

# ASX RELEASE

5 July 2016

## Mineral Resource Estimate increases 160% to 60.5Mt

Mineral Resources Limited (ASX: MIN) ("MRL"), Neometals Ltd (ASX: NMT) ("Neometals") and Ganfeng Lithium Co., Ltd (SZSE: 002460) are pleased to provide a new Mineral Resource Estimate for the Mt Marion Lithium Project ('Mt Marion'), prepared by Snowden Mining Industry Consultants ("Snowden").

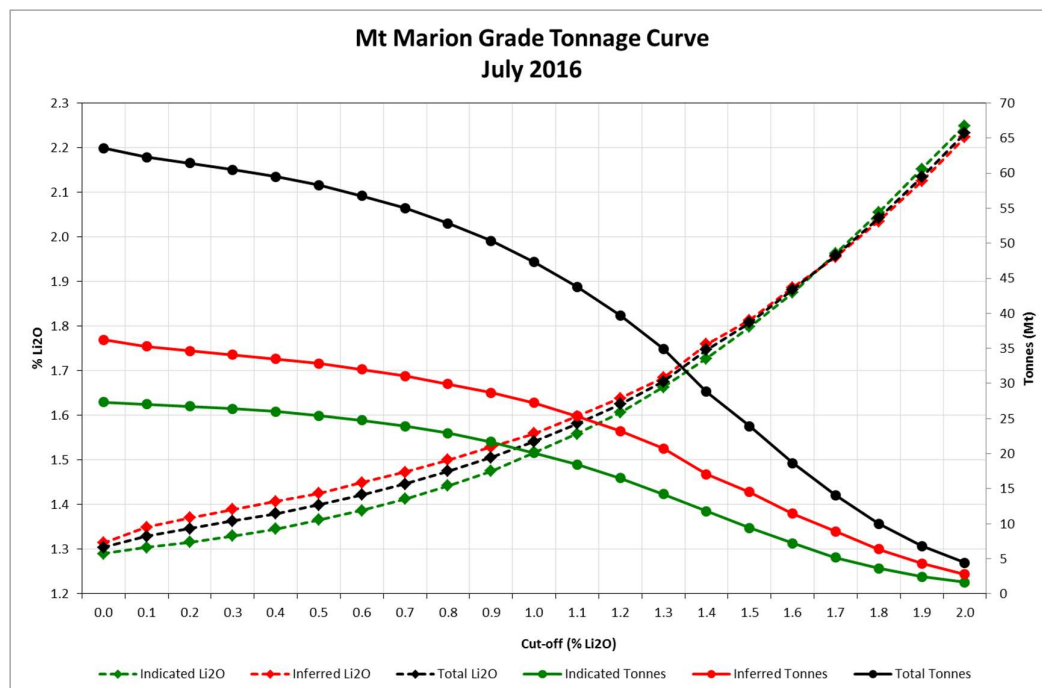
The results of the study have increased the Mineral Resource Estimate to Indicated and Inferred Mineral Resources of 60.5Mt at 1.36% Li<sub>2</sub>O and 1.09% Fe, at a cut-off grade of 0.3% Li<sub>2</sub>O (Table 1 and Appendix A), compared to 23.24Mt at 1.39% Li<sub>2</sub>O, at a cut-off grade of 0% Li<sub>2</sub>O previously. This represents a substantial increase in the size of the mineral resource, equating to a 160% increase in the total contained lithium at the Project. The 0.3% cut-off grade reflects the strategy of mining to the lithium-bearing pegmatite contacts.

**Table 1 Mt Marion Resource Table for 0.3% Li<sub>2</sub>O cut-off**

Category (JORC, 2012)	Tonnage (Mt)	Li <sub>2</sub> O (%)	Fe (%)
Indicated	26.4	1.33	1.09
Inferred	34.1	1.39	1.08
<b>Total</b>	<b>60.5</b>	<b>1.36</b>	<b>1.09</b>

Figure may not sum due to rounding  
Significant figures do not imply an added level of precision

**Figure 1 Mt Marion Grade-Tonnage Curve**



The Mt Marion lithium mineralisation is hosted within a number of sub-parallel, northeast to northwest trending pegmatite intrusive bodies which dip at between 10° and 30° to the west. Individual pegmatites vary in strike length from approximately 300 m to 1,500 m and average 15 m to 20 m in thickness, but vary locally from less than 2 m to up to 35 m thick, excluding the 2W feeder area where latest intercepts include 186m @ 1.82% Li<sub>2</sub>O, 139m @ 1.69% Li<sub>2</sub>O and 92m @ 1.54% Li<sub>2</sub>O. MRL notes that the 2W feeder zone is at an early stage of exploration and not well understood at this stage. Further work is required to develop the geological interpretation in this area. The pegmatites intrude the mafic volcanic host rocks of the surrounding greenstone belt.

The lithium occurs as 10 cm to 30 cm long grey-white spodumene crystals (Figure 2) within medium grained pegmatites comprising primarily of quartz, feldspar, spodumene and muscovite. Typically, the spodumene crystals are oriented orthogonal to the pegmatite contacts. Some zoning of the pegmatites parallel to the contacts is observed, with higher concentrations of spodumene typically occurring close to the upper contact.

