

ASX ANNOUNCEMENT

29 April 2022

**Quarterly Activities Report**

For the period ending 31 March 2022

**Nifty Copper Project Restart Study**

- Current copper price ~USD4.50/lb
- Oxide C1 costs of USD1.91/lb and C3 costs of USD2.82/lb
- Average production of 25,000 tpa copper cathode
- Oxide cathode production 146,100 tonnes copper metal
- Pre-production capital AUD149M
- Positive engagement with Financiers now accessing final study and extensive data room
- NPV @7% of AUD277M with an IRR of 37% (post tax)
- Mineral Resource Estimate (MRE) being upgraded to include 2021 drilling & inferred resource conversion
- Oxide mine life 2023-29 at ~6.3 years (pre-MRE upgrade) with sulphide potential +20yrs
- Metallurgical testwork confirms 85% recovery in Retreat and 90% in Oxide Pit material
- Free cashflow AUD544M
- Payback in 3 years
- Regulatory approvals submitted and on track
- Sulphide heap leach metallurgy testwork commenced

**Nifty drilling – Nifty copper mineralisation ~100m thick**

- Mineral Resource infill and extensional drilling programmes continues to provide wide intervals of ~70m to ~115m thick zones of significant copper mineralisation intersected including:
  - 20m at 0.70% Cu from 210m, 31m at 1.61% Cu from 234m and 13m at 0.55% Cu from 268m in Hole 21NRWP064
  - 57m at 1.01% Cu from 224m in Hole 21NRWP047
  - 19m at 0.66% Cu from 186m, 10m at 0.49% Cu from 218m, 17m at 1.19% Cu from 232m and 11m at 0.53% Cu from 271m in Hole 21NRWP048
  - 5m at 1.96% Cu from 221m, 22m at 0.88% Cu from 227m, 17m at 1.39% Cu from 265m in Hole 21NRWP049



- 1m at 1.16% Cu from 238m, 20m at 0.85% Cu from 258m and 13m at 1.14% Cu from 288m in Hole 21NRWP051
- 30m at 1.12% Cu from 234m and 41m at 0.91% Cu from 265m in Hole 21NRWP052

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

- Drilling further extends massive Maroochydore copper - cobalt resource potential
- Near-surface oxide copper/cobalt mineralisation extended to 3,000m long, up to 500m wide and up to 100m thick
- Sulphide copper - cobalt mineralisation 2,500m long (still open), up to 500m wide and up to 50m deep (still open)

#### **Significant results include:**

- 11m @ 2.27% Cu & 429 ppm Co from 65m and 20m @ 0.72% Cu & 38 ppm Co from 78m in 21MDRC015
- 20m @ 0.86% Cu & 609 ppm Co from 41m in 21MDRC016
- 5m @ 1.68% Cu & 678 ppm Co from 34m in 21MDRC017
- 17m @ 0.84% Cu & 462 ppm Co from 56m in 21MDRC011
- 13m @ 0.85% Cu & 429 ppm Co from 50m in 21MDRC012
- 41m @ 0.45% Cu & 263 ppm Co from 79m in 21MDRC018
- 23m @ 0.58% Cu & 261 ppm Co from 25m in 21MDWB02

Managing Director Barry Cahill commented:

*“We were very pleased to announce the results of the Nifty Copper Project Restart Study during the quarter. The fundamentals of the project are robust and outline the first phase of a long-life operation. Additionally the study does not include the addition of a further update to the Mineral Resource Estimate and the conversion of inferred resources during the pit mining.*

*Excellent drilling assay results continued during the quarter for the highly successful Nifty West drilling programme. There is a substantial zone of mineralisation, which provides additional copper tonnes in the future large-scale open pit development. Furthermore, this area remains open to the west and south.*

*Maroochydore is another exciting project, and the first round of RC drilling results reinforces the quality of this large copper-cobalt deposit. In addition, this drilling has increased the oxide-supergene resource potential further to the east.*

*We are currently focused on finalising the financing of the Restart of the Nifty Copper Project to establish Cyprium as copper producer in the shortest time frame possible.”*



Cyprium Metals Limited (ASX: CYM) (“Cyprium” or the “Company”) is pleased to provide the following overview of the Company’s activities for the March 2022 quarter.

## **Nifty Copper Project**

### **Nifty Copper Project Restart Study**

The results of the Restart Study for the Nifty Copper Project were released during the quarter (refer to CYM ASX announcements dated 11 March 2022, “Nifty Copper Project Restart Study” and “CYM Restart Study Presentation”). The study demonstrates a robust heap leach solvent extraction-electrowinning (“SX-EW”) operation in the initial stage of the project. The Restart is focused around the first phase of heap leach retreat and oxide open pit, and it is envisaged that the life will extend to the sulphide stage of the open pit with a considerably larger resource available. The sulphide study has already commenced with design optimisation and metallurgical testwork currently being undertaken.

There already is substantial infrastructure in place at the Nifty Copper Project, including:

- 2.8 Mtpa sulphide concentrator (care & maintenance since November 2019).
- 25 ktpa copper cathode heap leach SX/EW facility (care & maintenance since January 2009).
- 21 MW gas turbine power station, gas pipeline and power distribution systems.
- Water supply and reticulation systems including multiple bore fields.
- Full heavy vehicle workshops and mine village with a capacity of approximately 400 persons.
- Extensive stores inventory, mobile equipment, offices, paste and other fixed plant.
- Sealed all weather airstrip.
- Upgraded 4G network and communications infrastructure.

The restart of the heap leach SX/EW facility at the Nifty Copper Project will involve the following:

- Recommencement of open pit mining.
- Refurbishment of existing heap leach agglomeration, stacking/materials equipment, and irrigation systems.
- Refurbishment of the existing leach pads to place new oxide material on for leaching.
- Construction of additional leach pad capacity for retreatment of the existing heap leach pad material.
- Refurbishment of existing SX-EW facilities.
- Re-instatement of supporting reagent/utility systems.

The pit optimisation only includes material from the measured and indicated category of the current Nifty Mineral Resource Estimate (refer to CYM ASX announcement dated 17 November 2021, “Updated Nifty Copper Mineral Resource Estimate”), which does not include any assay results from the Nifty west and southeast drilling programmes undertaken during 2021 nor does it include any of the existing heap leach pad retreat material. The pit optimisation excludes inferred material.

There is a compelling opportunity to reclaim and retreat the historic heap leach pads to extract the residual copper and value contained within the existing historic material first stacked in 1993 and ceased stacking in 2006. The heap leach retreat segment of the project restart is a significant source of copper feed to the SX-EW plant, in conjunction with the heap leachable ore mined from the first phase of a return to open pit mining.

