ASX ANNOUNCEMENT

MIRAMAR RESOURCES LTD.

ASHBURTON/GASCOYNE PROJECTS UPDATE

- **Heritage approval received for Whaleshark EIS co-funded diamond drilling**
- **Drilling contractor appointed – diamond drilling to commence at end of month**
- **New tenement granted at Dooley Downs - Bangemall Ni-Cu-PGE Project**

Miramar Resources Limited (ASX:M2R, "Miramar" or "the Company") is pleased to provide an update on activities at the Company's' exploration projects in the Ashburton and Gascoyne regions of Western Australia.

Whaleshark IOCG Project

Miramar acquired the Whaleshark Project in 2020, as part of the Company's IPO, and is exploring for Iron-Oxide Copper-Gold (IOCG) mineralisation beneath younger sediments of the Northern Carnarvon Basin.

Since the Whaleshark tenement was granted in early 2021, Miramar has defined high-priority bedrock IOCG drill targets within the Whaleshark granite (Figures 1 and 2) comprising a combination of:

- Mobile Metal Ion (MMI) surface geochemical anomalism
- A gravity anomaly in the "neck" of the granite crosscut by a NW-trending structure
- Strongly elevated copper, cobalt, gold and silver results in "interface" aircore drilling
- REE anomalism consistent with published data from the Prominent Hill IOCG deposit

As previously advised, the Company has been successful in securing up to $180,000 through the Western Australian government's Exploration Incentive Scheme (EIS) co-funded drilling programme for the initial diamond drilling programme.

Miramar recently completed a heritage survey over the proposed drill hole locations and has now received the final report from that survey allowing for commencement of drilling.

The Company has recently signed an agreement with a drilling contractor, will complete site preparation within the next 2 weeks and aims to commence drilling at Whaleshark at the end of the month.

Miramar's Executive Chairman, Mr Allan Kelly, said the Company believed that Whaleshark had the potential to host a significant IOCG deposit, like Ernest Henry, Carrapateena or Prominent Hill.

"Since commencing work at Whaleshark in mid-2021, we have defined a robust IOCG target which has been further validated by the recent successful EIS application," Mr Kelly said.

"IOCG deposits can be very large, and potentially very valuable, meaning exploration success at Whaleshark would have a very significant positive impact on our Company' valuation," he added.

"We are therefore very excited to commence diamond drilling at Whaleshark in the near future," Mr Kelly said.