**Figure 2** Spodumene crystals (grey-white) within pegmatite at Area 1 deposit



The spodumene-bearing pegmatites were interpreted in section by Snowden as a series of sub-parallel lenses. Solid wireframes were subsequently built for each lens. The interpretation was based largely on the geological logging of pegmatite intersections, along with the geochemical assay data (e.g. Li<sub>2</sub>O, Fe and MgO). MRL provided working sections which were compiled by MRL during the recent drilling to guide the interpretation of the pegmatites. As no drilling was conducted at Areas 4 and 5, no changes were made to the pegmatite interpretation in these areas.

Prior to the additional drilling, Areas 1, 2 and 2W were separate distinct zones of pegmatite, however the additional drilling has resulted in the merging of these three areas (e.g. the Area 1 pegmatite joins with Area 2 and the deeper portions of Area 2W).

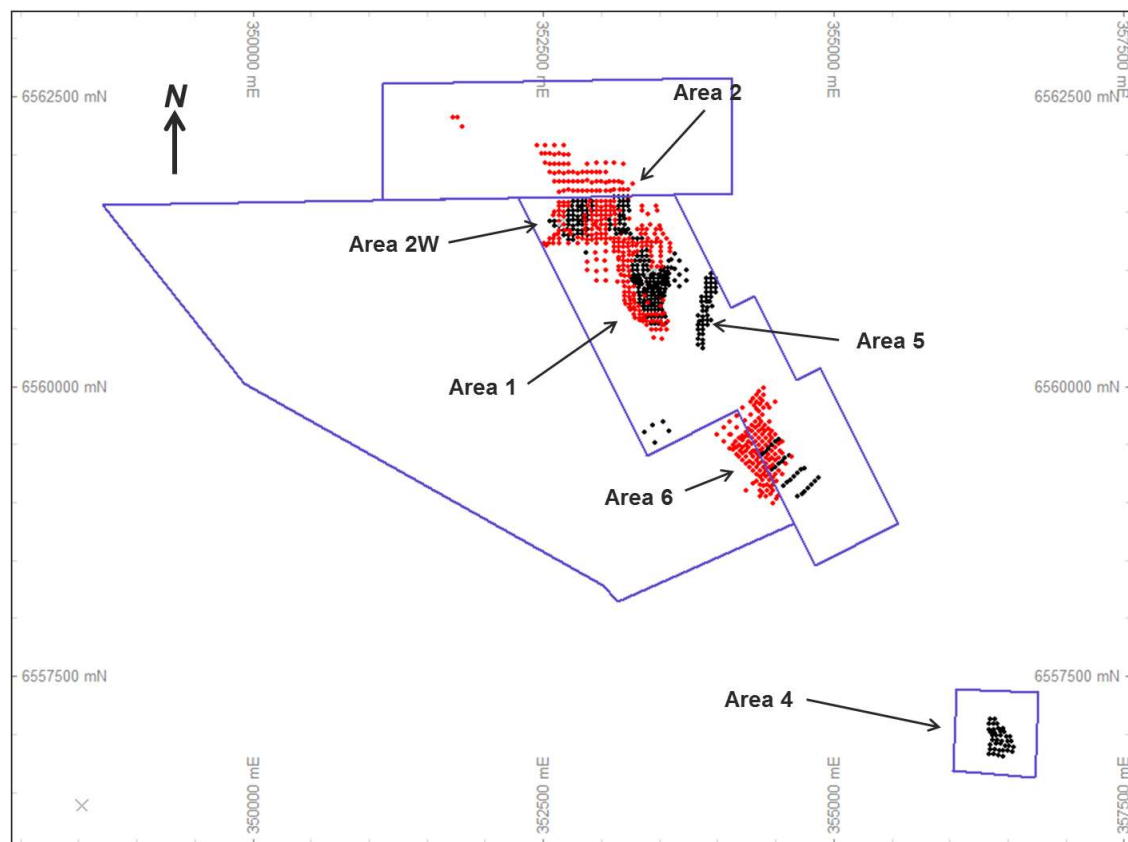
To the southwest of Area 2W, deep drilling (>300 m) has intersected large intervals of pegmatite, which are interpreted to be part of a sub-vertical feeder zone. The geometry and nature of this feeder zone is currently not well understood due to the limited drilling and sub-optimal orientation of the drilling with respect to the sub-vertical feeder zone.

The majority of the deposits have been drilled on a nominal 40 mE by 40 mN drill spacing, with the drill sections oriented east-west. Drilling within the Area 1 deposit is down to 25 m to 30 m. The drill sections are oriented northeast-southwest within Area 6, which has been infilled largely to 40 m along strike by 40 m across strike.

A total of 852 drill holes have been drilled as at 17 June 2016, totalling approximately 67,185 m in length. The majority of the drilling is RC drilling which comprises some 97% of the drilled metres, with the remainder drilled using diamond core drilling. Initial drilling at Mt Marion commenced in the early 1970s with Western Mining Corporation (WMC), however the vast majority of the drilling, approximately 99% of the drilled metres, was completed by Reed Resources Ltd (now Neometals), Reed Industrial Minerals Ltd (RIM) and MRL since 2009. Approximately 47,138 m of additional drilling has been completed in 2015 and 2016 since the previous resource estimate.

