

# **ASX Announcement** 30 November 2022

ASX:MLS

# High-Grade Titanium Contained in Ilmenite allows for Major Vanadium-Magnetite Upgrade at Manindi West Prospect

Diamond drilling to test entire intrusive for basal accumulations of vanadium-titanium as well as nickel-copper-cobalt bearing sulphides

Metals Australia Ltd (ASX:MLS) is very pleased to announce that petrography on high-grade titanium-vanadium-iron-sulphide mineralisation from drillhole MND003 at Manindi West, which included 25m @ 0.47%  $V_2O_5$ , 24.0%  $TiO_2$  and 40.8%  $Fe^1$ , indicates that the titanium is contained in coarse ilmenite that can be separated from the magnetite (see Image 1 below). This would more than double the vanadium content of the remaining magnetite concentrate product to more than 1%  $V_2O_5$  and up to 60% Fe and produce a separate, saleable, titanium-rich ilmenite product.

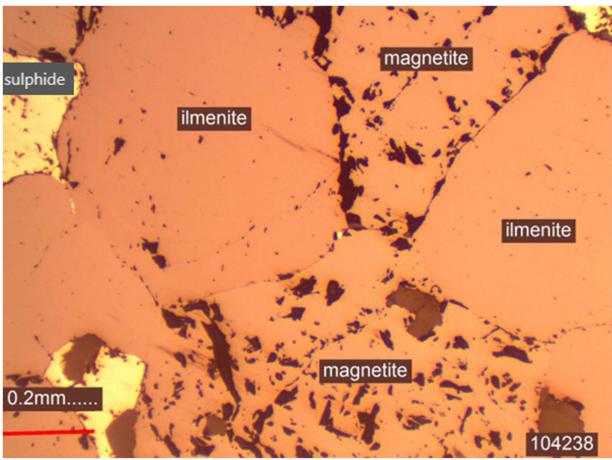


Image 1: MND003, 66.3m, Photomicrograph of magnetite – Ilmenite cumulate with interstitial sulphides



Previously completed diamond drillhole, MND003<sup>1</sup>, tested the 3km strike length Manindi West mafic intrusive (Figure 2) target below previous RC hole MNRC071<sup>2,3</sup> that had produced a broad vanadium-titanium-magnetite intersection of **70m @ 0.30% V\_2O\_5, 28% Fe, 11.5% TiO<sub>2</sub>** from 48m incl. **20m @ 0.44%**  $V_2O_5$ , **34.8% Fe, 14.3% TiO<sub>2</sub>**<sup>2,3</sup> (see cross section, Figure 2).

The mineralisation comprises magnetite and ilmenite crystals with interstitial sulphides that include pyrrhotite, pyrite and chalcopyrite (see Image 2 below).



Image 2: MND003, 66.3m, magnetite- Ilmenite cumulate with interstitial sulphides (pyrrhotite, pyrite, chalcopyrite)
Scanning Electron Microscope (SEM) analyses of the magnetite and ilmenite indicates that:

- i) Titanium is almost entirely contained in the ilmenite (SEM: TiO₂ 51.5%, FeO 46.5%, V₂O₅ 0.3%), and,
- ii) Vanadium is almost entirely contained in the magnetite (SEM: V<sub>2</sub>O<sub>5</sub> 1.6%, FeO 97.7%, TiO<sub>2</sub> 0.35%).

Ilmenite is a composite of iron and titanium oxides and is weakly magnetic. Highly magnetic minerals, such as magnetite, can be separated by a low intensity magnetic separator. The residual material can then be subjected to a wet high intensity magnetic separation stage to concentrate the ilmenite.

The resulting high-grade magnetite concentrate can grade up to 60% Fe and >1%  $V_2O_5$  and would represent a high-value ore for downstream processing. Facilities are being developed for downstream processing of such ores within WA, including at the Australian Vanadium (ASX:AVL) Project<sup>4</sup>, 200km north of Manindi that has completed a bankable feasibility study into on-site concentrate production and downstream processing in Geraldton to produce high-value Vanadium Pentoxide ( $V_2O_5$ )<sup>4</sup>.

