20 December 2023

### **2023 AGM TECHNICAL REVIEW PRESENTATION**

Havilah Resources Limited (**Havilah** or **Company**) is pleased to release the 2023 Technical Review presentation that will be presented at the 2023 Annual General Meeting today by Dr Chris Giles, Havilah's Technical Director.

The presentation provides a summary of Havilah's corporate and technical achievements during 2023 and its strategic planning for the year ahead.

The presentation will also be available on the Company's website at <a href="www.havilah-resources.com.au">www.havilah-resources.com.au</a>.

This release has been authorised on behalf of the Havilah Resources Limited Board by Mr Simon Gray.

For further information visit www.havilah-resources.com.au

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# Havilah Resources

**Strategic Minerals in South Australia** 



### **AGM 2023 Technical Review Presentation**

Photograph shows a contractor drilling rig in operation at the Homestead prospect near Kalkaroo

### **Cautionary and Competent Person's Statements**

#### **Cautionary Statement**

The information contained in this presentation is not financial product advice and does not constitute an offer. The presentation is for information purposes and is of a general and summary nature only. Neither Havilah Resources Limited (Havilah) nor any member of the Havilah Group of companies, gives no warranties in relation to the statements and information in this presentation. Investors should seek appropriate advice on their own objectives, financial situation and needs.

It is not recommended that any person makes any investment decision in relation to Havilah or the Kalkaroo project based on this presentation. This presentation should be read in conjunction with the latest Annual Report together with any announcements made by Havilah in accordance with its continuous disclosure obligations arising under the Corporations Act 2001.

This presentation contains certain statements which may constitute 'forward-looking statements'. Such statements are only predictions and are subject to inherent risks and uncertainties which could cause actual values, performance or achievements to differ materially from those expressed, implied or projected in any forward-looking statements. Havilah disclaims any intent or obligation to update publicly any forward-looking statements, whether as a result of new information, future events or results or otherwise. Investors are cautioned that forward-looking statements are not guarantees of future performance and investors are cautioned not to put undue reliance on forward-looking statements due to the inherent uncertainty therein.

Where discovery upside is identified, this is a collective opinion of Havilah's geologists based on their best interpretations of the available data and their experience in the region. Further work may disprove any or all the interpretations and models put forward in this presentation.

There is no guarantee that the engagement of Deutsche Bank will result in any specific transactional outcome for Kalkaroo.

#### **Competent Person's Statement**

The information in this presentation that relates to Exploration Results, Mineral Resources and Ore Reserves is based on data compiled by geologist Dr Chris Giles, a Competent Person who is a member of The Australian Institute of Geoscientists. Dr Giles is Technical Director of the Company, a full-time employee and is a substantial shareholder. Dr Giles has sufficient experience, which is relevant to the style of mineralisation and type of deposit and activities described herein to qualify as a Competent Person as defined in the 2012 Edition of 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Dr Giles consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.

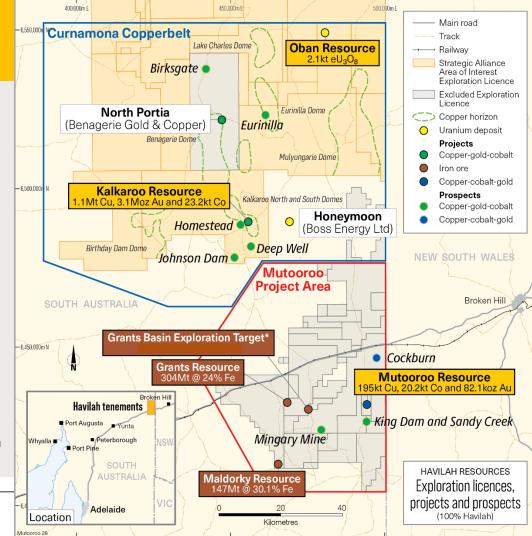
Information for Ore Reserve & Mineral Resources complies with the JORC Code 2012. Havilah confirms that all material assumptions and technical parameters underpinning the reserves and resources continue to apply and have not materially changed. Except where explicitly stated, this presentation contains references to prior exploration results and JORC Mineral Resources, which are cross-referenced to previous ASX announcements made by Havilah. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant ASX announcements.



