

ASX ANNOUNCEMENT

25 July 2023

Multiple LCT Pegmatites Identified - Li₂O grades up to 2.85% in Field Mapping

<u>Merrimac LCT Project – Northeast Victoria</u>

- ✓ Initial field mapping has now been completed with multiple LCT pegmatite dykes identified
- ✓ A total of 13 rock chip samples have returned anomalous and high-grade lithium assay results greater than 0.20% Li₂O
- ✓ Five samples returned high grade Li₂O including: 2.85%, 1.37%, 1.28%, 1.11% and 1.00%
- ✓ Elevated geochemical suite Li, Ce, Ta, Be and Nb confirms presence of highly fractionated LCT pegmatite dykes
- ✓ Laboratory test work is underway to classify mineralogy of lithium bearing samples
- √ Mapped pegmatite dykes extend onto Nexus application tenement

NSW Critical Mineral Search – 15,000km² "Mega Peg"

- ✓ NSW critical mineral search has commenced with geophysical data collation and reprocessing
- ✓ Interpretation of NSW Wagga Omeo Zone (WOZ) geophysical data commenced to classify intrusive bodies and accurately map geological contact relationships
- ✓ Regional scale geological approach applied with over ~15,000km² of granted tenure prospective for critical minerals hunting for large orebodies
- ✓ Field mapping and sampling on track to commence in NSW in October on completion of geophysical interpretation

Nexus Minerals Limited (ASX: NXM) (Nexus or **the Company)** is pleased to announce successful results from field reconnaissance on the Merrimac LCT project. Rock chip samples collected during field mapping have returned lithium oxide grades up to 2.85%, identified in fertile LCT (Lithium-Caesium-Tantalum) pegmatite dykes. Work has also commenced on the NSW critical minerals project, which has seen high quality geophysical data collated and reprocessed. The exploration team is focused on a systematic and regional approach to explore for large ore bodies.

Nexus Managing Director Andy Tudor commented "To receive such positive results from the first field campaign at the Merrimac LCT Project is hugely encouraging. The results of these initial exploration activities continue to validate and support Nexus' critical minerals strategy in Victoria and New South Wales, which has seen a significant project generation effort built from first principals geology. We look forward to replicating and expanding upon this initial success in NSW, where high quality geophysical data has been reprocessed for interpretation and target generation. We are on track for boots on the ground in NSW later this year where the scale and opportunity for discovery is yet to be fully realised. The exploration team remains highly engaged and certainly very busy on both sides of Australia".

Nexus Minerals has secured the largest package of exploration tenure in NSW (extending south into Victoria) to undertake the search for critical minerals - lithium, caesium, tantalum, tin and copper. Very limited exploration for these critical minerals has taken place in this highly prospective geological terrain. Exploration from first principals will allow Nexus to ascertain and prioritise exploration of specific targets, allowing this large tenement holding (15,000km²) to be reduced in the medium term.

