



ASX ANNOUNCEMENT

18 February 2022

## NMR awarded \$200,000 Collaborative Exploration Initiative (CEI) grant

### Highlights:

- NMR are pleased to announce that the Company has been awarded \$200,000 as part of the Queensland Governments highly competitive Collaborative Exploration Initiative (CEI) grants program.
- Funding will contribute towards the acquisition of a 30,349 line-kilometre fixed wing magnetics and radiometrics survey flown at a line spacing of 80m.
- The high-resolution magnetics survey will be the first project-scale survey ever flown in the region and will add a significant amount of new, key data to the region.
- NMR would like to thank the QLD government for offering the CEI grant scheme to active mineral explores to help discover new critical mineral deposits.
- This financial support helps demonstrate the confidence that the GSQ have in the project and the Company's ability to add significant value to this part of North-East Queensland.

Native Mineral Resources Holdings Limited (**ASX: NMR**), or ("**NMR**" the "**Company**"), is pleased to advise that it has been successful in securing a Queensland Government Collaborative Exploration Initiative (CEI) grant. NMR will receive grant funding of \$200,000 to support the completion of a 30,349-line kilometre fixed-wing magnetic and radiometric survey. The survey will be completed in collaboration with project partners Prophet Resources and professional geophysical acquisition company MagSpec Airborne Surveys Pty Ltd.

### Management Commentary

**NMR's Managing Director, Blake Cannavo, commented:** *"We are delighted to have secured this grant from the Queensland Government. The funding will allow the team to gather the data required to efficiently and precisely prioritise the many targets already defined at our Palmerville Project area. This is a great boost for NMR as it not only helps increase our knowledge of the geology in the region, but it also demonstrates a commitment from the Queensland Government to help companies find the critical metals required for the transition to a greener, healthier and more environmentally sustainable economy. Airborne magnetics is a great way to increase targeting success, reduce NMR's on-ground impact and help point our geologists to the best areas in the field for discovery. The geophysics will be the next critical piece of information on top of our growing number of positive sample results and targeting."*

### NMR's rationale for undertaking airborne geophysical survey

The primary, and arguably the most important, geophysical dataset in any exploration companies' exploration toolbox is high-resolution magnetic data. Airborne magnetic and radiometric data is a standard technique used across the industry and has been the foundation dataset for many new deposit discoveries. The mineral-rich, but discovery-poor northern Chillagoe Formation suffers from very low-resolution 400m line spacing magnetic data in what is a lithologically and structurally complex zone with exceptional potential for one or even multiple copper deposit discoveries.

Due to the geological complexity of the northern Chillagoe Formation, there is a desperate need for high-resolution geophysics to help make sound geological interpretations about the geological controls and location of mineralisation relative to the surrounding geology.

The proposed airborne magnetic and radiometric survey results will assist NMR and other exploration companies within the survey window to "virtually see" through the barriers inhibiting current exploration including thick vegetation, shallow rock cover and difficult-to-access terrain. The resulting dataset will be used to help observe, in more detail and continuity than ever before, the sub-surface structure and intrusion potential of the belt. The planned 30,349-line kilometre magnetic and radiometric survey will also add significant volume of critical data to QLD's growing digital database which in turn will help promote discovery now and into the future.

### Survey location and background

The Palmerville-North Chillagoe Project lies in the North-eastern Queensland mineral province and is a strategic area for new mineral deposit discoveries. The Project is NMR's principal Copper 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 (Figure 1). The Magnetic survey will cover almost the entire area of NMR's Palmerville Copper-Gold exploration project (Figure 2).

