

15 June 2017

# LATEST DRILLING FURTHER EXPANDS SPODUMENE-BEARING PEGMATITE ZONES AT SEYMOUR LAKE, CANADA

North Aubry prospect continues to deliver with thick intercepts of spodumene-bearing pegmatites expanding the scale and potential of the Seymour Lake Lithium Project

#### **HIGHLIGHTS:**

- Phase 2 resource drilling program continues to make steady progress with a further six diamond drillholes now completed.
- Multiple spodumene-bearing pegmatites intersected in latest holes, including thick mineralised zones with a combined down-hole width of up to 25m (SL-17-19).
- Drilling continues to confirm the interpreted mineralised extensions and the presence of multiple pegmatite zones extending northwards at the North Aubry prospect – with the mineralisation remaining open to the east, west and down-dip.
- Drilling is providing a greater level of geological understanding and confidence, while also steadily
  increasing the overall scale of the project.
- Phase 2 results to underpin a maiden JORC 2012 Mineral Resource.

Diversified minerals explorer and developer Ardiden Limited (ASX: ADV) is pleased to advise that it continues to make good progress with the ongoing Phase 2 resource delineation diamond drilling program at its Seymour Lake Lithium Project in Ontario, Canada, with the latest drill-holes intersecting multiple spodumene-bearing pegmatites.

#### **NORTH AUBRY PROSPECT DRILLING**

A further six drill-holes (SL-17-19, SL-17-33, SL-17-35, SL-17-36, SL-17-39 and SL-17-40) have now been completed and logged by the geological team. This batch of drill holes has again intersected multiple spodumene-bearing pegmatites over various widths, confirming the presence of multiple pegmatite layers at various depths, including:

- Hole SL-17-19, which intersected a total of **25.42m** of spodumene-bearing sills over a total down-hole width of 132m (including a **17.94m** zone from 45m down-hole);
- Hole SL-17-33, which intersected a continuous 19.77m zone of spodumene-bearing sills (from 51.84m down hole) over a total down-hole width of approximately 111m; and
- Hole SL-17-39, which intersected a total of **16.67m** of spodumene-bearing sills (*including a* **7.45m** *zone from 69.70m down-hole*) over a total down-hole width of approximately 153m (refer to Table 1 below).



The latest drilling has continued to validate the northern extension of the known primary mineralised zones, further expanding the boundaries of the main outcropping area and extensions of the secondary spodumene-bearing pegmatites at the project. Once the drill core has been logged, cut and prepared, the drill samples will be sent to Activation Laboratories in Thunder Bay for assay.

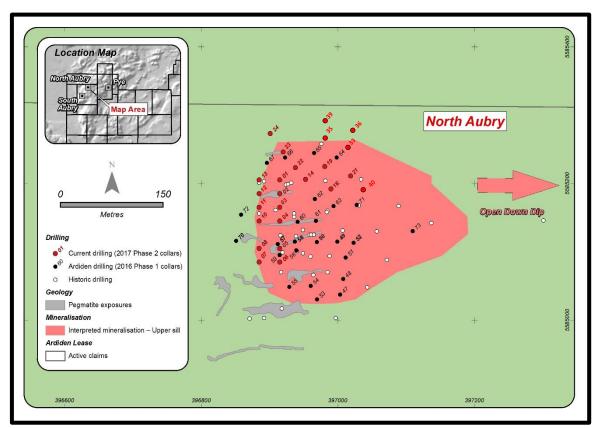
Ardiden notes that although the pegmatites at Seymour Lake can be somewhat difficult to model and predict due to the variable fluid pathways, confirmation of the interpreted extensions of the spodumene-bearing pegmatites and the verification of multiple pegmatite layers in the latest drilling provides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

As previously advised, the first portion of the current drilling program was designed with close-spaced drilling to ensure a high level of confidence in the data to support an initial maiden JORC 2012 Mineral Resource.

Once an appropriate number of drill results and geological data have been obtained during this drill program to allow increased confidence in the continuity of the multiple spodumene-bearing mineralisation zones contained in the central portion of the North Aubry prospect, the company will begin estimation to report a maiden JORC 2012 Mineral Resource for Seymour Lake.

Once the basis for the maiden JORC 2012 Mineral Resource in the central mineralised zone at North Aubry has been established, Ardiden will conduct wider-spaced drilling in order to confirm the extensions of the spodumene mineralised zones which can be incorporated in future resource estimates.

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



**Figure 1.** Overview showing the Phase 2 drill hole locations (Red) and the pegmatite exposures at North Aubry prospect, with interpreted extensions.



