



## ASX RELEASE

25 June 2020

### SOUTH WEST TERRANE INITIATIVE EMERGING PRECIOUS & BASE METAL MINERAL PROVINCE

Energex Limited (ASX:ENX) announces that it has initiated a major exploration play in the South West Terrane, Western Australia, having made applications for exploration licences for two project areas covering an aggregate of 1,944km<sup>2</sup>. It also has secured a first right of refusal with respect to a further potential project area; the nearby Miling area, covering an additional 408km<sup>2</sup>. (Refer Figure 1).

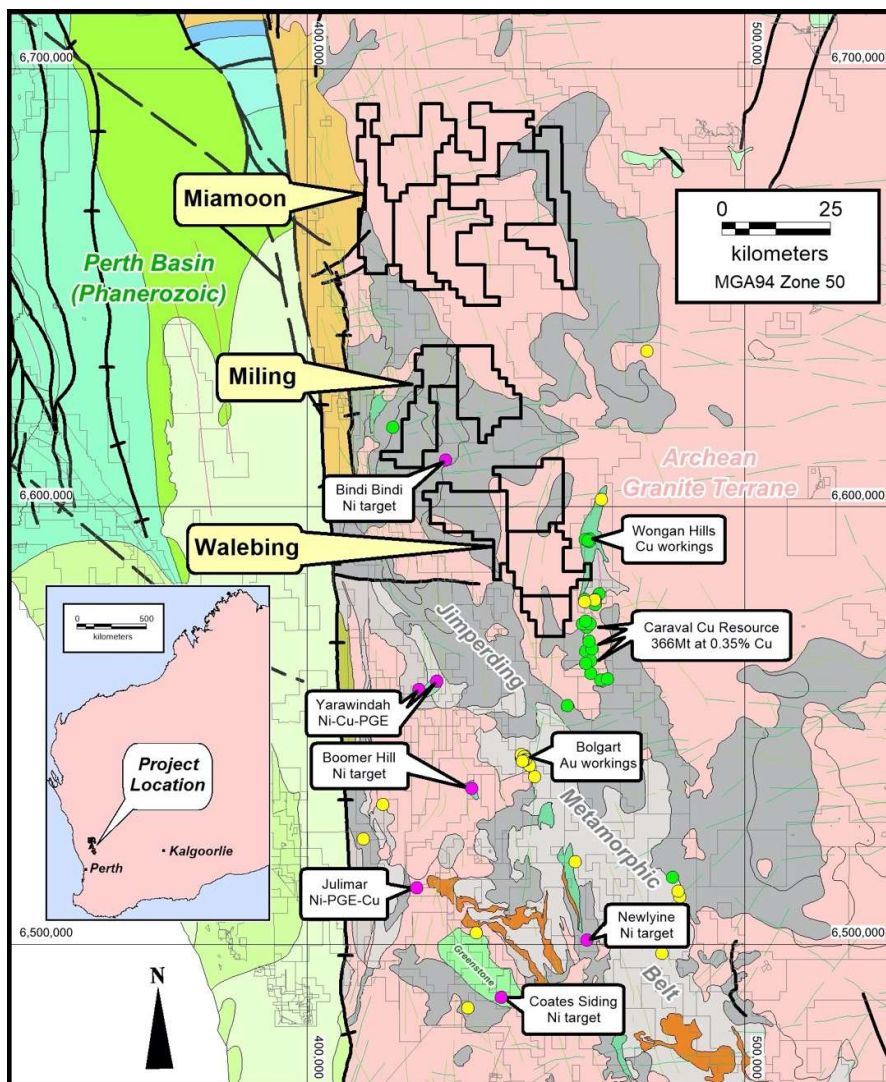


Figure 1 Energex South West Terrane Project Areas

The initiative is an outcome of EnegeX's focus on securing opportunities to carry out exploration for mineral commodities that are expected to become of vital importance to advances in energy generation, transmission and storage. In recent months, EnegeX has investigated and identified exploration opportunities in the South West Terrane, an area which is emerging as a mineral province of significant importance. The Company considers that its three project areas, comprised of twelve exploration licence applications, offer the potential for the discovery of deposits of nickel (Ni), copper (Cu), platinum group elements (PGE), gold (Au), lithium (Li) and rare earth elements (REE).