A collar location plan is provided in Figure 3, with the 2015 to 2016 drilling highlighted in red.

**Figure 3 Drill hole collar location plan (as at 17 June 2016)**



The Li<sub>2</sub>O assay was determined by Genalysis in 2009 to 2011 using a four-acid digest (comprising hydrofluoric, nitric, hydrochloric and perchloric acids) followed by determination of the Li<sub>2</sub>O content by atomic absorption spectroscopy (AAS) with a detection limit of 1 ppm. The Li<sub>2</sub>O grades were reported by the laboratory in percentage units, rather than ppm, to two decimal places. Nagrom determined the Li<sub>2</sub>O content for the 2015 to 2016 samples by peroxide fusion digest with an ICP finish.

An additional test portion was analysed by x-ray fluorescence (XRF) for the following elements at both Genalysis and Nagrom; detection limit in parentheses: Al<sub>2</sub>O<sub>3</sub> (0.01%), CaO (0.01%), Cr<sub>2</sub>O<sub>3</sub> (0.005%), Fe<sub>2</sub>O<sub>3</sub> (0.01%), K<sub>2</sub>O (0.01%), MgO (0.01%), MnO (0.005%), Na<sub>2</sub>O (0.01%), Nb (0.01%), P<sub>2</sub>O<sub>5</sub> (0.001%), SiO<sub>2</sub> (0.01%), SO<sub>3</sub> (0.01%), Ta (0.005%) and TiO<sub>2</sub> (0.01%).

A further test portion of the sample was analysed by thermogravimetric analysis (TGA) to determine the total loss on ignition (LOI) at 1000°C. The detection limit for the LOI determination is 0.01% LOI.

A block model was constructed based on a parent block size of 15 mE by 15 mN by 2.5 mRL, with a minimum sub-block size of 5 mE by 5 mN by 0.5 mRL. The chosen parent block size is based on the nominal drill hole spacing along with consideration of the geometry of the mineralisation and the results of the grade continuity analysis. The block size in the vertical direction was chosen to coincide with the proposed open-pit bench height. The block model was coded with the pegmatite wireframes and oxidation state. Snowden notes that the block model is limited to the tenement boundaries supplied by RIM.

Snowden estimated Li<sub>2</sub>O, Fe, Al<sub>2</sub>O<sub>3</sub>, CaO, K<sub>2</sub>O, LOI, MgO, MnO, Na<sub>2</sub>O, P, SiO<sub>2</sub>, Ta and TiO<sub>2</sub> grades using ordinary block kriging (parent cell estimates) using Datamine Studio 3 software. Due to the variable dip of the pegmatites, dynamic anisotropy was used to locally adjust the orientation of the search ellipse and variogram models. The initial search ellipse of 50 m along strike by 35 m down dip by 4 m across strike was defined based on the results of the variography and assessment of the data coverage. A minimum of eight and maximum of 20 composites was used for the initial search pass, with no more than four composites per drill hole.

The July 2016 Mt Marion Mineral Resource estimate was classified and reported in accordance with the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code).

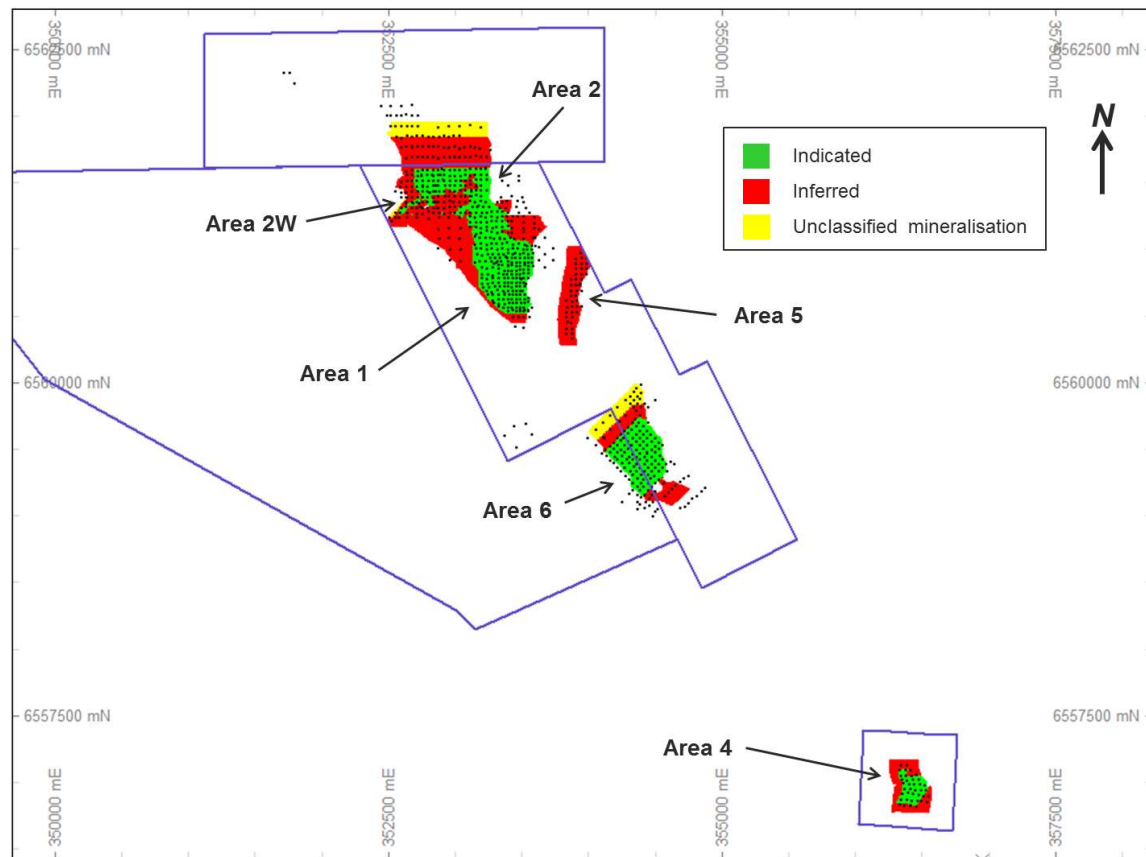
The Mineral Resource has been classified as a combination of Indicated and Inferred Resources using the following criteria:

- Indicated Resource – Area 1, 2, 2W, 4 and 6 mineralisation with good geological continuity and defined by drilling on a 40 mE by 40 mN grid or better. The Indicated Resource is limited to a vertical depth of approximately 100 m below surface.
- Inferred Resource – mineralisation with poor geological continuity or which is defined by drilling on a grid greater than 40 mE by 40 mN. Area 5 is classified as Inferred in its entirety.
- The Mineral Resource has been limited to pegmatite mineralisation above 150 mRL (an approximate vertical depth of 250 m below surface). Pegmatite below this level (deep portion of the Area 2W feeder zone) does not, in Snowden's opinion, have reasonable prospects for eventual economic extraction at this stage. A pit optimisation completed by Snowden in 2015 on the previous resource model showed potential open-pit mining to a depth of 170 m below surface and Snowden believes that the additional pegmatite identified in the recent drilling should extend this depth to around 250 m below surface.

Extrapolation beyond the drilling is limited to approximately one drill section in most cases. Mineralisation extrapolation beyond this limit remains unclassified and has been excluded from the Mineral Resource. In the northern portion of Area 2/2W and the northwest portion of Area 6, assays for approximately the last two lines of drilling were not available at the time of the resource estimate, and whilst the drilling shows pegmatite has been intersected, these regions of the pegmatite remain unclassified and do not form part of the Mineral Resource.

The resource classification scheme for the July 2016 Mt Marion Mineral Resource estimate is shown in Figure 4.

**Figure 4 Mineral Resource classification scheme**



The total Mineral Resource for the Mt Marion lithium deposit, reported above a 0.3%  $\text{Li}_2\text{O}$  cut-off grade, is estimated to be 60.5 million tonnes (Mt) grading at 1.36%  $\text{Li}_2\text{O}$  and 1.09% Fe (Table 2). A 0.3%  $\text{Li}_2\text{O}$  cut-off grade was applied for the reporting due to the change in interpretation methodology. For the July 2016 resource estimate, the pegmatite was interpreted irrespective of  $\text{Li}_2\text{O}$  content, whereas for the 2015 estimate the interpretation used a  $\text{Li}_2\text{O}$  threshold to interpret the mineralised pegmatite and hence was reported in its entirety within the interpreted domains. Snowden notes that the sensitivity of the Mineral Resource to the reporting cut-off grade is minimal at cut-offs below 0.5%  $\text{Li}_2\text{O}$ .



**Table 2**                      **Mt Marion Mineral Resource as at July 2016, reported above 0.3% Li<sub>2</sub>O cut-off**

Classification	Deposit	Tonnes (Mt)	Li <sub>2</sub> O (%)	Fe (%)
Indicated	Area 1, 2, 2W	18.5	1.38	1.09
	Area 4	0.9	1.24	1.03
	Area 6	7.0	1.22	1.09
	<b>Indicated total</b>	<b>26.4</b>	<b>1.33</b>	<b>1.09</b>
Inferred	Area 1, 2, 2W	29.4	1.42	1.04
	Area 4	1.4	1.19	1.29
	Area 5	1.0	1.32	1.71
	Area 6	2.3	1.19	1.25
	<b>Inferred total</b>	<b>34.1</b>	<b>1.39</b>	<b>1.08</b>
<b>Grand total</b>		<b>60.5</b>	<b>1.36</b>	<b>1.09</b>

*Note: Small discrepancies may occur due to rounding*

While exercising all reasonable due diligence in checking and confirming the data validity, Snowden has relied largely on the data as supplied by MRL to estimate and classify the Mt Marion Mineral Resource. As such, Snowden accepts responsibility for the resource modelling and classification while MRL has assumed responsibility for the accuracy and quality of the underlying drilling data.

