

**ASX ANNOUNCEMENT**

**30 October 2023**

## **QUARTERLY ACTIVITIES REPORT – SEPTEMBER 2023**

### **HIGHLIGHTS:**

#### **MANAGEMENT**

- NMR FY23 Financial Report and Annual Report released during the quarter.
- Mrs Patricia Vanni de Oliveira appointed as Company Secretary, replacing Mr Hasaka Martin in September 2023.

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

- A new 900m long chargeability high magnetic anomaly was delineated by the ground magnetic Pole-Dipole Induced Polarisation (PDIP) survey, which was completed in July 2023. *(Refer to the ASX announcement dated 19 July 2023)*
- Phase 2 drill targets were defined using the interpreted geological information from the geophysical and PDIP surveys. The drilling program began in September 2023 and target for completion Oct-Nov 2023. *(Refer to the ASX announcement dated 23 August 2023)*

#### **MCLAUGHLIN LAKE, MANITOBA, CANADA**

- Acquisition of 51% interest in High-Grade Lithium project in Manitoba Canada, MEL1208A McLaughlin Lake in Aug 2022. *(Refer to the ASX announcement dated 17 August 2023)*
- Completion of initial field work and sampling campaign in September 2023, in which 29 samples of multiple dykes were collected from the McLaughlin Lake and Magill Lake areas. The results of the assays are currently being completed and are expected in early October 2023. *(Refer to the ASX announcement dated 19 September 2023)*

#### **PALMERVILLE PROJECT, QLD**

- Ongoing 3D inversion and modeling of the previous quarter's airborne geophysical survey.
- Additional ground geophysical surveys, field mapping, and sampling are being planned, subject to the completion of 3D modeling and target ranking.

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 30 September 2023.

## PROJECT OVERVIEW

### Australia Assets

Eastern Goldfields, WA  
(Music Well - Au)  
(Arcoona, Mt Vetter - Au, REE, PGE)

Nullarbor, WA  
(Ni, Cu, Co, PGE, IOCG)

Maneater Breccia, QLD  
(Au, Cu, Base Metals)

Palmerville, QLD  
(Cu, Au)

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

### Canada Assets

Mclaughlin Lake, Manitoba  
(Li)

