubry prospect intersected pegmatite from **76.20m to 97.90m**, having an intersection of **21.7m\*** only at a weighted average grade of 0.26% Li<sub>2</sub>O. The result confirms a consistency of mineralisation as the intersected pegmatite contained a significant amount of spodumene throughout, however the spodumene was altered, with the subsequent assay results reflecting a localised alteration showing a likely leaching of the lithium from the spodumene crystals.

The pegmatites at the Central and South Aubry prospects host mineralisation which has been identified as having a downhole width in excess of 35m and 21m respectively, in drill holes SA-18-07 and SA-18-01. Both drill holes were drilled at a 60-degree dip, which is an approximate angle to show the normal mineralised unit.

\*Down-hole length of intersection; insufficient drilling has been completed to confirm the true thickness of the intersected pegmatite, although it is considered likely that the stated intersection is close to the actual true thickness.

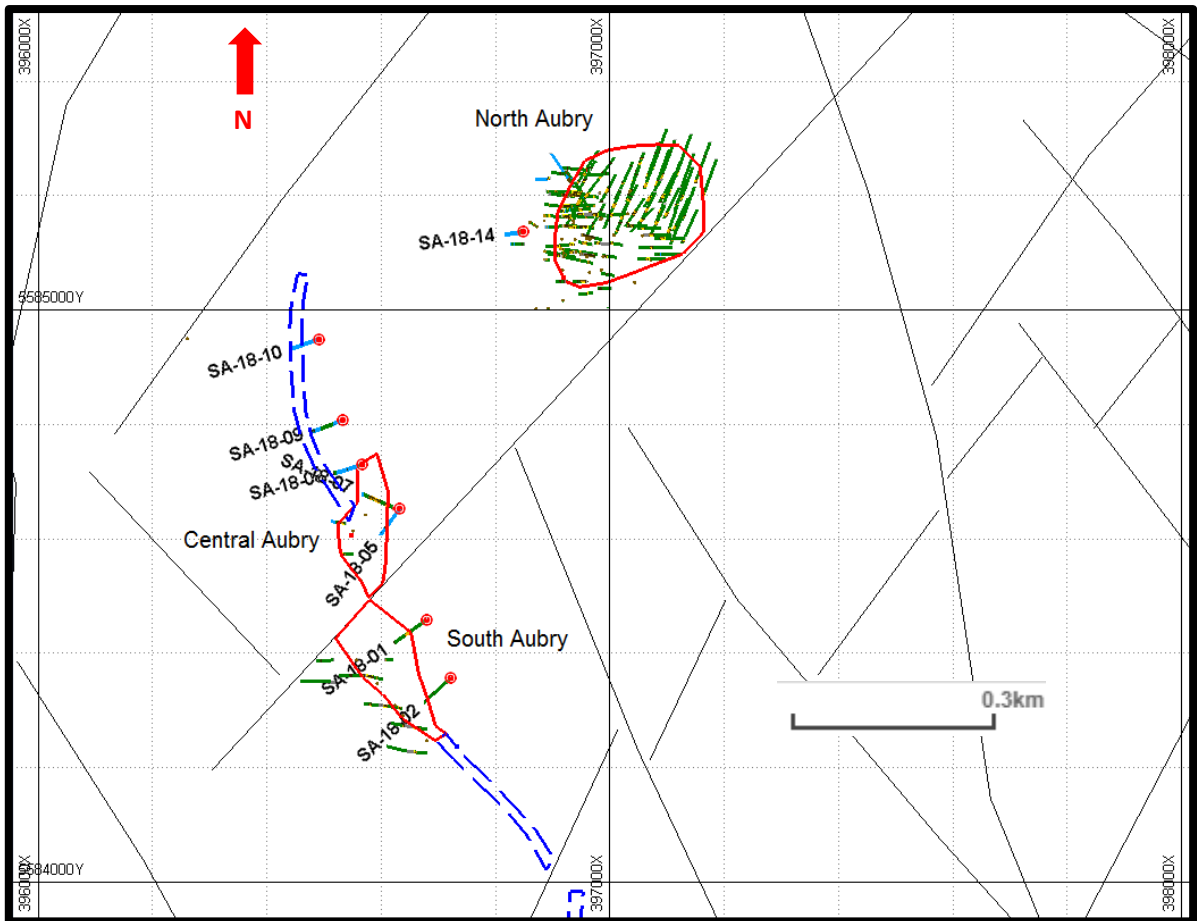


Figure 1. Plan view showing the current drill hole locations (Red) at the Central and South Aubry prospects.

