

## QUARTERLY ACTIVITY REPORT – MARCH 2023

### HIGHLIGHTS:

#### MANAGEMENT

- A share placement of 4,488,887 shares at \$0.09 per share was made on February 01, 2023. These shares came with an attaching Option (exercisable at \$0.20) on a 1 option for every 2 shares issued. These shares raised a total of \$403,999 (before costs).
- Appointment of Mr Greg Curnow as the New Chief Geologist.
- Mr Curnow is an experienced geologist with over 35 years' experience in both mining and exploration roles across gold, copper and base metals in Australia and internationally.

#### MANEATER PEAK POLYMETALLIC BRECCIA PROJECT, DIMBULAH, QLD

- Successful completion of two diamond drill holes at Maneater with all assays received.
- MPD002 drilled to a depth of 477.6m & MPD003 drilled to a depth of 543.3m.
- Both drill holes successfully identified sulphide mineralisation and have demonstrated significant volume of sulphide-bearing breccias.
- Best multi-element results for MPD003 now includes:
- 1m intervals grades up to 17.9g/t Au, 2.8% Zn, 0.19% Sb, 59.4g/t Ag, 0.72% Pb & 477ppm Cu.
- Best intersections for MPD003:
  - 446m @ 5.5g/t Ag, 0.02g/t Au, 0.13% Zn, 0.06% Pb & 100ppm Cu (from 99-544m end of hole).
    - Including 54m @ 16.4 g/t Ag, 0.08g/t Au, 0.33% Zn, 0.2% Pb & 130ppm Cu (from 238-292m).
- Best gold results from diamond drill hole MPD003 include:
  - 11m @ 2.22g/t Au (from 478m depth).
    - Including 1m @ 6.32g/t Au (from 478m depth).
    - Including 1m @ 17.9g/t Au (from 488m depth).
- Assay results received for both holes demonstrate higher silver, zinc, copper and gold than previous drilling.

#### General

In February, Greg Curnow was appointed as the new chief geologist and has been reviewing and prioritising all of NMR's projects and developing an exploration strategy for the upcoming year.

Copper- and gold-focussed exploration company **Native Mineral Resources Holdings Limited** (ASX: NMR), or ("NMR" or "the Company"), is pleased to provide its quarterly activity report for the three months ended 31 March 2023.

## Management Commentary

**Commenting on progress made during the December quarter, NMR's Managing Director, Blake Cannavo, said:**

*"This quarter was a difficult period for NMR with the resignation of Chief Geologist Dr Simon Richards in late 2022, and the ensuing search for his replacement. I am glad to announce that NMR has retained the services of Mr Greg Curnow as the new Chief Geologist, and he started working for NMR in February this year.*

*Greg is a highly experienced geologist with over 35 years of experience in mining and exploration in both Australia and overseas. He was previously a senior consultant with Sydney based geological consultants Geos Mining where he was exposed to numerous projects covering a raft of minerals including copper, gold, REE, lithium, base metals and coal.*

*Field work was limited during the quarter due to an exceptionally intense wet season in far north Queensland that has not allowed access to either the Maneater or Palmerville projects since late 2022.*

*NMR received the last of the drilling assays for drillhole MPD003 at Maneater and the results included exceptional gold assays including 1m @ 17.9g/t Au and 1m @ 6.32g/t Au, with both assays being from an intersection of 11m @ 2.22g/t Au).*

*Though the 11 metre intersection is from near the bottom of the hole, the results go a long way to proving NMR's exploration model of a deep polymetallic breccia beneath the Maneater Peak.*

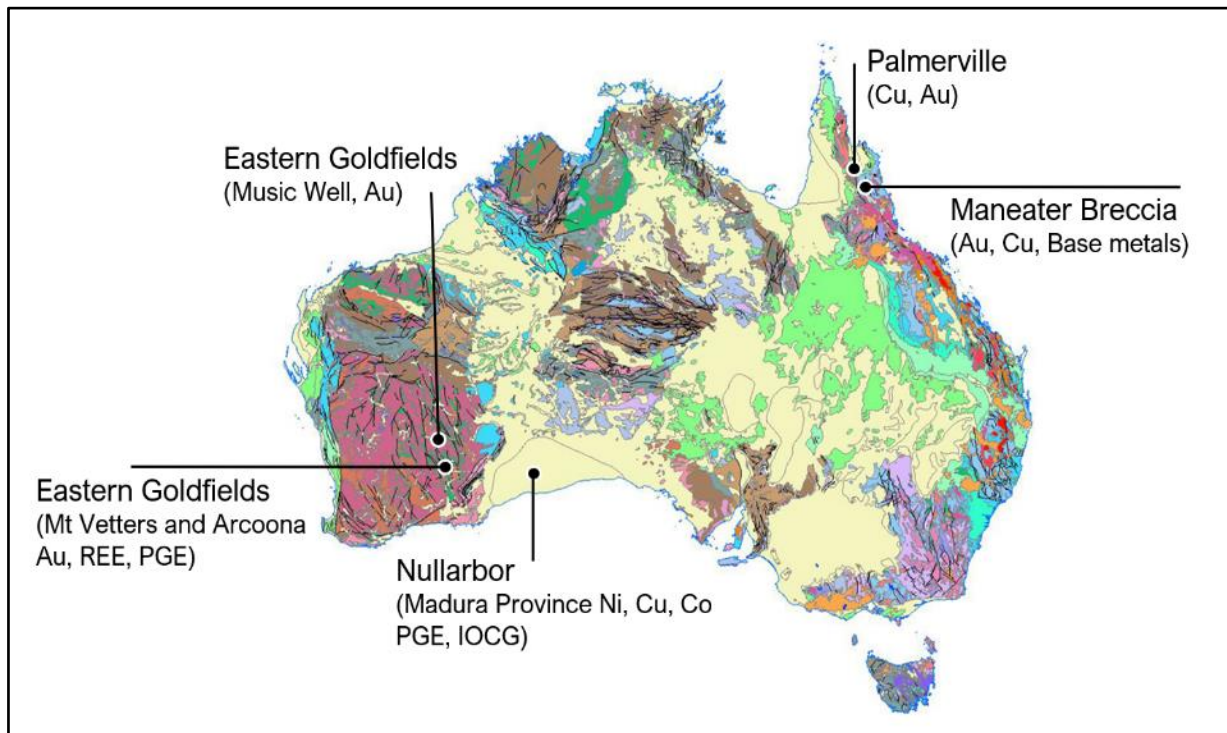
*With the two diamond holes being drilled with very different purposes in mind, both have demonstrated the presence of abundant massive, semi-massive and disseminated sulphides over their entire length making this a large and significant target requiring further investigation, which has now been backed up by the 446 metre long intersection of polymetallic mineralisation returned from MPD003.*

*NMR are now planning an airborne magnetic survey, at Maneater, which will be used in modelling the breccia pipe beneath the Maneater hill and provide better information for further drill planning. The survey will also cover the entire Maneater EPM, and the data received from the survey will assist in targeting potential new targets at Maneater.*

*The survey will be done in conjunction with the Palmerville survey in the second quarter of 2023.*

*Work on NMR's WA tenements was deferred to give the new chief geologist time to acquaint himself with the projects and to prioritise the targets on the projects before commencing any future work, which is now expected to be commenced later in the year.*

## PROJECT OVERVIEW



**Figure 1.** Map of Australia highlighting NMR's main project areas (Eastern Goldfields, Nullarbor and Far North Qld)

### MANEATER HILL, QLD

#### Maneater Hill (EPM 28038)

Much of the reporting period has been focussed on reviewing the assay results for MPD003 that were received during the quarter and comparing them to previous two diamond drillholes and determining the effect of the new assays on the geological model being formulated for the Maneater Hill polymetallic sulphide breccia project.

The mineralised breccia pipe located near Chillagoe in Northern Queensland (**Figure 2**), and the tenement is located 100 km west of Cairns in North Queensland.

NMR has now completed two diamond drillholes (MPD002 and MPD003) from an existing drill pad, however due to difficulties aligning the drill rig on the pad MPD002 was terminated early and MPD003 was oriented to the west at a shallower angle in order to test the western and southwestern extent of the breccia.

While both drill holes are considered successful, both terminated in what NMR would consider to be mineralised part of the breccia and are therefore open at depth.

Based on the lack of understanding of the structural geometry of the breccia target, due to all three drillholes at Maneater being drilled from the one drill pad, NMR has opted to complete a geophysical survey to help pinpoint the deeper part of the interpreted breccia pipe.

