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The Company Announcement Platform
ASX Limited
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WALK UP DRILL TARGETS DEFINED WITHIN DEVIL'S ELBOW PROJECT TENEMENT

Highlights

- **Geophysical and geological review highlights potential for the delineation of uranium mineralisation within the Devil's Elbow U-Au-Pd project.**
- **Seventeen (17) robust walk up drill targets have been defined within the Devil's Elbow Exploration Licence based on integration of all geophysical products generated from Cameco Australia Pty Ltd historical geophysical surveys.**
- **Several priority drill targets delineated have radiometric signatures similar to known uranium deposits within the Alligator Rivers Uranium Field.**
- **Radiometric anomalies coincide with historical uranium mineralisation within the Devil's Elbow, Terrace and Ferricrete prospects.**
- **Abundant magnetic lows coinciding with radiometric anomalies potentially outline alteration halos known to be associated with uranium mineralisation.**
- **The structural framework within EL27584 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.**

The Directors of Eclipse Metals Limited (**Eclipse Metals** or the **Company**) (ASX: EPM) are pleased to announce the Company has defined 17 walk-up drill targets in its 100% owned Devil's Elbow Project in West Arnhem Land from the recently acquired geophysical data from Cameco Australia. Interpretation of the recently acquired geophysical survey data highlights 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).**

Recently, Eclipse has focused on sourcing and filtering all available geophysical data over the tenement and surrounds in an effort to better understand the geophysical, structural and geological context of high-grade U, Au and Pd assays. The results are a substantial leap forward for the Devil's Elbow prospects and have enabled Eclipse to define and rank 17 drill target zones based on integration of all geophysical products generated. 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.

Eclipse Metals Ltd is an Australian exploration company focused on exploring the Northern Territory and Queensland for multi commodity mineralisation. The company has an impressive portfolio of assets prospective for gold, manganese, base metals and uranium mineralisation. The Company's mission is to increase Shareholder 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 income.

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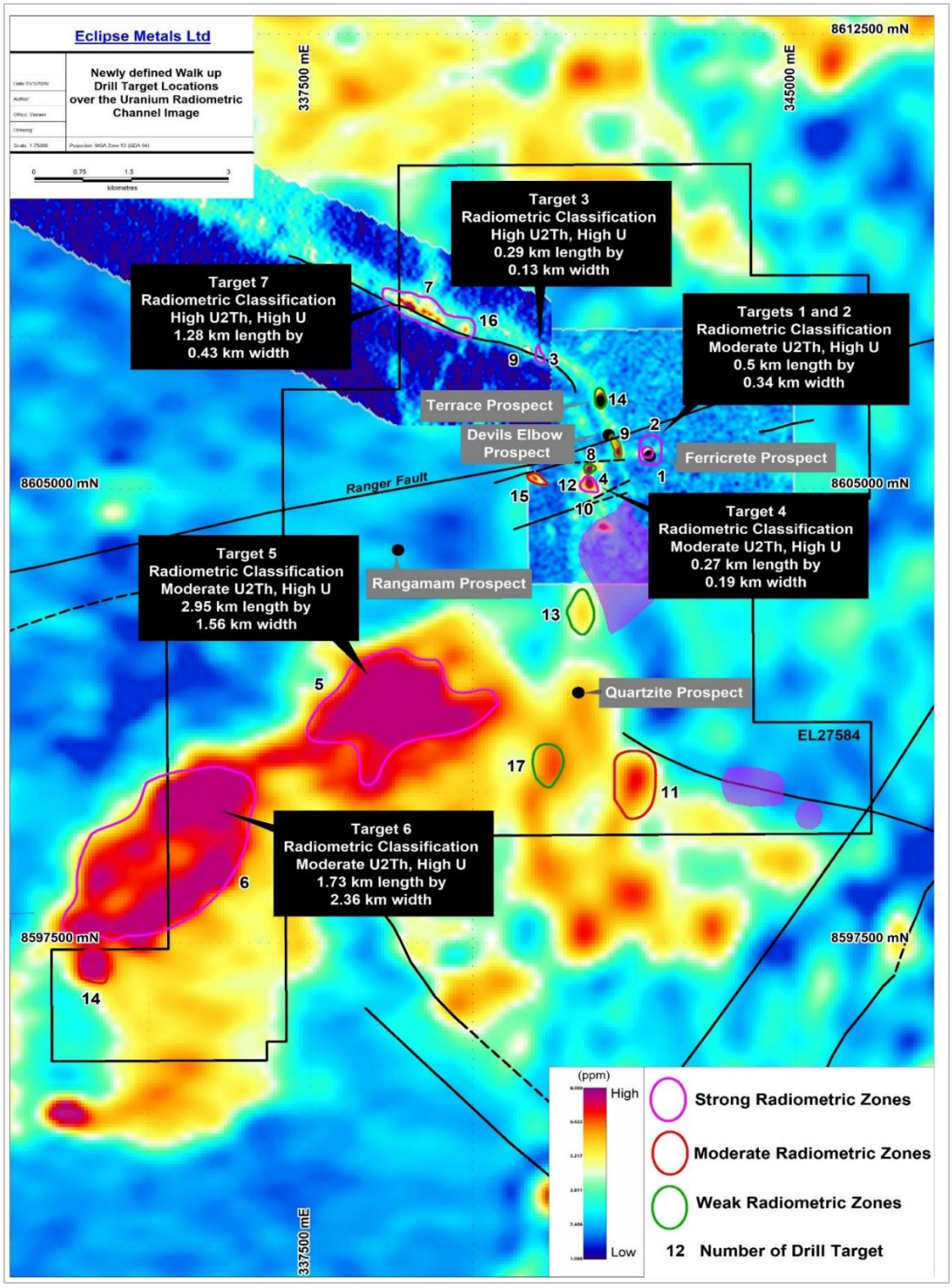

