5 May 2023

8.0 Mt at 1.07% Li_2O Maiden Mineral Resource at Mavis Lake

Highlights

- Maiden JORC Code 2012 compliant Inferred Mineral Resource Estimate (MRE) defined for the 100% owned Mavis Lake Lithium Project – Ontario, Canada

8.0 Mt at 1.07 % Li_2O

- The Mineral Resource is based on drilling on approximately 2% of the Mavis Lake Project area and includes drilling results completed by the Company between April 2022 to March 2023
- Drilling from April 2023 has not been included in the MRE, and will be included in any future Mineral Resource upgrade
- Significant potential for further Mineral Resource upgrades have been identified with the Mavis Lake Main Zone mineralisation remaining open both along strike and down-dip
- Multiple, mapped spodumene-bearing outcrops across the Mavis Lake Project are yet to be drill tested
- Spring exploration works will also be conducted on the contiguous Gullwing and Tot Lakes prospects, located immediately north of the Mavis Lake Main Zone
- 2023 drilling campaign to continue in parallel with development studies
- Critical Resources is now one of only two ASX-listed companies with a JORC Code 2012 compliant Lithium Mineral Resource in Ontario, Canada

Lithium development company Critical Resources Limited **ASX:CRR** ("Critical Resources" or "the Company") is pleased to announce a maiden JORC Code 2012 compliant Mineral Resource Estimate (MRE) for its100%-owned Mavis Lake Lithium Project in Ontario, Canada.

The maiden Inferred Mineral Resource of **8.0Mt grading 1.07% Li_2O** has been estimated following a continuous drilling program over the last 11 months. This reflects Critical Resources' strategy to rapidly establish a significant inventory of high-quality, hard-rock lithium resources at Mavis Lake, setting the foundation for the Company to play a significant role in the North American critical minerals sector.

Critical Resources Managing Director, Alex Cheeseman, said:

"This is a significant milestone for our company and an accomplishment our staff, management and shareholders should be very proud of."

"Critical Resources only began drilling at Mavis Lake 11 months ago and to have defined and declared a maiden Mineral Resource Estimate in such a short time is testament to the diligence and focus of our team and the high quality nature of the project."

"Critical Resources is now just one of two ASX-listed companies with a JORC Code 2012 compliant Mineral Resource in Ontario putting us in an enviable position as we begin to engage with potential strategic and off-take partners, whilst continuing to advance the project."

"A key message for investors is that this Resource is just the beginning of the Mavis Lake story."

"The deposit itself remains open both along strike and down-dip, with significant potential to add further tonnes to the MRE with continued drilling."

"In addition, the Gullwing/Tot Lakes prospects offer outstanding potential for new discoveries, supporting the already impressive MRE at Mavis Lake."

"We expect that we will be able to continue to grow the Resource while working in parallel on the development aspects of the project in the years to come."

Requirements for Material Mining Projects
The following subheadings are provided to satisfy the requirements applicable to reports of Mineral Resources for material mining projects under ASX Listing Rule 5.8.

Classification Criteria
The Mineral Resource has been classified in accordance with guidelines contained in the JORC Code. Key criteria that have been considered when classifying the Mineral Resource are detailed in JORC Table 1.

This classification is based on assessment and understanding of the deposit style, geological and grade continuity, drill-hole spacing, input data quality (including drill collar surveys and bulk density).

The Mineral Resource was classified as Inferred, accounting for the level of geological understanding of the deposit, quality of samples, density data, drill-hole spacing and sampling, analytical and metallurgical processes. Material classified as Inferred was considered sufficiently informed by geological and sampling data to imply geological, grade and quality continuity between data points.

The classification reflects the level of data available for the estimate, including input drill-hole data spacing, and high level of confidence in geological continuity for this particular style of deposit.

Geology and Geological Interpretation
The Mavis Lake Lithium Project consists of a large Main Zone and multiple smaller zones proximal to the Main Zone. The Main Zone pegmatite area has a dominant 1km E-W strike that has a shallow dip to the north that has been tested to a down-dip depth of ~300m (~250m vertical depth). The Main Zone is a complex structure that is associated with multiple stacks of pegmatites and

bifurcation. Spodumene is the main lithium-bearing mineral and occurs in varying concentrations within pegmatites of the Main Zone.

Multiple smaller zones have been identified through present and historical drilling. These are known as: Pegmatite 18, Main Zone East, and South Zone (Figure 1). All these zones were included in the MRE.