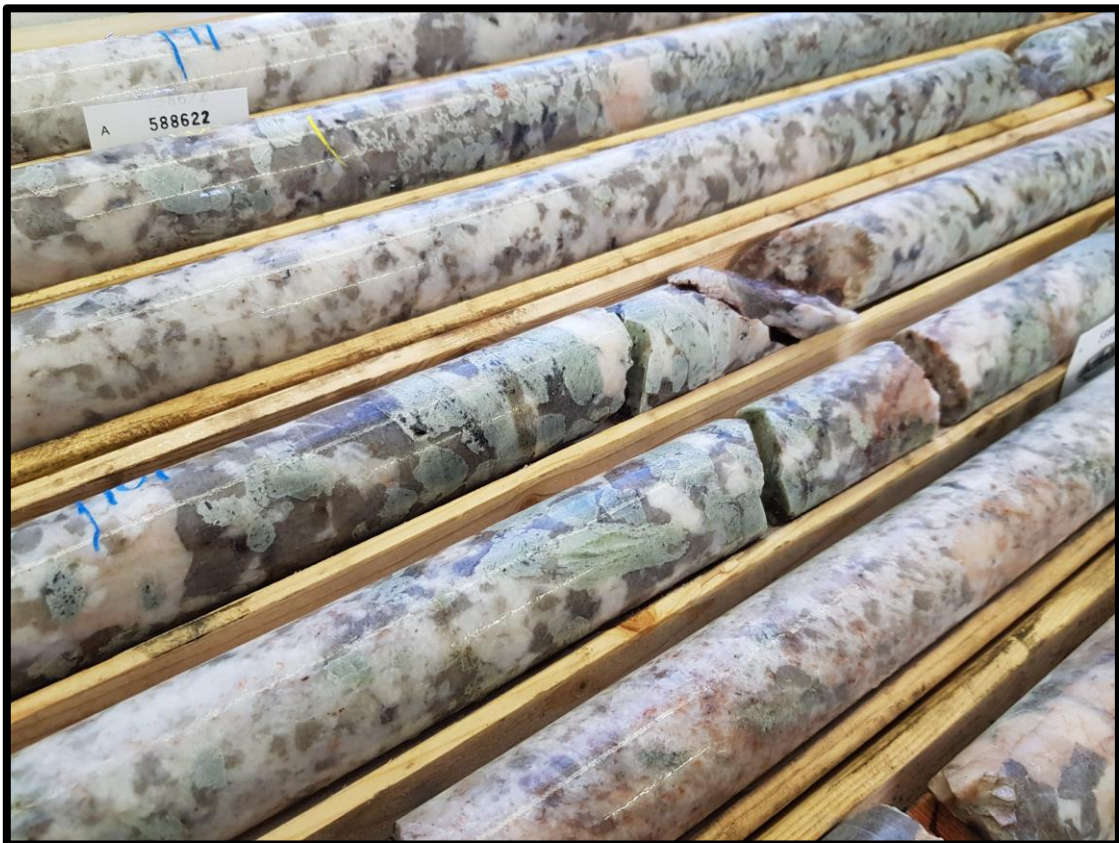


Figure 2. Image of the drill core obtained from drill hole SA-18-07, Note large pale green to whitish coarse tabular spodumene crystals with quartz and feldspar.

## ASSAY RESULTS

The Company has received assay results from the first seven diamond drill holes in this phase of the exploration expansion drilling program. Assay results for the 4 diamond drill holes are reported in this announcement, including SA-18-01, SA-18-02, SA-18-07 and SA-18-08, and any assays below a cut-off grade of 0.5% Li<sub>2</sub>O and have not been specifically reported in this announcement.

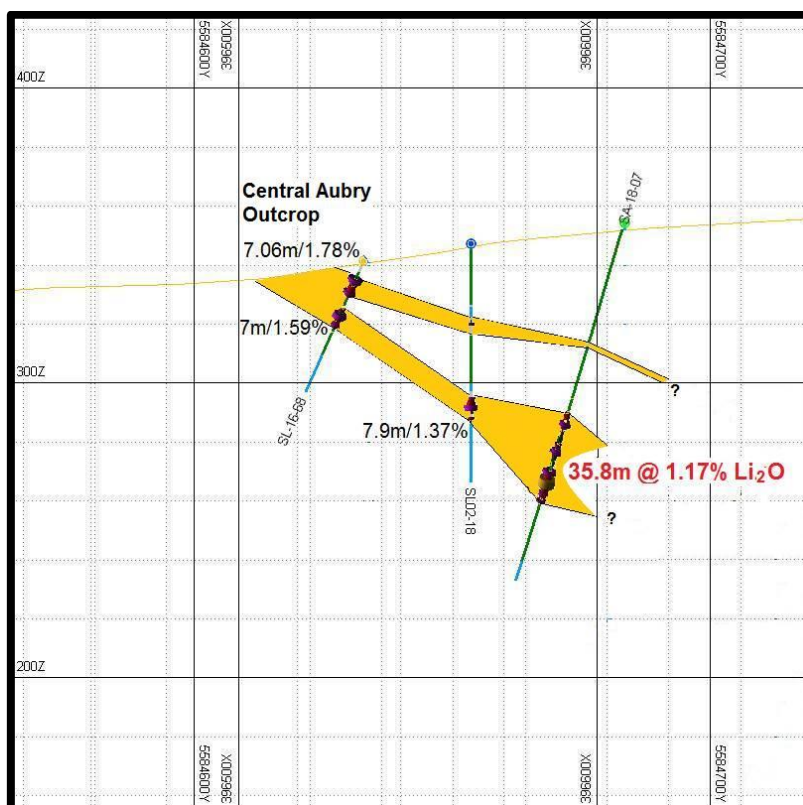
Lithium grades up to **3.29 Li<sub>2</sub>O** (SA-18-07) have been received in the latest batch of assay results, demonstrating a consistency of the high-grade lithium mineralisation at the Central Aubry prospect.

