

# ASX ANNOUNCEMENT 31 January 2022

# **Quarterly Activities Report**

For the period ending 31 December 2021

# Nifty drilling – Nifty copper mineralisation ~100m thick

- Mineral Resource infill and extensional drilling programmes continues to provide ore intercepts to expand the resource, including:
  - 87m @ 0.92% Cu from 193m downhole in 21NRWP043
  - 94m @ 0.58% Cu from 168m downhole in 21NRWP021
  - 86m @ 0.57% Cu from 170m downhole in 21NRWP018
  - 92m @ 0.55% Cu from 171m downhole in 21NRWP016
  - 115m @ 0.51% Cu from 156m downhole in 21NRWP044
  - 97m @ 0.47% Cu from 145m downhole in 20NRWP020

# **Nifty Copper Project**

- Nifty Heap Leach Restart development activities during the Quarter included:
  - Updated Nifty Mineral Resource estimate of 45.9Mt @ 1.6% Cu for 732,200t total contained copper metal
  - Drilling programmes continues to provide ore intercepts to expand the resource
  - First Government Approval document lodged
  - SX/EW and related infrastructure refurbishment has commenced
  - Front End Engineering and Design continuing with scheduling of long lead items
  - Metallurgical column test work continues to optimise processing parameters

# Maroochydore drilling – Maroochydore copper oxide mineralisation ~100m thick

- Maroochydore Mineral Resource infill and extensional drilling programme completed
- Oxide mineralisation currently extends over a strike length of 3,000m, has a width up to 800m and thicknesses up to 100m from less than 50m of surface

# Murchison drilling – Murchison copper mineralisation ~200m thick

- Assays received from final two diamond drill holes at Nanadie Well
- Extensive copper-gold sulphide mineralisation intersected extending over 168m and 274m downhole from ~30m respectively below the outlined shallow Cu-Au oxide mineralisation
- Previous diamond drill assay results included:
  - 144m @ 0.71% Cu & 0.21g/t Au from 25m downhole in NWD2004
  - 180m @ 0.64% Cu & 0.17g/t Au from 10m downhole in NWD2003
  - 232m @ 0.38% Cu & 0.07g/t Au from 109m downhole in NWD2001



# **Corporate**

## Cyprium ended the quarter with a cash balance of \$25.5 million

Managing Director Barry Cahill commented:

"The quarter has been very busy as we received significant broad mineralised intersections of copper from both Nifty and Nanadie Well. We have approached the conclusion of a number of significant milestones to progress our strategy to produce copper metal plate. If we look at the images of the drilling chips and core in this quarterly narrative in this report, all we see is copper minerals, copper minerals and more copper minerals.

We have been very pleased with the Nifty West drilling results received to date. These assay results confirm the presence of a substantial zone of copper mineralisation. This mineralisation is up-plunge of the former underground mine and contained within the resource zone within the proposed open pit envelope.

An updated Nifty mineral resource estimate was released during the quarter, and these assays will be included in a further mineral resource update during the first half of 2022.

The Nifty restart project is proceeding well, and we have commenced refurbishment activities. Copper metal production at Nifty is planned to commence by the second half of 2023. As usual for our team, we will aim to commence copper production at the earliest opportunity.

The initial drilling programmes were completed at the Maroochydore Copper Cobalt Project. The physical footprint of this shallow copper cobalt deposit is more than 3 kilometres in length. The width and quality of the mineralisation in the RC chips and diamond drill core was very impressive.

We also received another set of fantastic drill results from the extensive copper deposit emerging at Nanadie Well, with broad mineralised intercepts which remain open in multiple directions."



Image 1 / Native Copper sample taken from Heap 3



Cyprium Metals Limited (ASX: CYM) ("Cyprium" or the "Company") is pleased to provide the following overview of the Company's activities for the December 2021 quarter.

# **Nifty Copper Project**

## **Resource Definition Drilling**

The Nifty mineral resource remains open both up and down plunge of the host syncline. Technical studies and in-fill drilling of the existing mineralised envelope continued during the December 2021 quarter. The resource drilling at Nifty West and East has been designed primarily to confirm the mineralisation and to improve the confidence, hence classification of inferred resource, plus extension of mineralisation.

There is considerable potential to increase the mineral resource, including upgrading of the historical oxide mineralisation, based on a detailed review of the existing geological data and the extensional reverse circulation ("RC") and diamond drilling programmes that have been undertaken.

### Western drilling

A 16,000m RC drilling programme to test for potential up-plunge extensions to the oxide and transitional mineralisation at the western extremity of the Nifty open pit was completed during the quarter. The mineralisation in this area was of lower confidence, being mostly in the Inferred Mineral Resource category, due to the sparse drilling density.

Wide intervals of low to medium-grade copper sulphide mineralisation have been consistently encountered from the drilling below the western end of the open pit. This mineralisation is interpreted associated with the up-plunge extent of the Nifty Syncline keel zone, which has been lightly drilled tested from both surface and underground.

The intersections provide further confirmation of the presence of significant copper mineralisation associated with the lightly tested Nifty Syncline keel zone up-plunge of the former underground mine.

Significant results include:

- 87m @ 0.92% Cu from 193m downhole in 21NRWP043, including:
  - o 63m @ 1.10% Cu from 201m including:
    - 4m @ 1.85% Cu from 207m;
    - 3m @ 1.54% Cu from 215m;
    - 2m @ 1.76% Cu from 223m;
    - 3m @ 1.44% Cu from 226m;
    - 8m @ 2.02% Cu from 233m;
    - 6m @ 1.68% Cu from 256m; and
  - 11m @ 0.77% Cu from 269m including:
    - 1m @ 1.10% Cu from 272m; and
    - 1m @ 1.49% Cu from 274m



