



ASX ANNOUNCEMENT

4 May 2021

## High-grade Copper confirmed at two targets in the Northern Chillagoe Formation, QLD

*Rock chip samples from targets within Palmerville Project return grades up to 7.99% Cu from Fairlight and 19.99% Cu at Glenroy*

### Highlights:

- NMR has undertaken field work and sampling at multiple high-potential prospects within NMR's Palmerville Copper Project including Fairlight and Glenroy.
- Sampling has confirmed the presence of copper-rich rocks at the Fairlight prospect returning values of up to 7.99% copper.
- Samples from the Glenroy prospect returned positive results with copper values of up to 19.99% together with silver values of up to 32.1 ppm.
- Fairlight and Glenroy are highly encouraging new target areas for NMR and reinforce the significance of the Chillagoe Formation as a major copper exploration jurisdiction.
- Exciting results demonstrate the prospectivity of an extensive, N-S trending magnetic high that extends across multiple NMR tenements in the Palmerville region of north Queensland.
- Extensive follow-up exploration programs are planned to commence at the Palmerville Project following cessation of the wet season later this quarter.

Native Mineral Resources Holdings Limited (ASX: NMR), or ("NMR" the "Company") is pleased to advise that it has received results from its recently completed field program within the Palmerville Copper Project in North Queensland.

The program aimed to explore the prospectivity of the northern extension of the same magnetic anomaly that hosts the highly prospective Leane's Copper Prospect ("Leane's") within Palmerville. The results obtained from two new target areas for NMR are extremely promising and, when combined with evidence of historical copper mining operations in the area, provide NMR with the confidence to quickly advance these projects in parallel with further follow-up work at Leane's.

Native **Mineral** Resources Holdings Limited | ABN 93 643 293 71 (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)



**Figure 1.** Malachite (green  $\text{Cu}_2\text{CO}_3(\text{OH})_2$ ) contained within quartz breccia and jasper (red) from the Fairlight prospect. The copper-rich rocks occur along the contact between jaspers and metamorphosed mafic rocks of the Chillagoe Formation.

## Palmerville Sampling Program Summary

NMR has concentrated on developing several priority targets along a well-defined N-S trending geophysical anomaly shown in **Figure 3**.

The successful identification of high-grade copper south of the historical Fairlight copper mines (**Figure 4**) has 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.

A summary of results for each prospect is provided below.

### Management Commentary

**NMR's Managing Director, Blake Cannavo, commented:** "We are delighted with these high-grade sampling results from Palmerville which clearly demonstrate the project's potential to host a significant copper mineralised system.

*Palmerville provides NMR with exposure to one of Australia's premier exploration addresses for copper and we have locked up considerable acreage over the famous Chillagoe Formation in North Queensland. As evidenced by our recent work, NMR's team of geologists are narrowing their focus towards targets that have similar characteristics to the Mungana, Red Dome and other porphyry copper and gold mines in the Chillagoe Formation further south.*

*Looking ahead to the upcoming field season, NMR will be actively advancing two new, very-high-potential copper prospects, Fairlight and Glenroy, as well as building on the promising work completed last year at the Leane's Prospect. We will be ramping up exploration activities across Palmerville over the coming months, in conjunction with further work on our Music Well Gold Project in WA, so I look forward to providing regular updates on progress."*

