

#### ASX Announcement

## 23 September 2021

# Manindi Lithium-Tantalum Pegmatites, \$1.5M Funding Raised for Testing

## **Highlights:**

- > \$1.5M funds raised to immediately advance exploration of extensive Lithium-Tantalum (LCT) pegmatite field at the Manindi Project in WA
- Melbourne based Peak Asset Management acted as lead manager for the Placement
- > Previous sampling of pegmatite in drillcore at Manindi produced significant high-grade lithium-tantalum intersections including 15m @ 1.2% Li<sub>2</sub>O, 117 ppm Ta<sub>2</sub>O<sub>5</sub> from 34m with up to 2.14% Li2O in MND018 and 6m @ 247ppm Ta205 with up to 459ppm Ta205 in **MND022**
- Mapping has identified extensive pegmatite over a 2km x 1km area, with lithium-bearing pegmatites confirmed over strike lengths of >300 metres and widths of up to 25-30 metres
- > Previous rock chip sampling of the exposed pegmatites at the Mulgara and Warabi Prospects within the Manindi Project returned high-grade lithium results of up to 2.84% Li<sub>2</sub>O, up to 296 ppm Ta<sub>2</sub>O<sub>5</sub> and up to 746ppm Cs<sub>2</sub>O, confirming LCT type-pegmatites
- ➤ A limited program of RC drilling in 2018 returned significant intersections of LCT pegmatite mineralisation, including:
  - MNRC030: 8m @ 1.06% Li<sub>2</sub>O from 18m incl. 3m @ 1.65% Li<sub>2</sub>O, with up to 1.96% Li<sub>2</sub>O
  - MNRC032: 7m @ 599ppm Ta<sub>2</sub>0<sub>5</sub>
  - MNRC033: 8m @ 1.00% Li<sub>2</sub>O, 158ppm Ta<sub>2</sub>O<sub>5</sub> from 32m, and,

7m @ 1.29% Li<sub>2</sub>O, 242ppm Ta<sub>2</sub>O<sub>5</sub> from 42 m incl. 5m @ 1.53% Li<sub>2</sub>O

- > Only 3 of 12 identified pegmatite dykes drill-tested, with drilling limited to 1 hole per section. Untested potential down dip and along strike of all pegmatites tested remains
- > Priority exploration program initiated, to include:
  - Detailed mapping and sampling of identified pegmatites over the full project area
  - Further drilling of confirmed LCT pegmatites to extend at depth and along strike
  - Further RC drill testing to extend to new identified pegmatites in the project area
  - Petrography to confirm observed Spodumene in addition to lepidolite in drillcore, as well as tantalum mineralogy, prior to further metallurgical test-work

Metals Australia Director, Mr Gino D'Anna, commented, "The Company has raised \$1.5 million to fund immediate further sampling of the numerous pegmatite dykes within this extensive LCT pegmatite field as well as drilling to extend and define the pegmatites that have already produced significant high-grade lithium-tantalum intersections."





Metals Australia Ltd (**ASX: MLS**) (**MLS** or the **Company**) is pleased to announce that it has received a letter of firm commitments from Melbourne based lead manager, Peak Asset Management, in relation to a capital raising of \$1,517,054 via issue of 1,011,369,333 fully paid ordinary Shares at \$0.0015 per share (Placement). Each Share will, subject to receiving shareholder approval at the next General or Annual General Meeting of the Company, receive an Option with an exercise price of \$0.003 with an expiry date of 31 December 2023. Subject to meeting all relevant ASX requirements, the Company will apply to have these options quoted on the ASX.

The Company will issue 419,086,079 Shares pursuant to ASX LR 7.1A, and 592,283,254 pursuant to ASX LR 7.1.

The Placement includes funding for exploration of a potentially major, high-grade, lithium-tantalum (LCT) pegmatite field at the Manindi Project. The Manindi Project includes three granted mining leases in the fertile Youanmi Igneous geological complex, located approximately 20 km southwest of the Youanmi Gold Mine in the Murchison District of Western Australia (see location inset Figure 1).

