

## QUARTERLY ACTIVITY REPORT

30 September 2020

### PROJECTS

#### South West Terrane Initiative

During the quarter, Enegex expanded its South West Terrane exploration initiative, applying for a further seven exploration licences as well as one additional licence applied for following the end of the quarter. Enegex's South West Terrane project areas now cover an aggregate of 3,902km<sup>2</sup> (refer Figure 1).

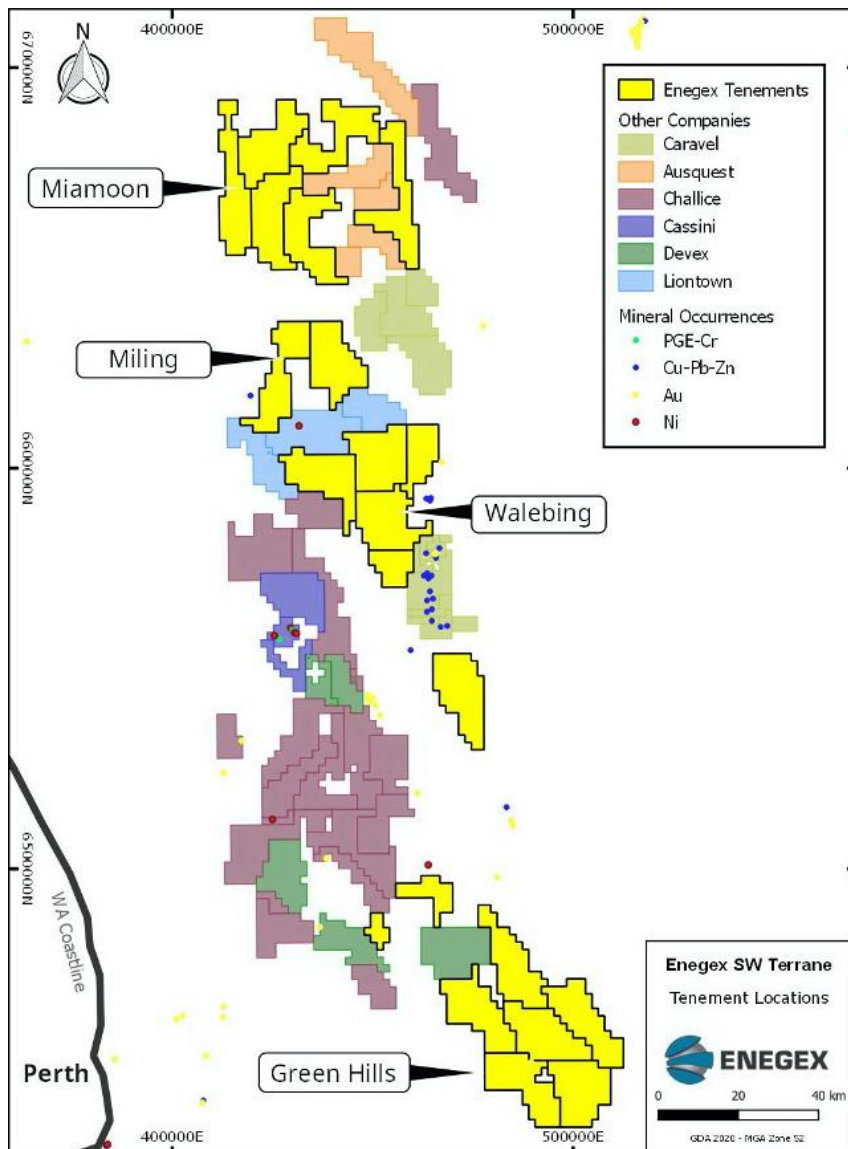


Figure 1 Enegex South West Terrane Project Areas

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Located proximal to Perth, the South West Terrane is an emerging mineral province of importance following the recent discovery of palladium and nickel mineralisation by Chalice Gold Mines Limited at its Julimar Project and Caravel Minerals' Caravel copper deposit.

Based on regional geophysical and geological data (refer Figure 2 and 3), EnegeX's exploration licence applications are interpreted to contain mafic and ultramafic igneous intrusions considered to be similar to the Julimar intrusion hosting the high-grade Ni-Cu-PGE mineralization discovered by Chalice to the south.