The survey will be an airborne magnetic and radiometric survey, which will be done in conjunction with the Palmerville airborne survey and will be commenced in April 2023.

Once the data has been received from the survey, it will be modelled and interpreted and then a decision will be made to either do a follow up ground geophysical survey to better delineate the breccia target, or further drilling will be commenced. This work is expected to be commenced in quarter 3 or 4 of this year.

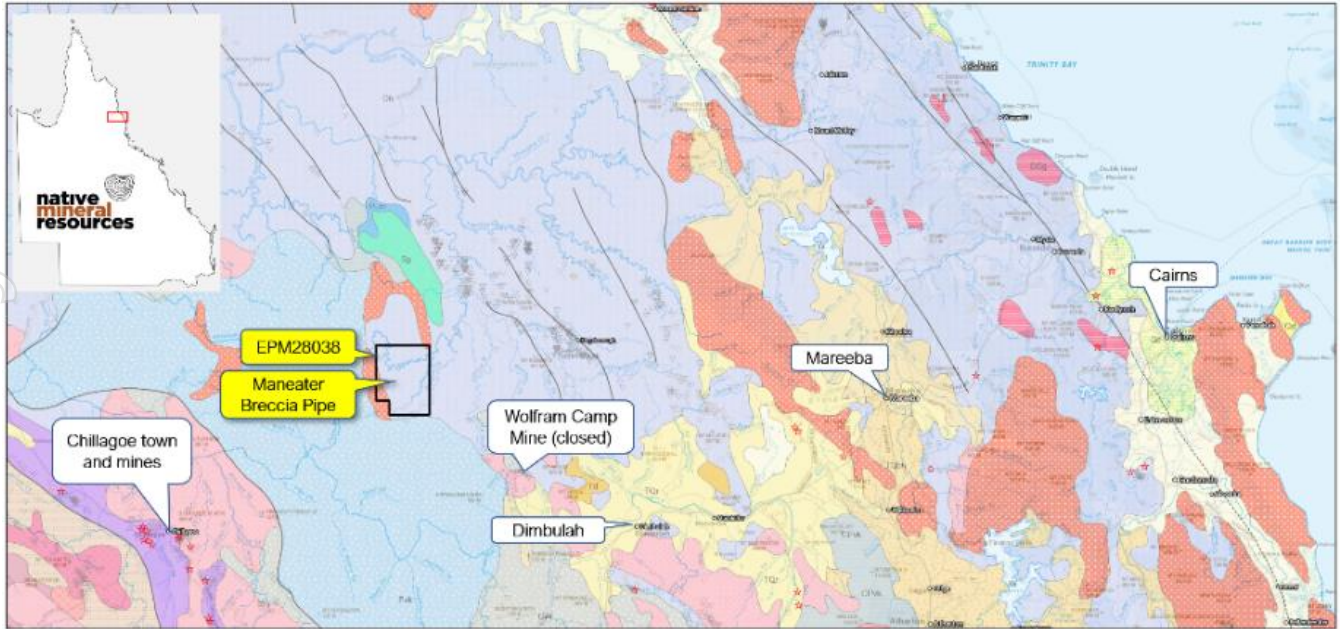


Figure 2. Map showing the location of NMR's Maneater Project.

NMR has interpreted the Maneater model to be similar to the metal zoning in the breccia pipe systems found at the Mt Wright Gold Mine where there is a Pb/Zn rich zone lying above a deeper Au/Cu rich zone that lies at depth (Figure 3).

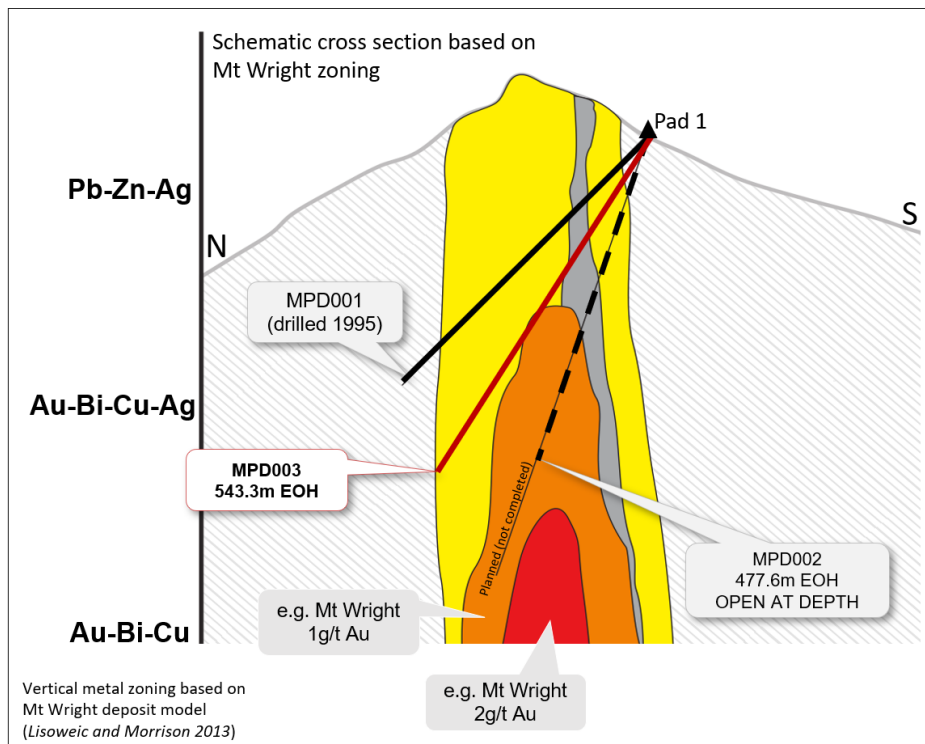


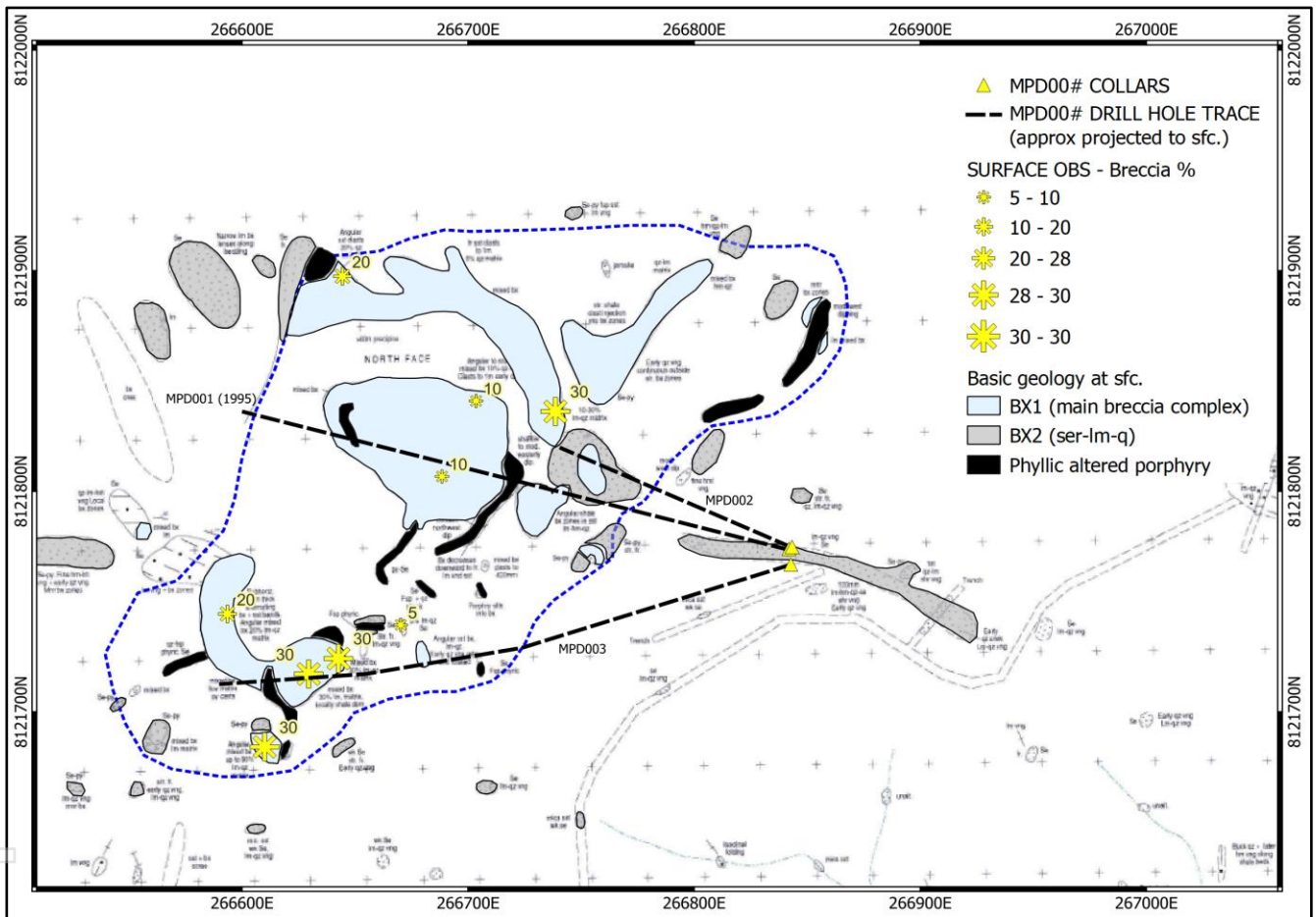
Figure 3. Interpreted cross section of the Maneater Breccia derived using the approximate shape, internal zoning and the vertical metal zoning of the Mt Wright gold deposit. Refer to previous ASX announcements for more detail. Figures below for detailed drill paths.

