METALS AUSTRALIA LTD

ASX Announcement
24 May 2022

ASX:MLS

Exceptional 68m @ 3.09% Zinc Intersection at Manindi

Opens-up potential to substantially increase high-grade zinc resources

- **Metals Australia has produced an exceptional zinc with copper and silver intersection at Kultarr Zinc Prospect on its Manindi Project[0] in Western Australia (see cross section, Figure 1):**
    - **68m @ 3.09% Zn (0.20% Cu, 2.33 g/t Ag) from 89m (down hole) in MNRC070,**
        - **including 24.0m @ 6.47% Zn (0.29% Cu, 3.58 g/t Ag) from 100m.**
- **The spectacular intersection in MNRC070 has extended the high-grade zinc mineralisation at Kultarr down plunge to the south (see longitudinal projection, Figure 2) and opens-up potential for deeper drilling to substantially increase the high-grade zinc resources at the prospect.**
- **A follow-up diamond drilling program is planned to test the down-plunge extensions of the high-grade zinc mineralisation at both Kultarr and Kowari (see location Figure 3) in an area of previously detected electromagnetic (EM) anomalies.**

Metals Australia Chairman, Mike Scivolo, said:

"This exceptional intersection of high-grade zinc mineralisation at Manindi is a key breakthrough for the Company, as it has opened up potential to significantly grow the already substantial zinc resources at the Project.

"We now plan to carry out further diamond drilling to test the extensions of both the Kultarr and Kowari high-grade zinc resources – that have previously been identified by electromagnetic anomalies at depth.

"In addition to this zinc intersection, we have results to come imminently from thick lithium bearing intersections and a new sulphide discovery on a parallel trend to the west.

"We look forward to providing investors with continued positive newsflow from this outstanding project."

Metals Australia Ltd (**"MLS" or the "Company"**) is delighted to announce **the results from reverse circulation (RC) drillhole MNRC070 that produced an exceptional intersection of high-grade zinc with copper and silver mineralisation** (see cross section, Figure 1, below and longitudinal projection, Figure 2) at the Company's **Kultarr Zinc Prospect** on the Manindi Project ("**Manindi**" or "**the Project**"), located 20 km southwest of Youanmi in the Murchison District of Western Australia (Figure 3).

