

Unlocking Uranium Potential in the NT

Eclipse Metal's High-Grade NT Projects Poised to Fuel Clean Energy Future, A Strategic Positioning with Uranium in The Northern Territory's Premier Uranium Provinces

- Promising uranium tenure in two of Australia's premier uranium provinces, the Alligator Rivers Uranium Field and Ngalia Basin.
- Drill-ready targets on granted tenements in the Northern Territory, a favourable and proven uranium mining jurisdiction.
- Significant exploration potential across tenure - high-grade surface uranium assays 5.8% U_3O_8 with 38.1 g/t Au and 28 g/t Pd at Devil's Elbow within the Alligator Rivers province.
- Geophysical and geological review highlights the potential for delineating uranium mineralisation within the Devil's Elbow U-Au-Pd prospect, EL27584.
- Seventeen robust drill targets at Devil's Elbow have been defined, integrating geophysical data from Cameco's historical surveys with several priority targets displaying radiometric signatures similar to known uranium deposits in the Alligator Rivers Uranium Field.
- Structural framework within Devil's Elbow has been mapped out for the first time. Uranium deposits generally form proximal to a major structure where fluid flow for uranium deposition can occur (e.g. Nabarlek).
- Nuclear energy plays a critical role in decarbonisation and zero-emission clean energy.

Eclipse Metals Limited (**Eclipse Metals** or the **Company**) (**ASX: EPM**) are pleased to provide this update on the prospective portfolio of the Company's wholly owned highly prospective 16 uranium tenements within two of Australia's most renowned uranium provinces: the **Alligator Rivers Uranium Field and the Ngalia Basin in the Northern Territory**.

Among the Company's key assets is the Devil's Elbow prospect within the Liverpool Project, which has seen considerable past exploration, with historical radiometric surveys and drilling confirming significant uranium anomalies. High-grade uranium results, such as those reported from previous campaigns, reinforce the potential of this project to deliver substantial value to shareholders. The area also benefits from proximity to major deposits, including those explored by Rio Tinto, which previously entered a joint venture with the Company on these assets. This underscores the region's long-term exploration value, making Eclipse Metals a compelling investment opportunity, especially considering the current uranium bull market.

The Devil's Elbow prospect in the highly sought-after Alligator Rivers Uranium field is particularly noteworthy, with exceptional high-grade uranium assays of up to **5.8% U_3O_8** , along with significant gold and palladium assays. Additionally, the Company has defined **17 drill-ready targets** in this prospect based on robust geophysical surveys, defining immediate exploration potential.

The growing role of nuclear energy in global decarbonisation efforts is expected to enhance the strategic importance of uranium resources. As nuclear power becomes a critical component of zero-emission energy solutions, Eclipse Metals is well-positioned to capitalise on the rising demand for uranium.

BACKGROUND

Eclipse Metals has made significant strides in advancing its uranium portfolio in the Northern Territory focusing on two premier uranium provinces: the Alligator Rivers Uranium Field (5 tenements for 1,464sqkm) and the Ngalia Basin (11 tenements for 7,527sqkm) (Figure 1). These regions are recognised for hosting high-grade uranium deposits, making the Company's tenure especially appealing for exploration and future development.

