

29 May 2024

## Major New LCT Pegmatite System Discovered at Mavis Lake East

### Highlights

- **31 new LCT pegmatites discovered** to the east of the Mavis Lake Main Zone, including multiple spodumene-bearing pegmatites<sup>1</sup>.
- Discoveries reinforced with the extension of multiple mapped outcrops – increasing the known outcrop of **spodumene-bearing pegmatites up to 250m** along strike.
- 83 grab and channel samples collected across the broader Mavis Lake Project Area.
- Muscovite samples gathered for Laser Induced Breakdown Spectroscopy (LIBS) analysis, enhancing knowledge on the fractionation trends.
- Advanced planning completed for the positioning of drill pad locations targeting known spodumene-bearing pegmatites within the Northern Prospects (Gullwing and Tot).
- Planning and **permits in place** to undertake mechanical stripping and channel sampling of the Tot Pegmatite.

Lithium exploration and project development company Critical Resources Limited **ASX:CRR** ("Critical Resources" or "the Company") is pleased to advise that it has discovered multiple additional spodumene-bearing pegmatites at the Company's 100%-owned **Mavis Lake Lithium Project** ("the Project") in Ontario, Canada.

The discoveries, made just weeks into the Company's 2024 Summer Field Exploration Campaign, highlight the outstanding potential of the Mavis Lake Project to yield further significant lithium discoveries. The exciting results also provide further validation of the JORC compliant Exploration Target announced last week for Mavis Lake (see ASX announcement, 22 May 2024).

### Detailed Field Work Delivers Outstanding Initial Results

A field work program comprising prospecting, mapping and sampling began in early May, designed to identify new spodumene-bearing pegmatites, determine fractionation trends at the Northern Prospects and conduct drill pad reconnaissance throughout the Mavis Lake Lithium Project.

A total of 83 samples were collected from pegmatite outcrops across the broader Project Area. A total of 31 new pegmatite discoveries have been made. The discoveries include a ~250m extension of a known spodumene-bearing pegmatite (Pegmatite 20) and 100m extension of the



Main Zone spodumene-bearing pegmatite cluster (Pegmatites 7 and 24). Samples have been prepared and will be dispatched to an independent analytical laboratory in the coming weeks, with full results expected in July/August 2024.

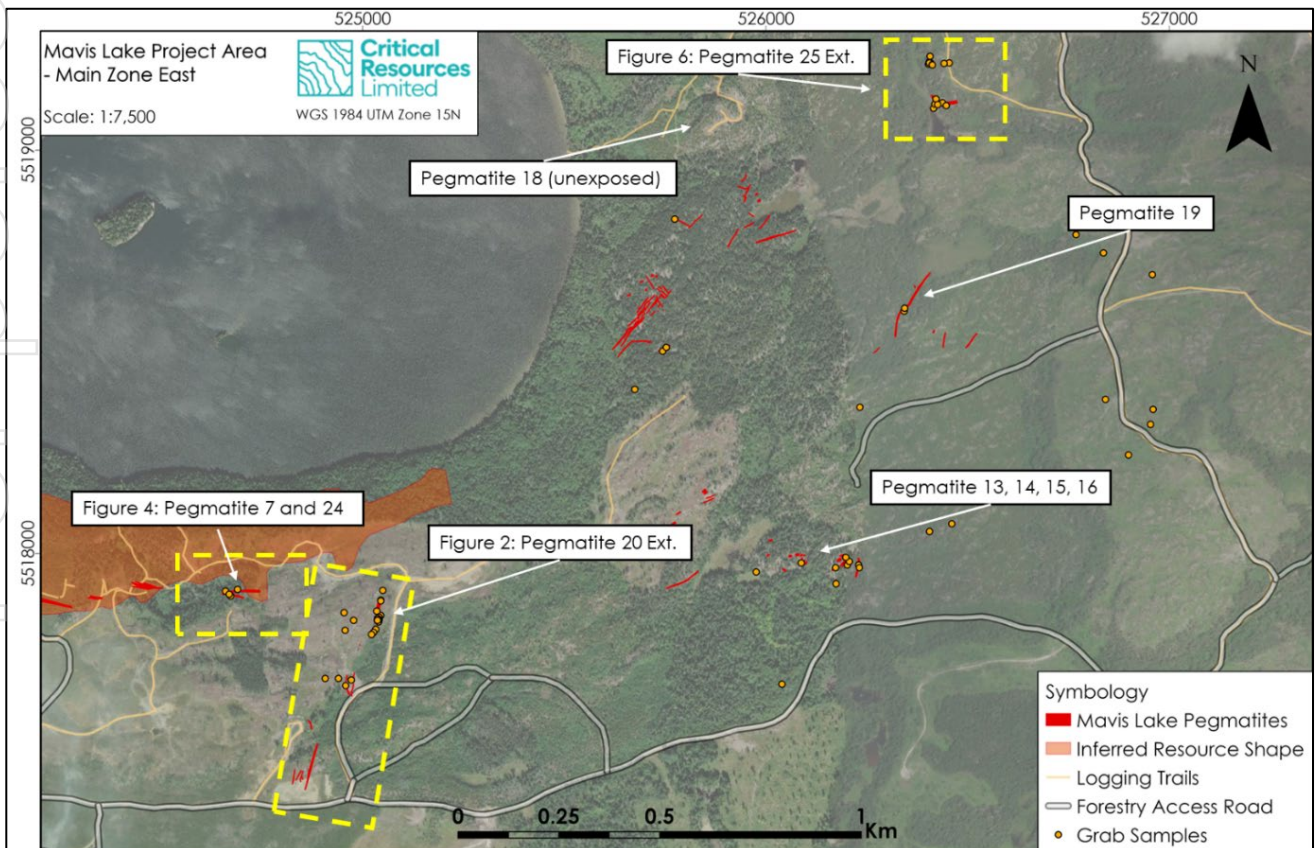
**Critical Resources Managing Director, Alex Cheeseman said:**

*"It's great to see field teams directly following up our Exploration Target and making further significant discoveries at Mavis Lake at the start of the new field season. The field program has already increased our confidence in our ability to deliver on the recently published Exploration Target, paving the way for drill testing a number of high-quality targets. We look forward to continuing our dual-track strategy of targeting resource growth while progressing our project development and permitting workstreams for Mavis Lake."*

## Discoveries at Main Zone and East of Main Zone

Field crews spent three weeks prospecting across the Mavis Lake Project Area, resulting in the discovery of 31 new LCT-Type pegmatites. Most of these discoveries are located proximal to and to the east of the Main Zone.

