

2 July 2024

## Exceptional Lithium Assay Results of up to 5.12% Li<sub>2</sub>O at Mavis Lake

### Highlights

- The Summer Field Program has delivered **multiple new discoveries** at Mavis Lake reinforcing the Company's recently announced Exploration Target of 18 - 29Mt at 0.8-1.2% Li<sub>2</sub>O<sup>1</sup>.
- Detailed surface mapping has identified **significant extensions** to previously discovered spodumene-bearing outcrops.
- Assay results confirm exceptionally high grades at surface with lithium assays of up to 5.12% Li<sub>2</sub>O along the extensions of pegmatites 7 and 24.
- Pegmatite 19 with confirmed high-grade spodumene up to 2.76% Li<sub>2</sub>O.
- Pegmatite 20 extension reveals substantial and consistent mineralisation up to 1.17% Li<sub>2</sub>O.
- The results confirm high-confidence drill targets to the south and east of the Mavis Lake Main Zone Resource.
- Northern Prospects confirmed as a highly fractionated system with significant potential.
- Planning and permits in place to undertake mechanical stripping and channel sampling of the Tot Pegmatite, within the Northern Prospects.
- A detailed targeted drilling campaign is being finalised from the new data collected.

Lithium exploration and project development company Critical Resources Limited **ASX:CRR** ("Critical Resources" or "the Company") is pleased to announce that it has received exceptionally high-grade lithium assay results from the recent field program at the Company's 100%-owned **Mavis Lake Lithium Project** ("the Project") in Ontario, Canada.

The discovery of surface extensions and new outcrops was announced in late May (refer to ASX announcement, 29 May 2024). The subsequent receipt of assay results from these areas, with lithium oxide concentrations reaching **up to 5.12% Li<sub>2</sub>O**, underscores the exceptional potential of the Mavis Lake Project for continued Resource growth and, ultimately, the ability to deliver on the Company's recently announced JORC compliant Exploration Target of 18 - 29Mt at 0.8-1.2% Li<sub>2</sub>O<sup>1</sup>.

1. Refer Announcement 22 May 2024. The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.



## High-Grade Extensions at Main Zone East

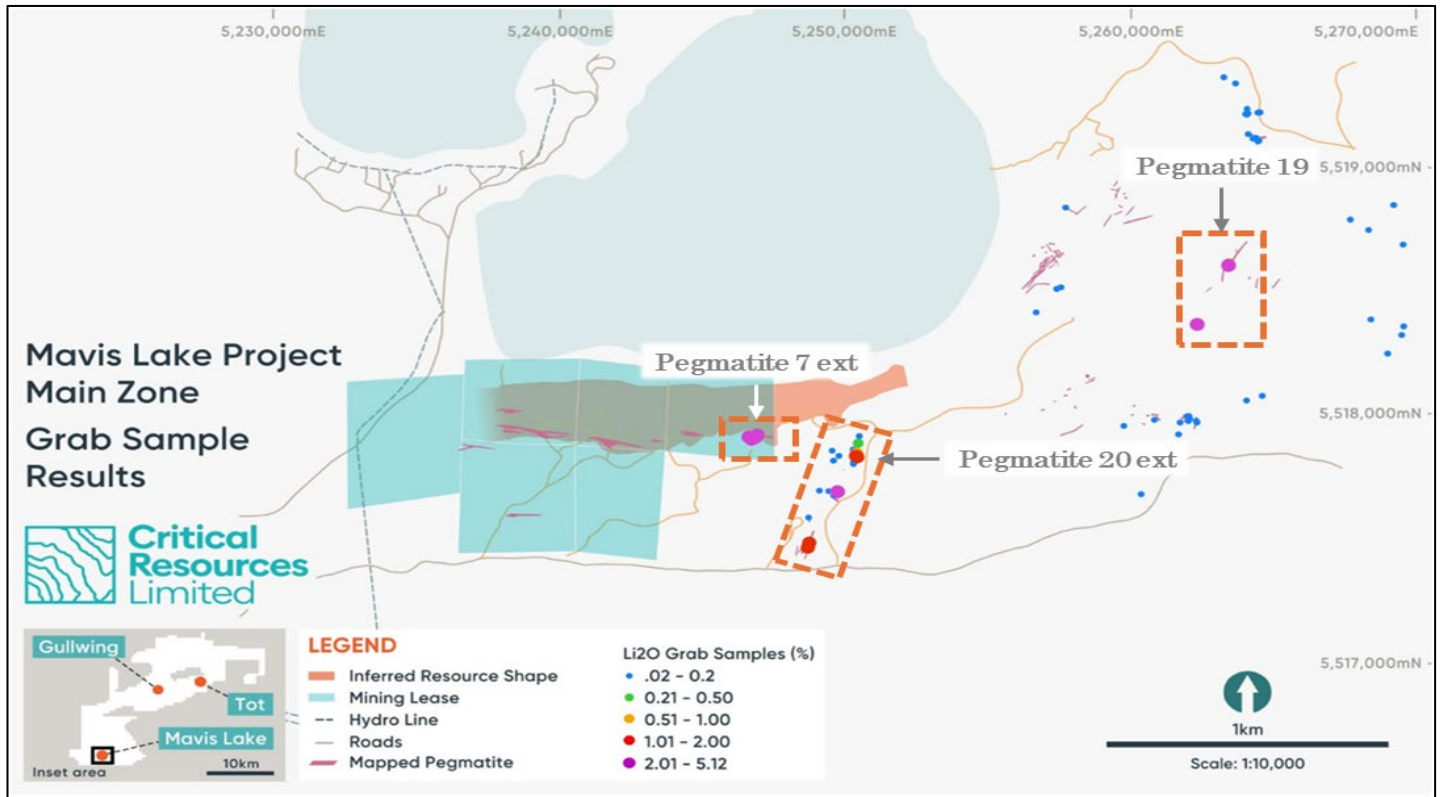
Field crews spent three weeks prospecting across the Mavis Lake Project Area, resulting in the discovery of 31 new LCT-type pegmatites. A total of 83 grab samples were collected to assess lithium mineralisation from spodumene, as well as fractionation and concentrations of Lithium, Rubidium, Caesium and Tantalum. Key results are shown in Table 1 and Figure 1, with full exploration results provided in Appendix 1.