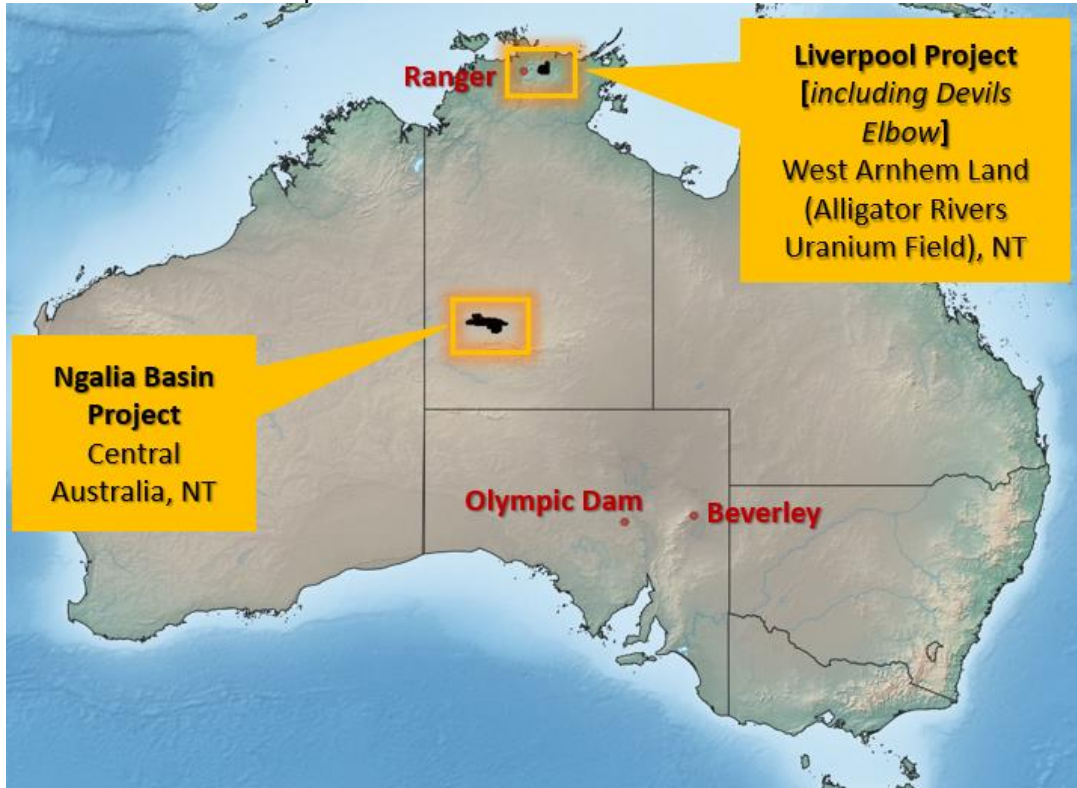


Figure 1: Map showing Eclipse Metals Key Project Details

Eclipse Metals is strategically positioned in the growing uranium market, particularly with its Devil's Elbow project in the Alligator Rivers Uranium Field, one of Australia's most prolific uranium-producing regions, known for high-grade uranium prospects, including the nearby Ranger and Nabarlek Uranium Mines.

