

ASX Announcement
10 May 2022

ASX:MLS

Spectacular 68m Zinc-Copper Drill Hit at Manindi

AND

New Nickel/Copper Sulphide Discovery on 3km Manindi West Trend

- Metals Australia has drilled two RC holes testing key base metals targets at the Manindi Project in parallel with the separate 3,500m drilling program testing lithium bearing pegmatites¹.
- **RC hole MNRC070, drilled to test down-plunge extensions of the Kultarr zinc deposit, intersected a 68m zone of massive to disseminated zinc-copper sulphide mineralisation.**
- Initial hand-held XRF readings on RC chips from MNRC070 recorded up to 17.4% Zn and averaged over 2.8% Zn over 68m from 88m downhole. This included a 16m zone averaging 7.4% Zn and 0.28% Cu from 105m downhole (*see portable XRF (pXRF) spot-readings in MNRC070, Appendix 1*).

Previous high-grade intersections at Kultarr include 16.07m @ 8.08% Zn from 140.93² in MND065.

- **RC hole MNRC071, drilled to test an electromagnetic (EM) anomaly on the parallel “Manindi West” (a.k.a. “Brushtail”) trend, 2km SW of Kultarr, intersected 17m of massive to disseminated sulphides from 56m downhole including a 7m semi-massive sulphide zone from 58m downhole.**
- Hand-held XRF readings from MNRC071 indicate strongly anomalous copper, nickel, cobalt, vanadium and zinc in mafic intrusive rocks. **This represents a new discovery of base metal sulphide mineralisation at Manindi on a previously untested >3km magnetic trend.**
- Samples from both MNRC070 and MNRC071 have been submitted to Intertek Laboratories in Perth for a full suite of analyses.
- A follow-up diamond drilling program will be undertaken following the assay results, with the aim of significantly increasing the size of the Manindi zinc resource. This program is designed to:
 - Further extend the Kultarr and Kowari zinc resources and enable down hole electromagnetic (DHEM) surveys to be undertaken to locate off-hole conductors for further drill testing and,
 - Test the new Brushtail sulphide discovery at Manindi West with diamond drilling and DHEM surveys to define/locate in-hole and off-hole conductors for further drill testing.

Metals Australia Chairman, Mike Scivolo, said: “In addition to the excellent results from the lithium program at Manindi, we have now drill intersected two exciting base metal sulphide zones at the project.

“The intersection of 68 metres of zinc and copper sulphide mineralisation at our Kultarr zinc project demonstrates potential to significantly grow our high-grade zinc resources.

“On top of that, it looks like we’re onto a parallel base-metal trend that has strongly anomalous copper, nickel, cobalt, vanadium and zinc in the only hole to date that has tested this 3km trend.

“The Company is now well funded to advance not only the lithium drill-out but also to grow the base metal sulphide resource on this very exciting project.”

Metals Australia Ltd (“MLS” or the “Company”) is pleased to announce that **drilling for extensions of the Kultarr high-grade zinc resource has intersected a 68m downhole zone of massive to disseminated sulphide mineralisation in MNRC070** at the Company’s Manindi Project (“Manindi” or “the Project”), located 20 km southwest of Youanmi in the Murchison District of Western Australia (see location, Figure 1).

In addition, a second RC hole, **MNRC071**, has tested a previously untested EM anomaly at **Brushtail Prospect** (Figure 1), associated with a 3km strike-length parallel magnetic western trend, **intersecting a 17m zone of massive to disseminated sulphide mineralisation from 56m downhole including a 7m semi-massive sulphide zone from 58m downhole**. Preliminary hand-held XRF readings indicate strongly anomalous copper, nickel, cobalt, vanadium and zinc values within the 7m semi-massive sulphide zone from 58m.