## **PALMERVILLE PROJECT, QLD**

### **Background**

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

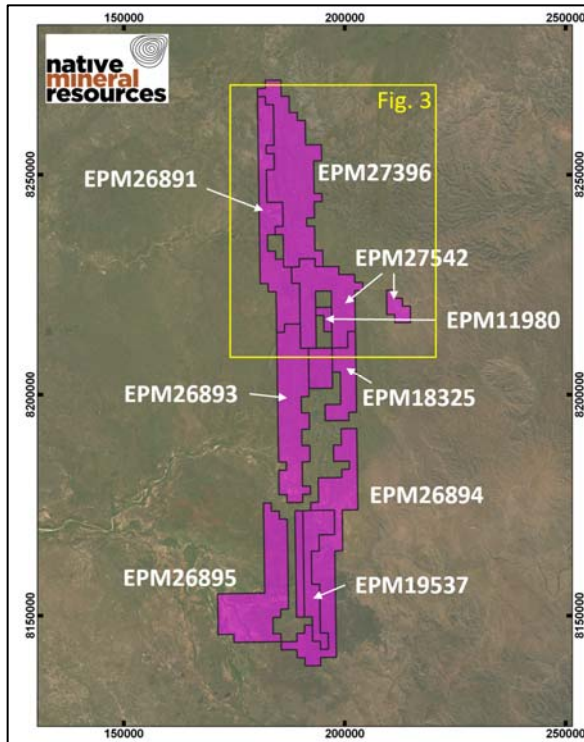
The tenements consist of nine Exploration Permit Minerals (EPMs) in the highly prospective Chillagoe Formation, which hosts the large Red Dome and Mungana porphyry and skarn-associated gold-copper deposits to the south of the Palmerville Project. The Chillagoe Formation also hosts significant zinc-rich and copper-rich limestone-hosted skarn-associated deposits, particularly at King Vol, Mungana, Griffiths Hill and Red Cap. These aforementioned mines all occur within the extensively explored southern part of the Chillagoe Formation. The region held by NMR shown below in **Figure 2** has been comparatively under explored despite the presence of several historical copper and other base metal mines in the area.

The Palmerville Project area is prospective for the following deposit styles:

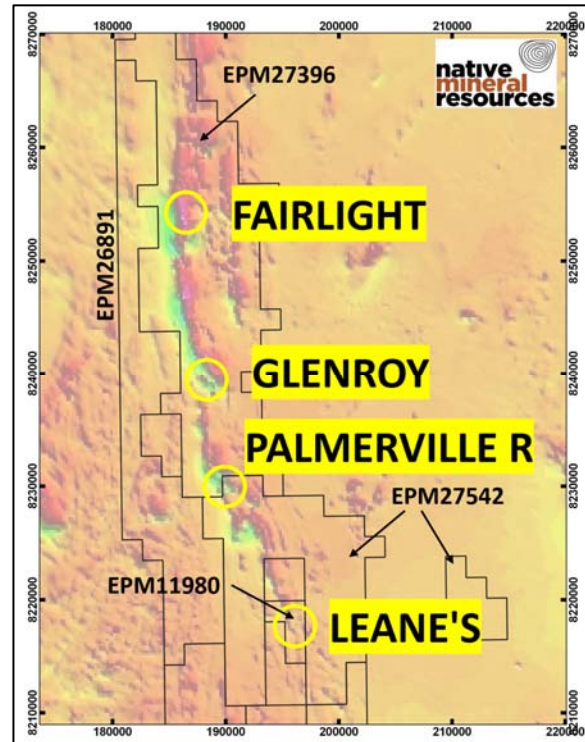
- *Porphyry- and skarn-associated copper-zinc-gold mineralisation in Chillagoe Formation limestone-dominant strata.*
- *Porphyry-related copper-gold mineralisation in non-carbonate lithologies.*
- *Copper-zinc-gold volcanic massive sulphide or vein-style mineralisation.*
- *Orogenic-style gold-antimony 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 with soil, stream sediment and rock chip sampling, trenching, and limited drilling. Elsewhere, exploration is at an early stage. NMR has completed a preliminary review of historical mining activity and past exploration and identified 65 mineralisation occurrences and eleven initial priority targets. NMR has been continuing to develop the Leane's copper prospect.

NMR is focusing its exploration efforts on these areas where historical mining has demonstrated copper production and here, we present some extremely positive results from these, and a new target identified on the banks of the Palmer River.



**Figure 2.** 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 for detailed geological maps. Location information is provided in GDA94 MGA Zone55.



**Figure 3.** 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.

## FAIRLIGHT COPPER PROSPECT

Native Mineral Resources has completed a first-pass investigation of several historical copper producing targets including the Fairlight area (**Figure 3, Figure 4**). Fairlight is characterized 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.