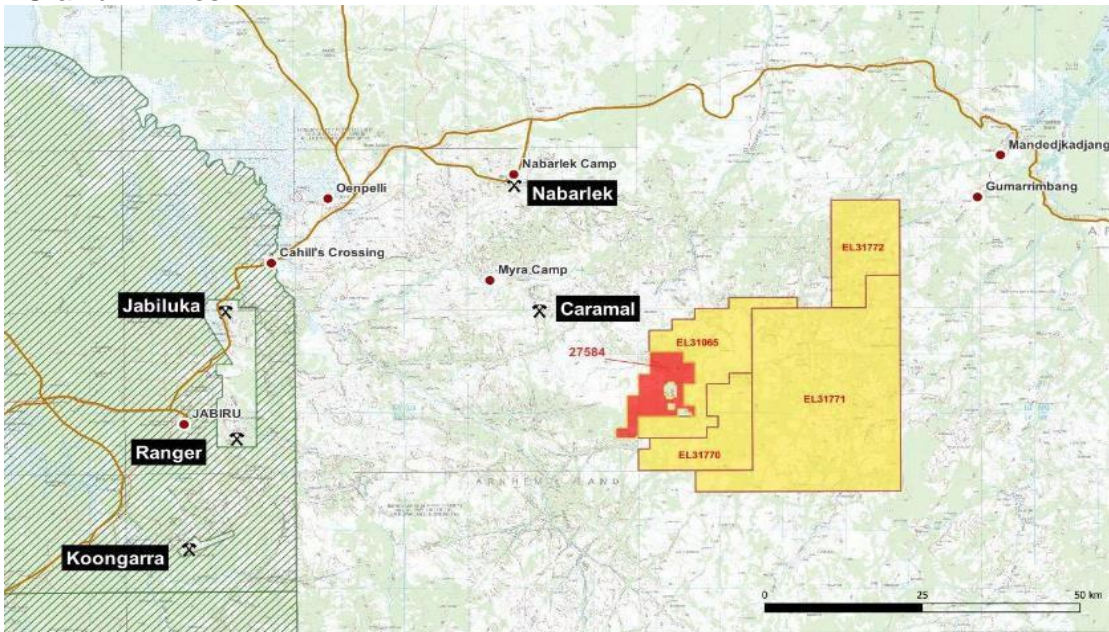


Figure 2: Map showing the boundary of Kakadu nation Park and the Liverpool Project location map and Devil's Elbow

Devil's Elbow EL 27584, within the Company's Liverpool tenements, lies approximately 285km east from Darwin and is located approximately 75km east from Ranger and 41km southeast from the worked-out Nabarlek uranium mines. The Ranger mine produced 132,000 tonnes of uranium oxide (U₃O₈) from 19.78 million tonnes of ore at a grade of 0.23% and Nabarlek produced 12,000 tonnes of uranium oxide from 568,402t of ore at a grade of 1.95% U₃O₈, both within the world-class Alligator Rivers Uranium Field (Figures 2 and 3).

Discovered in the 1970s and further explored by Uranerz and Cameco, the Devil's Elbow prospect has produced impressive high-grade uranium assays peaking at **5.8% U₃O₈** coupled with notable gold (**38.1 g/t**) and palladium (**28 g/t**) assays with exciting exploration potential. These results highlight the project's immediate potential and suggest it could host multi-metal deposits that are increasingly valuable in today's market.



Figure 3: Map showing Alligator Rivers Uranium Field and Ranger Geological Faultline in yellow the crossing the Liverpool projects outside of Alligator River as boundary of Kakadu Nation Park.

The Company's prior farm-in joint venture (JV) agreement with Rio Tinto highlights the project's credibility and potential. Under the farm-in JV, Rio Tinto were prepared to commit resources to explore and drill the Devil's Elbow tenement, reflecting the project's attractiveness to major uranium players. Subsequent success in obtaining access to land governed by the Aboriginal Land Rights Act further solidified the Company's position, demonstrating its ability to effectively navigate regulatory challenges ([ASX announcement 22 August 2016](#)).

The Company successfully obtained land access through an Aboriginal Land Rights Act 1976 (ALRA) deed, securing exploration rights for EL27584, Devil's Elbow (Figure 4), which marked a significant milestone. This agreement, with consent of the Traditional Owners, and approval by the commonwealth minister, ratified by the Northern Land Council, consolidated Company's standing in one of Australia's most favourable uranium mining jurisdictions ([ASX announcement 22 January 2020](#)). The Company's strong track record of stakeholder relations and agreements with local communities ensures it maintains a robust social license to operate, further supporting its exploration activities in the Northern Territory.