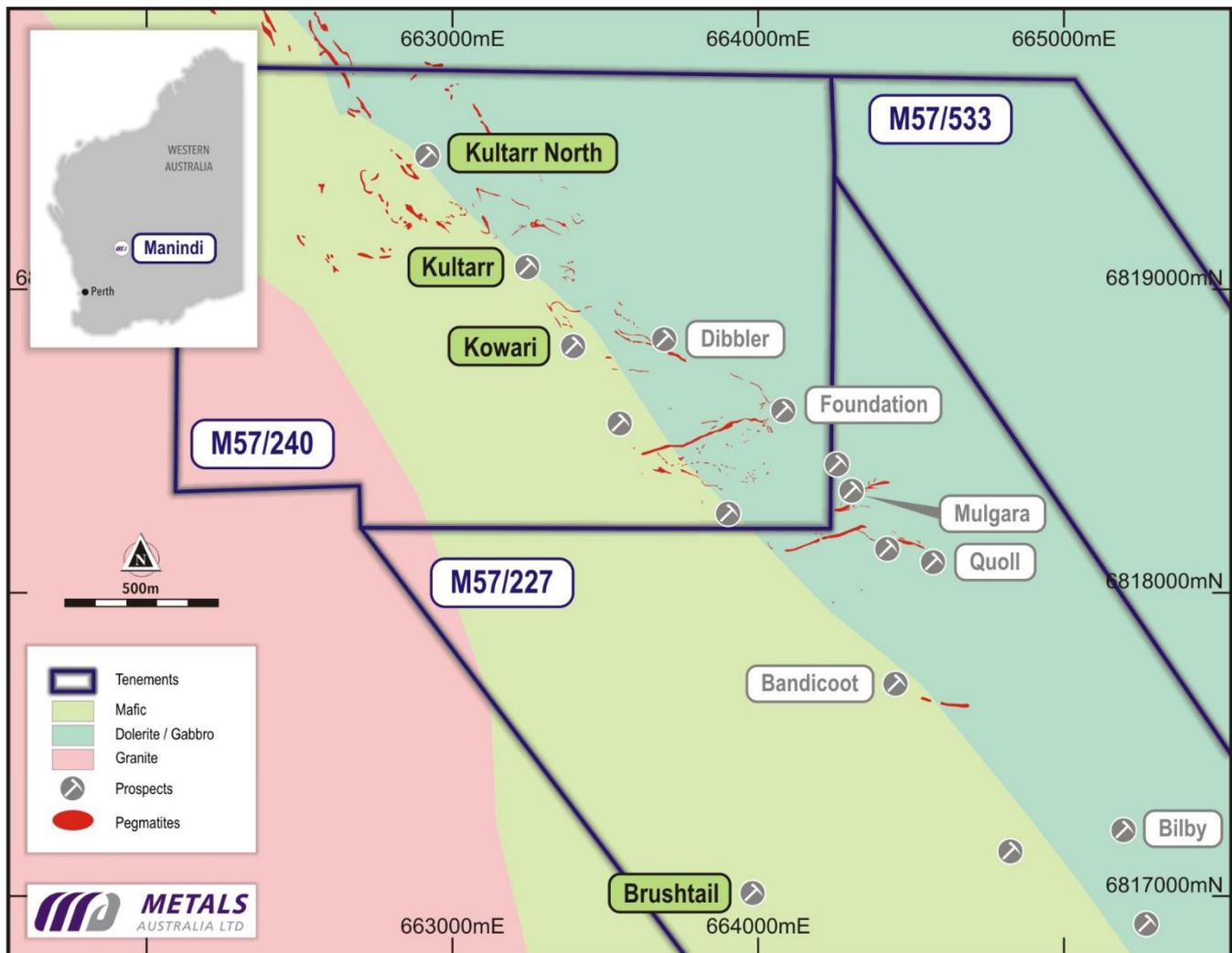


Figure 1: Manindi Zinc Project. Location of lithium prospects and Kultarr and Kowari zinc prospects

Manindi is located on three granted mining licences and includes the high-grade **Kultarr and Kowari Zinc deposits** (Figure 2, below). These deposits 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).

RC hole **MNRC070**, which intersected the 68m of sulphide mineralisation, was drilled to test for extensions of the high-grade zinc mineralisation at Kultarr that plunges to the south of the existing resource towards the previously detected “K2” down hole EM (DHEM) conductor (see Figure 2 and longitudinal projection, Figure 3).