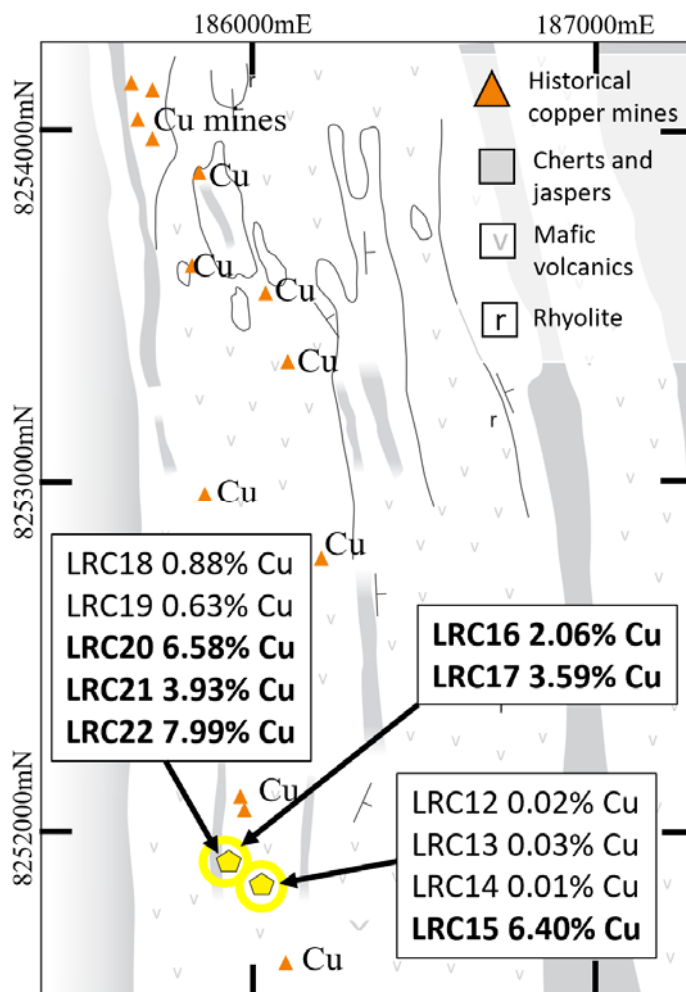
The geology of the area is dominated by metamorphosed, tight- and isoclinally-folded sequence of basic volcanics with thin interbedded cherts, rhyolites and limestones locally overlain by greywackes, slates and cherts. Basic volcanics include vesicular basalts, scoriaceous basalt, pillow lavas, flow top breccias and tuff lavas and 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 a number of 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.

**Native Mineral Resources Holdings Limited | ABN 93 643 293 71 (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)





**Figure 4.** Simplified geological map of the Fairlight prospect and historical mining district showing the location of samples and copper results presented in this announcement. The location of major rock types and historical copper mines are shown. Grid is GDA94 MGA Zone55. Grid spacing is 1km.

## RESULTS

A total of eleven (11) rock chip samples were collected from sites to the south of the main mining district at Fairlight (**Figure 4**). 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 had 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 but 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.

SAMPLE ID	X (m)	Y (m)	Cu (%)	Ag (ppm)
LRC022	185913	8251885	7.99	9
LRC020	185913	8251885	6.58	8.5
LRC015	186022	8251826	6.40	5.3
LRC021	185913	8251885	3.93	3.5
LRC017	185924	8251887	3.59	2.7
LRC016	185924	8251887	2.06	2.3
LRC018	185913	8251885	0.88	1
LRC019	185913	8251885	0.63	0.7
LRC013	186022	8251826	0.03	<0.5
LRC012	186022	8251826	0.02	<0.5
LRC014	186022	8251826	0.01	<0.5

**Table 1.** Eleven samples with associated copper and silver assays collected from two main sites at Fairlight. Location information is provided in GDA94 MGA Zone55.

## 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 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 but 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 chalcopyrite 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

Six samples were collected from the main mineralised zone and wall rocks within an area where shallow (<1m) workings had exposed un-weathered samples. The aim of the sampling was to determine whether the mineralised zone, which trends approximately NNW-SSE, has sufficient grade to warrant follow up exploration. 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**. These results will allow NMR to focus exploration along the Glenroy structure and to explore the lateral extents of mineralisation there. NMR are excited to add the Glenroy prospect to its growing number of prospects with confirmed high-grade copper.