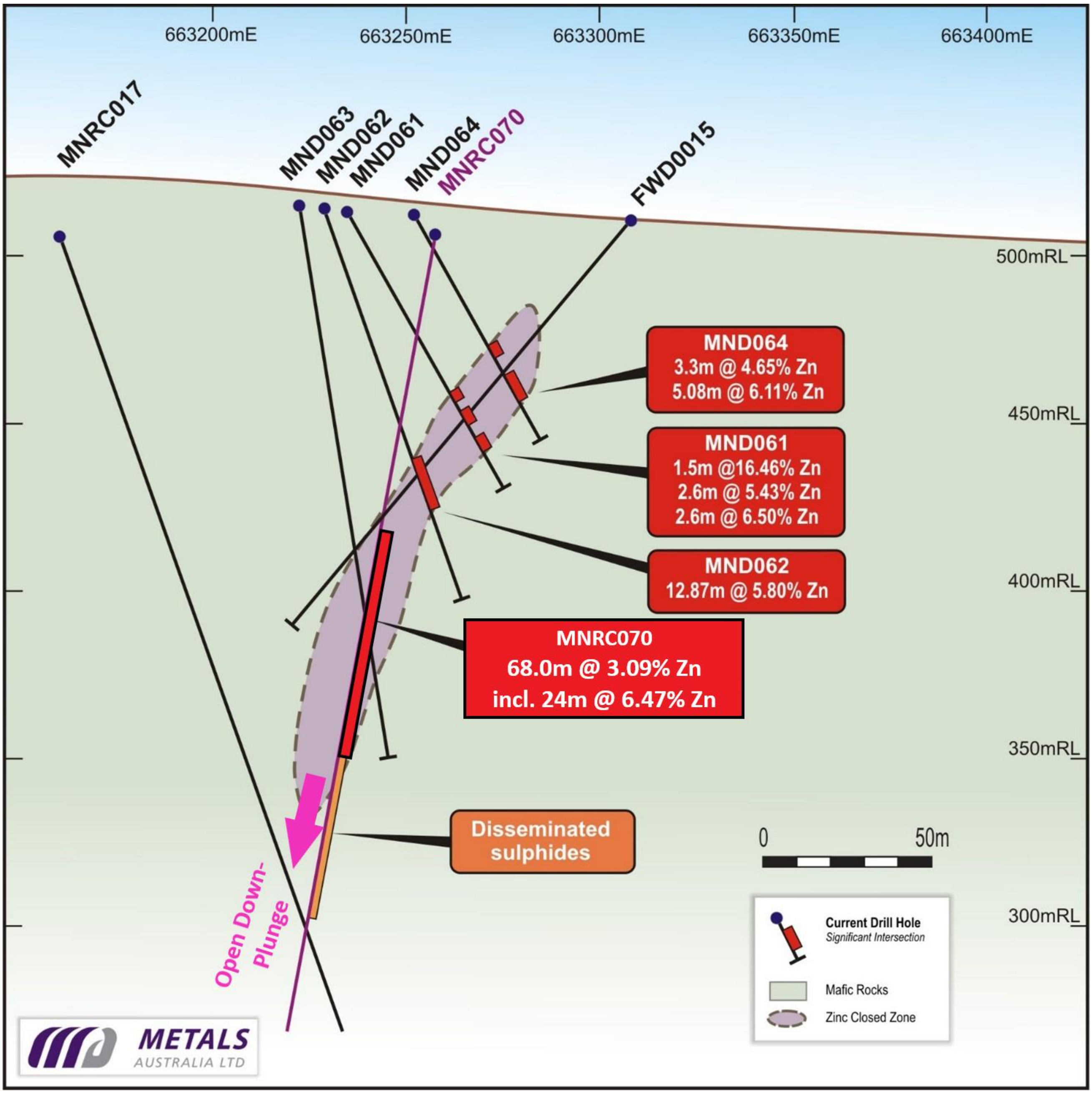

Figure 1: Manindi Zinc Project. Cross section through the Kultarr with MNRC070 high-grade zinc intersection

The high-grade intersection in **MNRC070 of 68m @ 3.09% Zn, 0.20% Cu, 2.33 g/t Ag from 89m, including 24.0m @ 6.47% Zn, 0.29% Cu, 3.58 g/t Ag from 100m,** has extended the high-grade zinc mineralisation at the Kowarri Prospect down plunge to the west of previous high-grade intersections[2] (Figure 2).

Previous electromagnetic (EM) surveys show EM anomalies at depth, below both the Kultarr (K2 anomaly) and Kowari (C1 anomaly) zones[2] (Figure 2). This drilling confirms that the high-grade zinc mineralisation extends beyond the previous drilling and opens-up potential to significantly expand the high-grade zinc resources at the prospect.

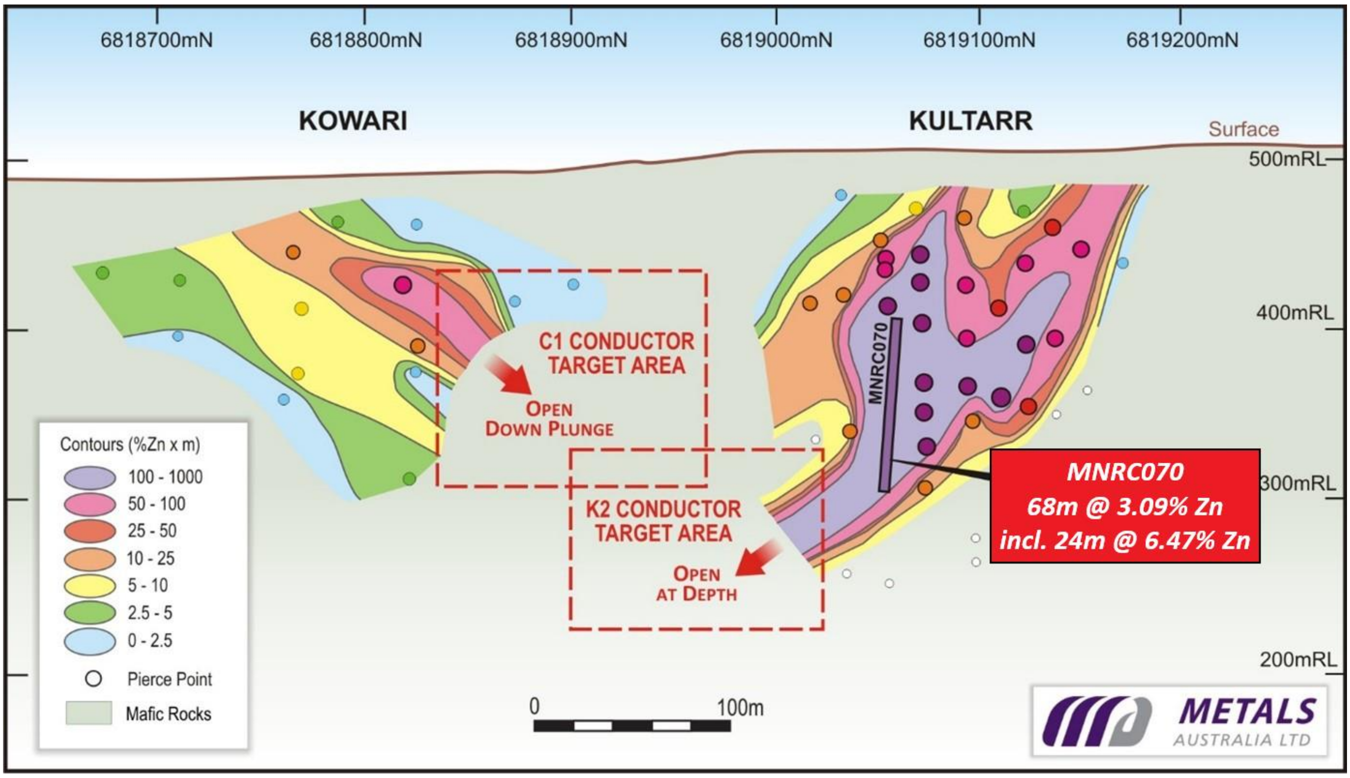

Figure 2: Manindi Zinc Project. Kultarr and Kowari Longitudinal Projection with MNRC070 sulphide Intersection

The Manindi Project is located on three granted mining licences (Figure 4) and includes the high-grade **Kultarr** and **Kowari Zinc deposits** (Figure 3, below). These deposits already host a JORC 2012, **Measured, Indicated & Inferred Mineral Resource of 1.08Mt @ 6.52% Zn, 0.26% Cu, 3.19% Ag for 70,102t Zn (2% Zn cut-off)**[2] (including Measured: 37.7kt @ 10.22% Zn, 0.39% Cu, 6.24 g/t Ag; Indicated: 131.5kt @ 7.84% Zn, 0.32% Cu, 4.60 g/t Ag and Inferred: 906.7kt @ 6.17% Zn, 0.25% Cu, 2.86 g/t Ag).