**Figure 2.** Map of Canada highlighting NMR's High Grade Lithium Project in Manitoba

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## MANEATER HILL, QLD

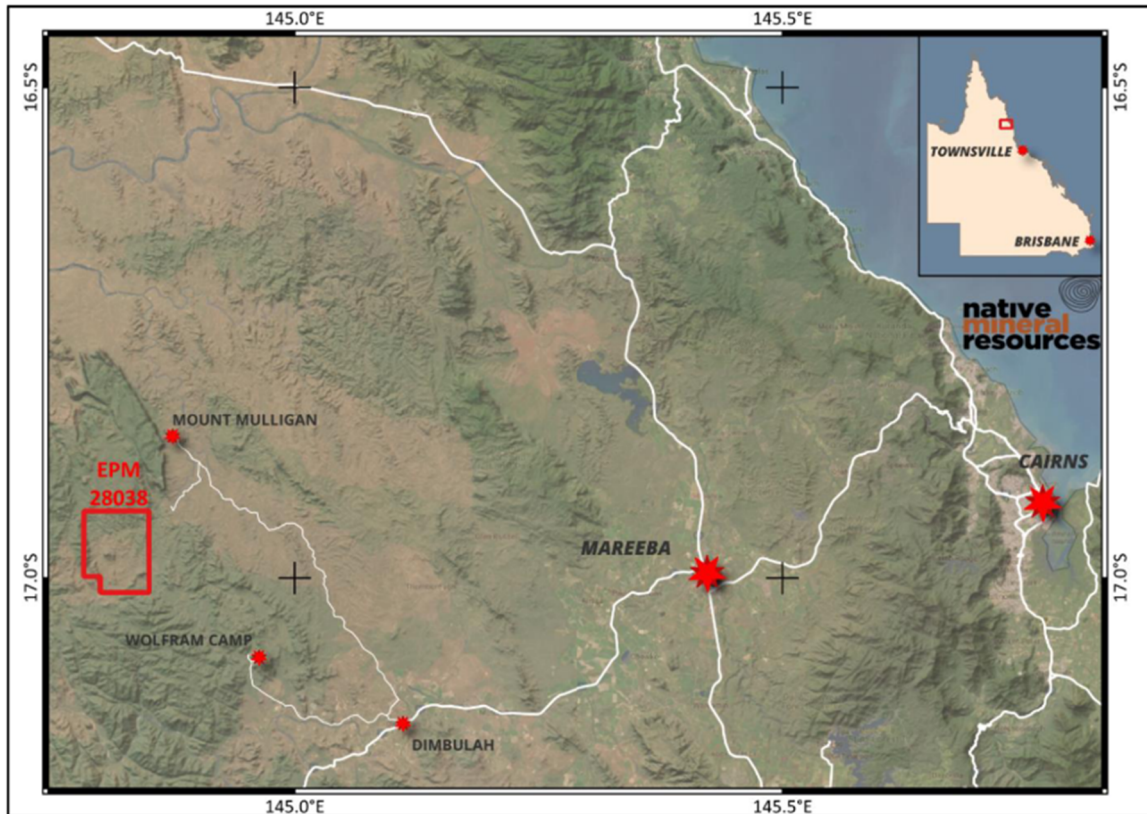


Figure 3. Location Plan of EPM28038 Maneater.

### Maneater Hill (EPM 28038)

The Maneater Hill project is located near Chillagoe in Northern Queensland and the tenement is located 100 km west of Cairns in North Queensland (*Figure 3*).

NMR completed two diamond drill holes, MPD002 and MPD003, in Q4 CY2022. Both drill holes intersected significant sulphide deposits, prompting the completion of an 894 line-kilometre airborne geophysical survey in April 2023, followed by interpretation and modelling work by GeoDiscovery Group in Brisbane, which identified several new, shallow exploration target areas extending 600m south of the Maneater Breccia Project.

During the reporting period, NMR completed a Pole Dipole (PDIP) IP survey over the Maneater Hill magnetic anomaly (*see ASX announcement 19 July 2023*). The Pole Dipole Induced Polarisation (PDIP) survey has revealed a new 900m long chargeability high anomaly over the Maneater Hill magnetic anomaly. Chargeability high is open to both the north and south, up to 400m deep, up to 150m wide, and located near the surface (*Figure 4*). The new anomaly can be identified by a high chargeability gradient with a low structurally controlled resistivity (*Figure 5*).

Because no part of the 900m anomaly has been drill tested to date, phase 2 diamond drilling is currently underway and expected to be completed in Q4 CY2023.