SAMPLE ID	X (m)	Y (m)	Cu (%)	Ag (ppm)
LRC006	188342	8239112	19.99	32.1
LRC009	188363	8239121	6.17	3.1
LRC007	188343	8239111	2.90	1.4
LRC008	188362	8239123	1.60	3
LRC011	188368	8239114	1.24	1.7
LRC010	188363	8239119	0.96	2.2

**Table 2.** Six samples with associated copper and silver assays collected from a variety of rocks including both the mineralised zone and the unmineralised wall rocks at the Glenroy prospect. Location information is provided in GDA94 MGA Zone55.

## 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.

Leane’s is currently NMR’s priority copper target in the northern Chillagoe Formation and NMR considers the target analogous to the Red Dome and Mungana deposits located some 100km to the south, where gold and base metal-bearing intrusive magmatic porphyry bodies were partially overprinted and modified by late-stage breccias formed by degassing and explosive release of over-pressured fluid. Red Dome and Mungana are examples of porphyry gold and base metal systems in which the economic mineral content is either disseminated or hosted in vein networks within the intrusive body itself or as a surrounding halo in the host rocks.



**Figure 5.** Photo of malachite (green) found within siliceous hydrothermal breccia found at the contact between limestones and altered metasediments and mafic rocks of the Chillagoe Formation. Leane’s project area.

## 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 but 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 **over 10% Cu** and **7.8ppm Ag**.

SAMPLE ID	X (m)	Y (m)	Cu (%)	Ag (ppm)
LRC004	196107	8216727	10.06	7.8
LRC025	196075	8216742	2.85	1.9
LRC003	196051	8216813	2.49	1.6
LRC026	195985	8216951	0.83	0.7
LRC023	196054	8216800	0.20	<0.5
LRC002	195936	8217156	0.07	<0.5
LRC027	195989	8216913	0.06	<0.5
LRC024	196031	8216798	0.02	<0.5
LRC001	195936	8217156	0.00	<0.5

**Table 3.** List of nine samples collected from the Leane’s prospect. The highest-grade copper samples are from three samples of hydrothermal breccia. The remaining samples are from limestones and adjacent wall rocks at the prospect. Grid reference is GDA94 MGA Zone55.

## PALMER RIVER PROSPECT

A single test sample from a newly identified outcrop of altered mafic rocks in the banks of the Palmer River (**Figure 3**) containing malachite and azurite in a zone trending approximately N-S returned a grade of **1.61% Cu**. The area is under investigation as it lies along the same N-S trending anomalous magnetic “ridge” at the Fairlight, Glenroy and Leane’s prospect. The positive results add yet further evidence of the prospectivity of the N-S trending zone for significant copper.

SAMPLE ID	X (m)	Y (m)	Cu (%)	Ag (ppm)
LRC005	189942	8229413	1.61	1.7

**Table 4.** Single sample collected from an outcrop on the banks of the Palmerville River at a new, previously un-tested copper prospect. Location information is provided in GDA94 MGA Zone55.



## Key Takeaways

- A recent field campaign to the Palmerville project area has successfully demonstrated high grade copper in two new key field targets for NMR, Fairlight and Glenroy.
- The sampling at Fairlight helped NMR extent the zone of known copper to the south (~2km) of the main historical mining region.
- Grades of up to **19.99% Cu** at the two prospects confirm previous mining and exploration results and have prompted NMR to continue an aggressive field campaign in the region.
- NMR are pleased to announce that the company is growing its pipeline of copper prospects in the famous Chillagoe Formation and the results presented here add to the already impressive results from the Leane's prospect.

-Ends-

## Notes - Specific-ASX Announcements

The following announcements were released to the ASX containing information specific to the Palmerville project and the Leane's prospect in particular. Supporting JORC Reporting Tables relate to the Palmerville project and current sampling and exploration campaign only. This announcement refers to material in previous ASX releases listed below. The Company confirms that it is not aware of any new information or data that materially affects the information provided on the Palmerville project.