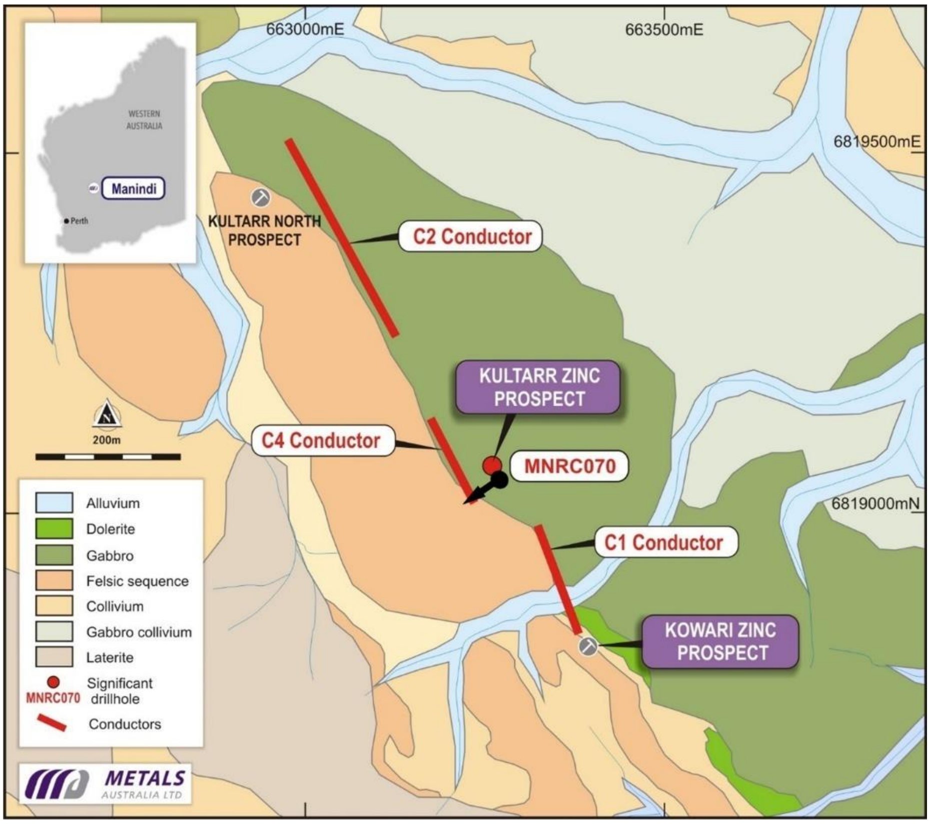

Figure 3: Manindi Zinc Project. Kultarr and Kowari Prospects with projected EM conductors and latest drilling

Details of the Kultarr High-Grade Zinc Intersection:

Drillhole **MNRC070** was drilled steeply east to west, across the interpreted plunge of the Kultarr mineralisation, to a depth of 240m. The **drillhole intersected a 68m downhole semi-massive to disseminated sulphide zone from 89m to 157m** (see cross section, Figure 1). The zone includes visible sphalerite (zinc sulphide), pyrite and minor chalcopyrite (copper sulphide). A disseminated sulphide zone continues from 157m to 235m that contains highly anomalous zinc, copper and silver mineralisation (see Appendix 1, results and sulphides).

Previous diamond drilling of the **Kultarr** resource zone in 2017[2] (see Figure 1) produced significant, high-grade zinc intersections, including:

- **MND065: 16.07m @ 8.08% Zn from 140.93,** including **3.40m @ 12.20% Zn and, 3.15m @ 6.91% Zn from 126.15m**
- **MND062: 12.87m @ 5.80% Zn from 80m** including **8m @ 6.92% Zn**

Downhole Time-domain Electromagnetic (DHTEM) surveys conducted in these diamond drill-holes[2] detected off-hole conductors down-plunge of the Kultarr mineralisation, including the K2 conductor (Figure 2). **The intersection of sulphide mineralisation in MNRC070 indicates that the high-grade mineralisation continues down plunge towards this conductor.** Further, diamond drilling is planned to extend the zone at depth.

In addition to the down-plunge projection of the **Kultarr** mineralisation, the **Kowari** sulphide zone is also open at depth in the vicinity of the C1 EM conductor[2], plunging northwest towards the Kultarr sulphide zone (Figure 2).

The planned diamond drilling program will test whether the two zinc-bearing sulphide zones are linked at depth and/or whether there is a fault offset between the two sulphide zones. DHTEM will be carried out in the planned diamond drillholes to detect extensions of the sulphide zones and/or off hole conductors for further testing.

The Company believes there is significant potential to grow the Manindi high-grade zinc resources, both within the identified zone of mineralisation at Kultarr and Kowari and associated with repeats of the sulphide zones either at depth or on parallel trends or strike extensions (e.g. **C2 conductor[2]** to the northwest of Kultarr - Figure 3).

The Company is well funded and has capacity to carry out a significant drilling campaign in order to achieve the objective of significantly growing the high-grade zinc resource base at Manindi.

