Multiple Spodumene Bearing Pegmatites Identified at the Cross Lake Lithium Project

HIGHLIGHTS

- Initial field program has identified multiple Spodumene bearing pegmatites over a 4.7km trend at the Spodumene Island and Metis Island prospect areas.
- Leeuwin's discovery of multiple spodumene-bearing occurrences marks the first such finding along the Cross Lake Greenstone Belt, expanding beyond the known spodumene-bearing pegmatites identified through the re-sampling of historic drill holes and historic channel sampling.
- A total of 30 channel samples were collected and will be submitted for analysis; results expected in the first quarter of 2024.
- After the successful completion of the fieldwork program, Leeuwin has submitted the drill permit application to the Manitoba government and expects to commence drilling activities in the first half of 2024.

Figure 1: Sampling of LCT Pegmatite on Spodumene Island. (refer to Appendix C, table 1 for the location and visual estimation of the Spodumene occurrence photographed above).

Leeuwin Metals Ltd ASX: LM1 | **ACN** 656 057 215
A: Level 2, Suite 16, 420 Bagot Road,
Subiaco, Western Australia 6008
T: +61 8 6556 6427
E: info@leeuwinmetals.com
W: leeuwinmetals.com

Managing Director, Christopher Piggott, commented:

"We are very pleased to have completed this phase of the field work at the Cross Lake Lithium Project, which has confirmed the potential large scale and under explored nature of the project. Our work has also clearly indicated that there are multiple Spodumene rich LCT pegmatites present within a 4.7km trend. The level of anomalism across the trend is highly encouraging with the expectation that more will be discovered once activities are completed to expose under cover outcrop and by future drilling. We look forward to advancing exploration at the project with a view to be drill testing some of these areas in the first half of next year.

Our team is enthusiastic about exploring in this highly mineral-rich region and we remain committed to executing comprehensive exploration programs while collaborating with the Government and local First Nation communities."

VP of Exploration, Danniel Oosterman, commented:

"I'm excited about our 2023 fieldwork at Cross Lake. It has validated the strong results we have gathered from the historic drilling and put into perspective the potential the project possesses in terms of scale; it's clear that there's much more to uncover. With numerous Spodumene-rich pegmatites extending for a minimum 4.7km in trend, outlined by only a modest amount of field work, we're eager to explore further. Next year, we plan to drill in these promising areas as well as augmenting our exploration efforts with a focus to expand our results in this target-rich environment."