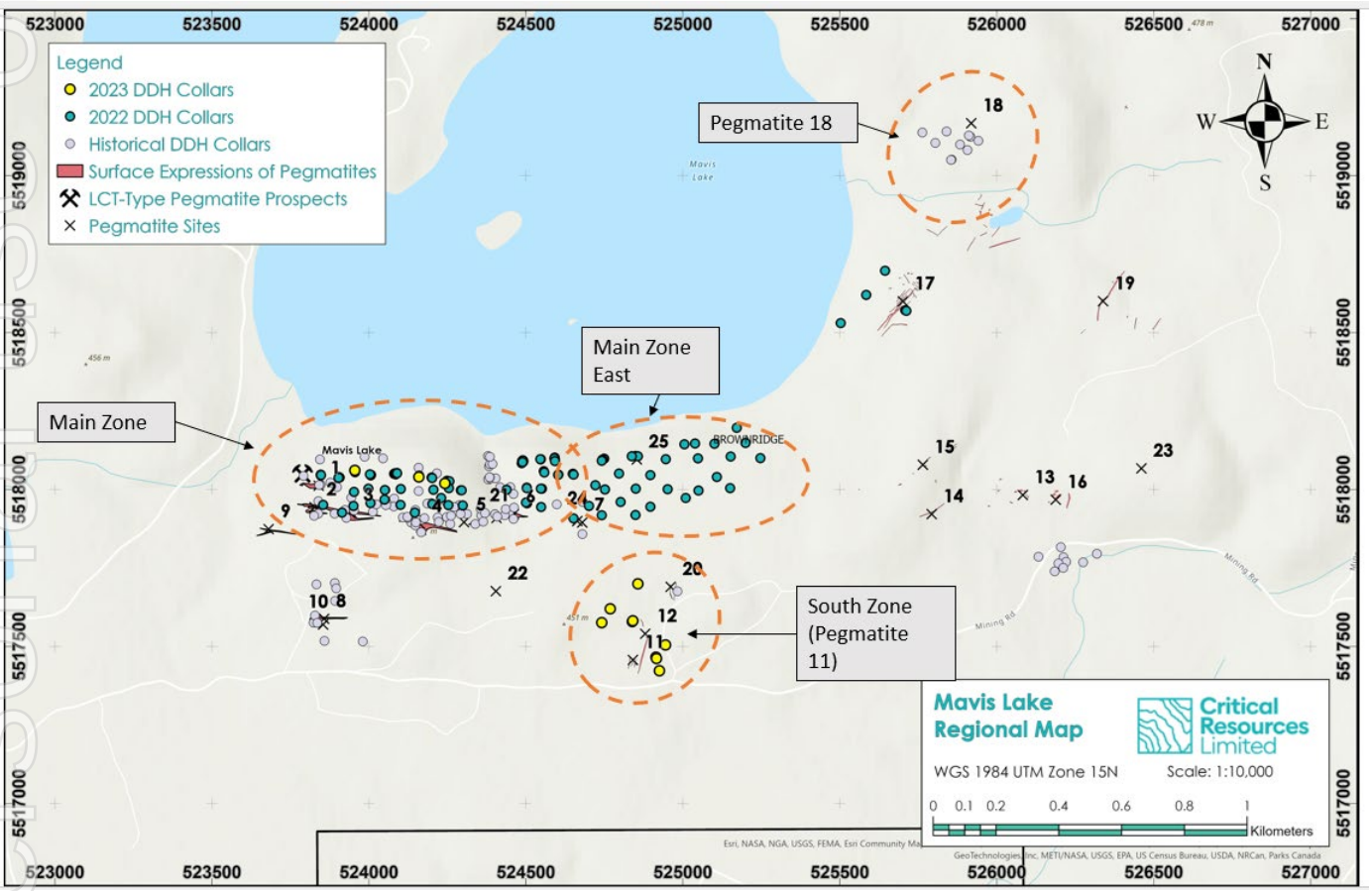

Figure 1: Plan Map of Mavis Lake Lithium Property highlighting all zones to date defined by historical and recent drilling

Sampling and Sub-Sampling Techniques

All samples in the 2023 MRE are from diamond drill cores. The sample lengths within mineralised rocks were from 0.3 m to 2.9 m or to match logged lithologies (Figure 2).

Sampling is conducted based on core logging, with 100% of the drill-hole core logged. The core logger is a geologist, has experience in lithium mineralisation, and determines the intervals of samples.

All pegmatite intersections are sampled regardless of the visual presence of lithium minerals/spodumene. Host rock is typically not sampled as lithium mineralisation is localised to pegmatites (spodumene mineral) or their alteration halos (holmquistite mineral) within mafic volcanic host rock.

All samples were dried, weighed, crushed, and milled in accordance with the sample preparation scheme that is considered industry standard. Sample preparation quality control was conducted with sizing checks, blank sample assays and certified reference material (CRM).

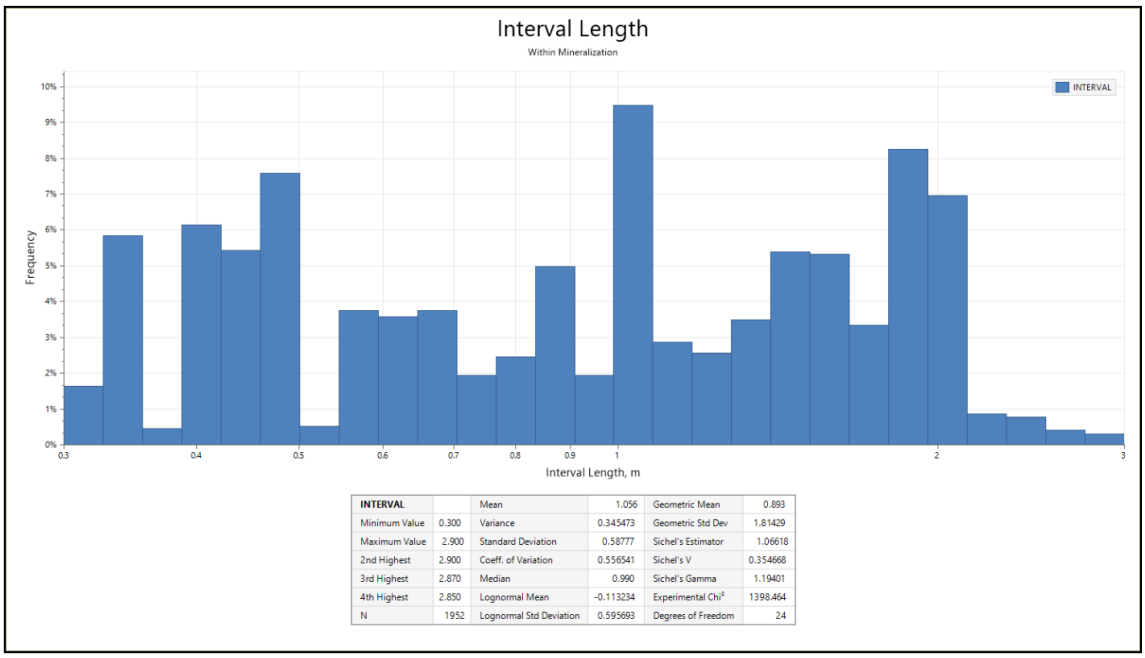

Figure 2 Histogram of drillhole sample length

Drilling Techniques

HQ drilling was used for casing through the overburden prior to the use of NQ2 diamond double tube coring by Cyr EF-50 rig was used throughout the hole. Drill-holes were completed with a standard barrel configuration. Core orientation was carried out by the drilling contractor utilizing a Reflex ACTIII tool.