The historic heap leach pads are generally regarded as a heterogeneous stockpile as there is little uniformity in the material stacked. There were approximately sixty individual pads formed and the results from metallurgical accounting produced from physical measurement, assay results and calculations estimate the current inventory of the historic heap leach pads to be:

- 17.16 Mt @ 0.53%Cu (~91Kt tonnes of copper metal)

To facilitate the retreat of the historic heaps, the remnant material will be relocated to newly constructed heap leach infrastructure located adjacent to the existing facilities.

| Ore Source         | Cut-Off    | Measured    |            |                | Indicated   |            |                | Inferred   |            |               | Total       |            |                |
|--------------------|------------|-------------|------------|----------------|-------------|------------|----------------|------------|------------|---------------|-------------|------------|----------------|
|                    | %Cu        | Ore Mt      | Grade %Cu  | Metal t Cu     | Ore Mt      | Grade %Cu  | Metal t Cu     | Ore Mt     | Grade %Cu  | Metal t 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         |
| <b>Total Oxide</b> | <b>0.4</b> | <b>7.0</b>  | <b>1.2</b> | <b>79,700</b>  | <b>3.1</b>  | <b>1.1</b> | <b>35,600</b>  | <b>1.9</b> | <b>1.1</b> | <b>20,100</b> | <b>11.9</b> | <b>1.1</b> | <b>135,500</b> |
| 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        |
| <b>TOTAL</b>       |            | <b>26.5</b> | <b>1.6</b> | <b>431,000</b> | <b>12.3</b> | <b>1.6</b> | <b>197,500</b> | <b>7.0</b> | <b>1.5</b> | <b>97,100</b> | <b>45.9</b> | <b>1.6</b> | <b>732,200</b> |

*Table 1 / November 2021 Mineral Resource Estimate – Nifty Copper Deposit*

Open pit mining operations are planned to be re-established to provide heap leachable ores to the redeveloped existing heap leach pad. The original project commenced with open pit mining in 1993 and was focused on the relatively high-grade part of the oxide mineralisation but closed in 2006 when open pit economics became marginal and site focus was on the large and rapidly developing underground sulphide operation.

The open pit optimisations using Whittle software were carried out using only measured and indicated mineral resources in line with JORC (2012). Inferred Resources have not been included in the open pit design and will be subject to further drilling to convert to a measured and indicated mineral resource category. The optimum open pit shell is based on the maximum un-discounted operating cashflow which reached a depth of 10,085mRL or approximately 225m below surface. The chosen shell used for the detailed mine plan contains 8.8Mt of process feed at 0.87% Cu for approximately 76.4kt of stacked recovered copper metal (~10% of the total November 2021 Nifty Mineral Resource Estimate). Approximately 52.9Mt of waste (includes material classified as inferred mineral resources) is contained within this open pit shell which equates to a waste to ore stripping ratio of 6:0.

Over time, Nifty was established as a robust oxide and secondary sulphide heap leach operation capable of producing approximately 25,000tpa of copper metal as cathodes (LME Grade A with a purity of more than 99.999% copper metal) via SX-EW processing. The metallurgical testwork used in the Nifty Copper Project Restart Study targeted copper recoveries of 85%, recovery times of 360 days under actual production leaching conditions, reduced acid consumption and reduced polymer agglomerant consumption.

Optimisation testwork, currently underway, will enable a scalable solution to be designed for the agglomeration, curing, stacking and irrigation of the historic heap leach material based on this work. Initial results of the optimisation columns will result in reduced reagents consumptions from those used in the restart study. Further optimisation testwork is being conducted on new oxide ore via diamond core drilled in 2021 and currently in the laboratory.

There will be two leach pad circuits on site producing copper in solution to the plant namely, the rehandling, retreatment and stacking of the existing historic leach pads and the mining, crushing, agglomeration and stacking of newly mined oxide material from the expanded historical open pit.

Numerous Government approvals are required for the restart project scope. Nifty is located on a State Agreement Act tenement and Ministerial Approval is required to amend the project size and its operating life.

There is 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 rock landform. There is an amended Mining Proposal required for the restart of the open 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 smaller permits required around the restart of the mining operation, that require reactivation or renewal.

| Permit / Item                                                         | Legislation                               | Department                                               | Description                                                            | Submission Status | Date Lodged        |
|-----------------------------------------------------------------------|-------------------------------------------|----------------------------------------------------------|------------------------------------------------------------------------|-------------------|--------------------|
| Works Approval and Licence                                            | Environmental Protection Act (1986)       | Department of Water & Environmental Regulation (DWER)    | Amended Prescribed Activities Licence to enable processing             | Lodged            | 8th March 2022     |
| Native Vegetation Clearing Permit                                     |                                           | Department of Mines Industry Regulation & Safety (DMIRS) | Authorises the clearing of native vegetation for project development   | Lodged            | 14th November 2021 |
| Mining Proposal                                                       | Mining Act (1978)                         | Department of Mines Industry Regulation & Safety (DMIRS) | Approval for mining activities and construction of mine infrastructure | Lodged            | 21st February 2022 |
| Mine Closure Plan                                                     |                                           | Department of Mines Industry Regulation & Safety (DMIRS) | Defines rehabilitation and closure accompanying the Mining Proposal    | Lodged            | 21st February 2022 |
| Project Management Plan                                               | Mines Safety & Inspection Act (1994)      | Department of Mines Industry Regulation & Safety (DMIRS) | Project safety plan approval                                           | Lodged            | 20th January 2022  |
| 26D Licence to Alter Water Abstraction Methods of an Existing Licence | Rights in Water and Irrigation Act (1914) | Department of Water & Environmental Regulation (DWER)    | Change in abstraction mechanism under the existing water licence       | Lodged            | 25th February 2022 |

**Table 2 / Nifty Copper Project Restart Study Regulatory Approvals and Permitting**

The overarching Works Approval proposal for the restart has been submitted to the Department of Water and Environmental Regulation and outlines that the project will involve excavating, crushing, agglomerating, stacking and retreatment of current heap leach material – relocated from the current (to be refurbished) leach pads to new pads constructed in a new location. It will also involve a cutback on the current open pit to provide new ore feed to the heap leach pads of two different types of copper ore, oxide and transitional.

The Proposal outlines that Cyprium will use existing facilities as most of this infrastructure has been maintained and has been approved by the Department of Water and Environmental Regulation under Operating Licence number L6617/1992/15. Five other proposals have been lodged with respect to the activities to be undertaken by the restart to operations (also refer to Table 2).



The Nifty site has extensive infrastructure in place and is commensurate with a remote operation located in the Northwest of Australia. Most of the developed infrastructure has remained in place since the operation was placed into a care and maintenance regime during November 2019. Support facilities were generally left idle with minimal maintenance undertaken prior to Cyprium taking control of the asset at the end of March 2021.

Since acquiring the Nifty copper project, Cyprium instituted a site maintenance and refurbishment programme that was specifically targeted at key components of the SX-EW system and associated infrastructure required to support the recommissioning of the heap leach and SX-EW operation. This programme included a camp facilities refurbishment and an upgrade to the communications infrastructure to meet the immediate and future needs of the site.

Pre-operations capital expenditure is estimated at AUD149 million, and including working capital and other site costs, the project funding required is estimated at AUD193 million. The SX-EW annual production capacity is 25,000 tonnes per annum copper cathode and the oxide heap leach operation post construction life of mine is 6.3 years.