- 92m @ 0.55% Cu from 171m downhole in 21NRWP016, including:
  - 8m @ 1.45% Cu from 191m including:
    - 3m @ 3.14% Cu from 195m, and
  - o 6m @ 0.48% Cu from 201m including:
    - 1m @ 1.09% Cu from 202m, and
  - 3m @ 0.53% Cu from 210m including:
    - 1m @ 1.03% Cu from 211m, and
  - 27m @ 0.74% Cu from 214m including:
    - 4m @ 1.99% Cu from 218m, 1m @ 1.02% Cu from 224m & 1m @ 1.16% Cu from 238m, and
  - o 7m @ 0.58% Cu from 245m including:
    - 1m @ 2.02% Cu from 246m, and
  - 8m @ 0.91% Cu from 255m<sup>1</sup> including:
    - 2m @ 1.79% Cu from 260m
- 90m @ 0.45% Cu from 156m downhole in 21NRWP015, including:
  - 9m @ 0.71% Cu from 172m including:
    - 1m @ 1.85% Cu from 179m, and
  - o 20m @ 0.68% Cu from 190m including:
    - 6m @ 1.09% Cu from 195m & 1m @ 1.52% Cu from 206m, and
  - o 11m @ 0.81% Cu from 213m including:
    - 2m @ 1.20% Cu from 217m & 3m @ 1.11% Cu from 221m, and
  - 3m @ 0.55% Cu from 243m<sup>1</sup>
- 68m @ 0.41% Cu from 179m downhole in 21NRWP013, including:
  - 8m @ 0.61% Cu from 179m including:
    - 1m @ 1.83% Cu from 185m, and
  - 2 12m @ 0.41% Cu from 195m, and
  - 14m @ 0.65% Cu from 208m including:
    - 1m @ 1.58% Cu from 212m & 1m @ 1.18% Cu from 219m, and
  - o 5m @ 0.97% Cu from 223m, and
  - o 3m @ 0.52% Cu from 244m including:
    - 1m @ 1.07% Cu from 245m
- 86m @ 0.57% Cu from 170m downhole in 21NRWP018, including:
  - 8m @ 0.49% Cu from 170m including:
    - 1m @ 1.09% Cu from 176m, and
    - o 9m @ 0.81% Cu from 181m including:
      - 2m @ 1.23% Cu from 182m & 2m @ 1.05% Cu from 187m, and
    - 18m @ 0.96% Cu from 196m including:
      - 1m @ 2.03% Cu from 197m & 3m @ 1.85% Cu from 202m & 1m @ 1.36% Cu from 207m & 2m @ 1.29% Cu from 209m, and
    - 10m @ 0.76% Cu from 215m including:
      - 1m @ 1.00% Cu from 217m & 1m @ 1.41% Cu from 223m, and
  - o 3m @ 1.09% Cu from 226m including:
    - 1m @ 1.62% Cu from 226m, and
  - 12m @ 0.52% Cu from 244m including:
    - 1m @ 2.21% Cu from 245m

<sup>&</sup>lt;sup>1</sup> Hole ended in mineralisation



## • 97m @ 0.47% Cu from 145m downhole in 20NRWP020, including:

- o 7m @ 0.58% Cu from 153m including:
  - 1m @ 1.02% Cu from 156m, and
- 5m @ 0.60% Cu from 169m including:
  - 1m @ 1.12% Cu from 170m, and
- 6m @ 0.91% Cu from 179m including:
  - 3m @ 1.30% Cu from 180m, and
- o 5m @ 0.54% Cu from 187m including:
  - 1m @ 1.02% Cu from 190m, and
- 5 15m @ 0.70% Cu from 201m including:
  - 2m @ 1.49% Cu from 207m & 1m @ 1.19% Cu from 215m, and
- o 4m @ 0.75% Cu from 222m including:
  - 1m @ 1.78% Cu from 223m, and
- o 7m @ 1.90% Cu from 235m including:
  - 3m @ 4.09% Cu from 236m

### • 94m @ 0.58% Cu from 168m downhole in 21NRWP021, including:

- 7m @ 0.65% Cu from 180m including:
  - 1m @ 1.98% Cu from 185m, and
- 18m @ 0.98% Cu from 194m including:
  - 1m @ 1.62% Cu from 195m & 4m @ 1.23% Cu from 199m & 2m @ 2.52% Cu from 207m, and
- o 9m @ 1.07% Cu from 213m including:
  - 4m @ 1.68% Cu from 215m, and
- o 2m @ 1.12% Cu from 224m including, and
- 5m @ 1.69% Cu from 228m including:
  - 3m @ 2.64% Cu from 228m

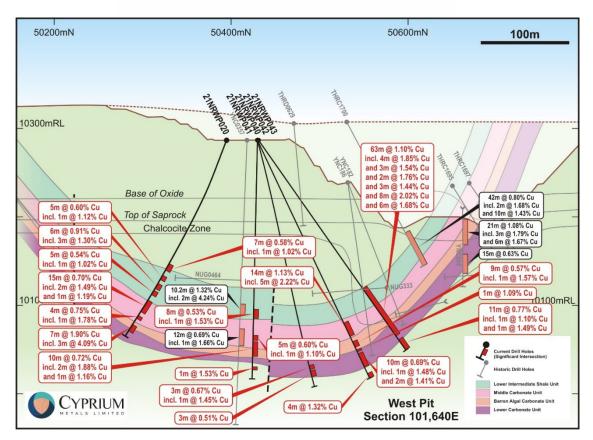
#### 100m @ 0.41% Cu from 190m downhole in 21NRWP042, including:

- 14m @ 1.13% Cu from 224m including:
  - 5m @ 2.22% Cu from 228m, and
- 9m @ 0.57% Cu from 246m including:
  - 1m @ 1.57% Cu from 251m, and
- 10m @ 0.69% Cu from 268m including:
  - 1m @ 1.48% Cu from 270m & 2m @ 1.41% Cu from 272m, and
- 4m @ 1.32% Cu from 286m

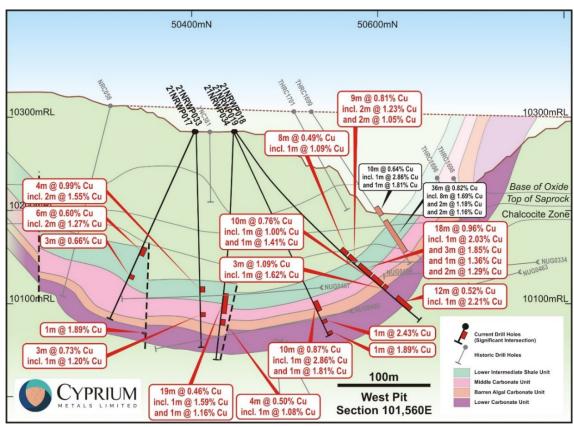
## 115m @ 0.51% from 156m downhole in 21NRWP044, including:

- o 5m @ 0.53% Cu from 188m, and
- 9m @ 0.83% Cu from 196m including:
  - 3m @ 1.64% Cu from 201m, and
- 9m @ 1.56% Cu from 208m including:
  - 3m @ 2.25% Cu from 208m, and
- 17m @ 1.22% Cu from 225m including:
  - 5m @ 2.80% Cu from 233m, and
  - 4m @ 0.85% Cu from 244m including:
  - 2m @ 1.35% Cu from 245m, and 4m @ 0.75% Cu from 260m including:
- 1m @ 1.34% Cu from 260m & 1m @ 1.17% Cu from 262m



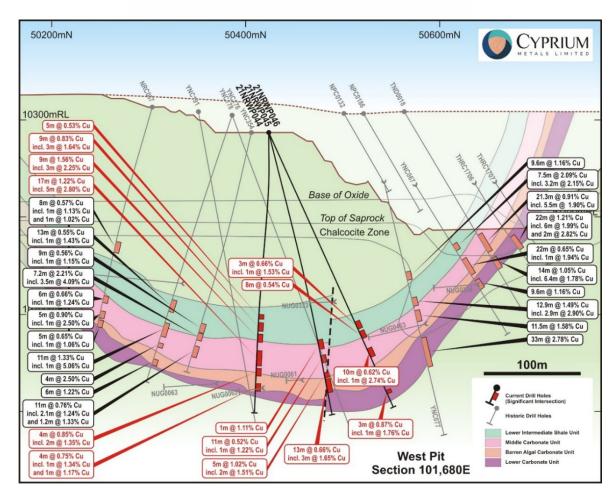


Section 1 / Nifty West drill hole section 101,640E



Section 2 / Nifty West drill hole section 101560E





Section 3 / Nifty West drill hole section 101,680E



Figure 1 / Nifty Copper Project showing location of western drilling program (local grid)



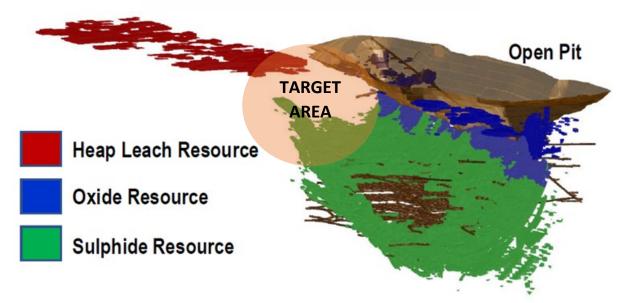


Figure 2 / Nifty West target area

#### **Mineral Resource Estimate**

The Company released an updated Mineral Resource estimate for the Nifty copper deposit during the quarter of 45.9Mt @ 1.6% copper for a total contained copper inventory of approximately 732,000t (refer to Table 1) <sup>i</sup>.

Ore Source	Cut- Off	Measured			Indicated			Inferred			Total		
	%Cu	Ore Mt	Grade %Cu	Metal t Cu									
Oxide	0.4	1.1	1.2	12,300	0.3	1.1	3,300	0.2	0.9	1,700	1.6	1.1	17,300
Lower Saprolite	0.4	1.3	0.9	12,200	0.4	0.8	3,000	0.2	0.8	1,200	1.8	0.9	16,300
Transition	0.4	0.2	0.7	1,500	0.2	0.7	1,000	0.2	0.7	1,200	0.5	0.7	3,700
Chalcocite	0.4	4.3	1.2	53,800	2.3	1.2	28,400	1.4	1.2	16,100	8.0	1.2	98,300
Total Oxide	0.4	7.0	1.2	79,700	3.1	1.1	35,600	1.9	1.1	20,100	11.9	1.1	135,500
Sulphide	0.75	19.6	1.8	351,200	9.2	1.8	161,900	5.1	1.6	76,900	33.9	1.8	596,700
TOTAL		26.5	1.6	431,000	12.3	1.6	197,500	7.0	1.5	97,100	45.9	1.6	732,200

Table 1: November 2021 Mineral Resource Estimate – Nifty Copper Deposit

The Nifty copper deposit is a structurally and lithological controlled stratabound body within the Nifty Syncline, which strikes southeast-northwest and plunges at about 6-12 degrees to the southeast.

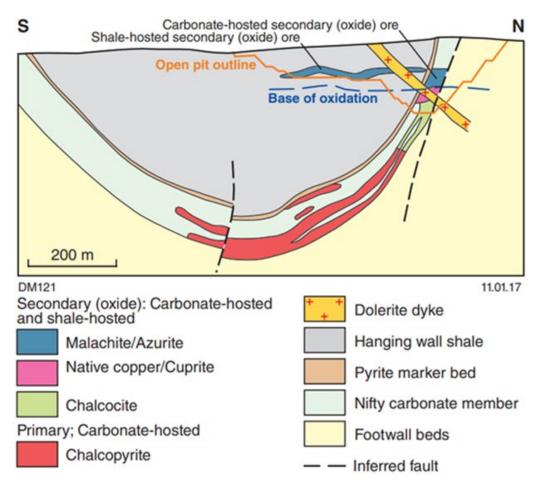
The massive, disseminated and vein-style copper mineralisation occurs as a structurally controlled, chalcopyrite-quartz-dolomite replacement of carbonaceous and dolomitic shale within the folded sequence. The copper sulphide mineralisation is largely confined to the keel of the syncline and the northern limb.

<sup>&</sup>lt;sup>i</sup> Refer to CYM ASX announcement dated 17 November 2021 "Updated Nifty Copper Mineral Resource Estimate"



The Nifty Heap Leach Restart Study is focussed on the development of the first phase of the project that involves a return to heap leaching and solvent extraction electrowinning (SX-EW) to produce refined copper cathode on site. The significant inventory of remnant heap leachable mineralisation confirmed by this Mineral Resource Estimate (11.9Mt @ 1.1% copper for 135,500t of contained copper metal).

The resource reporting cut-off grade is 0.75% Cu for the sulphide resource and 0.4% Cu for the oxide resource and is in keeping with past resource estimates for direct comparison purposes. The cut-off grades will be reviewed as part of the Heap Leach Restart Study.