Notable finds include a ~250-metre extension of spodumene-bearing pegmatite 20, a ~100-metre extension of spodumene-bearing pegmatites 7 and 24, and the identification of spodumene-bearing pegmatite 25.



**Figure 1 – Plan map of Mavis Lake Main Zone and East of Main Zone showing locations of grab samples and discovery reference areas**





## Pegmatite 20 Extension

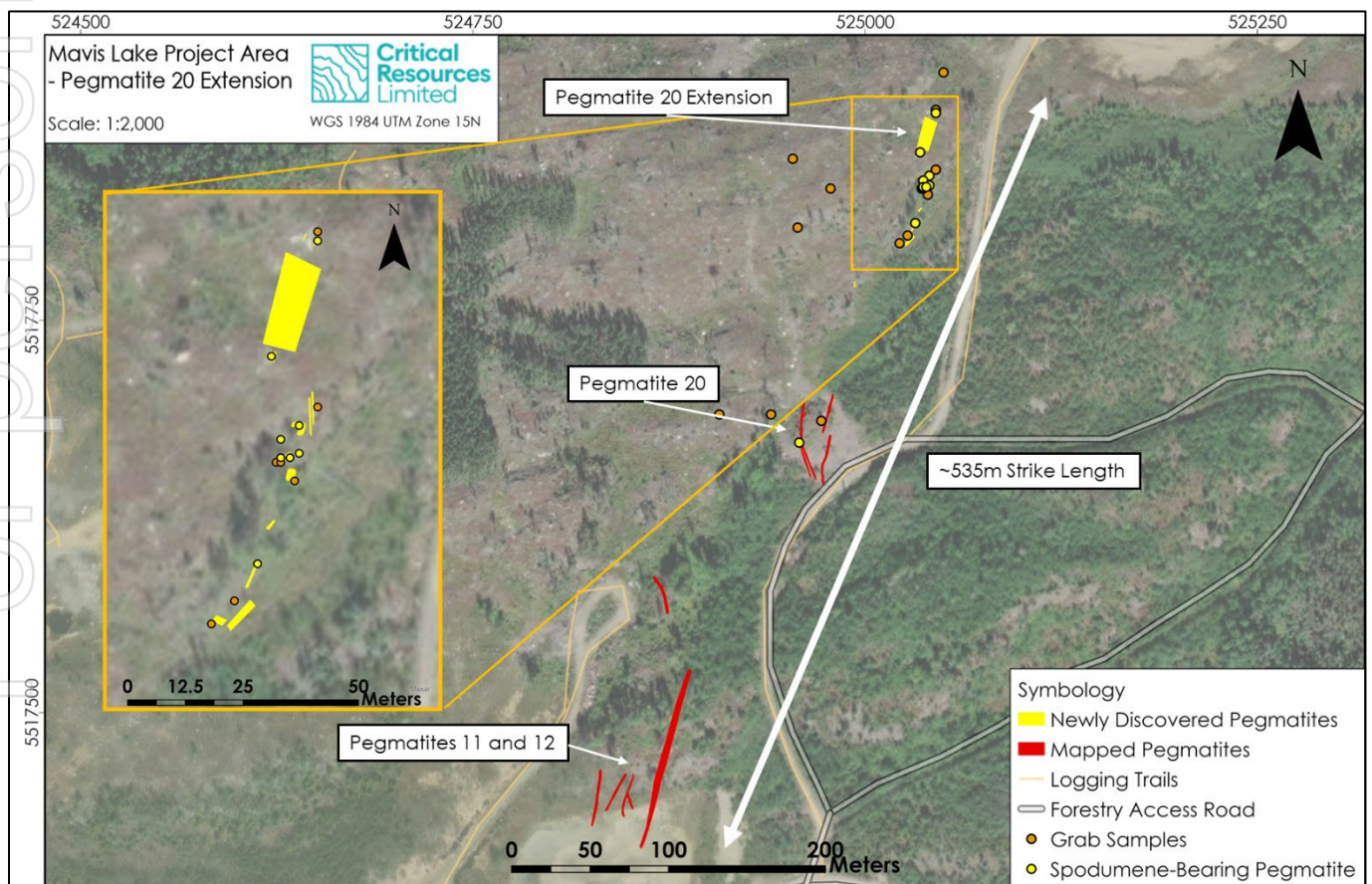
Historical exploration results within the Company's database, including litho-geochemical assessments of both mafic volcanic host rock and pegmatite, identified a number of areas with elevated lithium values. This data was used to vector field teams onto previously un-mapped pegmatite structures.

Field teams subsequently discovered spodumene-bearing pegmatites measuring up to 2 metres wide, which were mapped and channel sampled. Field teams noted that the newly discovered pegmatites exhibited mineralogical similarities to Pegmatites 11, 12, and 20.

The most recent drill testing of Pegmatites 11 and 12 was completed in early 2023, with key intercepts (refer to ASX Announcement released 27 March 2023) including:

- Drill-hole SZ23-002 with 6.08m @ 1.66% Li<sub>2</sub>O from 73.12m down-hole;
- Drill-hole SZ23-004 with 9.45m @ 1.22% Li<sub>2</sub>O from 111.85m down-hole; and
- Drill-hole SZ23-010 with 6.45m @ 1.53% Li<sub>2</sub>O from 208.05m down-hole.

