

ASX: LM1

# Discovery of High-Grade Lithium and Grant of Key Tenure at Jenpeg Lithium Project

# HIGHLIGHTS

- Results from the first two holes sampled from historical drilling return significant high-grade intercepts:
  - XL-10: 20.59m @ 1.23% Li₂O from 29.87m
  - o XL-22: 8.29m @ 1.13% Li₂O from 31.69m; and

15.12m @ 1.40% Li2O from 73.6m, incl. 11.8m @ 1.63% Li2O from 76.2m.

- Leeuwin recently sampled these drill holes which were never assayed for lithium.
- Confirms potential for a larger scale lithium project, with over 6km's of known pegmatite swarms, at the Jenpeg Lithium Project in Manitoba, Canada.
- Results represent a significant lithium discovery with shallow mineralisation open in all directions.
- Plans to complete additional sampling of drill holes located in the Winnipeg Core Library, in collaboration with Manitoba Geological survey.
- Grant of 100% owned Spodumene Island Mineral Exploration Licence, total project area currently +600km<sup>2</sup>.
- Leeuwin to ramp up exploration in the summer field season.

# Managing Director, Christopher Piggott, commented:

"These are exceptional results and confirm the Jenpeg project to be a highly attractive opportunity with significant upside for Leeuwin shareholders and believe these results represent the discovery of a new lithium district within Manitoba.

It is particularly pleasing that this project was the direct result of our own internal project generation, which underscores our commitment to exploration success in metals that are critical to the global energy transition. With our William Lake Nickel project and the Jenpeg Lithium project, our shareholders have significant exposure to critical metals exploration in Manitoba.

We look forward to updating the market on field activities across both our flagship William Lake Project and the Jenpeg Lithium project over the coming months."



Critical metals explorer L**eeuwin Metals Limited** (**LM1** or the **Company**) (**ASX: LM1**) is pleased to announce high-grade assay results from holes XL-10 and XL-22 at its 100% owned Jenpeg Lithium Project in Manitoba, Canada.

These holes were drilled in the early 1980's by Tantalum Mining Corporation of Canada Limited ("TANCO"), and although significant widths of spodumene were logged they were never assayed for lithium (refer to the ITAR in the Company's prospectus on the ASX 28 March 2023).

These results represent the potential for a significant discovery of a large scale lithium rich pegmatite swarm with additional regional upside. This confirms the Company's belief that the region has the potential to be a significant lithium district within Manitoba, Canada.



Figure 1 Photos of samples from XL-22 with visible Spodumene present under UV light, typically as 3-5cm crystals from interval grading 15.12m @ 1.4% Li<sub>2</sub>O from 73.6m.

The Company is engaged with ongoing discussions with the Manitoba Government and Geological Survey for sampling additional historic drill holes located at the Winnipeg Core library.

As the summer field season approaches, the Company has plans to commence boots on ground exploration activities, focusing on additional rock chip and channel sampling, detailed geological mapping and utilising remote sensing tools. This work will look to define the largescale lithium opportunity in a region that has previously not been subject to lithium exploration.



# Jenpeg Lithium Project – Manitoba, Canada

The project is a significant early-stage opportunity with mapped pegmatite swarms over +6km of strike that remains inadequately tested for lithium.

The results from today were drilled on the neighbouring island to Spodumene Island, which remains undrilled and under explored. Figure 2 shows the location of drilling, with significant strike remaining untested. With the recent grant of the Spodumene Island Mineral Exploration Licence (MEL 1209A), the Company has great confidence in delineating further pegmatite swarms within the region.

The historical drilling successfully intersected multiple, sub-parallel spodumene bearing ICT Pegmatites up to 20m thick over >400m strike length but the holes were not assayed for lithium. Spodumene crystals measuring 2-5cm are typically observed in core (see Figure 1 above) with occasional individual crystals up to 15cm also observed.