# 2023 – An active and productive year

- BHP (formerly OZ Minerals) Kalkaroo orebody studies included completion of 8,159 metres of diamond drilling, comprehensive metallurgical studies, mining studies and various logistical studies. Demonstrated a robust open pit copper deposit with good development prospects.
- Strategic Alliance regional exploration drilling totalled more than 15,000 metres, with substantial upgrading of four prospects within 15 km of Kalkaroo.
- Mutooroo ore body extensions partially tested. Regional exploration drilling returned promising copper-gold-cobalt intersections at several prospects.
- Birksgate prospect drilling supported the concept of a large stratabound mineralised zone and discovered significant graphite.
- **MacDonald Hill** iron ore tenement (EL6299) lying very close to transcontinental railway.
- Progressing discussions regarding dealing uranium assets given the renewed market interest in uranium.



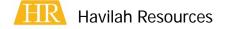


### Kalkaroo – current status

- BHP has advised that it will not exercise the Kalkaroo Call Option that it inherited as part of the OZ Minerals takeover.
- BHP **Study Program** found no fatal flaws or unexpected problems with the Kalkaroo project and highlighted:
  - > Reliability of Havilah's resource drilling from twinned holes and confirmation of resource block model.
  - > Material improvements in copper recovery and copper concentrate grade for the chalcopyrite-pyrite sulphide ore.
  - New open pit optimisations and mining schedules developed which potentially extends the open pit mine life to more than 20 years.
  - > Financial model confirms a robust long-life project.
- Curnamona Province **Strategic Alliance** regional exploration drilling targeted a province wide copper-gold exploration play, highlighting four multi-commodity prospects within 15 km of Kalkaroo with the scale to potentially generate new Kalkaroo size discoveries.
- Havilah intends to progress with its strategy of monetising Kalkaroo and has mandated Deutsche Bank to assist in engaging
  with several parties who have already expressed interest in the project.
- The Strategic Alliance drilling has reinforced Havilah's view that the Curnamona Province presents many opportunities for discovery of additional Kalkaroo-scale copper dominant, and/or multi-commodity mineral deposits.

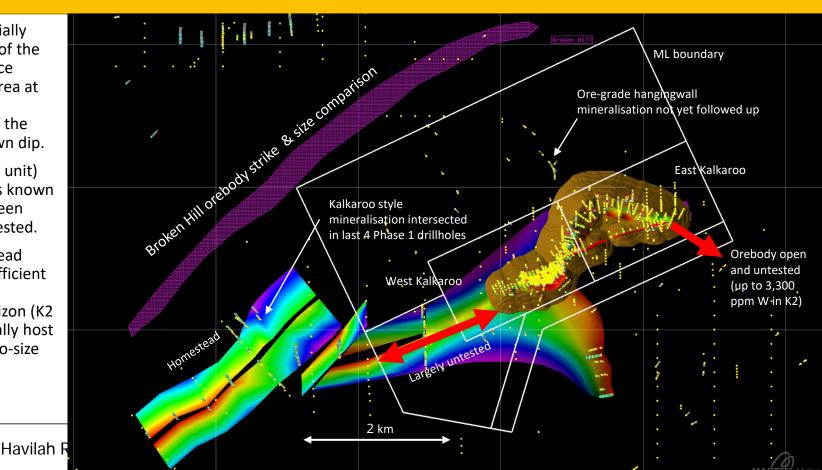
### Why Kalkaroo is a valuable asset

- Independent confirmation by BHP that Kalkaroo is a financially robust, potentially long life open pit copper-gold project.
- A wealth of consistent and high quality technical data of PFS standard or better is available for rigorous economic modelling and as the basis for development studies.
- Excellent logistics: near Broken Hill regional mining centre, main transport routes and potential renewable energy sources.
- No known development obstacles identified by multiple studies. Key approval milestones are already in place, including land ownership, granted mining leases and Native Title Mining Agreement. Outback pastoral country presents no known environmental or cultural impediments to development.
- Associated strategic and/or critical minerals including rare earth elements (REE), cobalt, molybdenum and tungsten.
- All mining concessions are 100% owned by Havilah with no attaching royalty or other encumbrances.
- Tier 1 ESG credentials and low sovereign risk in northeastern South Australia.
- Considerable potential value adding exploration upside exists:
  - > to materially expand the size of the Kalkaroo resource (currently remains open at depth, along strike and in largely untested hangingwall positions);
  - > to discover new copper-gold resources on Havilah's large contiguous ground position in the highly prospective but under-explored Curnamona Province (strongly supported by Strategic Alliance exploration drilling during the last 12 months).