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

Table 1. Drilling Logs for holes SL-17-19, SL-17-33, SL-17-35, SL-17-36, SL-17-39 and SL-17-40 at Seymour Lake Lithium Project.

						-			our Lake Lithium Project.
Hole ID	East	North	End of	Azimuth	Dip	From	То	Interval	Description
			Hole (m)			(m)	(m)	(m)	
SL-17-19	396981	5585225	132	200	-60	0.00	2.00	2.00	Overburden
32 17 13	330301	3303223	132	200	00	0.00	2.00	2.00	Overburden
SL-17-19	396981	5585225	132	200	-60	2.00	45.00	43.00	Mafic Volcanic: Fgr,
									Generally massive
									but laced or riddled
									with carb/qtz veining
SL-17-19	396981	5585225	132	200	-60	45.00	62.94	17.94	Spodumene Nb/Ta
31-17-13	330361	3363223	132	200	-00	43.00	02.54	17.54	Pegmatite: Massive
									Pegmatite, Sodic
									phase; Dominantly
									fgr sugary wh albite
									transitioning to
									creamy wh perthitic
									Kspar. Lt grn
									Spodumene with
									minor musc
									inclusions, variable
									in distribution 1-
									20%, traces of vfgr
									blk Nb/Ta oxides
									DIK ND/ 1a Oxides
SL-17-19	396981	5585225	132	200	-60	62.94	105.19	40.06	Mafic volcanic: Fgr -
									mgr massive basalt
SL-17-19	396981	5585225	132	200	-60	105.19	112.67	7.48	Spodumene Nb/Ta
									Pegmatite: Massive
									Pegmatite,
									Dominantly fgr
									sugary white albite It
									grn Spodumene with
									minor musc
									inclusions, variable
									in distribution 5-
									10%, traces of vfgr
									blk Nb/Ta oxides
SL-17-19	396981	5585225	132	200	-60	112.67	132.00	19.33	Mafic Volcanic: gr -
32 1, 13	333301	3333223	132			112.07	102.00	15.55	mgr massive basalt
									g. massive basait
							TOTAL	25.42	
SL-17-33	397010	5585243	111	200	-60	0.00	0.80	0.80	Overburden
SL-17-33	397010	5585243	111	200	-60	0.80	51.84	51.04	Mafic volcanic: Fgr-
									mgr basalt. Locally
									possibly pillowed
									with very irregular
									bands of





Hole ID	East	North	End of Hole (m)	Azimuth	Dip	From (m)	To (m)	Interval (m)	Description
									amph/carb/qtz +/- epid
SL-17-33	397010	5585243	111	200	-60	51.84	71.61	19.77	Spodumene Nb/Ta Pegmatite: Massive Pegmatite Dominantly creamy white perthitic Kspar. Lt grn Spodumene with minor musc inclusions, variable in distribution 5- 10%, traces of vfgr blk Nb/Ta oxides
SL-17-33	397010	5585243	111	200	-60	71.61	100.26	28.65	Mafic volcanic; Massive mgr basalt, becomes fgr and foliated
SL-17-33	397010	5585243	111	200	-60	100.26	100.45	0.19	Massive Pegmatite dykelet -'vein' Mostly very coarse radiating blades of cleavlandite
SL-17-33	397010	5585243	111	200	-60	100.45	105.26	4.81	Mafic volcanic; Massive mgr basalt. 1-2% irregular or planard calc/qtz veining
SL-17-33	397010	5585243	111	200	-60	105.26	105.44	0.18	Massive Pegmatite dykelet -'vein' Mostly vfgr sugary wh albite + Very coarse books of grn Musc and lesser gry qtz.
SL-17-33	397010	5585243	111	200	-60	105.44	111.00	5.56	Mafic volcanic; Massive mgr basalt. 1-2% irregular or planar calc/qtz veining
							TOTAL	19.77	
SL-17-35	396975	5585257	111	200	-60	0.00	1.80	1.80	Overburden
SL-17-35	396975	5585257	111	200	-60	1.80	22.81	21.01	Mafic volcanic; fgr pillowed basalt.