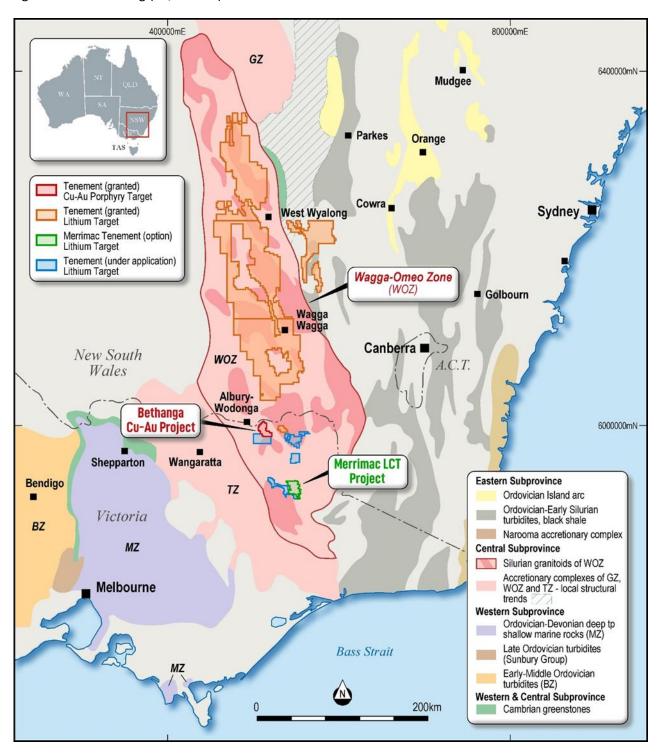


Figure 1: Nexus Critical Minerals Projects Location over Geology

Merrimac LCT Project

- ✓ Anomalous and high grade lithium assays up to 2.85% Li₂O
- ✓ Elevated geochemical suite Li, Ce, Ta, Be and Nb confirms presence of highly fractionated LCT pegmatite dykes
- ✓ Location proximal to peraluminous S-Type Mt. Wills Granite High degree of fractionation
- ✓ Situated in 'Goldilocks Zone' optimal distance from source being 3-6km

An initial field mapping and sampling campaign at the Merrimac Project has successfully identified LCT pegmatites in the southwestern portion of the Merrimac exploration licence (currently under option) over a potential 10km of prospective strike. Pegmatite dykes have returned anomalous and high-grade lithium assays up to 2.85% Li₂O (Table 1). The true extent of the Merrimac pegmatite dykes remains to be determined with further field work required to fully assess the anomalous zone.

A total of 112 litho-geochemical samples were collected across various lithologies to assist in mapping. From these, 13 pegmatite rock chip samples have returned anomalous results greater than 0.20% Li_2O , with 5 samples 1.00% Li_2O or greater (Figure 2 & 3). Results are from preliminary field mapping exercises only with no comprehensive sampling undertaken. Key samples have been submitted to the laboratory for X-ray diffraction (XRD) analysis to accurately inform pegmatite mineralogy and dominant lithium bearing minerals.

Analysis of the rock chip samples included a multi-element suite. Several key ratios have been used as fractionation indicators to assess system fertility, including K/Rb, K/Cs, Nb/Ta and Mg/Li. All ratios, in addition to the anomalous and high-grade lithium assays, support a high degree of fractionation and prospectivity for LCT mineralisation (Figure 4). The presence of historic tin workings located in the vicinity of the Merrimac project adds further support to project potential.

The Merrimac pegmatite dykes are located approximately 3km away from the S-type Mt. Wills granite which is considered the most likely source of the pegmatite occurrences. This is consistent with the interpreted source of the Dorchap dyke swarm situated north of the Mt Wills Granite (Hines et al. 2023).

The Mt. Wills Granite source further increases the prospectivity of the Nexus application licence (that abuts the Merrimac Project), which includes a greater area of exploration tenure within the 'goldilocks zone' (optimal distance from the source). Mapping identified the Merrimac dykes up to the boundary of the Nexus application licence, and key element ratios are anomalous on the boundary. The exploration team is currently assessing the project in light of the recent exploration success and planning further work for the Victorian field season.

Site ID	Easting	Northing	RL	Li2O (%)	Cs (ppm)	Ta (ppm)	Be (ppm)	Nb (ppm)	Rb (ppm)	Sn (ppm)
NMMC069	540733	5932581	1102	0.82	20.0	45.5	9	127	442	692
NMMC080	540923	5932360	1085	1.00	44.6	175.0	132	112	540	2250
NMMC089	540957	5932330	1108	0.78	71.9	139.5	143	89	1030	1170
NMMC099	540918	5932370	1085	1.28	77.6	90.7	126	76	1355	1805
NMMC101	540736	5932587	1101	0.25	47.6	56.7	136	86	756	1235
NMMC117	540730	5932596	1101	1.36	59.7	60.3	110	66	1040	1095
NMMC118	540928	5932350	1096	0.23	62.8	67.6	52	54	1100	1375
NMMC122	540947	5932353	1096	0.43	154.5	6.8	12	28	1980	419
NMMC133	540718	5932594	1109	0.87	58.9	69.7	170	81	1055	636
NMMC137	540700	5932591	1116	0.78	47.9	38.7	47	56	1105	655
NMMC139	540699	5932591	1116	0.22	52.0	74.2	106	104	798	1220
NMMC141	540698	5932591	1116	2.85	52.7	29.4	36	36	626	562
NMMC143	540697	5932593	1116	1.11	108.0	193.5	192	132	1210	1845