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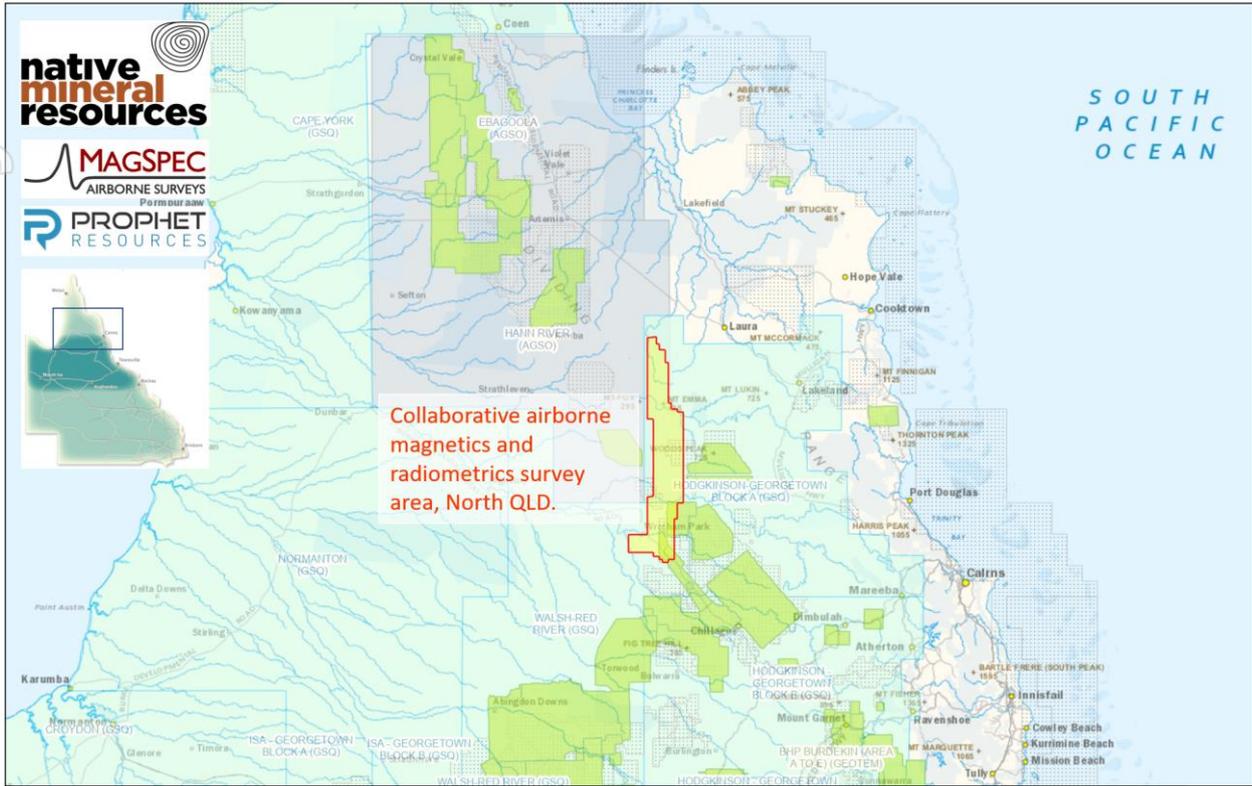


Figure 1. Simplified map showing the location of the proposed airborne magnetic and radiometric survey. The survey area is over 2000 km<sup>2</sup> and will be flown at 80m flight line spacing. The survey will gather over 30,300-line kilometres of new, continuous, seamless, and high-resolution magnetics and radiometrics data.