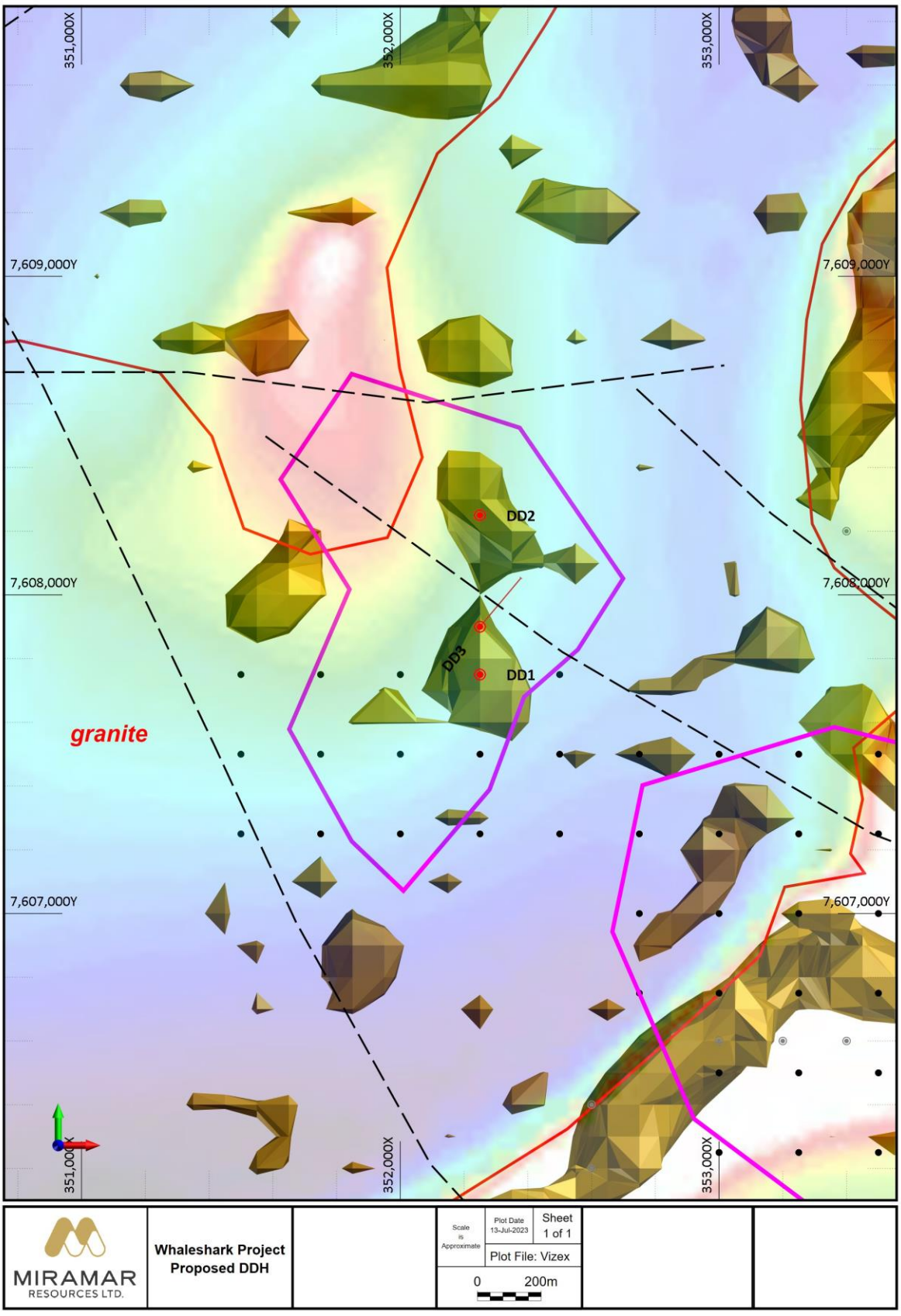


Figure 1. *Whaleshark magnetic image showing proposed diamond drill holes ("DD…") in relation to gravity shells and MMI anomalies (pink polygons).*