The high-grade titanium ilmenite concentrate (targeting >50% TiO<sub>2</sub>, >25% Fe) then becomes an additional high-value product that is priced at around \$USD 42k/t.

**Metals Australia Chairman Mike Scivolo said**, "These petrographic results are quite a breakthrough for the Company. Being able to separate the high-grade titanium mineral, ilmenite, from the magnetite means that the Company could produce several high-value products, including a high-grade vanadium bearing magnetite concentrate which is highly sought-after feedstock for vanadium pentoxide production.

"Vanadium Pentoxide is used to generate vanadium electrolyte for Vanadium Redox Flow Batteries (VRFBs) that are fast becoming the ideal grid-energy storage battery technology for renewable energy projects."



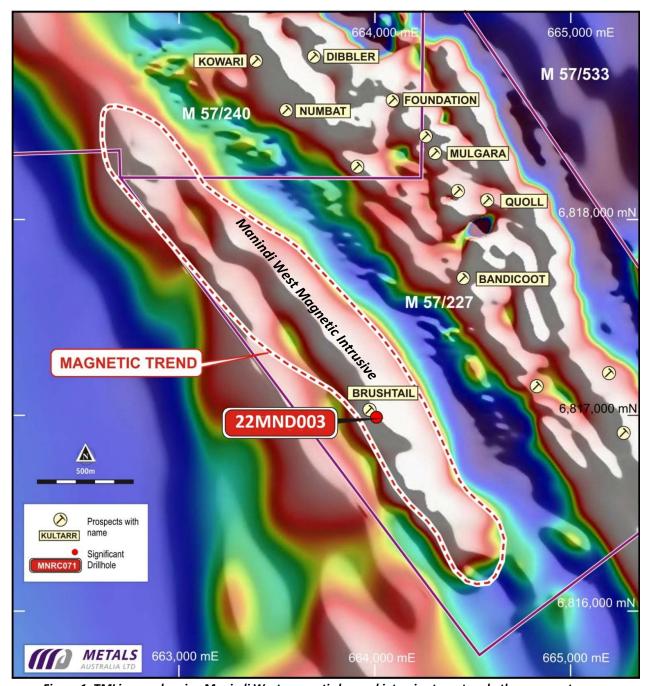


Figure 1: TMI image showing Manindi West magnetic layered intrusive target and other prospects

Follow-up drilling is set to commence to test across the entire magnetic unit at Manindi West (see Figure 2, below), including the base of the intrusive where there is also potential for nickel-copper-cobalt bearing massive sulphide zones.

Two diamond drillholes for approximately 600m are planned to test the Manindi West vanadium-titanium-sulphide target. A drilling contractor has been mobilised and drilling will commence early next week.