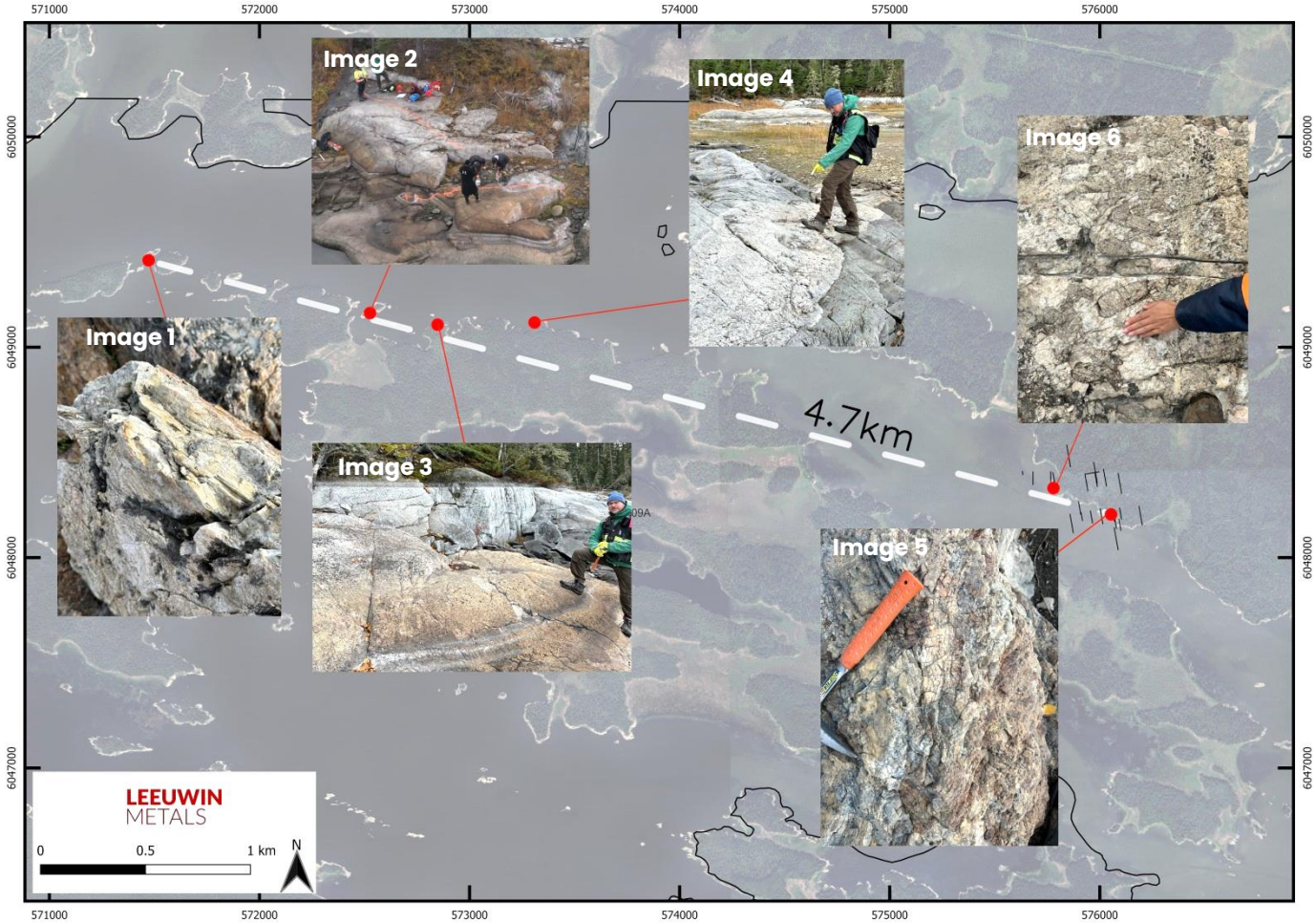


Figure 2: 4.7km trend with multiple LCT Pegmatites and Spodumene present (refer to Appendix C, table 1 for the location and visual estimation of the Spodumene occurrences in the images 1 to 6 above).

Critical metals explorer **Leeuwin Metals Ltd** (**LM1** or the **Company**) (**ASX: LM1**) is pleased to provide an update on field activities at our 100% owned Cross Lake Lithium project (**Cross lake** or the **Project**) in Manitoba, Canada.

Update on Field Activities

The Company has completed initial boots on the ground exploration activities, focused on additional rock chip and channel sampling, detailed geological mapping, and utilising remote sensing tools. This work has defined the potential large-scale lithium opportunity in a region that has previously not been subject to systematic lithium exploration.

Initial field works focused on the eastern target area, where historical drilling (refer Figure 2) has defined Spodumene bearing outcropping pegmatites along the shoreline of the islands (refer Figures 3 & 4). Exploration also focused on the main trend, and the western target area where no historical drilling has occurred but multiple Spodumene bearing pegmatites are present in outcrop. While mapping and sampling occurred as part of these activities, there remains a significant exploration opportunity remains still to be fully realised.

The work to date has been very encouraging, with the company able to identify over 15 pegmatites. We have also confirmed the under explored nature of the area where vegetation covers the majority of potential outcrop - it remains an attractive exploration opportunity.