Lithium-bearing pegmatite dykes have previously been identified on the Manindi Project in the vicinity of the Mulgara-Warabi (zinc) prospect areas<sup>1</sup> (Figure 1). Initial surface mapping identified at least three mineralised pegmatite dykes outcropping at surface with strike lengths of over 300m and widths of up to 25-30m. The pegmatites were subsequently rockchip sampled, producing high-grade lithium results of up to 2.84% Li<sub>2</sub>O, tantalum up to 296 ppm  $Ta_2O_5$  and caesium up to 746ppm  $Cs_2O$ , confirming the presence of lithium-caesium-tantalum (LCT) pegmatites.

Previous re-sampling of diamond drill core from Mulgara (originally targeting the zinc deposits at Manindi – see "about Metals Australia" section to follow) produced significant, high-grade, lithium and tantalum intersections including:

- 15m @ 1.2% Li<sub>2</sub>O, 117 ppm Ta<sub>2</sub>O<sub>5</sub> from 34m, with up to 2.14% Li<sub>2</sub>O in MND018, and,
- 6m @ 247ppm Ta<sub>2</sub>0<sub>5</sub> with up to 459ppm Ta<sub>2</sub>0<sub>5</sub> in MND022

A further nine (total twelve), pegmatite dykes have now been mapped over a 2km x 1km area to date (see Figure 1 below), and further pegmatites have been identified within a corridor continuing to the northwest, indicating that the Manindi LCT pegmatite field has potential for a major lithium-tantalum project.



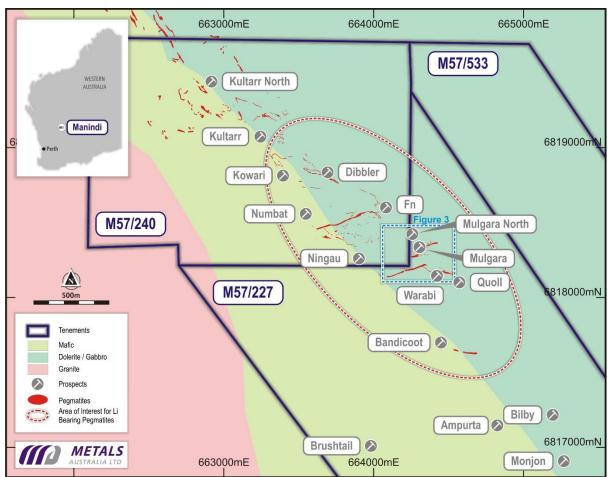


Figure 1: Manindi Lithium Project, WA, with mapped LCT pegmatites to date

## **About the Manindi Lithium Project:**

Detailed surface mapping carried out at Mulgara and Warabi, situated approximately 1.3km SE of the Kultarr and Kowari zinc resources (Figure 1), identified at least three lithium bearing pegmatites outcropping at surface with strike lengths of over 300m and widths up to 25-30m (Figure 2).

The pegmatite intrusions cross-cut the main geological strike in a northeast-southwest orientation and appear to be moderately zoned with coarser grained crystals adjacent to the contacts fining inward toward the centre. The pegmatite dykes trend east-northeast and have a moderate dip to the north-northwest.

Lithium-tantalum mineralisation also appears to be more concentrated adjacent to contacts exhibiting coarser grained and more abundant lepidolite/spodumene crystals. The pegmatites overall strike-length is not limited to surface outcrop as detailed airborne magnetics strongly suggest far more extensive development of pegmatite structures exist subsurface.

Following the positive identification of lithium bearing LCT pegmatites at Manindi, a shallow RC percussion drilling program was completed at the Mulgara Prospect to test the three outcropping pegmatite dykes (Figure 2).