Note: Metal zoning is indicated on the left-hand side showing elevated Pb, Zn and Ag at shallower levels of the Mt Wright deposit.

	Av grade - MPD003 "SHALLOWER"	Av grade - MPD002 "DEEPER"
Ag (ppm)	<b>5.2</b>	3.9
Zn (ppm)	<b>1236.9</b>	570
Pb (ppm)	<b>532.4</b>	335.6
Au (ppm)	<b>17.9 max</b>	2.14 max
As (ppm)	123.7	<b>171.2</b>
Bi (ppm)	5	<b>8</b>
Cu (ppm)	99.17	<b>126.3</b>
Mo (ppm)	0.4	<b>0.6</b>
Sb (ppm)	125.9	<b>132.8</b>
W (ppm)	2.7	<b>3.9</b>

**Table 1.** The table of results below presents average values (max values for Au) from all drill core assays from MPD002 and MPD003. Results presented in **bold** are the higher of the two sets and demonstrate the proposed vertical metal zonation.

Note: though MPD003 is a shallower-dipping drillhole than MPD002 the max gold was intersected near the bottom of the hole & still is consistent with the Mt Wright model of zoned metal abundance.



**Figure 4.** Plan of the Manateer Breccia Complex showing the location of the main breccia units mapped at the surface with the drillhole traces marked

## PALMERVILLE PROJECT, NORTH QLD

### Background

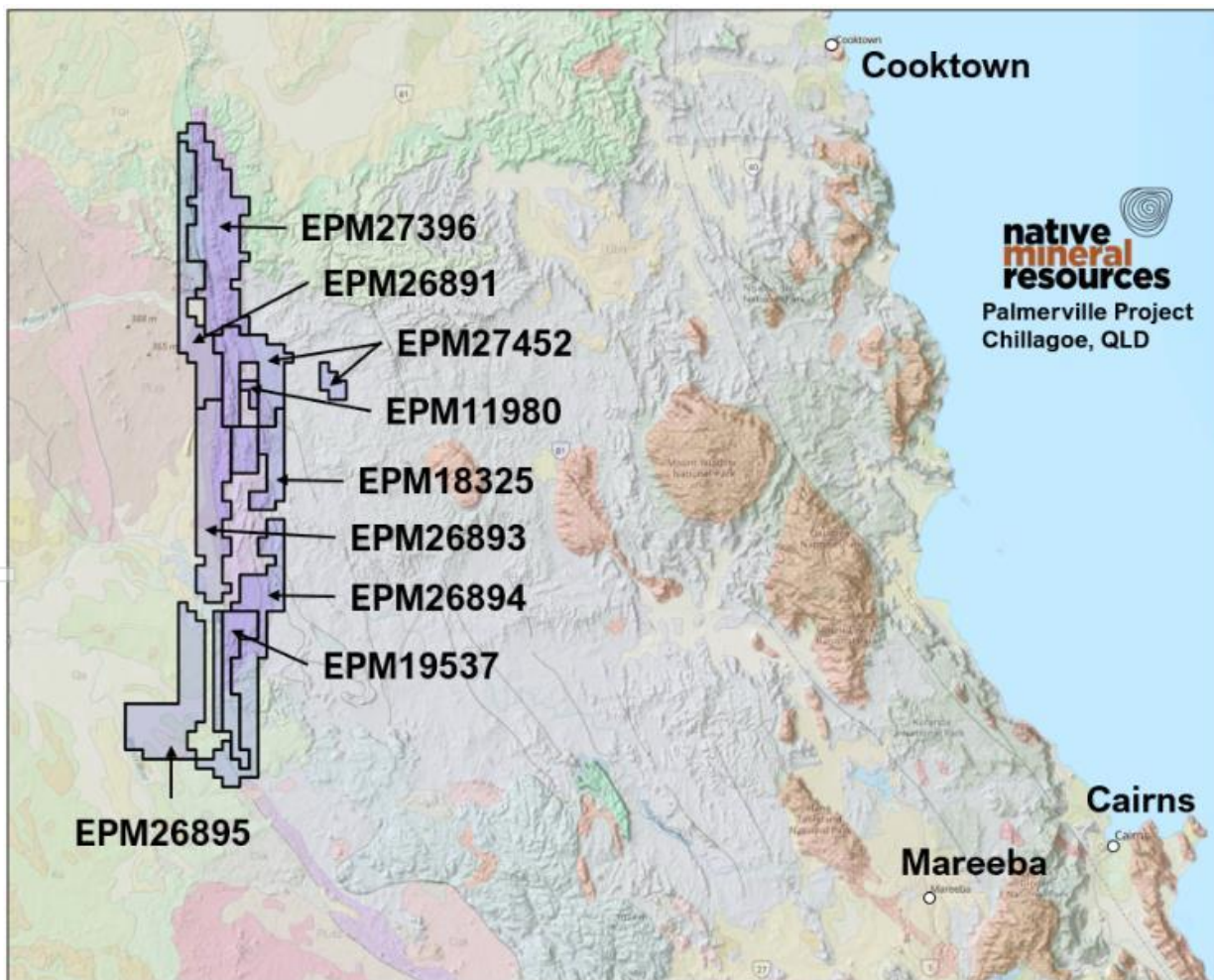
The Palmerville Project is the Company's principal copper exploration asset and covers a near-continuous strike length of 130km over an area of ~1,820km<sup>2</sup> and is located 200km west-northwest of Cairns in North Queensland (*Figure 5*).

The tenements consist of nine Exploration Permit Minerals (EPMs) in the highly prospective Chillagoe Formation, which, to the south, hosts the Red Dome and Mungana porphyry and skarn-associated gold-copper deposits.

The Chillagoe Formation also hosts significant zinc-rich and copper-rich limestone-hosted skarn-associated deposits, particularly at King Vol, Mungana, Griffiths Hill, and Red Cap.

The Palmerville project is prospective for the following deposit styles:

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



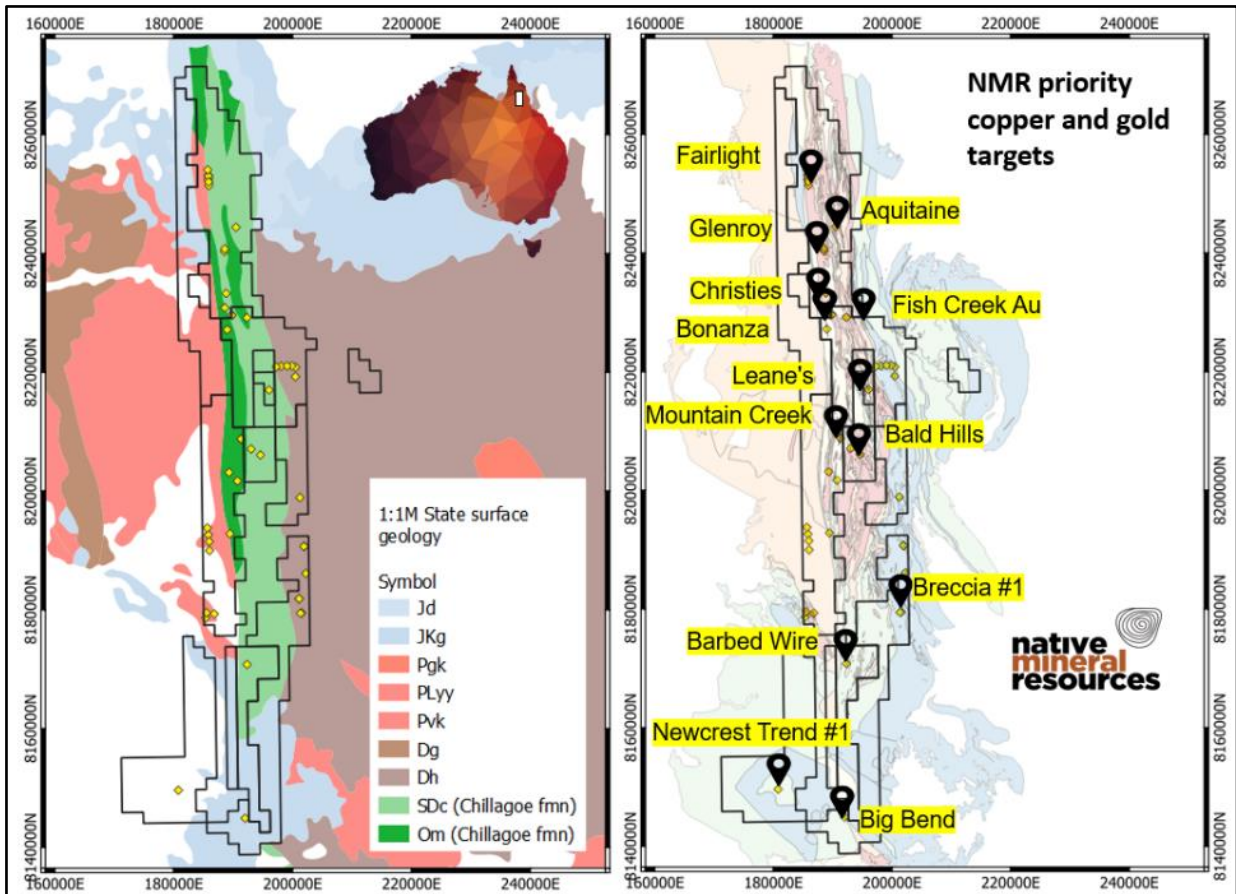
*Figure 5: Palmerville location plan*

Work for the quarter was limited to a review of the available data and desktop studies, due to this year's intensive wet season that was encountered in the area.

Planning continued during the quarter for the 30,000 line Km airborne magnetic and radiometric survey that is expected to begin in April 2023.

The prospectivity of several key targets already identified as containing significant copper and gold (**Figure 6**).

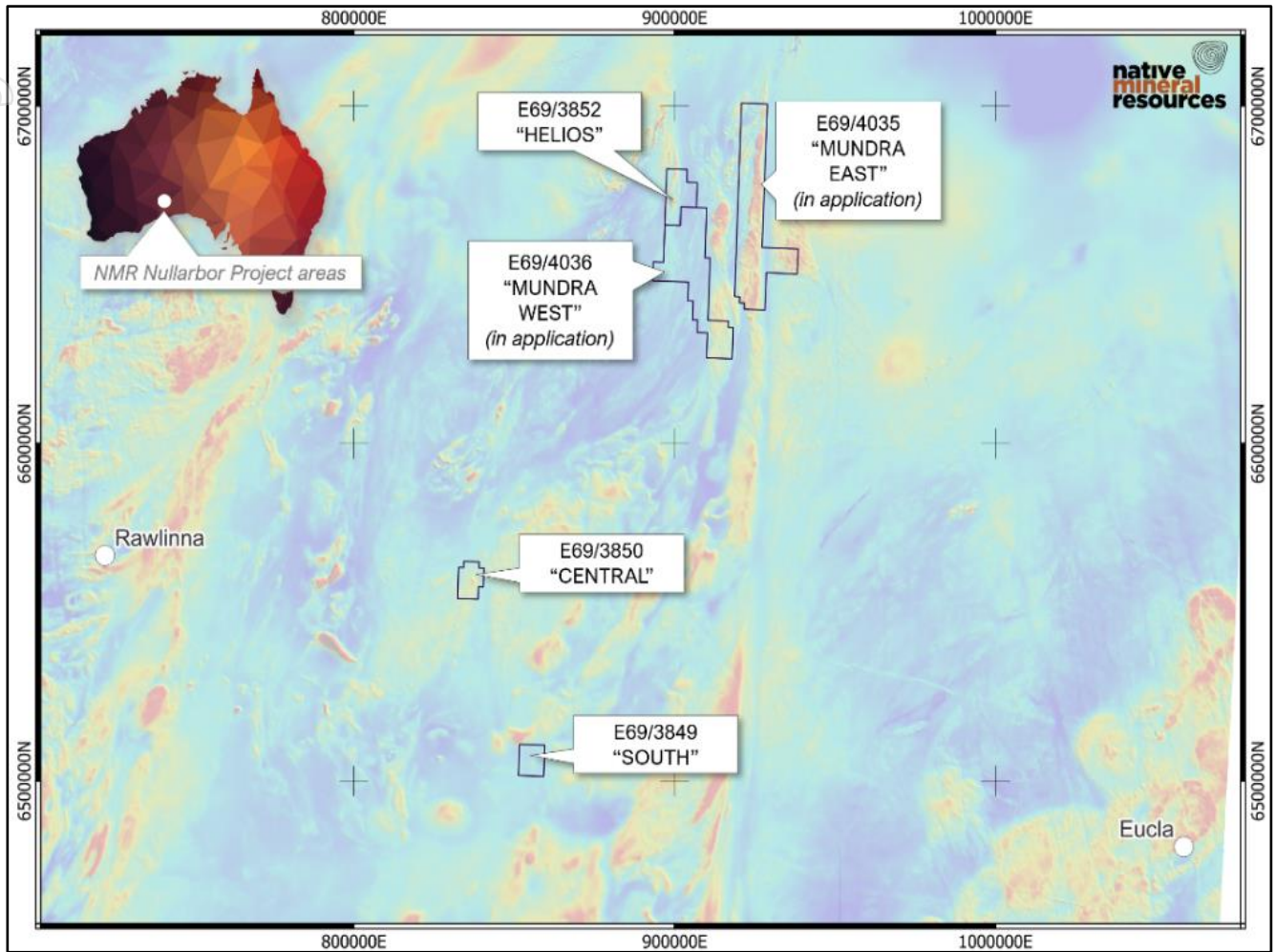
- The structural geometry of the Chillagoe Formation with a particular focus on unraveling the localized structural controls on copper, gold and antimony mineralisation.
- Highlight major mineral-bearing structures and relate these back to exploration and targeting model.



**Figure 6:** Simplified geology map showing the location of NMR tenements and just a small selection of priority prospect areas including Fairlight, Leane's, Glenroy.

## NULLARBOR TENEMENTS, WA

NMR has three granted exploration licences (E69/3849, E69/3850 and E69/3852) and two exploration licence applications (E69/4035 and E69/4036) in the Nullarbor region of SE Western Australia (**Figure 7**). All of the tenements are located over potential iron-oxide copper-gold (IOCG)-style mineralisation.



**Figure 7.** Location map of NMR's Nullarbor tenements

### E69/3852 Helios

NMR has completed two diamond holes into the Helios Iron Oxide Copper Gold (IOCG) target and NMR has intercepted significant hematite, sericite, magnetite, and pyrite alteration (**Figure 8**). This style of alteration is indicative of, and often found in association with other IOCG deposits in Australia.

These holes are the first to have encountered significant IOCG-style alteration in the under-explored Madura Province, making Helios potentially the first IOCG-style occurrences in Western Australia and as the basement is only 110m below the surface, making this an exciting new area requiring further investigation.

DDH002 was completed at a depth of 1020.3m (ASX announcement 20<sup>th</sup> September 2022), with the hole ending in intense IOCG-style alteration with pervasive red hematite staining and hematite infill in heavily altered granites and granite breccias.

The IOCG-style, hematite-dominated alteration has now been shown to extend for over 1km between the two drill holes highlighting a much larger alteration footprint than initially anticipated. The drilling has also confirmed that the IOCG-style alteration is part of an extensive Fe-dominated/enriched alteration zone similar to other IOCG deposits such as Ernest Henry.



In addition to the two drillholes, NMR has also completed a drone magnetic survey and a ground gravity survey at Helios.

NMR considers the combination of both the magnetic and gravity surveys to be crucial to the further planning of drillholes.