During diamond drilling, the length of each drill run and the length of sample recovered was recorded by the driller (driller's recovery). The recovered sample length was cross-checked by the geologist's logging of the drill core and recorded as the final recovery.

Sample Analysis Method

Samples have been sent to an accredited laboratory - Activation Laboratories Ltd. (ActLabs). UT-7 multi-element analysis with an upper detection limit of 5% Li was used for the samples. The UT-7 procedure is based on a total sodium peroxide fusion and analysis by ICP- MS.

In situ bulk density

A total of 3,150 bulk density measurements were made by Critical Resources with ~10-20 cm, in length, samples of either whole or ½ NQ core water immersion specific gravity technique. A total of 202 measurements were directly taken on both mineralised and unmineralized pegmatite core, details can be seen in table 1.

Table 1 – Bulk Density values

Rock Type	Average Bulk Density
Mineralised Pegmatite	2.8
Unmineralised Pegmatite	2.67
Mafic Volcanic (Host)	2.98

A default density of 2.8 t/m^3 was used for the mineralised pegmatites from the bulk density

measurements obtained in the metallurgical holes representing the lithium ore of the Mavis Lake Lithium Project.

Metallurgy

Metallurgical testwork has been conducted by SGS Canada on composite drill core samples. The testwork was based on 50 quarter and half core samples from seven drill-holes and provided a 'representative grade' composite (1.2% Li_2O) and a 'high grade' composite (1.6% Li_2O).

The representative feed grade composite produced a 6.02% Li_2O concentrate with total lithia recovery of 77.5% via heavy liquid separation (HLS) and flotation. The high feed grade (1.6% Li_2O) produced a 5.98% Li_2O concentrate with total lithia recovery of 87.3% via HLS and flotation.

The Fe_2O_3 content of the spodumene concentrates was 0.41% (representative grade composite) and 0.57% (high grade composite). Refer to Compliance Statement for full details of relevant ASX announcements.

Estimation Methodology

The interpretation of lithium mineralized bodies was based on lithology and 0.3% Li_2O cut-off grade that was selected after a statistical analysis.

Wireframes of the mineralization envelopes were developed based on the section interpretation. The deposit was interpreted over 25 section views. The interpretation was carried out by initially created strings. The orientation of the geological structures was considered during the interpretation. An example of an interpreted section is shown in Figure 3.

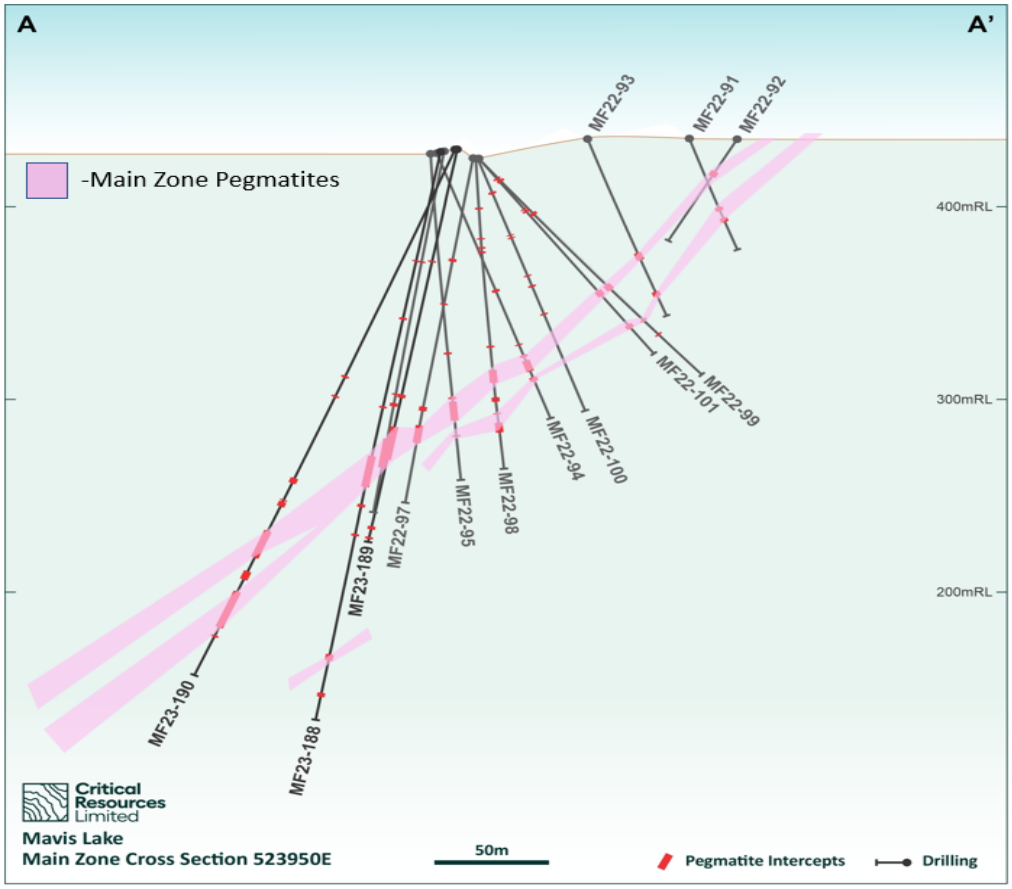

Figure 3: Example of interpretation of mineralisation along the 523950E cross-section

Lithium grades were interpolated into the empty block model using Inverse Distance Weighting in power of 2 method.

Interpolation was completed for the blocks that fell into the boundaries of the mineralization. To accommodate the morphology of the mineralisation zone, a dynamic (rotating) search ellipsoid was used. To set up the dynamic search, it was necessary to assign Azimuth, Dip and Plunge values to each cell in the block model.

Mineral Resource Estimate

The MRE has been reported in accordance with The JORC Code1. The MRE has been reported using a cut-off grade of 0.3% Li_2O and is shown in Table 2.