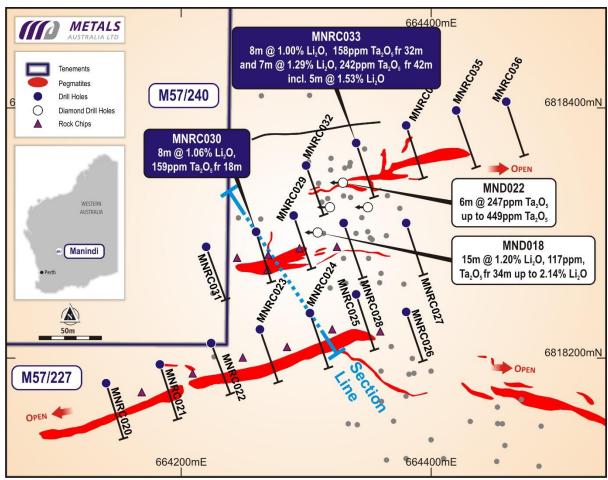


Figure 2: Manindi Lithium Drillhole Location Plan, WA

A total of 17 RC percussion drill holes were completed along three traverses, for a total of 837 m of drilling. Hole collars were located at approximately 40 metre intervals along the traverses. Hole collar details and pegmatite intersections are shown in Appendix 1. Table 1 lists the significant intersections. Table 1. Peak intersections included<sup>5,6</sup>:

- MNRC030: 8m @ 1.06% Li<sub>2</sub>O from 18m incl. 3m @ 1.65% Li<sub>2</sub>O with up to 1.96% Li<sub>2</sub>O
- MNRC032: 7m @ 599ppm Ta<sub>2</sub>0<sub>5</sub>
- MNRC033: 8m @ 1.00% Li<sub>2</sub>O, 158ppm Ta<sub>2</sub>O<sub>5</sub> from 32m, and,

### 7m @ 1.29% Li<sub>2</sub>O, 242ppm Ta<sub>2</sub>O<sub>5</sub> from 42 m incl. 5m @ 1.53% Li<sub>2</sub>O

Anomalous lithium and tantalum mineralisation occurred in all drill holes where pegmatite was intersected. Significant intersections (0.3%  $\text{Li}_2\text{O}$  cut-off grade) are tabulated below. Intersections are based on the length-weighted average of 1m assay results.

Table 1: Significant intersections from RC percussion drilling:

Hole ID	From	То	Interval	Assay Grade	
	(m)	(m)	(m)	Li₂O* (%)	Ta₂O₅** (ppm)
MNRC020	21	25	4	0.63	167
MNRC021	21	25	4	0.65	171
MNRC022	23	28	5	0.62	109
MNRC023	23	29	6	0.49	116



MNRC024	21	30	9	0.60	64
MNRC025	28	30	2	0.47	132
MNRC030	18	26	8	1.06	159
including	20	23	3	1.65	196
MNRC033	32	40	8	1.00	158
including	32	34	2	1.55	167
including	37	39	2	1.34	186
	42	49	7	1.29	242
including	42	47	5	1.53	230
MNRC034	27	31	4	0.33	331
	39	41	2	0.66	457
MNRC035	29	32	3	0.59	336
MNRC036	19	20	1	0.42	431

<sup>\*</sup> Calculated from Li assay grade based on the following conversion: Li<sub>2</sub>O = Li x 2.153

Highest grade lithium mineralisation was intersected in hole MNRC030 and MNRC033, where maximum 1 m results of 1.96%  $Li_2O$  (20-21 m) and 1.90%  $Li_2O$  (33-34 m) were returned, respectively.

No significant intersections were returned for holes MNRC026-028 (no pegmatite intersected); MNRC029 (low grade) and MNRC031 (no pegmatite intersected). Hole MNRC032 contained only anomalous lithium but significant tantalum (10-17m, 7 m @ 599 ppm  $Ta_2O_5$ ) suggesting that there is some zonation of the lithium and tantalum mineralisation.

Drill holes typically intersected the pegmatite dykes at a shallower depth than anticipated, indicating that the dykes have a moderate dip to the north-northwest (Figure 3). The southern-most pegmatite dyke showed excellent grade and thickness continuity along strike, which is interpreted to be in excess of 200 m. This dyke remains open to the southwest and is observed to reoccur to the east of hole MNRC026.