- **36%** of drill-holes assays (29 of the 80 drill core samples) returned results greater than the 0.5% Li<sub>2</sub>O cut-off with an average grade of **1.47% Li<sub>2</sub>O**
- **24%** (19 of 80 drill core samples) returned results greater than 1.0% Li<sub>2</sub>O with an average grade **1.85% Li<sub>2</sub>O**
- **14%** (11 of 80 drill core samples) returned results greater than 1.5% Li<sub>2</sub>O with an average grade of **2.34% Li<sub>2</sub>O**. (refer to Table 1)

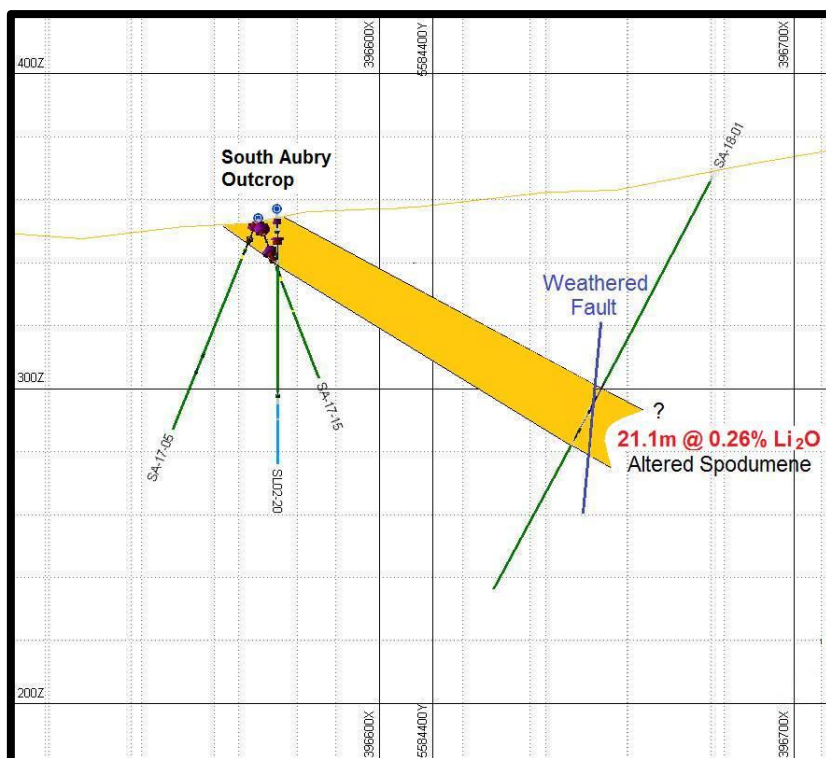
Table 1 below presents the significant intersections which contain lithium mineralisation in drill holes SA-18-01 and SA-18-07, that reported above the cut-off grade of 0.5% Li<sub>2</sub>O and the weighted average grade for each significant intersection, where the Li<sub>2</sub>O grades have been calculated using the Li<sub>2</sub>O assays as a function of the represented sample length (length X grade/length).

Some of the more significant assays for hole SA-18-07, shows lithium mineralisation of **40.70m at 1.08% Li<sub>2</sub>O** from 70.10m down hole including:

- **13.30m at 1.71% Li<sub>2</sub>O**;
- **7.00m at 2.35% Li<sub>2</sub>O**;
- **5.0m at 1.30% Li<sub>2</sub>O**; and
- **3.0m at 3.20% Li<sub>2</sub>O**. (refer to Tables 1 and 2 for a full list)



**Figure 3.** Cross Section at Central Aubry showing two pegmatite sills and drill holes SA-16-69, SA02-17, SA-16-68, SA02-18 and SA-18-07



**Figure 4.** Cross Section at South Aubry showing a thick pegmatite sill and drill holes, SA-17-02, SA-17-05 and SA-17-15, SA-18-01.

The assay results continue to validate the geological modelling of multiple stacked and parallel pegmatite sills and the northern extension of the known primary mineralised sills.