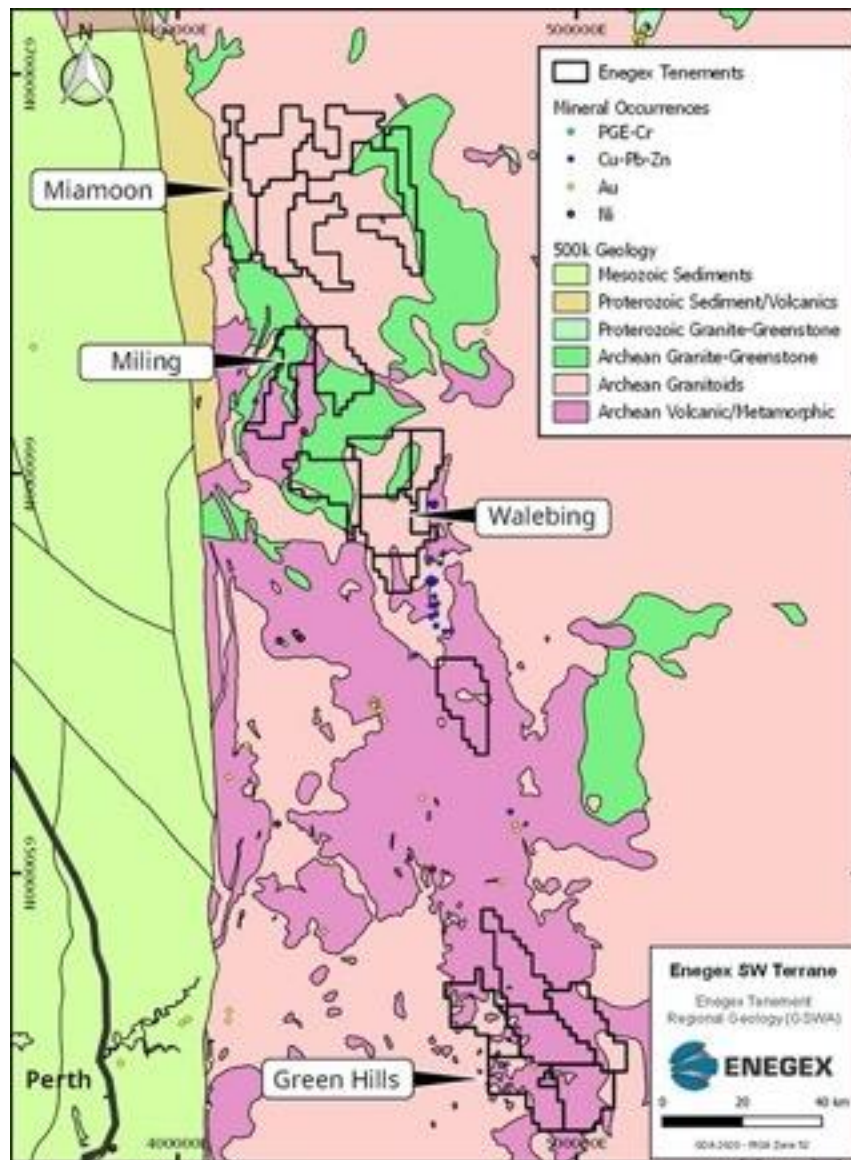


Figure 2 EnegeX South West Terrane Project Area (shown in yellow) with neighbouring tenement holders

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.

The Julimar and Caravel deposit discoveries, together with an improved geological and geophysical understanding of the South West Terrane, are 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 in the terrane.
- 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.

EnegeX's 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, while dominated by a regolith of transported sand and residual laterite, contain outcropping ultramafic and mafic rocks. Historically, the Greenhills project area has received very little exploration for any mineral commodity. Previous exploration has been focussed on bauxite and kaolin, and to a lesser extent, copper and gold. Previous geological mapping identified the presence of small ultramafic intrusions and mafic rocks (amphibolite, mafic gneiss, mafic granulite, hornblendite) of uncertain geological affinities. Regional laterite sampling programmes by the Geological Survey of Western Australia and Amira during the 1990s revealed the presence of anomalous Ni, Cu, Cr, Zn and Au which identifies the project area as

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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>

being of exploration interest. It is, for example, the closest regional laterite Au-Cu anomaly to the Boddington laterite Au-Cu anomaly.

Following grant of its exploration licences, EnegeX intends to conduct multicommodity exploration 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.

