








E79 Expands Highly Prospective Mountain Home Copper-Gold Project, NT

Exploration to commence imminently at this highly prospective project

-  Tenure area expanded by 51% to 868km² with two new tenement applications submitted.
-  The project lies within the North Australian Zinc Belt, a globally significant zone of zinc-lead-copper mineralisation.
-  Mapping and sampling planned to commence in mid-to-late June with the objective of expanding the identified surface mineralisation, where assays of up to 33% Cu and 1.31g/t Au have been returned from rock-chip sampling by the previous explorer¹.
-  A Share Purchase Plan (SPP) is currently open with an offer to acquire E79 Gold shares at 3.5c per share, allowing shareholders to take advantage of the Junior Mineral Exploration Incentive (JMEI) tax credits, equating to 1.05c per share applied for².
-  Funds raised by the SPP will contribute to funding both for exploration at Mountain Home and potentially an advanced project acquisition.

West Australian-based explorer E79 Gold Mines Limited (**ASX: E79**) ('E79 Gold' or 'the Company') is pleased to provide an update on planned exploration activities at the recently optioned Mountain Home Copper-Gold Project, located in the Northern Territory.

¹ See E79 Gold's ASX announcement dated 28 May 2024

² See E79 Gold's ASX announcement dated 31 May 2024

ASX Code: E79

Shares on issue: 81M
Market capitalisation: \$3.1M
Cash: \$1.97M (31 March 2024)
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E79 Gold CEO, Ned Summerhayes, said: *"We are moving quickly on the Mountain Home Project. We have expanded our exploration footprint with two new tenement applications that will give the Company access to 68% of the 376km² area of the highly prospective McArthur Basin inlier in Northern Australia.*

"We will commence ground-based exploration in mid-late June, starting off with a mapping and rock-chip sampling program to extend the area of known outcropping copper and gold mineralisation, as well as seeking to identify potential parallel mineralised structures.

"The Project is located within a highly prospective zone that has been defined by Geoscience Australia across Australia and includes the world's largest accumulation of zinc-lead-silver and copper (the North Australian Zinc Belt), including the Mount Isa lead-zinc and copper fields, the Broken Hill lead-zinc-silver deposits and the Olympic Dam, Prominent Hill, Carrapateena and Oak Dam copper-gold-uranium IOCG deposits. Nothing more need be said about the prospectivity of this region."

Northern Territory Project

Mountain Home (EL32470 – NT Minerals Option), East Tenement and West Tenement (both under application – 100% E79)

Including the two new tenement applications, and the Mountain Home Project Option, E79 Gold now controls a total area of 868km² within the highly prolific McArthur Basin in the Northern Territory.