Section 4 / Schematic cross-section through the Nifty Syncline

### **Metallurgical Test Work**

Metallurgy check column test work continued during the quarter. Four columns have been undertaken, including the fourth column which is a 6-metre column to match operating conditions. Results have been as expected and optimisation of reagent consumptions is continuing. A number of follow up tests will be conducted during the first quarter of 2022 to further optimise the operating parameters along with follow up tests undertaken on core and sonic drill samples. In addition, there are 550 sonic samples yet to be assayed that have been obtained from around the site to test for the location of stockpiled oxide material.



A mass balance and copper recovery cathode software model has commenced development for the project based on the metallurgical parameters and then a metallurgical accounting system for the project will be developed so that it is ready upon the commencement of plating copper metal at Nifty.



Image 2 / Nifty Metallurgical Column Test Work

#### **Regulatory Approvals**

Government Approvals are required in the new areas of the project and as a State Agreement tenement, there is a Ministerial approval required to amend the project size and life. There is also a requirement for clearing permits for the new clearing required for the new heap leach pads and an amendment to a current approval for the extension to the waste dump. There is an amended Mining Proposal required for the restart of the pit, pads and SX-EW which includes submission of a Project Management Plan and a Mine Closure Plan. There is an amended Works Approval required for the restart of the SX-EW and the new heap leach pads and an amendment to the Water Licence for the change in water extraction method from underground. There are also a number of other sundry permits required around the restart of the mining operation, which require reactivation or renewal.

The process of obtaining these approvals was advanced during the quarter, including conducting the initial meetings and workshops with the document compilation to be completed in the first quarter of 2022. The first submission of the required proposals for the clearing of native vegetation for the waste dump and the new heap leach pads was lodged during the quarter.



## **Other Heap Leach Restart Activities**

The design and scheduling of the open pit continued during the quarter, based on the updated Nifty Mineral Resource. The current pit envelope does not include any increase in resources from the results of the drilling programmes mentioned above. These designs will be sufficient to be included in the Restart Study and for the Finance process but will not be final until the resource is re-estimated, with Nifty West and Southeast drilling results included, during the first quarter of 2022 at the earliest.

The engineering design of the SX-EW plant and heap leach pads continued during the quarter and will be completed during the first quarter of 2022. The new heap leach pads construction and design detail is required for the Works Approval submission so that construction activities can commence. Concurrent with the design process, tenders are being issued for the purchase and supply of long lead items.

Refurbishment of the oxide crushing circuit and SX-EW plant has begun, with the plant is being stripped down and assessed for refurbishment on an item-by-item basis. The items to be refurbished are then despatched to the required refurbishment location within Australia for the work to be undertaken.

Refurbishment of the accommodation camp has commenced, with the eastern side of the camp undergoing a refurbishment process first. The refurbishment will bring the accommodation standard to be aligned with Cyprium's attraction and retention requirements for site personnel. Once the eastern refurbishment is complete the western refurbishment will commence. Refurbishment of the dry mess was also undertaken during the quarter.



Image 3 / Refurbishment of the Solvent Extraction ("SX") Plant commenced



# **Maroochydore Copper Project**

The Maroochydore Copper Project hosts a substantial shallow oxide and sulphide Mineral Resource of over 480,000 tonnes of copper <sup>ii</sup>. The Company's initial 6 diamond drillhole programme for 1,226m, obtained oxide, supergene and sulphide core samples for metallurgical and waste characterisation testing. The sulphide mineralisation remains open and has been lightly drilled to date. These results will be used in a scoping study for the project's development path and timetable.

The Company's initial 46 RC drillhole programme for 5,990m, was a combination of infill and extensional drilling, aimed at testing the oxide, transitional and supergene mineralisation at the Maroochydore copper project.

The oxide mineralisation currently extends over a strike length of 3,000m, has a width up to 800m and thicknesses up to 100m, as modelled in the existing JORC 2012 mineral resource estimate (refer to Figure 3 & 4, and Section 5).

Diamond drill core will be composited into bulk samples for metallurgical and waste characterisation testing, the results of which are expected to be available in the second half of 2022. RC drill chips will be assayed and the results to be included in a revised mineral resource estimate of the Maroochydore copper deposit. These assay results will also be announced to the market as they are received by the company during Q1 2022.

Examples of native copper, oxide, supergene and sulphide mineralisation in drill core and chips are shown in images 4 and 6 to 10.



Image 4 | Malachite and Chrysocolla 46-51m 21MDRC016

<sup>&</sup>lt;sup>ii</sup> Refer to MLX ASX announcements: 10 March 2020, "Nifty Copper Mine Resource Update" and 18 August 2016, "Annual Update of Mineral Resources and Ore Reserves"





Image 5 | RC drill rig at the Maroochydore project, October 2021

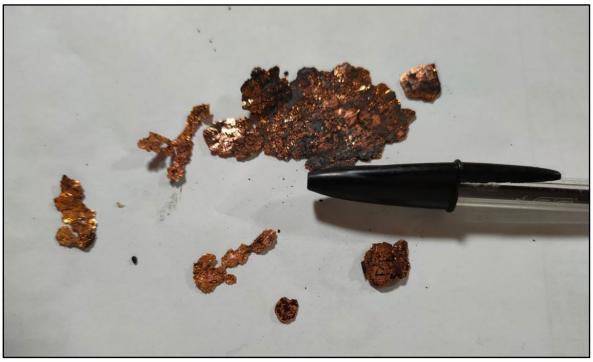


Image 6 | Native copper recovered from carbonaceous shale 21MDMT03, 114.6m





Image 7 | Native copper in carbonaceous shale 21MDMT03, 112.5m and 113.2m





Image 8 | Native copper in carbonaceous shale 21MDMT03, 115.6m and 117.8m



Image 9 | Malachite and chrysocolla mineralisation 87.2m 21MDMT01





Image 10 | Native copper mineralisation 90.0m 21MDMT01

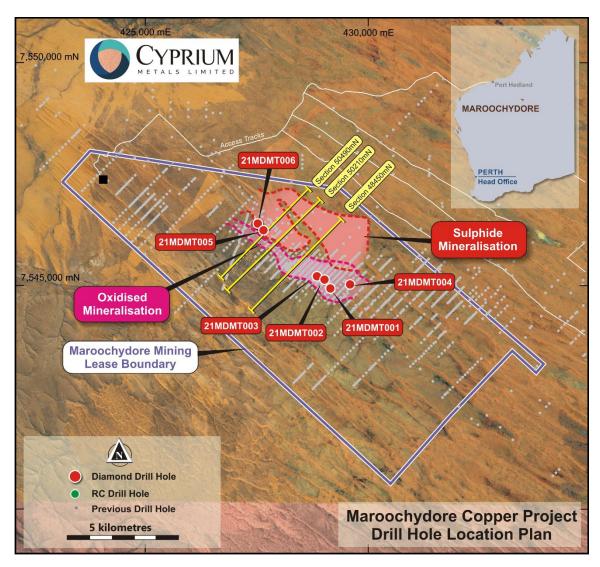


Figure 3 / Maroochydore Copper Project oxide and sulphide mineral resources outline projected to surface plan



