

## EXCEPTIONAL METALLURGICAL RESULTS FROM MOUNT HOPE

Carnaby Resources Limited (ASX: CNB) (**Carnaby** or the **Company**) is pleased to announce exceptional initial metallurgical test work results from the Mount Hope copper gold discovery at the Greater Duchess Copper Gold Project in Mt Isa, Queensland.

### Highlights – Mt Hope

- **Excellent copper recoveries of 92% to 99%;**
  - **Fresh Chalcopyrite Ore 97.5% to 99.3%**
  - **Transitional Chalcopyrite Ore 97.4% to 99.2%**
  - **Transitional Chalcocite Ore 91.6% to 93.8%**
- **High gold recoveries of 82 to 95%;**
  - **Fresh Chalcopyrite Ore 82.3% to 91.2%**
  - **Transitional Chalcopyrite Ore 82.1% to 94.6%**
  - **Transitional Chalcocite Ore 86.5% to 88.9%**
- **Transitional Zone copper recoveries are likely to be excellent as the zone comprises approximately 15% chalcocite ore and 85% chalcopyrite ore;**
- **Recleaner average concentrate grades of;**
  - **23.5% copper in concentrate at 98.2% copper recovery from the Fresh Rock Ore Composites**
  - **28.0% copper in concentrate at 97.2% copper recovery from the Transitional Ore Composites**
- **Extremely clean copper gold concentrate;**
  - **No material deleterious elements detected.**

The Company's Managing Director, Rob Watkins commented:

"These initial metallurgical results from Mount Hope are exceptional and confirm an outstanding high grade and high quality ore. The copper and gold recoveries lack of any deleterious elements and high concentrate grades indicate the potential for a highly sought-after quality product. Drilling continues apace at the Mount Hope discovery with three drill rigs in operation as we march towards a maiden mineral resource estimate at Greater Duchess."

### ASX Announcement

28 June 2023

#### Fast Facts

Shares on Issue 162.8M

Market Cap (@ \$1.04) \$169M

Cash \$31.8M<sup>1</sup>

<sup>1</sup>Based on cash of A\$11.8million as at 31 March 2023 and A\$20 million gross proceeds from the recent Placement, see ASX release dated 24 April 2023 for details.

#### Directors

Peter Bowler, Non-Exec Chairman

Rob Watkins, Managing Director

Greg Barrett, Non-Exec Director & Joint Company Secretary

Paul Payne, Non-Exec Director

#### Company Highlights

- Proven and highly credentialed management team.
- Tight capital structure and strong cash position.
- Mount Hope, Nil Desperandum and Lady Fanny Iron Oxide Copper Gold discoveries within the Greater Duchess Copper Gold Project, Mt Isa inlier, Queensland.
- Greater Duchess Copper Gold Project, numerous camp scale IOCG deposits over 1,022 km<sup>2</sup> of tenure.
- Projects near to De Grey's Hemi gold discovery on 442 km<sup>2</sup> of highly prospective tenure.
- 100% ownership of the Tick Hill Gold Project (granted ML's) in Qld, historically one of Australia highest grade and most profitable gold mines producing 511 koz at 22 g/t gold.

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## GREATER DUCHESS COPPER GOLD PROJECT

### Mount Hope Scoping Study Metallurgical Test Work Results

Australian Minmet Metallurgical Laboratories (AMML) was contracted by Carnaby to complete the first pass flotation study on the Mount Hope ores. Three composites were selected from diamond core and included, one 31 kg sample (MHMT001) representing chalcopyrite dominant ore from the Transitional Zone in the Boomerang Lode, one 27 kg sample (MHMT002) representing fresh rock ore from the Boomerang Lode and one 5kg sample (MHMT003) representing chalcocite dominant ore from the Transitional Lode in the Boomerang Lode.

The meterage's for the three separate composite samples are presented in Appendix 1. Figure 3 shows the location of the diamond drill holes used in the composites. A head sample from each composite was riffle split, pulverised and sent to ALS in Brisbane for chemical analysis. The full scan results are displayed in Appendix 2.

Flotation was completed at the three different grind sizes P80 at 75 um, 106 and 150 um. Different sets of float conditions were tested on the samples including xanthate collectors (PAX) at neutral pH, copper selective collector (IPET) at elevated pH (9.5 for roughing and 10.5 for cleaning).

Cleaning proved effective at improving grade with minor losses of copper recovery. For the fresh rock chalcopyrite ore composite MHMT002 a recleaner concentrate of **25.0% copper at 98.7% copper recovery** was obtained. For the Transitional ores, chalcopyrite composite MHMT001 had a recleaner concentrate of **27.8% copper at 98.7% recovery** was obtained and chalcocite composite MHMT003 had a recleaner concentrate of **30.2% copper at 91.6% recovery**.