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## **COMPETENT PERSON'S STATEMENT**

*The information in this report that relates to the Mt Marion Mineral Resource estimate is based on information compiled by John Graindorge who is a Chartered Professional (Geology) and a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM) and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity to which he is undertaking to qualify as a competent person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". John Graindorge is a full-time employee of Snowden Mining Industry Consultants Pty Ltd and consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.*

**JORC (2012) Table 1 – Section 1 Sampling Techniques and Data**

Item	Comments
Sampling techniques	<ul style="list-style-type: none"> <li>The bulk of the data used for resource estimation is based on the logging and sampling of RC drilling (approximately 97% of the data). RC samples were collected at 1 m intervals within the logged pegmatite using a static cone splitter mounted below the cyclone. Sample bags are pre-numbered.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>The vast majority (97% of drilled metres) of drilling was completed using vertical RC holes using a face sampling bit. Water injection was used for the 2015 to 2016 drilling due to the presence of fibrous minerals in the surrounding host rocks.</li> <li>Some diamond core drilling (NQ, HQ3 and PQ3 diameter core) was undertaken to collect samples for metallurgical/geotechnical testwork.</li> <li>Historical drilling completed in the 1970s accounts for approximately 1% of the drilled metres, with the remainder drilled by Reed Resources Ltd (Reed) and Reed Industrial Minerals Pty Ltd (RIM) in 2009 to 2011 and Mineral Resources Limited (MRL) in 2015 to 2016.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>RC recovery was estimated for 76 RC drillholes during the 2011 drilling campaign at the Area 4 deposit by weighing the residue bags, with an average recovery of 95% (with a range of 86% up to 100% recovery).</li> <li>Core recovery from the 2015 diamond drilling averages 98%, with a standard deviation of 15% recovery.</li> <li>No sample recovery was recorded for the 2015 to 2016 RC drilling due to the wet drilling conditions.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>Qualitative geological logging of most drillhole intervals was done with sufficient detail to meet the requirements of resource estimation.</li> <li>Where logging is available all intervals were logged, however some of the early drillholes do not have any geological logging.</li> </ul>
Subsampling techniques and sample preparation	<ul style="list-style-type: none"> <li>A nominal 1 m sample interval was used for the RC drilling and diamond core within the pegmatite intervals plus two samples either side. Outside the logged pegmatite, a 6 m composite sample was collected by scooping from each 1 m pile.</li> <li>Diamond drillhole, where sampled, was sampled using quarter core samples, cut with a diamond saw. RC samples were split using a static cone splitter with approximately 2 kg to 3 kg samples collected.</li> <li>Laboratory sample preparation conducted at Genalysis in Kalgoorlie, Western Australia and Nagrom in Perth, Western Australia, follows very similar processes comprising: <ul style="list-style-type: none"> <li>Drying at 105°C</li> <li>Crush to a nominal top size of 6.3 mm</li> <li>Pulverising to 80% to 85% passing 75 µm</li> <li>Approximate 200 g subsample collected from pulp using a rotary divider (Genalysis) or by scooping (Nagrom).</li> </ul> </li> <li>The sample sizes are considered to be reasonable to correctly represent the mineralisation based on the style of mineralisation (spodumene-bearing pegmatite), the thickness and consistency of intersections and the drilling methodology.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>No QAQC of historical 1970s drilling, however, this comprises only 1% of drilled metres and is not considered material.</li> <li>Pulps from 2009 to 2011 samples forwarded to Genalysis in Perth, Western Australia for analysis. Samples from the 2015 to 2016 drilling were prepared and analysed at the Nagrom laboratory in Perth, Western Australia.</li> <li>Li<sub>2</sub>O determined by four-acid digest with AAS finish for 2009 to 2011 data and by peroxide fusion digest with an ICP finish for 2015 to 2016 samples. XRF analysis for Al<sub>2</sub>O<sub>3</sub>, CaO, Cr<sub>2</sub>O<sub>3</sub>, Fe, K<sub>2</sub>O, MgO, MnO, Na<sub>2</sub>O, Nb, P, SiO<sub>2</sub>, SO<sub>3</sub>, Ta and TiO<sub>2</sub>. Loss on ignition (LOI) at 1000°C measured by thermogravimetric analysis (TGA).</li> <li>In-house pulp standards generated by Gannet Holdings Ltd from Mt Marion material. The standards were not certified, with the standard results assessed by RIM in 2009 to 2011 against the raw average of the round robin assays.</li> <li>2009 to 2011 drilling: Quality control samples, including field duplicates and uncertified standards, were inserted in each sample batch. One uncertified standard was inserted every 20 samples along with one field duplicate sample per drillhole. A total of 230 field duplicates were collected.</li> </ul>

