



Empire Metals Limited / AIM: EEE / Sector: Natural Resources

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Empire Metals Limited ('Empire' or the 'Company')

Technical update for the Eclipse Gold Project

Empire Metals Limited, the AIM-quoted resource exploration and development company, is pleased to announce the outcome of a recent technical review of the geology of the Eclipse Gold Project ('Eclipse' or the 'Project') located within the Eastern Goldfields of Western Australia.

Overview:

- The Company recently announced the appointment of additional key geoscientists to bolster its exploration team and to bring local technical expertise together to review the results of the drilling programmes recently completed at Eclipse.
- A strategic technical review has commenced focusing on the structural controls on known gold mineralisation and an appropriate exploration programme to unlock the full potential of the Project most efficiently.
- Drilling to date has confirmed that gold mineralisation is associated with a NW-striking and steeply SW-dipping shear zone ("**Eclipse shear**") with significant gold mineralisation known to extend over a strike length of more than 200 metres.
- It is now evident that the mineralised system at Eclipse is much larger than originally thought. Mineralisation at Eclipse Shaft may connect to the Jack's Dream area further to the NW, giving a total known strike length of the Eclipse system of some 500m, and the presence of multiple parallel mineralised structures has also been proven.
- Results from the drilling also indicate that gold mineralisation likely continues to greater depths, and this merits further drilling to test the strike and depth extensions of multiple gold structures at Eclipse.

Shaun Bunn, Managing Director, said: *"In considering how best to approach the next phase of exploration at the Eclipse Gold Project it has become apparent that we need to determine what controls the gold mineralisation and in doing so where the high-grade mineralisation might persist. Whilst our initial focus was on a near-surface, laterite-hosted deposit we now believe the high-grade targets will most likely be found slightly deeper at the fresh rock interface, both down dip and along strike of the current workings. We are also focusing on the wider potential that is offered by combinations of the Eclipse lode with the Jack's Dream extension and the recently discovered Twin Shaft lode to see if a larger mineralised inventory can be established prior to commencing further mine optimisation studies."*



Location and Regional Geology

The Eclipse Gold Project is comprised of a single mining licence (M27/153). The licence is located approximately 55km NNE of Kalgoorlie. The nearest gold processing plant is at Kanowna Belle, 35km to the south. The licence is accessed by the Yarri Road. This road is sealed to the turn off to Kanowna Belle. While it has not been gazetted, it is a well-used road generally in good condition.

Eclipse is situated within the Kurnalpi Terrane, close to the boundary of the prolific Kalgoorlie terrane (high Au and Ni endowment) defined by the major regional Ockerburry Fault system (Figure 1). The surrounding district is dominated by 2.70 Ga mafic volcanic rocks, calc-alkaline complexes, feldspathic sedimentary rocks, and mafic rocks. The western margin of the Kurnalpi terrane comprises slightly younger 2.68 Ga rhyolite-basalt and felsic calc-alkaline complexes and associated volcanoclastic sediments.

The interpreted position of the Ockerburry Fault is within 5-10km of Eclipse but its exact position is poorly defined and may be closer to the western boundary of the Project (Figure 2). Widespread historic gold workings are present in the Gindalbie area, but few larger deposits have yet been discovered which may largely be due to the limited past exploration or geological research previously undertaken in the area. The emerging Whiteheads/Blue Poles discovery of Great Boulder Resources (ASX:GBR) is 15km to the north and the 200,000oz Au Lindsays Project is just 5km to the west. In addition to gold, important Ni, Co, Cu \pm PGE magmatic deposits are present in the area which attests to the deep-seated structural framework. Black Swan (Silver Swan) is situated 12km to the WSW and the Carr Boyd layered mafic-hosted deposit is located 33km along strike to the NNW (Figure 2).

Quaternary-aged cover and a deep regolith profile obscures the basement geology throughout much of the licence. Low magnetic response of the local geology has impacted the effectiveness of aeromagnetic and ground magnetic surveys in defining the basement architecture except for a prominent mafic dyke, one of several NNW-orientated dykes within the Kurnalpi Terrane.

