2 August 2022

40.9m of Spodumene-Bearing Pegmatite Intersected in New Step out Hole at Mavis Lake

Highlights

Multiple pegmatite dykes totalling 40.9m intersected within step out hole MF22-116, including[1,2,3]

- **24.1m spodumene mineralisation from 53 to 77.1m downhole**
- **8.15m spodumene mineralisation from 89 to 97.15m downhole**
- **8.65m spodumene mineralisation from 112.75 to 121.4m down hole**

MF22-116 is located 80m east along trend from the nearest previous drilling, in an area not previously tested, demonstrating continuity and scale potential

Phase 2 drill campaign underway, focused on stepout and infill program to test the potential strike length of ~3km between Pegmatite 6 and Pegmatite 18

A total of 51 of 57 drill holes have intersected spodumene-bearing pegmatite to date, including most recent holes from MF22-109 to MF22-116

Assay work is ongoing and will be release as received

The Company continues its pursuit of a maiden JORC-compliant resource

Critical Resources Limited (ASX:CRR) ("Critical Resources" or "the Company") is pleased to announce further results from its latest drilling campaign at the Company's 100 per cent-owned Mavis Lake Lithium Project ("the Project") in Ontario, Canada.

The MF22-116 step out hole intersected multiple visual pegmatite dykes, with cumulative intersections totalling up to 40.9 metres, with local visual estimates of up to 75 per cent spodumene mineralisation, in metre-scale intervals (Table 1)[1,2,3].

The significant visual intersections of thick pegmatites from MF22-116 are likely related to zones defined by the 2018 drilling campaign, with the step out hole located approximately 80m east from the nearest significant zones drilled in the 2018 program, an area that has not been previously tested.

The 2018 drilling program was unable to demonstrate the continuity of significant intercepts, however, MF22-116 has proven that these zones continue along strike to the east.

Figure 1: Close up of MF22-116 at 76 to 76.2m downhole. Significant white-grey large spodumene laths

[1] 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. Laboratory assay results are required to determine the widths and grade of the visible mineralisation reported in preliminary geological logging. The Company will update the market when laboratory analytical results become available.
[2] The reported intersections are down hole measurements and are not necessarily true width.
[3] Descriptions of the mineral amounts seen and logged in the core are qualitative, visual estimates (they are listed in order of abundance of estimated combined percentages). Quantitative assays will be completed by Activation Labs in Dryden, Ontario.

Of note is Pegmatite 6, which continues to be intersected, demonstrating significant continuity. All zones intersected from the 2018 drilling program and MF22-116 are believed to be trending along with, or in proximity to, Pegmatite 6.

Assay work from the latest drilling campaign is ongoing, with results to be released once received.

A total of 7,470m out of 10,000m of approved drilling has been completed to date, with the Company's primary focus to continue drilling the infill program, followed by testing the approximate 3km of potential strike length towards Pegmatite 18.

Immediate 50m infill drill-hole spacing will continue to test strike length and down-dip continuity to further delineate the spodumene-bearing pegmatites to underpin the development of a maiden JORC compliant resource.

The Mavis Lake Project's location provides a strategic advantage, situated just 19km from the town of Dryden.

The project area is adjacent to the main rail and road networks connecting directly to Thunder Bay, which is being touted as a proposed regional hub for lithium processing.

The region boasts excellent infrastrure including hydroelectric power located a few kilometres to the south-west of the Project.