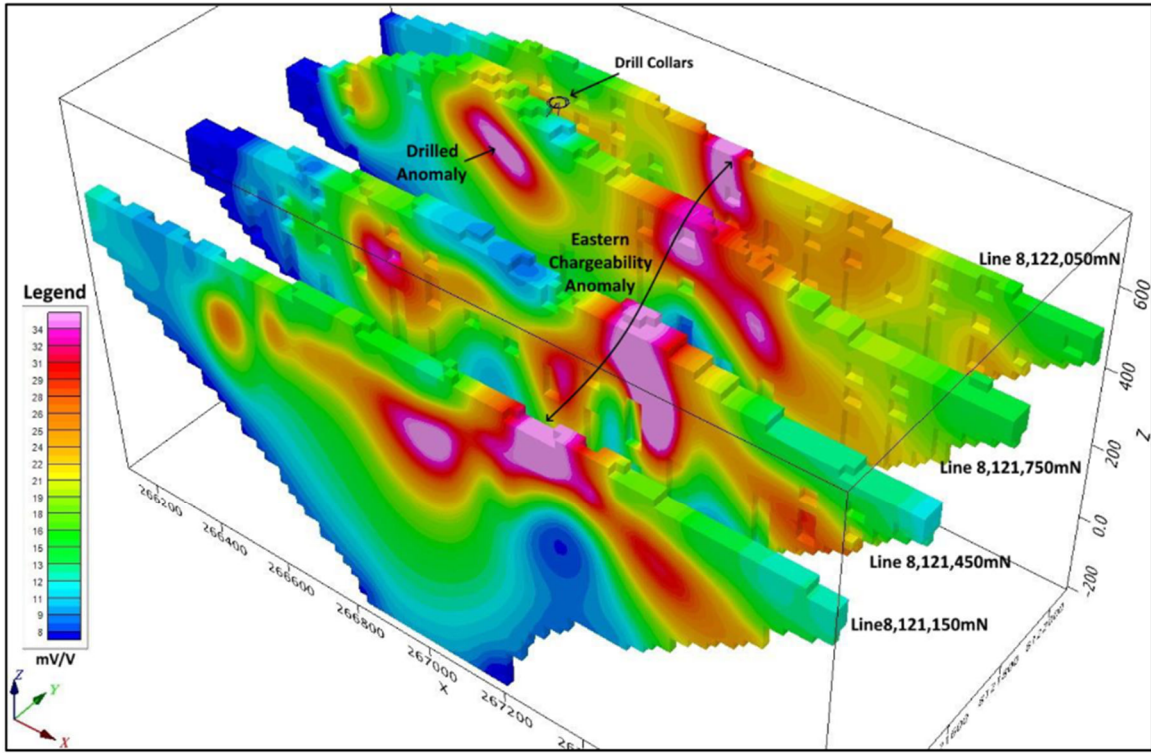


Figure 4. Manateer Hill Chargeability Sections

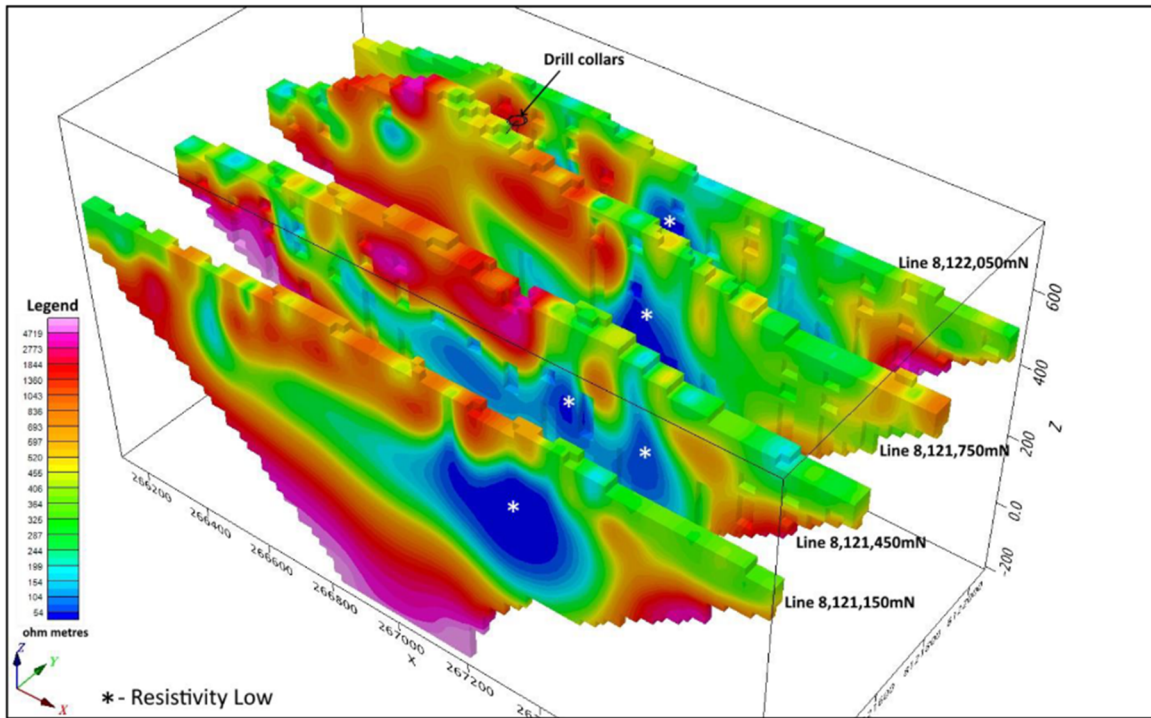


Figure 5. Manateer Hill Resistivity Sections

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# MCLAUGHLIN LAKE, MANITOBA (CANADA)