Hole ID	East	North	End of Hole (m)	Azimuth	Dip	From (m)	To (m)	Interval (m)	Description
SL-17-35	396975	5585257	111	200	-60	22.81	22.98	0.17	Massive pegmatite dykelet or 'vein'. Sodic phase dominantly fgr sugary albite, laminated or layered contacts with qtz - fsp -musc
SL-17-35	396975	5585257	111	200	-60	22.98	65.50	42.52	Mafic volcanic; fgr pillowed basalt. Irregular hble/calc/qtz +/- minor epid selvages
SL-17-35	396975	5585257	111	200	-60	65.50	69.15	3.65	Spodumene Nb/Ta Pegmatite: Massive pegmatite. Sodic phase with fgr sugary albite,but gry qtz is >> albite. Lt grn Spodumene with minor musc inclusions, variable in distribution 10- 15%, traces of vfgr blk Nb/Ta oxides
SL-17-35	396975	5585257	111	200	-60	69.15	70.05	0.90	Diabase dyke. Vfgr, massive and homogenous.
SL-17-35	396975	5585257	111	200	-60	70.05	71.00	0.95	Spodumene Nb/Ta Pegmatite: Massive pegmatite: Sodic phase with fgr sugary albite, but gry qtz is >> albite. Lt grn Spodumene with minor musc inclusions, variable in distribution 5- 10%, traces of vfgr blk Nb/Ta oxides
SL-17-35	396975	5585257	111	200	-60	71.00	76.74	5.74	Mafic volcanic. Both massive or foliated from 75deg TCA.
SL-17-35	396975	5585257	111	200	-60	76.74	77.70	0.96	Spodumene Nb/Ta Pegmatite: Massive pegmatite. Sodic phase with mostly





Hole ID	East	North	End of Hole (m)	Azimuth	Dip	From (m)	To (m)	Interval (m)	Description
									fgr sugary albite and much lesser gry qtz. Lt grn or white Spodumene with minor musc inclusions, variable in distribution 1-5%, traces of vfgr blk Nb/Ta oxides
SL-17-35	396975	5585257	111	200	-60	77.70	111.00	33.3	Mafic volcanic. Both massive or locally faintly foliated from 40deg TCA.
							TOTAL	5.56	
SL-17-36	397035	5585261	144	200	-60	0.00	0.60	0.60	Overburden
SL-17-36	397035	5585261	144	200	-60	0.60	11.93	11.33	Mafic volcanic; Fgr gen massive typical basalt flow. Locally pillowed with amph/calc/qtz selvages.
SL-17-36	397035	5585261	144	200	-60	11.93	12.24	0.31	Massive Pegmatite; Sodic phase, mainly vcgr clear gry qtz or qtz intimate with fgr sugary albite.
SL-17-36	397035	5585261	144	200	-60	12.24	79.65	67.41	Mafic volcanic; Fgr gen massive typical basalt flow. Locally pillowed with amph/calc/qtz selvages
SL-17-36	397035	5585261	144	200	-60	79.65	83.80	4.15	Spodumene Nb/Ta Pegmatite: Potassic phase, Fsp is creamy wh perthitic micro- fractured Kspar. Lt grn or white Spodumene with minor musc inclusions, variable in distribution 10- 20%, traces of vfgr blk Nb/Ta oxides
SL-17-36	397035	5585261	144	200	-60	83.80	125.84	42.04	Mafic volcanic; Fgr, basalt flow- massive





Hole ID	East	North	End of Hole (m)	Azimuth	Dip	From (m)	To (m)	Interval (m)	Description
									and foliated at 45- 55deg
SL-17-36	397035	5585261	144	200	-60	125.84	126.35	0.51	Nb/Ta Pegmatite: Massive Pegmatite; Sodic phase, mostly qtz intimate with fgr sugary albite. 3% fgr- mgr silvery musc. Traces of bluish Fl- apatite and Vfgr bk Nb/Ta oxides.
SL-17-36	397035	5585261	144	200	-60	126.35	135.98	9.63	Mafic volcanic; Fgr, basalt flow- massive and foliated at 45- 55deg
SL-17-36	397035	5585261	144	200	-60	135.98	136.90	0.92	Nb/Ta Pegmatite: Massive Pegmatite; Sodic phase, mostly qtz intimate with fgr sugary albite or quasi cleavlandite.
SL-17-36	397035	5585261	144	200	-60	136.90	144.00	7.10	Mafic volcanic; Fgr gen massive typical basalt flow. Pillowed with amph/calc/qtz selvages.
							TOTAL	5.58	
SL-17-39	396980	5585282	153	200	-60	0.00	2.20	2.20	Overburden
SL-17-39	396980	5585282	153	200	-60	2.20	29.35	27.15	Mafic volcanic; pillowed basalt. Fgr massive with very localized weak fol'n at approx. 40deg TCA.
SL-17-39	396980	5585282	153	200	-60	29.35	29.67	0.32	Pegmatite dykelet (vein). Mostly fgr sugary wh albite, intimate with qtz. Traces of fgr bluish Fl-Apatite.
SL-17-39	396980	5585282	153	200	-60	29.67	29.97	0.30	Mafic volcanic; pillowed basalt. Fgr massive with very localized weak fol'n