**21 January 2021. Porphyry Intrusions Confirmed at Leane's Copper Prospect**

**21 December 2020. Leane's Returns Shallow Intercepts Grading – Copper**

**15 December 2020. Drilling Confirms Mineralisation System at Leane's Copper Prospect**

**27 November 2020. Significant Results from Drilling at Leane's Copper Prospect.**

## References

Copper prices referred to in text are from [www.macrotrends.net](http://www.macrotrends.net)

Cooper, I. S. 1997a. *First and Final Report St George River Exploration Permit Minerals 11085.*

*Appendix 1 List of Samples with Locations and Geochemical Results.* I & D.I. Sijos #CR29595\_2

Cooper, I. S. 1997b. *First and Final Report St George River Exploration Permit Minerals 11085.*

*Appendix 3 Analysis Reports.* I & D.I. Sijos #CR29595\_4

Campbell, R. P. and Mathison, I. J. 1977. *Final Report on A to P 1495M "Palmerville". Aquitaine Australia Minerals Pty Ltd. #CR6042*

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

**Native Mineral Resources Holdings Limited** | ABN 93 643 293 71 (**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)

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)

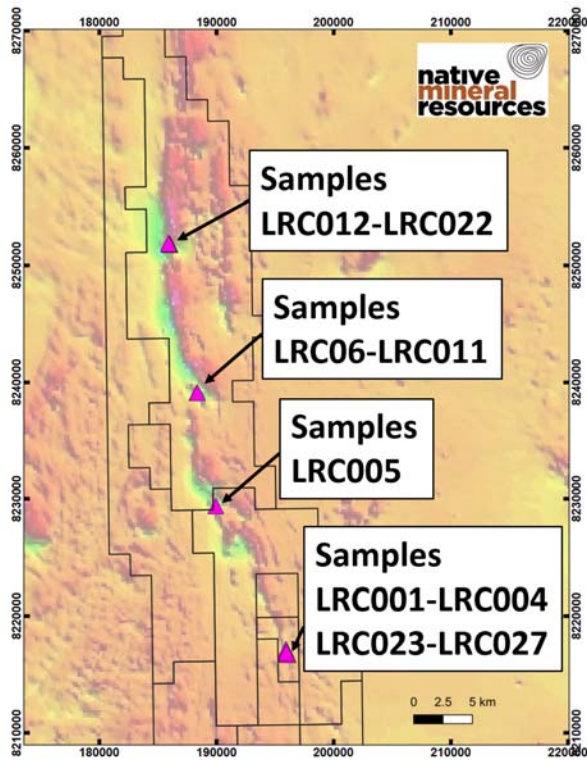
**Sam Burns**  
**Media & Investor Relation**  
**Six Degrees**  
T: +61 400 164 067  
E: [sam.burns@sdir.com.au](mailto:sam.burns@sdir.com.au)

**Competent Person Statement:**

*The information in this report relating to Exploration Results is based on information compiled by 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.*

### Appendix 1: Sample assays (Rock chips)

Prospect name	Sample ID	E (m)	N (m)	Cu %	Ag ppm
Leane's	LRC001	195936	8217156	0.00	<0.5
Leane's	LRC002	195936	8217156	0.07	<0.5
Leane's	LRC003	196051	8216813	<b>2.49</b>	1.6
Leane's	LRC004	196107	8216727	<b>10.06</b>	7.8
Palmer River	LRC005	189942	8229413	<b>1.61</b>	1.7
Glenroy	LRC006	188342	8239112	<b>19.99</b>	<b>32.1</b>
Glenroy	LRC007	188343	8239111	<b>2.90</b>	1.4
Glenroy	LRC008	188362	8239123	<b>1.60</b>	3
Glenroy	LRC009	188363	8239121	<b>6.17</b>	3.1
Glenroy	LRC010	188363	8239119	0.96	2.2
Glenroy	LRC011	188368	8239114	<b>1.24</b>	1.7
Fairlight	LRC012	186022	8251826	0.02	<0.5
Fairlight	LRC013	186022	8251826	0.03	<0.5
Fairlight	LRC014	186022	8251826	0.01	<0.5
Fairlight	LRC015	186022	8251826	<b>6.40</b>	5.3
Fairlight	LRC016	185924	8251887	<b>2.06</b>	2.3
Fairlight	LRC017	185924	8251887	<b>3.59</b>	2.7
Fairlight	LRC018	185913	8251885	0.88	1
Fairlight	LRC019	185913	8251885	0.63	0.7
Fairlight	LRC020	185913	8251885	<b>6.58</b>	8.5
Fairlight	LRC021	185913	8251885	<b>3.93</b>	3.5
Fairlight	LRC022	185913	8251885	<b>7.99</b>	9
Leane's	LRC023	196054	8216800	0.20	<0.5
Leane's	LRC024	196031	8216798	0.02	<0.5
Leane's	LRC025	196075	8216742	<b>2.85</b>	1.9
Leane's	LRC026	195985	8216951	0.83	0.7
Leane's	LRC027	195989	8216913	0.06	<0.5