| Sample/test         |          | MHMT001 (FT13)    |             |             | MHMT003 (FT19) |             |             | MHMT002 (FT16) |             |             |
|---------------------|----------|-------------------|-------------|-------------|----------------|-------------|-------------|----------------|-------------|-------------|
| Boomerang Lode Zone |          | Transitional Zone |             |             |                |             |             | Fresh Rock     |             |             |
| Mineralisation      |          | Chalcopyrite      |             |             | Chalcocite     |             |             | Chalcopyrite   |             |             |
| Concentrate stage   |          | Recleaner Con     | Cleaner Con | Rougher Con | Recleaner Con  | Cleaner Con | Rougher Con | Recleaner Con  | Cleaner Con | Rougher Con |
| Mass (%)            |          | 13.50             | 14.68       | 18.89       | 24.74          | 25.68       | 28.69       | 8.83           | 9.91        | 13.59       |
| Grade               | Cu (%)   | 27.80             | 25.62       | 19.96       | 30.20          | 29.29       | 26.68       | 25.00          | 22.32       | 16.34       |
|                     | Fe (%)   | 32.10             | 31.30       | 27.99       | 27.70          | 27.27       | 25.78       | 29.80          | 28.17       | 24.08       |
|                     | S (%)    | 25.70             | 24.83       | 21.33       | 30.20          | 29.42       | 26.92       | 22.90          | 21.04       | 16.16       |
|                     | Au (g/t) | 3.74              | 3.85        | 3.03        | 2.48           | 2.41        | 2.20        | 2.26           | 2.04        | 1.53        |
|                     | Cl (%)   | <0.01             | N/A         | N/A         | <0.01          | N/A         | N/A         | <0.01          | N/A         | N/A         |
|                     | F (%)    | 0.002             | N/A         | N/A         | 0.002          | N/A         | N/A         | 0.008          | N/A         | N/A         |
| Recovery (%)        | Cu       | 98.7              | 98.9        | 99.2        | 91.6           | 92.2        | 93.8        | 98.67          | 98.92       | 99.27       |
|                     | Fe       | 31.9              | 33.8        | 38.9        | 57.4           | 58.6        | 61.9        | 16.38          | 17.38       | 20.37       |
|                     | S        | 50.8              | 53.4        | 59.0        | 88.7           | 89.7        | 91.6        | 62.69          | 64.69       | 68.11       |
|                     | Au       | 83.6              | 93.5        | 94.6        | 86.5           | 87.2        | 88.9        | 82.32          | 83.31       | 85.74       |
|                     | Cl       | N/A               | N/A         | N/A         | N/A            | N/A         | N/A         | N/A            | N/A         | N/A         |
|                     | F        | N/A               | N/A         | N/A         | N/A            | N/A         | N/A         | N/A            | N/A         | N/A         |

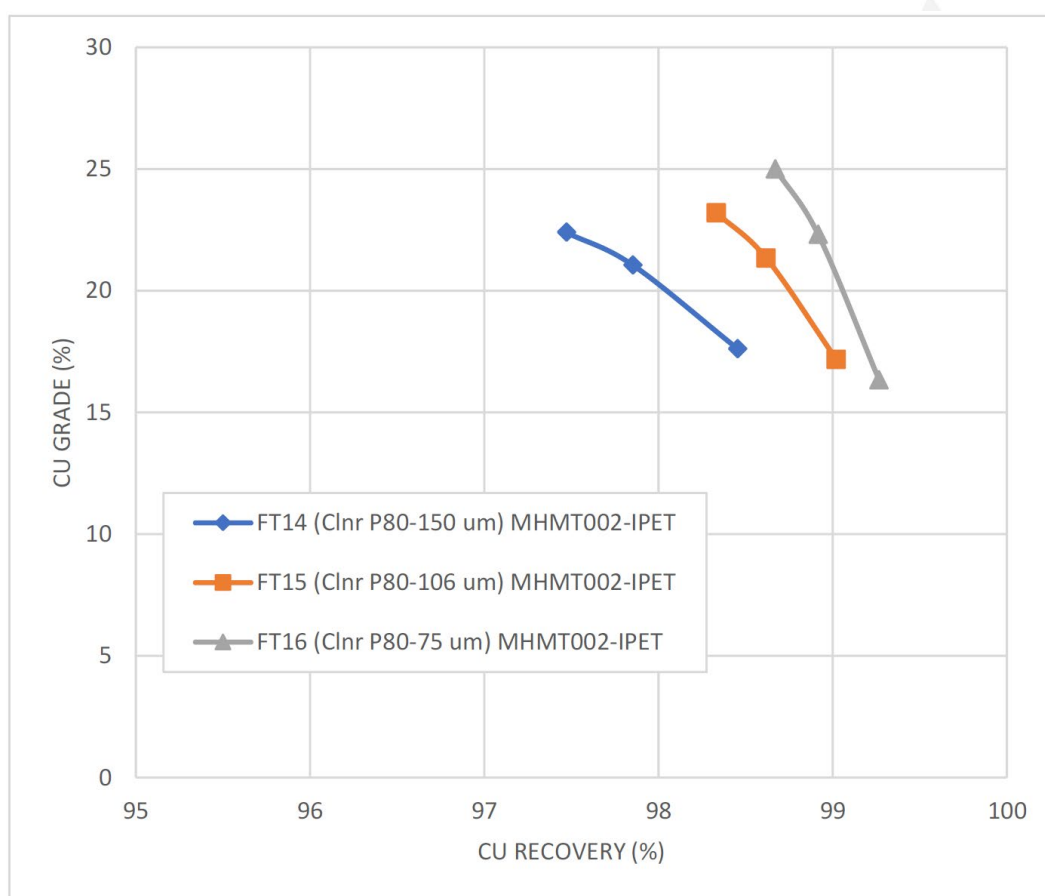
**Table 1. Mount Hope Cleaner Flotation Results.**

The metallurgical test work completed and reported represents only the first scoping level stage. More extensive metallurgical studies will be completed in future studies. The samples selected for the flotation test work are considered to represent core sections through the Boomerang Lode Fresh Rock and Transitional Zones, without being an extensive sampling program throughout the whole deposit.