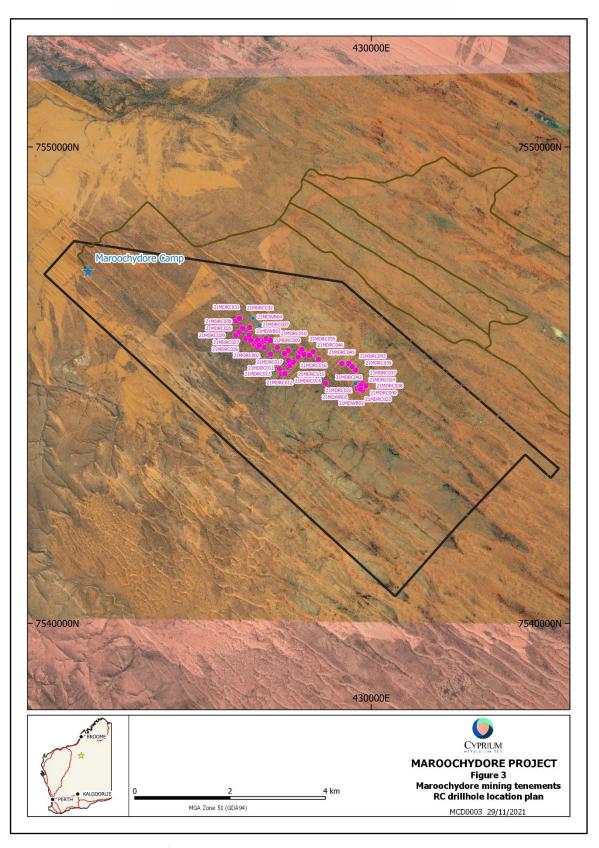
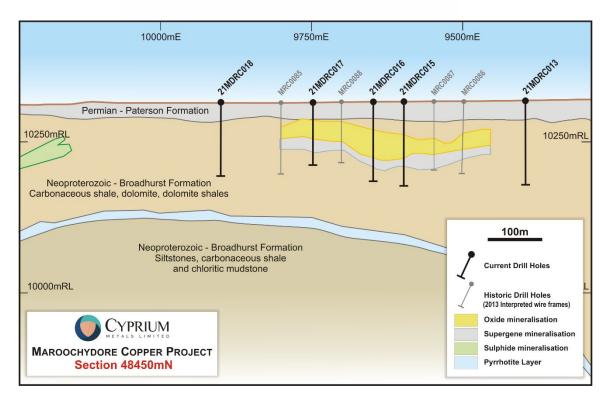
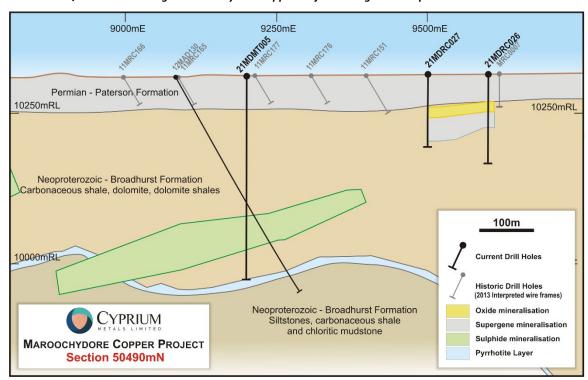


Figure 4 / Maroochydore Copper Project RC drillhole collar location plan





Section 5 / 48450 mN mine grid Maroochydore Copper Project drilling and interpreted mineralisation outlines



Section 6 / 50490 mN mine grid Maroochydore Copper Project drilling and interpreted mineralisation outlines



# Nanadie Well Copper-Gold Project

The layered mafic magmatic hosted disseminated/stringer sulphide mineralisation at Nanadie Well consists of pyrrhotite, pyrite and chalcopyrite as the dominant copper sulphide. It has previously been drilled on a wide-spaced pattern comprising 1 diamond and 88 RC drillholes over a strike length of 750 metres and between 100 to 200 metres wide, to a maximum depth of 234 metres and an average depth of 100 metres, with numerous drill holes ending in mineralisation. Higher grade mineralisation occurs as fractionated layers in the host metagabbros and metanorites, as is normally the case with magmatic copper deposits.

Extensive near-surface oxide and sulphide mineralisation has been identified from the drilling programmes, which is open along strike to the north and south and across strike to the west. The mineralisation does not outcrop and is covered by 1 to 25 metres of transported material. Preliminary investigations of the Nanadie Well deposit data indicates potential for oxide and sulphide mineralisation over the currently identified strike of 750 metres.

Nanadie Well Sulphide Diamond Drilling Programme

The Company's 5-hole (1,328 metre) diamond drilling programme completed during 2021 was primarily designed to test the sulphide mineralisation below a depth of 50 metres.