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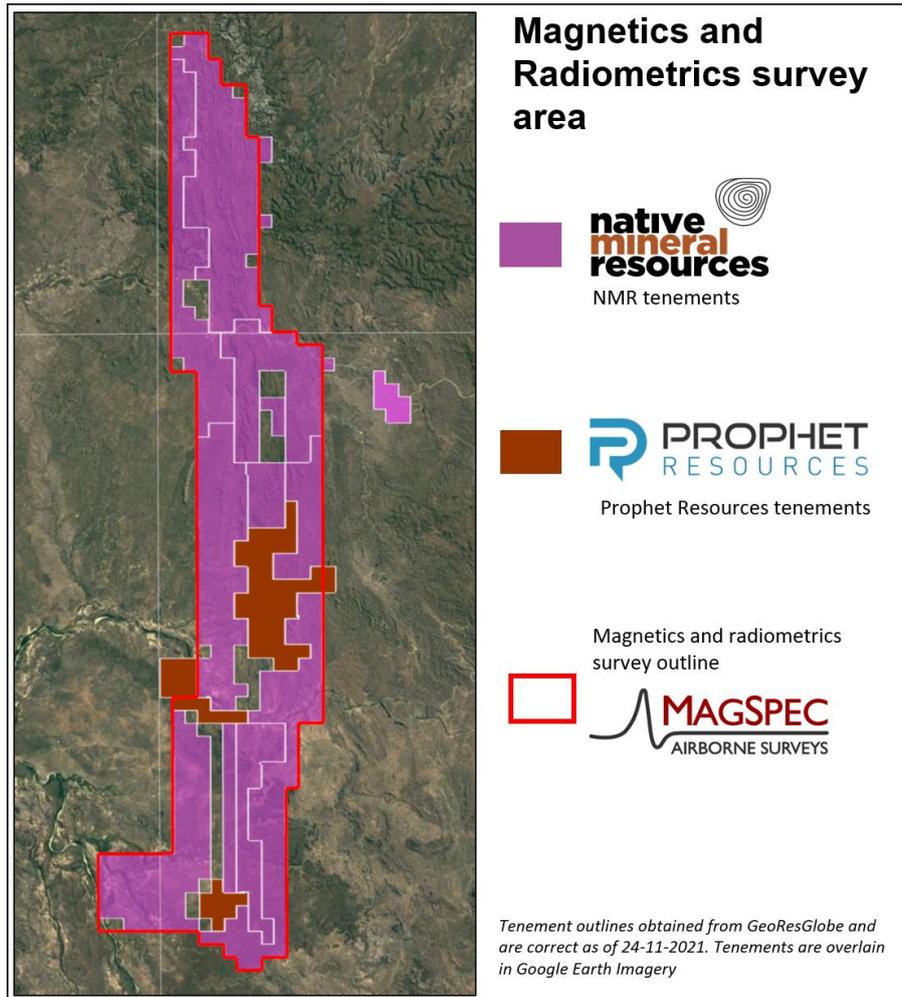


Figure 2. Location map submitted as part of the CEI application process outlining the area of the airborne magnetics survey. NMR are proud to have worked together with Prophet Resources to complete planning, grant submission and now successful grant of CEI funds.

### **Palmerville – Northern Chillagoe Project Background**

NMR’s Palmerville Project area consist of nine Exploration Permits (EPM’s) that cover a significant proportion of the highly prospective Chillagoe Formation (Figure 3). To the south of NMR’s project area, the same Chillagoe Formation hosts the large 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. These mines all occur within a relatively short, approximately 70-kilometre long, segment of the southern part of the Chillagoe Formation. This part of the southern Chillagoe Formation has been extensively explored, which contrasts with the region to the north held by NMR. The Northern Chillagoe Formation is comparatively under explored despite the presence of several historical copper and other base metal mines in the area.