### Kalkaroo orebody limits are undefined by current drilling

- Space to potentially double the size of the Kalkaroo resource within the ML area at the eastern and western ends of the deposit and down dip.
- Hangingwall (K3 unit) mineralisation is known but has never been systematically tested.
- Nearby Homestead prospect has sufficient strike length of prospective horizon (K2 unit) to potentially host another Kalkaroo-size deposit.



# Four large copper targets within 15 km of Kalkaroo

established by Phase 1 Strategic Alliance drilling

#### North Dome prospect (ASX announcement 16 Nov. 2023)

- ➤ 54 metres of 0.27% Cu and 60 metres 0.56 g/t Au to end of hole in fault/quartz breccia zone.
- > 5 km untested strike of fault zone.

#### Homestead prospect (ASX announcement 29 Aug. 2023)

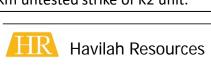
- ➤ 27 metres of 0.23% Cu, 3 metres of 5,530 ppm TREEO, 4 metres of 3.3 lbs/tonne U3O8 in extension of West Kalkaroo faulted anticline.
- > 5 km untested strike of K2 unit

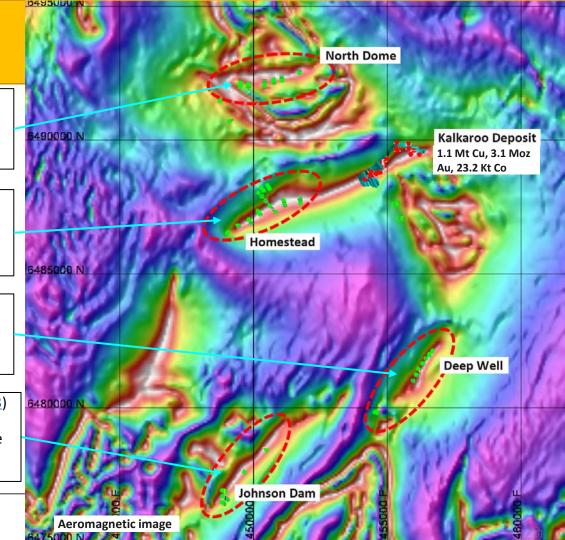
### Deep Well prospect (ASX announcement 9 May 2023)

- ➤ 19 metres of 0.42% Cu and 206 ppm Co in faulted anticlinal closure.
- > 4 km untested strike K2 unit and fault zone.

#### Johnson Dam prospect (ASX announcement 17 May 2023)

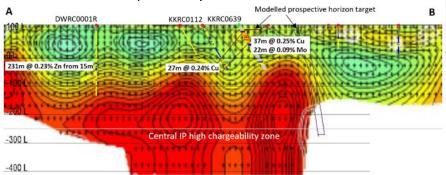
- ➤ 22 metres of 0.27% Cu, 15 metres 405 ppm Co, 22 metres of 3,533 ppm TREEO, 6 metres of 3.3 lbs/tonne U3O8 on eastern faulted anticlinal limb.
- > 3 km untested strike of K2 unit.