Table 2 - MRE summary table

JORC Classification	Li_2O Cut-Off grade (%)	Tonnage (Mt)	Li_2O (%)
Inferred	0.3	8.0	1.07
Total*	**Inferred**	**8.0**	**1.07**

*Reported at a cut-off grade of 0.30% Li2O for an open pit mining scenario. Estimation for the model is by inverse distance weighting. Classification is according to JORC Code Mineral Resource categories.

Final Data for MRE

The Company elected an arbitrary cut-off date of 29 March 2023 for data to be included in the MRE process. Drilling continues at Mavis Lake with assays pending. These pending results will be incorporated into a Mineral Resource upgrade, the timing of which is yet to be determined.

Ongoing Exploration

As snow begins to melt at the Mavis Lake Lithium Property, field crews are preparing to conduct regional geological mapping and bedrock sampling of the recently acquired Gullwing-Tot Lake property. Pegmatites in the Gullwing-Tot Lake Property are found within an E-NE trending cluster that has an approximate size of 2km by 15km.

There are two key Li-Cs-Rb-Be-Ta bearing pegmatites that are the focus of initial field work (the Gullwing Lake pegmatite and Tot Lake pegmatite).

Historical exploration on the property saw samples grading up to 6.78% Li_2O from the Gullwing pegmatite and 4.58% Li_20 from the Tot Lake pegmatite[2]. Given the lithium mineralisation in spodumene, and the possible strike, the Gullwing-Tot areas is highlight prospective and will reinforce the continued successful exploration enjoyed at Mavis Lake.

The drilling at Mavis Lake continues at the Main Zone and other known pegmatite occurrences adjacent to the Main Zone. Following the release of the MRE, the drilling strategy has shifted and is being managed in two-week campaign blocks – both in-filling the known mineralisation areas and then also testing exploratory targets centred on mapped spodumene bearing pegmatites.

[1] Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The JORC Code, 2012 Edition. Prepared by: The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC).

[2] Refer to ASX Announcement Strategic acquisition increases Mavis Lake lithium project footprint by 324% released 20 December 2022

Investor Updates

The Company will hold its Annual General Meeting (AGM) for Shareholders today, Friday 5 May 2023. The AGM is being held at South Perth Yacht Club, commencing at 11.00am AWST / 1.00pm AEST.

In addition to the AGM and to mark the significance of this milestone for the Company, the Company's Managing Director, Alex Cheeseman, will host a live investor webinar today (5 May 2023), commencing at 9.00am AWST / 11.00am AEST to discuss this Resource and Critical Resources' next steps at Mavis Lake.

Investors can register to join the webinar via the following link:

https://www.bigmarker.com/read-corporate/Critical-Resources-ASX-CRR-Investor-Update

Investors will also have the opportunity to submit questions to Mr Cheeseman via the webinar platform.

The Company encourages all shareholders to attend the AGM and/or the webinar to hear more about your Company, the excellent progress over the last 12 months and the exciting plans for the future.

This announcement has been approved for release by the Board of Directors.

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ABOUT CRITICAL RESOURCES LIMITED

Critical Resources is advancing and developing critical metals projects for a decarbonised future. The Company holds a suite of lithium prospects across Ontario, Canada, including Mavis Lake, Graphic Lake, Plaid and Whiteloon Lake. The Company's other projects include the Block 4 and Block 5 copper project, located in Oman, and the Halls Peak Project in NSW, Australia, a high-quality base metals project with significant scale potential.

The Company's primary objective is the rapid development of its flagship Mavis Lake Lithium Project. Mavis Lake is an advanced exploration project with near-term development potential. The Company completed over 19,500m of drilling in 2022 and has commenced another significant drilling program in 2023. The Company has also commenced initial studies that will underpin the transition from explorer to developer.

COMPETENT PERSONS STATEMENT

The information in this ASX Announcement that relates to Exploration Results is based on information compiled by Mr Troy Gallik (P. Geo), a Competent Person who is a Member of the Association of Professional Geoscientists of Ontario. Troy Gallik is a full-time employee of Critical Resources. Mr. Gallik has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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". Mr Gallik consents to the inclusion in this Announcement of the matters based on his information in the form and context in which it appears.

The information in this ASX Announcement that relates to Mineral Resource Estimate is based on information compiled by and fairly represents Mr Urbisinov a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Urbisinov is a full-time employee of AMC Consultants Pty Ltd. Mr Urbisinov has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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". Mr Urbisinov consents to the inclusion in this Announcement of the matters based on his information in the form and context in which it appears.

COMPLIANCE STATEMENT

This document contains information on the Mavis Lake Lithium Project extracted from ASX market announcements reported in accordance with the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (2012 JORC Code) and available for viewing at www.criticalresources.com.au. The Company confirms that it is not aware of any new information or data that materially affects the information included in any original ASX market announcement. ASX announcements are as follows; "Exceptional metallurgical test work results" 3 April 2023,, High-grade, Low Impurity Spodumene Concentrate Produced at Mavis Lake", 9 February 2023 and "First Concentrate Produced from Mavis Lake Test Work Program", 23 January 2023.

FORWARD LOOKING STATEMENTS

This announcement may contain certain forward-looking statements and projections. Such forward looking statements/projections are estimates for discussion purposes only and should not be relied upon. Forward looking statements/projections are inherently uncertain and may therefore differ materially from results ultimately achieved. Critical Resources Limited does not make any representations and provides no warranties concerning the accuracy of the projections and disclaims any obligation to update or revise any forward-looking statements/projects based on new information, future events or otherwise except to the extent required by applicable laws. While the information contained in this report has been prepared in good faith, neither Critical Resources Limited or any of its directors, officers, agents, employees or advisors give any representation or warranty, express or implied, as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in this announcement.