## FRESH ROCK ZONE BOOMERANG LODGE

The Fresh Rock Zone refers to the unoxidised chalcopryrite-pyrrhotite quartz lode mineralisation (Figure 3).

### MHMT002 - Chalcopryrite Ore Composite



**Figure 1. Copper concentrate grade (%) versus recovery (%) MHMT002**

The results from the metallurgical test work on the fresh rock chalcopryrite ore, which make up a majority of the known mineralisation at Mount Hope, have yielded highly encouraging first pass results (Table 1 & Figure 1).

Copper recoveries at all three grind sizes are excellent and show increasing grade and recovery with reducing particle size. In addition, the re-cleaner concentrate grade increases from **22.4% to 25.0%** copper, while copper recovery increase from **97.5% to 98.7%**.

Gold recoveries at all three grind sizes are high, varying from **82.3% to 88.4%**.

Full Scan assay results of MHMT002 prior to flotation are presented in Appendix 2. No deleterious elements are present, indicating high quality copper mineralisation for a potential concentrate product.

### **TRANSITIONAL ZONE BOOMERANG LODGE**

The Transitional Zone refers to the generally vuggy chalcopyrite-pyrite-chalcocite zone which forms a high grade core in the apex of the Boomerang Lodge (Figure 3). Whilst this zone does appear to be preferentially partially oxidised at depth, it is considered highly likely that hypogene mineralisation is present and responsible for the great depth extents of the high grade mineralisation. This mineralisation remains completely open below the deepest intersection to date in MHDD099 of **41m @ 3.5% Cu, 0.6g/t Au** at approximately 400m below surface (See ASX release 8 June 2023).

The Transitional Zone is a mixture of chalcopyrite-pyrite mineralisation overprinted by chalcocite. Further analysis and modelling are required however the chalcopyrite mineralisation forms a majority of the copper bearing mineral in the Transitional Zone and is broadly estimated to account for approximately 85% of the copper in the Transitional Zone, with Chalcocite mineralisation comprising approximately 15%. Further test work is required to quantify this assumption and determine whether there is a vertical profile change in the percentage of chalcocite ore versus chalcopyrite ore depth.

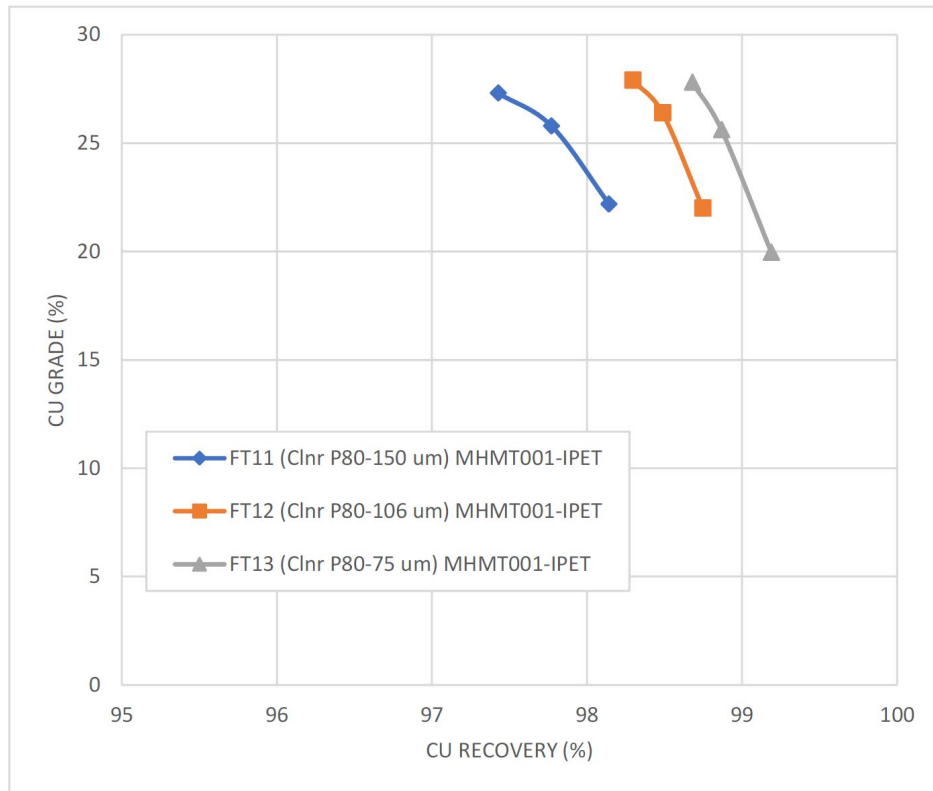
### **MHMT001 - Chalcopyrite Ore Composite**

The results from the metallurgical test work on the chalcopyrite ore within the Transitional Zone have yielded highly encouraging first pass results (Table 1 & Figure 2).

Copper recoveries at all three grind sizes are excellent and show increasing recovery with reducing particle size. Re-cleaner concentrate grades for the three grind sizes varied from **27.3% to 27.9%** copper, while copper recovery increases from **97.4% to 98.7%** with decreasing particle size.