Mineralisation remains open at both Central and South Aubry. Further drilling is required to obtain a better understanding of the size and extent and potential connection of the underlying pegmatite structures.

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 assay results provides the Company with a greater level of understanding and confidence in the project, while also steadily expanding the overall scale of Seymour Lake and its future resource expansion potential.

### 2018 EXPLORATION EXPANSION DRILL PROGRAM

Phase 1 of the exploration expansion diamond drilling program is close to completion at Seymour Lake, as the Ardiden geological team prepare to start the large-scale field mapping program which will assess the 100 new target areas across the Seymour Lake.

Ardiden will complete a full geological and technical assessment of these drilling results and how they fit into the current geological model. The geological model will be further enhanced with the results of the GPR survey and field mapping results of the new target areas.

This data will provide Ardiden a greater understanding of the complex pegmatite structures contained within the project and assist in the identification of a number of new priority drilling targets, in preparation for the next phase of the Seymour Lake exploration expansion drilling program.

Ardiden expects to recommence the 2018 exploration expansion diamond drilling program at Seymour Lake after the completion of the due diligence drill program at the Pickle Lake Gold project, which is due to finish in June 2018.

## CONCLUSION AND OUTLOOK

The latest drilling results from the Central and South Aubry prospects which include multiple high-grade intercepts of up to **3.29%** Li<sub>2</sub>O at various depths, have further increased the Company's confidence in the overall potential of the quality and continuity of lithium mineralisation at the Seymour Lake Lithium Project.

The Company believes that the Seymour Lake Project has the potential to host multiple high-quality lithium deposits and that potential has increased with these latest drill assay results and the recent identification of many new target areas across the whole project area.

Ardiden looks forward to providing further updates in the near future on current activities, including further drilling and assay results from Seymour Lake, drilling updates at the Pickle Lake Gold Project, Field Mapping and feasibility work which includes the Baseline Environmental Study activities being conducted at the Seymour Lake Project.

**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. Test work 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 100%-owned Bold Properties 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. 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 cobalt, copper and nickel grades, 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.

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

The information in this report that relates to exploration results for the Drilling Results and Exploration at the Seymour Lake Lithium project and is based on, and fairly represents, information and supporting geological information and documentation in this report has been reviewed by Mr Robert Chataway who is a member of the Association of Professional Geologists of Ontario. Mr Chataway is not a full-time employee of the Company. Mr Chataway is employed as a Consultant Geologist. Mr Chataway has more than five years relevant exploration experience, and qualifies as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (the JORC Code). Mr Chataway consents to the inclusion of the information in this report in the form and context in which it appears.

#### **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.

## APPENDIX 1

**Table 1.** Results for drill holes SA-18-01 and SA-18-07 at Seymour Lake Lithium Project, using a cut-off grade of 0.5% Li<sub>2</sub>O.

Hole ID	East	North	End of Hole (m)	Azimuth	Dip	From (m)	To (m)	Interval (m)	Li <sub>2</sub> O% (0.5% cut off)
SA-18-01	396680	5854459	150	226	-60	91.70	93.30	1.60	0.54
SA-18-07	396629	5584560	141	285	-60	73.00	75.20	2.20	1.07
SA-18-07	396629	5584560	141	285	-60	76.35	79.00	2.65	1.91
SA-18-07	396629	5584560	141	285	-60	80.00	93.40	13.40	1.00
					Including	85.00	90.00	5.00	1.30
					Including	87.00	89.00	2.00	1.97
SA-18-07	396629	5584560	141	285	-60	95.50	105.80	10.30	2.05
					Including	95.50	96.50	1.00	2.54
					Including	98.50	101.50	3.00	3.20
SA-18-07	396629	5584560	141	285	-60	106.80	107.80	1.00	1.57

**Table 2.** Drill collar information and lithium mineralisation zones for drill SA-18-01, SA-18-02, SA-18-07 and SA-18-08 at Seymour Lake Lithium Project with no cut-off lithium grade.

Hole ID	East	North	End of Hole (m)	Azimuth	Dip	From (m)	To (m)	Interval (m)	Li <sub>2</sub> O%
SA-18-01	396680	5854459	150	226	-60	74.20	99.90	25.70	0.22
SA-18-02	396722	5584357	132	223	-60	85.85	86.18	0.33	0.48
SA-18-02	396722	5584357	132	223	-60	119.38	124.11	4.73	0.08
SA-18-07	396629	5584560	141	285	-60	70.10	110.80	40.70	1.08
SL-18-08	396629	5584560	141	249	-68	6.00	7.70	1.70	0.36