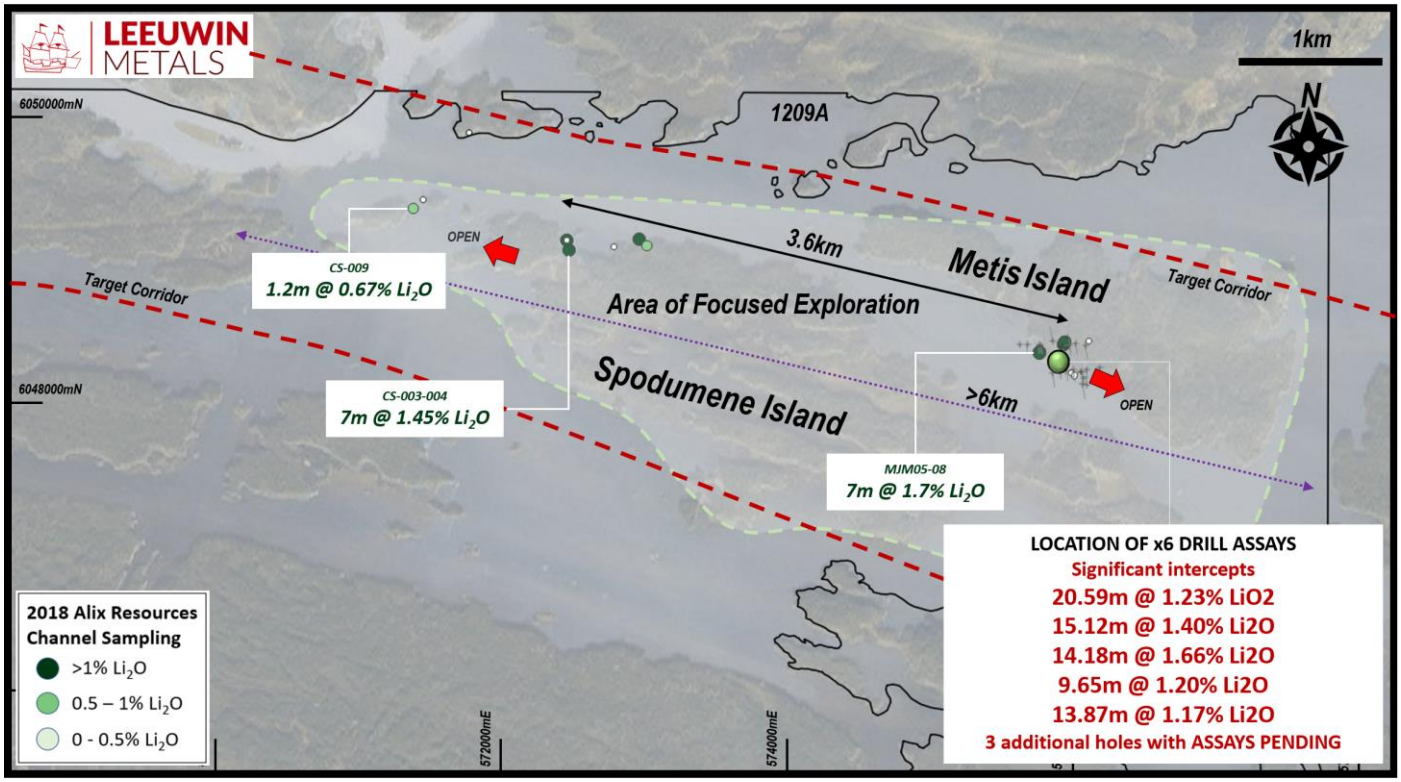


Figure 3: Local Geology of Spodumene Island Prospect area. For full details of historical drill results refer to ASX on 17 April 2023, 21 August 2023 and for further details of historical channel sampling refer to the ITAR in the Company's prospectus on the ASX 28 March 2023 (Coordinates in UTM NAD83 z14N).

Future Plans

With the completion of 2023 field work and based on the results received as part of exploration actives carried out with respect to historical drill holes, the Company is very encouraged by the results and is aiming to complete a maiden drill program at the Project in the first half of 2024. A drill permit has been submitted to the Manitoba Department of Economic Development, Investment and Trade for an initial 10,000 metres of drilling. This application process will run in parallel with the Company's ongoing engagement and consultation with first nation communities. Additionally, the Company has applied for Manitoba Mineral Development Fund (MMDF), which is aimed at supporting mineral exploration in the province of Manitoba by making available funding of up to $300,000 CAD if successful. The outcome of this is expected to be known in the March quarter of 2024.