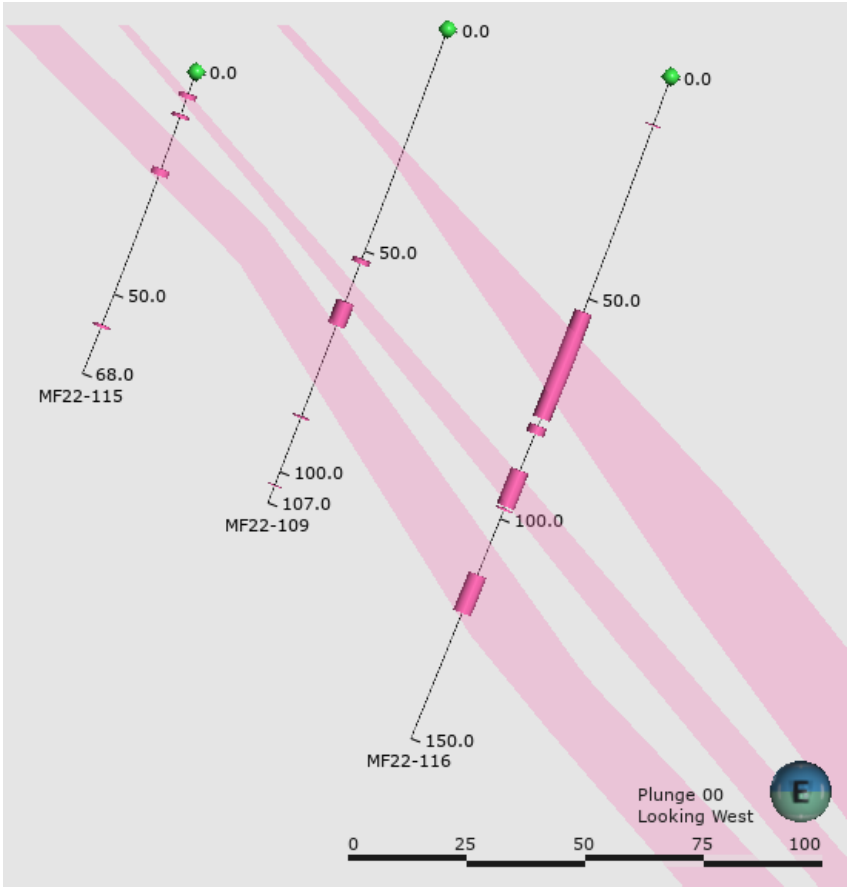

Figure 2: Cross-section, looking west, with projections of pegmatites (pink shapes) with recently drilled holes of MF22-109, MF22-115, and MF22-116 (measurement in metres)

Critical Resources Chairman Robert Martin commented:

"To intercept 40-plus meters of lithium-bearing pegmatites in one hole 80m east of any known occurrences in a previously untested area at Mavis Lake is extremely encouraging. The Company's drilling program continues to intersect mineralised pegmatite and show the pegmatites remain open at depth and along a potential strike length of approximately 3km between our Pegmatite 6 and Pegmatite 18 prospects. We look forward to keeping the market updated as we continue our extended program at Mavis Lake."

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

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EXPLORATION WORK – COMPETENT PERSONS STATEMENT

The information in this ASX Announcement that relates to Exploration Results is based on information compiled by 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 Ltd. Troy 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". Troy Gallik consents to the inclusion in this ASX 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.

NO NEW INFORMATION

Except where explicitly stated, this announcement contains references to prior exploration results, all of which have been cross-referenced to previous market announcements made by the Company. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements.

ABOUT THE MAVIS LAKE PROJECT

The Mavis Lake Lithium Project is 19km east of the town of Dryden, Ontario and in close proximity to the Trans-Canada highway and railway, major transportation arteries which link larger cities such as Thunder Bay, Ontario, to the southeast and Winnipeg, Manitoba, to the west. The region boasts excellent infrastructure with hydropower located a few kilometres to the southwest of the project. The region is an emerging lithium province with multiple projects located nearby.