To date Leeuwin has sampled only 2 holes from the 23-hole 1980 drill program with further work focused on sampling additional holes. The results from to today are located 200m apart within the defined pegmatite trend (refer to Figure 2 below).

Multiple, shallow, spodumene bearing pegmatites, dipping gently to the north have been defined by the drilling with many of the holes not yet assayed for lithium (refer to Figure 3 and 4 below).

Significant results from the recent sampling include (Refer to Appendix B for full table of results):

### XL-10

- **1.17m @ 2.31% Li₂O** from 20.5m; and
- 20.59m @ 1.23% Li₂O from 29.87m, incl. 15m @ 1.34% Li₂O from 35m.

### • XL-22

- 8.29m @ 1.13% Li<sub>2</sub>O from 31.69m;
- 0.67m @ 1.41% Li₂O from 55.26m;
- 15.12m @ 1.40% Li<sub>2</sub>O from 73.6m, incl. 11.8m @ 1.63% Li<sub>2</sub>O from 76.2m;
- 2.16m @ 1.86% Li<sub>2</sub>O from 92.69m; and
- 2.0m @ 1.57% Li<sub>2</sub>O from 104.0m.



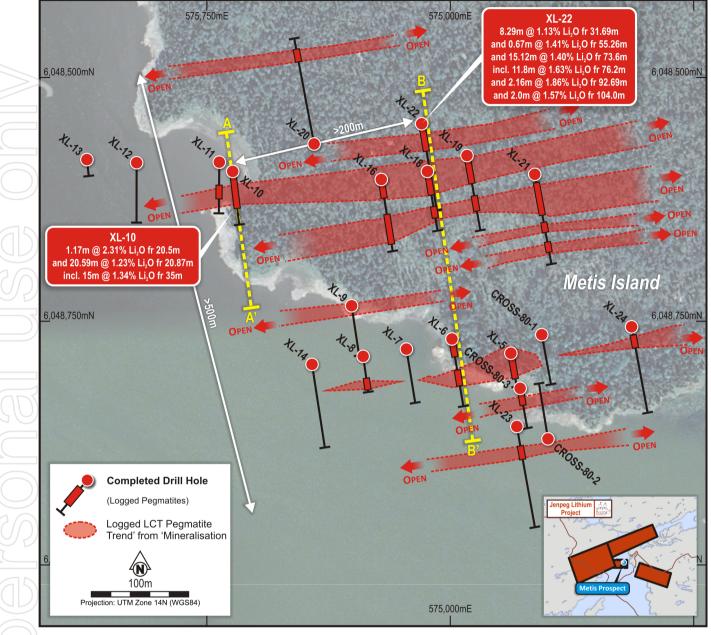


Figure 2 Plan map of historical drilling and defined LCT pegmatite trends. Recent sampling shown on map. Coordinates in UTM NAD 83 z14.



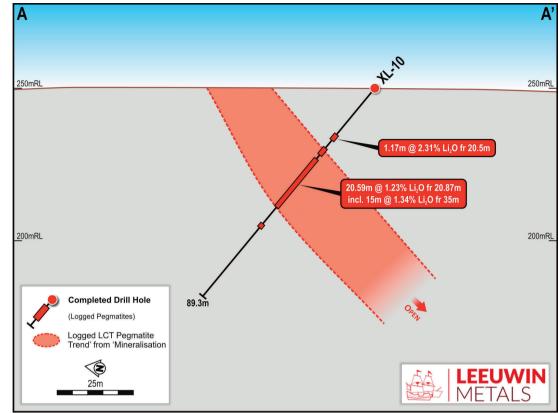


Figure 3 Section A-A' as shown on plan map Figure 2 with significant intervals from recent assay program. Coordinates in UTM NAD 83 z14.