Appendix 1 – Mavis Lake Mineral Resource Estimate JORC 2012 Table 1

Section 1: Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

<table>
<tr><th>Criteria</th><th>JORC-Code Explanation</th><th>Commentary</th></tr>
<tr><td rowspan="2">Sampling techniques</td><td>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.</td><td>Diamond Drilling
• 2011 to 2018 historical drilling were included in the current MRE as the sampling and preparation practices for assaying and QAQC was verified to meet the requirements of JORC 2012.
• Historical drilling prior to 2011 were not included into the MRE as the sampling and preparation practices for assaying and QAQC was not able to be verified to meet the requirements of JORC 2012. The drill hole locations and spatial locations were not involved in the MRE.
• A total of 213 drill holes comprising of 34,507.1m was included in the MRE.

Drilling used in May 2023 Mineral Resource Estimate
<table><tr><th>Year</th><th>Company</th><th>DDH Holes</th><th>Meters Drilled</th></tr><tr><td>2011</td><td>International Lithium Corporation (ILC)</td><td>20</td><td>1,753</td></tr><tr><td>2012</td><td>International Lithium Corporation (ILC)</td><td>11</td><td>1,580.1</td></tr><tr><td>2013</td><td>International Lithium Corporation (ILC)</td><td>8</td><td>597</td></tr><tr><td>2017</td><td>International Lithium Corporation (ILC)</td><td>12</td><td>1,308</td></tr><tr><td>2018</td><td>Pioneer Canada Lithium Corporation</td><td>9</td><td>1,591</td></tr><tr><td>2022</td><td>Critical Resources Limited</td><td>122</td><td>20,004</td></tr><tr><td>2023</td><td>Critical Resources Limited</td><td>31</td><td>7,674</td></tr><tr><td>Total</td><td></td><td>213</td><td>34,507.1</td></tr></table>Drill Holes from 1956, 1979, 1980, 1981 were excluded from the MRE.</td></tr>
<tr><td>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 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information.</td><td>• Oriented core was placed V-rail and a consistent cut-line drawn along core to ensure cutting (halving) of representative samples.

• Sampling is conducted based on core logging, 100% of drill hole core is logged. The core logger is a geologist, has experience in lithium mineralisation, and determines the intervals of samples. All pegmatite intersections are sampled regardless of the visual presence of lithium minerals/spodumene. Host rock is typically not sampled as lithium mineralisation is localized to pegmatites (spodumene mineral) or their alteration halos (holmquistite mineral) within mafic volcanic host rock.

• Determination of mineralisation has been based on geological logging and photo analysis.</td></tr>
</table>

Criteria	JORC-Code Explanation	Commentary
		• Diamond Core drilling was used to obtain 3m length samples from the barrel which are then marked in one metre intervals based on the drillers core block measurement. • Assay samples are selected based on geological logging boundaries or on the nominal metre marks. • Samples will be dispatched to an accredited laboratory (ActLabs) in Dryden, Ontario, Canada for sample preparation and shipment to analysis. **Surface Samples** Historical bedrock grab samples and channel samples were not included into the MRE. The data provided were used to aid in the interpretation of the pegmatites at surface.
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*	•HQ drilling was used for casing through the overburden prior to the use of NQ2 diamond double tube coring by Cyr EF-50 rig was used throughout the hole. •Holes were drilled with a standard barrel configuration • Core orientation was carried out by the drilling contractor utilizing a Reflex ACTIII tool.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	• Lithological logging, photography • Core samples were measured with a standard tape within the core trays. Length of core was then compared to the interval drilled, and any core loss was attributed to individual rock units based on the amount of fracturing, abrasion of core contacts, and the conservative judgment of the core logger. Results of core loss are discussed below. • Experienced driller contracted to carry out drilling. •In broken ground the driller produced NQ core from short runs to maximise core recovery. • Core was washed before placing in the core trays. • Core was visually assessed by professional geologists before cutting to ensure representative sampling.
	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.	
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource*	

Criteria	JORC-Code Explanation	Commentary
	estimation, mining studies and metallurgical studies.	• Core samples were not geotechnically logged. • Core samples have been geologically logged to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • The core logging was qualitative in nature. • All core was photographed
	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.*	•Oriented core was placed V-rail and a consistent cut-line drawn along core to ensure cutting (halving) of representative samples •Oriented NQ core was cut in half using a diamond saw, with half core sent for assay and half core retained. •Core sample intervals were based in logged mineralisation •No duplicates or second half-sampling • Appropriate method: oriented NQ core cut in half using a diamond saw, with a half core sent for assay and half core retained
	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.	

Criteria	JORC-Code Explanation	Commentary
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.*	• Assays methods appropriate for style of mineralisation: UT-7 (Li up to 5%) QOP Sodium Peroxide (Sodium Peroxide Fusion ICP-MS. •Samples were sent to an accredited laboratory - Activation Laboratories Ltd. (ActLabs). • Either standards or blanks are inserted every 10th sample interval as a part of a QAQC process. Standard and blank results from recent drilling are within acceptable margins of error. • Activation Laboratory performs internal QA/QC measures. Results are released once all internal QA/QC is verified and confirmed to be acceptable.
	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.	
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	• No independent verification completed at this stage. • No holes are twins of previous holes. • Core measured, photographed and logged by geologists. Digitally recorded plus back-up records. • All assay results are provided. • No adjustments to the assay data. • No assay cut off grades are applied. • Lithium mineralisation were verified from project geologist on site as well as Critical Resource's Exploration Manager from the use of core photography and visits to the Dryden, Ontario core facility to inspect the core. • A database hosts all of the geological logs and supporting data to minimize typographical errors. • All drill hole logging data is retained in a SQL database through GeoSpark • No adjustments were made to the laboratory assay data. All Li2O percentage data was calculated by a factor of 2.153.
	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.	
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.*	• Drill collars recorded with Garmin GPS that has an accuracy in the order of ±3 metres for location. A registered
	Specification of the grid system used.	