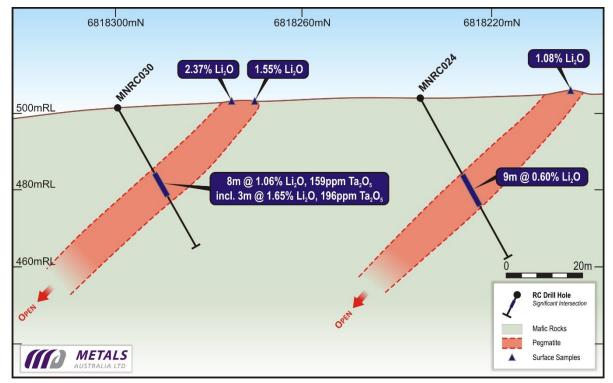


Figure 3: NNW-SSE cross section through MNRC030 and MNRC024 showing pegmatites intersected

<sup>\*\*</sup> Calculated from Ta assay grade based on the following conversion: Ta<sub>2</sub>O<sub>5</sub> = Ta x 1.221



Continuity of the pegmatite dykes and mineralisation was less consistent along the other two traverses, suggesting that the dykes may pinch and swell both along strike and down dip. The pegmatite dykes were also observed to locally bifurcate into multiple zones.

## Metallurgical testwork

Metallurgical testwork and mineralogical characterisation has been completed on two composite samples of lithium mineralisation from the Manindi Project<sup>3</sup>. Tests completed included semi-quantative XRD analysis, size fraction analysis, wet screen analysis, heavy liquid separation, magnetic separation, and sighter flotation testing.

Results indicate that Manindi lithium mineralisation principally occurs as lepidolite with flotation tests producing concentrates with grade up to 3.05% Li<sub>2</sub>O and lithium recovery of up to 77% from 30% of the mass feed. Flotation tails contain significant tantalite mineralisation (Ta<sub>2</sub>O<sub>5</sub>) that could potentially also be recovered and provides additional upside to the potential economics of the project.

Concentrate grade and recovery compares favourably against other lepidolite hosted lithium projects with the low iron-oxide ( $Fe_2O_3$ ) content confirming the Manindi lithium concentrate is a preferred product for potential end-users.

Potential for further improvements in the metallurgical results are high given that the tests were scoping level in nature and that the flowsheet has not been optimised for the Manindi mineralization.

## **Proposed Work Program**

The proposed work program for the Manindi Lithium-tantalum project includes:

- Further field investigation/mapping of new LCT pegmatites and geochemical analysis for future drill targeting (refer Figure 1)
- Review and re-sampling of all the original zinc focussed diamond drill core to potentially identify further pegmatite mineralisation
- Extensional drilling of existing pegmatite targets (refer Figure 2);
  - o Lateral extension to >60m vertical depth
  - Depth extension under anomalous intercepts to >100m vertical depth
- Initial RC drilling of new pegmatite targets targeting lithium and/or tantalum (Bandicoot and Kultarr/Kowari)
  - Traverse drill lines at 40 m drillhole spacing, to intercept between 20-30m below surface
- interpretation and independent modelling of tantalum mineralisation
- Initial lithium and tantalum resource modelling and resource estimation
- Further metallurgical testwork to differentiate tantalum mineralisation, scope a Manindi lithium processing-flowsheet and potential tantalum recovery process



#### **About Metals Australia**

Metals Australia is also actively exploring a number of highly prospective base metal, precious metal and battery metal projects within Australia and Quebec, Canada.

#### **Manindi Zinc Project**

The Manindi Zinc project is located in the Murchison District of Western Australia in close proximity to the Golden Grove Mine and the Youanmi Gold Mine. The Manindi Zinc Deposit hosts a JORC 2012, **Measured, Indicated and Inferred resource 1.08Mt @ 6.52% Zn for 70,102t Zn (2% Zn cut-off)**<sup>7</sup>. A number of other target zones remain to be tested adjacent and close to the existing resource. Drilling to date has been limited to a depth of approximately 250m.

