



ASX ANNOUNCEMENT

7 June 2021

## **NMR expands exploration portfolio with three new tenement applications targeting copper, gold and nickel in WA**

### **Highlights:**

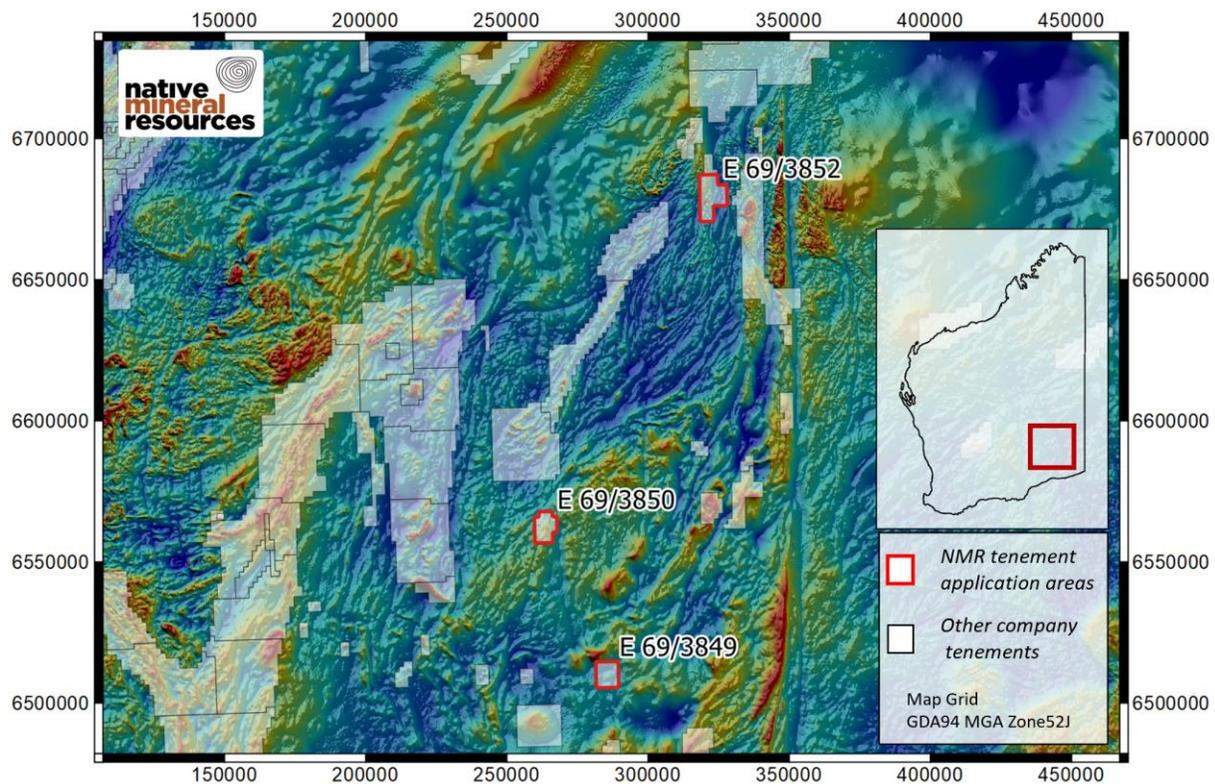
- NMR has lodged three new tenement applications over strategically placed, geophysically-defined targets in Western Australia.
- Tenements add approx. 274 km<sup>2</sup> to NMR's existing copper and gold exploration portfolio in WA and Queensland, taking NMR's total exploration landholding to approx. 2660km<sup>2</sup>
- Tenement E69/3852 is a high-priority magnetic and gravity anomaly discovered using the geophysical characteristics exhibited by the Nova-Bollinger Nickel deposit in the adjacent Frazer Range.
- E69/3850 and E69/3852 lie over coincident gravity and magnetics anomalies in a region where a regional Magnetotelluric (MT) geophysical survey shows a distinctive zone of relatively low resistivity beneath the target area, similar to the "Fingers of God" anomaly found beneath Olympic Dam.
- Tenement applications and associated targets are in a highly sought-after exploration region, giving NMR a strategic foothold in southeastern WA.
- Availability of new geophysical datasets over the area including MT and seismic give NMR a first-pass opportunity to explore these high potential targets in a highly prospective, yet underexplored region.
- Work program currently underway at Music Well Gold Project in WA and planning is well advanced to re-commence exploration at Palmerville Copper Project in North QLD this quarter.