Table 1 below shows drillhole details for MNRC070:

Hole Id	Grid	Northing	Easting	Azimuth°	Dip°	Depth
MNRC070	GDA94 Zone 50	6,819,064mN	663,260mE	240	-80	240m

Table 2 below shows significant intersections in MNRC070:

Prospect	Hole ID	From	To	m	Zn %	Cu %	Ag g/t	Cut-off
Kultarr	**MNRC070**	**89**	**157**	**68**	**3.09**	**0.20**	**2.33**	0.8% Zn
	incl.	**100**	**124**	**24**	**6.47**	**0.29**	**3.58**	2.0% Zn
	incl.	**146**	**150**	**4**	**3.18**	**0.16**	**2.18**	2.0% Zn

Appendix 2 is JORC Table 1, sections 1 and 2.

About Metals Australia

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

Manindi Project

The Manindi Project includes the Manindi Zinc and Manindi Lithium Projects, and comprises three granted mining leases (M57/227, M57/240 and M57/533) located in the Murchison District of Western Australia in close proximity to the Golden Grove Mine and the Youanmi Gold Mine (see location, Figure 4 below).

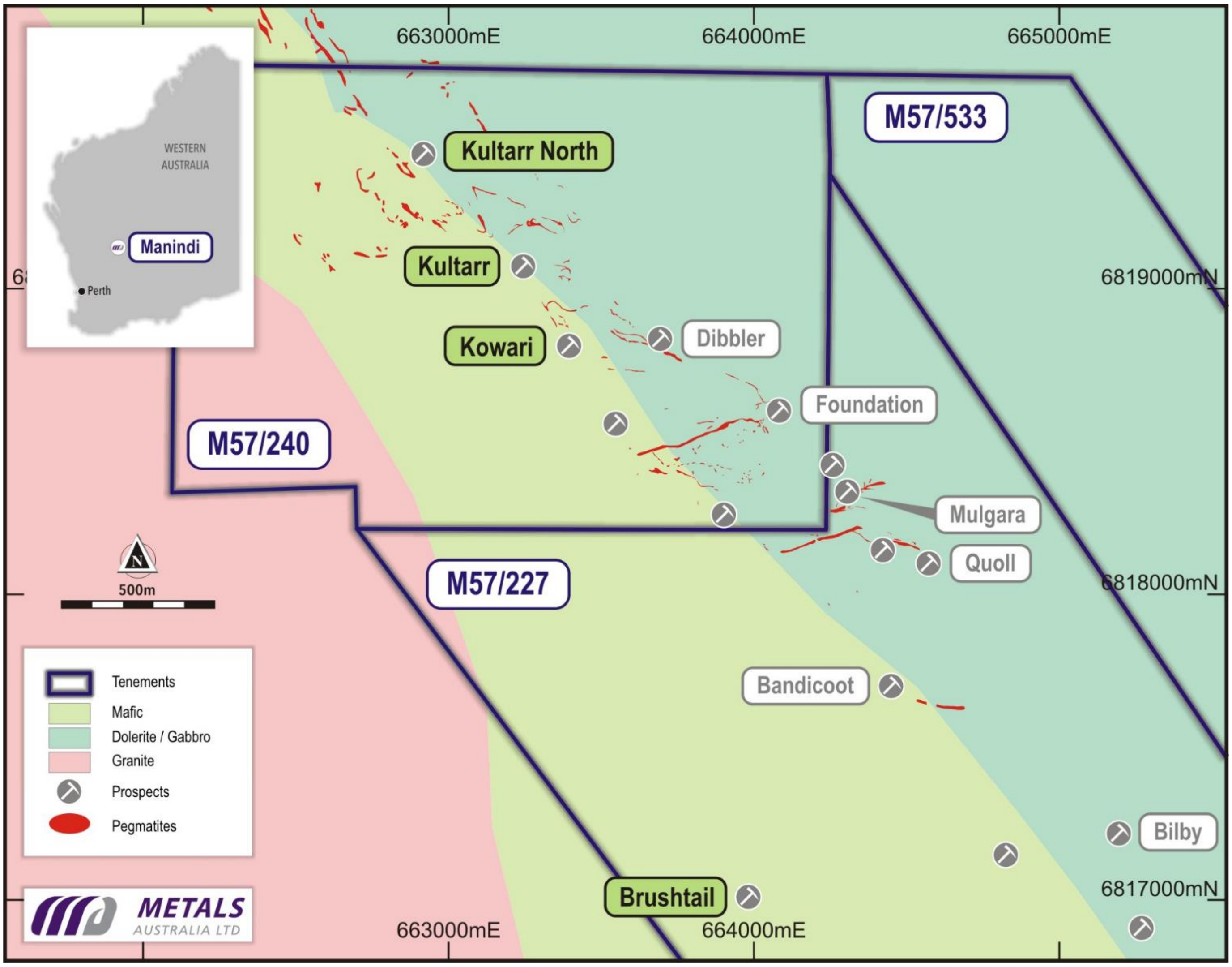

Figure 4: Manindi Zinc Project. Location of lithium prospects and Kultarr and Kowari zinc prospects

The Manindi Zinc Project includes the high-grade **Kultarr** and **Kowari Zinc deposits** (Figure 3 and 4), located close to the northern end of the Project at the boundary between a sequence of mafic intrusive units and mafic volcanics and felsics to the west. The drilling intersection announced in this release was from the Kultarr deposit (Figures 3 and 4). Results are awaited from the previous nickel-copper-cobalt-vanadium-zinc bearing sulphide intersection at Brushtail[0] (Figure 4).