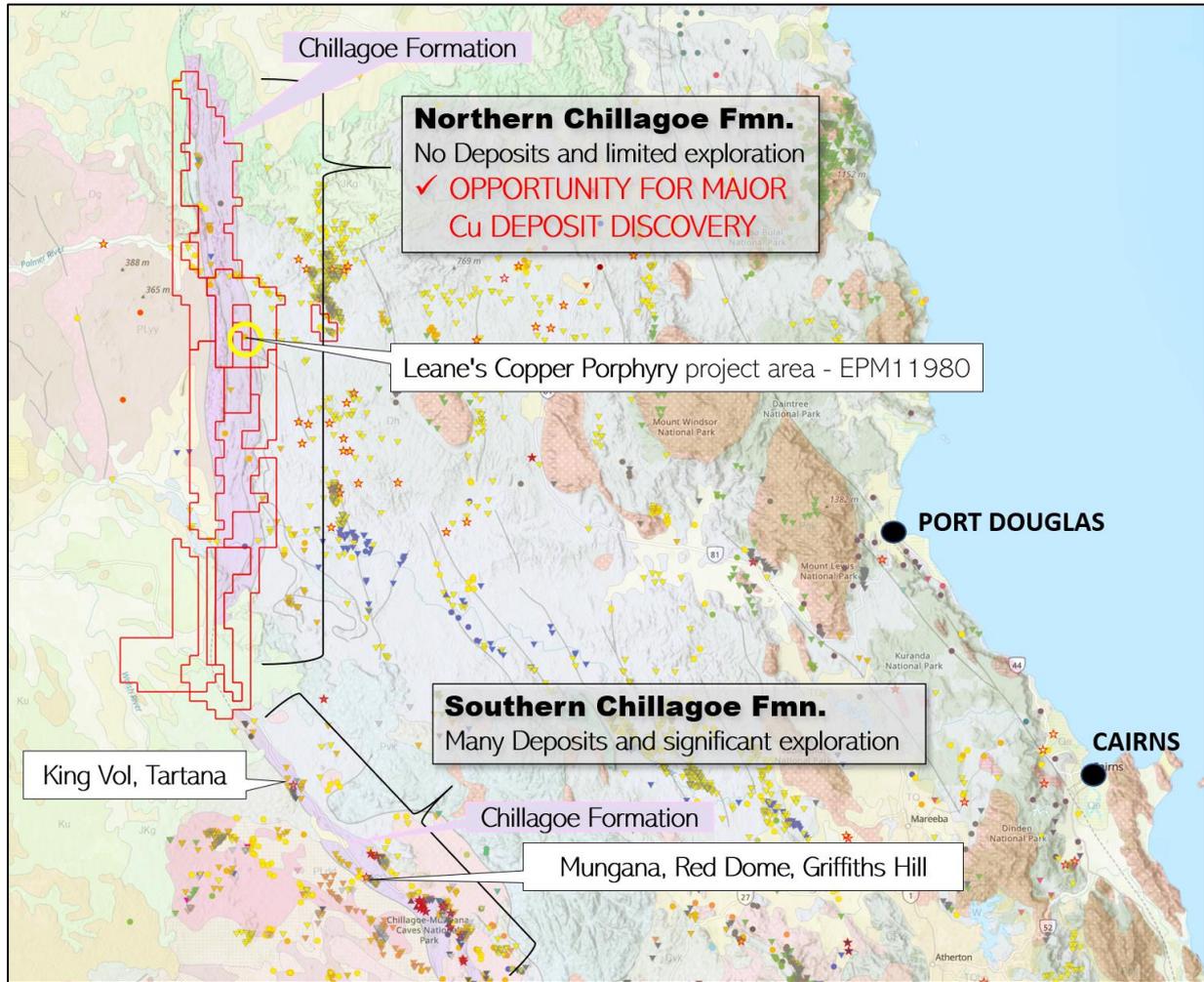


Figure 3. NMR's tenements (red) over the northern Chillagoe Formation. The area covered by tenements is considered by the Company to be under-explored despite sharing almost identical rock types as the southern Chillagoe Formation and having significant evidence of copper mineralisation. NMR is a frontier explorer having discovered at least three very high potential targets including the Leane's project.

The Palmerville Project area is 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.*

Previous exploration over the tenements has, in places, been extensive including soil, stream sediment and rock chip sampling, trenching, and limited drilling. However, no previous explorers have continued to develop the many targets identified. For the majority of the region, exploration is at a very early stage. NMR has completed a preliminary review of historical mining activity and past

exploration, identifying 65 mineralisation occurrences and eleven initial priority targets. The airborne magnetic survey will allow NMR to carry out comprehensive targeting, current target analysis and ranking, whilst also allowing the Company to assess existing targets relative to variability and features identified in the magnetics and radiometrics survey data.

NMR is continuing to focus its exploration efforts in areas where historical mining has demonstrated copper production including the Fairlight and Glenroy prospects and where initial drilling results have demonstrated the presence of copper beneath high grade rock chip samples and soil anomalies.