C1 operating costs are USD1.91/lbs and all in C3 costs are USD2.82/lbs, to provide a post capital free cash flows of AUD544 million, a post-tax Net Present Value of AUD277 million, an Internal Rate of Return of 37% and a project payback of 3 years.

|                                                        |        |       |
|--------------------------------------------------------|--------|-------|
| Open Cut Ore mined                                     | Mt     | 8.8   |
| Re-treat ore tonnes stacked                            | Mt     | 17.1  |
| Total ore stacked                                      | Mt     | 25.9  |
| Average Grade                                          | %      | 0.65  |
| Average Recovery                                       | %      | 87.3  |
| Copper Metal Cathode Production Capacity               | ktpa   | 25.0  |
| Copper Metal Cathode Produced                          | Kt     | 146.1 |
| Copper Metal Cathode Produced                          | Mlbs   | 322.0 |
| Life of Oxide Heap Leach Operation (post construction) | Years  | 6.3   |
| Revenue                                                | USD/lb | 4.08  |
| C1 Costs                                               | USD/lb | 1.91  |
| C2 Costs                                               | USD/lb | 2.56  |
| C3 Costs                                               | USD/lb | 2.82  |
| Pre-production Capital Expenditure                     | AUDM   | 149.3 |
| Operating Cash Flows (EBITDA)                          | AUDM   | 822.8 |
| Free Cash Flows (EBIT)                                 | AUDM   | 543.7 |
| NPV Pre-Construction (after tax) @7% discount rate     | AUDM   | 277.3 |
| IRR (after tax)                                        | %      | 37    |
| Project payback post construction                      | Years  | 3.0   |

**Table 3 / Nifty Copper Project Restart Study Economic Analysis Summary**

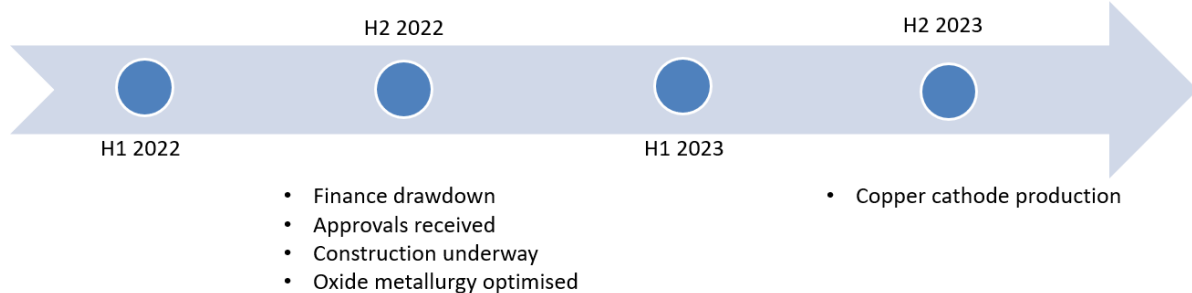
The project cash flows and forecast returns are very sensitive to the movement in the LME Copper price and AUD/USD FX rate which has been based on an LME Copper price of USD9,000 per tonne (USD4.08/lb) and an AUD/USD FX rate of 0.75. The LME Copper price has been regularly trading above USD10,000 per tonne (USD4.54/lb) during 2022 and the AUD/USD FX rate in a range of 0.70 - 0.74 during 2022, which at market current pricing provides considerable upside against the upwards operating and capital cost trends that the industry is currently experiencing.

| Sensitivities | Base Case   | Sensitivity | Cash Flow <sup>1</sup> | NPV <sup>2</sup> | IRR <sup>2</sup> |
|---------------|-------------|-------------|------------------------|------------------|------------------|
| Cu Price      | USD9,000/t  | USD1,000    | AUD195m                | AUD101m          | +12%             |
| Cu Price      |             | USD10,000/t | AUD1,947m              | AUD379m          | 49%              |
| AUD/USD FX    | 0.75        | 5%          | AUD92m                 | AUD48m           | +6%              |
| AUD/USD FX    |             | 0.7125      | AUD1,845m              | AUD325m          | 43%              |
| C1 Costs      | USD1.91/lbs | 10%         | AUD(82)m               | AUD(61)m         | (7)%             |
| C1 Costs      |             | USD2.10/lb  | AUD903m                | AUD216m          | 30%              |
| Capital Costs | AUD279m     | 10%         | AUD(28)m               | AUD(25)m         | (4)%             |
| Capital Costs |             |             | AUD307m                | AUD252m          | 33%              |

<sup>1</sup> Pre-tax cash flows  
<sup>2</sup> After tax cash flows

**Table 4 / Nifty Copper Project Restart Study Sensitivities**

- Complete Restart Study
- Submit Approvals
- Finance Process
- Resource Update
- Sulphide metallurgy underway
- Commissioning
- Open Pit mining underway
- Ore stacking underway



**Figure 1 / Nifty Copper Project Restart Study Project Development Schedule**

There remains a number of opportunities at the Nifty Copper Project, summarised as follows:

1. Only known significant near-term copper development project in Australia at present.
2. The open pit shape contains 1.2MT at 0.8% copper of inferred resources (9,600 copper metal tonnes insitu) that have the potential to provide extra copper tonnes to the heap leach. The cost of the material in this study classifies and costs that material as waste.
3. The drilling conducted by Cyprium and released to the market in late 2021 and early 2022 has not been included in the Mineral Resource Estimate and is expected to add copper tonnes to the inventory and convert existing copper metal classifications to higher confidence. This new estimate will be available in Q2 2022.
4. Reagent consumptions are currently being optimised in the laboratory and so far, indications are good. The optimisation tests are being undertaken on a representative trench sample and high grade and low-grade composite sonic samples. A chalcopyrite sample is also being tested under the proposed regime. Results are expected in H1 2022. Further optimisation testwork will be conducted on new ore from the oxide pit via diamond core currently in the laboratory.
5. The sulphide project will extend the mine life substantial as either a sulphide heap leach operation or a concentrator operation. These studies have commenced and are currently in a design optimisation and metallurgical test work phase.

## Resource Definition Drilling

The Nifty mineral resource remains open both up and down plunge of the host syncline. The resource drilling at Nifty West and East undertaken in 2021 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

The RC drilling programme targeted lightly drilled areas up-plunge of the former underground mine in the keel area of the Nifty Syncline below the western end of the Nifty open pit (Figure 2).



*Figure 2 / Nifty Copper Project showing location of Nifty West drill program (local grid)*

Wide intervals of ~70m to ~115m thick zones of significant copper mineralisation intersected in the keel zone of the Nifty Syncline, up-plunge of the former underground mine, have been consistently encountered from the drilling below the western end of the open pit. The Nifty West RC drilling programme has confirmed the continuation of significant copper mineralisation in the keel zone to the west at 80-100m thick, which is ideal for a large-scale open pit development.

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. Excellent potential remains to outline further copper mineralisation extending into the southern limb and up-plunge of the Nifty syncline, in the next phase of drilling.





The remaining assays for the Nifty West RC drilling programme were received during the quarter. Significant results included:

**Hole 21NRWP064 – copper mineralisation extends over 92m downhole, including:**

- **20m at 0.70% Cu** from 210m, including:
  - **1m at 1.04% Cu** from 210m
  - **4m at 1.29% Cu** from 214m
  - **1m at 1.23% Cu** from 221m
  - **1m at 1.42% Cu** from 225m
- **31m at 1.61% Cu** from 234m, including:
  - **14m at 2.72% Cu** from 235m
- **13m at 0.55% Cu** from 268m, including:
  - **1m at 1.14% Cu** from 271m
  - **1m at 1.26% Cu** from 273m

**Hole 21NRWP047 – copper mineralisation extends over 69m downhole, including:**

- **57m at 1.01% Cu** from 224m, including:
  - **5m at 1.38% Cu** from 225m
  - **3m at 1.61% Cu** from 232m
  - **2m at 1.95% Cu** from 244m
  - **2m at 1.86% Cu** from 267m
  - **8m at 2.65% Cu** from 270m, including:
    - **2m @ 6.29% Cu** from 274m