The ~250 metre extension of Pegmatite 20 identified along strike has resulted in a total strike length of approximately 535m. The Mavis Lake Mineral Resource Estimate does not include any ore shapes originating from this area of Mavis Lake. The newly discovered pegmatites have been designated as Pegmatite 20 extension (P20 ext) and are shown in Figure 2.



**Figure 2 – Plan map of the newly discovered Pegmatite 20 extension, with a strike length of approximately 535m from Pegmatites 11 and 12 through to the extension of Pegmatite 20**





The Pegmatite 20 extension consists of multiple steeply-dipping veins. Visual identification has confirmed the presence of spodumene ranging from 5% to 10%, presented as fine to medium-grained mint green lathes (refer to Figure 3) with assay results pending<sup>1</sup>. Visual mineral mapping indicates a connection to Pegmatites 11, 12, and 20. Details of all samples and visual estimates can be seen in Appendix 1 – Exploration Results Table 1.



**Figure 3 – Medium to fine-grained spodumene within channel sample of the Pegmatite 20 extension**

In relation to the disclosure of visual mineralisation, the Company cautions that visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analysis where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations. Refer to Cautionary Note – Visual Estimates.

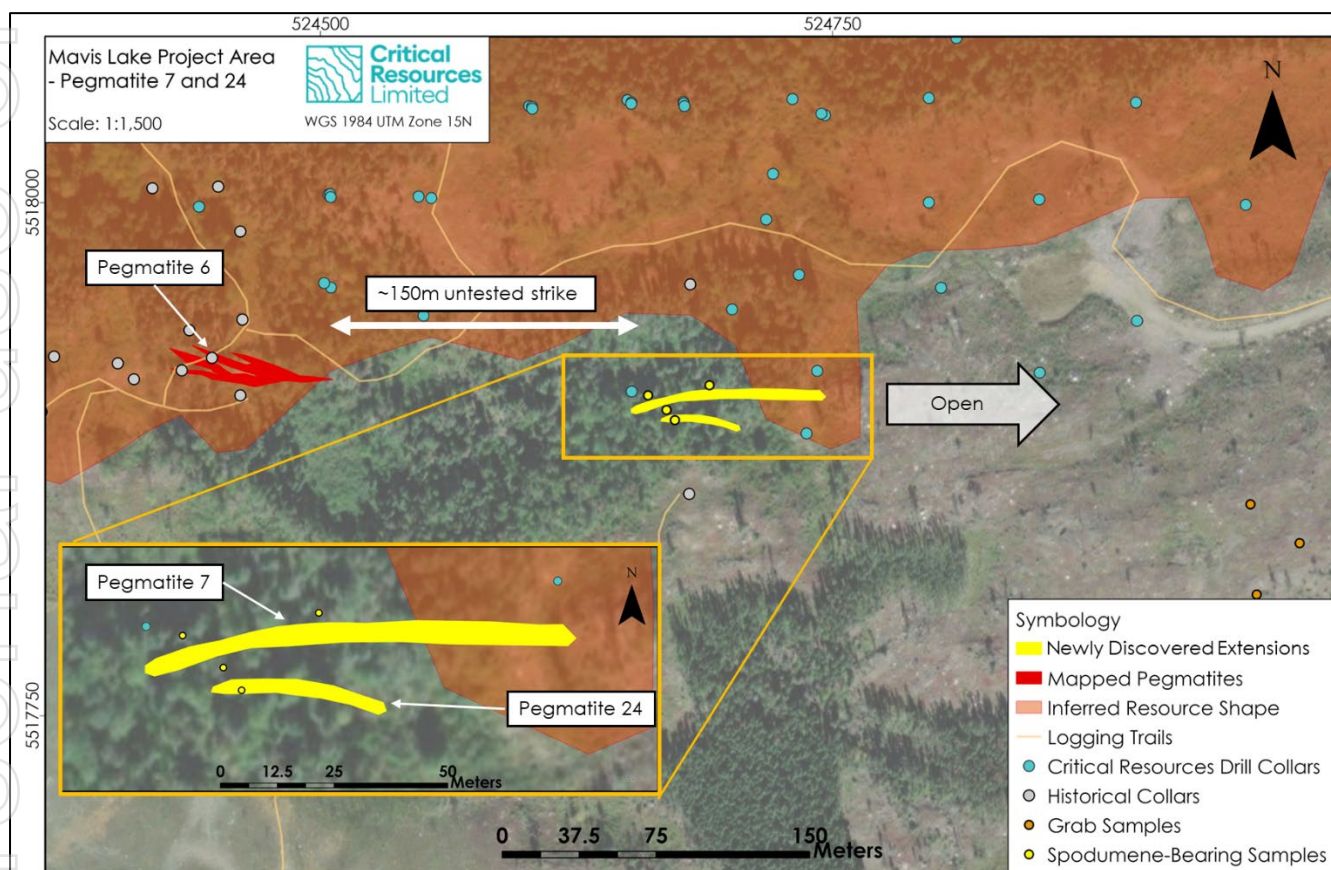
## **Pegmatite 7 and 24 Extension**

Pegmatites 7 and 24 were previously mapped as relatively small pegmatite occurrences, hidden beneath thick till overburden. Following the 2023 drilling program, drill pad and drill trail construction exposed a number of pegmatite occurrences at surface.

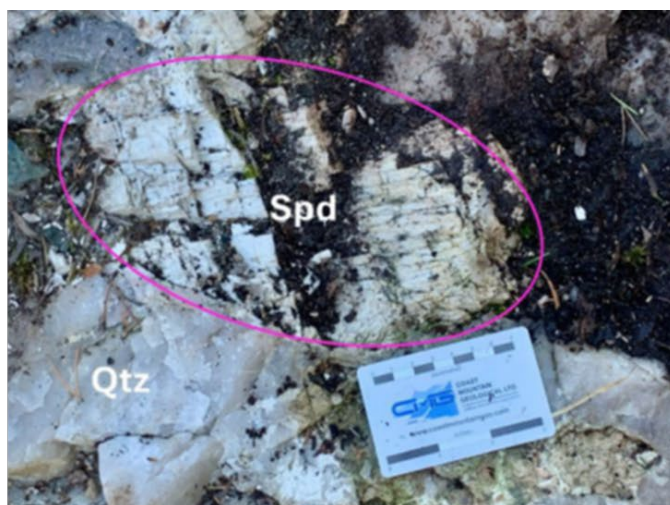
Field teams completed prospecting and clearing around Pegmatites 7 and 24 and were able to successfully expose both pegmatites towards the east and west.