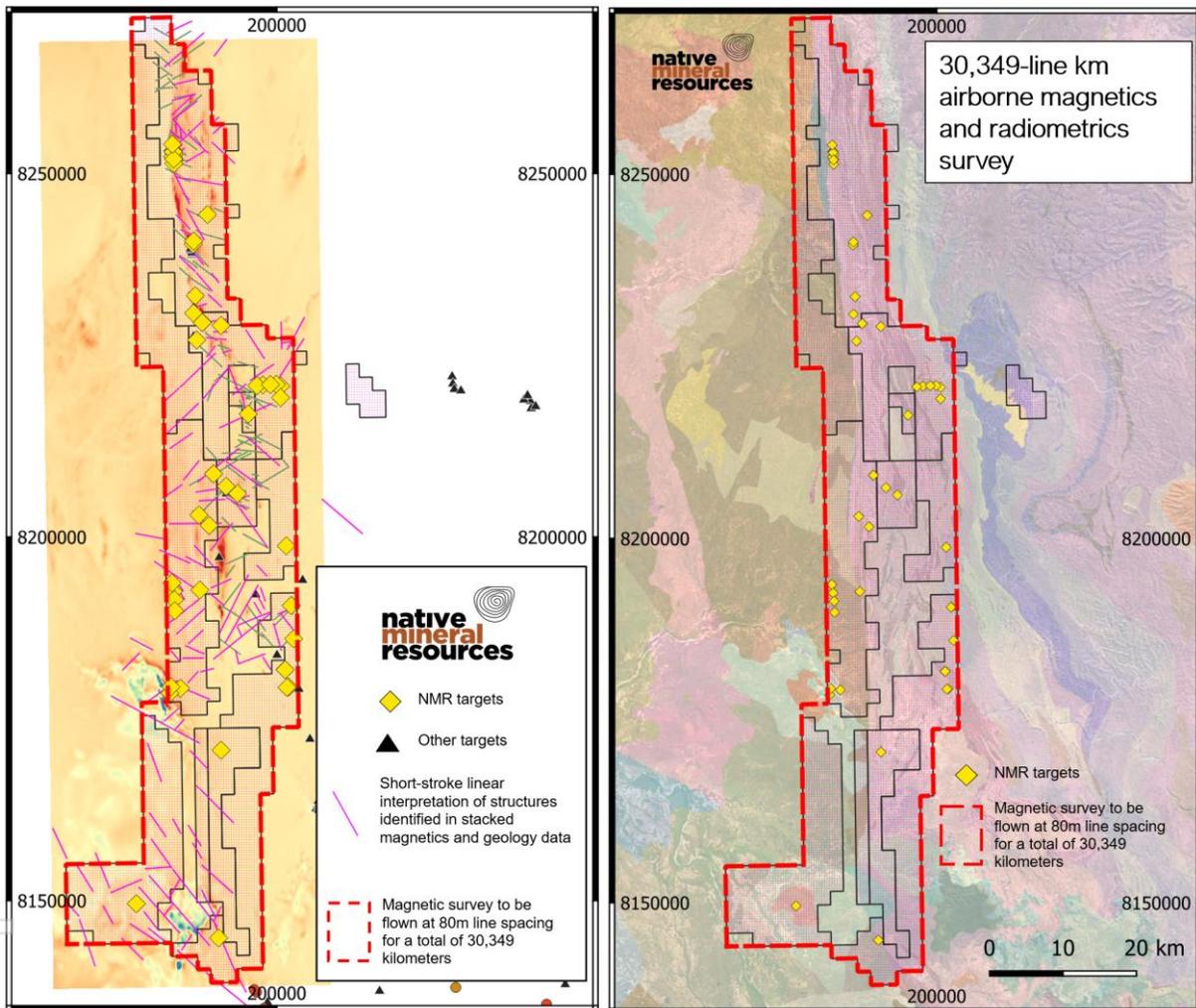


Figure 4. Maps highlighting the location of NMR's targets, linear features identified in geology and existing magnetics data. Just a sub-set of the targets identified are shown. The current magnetic data shown on the image to the left is 400m line spacing, therefore NMR's 80m line spacing will offer a significant upgrade in resolution.