## **Lac Rainy Graphite Project**

The Lac Rainy Graphite Project is located in Quebec, Canada, in close proximity to the operating mines around Fermont and is 100% owned by Metals Australia. The Lac Rainy project hosts a JORC 2012 Indicated and Inferred Resource of 13.3Mt @ 11.5% TGC 8.

In 2020, Metals Australia completed a Phase I Scoping Study highlighting the significant economic attractiveness of the Lac Rainy project. The design basis was the production of a high-grade, high-purity and high-total carbon graphite concentrate and resulted in an NPV8 (pre-tax) of US\$123 million with a pre-tax IRR of 18.9% <sup>9</sup>. The Company is currently undertaking an advanced stage of metallurgical testwork designed to improve the mesh size distribution across the large and jumbo flake sizes which is anticipated to have a material effect on the pricing environment and the economics of the Lac Rainy project. In addition, the metallurgical testwork is anticipated to show improvements in overall plant size, design and operation due to the optimised flowsheet which has the potential to reduce overall OPEX and CAPEX. These results will directly feed into the Phase II Scoping Study. Finally, the Company is also advancing its discussions with key North American and European partners to complete down-stream product testing including purified-micronised graphite, graphite anode, graphite foil, expandable graphite and spheronized graphite.

### **Eade-Felicie-Pontois Copper-Gold-Polymetallic Projects**

The Eade-Felicie-Pontois Copper-Gold-Polymetallic Projects are located in northern Quebec, Canada in the Lac Grande Greenstone Belt along strike of Midland Exploration Inc. (TSX: MD). The Company has recently completed and received the results of a project wide EM-TDEM survey which complements the previous field work and ASTER satellite and remote sensing work that has been completed. The results of the EM-TDEM survey have confirmed previous areas of significant mineralisation which have been field tested but has also importantly identified additional areas of high priority which are yet to be field tested across the extensive 15km strike. The Company is currently preparing and planning a field program based around these high priority target areas and based on these results will finalise plans for an initial drilling campaign.

#### Lac du Marcheur Copper-Cobalt Project

The Lac du Marcheur Copper-Cobalt Project is located in central Quebec, Canada in close proximity to the Chilton Copper-Cobalt project. An initial field program was undertaken by the Company in 2017 which confirmed the historical high-grade copper and cobalt occurrences and prospects on surface. The Company has commissioned an airborne EM-TDEM survey to occur within the next 4-6 weeks and is expected to have the results later in the year (2021).



## **Nepean South Nickel Project**

The Nepean South Nickel Project is located near Coolgardie in Western Australia, south of and along strike of the historic Nepean nickel sulphide mine - a Kambalda style nickel sulphide project, currently 80% owned by Auroch Minerals Limited (Auroch) (ASX: AOU). Nepean South Nickel Project is considered both highly prospective and underexplored for both gold and nickel, with historic RAB drilling completed to very shallow depths on average only 42m from surface, and with many holes drilled at even shallower depths. Previous exploration<sup>10</sup> identified an EM target conductor on a basal ultramafic contact 100-200m below surface located at the northern tenement boundary of the Nepean South project which is interpreted to continue south along strike into the Nepean South licence and is a high-priority target for the Company. An initial exploration program planned at the Nepean South project comprises an airborne EM survey across the entire strike length of the prospective ultramafic sequence. This is planned to be followed by a drilling campaign.

### References

This announcement was authorised for release by the Board of Directors.

#### \*\*\*ENDS\*\*\*

## For further information, please refer to the Company's website or contact:

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## **Cautionary Statement regarding Forward-Looking information**

This document contains forward-looking statements concerning Metals Australia. Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward-looking statements as a result of a variety of risks, uncertainties and other factors. Forward-looking statements are inherently subject to business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company, or on behalf of, the Company. Such factors include, among other things, risks relating to additional funding requirements, metal prices, exploration, development and operating risks, competition, production risks, regulatory restrictions, including environmental regulation and liability and potential title disputes.