ABOUT CRITICAL RESOURCES LIMITED

Critical Resources is an ASX listed, base metals and lithium exploration and development company headquartered in Perth, Western Australia. The Company is focussed on providing shareholder value through the exploration, development and advancement of the Company's base metals asset in NSW, copper asset in Oman and its suite of hard rock lithium assets in Ontario, Canada

Appendix 1: Key Results

Figure 3: Significant zone of spodumene-bearing pegmatite from MF22-116 from 53 to 77.1m downhole

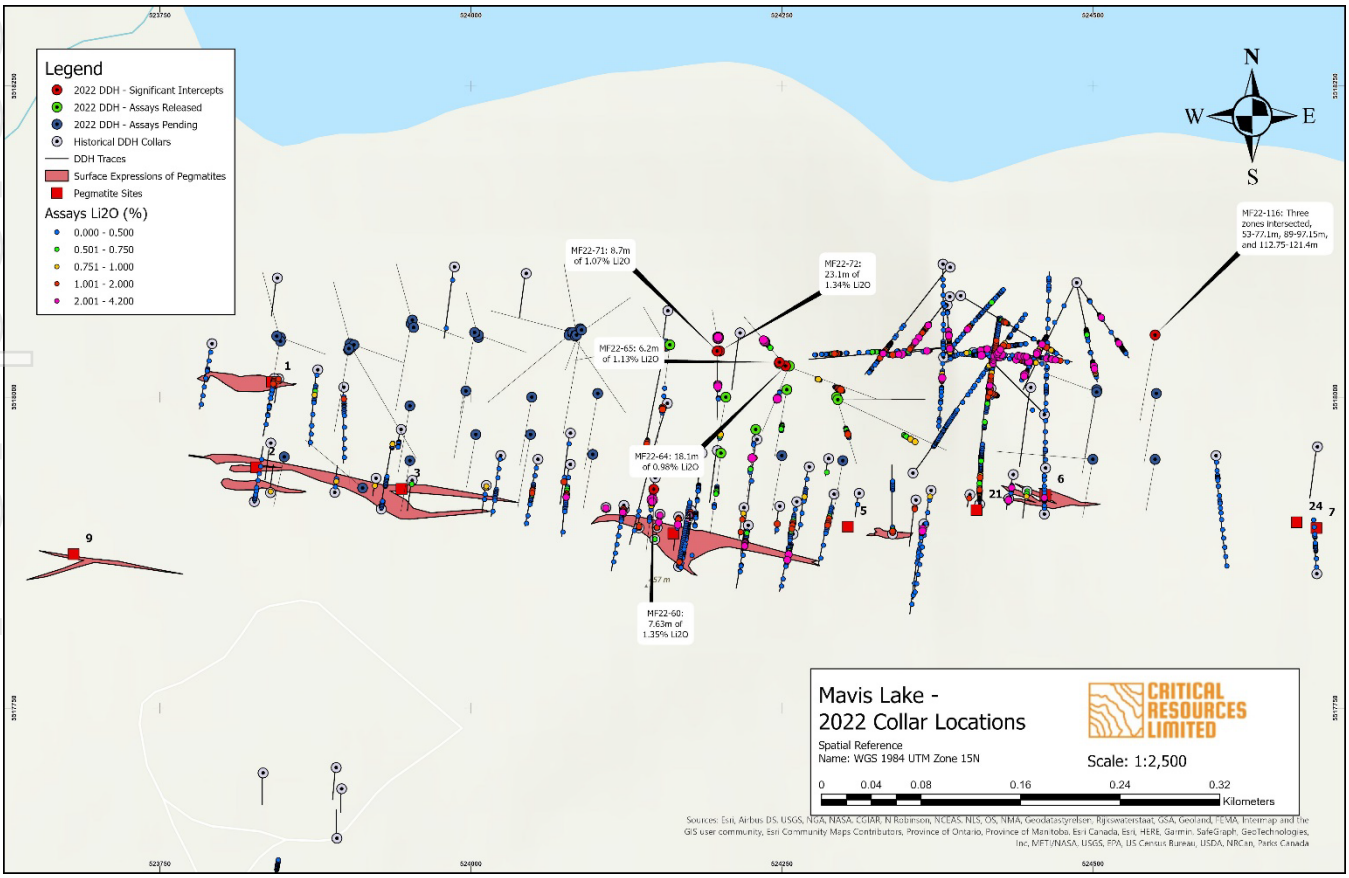

Figure 4: Plan map of Mavis Lake Drilling including highlights from the 2022 drill program