*Figure 6. Reference map showing the location of sample groups presented throughout the announcement. Key prospects and associated samples lie along a well-defined magnetic high.*



## JORC Code 2012 Edition -Table 1 Music Well Gold Deposit

### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
Sampling Techniques	<ul style="list-style-type: none"> <li><i>Nature and quality of sampling (e.g. cut channels, random chips or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i></li> </ul>	<p>All sampling at the four exploration prospects referred to in the above document were from outcropping rocks or from shallow excavations where mineralised and non-mineralised rocks had been exposed. Sampling was from a range of both mineralised and non-mineralised wall rocks in order to gain a representative number of samples from each site. Weathering, a lack of sufficient outcrop and variability in the width of host structures means that true widths cannot be provided. Samples collected were all small 250 grams to 1.5 kilogram hand specimen size. Samples were individually photographed, bagged separately in standard calico sample bags. GPS coordinates were taken from the location where samples were collected across the tenement and locations recorded in GDA94, MGS Zone55 south unless otherwise stated. Samples were stored in calico bags and delivered to the laboratory for assay where a 30-50g charge was obtained for copper assay and multi-element geochemistry.</p>
	<ul style="list-style-type: none"> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> </ul>	<p>In all cases, NMR aimed to collect samples of the mineralised structures as well as wall rocks. Samples collected at the Leane's prospect and reported here were primarily collected from wall rocks adjacent to the mineralised breccia reported in previous announcements. NMR was exploring the opportunity for wall rock alteration and mineralisation, therefore samples from Leane's are biased towards low- to no-copper. Rock chip samples at Fairlight were collected away from copper-bearing rocks associated with the major historical mines. Samples were selected from the mineralised contact between basalts and jaspers where shallow (&lt;2m deep) artisanal mining had exposed the contact. At Glenroy, samples were also taken from exposed mineralised and non-mineralised rocks in small, &lt;1m deep pits along the structure. NMR ensured it gathered samples from both the mineralised structure as well as the un-mineralised wall rocks in order to obtain a representative collection of rocks and grade. The results reported here are part of a very early-phase exploration of new prospects, therefore, NMR did not undertake any trenching or channelling to determine the total width of the structure.</p>
	<ul style="list-style-type: none"> <li><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> </ul>	<p>NMR have been focussing efforts on resolving the style of mineralisation at Palmerville. Previous announcements contain details of evidence lending towards the upper part of a porphyry style deposit, however, limited outcrop and other features at</p>

		Fairlight and Glenroy make an interpretation of deposit style more difficult to resolve. Regardless, in all cases, the copper mineralisation was closely linked to approximately N-S trending structures developed at or near to contacts between major rock types such as meta basalts and jaspers. At this early stage of exploration, NMR are considering the mineralisation to be structurally-controlled, shear zone and contact-hosted copper mineralisation.
	<ul style="list-style-type: none"> <li><i>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30g charge for fire assay'), In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	In tables of results, assays for copper are referred to in % and for silver (Ag) in ppm. In the body text, results are similarly referred to in % and ppm for Cu and Ag respectively.
<i>Drilling techniques</i>	<ul style="list-style-type: none"> <li><i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary aid blast, auger, Bangka, sonic, etc.,) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is orientated and if so by what method, etc.).</i></li> </ul>	N/A
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> </ul>	N/A
	<ul style="list-style-type: none"> <li><i>Measures taken to maximise sample recovery and ensure representative nature of samples</i></li> </ul>	N/A
	<ul style="list-style-type: none"> <li><i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material</i></li> </ul>	N/A
<i>Logging</i>	<ul style="list-style-type: none"> <li><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></li> </ul>	N/A