Gold recoveries at all three grind sizes are high, varying from **82.1% to 87.0%**.

Full Scan assay results of MHMT001 prior to flotation are presented in Appendix 2. No deleterious elements are present indicating high quality copper mineralisation for a potential concentrate product.



**Figure 2. Copper concentrate grade (%) versus recovery (%) MHMT001**

### MHMT003 - Chalcocite Ore Composite

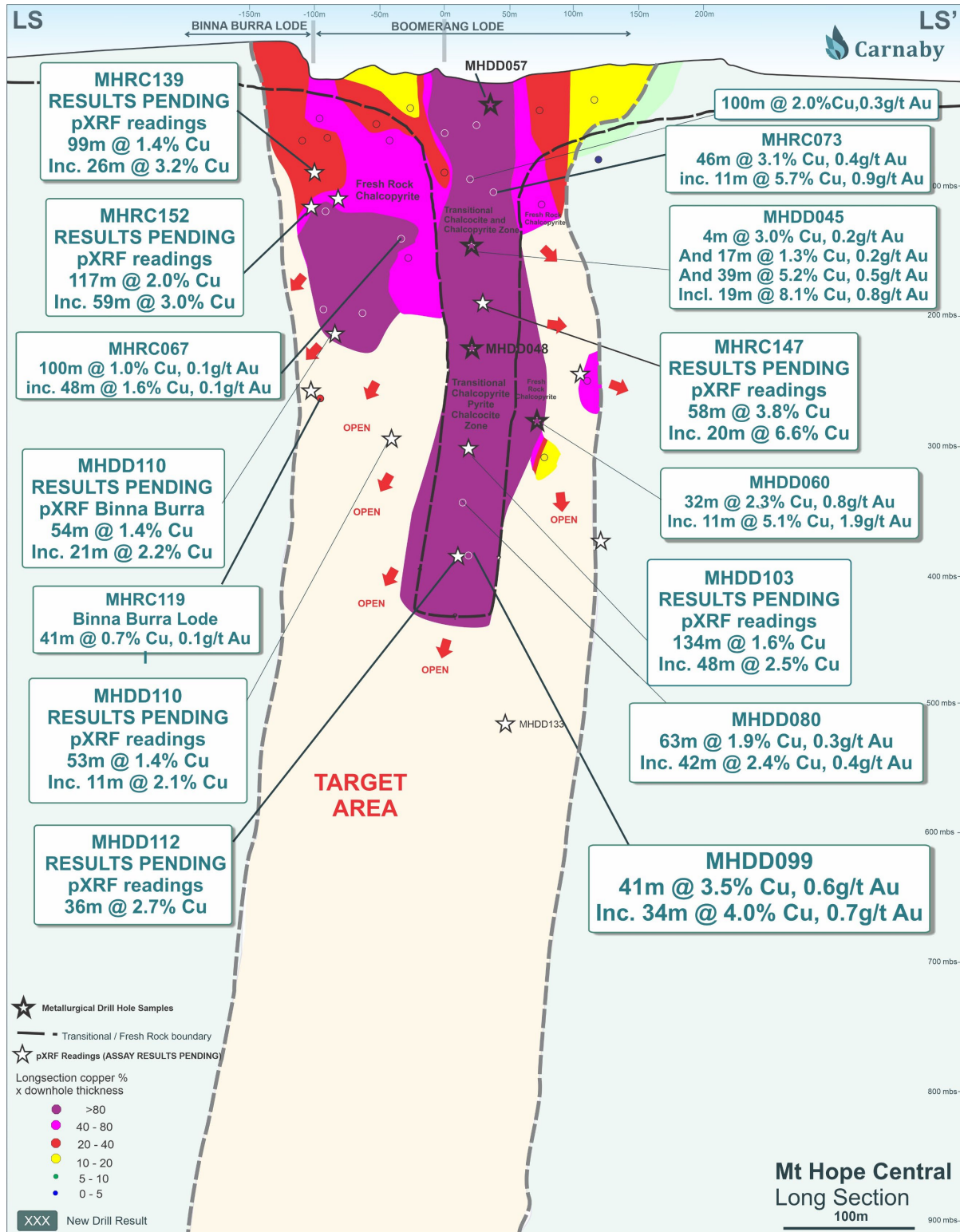
The results from the metallurgical test work on the chalcocite ore within the Transitional Zone have yielded highly encouraging first pass results (Table 1). The Chalcocite ore is broadly estimated to represent approximately 15% of the copper ore in the Transitional Zone however further analysis and test work is required to quantify this assumption and whether there are any vertical zonation changes in the ratio of chalcocite to chalcopyrite ores.

Due to the small amount of chalcocite ore available for compositing (~5kg) and high head copper grade of ~8% copper, the initial test work was restricted to a single effective flotation test at 75 micron.

Copper recoveries of the Chalcocite Ore are excellent, varying from **91.6% to 93.8%**. A re-cleaner concentrate grade of **30.2% copper** was produced with a **91.6%** copper recovery.

Gold recoveries are high, varying from **86.5% to 88.9%**.

Full Scan assay results of MHMT001 prior to flotation are presented in Appendix 2. No deleterious elements are present indicating high quality copper mineralisation for a potential concentrate product.



**Figure 3. Mount Hope Central Long Section showing metallurgical samples drill hole locations.**

This announcement has been authorised for release by the Board of Directors.