**Table 3. Drilling Logs for drill holes SA-18-01 and SA-18-07 at Seymour Lake Lithium Project.**

Hole ID	East	North	End of Hole (m)	Azimuth	Dip	From (m)	To (m)	Interval (m)	Description
SA-18-01	396680	5854459	150	226	-60	0.00	3.00	3.00	Overburden
SA-18-01	396680	5854459	150	226	-60	3.00	76.20	73.20	Mafic volcanic: Massive pillowed basalt. Gen mass with very localized weak fol'n dom @ 35° TCA. Random pillow selvages of amph/cal/qtz and epid. Patchy Fract introduced epid alt'n as well.
SA-18-01	396680	5854459	150	226	-60	<b>76.20</b>	<b>97.90</b>	<b>21.70</b>	<b>Spodumene Nb/Ta Pegmatite:</b> Potassic phase with common megacrysts of Kspar. Majority of Kspar perthitic has converted to alb. 5-12% coarse books of dk grn musc. Ave of approx 0.5% - 1% Spodumene to which the vast majority has been altered and oxidized soft, rusty brn. Rock is wkly oxidized along xtal margins and micro fractures.
SA-18-01	396680	5854459	150	226	-60	97.90	146.70	48.80	Mafic volcanic Massive pillowed basalt. Gen mass with very localized weak fol'n dom @ 35° TCA. Random pillow selvages of amph/cal/qtz and epid. Patchy Fract introduced epid alt'n as well. 4-6% calc/epid/qtz



									veining -planar and irregular and often mult-cm. Material becomes phaneritic homogenous and wkly veined (no pillows).
SA-18-01	396680	5854459	150	226	-60	<b>146.70</b>	<b>146.76</b>	<b>0.06</b>	<b>Spodumene Nb/Ta Pegmatite:</b> Massive Pegmatite vein/dykelet. Sodic phase alb/qtz with a few mgr xtals of wkly alt'd/oxidized Spod and Nb/Ta oxides up to 4mm. Patchy wk oxid'n
SA-18-01	396680	5854459	150	226	-60	146.76	150.00	3.24	Mafic volcanic. As above dykelet
							<b>TOTAL</b>	<b>21.76</b>	
SA-18-07	396629	5584560	141	285	-60	0.00	1.00	1.00	Overburden
SA-18-07	396629	5584560	141	285	-60	1.00	45.30	44.30	Mafic volcanic; Predominantly pillowed basalt with sections of intercalated bedded (compositionally banded) mafic - intermed tuff.
SA-18-07	396629	5584560	141	285	-60	45.30	47.15	1.85	Felsic dyke; Fsp porphyry, vfgr siliceous grndms with mm wh subhedral fsp pheno's. Sharp contacts with host fabric. Competent, homogenous and unaltered.
SA-18-07	396629	5584560	141	285	-60	47.15	67.27	20.12	Mafic volcanic as above
SA-18-07	396629	5584560	141	285	-60	<b>67.27</b>	<b>67.45</b>	<b>0.18</b>	<b>Pegmatite sill and dykelet -Kspar/qtz fract introduced hem stained/oxidized, becoming near</b>



									pervasive. Traces of vfgr blk Nb/ta oxides and bluish Flour apatite.
SA-18-07	396629	5584560	141	285	-60	67.45	72.10	4.65	Mafic volcanic as above
SA-18-07	396629	5584560	141	285	-60	<b>72.10</b>	<b>72.50</b>	<b>0.40</b>	<b>Nb/Ta Pegmatite sill and dykelet</b> - Kspar/qtz fract introduced hem stained/oxidized, becoming near pervasive. Traces of vfgr blk Nb/ta oxides and bluish Flour apatite.
SA-18-07	396629	5584560	141	285	-60	72.5	73.0	0.50	Mafic volcanic as above
SA-18-07	396629	5584560	141	285	-60	<b>73</b>	<b>92.4</b>	<b>19.40</b>	<b>Spodumene Nb/Ta Pegmatite</b>  Massive Pegmatite; Dominant fsp is Kspar (with one 15cm section of fgr alb/qtz). Fract introduced hem oxid'n becomes patchy. 2-10% lt grn Spodumene -a small percentage of the Spod has been oxid'd and altered. Traces of vfgr blk Nb/ta oxides
SA-18-07	396629	5584560	141	285	-60	92.4	95.5	3.10	Mafic volcanic; mgr-near cgr amph with fgr-mgr wh fsp and much lesser qtz. Metamorphosed and mod foliated @ ~70° TCA.
SA-18-07	396629	5584560	141	285	-60	<b>95.50</b>	<b>103.90</b>	<b>8.40</b>	<b>Spodumene Nb/Ta Pegmatite:</b> Massive Pegmatite; Potassic phase. Kspar is mostly cloudy and not



									quite megacrystic. Gry interstitial or quasi graphic qtz. Minor grn Musc. Rel consistent cgr lt grn Spod from 8- 25% throughout. Possible mm beryl. Traces of vfgr blk Nb/Ta oxides.
SA-18-07	396629	5584560	141	285	-60	103.90	104.80	0.90	Mafic volcanic as above
SA-18-07	396629	5584560	141	285	-60	<b>104.80</b>	<b>108.80</b>	<b>4.00</b>	<b>Spodumene Nb/Ta Pegmatite as above</b>
SA-18-07	396629	5584560	141	285	-60	108.80	131.00	22.20	Mafic volcanic; mgr-near cgr amph with fgr-mgr wh fsp and much lesser qtz
SA-18-07	396629	5584560	141	285	-60	131.00	141.00	10.00	Intermediate bedded tuff; Compositional banding/bedding feldspathic beds vs hble rich bedding. As well as mm fsp (relict ash clasts).
							<b>TOTAL</b>	<b>32.38</b>	