	<ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.,) photography.</li> </ul>	N/A
	<ul style="list-style-type: none"> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	N/A
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken</li> </ul>	N/A
	<ul style="list-style-type: none"> <li>If non-core, whether riffles, tube sampled, rotary split, etc., and whether sampled wet or dry</li> </ul>	N/A
	<ul style="list-style-type: none"> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> </ul>	In all cases, samples were sent to a registered laboratory for preparation and analysis.
	<ul style="list-style-type: none"> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	N/A
	<ul style="list-style-type: none"> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second half sampling.</li> </ul>	Owing to the limited size of some outcrops, duplicates from the same outcrop could not be obtained, however, several samples from the same location (within a few meters) were collected in order to document small scale variability in copper distribution. Based on the results obtained, NMR will complete a more comprehensive duplicate sample assay campaign in the following field visit.
	<ul style="list-style-type: none"> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	Samples collected were standard 0.25 to 1.5 kilogram rock chips which is appropriate for both the scale of the mineralisation as well as the distribution of copper throughout both the mineralised zone and the unmineralised wall rocks.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> </ul>	Copper was assessed using standard analytical procedures at a registered laboratory. The techniques used are suitable for samples with copper below 1% and above 1%.
	<ul style="list-style-type: none"> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instruments make and model, reading times, calibrations factors applied and their derivation, etc.</li> </ul>	N/A
	<ul style="list-style-type: none"> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	

Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> </ul>	<p>The 2021 sampling program represents an exploration phase. No independent verification is planned, but there will be the opportunity for checks on significant intersections by other company staff.</p> <p>Sampling was completed by NMR to initially test new prospect areas which will require follow-up exploration.</p>
	<ul style="list-style-type: none"> <li>The use of twinned holes.</li> </ul>	N/A
	<ul style="list-style-type: none"> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<p>All site and sample information were duplicated in the field as both a hardcopy and as a digital copy. Samples were photographed individually prior to dispatch to the laboratory.</p>
	<ul style="list-style-type: none"> <li>Discuss any adjustment to assay data.</li> </ul>	N/A
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys) trenches, mine workings and other locations used in Mineral Resource estimation.</li> </ul>	<p>The location of sample points was recorded using a GPS and photos of samples were saved along with location information.</p>
	<ul style="list-style-type: none"> <li>Specification of the grid system used.</li> </ul>	<p>In all cases, unless otherwise stated, grid references and points are provided in GDA94 MGA Zone 55 (Southern Hemisphere).</p>
	<ul style="list-style-type: none"> <li>Quality and adequacy of topographic control.</li> </ul>	<p>Topographic information was recorded along with location (X(m), Y(m)) at each sample waypoint.</p>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> </ul>	<p>For the reported field campaign, samples were collected from areas where the mineralised vein had been exposed, typically in association with small historical diggings between 1 and 2m deep. The samples were collected from various sites on either the same (Leane's) or parallel (Fairlight) structures as a guide to the potential for mineralisation and further, more detailed field work. Sample spacing was sufficient to collect both mineralised and non-mineralised (visual inspection) samples from across the structures.</p>
	<ul style="list-style-type: none"> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedures and classifications applied.</li> </ul>	<p>Sampling was entirely reliant on surface exposure. No drilling has taken place yet, therefore, the sampling is inadequate to provide any indication of a resource.</p>
	<ul style="list-style-type: none"> <li>Whether sample compositing has been applied.</li> </ul>	N/A
Orientation of data in relation to geological structure.	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> </ul>	<p>In every case, sample collection was from mineralised and non-mineralised zones in order to gather an unbiased representation of the potential grade and prospectivity of each site. In particular, the possibility of mineralisation extending into limestones was tested at Leane's, therefore, samples are typically of rocks exhibiting no or low-grades of copper.</p>
	<ul style="list-style-type: none"> <li>If the relationship between drilling orientation and the orientation of key</li> </ul>	N/A



	<i>mineralized structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	
<i>Sample security</i>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	N/A
<i>Audits and review</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	As this is the first phase of regional exploration at Palmerville, no audits or reviews have been undertaken or are planned in the short term.