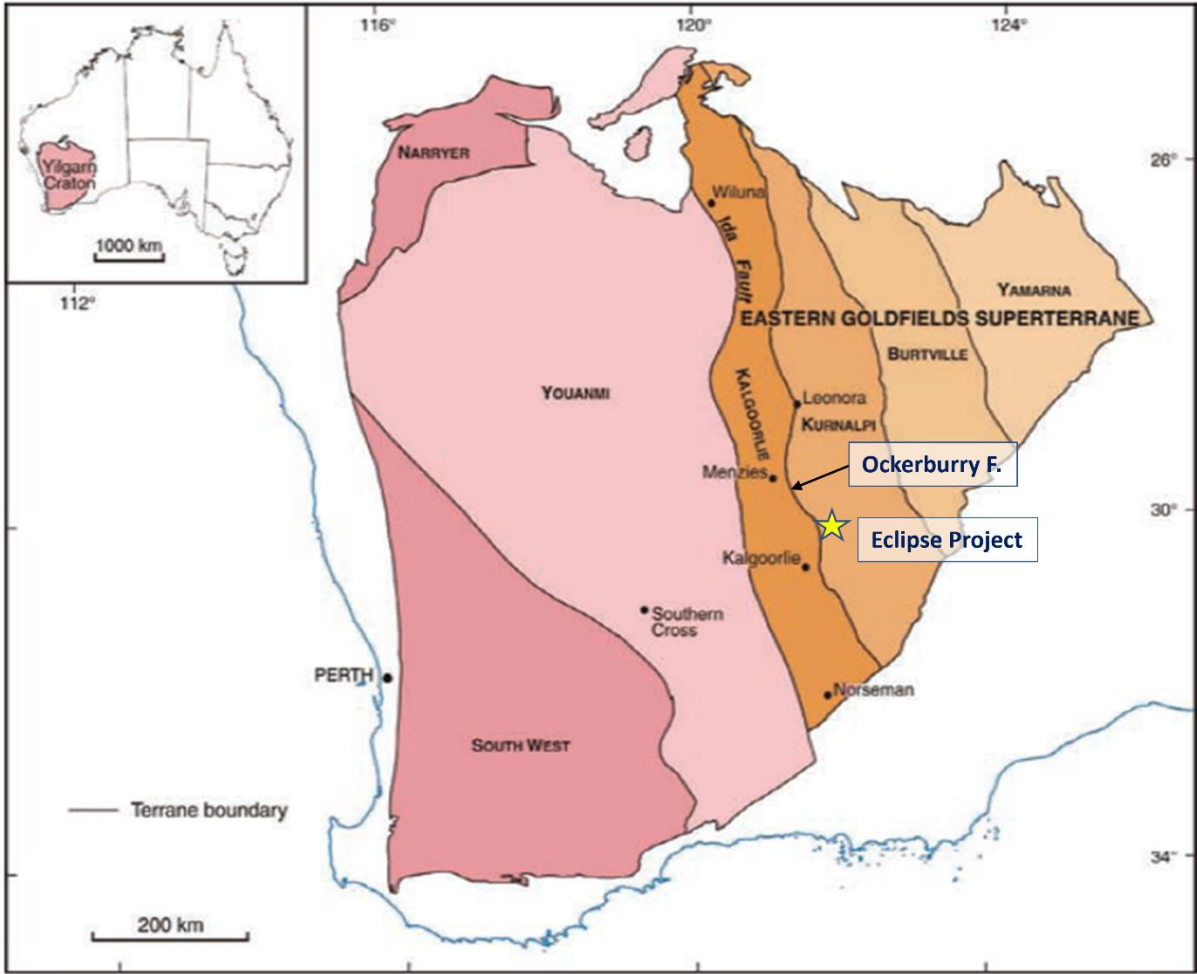


Figure 1. Tectonic Division of the Yilgarn Craton, showing Sub-Division into Key Terranes