Item	Comments
	<ul style="list-style-type: none"> <li>2015 to 2016 drilling: Quality control samples, including field duplicates and uncertified standards, were inserted in each sample batch. One uncertified standard was inserted every 25 samples and one field duplicate every 20 samples. A total of 535 field duplicates were collected.</li> <li>Results show that reasonable accuracy and precision was achieved during sampling, sample preparation and assaying. However, Snowden notes that the in-house standards used from 2009 to 2016 do not have a certified expected value or standard deviation and only provide an indicative assessment of the analytical accuracy.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>Snowden has not conducted any independent verification of the assay data.</li> <li>Procedures for all aspects of drilling, sampling and geological logging are documented by MRL.</li> <li>Ten drillholes have been twinned by RC drillholes. Analysis of the twinned holes shows a reasonable comparison between the drilling techniques.</li> <li>Values below the analytical detection limit were replaced with half the detection limit value. Due to the different generations of data some assay conversions from ppm to percent were made (by dividing by 10,000). Additionally, in some cases conversion from Li to Li<sub>2</sub>O and from Fe<sub>2</sub>O<sub>3</sub> to Fe was required. No other adjustments have been made to the assay data.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>The grid is based on the GDA94 grid system.</li> <li>Drillhole collar locations were surveyed by a contract surveyor. The survey methodology and nominal accuracy is not documented. 17 drillholes were found to have incorrect Z coordinates for the collar and were subsequently projected to the topographic surface.</li> <li>No downhole survey information was collected. The majority of holes were drilled vertically. Some shallow inclined holes were drilled at the Area 5 deposit.</li> <li>Given that all the drillholes at the Mt Marion deposit are vertical, Snowden does not consider the downhole deviation (and lack of adequate downhole surveys) to be a major risk with respect to the shallow portions of the Mt Marion resource. Below 100 m vertical depth the Mineral Resource has been classified as Inferred, partly to reflect uncertainty associated with potential drillhole deviation.</li> <li>A LIDAR topographic survey of the project area was provided based on 1 m contours. The topography surface is validated by the drillhole collar surveys.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>The drilling was completed along a set of east-west trending sections for Areas 1, 2, 2W, 4 and 5. The drill sections are oriented northeast-southwest for Area 6. The drill spacing ranges from 30 m to 40 m apart (in the along strike and down dip directions) for the majority of the deposit.</li> <li>The section spacing is sufficient to establish the degree of geological and grade continuity necessary to support the resource classifications that were applied.</li> <li>The drilling was composited downhole using a 1 m interval within the pegmatite and 6 m within the surrounding host rocks.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>The vast majority of the drilling is vertical.</li> <li>The location and orientation of the majority of the Mt Marion drilling is appropriate given the strike and morphology of the lithium pegmatite mineralisation. For the sub-vertical feeder zone at Area 2W, the vertical drilling is not considered appropriate and is reflected in the Inferred classification in this area.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>No specific measures have been taken to ensure sample security.</li> <li>Once received at the laboratory, samples were compared by the laboratory to the sample dispatch documents.</li> <li>Snowden does not believe that sample security poses a material risk to the integrity of the assay data used in the Mineral Resource estimate.</li> </ul>
Audits and reviews	<ul style="list-style-type: none"> <li>Snowden is not aware of any other independent reviews of the drilling, sampling and assaying protocols, or the assay database, for the Mt Marion project.</li> </ul>



**JORC (2012) Table 1 – Section 2 Reporting of Exploration Results**

Item	Comments
Mineral tenement and land tenure	<ul style="list-style-type: none"> <li>Granted Mining Leases M15/717, M15/999 and M15/1000. Leases granted to Reed Industrial Minerals Pty Ltd (RIM), which is a joint venture between Neometals Ltd (13.8%), Mineral Resources Limited (43.1%) and Jiangxi Ganfeng Lithium Co. Ltd (43.1%).</li> <li>Northern portion of project occurs on Hampton Area Location 53, which is owned by Metals X Limited. RIM has agreed to lease the lithium mining rights over a portion of Hampton Area Location 53, adjoining the Mt Marion project. The agreement allows RIM to explore and develop the lithium project within the agreed portion of Hampton Area Location 53. For details, refer to Neometals Ltd announcement dated 7 July 2015 entitled "Completion of transaction with Metals X".</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>A total of 852 drillholes have been drilled as at 17 June 2016 totalling approximately 67,185 m in length. Initial drilling at Mt Marion was completed by Western Mining Corporation in the 1970s. Approximately 28% of the drilled metres, were completed by Reed and later RIM between 2009 and 2011, with the remainder completed by MRL between 2015 and 2016.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>The Mt Marion lithium mineralisation is hosted within a number of sub-parallel, northeast to northwest trending pegmatite intrusive bodies which dip at between 10° and 30° to the west. Individual pegmatites vary in strike length from approximately 300 m to 1,500 m and average 15 m to 20 m in thickness, but vary locally from less than 2 m to up to 35 m thick. The pegmatites intrude the mafic volcanic host rocks of the surrounding greenstone belt.</li> <li>The lithium occurs as 10 cm to 30 cm long grey-white spodumene crystals within medium grained pegmatites comprising primarily of quartz, feldspar, spodumene and muscovite. Typically, the spodumene crystals are oriented orthogonal to the pegmatite contacts. Some zoning of the pegmatites parallel to the contacts is observed, with higher concentrations of spodumene occurring close to the upper contact.</li> <li>To the southwest of Area 2W, deep drilling (&lt;300 m) has intersected large intervals of pegmatite, which are interpreted to be part of a sub-vertical feeder zone. The geometry and nature of this feeder zone is currently not well understood due to the limited drilling and sub-optimal orientation of the drilling with respect to the sub-vertical feeder zone.</li> </ul>
Drillhole information	<ul style="list-style-type: none"> <li>No exploration results being reported.</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>No exploration results being reported.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>No exploration results being reported.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>Refer to figures in main summary.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>No exploration results being reported.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>No exploration results being reported.</li> <li>Outcrop of spodumene-bearing pegmatite support the interpreted pegmatite in these areas.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>Snowden understands that drilling is still ongoing at the Mt Marion project, with drilling targeting the deep feeder zone at Area 2W, plus along strike extensions of the pegmatite.</li> </ul>

