

## QUARTERLY ACTIVITY REPORT – SEPTEMBER 2021

### HIGHLIGHTS:

#### MUSIC WELL GOLD PROJECT, EASTERN GOLDFIELDS, WA

- 4 diamond drill holes have been completed and successfully intersected the principal Music Well target vein at the predicted depth of 50m down-hole. The intersections confirm the continuation of the mineralised vein system at depth.
- A second field campaign of bulk sampling 2021 delivered exceptional results, including:
  - High grade gold in samples ranging up to 129g/t Au.
  - Visible gold was observed in several rock chip samples.
  - The target vein was bulk sampled for toll treatment, to obtain samples of fresh vein material for assay and to observe the geometry of the vein at approximately 2-3m below the surface where possible.
- An airborne geophysical survey has been planned to cover the western Music Well Project tenement (E37/1363) to refine target areas on existing gold target structures.

#### PALMERVILLE COPPER AND GOLD PROJECT, QLD

- An airborne magnetic and radiometric survey is planned to cover the entire Palmerville Project in Q1 2022.
- New geophysics data will help NMR characterise the geologically complex Chilligoe formation and help define NMR's exciting copper prospects at Palmerville.

#### THE NULLARBOR PROJECT WESTERN AUSTRALIA

- All three targets at the Nullarbor Project are geophysical anomalies in this highly mineralised, yet significantly underexplored south-eastern region of Western Australia.
- NMR are specifically targeting intrusion-related Nickel-Cu-PGE and IOCG-style copper gold mineralisation.
- NMR have commenced a geophysical survey over the Nullarbor tenements and intends to expedite further testing of the Nullarbor targets using additional geophysics and drilling.

#### APPLICATION FOR TENEMENT COVERING THE MINERALISED MANEATER HILL BRECCIA PIPE, QLD

- NMR have applied for a new and exciting tenement located 100 km west of Cairns in North Queensland.
- The target is a proven sulphide-bearing, mineralised breccia pipe centrally located within the tenement.
- EPM 28038 covers an area of 62 km<sup>2</sup> and the target has very high potential for a breccia-hosted gold +/- copper deposit below the current limit of drilling.
- Existing sample results (previous explorers) returned grades of up to 2.05 g/t Au, 65g/t Ag and Pb up to 15% from surface samples at the Maneater Breccia prospect.
- A single diamond drill hole (-53° dip; EOH 365.8m) drilled across the breccia by previous explorers proves that mineralisation continues at depth with up to 100% sulfides noted at ~240m down hole.

Copper, gold and nickel 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 2021.

## Management Commentary

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

*"NMR continues to deliver on its exploration goals, driven by our discovery-focussed work programs across our gold and copper projects in WA and North Queensland. We have also pursued two new strategic and highly complementary additions to our exploration portfolio this quarter at Nullarbor and Maneater, which we believe can add significant value in the near-term.*

*A major operational focus for the quarter was our Music Well Gold Project in WA. Drilling has been completed and initial results confirm that the Music Well quartz vein system continues at depth. Initial bulk sampling has also been completed. The results from both drilling and bulk sampling will greatly increase NMR's knowledge of the size and grade of the target vein system.*

*At the Palmerville project, our team is finalising plans for a large airborne geophysical survey over the tenement package. The geophysics will be the fundamental data required to help constrain the in-field activities for 2022.*

*We are extremely proud to maintain a record of 0 LTI's as we continue to advance our operational programs with the highest level of safety, environmental care and positive community engagement possible. With a busy work pipeline planned for the December quarter, I look forward to providing further updates on progress at regular intervals."*