Copper and gold exploration company Native Mineral Resources Holdings Limited (ASX: NMR), or ("NMR" the "Company"), is pleased to advise that the Company has applied for three new tenements

(E69/3852, E69/3850 and E69/3852) which cover ~274km<sup>2</sup> of ground in southeastern Western Australia. The area is highly prospective for copper, gold and nickel mineralisation.

Recent government geophysical surveys have highlighted the potential prospectivity of these tenements. Data from new Magnetotelluric (MT) geophysical and seismic surveys highlights several targets that will be prioritised for initial exploration. Preparations are in progress to quickly test the geophysical targets using high-resolution geophysical methods and a targeted drilling program once the application areas are granted. NMR is particularly excited as the general target areas have already been defined using existing geophysical data thereby speeding up the next phase of exploration.

Securing these key tenements will add to the pipeline of copper and gold projects currently being explored by NMR including near-surface copper opportunities along the almost 130km long, highly prospective Chillagoe Formation in Queensland and the growing, near-surface gold mineralisation at Music Well in Western Australia. The tenements included here are all located under less than 200m of cover (interpreted from geophysics) and all host short term drilling targets. An overview of the three tenement application areas is provided below.



**Figure 1.** Map showing the location of the three tenements under application by NMR. Base map is the 40m TMI image from the DMIRS with a west-to-east hill shade to enhance magnetic features. The tenement map shown here was obtained from DMIRS on 1st June 2021. Map grid is GDA94 MGA zone 52J and coordinate values are provided in meters. NMR tenement application areas are E69/3852, E69/3850 and E69/3849.

**Native Mineral Resources Holdings Limited** | ABN 93 643 293 716 ASX: NMR

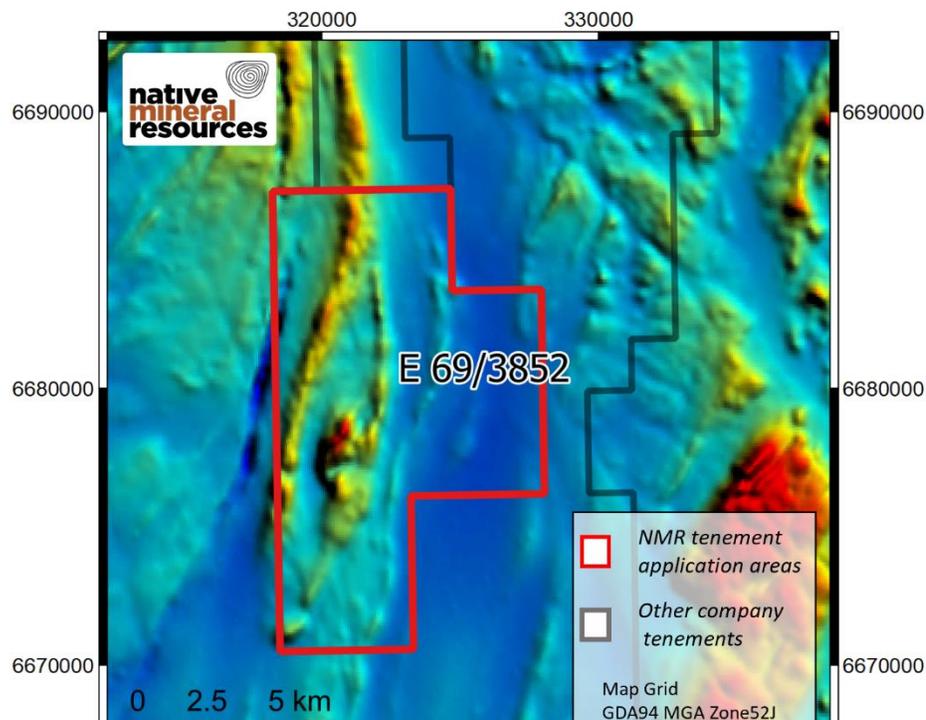
Suite 10, 6-14 Clarence Street, Port Macquarie NSW 2444

