15 November 2017

FURTHER OUTSTANDING METALLURGICAL RESULTS FROM SEYMOUR LAKE BULK SAMPLES

Heavy Liquid and Dense Media Separation tests in China on bulk samples from the North Aubry lithium deposit, provide viable support to the potential commerciality of the project

HIGHLIGHTS:

- **Metallurgical testwork program continues to demonstrate robust recoveries on the bulk sample obtained from the North Aubry Lithium deposit at Ardiden's 100%-owned Seymour Lake Lithium Project in Ontario, Canada.**

- **Additional Heavy Liquid Separation (HLS) testwork on the bulk spodumene sample improves previous Yantai results, producing very high-grade lithium concentrate of up to 7.01% Li_2O using a liquid density of 2.95g/ml and achieving a very impressive 91.63% recovery rate.**

- **Initial Dense Media Separation (DMS) testwork on the spodumene sample produces high-grade lithium concentrate of up to 6.92% Li_2O, with a recovery of 81.74%, and a concentrate of 6.05% with recovery of 85.58%**

- **Positive results obtained from the bulk sample with coarse spodumene particles of up to 6.0mm and an average head feed grade of 1.29% Li_2O.**

- **Extensive metallurgical testwork programs continue on the bulk samples.**

- **The overall results from this testwork program will assist in the development of a suitable commercial process flow design for the Seymour Lake lithium processing facility.**

Diversified minerals explorer and developer Ardiden Limited (ASX: ADV) is pleased to provide a further update on the comprehensive metallurgical testwork program being completed by the Company's strategic partner, Yantai Jinyuan Mining Machinery Co., Ltd ("Yantai"), on the bulk sample obtained from the North Aubry Lithium Deposit at its 100%-owned **Seymour Lake Lithium Project** in Ontario, Canada.

Ardiden confirms the Yantai metallurgical test results have provided further confirmation the spodumene crystals from the North Aubry Lithium deposit, liberate extremely well at a very coarse particle size of up to **6.0mm**, confirming the previous testwork results. The 500kg spodumene sample had a solid average head grade of **1.29% Li_2O** (refer Table 1).

Figure 1. Bulk sample of Spodumene bearing pegmatite obtained from the North Aubry prospect.

The comprehensive testwork on the bulk sample is to develop a commercial process flowsheet design for the Seymour Lake lithium processing facility.

COURSE SPODUMENE PARTICLE SIZES

The bulk sample feed material was collected from the North Aubry deposit using a large rock breaker and excavator. This sample did not have a natural particle size distribution (PSD) resulting from the typical drill and blast and crushing process that would normally occur on site.

Ardiden confirms the large rocks were hand broken and homogenised, then using a number of high controlled staged crushing and sample preparation procedures, Yantai artificially generated a typical feed for processing units. 500kg sample and the top size of 6mm was selected for the first stage of testwork. 6mm is the topical size limit for lithium chemical plant. The crushed head sample size distribution and grades are shown in Table 1 below, with **86.46%** of the particle sizes ranging from 0.5mm to 6.0mm and having an average head grade of **1.37% Li_2O**. There was only 13.54% of the particles that were below the 0.5mm produced with an average head grade of 0.84% Li_2O.

Figure 2. Images of Ardiden Director, Dr. Michelle Li inspecting the bulk sample of spodumene material at Yantai, obtained from the North Aubry Lithium deposit.

The aim of these metallurgical tests is to create the commercial process flow design which will increase the quantity of coarse material produced during the crushing phase, without the need to use a roller crusher, which in turn reduces the quantity of fine material generated and potentially assisting Ardiden with reduced crushing and processing times, which in turn are likely to reduce the costs of producing a lithium concentrate.

Figure 3. Images of a concentrate producedin 0.5mm to 6mm range (Left), Ardiden Director, Dr. Michelle Li inspecting the sample and discussing the testwork with Prof Gao (Right).