Pegmatite 7, trending roughly east-west, is up to 4 metres thick with a known strike length of 100 metres and the mineralisation appearing to be open at each end as shown in Figure 4. Notably, Pegmatite 7 exhibits surface features of megacrystic quartz and spodumene, indicating significant mineralisation potential as seen in Figure 5. Multiple samples were taken, with assay results pending.



**Figure 4 – Plan map showing the extensions of Pegmatites 7 and 24**



**Figure 5 – Left image: very coarse spodumene (Spd) laths up to 30cm in length. Right image: flat lying outcrop, hosting coarse spodumene as distinct from Quartz (Qtz)<sup>1</sup>.**



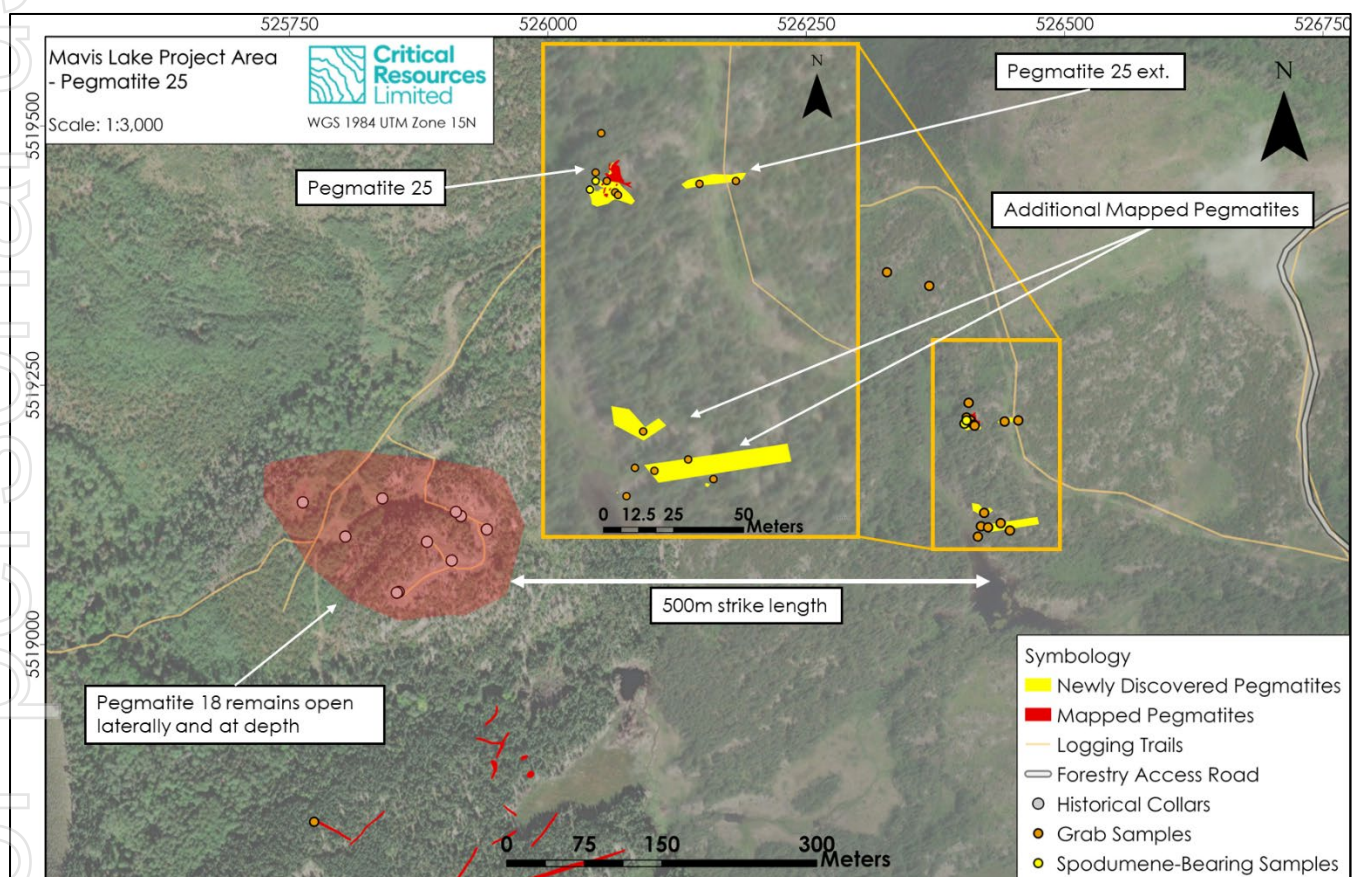


The surface contacts of these pegmatites revealed structural deviations, contrary to previous understanding. Pegmatite 7 exhibited a near-vertical dip, while Pegmatite 24 dips shallowly towards the south, contrasting with the typical shallow northward dip of the Main Zone.

This structural divergence is now better understood the newly defined structural trend of these pegmatites have unveiled new additional drill targets for possible immediate high-grade success, near surface.

## Pegmatite 25 Extension

Field crews completed prospecting around previously mapped Pegmatite 25. Discoveries of additional pegmatite veins were made 100m south and 30m east of Pegmatite 25. One of the newly mapped veins, crossing a well-established logging trail, shares similar characteristics with Pegmatite 25, suggesting it could be an extension of Pegmatite 25 as shown in Figure 6.



