03 April 2023

Exceptional Reuslts From Metallurgical Test Work – up to 87.3% Lithium Recovery

Highlights

- Scoping-level metallurgical test work program concludes with consistently strong results across lithia grade and recoveries
- High lithium grades and recoveries, coupled with very low impurities demonstrates excellent potential for Mavis Lake to produce a premium product
- Representative feed grade (1.2% Li2O) produced a 6.02% Li2O concentrate with total lithia recovery of 77.5% via heavy liquid separation (HLS) and flotation
- High feed grade (1.6% Li2O) produced a 5.98% Li2O concentrate with total lithia recovery of 87.3% via HLS and flotation
- HLS optimisation delivers a coarse concentrate at 6.2% Li2O with 72.1% recovery
- Processing techniques, concentrate grade, impurities and recoveries to inform the Mavis Lake Scoping Study, due for completion mid-CY2023

Overview
Lithium development company, Critical Resources Limited (**ASX:CRR**) ("Critical Resources" or "the Company") is pleased to announce the conclusion of its first metallurgical test work program and advises that high-grade, low-impurity spodumene concentrate has been produced with very high recoveries from its 100%-owned Mavis Lake Lithium project in Ontario, Canada.

Test Work Overview
The scope of the test work program was designed to support a Scoping Study for the Mavis Lake Lithium Project. The first tranche of test work was designed as a basic mineralogical characterisation and coarse fraction Heavy Liquid Separation (HLS) test work program focused HLS and magnetic separation. The first tranche of test work resulted in the production of excellent grade concentrate (6.4% Li2O) with very low Fe2O3 impurities (refer to ASX Announcement released 9 February 2023).

The second tranche of test work expanded to incorporate concentration test work on both the HLS middlings and fines components. From this, a global grade and recovery balance was developed for each composite. Mass balance, grade and yield can be seen in tables 1 and 2.

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Table 1 – Grade and Recovery Balance – Representative Grade Composite

Sample Stream			SG	Weight		Assays (%)			Distribution (%)	
	Name	Description		g	%	Li	Li_2O	Fe_2O_3	Li	Fe_2O_3
Coarse Concentration	HLS SG 2.95 Sink, Non-mag	Coarse Spodumene Product	2.95	579	9.6	2.84	6.11	0.37	50.0	1.9
	HLS Mags	Coarse mags waste	2.95-2.70	665	11.1	0.45	0.98	12.55	9.2	73.9
	HLS Tailings (-2.70 SG)	Coarse non mags waste	2.7	3257	54.2	0.05	0.11	0.28	5.0	8.0
	Fines Circuit Feed	Coarse non mags Middlings + undersize		1504	25.0	0.78	1.69	1.22	35.8	16.2
Fine Concentration	Slimes + Fine Mags	Slimes tails		306	5.1	0.71	1.53	4.73	6.6	12.8
	Mica Removal	Fine mica tails		136	2.3	0.30	0.64	1.10	1.2	1.3
	Flotation Tailings	Flotation tails		728	12.1	0.02	0.03	0.10	0.4	0.6
	Flotation Con	Fine Spodumene Product		334	5.6	2.72	5.85	0.49	27.6	1.4
Feed (calc.)				6005	100	0.55	1.18	1.88	100	100
Final Concentrate				**914**	**15.2**	**2.80**	**6.02**	**0.41**	**77.6**	**3.3**