Further information regarding the Company can be found on the Company's website:

[www.carnabyresources.com.au](http://www.carnabyresources.com.au)

**For further information please contact:**

**Robert Watkins, Managing Director**

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**Competent Person Statement**

The information in this document that relates to exploration results is based upon information compiled by Mr Robert Watkins. Mr Watkins is a Director of the Company and a Member of the AUSIMM. Mr Watkins consents to the inclusion in the report of the matters based upon the information in the form and context in which it appears. Mr Watkins has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is undertaken to qualify as a Competent Person as defined in the December 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code).

**Disclaimer**

References may have been made in this announcement to certain ASX announcements, including references regarding exploration results, mineral resources and ore reserves. For full details, refer to said announcement on said date. The Company is not aware of any new information or data that materially affects this information. Other than as specified in this announcement and the mentioned announcements, the Company 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, Exploration Target(s) or Ore Reserves that 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 been materially modified from the original market announcement.

**Recently released ASX Material References that relate to this announcement include:**

Momentous Mount Hope Results pXRF 47m @ 3.9% Cu, 8 June 2023

Mount Hope Strengthens 63m @ 1.9% Cu, 26 May 2023

New Chalcus Lode Emerges and pXRF 134m @ 1.6% Cu, 5 May 2023

Mount Hope Central New Lode Emerges - 20m @ 4.0% Cu, 17 April 2023

Stunning Results At Mount Hope Central – 36m @ 4.2% Cu, 30 March 2023

Mount Hope Continues To Expand – 63m @ 1.8% Cu, 24 March 2023

Major Extension At Mount Hope Central – 36m @ 2.2% Cu, 16 March 2023

New High Grade Zone Discovered At Mount Hope – 71m @ 1.1% Cu, 2 March 2023

Ministerial Approval of Mount Hope Boundary Resolution, 14 February 2023

Mount Hope Shines – 39m @ 5.2% Copper, 2 February 2023

Mount Hope Mining Lease Boundary Resolution, 9 January 2023

## APPENDIX ONE

### Drill Hole Meterage's Used to Produce Composites

| Sample  | Hole    | Start (m) | End (m) | Gross (kg)   | Net (kg)     |
|---------|---------|-----------|---------|--------------|--------------|
| MHMT001 | MHDD045 | 179.2     | 180     | 0.29         | 0.246        |
| MHMT001 | MHDD045 | 180.45    | 181.15  | 0.944        | 0.9          |
| MHMT001 | MHDD045 | 181.15    | 181.6   | 0.51         | 0.466        |
| MHMT001 | MHDD045 | 181.9     | 182.25  | 0.784        | 0.74         |
| MHMT001 | MHDD045 | 188.6     | 188.9   | 0.814        | 0.77         |
| MHMT001 | MHDD045 | 190       | 190.3   | 0.585        | 0.541        |
| MHMT001 | MHDD045 | 191.5     | 191.7   | 0.588        | 0.544        |
| MHMT001 | MHDD045 | 191.7     | 192     | 0.451        | 0.407        |
| MHMT001 | MHDD045 | 192.9     | 193.1   | 0.492        | 0.448        |
| MHMT001 | MHDD045 | 193.1     | 193.45  | 0.6          | 0.556        |
| MHMT001 | MHDD048 | 249.6     | 250     | 0.614        | 0.57         |
| MHMT001 | MHDD048 | 251       | 251.4   | 0.473        | 0.429        |
| MHMT001 | MHDD048 | 251.4     | 252.6   | 1.319        | 1.275        |
| MHMT001 | MHDD048 | 253.2     | 254.5   | 1.753        | 1.709        |
| MHMT001 | MHDD048 | 254.5     | 254.8   | 0.559        | 0.515        |
| MHMT001 | MHDD048 | 258.3     | 258.5   | 0.447        | 0.403        |
| MHMT001 | MHDD048 | 258.5     | 258.8   | 0.569        | 0.525        |
| MHMT001 | MHDD048 | 258.8     | 259.5   | 1.276        | 1.232        |
| MHMT001 | MHDD048 | 259.5     | 261.1   | 1.563        | 1.519        |
| MHMT001 | MHDD048 | 262.1     | 262.9   | 0.927        | 0.883        |
| MHMT001 | MHDD048 | 270       | 271     | 1.346        | 1.302        |
| MHMT001 | MHDD048 | 272       | 272.5   | 0.846        | 0.802        |
| MHMT001 | MHDD048 | 273       | 275.1   | 2.298        | 2.254        |
| MHMT001 | MHDD048 | 275.1     | 275.6   | 1.006        | 0.962        |
| MHMT001 | MHDD059 | 260.05    | 260.15  | 0.301        | 0.257        |
| MHMT001 | MHDD059 | 260.4     | 260.6   | 0.298        | 0.254        |
| MHMT001 | MHDD059 | 268.3     | 268.4   | 0.382        | 0.338        |
| MHMT001 | MHDD059 | 268.4     | 270.75  | 0.526        | 0.482        |
| MHMT001 | MHDD059 | 270.75    | 271.8   | 0.711        | 0.667        |
| MHMT001 | MHDD059 | 273.7     | 273.9   | 0.399        | 0.355        |
| MHMT001 | MHDD059 | 278.9     | 282.5   | 3.411        | 3.367        |
| MHMT001 | MHDD059 | 289.3     | 289.35  | 0.197        | 0.153        |
| MHMT001 | MHDD060 | 260.6     | 260.8   | 0.24         | 0.196        |
| MHMT001 | MHDD060 | 306.1     | 306.4   | 0.518        | 0.474        |
| MHMT001 | MHDD060 | 308.75    | 310.4   | 2.003        | 1.959        |
| MHMT001 | MHDD060 | 311.6     | 314     | 2.899        | 2.855        |
|         |         |           |         | <b>32.94</b> | <b>31.36</b> |