Highlights include:

- High-grade lithium results ranging from 2.07% to 5.12% Li<sub>2</sub>O in grab samples across the ~100-metre extensions of spodumene-bearing Pegmatites 7 and 24.
- Up to 1.17% Li<sub>2</sub>O at the ~250-metre extension of spodumene-bearing Pegmatite 20.
- Up to 2.76% Li<sub>2</sub>O in grab samples from Pegmatite 19.

**Table 1: Significant Assay Results from the Summer Prospecting Program**

Sample ID	Easting	Northing	Li (ppm)	Li <sub>2</sub> O (%)	Cs (ppm)	Rb (ppm)	Ta (ppm)	Pegmatite	Type
846868	524679	5517902	23800	<b>5.12</b>	<b>254</b>	738	52.4	Pegmatite 7ext	Outcrop
846831	524661	5517907	19800	<b>4.26</b>	81.9	486	14.4	Pegmatite 7ext	Outcrop
846751	526343	5518601	12800	<b>2.76</b>	<b>658</b>	<b>5000</b>	<b>200</b>	Pegmatite 19	Outcrop
846832	524690	5517914	12800	<b>2.76</b>	61.4	830	<b>186</b>	Pegmatite 7ext	Outcrop
846782	524972	5517685	10200	<b>2.20</b>	101	<b>1930</b>	60.2	Pegmatite 20	Outcrop
846803	526233	5518362	10000	<b>2.15</b>	<b>370</b>	<b>3070</b>	168	Pegmatite 19	Float
846787	524670	5517898	9610	<b>2.07</b>	204	538	50.1	Pegmatite 7ext	Outcrop
846788	524873	5517479	8800	<b>1.89</b>	175	<b>2240</b>	89.2	Pegmatite 20	Outcrop
846834	524868	5517459	7370	<b>1.59</b>	189	<b>2780</b>	96.9	Pegmatite 20	Outcrop
846829	525037	5517830	5420	<b>1.17</b>	15.1	53.4	2.4	Pegmatite 20ext	Outcrop
846817	525041	5517825	5290	<b>1.14</b>	24.8	105	5.2	Pegmatite 20ext	Outcrop



**Figure 1 – Plan map showing locations of grab samples and discovery reference areas.**

## **Pegmatite 7 and 24 Extension.**

Field teams completed prospecting and clearing around Pegmatites 7 and 24 and were able to successfully expose both pegmatites towards the east and west by over a strike length of up to ~100m. Assay results have confirmed high-grade mineralisation, up to 5.12% Li<sub>2</sub>O from grab samples.