T: +61 2 6583 7833 | [info@nmresources.com.au](mailto:info@nmresources.com.au) | [www.nmresources.com.au](http://www.nmresources.com.au)

## Management Commentary

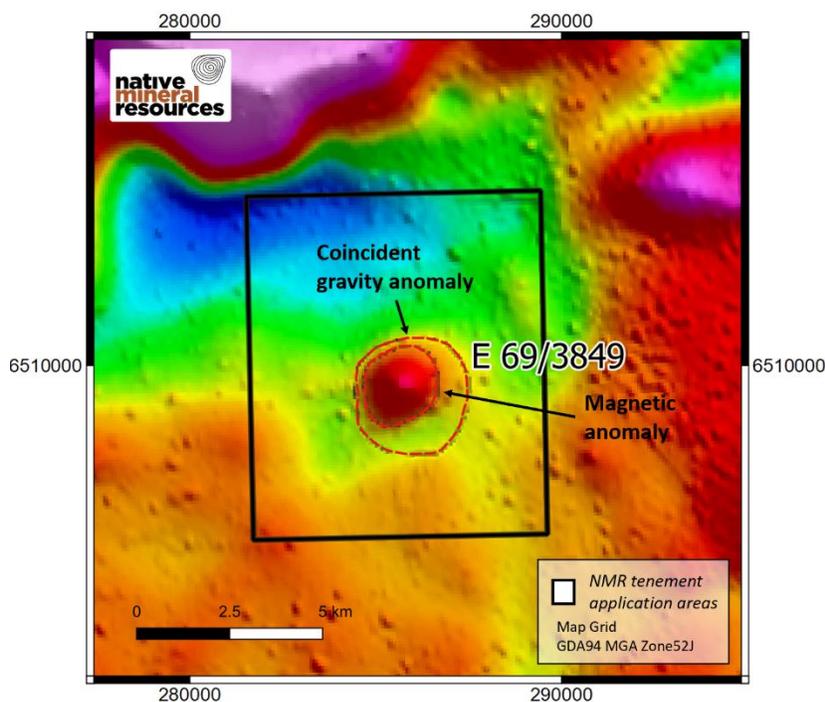
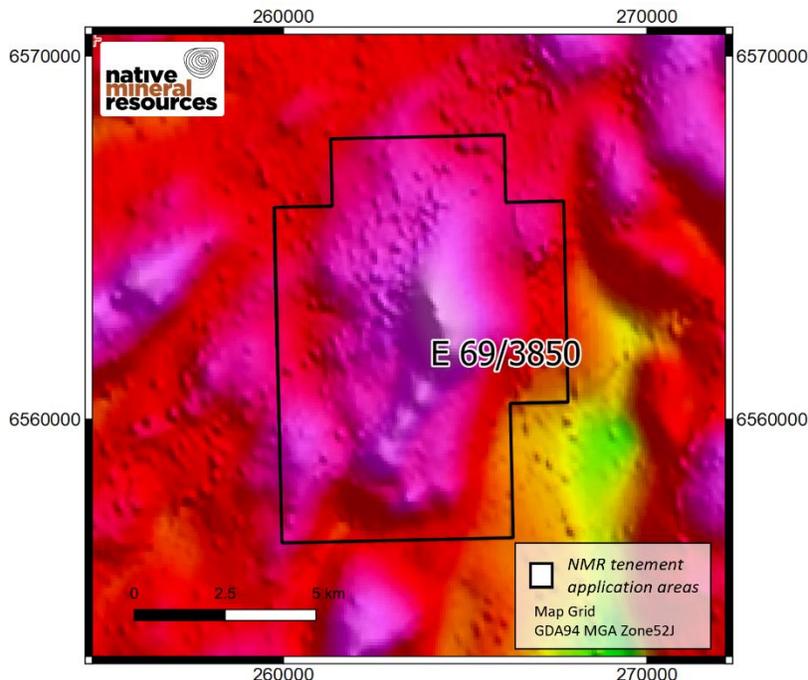
**NMR's Managing Director, Blake Cannavo, commented:** "We are very pleased to have secured applications over these highly sought-after targets in the Nullarbor region of Western Australia. These tenements complement NMR's existing strategic focus and provide exposure to several well-defined areas that demonstrate the potential host copper, gold and nickel mineralisation. Following the release of new geophysical data sets from a recently completed government study, this area has been keenly contested and we are pleased to secure this footprint. Pending the granting of these tenements, our technical team has already commenced planning our initial exploration programs for the Nullarbor, with a particular focus on the targets above the MT anomaly which point to similarities with the Olympic Dam "Fingers of God".