Table 1: Merrimac LCT Project rock chip sampling results (>0.20% Li₂O)

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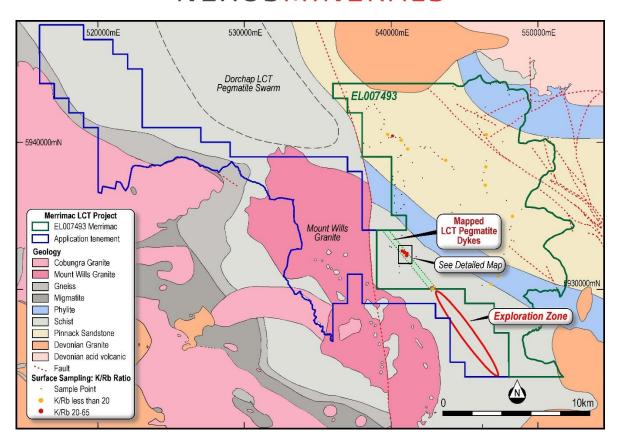


Figure 2: Merrimac LCT Project map

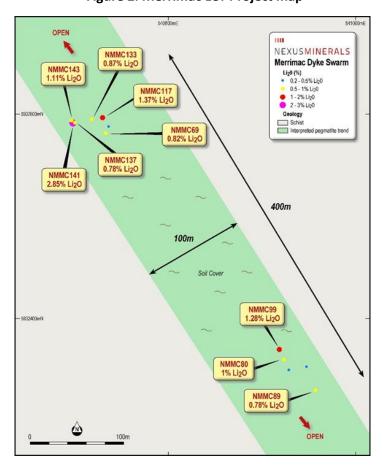


Figure 3: Merrimac LCT dykes rock chip assays (detailed map from Figure 2)

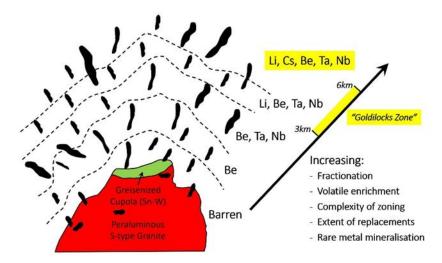


Figure 4: Detailed geochemical zoning of pegmatites from a fertile intrusive contact (From Steiner, 2019)

NSW Critical Minerals

- ✓ First mover advantage with over 15,000km² of granted tenure prospective for critical minerals
- ✓ Systematic, regional geological scale exploration targeting approach commenced focused on discovery of large ore bodies

Through analysis of geological and lithogeochemical data sourced from the Lachlan Orogen's Wagga-Omeo Zone (WOZ) in southern New South Wales (NSW), Nexus successfully identified prospective reduced, fractionated, peraluminous S-type granites capable of supporting LCT pegmatite formation. Recognizing this opportunity, the Company has strategically positioned itself as a first mover on a regional scale, securing 15,000km² of granted critical minerals tenure.

Nexus has now taken significant steps to leverage the best available government and open-file company geophysics surveys. These surveys have been compiled and re-processed, encompassing detailed magnetic, radiometric, and gravity data. To aid in the analysis, a comprehensive set of images and enhancements of the data have been generated, providing valuable insights for the ongoing exploration efforts (Figures 5-7).