Table 1: Recent Significant Visual Estimated Exploration Results

Hole ID	From	To	Length	Visual Estimate of Spodumene
MF22-109	51.8	52.8	1	~5%
and	61.5	66.8	5.3	~17.5%
MF22-110	68.25	71.8	3.55	~15%
MF22-111	69.65	74.2	4.55	~12%
and	103.7	105.05	1.35	~18%
and	105.55	110	4.45	~28%
MF22-112	80.05	85	4.95	~17%
and	86	89.25	3.25	~12%
MF22-113	16	17.2	1.2	<5%
MF22-114				N/A
MF22-115				N/A
MF22-116	53	77.1	24.1	~18%
and	89	97.15	8.15	~24%
and	112.75	121.4	8.65	~35%
Including	115.9	117.05	1.15	~75%

*MF22-114 and MF22-115 intersected metre-scale barren pegmatites

Cautionary Note:
The Company stresses that the reported visual estimated percentages in Table 1 above relate specifically to the abundance of spodumene logged in the drill core and is not estimated lithium grade for the interval.

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. Laboratory assay results are required to determine the widths and grade of the visible mineralisation reported in preliminary geological logging. The Company will update the market when laboratory analytical results become available.

The reported intersections are down hole measurements and are not necessarily true width. Descriptions of the mineral amounts seen and logged in the core are qualitative, visual estimates (they are listed in order of abundance of estimated combined percentages). Quantitative assays will be completed by Activation Labs in Dryden, Ontario

Table 2: Drill Hole Summary

Hole ID	Date Drilled		UTM Zone 15N (NAD83)			Collar Orientation		Metres Drilled	
	Start Date	End Date	Easting	Northing	Elevation (m)	Az	Dip	Casing Depth	End Depth
MF22-109	2022-07-16	2022-07-17	524551	5518003	439	190	-70	3	107
MF22-110	2022-07-17	2022-07-18	524503	5518006	435	190	-70	3	104
MF22-111	2022-07-19	2022-07-20	524503	5518004	433	290	-80	3	134
MF22-112	2022-07-20	2022-07-21	524503	5518004	434	190	-70	3	140
MF22-113	2022-07-21	2022-07-22	524504	5517956	425	190	-70	7.2	80
MF22-114	2022-07-22	2022-07-23	524500	5517959	425	274.68	-49.83	3	89
MF22-115	2022-07-24	2022-07-24	524549	5517944	431	190	70	3	68
MF22-116	2022-07-25	2022-07-26	524506	5518055	446	189.5	-70.1	3	152

Appendix 2: JORC Table 1 – MF22-109 to MF22-116 Exploration Results

2.1 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.*	• *Oriented NQ core was cut in half using a diamond saw, with a half core sent for assay and half 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.	• *Oriented core was placed V-rail and a consistent cutline drawn along core to ensure cutting (halving) of representative samples* • *Core sample interval was based in logged mineralisation*
	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.	• *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.* • *Assay samples will be selected based on geological logging boundaries or on the nominal metre marks.* • *Samples will be dispatched to an accredited laboratory (ActLabs) in Dryden, Ontario, Canada for sample preparation and shipment to analysis*
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 core is oriented and if so, by what method, etc).*	• *NQ2 diamond double tube coring by Cyr EF-50 rig was used throughout the hole.* • *Core orientation was carried out by the drilling contractor.*