Criteria	JORC-Code Explanation	Commentary
	Quality and adequacy of topographic control.	surveyor will be contracted to accurately survey all drill collars at completed of drill program. •Out of hole surveys are taken every 9m while tripping out of the hole. Logging Geologist to validate every survey, and to not include bad surveys in their database. • WGS 1984 UTM Zone 15N. • No specific topography survey has been completed over the project area.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	Drill spacing was variable ranging from 50 x 50 to 100 x 100 with some more sparsely drilled areas of the deposit. The grid is sufficient to trace mineralization zones.
	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.	
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.*	• The orientation of the mineralisation is known and complex. The drilling program is aimed at determining orientation of the mineralisation. • If orientation of mineralisation is known or thought to be known, drill holes are planned to intersect at an appropriate angle relative to true width of the mineralisation. Intercepts with mineralisation released are given as downhole widths, not true widths unless true widths are stated • It is uncertain whether sampling bias has been introduced, or whether the thickness drilled is a true thickness.
	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.	
Sample security	*The measures taken to ensure sample security.*	• Core samples were stored at the Dryden core yard and core shack under lock and key before delivery to ActLabs Groups in Dryden, Ontario for analysis.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	• No independent audits or reviews have been undertaken on this Mineral Resource Estimate

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 licence to operate in the area.*	The Mavis Lake Lithium Project consists of 1,190 unpatented Single Cell Mining Claims and six separate surface leases which secure the surface rights of the land required for the Project footprint. The Mavis Lake Lithium Project spans over ~22,984 hectares in the Kenora, Mining District, in Ontario, Canada All claims and leases are active and in good standing. The leases have a term of 21 years and are not set to expire until 2032, at which time they can be renewed for an additional 21 years if required. All cell claims are in good standing
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties*	• 1956: Lun-Echo Gold Mines Ltd. drilled 50 DDH totalling 2234.19 m immediately south of Mavis Lake. Milestone Mines conducted trenching work and limited DD east and southeast of Mavis Lake. 1978: R.J. Fairservice staked the property and then optioned the property to Selco Mining Corp Ltd. 1979-81: Selco conducted geological mapping, lithogeochemical surveys and drilled 8 DDH totalling 351.4 m. 1982: Tantalum Mining Corp of Canada Ltd (Tanco) optioned the Fairservice property and conducted line cutting, a geophysical survey and a lithogeochemical survey. 2002: Emerald Field Resources optioned the property from R.F. Fairservice. 2003: Emerald Field conducted prospecting, trenching, geological mapping, and drilled 4 DDH. 2009: TNR Gold and International Lithium Corp. (ILC) optioned the property from Rich Resource Investments Ltd. ILC conducted geological mapping and sampling. 2011: ILC drilled 20 DDH totalling 1753 m. 2012-13: ILC drilled 19 DDH totalling 2072.1 m. 2016: ILC conducted a ground magnetometer survey and sampling. 2017: ILC drilled 12 DDH totalling 1305 m. 2018: Pioneer Resources optioned the property from ILC and drilled 9 DDH totalling 1,591 m. 2022: Critical Resources Ltd. acquired the property and drilled 121 DDH totalling 19,855m. 2023: Critical Resources Ltd. drilled 31 DDH totalling 7,674m.

Geology	*Deposit type, geological setting and style of mineralisation.*	**Regional Geology** In the regional context, the Project lies within the Sioux Lookout Domain in the western Wabigoon Subprovince. The Sioux Lookout Domain is constrained between the granitoid-dominated Winnipeg River Subprovince (WRS) to the north and the greenstone-granite rich WS to the south. The eastern half of the WS shares border with the meta-sedimentary-dominated English River Subprovince (ERS) to the north and in the south by the meta-sedimentary Quetico Subprovince (QS). The Wabigoon Subprovince is approximately 900 km long, 150 km wide granite-greenstone terrain and comprises meta-volcanic and subordinate meta-sedimentary rocks, ranging in age from 3.0 Ga to 2.71 Ga, and intruded by a suite of 3.0 to 2.69 Ga granitoid batholiths, gabbroic sills and stocks. **Local Geology** Beakhouse (2001) has subdivided the supracrustal units of the Sioux Lookout Domain, from north to south, into an alternating series of southward facing meta-volcanics and meta-sedimentary rocks. The supracrustal rocks in the Mavis Lake area comprise the following sequences: 1. Brownridge sediments and volcanics in the north, 2. Thunder Lake sediments and volcanics in the middle and, 3. Highly strained Zealand sediments adjacent to the Wabigoon Fault defining the southernmost portion of the Sioux Lookout Domain. **Mineralisation** Numerous granitic pegmatite dikes occur on the Mavis Lake and Fairservice properties, ranging from the primary spodumene-bearing to albite-rich, tantalum-enriched varieties. The pegmatites are generally found within the mafic meta-volcanic rocks of the Brownridge volcanics. These pegmatites are part of the Mavis Lake Pegmatite Group (Breaks and Janes 1991) and are linked to the Ghost Lake batholith (Breaks 1989). The Mavis Lake Pegmatite Group is characterized by east-trending concentration of rare element-bearing pegmatites and related metasomatic zones. Twenty rare-metal pegmatites of the Mavis Lake Pegmatite Group occur on the Mavis Lake and Fairservice properties (Figure 12). Pegmatites 1 through 10 occur on the Fairservice Property and the remaining 10, including Pegmatite TVL discovered during the 2009 TNR Gold Corp. exploration program, occur on the Mavis Lake Property. These pegmatites fall into two zones according to the initial classification of Breaks (1989), based upon systematic variation in rare-element mineralogy and petrochemistry: • Spodumene-beryl-tantalite zone (Li-Rb-Be-Ta>Nb-B), and, • Albite-type pegmatite zone (Li>Rb-Be-Ta>Nb and Rb>Li-Be-Ta>Nb). In the classification of Černý (1991) and recent revisions (Černý and Ercit 2005), these pegmatites represent a mix of albite-spodumene-type, albite-type and complex-type pegmatite

<table>
<tr><th>Criteria</th><th>JORC-Code Explanation</th><th>Commentary</th></tr>
<tr><td rowspan="8">Drill hole Information</td><td>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:</td><td rowspan="8">• 2011 to 2018 historical drilling were included in the current MRE as the sampling and preparation practices for assaying and QAQC was verified to meet the requirements of JORC 2012.
• Historical drilling prior to 2011 were not included into the MRE as the sampling and preparation practices for assaying and QAQC was not able to be verified to meet the requirements of JORC 2012. The drill hole locations and spatial locations were not involved in the MRE.
• A total of 213 drill holes comprising of 34507.1m was included in the MRE.