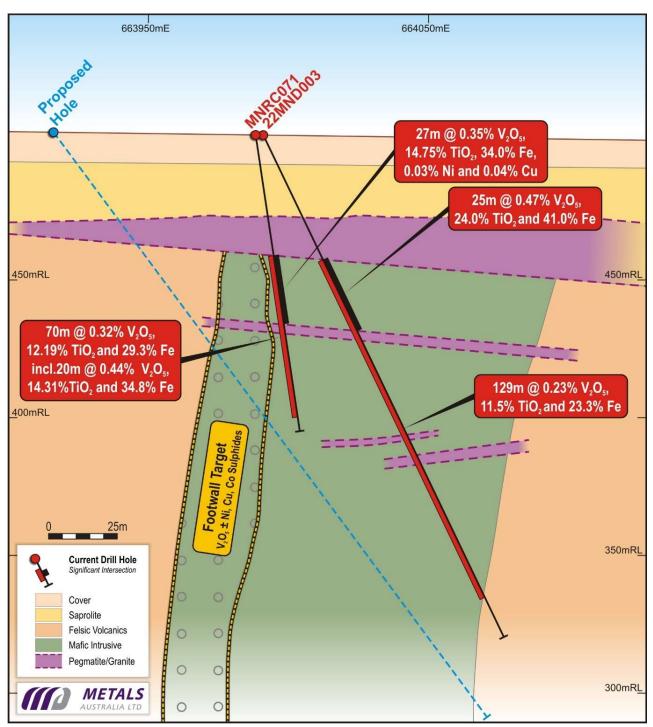


Figure 2: Cross Section through MND003 intersection, Manindi West with previous MNRC071 intersection

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

\*\*\*ENDS\*\*\*

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

Michael Muhling Company Secretary Metals Australia Limited +61 (08) 9481 7833 Andrew Rowell White Noise Communications +61 400 466 226

andrew@whitenoisecomms.com

### **ABOUT METALS AUSTRALIA**

Metals Australia is an active exploration and mining development company listed on the Australian Securities Exchange (ASX:MLS) with a portfolio of battery minerals / metals and gold projects in the well-established mining provinces of Australia and Canada.

The Company's flagship Lac Rainy Graphite Project is located in a major graphite province in Quebec, Canada. Lac Rainy hosts a JORC-2012 graphite mineral resource that is one of the highest grade in the region, with potential to grow substantially. Metallurgical testwork has generated high-grade flotation concentrate results of up to 97% graphitic carbon (Cg)<sup>5</sup>. A bulk concentrate sample despatched to Germany is undergoing downstream spherical graphite and battery testwork to determine the quality of the Lac Rainy graphite for use in lithium-ion battery applications for the Electric Vehicle (EV) industry. Results from the spherical graphite testwork phase are imminent.

In Western Australia, Metals Australia holds an 80% interest in Manindi Project, located around 500km northeast of Perth. The Company has been drilling and defining the project's high-grade lithium pegmatite potential and extending the existing high-grade zinc with copper resources. The Company has also identified a new intrusive related vanadium-titanium discovery<sup>6</sup> with copper-nickel-cobalt sulphide potential.

Metals Australia recently purchased an 80% interest in Payne Gully Gold Pty Ltd which includes the Warrambie, Tennant Creek and Murchison Projects<sup>7</sup>. This gives the Company additional exposure to a suite of prospective battery metals and gold assets in Western Australia and the Northern Territory in known mineral provinces. At the Warrambie Project the Company has identified electromagnetic (EM) anomalies associated with interpreted intrusive units<sup>8</sup> analogous to the Andover nickel deposit (ASX:AZR)<sup>9</sup> and Sherlock Bay resource (ASX:SBR)<sup>10</sup>, both located along strike from the Warrambie Project.

Leveraging off its extensive corporate and exploration experience, Metals Australia's strategy is to create shareholder value through continued development of advanced battery minerals/metals projects and the discovery of new resources.

### CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION

This document contains forward-looking statements concerning Metals Australia Limited. 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

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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 Limited 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.

## **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 information in this report that relates to Mineral Resources and Exploration Targets has been reviewed, compiled and fairly represented by Mr Jonathon Dugdale. Mr Dugdale is a Technical Advisor to Metals Australia Ltd and a Fellow of the Australian Institute of Mining and Metallurgy ('FAusIMM'). Mr Dugdale has sufficient experience, including over 34 years' experience in exploration, resource evaluation, mine geology and finance, 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 Dugdale 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.

#### REFERENCES

<sup>&</sup>lt;sup>1</sup> Metals Australia Ltd (ASX:MLS), 29 September 2022. High-Grade Titanium-Vanadium-Fe Intersection at Manindi.

<sup>&</sup>lt;sup>2</sup> Metals Australia Ltd (ASX:MLS), 09 June 2022. Substantial Vanadium Intersection with Ni-Cu-Co at Manindi.