## Mclaughlin Lake (MEL 1208A)

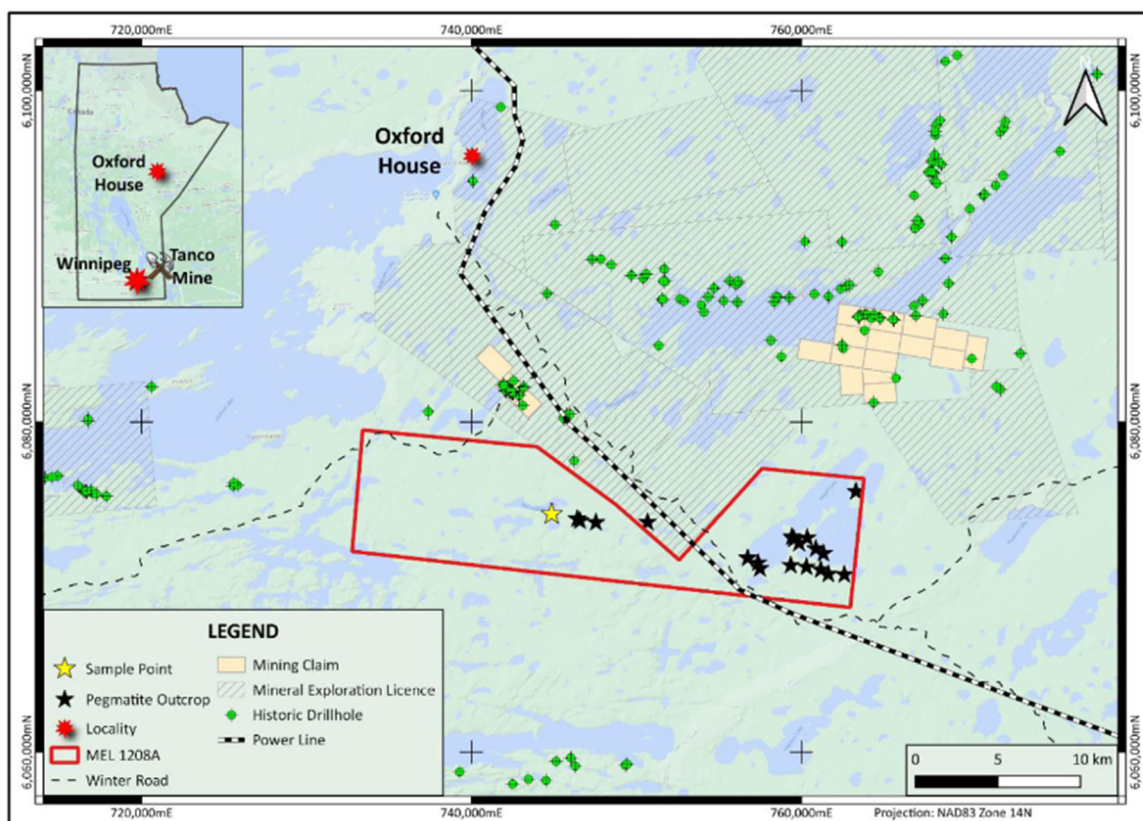


Figure 6. Location Plan of MEL1208A Mclaughlin Lake

On 19 August 2023, the Company announced it had acquired a 51% interest in the Mclaughlin Lake Pegmatite Project, which consists of Mineral Exploration License (MEL) 1208A which covers 19,245 Ha and was granted on 18 August 2023 for three years.

MEL 1208A is a 30km east-west striking tenement located approximately 560km north of Winnipeg and 10km south-east of the locality of Oxford House which is accessible by air and winter road in the Canadian province of Manitoba (**Figure 6**).

Mclaughlin Lake is located in the Archean-aged Superior Province of the Canadian Shield, which is host to some of the most significant lithium resources in the world, mainly in Quebec and Ontario, though the Lithium Tanco Mine is located within Manitoba and has been mined for tantalum and caesium since the 1920's, and has an established Reserve (see ASX announcement 17 August 2023). An east-west 30km long inferred shear zone contact running through the MEL which has the potential for lithium bearing pegmatites to be associated with it.