## PROJECT OVERVIEW

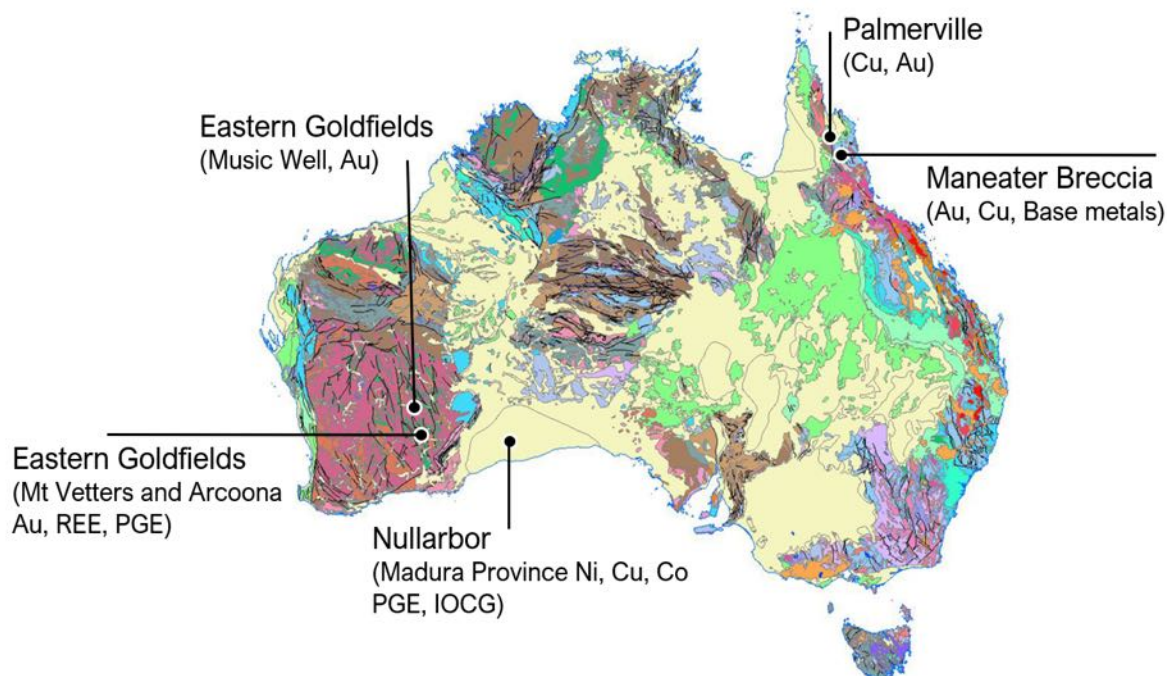
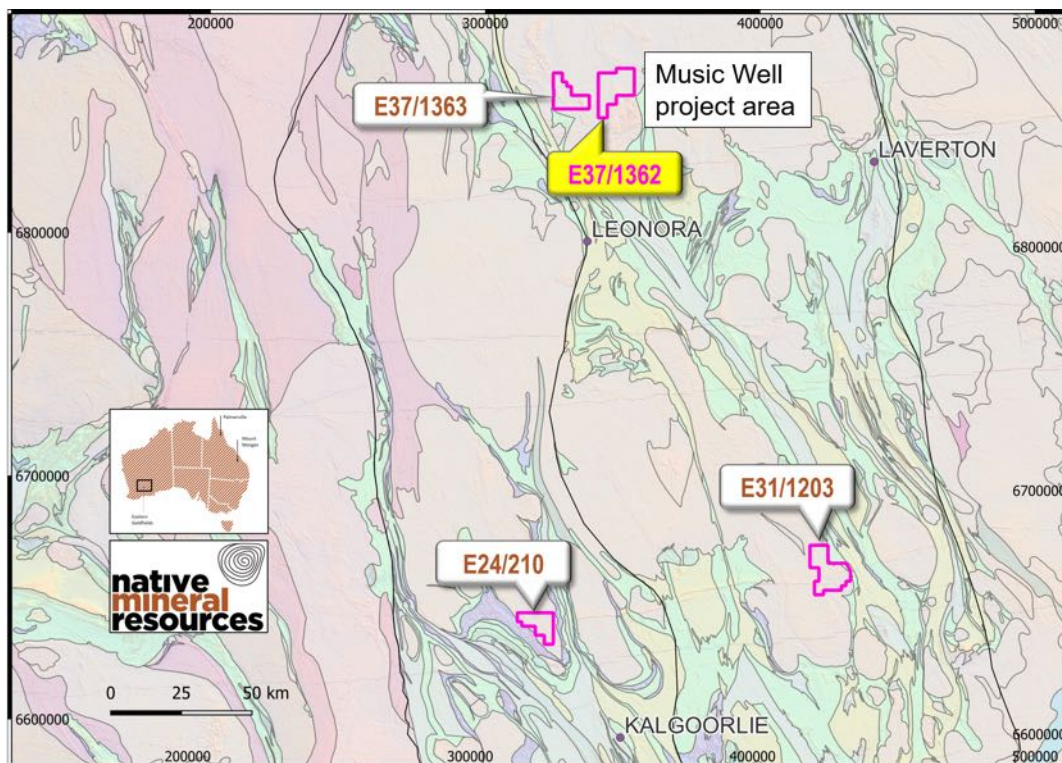


Figure 1. Map of Australia highlighting NMR's three main project areas including the new applications in the Nullarbor region of SE western Australia.

## EASTERN GOLDFIELDS PROJECTS, WA

### Project Background and Music Well Exploration Summary

The Eastern Goldfields is located in the eastern part of the world famous Yilgarn Craton. This unique part of Australia is host to significant mineral resources, particularly gold and nickel. Native Mineral Resources is exploring for granite-hosted gold mineralisation on four highly prospective tenements in the Eastern Goldfields (**Figure 1**). The discovery of structurally-controlled high-grade gold at Music Well, has prompted NMR to focus on this prospect, however, the Mt Vettors and Arcoona Projects, which are located within close proximity to Kalgoorlie (**Figure 2**), are gaining exploration momentum from the company based on the exploration success identifying mineralised, granite-hosted structures at the Music Well Project (E37/1362 and E37/1363).



**Figure 2:** Location map of NMR projects (four tenements) in the Eastern Goldfields of Western Australia. All three projects are located within regions near operating mines and proven mineralisation. NMR's Music Well Project is located approximately 60km north of Leonora (Grid reference is GDA94 Zone51).

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 2**).

The drilling of four diamond drill holes has been completed at Music Well. The four holes completed to a total of 456m. Drilling was undertaken as part of the co-funded EIS drill grant awarded to NMR.