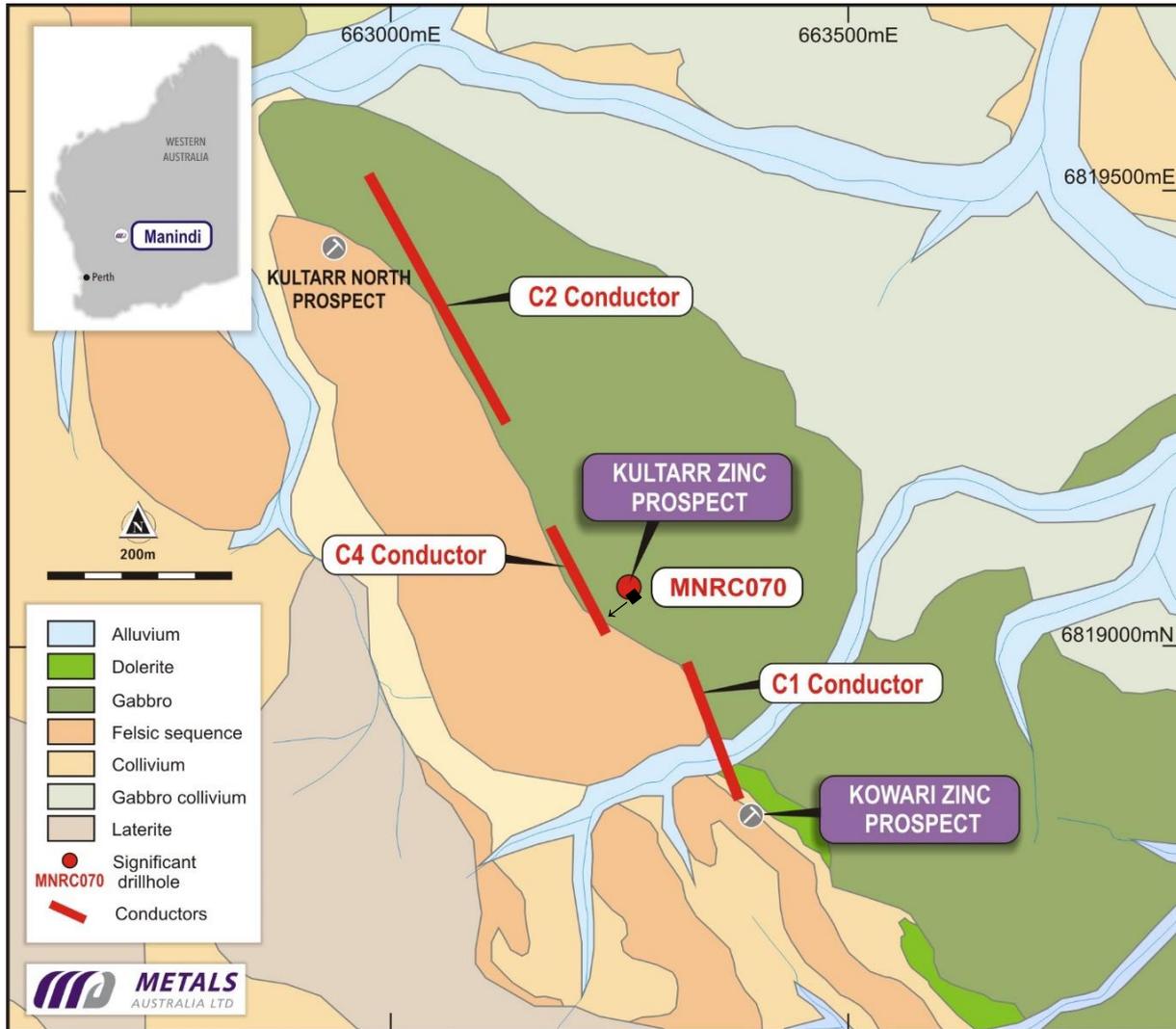


Figure 2: Manindi Zinc Project. Kultarr and Kowari Prospects with projected EM conductors and latest drilling

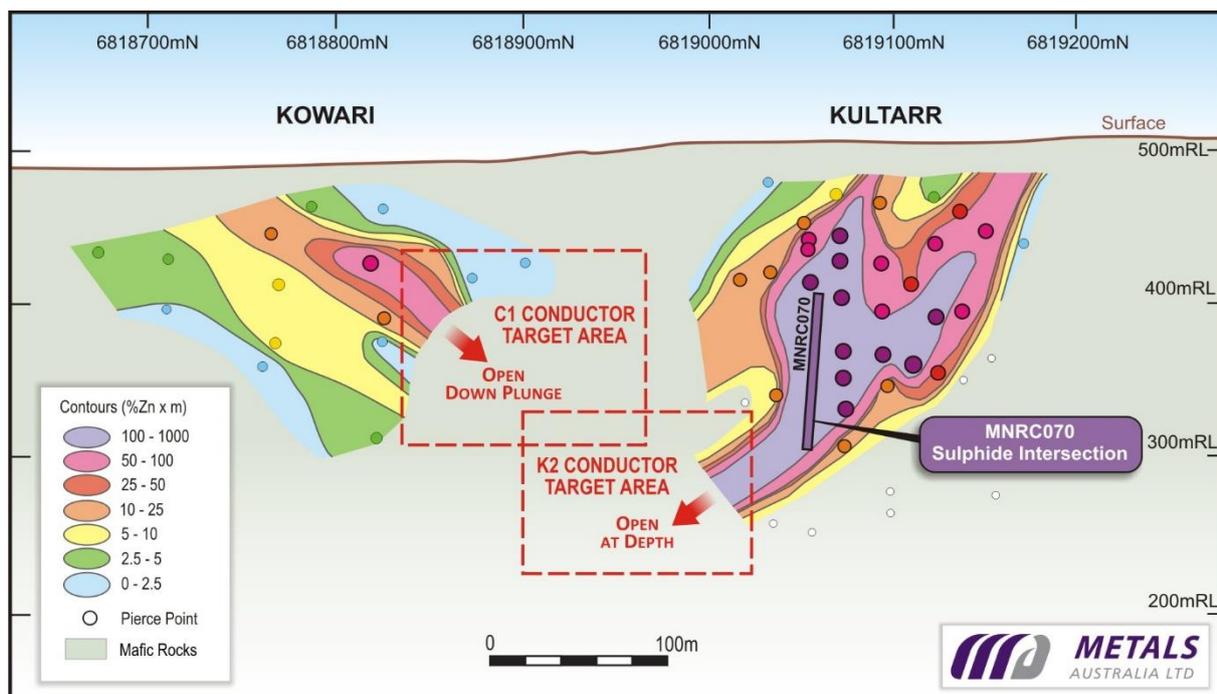


Figure 3: Manindi Zinc Project. Kultarr and Kowari Longitudinal Projection with MNRC070 sulphide Intersection

Details of the Kultarr Sulphide 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 88m to 156m** (see Figure 3, cross section, below). The zone includes visible sphalerite (zinc sulphide), pyrite and minor chalcopyrite (copper sulphide).