The data will now be integrated with available government geological mapping, geochemical and petrological information with the following objectives:

- 1. Accurately map and refine the granite boundaries.
- 2. Categorise granites according to their geophysical signatures.
- 3. Identify S-type granites based on geophysical signature.
- 4. Identify granites with zoning evident in the geophysics.
- 5. Map large scale faults and structural trends that may be controlling pegmatite distribution.

The Nexus exploration team will then analyse and interpret the results to refine priority target areas to initiate on ground exploration activities. Due to the size of the datasets involved the project area will be split into two halves, north and south. This interpretation exercise will be completed on the northern half of the project through the current quarter, with the geology team on track to begin reconnaissance, mapping and initial geochemical sampling in October. Given the scale and opportunity on the project, the exploration team remains focussed on a methodical, science driven approach to identify large mineralising systems.

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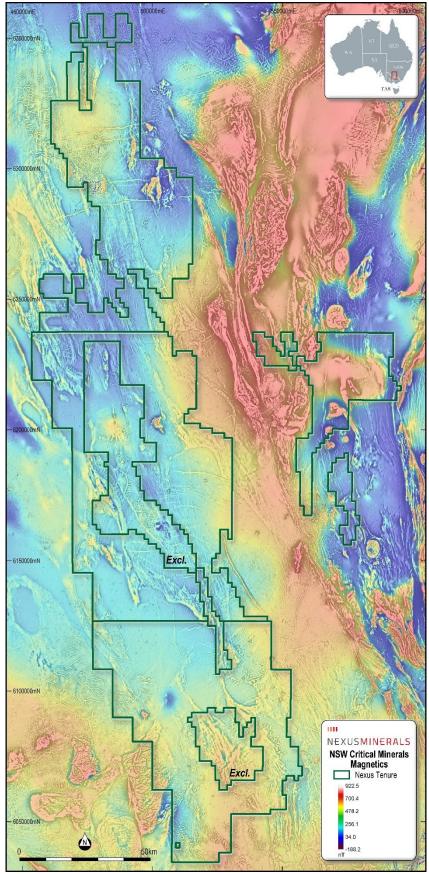