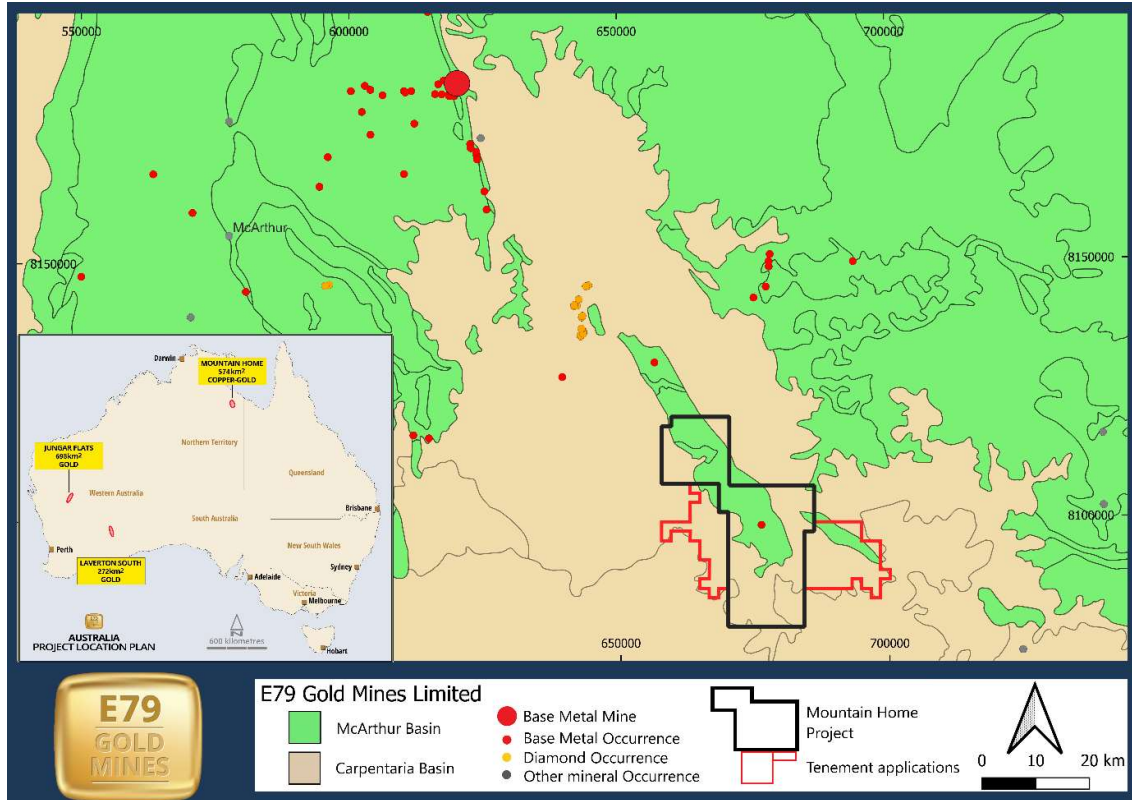


Figure 1: Location map of the Mountain Home Project with the McArthur and Carpentaria Basins.

The Mountain Home Project has demonstrated prospectivity with previous exploration having defined a zone of mineralised outcrop in an identified 5km long structural trend, with previous rock chips returning assays of^{3,4}:

- 21RRX0180 – **15.69% Cu and 0.75g/t Au;**
- 21RRX0187 – **25.20% Cu and 0.55g/t Au;**
- 21RRX0188 – **9.81% Cu and 1.31g/t Au;** and
- 21RRX0197 – **32.73% Cu and 0.16g/t Au.**

This mineralised outcrop is hosted within an inlier of prospective McArthur Basin stratigraphy, which also hosts the world-class McArthur River Zinc-Lead Mine, the Teena Zinc-Lead Deposit and numerous base metal prospects. Additionally, the Merlin diamond pipe cluster is located some 40km to the north.

The image below (Figure 2) is one of the outcomes from the ‘Exploring for the Future’ research by Geoscience Australia, undertaken over the last few years. In this part of the research, mapping the large sedimentary and iron-oxide copper-gold (IOCG) base metal deposits shows the distribution of deposits is

³ Refer to NT Minerals Limited ASX Announcement 14 December 2023

⁴ Refer to NT Minerals Limited ASX Announcement 3 March 2022

concentrated along the margin of the thicker lithosphere, as shown in Image a below.