Pegmatite 7, trending roughly east-west, is up to 4 metres thick with a known strike length of 100 metres and the mineralisation appears to be open laterally in both directions. Notably, Pegmatite 7 exhibits surface features of megacrystic quartz and spodumene, indicating significant exploration potential (refer to Figure 2 and Figure 3).





**Figure 2 – Large Coarse Spodumene samples from Pegmatite 7 (assays confirm grades up to 5.12%  $\text{Li}_2\text{O}$ ).**

The surface contacts of these pegmatites revealed unexpected 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 and the newly defined structural trend of these pegmatites has revealed new drill targets with the potential to host significant high-grade mineralisation close to surface.





**Figure 3 – Coarse Spodumene at Pegmatite 7 (assays confirm grades up to 5.12%  $\text{Li}_2\text{O}$ ).**

## **Pegmatite 19, 20, and Pegmatite 25**

Pegmatite 19 was previously mapped in 2009 and 2018 and was identified then to have spodumene-mineralisation. Field crews were able to replicate similar grades of up to 2.76%  $\text{Li}_2\text{O}$ . This pegmatite extends over a known strike length of ~250 metres and is up to 3m wide. Pegmatite 19 is an immediate drill target.

The mineralisation of Pegmatite 20 was extended by an additional 250 meters to the north, resulting in a total strike length of approximately 535 meters. Assay results revealed grades of up to 1.17%  $\text{Li}_2\text{O}$ . This extension provides several new high-priority drill targets for further exploration and resource definition.

Pegmatite 25 hosted altered out relic spodumene minerals however the alteration remobilized the majority of the lithium values. Even with minimum lithium values, this pegmatite remains a priority for drill testing to determine if the alteration is pervasive throughout the pegmatite or if spodumene minerals occur within this area.





## Highly Fractionated Pegmatites at Northern Prospects

During the field program, a total of 113 muscovite samples were collected from known pegmatites across the Northern Prospects – Gullwing, Coates, Drope, East Drope and Little Wing – with reference samples also taken from the Mavis Lake Main Zone. The samples were collected for internal analysis by Laser Induced Breakdown Spectroscopy (LIBS).

LIBS analysis is aimed at determining the degree of fractionation of pegmatites, ultimately to better target potential areas of spodumene mineralisation. A muscovite sample is shown in Figure 4.



**Figure 4 – Muscovite sample tested for fractionation trend using LIBS analysis**

The Company utilised LIBS analysis on muscovite samples to determine the fractionation of pegmatites in the following way:

- **Sample Collection:** Muscovite samples were collected from different pegmatite bodies in the field.
- **Preparation:** Samples were cleaned and prepared to ensure accurate LIBS analysis.
- **LIBS Analysis:** A high-energy laser pulse is directed at the muscovite samples. This laser pulse ablates a small amount of the sample, creating a plasma.