**Figure 6 - Plan map of Pegmatite 25/Pegmatite 25 extension**

Structurally, Pegmatite 25 appears as an undulating, amorphous intrusive body, relatively flat-lying with a northward dip along its northern flank. Several offshoots or limbs were observed and sampled along the south-west foot of the outcrop, with assay results pending.

## Prospecting the Northern Prospects

The Northern Prospects comprises pegmatites that form an East-North-East trending cluster spanning approximately 2km wide and extending over an 8km strike. This highly prospective area encompasses various pegmatite dykes, including the Gullwing spodumene pegmatite swarm, Tot



spodumene pegmatite, Coates beryl-molybdenite pegmatite, and a further 15 LCT pegmatite dykes.

The primary objective of the prospecting program at the Northern Prospects was to investigate geochemical anomalies and explore potential structural breaks highlighted by recent airborne magnetic survey (refer to ASX Announcement dated 17 April 2024).

Drill pad locations and access routes for exploratory drilling of the Gullwing and Tot pegmatites were also identified during prospecting.

Previously mapped LCT pegmatites may have been underestimated for their spodumene mineralisation potential. Each previously mapped pegmatite was revisited, exposed and thoroughly sampled. Muscovite/biotite samples have been taken on most outcrops to determine degree of fractionation by utilizing Laser Induced Breakdown Spectroscopy (LIBS) analysis.

## Future Work

The pending assays will inform and support priorities for future drill testing. The Company's current assessment is that the Tot pegmatite presents as the highest priority for immediate follow-up exploration effort. This is due to the high-grade and consistent nature of the mineralisation found throughout the outcrop.

Extensional drilling to the east and south of the Main Zone as well as drill testing of the Gullwing Pegmatite remain as secondary priorities to occur within the Company's CY2024 drilling program.

The Tot pegmatite contains metacystic spodumene throughout the entire 50m outcrop surface. A mechanical stripping and channel sampling program is currently being designed to expose the outcrop's surface extensions and provide channel sample results for future resource definition drilling.

The Company has approved drill permits to allow all potential target areas to be tested as well as stripping and channel sampling permits for immediate testing of the Tot Pegmatite.

The Company expects a stripping and channel sampling program at Tot to commence in early July 2024.

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

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**ABOUT CRITICAL RESOURCES LIMITED** Critical Resources is focused on the exploration, development and delivery of the critical metals required for a decarbonized future, underpinned by a portfolio of lithium projects in Ontario, Canada which are ideally positioned to participate in the rapidly growing North American battery materials supply chain.

The Company's principal focus is on its flagship Mavis Lake Lithium Project in Ontario, Canada, where it has completed over 45,000m of drilling and defined a maiden Inferred Mineral Resource of 8Mt grading 1.07% Li<sub>2</sub>O. Recent exploration



success has demonstrated substantial potential to expand this resource and make new discoveries in the surrounding area. Critical is progressing a dual-track strategy at Mavis Lake of targeting resource growth in parallel with multiple permitting and project development workstreams.

**COMPETENT PERSONS STATEMENT / COMPLIANCE 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.

This announcement contains information on the Mavis Lake Lithium Project extracted from ASX market announcements dated 27 March 2023 and 22 May 2024 reported in accordance with the 2012 JORC Code and available for viewing at [www.criticalresources.com.au](http://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.

This information in this ASX Announcement regarding that relates to the Mavis Lake Mineral Resource Estimate is extracted from ASX market announcement dated 5 May 2023 and reported in accordance with the 2012 JORC Code and available for viewing at [criticalresources.com.au](http://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 announcement and that all material assumptions and technical parameters underpinning the estimates in the original market announcement continue to apply and have not materially changed.

JORC Classification	Li <sub>2</sub> O Cut-Off grade (%)	Tonnage (Mt)	Li <sub>2</sub> O (%)
Inferred	0.3	8.0	1.07
Total*	Inferred	8.0	1.07

\*Reported at a cut-off grade of 0.30% Li<sub>2</sub>O for an open pit mining scenario. Estimation for the model is by inverse distance weighting. Classification is according to JORC Code Mineral Resource categories. Refer to ASX announcement 5 May 2023, 8.0 Mt at 1.07% Li<sub>2</sub>O Maiden Mineral Resource at Mavis Lake.