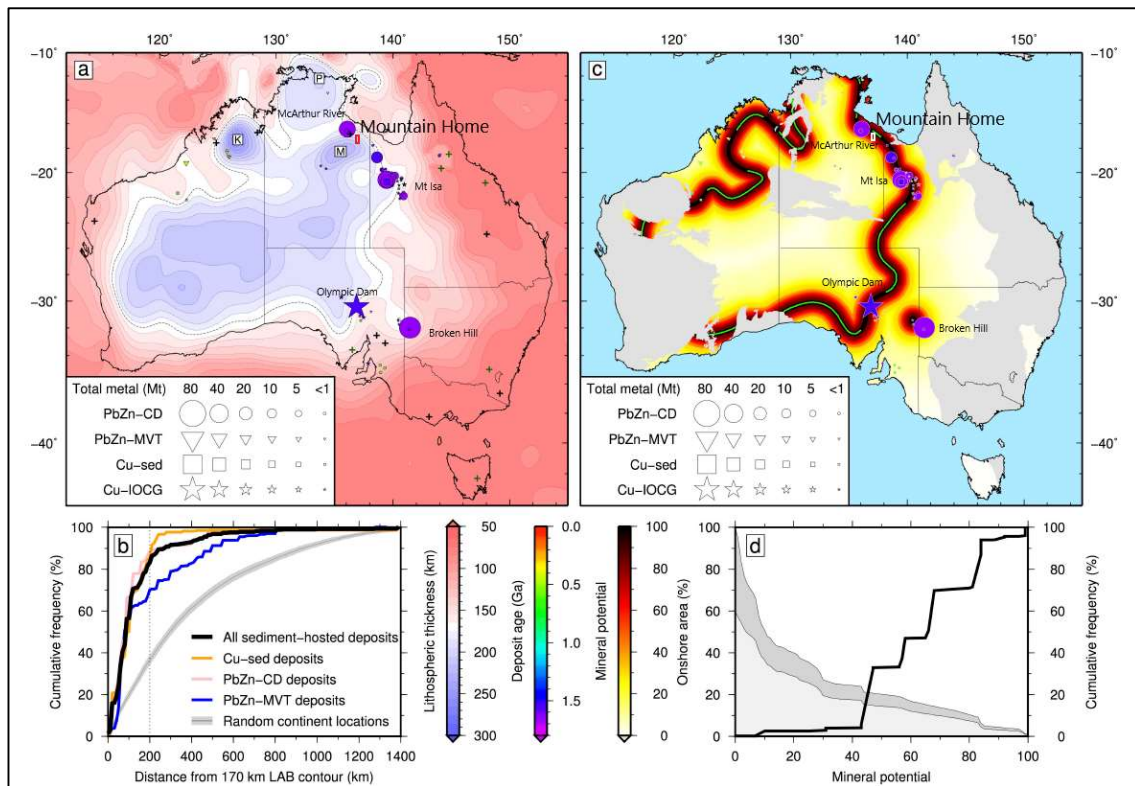


Figure 2: Prospectivity Map based on the Lithosphere-Asthenosphere Boundary (LAB), adapted from Czarnota et al 2020⁵. The K, P and M annotations on Map A refer to newly identified zones of thick lithosphere.

Image c shows this 170km Lithosphere-Asthenosphere Boundary (LAB), which is an Australian-wide feature that takes in the world-class McArthur River Mine in the Northern Territory, Mount Isa in Queensland, Broken Hill in NSW and Olympic Dam in South Australia (see Figure 2).

Further research shows that step changes in the depth of lithosphere⁵ (see Figure 3) may be the controlling mechanism required to form these large sediment-hosted metal deposits.

⁵ Czarnota et al., 2020. Minerals on the edge: sediment-hosted base metal endowment above steps in lithospheric thickness. Exploring for the Future: Extended Abstracts.