Figure 1: Newly defined walk-up drill target locations over the Uranium radiometric anomaly image.

Target No	Drill Target Rank	Radiometric Features	Magnetic Features	Magnetic Structure
1	1	Moderate U2Th, High U	Shallow Residual flat Low	Ranger Fault, Northern Splay
2	1	Moderate U2Th, High U	Shallow Residual flat Low	Ranger Fault, Northern Splay
3	1	High U2Th, High U	Shallow Residual Gradient	Strong unit boundary with cross structure
4	1	Moderate U2Th, High U	Shallow Residual Low and variable	Complex Structural Zone
5	1	Moderate U2Th, High U	Shallow Residual Low to variable	Complex Structural Zone
6	1	High U2Th, Moderate U	Shallow Residual High	Strong unit boundary with structural intersection zone
7	1	High U2Th, High U	Shallow Residual High	Strong unit boundary with cross structure
8	2	High U2Th, High U	Shallow Residual Low	Ranger Fault, Northern Splay
9	2	Moderate U2Th, High U	Shallow Residual Moderate	Strong Unit boundary within cross structure - Ranger fault northern splay
10	2	High U2Th, High U	Shallow Residual Low	On a structure
11	2	Moderate U2Th, High U	Shallow Residual High	On a structure
12	3	High U2Th, High U	Shallow Residual High	On a structure cutting the host unit
13	3	High U2Th, High U	Shallow Residual High	On a structure cutting the host unit
14	3	High U2Th, High U	Shallow Residual Gradient	Strong unit boundary within subtle cross structure
15	3	Moderate U2Th, High U	Shallow Residual High	Strong unit boundary within cross structure belt orientation change
16	3	High U2Th, High U	Shallow Residual Low	On a structure cutting the host unit
17	3	U2Th gradient, Moderate U	Shallow Residual Low to gradient	On a structure

Table 1: Drill Target Ranking based on all Geophysical Features

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.

In 2012 /13 the reserves at Jabiluka were quoted as 67,700t U_3O_8 ore; measured and indicated resources of 16,440t at 0.36% U_3O_8 and inferred resources of 57,500t of 0.48% U_3O_8, with a gold resource of 1.1Mt at 10.7g/t for 380,000oz. The Jabiluka deposits were discovered by drilling following-up trenching in an area of high-grade mineralized float. This is amongst the world's largest and highest grade uranium deposits.