**Table 4. Drilling logs for drill holes SA-18-02, SA-18-05, SA-18-08 to SA-18-10 at Seymour Lake Lithium Project.**

Hole ID	East	North	End of Hole (m)	Azimuth	Dip	From (m)	To (m)	Interval (m)	Description
SA-18-02	396722	5584357	132	223	-60	0.00	5.80	5.80	Overburden
SA-18-02	396722	5584357	132	223	-60	5.80	85.85	80.05	Mafic volcanic. Massive pillowed basalt. Gen mass with very localized weak fol'n dom @ 35° TCA. Random pillow selvages of amph/cal/qtz and epid. Patchy Fract introduced epid alt'n as well. 1-3% Qtz/carb veining



SA-18-02	396722	5584357	132	223	-60	85.85	86.18	0.33	<b>Pegmatite dyke/sill.</b> Sodic phase, fgr alb intimate with qtz - cloudy or diffuse xtal margins. Trace lt grn fgr Musc but peg shows abundant quasi laminated biotite. Intercalated with metasomatized host likely.
SA-18-02	396722	5584357	132	223	-60	86.18	114.00	27.82	Pillowed basalt as above, except rock is mod foliated and banded @ 68° TCA. After 94.8m material becomes massive. Lower contact in broken and slightly ground core.
SL-18-02	396722	5584357	132	223	-60	114.00	114.48	0.48	<b>Massive Pegmatite;</b> Dominantly mgr-cgr, wh-pk Kspar with interstitial gry qtz. Contains interstitial vfgr anhed blk oxides, interstitial hble and traces of garnet and tourmalin
SL-18-02	396722	5584357	132	223	-60	114.48	121.38	6.90	Mafic volcanic. Massive pillowed basalt. Gen mass with very localized weak fol'n dom @ 35° TCA. Random pillow selvages of amph/cal/qtz and epid. Patchy Fract introduced epid alt'n as well. 1-3% Qtz/carb veining. Gen competent and wkly fract'd.
SL-18-02	396722	5584357	132	223	-60	121.38	122.11	0.73	<b>Nb/Ta Massive Pegmatite;</b> Sodic



									phase dominantly fgr sugary alb - locally as well developed clevelanditegraphic with gry Qtz. Rock contains numerous specks of vfgr blk Nb/Ta oxides. Trace or very minor fgr It silver grn Musc.
SL-18-02	396722	5584357	132	223	-60	122.11	132.00	9.99	Pillowed basalt as above, except rock is massive. 2-3% irreg epid/carb/Qtz veining. Trace FC Py.
							<b>TOTAL</b>	<b>1.54</b>	
SL-18-05	396636	5584652	120	212	-60	0.00	1.40	1.40	Overburden
SL-18-05	396636	5584652	120	212	-60	1.40	48.70	47.30	Mafic to intermediate bedded ash lapilli tuff. Amphibolite facies metamorphism. Fgr to cgr hble/amph. Bedded dominantly @ 20° with ash to lapilli relict clasts rextal'd to fsp/Qtz/amph. 2-3% carb/Qtz vein'g mostly conformable to bed'g -fol'n.
SL-18-05	396636	5584652	120	212	-60	48.70	61.85	13.15	Light to medium gray, faintly banded crysatl tuff. Diffuse feldspar spots (likely relic clasts.) Faint foliation @ 40 degrees. Vfg disseminated garnets. Rock is Qtz rich and felsic
SA-18-05	396636	5584652	120	212	-60	61.85	83.60	21.75	Mafic to intermediate



									bedded ash lapilli tuff. Amphibolite facies metamorphism. Fgr to cgr hble/amph. Bedded dominantly @ 20° with ash to lapilli relict clasts rextal'd to fsp/qtz/amph. 2-3% carb/qtz vein'g mostly conformable to bed'g -fol'n. Rock is commonly strongly fractured.
SA-18-05	396636	5584652	120	212	-60	<b>83.60</b>	<b>84.30</b>	<b>0.70</b>	<b>Nb/Ta Massive Pegmatite;</b> Sodic phase with fgr sugary alb or more commonly radiating blades of cleavandite. With interstitial qtz. Rock is wkly oxidized with Fract controlled Hem becoming near near pervasive. Traces of vfgr blk Nb/Ta oxides
SA-18-05	396636	5584652	120	212	-60	84.30	120.00	35.70	Mafic tuff as above in 61.85 to 83.6m.
							<b>TOTAL</b>	<b>0.70</b>	
SA-18-08	396629	5584560	141	248	-69	0.00	6.00	6.00	overburden
SA-18-08	396629	5584560	141	248	-69	<b>6.00</b>	<b>7.70</b>	<b>1.70</b>	<b>Spodumene Massive Pegmatite;</b> Dominant Fsp is creamy wh Kspar and coarse gry qtz. Last 20cm is fgr alb/qtz specked with vfgr blk Nb/Ta oxides that are incipiently oxidizing yell. Minor fgr-mgr grn