The geology of the South West Terrane is a complex mix of Archean high-grade metamorphic gneisses and highly radioactive granites with widespread enclaves of greenstone and dismembered layered mafic and ultramafic intrusions. Proterozoic tectonic events, mainly evident from mafic dyke swarms, have also impacted the terrane. In general, the Archean bedrock geology is not well known as it is blanketed by laterite soil profiles and transported sands. EnegeX's project areas are located within the same terrane as the Chalice Gold's recent Julimar Ni-PGE-Cu discovery and the Caravel Minerals' Caravel Cu deposit.

The Julimar and Caravel deposit discoveries, together with an improved geological and geophysical understanding of the South West Terrane, appear to be changing perceptions regarding the prospectivity of the South West Terrane:

- The Julimar Ni-PGE-Cu deposit discovery, made by Challis Gold Mines, is associated with magnetic layered gabbroic complex. Similar gabbroic bodies with similar magnetic features in the terrane, such as Yarawindah Brook and Coates Siding, are also attracting increased exploration attention, as are various ultramafic bodies.
- The discovery by Caravel Minerals of the Caravel Cu deposits (366 million tonnes at 0.35% Cu<sup>1</sup>), hosted by granite, has attracted increased exploration attention for ancient porphyry Cu-Au deposits in the terrane.
- The giant Boddington gold deposit, generally considered to be a porphyry Au-(Cu-Mo-Bi-W) deposit, is associated with late-stage diorite intrusion.
- The Greenbushes lithium mine, hosted by granitic pegmatite, has been a long-lived mining operation for lithium, tantalum and tin and is recognized as the world's largest commercial lithium resource.
- The South West Terrane has long been recognized as one of the world's premier bauxite mining provinces.
- EnegeX believes that the combination of the presence of wide-spread highly radioactive granitoids and a deeply weathered laterite profile covering large areas of the South West Terrane is also an attractive environment for the discovery of ion adsorption REE deposits.
- In summary, the South West Terrane contains large mines and mineral resources in a favourable geographical location with excellent infrastructure, proximal to Perth (including a proposed REE processing plant). However, it remains little explored, especially for magmatic Ni-Cu-PGE, porphyry Cu-Au-Mo and Au deposits.

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<sup>1</sup> Combined Indicated and Inferred Mineral Resources, Source: Caravel Minerals announcement 3 February 2019  
<https://caravelminerals.com.au/wp-content/uploads/2019/02/2019-02-13-Major-Increase-in-Caravel-Copper-Resource.pdf>

The areas contained within EnegeX's new project areas contain interpreted Archaean gneisses and granites and numerous pronounced and subtle magnetic anomalies interpreted to be a combination of greenstone enclaves and mafic and ultramafic intrusions. The Miamoon project area is dominated by a regolith of transported sand and residual laterite overlying a number of unexplained magnetic anomalies which attract comparisons to the Julimar magnetic anomaly. The Walebing and Miling project areas are also dominated by a regolith of transported sand and residual laterite, but contain outcropping ultramafic and mafic rocks.

Although the South West Terrane contains a prestigious suite of mineral resources and mines, it has, historically, been subject to limited exploration. The tenement package acquired by EnegeX has received only a very nominal exploration attention from previous explorers (Refer Figure 2).

Following grant of exploration licences EnegeX intends to conduct exploration activities on a multicommodity approach with a focus on magmatic Ni-Cu-PGE deposits, porphyry Cu-Au deposits and Au deposits. It will also be vigilant regarding the potential for pegmatite Li-Ta-Sn deposits and ion adsorption REE deposits.