<sup>&</sup>lt;sup>3</sup> Metals Australia Ltd (ASX:MLS), 29 June 2022. Battery Minerals diamond Drilling Commenced at Manindi.

<sup>&</sup>lt;sup>4</sup> Australian Vanadium Ltd (ASX:AVL), 06 April 2022. Bankable Feasibility Study for the Australian Vanadium Project.

<sup>&</sup>lt;sup>5</sup> Metals Australia Ltd (ASX:MLS), 25 July 2022. 95% Graphite Concentrate Despatched to Germany for Battery-Testing

<sup>&</sup>lt;sup>6</sup> Metals Australia Ltd (ASX:MLS), 29 September 2022. High Grade Titanium-Vanadium-Fe Intersection at Manindi.

<sup>&</sup>lt;sup>7</sup> Metals Australia Ltd (ASX:MLS), 16 June 2022. Metals Australia to Acquire Key Battery Metals Projects.

<sup>8</sup> Metals Australia Ltd (ASX:MLS), 07 November 2022. EM Anomalies - Nickel Sulphide Taregts at Warrambie.

<sup>&</sup>lt;sup>9</sup> Azure Minerals Limited (ASX:AZR), ASX release 30 March 2022. Azure Delivers Maiden Mineral Resource for Andover.

<sup>&</sup>lt;sup>10</sup> Sabre Resources Ltd (ASX:SBR), 12 June 2018. Resource Estimate for the Sherlock Bay Nickel-Copper- Cobalt Deposit.



## Appendix 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)</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.  Samples for the current RC program are being analysed as 1m sample or 4m composites as determined by geological logging.  Previous and current diamond drilling has been sampled at approximate 1m intervals, utilising geological contacts where necessary.  Rockchip samples reported in this release were grab samples of pegmatite occurrences, collected in a calico bag and weighing approximately 2 to 3 kg
Drilling techniques	<ul> <li>may warrant disclosure of detailed information.</li> <li>Drill type (e.g., core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	Drilling type is (i) reverse circulation (RC) percussion drilling, using a 4.5" face-sampling drill bit.  (ii) Diamond drilling is currently being undertaken by SD1000 rig collecting HQ size core
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.  Diamond drill core recovery is considered high and is recorded by standard geological techniques
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	Chips from 1m RC percussion drilling intervals were logged according to industry standard practice and representative samples stored in chip trays. HQ core was logged to industry standard practice Logging was qualitative in nature and recorded using standard logging templates. The resulting data was uploaded to a Datashed database and validated. Core photography was undertaken for records 100% of the RC chips and diamond core drilling was logged.



Criteria	JORC Code explanation	Commentary
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> </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>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	For all samples, the nature, quality and appropriateness of the sample preparation technique is considered suitable as per industry best practice.
		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 lab "as is".
		Rockchip samples were processed by Intertek / Genalysis laboratories in Maddington, Perth and analysed using the 48 element "Lithium Package" (4A-Li/MS48).
		The sample preparation is considered appropriate for the sample size and grain size of the material being sampled and appropriate for the sample type.
		Currently drilled HQ core is sampled over $1m$ intervals or geological contacts and was cut to quarter core for sample analysis. Duplicate analyses were collected at a $1$ in $25$ interval for check results with blanks inserted in the sample process at a similar spacing.
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> </ul>	Previous assaying was completed by the Bureau Veritas (BV) laboratory based in Perth, Western Australia. 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.
	<ul> <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 (i.e., lack of bias) and precision have been established.</li> </ul>	Assaying for this current RC and diamond drill program is being undertaken by Intertek Perth utilising their 4A-Li/MS48 (four acid digest/ICP-MS) package.
		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 (1 in 25) 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 Intertek and the results are considered to be satisfactory with no material concerns.
Verification of		Significant intersections have been reviewed and verified by company technical and management personnel.
sampling and assaying	<ul> <li>and either independent or alternative company 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>	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 <sub>2</sub> O , Ta <sub>2</sub> O <sub>5</sub> ,V <sub>2</sub> O <sub>5</sub> and TiO <sub>2</sub> grades from assay data, as specified in the announcement.
Location of data	Accuracy and quality of surveys used to locate  drill balas (callar and down bala surveys)	Drill hole collar and rock chip sample locations have been verified with handheld GPS with a ±5 m degree of accuracy.
points	<ul> <li>drill holes (collar and down-hole surveys),</li> <li>trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	The grid system used is GDA94 datum, MGA zone 50 projection.
		Topographic control is based on a digital terrain model (DTM) with an accuracy of $\pm 5\mathrm{m}$ .
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing, and distribution is</li> </ul>	Data spacing is 1 m intervals downhole. Drill holes spaced at approximately 20 m intervals along strike of the Kultarr resource.
	sufficient to establish the degree of geological	The drilling intersection announced presents sufficient data to establish