									<p>musc. Sporadic lt grn, mgr Spodumene up to 1-2% which displays minor oxid'n/alt'n about xtal margins. Trace pk mm garnet?</p>
SA-18-08	396629	5584560	141	248	-69	7.70	27.00	19.30	<p>Mafic volcanic; Cgr amph with fgr fsp and qtz becoming mgr then fgr downhole.</p>
SA-18-08	396629	5584560	141	248	-69	27.00	72.50	45.50	<p>Intermediate tuff; Vfgr -mostly aphanitic with mm strained amph and fsp relict 'clasts', bed'g can be very faint or well developed and clearly defined</p>
SA-18-08	396629	5584560	141	248	-69	<b>72.50</b>	<b>73.10</b>	<b>0.60</b>	<p><b>Massive Pegmatite;</b> Sodic zone. Fgr sugary alb (locally as cleavlandite) with 'blebby' gry qtz and 2-3% mgr-cgr silvery grn Musc.</p>
SA-18-08	396629	5584560	141	248	-69	73.10	128.80	55.70	<p>Intermediate tuff as above</p>
SA-18-08	396629	5584560	141	248	-69	128.80	136.70	7.90	<p>Mafic volcanic; Fgr basalt. Mostly massive with local faint -weak foliation @ 60° TCA. Competent, weakly fractured and unaltered.</p>
SA-18-08	396629	5584560	141	248	-69	<b>136.70</b>	<b>137.17</b>	<b>0.47</b>	<p><b>Massive Pegmatite;</b> Sodic zone. Fgr sugary alb (locally as cleavlandite) with 'blebby' gry qtz and 2-3% mgr-cgr silvery grn Musc.</p>





SA-18-08	396629	5584560	141	248	-69	137.17	141.00	3.83	Mafic volcanic; As above
							<b>TOTAL</b>	<b>2.77</b>	
SA-18-09	396532	5584808	150	245	-67	0.00	5.00	5.00	Overburden
SA-18-09	396532	5584808	150	245	-67	5.00	51.00	46.00	Intermediate volcanic; Bedded tuf. Flecked throughout with fsp relict. Variable composition with siliceous felsic bed'g vs mafic bedding. Local cm beds of hble/garnet.
SA-18-09	396532	5584808	150	245	-67	51.00	113.70	62.70	Mafic volcanic; Likely basalt flow. Gen mass and homog -amph (hble) rich, with local wk fol'n @ 40-60deg TCA.
SA-18-09	396532	5584808	150	245	-67	113.7	136.00	22.30	Mafic volcanic; Mafic tuff. Str fol'n/bed'g but distinct compositional banding (bed'g) is localized. Hble rich with common mm fsp relict 'clasts'
SA-18-09	396532	5584808	150	245	-67	136.00	139.20	3.20	Intermediate to felsic volcanic; Massive to wkly foliated @ 60 deg TCA. Fgr phaneritic, qtz rich with fine wh fsp and fgr amph.
SA-18-09	396532	5584808	150	245	-67	<b>139.20</b>	<b>139.40</b>	<b>0.20</b>	<b>Pegmatite dykelet/sill.</b> Dominantly cgr wh-pk Kspar with minor gry qtz and <1% fgr musc.



									Interstitial very fgr blk Nb/Ta oxides
SA-18-09	396532	5584808	150	245	-67	139.40	149.80	10.40	Intermediate to felsic volcanic; Massive to wkly foliated @ 60 deg TCA. Fgr phaneritic, qtz rich with fine wh fsp and fgr amph. Metamorphosed to amph facies.
SA-18-09	396532	5584808	150	245	-67	<b>149.80</b>	<b>149.87</b>	<b>0.07</b>	<b>Pegmatite dykelet</b> -pk/wh Kspar intimate with qtz, traces of very fgr blk Nb/Ta oxides
SA-18-09	396532	5584808	150	245	-67	149.87	150.00	0.13	Intermediate to felsic volcanic; Massive to wkly foliated @ 60 deg TCA. Fgr phaneritic, qtz rich with fine wh fsp and fgr amph. Metamorphosed to amph facies.
							<b>TOTAL</b>	<b>0.27</b>	
SA-18-10	396491	5584949	150	246	-70	0.00	2.40	2.40	Overburden
SA-18-10	396491	5584949	150	246	-70	2.40	20.67	18.27	Mafic volcanic; Likely a tuff? Str pervasive fol'n @ 35-50 deg TCA occasionally showing compositional banding (bed'g). Amph/wh fsp and minor vfgr qtz.
SA-18-10	396491	5584949	150	246	-70	20.67	21.10	0.43	Dominantly diffuse -cloudy wh alb intimate with qtz locally becoming cleavlandite.
SA-18-10	396491	5584949	150	246	-70	21.10	22.50	1.40	Mafic to intermediate ash (+lapilli) tuff. Metamorphosed to amph facies.