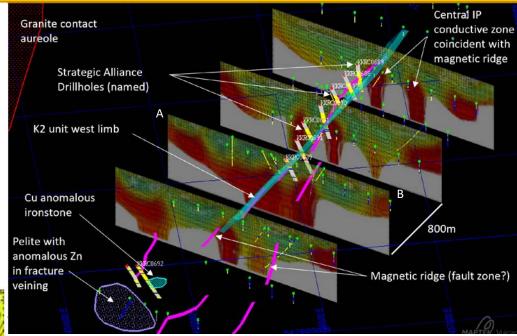




### **Deep Well prospect - best copper results to date**

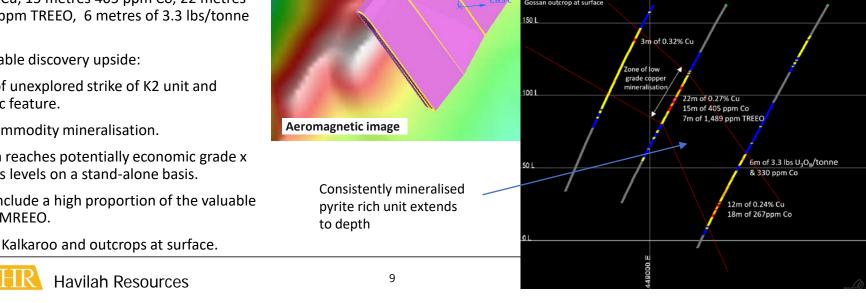
- 7 Strategic Alliance drillholes intersected copper on the K2 western limb, including a best result of 19 metres of 0.42% Cu and 206 ppm Co from 163 metres.
- Considerable discovery upside:
- > 4 km strike of aircore Cu anomalies.
- Eastern limb K2 unit not tested.
- ➤ IP conductor and chargeability anomaly remains untested. Hint of feeder zone with Cu, W, fluorite and calc-silicate.
- > Associated Co and Mo critical minerals.
- > Close to Kalkaroo, relatively thin cover.





### Johnson Dam prospect - a new multi-metal discovery

- Targeted a previously undrilled Cu anomalous gossan associated with a linear magnetic feature.
- Interpreted to be a faulted tight anticlinal closure.
- 11 Strategic Alliance drillholes intersected copper in a 30-40 metre thick pyrite-rich unit on the eastern limb. Includes best results of 22 metres of 0.27% Cu, 15 metres 405 ppm Co, 22 metres of 3,533 ppm TREEO, 6 metres of 3.3 lbs/tonne U308.
- Considerable discovery upside:
- > 3 km of unexplored strike of K2 unit and magnetic feature.
- Multi-commodity mineralisation.
- Uranium reaches potentially economic grade x thickness levels on a stand-alone basis.
- > TREEO include a high proportion of the valuable magnet MREEO.
- Close to Kalkaroo and outcrops at surface.



Mineralised envelope

within K2 unit

### Birksgate prospect exploration

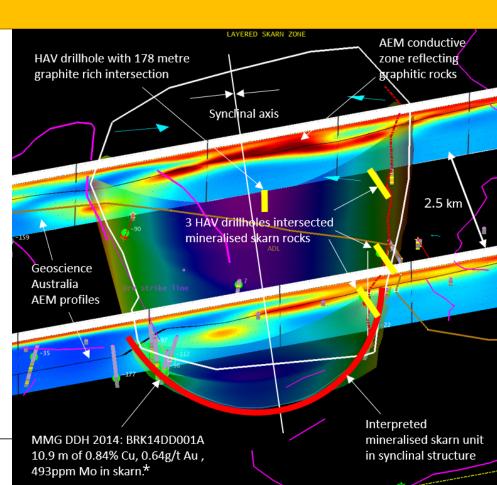
#### Birksgate prospect

- Recent drilling sole-funded by Havilah appears to have confirmed an exploration concept involving mineralised ironstone skarn on both sides of a 2 km wide regional syncline.
- If mineralisation persists over the entire area of the synclinal structure there is potential for discovery of a large copper-gold deposit.
- Assay results for Havilah's drilling are awaited.

#### Graphite in hangingwall pelite sequence

- Drill-testing of an AEM conductive zone, based on 2.5 km line spaced BHEI surveying, intersected a thick layer of graphiteenriched pelite in the hangingwall (K3) position.
- Full graphite analyses for the entire hole are presently being compiled and evaluated.
- Similar airborne electromagnetic (AEM) geophysical responses and possible graphite targets in a similar stratigraphic position exist closer to Kalkaroo.
- \* Refer to ASX announcement of 17 October 2014



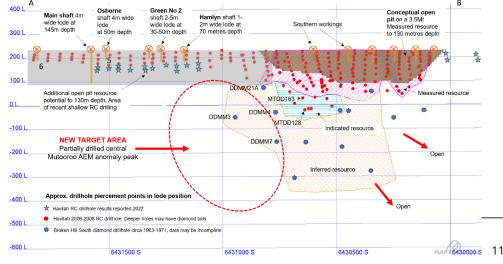


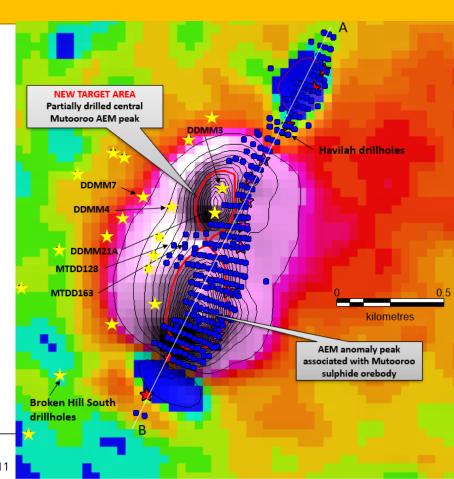
### Mutooroo orebody resource expansion potential