The Manindi Lithium Project is described below and includes a series of lithium bearing pegmatites, generally striking east-west, within a 3km strike-length corridor that transect the same mafic intrusive / mafic volcanic boundary as the zinc deposits (Figures 3 and 4).

Manindi Lithium 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, Figures 3 and 4).

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

Re-sampling of previous diamond drillcore that targeted VHMS sulphide mineralisation at Mulgara, produced intersections including[4]:

- **15m @ 1.20% Li_2O from 34m, including 5m @ 1.53% Li_2O from 38m in MND018, and,**
- **3m @ 1.00% Li_2O from 41m in MND022**.

Following the positive identification of lithium bearing LCT pegmatites at Manindi, a shallow RC percussion drilling program was completed in 2018[5,6] at the **Mulgara Prospect** to test the three outcropping pegmatite dykes identified.

Significant intersections produced from this RC drilling program at Mulgara included[5,6]:

- **MNRC030: 8m @ 1.06% Li_2O from 18m incl. 3m @ 1.65% Li_2O with up to 1.96% Li_2O**
- **MNRC032: 7m @ 599ppm Ta_20_5**
- **MNRC033: 8m @ 1.00% Li_2O, 158ppm Ta_20_5 from 32m, and 7m @ 1.29% Li_2O, 242ppm Ta_20_5 from 42 m incl. 5m @ 1.53% Li_2O**

Preliminary flotation tests on previous diamond drilling samples produced concentrates with grades up to 3.05% Li_2O and lithium recovery of up to 77% from a concentrated 30% of the mass feed[7]. Flotation tails contained significant tantalite mineralisation (Ta_2O_5) that could also be recovered and provide additional upside to the potential economics of the project.

Potential for further improvements in the metallurgical results is high given that the previous tests carried out were scoping level in nature and that the flowsheet had not been optimised for the Manindi mineralization.

Recent mapping and systematic rockchip sampling resulted in the identification of other LCT pegmatites within a 3km corridor at the northwest end of the Manindi Mining Leases. This included the identification of the **Foundation Pegmatite[8]** (Figure 1) that is the largest pegmatite identified to date at Manindi. The **Foundation Pegmatite has a 500m strike-length, trending in a southwest–northeast direction, and includes multiple pegmatite outcrops across a 200m wide zone in a northwest-southeast direction** (see Figure 4).

Rockchip sample results averaging >1% Li_2O with Cs, Ta and >0.4% Rb and up to 2.30% Li_2O and 0.70% Rb[8], confirm that Foundation is a high-grade LCT pegmatite. These results compare favourably with previous results from rockchip sampling of the **Mulgara pegmatites** that produced high-grade results of up to **2.84% Li_2O, 296 ppm Ta_20_5 and up to 746ppm Cs_2O[6]**.

The company has completed its 44 hole, ~3,500m, RC drilling program[14] that has tested the Foundation and Mulgara Pegmatites as well as other nearby zones (e.g. Dibbler, Quoll). Significant results lithium-rubidium results were produced from the initial seven holes from the **Foundation Pegmatite**, **including the following thick and high-grade intersections[9]:**

- **16m @ 1.12% Li_2O, 0.32% Rb from 19m in MNRC042, incl. 13.0m @ 1.25% Li_2O, 0.34% Rb**
- **12m @ 0.86% Li_2O, 0.30% Rb from 62m in MNRC043, incl. 4.0m @ 1.37% Li_2O, 0.33% Rb**

Further results are expected to be received shortly.

Following planned diamond drill testing, further metallurgical testwork will be designed to optimise lithium and rubidium recovery and differentiate the tantalum mineralisation, prior to developing a lithium-rubidium-tantalum processing flowsheet.

The Company then plans to initiate scoping studies into a Manindi mining and processing operation.

Lac Rainy Graphite Project, Quebec, Canada

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 Graphite Project hosts **a JORC 2012 Indicated and Inferred Resource of 13.3Mt @ 11.5% Total Graphitic Carbon (Cg[10]**) (including Indicated: 9.6Mt @ 13.1% Cg and Inferred 3.7Mt @ 7.3% Cg).

In 2020, Metals Australia completed a Phase 1 Scoping Study highlighting the significant economic attractiveness of the Lac Rainy project[11].

Recently completed Phase 2 metallurgical tests produced very encouraging results[12] based on the optimum flowsheet developed from testing of a composite sample from the high-grade Lac Rainy Graphite Project grading **16.2% Cg**. Highlights of the Phase 2 testing program are as follows:

i) **Optimised tests produced a combined, -150µm and +150µm, concentrate grade of 96.8% Cg**, which is at the upper end of the targeted purity range of 95% to 97% Cg.

ii) The proportion of larger flake recovered under these optimised grinding and flotation conditions was 13.9% in the +150µm fraction, at a very high-purity of 97.4% Cg.

iii) Carbon recovery in open-circuit tests ranging from 69.4% to 85.6%. **Subsequent locked closed circuit (LCT) testwork produced a very-high overall recovery into the concentrate of 95.1% Cg. Concentrate grade was maintained in target range at 95.5% Cg[13]**.

iv) The flow-sheet development program has significantly improved the open-circuit conditions of the rougher, primary cleaning and secondary cleaning flotation circuits

The last stages of the Phase 2 testwork are generating a bulk concentrate, high-purity, flake-graphite sample to be sent to specialist battery grade graphite testing group, ProGraphite GmbH (**ProGraphite**) in Germany. ProGraphite will conduct specialist downstream testwork, including spheroidization and purification, to be followed by battery testwork to determine the quality of the Lac Rainy graphite products for use in lithium-ion battery applications.