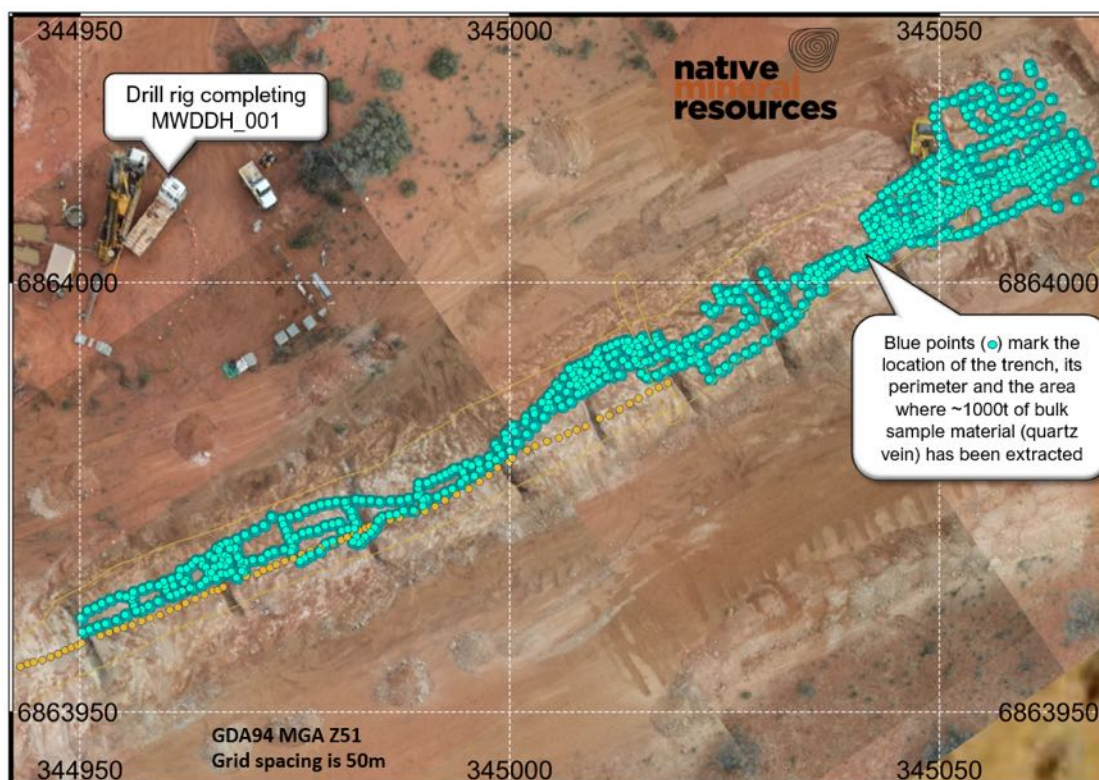
- Four diamond drill holes confirm the presence of the vein at ~45m vertically below the surface (intercept depth ~50m down hole in each hole). Additionally, a second smaller vein was intersected in all four boreholes.

The major target vein occurred at the predicted depths from 3D modelling at around 50 meters down-hole in each of the four holes. Key sections of the diamond drill core (predominantly quartz vein intercepts) were cut and sent for assay. A total of 73 samples are planned to be analysed for gold and other elements. .



Excavation of a 1000t bulk sample of quartz vein material was also completed. The quartz was extracted from the target 1 vein and transported for toll treatment (**Figure 3**). Some key points are listed below.

- The vein was wider than expected at ~1-1.2m and up to 2.5m wide, which helped reduce the depth of excavation.
- 1000t of quartz was stockpiled and transported for toll treating. Cartage of 1000t bulk sample was completed on the 1st Sep 21 from site to the Toll Treating Mill Facility's ROM.
- Toll treating of the sample was completed on the 3rd of September.
- The results from the toll treating are to be obtained and reviewed relative to their point of extraction from the vein.

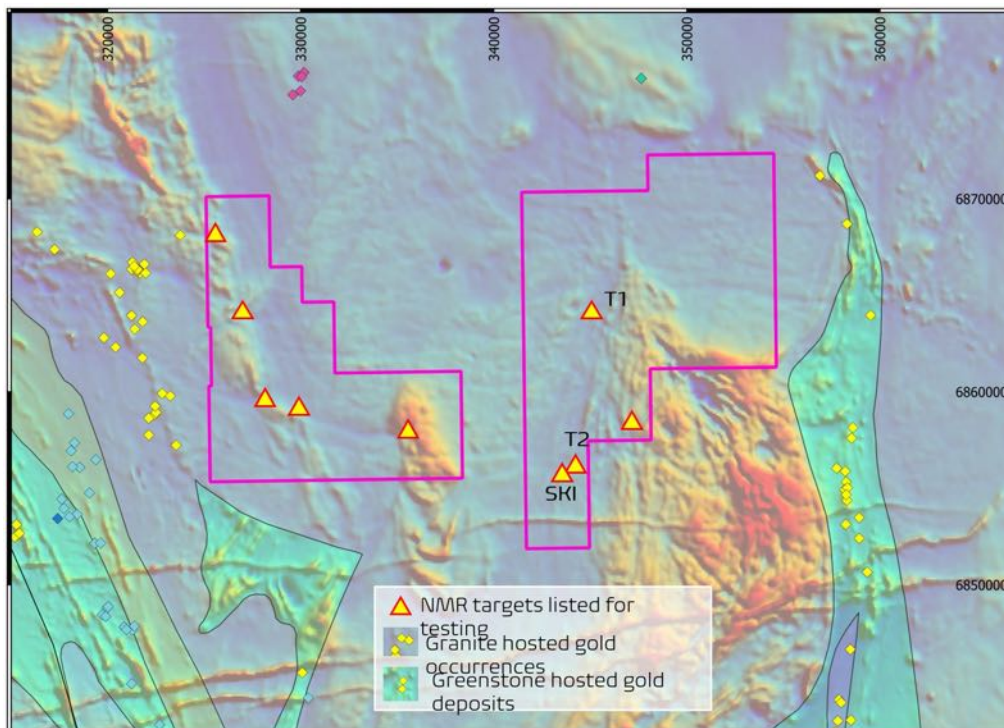


**Figure 3:** Map showing the location of a few key features on the Music Well target site.

Exploration on E37/1363 (western tenement **Figure 4**) to date has revealed several targets. The results have prompted NMR to undertake a high-resolution airborne magnetic survey at 25m line spacing over E37/1363 tenement.