| Sample  | Hole    | Start (m) | End (m) | Gross (kg) | Net (kg) |
|---------|---------|-----------|---------|------------|----------|
| MHMT002 | MHDD024 | 300       | 301.9   | 1.94       | 1.896    |
| MHMT002 | MHDD024 | 308.5     | 309.5   | 1.431      | 1.387    |
| MHMT002 | MHDD024 | 333.7     | 334.3   | 0.668      | 0.624    |

| Sample  | Hole    | Start (m) | End (m) | Gross (kg)   | Net (kg)     |
|---------|---------|-----------|---------|--------------|--------------|
| MHMT002 | MHDD045 | 199.5     | 199.7   | 0.714        | 0.67         |
| MHMT002 | MHDD045 | 199.8     | 200     | 0.371        | 0.327        |
| MHMT002 | MHDD048 | 279.9     | 280.45  | 1.158        | 1.114        |
| MHMT002 | MHDD048 | 280.8     | 282.2   | 2.044        | 2            |
| MHMT002 | MHDD059 | 292.1     | 294     | 2.556        | 2.512        |
| MHMT002 | MHDD059 | 302.8     | 306.5   | 4.302        | 4.258        |
| MHMT002 | MHDD060 | 315.4     | 315.7   | 0.266        | 0.222        |
| MHMT002 | MHDD060 | 324.8     | 326.4   | 2.498        | 2.454        |
| MHMT002 | MHDD060 | 328.3     | 328.65  | 0.935        | 0.891        |
| MHMT002 | MHDD060 | 328.65    | 329.3   | 1.403        | 1.359        |
| MHMT002 | MHDD060 | 331.4     | 332.6   | 1.484        | 1.44         |
| MHMT002 | MHDD060 | 334.5     | 336.05  | 2.516        | 2.472        |
| MHMT002 | MHDD060 | 336.2     | 336.7   | 0.976        | 0.932        |
| MHMT002 | MHDD060 | 336.9     | 337.9   | 1.401        | 1.357        |
| MHMT002 | MHDD060 | 346.8     | 347.1   | 0.716        | 0.672        |
|         |         |           |         | <b>27.38</b> | <b>26.59</b> |

| Sample  | Hole    | Start (m) | End (m) | Gross (kg)  | Net (kg)    |
|---------|---------|-----------|---------|-------------|-------------|
| MHMT003 | MHDD045 | 177.9     | 178.15  | 1.125       | 1.081       |
| MHMT003 | MHDD045 | 181.6     | 183     | 0.364       | 0.32        |
| MHMT003 | MHDD045 | 185.3     | 185.6   | 0.382       | 0.338       |
| MHMT003 | MHDD045 | 186.75    | 186.9   | 0.533       | 0.489       |
| MHMT003 | MHDD057 | 54.7      | 55      | 0.428       | 0.384       |
| MHMT003 | MHDD057 | 75.7      | 76.2    | 0.994       | 0.95        |
| MHMT003 | MHDD057 | 80.3      | 81.2    | 1.007       | 0.963       |
| MHMT003 | MHDD060 | 357.7     | 358     | 0.424       | 0.38        |
|         |         |           |         | <b>5.26</b> | <b>4.91</b> |

## APPENDIX TWO

### Full Scan Assay Results of Composites Prior to Flotation

| Method   | Element   | Unit | MHMT001 | MHMT002 | MHMT003 |
|----------|-----------|------|---------|---------|---------|
| ME-ICP61 | Ag        | ppm  | 0.8     | 0.5     | 1.7     |
| ME-ICP61 | Al        | %    | 0.7     | 3.51    | 1.02    |
| ME-ICP61 | As        | ppm  | 17      | <5      | 5       |
| Au-AA26  | Au        | ppm  | 0.38    | 0.2     | 0.47    |
| Au-AA26D | Au        | ppm  | 0.26    | 0.2     | 0.67    |
|          | Au (Ave.) | ppm  | 0.32    | 0.2     | 0.57    |
| ME-ICP61 | Ba        | ppm  | 20      | 50      | 10      |
| ME-ICP61 | Be        | ppm  | <0.5    | 1.2     | 0.5     |
| ME-ICP61 | Bi        | ppm  | 10      | 4       | <2      |
| ME-ICP61 | Ca        | %    | 0.08    | 0.69    | 0.06    |
| ME-ICP61 | Cd        | ppm  | <0.5    | 0.5     | <0.5    |