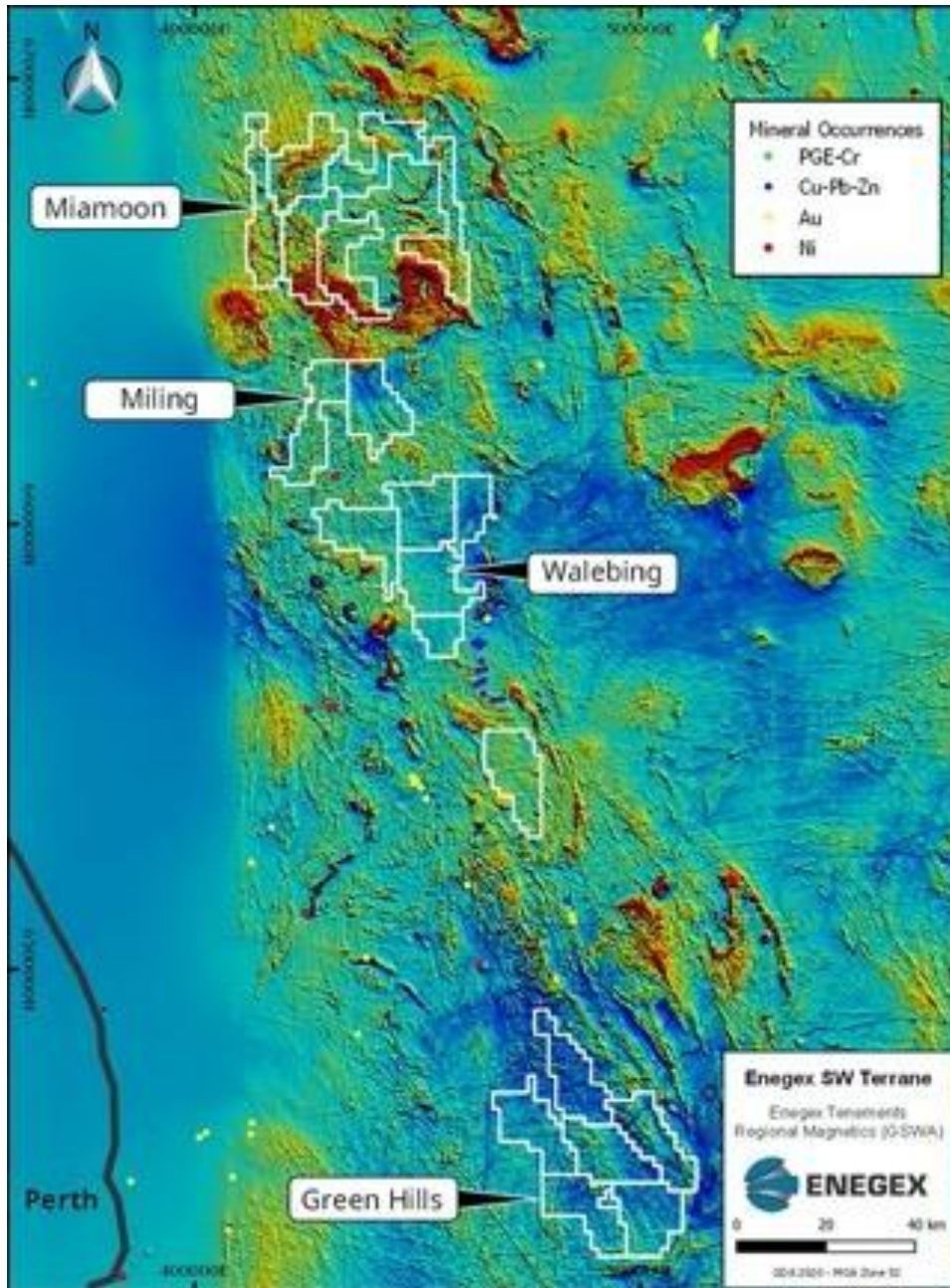


Figure 3 EnegeX project areas over regional airborne magnetic data

## Kimberley Basin Exploration Licences

Energex has applications for two exploration licenses in the eastern margin of the Kimberley Basin of Western Australia (Figure 4), an area it has identified as offering prospectivity for Vanadium, Cobalt-Nickel, PGE and Fluorite mineralisation.