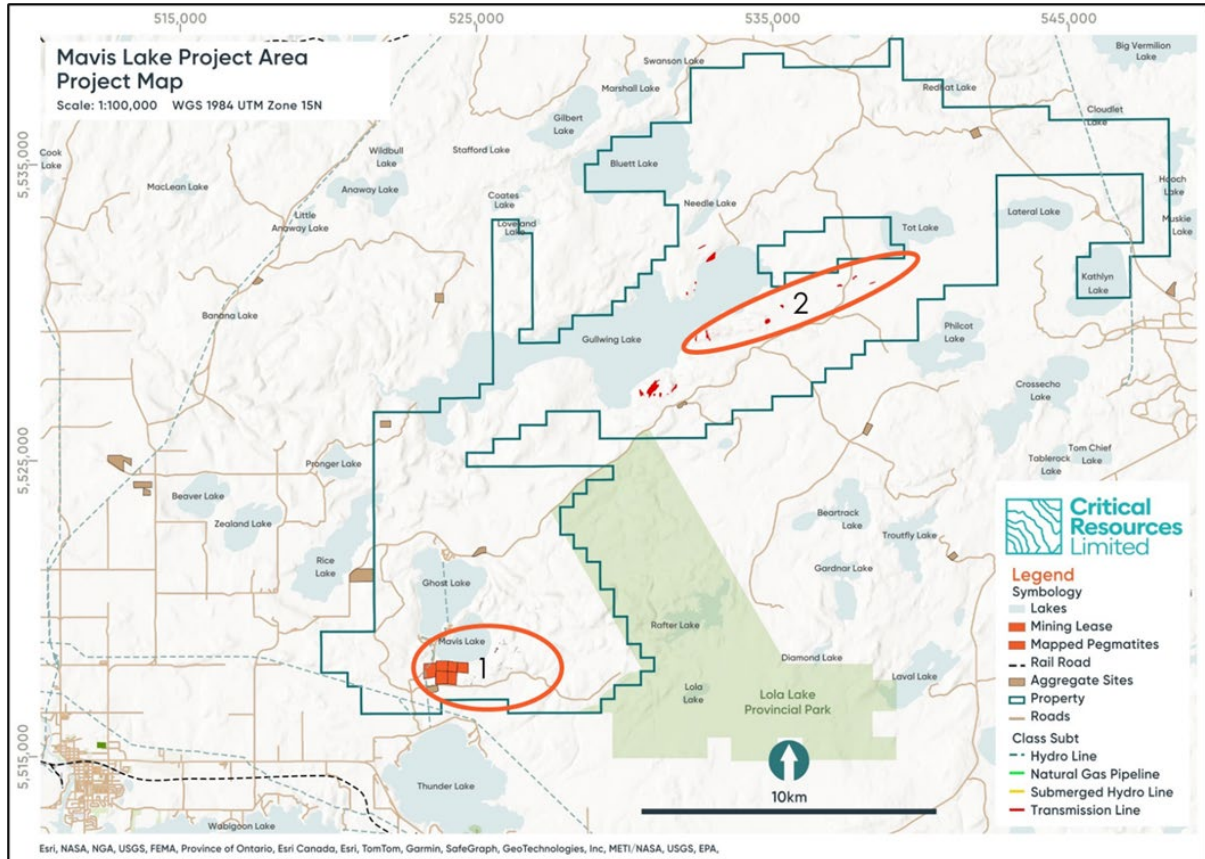
**CAUTIONARY NOTE – VISUAL ESTIMATES** in relation to the disclosure of visual mineralisation, the Company cautions that visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analysis where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations. The presence of pegmatite rock does not necessarily indicate the presence of lithium, caesium, tantalum (LCT) mineralisation. Laboratory chemical assays are required to determine the grade of mineralisation.

**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 – Exploration Results



**Figure A1-1 - Project area map highlighting field program locations. Target 1 shows the location of the Main Zone program and Target 2 shows the location of the Northern Prospects program**



**Table 1: Grab samples with lithology and visual estimates of Spodumene mineralisation**

Sample ID	Easting	Northing	UTM	Date	Type	Lithology	Spd (%)
846868	524679	5517902	UTM_Z15N	2024-05-09	Outcrop	Spd-bearing	<50
846831	524661	5517907	UTM_Z15N	2024-05-09	Outcrop	Spd-bearing	<50
846787	524670	5517898	UTM_Z15N	2024-05-09	Outcrop	Spd-bearing	50
846832	524690	5517914	UTM_Z15N	2024-05-09	Outcrop	Spd-bearing	50
846761	526403	5519213	UTM_Z15N	2024-05-03	Proximal Float	Spd-bearing	25
846751	526343	5518601	UTM_Z15N	2024-05-01	Outcrop	Spd-bearing	15
846802	526344	5518608	UTM_Z15N	2024-05-01	Outcrop	Spd-bearing	10
846803	526233	5518362	UTM_Z15N	2024-05-01	Float	Spd-bearing	10
846785	525039	5517842	UTM_Z15N	2024-05-08	Outcrop	Spd-bearing	10
846824	525040	5517842	UTM_Z15N	2024-05-08	Channel	Spd-bearing	10
846823	525043	5517843	UTM_Z15N	2024-05-08	Channel	Spd-bearing	5
846786	525039	5517830	UTM_Z15N	2024-05-09	Channel	Spd-bearing	5
846827	525036	5517835	UTM_Z15N	2024-05-09	Channel	Spd-bearing	5
846788	524873	5517479	UTM_Z15N	2024-05-19	Outcrop	Spd-bearing	5
846773	525026	5517855	UTM_Z15N	2024-05-06	Outcrop	Spd-bearing	3
846819	525036	5517809	UTM_Z15N	2024-05-07	Outcrop	Spd-bearing	2
846834	524868	5517459	UTM_Z15N	2024-05-19	Outcrop	Spd-bearing	2
846855	526408	5519214	UTM_Z15N	2024-05-03	Proximal Float	Spd-bearing	1
846814	525976	5517951	UTM_Z15N	2024-05-05	Outcrop	Spd-bearing	1
846778	525044	5517881	UTM_Z15N	2024-05-07	Proximal Float	Spd-bearing	1
846779	524959	5517669	UTM_Z15N	2024-05-07	Outcrop	Spd-bearing	1
846826	525036	5517833	UTM_Z15N	2024-05-09	Channel	Spd-bearing	1
846757	526770	5518786	UTM_Z15N	2024-05-03	Float	Pegmatite	0
846758	526955	5518685	UTM_Z15N	2024-05-03	Float	Pegmatite	0
846762	526406	5519212	UTM_Z15N	2024-05-03	Outcrop	Pegmatite	0
846763	526409	5519215	UTM_Z15N	2024-05-03	Outcrop	Pegmatite	0
846764	526472	5519056	UTM_Z15N	2024-05-04	Float	Pegmatite	0
846765	526446	5519102	UTM_Z15N	2024-05-04	Outcrop	Pegmatite	0
846766	526326	5519362	UTM_Z15N	2024-05-04	Outcrop	Pegmatite	0
846808	526408	5519234	UTM_Z15N	2024-05-03	Outcrop	Pegmatite	0
846809	526439	5519117	UTM_Z15N	2024-05-03	Outcrop	Pegmatite	0
846854	526950	5518319	UTM_Z15N	2024-05-03	Float	Pegmatite	0
846856	526411	5519216	UTM_Z15N	2024-05-03	Proximal Float	Pegmatite	0
846857	526409	5519212	UTM_Z15N	2024-05-03	Outcrop	Pegmatite	0
846858	526412	5519132	UTM_Z15N	2024-05-03	Outcrop	Pegmatite	0
846862	526450	5519220	UTM_Z15N	2024-05-04	Outcrop	Pegmatite	0
846863	526446	5519219	UTM_Z15N	2024-05-04	Outcrop	Pegmatite	0
846767	527983	5518199	UTM_Z15N	2024-05-05	Float	Pegmatite	0
846768	526167	5517917	UTM_Z15N	2024-05-05	Float	Pegmatite	0
846769	526083	5517976	UTM_Z15N	2024-05-05	Proximal Float	Pegmatite	0
846771	525668	5518411	UTM_Z15N	2024-05-05	Float	Pegmatite	0
846866	526036	5517675	UTM_Z15N	2024-05-05	Float	Pegmatite	0
846867	524958	5517811	UTM_Z15N	2024-05-06	Float	Pegmatite	0
846816	525040	5517842	UTM_Z15N	2024-05-06	Outcrop	Pegmatite	0
846774	525026	5517855	UTM_Z15N	2024-05-06	Outcrop	Pegmatite	0
846776	524953	5517851	UTM_Z15N	2024-05-06	Float	Pegmatite	0
846753	526207	5517980	UTM_Z15N	2024-05-02	Outcrop	Pegmatite	0
846754	526173	5517965	UTM_Z15N	2024-05-02	Outcrop	Pegmatite	0