- Airborne electromagnetic (AEM) data clearly identifies the known Mutooroo massive sulphide orebody (12.5Mt of 1.53% copper, 0.16% cobalt and 0.20 g/t gold).
- An AEM peak 500 metres to the north likely indicates another thicker zone of largely undrilled massive sulphide copper-cobalt mineralisation that could potentially add to the Mutooroo sulphide resource.
- Historic diamond drilling results are supportive, for example

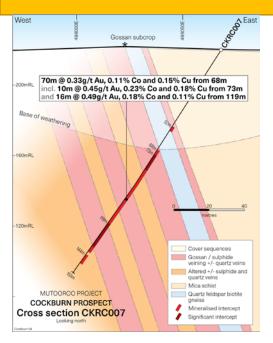
**DDMM21A:** 17.1 metres of 1.66% copper, 0.16% cobalt and 0.18 g/t gold from 162 metres **DDMM4:** 12.2 metres of 1.87% copper from 337.4 metres (no gold assays)

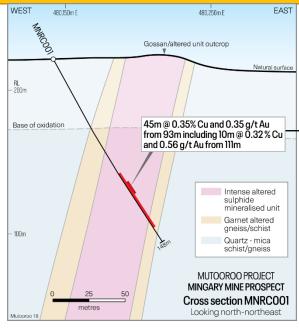
**DDMM7:** 9.4 metres of 1.72% copper, 0.19% cobalt and 0.63 g/t gold from 469.4 metres **DDMM3:** 15.2 metres of 1.05% copper from 374.9 metres downhole (no gold assays).





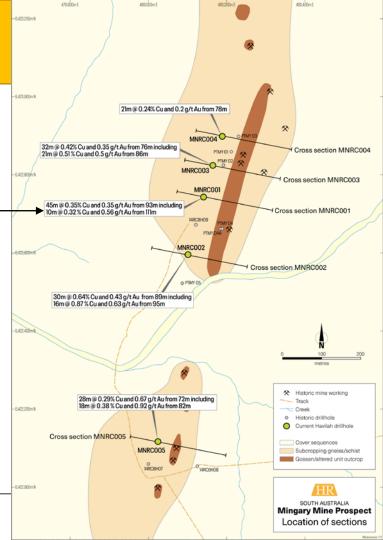
### **Mutooroo Project Area exploration**





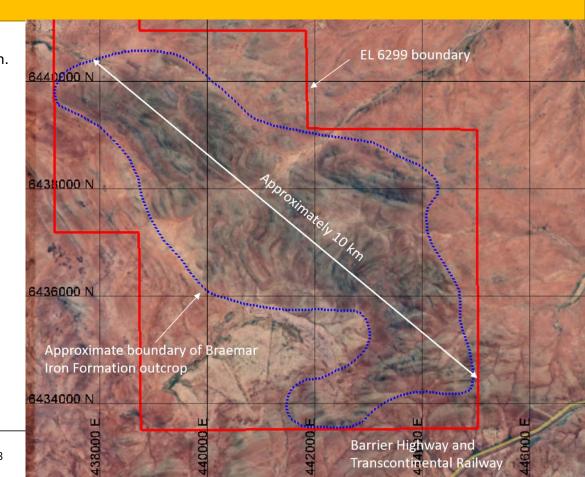
- Wide zones of copper-gold mineralisation intersected at the Mingary Mine prospect for over 1 km of strike(refer to ASX announcement of 5 July 2023). Similarly for copper-cobalt at the Cockburn prospect (refer to ASX announcement of 17 October 2023).
- Potentially additional sources of ore feed for a conceptual sulphide mining and processing operation at Mutooroo.





### **MacDonald Hill iron ore**

- In process of finalising acquisition of EL 6299 with an extensive area of outcropping Braemar Iron Formation.
- Lies only a few kilometres north of the main Barrier Highway and Transcontinental Railway line.
- The steeply dipping nature of the iron rich horizons means that higher grade zones could potentially be selectively mined from surface.
- A strategic, well located iron ore asset that is potentially capable of meeting the more stringent quality demands of future next generation energy efficient steel plants.