Figure 5: NSW critical minerals tenure over magnetics

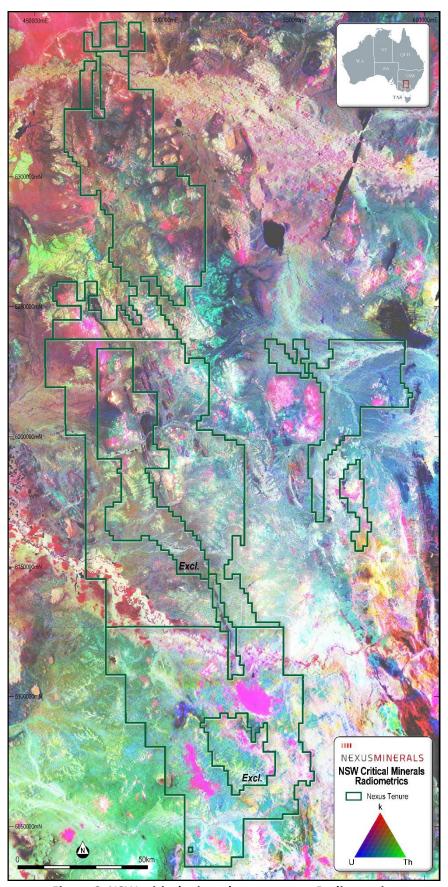


Figure 6: NSW critical minerals tenure over Radiometrics

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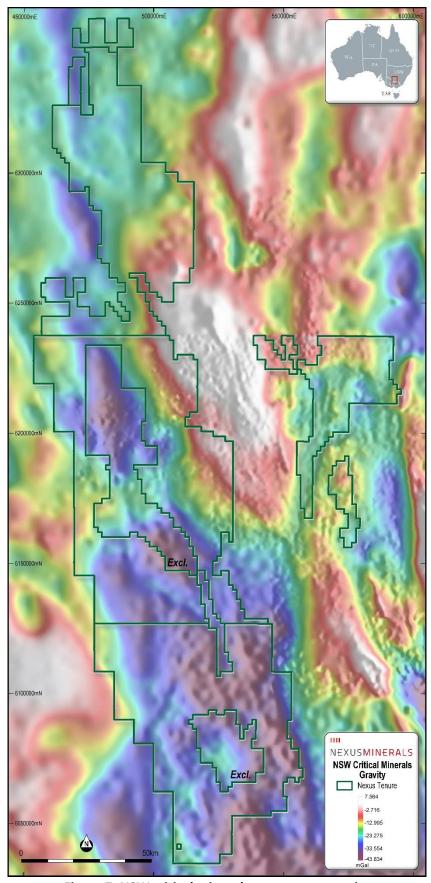


Figure 7: NSW critical minerals tenure over gravity



Other Exploration

Bethanga Cu-Au Project

The Bethanga Porphyry Cu-Au Project has been progressed to a drill ready stage with a technically robust copper-gold porphyry target. The diamond drilling program is currently scheduled to commence in October, with all necessary permitting in place, when suitable weather conditions return.

Granya Project

Field reconnaissance and mapping has now been completed at the Granya Project (northeast Victoria). Results are pending, with collation and interpretation of results to follow. A number of pegmatite dykes have been mapped, though fertility is yet to be established.

This announcement is authorised for release by Mr Andy Tudor, Managing Director, Nexus Minerals Limited.

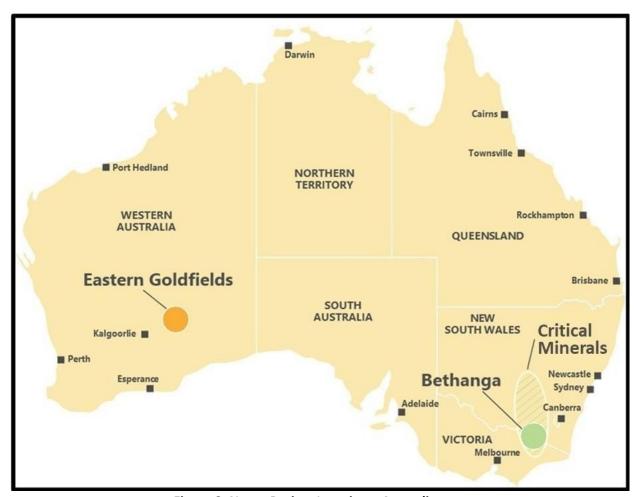


Figure 8: Nexus Project Locations, Australia



About Nexus

Nexus principal activity is exploring for gold deposits on its highly prospective 204km² Wallbrook tenement package in the Eastern Goldfields of Western Australia. In addition to this, the company has expanded its existing project portfolio with the addition of the Bethanga Porphyry Copper-Gold project in Victoria, and its extensive Critical Mineral tenement exploration package of 15,000km² in north-eastern Victoria and NSW.

Nexus Minerals' tenement package at the Wallbrook Gold Project commences immediately to the north of Northern Star's multi-million ounce Carosue Dam mining operations, and current operating Karari and Whirling Dervish underground gold mines. Nexus holds a significant land package of highly prospective geological terrane within a major regional structural corridor and is exploring for gold deposits.

Nexus is actively investing in new exploration techniques to refine the targeting approach for their current and future tenements.

- Ends -

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ASX Code NXM

The information in this release that relates to Exploration Results, Mineral Resources or Ore Reserves is based on, and fairly represents, information and supporting documentation, prepared, compiled or reviewed by Mr Andy Tudor, who is a Member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Tudor is the Managing Director and full-time employee of Nexus Minerals Limited. Mr Tudor has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity for which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Tudor consents to the inclusion in the release of the matters based on his information in the form and context in which it appears. The results are available to be viewed on the Company website www.nexus-minerals.com. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original announcements.