In the Alligator Rivers Uranium Field, airborne radiometric surveys detected significant uranium mineralisation at Ranger 1, Koongarra and Nabarlek. The largest radiometric anomaly, at Ranger 1, was 15 times background intensity and extended over an area of 7 km by 1.5 km (Rowntree and Mosher 1975). Ranger 1 mineral resource was 18.04 Mt at 0.34% U with 60,961t contained U_3O_8. By contrast, the Koongarra U-Au anomaly was detected on one flight line and had an extent of only 100m. This small weak radiometric anomaly yielded the Koongarra 1 and 2 deposits. Koongara 1 has a mineral reserve of 1.82Mt at 0.79% U_3O_8 with 14,512t contained U_3O_8 and 100,000oz Au. The Koongarra 2 mineral resource is 0.66Mt at 0.30% U_3O_8 with 2,000t contained U_3O_8 (Bajwah & Lally, 2006).

Based on the geophysical review, seven first order (Priority 1) drill targets have been defined as shown in Figure 1 with the radiometric, magnetic and structural features outlined in Table 1. The newly available radiometric data were processed, filtered and imaged, providing key layers in the targeting model. Regions of elevated uranium and U^2/Th, U^2/K ratios were highlighted along with magnetic and structural data as part of the drill target identification process. Another 10 drill target areas have also been classified as Priority 2 and 3 based on elevated uranium and U^2/Th, U^2/K ratios.

Most radiometric target areas identified are small in size (diameter < 1km) over and proximal to the Devil's Elbow, Terrace and Ferricrete prospects. The main limitation of airborne radiometric surveys is depth penetration. The experience at Jabiluka showed that even a large deposit is rendered 'blind' by a thin cover of overburden (less than 3 m over Jabiluka 1). These surveys are still used as a very cost-effective means of rapidly assessing large areas for priority targets from surface anomalies (Bajwah & Lally, 2006).

From these results, weak radiometric anomalies are seen to coincide with uranium mineralisation over Devil's Elbow U-Au-Pd prospect which yielded high grade surface uranium assays of **3.2% U_3O_8**, **3.7% U_3O_8**, **4.40% U_3O_8 and 5.8% U_3O_8**, with **38.1 g/t Au** and **28.02 g/t Pd**.

The Terrace anomaly is located at the northern end of the Devil's Elbow area, characterised by a small weak radiometric anomaly. Significantly, approximately 20 boulders of ferruginous sandstone float were identified as anomalous in uranium, with one boulder being highly anomalous, containing **0.21% U_3O_8**. The boulders are located near a major southeast trending lineament.

A radiometric feature over the Ferricrete uranium prospect has also been classified as a weak anomaly. This is located to the southeast of the Devil's Elbow area, within a deeply incised valley coincident with an east-northeast trending fault splay off the Ranger Fault. Assays from ferricrete / ironstone samples returned up to **0.35% U_3O_8**. Trenching across the valley floor returned assay results of up **0.44% U_3O_8** with enriched gold associated with lateritic clays.

Two large and unexplained uranium anomalies located to the south-west of the Devil's Elbow prospect have been flagged for immediate follow-up (refer to Figure 1 - Targets 5 and 6). They remain high priority targets based on their size and radiometric signatures which are similar to known uranium deposits across the Alligator Rivers Uranium Field. These radiometric target zones remain unexplored by previous companies and will require ground verification to assess the radiometric source.

Based on the re-interpreted radiometric data, Eclipse has determined the uranium mineralisation is closely associated with radiometric signatures over EL27584. The potential to delineated further uranium mineralisation to the south-west is very encouraging as these are very strong radiometric features. Ground investigation over these radiometric anomalies will commence during the dry season.

Airborne magnetic data is almost always a key dataset for mapping structure and lithology under cover. Filtered products can be used to map faults, geological boundaries and basement highs. Uranium cannot be directly detected in magnetic data but the alteration halo surrounding the mineralization is often a magnetic low due to presence of hematite alteration.