Results from the remaining two diamond holes, NWD2002 and NWD2101, were reported in November 2021 which both returned extensive copper-gold intersections of 168m and 274m downhole respectively, below the previously outlined shallow copper-gold oxide mineralisation. (Images 11 to 14 and Figure 5). Core from this programme will also be used for preliminary metallurgical testwork on the oxide and sulphide mineralisation. Significant results include:

### Hole NWD2002 – copper mineralisation extends over 168m downhole, including:

- 29m @ 0.6% Cu and 0.2 g/t Au from 49m including:
  - o 1m @ 1.1% Cu and 0.2 g/t Au from 50m
  - o 2m @ 1.0% Cu and 0.2 g/t Au from 64m
  - 2m @ 1.7% Cu and 0.2 g/t Au from 72m
- 10m @ 1.9% Cu and 0.2 g/t Au from 106m including:
  - 2m @ 6.2% Cu and 0.5 g/t Au from 107m
  - o 1m @ 1.2% Cu and 0.2 g/t Au from 113m
- 25m @ 0.6% Cu and 0.1 g/t Au from 146m including:
  - o 1m @ 1.2% Cu and 0.2 g/t Au from 154m
  - o 1m @ 1.1% Cu and 0.1 g/t Au from 160m
- 12m @ 0.6% Cu and 0.2 g/t Au from 187m including:
  - 1m @ 1.9% Cu and 0.4 g/t Au from 197m

### Hole NWD2101 - copper mineralisation extends over 274m downhole, including:

- 5m @ 0.7% Cu and 0.1 g/t Au from 45m including:
  - o 2m @ 1.5% Cu and 0.2 g/t Au from 46m
- 5m @ 1.9% Cu and 0.5 g/t Au from 75m including:
  - o 1m @ 6.2% Cu and 2.1 g/t Au from 76m
  - 4m @ 0.9% Cu and 0.2 g/t Au from 83m including:

    o 1m @ 1.5% Cu and 0.3 g/t Au from 85m
- 2m @ 1.0% Cu and 0.2 g/t Au from 91m
- 35m @ 0.5% Cu and 0.1 g/t Au from 108m including:
  - o 2m @ 1.8% Cu and 0.4 g/t Au from 108m



- 40m @ 0.4% Cu and 0.1 g/t Au from 157m
- 56m @ 0.9% Cu and 0.2 g/t Au from 202m including:
  - o 2m @ 3.9% Cu and 0.8 g/t Au from 222m
  - o 2m @ 3.2% Cu and 0.6 g/t Au from 229m
  - o 2m @ 1.4% Cu and 0.2 g/t Au from 250m
  - o 2m @ 1.3% Cu and 0.2 g/t Au from 254m
- 11m @ 0.9% Cu and 0.2 g/t Au from 262m including:
  - o 3m @ 2.1% Cu and 0.6 g/t Au from 262m
- 14m @ 0.7% Cu and 0.2 g/t Au from 290m including:
  - o 1m @ 2.2% Cu and 1.1 g/t Au from 292m
  - o 1m @ 1.5% Cu and 0.6 g/t Au from 295m

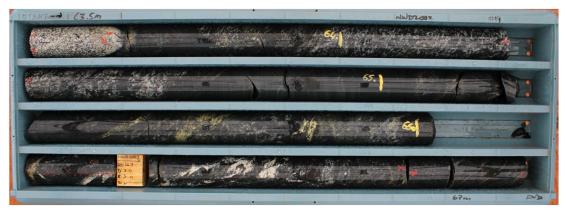


Image 11 / NWD2002: 64m to 66m; 2.0m @ 1.0% Cu, 0.2 g/t Au and 2.0 g/t Ag





Image 12 | NWD2002: 107m to 109m; 2m @ 6.2% Cu, 0.5 g/t Au and 14.0 g/t Ag







Image 13 | NWD2101: 222m to 224m; 2m @ 3.9% Cu, 0.8 g/t Au and 6.1 g/t Ag





Image 14 | NWD2101: 229m to 231m; 2m @ 3.2% Cu, 0.6 g/t Au and 4.9 g/t Ag



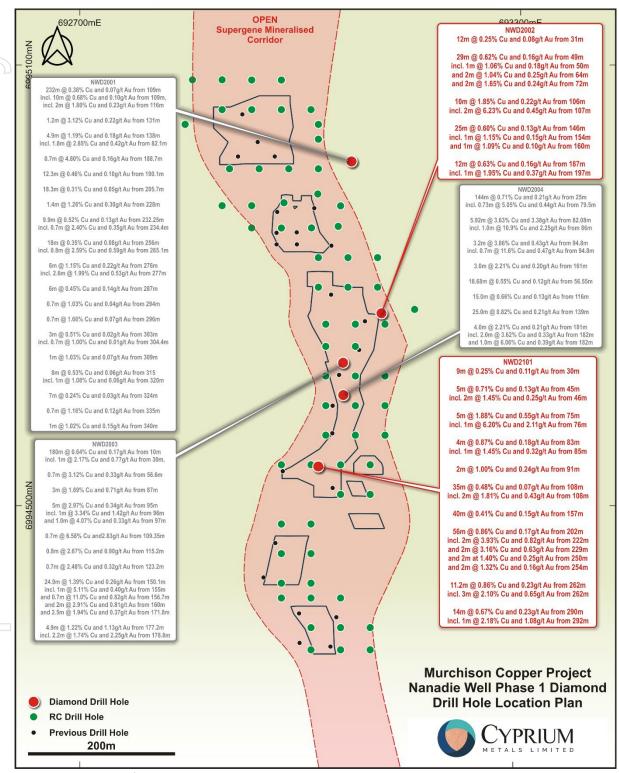


Figure 5 / Nanadie Well Phase 1 drill hole collar locations and diamond drill hole intercept highlights



## **March 2022 Quarter Plans**

The current progress on the project has been very good however there has been some delays to the progress due to the effects of numerous impacts on the industry, which have caused and will continue to cause further delays to the project progress. These include:

#### Labour Issues

- Consultants' workloads are extending timelines for deliverables including required site visits, data and reports that are essential to completing government approval submissions and other key study inputs
- Appropriate personnel levels in critical areas have been difficult, restricting CYM's progress
- Delays on the delivery of data for project studies (e.g., assays etc)

#### Government Approvals

- Delays in approvals timelines due to government understaffing
- Reviewing and rectifying poor historical environmental management practices and stewardship
- Workshop and education sessions with stakeholders regarding the way forward for the project

The COVID imposed lockdowns, travel restrictions and vaccination mandates are also exacerbating of all of the impacts outlined above.

These issues combined have required CYM to reforecast its schedule timeline and is planned that construction of the major elements of the Nifty Restart will commence after the September 2022 quarter and copper production occurring during the second half of 2023.

A positive outcome of these delays is that it enables CYM to further optimise both the mining of the resource and the metallurgy for the project to further bolster the robust economics of the Nifty Copper Project. The time delay allows the completion of outstanding work in these areas.