**Hole 21NRWP048 – copper mineralisation extends over 115m downhole, including:**

- **19m at 0.66% Cu** from 186m, including:
  - **2m at 1.64% Cu** from 191m
  - **1m at 1.28% Cu** from 202m
- **10m at 0.49% Cu** from 218m
- **17m at 1.19% Cu** from 232m, including:
  - **2m at 1.39% Cu** from 234m
  - **2m at 1.51% Cu** from 238m
  - **2m at 4.03% Cu** from 241m
- **11m at 0.53% Cu** from 271m, including:
  - **2m at 1.08% Cu** from 272m

**Hole 21NRWP049 – copper mineralisation extends over 82m downhole, including:**

- **5m at 1.96% Cu** from 221m, including:
  - **1m at 4.11% Cu** from 225m

- **22m at 0.88% Cu** from 227m, including:
  - **4m at 1.96% Cu** from 233m
  - **1m at 1.88% Cu** from 238m
  - **1m at 1.03% Cu** from 243m
- **17m at 1.39% Cu** from 265m, including:
  - **8m at 2.65% Cu** from 266m

**Hole 21NRWP051 – copper mineralisation extends over 88m downhole, including:**

- **1m at 1.16% Cu** from 238m
- **20m at 0.85% Cu** from 258m, including:
  - **5m at 1.96% Cu** from 270m
- **13m at 1.14% Cu** from 288m, including:
  - **9m at 1.47% Cu** from 288m

**Hole 21NRWP052 – copper mineralisation extends over 93m downhole, including:**

- **30m at 1.12% Cu** from 234m, including:
  - **2m at 4.02% Cu** from 237m
  - **4m at 1.62% Cu** from 240m
  - **3m at 2.32% Cu** from 253m
  - **2m at 1.94% Cu** from 259m
- **41m at 0.91% Cu** from 265m, including:
  - **3m at 1.92% Cu** from 277m
  - **2m at 3.17% Cu** from 286m
  - **1m at 1.38% Cu** from 295m
  - **4m at 1.36% Cu** from 297m

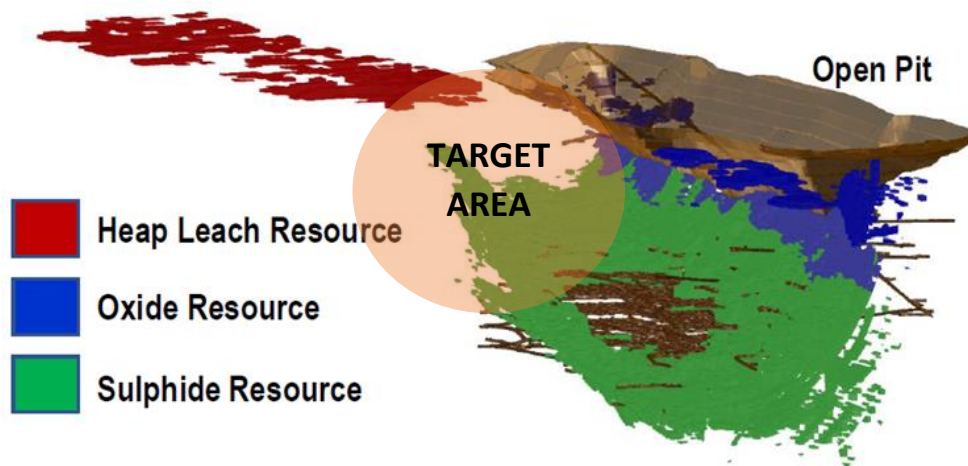
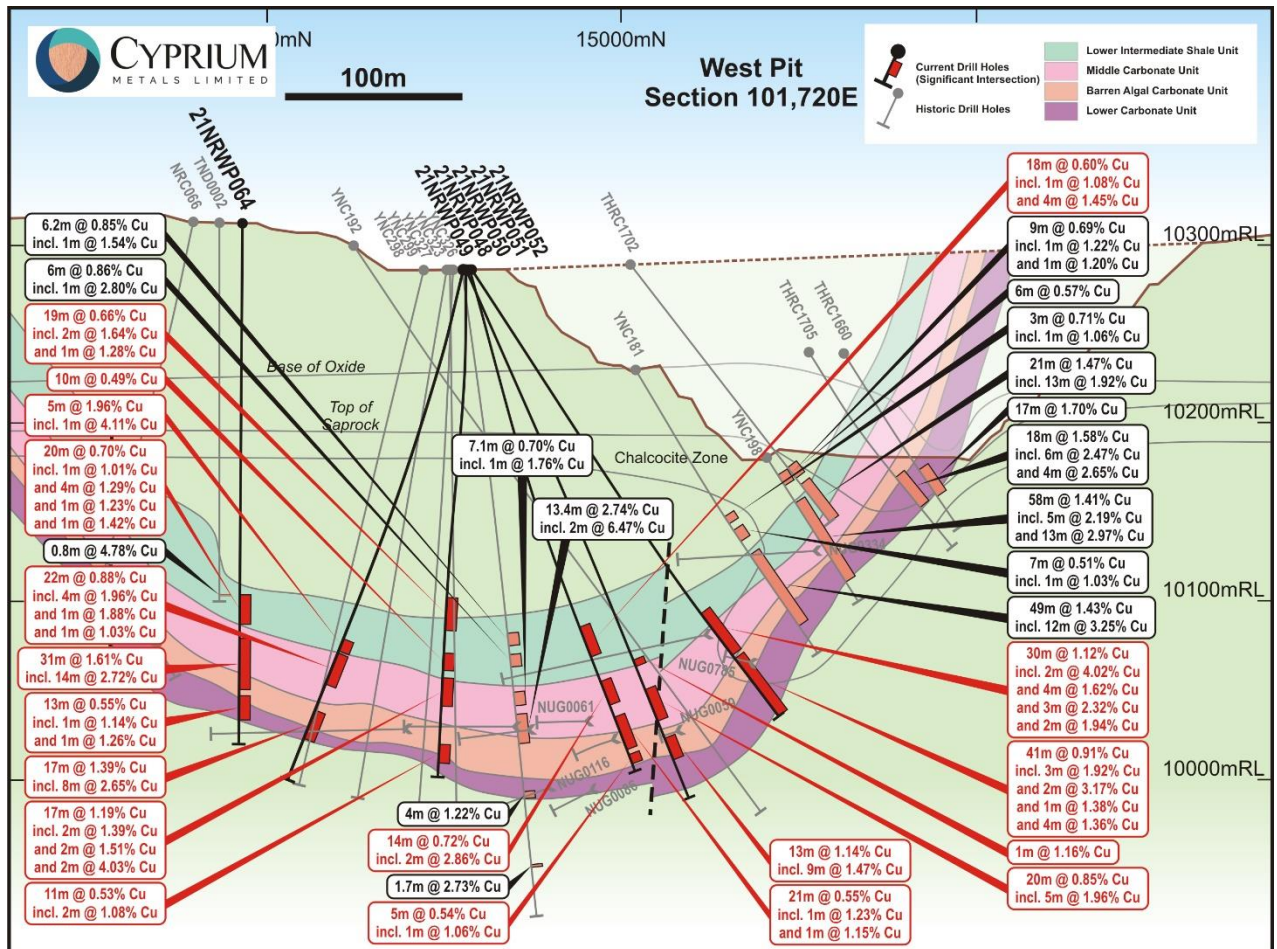


Figure 3 / Nifty West target area

## Section 101,720E

Hole 21NRWP064 successfully confirmed the continuity of the thick zone of copper mineralisation returning **20m at 0.70% Cu** from 210m, **31m at 1.61% Cu** from 234m, including **14m at 2.72% Cu** from 235m, and **13m at 0.55% Cu** from 268m, which remains open to the south. Five holes (21NRWP048 to 52) drilled along this previously untested section line all returned significant widths of low to medium grade copper mineralisation consistent with the historic holes (refer to Section 1).