Table 2 – Grade and Recovery Balance – High Grade Composite

Sample Stream			SG	Weight		Assays (%)			Distribution (%)	
	Name	Description		g	%	Li	Li_2O	Fe_2O_3	Li	Fe_2O_3
Coarse Concentration	HLS SG 2.95 Sink, Non-mag	Coarse Spodumene Product	2.90	1065	17.4	2.84	6.11	0.59	64.5	14.2
	HLS Mags	Coarse mags waste	2.95-2.70	253	4.1	0.59	1.27	7.47	3.2	42.9
	HLS Tailings (-2.70 SG)	Coarse non mags waste	2.7	3120	50.8	0.06	0.12	0.26	3.8	18.6
	Fines Circuit Feed	Coarse non mags Middlings + undersize		1504	25.0	0.78	1.69	0.63	28.8	24.4
Fine Concentration	Slimes + Fine Mags	Slimes tails		222	3.6	0.85	1.84	2.43	4.0	12.2
	Mica Removal	Fine mica tails		141	2.3	0.30	0.65	1.09	0.9	3.5
	Flotation Tailings	Flotation tails		928	15.1	0.04	0.09	0.18	0.8	3.8
	Flotation Con	Fine Spodumene Product		408	6.7	2.62	5.63	0.52	22.8	4.8
Feed (calc.)				6138	100	0.76	1.65	0.72	100	100
Final Concentrate				**1473**	**24.0**	**2.78**	**5.98**	**0.57**	**87.3**	**19.0**

Program Details

The Metallurgical test work was undertaken by SGS Canada at their Lakefield facility in Ontario, with supervision in Australia by technical consultants MineScope Services. The sample suite for the test work program, was focused on representative samples from the Mavis Lake mineralised zone.

A total of 50 quarter-and-half core samples, from seven drill holes, were selected to provide a wide range of spatial locations, lithia grades, lithologies, spodumene intersection depths and also account for typical mining dilution. For full details refer to Appendix 1.

The samples were delivered to SGS and compiled to create two composites, being a representative grade composite (SGS assays confirmed 1.2% Li_2O) and a high-grade composite (SGS assays confirmed 1.6% Li_2O).

HLS and magnetic separation test work 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 for 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. It was later identified that incorporating the SG 2.90 sinks fraction achieved an SC6.0 compliant coarse spodumene product of 6.11% Li_2O at a higher lithium recovery of 64.5%.

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). This is likely due to good liberation of iron within the pegmatite, facilitating effective iron removal through magnetic separation.

An additional HLS and magnetic separation testwork program was undertaken on the High Grade composite to ascertain the effect of particle size on grade and recovery. In this program, the top size of the crushed product was reduced to +3.35mm. The SG 2.95, 2.90 and 2.85 sink products (after magnetic separation) were recovered to coarse product. This resulted in an increased lithium recovery to coarse product of 72.1% while maintaining a spodumene product grade of 6.18% Li_2O. Although the +3.35mm top size is considered impractical to replicate in a DMS circuit, it does indicate that spodumene liberation improves with decreasing particle size.

Future Work

The Company has commenced permitting to allow bulk sample collection which it intends to complete during the Canadian summer. The Bulk Samples are to allow for more extensive test work should to Company commit to advancing to Preliminary Feasibility Studies[1].

[1] Subject to Board approval following the release of the Mavis Lake Scoping Study

Should studies progress beyond scoping-level, the metallurgical and mineralogical test work program should be designed to satisfy all the requirements of such a study as defined by JORC 2012, this includes, but is not limited to:

- Designing a sample suite that best represents the knowledge of the Mavis Lake resource[2], considering variability in lithia grades, spatial locations, intersect depths, lithologies, lithium mineralisation, gangue mineralisation, pegmatite sill widths and assumed mining practices and dilution.
- Assessing the variability of the characteristics listed above in the known resource and potential impacts on processing performance.
- Assessing the applicability of all known coarse and fine spodumene beneficiation processes, including but not limited to:
  - Ore characterisation and optical ore sorting techniques
  - Crushing and comminution, grinding and de-sliming
  - Liberation assessments
  - Dense Medium Separation (DMS)
  - Coarse and Fine Magnetic Separation
  - Coarse Mica Removal
  - Fine Mica Flotation and spodumene flotation
  - Filtration and dewatering
- Optimising lithia losses identified in the Scoping Study testwork, notably:
  - HLS / DMS magnetic rejects
  - HLS / DMS non-magnetic rejects
  - De-slimed fines
- Assessing the amenability of the Mavis Lake spodumene product to downstream processing, marketability assessment.