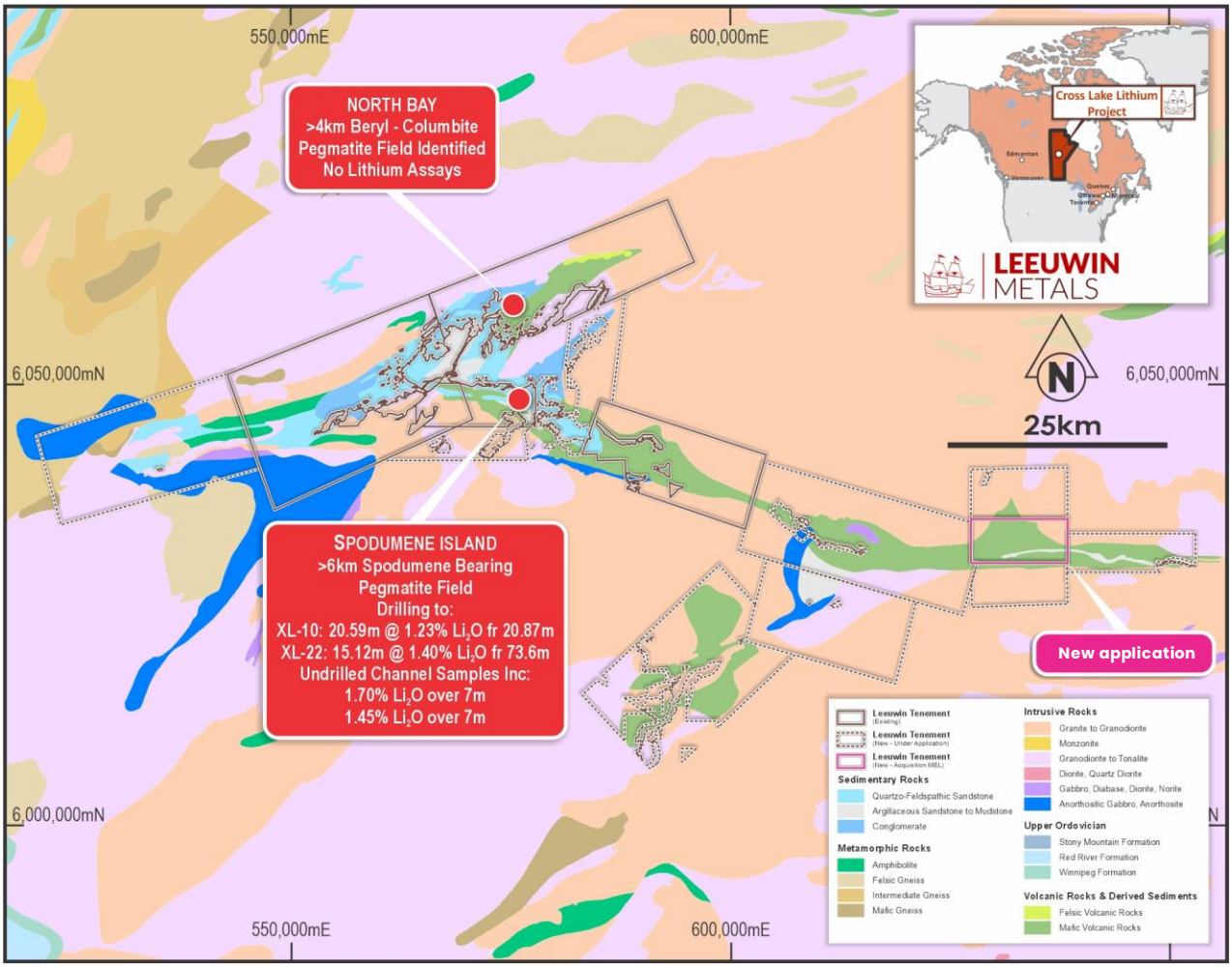


Figure 4: Leeuwin holds the largest land area, with over 2,000 km² of tenure, in the consolidated regional geology of the Cross Lake Greenstone Belt.

Infrastructure and Location

Cross Lake Lithium Project is located in the Canadian province of Manitoba, approximately 120km to the south of the major regional mining centre of Thompson. The Project has all year-round accessibility via by Provincial Highway 6 and as is well serviced by a hydroelectric power station to the south.

The Leeuwin 100% owned Cross Lake Lithium Project consists of 2,002km^2 granted and pending Mineral Exploration Licences (refer to Figures 4 & 5).