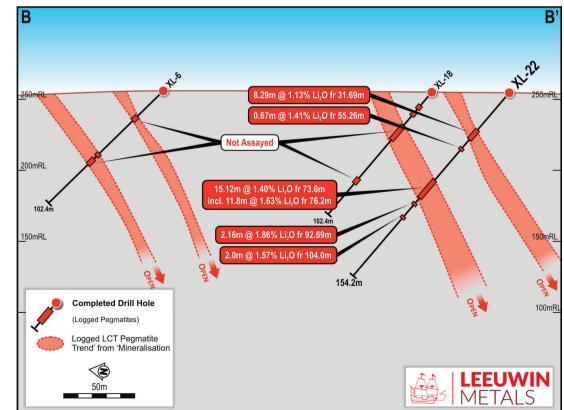


Figure 4 Section B-B' as shown on plan map Figure 2 with significant intervals from recent assay program. Coordinates in UTM NAD 83 z14.



# **Regional Exploration**

Although only limited Lithium focused regional exploration has occurred, previously reported rock chips and historic channel sampling from spodumene bearing pegmatites returned 13 samples out of 29 with assay results greater than 1% Li<sub>2</sub>O. Results include (refer to the ITAR in the Company's prospectus on the ASX 28 March 2023):

- 1.7% Li<sub>2</sub>O over 7m;
- 1.45% Li20 over 7m;
- 1.11% Li<sub>2</sub>O over 4.4m; and
- 0.94% Li<sub>2</sub>O over 9.2m.

Combined with the historical drilling and sampling at Metis Island these results define more than 3.6km of prospective strike extent for LCT Pegmatite mineralisation which remains open in all directions (refer to Figure 5 below):

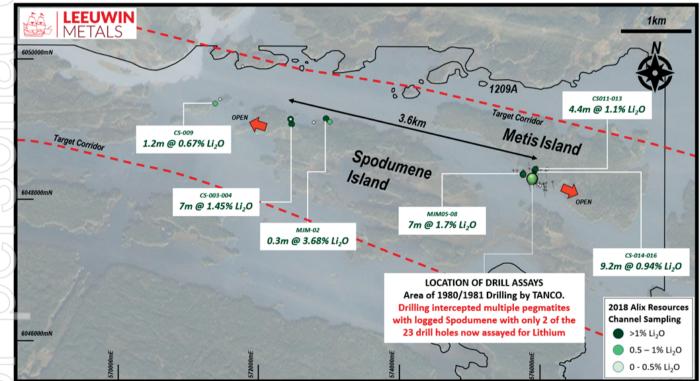


Figure 5 Plan map of the Jenpeg Lithium Project area showing the partial outline of the recently granted MEL 1209A. Coordinates in UTM NAD 83 z14.



# Infrastructure and Location

The project is located in the Canadian province of Manitoba, around 120km south of the major regional mining centre of Thompson. It has all year-round access via Provincial Highway 6 and is well serviced by hydro-power from the Jenpeg power station to the south.

The 100% owned Jenpeg Project consists of the 57.4km<sup>2</sup> granted Mineral Exploration Licences (MEL1209A) within a larger area of applications covering more than +550km<sup>2</sup> (refer to Figure 6 below).

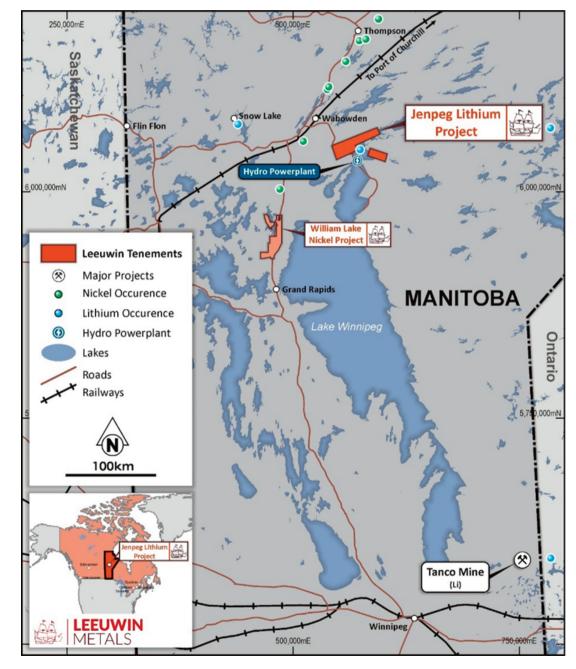


Figure 6 Location of the 100% owned Jenpeg Lithium Project MEL Applications. Coordinates in UTM NAD 83 z14.