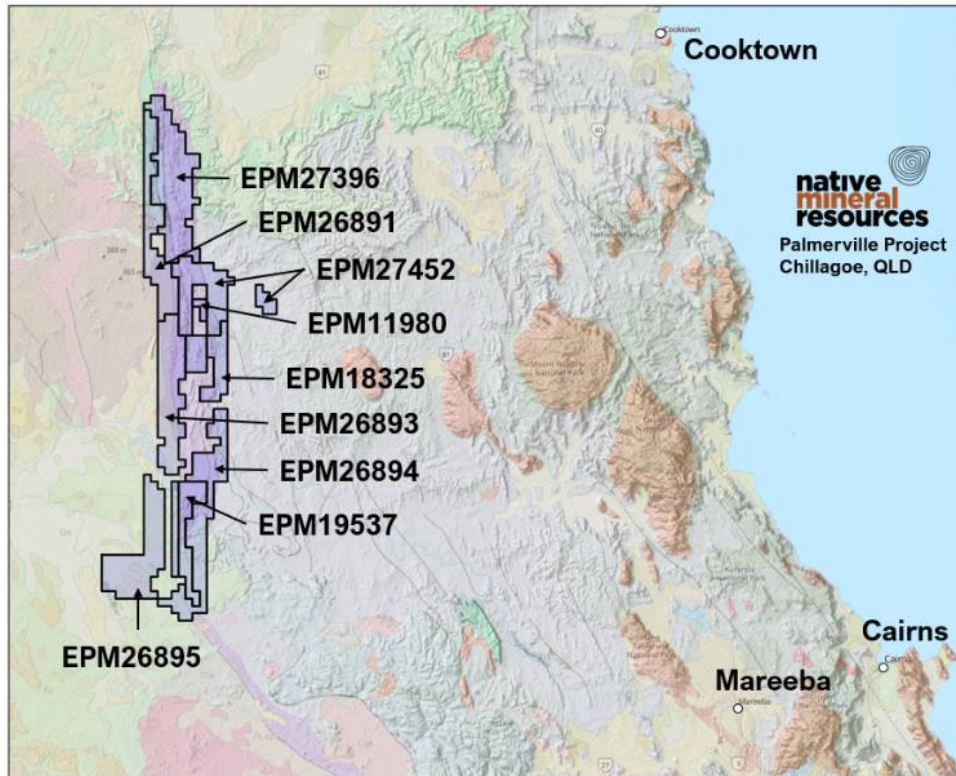
During the September quarter, NMR completed an initial ground-based sampling program proposed by Axiom Exploration Group, one of its Canadian geological contractors. 29 samples from various pegmatite dykes were collected for analysis. Two of the samples returned high Li<sub>2</sub>O grades of 2.77% and 2.25%.

In addition, a 3,000-line km Heli-Mag survey will begin in the coming months. This survey will be used to create a 3D Magnetic Inversion (Susceptibility Inversion) model of the bedrock within the MEL, allowing horizontal slices to be extracted at specific depths to aid in future drillhole planning.

## PALMERVILLE PROJECT, NORTH QLD

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 7**).

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.



**Figure 7.** Palmerville location plan

A 30,000-line km (2,162km<sup>2</sup>) airborne magnetic and radiometric survey was completed in the June quarter. This survey was partly funded by the Queensland Government as part of the Collaborative Exploration Initiative (CEI) (**Figure 8**). The initial observations of the survey data provide the following insights:

- Clear delineation of the Palmerville fault structure in the northern section which controls the Fairlight and Glenroy deposits.
- Possible dislocation and offsetting of the Palmerville fault between Glenroy & Leanes Prospect.
- Possible faulting and large circular structures south of Leanes Prospect
- Two high/low mag anomalies in the southern portion of the Palmerville region with one of them being related to the flexure of the Palmerville fault between the southern and northern Chillagoe formations.

NMR had filed an Exploration Permit for Minerals (EPM) application at Wrotham Park North Queensland based on the data from this survey. This EPM 28847 is adjacent to NMR's existing EPM 26895, and it covers 18 sub-blocks (51km<sup>2</sup>). This additional ground will provide strategic exposure to newly discovered magnetic anomalies.

Upon completion of the 3D modelling and data interpretation from the survey, priority areas will be defined for field-based mapping and sampling program followed by a program of electromagnetic (EM) or Induce Polarisation (IP) surveys covering the key priority targets including Fairlight, Glenroy, Leanes, and Pinnacle Hill.