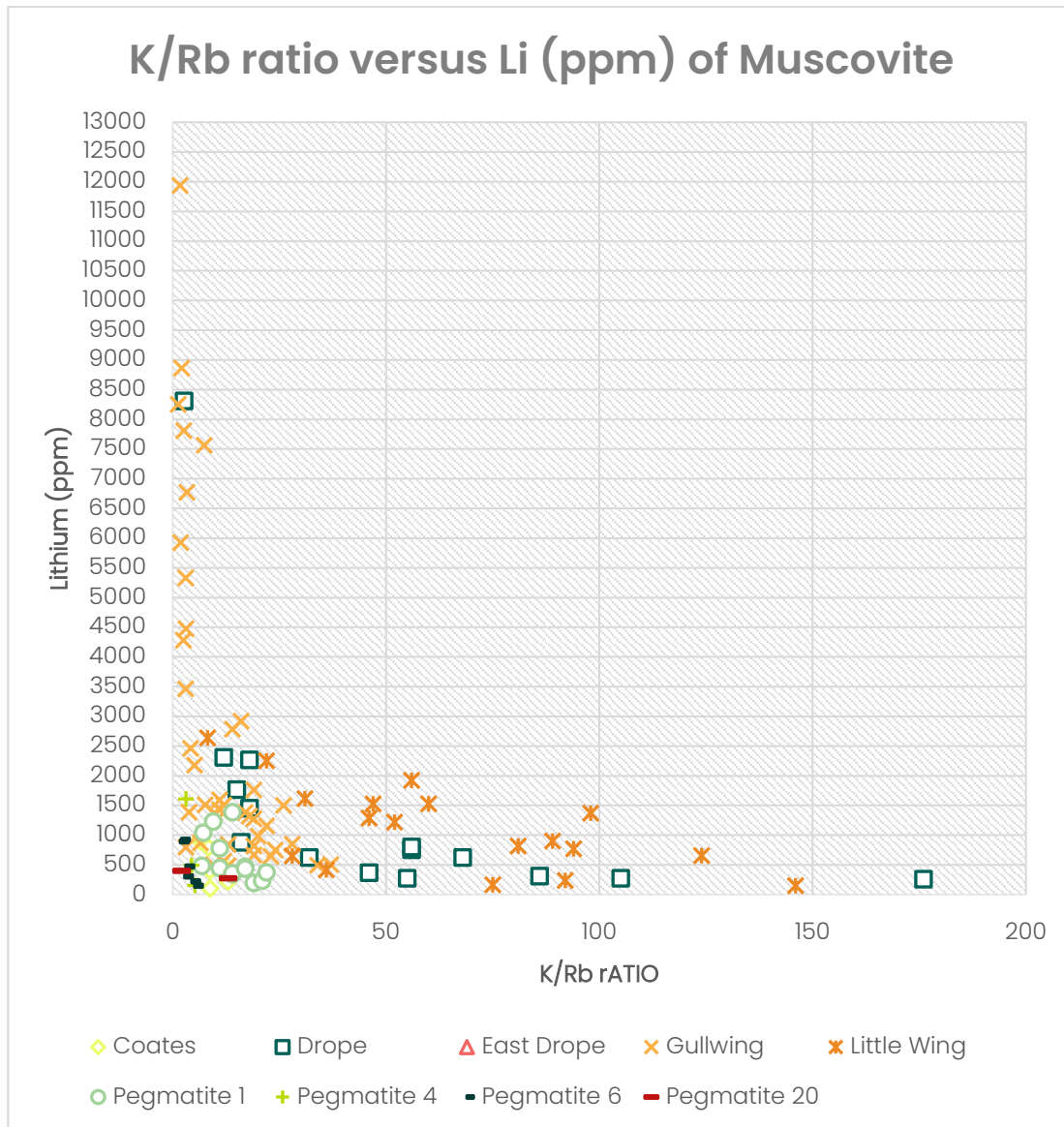


- **Emission Spectroscopy:** As the plasma cools, it emits light at characteristic wavelengths. The emitted light is collected and analysed to identify and quantify the elemental composition of the sample.
- **Data Interpretation:** A qualified geologist interprets the spectral data to determine the concentrations of elements such as lithium, rubidium, caesium and tantalum. Higher concentrations of these elements indicate higher degrees of fractionation.
- **Fractionation Assessment:** By comparing the elemental compositions across different samples, the Company can assess the degree of fractionation of the pegmatites. More fractionated pegmatites typically show higher concentrations of incompatible elements.
- **Geological Implications:** The results help in understanding the evolution of the pegmatite bodies and can indicate areas with higher potential for lithium (spodumene) minerals.

The data allows Critical Resources to map the spatial distribution of mineralisation, guiding drilling efforts to the most promising areas.

The ability to immediately adjust exploration strategies based on LIBS results, combined with the correlation of LIBS data with other geophysical and geological information, reduces exploration risks and validates existing models. Ultimately, this comprehensive, iterative and dynamic approach will optimise drill target selection, increasing the likelihood of a successful spodumene discovery and ensuring that drilling metres are optimised to deliver increased value for money.

The results revealed multiple locations with a high degree of fractionation within all pegmatites (refer to Figure 5). Typically, a high-degree fractionation is defined by a K/Rb ratio of less than 20 and lithium concentrations exceeding 500 ppm, however these values are dependent on the overall pegmatite system. Critical Resources will compare the values of known spodumene-bearing pegmatite's muscovite and determine what anomalous values to use.