| Method   | Element | Unit | MHMT001 | MHMT002 | MHMT003 |
|----------|---------|------|---------|---------|---------|
| CI-VOL66 | Cl      | %    | 0.02    | 0.04    | 0.01    |
| ME-ICP61 | Co      | ppm  | 526     | 165     | 665     |
| ME-ICP61 | Cr      | ppm  | 22      | 37      | 20      |
| ME-ICP61 | Cu      | ppm  | >10000  | >10000  | >10000  |
| Cu-OG62  | Cu      | %    | 3.75    | 2.3     | 8.14    |
| F-ELE81a | F       | ppm  | 80      | 410     | 70      |
| ME-ICP61 | Fe      | %    | 13.15   | 16.2    | 12.65   |
| ME-ICP61 | Ga      | ppm  | <10     | 20      | 10      |
| ME-ICP61 | K       | %    | 0.12    | 0.64    | 0.08    |
| ME-ICP61 | La      | ppm  | 10      | 10      | 10      |
| ME-ICP61 | Li      | ppm  | <10     | 10      | <10     |
| ME-ICP61 | Mg      | %    | 0.12    | 0.64    | 0.08    |
| ME-ICP61 | Mn      | ppm  | 464     | 384     | 247     |
| ME-ICP61 | Mo      | ppm  | 7       | 8       | 15      |
| ME-ICP61 | Na      | %    | 0.08    | 1.88    | 0.04    |
| ME-ICP61 | Ni      | ppm  | 317     | 120     | 374     |
| ME-ICP61 | P       | ppm  | 110     | 340     | 130     |
| ME-ICP61 | Pb      | ppm  | 4       | 13      | 10      |
| ME-ICP61 | S       | %    | 7.6     | 4.11    | 8.53    |
| IR-08    | S       | %    | 8       | 4.09    | 8.94    |
| ME-ICP61 | Sb      | ppm  | <5      | <5      | <5      |
| ME-ICP61 | Sc      | ppm  | 5       | 12      | 4       |
| ME-ICP61 | Sr      | ppm  | 5       | 29      | 5       |
| ME-ICP61 | Th      | ppm  | <20     | <20     | <20     |
| ME-ICP61 | Ti      | %    | 0.08    | 0.46    | 0.12    |
| ME-ICP61 | Tl      | ppm  | <10     | <10     | <10     |
| ME-ICP61 | U       | ppm  | <10     | <10     | <10     |
| ME-ICP61 | V       | ppm  | 33      | 132     | 58      |
| ME-ICP61 | W       | ppm  | <10     | <10     | <10     |
| ME-ICP61 | Zn      | ppm  | 66      | 39      | 45      |

### APPENDIX THREE

#### JORC Code, 2012 Edition | 'Table 1' Report Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections)

| Criteria            | JORC Code explanation                                                                                                                                                                                                                                                                                                                                                                                                                                               | Commentary                                                                                                                                                                                         |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sampling techniques | <ul style="list-style-type: none"> <li>Nature and quality of sampling (eg 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.</li> <li>Include reference to measures taken to ensure sample representivity and the</li> </ul> | <ul style="list-style-type: none"> <li>Metallurgical samples were taken from quarter core.</li> <li>The samples weighed ~31, 27 and 5 kg for MHMT001, MHMT002 and MHMT003 respectively.</li> </ul> |

| Criteria                                       | JORC Code explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                | <p>appropriate calibration of any measurement tools or systems used.</p> <ul style="list-style-type: none"> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g 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 (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Drilling techniques                            | <ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>Metallurgical samples were collected from quarter cut NQ sized drill core.</li> <li>All drill core was orientated and logged prior to sampling.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Drill sample recovery                          | <ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>                                                                                                                                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>Core intervals were measured between runs for metres drilled and metres recovered. No significant recovery issues identified.</li> <li>All core was sampled from the same side of the orientation line.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Logging                                        | <ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> </ul> <p>The total length and percentage of the relevant intersections logged.</p>                                                                                                                                                                                                                                                                                               | <ul style="list-style-type: none"> <li>Diamond holes have been interval logged for lithology, weathering, alteration, mineralisation, veining, structure and RQD. Core is orientated, structural measurements taken and photographed prior to cutting.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 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> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <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> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul> | <ul style="list-style-type: none"> <li>Drill core was half sawn for assay of copper and gold at ALS.</li> <li>Field duplicates (second half of core) were taken at 50m intervals in the mineralised zones.</li> <li>Selected remaining half core was quarter cut and metallurgical composites for each deposit created based on weathering and sulphide mineral assemblage. These equated to 3 composite samples from Mt Hope.</li> </ul> <p>Metallurgical sample preparation:</p> <ul style="list-style-type: none"> <li>Samples were combined, stage crushed to -3.35 mm, homogenised and rotary split into test work portions of 1 kg and bulk excess.</li> <li>A head sample was riffle split from one of the portions, pulverised and sent to ALS</li> <li>Brisbane for chemical analysis, the results are displayed in Table 1. Full scan results are displayed in Appendix 2.</li> </ul> |
| 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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>For routine ab assays, company inserted blanks are inserted as the first sample for every hole. A company inserted gold standard and a copper standard are inserted every 50<sup>th</sup> sample. No standard identification numbers are provided to the lab.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