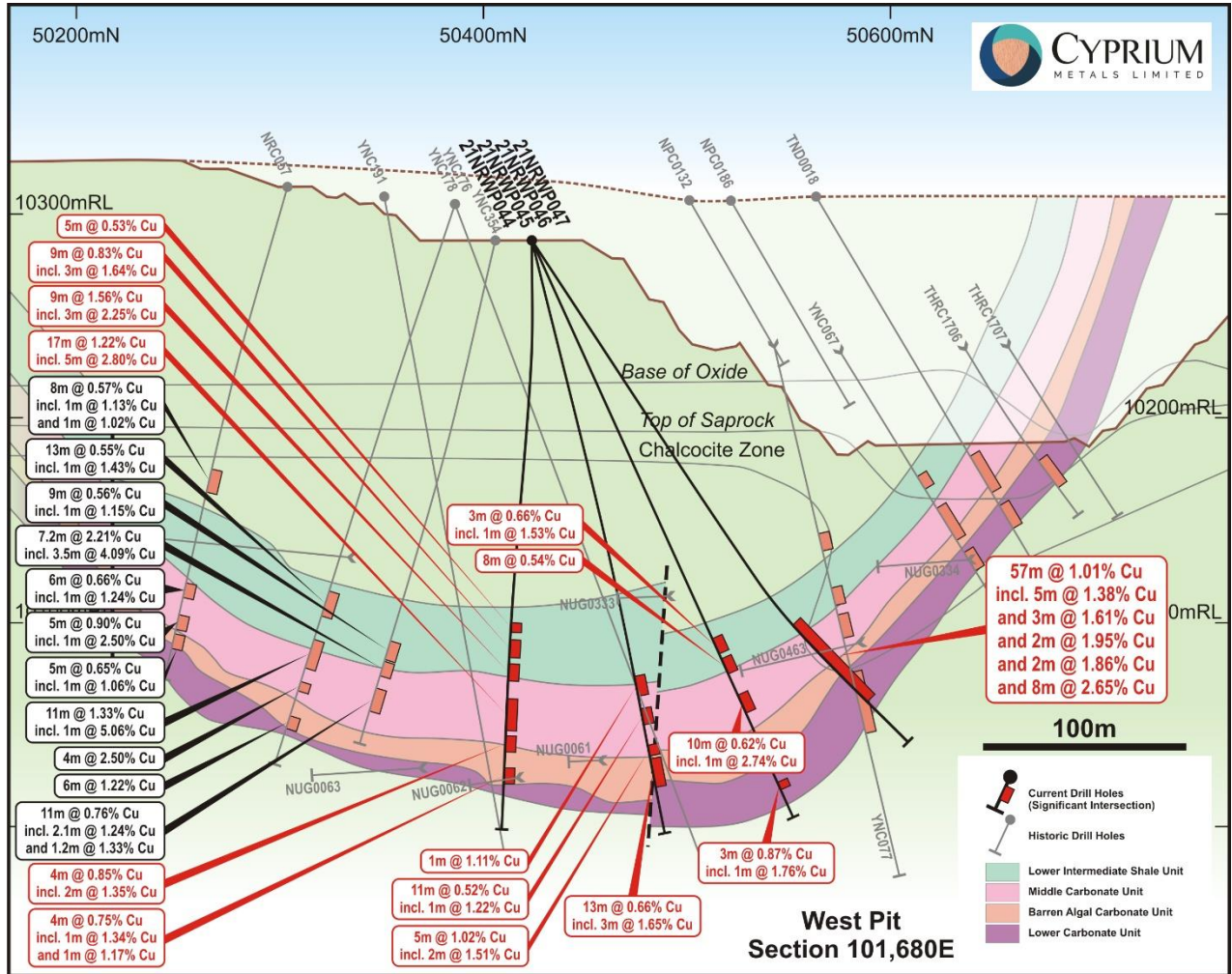


**Section 1 / Nifty West drill hole section 101720E**

*(Note: underground holes were drilled sub-parallel to the mineralisation and are displayed for information purposes only. Intersections for historic holes not displayed if superseded by current drilling)*

## Section 101,680E

A single infill hole (21NRWP047) drilled on this section confirmed the integrity of historic hole (YNC077), returning an impressive **57m at 1.01% Cu** from 224m, including **5m at 1.38% Cu** from 225m, **3m at 1.61% Cu** from 232m, **2m at 1.95% Cu** from 244m, **2m at 1.86% Cu** from 267m and **8m at 2.65% Cu** from 270m (refer to Section 2).



Section 2 / Nifty West drill hole section 101,680E

(Note: underground holes were drilled sub-parallel to the mineralisation and are displayed for information purposes only. Intersections for historic holes not displayed if superseded by current drilling)

## 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>. An RC drilling campaign at the Maroochydore Copper – Cobalt Project (refer to Figure 4) was completed by the end of 2021, which included 46 resource definition and extension holes (5,990m) and 4 water bores (228m) for a total of 6,218 metres as detailed in Figure 5, Images 1 to 7. To date, the results from 19 holes have been received by the Company.

The RC drill holes targeted oxide, supergene and transitional mineralisation at the project with several holes extending into fresh basement rock. Sulphide mineralisation was intersected from 108m down hole in 21MDRC018 (refer to Image 6).

The oxide mineralisation currently extends over a strike length of 3,000 metres, has a width of up to 500 metres and thicknesses up to 100 metres, as modelled in the existing JORC 2012 mineral resource estimate. The sulphide copper - cobalt mineralisation currently extends over a strike length of 2,500 metres long (still open), up to 500 metres wide and up to 50 metres deep (still open). The resource shapes are outlined in Figure 4 and sections 1 and 2.

Once all the RC assay results are received, they will be included in a revised mineral resource estimate of the Maroochydore copper – cobalt deposit. Significant results included:

- **11m @ 2.27% Cu & 429 ppm Co** from 65m in 21MDRC015, including:
  - **8m @ 2.95% Cu Ag & 555 ppm Co** from 65m, and;
- **20m @ 0.72% Cu & 38 ppm Co** from 78m, including:
  - **5m @ 1.99% Cu & 30 ppm Co** from 82m
- **20m @ 0.86% Cu & 609 ppm Co** from 41m in 21MDRC016, including:
  - **9m @ 1.25% Cu & 775 ppm Co** from 44m
- **5m @ 1.68% Cu & 678 ppm Co** from 34m in 21MDRC017
- **17m @ 0.84% Cu & 462 ppm Co** from 56m in 21MDRC011, including:
  - **11m @ 1.13% Cu & 570 ppm Co** from 58m
- **13m @ 0.85% Cu & 429 ppm Co** from 50m in 21MDRC012, including:
  - **9m @ 1.10 % Cu & 303 ppm Co** from 51m
- **41m @ 0.45% Cu & 263 ppm Co** from 79m in 21MDRC018, including:
  - **9m @ 0.95% Cu & 284 ppm Co** from 108m
- **23m @ 0.58% Cu & 261 ppm Co** from 25m in 21MDWB02, including:
  - **14m @ 0.81% Cu & 366 ppm Co** from 34m