Forward looking statements in this document are based on the company's beliefs, opinions and estimates of Metals Australia Ltd as of the dates the forward-looking statements are made, and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.

<sup>&</sup>lt;sup>1</sup> Metals Australia Ltd, 21 March 2017. High grade lithium bearing pegmatites discovered at Manindi

<sup>&</sup>lt;sup>2</sup> Metals Australia Ltd, 30 January 2018. Expanded Lithium Exploration Opportunities at Manindi Project

<sup>&</sup>lt;sup>3</sup> Metals Australia Ltd, 13 April 2018. Preliminary Metallurgical Test program underway at Manindi Lithium Project

<sup>&</sup>lt;sup>4</sup> Metals Australia Ltd, 21 May 2018. Manindi Lithium Metallurgical testwork demonstrates high lithium recovery and favourable grades

<sup>&</sup>lt;sup>5</sup> Metals Australia Ltd, 12 June 2018. Lithium pegmatite drilling program commences at Manindi Lithium Project

<sup>&</sup>lt;sup>6</sup> Metals Australia Ltd, 24 July 2018. Results of RC percussion drilling program at Manindi Lithium Project

<sup>&</sup>lt;sup>7</sup> Metals Australia Ltd, 12 January 2017. Metals Australia commences drilling at Greenfield and Resource Extension Targets at Manindi Zinc Deposit

<sup>&</sup>lt;sup>8</sup> Metals Australia Ltd, 15 June 2020. Metals Australia delivers High Grade Maiden JORC Resource at Lac Rainy Graphite Project, Quebec

<sup>&</sup>lt;sup>9</sup> Metals Australia Ltd, 3 February 2021. Lac Rainy Graphite Study delivers strong economics with Significant Economic upside

<sup>&</sup>lt;sup>10</sup> Metals Australia Ltd,3 March 2021. Metals Australia to Acquire Nepean South Nickel Project, Western Australia



## **Competent Person Statement**

The information in this report that relates to exploration results has been reviewed, compiled and fairly represented by Mr Nick Burn. Mr Burn is the Exploration Manager of Metals Australia Limited and a member of the AIG. Mr Burn has sufficient experience relevant to the style of mineralisation and type of deposits under consideration to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee ('JORC') Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. Mr Burn consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. 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 market announcements.

Appendix 1: Summary of RC percussion drilling and resampled DD completed at the Manindi Lithium Project

Hole ID	Collar Coordinates		Dip	Azimuth	h Hole	Pegmatite Intersection			
	Easting (m)	Northing (m)	RL (masl)	(°)	(°)	Depth (m)	Fro m (m)	To (m)	Interval (m)
MND018	664310	6818300	483	-60	270	49.2			
MND019	664350	6818320	483	-60	270	120.62			
MND020	664329	6818320	483	-60	270	81.7			
MND022	664330	6818340	483	-60	270	90.7			
MNRC020	664140	6818180	500	-60	160	60	17	28	11
MNRC021	664183	6818195	499	-60	160	47	19	31	12
MNRC022	664224	6818212	499	-60	160	41	6	9	3
							20	30	10
MNRC023	664263	6818223	501	-60	160	41	20	32	12
MNRC024	664303	6818236	503	-60	160	47	21	31	10
MNRC025	664340	6818251	506	-60	160	47	18	33	15
MNRC026	664380	6818237	508	-60	160	41	-	-	-
MNRC027	664380	6818308	509	-60	160	60	-	-	-
MNRC028	664330	6818308	507	-60	160	59	-	-	-
MNRC029	664290	6818314	504	-60	160	65	30	33	3
							52	53	1
							57	58	1
MNRC030	664260	6818301	501	-60	160	41	17	29	12
MNRC031	664220	6818289	498	-60	160	47	-	-	-
MNRC032	664300	6818354	503	-60	160	29	9	17	8
MNRC033	664340	6818372	505	-60	160	59	30 42	39 49	9 7
MNRC034	664380	6818386	505	-60	160	65	27 38	32 41	5 3
MNRC035	664420	6818398	503	-60	160	47	27	31	4
MNRC036	664460	6818405	501	-60	160	41	19 24	20 25	1 1
Total						837m		20	1