FORWARD LOOKING AND CAUTIONARY STATEMENTS. Some statements in this announcement regarding estimates or future events are forward-looking statements. They include indications of, and guidance on, future earnings, cash flow, costs and financial performance. Forward looking statements include, but are not limited to, statements preceded by words such as "planned", "expected", "projected", "estimated", "may", "scheduled", "intends", "anticipates", "believes", "potential", "predict", "foresee", "proposed", "aim", "target", "opportunity", "could", "nominal", "conceptual" and similar expressions. Forward-looking statements, opinions and estimates included in this report are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward-looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward-looking statements may be affected by a range of variables that could cause actual results to differ from estimated results and may cause the Company's actual performance and financial results in future periods to materially differ from any projections of future performance or results expressed or implied by such forward-looking statements. So, there can be no assurance that actual outcomes will not materially differ from these forward-looking statements.

Appendix A 25/07/2023

JORC Code, 2012 Edition – Table 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 (eg 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.	Grab samples were taken from outcrop using a geological hammer with 2-3kg collected from each sample position. Geology and hand-held GPS points were recorded for each sample location.
	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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.	
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).	No drilling has been conducted.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	No drill samples have been collected.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	

Criteria	JORC Code explanation	Commentary	
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.	Grab samples were logged with lithology, mineralogy, alteration, mineralisation, colour, weathering and other characteristics as observed. Location description was also recorded.	
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.		
	The total length and percentage of the relevant intersections logged.		
Sub-sampling techniques	If core, whether cut or sawn and whether quarter, half or all core taken.	No QAQC samples have been included as sampling is initially quantitative to identify prospective areas.	
and sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Samples were collected evenly across the rock face to ensure representative analysis.	
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Samples were collected into calico bags, which were then submitted to ALS laboratory in Adelaide.	
	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.	Samples were analysed at an accredited laboratory (ALS) in Adelaide. All samples were analysed for lithium and multielelement suite. The analytical method included a lithium suite peroxide fusion including select additional elements, with ICP-MS finish. This method is considered appropriate for the material being assayed. The method provides a near total digestion of the material.	
	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.	No other geophysical tools, spectrometers etc were used in this drill program.	

Criteria	JORC Code explanation	Commentary	
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	Nexus included no QAQC samples as sampling is initially quantitative to identify prospective areas. Lab introduced QAQC was reviewed with no issues noted.	
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	All sampling was supervised by a qualified geologist.	
	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	Accuracy and quality of surveys used to locate drill holes (collar and	Sample locations were recorded with a handheld GPS.	
data points	down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Accuracy is +/- 3m.	
	Specification of the grid system used.		
	Quality and adequacy of topographic control.		
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.	Sampling was undertaken as part of a geological mapping exercise and as such constrained to areas of outcrop and guided by the aim of informing a reasonable geological interpretation of the area. There was no regular sample spacing.	
	Whether sample compositing has been applied.		
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Sampling was undertaken as part of a geological mapping exercise. Geological controls are not well understood at this stage of exploration.	
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.		
Sample security	The measures taken to ensure sample security.	Samples were collected in sealed calico bags transported to the laboratory in Adelaide by courier.	
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	All sampling, logging, assaying and data handling techniques are considered to be industry best practice.	

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.	Sampling was undertaken on tenement EL007493. Nexus has an Option Agreement to acquire 100% of this tenement (refer to ASX: NXM 29/3/2023).
	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.	
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The tenement has not been subject to prior exploration activities for lithium.
Geology	Deposit type, geological setting and style of mineralisation.	Geology is typical of LCT pegmatite hosted lithium mineralisation.
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:	No drilling has been undertaken.
	 easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 	
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.	No data aggregation has been undertaken.
	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.	

Criteria	JORC Code explanation	Commentary
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	Not determinable from this sampling program.
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.	Refer to the maps included in the text.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Clearly stated in body of release
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.	No other exploration data to be reported.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Post full assessment of the recent mapping campaign, including analysis of the pending XRD samples, the exploration team will plan follow up exploration to commence once climate conditions are suitable.