This downstream testwork will provide impetus to discussions with potential off-take and/or funding partners to assist driving the Lac Rainy Project towards feasibility, development and production.

Eade-Felicie-Pontois Copper-Gold-Polymetallic Projects, Canada

The Eade-Felicie-Pontois Copper-Gold-Polymetallic Projects are located in northern Quebec, Canada, in the Lac Grande Greenstone Belt. The Company has received the results of an EM-TDEM survey that confirmed areas of identified mineralisation and identified new targets to be field tested across the extensive 15km strike corridor of identified taregts[13].

The Company recently completed a reconnaissance fieldwork program over high priority target areas and, based on re-evaluation of the geophysical interpretation and a more intensive and systematic fieldwork program, will be finalising plans for an initial drilling campaign.

Lac du Marcheur Copper-Cobalt Project, Canada

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 recently completed an airborne EM-TDEM survey. The preliminary processed results of this heliborne Magnetic (MAG) and Time-Domain Electromagnetic (TDEM) survey has highlighted several conductors aligned and coincident with magnetic trends/lineaments trending NW-SE to NNE-SSW. These conductors/anomalies may be associated with graphitic and/or sulphidic zones and field work will be carried out to identify the source of the conductors/anomalies[13].

References

[0] *Metals Australia Ltd, 10 May 2022. Spectacular Zinc Intersection and Sulphide Discovery – Manindi.*

[1] *Metals Australia Ltd, 16 February 2022. Drilling Commenced at Manindi Lithium Pegmatite Project, WA.*

[2] *Metals Australia Ltd, 25 July 2017. C4 Conductor Delivers High Grade Zinc Intersection at Manindi.*

[3] *Southern Geoscience Consultants, Oct 2019. Metals Australia Manindi Project. Geophysical data review and Recommendations.*

[4] *Metals Australia Ltd, 21 March 2017. High Grade Lithium Bearing Pegmatites Discovered at Manindi.*

[5] *Metals Australia Ltd, 12 June 2018. Lithium pegmatite drilling program commences at Manindi Lithium Project.*

[6] *Metals Australia Ltd, 24 July 2018. Results of RC percussion drilling program at Manindi Lithium Project.*

[7] *Metals Australia Ltd, 13 April 2018. Preliminary Metallurgical Test program underway at Manindi Lithium Project.*

[8] *Metals Australia Ltd, 10 November 2021. High Grade Lithium-Tantalum Results from Manindi Pegmatites.*

[9] *Metals Australia Ltd, 3 May 2022. Excellent Drill Hits from Manindi pegmatites.*

[10] *Metals Australia Ltd, 15 June 2020. Metals Australia delivers High Grade Maiden JORC Resource at Lac Rainy Graphite Project, Quebec.*

[11] *Metals Australia Ltd, 3 February 2021. Lac Rainy Graphite Study delivers strong economics with Significant Economic upside.*

[12] *Metals Australia Ltd, 28 February 2022. Outstanding 96.8% Flake Graphite Concentrate for Lac Rainy.*

[13] *Metals Australia Ltd, 28 April 2022. Quarterly Activities Report for the Quarter Ended 31 March 2022.*

[14] *Metals Australia Ltd, 16 May 2022. Thick Lithium Bearing Pegmatite Intersections at Manindi.*

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 Ltd. 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.

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.

Appendix 1: Assay Results MNRC070:

Hole ID	From	To	Zn%	Cu %	Ag g/t	Mineralisation
MNRC070	0	16	NR			None
MNRC070	16	17	NR			Disseminated pyrite
MNRC070	17	18				
MNRC070	18	19				
MNRC070	19	20				
MNRC070	20	21				
MNRC070	21	22				
MNRC070	22	23				
MNRC070	23	24				
MNRC070	24	25				
MNRC070	25	38	NR			None
MNRC070	38	39	NR			Disseminated pyrite , minor chalcopyrite
MNRC070	39	40				
MNRC070	40	41				
MNRC070	41	42				
MNRC070	42	56	NR			None
MNRC070	56	57				Disseminated pyrite, rare chalcopyrite.
MNRC070	57	68	NR			None
MNRC070	68	69	NR			Disseminated pyrite, rare chalcopyrite
MNRC070	69	70				
MNRC070	70	71				
MNRC070	71	76	NR			None
MNRC070	76	77	0.1166	0.0069	0.10	Disseminated pyrite, minor chalcopyrite
MNRC070	77	78	0.2616	0.01121	0.18	
MNRC070	78	79	0.2947	0.01611	0.23	
MNRC070	79	80	0.2288	0.01351	0.15	
MNRC070	80	81	0.0718	0.00559	0.10	
MNRC070	81	82	0.0421	0.01654	0.13	
MNRC070	82	83	0.0638	0.00762	0.12	
MNRC070	83	84	0.2004	0.02113	0.34	
MNRC070	84	85	0.1947	0.01956	0.37	
MNRC070	85	86	0.0773	0.01207	0.45	
MNRC070	86	87	0.0745	0.00705	0.29	
MNRC070	87	88	0.5056	0.0231	0.54	
MNRC070	88	89	0.5358	0.11659	1.99	Massive sphalerite, minor chalcopyrite/pyrite
MNRC070	89	90	4.0614	0.29362	4.16	
MNRC070	90	91	1.6308	0.12697	1.70	
MNRC070	91	92	3.4351	0.21736	2.58	
MNRC070	92	93	1.3773	0.09345	1.34	Disseminated pyrite, minor chalcopyrite
MNRC070	93	94	0.4007	0.02913	0.39	
MNRC070	94	95	0.1205	0.00908	0.13	
MNRC070	95	96	0.0742	0.00933	0.12	
MNRC070	96	97	0.0182	0.00495	<0.01	
MNRC070	97	98	0.0571	0.00356	0.08	
MNRC070	98	99	0.0543	0.00336	0.07	Massive sphalerite, minor chalcopyrite/pyrite
MNRC070	99	100	0.3056	0.20082	1.93	
MNRC070	100	101	2.5877	0.4408	3.27	
MNRC070	101	102	7.0595	0.39425	3.25	
MNRC070	102	103	5.6403	0.33404	3.76	
MNRC070	103	104	5.4273	0.20157	2.55	Disseminated sphalerite, minor chalcopyrite/pyrite
MNRC070	104	105	2.7093	0.11036	1.57	