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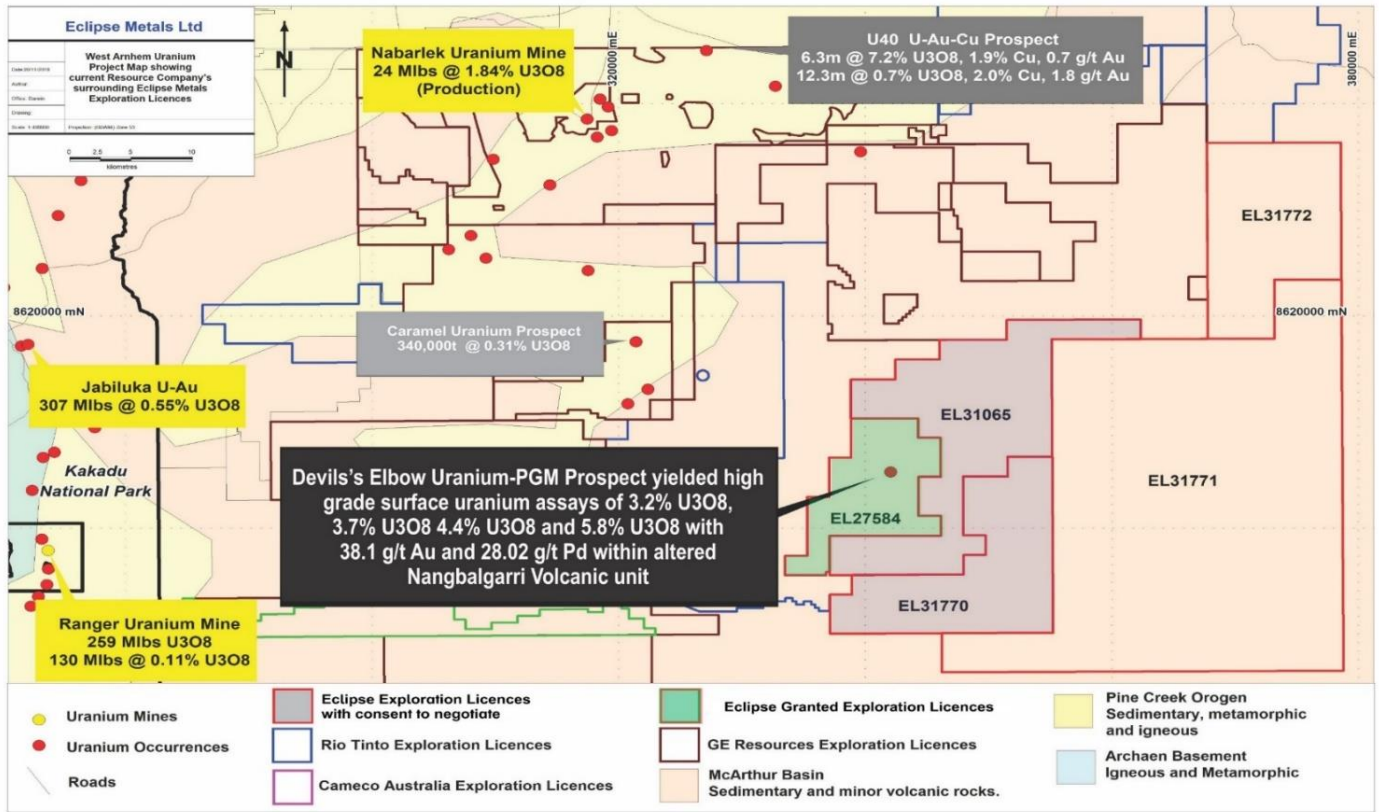


Figure 4: Map showing Devil's Elbow Project within the Liverpool Group of Five Tenements.

The Devil's Elbow U-Au-Pd prospect shows strong potential for uranium mineralisation, supported by drilling and geophysical reviews that highlight several robust drill targets with radiometric signatures similar to known uranium deposits in the Alligator Rivers Uranium Field. Additionally, magnetic lows associated with radiometric anomalies (Figure 6) suggest alteration halos indicative of uranium deposits, while the newly mapped structural framework reveals key zones for potential uranium deposition.