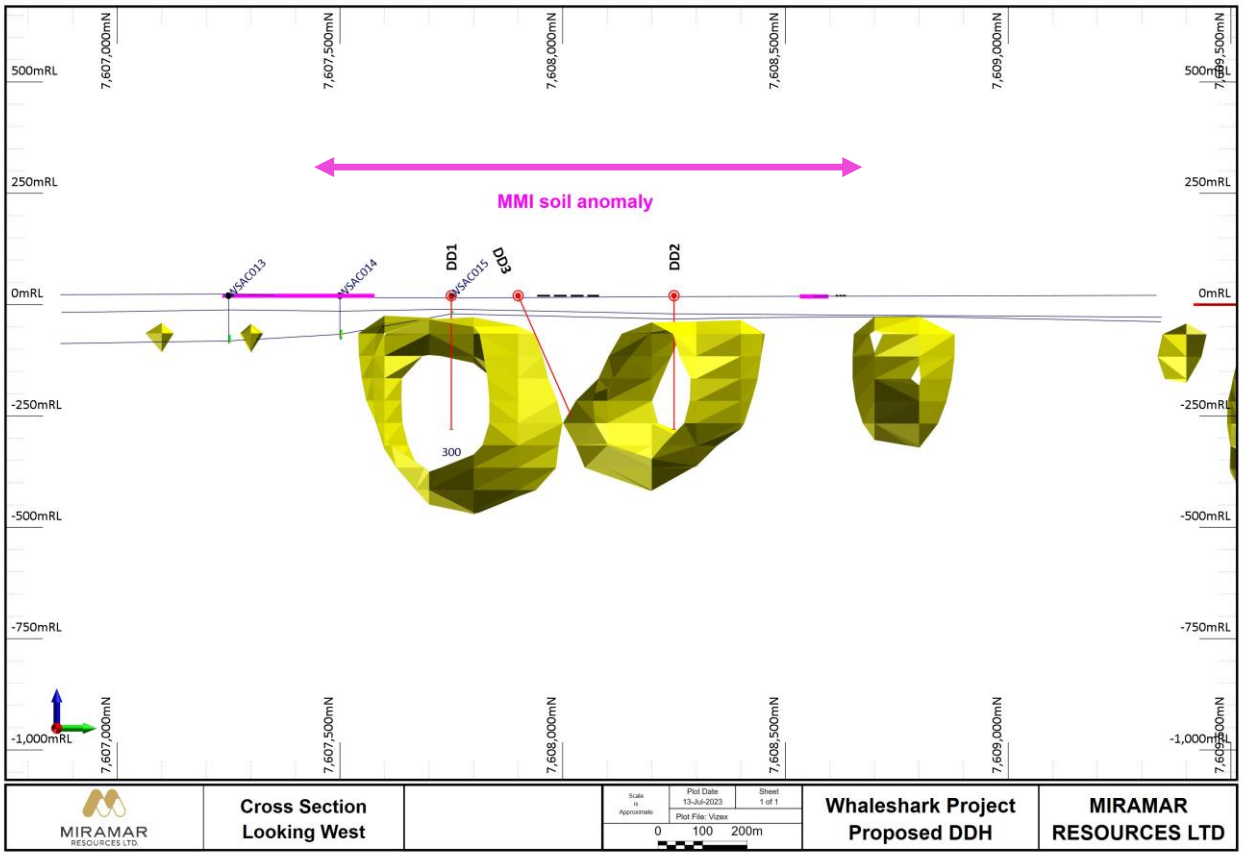


Figure 2. *North-south cross section (looking west) showing proposed diamond drill holes in relation to gravity inversion shells (yellow shapes) and MMI soil anomalism.*

Bangemall Projects

Miramar is pleased to advise that E09/2647, part of the Dooley Downs Project, has recently been granted.

The newly granted Exploration Licence covers the contact between the older Edmund Basin and younger Collier Basin (Figure 3) and has potential for:

- Ni-Cu-PGE mineralisation associated with Proterozoic dolerite sills.
- Sediment hosted copper mineralisation within the Edmund Basin evident by elevated results in historic rock chip and soil samples

The Company will now compile all previous exploration data before planning the first fieldwork.

Sampling planned for the Mt Vernon Ni-Cu-PGE Project will be completed after the diamond drilling at Whaleshark.