Criteria	JORC Code explanation	Commentary
	and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation	the degree of geological and grade continuity required for estimation of a resource. Further drilling will be carried out before a revised resource estimate is produced.
	<ul><li>procedure(s) and classifications applied.</li><li>Whether sample compositing has been applied.</li></ul>	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	The drilling and sampling orientation is not considered to have resulted in a true width intersection of the zinc or titanium mineralised zones (see figure 2, cross section).
geological structure	deposit type.	Given the nature of the deposit type, the drilling and the sampling is considered to achieve unbiased sampling as the sulphide body has been tested from hangingwall to footwall.
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 lab.
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.

## JORC Code, 2012 Edition – Table 1 - Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	The Company controls an 80% Interest in three granted Mining Licences in Western Australia covering the known mineralisation and surrounding area.  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	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	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 mineralisation or vanadium bearing titanium at Manindi West.
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

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Criteria	JORC Code explanation	Commentary
		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.
		Initial exploration of the Manindi West magnetic 'high' identified a steeply dipping mafic intrusive under 20m of cover.
Drill hole Information	<ul> <li>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:         <ul> <li>easting and northing of the drill hole collar</li> <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> </ul> </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>	A summary of all information material to the understanding of the previous lithium exploration results is included in the announcement, see Appendix 1 of the announcement by Metals Australia Ltd, 24 July 2018. "Results of RC percussion drilling program at Manindi Lithium Project".  A summary of previous exploration at Kultarr is included in the announcement by Metals Australia Ltd, 25 July 2017. "C4 Conductor delivers High Grade Zinc Intersection at Manindi"
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 should be stated.</li> <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>	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.  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 zinc diamond drill hole 22MND002 was designed to investigate the potential for down plunge Zn mineralisation and an interpreted EM plate anomaly. The reported mineralised intersections are therefore not true width.  Diamond drill hole 22MND003 at Manindi West is investigating the thickness of the covered mafic intrusive and seeking the hanging wall of the intrusive.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Appropriate maps and sectional views are included in the body of the announcement.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable,	Full and representative reporting of previous relevant results in announcement by Metals Australia Ltd, 24 July 2018. "Results of RC



Criteria	JORC Code explanation	Commentary
	representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.	percussion drilling program at Manindi Lithium Project".  With respect to previous zinc exploration, see a summary of previous exploration at Kultarr included in the announcement by Metals Australia Ltd, 25 July 2017. "C4 Conductor delivers High Grade Zinc Intersection at Manindi"
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.	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 to test the grade, thickness and continuity of vanadium-titanium-sulphide mineralisation at the Manindi West Prospect.  Metallurgical testwork to determine separation properties of ilmentite from magnetite then concentration of vanadium-magnetite concentrate.  DHEM surveying of diamond drillholes at Manindi West to investigate the extent of sulphide mineralisation.

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