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li><i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></li> </ul>	All sampling occurred on NMR held exportation permits (EPM's) including EPM27396, EPM27542 and EPM11980. All three tenements are 100% owned by NMR.
	<ul style="list-style-type: none"> <li><i>The security of tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></li> </ul>	
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgement and appraisal of exploration by other parties</i></li> </ul>	Both the Fairlight and Glenroy areas have undergone previous exploration with the majority of this ending prior to 1997. The Fairlight area is known for its historical operations dating to 1907 but NMR specifically avoided sampling in these regions due to the motivation to test the southern extension of the copper mineralisation. NMR are also aware that exploration for copper in 1997 was ceased due to the rapidly declining copper prices, therefore, previous high-grade copper was not considered significant. A comprehensive review of all previous exploration across all of NMR's Palmerville tenements has been recently completed and formed much of the motivation to follow up additional sampling. Leane's has seen a lot of recent exploration by NMR which follows up initial discovery by Lodestone.
<i>Geology</i>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation</i></li> </ul>	The mineralisation style at Leane's is interpreted to be hydrothermal breccia hosted copper in the upper part of a buried porphyritic intrusive at depth, similar to the Mungana, Red Dome and Griffiths Hill style of mineralisation also found within the Chillagoe Formation.

		The style of mineralisation at Fairlight and Glenroy are contact-hosted and structurally hosted copper. It is interpreted that the copper, which is laterally extensive is related to remobilisation of copper from under-exposed VMS-style mineralisation.
Drill hole information	<ul style="list-style-type: none"> <li>• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all material drill holes;</li> <li>• Easting and northing of the drill hole collar</li> <li>• Elevation or RL (reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>• Dip and azimuth of the hole</li> <li>• Down hole length and interception depth</li> <li>• Hole length</li> </ul>	No drilling by NMR has been completed at Fairlight or Glenroy. Drilling at Leane’s has been reported in previous ASX announcements as reported above in the body text.
	<ul style="list-style-type: none"> <li>• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	N/A
Data aggregation methods	<ul style="list-style-type: none"> <li>• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut off grades are usually Material and should be stated.</li> </ul>	N/A
	<ul style="list-style-type: none"> <li>• Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> </ul>	N/A
	<ul style="list-style-type: none"> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	N/A

<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results</i></li> </ul>	NMR are reporting the results from rock chip sampling only and no drilling or channelling has been completed at the time of writing.
	<ul style="list-style-type: none"> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported</i></li> </ul>	N/A
	<ul style="list-style-type: none"> <li>• <i>If it is known and only the down hole lengths reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i></li> </ul>	N/A
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>• <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></li> </ul>	Please refer to the body of the public release for location maps. All sample locations are provided with grid references in GDA94 MGA Zone 55.
<i>Balanced Reporting</i>	<ul style="list-style-type: none"> <li>• <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results</i></li> </ul>	Samples of all rock types were collected at each site including both mineralised and non-mineralised rocks (based on visual inspection). NMR used the sampling campaign to test the copper grades of each mineralised zone, therefore both samples from the zone and the surrounding rocks was imperative in order to obtain a true estimation of the prospectivity of each site.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>• <i>Other exploration data, if meaningful and material should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, ground water, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	Not applicable for this release.
<i>Further work</i>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (e.g. tests for lateral extension or depth extensions or large-scale step-out drilling).</i></li> </ul>	The results obtained during the field campaign and reported here have provided NMR with the evidence required to undertake significant and focussed exploration at both Fairlight and Glenroy. Particular focus will be aimed at sampling along the continuation of the N-S trending structure that is host to all of the

		<p>prospects visited and reported here. The cluster of historical mines to the north of samples reported for Fairlight are of primary interest as here copper mining reached a locally significant depth of 27m on host structures.</p> <p>As described in the main body text, the sampling was aimed at determining whether mineralisation outcropping at or near surface was of sufficient grade to warrant further exploration. The recovery of high grades, up to 19.99% Cu, has led NMR to generate a well-defined future exploration workflow.</p>
	<ul style="list-style-type: none"> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	