Mineral alteration at Nabarlek Mine (past production of 0.57Mt at 1.95% U_3O_8 with 11,084t contained U_3O_8) has been the subject of several studies (Bajwah ZU. & Lally, 2006) and is well-defined. Alteration extends for at least 1 km perpendicular to the plane of the Nabarlek fault and two main alteration zones were identified. The outer halo was characterised by retrograde replacement of metamorphic biotite, feldspar and hornblende by iron chlorite and minor sericite. The inner alteration halo associated with the main orebody is characterised by illite, hematite and iron chlorite. Abundant hematite in the alteration halo suggests the presence of an oxidized fluid (which was thus suitable for transporting ore-forming quantities of uranium).

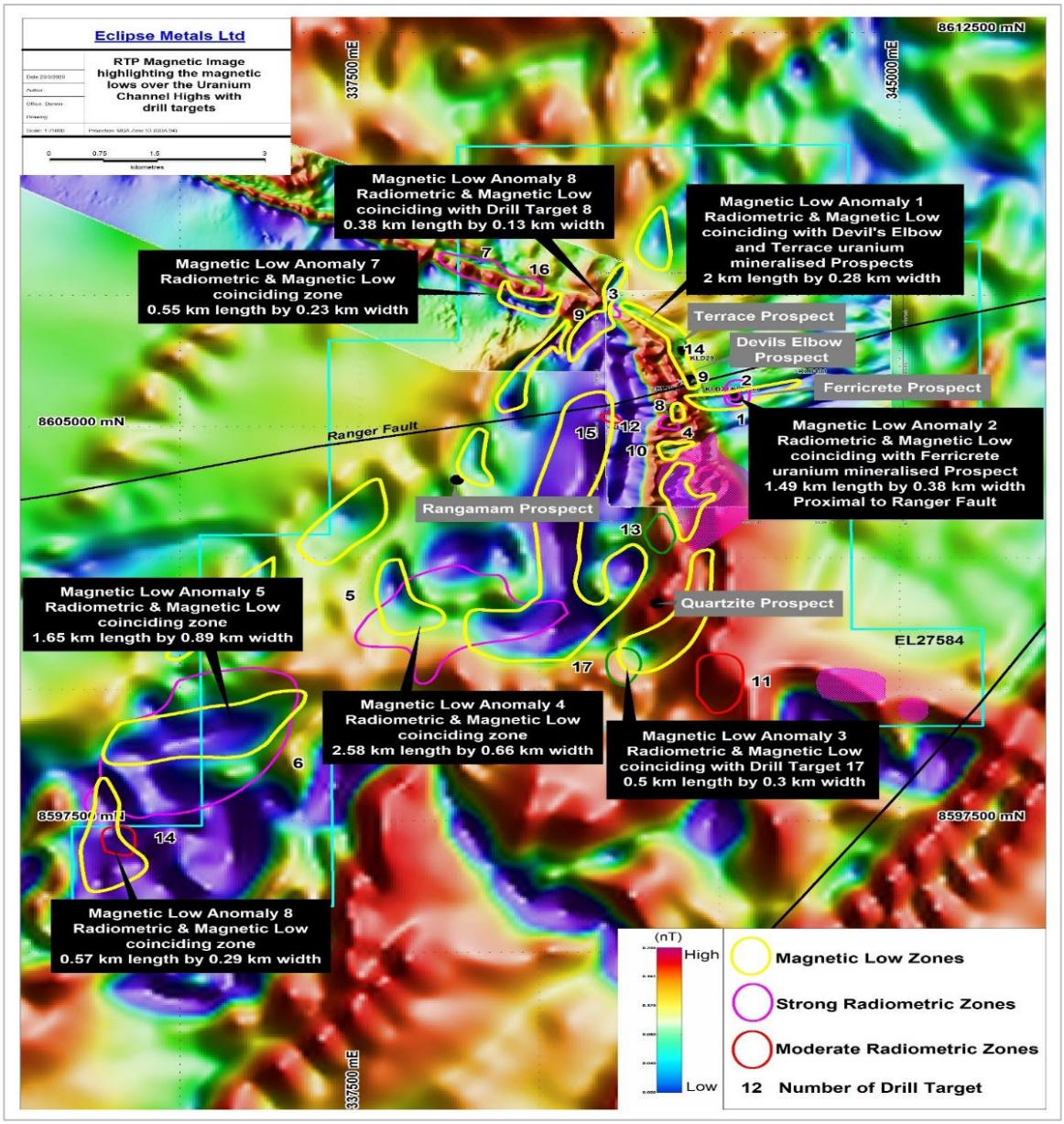

Figure 2: Newly defined Magnetic Lows coinciding with radiometric Anomalies.