									Bedded and foliated @ 40 deg TCA. Amph/wh fsp and minor vfgr qtz, local garnet and local fine lenses or clusters of musc.
SA-18-10	396491	5584949	150	246	-70	<b>22.50</b>	<b>22.65</b>	<b>0.15</b>	<b>Pegmatite dykelet</b> from 22.5 to 22.65; qtz/alb + 8% fgr-mgr silver and grn Musc.
SA-18-10	396491	5584949	150	246	-70	22.65	140.05	117.40	Mafic to intermediate ash as above
SA-18-10	396491	5584949	150	246	-70	140.05	150.00	9.95	Massive diabase; Fgr aphanitic, homogenous and magnetic. Mostly shattered to coarse angular rubble
							<b>TOTAL</b>	<b>0.15</b>	

## 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>Nature and quality of sampling (e.g. 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g 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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond Drill Core was cut in half using a core saw along the core axis.</li> <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 Spodumene Pegmatite zones were intersected</li> <li>The sample preparation and assaying techniques are industry standard and appropriate for this type of mineralisation.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Diamond wireline core drilling.</li> <li>The drill core size is CHD 76, core diameter is 43.5 millimetres</li> <li>Drill holes were orientated using the Reflex ACT II RD core orientation tool</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</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>
Logging	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Samples represent half the core width, and are logged in detail to support appropriate Mineral Resource estimation at a later stage of exploration.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>• The total length and percentage of the relevant intersections logged.</li> </ul>	
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>• If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>• For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>• 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.</li> <li>• Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>• Core is split in half using a core saw with the remaining half retained in the core tray.</li> <li>• Mineralisation is massive and relatively uniform so assay samples closely represent the in-situ material.</li> <li>• Samples were taken on an average of 1 metre intervals and were determined to be appropriate for the mineralised material being sampled</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>• 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.</li> <li>• Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>• All samples will be analysed by Actlabs in Thunder Bay, Ontario Canada a SCC (Standards Council of Canada) accredited laboratory.</li> <li>• The assay technique will be FUS-Na2O2</li> <li>• Quality control procedures included the insertion of certified standards and blanks into the sample stream.</li> <li>• Drill core assay results for drill-holes SA-18-01, SA-18-02, SA-18-07 and SA-18-08 are outlined in Tables 1 and 2.</li> </ul>
verification of sampling and assaying	<ul style="list-style-type: none"> <li>• The verification of significant intersections by either independent or alternative company personnel.</li> <li>• The use of twinned holes.</li> <li>• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>• Discuss any adjustment to assay data.</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> <li>• Details of the drill logs are outlined in Tables 3 and 4.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• Drill holes were located with handheld WAAS enabled handheld GPS units set for recording UTM NAD83 Zone 16N projection coordinates.</li> <li>• Drill holes were orientated using the Reflex ACT II RD core orientation tool</li> </ul>

Criteria	JORC Code explanation	Commentary
<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 metre intervals and deemed appropriate to represent the in-situ nature of the mineralization.</li> <li>• Further drilling and sampling will be required to adequately establish the geologic and grade continuity for any Mineral Resource and Ore Reserve estimation procedure.</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>• No audits or reviews of sampling techniques have been conducted</li> </ul>

## 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 100% owned by Ardiden, these include claims 1245661 1245648 1245662 1245664 1245646, 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, 4279874, 4280710 and 428071.</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 variably</li> </ul>

Criteria	JORC Code explanation	Commentary
<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 drill holes:</i> <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> </li> <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>	<p>steeply dipping pegmatite dykes and and sills.</p> <ul style="list-style-type: none"> <li>• See Tables 1 to 4 and Figures 3 and 4 for the location of the drill collars and other dill hole information.</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 (e.g. 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 (e.g. ‘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 at -60 degrees so that drilling orientation bias was minimised</li> </ul>
<i>diagrams</i>	<ul style="list-style-type: none"> <li>• <i>Appropriate maps and sections (with scales) and 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></li> </ul>	<ul style="list-style-type: none"> <li>• See Tables 1, 2 and Figures 3 and 4 for the location of the drill hole collars.</li> </ul>

Criteria	JORC Code explanation	Commentary
<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 (e.g. 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>