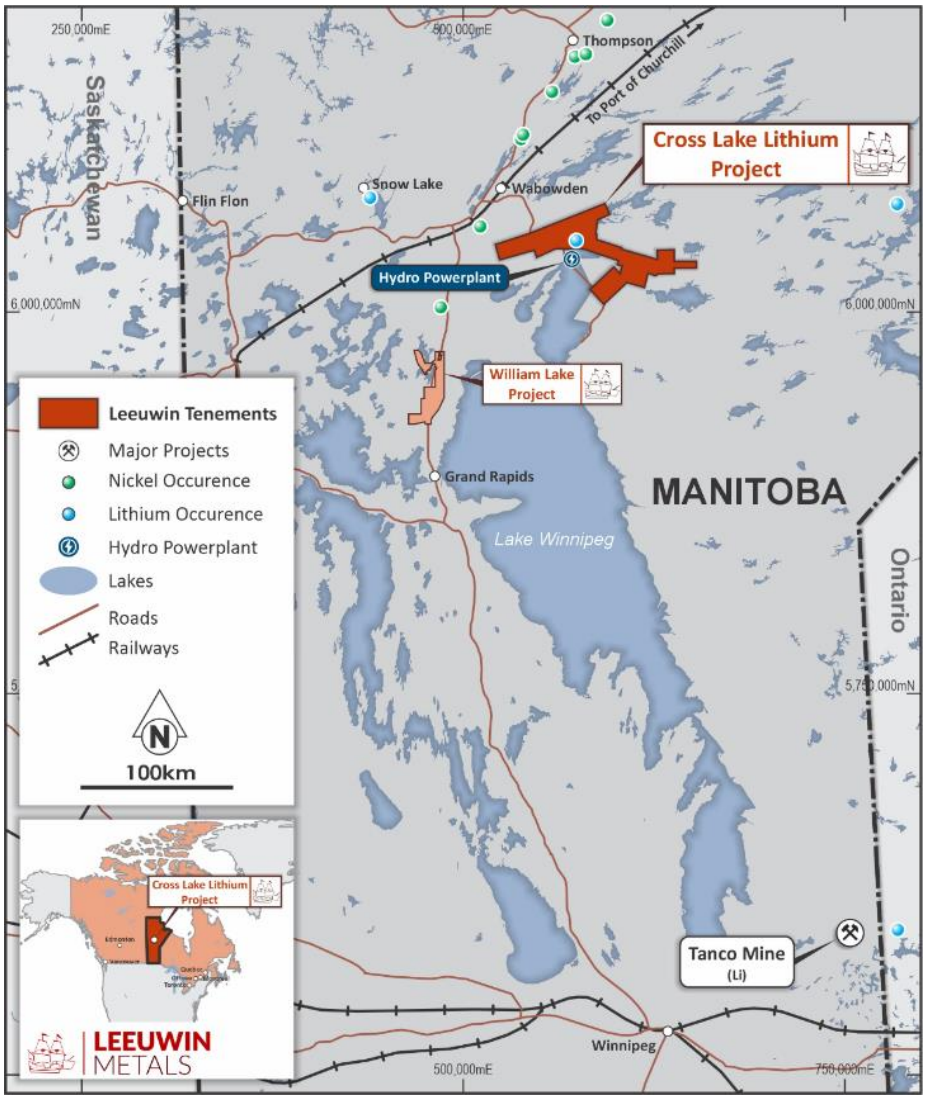


Figure 5: Location of the 100% owned Cross Lake Lithium Project.

KEY CONTACTS
Christopher Piggott
Managing Director
E info@leeuwinmetals.com T +61 8 6556 6427

About Us

Leeuwin Metals Ltd (**Leeuwin**) is a mineral explorer committed to securing critical metals vital for the advancement of electric vehicles and renewable energy.

Leeuwin has five projects, three located in Canada and two Western Australia which are highly prospective for Nickel, Copper, PGE, and Lithium.

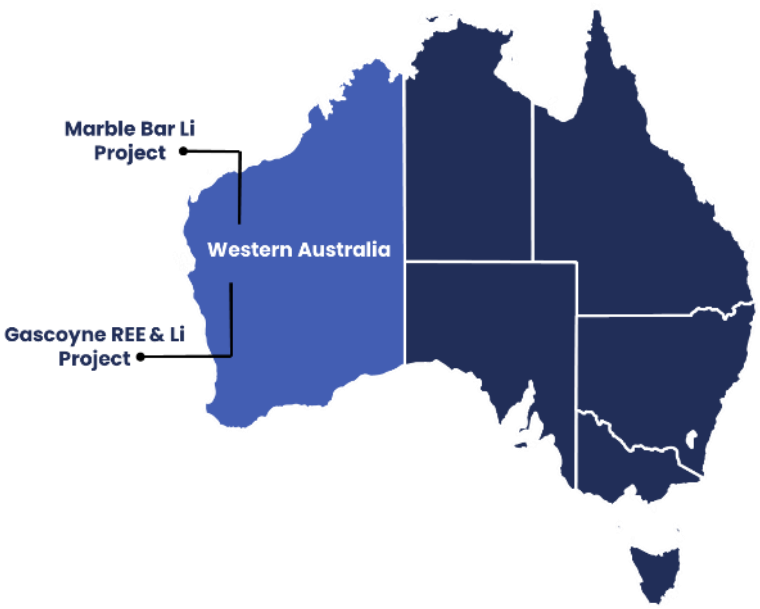
Our goal is to contribute to the global shift towards decarbonisation and electrification, working towards a greener future. Led by a skilled team with expertise in project generation, discovery, development, operations, and transactions.