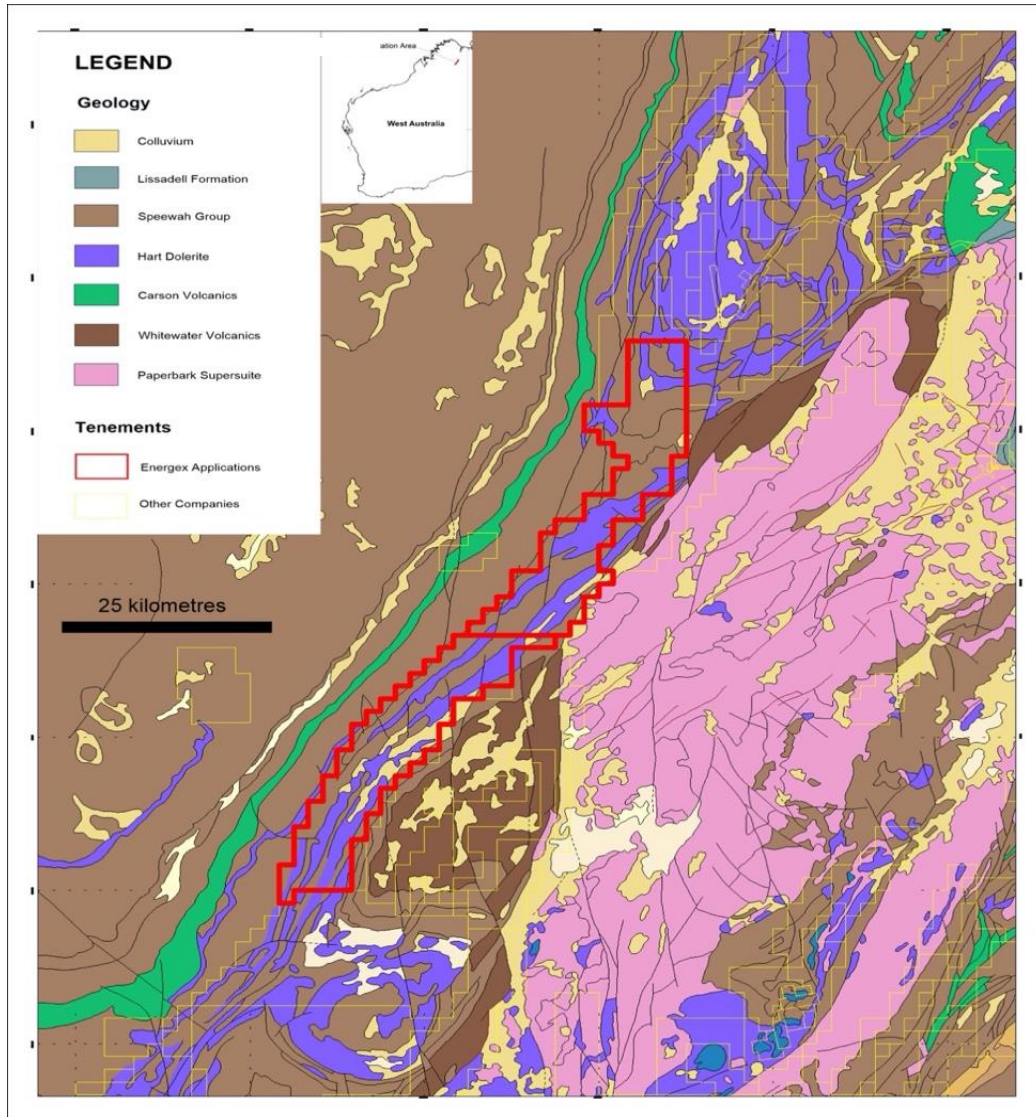


Figure 4 Energex Application Areas shown on regional geology

The geology of the tenements has been mapped as “Hart Dolerite”, a regionally extensive Proterozoic sill complex which has historically not been considered prospective. The tenement areas have been the subject of only limited exploration, focused on gold and diamonds (Figure 5).