### Summary of results obtained in May 2021

In May of 2021, NMR successfully identified high-grade copper to south of the historical Fairlight copper mines (Figure 6). The result confirmed southward continuation of the mineralised structures and contacts that are host to the copper mines further north. The Fairlight and Glenroy prospects are new field targets for NMR and add to the growing number of high-grade copper

prospects within the N-S trending tenement package and will be one of the key targets to be identified in the planned magnetic survey.

### PALMERVILLE PROJECT, QLD

NMR are continuing to build on the growing number of high-grade copper results and increasing confidence in the Company's many targets. Included below is an extract of information from NMR's most recent field campaign exploring four high-potential targets in the Palmerville project area. These are Fairlight, Glenroy, Palmerville River and Leane's (Figure 6).

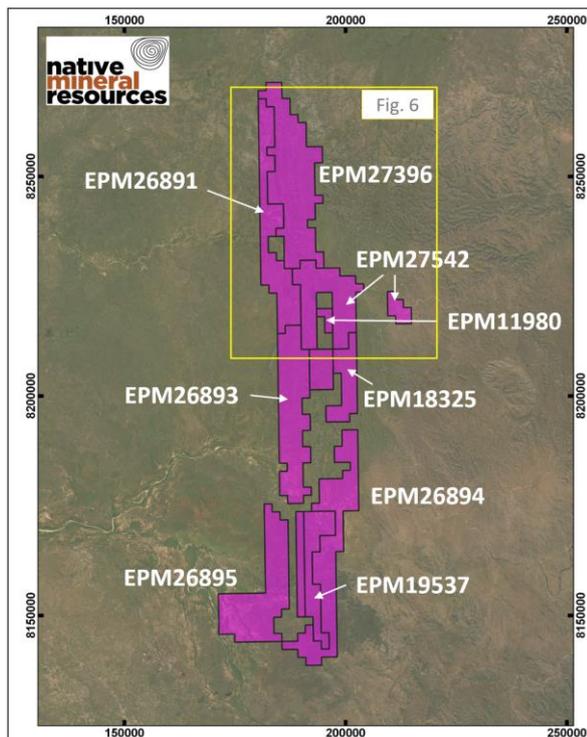


Figure 5. Map showing the location of NMR's 9 tenements that make up the Palmerville project. The tenements encompass a significant portion of the northern Chillagoe Formation and N-S trending Palmerville Fault. Please refer to previous ASX announcements and NMR's website for detailed geological maps. Location information is provided in GDA94 MGA Zone55.

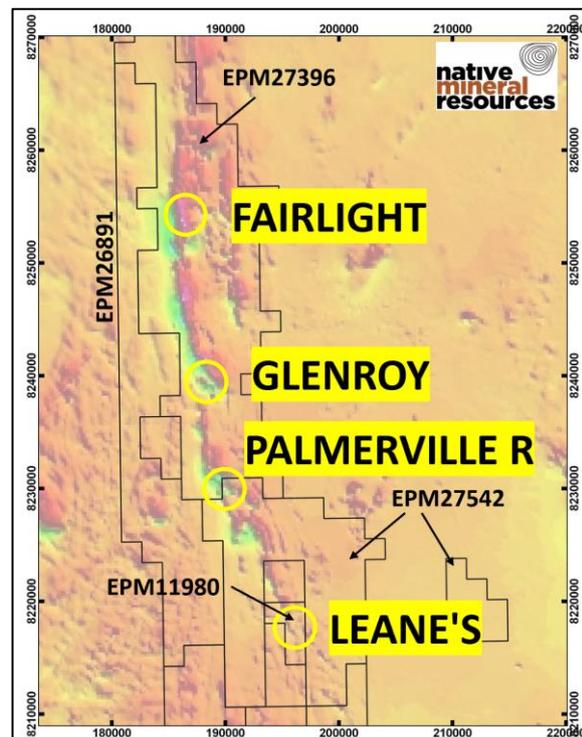


Figure 6. Map showing the northern part of the tenement package with the location of prospects referred to in this release. The base map is the publicly available, but low resolution, total magnetic intensity (TMI) image. As described in the body text, NMR is targeting copper prospects along the length 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.