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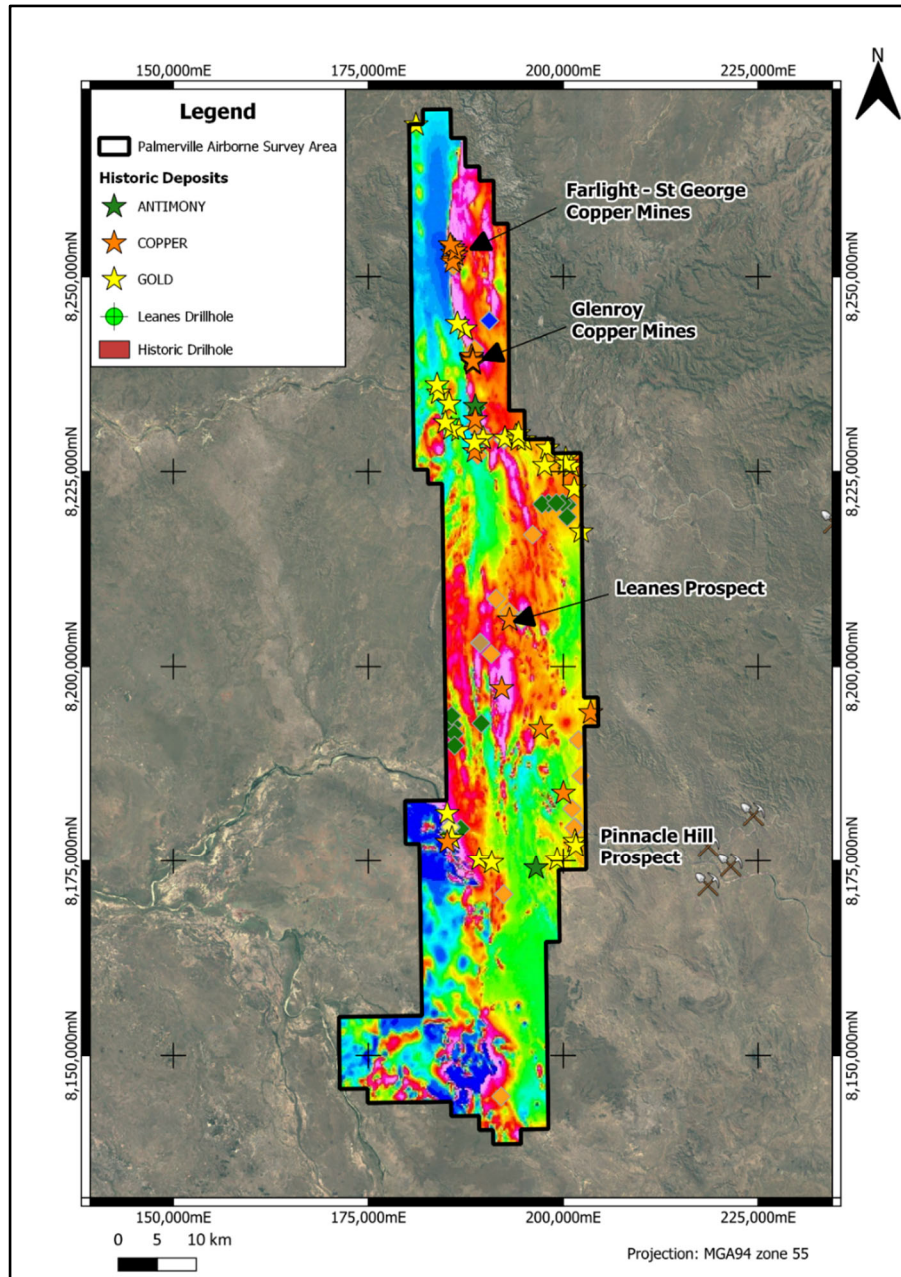
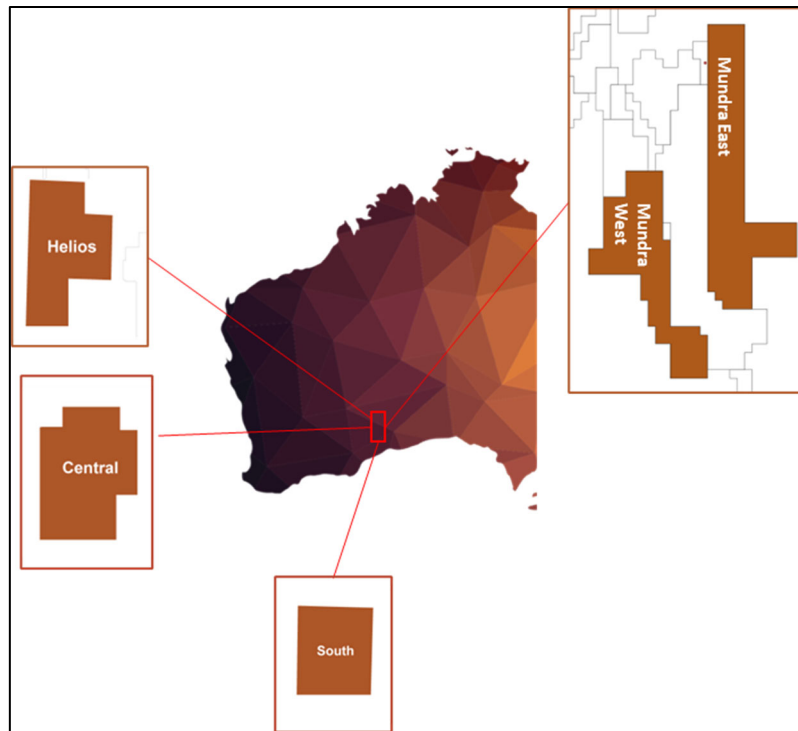