Critical Resources' Managing Director Alex Cheeseman said:

"These exceptional results in terms of concentrate grade, recovery and impurity profile re-enforce the quality of the Mavis Lake Lithium project.

Metallurgical test work is a key step in advancing Mavis Lake along its development pathway, with that pathway underpinned by these excellent results.

With continued drilling and concurrent studies work, we are set on our pathway to unlocking the economic potential of Mavis Lake. With unprecedented investment into Canadian and American EV supply chains, it is an excellent time to be advancing this project."

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

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[2] On the basis that a JORC 2012 compliant Mineral Resource Estimate has been released.

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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 Metallurgical Results is based on information compiled by Mr Michael Davis, a Competent Person who is a Fellow of the Australian Institute of Mining and Metallurgy (FAusIMM). Michael Davis is the Technical Director of MineScope Services Pty Ltd (MineScope). Mr Davis has sufficient experience in mineral processing of this nature 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 Davis consents to the inclusion in this Announcement of the metallurgical test work results and mineral processing information in the form and context in which it appears.

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.

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 1: List of samples taken for the representative composite averaging ~1.2% Li_2O

	Drill Hole	Core Type	From (m)	To (m)	Length (m)	Est. Sample (kg)
Samples for Representative Composite	MF22-063	Quarter NQ	64.64	65	0.36	0.38
	MF22-063	Quarter NQ	65	67	2	2.14
	MF22-063	Quarter NQ	67	69	2	2.14
	MF22-063	Quarter NQ	69	70.3	1.3	1.39
	MF22-065	Quarter NQ	126	126.41	0.41	0.44
	MF22-065	Quarter NQ	126.41	128	1.59	1.70
	MF22-065	Quarter NQ	128	128.92	0.92	0.98
	MF22-065	Quarter NQ	128.92	130.86	1.94	2.07
	MF22-065	Quarter NQ	130.86	132.63	1.77	1.89
	MF22-065	Quarter NQ	132.63	132.93	0.3	0.32
	MF22-071	Quarter NQ	110	110.52	0.52	0.56
	MF22-071	Quarter NQ	110.52	111.95	1.43	1.53
	MF22-071	Quarter NQ	111.95	113.9	1.95	2.08
	MF22-071	Quarter NQ	113.9	115.72	1.82	1.94
	MF22-071	Quarter NQ	115.72	117.72	2	2.14
	MF22-071	Quarter NQ	117.72	119.25	1.53	1.63
	MF22-072	Quarter NQ	142.26	144.22	1.96	2.09
	MF22-072	Quarter NQ	144.22	146	1.78	1.90
	MF22-072	Quarter NQ	146	148	2	2.14
	MF22-072	Quarter NQ	148	150	2	2.14
	MF22-072	Quarter NQ	150	152	2	2.14
	MF22-072	Quarter NQ	152	152.98	0.98	1.05
	MF22-080	Quarter NQ	150.35	152.15	1.8	1.92
	MF22-080	Quarter NQ	152.15	152.5	0.35	0.37
	MF22-080	Quarter NQ	152.5	154.15	1.65	1.76
	MF22-080	Quarter NQ	154.15	156	1.85	1.98
	MF22-080	Quarter NQ	156	156.55	0.55	0.59

Table 2: List of samples taken for the high-grade composite averaging ~1.6% Li_2O