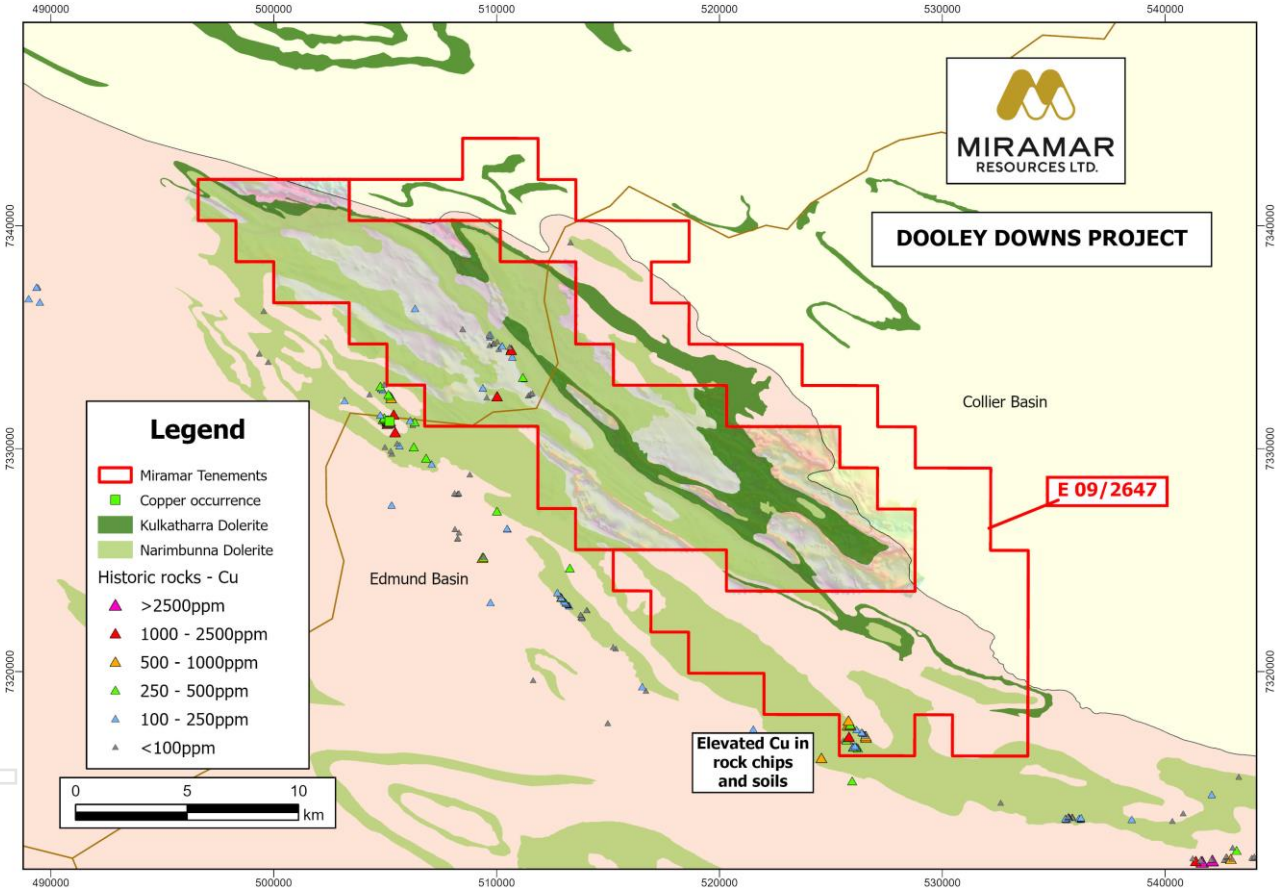


Figure 3. *Dooley Downs Project showing newly granted E09/2647 and historic rock chip sampling.*

For more information on Miramar Resources Limited, please visit the company's website at www.miramarresources.com.au or contact:

Allan Kelly
Executive Chairman
info@miramarresources.com.au

Margie Livingston
Ignite Communications
margie@ignitecommunications.com.au

This announcement has been authorised for release by Mr Allan Kelly, Executive Chairman, on behalf of the Board of Miramar Resources Limited.

COMPETENT PERSON STATEMENT

The information in this report that relates to Exploration Targets or Exploration Results is based on information compiled by Allan Kelly, a "Competent Person" who is a Member of The Australian Institute of Geoscientists. Mr Kelly is the Executive Chairman of Miramar Resources Ltd. He is a full-time employee of Miramar Resources Ltd and holds shares and options in the company.

Mr Kelly has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to Qualify as a "Competent Person" as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

Mr Kelly consents to the inclusion in this Announcement of the matters based on his information and in the form and context in which it appears.

Historical exploration results for the Whaleshark Project, including JORC Table 1 and 2 information, is included in the Miramar Prospectus dated 4 September 2020.

JORC Table 1 and 2 information for recent exploration results at the Whaleshark Project is contained in the following ASX Announcements:

- 14 June 2023 – *Whaleshark Project Update*
- 21 April 2023 – *Successful EIS Application for Whaleshark Diamond Drilling*
- 14 February 2023 - *Significant Basement Copper and Cobalt Results Upgrade Whaleshark IOCG Potential*
- 14 December 2022 – *Whaleshark REE Results Upgrade IOCG Potential*
- 7 Nov 2022 - *Aircore Drilling Confirms IOCG Potential at Whaleshark*
- 18 Aug 2022 – *Drilling underway at Whaleshark Copper-Gold Project*
- 13 Dec 2021 – *Large IOCG targets outlined at Whaleshark*
- 3 Sep 2021 - *Whaleshark Soil Survey Outlines Numerous Large Targets*

IOCG Deposits – A summary

Iron oxide copper gold (**IOCG**) and iron sulphide copper gold (**ISCG**) deposits host significant amounts of copper and gold mineralisation in association with iron oxide and/or iron sulphide minerals (hematite/magnetite and/or pyrite/pyrrhotite respectively).

These deposits can be very large, in the order of hundreds of millions of tonnes, and have average copper and gold grades in the order of 1% and 1g/t respectively, which make them attractive exploration targets.

The Merlin Mo-Re deposit in Queensland, the giant Kiruna iron-oxide apatite deposit in Sweden and the various high-grade Tennant Creek Au +/- Bi and Cu deposits are also considered part of the IOCG/ISCG "family".

The deposits occur on the margins of large igneous bodies, usually a granite, which has intruded into a sedimentary sequence, and where an iron-rich host rock (e.g., a Banded Iron Formation) is also present.