Criteria	JORC-Code Explanation	Commentary
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 driller produced NQ core from short runs to maximise core recovery.* *• Core was washed before placing in the core trays.* *• Core was visually assessed by professional geologists before cutting to ensure representative sampling.*
	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.*	*• Core samples were not geotechnically logged.* *• Core samples have been geologically logged 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.	*• The core logging was qualitative in nature.* *• All core was photographed*
	The total length and percentage of the relevant intersections logged.	*• Total length of the MF22-109 was 107m* *100% of the relevant intersections were logged.* *• Total length of the MF22-110 was 104m* *100% of the relevant intersections were logged.* *• Total length of the MF22-111 was 134m* *100% of the relevant intersections were logged* *• Total length of the MF22-112 was 140m* *100% of the relevant intersections were logged* *• Total length of the MF22-113 was 80m* *100% of the relevant intersections were logged* *Total length of the MF22-114 was 89m* *100% of the relevant intersections were logged* *Total length of the MF22-115 was 68m* *100% of the relevant intersections were logged* *Total length of the MF22-116 was 152m* *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 cores taken.*	*• No sampling completed at this stage*
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	

Criteria	JORC-Code Explanation	Commentary
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	
	Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.	
	Whether sample sizes are appropriate to the grain size of the material being sampled.	
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.*	*• No assays have been conducted for this drill program at this time. Techniques will be updated when assays are completed.*
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	
	Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.	
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	*• No independent verification completed at this stage*
	The use of twinned holes.	*• No holes are twins of previous holes*
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	*• Core measured, photographed and logged by geologists. Digitally recorded plus back-up records.*
	Discuss any adjustment to assay data.	*• No assay data received at this stage*
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	*• Drill collars recorded with Garmin GPS that has an accuracy in the order of ±3 metres for location. A registered*
	Specification of the grid system used.	

Criteria	JORC-Code Explanation	Commentary
	Quality and adequacy of topographic control.	*surveyor will be contracted to accurately survey all drill collars at completed of drill program.* *• 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.*	*• Not relevant to current drilling.*
	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.	*• Not relevant to current drilling.*
	Whether sample compositing has been applied.	*• No sample compositing has been applied.*
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	*• The orientation of the mineralisation is unknown. The drilling program is aimed at determining orientation of the mineralisation.*
	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.	*• 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 will be stored the Dryden core yard before delivery to ActLabsGroups in Dryden, Ontario for analysis.*
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	*• Not undertaken at this stage*

2 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 Mavis Lake Lithium Project consists of 189 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.*

<table>
<tr><td>Criteria</td><td>JORC-Code Explanation</td><td>Commentary</td></tr>
<tr><td></td><td>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.</td><td></td></tr>
<tr><td>Exploration done by other parties</td><td>Acknowledgment and appraisal of exploration by other parties.</td><td>• 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).</td></tr>
<tr><td>Geology</td><td>Deposit type, geological setting, and style of mineralisation.</td><td>• The Fairservice and Mavis Lake Prospects host zoned pegmatites that are prospective for lithium and tantalum</td></tr>
<tr><td>Drill hole Information</td><td>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:
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.</td><td>
<table>
<tr><th>Hole ID</th><th>Easting</th><th>Northing</th><th>RL</th><th>Azimuth</th><th>Dip</th><th>To Depth</th></tr>
<tr><td>MF22-109</td><td>524551</td><td>5518003</td><td>439</td><td>190</td><td>-70</td><td>107</td></tr>
<tr><td>MF22-110</td><td>524503</td><td>5518006</td><td>435</td><td>190</td><td>-70</td><td>104</td></tr>
<tr><td>MF22-111</td><td>524503</td><td>5518004</td><td>433</td><td>290</td><td>-80</td><td>134</td></tr>
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Criteria	JORC-Code Explanation	Commentary
	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.	**Collar coordinates are in WGS 1984 UTM Zone 15N* • *Not relevant*
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 not currently known. All lengths are down-hole lengths and not true width.*
	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 appropriate sectional views.*	• *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 avoiding 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 characteristics; potential deleterious or contaminating substances.*	*• Overview of exploration data leading to selection of drill targets provided.* *• There were no deleterious elements identified.*
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 previous drilling conducted by various parties, bringing total drilling by the Company to 10,000m* • *The Company is considering a Phase 3 program to extend the current 10,000m program up to a possible 15,000m total (planning and permitting actions are still be developed).*