Due to the tenement being mostly under cover; exploration will be geophysics and geochemistry intensive. In addition to the acquisition of new data, NMR will work with the contractor to seamlessly integrate the new magnetics data with the existing 100m-spacing magnetic data over the eastern tenement E37/1362. The results from the magnetic survey will be used to help delineate the structures on each tenement that host potential mineralisation (**Figure 4**).

Target 2 Veins, located on the southern part of E37/1362 (identified from previous NMR mapping and sampling), are to be targeted using trenching and sampling at or near the surface. The Target 2 (T2) vein and the SKI targets (shown in **Figure 4**) will be investigated and sampled for Au mineralisation.



**Figure 4:** Target generation over the two music well tenements has been very successful, southern targets T2 and SKI are next to be investigated Targets 2 occurs 8km south of the T1 vein.

## PALMERVILLE PROJECT, NORTH QLD

### Background

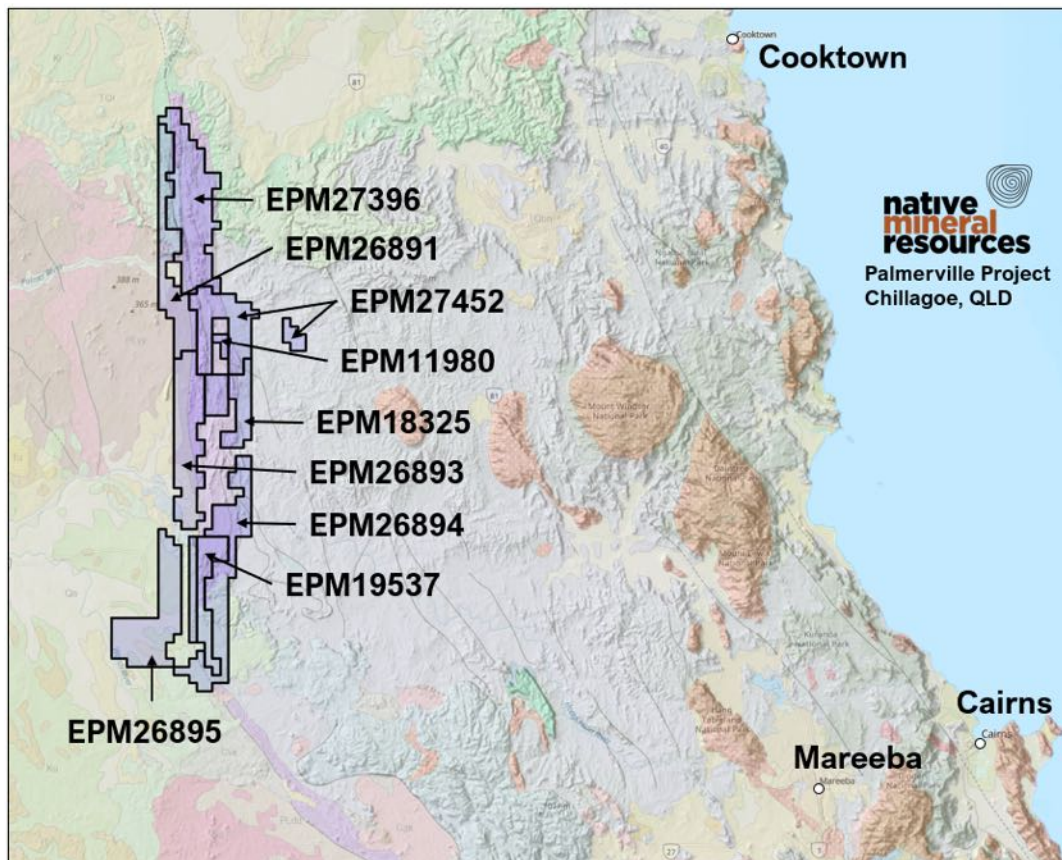
The Palmerville Project is the Company's principal copper exploration asset and covers a near continuous strike length of 130km over an area of ~1,820km<sup>2</sup> centred 200km west-northwest of Cairns in North Queensland.

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

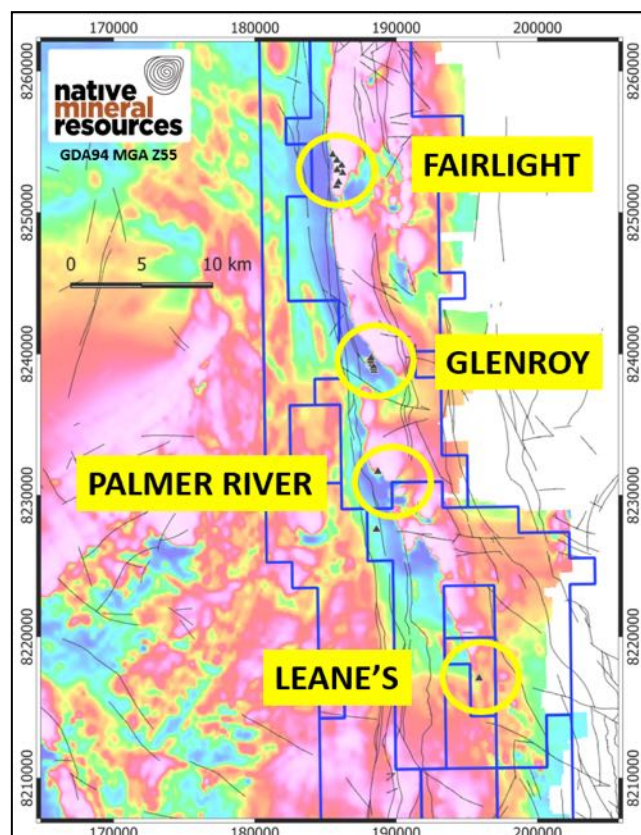
The Project is prospective for the following deposit styles:

- *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:** Map showing the location of NMR's 9 tenements that make up the Palmerville project. The tenements encompass a significant portion of the Chillagoe Formation and N-S trending Palmerville Fault. Please refer to previous ASX announcements and NMR's website.