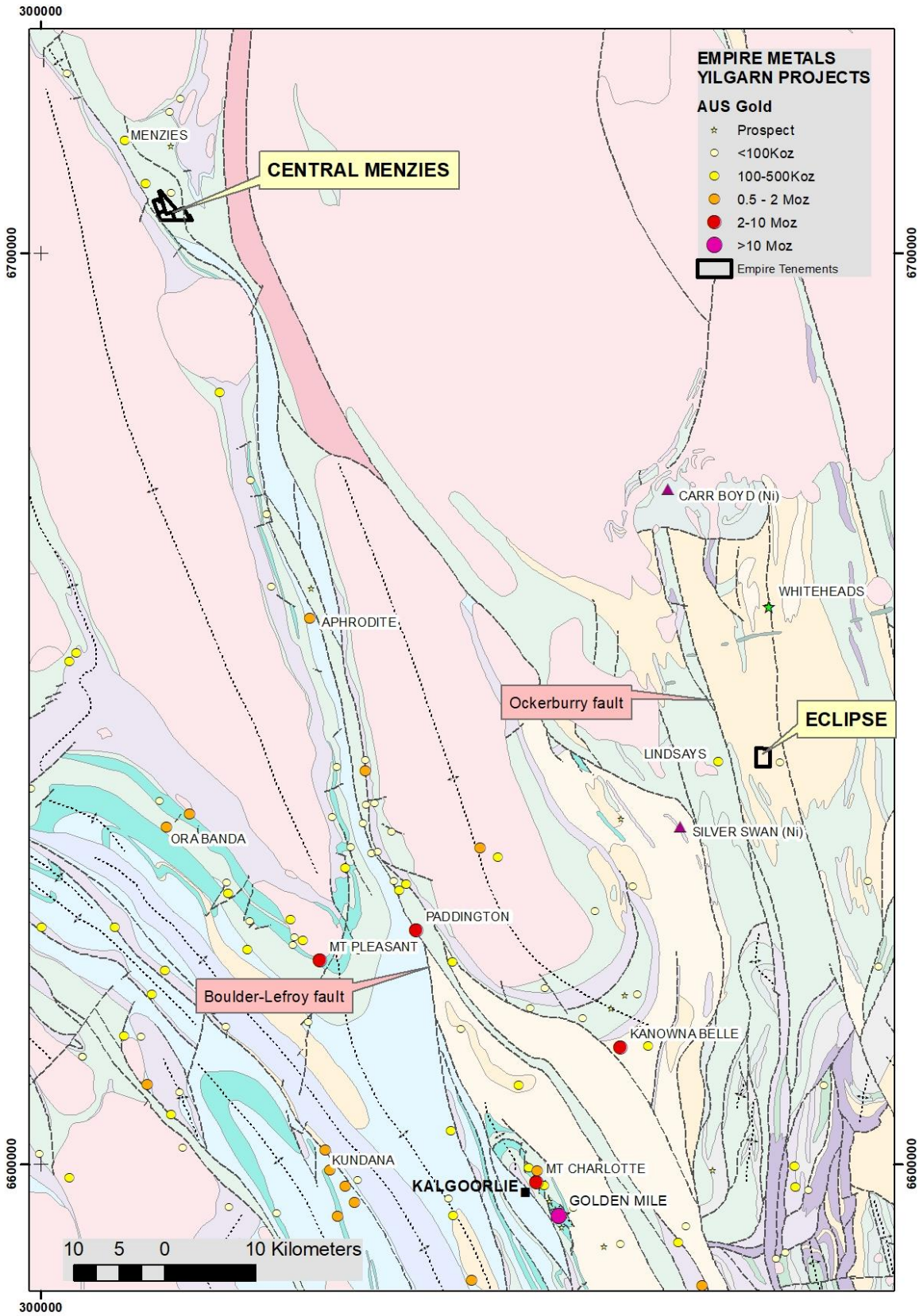


Figure 2. Regional geology with respect to the Eclipse Gold Project



Local Geology

Drilling by the Company at Eclipse has confirmed that gold mineralisation is associated with a NW-striking and steeply SW-dipping shear zone (“Eclipse Shear”) with significant gold mineralisation known to extend over a strike length of more than 200 metres. Mineralisation may connect to the Jack’s Dream area further to the NW giving a total known strike length of the Eclipse system of some 500 metres. High grade mineralisation has also been intersected at Twin Shaft about 120m south of the Eclipse shear. It is not yet clear if the known mineralisation in the Eclipse area is part of a linked shear system, or separate sub-parallel shear zones.