This ASX release has been approved for release by the Board.

# KEY CONTACTS

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## **ABOUT LEEUWIN METALS LTD**

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

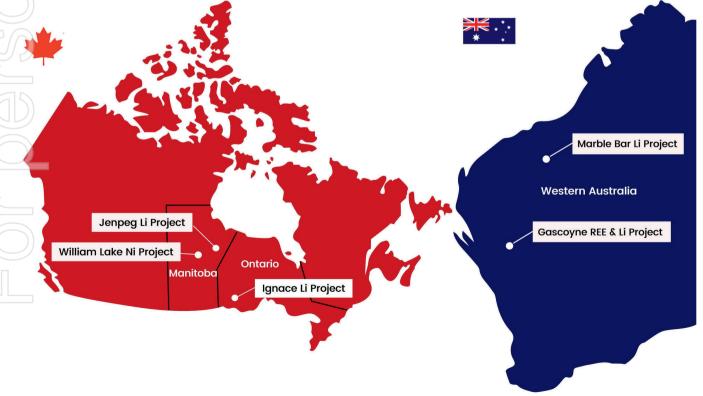
Leeuwin has five projects, three located in Canada and two Western Australia which are highly prospective for Nickel, Copper, PGE, and Lithium.

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 it exploring for high grade Nickel, Copper and PGE mineralization hosted in sulphides. The project is located in the Thompson Nickel Belt, this belt is a highly fertile with several existing nickel mines currently in production.

**Jenpeg Lithium Project** is highly prospective for LCT type pegmatites. The project is located in the Cross Lake greenstone belt with previous drilling targeting Tin and Tantalum within pegmatites.

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





### **APPENDIX A: IMPORTANT NOTICES**

#### End note

1 - As set out in section 4.3.1 of the Jenpeg Project in the Independent Technical Assessment Report (ITAR) contained within Annexure A to the Company's prospectus dated 10 February 2023 and released on the ASX on 28 March 2023.

#### **Competent Person's Statements**

The information in this release that relates to Exploration Results is based on activities carried out by Mr Marcus Harden is a Member of the Australasian Institute of Geoscientists. Mr Harden has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and the activity they are undertaking to qualify as Competent Persons as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012). Mr Harden consents to the inclusion in this release of the matters based on the information in the form and context in which it appears in this release. Mr Harden is the Chief Geologist of the Company and holds securities in the Company.

#### 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.

The information in the announcement with respect to exploration results (other than assay results for holes XL-10 and XL-22) was first released by the Company to ASX in its IPO prospectus on 28 March 2023. The Company confirms that it is not aware of any new information or data that materially affects the information in its IPO prospectus.

#### **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 Report**

#### Significant Intercept table

Cut-off grade of >0.5% Li2O and allowing for up to 1m interval of internal waste. Intercept lengths may not add up due to rounding to appropriate precision. Coordinates are in UTM NAD 83 z14 projection.