As part of the review, major and minor structures across EL27584 have been identified through reprocessing and filtering of the magnetic data which has allowed this to be done for the first time. A Uranium deposit must be proximal to a major structure for fluid flow for any uranium deposition to occur.

Based on re-interpretation of the magnetic data, there are extensive magnetic lows which coincide with the radiometric anomalies at the Devil's Elbow, Terrace and Ferricrete prospects. This was previously unknown to Eclipse and further highlights the potential for outer alteration halos being associated with uranium mineralisation. Figure 2 highlights the extensive semi-coincident magnetic lows and radiometric anomalies within EL27584. Eight targets have been defined to date.

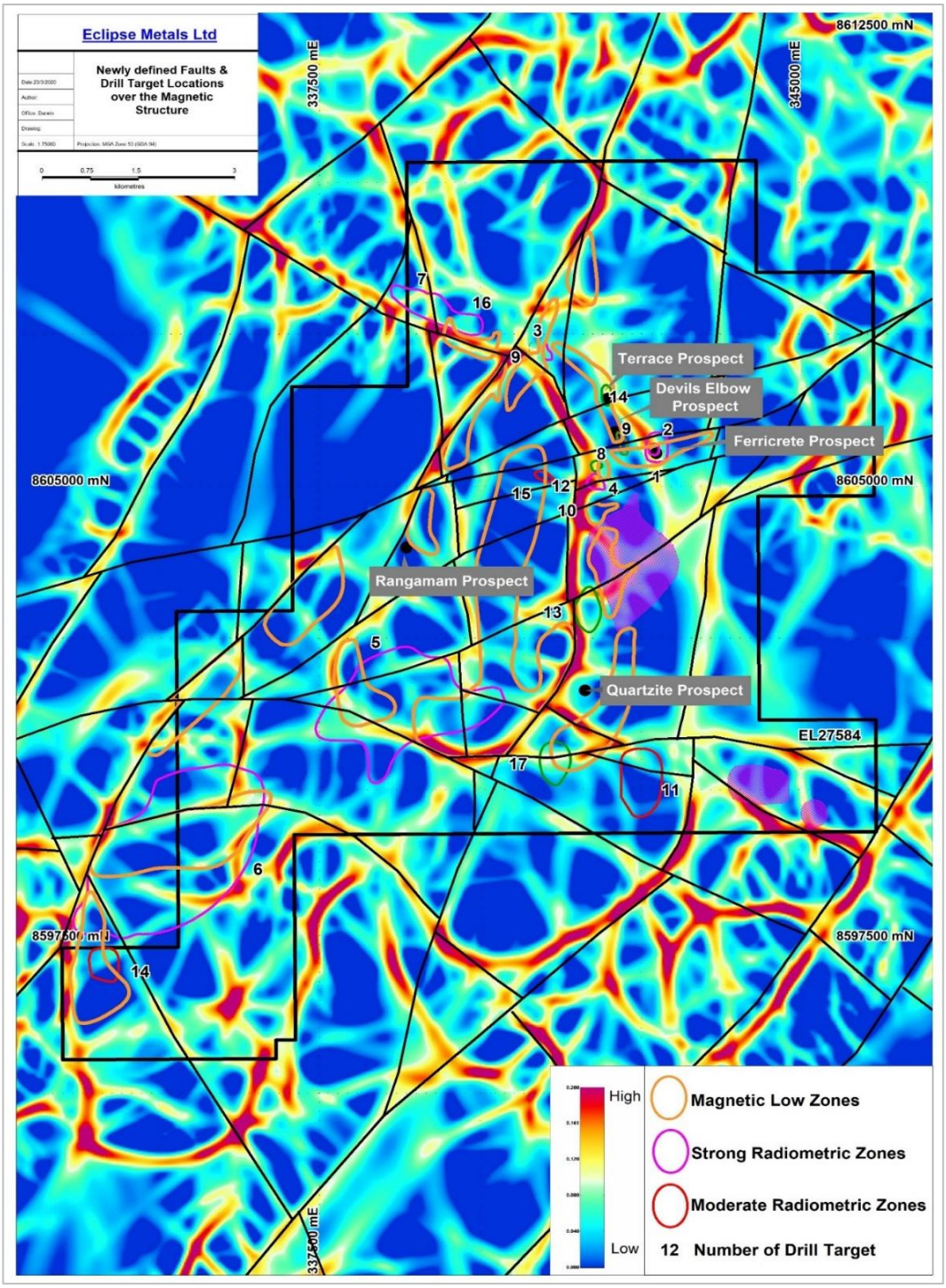

Figure 3: Magnetic derived structure image. Newly defined Faults/Magnetic Lows coinciding with radiometric Anomalies

Various aeromagnetic (+radiometric) surveys have been flown over EL27584, the most detailed being a 50m survey over the Devil's Elbow prospect (Cameco 2002 & Cameco 2005). The detailed (50m) and regional (400m) aeromagnetic data were filtered and structure detection applied. The trace of the Ranger faults as well as sub parallel splays was imaged and various cross faulting sets were identified.

The disposition of ore at Nabarlek is controlled by a prominent reverse fault, which is part of a larger zone of reverse faulting. A striking feature of the deposit is the extent and intensity of hydrothermal alteration which extends more than 1 km from the ore (Lally and Bajwah, 2006). A similar reverse fault is evident from historical geological mapping and drilling at Devil's Elbow.

Structural mapping over Devil's Elbow showed that the mineralisation is concentrated in small NNW-SSE and NE-SW trending structures. The magnetic data has also outlined extensive faulting c highs and magnetic low zones which further supports potential for uranium mineralisation as some faults may act as pathways for uranium-bearing fluids.

Eclipse Metals Ltd Executive Chairman Mr Carl Popal commented: *"Despite the restrictions of the pandemic, the team at Eclipse is progressing efforts to explore Devil's Elbow based on encouraging results showing strong geophysical signatures similar to other world class deposits. Gold, uranium and palladium are commodities in high demand in the volatile global market economy and Eclipse is poised to move forward in developing exploration programs. Significant market-place firming in the price of uranium, gold and palladium provides further encouragement for exploration of the Devil's Elbow and other company's tenements in the Alligator Rivers Uranium Field.*