<table>
<tr><th colspan="4">Drilling used in May 2023 Mineral Resource Estimate</th></tr>
<tr><th>Year</th><th>Company</th><th>DDH Holes</th><th>Meters Drilled</th></tr>
<tr><td>2011</td><td>International Lithium Corporation (ILC)</td><td>20</td><td>1753</td></tr>
<tr><td>2012</td><td>International Lithium Corporation (ILC)</td><td>11</td><td>1580.1</td></tr>
<tr><td>2013</td><td>International Lithium Corporation (ILC)</td><td>8</td><td>597</td></tr>
<tr><td>2017</td><td>International Lithium Corporation (ILC)</td><td>12</td><td>1308</td></tr>
<tr><td>2018</td><td>Pioneer Canada Lithium Corporation</td><td>9</td><td>1591</td></tr>
<tr><td>2022</td><td>Critical Resources Limited</td><td>122</td><td>20004</td></tr>
<tr><td>2023</td><td>Critical Resources Limited</td><td>31</td><td>7674</td></tr>
<tr><td>Total</td><td></td><td>213</td><td>34507.1</td></tr>
<tr><td colspan="4">Drill Holes from 1956, 1979, 1980, 1981 were excluded from the MRE.</td></tr>
</table>
</td></tr>
<tr><td>Easting and northing of the drill hole collar</td></tr>
<tr><td>Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</td></tr>
<tr><td>Dip and azimuth of the hole</td></tr>
<tr><td>down hole length and interception depth</td></tr>
<tr><td>hole length.</td></tr>
<tr><td>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.</td></tr>
<tr><td rowspan="2">Data aggregation methods</td><td>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.</td><td rowspan="2">• Exploration results are not being reported</td></tr>
<tr><td>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.</td></tr>
</table>

Criteria	JORC-Code Explanation	Commentary
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.*	• True width is calculated from logging geologists structural measurements from upper and lower contacts of pegmatite dyke and the host rock. Both apparent downhole lengths and true widths are provided. • When the precise geometry is not known but is being tested by the planned drilling, azimuths are designed to drill normal to the interpreted mineralised structure.
	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').	
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*	• Refer to diagrams in body of text.
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.*	• Exploration results are not being reported.

Criteria	JORC-Code Explanation	Commentary
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.*	•A Fixed wing airborne high resolution magnetic/radiometric/VLF survey was completed over one (1) block identified by the Client as "Dryden". The work was completed under contract to CRITICAL RESOURCES LIMITED ("the client"). The MPX equipment was previously installed into the Piper Navajo PA31 (Figure 1) prior to the commencement of the survey campaign in Ontario. The MPX crew arrived in Dryden (Ontario, Canada) on November 5th, 2021, from where the acquisition operations were conducted. The first production flight was completed on November 6th, 2021, and the final survey flight one day after on November 7th, 2021. A total of 895.6 line-km of data were collected over the Dryden Block. The survey was flown with the best effort to sustain a nominal mean terrain clearance of 70 m along N-S traverse lines separated by 75 m, and E-W control lines at 750 m. All the details of the project areas are summarized in Table 1. Geophysical data acquisition involved the use of precision differential GPS positioning, a Radiation Solution RSX-5 multi-channel gamma-ray spectrometer system, a high sensitivity magnetometer installed in a tail-stinger and a VLF Totem-2A system. The Piper Navajo Registration C-GQVP was used for this survey.
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).*	• Further drilling underway to confirm, infill and extend known mineralisation. • A total of 20,000m for 2023 has been approved with consideration for further extensions at the Board's discretion. • Mapping/sampling and target generation fieldwork is due to commence on the Gullwing/Tot prospects in the Canadian spring.

Section 3: Estimation and Reporting Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• Data used in the Mineral Resource estimate (MRE) is sourced from a database dump, provided in the form of Microsoft Excel files. Relevant tables from the files are imported into Micromine 2023 software for use in the MRE. These were validated in Micromine for inconsistencies, overlapping intervals, out of range values, and other important items. • All data was visually checked.
Site visits	• *Comment on any site visits undertaken by the*	• No site visit is completed at this stage. Site visit is planned at a later stage when more information and core will be

Criteria	JORC Code explanation	Commentary
	Competent Person and the outcome of those visits. • *If no site visits have been undertaken indicate why this is the case.*	collected and available for the review on the site.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• There is a reasonable level of confidence in the geological interpretation of mineralisation zones. Drill holes and surface mapping have been used to assist the interpretation. Additional work is required to better define exact geometry and the extents of the interpreted mineralised zones in the areas of sparse drilling. • Surface mapping of mineralised outcrop, drill hole intercept logging and assay results have formed basis for the geological interpretation. • The precise limits and geometry cannot be absolutely defined due to the limitations of the current drill coverage. Further work is required to better define the geometry and limits of the mineralised zones, but no significant downside changes to the interpreted mineralised volume are anticipated. • The grade and lithological interpretation forms the basis for the modelling.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The currently interpreted mineralisation of the Mavis Lake area extends for approximately 1.4 km for the Main zone and dips approximately at 40 degrees, 0.3 km for the South zone (Pegmatite 11) and steeply dips at 75 degrees, and 0.2 km for Pegmatite 18 zone with shallow dipping at 10 degrees. The zone extends from surface to 300 m depth below the surface in the Main zone, 200 m depth below the surface in the South zone, and 70 m in Pegmatite 18 zone. The thickness of the mineralisation envelopes ranges from 1.5 m to 25 m.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of*	• Grade estimation was by Inverse Distance Weighting (IDW) to the power of two using Micromine 2023 software. The interpretation was extended perpendicular to the corresponding first and last interpreted cross section to the distance equal to a half distance between the adjacent exploration lines. If a mineralised envelope did not extend to the adjacent drill hole section, it was projected halfway to the next section and terminated. The general direction and dip of the envelopes was maintained. • There were no previous estimates for this deposit. No mining has taken place. • No assumptions were made regarding the recovery of by-products.