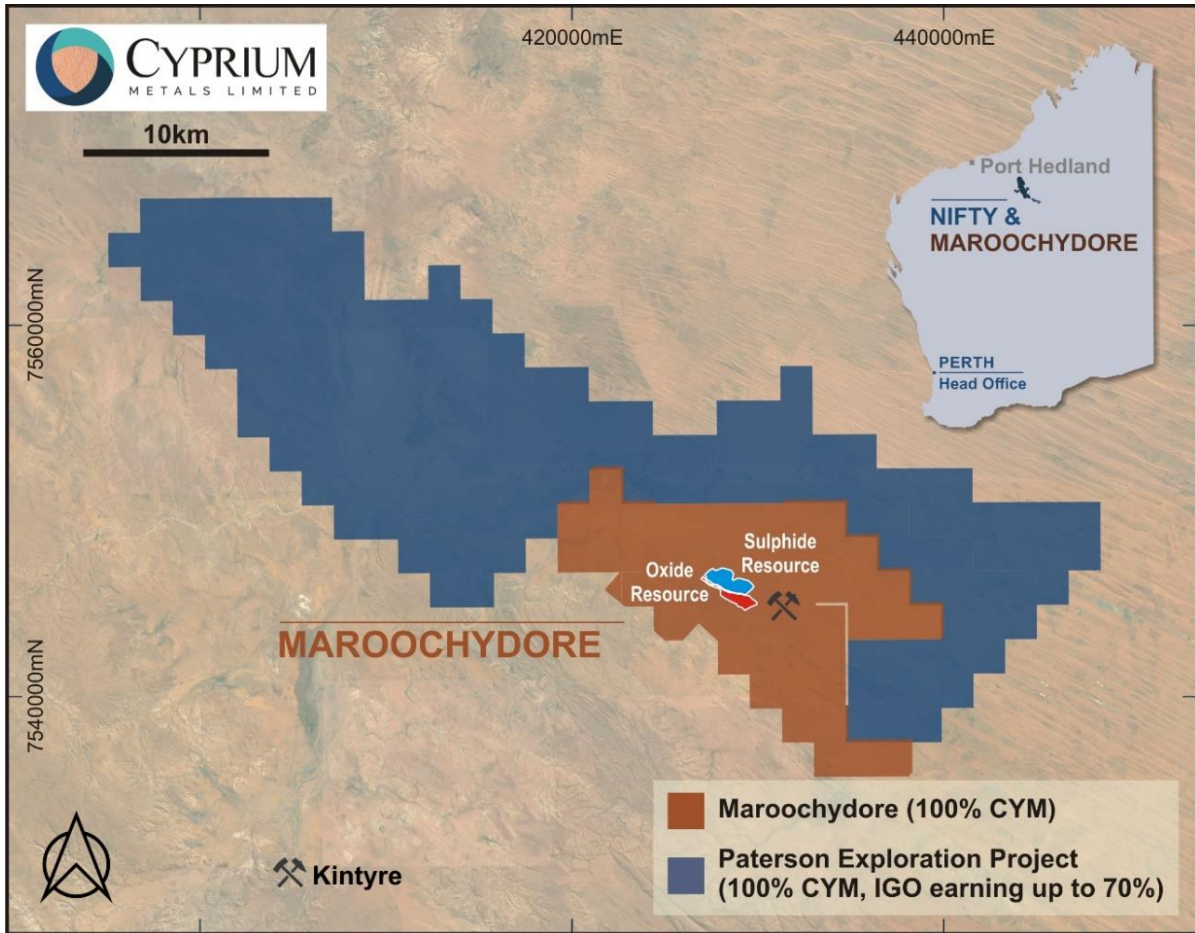


Figure 4 / Maroochydore Copper – Cobalt Project location plan



Image 1 / RC drill chips: 21MDRC011, 56-73m  
(17m @ 0.84% Cu & 462ppm Co, chalcocite & covellite mineralisation)



Image 2 / RC drill chips: 21MDRC012, 50-63m  
(13m @ 0.85% Cu & 429ppm Co, cuprite, chalcocite & covellite mineralisation)



**Image 3 / RC drill chips: 21MDRC015 65-76m  
(11m @ 2.27% Cu & 429ppm Co & 78-98m 20m @ 1.99% Cu & 30ppm Co, chalcocite & covellite mineralisation)**



**Image 4 / RC drill chips: 21MDRC016 41-61m  
(20m @ 0.86% Cu & 609ppm Co malachite, cuprite & chalcocite mineralisation)**