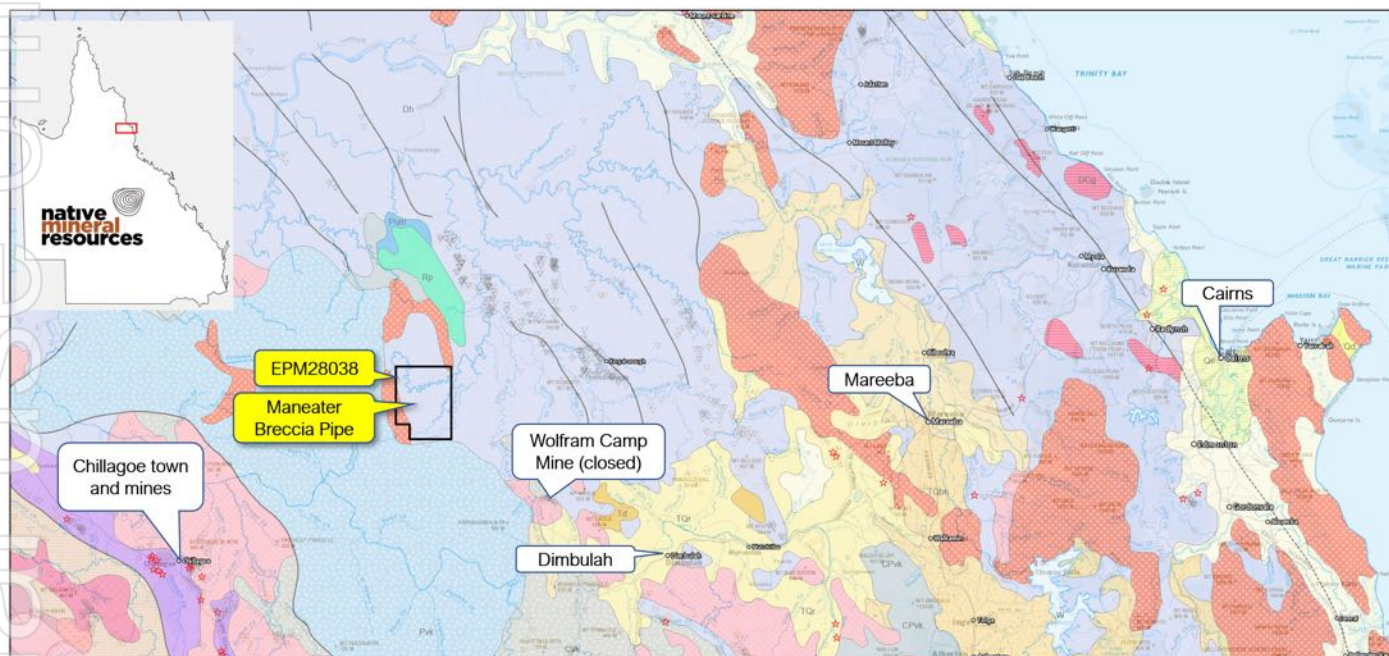


**Figure 6:** Map showing the northern part of the tenement package with the location of prospects referred to in this release. The base map is the publicly available total magnetic intensity (TMI) image. As described in the body text, NMR is targeting copper prospects along the length of the approximately N-S trending magnetic high (reds and purples) in the centre of the tenements. Location information is provided in GDA94 MGA Zone55.

## MANEATER HILL, QLD

### Maneater Hill (EPM 28038)

NMR have applied a new exploration permit over a mineralised breccia pipe located near Chillagoe in Northern Queensland. Specifically, the tenement is located 100 km west of Cairns in North Queensland, the target of the application is a sulphide-bearing, intrusion-related breccia pipe centrally located within the tenement. EPM 28038 covers an area of 62 km<sup>2</sup> and the target has very high potential for breccia hosted gold and copper mineralisation below the predominantly lead and zinc mineralisation identified near surface.



**Figure 7.** Map showing the location of NMR's Maneater Breccia exploration tenement application EPM28038. The tenement is located in northern Queensland, approximately 100km west of Cairns.