NMR has a busy pipeline of work planned across our growing tenement portfolio over the coming months and I look forward to providing regular updates on exploration work from across our projects over the coming weeks and months as the field season continues in 2021."

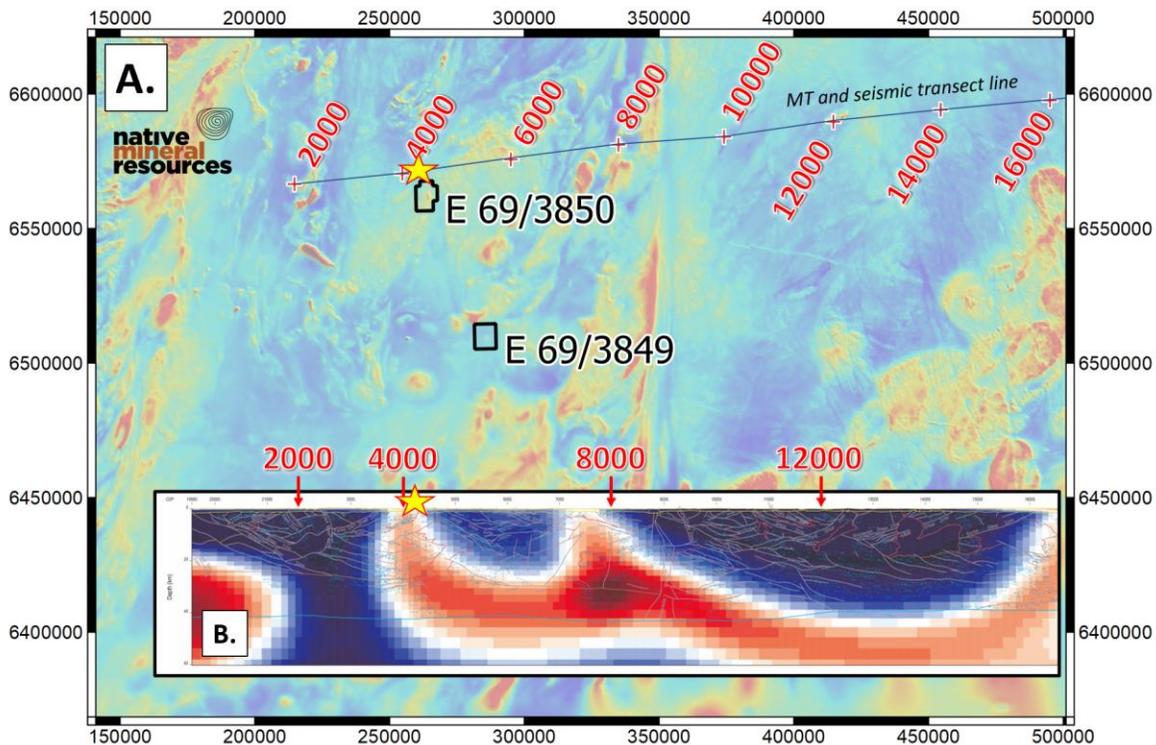


**Figure 2. Map of tenement application E69/3852 overlain on 40m TMI magnetic map of Western Australia. NMR are targeting the central part of an "Eye-shaped" structure similar to that housing IGO's Nova-Bollinger mine in the Frazer Range. Rio Tinto Exploration's recent application (November 2020) area lies immediately to the east of E69/3852. The high magnetic anomaly in the center of the structure is a short term geophysical and drill target for NMR. Grid reference is GDA94 MGA Zone 52J. Grid reference intervals are meters east and south.**