Most significant IOCG/ISCG deposits, including all those located in Australia, are almost exclusively restricted to Mesoproterozoic to Neoproterozoic basement rocks (i.e., 850 million to 1.6 billion years ago).

The deposits occur within "provinces" where a range of sizes, grades, depths and styles can exist, for example the multiple deposits along the eastern edge of the Gawler Craton in South Australia (Figure 4).

Alteration signatures can be widespread, stretching over 10's to 100's of square kilometres, and include a mixture of regional and/or earlier sodic-calcic alteration with later and/or proximal potassic alteration.

Ore minerals include primary chalcopyrite, plus bornite and chalcocite, with pyrite and hematite in IOCG deposits, and pyrite and pyrrhotite in ISCG deposits.

The classic exploration process for IOCG deposits includes looking for a significant gravity anomaly, caused by dense hematite, adjacent to a magnetic anomaly, caused by magnetite.

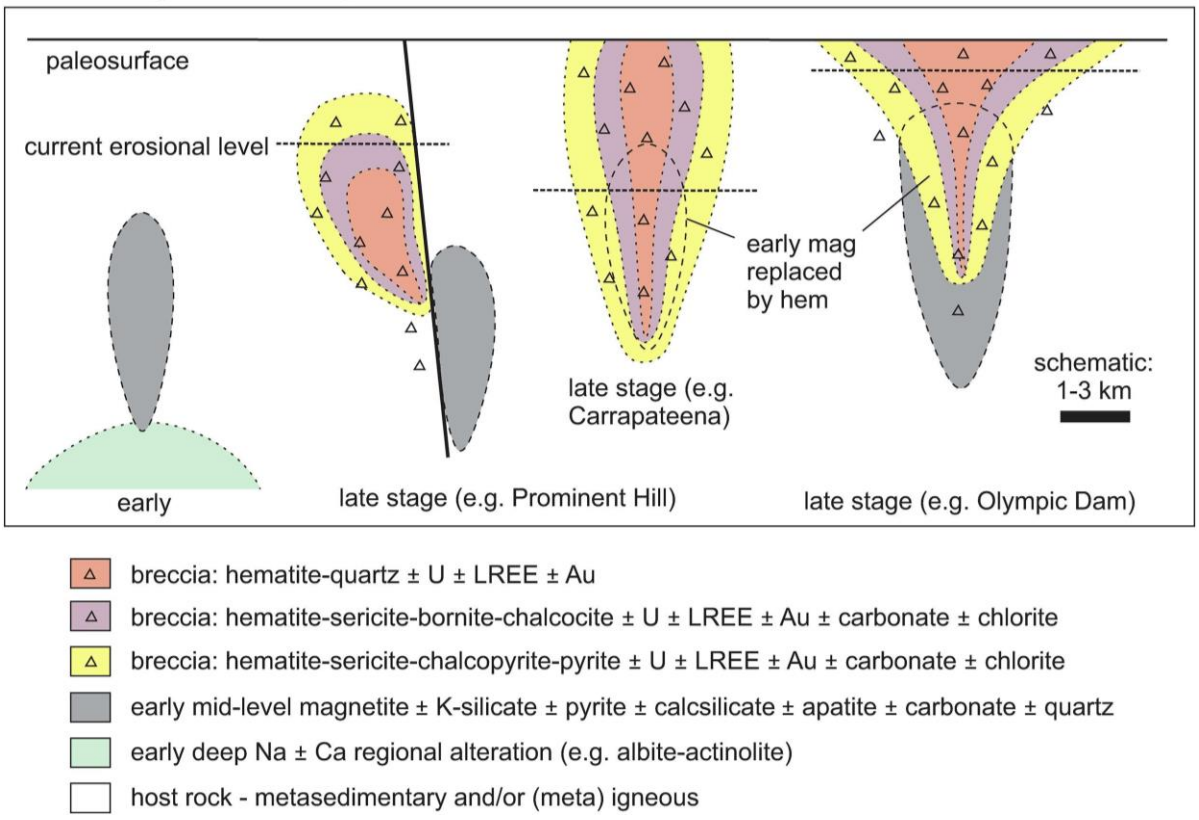
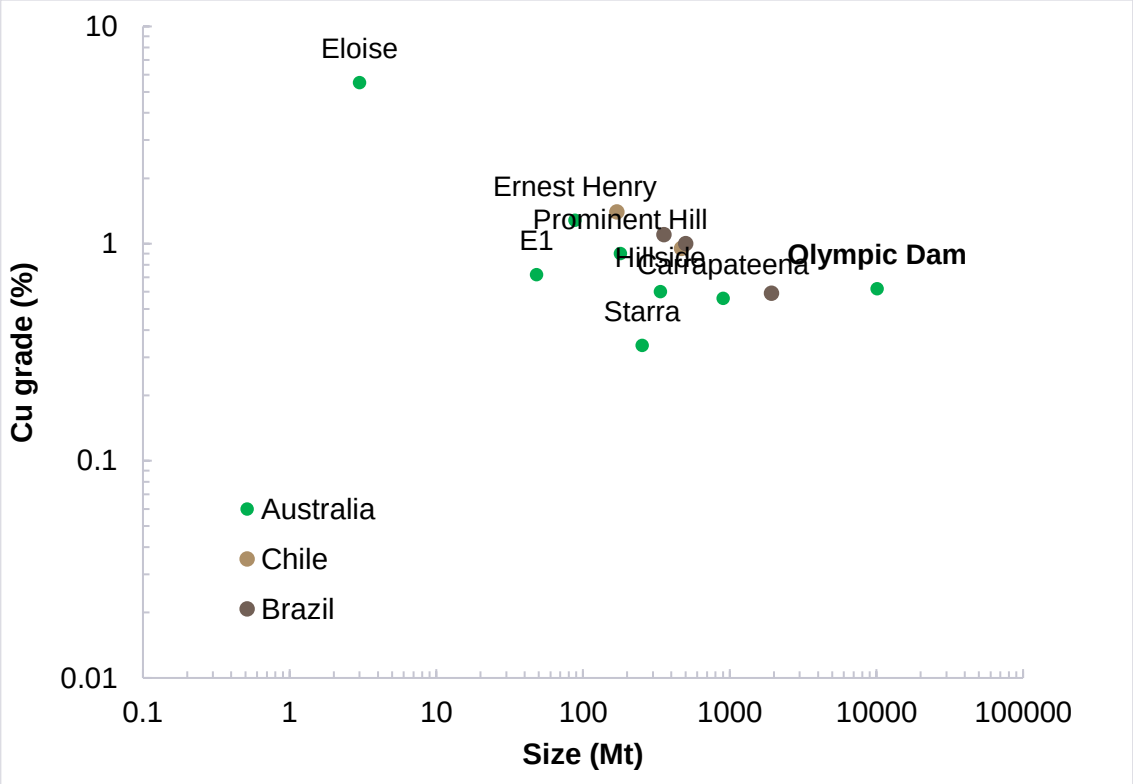