**Image 5 / RC drill chips: 21MDRC017 34-39m  
(5m @ 1.68% Cu & 678ppm Co cuprite mineralisation)**



**Image 6 / RC drill chips: 21MDRC018 108-117m  
(9m @ 0.95% Cu & 284ppm Co. pyrite & chalcopyrite mineralisation)**



**Image 7 / RC drill chips: 21MDWB02 34-48m  
(14m @ 0.81% Cu & 366ppm Co. malachite & cuprite mineralisation)**

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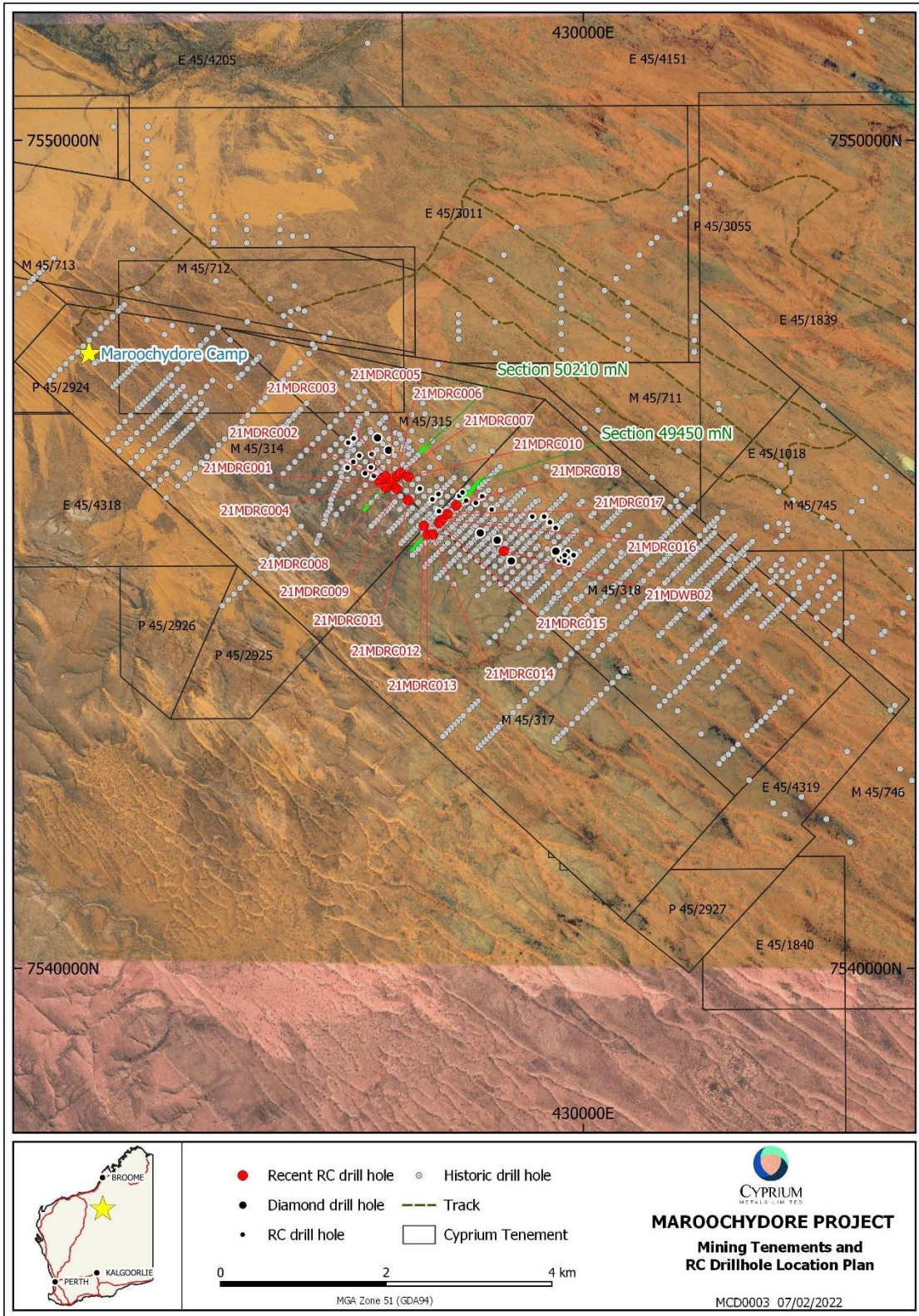
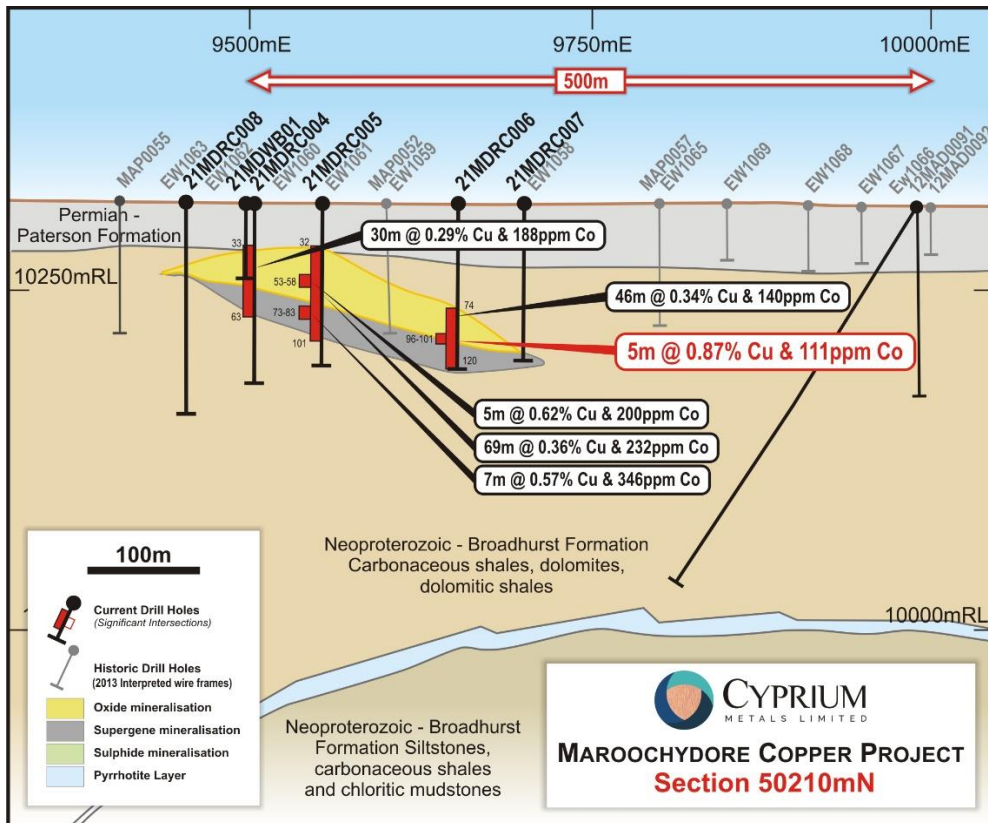
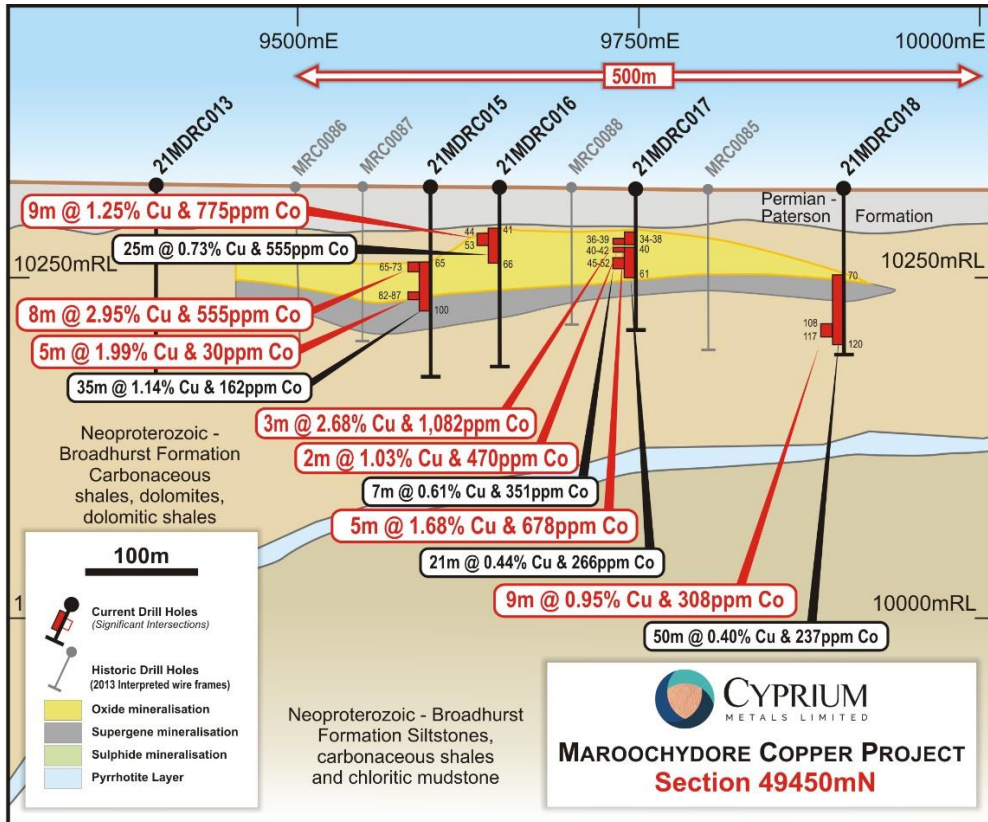


Figure 5 / Maroochydore Copper – Cobalt Project RC drillhole collar location plan



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Section 2 / 50210 mN mine grid Maroochydore Copper Project drilling and interpreted mineralisation outlines<sup>1</sup>

<sup>1</sup> Note sections are drawn looking towards the northwest

## June 2022 Quarter Plans

- Continuation of the Nifty Heap Leach Restart development plans with an aim of establishing an efficient long-term producing copper mine, including:
  - Finalise the Financing of the project during Q2 2022
  - Ongoing metallurgical testwork and optimisation
  - Continue the camp refurbishment
  - Continue the Government approval process for the Heap Leach Restart
  - Update the Mineral Resource and in pit inventory, including expansion options
  - Complete financing and final government approvals post FID
- Commence RC drilling programmes at the Murchison Copper-Gold projects
- Review of the drilling assay results, update the 2004 JORC mineral resource estimate and commence metallurgical testwork on the diamond drill core for the Nanadie Well deposit
- Review of the Maroochydore Copper-Cobalt drilling assay results and the core for geological interpretation and commence metallurgical testwork.