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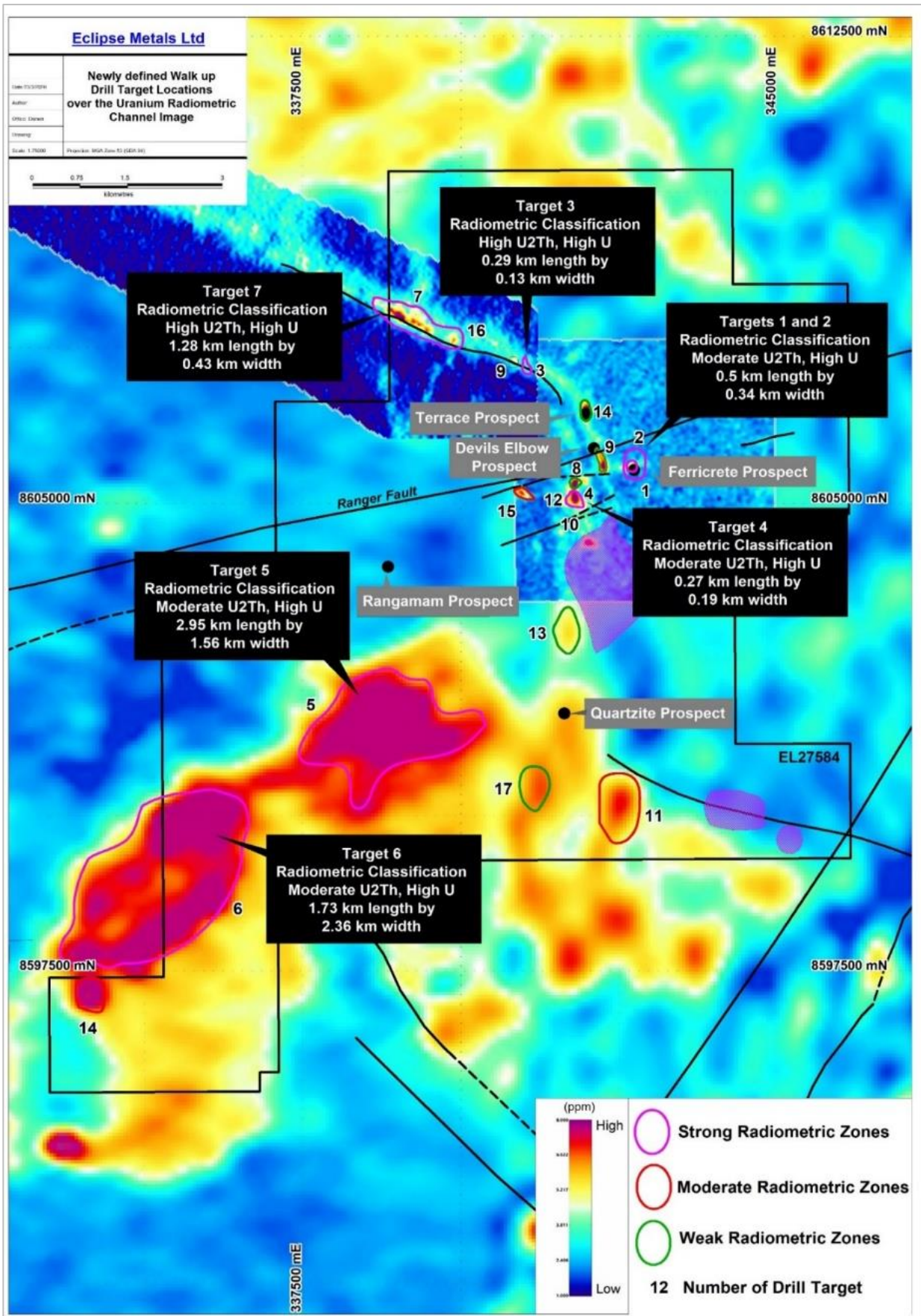


Figure 5: Walk-up drill target locations over the Uranium radiometric anomaly image.

Seventeen high-priority drill targets have been identified, with radiometric signatures analogous to known uranium deposits in the region. This has highlighted the rich potential for further discoveries of uranium, gold, and platinum group elements (PGE) ((Figure 5). [ASX announcement 20 April 2020](#)).