Diamond drillhole ECDD21_003 intersected the Eclipse Shear in fresh rock which confirmed the presence and orientation of the structure. High-grade gold up to 15g/t was associated with thin foliation-parallel quartz veins and a possible laminated quartz structure, and strong silica-sericite-pyrite-arsenopyrite in the immediate wallrock. This was the first instance of arsenopyrite recognised at Eclipse and it may prove to be useful future indicator of gold mineralisation. Surrounding the high-grade core of the Eclipse Shear, the shear comprised chlorite-carbonate-pyrite alteration, and was weakly gold mineralised being typically <1g/t. Within the fresh rock, short strike length (<50 metres) high-grade shoots are present and appear to extend below the currently drilled area.

Strong weathering extends to 30-50 metres depth below surface and the shallow RC drilling demonstrates that gold is extensively leached within the weathered zone. Locally high gold grades (and some surface old workings) within the weathered zone may reflect gold encapsulated within quartz veining, although it appears that the bulk of the gold associated with altered wallrock has been removed or remobilised.

The stratigraphy hosting Eclipse is poorly exposed within the project but is known from 1:100,000 scale government geological mapping and from logging of RC and diamond drilling at Eclipse. The geology is dominated by felsic to intermediate volcanics and volcanoclastic sediments intercalated with fine grained siltstone and mudstone. Geology within the project appears to strike NNW and is cut obliquely by the NW-trending Eclipse Shear zone. Stratigraphy may exert some control on the localisation of high-grade gold within the Eclipse Shear.

Future Exploration Focus

Further exploration is required to understand the full extent of the gold mineralised system at Eclipse. This includes:

- Detailed analysis of available structural data from televiewer surveys and diamond drillcore;
- Detailed surface geochemistry on NE-SW oriented lines to define gold-arsenic anomalies on the projected position of the Eclipse Shear and on any as yet unrecognised parallel structures;
- Additional drilling to target extensions of the Eclipse Shear in fresh rock below the gold-depleted weathered zone;
- Deeper drilling to test the plunge continuity of high-grade gold shoots.



Market Abuse Regulation (MAR) Disclosure

Certain information contained in this announcement would have been deemed inside information for the purposes of Article 7 of Regulation (EU) No 596/2014, as incorporated into UK law by the European Union (Withdrawal) Act 2018, until the release of this announcement.

****ENDS****

For further information please visit www.empiremetals.co.uk or contact:

Shaun Bunn	Empire Metals Ltd	Company	Tel: 020 7907 9327
Mike Struthers	Empire Metals Ltd	Company	Tel: 020 7907 9327
Ewan Leggat	S. P. Angel Corporate Finance LLP	Nomad & Broker	Tel: 020 3470 0470
Adam Cowl	S. P. Angel Corporate Finance LLP	Nomad & Broker	Tel: 020 3470 0470
Damon Heath	Shard Capital Partners LLP	Joint Broker	Tel: 020 7186 9950
Susie Geliher	St Brides Partners Ltd	PR	Tel: 020 7236 1177
Selina Lovell	St Brides Partners Ltd	PR	Tel: 020 7236 1177

About Empire Metals Limited

Empire Metals is an AIM-listed (LON: EEE) exploration and resource development company with a project portfolio comprising gold interests in Australia and Austria.

The Company strategy is to develop a pipeline of projects at different stages in the development curve. Its current focus is on the high-grade Eclipse Gold Project and the Central Menzies Gold Project in Western Australia, with the goal to expand through the addition of further projects in the region to develop a viable and compelling portfolio of precious metals assets.

Empire also holds a portfolio of three precious metals projects located in a historically high-grade gold production region comprising the Rotgulden, Schonberg and Walchen prospects in central-southern Austria.

The Board continues to evaluate opportunities through which to realise the value of its wider portfolio and reviews further assets which meet the Company's investment criteria.