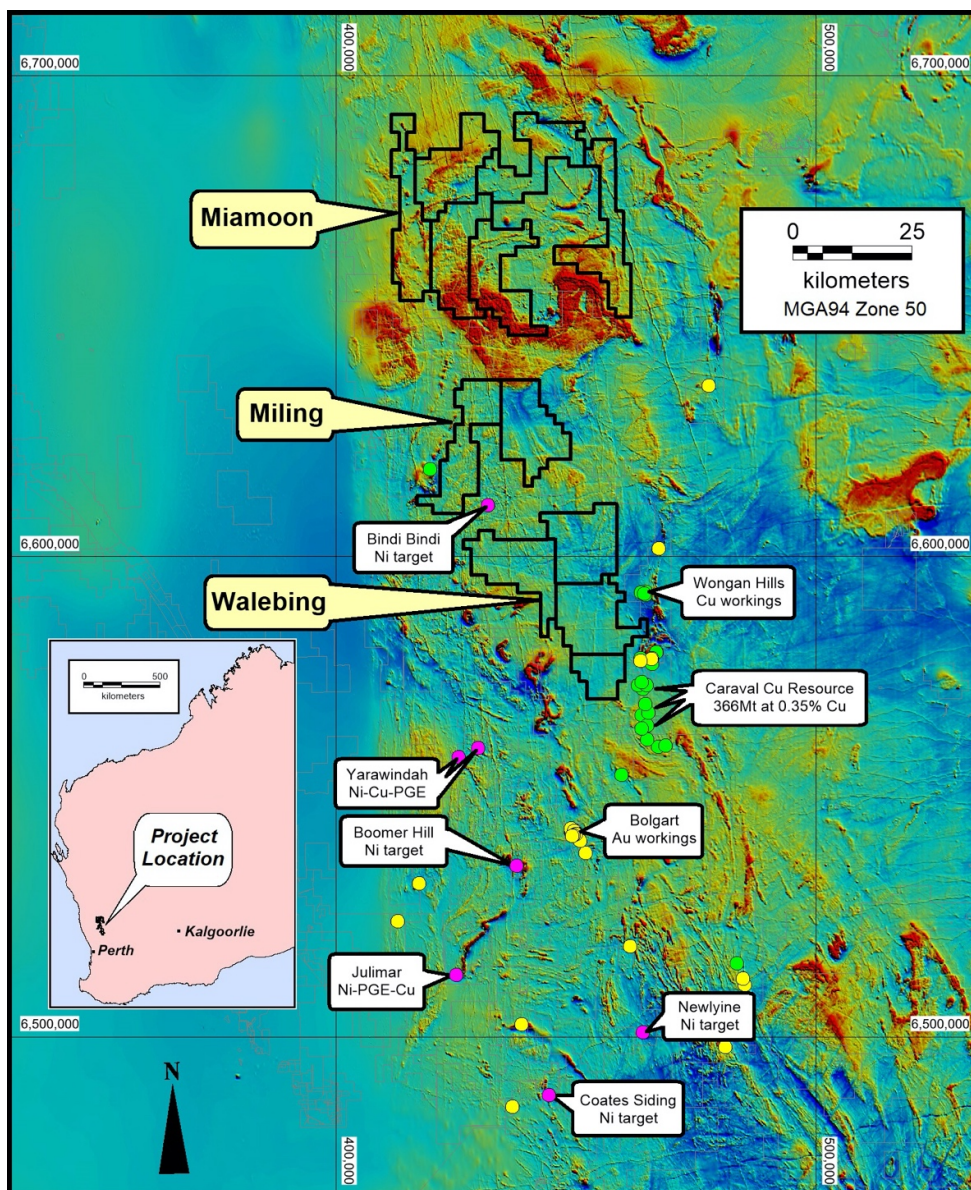


Figure 2 EnegeX project areas over regional airborne magnetics data