Criteria	JORC Code explanation	Commentary
	computer software and parameters used. • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. Sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.*	• Fe_2O_3 grades were considered during the interpretation of the mineralised pegmatites, no host rock with high iron content were included in the mineralisation despite high lithium grades. However, some intervals with elevated iron grades were included due to the internal dilution. The estimated iron grade in the block model is around 1.84% Fe_2O_3. • The block model was constructed using a 25 m E x 10 m N x 10 m RL parent block size, with sub-celling to 5 m E x 1 m N x 1 m RL for domain volume resolution. The parent cell size was chosen based on the general morphology of mineralised bodies and in order to avoid the generation of too large block models. The sub-celling size was chosen to maintain the resolution of the mineralised bodies. The sub-cells were optimised in the models where possible to form larger cells.

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques (continued)	• *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.*	• Interpolation was conducted for the blocks that fell into the boundaries of the mineralisation. • To accommodate for the morphology of the mineralisation zone a dynamic search ellipsoid was used for the grade interpolation. • No selective mining units were assumed in this estimate. • No strong correlations were found between the grade variables. • The radii of the search ellipsoid and orientation of axes were selected based on drill hole distribution and geological orientation. The first search radius was selected, so the search ellipsoid is approximately equal to block size dimensions to use the grades from the workings that intercepted the block. The second search radius was selected to be equal to 25 m along the first direction, and 10 m along the second and third directions. Model cells that did not receive a grade estimate from the first or second interpolation run were used in the next interpolation with greater search radii equal to two times bigger in all directions than in the previous run. When model cells were estimated using radii not exceeding 125 m in the first direction, and 50 m in the second and third directions. A restriction of at least three samples from at least two drill holes or development drives was applied to increase the reliability of the estimates.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• The tonnages are estimated on a dry basis
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• Statistical analysis showed natural breaks in the lithium grade population distribution at approximately 0.3% which formed the basis for the decision regarding determination of mineralisation envelope cut-off grade. • The Mineral Resource was reported at 0.3% Li_2O.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made*	• At this stage of resource development, it is assumed that mining would be by open pit methods. It has been assumed that the full strike length, width and depth of the modelled mineralisation can be economically mined.

Criteria	JORC Code explanation	Commentary
	regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Metallurgical testwork has been conducted by SGS Canada on composite drill core samples. Refer to ASX announcements of 23 January 2023, 9 February 2023 and 3 April 2023 for sample and testwork details. • The metallurgical testwork was based on 50 quarter and half core samples from 7 drillholes and provided a 'representative grade' composite (1.2% Li_2O) and a 'high grade' composite (1.6% Li_2O). • HLS and magnetic separation tests on the +6.35mm fraction of the representative grade composite achieved a coarse spodumene product of 6.11% Li_2O at SG 2.95, with 50% of lithium in the initial sample recovered to coarse product. • HLS non-magnetic middlings were then combined with the fines fraction and subjected to a fines concentration test work program consisting of grinding, de-sliming, magnetic separation, mica flotation and finally spodumene flotation. This recovered an additional 27.6% of lithium to fines spodumene product at a grade of 5.85% Li_2O. • The final combined spodumene product achieved from the representative grade composite was 6.02% Li_2O with 77.6% of lithium recovered to final product. • HLS and magnetic separation test work on the +6.35mm fraction of the high grade composite initially achieved a coarse spodumene product of 6.42% Li_2O at SG 2.95, with 57.4% of lithium in the initial sample recovered to coarse product. • HLS non-magnetic middlings were then combined with the fines fraction and subjected to a fines concentration testwork program consisting of grinding, de-sliming, magnetic separation, mica flotation and finally spodumene flotation. This recovered an additional 22.8% of lithium to fines spodumene product at a grade of 5.63% Li_2O. • The final combined spodumene product achieved for the High Grade composite was 5.98% Li_2O with 87.3% of lithium recovered to final product. • Of particular note is the low Fe_2O_3 content of both spodumene products, at 0.41% (representative grade) and 0.57% (high grade).

Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• No detailed assumption regarding possible waste and process residue disposal options have been made at this stage.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vughs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates*	• A total of 3150 bulk density measurements were taken by Critical Resources with ~10-20cm, in length, samples of either whole or ½ NQ core water immersion specific gravity technique. • Density measurements were taken from 153 diamond drill holes from Critical Resources 2022-2023 drill program. • A total of 202 measurements were directly taken on both mineralised and unmineralized pegmatite core. • A bulk density value of 2.8 t/m^3 was assigned to each block of the block model. • A value of 2.8 t/m^3 was determined for the mineralized pegmatite samples, that were sent for metallurgical testing, was obtained on site by the water immersion process. • A value of 2.98t/m^3 was determined for the mafic volcanic host rock that was obtained on site by the water immersion process. • A value of 2.67t/m^3 was determined from the unmineralized pegmatite samples that was obtained on site by the water immersion process.

Criteria	JORC Code explanation	Commentary
	used in the evaluation process of the different materials.	
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The Inferred Mineral Resource classification is based on the evidence from the available drill sampling and surface mapping. This evidence is sufficient to imply, but not verify, geological and grade continuity. • The classification has taken into account all available geological and sampling information, and the classification level is considered appropriate for the current stage of this project.
Audits or reviews.	• *The results of any audits or reviews of Mineral Resource estimates.*	• Internal audits were completed by AMC Consultants which verified the technical inputs, methodology, parameters and results of the estimate.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*	• The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource to an Inferred classification as per the guidelines of the 2012 JORC Code. • The statement refers to global estimation of tonnes and grade.

Criteria	JORC Code explanation	Commentary
	• *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	