HEAVY LIQUID SEPARATION (HLS) TESTWORK

The HLS float and sink test results have continued to provide further evidence of the high-quality nature of the spodumene material from Seymour Lake.

Figure 4. Images of Ardiden Director, Dr. Michelle Li inspecting Spiral separation test work.

The HLS tests on the North Aubry spodumene material shows that, with the heavy liquid density of 2.95g/ml, a very impressive spodumene concentrate of up to **7.04% Li_2O**, with a recovery of **91.63% is produced** (Refer to Table 2).

DENSE MEDIA CYCLONE SEPARATION TEST WORK

The Dense Media Cyclone mineral separation tests were conducted on 0.5mm to 6mm size fractions, under a number of different operating conditions (refer to Table 3).

The testwork results indicate that with recovery rate of **85.58%,** a lithium concentrate grade of **6.05% Li_2O can be achieved**. Ardiden notes as shown in Table 3, that should it be needed the lithium concentrate grades can be improved with an increase in feed pressure, but the recovery rate is likely to be decreased.

Different medium densities were also tested, as shown in Table 4. A lithium concentrate grade of **6.92% Li_2O** with a strong recovery rate of **81.74% was achieved.** The most encouraging results occurred when using:

- Feeding density of 2400kg/m;
- Ore feeding pressure 0.045Mpa;
- Ratio of ore and medium at 1:6; and
- Feed size of 0.5mm to 6.0mm.

The metallurgical test results support that gravity separation is viable method to produce commercial grade lithium concentrate from the Seymour Lake spodumene. Testwork on bulk sample is continuing.

COMMERICAL PRODUCTION POTENTIAL

These latest metallurgical testwork results obtained from Yantai confirm that the North Aubry spodumene quality is world-class and appears to contain only traces amounts of deleterious minerals (announced 12 April 2017). High grade lithium concentrates with excellent recovery rates can also be achieved.

The Company anticipates the development of a robust commercial process flowsheet from the bulk sample testwork program.

Unlike some lithium deposits found in Australia, the North Aubry lithium deposit does not appear to have any issues with iron. Higher content of iron in spodumene will negatively impact the down-stream processing, and hence the commercial value of the lithium concentrate produced.

CONCLUSION

Ardiden considers these latest metallurgical testwork results from Yantai to be extremely encouraging. The HLS having achieved high-grade lithium concentrate of up to **7.01% Li_2O**, combined with impressive recovery rates of up to **91.63%**, the Company looks forward to advancing the development of an optimal process flowsheet to produce a commercial grade lithium concentrate.

Ardiden confirms that as these are still only preliminary testwork results and further work is underway for the development of the process flowsheet as part of the feasibility studies being conducted at the Seymour Lake Lithium Project.