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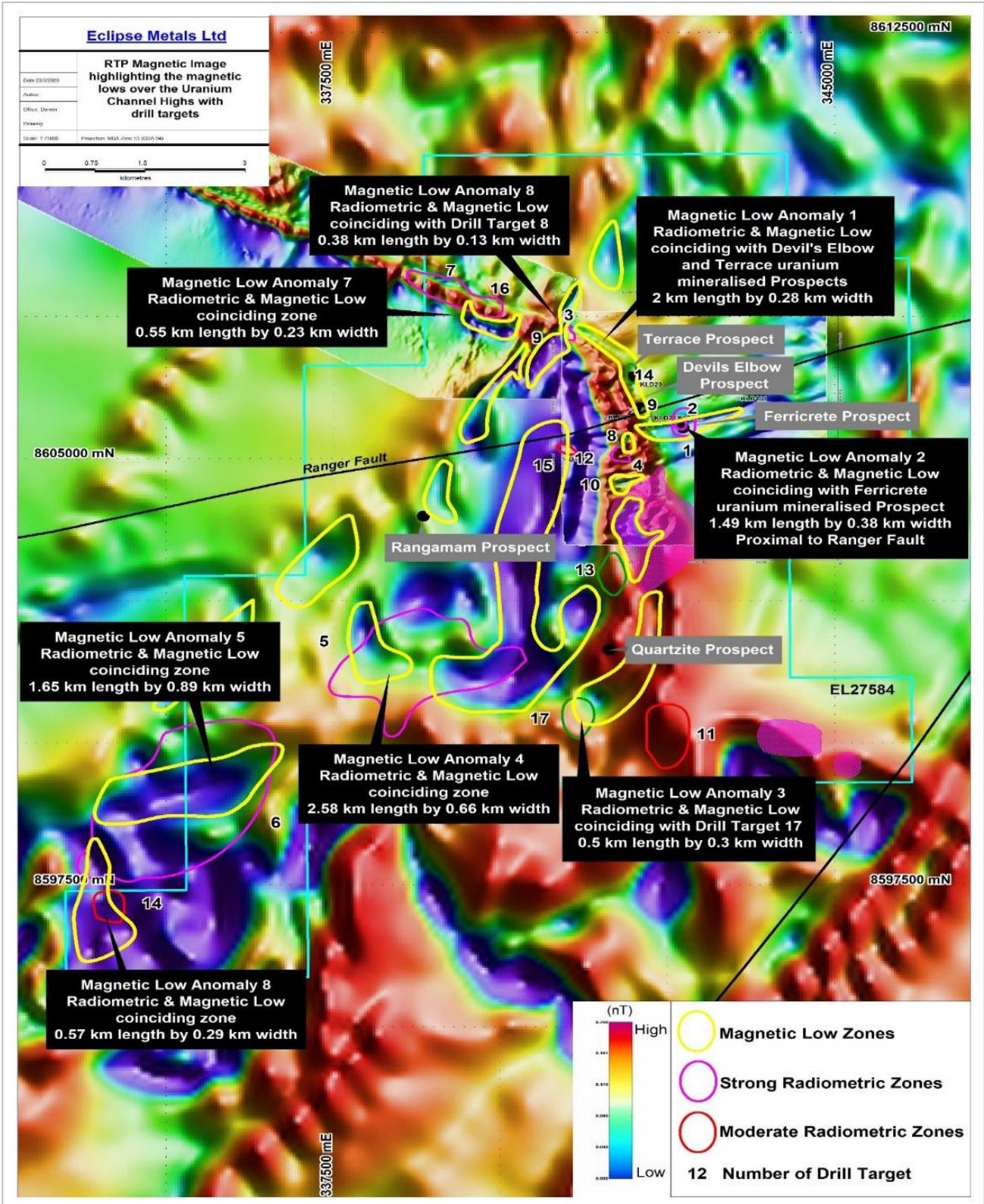


Figure 6: Newly defined Magnetic Lows coinciding with radiometric Anomalies.