| Criteria                                                | JORC Code explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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|                                                         | <ul style="list-style-type: none"> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul> | <ul style="list-style-type: none"> <li>Standards are checked against expected lab values to ensure they are within tolerance. No issues have been identified.</li> <li>Field duplicates are routinely taken in mineralised zone approximately every 50<sup>th</sup> sample.</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> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>                                                                                                                            | <ul style="list-style-type: none"> <li>Historic production data has been collated from government open file reports.</li> <li>A Maxgeo SQL database is currently used in house for all historic and new records. Recent results have been reported directly from lab reports and sample sheets collated in excel.</li> </ul> <p>Results reported below the detection limit have been stored in the database at half the detection limit – eg &lt;0.001ppm stored as 0.0005ppm</p> |
| 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> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>                                                                                                                                                                      | <ul style="list-style-type: none"> <li>All hole locations were obtained using a Trimble SP60 GPS in UTM MGA94.</li> <li>Current RC and Diamond holes were downhole surveyed by Reflex True North seeking gyro.</li> <li>Survey control is of high accuracy with periodic checks made between two different down-hole gyro instruments.</li> </ul>                                                                                                                                 |
| Data spacing and distribution                           | <ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <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 procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>                                                                                                         | <ul style="list-style-type: none"> <li>Further extensional and infill drilling is required to confirm the orientation and true width of the copper mineralisation intersected.</li> <li>Metallurgical samples were collected as representative of the mineralisation for scoping level analysis</li> </ul>                                                                                                                                                                        |
| 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> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>                                                                         | <ul style="list-style-type: none"> <li>Holes at Mt Hope are considered to intersect the mineralisation at a reasonable angle, being drilled at an orthogonal angle to the principal vein strike. More recent Mt Hope drill results typically have a true width approximately 1/3 of the down hole width.</li> </ul>                                                                                                                                                               |
| Sample security                                         | <ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>Samples immediately taken following drilling and submitted for assay at Mt Isa by supervising Carnaby geology personnel.</li> </ul>                                                                                                                                                                                                                                                                                                        |
| Audits or reviews                                       | <ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                  | <ul style="list-style-type: none"> <li>Not conducted</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                   |

## Section 2 Reporting of Exploration Results

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

| Criteria                                                      | Explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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| Mineral tenement and land tenure status                       | <ul style="list-style-type: none"> <li>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.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>                                                                                                                                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>The Mount Hope Mining Lease ML90240 is 100% owned by Carnaby Resources.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Acknowledgment and appraisal of exploration by other parties. | <ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>Historical modern day exploration was limited to IP geophysics and minor surface geochemical sampling. No publicity available records of any historical exploration drilling at Mount Hope have been located</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Geology                                                       | <ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>The prospects mentioned in this announcement are located in the Mary Kathleen domain of the eastern Fold Belt, Mount Isa Inlier. The Eastern Fold Belt is well known for copper, gold and copper-gold deposits; generally considered variants of IOCG deposits. The region hosts several long-lived mines and numerous historical workings. Deposits are structurally controlled, forming proximal to district-scale structures which are observable in mapped geology and geophysical images. Local controls on the distribution of mineralisation at the prospect scale can be more variable and is understood to be dependent on lithological domains present at the local-scale, and orientation with respect to structures and the stress-field during D3/D4 deformation, associated with mineralisation.</li> </ul> |
| 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: <ul style="list-style-type: none"> <li>eastings 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> </li> </ul> <p>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.</p> | <ul style="list-style-type: none"> <li>Details of samples used for metallurgical testing are contained in Appendices 1 &amp; 2.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>No metal equivalent values have been reported.</li> <li>All reported intersections have Cu% weight averaged by sample interval length and reported by total downhole width of the intersection.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

| Criteria                                                                 | Explanation                                                                                                                                                                                                                                                                                                                                                                                                                                        | Commentary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
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|                                                                          | <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> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Average Relationship between mineralisation widths and intercept lengths | <ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').</li> </ul> | <ul style="list-style-type: none"> <li>Mt Hope intervals are reported as downhole width and true widths. Where true widths are not definitively known only downhole widths are reported.</li> <li>Drill holes at Mt Hope are typically orientated orthogonal to the vein strike with down dip angles of intersection generally resulting in vein true widths approximately 1/3 of the down hole width.</li> <li>Recent drill holes in the Binna Burra Lode intersect at a highly acute angle to the vein and estimated true width is significantly less than downhole width. Estimated true widths for MHRC152 &amp; MHRC139 are based on modelling and previous intersections of holes more orthogonal to the Binna Burra lode.</li> </ul> |
| Diagrams                                                                 | <ul style="list-style-type: none"> <li>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.</li> </ul>                                                                                                                               | <ul style="list-style-type: none"> <li>See the body of the announcement.</li> <li>The Mount Hope Central Long Section presented in Figure 3 represents a 2D vertical schematic illustration to show the overall distribution of copper gold mineralisation. Due to the complex shape of the deposit being an inclined boomerang geometry, it has been necessary to use an inclined plane to calculate the horizontal distance when calculating the NE lode pierce points in relation to the NW lode pierce points whereas the NW pierce points are determined directly onto a vertical plane. The long section is considered to represent actual strike and relative level positions of the mineralisation.</li> </ul>                      |
| Balanced reporting                                                       | <ul style="list-style-type: none"> <li>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.</li> </ul>                                                                                                                                                                        | <ul style="list-style-type: none"> <li>As discussed in the announcement</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Other substantive exploration data                                       | <ul style="list-style-type: none"> <li>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, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>            | <ul style="list-style-type: none"> <li>As discussed in the announcement</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Further work                                                             | <ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> </ul>                                                                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>Planned exploration works are detailed in the announcement.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

| Criteria | Explanation                                                                                                                                                                                                                                         | Commentary |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
|          | <ul style="list-style-type: none"> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul> |            |

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