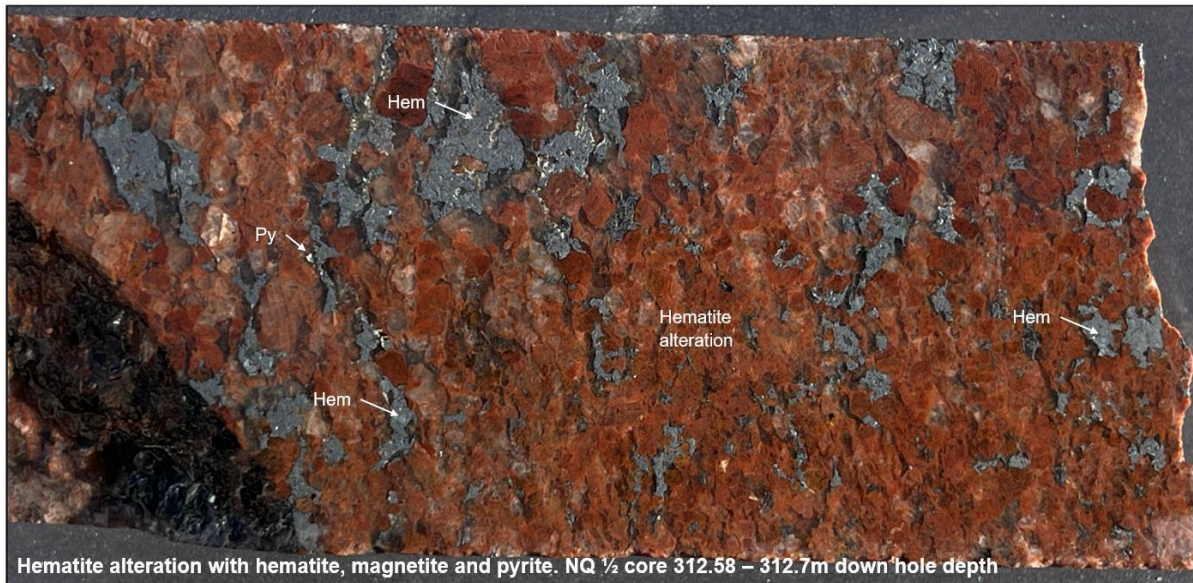


Figure 8. Photo of intensive hematite alteration in DDH001.

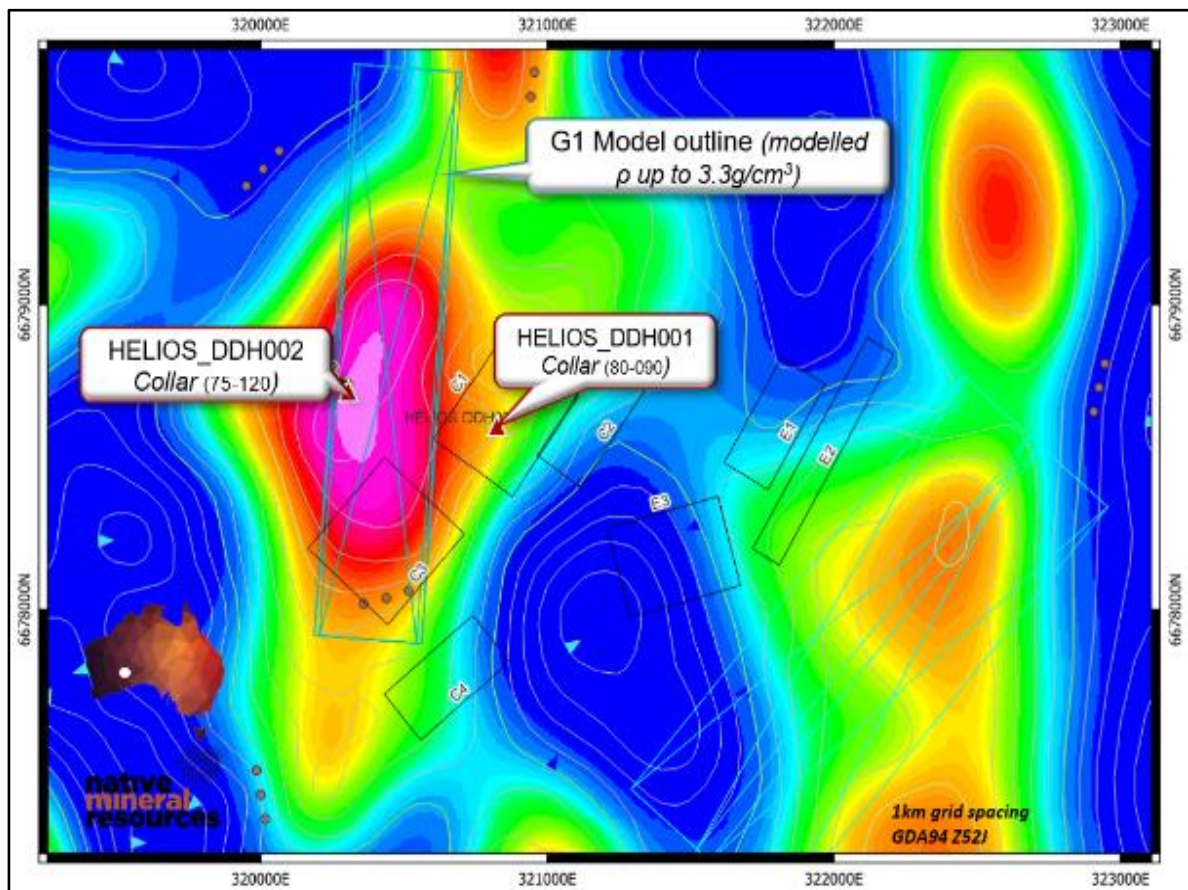


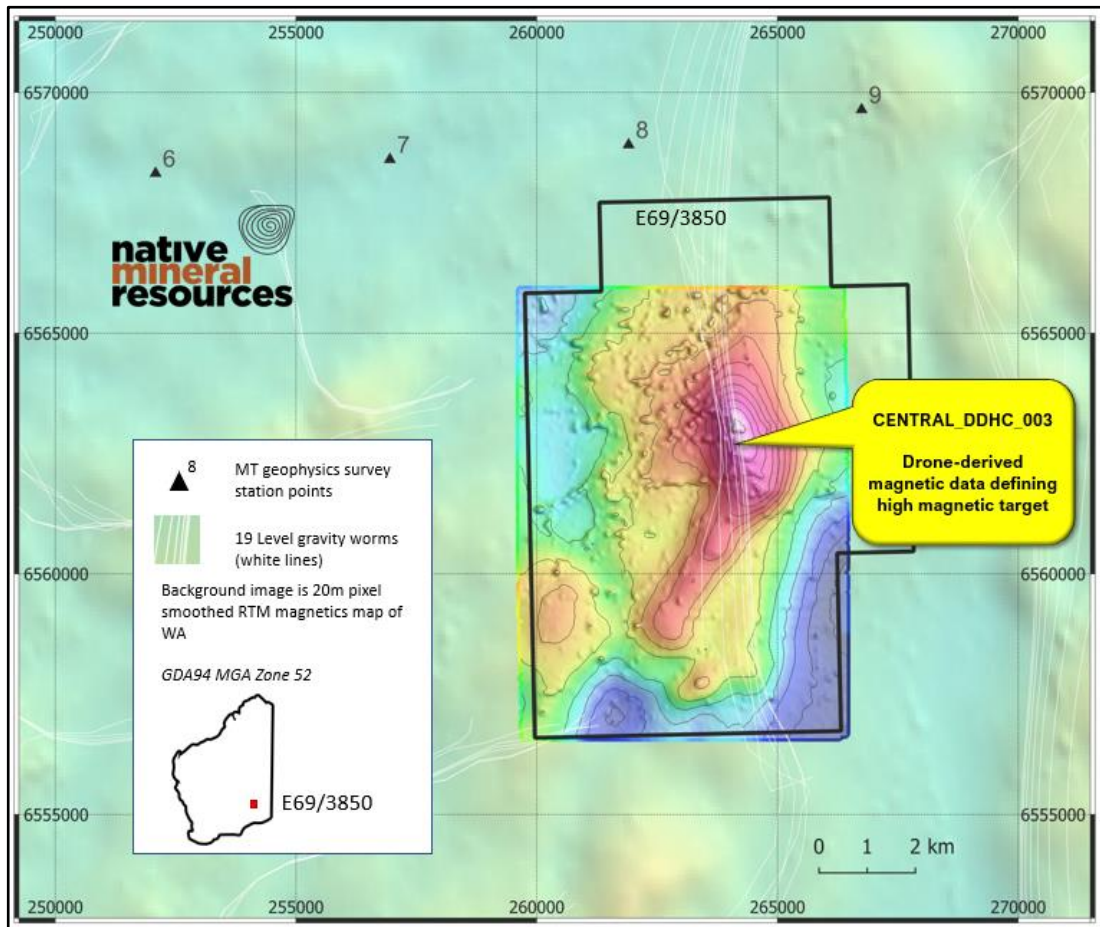
Figure 9. Map showing the location of Helios drill collars superimposed on gravity inversion (-400m RL level depth slice). Also shown are the modelled magnetic bodies

## E69/3850 – “Central” IOCG target

NMR has completed its diamond hole (DDHC003) at its Central project at EOH 551.4m. Initial observations show multiple styles of hydrothermal alteration overprinting regional host rocks and granites (**Figure 11 - Figure 14**). Logging of the core and assays are due in Q2 2023.