**Figure 3. Map showing the location of tenement application E69/3850 overlain on 20m TMI RTP magnetics map. The location of the magnetic high lies directly above the conductive anomaly discovered in the recent magnetotelluric survey shown in figure 5 below. NMR are targeting Olympic Dam-type IOCG or similar intrusion related copper-gold mineralisation at an estimated 150m below surface. Grid reference is GDA94 MGA Zone 52J. Grid reference**



**Figure 4. Map showing the location of tenement application E69/3849 overlain on 20m TMI RTP magnetics map. The magnetic high is also coincident with a gravity high found in regional 0.004 degree pixel resolution Bouger gravity data available from DMIRS. The target lies along the southern extension of the same major interpreted crustal structure, the Nurina Shear Zone, as hosts the target found on E69/3850 above. NMR are targeting Prominent Hill-type IOCG or similar intrusion related copper-gold mineralisation at an estimated 120-160m below surface. Grid reference is GDA94 MGA Zone 52J. Grid reference intervals are meters east and south.**



**Figure 5. (A) NMR Tenements overlain on 40m TMI magnetics map with the location of 2D seismic and MT transect line 13GA-EG1 with respective station numbers shown. Grid reference is GDA94 MGA Zone 52J. Grid reference intervals are meters east and south. Inset (B) shows the interpreted seismic structure lines overlain on the MT interpretation showing relative resistivity of the crust to 60 kilometres beneath the surface. More conductive areas are shown in Red. MT Results are from Spaggiari, CV, Dutch, RA, Doublier, MP, Pawley, MJ, Thiel, S, Wise, TW, Kennett, BLN, Gessner, K, Smithies, RH, Holzschuh, J and Clark, DJ 2017, Geological interpretation of the Madura and Coompana Provinces along the Eucla–Gawler seismic and magnetotelluric line 13GA-EG1: Geological Survey of Western Australia, non-series map.**

The acquisition of the two tenements (E69/3849 and E69/3850) was driven by geological and geophysical features and exploration criteria found to correlate with large Iron Oxide Copper Deposits (IOCG). Some of the criteria that the target areas meet include, but not limited to;

- 1) magnetic anomaly at the scale of other IOCG deposits,
- 2) fall on major lithospheric structure (Nurina Shear Zone) and associated intrusive rocks identified in Seismic data,
- 3) located at major deep crustal conductor “Finger of God” identified in magnetotelluric data,
- 4) located under cover and had no previous exploration,
- 5) located in an area with rapid growing interest as evidenced by increasing tenement applications including BHP and Rio Tinto.

-Ends-

The Board of Native Mineral Resources Holdings Ltd authorised this announcement to be lodged with the ASX.

For more information, please visit [www.nmresources.com.au](http://www.nmresources.com.au) or contact:

**Blake Cannavo**  
**Relations**  
**Managing Director and Chief Executive Officer**  
**Native Mineral Resources Holdings Limited**  
T: +61 2 6583 7833  
E: [blake@nmresources.com.au](mailto:blake@nmresources.com.au)

**Media & Investor**  
  
Sam Burns  
Six Degrees  
T: +61 400 164 067  
E: [sam.burns@sdir.com.au](mailto:sam.burns@sdir.com.au)

**Competent Person Statement:**

*The information that relates to Exploration Targets and Exploration Results is based on, and fairly represents, information compiled by Dr Simon Richards, a Competent Person, who is a Member of the AIG and AusIMM. Dr Richards is the Chief Geologist of NMR. Dr Richards has sufficient experience in both mining and exploration, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Dr Richards consents to the inclusion of the matters based on his information in the form and context in which it appears.*

**About Native Mineral Resources:**

**Native Mineral Resources** (ASX: NMR) is an Australian publicly listed minerals exploration company established to explore for copper and gold deposits in the Palmerville and Mount Morgan regions in North Queensland and for gold deposits in the Eastern Goldfields region in Western Australia (Figure 6).