Insights from the geophysical interpretation has progressed the Company's ability to commence planning detailed ground exploration programs on the Devil's Elbow prospects with considerably reducing exploration cost and shorter lead time. The supporting radiometric, magnetic and structural data has facilitated a greater understanding of the potential controls on uranium deposition and allows precise targeting for these areas. As we progress with the planning of exploration activities over Devil's Elbow, we are further encouraged with the information we have obtained through this geophysical program".

For and on behalf of the board

Carl Popal
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Competent Persons Statement
The information in this report that relates to Exploration Results together with any related assessments and interpretations is based on information compiled by Mr. Petro Kastellorizos (geological consultant) for Mr. Rodney Dale, a Non-Executive director of Eclipse Metals Limited. Mr. Dale is a Fellow of the Australasian Institute of Mining and Metallurgy (the AusIMM) and Mr Kastellorizos is a Member of the AusIMM; both of whom have sufficient experience relevant to the styles of mineralisation under consideration and to the activity being reported 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. Dale and Mr. Kastellorizos have verified the data disclosed in this release and consent to the inclusion in this release of the matters based on the information in the form and context in which it appears.

Geophysics commentary in this announcement that relates to geophysical methods and data is based on information reviewed by Dr Amanda Buckingham who is a consultant geophysicist and a Director and co-founder of Fathom Geophysics Australia Pty Ltd [and Fathom Geophysics LLC]. Dr Buckingham was contracted by Eclipse Metals Ltd and gives consent to the inclusion of the information and data in the form and context in which it appears.

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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)