Consequently, the Focus for the March 2022 Quarter includes:

- Continuation of the Nifty Heap Leach Restart development plans with an aim of establishing an efficient long-term producing copper mine, including:
  - Ongoing metallurgical testwork and optimisation
  - Update of the Nifty Mineral Resource
  - Complete Front End Engineering and Design work
  - Continue tendering and procurement of long lead items
  - Continue the camp refurbishment
  - Continue the Government approval process for the Heap Leach Restart
  - Complete the Heap Leach Restart Study
  - Commence the Project Finance process
- Review of the Nanadie Well and Maroochydore copper project drilling assay results and the core for geological interpretation, geophysical logging downhole and metallurgical testwork purposes.



# **Capital Structure**

The capital structure of the Company Limited is summarised as follows:

Security	Number
Fully Paid Ordinary Shares	
Issued Ordinary Shares	564,819,214
Performance Rights	
Unvested performance rights at a nil exercise price, subject to performance conditions	57,000,000
Share Options	
Unlisted share options exercisable at 31.41 cents each, expiring 30 March 2022	20,274,755
Unlisted share options exercisable at 30 cents each, expiring 11 December 2022	6,000,000
Unlisted share options exercisable at 35.51 cents each, expiring 30 March 2023	20,274,755
Convertible Notes	
Unlisted Convertible Notes at 4% per annum, maturing 30 March 2025	101,373,777

# **Financial Commentary**

The cash flow report (Appendix 5B) for the December 2021 quarter provides an overview of Cyprium's financial activities. Cyprium closed the quarter with cash at bank of \$25.5 million.

The Nifty copper project site incurred \$11.5 million expenditure during the December 2021 quarter, including personnel, RC and diamond drilling, technical and base line studies, surveys, metallurgical testwork, front end engineering design, SX-EW and related infrastructure refurbishment, camp refurbishment, maintenance and administration activities.

Exploration expenditure for the December 2021 quarter was \$2.4 million, including RC and diamond drilling geological analysis and fieldwork. There was also \$0.6 million of expenditure spent on corporate administrative and personnel costs, including \$30,000 paid for Directors fees (refer to item 6.1 of appendix 5B).

This ASX announcement was approved and authorised by the Board.

### For further information:

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Follow the Company developments through our website and social media channels:







## **Announcements**

This Quarterly Activities Report contains information extracted from ASX market announcements reported in accordance with the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" ("JORC Code, 2012"). Further details (including JORC Code reporting tables where applicable) of exploration results referred to in this Quarterly Activities Report can be found in the following announcements lodged on the ASX:

- 02 November 2021 1 2 1 Investment APAC Online Presentation <a href="https://wcsecure.weblink.com.au/pdf/CYM/02446205.pdf">https://wcsecure.weblink.com.au/pdf/CYM/02446205.pdf</a>
- 02 November 2021 Significant Copper Intersections from Nifty West Drilling https://wcsecure.weblink.com.au/pdf/CYM/02446210.pdf
- 17 November 2021 Updated Nifty Copper Mineral Resource Estimate https://wcsecure.weblink.com.au/pdf/CYM/02453157.pdf
- 22 November 2021 Significant Copper Intersections from Nanadie Well Drilling https://wcsecure.weblink.com.au/pdf/CYM/02455284.pdf
- 23 November 2021 ASX Investor Copper Day Presentation https://wcsecure.weblink.com.au/pdf/CYM/02456000.pdf
- 06 December 2021 Investor Webinar Presentation https://wcsecure.weblink.com.au/pdf/CYM/02462710.pdf
- 06 December 2021 Nifty Copper Project Update https://wcsecure.weblink.com.au/pdf/CYM/02462718.pdf
- 13 December 2021 Maroochydore Project 2021 Drilling Campaign Update <a href="https://wcsecure.weblink.com.au/pdf/CYM/02465744.pdf">https://wcsecure.weblink.com.au/pdf/CYM/02465744.pdf</a>
- 27 January 2022 Further Significant Copper Intersections from Nifty West Drilling https://wcsecure.weblink.com.au/pdf/CYM/02479300.pdf

These announcements are available on the Company's website, https://cypriummetals.com/.

Cyprium confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of Mineral Resources, which all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not materially changed from the original market announcement.



## **Tenement Information**

Tenement	Location	Interest
Cyprium has an 80% joint venture interest in the Cue Copper-Gold project's copper, gold and silver mineralisation however Musgrave Minerals Limited (ASX Code: MGV) has a 100% interest in primary gold deposits that are not associated with copper-gold deposits, for the following tenements at the Cue Copper Project, WA:  M20/0225, M20/0245, M20/0277, M20/526, E20/0606, E20/0608, E20/0616, E20/0629, E20/0630, E20/0659, E20/0698, E20/0700, E20/0836 and P20/2279	Murchison region, WA	80%
Cyprium has a 100% interest in the Nanadie Well Copper-Gold Project, WA, which comprises the following tenements: M51/887, E51/1040, E51/1986 and E51/1987	Murchison region, WA	100%
Cyprium has a 100% interest in the Paterson Copper Project (Nifty Copper Mine and Maroochydore Copper Project), WA, which comprises the following tenements: E45/1018, E45/1840, E45/1841, E45/3011, E45/4318, M45/314, M45/315, M45/317, M45/318, M45/492, P45/2924, P45/2925, P45/2926, P45/2927, P45/3055, L45/102, L45/128, L45/143, L45/148, L45/74, L45/91, M271SA, E45/4319, E45/5705, M45/711, M45/712, M45/713, M45/745, M45/746, P45/3150, P45/3151, E45/3003, M45/752, M45/753 and M45/754	Paterson Province, WA	100%
Cyprium has a 100% interest in the Paterson Exploration Project, WA (IGO earning up to 70%), which comprises the following tenements: E45/1839, E45/2280, E45/2415, E45/2771, E45/2772, E45/2773, P45/2792, P45/2793, P45/2794, P45/2801, P45/2802, P45/2803, P45/2804, P45/2805, P45/2806, P45/2807, P45/2808, E45/3573, E45/3574, E45/3575, E45/3576, E45/3577, E45/4151, E45/4205, E45/4234, E45/4862, E45/5199, E45/5300, M45/1109, M45/1110, M45/1111, M45/1112, M45/1113, M45/1114	Paterson Province, WA	100%

## **Changes during the December 2021 Quarter:**

There were no changes during the quarter.