Figure 8. Palmerville Airborne Magnetic data (RTP) and Major Prospects (see ASX announcement of 29 May 2023)

## 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 9**). All of the tenements are located over potential iron-oxide copper-gold (IOCG)-style mineralisation.



**Figure 9.** Location map of NMR's Nullarbor tenements

### E69/3852 – “Helios” IOCG target

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

DDH002 was completed at a depth of 1020.3m (*ASX announcement 20 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.

### 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, but little indication of mineralisation.

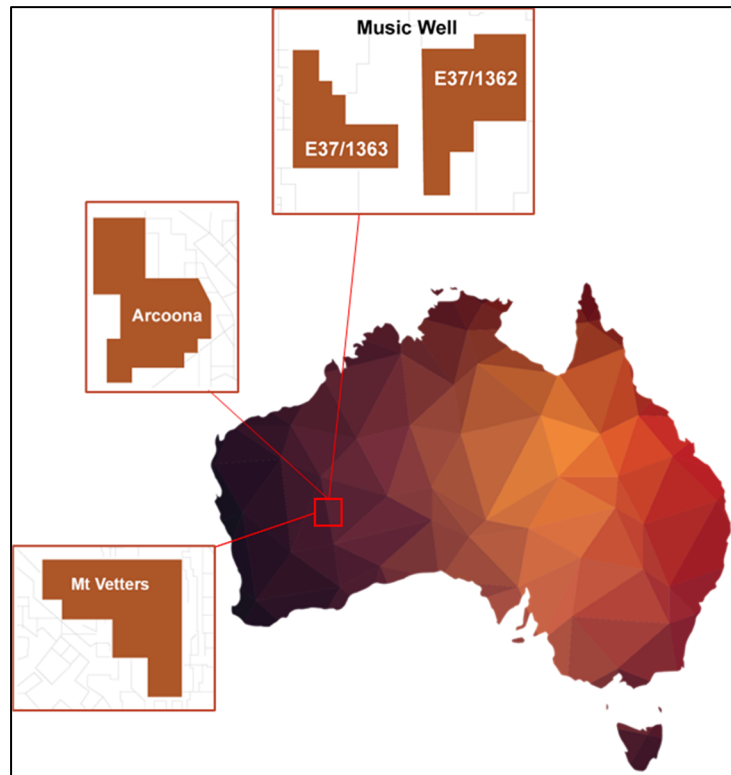
The target at Central was derived from a drone-based magnetic survey that confirmed the presence of a significant anomaly – 1200m long and 400m wide - with a relative peak of over 760nT and a target depth estimated at 300m below the surface.

No work was undertaken at all Nullarbor tenements during the quarter. A strategic decision is taking place to optimise NMR's financial resources towards other priority projects.



## EASTERN GOLDFIELDS PROJECTS, WA

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 10**).



**Figure 10.** Location map of NMR's Eastern Goldfields tenements

### E37/1362 and E37/1363 – Music Well

Exploration on E37/1363 by NMR to date has revealed several targets and the completion of high-resolution airborne magnetics survey by NMR has added significant information about these targets. The results have prompted NMR to complete the recent high-resolution 6,500 line km airborne magnetic survey over the entire tenement E37/1363. E37/1363 field sampling campaign is being planned on the back of these results.