# JORC Code, 2012 Edition – Table 1

# Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	Reverse circulation (RC) percussion drilling was used to obtain 1 m samples, from which approximately 2-3 kg was sub-sampled and pulverised to produce a sample for assay.
Drilling techniques	<ul> <li>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).</li> </ul>	Drilling type is reverse circulation (RC) percussion drilling, using a 4.5" face-sampling drill bit.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	Sample recovery was visually assessed on basis of the volume of RC percussion chip recovery and overall is considered to be good based on the drilling records.
		Standard RC percussion drilling techniques were utilised to maximise sample recovery. The cyclone unit was routinely cleaned to limit contamination and ensure representivity of the sample.
		There is no apparent relationship between sample recovery and grade.
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	Chips from 1m RC percussion drilling intervals were logged according to industry standard practice and representative samples stored in chip trays.
	<ul> <li>studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul>	Logging was qualitative in nature and recorded using standard logging templates. The resulting data was uploaded to a Datashed database and validated.
	The total length and percentage of the relevant intersections logged.	100% of the drilling was logged.
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all cores taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	RC percussion samples were collected for every metre drilled using a cone splitter installed beneath the rig cyclone. Each sample had a weight of approximately 2-3 kg. Duplicate samples of the same size were collected using a second collection point from the cone splitter at a frequency of approximately one duplicate per 20 samples.
	<ul> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected,</li> </ul>	For all samples, the nature, quality and appropriateness of the sample preparation technique is considered suitable as per industry best practice.
	<ul> <li>including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	All samples were sent to the Bureau Veritas laboratory in Perth for sample preparation (codes PR001 and PR302) using standard codes of practices. All samples were dry and presented to the laboratory



Criteria	JORC Code explanation	Commentary
		"as is".
		The sample preparation is considered appropriate for the sample size and grain size of the material being sampled and appropriate for the sample type.
Quality of assay	The nature, quality and appropriateness of the assaying and laboratory procedures used and	Assaying was completed by the Bureau Veritas (BV) laboratory based in Perth, Western Australia.
data and laboratory tests	<ul> <li>whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	BV undertook a standard multi-element assay procedures (codes PF100, PF101 and PF102) utilising a peroxide fusion digestion technique followed by ICP-AES and ICP-MS analysis.
		The quality of the assay and laboratory procedures is considered to be high and appropriate for the type of mineralisation. The technique used is considered to be a total digestion.
		A comprehensive QAQC program including blank, standard and duplicate samples were submitted by the Company for analysis with the drilling samples. The results of the QAQC program have been reviewed by the Company's consultant, who has not identified any material concerns.
		Routine internal QAQC checks were also completed by Bureau Veritas and the results are considered to be satisfactory with no material concerns.
Verification of sampling and	<ul> <li>personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	Significant intersections have been reviewed and verified by company technical and management personnel.
assaying		Primary drilling data was documented in detailed electronic drill hole logs. Primary assay data was received electronically from the analytical laboratory. Data is uploaded to a Datashed geological database and verified.
		No adjustments have been made to the reported assays other than the calculation of $Li_2O$ and $Ta_2O_5$ grades from assay data, as specified in the announcement.
Location of data	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys),	Drill hole collar locations have been verified with handheld GPS with a ±5 m degree of accuracy.
points	trenches, mine workings and other locations used in Mineral Resource estimation.  • Specification of the grid system used.	The grid system used is GDA94 datum, MGA zone 50 projection.
	Quality and adequacy of topographic control.	Topographic control is based on a digital terrain model (DTM) with an accuracy of ±5m.
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing, and distribution is sufficient to establish the degree of geological and</li> </ul>	Data spacing is $1\mathrm{m}$ intervals downhole drill holes spaced at approximately 40 m intervals along 3 traverses, as discussed in the announcement.
	<ul> <li>grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	Insufficient data is available to establish the degree of geological and grade continuity required for estimation of a resource.
		No sample compositing has been applied.
Orientation of data in relation to	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The drilling and sampling orientation is considered to have resulted in a true width intersection of the mineralised pegmatite dykes.
geological structure	<ul> <li>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.</li> </ul>	Given the nature of the deposit type, the drilling and the sampling is therefore considered to achieve unbiased sampling.