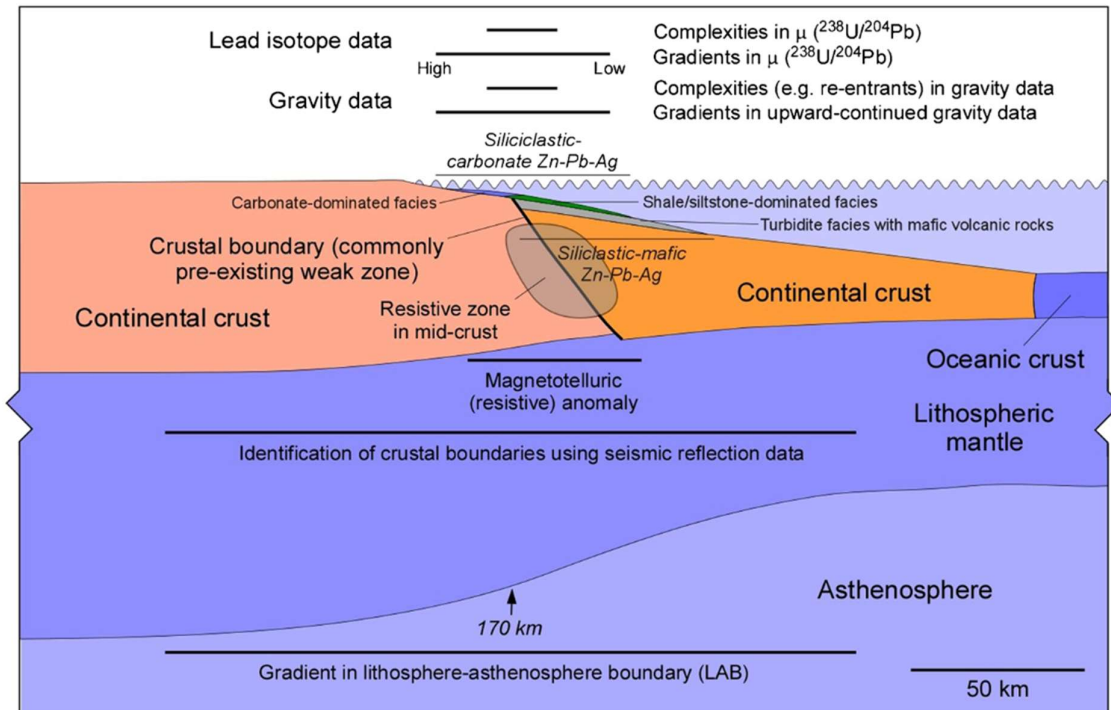


Figure 3: Schematic from Huston et al, 2023⁶ showing changes in LAB affecting mineralisation location.

The newly expanded Mountain Home Project sits within this prospective LAB 170km gradient zone, and on the edge of a newly identified zone of thick lithosphere⁶, highlighting the significant mineral potential of the project.

⁶ Huston et al., 2023. Zinc On The Edge— isotopic and geophysical evidence that cratonic edges control world-class shale-hosted zinc-lead deposits. *Mineralium Deposita* (2023) 58:707–729.



Share Purchase Plan (SPP)

E79 Gold reminds Shareholders that the SPP is scheduled to close at 5pm (WST) on **Friday 21 June 2024**.

The SPP is offered to eligible shareholders to acquire up to A\$30,000 worth of shares under the SPP, free of brokerage and commission, at a price of **A\$0.035** per share.

Eligible Shareholders participating in the SPP may be eligible for Junior Minerals Exploration Incentive (JMEI) credits. Australian resident Shareholders that are issued with JMEI credits will generally be entitled to refundable tax offsets (for individual shareholders, trusts or superannuation funds) or franking credits (for companies).

By participating in the SPP, you may be able to take advantage of these credits, while also providing funding for further exploration programs for E79 Gold. These tax credits are anticipated to be approximately 1.05 cents per SPP Share and provides Eligible Shareholders with a very attractive effective discount on the subscription share price when the tax credit is included. The tax credit becomes available to eligible shareholders once the Company's FY2024 tax return has been finalised.

The SPP Offer Booklet and a personalised application form were dispatched to shareholders on 31 May 2024.

Eligible shareholders can also access their personalised application form by logging onto <https://investor.automic.com.au/#/home>, or contacting E79 Gold requesting a copy of their personalised application form.

Upcoming Presentations

- **October 2024** Present at AMEC - Perth

Our motto: Money in the ground.

Yours sincerely,

Ned Summerhayes

Chief Executive Officer

The information in this report that relates to Exploration Results is based on information compiled by Mr Ned Summerhayes, a Competent Person who is a member of the Australian Institute of Geoscientists. Mr Summerhayes is a full-time employee, a shareholder and an option holder of the Company. Mr Summerhayes has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Summerhayes consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Previously Reported Information: The information in this report that references previously reported exploration results is extracted from the Company's ASX market announcements released on the date noted in the body of the text where that reference appears. The previous market announcements are available to view on the Company's website or on the ASX website (www.asx.com.au). 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. 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 announcements.

Authorised for release by the CEO of E79 Gold Mines Limited.