**JORC (2012) Table 1 – Section 3 Estimation and Reporting of Mineral Resources**

Item	Comments
Database integrity	<ul style="list-style-type: none"> <li>MRL stores all of the Mt Marion drilling information in a DataShed database. The database is managed by Rock Solid Consultancy Pty Ltd.</li> <li>Snowden undertook a basic check of the data for potential errors as a preliminary step to compiling the resource estimate. No significant flaws were identified.</li> </ul>
Site visits	<ul style="list-style-type: none"> <li>John Graindorge (Principal Consultant, Snowden) visited the Mt Marion site on 20 July 2015 and again on 8 and 9 February 2016, observing the outcropping spodumene-bearing pegmatites, RC drilling and sampling, drillhole collars (where preserved) and general site layout.</li> </ul>
Geological interpretation	<ul style="list-style-type: none"> <li>Snowden believes that the local geology is reasonably well understood as a result of work undertaken by RIM.</li> <li>Lithium mineralisation occurs as spodumene crystals which are hosted within quartz-feldspar-muscovite pegmatites.</li> <li>The spodumene-bearing pegmatites were interpreted and wireframed in section by Snowden based largely on the geological logging of pegmatite intersections, along with the geochemistry (e.g. Li<sub>2</sub>O, Fe and MgO content).</li> <li>The feeder zone at Area 2W is interpreted to be sub-vertical, however the limited drilling and vertical orientation of the drilling means that there is significant uncertainty associated with this zone.</li> <li>No changes were made to Areas 4 or 5 from the 2011 interpretation as no further drilling has been conducted in these areas.</li> <li>Outcrops of the pegmatite mineralisation confirm the validity of the geological interpretation based on the drilling.</li> <li>Alternative interpretations of the mineralisation are unlikely to significantly change the overall volume of the mineralised envelopes in terms of the reported classified resources.</li> </ul>
Dimensions	<ul style="list-style-type: none"> <li>The Mt Marion lithium mineralisation is hosted within a number of sub-parallel, northeast to northwest trending pegmatite intrusive bodies which dip at between 10° and 30° to the west. Individual pegmatites vary in strike length from approximately 300 m to 1,500 m and average 15 m to 20 m in thickness, but vary locally from less than 2 m to up to 35 m thick. The pegmatites are currently defined to a depth of up to 250 m below surface, with the feeder zone extending down to a depth of 400 m below surface.</li> </ul>
Estimation and modelling techniques	<ul style="list-style-type: none"> <li>Estimation of Li<sub>2</sub>O, Fe, Al<sub>2</sub>O<sub>3</sub>, CaO, K<sub>2</sub>O, LOI, MgO, MnO, Na<sub>2</sub>O, P, SiO<sub>2</sub>, Ta, and TiO<sub>2</sub> using ordinary block kriging with hard domain boundaries and top-cuts where required to control the impact of outlier grades. No top-cuts were applied to Li<sub>2</sub>O or Fe. Dynamic anisotropy was used to locally adjust the search ellipse and variogram orientation based on the local dip and dip direction of the geological interpretation. Grade estimation was completed using Datamine Studio 3 (Datamine) software.</li> <li>Block model constructed using a parent block size of 15 mE by 15 mN by 2.5 mRL based on half the nominal drillhole spacing along with an assessment of the grade continuity. The search ellipse orientation and radius was based on the results of the grade continuity analysis, with the same search neighbourhood parameters used for all elements to maintain the metal balance and correlations between elements. An initial search of 50 m by 35 m by 4 m thick was used, with a minimum of eight and maximum of 20 samples. The number of samples per drillhole was limited to four.</li> <li>Lithium mineralisation was modelled, along with the surrounding host rock domains.</li> <li>Grade estimates were validated against the input drillhole composites (globally and using grade trend plots) and show a good comparison.</li> <li>Snowden previously estimated the Mt Marion Mineral Resource in September 2015. The 2016 Mineral Resource estimate is significantly larger in terms of tonnage (60.5 Mt compared to 23.2 Mt), due to the additional pegmatite identified during the 2015 to 2016 drilling, although the Li<sub>2</sub>O grade is very similar to the previous estimate.</li> </ul>
Moisture	<ul style="list-style-type: none"> <li>All tonnages have been estimated as dry tonnages.</li> </ul>
Cut-off parameters	<ul style="list-style-type: none"> <li>The mineralisation has been reported above a 0.3% Li<sub>2</sub>O cut-off grade.</li> <li>A 0.3% Li<sub>2</sub>O cut-off grade was applied for the reporting due to the change in interpretation methodology. For the July 2016 resource estimate, the pegmatite was interpreted irrespective of Li<sub>2</sub>O content, whereas for the 2015 estimate the interpretation used a Li<sub>2</sub>O threshold to interpret the mineralised pegmatite and hence was reported in its entirety within the interpreted domains. Snowden notes that the sensitivity of the Mineral Resource to the reporting cut-off grade is minimal at cut-offs below 0.5% Li<sub>2</sub>O.</li> </ul>