The target at Central was derived from a drone-based magnetic survey that confirmed the presence of a significant anomaly – 1200m long and 400m wide - with a relative peak of over 760nT and a target depth estimated at 300m below the surface. (**Figure 10**)

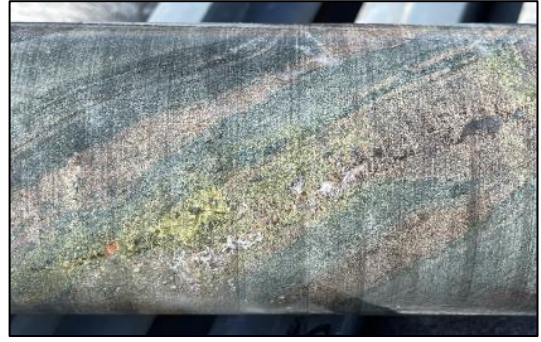
The high magnetic anomaly lies directly above a well-defined zone of low resistivity imaged in the results from the regional Magnetotelluric survey transect that passes directly along the northern boundary of the tenement (black triangles in **Figure 10**).



**Figure 10.** Plan of Central project showing location of DDHC003 and the high-resolution drone magnetic survey



**Figure 11.** Initial first-pass observation of stage 2 hydrothermal alteration of host rocks. Initial observations indicate epidote-chlorite-sericite +/- actinolite and biotite alteration. Diamond HQ drill core Central\_DD003.



**Figure 12.** "Green rock" alteration (with possible garnet, pink) of host country rocks in Central\_DD003



**Figure 13.** Photo showing an example of granite found in drill core from Central DD003.



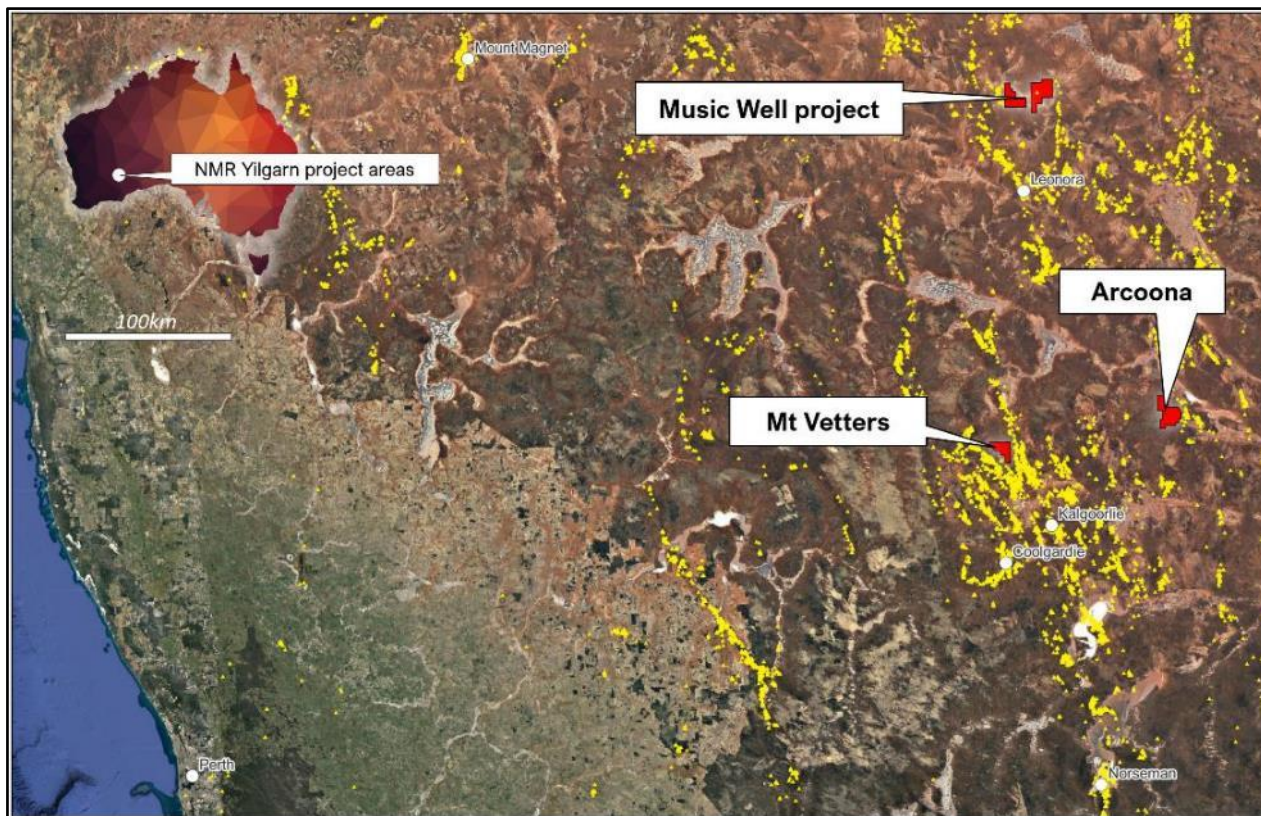
**Figure 14.** Photo of HQ diamond drill core CENTRAL\_DD003 showing hematite staining of country rocks.

## EASTERN GOLDFIELDS PROJECTS, WA

### Project Background and Exploration Summary

The Eastern Goldfields are part of the Yilgarn Craton which is host to significant mineral resources, particularly gold and nickel and is becoming an increasingly important target area for lithium, REE's and other key metals and minerals.

NMR is exploring for granite-hosted gold mineralisation and a host of new mineralisation opportunities across four highly prospective tenements in the Eastern Goldfields (**Figure 15**).



*Figure 15. Location map of NMR's Eastern Goldfields projects*

#### Music Well Project (E37/1362 and E37/1363)

The Music Well Gold Project is located approximately 60 km north of Leonora and is comprised of the two tenements E37/1362 and E37/1363 (**Figure 16**). Exploration on E37/1363 to date has revolved around NMR's high-resolution airborne magnetics survey that has enabled several significant targets to be developed (**Figure 17**)

The high-resolution magnetic data has provided NMR with the ability to interpret the structures and rock types beneath the cover, with the results of the magnetic survey to be tested by field sampling later in 2023.

Target 2 Vein, located on the southern part of E37/1362 and identified from previous NMR mapping and sampling, will also be targeted during fieldwork planned for later in 2023 (**Figure 16**).