Hole ID	Easting m	Northing m	RLm	EOH Depth	Azimuth	Dip	From	То	Interval	Li20 %	Ta2O5 ppm
CROSS-8	30-1 576094	6048236	225	84.7	170	-50		Nc	ot Yet Assay	ed	
CROSS-8	30-2 576100	6048129	225	76.8	350	-45		Nc	ot Yet Assay	ed	
CROSS-8	30-3 576072	6048181	225	61.6	170	-45		Nc	ot Yet Assay	ed	
XL-4	576062	6048217	225	90.2	170	-60		Nc	ot Yet Assay	ed	
XL-5	576062	6048217	225	89	360	-90		Nc	ot Yet Assay	ed	
XL-6	576002	6048232	225	102.4	170	-45		Nc	ot Yet Assay	ed	
XL-7	575955	6048221	225	90.2	170	-50		Nc	ot Yet Assay	ed	
XL-8	575911	6048214	225	61	170	-50		Nc	ot Yet Assay	ed	
XL-9	575899	6048266	225	95.4	170	-50		Nc	ot Yet Assay	ed	
XL-10	575776	6048404	225	89.3	170	-50	20.5	21.67	1.17	2.31	485
103							29.87	50.46	20.59	1.23	194
U						incl:	35	50	15	1.34	194
							51.32	52.12	0.8	0.84	4
XL-11	575766	6048408	225	92.4	180	-50		Nc	ot Yet Assay	ed	
XL-12	575682	6048407	225	93.3	180	-50		Nc	ot Yet Assay	ed	
XL-13	575631	6048410	225	22.9	170	-50		Nc	ot Yet Assay	ed	
XL-14	575858	6048206	225	155.4	170	-55		Nc	ot Yet Assay	ed	
XL-16	575929	6048396	225	105.5	80	-50		Nc	ot Yet Assay	ed	
XL-17	575929	6048395	225	123.7	170	-50		Nc	ot Yet Assay	ed	
XL-18	575977	6048404	225	102.4	170	-50		Nc	ot Yet Assay	ed	
XL-19	576017	6048420	225	126.8	170	-50		Nc	ot Yet Assay	ed	
XL-20	575860	6048432	225	160.9	350	-50		Nc	ot Yet Assay	ed	
XL-21	576087	6048401	225	150.3	170	-50		Nc	ot Yet Assay	ed	
XL-22	575971	6048452	225	154.2	170	-50	31.69	39.98	8.29	1.13	153
							55.26	55.93	0.67	1.41	107
)							72.83	72.9	0.07	0.78	10
1							73.6	88.72	15.12	1.4	159
						incl:	76.2	88	11.8	1.63	143
							92.69	94.85	2.16	1.86	50
							104	106	2	1.57	128
XL-23	576068	6048142	225	212.1	170	-60		Nc	ot Yet Assay	ed	
XL-24	576186	6048244	225	142	170	-50		Nc	t Yet Assay	ed	