Hole ID	East	North	End of Hole (m)	Azimuth	Dip	From (m)	To (m)	Interval (m)	Description
									at approx. 40deg TCA.
SL-17-39	396980	5585282	153	200	-60	29.97	30.13	0.16	Pegmatite dykelet (vein). Mostly fgr qtz with fgr sugary wh albite. Traces of fgr bluish FI-Apatite.
SL-17-39	396980	5585282	153	200	-60	30.13	69.70	39.57	Mafic volcanic; pillowed basalt. Fgr massive with very localized weak fol'n at approx. 40deg TCA.
SL-17-39	396980	5585282	153	200	-60	69.70	77.15	7.45	Spodumene Nb/Ta Pegmatite: Very cgr, dominantly creamy wh Kspar with coarse anhedral gry qtz. Lt grn Spodumene with minor musc inclusions, variable in distribution 7- 15%, traces of vfgr blk Nb/Ta oxides
SL-17-39	396980	5585282	153	200	-60	77.15	78.64	1.49	Mafic volcanic; pillowed basalt. Fgr massive with very localized weak fol'n at approx. 40deg TCA.
SL-17-39	396980	5585282	153	200	-60	78.64	80.30	1.66	Nb/Ta Pegmatite: Dominantly fgr sugary albite often intimate with gry qtz, or as cleavlandite near lower contact.
SL-17-39	396980	5585282	153	200	-60	80.30	123.77	43.47	Mafic volcanic; pillowed basalt. Fgr massive or weakly foliated at approx. 35deg TCA.
SL-17-39	396980	5585282	153	200	-60	123.77	131.33	7.56	Spodumene Nb/Ta Pegmatite: Dominantly fgr sugary albite often





Hole ID	East	North	End of Hole (m)	Azimuth	Dip	From (m)	To (m)	Interval (m)	Description
									intimate with gry qtz. Lt grn Spodumene with minor musc inclusions, variable in distribution 1-5%, traces of vfgr blk Nb/Ta oxides
SL-17-39	396980	5585282	153	200	-60	131.30	153.00	21.70	Mafic volcanic; Fgr massive basalt, homogenous and featureless but becoming pillowed
							TOTAL	16.67	
SL-17-40	397032	5585191	126	200	-60	0.00	1.00	1.00	Overburden
SL-17-40	397032	5585191	126	200	-60	1.00	53.50	52.50	Mafic volcanic; Fgr- mgr pillowed basalt. Massive or locally strongly foliated at 40deg TCA.
SL-17-40	397032	5585191	126	200	-60	53.50	65.40	11.90	Spodumene Nb/Ta Pegmatite: Dominantly massive white to translucent gry bull qtz. Lt grn Spodumene with minor musc inclusions, variable in distribution 5- 10%, traces of vfgr blk Nb/Ta oxides
SL-17-40	397032	5585191	126	200	-60	65.40	78.58	13.18	Mafic volcanic; Fgr- mgr pillowed basalt. Amph/epid/calc/qtz selvages are localized
SL-17-40	397032	5585191	126	200	-60	78.58	80.82	2.24	Spodumene Nb/Ta Pegmatite: Potassic phase. Dom creamy wh, perthitic Kspar that can appear to be alt'g to alb. Lt grn Spodumene with minor musc inclusions, variable in distribution 1-5%,



Hole ID	East	North	End of Hole (m)	Azimuth	Dip	From (m)	To (m)	Interval (m)	Description
									traces of vfgr blk Nb/Ta oxides
SL-17-40	397032	5585191	126	200	-60	80.82	126.00	45.18	Mafic volcanic; Fgr- mgr pillowed basalt. Amph/epid/calc/qtz selvages are localized.
							TOTAL	14.14	

The identification of pegmatites either at or close to surface represents a strategic advantage for the project, potentially allowing easier access to high-quality mineralisation in a future mining scenario. The proximity of the pegmatites to surface is likely to reduce the required pre-strip.

Ardiden confirms that the drill logs contained in this announcement refer to the identification and distribution of visible spodumene crystals of various sizes and colours contained within drill core samples.

Ardiden notes that the estimated distribution of visible spodumene crystals in the drill core is not an accurate reflection of potential lithium grade and this will be determined with additional laboratory analysis.