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ABOUT E79 GOLD MINES LIMITED (ASX: E79)

E79 Gold's Projects comprise ~1,838km² of highly prospective ground including within the McArthur Basin of the Northern Territory, which is the world's largest accumulation of Zn-Pb-Ag and is prospective for copper, gold and diamonds, and within the Laverton Tectonic Zone and Murchison Goldfields, both of which are endowed with >30 million ounces of gold and located within the Yilgarn Craton of Western Australia.

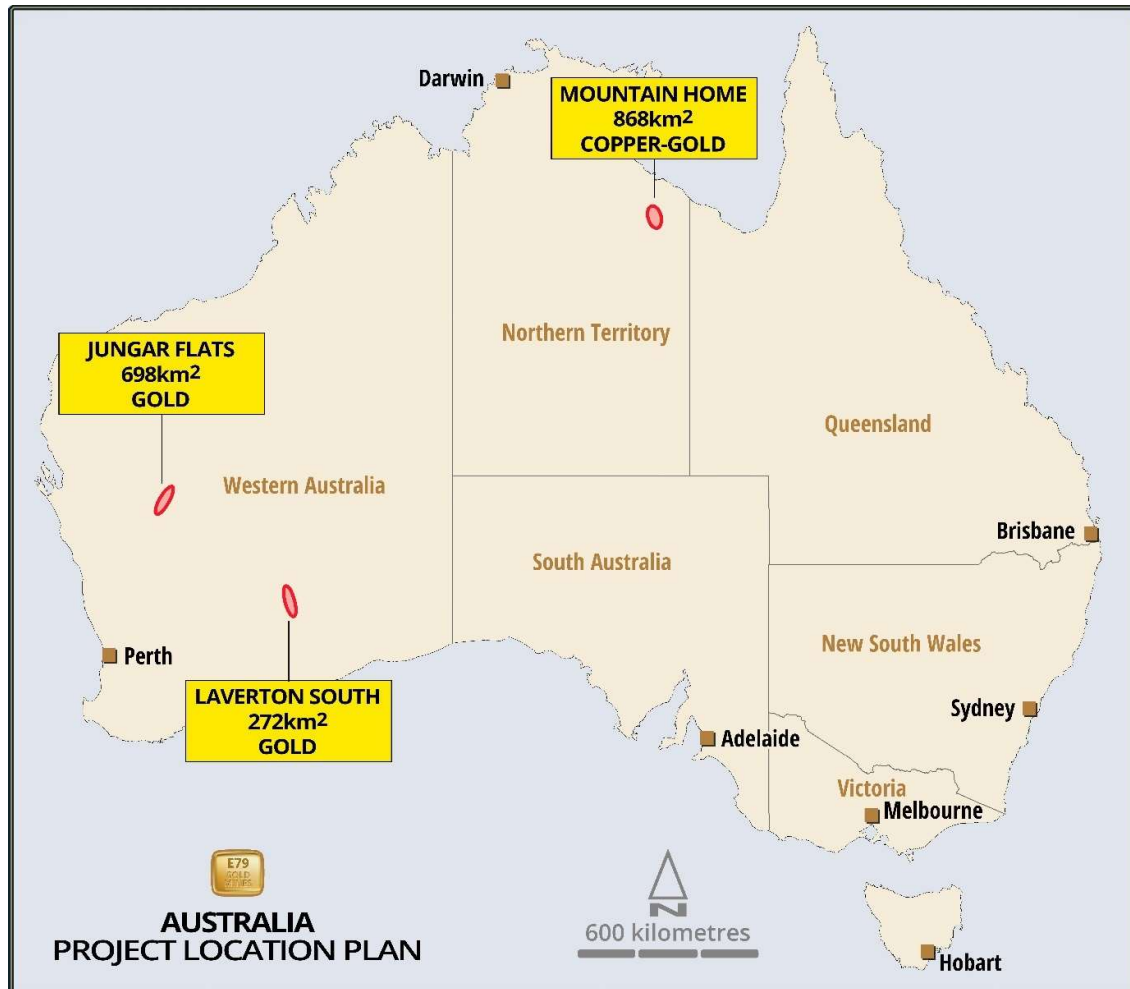


Figure 4: Map of E79 Gold's exploration projects