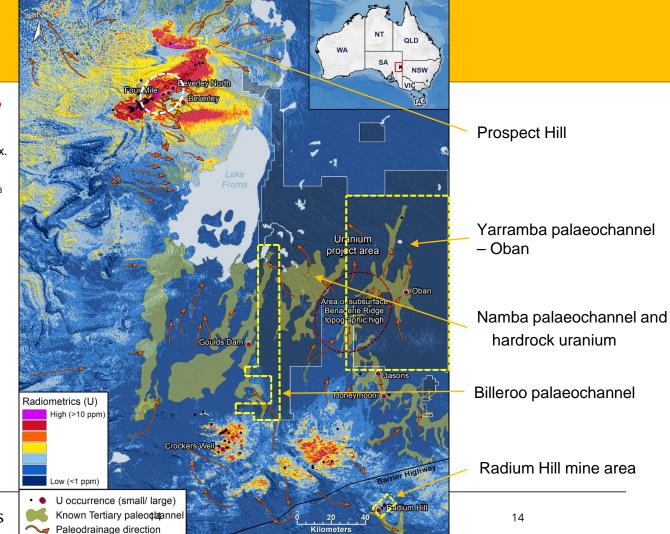
### **Uranium assets**

### Large area of exploration terrain covering the same geology and prospectivity as:

- World class Beverley ISR mining camp with 20 years continuous production of over approx. 40 Kt U<sub>3</sub>O<sub>8</sub> (resources 79.6Kt eU<sub>3</sub>O<sub>8</sub>)\*
- Honeymoon project (resource 16.2 Kt eU<sub>3</sub>O<sub>8</sub> and Jason's 4.9Kt eU<sub>3</sub>O<sub>8</sub>)\*\*. Production commenced.

#### Havilah exploration areas include:

- Prospect Hill (4 Mile type setting).
- Yarramba palaeochannel Oban.
- Billeroo palaeochannel (host to Boss Energy Ltd Gould's Dam uranium deposit).
- Radium Hill mine area (near iconic South Australian uranium mine).
- Namba palaeochannel will be retained by Havilah because of its hardrock and sandhosted potential.





<sup>\*</sup> Department for Energy and Mining website
\*\* Boss Energy Ltd 2023 Annual Report

### **Summary of Key Objectives for 2024**

#### **Setting for 2024**

- ❖ Havilah is going into 2024 with appreciable exposure to commodities with a good outlook namely copper, gold, uranium and iron ore.
- A great time to be exploring for copper and gold and to be dealing on copper –gold assets due to the near record AUD nominal copper and gold prices. Uranium is also looking attractive.

#### **Key Objectives**

- 1. Seek to monetise Kalkaroo copper-gold-cobalt project. Deutsche Bank engagaed to manage sales process.
- 2. Seek a joint venture partner to assist with Mutooroo PFS funding and project development.
- 3. Resource drilling and commencement of a mining scoping study on the western outcropping portion of the Grants Basin iron ore deposit (carry over from work not completed during 2023).
- 4. Investigation of iron ore potential of the MacDonald Hill iron ore prospect area.
- 5. Seek to monetise certain uranium assets.
- 6. Exploration for sand-hosted uranium in the Namba palaeochannel and hardrock uranium and multi-commodity mineralisation in the headwaters of the Namba palaeochannel (eg Birksgate prospect).

Note that ongoing exploration drilling in the areas near Kalkaroo and Mutooroo deposits during 1H 2024 is dependent on availability of funds and suitable drilling equipment.



### **JORC Ore Reserve & Mineral Resources 2023**

### JORC Ore Reserves as at 31 July 2023

|       | Project   | Classifica<br>tion | Tonnes<br>(Mt) | Copper<br>% | Gold<br>g/t | Copper tonnes<br>(Kt) | Gold ounces<br>(Koz) |
|-------|-----------|--------------------|----------------|-------------|-------------|-----------------------|----------------------|
|       | Kalkaroo¹ | Proved             | 90.2           | 0.48        | 0.44        | 430                   | 1,282                |
| Naika | Kaikai 00 | Probable           | 9.9            | 0.45        | 0.39        | 44                    | 125                  |
| Tota  |           |                    | 100.1          | 0.47        | 0.44        | 474                   | 1,407                |

#### **Footnotes to the JORC Ore Reserve and Mineral Resource Tables**

Numbers in tables are rounded. Ore Reserves are a subset of the Mineral Resources.