**Figure 5 – LIBS results showing high-fractionation trends across the Project Area.**

## Future Work

These assays will further inform and refine the priorities for upcoming drill testing. Based on current assessments, the Tot pegmatite has emerged as the highest priority for immediate follow-up exploration due to its high-grade and consistent mineralisation.

To further delineate the Tot pegmatite, a mechanical stripping and channel sampling program is being designed. This program will aim to expose surface extensions of the outcrop and provide comprehensive channel sample results to support future resource definition drilling.

The Company has secured the necessary permits for drilling, stripping and channel sampling to facilitate these efforts. The stripping and channel sampling program at Tot is scheduled to commence in early July 2024.





In addition to the Tot pegmatite, extensional drilling to the east and south of the Main Zone, as well as drill testing of the Gullwing Pegmatite, remain priorities. These activities are expected to be part of the Company's CY2024 drilling program, ensuring a comprehensive approach to exploring and evaluating the mineral potential of the entire project area.

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

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## For further information please contact

**E:** [info@criticalresources.com.au](mailto:info@criticalresources.com.au)

**P:** +61 (8) 9465 1024

**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** 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.

**COMPLIANCE STATEMENT** This announcement contains information on the Mavis Lake Lithium Project extracted from ASX market announcements dated 20 December 2022, 27 March 2023, 17 July 2023, 2 November 2023, 18 March 2024, 17 April 2024, 22 May 2024 and 29 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.

**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 – Table of all Assay Results from Prospecting Program

Sample ID	Easting	Northing	Li (ppm)	Li <sub>2</sub> O (%)	Cs (ppm)	Rb (ppm)	Ta (ppm)	Date	Type
846868	524679	5517902	23800	5.12	254	738	52.4	2024-05-09	Outcrop
846831	524661	5517907	19800	4.26	81.9	486	14.4	2024-05-09	Outcrop
846751	526343	5518601	12800	2.76	658	5000	200	2024-05-01	Outcrop
846832	524690	5517914	12800	2.76	61.4	830	186	2024-05-09	Outcrop
846782	524972	5517685	10200	2.20	101	1930	60.2	2024-05-07	Outcrop
846803	526233	5518362	10000	2.15	370	3070	168	2024-05-01	Float
846787	524670	5517898	9610	2.07	204	538	50.1	2024-05-09	Outcrop
846788	524873	5517479	8800	1.89	175	2240	89.2	2024-05-19	Outcrop
846834	524868	5517459	7370	1.59	189	2780	96.9	2024-05-19	Outcrop
846829	525037	5517830	5420	1.17	15.1	53.4	2.4	2024-05-09	Outcrop
846817	525041	5517825	5290	1.14	24.8	105	5.2	2024-05-06	Outcrop
846785	525039	5517842	3840	0.83	49.9	740	56.1	2024-05-08	Outcrop
846828	525035	5517835	2970	0.64	41.9	140	4.4	2024-05-09	Outcrop
846825	525041	5517837	2710	0.58	41	141	1.3	2024-05-08	Channel
846827	525036	5517835	2690	0.58	189	2200	50	2024-05-09	Channel
846802	526344	5518608	2580	0.56	986	5000	157	2024-05-01	Outcrop
846777	525044	5517882	2270	0.49	79.8	2120	37	2024-05-07	Outcrop
846824	525040	5517842	1680	0.36	76.5	1530	66.6	2024-05-08	Channel
846823	525043	5517843	1440	0.31	80.5	2130	50.1	2024-05-08	Channel
846816	525040	5517842	1040	0.22	88.3	1380	89.5	2024-05-06	Outcrop
846861	526454	5519220	552	0.12	857	673	2.3	2024-05-04	Outcrop
846781	524959	5517669	357	0.08	115	409	5.1	2024-05-07	Outcrop
846763	526409	5519215	289	0.06	171	533	128	2024-05-03	Outcrop
846811	526449	5519106	248	0.05	140	857	226	2024-05-04	Outcrop
846805	526232	5517965	218	0.05	1.4	3.1	29.1	2024-05-02	Outcrop
846773	525026	5517855	215	0.05	84.8	2210	64.1	2024-05-06	Outcrop
846863	526446	5519219	181	0.04	23.7	381	235	2024-05-04	Outcrop
846774	525026	5517855	97	0.02	68.6	1010	93.5	2024-05-06	Outcrop
846851	526198	5517990	95	0.02	198	5000	30.9	2024-05-02	Outcrop
846813	528095	5518261	76	0.02	15.3	251	6.7	2024-05-05	Float
846758	526955	5518685	74	0.02	11	212	4.7	2024-05-03	Float
846779	524959	5517669	72	0.02	71.4	790	282	2024-05-07	Outcrop
846819	525036	5517809	68	0.01	136	2480	58.7	2024-05-07	Outcrop
846814	525976	5517951	65	0.01	278	5000	340	2024-05-05	Outcrop
846857	526409	5519212	61	0.01	176	29.3	27.4	2024-05-03	Outcrop
846852	526204	5517991	59	0.01	121	2610	51.1	2024-05-02	Outcrop
846855	526408	5519214	57	0.01	188	3690	84	2024-05-03	Float
846769	526083	5517976	56	0.01	70.2	7.5	81.5	2024-05-05	Float
846761	526403	5519213	53	0.01	174	3390	83.6	2024-05-03	Float
846762	526406	5519212	53	0.01	180	2350	215	2024-05-03	Outcrop