846755	526406	5518054	UTM_Z15N	2024-05-02	Outcrop	Pegmatite	0
846756	526461	5518073	UTM_Z15N	2024-05-02	Outcrop	Pegmatite	0
846801	526842	5518382	UTM_Z15N	2024-05-01	Float	Pegmatite	0
846851	526198	5517990	UTM_Z15N	2024-05-02	Outcrop	Pegmatite	0
846852	526204	5517991	UTM_Z15N	2024-05-02	Outcrop	Pegmatite	0
846805	526232	5517965	UTM_Z15N	2024-05-02	Outcrop	Pegmatite	0
846818	525048	5517910	UTM_Z15N	2024-05-07	Outcrop	Pegmatite	0
846821	525028	5517804	UTM_Z15N	2024-05-07	Outcrop	Pegmatite	0
846822	525028	5517797	UTM_Z15N	2024-05-07	Outcrop	Pegmatite	0
846777	525044	5517882	UTM_Z15N	2024-05-07	Outcrop	Pegmatite	0
846782	524972	5517685	UTM_Z15N	2024-05-07	Outcrop	Pegmatite	0
846789	524870	5517581	UTM_Z15N	2024-05-19	Outcrop	Pegmatite	0
846759	526957	5518354	UTM_Z15N	2024-05-03	Float	Other	0
846806	526922	5518845	UTM_Z15N	2024-05-03	Float	Other	0
846807	526901	5518244	UTM_Z15N	2024-05-03	Float	Other	0
846853	526834	5518744	UTM_Z15N	2024-05-03	Float	Other	0
846772	525740	5518506	UTM_Z15N	2024-05-05	Outcrop	Other	0
846866	525755	5518512	UTM_Z15N	2024-05-05	Outcrop	Other	0
846813	528095	5518261	UTM_Z15N	2024-05-05	Float	Other	0
846815	525772	5518835	UTM_Z15N	2024-05-05	Outcrop	Other	0
846861	526454	5519220	UTM_Z15N	2024-05-04	Outcrop	Host	0
846817	525041	5517825	UTM_Z15N	2024-05-06	Outcrop	Host	0
846781	524959	5517669	UTM_Z15N	2024-05-07	Outcrop	Host	0
846825	525041	5517837	UTM_Z15N	2024-05-08	Channel	Host	0
846828	525035	5517835	UTM_Z15N	2024-05-09	Outcrop	Host	0
846829	525037	5517830	UTM_Z15N	2024-05-09	Outcrop	Host	0
846811	526449	5519106	UTM_Z15N	2024-05-04	Outcrop	Barren Peg	0
846812	526367	5519337	UTM_Z15N	2024-05-04	Outcrop	Barren Peg	0
846859	526429	5519114	UTM_Z15N	2024-05-04	Outcrop	Barren Peg	0
846864	527958	5518198	UTM_Z15N	2024-05-05	Float	Barren Peg	0
846775	524977	5517830	UTM_Z15N	2024-05-06	Outcrop	Barren Peg	0
846804	526230	5517971	UTM_Z15N	2024-05-02	Outcrop	Barren Peg	0
846783	524908	5517689	UTM_Z15N	2024-05-07	Outcrop	Barren Peg	0
846784	524941	5517687	UTM_Z15N	2024-05-07	Outcrop	Barren Peg	0
846752	526202	5517971	UTM_Z15N	2024-05-02	Outcrop	Aplite	0



## Section 1: Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC-Code Explanation	Commentary
<b>Sampling techniques</b>	<i>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.</i>	<b>Bedrock Grab Samples</b> <ul style="list-style-type: none"><li>• Sampling will be conducted on the surface of exposed outcrops or float rocks via pick, hammer, or another handheld tool.</li><li>• Samples only represent a direct point on the surface and may not be representative to the entire rock body.</li><li>• All rock samples collected were shipped to Actlabs Laboratories in Dryden, ON, for trace and rare earth elements by sodium peroxide fusion ICP-OES/ICP-MS 58 elements. The Company submitted standards and blanks while Actlabs also provided internal lab QAQC.</li><li>• All grab samples will have NAD83 15N coordinates.</li></ul>
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>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.</i>	
<b>Drilling techniques</b>	<i>Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i>	<ul style="list-style-type: none"><li>• Not applicable as no drilling was undertaken</li></ul>





Criteria	JORC-Code Explanation	Commentary
<b>Drill sample recovery</b>	Method of recording and assessing core and chip sample recoveries and results assessed.	<ul style="list-style-type: none"> <li>• Not Applicable</li> </ul>
	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.	
<b>Logging</b>	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	<b>Bedrock</b> <ul style="list-style-type: none"> <li>• Sample site description and basic nature of the sample medium was routinely collected and at times photographed for reference.</li> </ul>
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	
	The total length and percentage of the relevant intersections logged.	
<b>Sub-sampling techniques and sample preparation</b>	If core, whether cut or sawn and whether quarter, half or all core taken.	<ul style="list-style-type: none"> <li>• Not Applicable</li> </ul>
	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.	