The Company also notes that it has reported various widths of the highly evolved spodumene-bearing pegmatites. The North Aubry pegmatites are classified as highly evolved, complex type, spodumene-subtype, lithium-caesium-tantalum pegmatites. These pegmatites generally form under high-pressure—low-temperature conditions, display complex internal zoning, have relatively low Nb/Ta ratios in the ore-forming assemblages, and contain significantly elevated tantalum values.

Ardiden confirms that the North Aubry prospect contains multiple layers of highly evolved complex pegmatites and, as such, a number of the diamond drill-holes have been reported with a down-hole aggregate of visible spodumene-bearing and non-spodumene-bearing pegmatites.

The highly evolved non-spodumene-bearing pegmatites have been clearly identified in the drill log, however the lack of spodumene crystals being externally visible in the drill core is not an accurate reflection of the potential spodumene crystal content within the drill core or the potential lithium grade of the sample, which will be determined with additional laboratory analysis.

Ardiden looks forward to receiving additional drilling results, which should provide the Company with sufficient data to generate cross-sections and assist in the overall structural understanding of the North Aubry prospect.

Ardiden looks forward to providing further updates as they come to hand.

**ENDS** 

For further information:

Investors: Brad Boyle Ardiden Ltd

Tel: +61 (0) 8 6555 2950

Media:

Nicholas Read Read Corporate

Mobile: 0419 929 046



#### **About Ardiden Ltd**

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

The Seymour Lake Lithium Project comprises 7,019 Ha of mining claims and has over 4,000m of historic drilling. Mineralisation is hosted in extensive outcropping spodumene-bearing pegmatite structures with widths up to 26.13m and grades of up to 6.0% Li<sub>2</sub>O. These high-grade pegmatite structures have been defined over a 5km strike length.

The 100%-owned Root Lake Lithium Project is located in Ontario, Canada. The project comprises 1,013 Ha of mining claims and has over 10,000m of historic drilling. Mineralisation is hosted in extensive outcropping spodumene-bearing pegmatite structures with widths up to 19m and grades of up to 5.10% Li2O. 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 testwork indicated that up to 80% of the graphite at Manitouwadge is high value jumbo or large flake graphite. Testwork also indicated that simple, gravity and flotation beneficiation can produce graphite purity levels of up to 96.8% for jumbo flake and 96.8% for large flake. With the proven caustic bake process, ultra-high purity (>99.95%) graphite can be produced. The graphite can also be processed into high value expandable graphite, high quality graphene and graphene oxide.

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

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

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

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

The information in this report that relates to exploration results for 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.

## **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> <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> <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> <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> <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> <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> <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> <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>	Samples represent half the core width, and are logged in detail to support appropriate Mineral Resource estimation at a later stage of exploration.

Criteria	JORC Code explanation	Commentary
	<ul> <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> <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> <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 meter intervals and were determined to be appropriate for the mineralised material being sampled</li> </ul>
Quality of assay data and laboratory tests	<ul> <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> <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-Na202</li> <li>Quality control procedures included the insertion of certified standards and blanks into the sample stream.</li> <li>Results of the Heavy Liquid Separation tests are outlined in Table 3.</li> </ul>
verification of sampling and assaying	<ul> <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>	Drill logs and sample information is documented and stored digitally in field laptop units and backed up on the Ardiden server.
Location of data points	<ul> <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> <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
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <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>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>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	Drill hole locations were designed to intercept the mineralised zone as close to true width as possible to avoid sampling bias.
Sample security	The measures taken to ensure sample security.	Samples were secured and delivered to the assay lab under chain of custody controls by the Caracle Creek Consulting group
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews of sampling techniques have been conducted

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <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:</li> </ul>
		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

Criteria	JORC Code explanation	Commentary
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Other parties have not appraised the exploration carried out to date
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <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 steeply dipping pegmatite dykes and and sills.</li> </ul>
Drill hole Information	<ul> <li>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:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	See Tables 1 and Figure 1 for the location of the drill collars and other dill hole information.
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	With the homogeneity of the mineralised material, sample intervals for the most part were kept at one metre intervals
Relationship between mineralisation widths and	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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</li> </ul>	Mineralised zones were determined to be shallow dipping and drill holes were drilled at -60 degrees so that drilling orientation bias was minimised

Criteria	JORC Code explanation	Commentary
intercept lengths	known').	
diagrams	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.	See Figure 1 for the location of the drill hole collars.
Balanced reporting	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.	No comprehensive report has been completed to date to include the latest Ardiden exploration results.
Other substantive exploration data	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.	All meaningful and material data is reported
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Refer to text within the report.