William Lake Nickel Project is the flagship asset where the Company is exploring for high-grade Nickel, Copper and PGE mineralisation hosted in sulphides. The project is located in the Thompson Nickel Belt, which is highly fertile with several existing nickel mines in production.

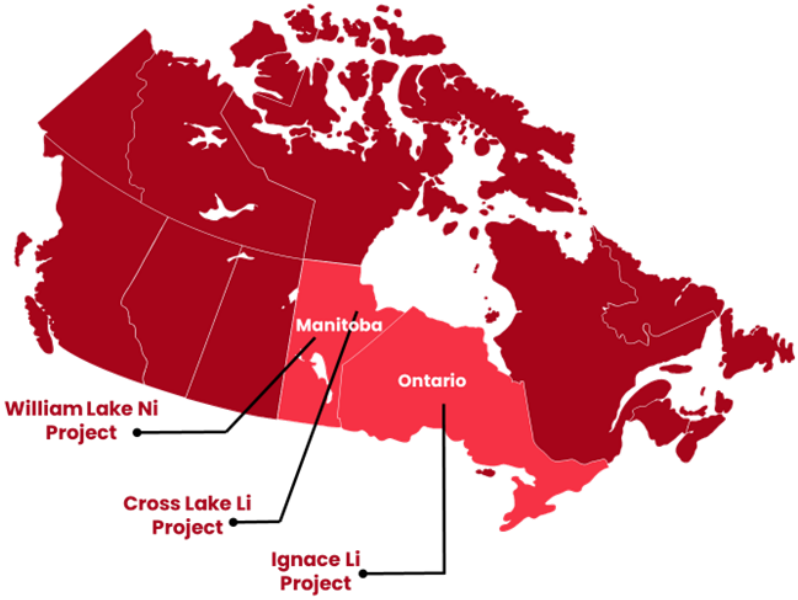
Cross Lake Lithium Project is highly prospective for LCT type pegmatites. The project is located in the Cross Lake greenstone belt with previous drilling intercepting Spodumene bearing pegmatites with grades of +1% Li_2O present.

Complimentary Projects located in Western Australia and Ontario targeting Lithium and REE's.

Australian Projects



Canadian Projects



APPENDIX A: IMPORTANT NOTICES

Cautionary Statement

In relation to the disclosure of visual occurrences of pegmatite and spodumene, the Company cautions that visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations.

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.

Competent Person Statement

The information in this report that relates to exploration results is based on and fairly represents information compiled by Mr Christopher Piggott, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy and the Managing Director of the Company. Mr Piggott 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 Piggott consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Forward Looking Statements

Various statements in this announcement constitute statements relating to intentions, future acts, and events. Such statements are generally classified as "forward looking statements" and involve known and unknown risks, uncertainties and other important factors that could cause those future acts, events, and circumstances to differ materially from what is presented or implicitly portrayed herein. The Company gives no assurances that the anticipated results, performance, or achievements expressed or implied in these forward-looking statements will be achieved.

APPENDIX B: JORC CODE, 2012 EDITION

Table 1: Channel samples assays pending. Coordinates are in UTM NAD 83 z14 projection.