# APPENDIX B: JORC CODE, 2012 EDITION - Table 1 Report

### 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.	All drilling quoted is from Historical Operators. Drill is predominantly AQ diameter and is now stored at the Brady Road Core Facility of the Manitoban Geological Survey. Exploration drill core samples were collected according to historical operator protocols. Sampling of mineralized intervals was done on a geological basis under supervision of the responsible geologist and averaged 3.8ft, with samples as short as 1.2ft and as long as 8.7ft m or more but usually less than 5ft. The logging geologist was responsible to mark the sampling interval and to draw a line down the centre of the core. Core was split with a core splitter, with half the core placed in plastic sample bags and the remaining half left in the core box. For consistency the same half of core was collected for successive samples. For the 2018 channel sampling trenching/moss peeling was done using a hand axe and shovel. Once exposed the pegmatite was channel cut using a Stihl TS800 16" concrete saw. Recent re-sampling of the drill core was ¼ core of residual reference core under the supervision of a qualified geologist on nominal 1m intervals. Interval lengths were adjusted to logged geological intervals. ¼ core samples were taken from the split core using a core saw with half the core placed in plastic sample bags and the remaining half left in the core box. For consistency the same half of core was collected for successive samples.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	For consistency the same half of core was collected for successive samples. Channel cuts were continuous samples of the outcrop to ensure representivity. The Quality assurance procedures of historical operators are unknown. However, recent resampling was completed on the remaining ½ core, this core was then sampled, with ¼ core sent for analysis. Sampling was completed based on geological intervals on a nominal Im interval but can range between 0.2m and up to 2m's. The holes have meter marks down holes. Sample sizes are considered appropriate and correctly represent the style and type of mineralisation. Field standards, laboratory standards and laboratory repeats were used to monitor quality of analysis.
	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.	Diamond drilling was used to obtain AQ sized diamond core which was split for sample submission. Analysis technique is unknown. Selected samples were submitted to Tanco's analytical laboratory in Manitoba for Tantalum and Tin assay – no Lithium assays are recorded for the drilling. Rock Chip and Channel Sampling completed in 2018 was submitted to SGS Minerals, Vancouver for crushing to 75% passing 2 mm, split then pulverised to 85% passing 2 micron. Samples were then assayed by GE_IC90A method and Sodium peroxide fusion with an ICP-AES and ICP-MS finish and an Aqua Regia digest of 25g prep sample in 300ml with an ICPMS finish. Resampled ¼ core was submitted to Actlabs Laboratories in Thunder Bay. The entire sample was crushed to a nominal -2 mm, mechanically split to obtain a representative sample and then pulverized to at least 95% -105 microns (µm). Samples were then assayed by Peroxide 'Total' Fusion ICP-OES+ICP-MS (laboratory package Ultratrace 7). Samples assaying above 10,000ppm Li were then analysed by ore grade analysis through Peroxide Fusion ICP-OES.



Criteria	JORC Code explanation	Commentary
Drilling echniques		All drilling quoted is from Historical Operators, Tanco Mining. Drilling is predominantly AQ diameter. Diamond Drill core was not historically oriented.
Drill sample ecovery	ě	All drilling quoted is AQ diamond core. There is no recorded RQD data as is standard by observations by Leeuwin Minerals geologists do not record significant zones of core loss.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Unknown, not recorded by previous operators.
	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.	There is no relationship between sample recovery and grade indicated by previous operators of the project.
ogging	have been geologically and geotechnically logged to a level of detail to support appropriate	All samples were geologically logged on site by professional geologists. Details on the host lithology, deformation, dominant minerals including sulphide species and alteration minerals plus veining are recorded. Loggin is to a sufficient standard to support Mineral Resource Estimation, mining studies and metallurgical studies.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	All samples have been qualitatively logged for lithology, alteration, weathering and foliation and qualitatively logged for vein percentage, mineralization/sulphide percentage.
		All samples were geologically logged on site by professional geologists. Details on the host lithology, deformation, dominant minerals including sulphide species and alteration minerals plus veining are recorded.



Criteria	JORC Code explanation	Commentary
Subsampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Sampling of mineralized intervals was done on a geological basis under supervision of the responsible geologist and averaged 3.8ft, with samples as short as 1.2ft and as long as 8.7ft m or more but usually less than 5ft. The logging geologist was responsible to mark the sampling interval and to draw a line down the centre of the core. Core was split with a core splitter, with half the core placed in plastic sample bags and the remaining half left in the core box. For consistency the same half of core was collected for successive samples. Recent re-sampling of the drill core was ½ core of residual reference core under the supervision of a qualified geologist on nominal 1m intervals. Interval lengths were adjusted to logged geological intervals. ½ core samples were taken from the split core using a core saw with half the core placed in plastic sample bags and the remaining half left in the core box. For consistency the same half of core was collected for successive samples.
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	Channel samples were cut dry.
	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.	For consistency the same half of core was collected for successive samples. Recent re-sampling of the drill core was ¼ core of residual reference core under the supervision of a qualified geologist on nominal Im intervals. Interval lengths were adjusted to logged geological intervals. ¼ core samples were taken from the split core using a core saw with half the core placed in plastic sample bags and the remaining half left in the core box. For consistency the same half of core was collected for successive samples. The Quality assurance procedures of historical operators and laboratories are
		unknown.
	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.
		Given the reconnaissance nature of the drilling sample sizes are deemed industry standard for LCT Pegmatite exploration. Channel sampling was continuous over intervals and obtained representative sample sizes for intervals.
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.	Diamond drilling was used to obtain AQ sized diamond core which was split for sample submission. Analysis technique is unknown. Selected samples were submitted to Tanco's analytical laboratory in Manitoba for Tantalum and Tin assay – no Lithium assays are recorded for the drilling. Samples from the 2018 channel sampling were shipped to SGS labs in Vancouver where they were submitted for GE_ICM90A element package by sodium peroxide fusion. Resampled ¼ core was submitted to Actlabs Laboratories in Thunder Bay. The entire sample was crushed to a nominal -2 mm, mechanically split to obtain a representative sample and then pulverized to at least 95% -105 microns (µm). Samples were then assayed by Peroxide 'Total' Fusion ICP-OES+ICP-MS (laboratory package Ultratrace 7). Samples assaying above 10,000ppm Li were then analysed by ore grade analysis through Peroxide Fusion ICP-OES. This analysis technique is considered total.