### FAIRLIGHT COPPER PROSPECT

Native Mineral Resources has completed a first-pass investigation of several historical copper producing targets including the Fairlight area (Figure 5, Figure 6). Fairlight is characterised by scattered workings, shafts located to the east of the Little Kennedy River and approximately 4km south-east of the Fairlight homestead. The area has been mined historically with records showing more than 16 shafts ranging from 3 to 27 metres deep.

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The geology of the area is dominated by metamorphosed, tight- and isoclinally-folded sequence of basic volcanics with thin interbedded cherts, rhyolites and limestones locally overlain by greywackes, slates and cherts. Basic volcanics include vesicular basalts, scoriaceous basalt, pillow lavas, flow top breccias and tuff lavas, along with reported occurrences of porphyritic gabbro's. The main copper workings are in vesicular basalt and at the contact between basalts and metasedimentary rocks including cherts and jaspers. Copper carbonate, chalcocite, chalcopyrite and bornite have also been reported from these areas. The rich copper ore was reported to have occurred along joints in the basalt and at basalt-slate contacts. In 1997, Sipos Mining identified several targets from which 11 of 32 rock chip samples from Fairlight returned up to 22.8% Cu, including two soil samples recording 2.13% and 6.45% Cu (Cooper, 1997a). NMR consider the area as extremely prospective, and the results presented here represent the very first investigation by NMR of a target south of the main mining region with no known record of recent sampling.

### RESULTS (May 2021)

A total of eleven (11) rock chip samples were collected from sites to the south of the main mining district at Fairlight. Six of the eleven samples collected from the target revealed excellent grades of over 1% Cu and maximum grades of 7.99% Cu. In addition, silver grades were also high at up to 9g/t.

Two sites (an eastern and western) were of principal interest and located between two small historical mines. At both sample locations, a small number of undocumented workings exposed the contact between red jaspers to the west from metamorphosed and altered basalts to the east. The contact between the two rock types had been mostly removed, however, fractures within the footwall jasper contained abundant malachite. The meta-mafic rocks at the target to the east contained small quartz veins and grades of up to 6.4% Cu. At both locations, multiple samples were collected of mineralised rocks and un-mineralised wall rocks, which is reflected in the variability of the grades shown below.

This initial field campaign and associated high-grade copper results has provided the team with the confidence to continue to investigate this extremely significant copper prospect.

### GLENROY COPPER PROSPECT

The Glenroy Prospect is located 500m west of the Palmerville – Fairlight Road around 9km north of Palmerville within the Chillagoe Formation. One short, 5-metre-deep shaft was sunk in the early 1900's with several shallow pits also apparent on scattered outcrops.

Chalcocite, copper carbonates, chalcopyrite and minor pyrite are evident in the mine site dump and smaller pits. Minerals occur in weathered and altered basalts associated with fine-grained light grey rock possible aplite or weathered rhyolite.

Previous exploration has been carried out at Glenroy and has been mostly limited to surface sampling, geochemical analysis and geophysics work, yet very little follow-up work has been carried out in the past decade. In 1977, Aquitaine carried out a limited auger and air core drilling campaign. Auger holes were less than 4 m in depth and contained anomalous copper values up to 1000ppm. The 2 air core holes terminated at 15 and 37m. DH 1 to 37 m had aphanitic chloritic basalts and was moderately magnetic

between 13-17m and 28-35 m. Hole 2 intersected malachite and chalcopryrite in calcite veining assaying up to 1550ppm Cu (Cambrell and Mathison, 1977).

23 rock chip samples collected by Sipos from the Glenroy prospect returned anomalous results for copper with 7 results of up to 5.26% Cu (Cooper, 1997b).