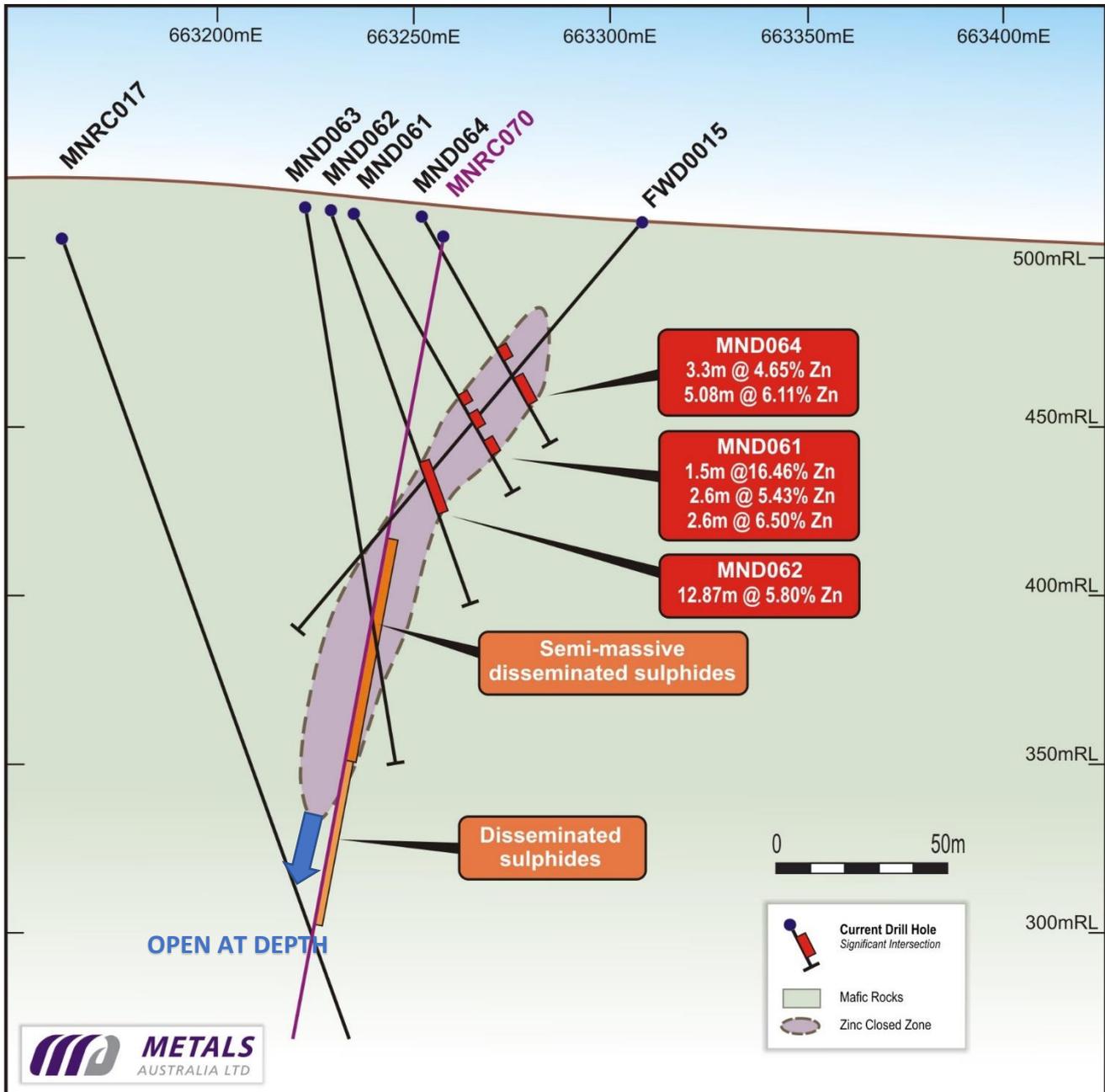


Figure 4: Manindi Zinc Project. Cross section through the Kultarr zinc deposit with MNRC070 sulphide Intersection

Portable XRF (pXRF) readings on the MNRC070 RC percussion chips were taken every metre through the visible sulphides zone. **The range of pXRF values within the identified mineralised zone from 88m to 156m (downhole) depth are from 0.1% Zn to 17.4% Zn, averaging 2.8% Zn. This includes a higher-grade 16m zone from 105m to 121m (downhole) depth with a range of values from 3.7% Zn to 17.4% Zn, averaging 7.4% Zn.** The pXRF readings are unrepresentative spot indications of grade only and laboratory assays (ICP-MS/OES) are required to confirm representative grades and intervals. Appendix 1 includes a table of pXRF readings and sulphide zones in MNRC070.

Previous diamond drilling of the **Kultarr** resource zone in 2017² (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 (see Figure 3)**

Downhole Time-domain Electromagnetic (DHTEM) surveys conducted in these diamond drill-holes detected off-hole conductors down-plunge of the Kultarr mineralisation, including the K2 conductor (Figure 3). **The intersection of sulphide mineralisation in MNRC070 indicates that the high-grade mineralisation continues down plunge towards this conductor** and 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, plunging northwest towards the Kultarr sulphide zone (Figure 3).

The planned diamond drilling program will test whether the two 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 to the northwest of Kultarr - Figure 2).

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.

The New sulphide Discovery on Parallel Brushtail Trend:

A second drillhole targeting base metal sulphides, MNRC071, tested a previously detected EM anomaly associated with a parallel magnetic zone to the southwest of the zinc trend at **Brushtail** (see Figure 1 and 5).

The EM anomaly (**MNV02**) (see Figure 5 for location) was detected by a previous fixed loop TEM survey and was described by Southern Geoscience (SGC) in 2012³ as a potential new discovery on a trend that had not received EM surveying previously. The anomaly was interpreted as a strong bedrock TEM conductor approximately 50m below surface and dipping to the southwest.