Item	Comments																	
Mining factors and assumptions	<ul style="list-style-type: none"><li>It is assumed the deposit will be mined using conventional open cut mining methods, with on-site processing and road train haulage of the spodumene concentrate.</li></ul>																	
Metallurgical factors and assumptions	<ul style="list-style-type: none"><li>RIM indicated that the ore will be processed on site to produce a spodumene concentrate.</li><li>A prefeasibility study completed by Reed in October 2012 indicates that lithium hydroxide can be produced from Mt Marion lithium concentrates.</li></ul>																	
Environmental factors and assumptions	<ul style="list-style-type: none"><li>It is assumed that no environmental factors exist that could prohibit any potential mining development at the Mt Marion deposit.</li></ul>																	
Bulk density	<ul style="list-style-type: none"><li>Only 11 direct bulk density measurements have been completed to date. The bulk density measurements were completed at the Genalysis Laboratory in 2011 on 10 cm pieces of unoxidised PQ3 diamond drill core from the Area 1, 2 and 2W deposits, from drillholes MMD103 to MMD108. The average bulk density of the 11 samples is 2.72 t/m<sup>3</sup>, varying from 2.62 t/m<sup>3</sup> up to 2.86 t/m<sup>3</sup>.</li><li>A number of diamond core holes were drilled in 2015 to provide material for metallurgical testwork. No bulk density measurements were taken prior to sampling the core; however, whilst no direct density measurements were taken, full core trays were weighed and the core diameter was measured. Snowden used this data to estimate the bulk density for each tray, given the core diameter, interval length and weight (factored to remove the weight of the empty core tray). These calculated density values (219 in total) were then merged with the drillhole database and coded with the oxidation state and whether the interval was within the pegmatite interpretations. Snowden then analysed this data to derive bulk density values for each combination of rock type (i.e. pegmatite or host rock) and oxidation state. Whilst not ideal, these measurements provide a reasonable estimate of the bulk density of the Mt Marion pegmatite.</li><li>Based on the limited available bulk density data, Snowden assigned default bulk density values to the model blocks as follows:<table><tr><th>Unit</th><th>Oxidation state</th><th>Bulk density (t/m<sup>3</sup>)</th></tr><tr><td rowspan="3">Pegmatite</td><td>Oxide</td><td>2.50</td></tr><tr><td>Transitional</td><td>2.60</td></tr><tr><td>Fresh</td><td>2.75</td></tr><tr><td rowspan="3">Mafic volcanic host rocks</td><td>Oxide</td><td>2.25</td></tr><tr><td>Transitional</td><td>2.50</td></tr><tr><td>Fresh</td><td>2.85</td></tr></table></li></ul>	Unit	Oxidation state	Bulk density (t/m <sup>3</sup> )	Pegmatite	Oxide	2.50	Transitional	2.60	Fresh	2.75	Mafic volcanic host rocks	Oxide	2.25	Transitional	2.50	Fresh	2.85
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Classification	<ul style="list-style-type: none"><li>The resources have been classified based on the continuity of both the geology and the grades, along with the drillhole spacing and data quality.</li><li>The Mineral Resource has been classified as a combination of Indicated and Inferred Resources using the following criteria:<ul style="list-style-type: none"><li>Indicated Resource – Area 1, 2, 2W, 4 and 6 mineralisation with good geological continuity and defined by drilling on a 40 mE by 40 mN grid or better. The Indicated Resource is limited to a vertical depth of approximately 100 m below surface.</li><li>Inferred Resource – mineralisation with poor geological continuity or which is defined by drilling on a grid greater than 40 mE by 40 mN. Area 5 is classified as Inferred in its entirety.</li><li>The Mineral Resource has been limited to pegmatite mineralisation above 150 mRL (an approximate vertical depth of 250 m below surface). Pegmatite below this level (deep portion of the Area 2W feeder zone) does not, in Snowden’s opinion, have reasonable prospects for eventual economic extraction at this stage. A pit optimisation completed by Snowden in 2015 on the previous resource model showed potential open-pit mining to a depth of 170 m below surface and Snowden believes that the additional pegmatite identified in the recent drilling should extend this depth to around 250 m below surface.</li></ul></li><li>The Mineral Resource classification appropriately reflects the view of the Competent Person.</li></ul>																	
Audits and reviews	<ul style="list-style-type: none"><li>The Mineral Resource estimate has been peer reviewed as part of Snowden’s standard internal peer review process.</li><li>Snowden is not aware of any external reviews of the Mt Marion Mineral Resource estimate.</li></ul>																	

Item	Comments
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> <li>• The Mineral Resource has been validated both globally and locally against the input composite data. The Indicated portion of the Mineral Resource estimate is considered to be locally accurate at the scale of the parent block size. Close spaced drilling is required to assess the confidence of the short range grade continuity.</li> <li>• No production data is available for comparison with the Mineral Resource estimate at this stage.</li> </ul>