Criteria	JORC Code explanation	Commentary
assay data and laboratory tests	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 handheld XRF or spectrometer data is recorded for the project.
	levels of accuracy (i.e. lack of bias)	The Quality assurance procedures of historical operators and laboratories are unknown. For ¼ core resampling Laboratory QAQC procedures include the insertion of certified reference materials as assay standards as well as including blank and sample duplicates.
		Company QAQC protocols include the insertion of certified reference materials and blanks every 25 samples or at geologist discretion.
		Lab and company QAQC samples were both reported within QAQC tolerance.
sampling and	The verification of significant intersections by either independent or alternative company personnel.	Historical results have not been reviewed and verified by Leeuwin Metals professional geologists, however, the diamond drill core is stored by the Manitoban Geological survey and has been reviewed and intersections are coincident with LCT pegmatite occurrences in the drill holes.
		Results from recent sampling has been under the supervision of Leeuwin Geologists and has been verified by professional consultant geologists.
	The use of twinned holes.	There are no twinned holes in the dataset but a comparison of the results of different drilling generations showed that results were comparable.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Details of primary data acquisition, data entry and verification procedures utilised by previous operators are unavailable but logging and data entry was captured on paper logs, now in Manitoba Assessment report no: 93742.
		Recent sampling and assay results have been documented in digital format, verified and stored by the company.
	Discuss any adjustment to assay data.	No adjustments were made to assay data in results quoted.
data points	to locate drillholes (collar and downhole surveys), trenches, mine	Drill holes were collared in local grid coordinates. Later the grids were georeferenced manually to take advantage of GIS mapping technology.
	workings and other locations used in Mineral Resource estimation.	Channel sample locations were picked up by GPS and as such have a <3m accuracy.
	Specification of the grid system used.	Drill holes were collared in local grid coordinates. Later the grids were georeferenced manually to take advantage of GIS mapping technology. The mainly idealized grids were approximately positioned by rotation and translation to fit with known topographic features, and collars were positioned on the georeferenced grids and in turn georeferenced. Drilling is now recorded in the UTM NAD 83 coordinate system Zone 14.
	Quality and adequacy of topographic control.	Channel samples were collected in the NAD 83 coordinate system, Zone 14. Topographic control is based on government topographic maps. This method of topographic control is deemed adequate at this exploration stage of the project.