	Drill Hole	Core Type	From (m)	To (m)	Length (m)	Est. Sample (kg)
Samples for High-Grade Composite	MF22-117	Quarter NQ	131	133	2	2.14
	MF22-117	Quarter NQ	133	134.8	1.8	1.92
	MF22-117	Quarter NQ	134.8	136.4	1.6	1.71
	MF22-117	Quarter NQ	136.4	138.3	1.9	2.03
	MF22-117	Quarter NQ	138.3	139.3	1	1.07
	MF22-117	Quarter NQ	139.3	139.7	0.4	0.43
	MF22-117	Quarter NQ	139.7	140	0.3	0.32
	MF22-117	Quarter NQ	140	140.5	0.5	0.53
	MF22-117	Quarter NQ	140.5	141.1	0.6	0.64
	MF22-117	Quarter NQ	141.1	143	1.9	2.03
	MF22-117	Quarter NQ	143	143.5	0.5	0.53
	MET22-001	Half HQ	58.4	59.8	1.4	5.33
	MET22-001	Half HQ	59.8	61.7	1.9	7.23
	MET22-001	Half HQ	61.7	63.15	1.45	5.52
	MET22-001	Half HQ	63.15	65	1.85	7.04
	MET22-001	Half HQ	65	66.85	1.85	7.04
	MET22-001	Half HQ	112.4	112.75	0.35	1.33
	MET22-001	Half HQ	112.75	114.55	1.8	6.85
	MET22-001	Half HQ	114.55	116.35	1.8	6.85
	MET22-001	Half HQ	116.35	118.15	1.8	6.85
	MET22-001	Half HQ	118.15	120.15	2	7.61
	MET22-001	Half HQ	120.15	121.45	1.3	4.95
	MET22-001	Half HQ	121.45	121.75	0.3	1.14

JORC Table 1 – MF22-063, MF22-065, MF22-071, MF22-072, MF22-080, MF22-117, MET22-001

Section 1: Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

Criteria	JORC-Code Explanation	Commentary
Sampling techniques	*Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	• Drill core samples were provided by drill holes from the 2022 Mavis Lake Drill Program performed by Critical Resources Limited. • Oriented NQ and HQ core was cut in half and quarters using a diamond saw, with a half core sent for assay and remaining core retained. • No other measurement tools other than directional survey tools have been used in the holes at this stage.
	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.	• 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. • 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. • HLS testing samples are selected based on geological logging boundaries or on the nominal metre marks.

Criteria	JORC-Code Explanation	Commentary
		• Samples sent to SGS were bagged on site with security tags. Shipped to SGS via vehicle transport and recovered by SGS Laboratory in Lakefield, Ontario, Canada.
Drilling techniques	*Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether*	• NQ2 and HQ2 diamond double tube coring by Cyr Drilling's EF-50 rig was used throughout the hole. • Core orientation was carried out by the drilling contractor.
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.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	• Experienced driller contracted to carry out drilling. • In broken ground the drillers 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.
	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.	• See "Aspects of the determination of mineralisation that are Material to the Public Report" above.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	

Criteria	JORC-Code Explanation	Commentary
	The total length and percentage of the relevant intersections logged.	• 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 •Total length of the MET22-001 was 149m • 100% of the relevant intersections were logged. Total length of the MF22-117 was 188m • 100% of the relevant intersections were logged. Total length of the MF22-63 was 101m • 100% of the relevant intersections were logged. Total length of the MF22-65 was 161m • 100% of the relevant intersections were logged. Total length of the MF22-71 was 158m • 100% of the relevant intersections were logged. Total length of the MF22-72 was 194m • 100% of the relevant intersections were logged Total length of the MF22-80 was 185m • 100% of the relevant intersections were logged
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.* *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*	•Oriented core was placed V-rail and a consistent cut-line drawn along core to ensure cutting (halving) of representative samples. •Core sample intervals were based in logged mineralisation •No duplicates or second half-sampling. • Appropriate method: oriented NQ and HQ core cut in half using a diamond saw, with a half core sent for assay and half core retained. • Core samples were sent to SGS Laboratory for the purposes of heavy liquidation separation testing for concentrate recoveries.