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

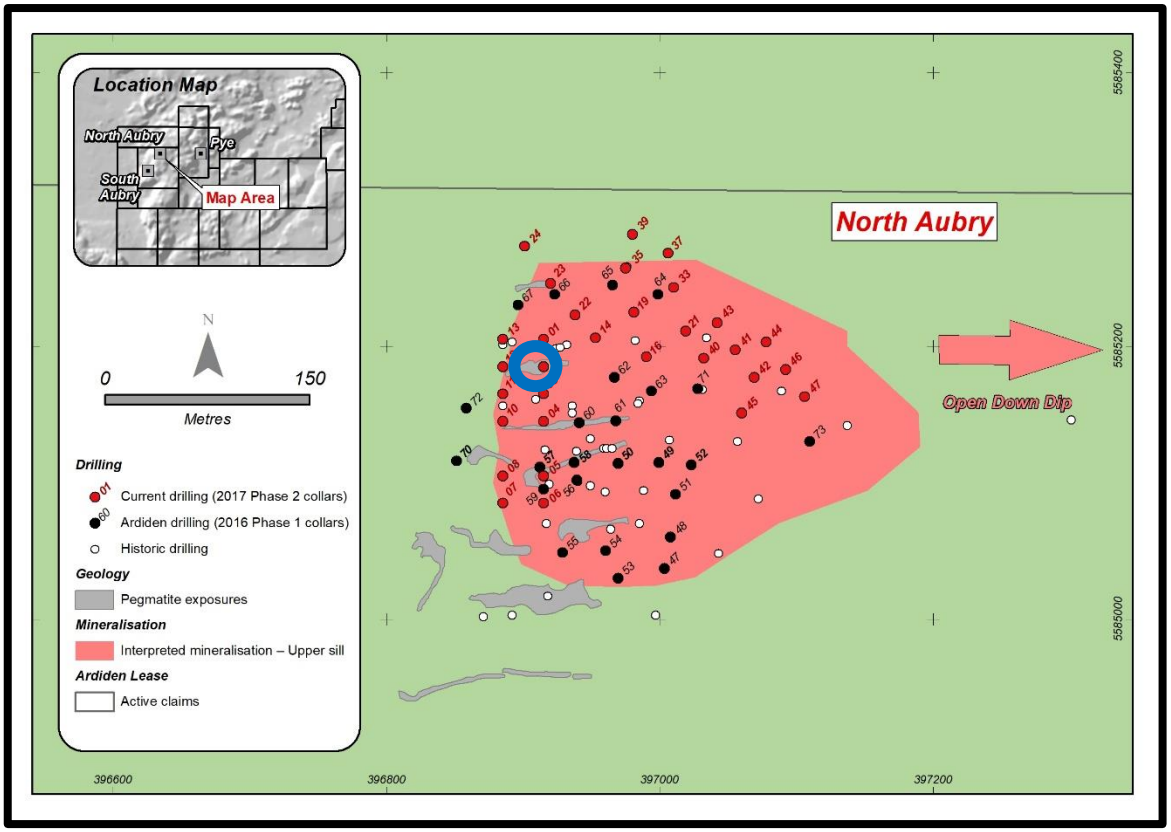

Figure 5. Overview showing the Phase 2 drill hole locations (Red) and the pegmatite exposures at North Aubry prospect, with interpreted extensions. Highlighted in the blue circle is approximate sample location for the bulk sample, which was taken at 5585185N, 3969000E.

Table 1. Yantai fraction analysis of the spodumene material obtained from the North Aubry Lithium deposit.

Product fraction （mm）	Sample weight （kg）	Productivity （%）	Grade Li_2O （%）
6-0.5	434.6	86.46	1.37
-0.5	68.1	13.54	0.84
Raw ore	502.7	100.00	1.29

Table 2. Heavy Liquid Float-and-Sink test of the Bulk Sample completed by Yantai.

Heavy-liquid density （g/ml）	Productivity （%）	Grade Li_2O （%）	（%） Recovery Li_2O
2.95	17.51	7.04	91.63
2.85	0.51	3.11	1.24
2.75	0.51	1.06	0.42
2.65	81.47	0.03	1.92
Raw ore	100.00	1.28	100.00

Table 3. The mineral test result under different feed pressure

Test conditions	Product name	Productivity （%）	Grade Li_2O （%）	Recovery Rate Li_2O （%）
Pressure：0.035MPa Flow：10.5 m^3/h Second stage under flow density： ρ=2970 kg/m^3	Spodumene concentrate	17.15	6.05	85.58
	Spodumene middlings	64.35	0.24	12.74
	Spodumene tailings	18.50	0.11	1.68
	Raw ore	100.00	1.21	100.00
Pressure：0.045MPa Flow：11.5 m^3/h Second stage underflow density： ρ=3010 kg/m^3	Concentrate Spodumene concentrate	14.25	6.74	82.45
	Spodumene middlings	62.14	0.31	16.53
	Spodumene tailings	23.61	0.05	1.02
	Raw ore	100.00	1.16	100.00
Pressure：0.055MPa flow：12.7 m^3/h Second stage underflow density： ρ=3090 kg/m^3	Spodumene concentrate	12.70	6.88	74.30
	Spodumene middlings	55.84	0.53	25.17
	Spodumene tailings	31.46	0.02	0.53
	Raw ore	100.00	1.18	100.00