Sample ID	Easting	Northing	Li (ppm)	Li <sub>2</sub> O (%)	Cs (ppm)	Rb (ppm)	Ta (ppm)	Date	Type
846768	526167	5517917	52	0.01	7.3	142	1.6	2024-05-05	Float
846866	526036	5517675	51	0.01	45.5	74.7	3.5	2024-05-05	Float
846866	525755	5518512	51	0.01	45.5	74.7	3.5	2024-05-05	Outcrop
846818	525048	5517910	48	0.01	54.9	1280	64.2	2024-05-07	Outcrop
846822	525028	5517797	47	0.01	69.2	1850	42.9	2024-05-07	Outcrop
846812	526367	5519337	45	0.01	23	300	162	2024-05-04	Outcrop
846854	526950	5518319	45	0.01	25.4	499	6.4	2024-05-03	Float
846772	525740	5518506	42	0.01	12	62.4	1.7	2024-05-05	Outcrop
846821	525028	5517804	41	0.01	59.5	1040	65.7	2024-05-07	Outcrop
846826	525036	5517833	39	0.01	113	2640	91.5	2024-05-09	Channel
846776	524953	5517851	38	0.01	34.3	552	3.9	2024-05-06	Float
846801	526842	5518382	38	0.01	9.8	179	3.2	2024-05-01	Float
846804	526230	5517971	31	0.01	11.3	37	236	2024-05-02	Outcrop
846862	526450	5519220	31	0.01	291	3380	343	2024-05-04	Outcrop
846786	525039	5517830	27	0.01	50.7	428	63.5	2024-05-09	Channel
846789	524870	5517581	27	0.01	47.8	1260	71.8	2024-05-19	Outcrop
846775	524977	5517830	25	0.01	4.3	13.6	348	2024-05-06	Outcrop
846867	524958	5517811	22	0.00	9.3	114	5.1	2024-05-06	Float
846756	526461	5518073	21	0.00	59.5	972	169	2024-05-02	Outcrop
846766	526326	5519362	20	0.00	3.8	7.8	54.1	2024-05-04	Outcrop
846806	526922	5518845	19	0.00	21.1	350	1.9	2024-05-03	Float
846807	526901	5518244	18	0.00	8.8	176	2.4	2024-05-03	Float
846752	526202	5517971	17	0.00	4	5.4	539	2024-05-02	Outcrop
846767	527983	5518199	17	0.00	37.1	555	3.4	2024-05-05	Float
846778	525044	5517881	17	0.00	45.5	1730	52.9	2024-05-07	Float
846755	526406	5518054	16	0.00	33.9	280	361	2024-05-02	Outcrop
846815	525772	5518835	16	0.00	9.1	31.8	4.7	2024-05-05	Outcrop
846753	526207	5517980	15	0.00	8	7.1	417	2024-05-02	Outcrop
846754	526173	5517965	15	0.00	3.9	12.8	167	2024-05-02	Outcrop
846757	526770	5518786	15	0.00	21.8	649	21.1	2024-05-03	Float
846759	526957	5518354	15	0.00	11.4	266	6.1	2024-05-03	Float
846764	526472	5519056	15	0.00	11.6	239	5.8	2024-05-04	Float
846765	526446	5519102	15	0.00	6.4	30.3	237	2024-05-04	Outcrop
846771	525668	5518411	15	0.00	30	681	2.5	2024-05-05	Float
846783	524908	5517689	15	0.00	2.8	32.5	27.7	2024-05-07	Outcrop
846784	524941	5517687	15	0.00	14.7	303	52.5	2024-05-07	Outcrop
846808	526408	5519234	15	0.00	11.3	6.7	146	2024-05-03	Outcrop
846809	526439	5519117	15	0.00	11.6	196	66.6	2024-05-03	Outcrop
846853	526834	5518744	15	0.00	2	61.9	2.2	2024-05-03	Float
846856	526411	5519216	15	0.00	338	5000	35.2	2024-05-03	Float
846858	526412	5519132	15	0.00	80.6	2790	78.5	2024-05-03	Outcrop