Criteria	JORC Code explanation	Commentary
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Due to the reconnaissance stage of the Jenpeg Project the hole spacing is highly variable and of a progressive exploration in nature. However, a nominal spacing of 100m line spacing over the drill areas has been completed.
	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.
Drientation of data in relation to geological structure	achieves unbiased sampling of	Drill hole orientations were designed to test perpendicular or sub- perpendicular to the orientation of the intersected mineralisation. Drillir was typically oriented perpendicular to the trend of geophysical anomalism and the mapped strike and dip of observed mineralisation on surface and elsewhere in the project area.
	orientation and the orientation of key	Channel samples were cut across true with where possible. Due to the density of drilling and the orientation of drilling perpendicula to mineralized bodies there is limited bias introduced by drillhole orientation
sample security		Measures taken to ensure sample security by historic operators are unknown. Recent resampling was secured at the Manitoba Geological survey prio to shipping via commercial transport directly to the Actlabs laboratory in Thunder Bay for assay.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	There have been no audits or reviews of sampling techniques and date



# APPENDIX B: JORC CODE, 2012 EDITION - Table 1 Report

### Section 2: Reporting of exploration results

Criteria		JORC Code explanation	Commentary
Mineral teneme land ter status	nt and	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 Jenpeg Project is comprised of one granted and three Mineral Exploration Licence (MEL) applications covering an area of 841.45km <sup>2</sup> surrounding the granted MEL1209A licence 57.4km <sup>2</sup> . 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.
Explora done by parties		Acknowledgment and appraisal of exploration by other parties.	The area covering the Jenpeg 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. Alix undertook 65 line km of prospecting and supported by rock chipping and trenching in 2016 which are also reported in this release.
			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 and Pikwitonei domains in the northern half and north-western corner, respectively (Manitoba Energy and Mines, 1996). The Molson Lake domain comprises dominantly granitoid plutonic rocks and minor amphibolite grade supracrustal rocks. The northern boundary of the Molson Lake domain is defined by the southern margin of the narrow, high metamorphic grade greenstone belt, that extends from Aswapiswana Lake through to Cross Lake. The Moslon Lake domain is dominated by granodiorites, with widespread granitic rocks, granites and pegmatites; monzodiorites and gabbroic dykes are also present. Late granitic intrusives crosscut the rocks of the Cross Lake belt. REE- enriched and simple pegmatite dykes are common, and a reasonable amount of work has been undertaken to classify the pegmatites. Pegmatites in the Cross Lake area are enriched in lithium, niobium, tantalum and may contain spodumen, tourmaline, muscovite, beryl and apatite (Lenton, 1983). The mineralogically simpler pegmatites are thought to be a by-product of migmatisation of high metamorphic grade rocks, with the origins of the REE-enriched pegmatites linked to unidentified granitic bodies(Manitoba Energy and Mines, 1996). As lithium mineralisation is associated with REE pegmatites, previous tin- tantalum pegmatite mineralisation is considered to be a proxy for identifying areas prospective for LCT pegmatites, which are most likely to host spodumene in the Proterozoic granites of the Cross Lake area. These REE pegmatites commonly occur as groups or clusters above shallowly- dipping granite contacts. They are generally found in linear belts parallel to regional faults and parent granites. Mineralised pegmatites of the Southern Suite pegmatites contain minerals of lithium, beryllium, niobium, tantalum and tin, with the lithium mineral spodumene being relatively abundant in almost all of the pegmati



Criteria	JORC Code explanation	Commentary
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.	Please refer to Appendix B in the body of the release.
ággregation 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.	All drill hole intersections are reported in Appendix B in the body of the release, with no upper cut off grade applied. Metal equivalent values are not used.
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').	The majority of the drill holes are drilled as close to orthogonal to the plane of the mineralized lodes as possible. A number of drill holes have intersected the mineralisation at high angles. Only down hole lengths are reported.
	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.
reporting	Exploration Results is not practicable,	All drill hole intersections >0.5% Li2O are reported in Appendix B in the body of the release, with no upper cut off grade applied. Up to 1.5m of internal waste has been allowed in the reporting of significant intervals.
substantive exploration data	and material, should be reported including (but not limited to):	All substantive exploration data as known at the time of this release is included in the release. No metallurgical test work has been completed on the property to date.
	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.