Hole ID	Easting m	Northing m	RL m	Length	Azimuth	Dip	From	To	Interval	Li_2O %	Ta_2O_5
CLCH23-001	575773	6048357	210	4.8	185	0	Assays Pending				
CLCH23-002	575766	6048362	200	1.3	190	0	Assays Pending				
CLCH23-003	575764	6048361	202	4.05	188	0	Assays Pending				
CLCH23-004	575771	6048371	203	1.4	174	0	Assays Pending				
CLCH23-005	575776	6048371	201	1.15	182	0	Assays Pending				
CLCH23-006	575901	6048252	218	2.85	185	0	Assays Pending				
CLCH23-007	575892	6048254	227	3.5	198	0	Assays Pending				
CLCH23-008	575894	6048259	212	3.65	198	0	Assays Pending				
CLCH23-009	575990	6048213	218	1.95	184	0	Assays Pending				
CLCH23-010	575987	6048219	204	1.55	164	0	Assays Pending				
CLCH23-011	575999	6048201	208	0.6	150	0	Assays Pending				
CLCH23-012	576004	6048214	206	2.05	220	0	Assays Pending				
CLCH23-013	576011	6048195	206	1.8	176	0	Assays Pending				
CLCH23-014	576011	6048194	204	1.05	164	0	Assays Pending				
CLCH23-015	576013	6048195	205	3.4	175	0	Assays Pending				
CLCH23-016	576014	6048198	208	2.2	190	0	Assays Pending				
CLCH23-017	576050	6048178	210	1.4	142	0	Assays Pending				
CLCH23-018	576051	6048180	208	0.9	156	0	Assays Pending				
CLCH23-019	576069	6048142	210	7.8	245	0	Assays Pending				
CLCH23-020	576065	6048176	204	6	152	0	Assays Pending				
CLCH23-021	572492	6049155	215	7	234	0	Assays Pending				
CLCH23-022	572483	6049155	210	6.1	195	0	Assays Pending				
CLCH23-023	571375	6049357	205	2.7	160	0	Assays Pending				
CLCH23-024	571397	6049371	204	5	190	0	Assays Pending				
CLCH23-025	573078	6049121	208	1.35	345	0	Assays Pending				
CLCH23-026	573049	6049095	208	1.4	39	0	Assays Pending				
CLCH23-027	573038	6049097	206	3.7	5	0	Assays Pending				
CLCH23-028	573018	6049141	208	0.9	3	0	Assays Pending				
CLCH23-029	571463	6049419	212	2.3	350	0	Assays Pending				
CLCH23-030	571489	6049436	212	5.4	10	0	Assays Pending				

Section 1: Sampling techniques and data

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 downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	Cut Channel samples and rock chip sampling is being reported on, no assay results are being reported.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Based on field inspection, channel samples were selected by field geologists with sampling, cutting and logging completed by Leeuwin geologists with standard industry procedures in regards to QAQC.
	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.	Results of the channel samples and rock chip samples will be provided once the relevant assay information has been reported.
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.).	Not applicable as no drilling has been undertaken.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Not applicable as no drilling has been undertaken.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Not applicable as no drilling has been undertaken.
	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.	Not applicable as no drilling has been undertaken.
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.	Channel samples were logged with sample boundaries being determined by these observations.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Results of the channel samples and rock chip samples will be provided once the relevant assay information has been reported.
	The total length and percentage of the relevant	Results of the channel samples and rock chip

Criteria	JORC Code explanation	Commentary
	intersections logged.	samples will be provided once the relevant assay information has been reported.
Subsampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Not applicable as no new drilling or sampling is being reported.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	Sampling of mineralized intervals was done on a geological basis under supervision of the responsible geologist. Channel samples were approximately 5cm wide and the determined length was decided by the geologist based on geological observations. Samples were cut, logged and recorded in a data base. Samples were placed in numbered bags and submitted for analysis.
	For all sample types, the nature, quality, and appropriateness of the sample preparation technique.	Sampling techniques are industry standard and deemed appropriate.
	Quality control procedures adopted for all subsampling stages to maximise representivity of samples.	Channel Sampling was completed under the supervision of a qualified geologist on nominal 0.5m intervals. Interval lengths were adjusted to logged geological intervals. Samples were placed in plastic sample bags.
	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.	The samples are considered representative.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Given the reconnaissance nature of the channel sample sizes are deemed industry standard for LCT Pegmatite exploration.
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.	Not applicable as no assay data is being reported.
	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.	Not applicable as no assay data is being reported.
	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.	Not applicable as no assay data is being reported.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Not applicable as no assay data is being reported. Refer Appendix B Table 1.
	The use of twinned holes.	Not applicable as no new drilling is being reported.
	Documentation of primary data, data entry	Recent sampling has been documented in digital

Criteria	JORC Code explanation	Commentary
	procedures, data verification, data storage (physical and electronic) protocols.	format, verified and stored by the Company.
	Discuss any adjustment to assay data.	Not applicable as no assay data is being reported.
Location of data points	Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	Samples were collected with a handheld GPS with the collar location recorded in a digital database.
	Specification of the grid system used.	Any grid references are presented in UTM NAD 83 coordinate system Zone 14.
	Quality and adequacy of topographic control.	Topographic control is based on government topographic maps. This method of topographic control is deemed adequate at this exploration stage of the project.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Due to the reconnaissance stage of the Project the sample spacing is highly variable
	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	Data spacing is not considered sufficient to establish geological and grade continuities for Mineral Resource estimation at this stage.
	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.	Sampling was typically perpendicular or sub perpendicular to the orientation of the trend.
	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.	Not applicable as no new drilling is being reported.
Sample security	The measures taken to ensure sample security.	Not applicable as no assay data is being reported.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Not applicable as no assay data is being reported.