### **Competent Person**

The information in this report that relates to Exploration Targets, Exploration Results and the estimation and reporting of the Hollandaire Mineral Resource Estimate is an accurate representation of the available data and is based on information compiled by external consultants and Mr. Peter van Luyt who is a member of the Australian Institute of Geoscientists (2582). Mr. van Luyt is the Chief Geologist of Cyprium Metals Limited, in which he is also a shareholder. Mr. van Luyt has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person (CP). Mr. van Luyt consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to the Nifty and Maroochydore Mineral Resources is based on information compiled by Mr Terry Burns BAppSc (Geology) GDipEd PDGeosci (Mineral Economics) GDipEng (Mining), a Competent Person who is a Fellow and Chartered Professional of the Australasian Institute of Mining and Metallurgy. Mr Burns is an independent consultant to Cyprium Metals Limited and is a director of Warbrooke-Burns & Associates Pty Ltd which is the entity providing services to Cyprium Metals Limited. Warbrooke-Burns & Associates Pty Ltd is retained by Cyprium Metals Limited under industry standard commercial consulting rates. Mr Burns has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Burns consents to the inclusion in the report of the matters based on his compilation and in the form and context in which it appears.



## **About Cyprium Metals Limited**

Cyprium Metals Limited (ASX: CYM) is an ASX listed company with copper projects in Australia. The Company has a highly credentialed management team that is experienced in successfully developing sulphide heap leach copper projects in challenging locations. The Company's strategy is to acquire, develop and operate mineral resource projects in Australia which are optimised by innovative processing solutions to produce copper metal on-site to maximise value.

The Company has projects in the Murchison and Paterson regions of Western Australia, which is host to a number of base metals deposits with copper and gold mineralisation.

## **Paterson Copper Projects**

This portfolio of copper projects comprises the Nifty Copper Mine, Maroochydore Copper Project and Paterson Exploration Project.

The Nifty Copper Mine ("Nifty") is located on the western edge of the Great Sandy Desert in the north-eastern Pilbara region of Western Australia, approximately 350km southeast of Port Hedland. Nifty contains a 2012 JORC Mineral Resource of 732,000 tonnes of contained copper <sup>i</sup>. Cyprium is focussed on a heap leach SX-EW operation to retreat the current heap leach pads as well as open pit oxide and transitional material. Studies will investigate the potential restart of the copper concentrator to treat open pit sulphide material.

The Maroochydore deposit is located ~85km southeast of Nifty and includes a shallow 2012 JORC Mineral Resource of 486,000 tonnes of contained copper ii. Aeris Resources Limited (ASX: AIS, formerly Straits Resources Limited) holds certain rights to "buy back up to 50%" into any proposed mine development in respect of the Maroochydore Project, subject to a payment of 3 times the exploration expenditure contribution that would have been required to maintain its interest in the project.

An exploration earn-in joint venture has been entered into with IGO Limited on ~2,400km² of the Paterson Exploration Project. Under the agreement, IGO is to sole fund \$32 million of exploration activities over 6.5 years to earn a 70% interest in the Paterson Exploration Project, including a minimum expenditure of \$11 million over the first 3.5 years. Upon earning a 70% interest, the Joint Venture will form and IGO will free-carry Paterson Copper to the completion of a pre-feasibility study (PFS) on a new mineral discovery.

#### **Murchison Copper-Gold Projects**

Cyprium has an 80% attributable interest in a joint venture with Musgrave Minerals Limited (ASX: MGV) at the Cue Copper-Gold Project, which is located ~20km to the east of Cue in Western Australia. Cyprium will free-carry the Cue Copper Project to the completion of a definitive feasibility study (DFS). The Cue Copper-Gold Project includes the Hollandaire Copper-Gold Mineral Resources of 51,500 tonnes contained copper <sup>iii</sup>, which is open at depth. Metallurgical test-work has been undertaken to determine the optimal copper extraction methodology, which resulted in rapid leaching times (refer to 9 March 2020 CYM announcement, "Copper Metal Plated", https://cypriummetals.com/copper-metal-plated/).

The Nanadie Well Project is located ~650km northeast of Perth and ~75km southeast of Meekatharra in the Murchison District of Western Australia, within mining lease M51/887.

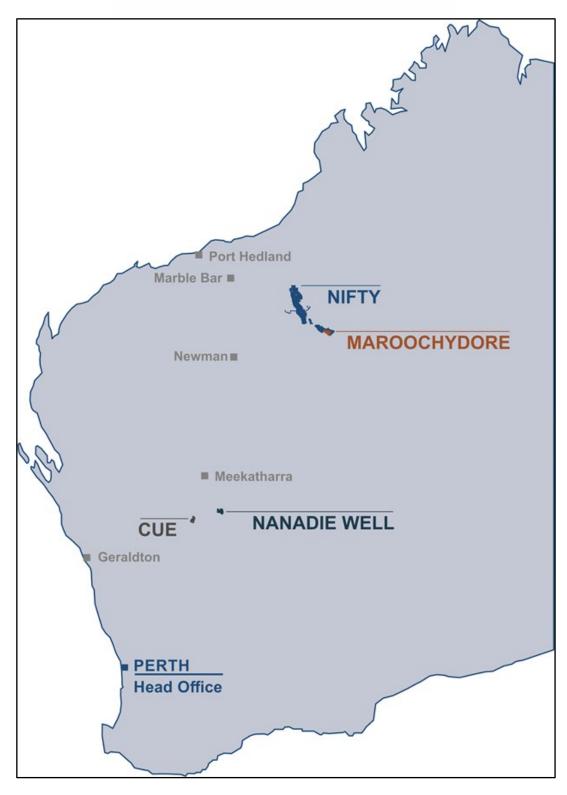
The Cue and Nanadie Well Copper-Gold projects are included in an ongoing scoping study, to determine the parameters required to develop a copper project in the region, which provides direction for resource expansion work.

<sup>&</sup>lt;sup>1</sup> Refer to CYM ASX announcement dated 17 November 2021 "Updated Nifty Copper Mineral Resource Estimate"

ii Refer to MLX ASX announcements: 10 March 2020, "Nifty Copper Mine Resource Update" and 18 August 2016, "Annual Update of Mineral Resources and Ore Reserves"

iii Refer to CYM ASX announcement: 29 September 2020, "Hollandaire Copper-gold Mineral Resource Estimate"





Cyprium Metals project locations