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Suite 10, 6-14 Clarence Street, Port Macquarie NSW 2444

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Project	Tenement ID	Tenement Name	Sub-Block (Sqkm)	Key Commodity	Status
Palmerville, QLD	11980	Limestone Creek	4 (13.2)		Granted
Palmerville, QLD	18325	Bald Hills	15 (49.4)		Granted
Palmerville, QLD	19537	Mitchell River South	33 (108.6)		Granted
Palmerville, QLD	26891	Palmerville North	63 (207.27)		Granted
Palmerville, QLD	26893	Palmerville West	100 (329)	Copper	Granted
Palmerville, QLD	26894	Palmerville East	84 (276.36)		Granted
Palmerville, QLD	26895	Palmerville South	63 (292.81)		Granted
Palmerville, QLD	27396	East Palmerville North	100 (329)		Granted
Palmerville, QLD	27452	East Palmerville South	65 (213.85)		Granted
Mount Morgan, QLD	17850	Mount Morgan	13 (41.6)	Copper, Gold	Granted
Eastern Goldfields, WA	E37/1362	Music Well	58 (162)		Granted
Eastern Goldfields, WA	E37/1363	Music Well	39 (109)	Gold	Granted
Eastern Goldfields, WA	E31/1203	Arcoona	61 (171)		Granted
Eastern Goldfields, WA	E24/210	Mt Vettors	35 (98)	Gold, Nickel	In Transfer
Nullarbor, WA	E69/3849	South Nullarbor	25 (70)	Iron Oxide Copper Gold (IOCG)	In Application
Nullarbor, WA	E69/3850	Central Nullarbor	26 (72.8)		In Application
Nullarbor, WA	E69/3852	North Nullarbor	41 (114.8)	Nickel	In Application
TOTAL			825 (2,658.69)		

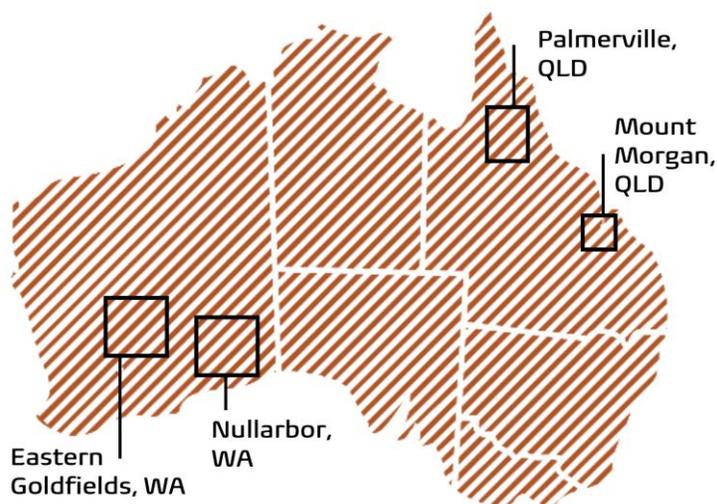


Figure 6: Native Mineral Resources' exploration portfolio

### **Palmerville Project**

The Palmerville Project is the Company's principal exploration asset and covers a near continuous strike length of 130km over an area of ~1,820km<sup>2</sup> centered 200km west-northwest of Cairns in North Queensland. The Project is considered prospective for the following deposit styles:

- Porphyry- and skarn-associated copper-zinc-gold mineralisation in Chillagoe Formation limestone-dominant strata.
- Porphyry-related copper-gold mineralisation in non-carbonate lithologies.
- Copper-zinc-gold volcanic massive sulphide or vein-style mineralisation.
- Orogenic-style gold-antimony mineralisation.
- Epithermal gold mineralisation distal to porphyry intrusions
- Alluvial gold akin to the historic Palmerville Goldfield.

Exploration results released in May 2021 (see ASX release "High-grade Copper confirmed within NMR's Palmerville project" 04 May 2021)

### **Eastern Goldfield Project**

The Yilgarn Craton is one of Australia's premier mineral provinces and host to major deposits of gold, nickel, zinc, silver, tantalum and iron ore and other commodities. Recent exploration success has discovered new gold deposits that are intrusion-related gold systems (IRGS), which has led to a greater exploration focus in areas that have received little exploration focus.

NMR has a landholding of 540km<sup>2</sup> in the Eastern Goldfields between Kalgoorlie and Leonora, in areas of prospective intrusive rocks, close to operating gold mines. The tenements are underexplored and offer opportunities to discover relatively new concepts of gold mineralisation. Exploration results released from stage 1 in May 2021 (ASX release "NMR awarded EIS grant to fund diamond drilling at Music Well 05 May 2021).