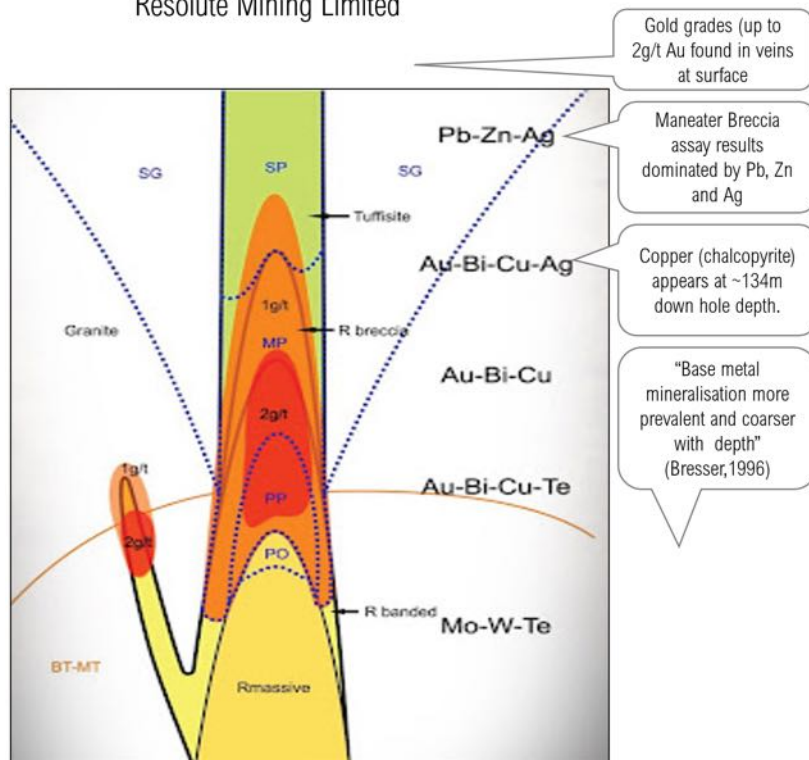
Previous explorers completed a single diamond drill hole (MPD001) at an angle of 53 degrees across the breccia pipe to a total depth of approximately 365m. The hole, which was drilled in 1995, revealed lead and zinc mineralisation with pyrite but also showed (as reported by previous explorers) increasing metal content and the appearance of copper in the form of chalcopryite with increasing depth (*refer to previous ASX announcement, October 21, 2021*). A review of existing data and a comparison with other breccia-hosted mineral deposits has demonstrated very similar features, including mineral zoning, to many of the features identified in the upper part of the >1Moz Au Mt Wright breccia located near Ravenswood (~280km south of the Maneater Breccia). The current level of exposure is interpreted to be above the zone of gold and copper mineralisation. The breccia pipe is located within a topographic high, with mineralisation present at the surface and the breccia outcrops on top of the hill.

Soil and rock chip samples were also completed. Sampling returned Au up to 2.05 g/t Au, 65g/t Ag in small veins around the breccia pipe and Pb values of over 14% at surface.



Mt Wright (Breccia Pipe)  
Resolute Mining Limited

NMR's Maneater Breccia



**Figure 8:** Schematic diagram from Resolute Mining's Mt Wright Breccia Pipe showing the metal zoning observed in association with gold mineralisation at depth. A review of existing data contained within publicly accessible reports from previous explorers shows similarities with the zoning observed at the Mt Wright Breccia including a zone of high lead, zinc, and silver, but low gold near the top of the breccia and above the zone of primary gold mineralisation. Features found at the Maneater Breccia are listed on the right-hand side of the cross section. The schematic section through the Mt Wright Breccia Pipe obtained from a Resolute Mining Limited Presentation (2013). The upper part of the metal zoning is analogous to the results from the single drill hole in the Maneater Breccia on EPM 28038.

NMR are basing its interpretations and prospectivity analysis on a newly understood geochemical model of metal zoning in breccia pipe systems whereby a Pb- Zn- and Ag dominated zone lies near the top of the system, but grades downwards into the Au- and Cu-rich mineral zone at depth (**Figure 8**). The presence of lead and zinc in the drill core and increasing copper near the base of the drill core (below 134m down-hole depth) indicates that the current level of exposure of the Maneater Breccia may be near the upper part of a gold-bearing breccia pipe and the gold and copper mineralisation lies at greater depth, beyond the current limits of drilling or any sampling. The schematic cross section shown in **Figure 8** is for the Mt Wright gold breccia system (Mt. Wright Gold Mine – Resource of 1.3 million ounces of gold). After an initial data review NMR consider Maneater Breccia as a potential analogue of Mt Wright.