### RESULTS (May 2021)

Six samples were collected from the main mineralised zone and wall rocks within an area where shallow (<1m) workings had exposed un-weathered samples. Rock chip samples returned exceptional grades of up to 19.99% Cu. Samples from within a 5m radius from the rocks exposed in the shallow workings also returned extremely positive results of between 6.17 and 0.96% Cu.

### LEANE'S COPPER PROSPECT

The Leane's Copper Prospect is in the central area of the Palmerville Project. It was originally discovered in 2007 by Lodestone Exploration Limited ("Lodestone") when outcrops containing malachite veining were mapped at surface. Subsequent exploration, including detailed soil geochemistry identified strongly anomalous copper over a 1,200m extent along a north-northwest trending brecciated contact between limestone to the west and siliciclastic sediments, and locally basalt to the east. In 2010, Lodestone completed a shallow 8 drillhole RC program to test the copper soil anomalies over a 500m strike length, plus two drillholes further south to test gold anomalies. The best intervals in that program intersected 28m @ 0.55% Cu in drillhole LRC004, 4m @ 0.55% Cu in drillhole LRC003, and 11m @ 0.32% Cu in drillhole LRC002. All drilling intersected the breccia zone in the weathered horizon.



*Figure 7. Photo of copper-bearing minerals Malachite (green) and Azurite (blue) found within rocks at the Palmerville River prospect, Chillagoe Formation. NMR are primarily exploring for copper and gold in the extensive N-S trending Chillagoe formation.*

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## RESULTS

Sampling at Leane's prospect was aimed at following up on results obtained during previous field mapping. Samples were collected from a range of different rock types along the hydrothermal Breccia Zone identified in previous mapping and sampling campaigns. The aim of the recent mapping and sampling was to determine whether high-grade copper was restricted to specific rock types or whether the high copper grades were also pervasive into the adjacent footwall limestones. The results from a collection of nine samples of different rock types revealed significant differences in copper grades and confirmed that the copper is principally contained within breccias with a minor amount of copper present within altered and sheared metasediments at the contact as well as within fractures along the margin of the limestone. The highest-grade sample returned a grade of 10.06% Cu and 7.8ppm Ag.

-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:

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### **Competent Person Statement:**

The information in this report relating to Exploration Results is based on information provided to, or compiled by 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.

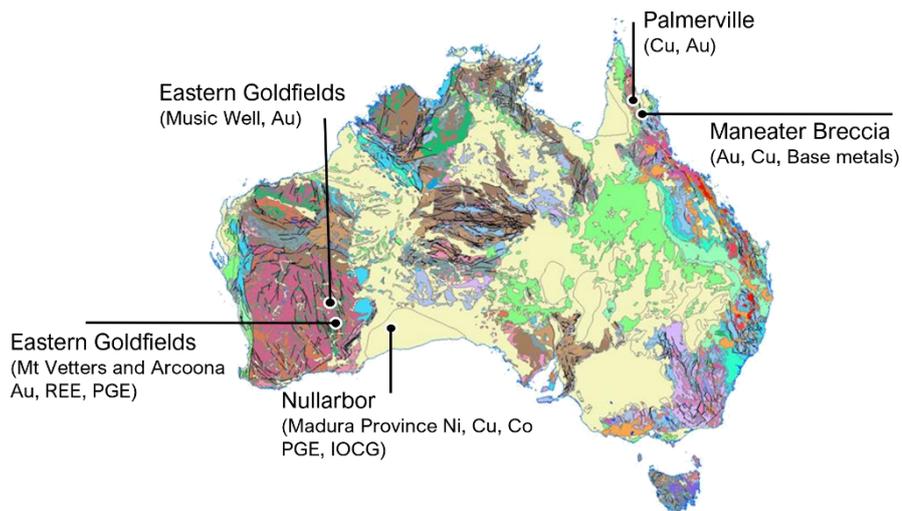
**Notes – Specific ASX announcements:**

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 4<sup>th</sup> May 2021 – High-grade Copper confirmed within NMR’s Palmerville Project

**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.



*Map showing the location of NMR's major projects in Queensland and Western Australia*

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