The RC hole that tested the MNV02 EM anomaly, **MNRC071**, was drilled from at -60° towards the northeast, targeting the top of the EM anomaly from 65m to 95m downhole, as proposed by SGC. **MNRC071 intersected a 17m zone of massive to disseminated sulphide mineralisation from 56m downhole including a 7m semi-massive sulphide zone from 58m downhole.**

Preliminary hand-held pXRF readings from MNRC071 indicate strongly anomalous copper, nickel, cobalt, vanadium and zinc values within the 7m semi-massive sulphide zone from 58m. PXRf values range from 720ppm Cu to 2751ppm (0.27%) Cu (average 0.12% Cu), 456ppm to 2502ppm (0.25%) Ni (average 0.1% Ni and include high spot values for cobalt (up to 1,149ppm, 0.11% Co) and vanadium (up to 4,297ppm, 0.42% V). The sulphides are hosted by mafic to ultramafic rocks and the mineralogy of the sulphides indicates a potential mafic/ultramafic intrusive related magmatic sulphide zone.

The sulphide intersection in MNRC071 represents a new discovery of mafic intrusive hosted nickel, copper, cobalt and vanadium bearing sulphides on a new 3km long trend that has not been previously tested.

Further, diamond drilling is planned to test this new sulphide discovery at depth and along strike. DHEM will be carried out in these holes to detect both in-hole and off-hole conductors for further drilling.

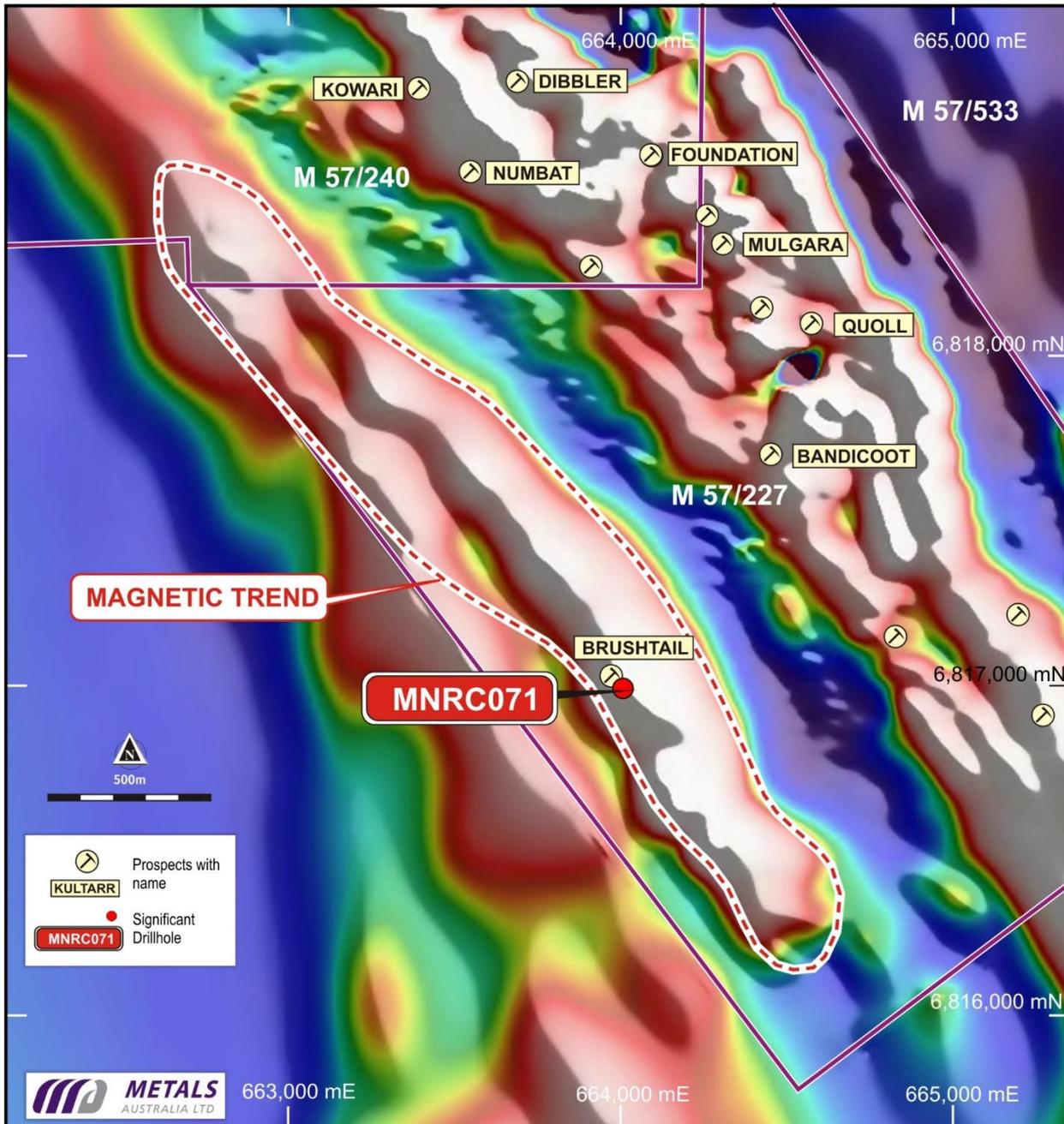


Figure 5: Manindi Project. Total Magnetic Intensity image showing main zinc corridor and Brushtail Trend to the west

Table 1 below shows drillhole details for MNRC070 and MNRC071.