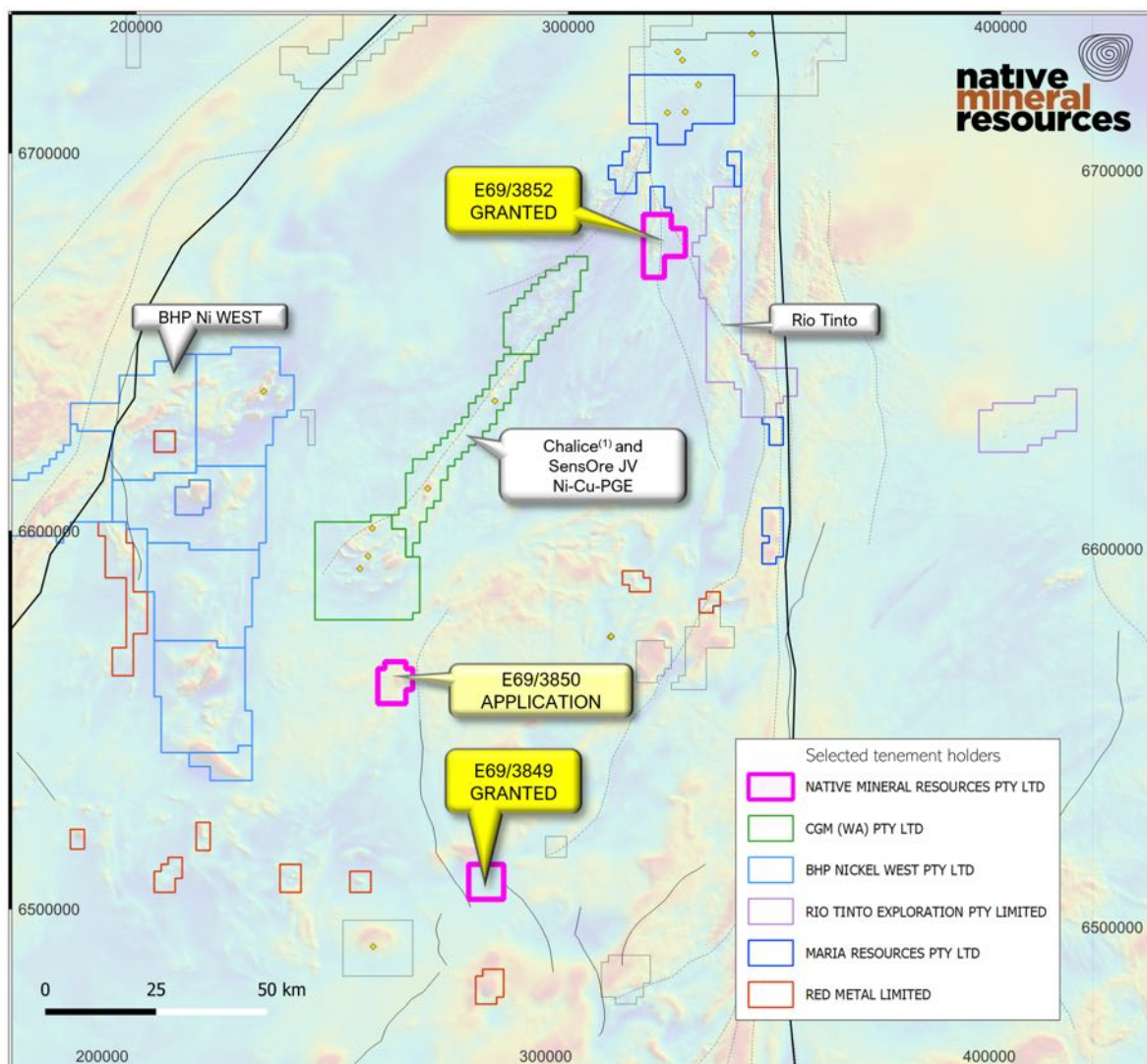


## NULLARBOR TENEMENTS, WA

NMR have been granted two (E69/3849 and E69/3852) of the three tenements in the Nullarbor region of SE Western Australia (**Figure 9**). The three tenements are located over two potential target types including intrusion hosted Ni (E69/3852) and iron-oxide copper-gold (IOCG)-style mineralisation (E69/3850 and 3849).

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. This target is observed in regional, publicly available geophysics, however, in order to resolve the target in more detail, NMR have begun a higher-resolution magnetic survey over the tenement. The detailed geophysical survey results will then be used to target and drill the highest potential area on the tenement.

The southern and central tenement E69/3850 and E69/3849 were acquired to enable NMR to explore the potential for IOCG-style mineralisation. The distinctive anomalies identified in magnetics are within proximity to a distinctive zone of relatively low resistivity identified in a regional Magnetotelluric (MT) geophysical survey. The target on E69/3850 lies in a setting similar to the Olympic Dam Deposit which also lies above these geophysically defined zones, also referred to as the “Fingers of God”.



**Figure 9:** Map of the western Nullarbor region showing NMR's recently granted tenements (E69/3852 and E69/3849). The central of the three tenements (E69/3850) is in application. The tenements are located in a prospective area of South-eastern Western Australia surrounded by other major mineral explorers. (1) via subsidiary CGM (WA). Map grid is GDA94 MGA Zone 52. Background image is TMI (80m pixels) from DMIRS. Major structures overlain on magnetic data. Selected tenement holders shown and labelled in key. Other tenements are in black.

## PLANNING FOR Q4

### Music Well Gold Project

Both exploration drilling and bulk sampling were completed at Music Well during the third quarter of 2021. In Q4, modelling of the targets and planning of further works for 2022 will be undertaken. A summary of the key work programs planned are outlined below:

- Music Well East (E37/1362), Target 2 and 'SKI' targets will be investigated and sampled to follow up on promising high-grade grab samples and epithermal vein textures.
- Modelling of the Target 1 vein and the associated assays will be completed in the next quarter.
- In addition, NMR is looking to perform a regional fixed-wing airborne geophysics survey over the Music Well tenement (E37/1363) to gain insight to geology and structure under cover.

### Palmerville Project

The Palmerville Project is NMR's largest tenement holding with high-quality new and existing targets identified and/or advanced. NMR hold considerable exploration area over the northern Chillagoe Formation and, to help explore the area more effectively, NMR is carrying out a seamless airborne magnetic survey over all of its tenements in Palmerville, commencing November 2021. The resulting dataset will be significantly higher resolution than the currently available public data and will be used to help refine the targeting already completed in the area.

This significant magnetic survey will be the basis for further, more detailed target definition, with further follow-up work programs for the 2022 field season to be reported in due course.

### Maneater Hill

Maneater Hill (EPM 28038 currently under application) is a very exciting new tenement for NMR. The topographic peak is an intrusive breccia that, based on existing information obtained from previous exploration reports, exhibits extremely high-potential for mineralisation to exist below the current level of shallow drilling. With potential for a large gold +/- copper deposit, mineralisation (pyrite, lead, zinc and silver dominated) starts at surface and continues at depth. Maneater is a high priority for NMR. Once granted in Q1 2022, geological mapping and drilling will be planned to help define the extent and grade of this clast-supported, sulfide-rich, breccia-hosted mineral system.