Given strong uranium demand and the project's favourable location within an established uranium field, Devil's Elbow stands out as a key asset for future exploration. Its structural framework, mapped for the first time, presents prime conditions for uranium deposition, particularly along major fluid flow paths. With several anomalies indicating significant potential, the project is well-positioned for further development in line with the growing momentum in the uranium market.

DEVIL'S ELBOW GEOPHYSICAL TARGETS

The 2020 interpretation of the Cameco Australia geophysical survey data highlighted several untested **high priority drill targets** with geophysical signatures similar to other world class deposits in the **Alligator Rivers Uranium Field (including Jabiluka, Ranger, Koongarra, Nabarlek)**.

The Company's better understanding of the geophysical, structural and geological context of high-grade U, Au and Pd assays for the Devil's Elbow prospects has facilitated definition and ranking of **17 drill target zones based** on integration of all geophysical products generated (Figure 1 and Table 1). Airborne radiometric surveys are the most common technique used in uranium exploration and have successfully discovered many significant deposits in the Northern Territory and worldwide.

The Devil's Elbow prospects have strong similarities to the Jabiluka Uranium-Gold mine which was discovered in 1971 following-up a low order anomaly from a ground radiometric survey. Jabiluka is located 20km to the north of the Ranger uranium mine, about 75km to the west of Devil's Elbow. The uranium and gold mineralization occur in an altered member of the Cahill Formation, proximal to reverse faulting structures ([ASX announcement, 22 January 2020](#)).

The Company's commitment to sustainable mining practices aligns with the growing emphasis on Environmental, Social, and Governance (ESG) principles within the industry. The Company has demonstrated strong stakeholder engagement through its relationships with local communities and adherence to environmental regulations. This focus on ESG compliance enhances the Company's attractiveness to investors who prioritize responsible investment strategies.

In addition to its uranium projects, the Company's Greenlandic multi-commodity poly-metallic rare earth project represents a significant opportunity to diversify its asset portfolio. Rare earth elements are crucial for high-tech applications and renewable energy technologies, placing the Company in a strategic position to capitalise on the increasing demand for critical minerals. As the need for uranium and rare earths continues to grow, the Company's dual focus enhances its appeal to investors looking for a comprehensive approach to mining in the green energy landscape. The potential for joint ventures and partnerships with major players further solidifies the company's position in the market.

Authorised by the board of Eclipse Metals Limited.

Carl Popal
Executive Chairman

For further information, please contact:

Carl Popal
Executive Chairman
T: +61 8 9480 0420

Rodney Dale
Non-Executive Director
T: +61 8 9480 0420

About Eclipse Metals Ltd (ASX: EPM)

Eclipse Metals Ltd is an Australian exploration company focused on exploring southwestern Greenland, Australia's Northern Territory and state of Queensland for multi-commodity mineralisation. Eclipse has an impressive portfolio of assets prospective for cryolite, fluorite, siderite, quartz (high-purity silica), rare earths, gold, platinum group metals, manganese, palladium, vanadium and uranium mineralisation. The Company's mission is to increase shareholders' wealth through capital growth and ultimately dividends. Eclipse plans to achieve this goal by exploring for and developing viable mineral deposits to generate mining or joint venture incomes.

Listing Rule 5.23

The information in this report has previously been announced as referenced in this document (Announcement). The Company confirms that it is not aware of any new information or data that materially affects the information included in the Announcements.

References

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- Uranium Mineral Systems: GeoCat # 69124 Processes, exploration criteria and a new deposit framework GA Record 2009/20; especially Table A6: Unconformity-related U ± Au ± PGEs (ingredients, processes and mappable features)