Hole Id	Grid	Northing	Easting	Azimuth°	Dip°	Depth
MNRC070	GDA94 Zone 50	6819064	663260	240	-80	240
MNRC071	GDA94 Zone 50	6817000	663990	015	-60	130

Appendix 1 shows pXRF values and sulphides description in the two RC holes.

Appendix 2 is JORC Table 1.

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 (Figure 1).

The Manindi Zinc Project includes the high-grade **Kultarr** and **Kowari Zinc deposits** (Figure 1 and 2), 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 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 1 and 2).

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, Figure 1).

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:

- **15m @ 1.20% Li₂O from 34m, including 5m @ 1.53% Li₂O from 38m in MND018, and,**
- **3m @ 1.00% Li₂O from 41m in MND022⁴** (see locations, Figure 1).

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% Li₂O from 18m incl. 3m @ 1.65% Li₂O with up to 1.96% Li₂O**
- **MNRC032: 7m @ 599ppm Ta₂O₅**
- **MNRC033: 8m @ 1.00% Li₂O, 158ppm Ta₂O₅ from 32m, and 7m @ 1.29% Li₂O, 242ppm Ta₂O₅ from 42 m incl. 5m @ 1.53% Li₂O**

Preliminary flotation tests on previous diamond drilling samples produced concentrates with grades up to 3.05% Li₂O and lithium recovery of up to 77% from a concentrated 30% of the mass feed⁷. Flotation tails contained significant tantalite mineralisation (Ta₂O₅) 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 Pegmatite⁸ (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 1).

Rockchip sample results^{4,8} averaging >1% Li₂O with Cs, Ta and >0.4% Rb and up to 2.30% Li₂O and 0.70% Rb², 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% Li₂O, 296 ppm Ta₂O₅ and up to 746ppm Cs₂O**⁶.

The company is close to completing a 40 to 45 hole, over 3,500m, RC drilling program 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% Li₂O, 0.32% Rb from 19m (down hole) in MNRC042,**
 - **including 13.0m @ 1.25% Li₂O, 0.34% Rb from 21m,**
- **12m @ 0.86% Li₂O, 0.30% Rb from 62m (down hole) in MNRC043,**
 - **including 4.0m @ 1.37% Li₂O, 0.33% Rb from 68m,**

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 (Cg¹⁰)** (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 project¹⁰.

Recently completed Phase 2 metallurgical tests produced very encouraging results¹² 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 targets¹³.

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 airborne 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/anomalies¹³.

References

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.*

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

*****ENDS*****

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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 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: pXRF Results MNRC070 and MNRC071

Hole ID	From	To	Zn%	Cu %	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		
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	0.01	0.01	Disseminated pyrite, minor chalcopyrite
MNRC070	77	78	0.01	0.01	
MNRC070	78	79	0.01	0.01	
MNRC070	79	80	0.01	0.01	
MNRC070	80	81	0.01	0.01	
MNRC070	81	82	0.01	0.01	
MNRC070	82	83	0.01	0.01	
MNRC070	83	84	0.19	0.01	
MNRC070	84	85	0.01	0.01	
MNRC070	85	86	0.01	0.01	
MNRC070	86	87	0.24	0.01	
MNRC070	87	88	0.01	0.01	
MNRC070	88	89	0.78	0.27	Massive sphalerite, minor chalcopyrite/pyrite
MNRC070	89	90	10.58	0.01	
MNRC070	90	91	0.86	0.97	
MNRC070	91	92	1.05	0.27	
MNRC070	92	93	0.1	0.01	
MNRC070	93	94	0.01	0.01	Disseminated pyrite, minor chalcopyrite
MNRC070	94	95	0.01	0.01	
MNRC070	95	96	0.01	0.01	
MNRC070	96	97	0.01	0.01	
MNRC070	97	98	0.01	0.01	
MNRC070	98	99	0.01	0.01	
MNRC070	99	100	0.01	0.18	Massive sphalerite, minor chalcopyrite/pyrite
MNRC070	100	101	0.39	0.19	
MNRC070	101	102	4.1	0.32	
MNRC070	102	103	3.64	0.15	
MNRC070	103	104	0.3	0.01	
MNRC070	104	105	1.06	0.17	Disseminated sphalerite, minor chalcopyrite/pyrite