## Capital Structure

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

| Security                                                                               | Number      |
|----------------------------------------------------------------------------------------|-------------|
| <b>Fully Paid Ordinary Shares</b>                                                      |             |
| Issued Ordinary Shares                                                                 | 564,819,214 |
| <b>Performance Rights</b>                                                              |             |
| Unvested performance rights at a nil exercise price, subject to performance conditions | 57,000,000  |
| <b>Share Options</b>                                                                   |             |
| 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  |
| <b>Convertible Notes</b>                                                               |             |
| Unlisted Convertible Notes at 4% per annum, maturing 30 March 2025                     | 101,373,777 |

20,274,755 unlisted share options exercisable at 31.41 cents each expired on 30 March 2022.

## Financial Commentary

The cash flow report (Appendix 5B) for the March 2022 quarter provides an overview of Cyprium's financial activities. Cyprium closed the quarter with cash at bank of \$14.1 million.

The Nifty copper project site incurred \$8.2 million expenditure during the March 2022 quarter, including personnel, assays, technical and base line studies, surveys, metallurgical testwork, front end engineering design, SX-EW and related infrastructure refurbishment, camp refurbishment, communications infrastructure upgrades, maintenance and administration activities.

Exploration expenditure for the March 2022 quarter was \$0.5 million, including assay costs, geological analysis and fieldwork. There was also \$1.4 million paid for the interest on the Convertible Notes, \$0.6 million for stamp duty on the Paterson Copper Assets acquisition, \$0.7 million of expenditure spent on other administrative and personnel costs, including \$40,000 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:**

Barry Cahill  
Managing Director

Wayne Apted  
Chief Financial Officer  
& Company Secretary

Lexi O'Halloran  
Investor and Media Relations  
[lexi@janemorganmanagement.com.au](mailto:lexi@janemorganmanagement.com.au)

T +61 8 6374 1550

E [info@cypriummetals.com](mailto:info@cypriummetals.com)

T +61 404 577 076

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:

- 14 February 2022 Maroochydore Copper – Cobalt Project Initial RC Drilling Results  
<https://wcsecure.weblink.com.au/pdf/CYM/02486202.pdf>
- 28 February 2022 Nifty West Grows with Further Significant Copper Intersections  
<https://wcsecure.weblink.com.au/pdf/CYM/02492962.pdf>
- 11 March 2022 CYM Restart Study Presentation  
<https://wcsecure.weblink.com.au/pdf/CYM/02497928.pdf>
- 11 March 2022 Nifty Copper Project Restart Study  
<https://wcsecure.weblink.com.au/pdf/CYM/02497930.pdf>
- 14 March 2022 Final Drilling Results Extend Nifty West  
<https://wcsecure.weblink.com.au/pdf/CYM/02498602.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:<br>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:<br>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:<br>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:<br>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 March 2022 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 that 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 330km southeast of Port Hedland. Nifty contains a 2012 JORC Mineral Resource of 732,200 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<sup>ii</sup>. 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 ~2,400km<sup>2</sup> 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.

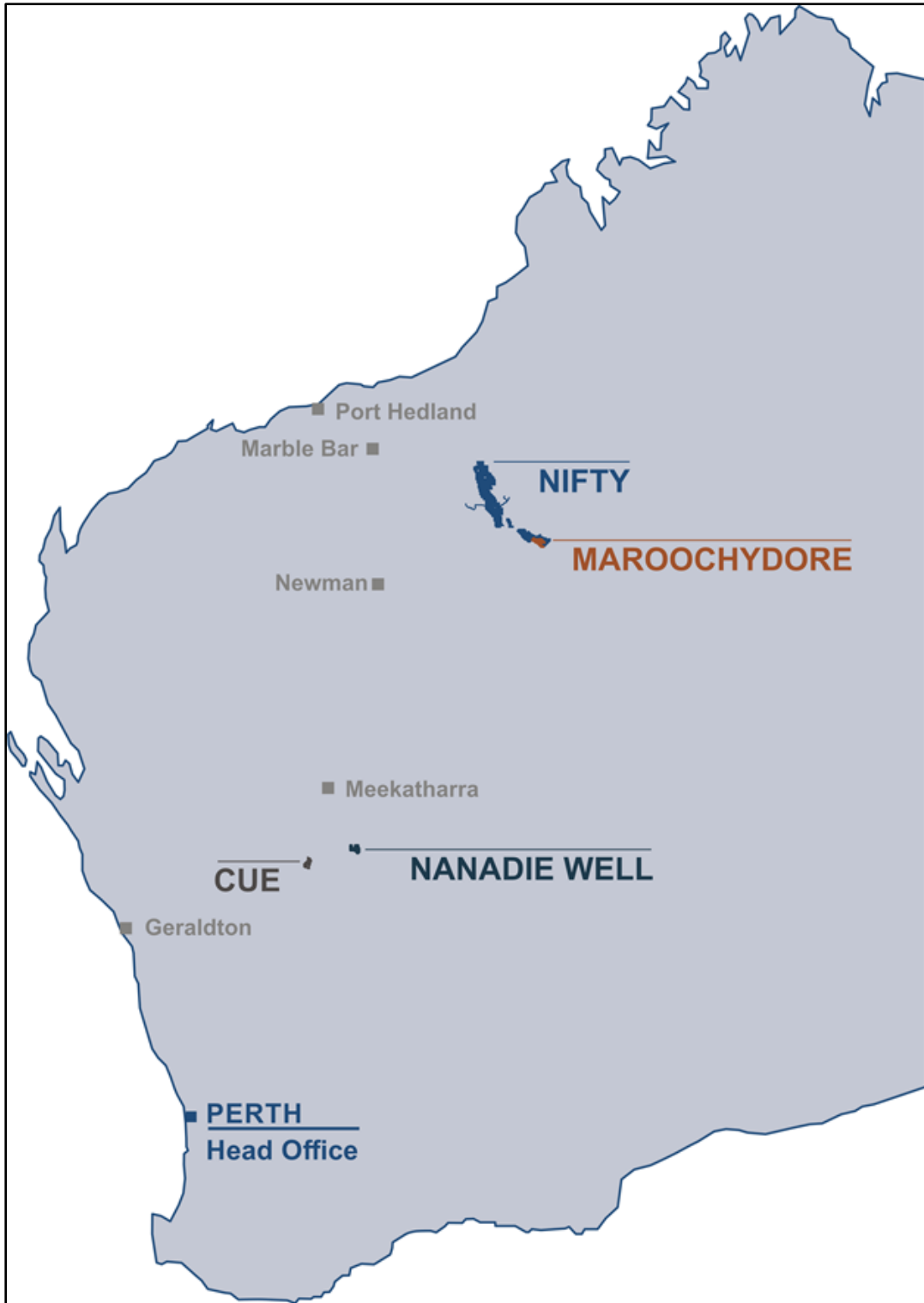
The Cue and Nanadie Well Copper-Gold projects are included in an ongoing scoping study, to determine the parameters required to develop a copper project in the region, which provides direction for resource expansion work.

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

<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*"

<sup>iii</sup> Refer to CYM ASX announcement: 29 September 2020, "*Hollandaire Copper-gold Mineral Resource Estimate*"

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*Cyprium Metals project locations*