Sample ID	Easting	Northing	Li (ppm)	Li <sub>2</sub> O (%)	Cs (ppm)	Rb (ppm)	Ta (ppm)	Date	Type
846859	526429	5519114	15	0.00	382	5000	27.3	2024-05-04	Outcrop
846864	527958	5518198	15	0.00	16.3	697	4.7	2024-05-05	Float

## 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>	



Criteria	JORC-Code Explanation	Commentary
<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>	Not applicable as no drilling was undertaken
<b>Drill sample recovery</b>	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	• Not Applicable
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	
	<i>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.</i>	
<b>Logging</b>	<i>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.</i>	<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>
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	
	<i>The total length and percentage of the relevant intersections logged.</i>	
<b>Sub-sampling techniques and sample preparation</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	• Not Applicable
	<i>If non-core, whether riffled, tube sampled, rotary split, etc</i>	



Criteria	JORC-Code Explanation	Commentary
	<p>and whether sampled wet or dry.</p> <p>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</p> <p>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</p> <p>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.</p> <p>Whether sample sizes are appropriate to the grain size of the material being sampled.</p>	
<b>Quality of assay data and laboratory tests</b>	<p>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</p> <p>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.</p> <p>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.</p>	<p><b>Bedrock Grab Samples</b></p> <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>
<b>Verification of sampling and assaying</b>	The verification of significant intersections by either independent or alternative company personnel.	





Criteria	JORC-Code Explanation	Commentary
	<p><i>The use of twinned holes.</i></p> <p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><i>Discuss any adjustment to assay data.</i></p>	<p><b>Bedrock Grab Samples</b></p> <ul style="list-style-type: none"> <li>• No independent verification completed at this stage.</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>
<b>Location of data points</b>	<p><i>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.</i></p> <p><i>Specification of the grid system used.</i></p> <p><i>Quality and adequacy of topographic control.</i></p>	<p><b>Bedrock Grab Samples</b></p> <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>
<b>Data spacing and distribution</b>	<p><i>Data spacing for reporting of Exploration Results.</i></p> <p><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></p> <p><i>Whether sample compositing has been applied.</i></p>	<p><b>Bedrock Grab Samples</b></p> <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>
<b>Orientation of data in relation to geological structure</b>	<p><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></p> <p><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></p>	<p><b>Bedrock Samples</b></p> <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>



Criteria	JORC-Code Explanation	Commentary
<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 obtaining a licence to operate in the area.</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>
<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<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>	<i>Deposit type, geological setting and style of mineralisation.</i>	<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>	<i>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:</i>	<ul style="list-style-type: none"> <li>No drilling was undertaken</li> </ul>



Criteria	JORC-Code Explanation	Commentary
	<p><i>Easting and northing of the drill hole collar</i></p> <p><i>Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></p> <p><i>Dip and azimuth of the hole</i></p> <p><i>down hole length and interception depth</i></p> <p><i>hole length.</i></p> <p><i>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.</i></p>	
<b>Data aggregation methods</b>	<p><i>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.</i></p> <p><i>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.</i></p> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<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>
<b>Relationship between mineralisation widths and intercept lengths</b>	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p> <p><i>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').</i></p>	<ul style="list-style-type: none"> <li>• The geometry of any mineralized bodies is not known at this stage.</li> </ul>





Criteria	JORC-Code Explanation	Commentary
<b>Diagrams</b>	<i>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.</i>	<ul style="list-style-type: none"><li>• Refer to images in the main document.</li></ul>
<b>Balanced reporting</b>	<i>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.</i>	<ul style="list-style-type: none"><li>• All geological and assay data is reported.</li></ul>
<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>