For personal use only

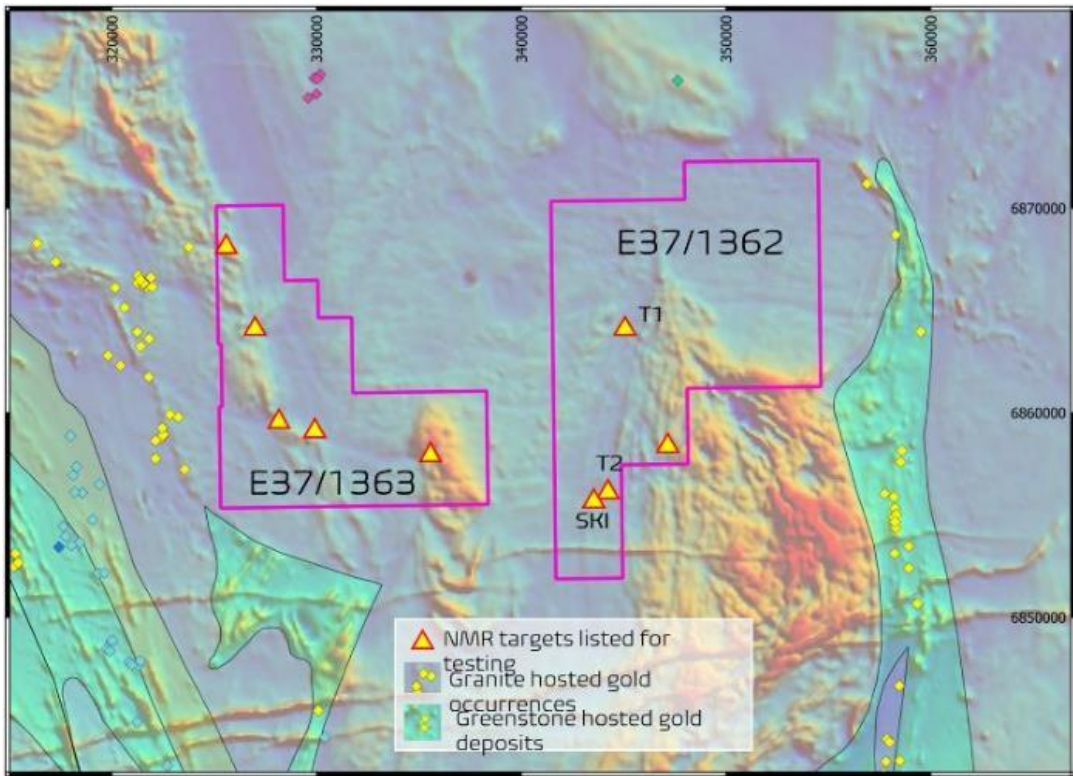


Figure 16: Music Well plan showing NMR generated targets

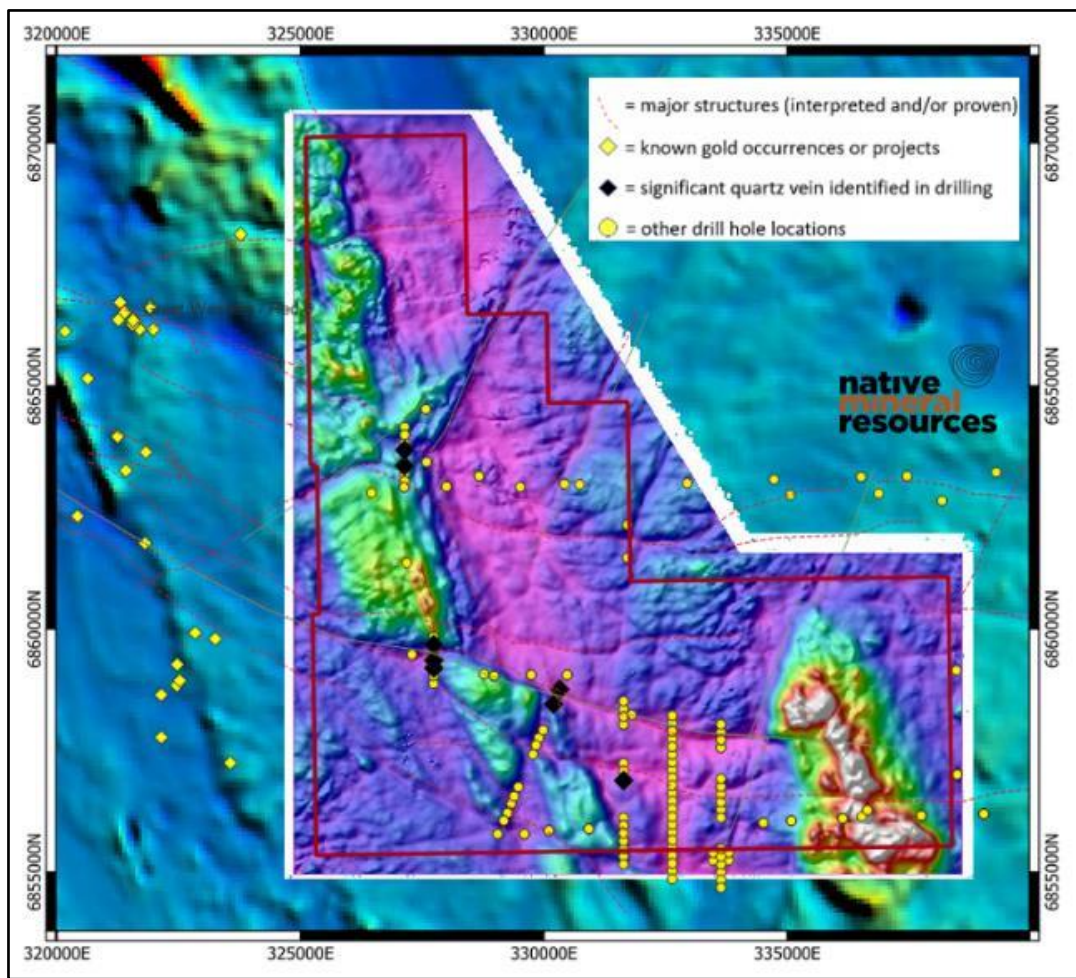
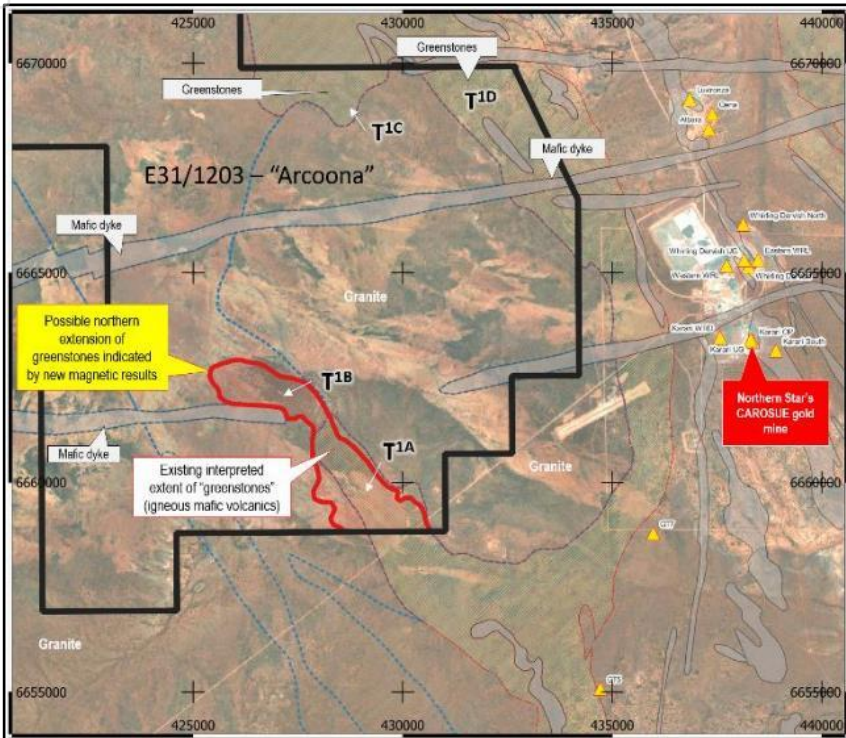


Figure 17. Map showing E37/3063 airborne magnetic survey (TMI RTP).

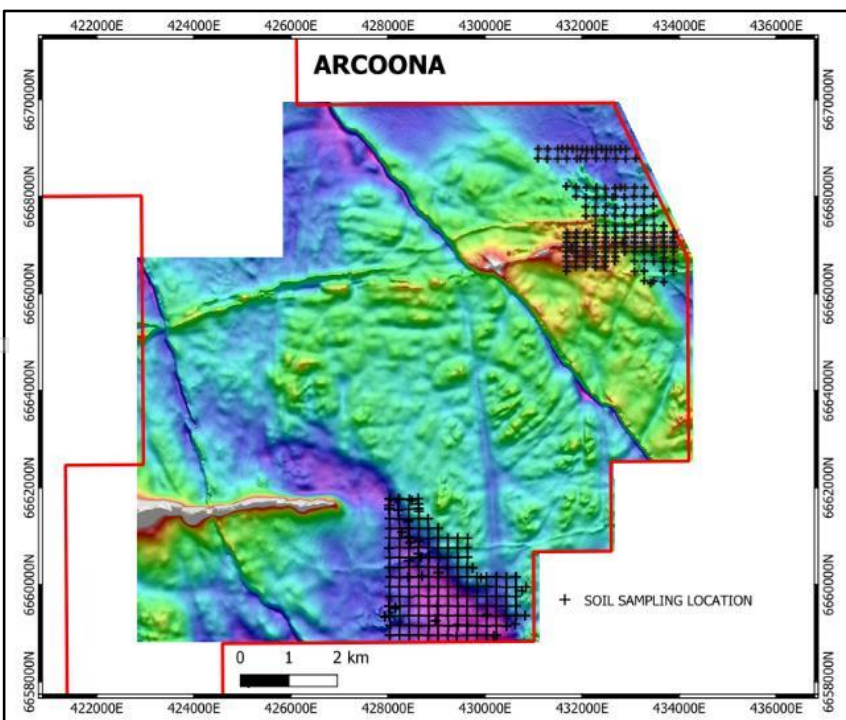
## Arcoona Project (E31/1203)

The Arcoona Au-Ni-Cr-Co project (E21/1203) is located approximately 100 kilometres northeast of Kalgoorlie and is located adjacent to Northern Star's Carosue Dam gold mine which located to the east of the EPM (**Figure 18**)

Previous work by NMR at Arcoona includes a 4,632 Line-km airborne geophysical survey which identified eight new targets. NMR has completed two soil sampling programs over several of the identified targets. Results are currently under review and are expected to be released next quarter.