### Nullarbor Project

Both the northern (E69-3852) and southern (E69-3849) Nullarbor tenements were granted on the 13th of October 2021. The central Nullarbor tenement (E69-3850) is anticipated to be granted in late October. The drone-based magnetic survey for the Nullarbor has been planned on the two northern tenements and commenced in October.

## TENEMENT SCHEDULE AS AT 30 SEPTEMBER 2021

Region	Tenement ID	Tenement Name	Date Granted	Date Expire	Sub-Block	SQKM (approx.)
Queensland	EPM 11980	Limestone Creek	3-Jun-05	2-Jun-22	4	13.16
Queensland	EPM 18325	Bald Hills	30-Jul-12	29-Jul-21	15	49.35
Queensland	EPM 19537	Mitchell River South	21-Jan-08	20-Jan-24	33	108.57
Queensland	EPM 26891	Palmerville North	29-Jan-19	28-Jan-24	63	207.27
Queensland	EPM 26893	Palmerville West	29-Jan-19	28-Jan-24	100	329
Queensland	EPM 26894	Palmerville East	1-Apr-19	31-May-24	84	276.36
Queensland	EPM 26895	Palmerville South	31-Jan-19	30-Jan-24	89	292.81
Queensland	EPM 27396	East Palmerville North	4-Jun-20	3-Jun-25	100	329
Queensland	EPM 27452	East Palmerville South	2-Feb-21	1-Feb-26	65	213.85
Queensland	EPM 17850	Mount Morgan	Transfer to GBM on 1 <sup>st</sup> July 2021		13	41.6
Queensland	EPM 28038	Maneater Hill	In Application since 23 <sup>rd</sup> Sep 2021		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 <sup>[1]</sup>	12-Oct-26	41	121.5
WA	E69/3850	Nullarbor Central	TBA	TBA	26	76.65
WA	E69/3849	Nullarbor South	13-Oct-21 <sup>[1]</sup>	12-Oct-26	25	73.7

### Notes:

[1] Granted after reporting period

## CORPORATE

### Use of Funds

Pursuant to ASX Guidance Note 23, Appendix sets out a comparison of the actual expenditure on the individual line items in the “use of funds” statement since the date of admission to the ASX on 12 November 2020.

With the exceptional results from the exploration campaigns, spending has been accelerated to advance year 2 planned work program. The overall spending is in line with the prospectus budget. The fast tracking of work program is driven by NMR’s strategic move to enable NMR to develop revenue opportunities in the near term.

Use of Funds	Prospectus use of Funds	Funds used to 30 Sep 2021
Exploration Costs (2 years)	3,327,000	3,038,450
Acquisition of mining tenements in W.A.	80,000	99,284
Palmerville Project Land Access agreement expense	16,000	-
Operating expenses	1,545,700	1,008,405
Costs of Offer - fundraising	445,000	445,000
Costs of Offer - ASX, legal, accounting & other support services	329,000	386,645
<b>TOTAL</b>	<b>5,742,700</b>	<b>4,977,783</b>

The payments to related parties and their associates during the quarter of \$13,000 disclosed in the Appendix 5B are comprised of Directors fees.

**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)



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)

#### **Competent Person Statement:**

The information in this report relating to Exploration Results is based on information compiled by and/or provided to Dr Simon Richards, a Competent Person who is a Member of the Australian Institute of Geoscientists and the Australasian Institute of Mining and Metallurgy. Dr Simon Richards is a full-time employee of Native Mineral Resources. Dr Richards 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'. Dr Richards has no potential conflict of interest in accepting Competent Person responsibility for the information presented in this report and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### **Notes – Specific ASX announcements:**

No new results have been presented in this announcement. Material contained in this release refers to information including, but not limited to sample results and the methodologies used for sample acquisition and processing (JORC table) presented in the previous ASX Announcements listed below.

- ASX Announcement, 21<sup>st</sup> Oct 2021 – NMR explore a Mineralsied Breccia Pipe in North Queensland
- ASX Announcement, 23rd Sep 2021 – Positive Outcomes from Diamond Drilling at Music Well
- ASX Announcement, 30th Aug 2021 – Key Work Programmes Advanced at Music Well
- ASX Announcement, 06th July 2021 – Music Well Gold Project Access Agreement
- ASX Announcement, 01st July 2021 – Divestment of Mount Morgan Project
- ASX Announcement, 28th June 2021 - NMR Confirms Further High-Grade Gold Mineralisation at Music Well Project in WA
- ASX Announcement, 7th June 2021 - NMR expands exploration portfolio with three new tenement applications targeting copper, gold and nickel in WA.
- ASX Announcement, 29th March 2021 - High-grade and free-milling gold at Music Well
- ASX Announcement, 4th February 2021 - East Palmerville South Permit Granted
- ASX Announcement, 5th May 2021 - NMR awarded EIS grant to fund diamond drilling at Music Well
- ASX announcement 21st January 2021 - Porphyry Intrusions Confirmed at Leane's Copper Prospect
- ASX announcement 21st December 2020 - Leane's Returns Shallow Intercepts Grading – Copper
- ASX announcement 15th December 2020 - Drilling Confirms Mineralisation System at Leane's Copper Prospect
- ASX announcement 27th November 2020 - Significant Results from Drilling at Leane's Copper Prospect.