- <sup>1</sup> Details released to ASX: 18 June 2018 (Kalkaroo)
- <sup>2</sup> Details released to ASX: 18 October 2010 and 5 June 2020 (Mutooroo)
- <sup>3</sup> Details released to ASX 30 January 2018 & 7 March 2018 (Kalkaroo)
- <sup>4</sup> Note that the Kalkaroo cobalt Inferred resource is not added to the total tonnage
- <sup>5</sup> Details released to ASX: <u>10 June 2011</u> applying an 18% Fe cut-off (Maldorky)
- <sup>6</sup> Details released to ASX: 5 December 2012 applying an 18% Fe cut-off (Grants)
- <sup>7</sup> Details released to the ASX: 4 June 2009 applying a grade-thickness cut-off of
- 0.015 metre % eU3O8 (Oban)

#### **JORC Mineral Resources as at 31 July 2023**

| Project       | Classification | Resource<br>Category               | Tonnes         | Copper<br>% | Cobalt<br>% | Gold<br>g/t | Copper<br>tonnes    | Cobalt<br>tonnes | Gold<br>ounces     |
|---------------|----------------|------------------------------------|----------------|-------------|-------------|-------------|---------------------|------------------|--------------------|
|               | Measured       | Oxide                              | 598,000        | 0.56        | 0.04        | 0.08        |                     |                  |                    |
|               | Total          | Oxide                              | 598,000        | 0.56        | 0.04        | 0.08        | 3,300               | 200              | 1,500              |
|               | Measured       | Sulphide<br>Copper-<br>Cobalt-Gold | 4,149,000      | 1.23        | 0.14        | 0.18        |                     |                  |                    |
| Mutooroo      | Indicated      | Sulphide<br>Copper-<br>Cobalt-Gold | 1,697,000      | 1.52        | 0.14        | 0.35        |                     |                  |                    |
|               | Inferred       | Sulphide<br>Copper-<br>Cobalt-Gold | 6,683,000      | 1.71        | 0.17        | 0.17        |                     |                  |                    |
|               | Total          | Sulphide<br>Copper-<br>Cobalt-Gold | 12,529,000     | 1.53        | 0.16        | 0.20        | 191,700             | 20,000           | 80,600             |
|               |                | Total<br>Mutooroo                  | 13,127,000     |             |             |             | 195,000             | 20,200           | 82,100             |
|               | Measured       | Oxide Gold<br>Cap                  | 12,000,000     |             |             | 0.82        |                     |                  |                    |
|               | Indicated      | Oxide Gold<br>Cap                  | 6,970,000      |             |             | 0.62        |                     |                  |                    |
|               | Inferred       | Oxide Gold<br>Cap                  | 2,710,000      |             |             | 0.68        |                     |                  |                    |
|               | Total          | Oxide Gold<br>Cap                  | 21,680,000     |             |             | 0.74        |                     |                  | 514,500            |
| Kalkaroo      | Measured       | Sulphide<br>Copper-Gold            | 85,600,000     | 0.57        |             | 0.42        |                     |                  |                    |
| 3             | Indicated      | Sulphide<br>Copper-Gold            | 27,900,000     | 0.49        |             | 0.36        |                     |                  |                    |
|               | Inferred       | Sulphide<br>Copper-Gold            | 110,300,000    | 0.43        |             | 0.32        |                     |                  |                    |
|               | Total          | Sulphide<br>Copper-Gold            | 223,800,000    | 0.49        |             | 0.36        | 1,096,600           |                  | 2,590,300          |
|               |                | Total<br>Kalkaroo                  | 245,480,000    |             |             |             | 1,096,600           |                  | 3,104,800          |
|               | Inferred       | Cobalt<br>Sulphide <sup>4</sup>    | 193,000,000    |             | 0.012       |             |                     | 23,200           |                    |
| Total All Pro | ojects         | All<br>Categories<br>(rounded)     | 258,607,000    |             |             |             | 1,291,600           | 43,400           | 3,186,900          |
| Project       | Classification |                                    | Tonnes<br>(Mt) |             | Iron<br>(%) | Fe          | concentrate<br>(Mt) |                  | Estimated<br>yield |



| sources |  |
|---------|--|
|         |  |





Maldorky

Grants 6





Indicated

Inferred





147





30.1

260

24

40%

33%

59

100

## **CONTACT INFORMATION**

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