Hole ID	From	To	Zn%	Cu %	Ag g/t	Mineralisation
MNRC070	105	106	11.8626	0.21836	2.54	Disseminated to massive sphalerite, minor pyrite/chalcopyrite
MNRC070	106	107	6.8593	0.28802	3.11	
MNRC070	107	108	8.0337	0.2632	2.85	
MNRC070	108	109	5.6885	0.20714	4.22	
MNRC070	109	110	5.7118	0.42399	4.71	
MNRC070	110	111	2.2797	0.47895	4.62	
MNRC070	111	112	8.2154	0.40884	4.67	
MNRC070	112	113	12.9501	0.45573	5.15	
MNRC070	113	114	11.3409	0.15976	4.23	
MNRC070	114	115	5.5452	0.34447	4.27	
MNRC070	115	116	10.8586	0.23484	3.05	
MNRC070	116	117	10.1273	0.30435	4.90	
MNRC070	117	118	8.9862	0.27098	3.95	
MNRC070	118	119	8.995	0.36075	4.62	
MNRC070	119	120	4.8893	0.41503	4.41	
MNRC070	120	121	4.3258	0.18227	2.38	
MNRC070	121	122	1.6992	0.13767	3.12	
MNRC070	122	123	0.8647	0.06441	0.93	
MNRC070	123	124	2.5567	0.30788	3.73	Disseminated pyrite, minor chalcopyrite
MNRC070	124	125	0.3607	0.02096	0.29	
MNRC070	125	126	0.2349	0.01524	0.21	
MNRC070	126	127	0.2979	0.01854	0.30	
MNRC070	127	128	0.17	0.00716	0.17	
MNRC070	128	129	1.0504	0.38821	3.66	Semi-massive sphalerite, minor pyrite/chalcopyrite
MNRC070	129	130	3.4819	0.22184	2.85	
MNRC070	130	131	1.2277	0.11205	1.35	
MNRC070	131	132	0.7294	0.15781	1.44	Disseminated to semi-massive sphalerite, minor pyrite/chalcopyrite
MNRC070	132	133	0.4213	0.0438	0.60	
MNRC070	133	134	0.7707	0.5433	4.51	
MNRC070	134	135	0.231	0.35085	3.71	
MNRC070	135	136	0.1228	0.18151	2.07	
MNRC070	136	137	0.1143	0.11618	1.36	
MNRC070	137	138	0.3832	0.22169	2.36	
MNRC070	138	139	0.3747	0.24131	2.78	
MNRC070	139	140	1.6779	0.25252	3.11	
MNRC070	140	141	1.9527	0.04809	0.79	
MNRC070	141	142	1.5601	0.05427	0.84	
MNRC070	142	143	1.6324	0.04538	0.62	
MNRC070	143	144	0.6133	0.08257	1.01	
MNRC070	144	145	0.4741	0.43296	3.75	
MNRC070	145	146	1.738	0.19384	2.17	
MNRC070	146	147	3.1671	0.16676	2.69	Semi-massive sphalerite, minor py/cpy
MNRC070	147	148	4.2923	0.19687	2.11	Disseminated pyrite, minor chalcopyrite
MNRC070	148	149	2.79	0.13926	1.95	
MNRC070	149	150	2.4705	0.13139	1.98	
MNRC070	150	151	0.923	0.1115	1.35	
MNRC070	151	152	0.8481	0.10841	1.00	
MNRC070	152	153	1.3679	0.17017	1.51	
MNRC070	153	154	1.9859	0.16504	2.04	Semi-massive sphalerite, minor py/cpy
MNRC070	154	155	1.0873	0.15659	1.84	Disseminated sphalerite, pyrite/chalcopyrite
MNRC070	155	156	0.9906	0.11153	1.40	
MNRC070	156	157	0.8114	0.0889	0.92	
MNRC070	157	158	0.387	0.01604	0.22	
MNRC070	158	159	0.5004	0.04322	1.15	