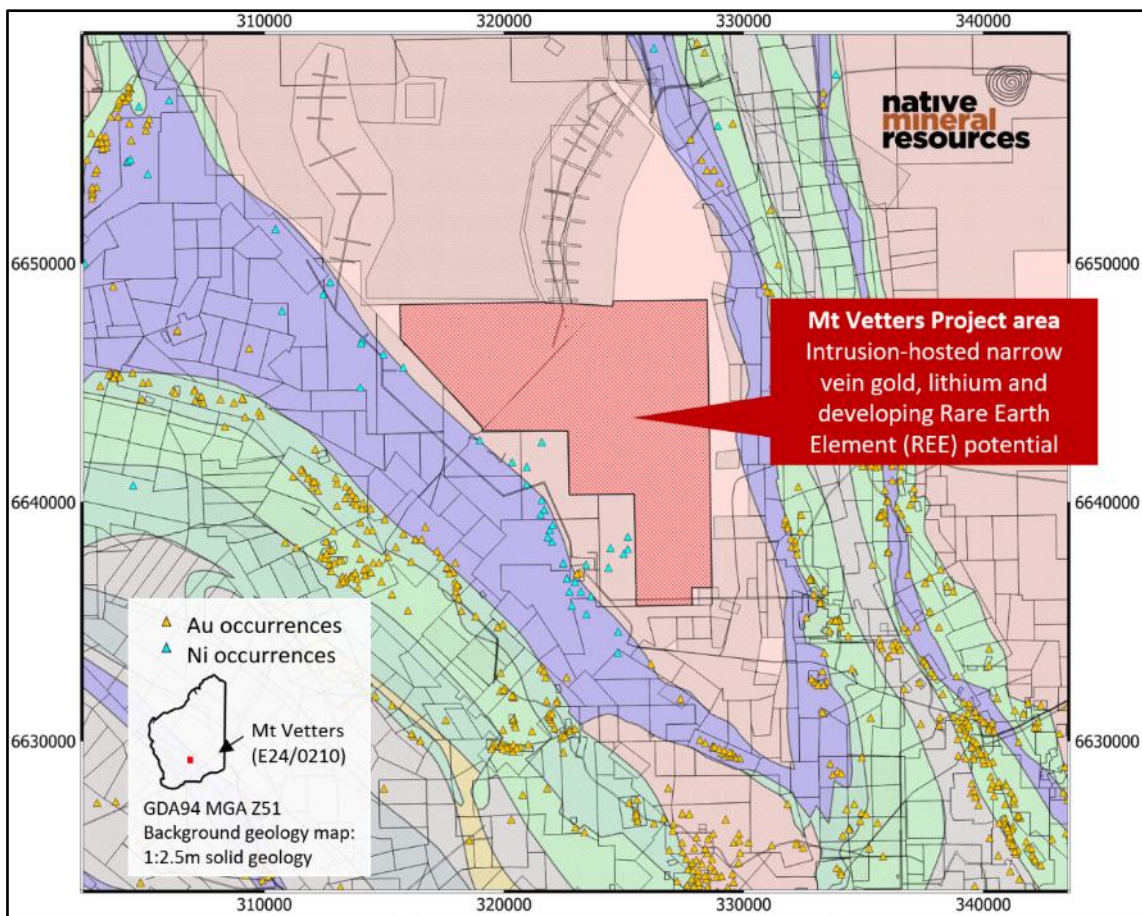
**Figure 18.** Map showing E31/1203 Arcoona and the inferred buried greenstones & the location of Carouse Dam gold mine.



**Figure 19:** Location of soil sampling overlaying NMR's airborne magnetic survey (TMI RTP).

### Mt Vettters Project (E24/210)

Mt Vettters project (E24/210) is located 45 km northwest of Kalgoorlie, 4 km to the west of the Goldfields Highway in the Eastern Goldfields region of Western Australia (**Figure 20**). Mt Vettters is a new opportunity in a highly competitive and emerging area close to Kalgoorlie. It lies adjacent to multiple Ni mines and is one of the largest single tenements in this area.



**Figure 20:** Plan of E24/210 showing nearby nickel and gold occurrences

## PLANNING FOR Q2 CY2023

### 1. Palmerville Project

The Palmerville airborne magnetic survey will commence in mid-April, and cover the Palmerville tenement package, and will be critical in assisting to prioritise the over 50 very high potential copper, gold, antimony and other targets located at Palmerville.

These targets include Glenroy (rock chip samples up to 20% copper in newly identified southern extension) and Fairlight (rock chip samples up to 8% Cu). A field-based targeting program has been planned for Q2-Q3 in 2023, after the results are received from the airborne magnetics survey.

Field work will be focused on the highest ranked of these targets and it is anticipated that several drill targets will be identified.

### 2. Maneater Hill

With the return of all the drill assays during the quarter, NMR has contracted Thomson Airborne to complete an airborne magnetic and radiometric survey for the Maneater EPM. The survey will assist NMR in determining the structural and sub-surface geometry of the Maneater target and this will assist planning of further drilling scheduled for later in the year.

### 3. Nullarbor Project

Fieldwork at the Nullarbor projects is on hold for the present, while all of the available data is reviewed and analysed.

### 4. Eastern Goldfields Project

Fieldwork at the Eastern Goldfields projects is on hold for the present, while all of the available data is reviewed and analysed.

## TENEMENT SCHEDULE AS AT 31 MARCH 2023

Region	Tenement ID	Tenement Name	Date Granted	Date Expire	Sub-Block	SQKM (approx.)
QLD	EPM 11980	Limestone Creek	3-Jun-05	2-Jun-25	4	13.16
QLD	EPM 18325	Bald Hills	30-Jul-12	29-Jul-24	15	49.35
QLD	EPM 19537	Mitchell River South	21-Jan-08	20-Jan-24	33	108.57
QLD	EPM 26891	Palmerville North	29-Jan-19	28-Jan-24	63	207.27
QLD	EPM 26893	Palmerville West	29-Jan-19	28-Jan-24	100	329
QLD	EPM 26894	Palmerville East	1-Apr-19	31-May-24	84	276.36
QLD	EPM 26895	Palmerville South	31-Jan-19	30-Jan-24	89	292.81
QLD	EPM 27396	East Palmerville North	4-Jun-20	3-Jun-25	100	329
QLD	EPM 27452	East Palmerville South	2-Feb-21	1-Feb-26	65	213.85
QLD	EPM 28038	Maneater Hill	25-Jul-22	24-Jul-27	19	62.51
WA	E37/1362	Music Well	17-Sep-19	16-Sep-24	58	190.82
WA	E37/1363	Music Well	17-Sep-19	16-Sep-24	39	128.31
WA	E31/1203	Arcoona	19-Nov-20	18-Nov-25	61	200.69
WA	E24/210	Mt Vettors	26-Jul-21	25-Jul-25	35	115.15
WA	E69/3852	Nullarbor North	13-Oct-21	12-Oct-26	41	121.5
WA	E69/3850	Nullarbor Central	26-Oct-21	25-Oct-26	26	76.65
WA	E69/3849	Nullarbor South	13-Oct-21	12-Oct-26	25	73.7



Region	Tenement ID	Tenement Name	Date Granted	Date Expire	Sub-Block	SQKM (approx.)
WA	E69/4035	Mundra East	In Application since 25th Mar 2022		196	548.8
WA	E69/4036	Mundra West	In Application since 25th Mar 2022		151	422.8

## CORPORATE

A total of \$13,812 (FY23 YTD: \$41,437) was paid to Non-Executive Directors as Director Fees. In addition, \$46,041 (FY23 YTD: 325,554) was paid to the Managing Director as wages.

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**  
**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)

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