Hole ID	From	To	Zn%	Cu %	Mineralisation
MNRC070	105	106	3.92	0.09	Disseminated to massive sphalerite, minor pyrite/chalcopyrite
MNRC070	106	107	4.72	0.26	
MNRC070	107	108	8.99	0.2	
MNRC070	108	109	6.11	0.24	
MNRC070	109	110	13.99	1.09	
MNRC070	110	111	0.85	0.8	
MNRC070	111	112	10.12	0.4	
MNRC070	112	113	5.43	0.12	
MNRC070	113	114	16.63	0.01	
MNRC070	114	115	9.01	0.18	
MNRC070	115	116	5.23	0.24	
MNRC070	116	117	17.41	0.14	
MNRC070	117	118	3.71	0.01	
MNRC070	118	119	4.04	0.01	
MNRC070	119	120	4.7	0.14	
MNRC070	120	121	4.09	0.42	
MNRC070	121	122	1.17	0.28	
MNRC070	122	123	1.23	0.16	
MNRC070	123	124	0.19	0.01	Disseminated pyrite, minor chalcopyrite
MNRC070	124	125	0.73	0.01	
MNRC070	125	126	0.01	0.01	
MNRC070	126	127	0.01	0.01	
MNRC070	127	128	0.23	0.01	
MNRC070	128	129	0.75	0.47	Semi-massive sphalerite, minor pyrite/chalcopyrite
MNRC070	129	130	2.06	0.31	
MNRC070	130	131	0.88	0.15	
MNRC070	131	132	0.32	0.01	Disseminated to semi-massive sphalerite, minor pyrite/chalcopyrite
MNRC070	132	133	0.34	0.01	
MNRC070	133	134	0.71	0.01	
MNRC070	134	135	0.01	0.01	
MNRC070	135	136	0.14	0.39	
MNRC070	136	137	0.14	0.01	
MNRC070	137	138	1.85	0.11	
MNRC070	138	139	0.45	0.13	
MNRC070	139	140	2.62	0.21	
MNRC070	140	141	1.93	0.01	
MNRC070	141	142	0.34	0.01	
MNRC070	142	143	1	0.01	
MNRC070	143	144	0.18	0.01	
MNRC070	144	145	1.11	0.23	
MNRC070	145	146	0.83	0.01	
MNRC070	146	147	14.37	0.01	Semi-massive sphalerite, minor pyrite/chalc
MNRC070	147	148	0.23	0.01	Disseminated pyrite, minor chalcopyrite
MNRC070	148	149	0.61	0.01	
MNRC070	149	150	1.39	0.01	
MNRC070	150	151	0.43	0.01	
MNRC070	151	152	1.56	0.01	
MNRC070	152	153	0.01	0.01	
MNRC070	153	154	10.33	0.3	Semi-massive sphalerite, minor pyrite/chalc
MNRC070	154	155	1.04	0.01	Disseminated sphalerite, pyrite/chalcopyrite
MNRC070	155	156	1.02	0.01	
MNRC070	156	157	0.33	0.01	
MNRC070	157	158	0.32	0.01	
MNRC070	158	159	0.29	0.01	

Hole ID	From	To	Zn%	Cu %	Mineralisation
MNRC070	159	160	0.13	0.01	Disseminated pyrite/rare chalcopyrite
MNRC070	160	161	NR		
MNRC070	161	162			
MNRC070	162	163			
MNRC070	163	164			
MNRC070	164	165			
MNRC070	165	166			
MNRC070	166	167			
MNRC070	167	168			
MNRC070	168	169			
MNRC070	169	170	NR		Disseminated pyrite
MNRC070	170	171			
MNRC070	171	172			
MNRC070	172	173			
MNRC070	173	174			
MNRC070	174	175			
MNRC070	175	176			
MNRC070	176	177			
MNRC070	177	178			
MNRC070	178	179			
MNRC070	179	180			
MNRC070	180	181			
MNRC070	181	182			
MNRC070	182	183			
MNRC070	183	184			
MNRC070	184	185			
MNRC070	185	186			
MNRC070	186	187			
MNRC070	187	188			
MNRC070	188	189			
MNRC070	189	190			
MNRC070	190	191			
MNRC070	191	192			
MNRC070	192	193			
MNRC070	193	215			None
MNRC070	215	216	NR		Disseminated pyrite/rare chalcopyrite
MNRC070	216	217			
MNRC070	217	218			
MNRC070	218	223	NR		None
MNRC070	223	224	NR		Disseminated pyrite/rare chalcopyrite
MNRC070	224	225			
MNRC070	225	226			
MNRC070	226	227			
MNRC070	227	228			
MNRC070	228	229			
MNRC070	229	230			
MNRC070	230	231			
MNRC070	231	232			
MNRC070	232	233			
MNRC070	233	234			
MNRC070	234	235			
MNRC070	235	240	NR		None



Hole ID	From	To	Zn ppm	Cu ppm	Ni ppm	Other ppm	Mineralisation
MNRC071	0	51	NR				None
MNRC071	51	52	114	275	94		Disseminated pyrite
MNRC071	52	55	NR				None
MNRC071	55	56	212	416	32		Disseminated pyrite/chalcopyrite
MNRC071	56	57	611	467	73		
MNRC071	57	58	287	430	89		
MNRC071	58	59	110	720	2502		Semi-massive chalcopyrite/pyrite
MNRC071	59	60	594	872	456		Disseminated pyrite/chalcopyrite
MNRC071	60	61	238	1781	1326		Semi-massive chalcopyrite/pyrite
MNRC071	61	62	247	1078	1159	Co 274, V 1967	
MNRC071	62	63	200	1281	941		Disseminated pyrite/chalcopyrite
MNRC071	63	64	143	1350	557		
MNRC071	64	65	2068	2751	592	Co 1149, V 4297	
MNRC071	65	66	72	105	247		Disseminated pyrite
MNRC071	66	67	213	415	20		
MNRC071	67	68	309	119	111		
MNRC071	68	69	322	174	147		
MNRC071	69	70	255	204	193		
MNRC071	70	71	392	160	299		
MNRC071	71	72	441	299	66		
MNRC071	72	73	793	293	294	Co 972	
MNRC071	73	81	NR				None
MNRC071	81	82	89	21	255		Disseminated pyrite
MNRC071	82	88	NR				None
MNRC071	88	89	171	262	160		Disseminated pyrite/chalcopyrite
MNRC071	89	90	422	7752	608		
MNRC071	90	91	283	10	211		
MNRC071	91	92	458	540	137		
MNRC071	92	96	NR				None
MNRC071	96	97	520	5156	145		Disseminated pyrite
MNRC071	97	98	396	1030	126		
MNRC071	98	99	169	112	46		
MNRC071	99	105	NR				None
MNRC071	105	106	174	100	85		Disseminated pyrite
MNRC071	106	109	NR				None
MNRC071	109	110	266	3	3		Disseminated pyrite
MNRC071	110	111	234	58	350		
MNRC071	111	130	NR				None