Criteria	JORC Code explanation	Commentary
Sample security	The measures taken to ensure sample security.	Industry standard chain of custody followed, with samples collected, transported and delivered to a secure freight depot by Company geologist. Samples were shipped directly to the analytical laboratory.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	The Company's consultant has reviewed the sampling and assay data for completeness and quality control and has not identified any material concerns.

# Section 2 Reporting of Exploration Results

Criteria	JO	RC Code explanation	Commentary		
Mineral tenement and land tenure	•	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 Company controls an 80% Interest in three granted Mining Licences in Western Australia covering the known mineralisation and surrounding area.		
status	•		The licences are M57/227, M57/240 and M57/533. The licence reports and expenditure are all in good standing at the time of reporting.		
			There are no known impediments with respect to operating in the area.		
Exploration done by other parties	•	Acknowledgment and appraisal of exploration by other parties.	The Manindi zinc deposits were identified by WMC in the early 1970s and have been extensively explored using surface and geophysical techniques prior to drilling. Mapping and soil geochemistry preceded airborne, and surface geophysical techniques being applied to the project.		
			The Project has been drilled in 8 separate drill programs since 1971, with a total of 393 holes having been completed. These include 109 diamond drillholes, 109 RC drillholes, 169 RAB drillholes and 8 percussion holes.  The zinc deposits have never been mined.		
			The Project has not previously been explored for lithium.		
Geology	•	Deposit type, geological setting and style of mineralisation.	The mineralisation at Manindi is hosted within an Archaean felsic and mafic volcanic sequence. The sequence has been extensively deformed by regional metamorphism and structural event related to the Youanmi Fault and emplacement of the Youanmi gabbro intrusion and other later granitic phases.		
			The Manindi zinc-copper mineralisation is considered to be a volcanogenic massive sulphide (VMS) deposit, comprising a series of lenses of zinc-dominated mineralisation that have been folded, sheared, faulted, and possibly intruded by later dolerite and gabbro.		
			Pegmatite dykes crosscut the felsic and mafic rock sequences at a high angle and are interpreted to have intruded along structures that transect the area. The dykes that occur in the area are considered to be of the lithium-caesium-tantalum type (LCT) and some contain visible lepidolite 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:  o easting and northing of the drill hole collar	A summary of all information material to the understanding of the exploration results is included in the announcement.		



Criteria	JORC Code explanation	Commentary
	<ul> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>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.</li> </ul>	
Data aggregation methods	<ul> <li>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</li> </ul>	Exploration results are reported as a length weighted average grade. This ensures that short lengths of high-grade material receive less weighting than longer lengths of low grade material.
,,,cs,,ca	<ul> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	Where aggregate intercepts incorporate short lengths of high-grade results within longer lengths of lower grade results, these zones have been reported separately.  No maximum or minimum grade truncations have been applied.  No metal equivalents are reported.
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	The orientation and dip of the reported drill holes were designed to intersect the pegmatite dykes that host lithium mineralisation as close as possible to perpendicular to their strike and dip. Reported mineralised intersections are therefore considered to be close to true width.
Diagrams	<ul> <li>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.</li> </ul>	Appropriate maps and sections and tabulated data are included in body of the announcement.
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.	Full and representative reporting of relevant results in announcement.
Other substantive exploration data	<ul> <li>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.</li> </ul>	There are no other substantive exploration data.
Further work	<ul> <li>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Further drilling will be considered to test the grade, thickness and continuity of lithium mineralisation at the Manindi Project, as discussed in the announcement.