Criteria	JORC-Code Explanation	Commentary
	Whether sample sizes are appropriate to the grain size of the material being sampled.	
<b>Quality of assay data and laboratory tests</b>	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	<b>Bedrock Grab Samples</b> <ul style="list-style-type: none"> <li>• All rock samples collected will be shipped to Actlabs Laboratories in Dryden, ON, Canada</li> <li>• Samples were analysed for trace and rare earth elements by sodium peroxide fusion ICP-OES/ICP-MS 58 elements.</li> <li>• The Company submitted standards and blanks while Actlabs also provided internal lab QAQC</li> </ul>
	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.	
<b>Verification of sampling and assaying</b>	The verification of significant intersections by either independent or alternative company personnel.	<b>Bedrock Grab Samples</b> <ul style="list-style-type: none"> <li>• No independent verification completed at this stage.</li> <li>• No assay results are provided.</li> <li>• No adjustments to the assay data.</li> <li>• No assay cut off grades are applied.</li> <li>• The data regarding sampling location and sample information is stored in tabular format and is appended to this report.</li> </ul>
	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.	
<b>Location of data points</b>	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.	<b>Bedrock Grab Samples</b> <ul style="list-style-type: none"> <li>• Samples will be recorded with Garmin GPS that has an accuracy in the order of <math>\pm 3</math> metres for location.</li> <li>• WGS 1984 UTM Zone 15N.</li> <li>• No specific topography survey has been completed over the project area.</li> </ul>
	Specification of the grid system used.	
	Quality and adequacy of topographic control.	
<b>Data spacing and distribution</b>	Data spacing for reporting of Exploration Results.	





Criteria	JORC-Code Explanation	Commentary
	<i>Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i>	<b>Bedrock Grab Samples</b> <ul style="list-style-type: none"><li>• The samples are considered random taken directly from outcropping spodumene-bearing pegmatite.</li><li>• The data spacing, and distribution are not sufficient to establish the degree of geological and grade continuity.</li></ul>
	<i>Whether sample compositing has been applied.</i>	
<b>Orientation of data in relation to geological structure</b>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>  <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	<b>Bedrock Samples</b> <ul style="list-style-type: none"><li>• ESE-WNW oriented grids are used to cover the majority of known geological and structural trends.</li><li>• Samples were spaced to provide a first pass test of as many geological/geophysical targets as possible in the time available.</li></ul>
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	<b>Bedrock Grab Samples</b> <ul style="list-style-type: none"><li>• All rock samples collected were shipped to Actlabs Laboratories in Dryden, ON by transport trailer. All sample bags had security tags and were confirmed upon arrive to the lab.</li></ul>
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	<ul style="list-style-type: none"><li>• Assay results were checked and validated by competent persons in Thunder Bay, Ontario.</li></ul>

## Section 2: Reporting of Exploration Results

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

Criteria	JORC-Code Explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i>  <i>The security of the tenure held at the time of reporting along with any known impediments to</i>	<p>The Mavis Lake Project Area consists of 1097 unpatented Single Cell Mining Claims and six separate surface leases which secure the surface rights of the land required for the Project footprint.</p> <p>The Gullwing-Tot/Northern Prospects area consists of 358 individual unpatented Single Cell Mining Claims.</p> <p>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.</p>



Criteria	JORC-Code Explanation	Commentary
	obtaining a licence to operate in the area.	
<b>Exploration done by other parties</b>	Acknowledgment and appraisal of exploration by other parties.	<ul style="list-style-type: none"> <li>• Previous exploration has been conducted by a number of parties including Lun-Echo Gold Mines Limited (1956), Selco Mining Corporation (1979-1980), Tantalum Mining Corporation of Canada Limited (1981-1982), Emerald Field Resources (2002), International Lithium Corp (2006-2021) and Pioneer Resources Limited/Essential Metals Limited (2018-2021). Power Metals prospecting programs (2018 and 2022)</li> </ul>
<b>Geology</b>	Deposit type, geological setting and style of mineralisation.	<ul style="list-style-type: none"> <li>• The Fairservice and Mavis Lake Prospects host zoned pegmatites that are prospective for lithium and tantalum</li> <li>• The Gullwing-Tot area hosts pegmatites that are prospective for lithium and tantalum.</li> </ul>
<b>Drill hole Information</b>	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	<ul style="list-style-type: none"> <li>• No drilling was undertaken</li> </ul>
	Easting and northing of the drill hole collar	
	Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	
	Dip and azimuth of the hole	
	down hole length and interception depth	
	hole length.	
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
<b>Data aggregation methods</b>	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.	<ul style="list-style-type: none"> <li>• No data aggregation was carried out and no truncation or top cuts of results were employed.</li> </ul>



Criteria	JORC-Code Explanation	Commentary
	Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
<b>Relationship between mineralisation widths and intercept lengths</b>	These relationships are particularly important in the reporting of Exploration Results.	<ul style="list-style-type: none"> <li>The geometry of any mineralized bodies is not known at this stage.</li> </ul>
	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').	
<b>Diagrams</b>	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	<ul style="list-style-type: none"> <li>Refer to images in the main document.</li> </ul>
<b>Balanced reporting</b>	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.	<ul style="list-style-type: none"> <li>All geological and assay data is reported.</li> </ul>





Criteria	JORC-Code Explanation	Commentary
<b>Other substantive exploration data</b>	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating</i>	<ul style="list-style-type: none"><li>• All known and relevant data has been reported.</li></ul>
<b>Further work</b>	<i>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	<ul style="list-style-type: none"><li>• Possible mechanical stripping of Tot pegmatite followed by channel sampling the exposed pegmatite.</li><li>• Reconnaissance drilling is imperative to confirm models/investigations and the exploration target with the objective of detecting bedrock lithium mineralisation.</li></ul>