Appendix 2 JORC Code, 2012 Edition – Table 1 - Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. 	<p>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.</p> <p>Previous diamond drilling has also been sampled at approximate 1m intervals, utilising geological contacts where necessary.</p>
Drilling techniques	<ul style="list-style-type: none"> 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). 	<p>Drilling type is reverse circulation (RC) percussion drilling, using a 4.5" face-sampling drill bit.</p>
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<p>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.</p> <p>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.</p> <p>There is no apparent relationship between sample recovery and grade.</p>
Logging	<ul style="list-style-type: none"> 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. 	<p>Chips from 1m RC percussion drilling intervals were logged according to industry standard practice and representative samples stored in chip trays.</p> <p>Logging was qualitative in nature and recorded using standard logging templates. The resulting data was uploaded to a Datashed database and validated.</p> <p>100% of the drilling was logged.</p>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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. 	<p>Assaying for this current RC program is being undertaken by Intertek Perth utilising their 4A /MS48 (four acid digest/ICP-MS) package.</p> <p>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.</p> <p>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.</p>



Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> 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. 	<p>Previous drill sample assaying was completed by the Bureau Veritas (BV) laboratory based in Perth, Western Australia.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>
Verification of sampling and assaying	<ul style="list-style-type: none"> 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. 	<p>Significant intersections have been reviewed and verified by company technical and management personnel.</p> <p>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 Li₂O and Ta₂O₅ grades from assay data, as specified in the announcement.</p>
Location of data points	<ul style="list-style-type: none"> 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. 	<p>Drill hole collar and rock chip sample locations have been verified with handheld GPS with a ±5 m degree of accuracy.</p> <p>The grid system used is GDA94 datum, MGA zone 50 projection.</p> <p>Topographic control is based on a digital terrain model (DTM) with an accuracy of ±5m.</p>
Data spacing and distribution	<ul style="list-style-type: none"> 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. 	<p>Data spacing is 1 m intervals downhole drill holes spaced at approximately 40 m intervals along 3 traverses, as discussed in the announcement.</p> <p>Insufficient data is available to establish the degree of geological and grade continuity required for estimation of a resource.</p> <p>No sample compositing has been applied.</p>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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. 	<p>The drilling and sampling orientation is considered to have resulted in a true width intersection of the mineralised pegmatite dykes.</p> <p>Given the nature of the deposit type, the drilling and the sampling is therefore considered to achieve unbiased sampling.</p>
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<p>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.</p>

Criteria	JORC Code explanation	Commentary
Audits or reviews	<ul style="list-style-type: none"> 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 style="list-style-type: none"> 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. 	<p>The Company controls an 80% Interest in three granted Mining Licences in Western Australia covering the known mineralisation and surrounding area.</p> <p>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.</p> <p>There are no known impediments with respect to operating in the area.</p>
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<p>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.</p> <p>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.</p> <p>The zinc deposits have never been mined.</p> <p>The Project has not previously been explored for lithium.</p>
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<p>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.</p> <p>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.</p> <p>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.</p>
Drill hole Information	<ul style="list-style-type: none"> 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 style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth 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. 	<p>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".</p> <p>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"</p>

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<p>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.</p> <p>Where aggregate intercepts incorporate short lengths of high-grade results within longer lengths of lower grade results, these zones have been reported separately.</p> <p>No maximum or minimum grade truncations have been applied.</p> <p>No metal equivalents are reported.</p>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>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’).</i> 	<p>The orientation and dip of the reported lithium 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.</p> <p>The reported drillholes MNRC070 and MNRC071 were designed to investigate the potential for down plunge Zn mineralisation and an interpreted EM plate anomaly.</p>
Diagrams	<ul style="list-style-type: none"> <i>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.</i> 	<p>Appropriate maps are included in body of the announcement.</p>
Balanced reporting	<ul style="list-style-type: none"> <i>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.</i> 	<p>Full and representative reporting of relevant results in announcement by Metals Australia Ltd, 24 July 2018. “Results of RC percussion drilling program at Manindi Lithium Project”.</p>
Other substantive exploration data	<ul style="list-style-type: none"> <i>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.</i> 	<p>There are no other substantive exploration data.</p>
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<p>Further drilling to test the grade, thickness and continuity of lithium mineralisation at the Manindi Project, as discussed in the previous announcements.</p> <p>Further diamond drill testing to determine down plunge extensions of the Kultarr mineral resource</p>