Table 4. Different feed media density test result

Test condition	Product name	Productivity （%）	Grade （%）		Recovery Li_2O （%）
			Li_2O	Fe	
Feed density :1800kg/m^3 feed pressure：0.045MPa Second stage underflow density : 3090kg/m^3 Flow:12.33m^3/h	Spodumene concentrate	11.78	6.89	0.40	67.64
	Spodumene middlings	41.34	0.86		29.83
	Spodumene tailings	46.88	0.07		2.73
	Raw ore	100.00	1.20		100.00
Feed density:2000kg/m^3 Feed pressure：0.045MPa Second stage underflow density: 3050kg/m^3 Flow:11.80m^3/h	Spodumene concentrate	13.06	6.93	0.43	75.11
	Spodumene middlings	32.26	0.76		20.35
	Spodumene tailings	54.68	0.10		4.54
	Raw ore	100.00	1.21		100.00
Feed density:2200kg/m^3 Feed pressure：0.045MPa Second stage underflow density: 3060kg/m^3 Flow:11.65m^3/h	Spodumene concentrate	14.82	6.42	0.39	78.30
	Spodumene middlings	31.03	0.73		23.35
	Spodumene tailings	54.15	0.07		2.72
	Raw ore	100.00	1.22		100.00
Feed density:2400kg/m^3 Feed pressure：0.045MPa Second stage underflow density: 3070kg/m^3 Flow:11.70m^3/h	Spodumene concentrate	14.58	6.92	0.48	81.74
	Spodumene middlings	13.35	1.31		14.17
	Spodumene tailings	72.07	0.07		4.09
	Raw ore	100.00	1.23		100.00

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_2O. 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% 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 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 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 metallurgical results on lithium recovery from drill core obtained from the 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 she 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.

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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 2: 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	• *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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *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.*	• A bulk sample was taken using a hydraulic rockbreaker and excavator to load several tonnes of material into a rock truck for shipment and export to Canada for process flow test work • The bulk sample will be utilised by Yantai, a potential project partner, to assess optimise process flow, recovery techniques and other metallurgical factors as part of their due diligence into the project.
Drilling techniques	• *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).*	• No drilling was undertaken
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• No drilling was undertaken
Logging	• *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.*	No logging was undertaken

Criteria	JORC Code explanation	Commentary
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• No sampling was undertaken
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.* • *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.*	• Laboratory testing is being undertaken in China by Yantai, a potential project partner • Preliminary metallurgical testwork results are reported in the main body of the text and in Table 1 •
verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• No sampling was undertaken
Location of data points	• *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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Figure 4 presents the location of the bulk sample excavation, which was recorded using UTM NAD83 Zone 16N projection coordinates. • A DGPS handheld unit was used to record the location and this method is deemed appropriate for use.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• No Exploration results are reported • No Mineral Resource estimate is reported
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	• No grab sampling, channel sampling, trench sampling or drill core sampling was undertaken • A bulk sample was taken for metallurgical testwork
Sample security	• *The measures taken to ensure sample security.*	• Samples were secured and delivered to Chin under chain of custody controls by Gardewine transport, and Global Pack and Send via road shipment to Winnipeg then Vancouver and by slow boat to China
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews of the bulk excavation 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	• *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.* • *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.*	• All claims in the Seymour Lake Lithium project are in good standing and 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 and 4279874.
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.*	• Seymour Lake area pegmatites have been classified as belonging to the

Criteria	JORC Code explanation	Commentary
		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.

Drill hole Information	• *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:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *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.*
		• No drilling is reported

Data aggregation methods	• *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.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No exploration results are reported • No drilling is reported
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	• No drilling is reported
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 4 for the location of the bulk sample excavation

Criteria	JORC Code explanation	Commentary
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	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Refer to text within the report.