Target 2 Veins, located on the southern part of E37/1362 (identified from previous NMR mapping and sampling), are to be targeted using trenching, sampling, and targeted geochemistry. The Target 2 (T2) vein and the SKI targets will be investigated and sampled for Au mineralisation in our next field campaign.

### E31/1203 – Arcoona

NMR completed the 4,632 line km airborne geophysical survey in December 2021, identifying eight new targets, which prompted NMR to conduct a major field sampling campaign in May 2022 to follow up on these gold and possible Co-Cr-Ni-magnetics new targets. 352 soil samples were collected and analysed. Assay results show gold occurrences above greenstone occurrences on the tenement (*ASX announcement 17 April 2023*). An RC drilling campaign is being planned on the back of these results.

No work was undertaken on the Eastern Goldfields projects during the quarter.

## PLANNING FOR Q4 CY2023

### Maneater Hill, QLD

1. Phase 2 diamond drilling is expected to be completed in October 2023, followed by core sample preparation and assaying.
2. The results of these assays will be used to guide further exploration.

### Mclaughlin Lake, MANITOBA (CANADA)

1. Commence discussions with First Nations regarding diamond drilling campaign planned for Jan 2024.
2. Continue planning for diamond drilling program.
3. Airborne geophysical survey postponed until late spring 2024 due to snow coverage affecting the radiometric and LIDAR readings.

### Palmerville Project, QLD

1. There are no field-based activities planned for the coming quarter.
2. Next quarter is focused on completing the 3D inversion and modelling of previously completed airborne magnetic surveys.
3. Following the completion of the survey data interpretation and modelling, it will be used to aid in the field-based mapping and sampling program targeting the priority areas highlighted in the geophysical data, which is scheduled for Q1 CY2024.

### Eastern Goldfields Project, WA

1. As resources are currently allocated to the North Queensland project, no work is scheduled for the next quarter.
2. Desktop review of Lithium (Li) and Rare Earth Element (REE) prospectivity.
3. Possible fieldwork to follow up review of Li and REE review.

### Nullarbor Project, WA

1. As resources are currently allocated to the North Queensland project, no work is scheduled for the next quarter.

## TENEMENT SCHEDULE AS AT 30 SEPTEMBER 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           |
| 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          |
| QLD              | EPM 28847   | Wrotham                | In Application since 23rd June 2023 |             | 18        | 51             |
| Manitoba, Canada | MEL 1208A   | Mclaughlin Lake        | 18-Aug-23                           | 17-Aug-26   | 19,245 Ha |                |

### CORPORATE

- On 30 August 2023, NMR issued 6,666,667 shares as initial consideration for the acquisition of a 51% interest in McLaughlin Lake Lithium Project).
- On 28 August 2023, NMR Issued 21,363,744 shares at an issue price of \$0.03 per share by way of a Placement.
- On 6 September 2023, NMR issued 26,540,345 shares as part of the Shortfall of shares in the previous Rights Issue of shares to shareholders. Shareholder approval was obtained at the Company's AGM on 27 October 2023 for Director participation for a further 6,702,889, which will be issued shortly.
- On 6 September 2023, NMR indicated a proposal to Issued 666,667 shares to the Placement joint lead managers (Advisors) for the Shortfall.
- For the purposes of Listing Rule 5.3.5, wages to the Managing Director were \$138,750 and Directors Fees totalled \$13,875 during the quarter.
- For the purposes of Listing Rule 5.3.1, expenditure on exploration during the quarter totalled \$607,000 which comprised mainly of the phase 2 Maneater drilling program and the Mclaughlin lake field sampling program.

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:

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#### **COMPETENT PERSON STATEMENT**

*The information in this report relating to Exploration Results is based on information provided to Mr Greg Curnow, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Greg Curnow is a full-time employee of Native Mineral Resources. Mr Curnow has sufficient experience that is relevant to the styles of mineralisation and type of deposit under consideration and to the activity being undertaken 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'. Mr Curnow has no potential conflict of interest in accepting Competent Person responsibility for the information presented in this report. The Company confirms it is not aware of any new information or data that materially affects the information included in the relevant market announcement.*