Figure 4. *Schematic cross sections of deposit-scale zoning and hydrothermal alteration in IOCG deposits formed in "post-orogenic" settings, with examples from the Gawler Craton. (Skirrow, 2022).*

Examples of significant IOCG/ISCG deposits worldwide

Location	Deposit	Size (Mt)	Grade (Cu %, Au g/t)
Gawler Craton South Australia	**Olympic Dam**	10,100	0.62, 0.28
	Carrapateena	900	0.56, 0.24
	Prominent Hill	180	0.9, 0.8
	Hillside	337	0.6, 0.14
Cloncurry Queensland	**Ernest Henry**	88	1.28, 0.73
	Starra	253	0.34, 0.48
	Eloise	3	5.5, 1.4
	E1	48.1	0.72, 0.21
Punta del Cobre Chile	**La Candelaria**	470	0.95, 0.22
	Mantos Blancos	170	1.4
Carajas Brazil	**Salobo**	1,926	0.59, 0.34
	Cristalino	500	1.0, 0.25
	Sossego	355	1.1, 0.28



Grade-tonnage data showing copper grades for selected IOCG deposits.

References:

Skirrow, R. G., "Iron oxide copper-gold (IOCG) deposits – A review (part 1): Settings, mineralogy, ore geochemistry and classification". Ore Geology Reviews Volume 140, January 2022, 104569.

About Miramar Resources Limited

Miramar Resources Limited is an active, WA-focused mineral exploration company exploring for gold, IOCG, Ni-Cu-PGE and REE deposits in the Eastern Goldfields, Murchison and Gascoyne regions of WA.

Miramar's Board has a track record of discovery, development and production within Australia, Africa, and North America, and aims to create shareholder value through discovery of high-quality mineral deposits.