Hole ID	From	To	Zn%	Cu %	Ag g/t	Mineralisation
MNRC070	159	160	0.5693	0.05588	0.67	Disseminated pyrite/rare chalcopyrite
MNRC070	160	161	0.3369	0.04257	0.52	
MNRC070	161	162	0.3424	0.06948	0.64	
MNRC070	162	163	0.1947	0.12709	1.02	
MNRC070	163	164	0.0735	0.05865	0.52	
MNRC070	164	165	0.0261	0.00689	0.09	
MNRC070	165	166	0.053	0.02549	0.20	
MNRC070	166	167	0.0583	0.02223	0.21	
MNRC070	167	168	0.1075	0.06115	0.62	
MNRC070	168	169	0.1090	0.00767	0.10	
MNRC070	169	170	0.0486	0.02419	0.46	Disseminated pyrite
MNRC070	170	171	0.0589	0.02753	0.52	
MNRC070	171	172	0.0522	0.01965	0.48	
MNRC070	172	173	0.1244	0.02031	1.05	
MNRC070	173	174	0.0594	0.00899	0.16	
MNRC070	174	175	0.1881	0.22268	1.51	
MNRC070	175	176	0.4550	0.20065	2.54	
MNRC070	176	177	0.1531	0.06693	1.66	
MNRC070	177	178	0.0685	0.02601	1.78	
MNRC070	178	179	0.0572	0.03141	1.12	
MNRC070	179	180	0.0654	0.07772	0.57	
MNRC070	180	181	0.0238	0.02304	0.23	
MNRC070	181	182	0.0510	0.07174	0.45	
MNRC070	182	183	0.0277	0.16685	0.78	
MNRC070	183	184	0.0161	0.06052	0.33	
MNRC070	184	185	0.0333	0.0384	0.23	
MNRC070	185	186	0.0139	0.04159	0.30	
MNRC070	186	187	0.0109	0.02672	0.28	
MNRC070	187	188	0.0107	0.02483	0.31	
MNRC070	188	189	0.0108	0.02093	0.25	
MNRC070	189	190	0.0161	0.00502	0.08	
MNRC070	190	191	0.0127	0.00715	0.16	
MNRC070	191	192	0.0094	0.01019	0.16	
MNRC070	192	193	0.0121	0.0136	0.17	
MNRC070	193	215				None
MNRC070	215	216	0.0121	0.00366	0.06	Disseminated pyrite/rare chalcopyrite
MNRC070	216	217	0.0178	0.00644	0.09	
MNRC070	217	218	0.0196	0.01	0.13	
MNRC070	218	223	NR			None
MNRC070	223	224	0.0254	0.00392	0.12	Disseminated pyrite/rare chalcopyrite
MNRC070	224	225	0.0132	0.00459	0.29	
MNRC070	225	226	0.0208	0.01063	0.19	
MNRC070	226	227	0.0202	0.00632	0.08	
MNRC070	227	228	0.0146	0.00295	0.09	
MNRC070	228	229	0.019	0.00423	0.14	
MNRC070	229	230	0.0193	0.00939	0.08	
MNRC070	230	231	0.0164	0.00518	0.25	
MNRC070	231	232	0.0106	0.00932	0.25	
MNRC070	232	233	0.004	0.0091	0.27	
MNRC070	233	234	0.0045	0.00933	0.32	
MNRC070	234	235	0.0037	0.01069	0.12	
MNRC070	235	240	NR			None

Appendix 2 JORC Code, 2012 Edition – Table 1 - 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 down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (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.*	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. Previous diamond drilling has also been sampled at approximate 1m intervals, utilising geological contacts where necessary.
Drilling techniques	• *Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	Drilling type is reverse circulation (RC) percussion drilling, using a 4.5" face-sampling drill bit.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	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 studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	Chips from 1m RC percussion drilling intervals were logged according to industry standard practice and representative samples stored in chip trays. Logging was qualitative in nature and recorded using standard logging templates. The resulting data was uploaded to a Datashed database and validated. 100% of the drilling was logged.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all cores taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	Assaying for this current RC program is being undertaken by Intertek Perth utilising their 4A /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.being sampled and appropriate for the sample type.being sampled and appropriate for the sample type.

Criteria	JORC Code explanation	Commentary
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.* • *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.* • *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.*	Previous drill sample 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. Assaying for this current RC program is being undertaken by Intertek Perth utilising their 4A /MS48 (four acid digest/ICP-MS) package. Gold and PGE assays will be completed by fire assay/ 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.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	Significant intersections have been reviewed and verified by company technical and management personnel. 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 (Appendix 1).
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	Drill hole collar and rock chip sample locations have been verified with handheld GPS with a ±5 m degree of accuracy. 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 ±5m.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	Data spacing is 1 m intervals downhole. Drill holes spaced at approximately 20 m intervals along strike of the Kultarr resource. The drilling intersection announced presents sufficient data to establish 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. No sample compositing has been applied.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *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.*	The drilling and sampling orientation is not considered to have resulted in a true width intersection of the zinc mineralised zone (see figure 1, cross section). 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 haningwall 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	• *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 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	• *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* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	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"

Criteria	JORC Code explanation	Commentary
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	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	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').*	The orientation and dip of the reported zinc RC drill hole MNRC070 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.
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, 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 previous relevant results in announcement by Metals Australia Ltd, 24 July 2018. "Results of RC 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	• *The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Further drilling to test the grade, thickness and continuity of lithium mineralisation at the Manindi Project, as discussed in the previous announcements. Further diamond drill testing to determine down plunge extensions of the Kultarr mineral resource.