Criteria	JORC-Code Explanation	Commentary
	Whether sample sizes are appropriate to the grain size of the material being sampled.	
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.*	• Samples were previously assayed from accredited lab – Activation Laboratories. • Methods appropriate for style of mineralisation: UT-7 (Li up to 5%) QOP Sodium Peroxide (Sodium Peroxide Fusion ICPOES + ICPMS. • Assays were released in previous announcements.
	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.	• 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. • HLS test work samples sent to SGS were bagged on site with security tags. Shipped to SGS via vehicle transport and recovered by SGS Laboratory in Lakefield, Ontario, Canada
	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.	• The Heavy Liquid Separation (HLS) testing samples were sent to an accredited laboratory – SGS Canada Laboratory in Lakefield, Ontario, Canada. • Additional assay analysis was conducted by SGS on the concentrates
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	• No independent verification completed at this stage. • MET22-001 is a twined hole of MF22-116. • Core measured, photographed and logged by geologists. Digitally recorded plus back-up records. • No adjustments to the laboratory assay data. • No assay cut off grades are applied.
	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 surveyor will be

Criteria	JORC-Code Explanation	Commentary
	Specification of the grid system used. *Quality and adequacy of topographic control.*	contracted to accurately survey all drill collars at completed of drill program. • 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.* *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.*	• Not relevant to current drilling. • Not relevant to current drilling. •Core sample intervals were based in logged mineralisation and no sample composting applied. Reporting of final results includes many weighted average- composting of assay data.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• The orientation of the mineralisation is unknown. 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.
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 • Samples sent to SGS were bagged on site with security tags. Shipped to SGS via vehicle transport and recovered by SGS Laboratory in Lakefield, Ontario, Canada
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	• Not undertaken at this stage.

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 1097 unpatented Single Cell Mining Claims and six separate surface leases which secure the surface rights of the land required for the Project footprint. • 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.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	• 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).
Geology	*Deposit type, geological setting and style of mineralisation.*	• The Fairservice and Mavis Lake Prospects host zoned pegmatites that are prospective for lithium and tantalum
Drill hole Information	*A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* *Easting and northing of the drill hole collar* *Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* *Dip and azimuth of the hole* *down hole length and interception depth* *hole length.* *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does*	(table below) • All drill collars are re-surveyed at a later date upon completion of drill hole for accurate collar coordinates.

Hole ID	Easting	Northing	RL	Azimuth	Dip	To Depth
MET22-001	524557	5518059	437	190	-70	149
MF22-117	524548	5518097	439	190.1	-70	188
MF22-63	524231	5517973	446	187.4	-70.1	101
MF22-65	524249	5518028	447	110	-67	161
MF22-71	524200	5518038	447	179.8	-77	158
MF22-72	524202	5518037	447	349.8	-85.9	194
MF22-80	524083	5518052	442	284.8	-74.9	185

Criteria	JORC-Code Explanation	Commentary
	not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.*	• Uncut.
	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.	• All aggregate intercepts detailed on tables are weighted averages.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	• None used
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.
	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	• The precise geometry is not currently known but is being tested by the planned drilling, with diamond drill hole azimuths designed to drill normal to the interpreted mineralised structure.
	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').	• Down-hole length reported, 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*	• The drilling is aimed at clarifying the structure of the mineralisation.

Criteria	JORC-Code Explanation	Commentary
Balanced reporting	*Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Representative reporting of all relevant grades is provided in tables to avoid misleading reporting of Exploration Results.
Other substantive exploration data	*Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock*	• Overview of exploration data leading to selection of drill targets provided.

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 20,000 has been approved for completion in 2023 with consideration for further extensions at the Board's discretion.
		• Further metallurgical test work requirements will be developed and implemented to support future studies and may include but are not limited to:
		• Optical ore sorting techniques
		• Ore characterization
		• Crushing and Comminution
		• Liberation assessments
		• Dense Medium Separation (DMS)
		• Coarse and Fine Magnetic Separation
		• Coarse Mica Removal
		• Grinding and De-sliming
		• Fine Mica Flotation
		• Spodumene Flotation
		• Material handling characteristics
		• Filtration and Dewatering
		• Tailings characteristics
		• Optimising lithia losses identified from the Scoping Study testwork, notably:
		  ◦ HLS / DMS magnetic rejects
		  ◦ HLS / DMS non-magnetic rejects
		  ◦ De-slimed fines
		• Assessing the amenability of the Mavis Lake spodumene product to downstream processing, marketability assessment.