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 Cross Lake Project is comprised of eight granted and six Mineral Exploration Licence (MEL) applications covering a total area of 2,202km2 surrounding the granted MEL1209A, 1229A, 1213A, 1212A, 1228A, 1214A, 1227A and 1230A licences for 1405.6km2. All drilling and results reported in the body of this release are from within the granted MEL1209A licence. Leeuwin Metals has submitted applications based on the Manitoban Staking process and as such will have a 100% interest in the project areas.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The area covering the Cross Lake Project has been the subject of exploration since the 1950s, by XL Syndicate – 1958, Noranda Exploration Company (Noranda) – 1959 to 1968, Falconbridge – 1963, Guggenheim Exploration (1969), Tantalum Mining Corporation of Canada Ltd (TANCO) – 1970 to 1982, Cross Lake Indian Band (1988), Gossan Resources Ltd – 1994 to 1995, and Alix Resources (Alix) – 2016 to 2018. TANCO discovered tantalum and niobium oxide mineralisation in granitic pegmatites in the project area in 1979 and drilled 23 holes in 1980 but did not assay for Lithium. These holes are the subject of this release.
Geology	Deposit type, geological setting and style of mineralisation.	Pegmatites in the Cross Lake area are enriched in lithium, niobium, tantalum and may contain spodumene, tourmaline, muscovite, beryl and apatite. The Cross Lake area is underlain by rocks of the Archean Superior Province. The area is subdivided into the Molson Lake domain in the southern area and the Gods Lake domain in the northern area. The Moslon Lake domain is dominated by granodiorites, with widespread granitic rocks, granites, and pegmatites; monzodiorites and gabbroic dykes are also present. The Gods Lake domain is characterised by amphibolite facies mafic and ultramafic metavolcanics and metasedimentary rocks. Lithium mineralisation is associated with REE pegmatites and lithium-tin-tantalum pegmatites.

Criteria	JORC Code explanation	Commentary
Drillhole information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes: • easting and northing of the drillhole collar • elevation or RL (elevation above sea level in metres) of the drillhole collar • dip and azimuth of the hole • downhole length and interception depth hole length.	No drilling activities are being reported. The general location of visual spodumene occurrences photographed have been provided, in Appendix C, Table 1. The co-ordinates of the channel samples and rock chip samples will be provided once the relevant assay information has been received.
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.	No analytical results are being reported.
Relationship between mineralisation widths and intercept lengths	If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'downhole length, true width not known').	No drilling activities are being reported.
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 drillhole collar locations and appropriate sectional views.	Exploration plans and further diagrams are included in the body of this release as deemed appropriate by the competent person.
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.	All relevant and material exploration data for the target areas discussed, has been reported or referenced.
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.	All relevant and material exploration data for the target areas discussed, has been reported or referenced. Pegmatites photographed range from 1 to 10m in width.
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).	Please refer to the body of this release, noting further exploration is warranted across the Mineral Exploration Licence to improve the understanding of the mineralisation.

Appendix C: PEGMATITE DESCRIPTIONS

Table 1 - Visual estimation of abundance of spodumene within pegmatite & locations

Figure	Easting	Northing	Lithology	Commentary
Figure 2, image 1	571465	6049422	Quartz, albite, spodumene, muscovite, microcline pegmatite.	Estimated 10-20% spodumene
Figure 1 & Figure 2, image 2	572490	6049155	Quartz, albite, spodumene, muscovite, microcline pegmatite.	Estimated 10-20% spodumene
Figure 2, image 3	573049	6049095	Quartz, albite, spodumene, muscovite, microcline pegmatite.	Estimated 10-20% spodumene
Figure 2, image 4	573342	6049117	Quartz, albite, spodumene, muscovite, microcline pegmatite.	Estimated 10-20% spodumene
Figure 2, image 5	575775	6048374	Quartz, albite, spodumene, muscovite, microcline pegmatite.	Estimated 10-20% spodumene
Figure 2, image 6	576065	6048175	Quartz, albite, spodumene, muscovite, microcline pegmatite.	Estimated 10-20% spodumene