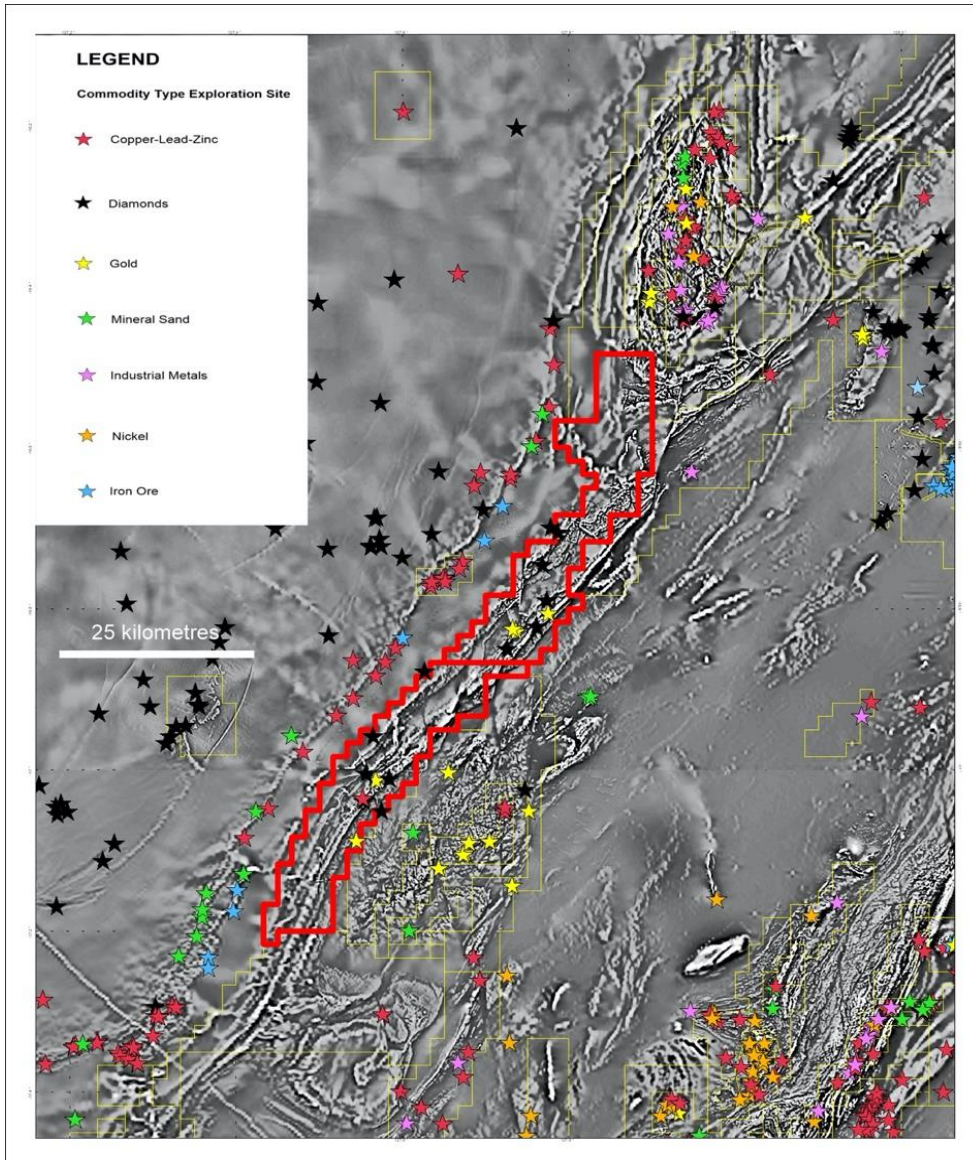


Figure 5: Historical Exploration in and around Enegex Application Areas shown on regional magnetics (reduced to pole first vertical derivative)

Enegex has identified recent advances in geological understanding that alter the prospectivity of the Hart Dolerite:

- Mapping and exploration of the Speewah Dome, immediately to the north of the Enegex tenement areas, has identified that the Hart Dolerite comprises a layered intrusive suite of rocks (Intrusive Suite), and that the prospective part of the Intrusive Suite is the Disseminated Magnetite Gabbro which hosts the Speewah Dome Vanadium Deposit (adjacent to the Enegex application area). Disseminated gold and copper also identified in the sulphides of the Intrusive Suite indicate potential for reef-type PGE mineralization in the upper, differentiated, magnetite-rich parts of the layered intrusion.
- Regolith sampling by Geological Survey WA (GSWA) has identified high cobalt and coincident high nickel anomalies in Hart Dolerite, indicating prospective fertile host rocks for these minerals within the Suite.

- A later epithermal event has been identified in the Hart Dolerite in the Speewah area with carbonate and epithermal fluorite overprinting the dolerite. Fluoride is currently being investigated as a potential replacement for lithium in batteries.

The limited historical exploration in the Enege application areas has not determined which units of the Intrusive Suite are exposed. Thus, following grant of exploration licenses, Enege intends to conduct exploration activities to determine the presence or otherwise of prospective units within the tenement area.

Both tenements are proceeding through the grant process.

#### **Other Mineral Resources Opportunities**

Enege is open to other natural resource opportunities and continues to evaluate opportunities to generate shareholder value including in the areas of:

- The exploration for a range of strategic energy, transmission and storage minerals
- Energy storage technologies
- Alternative and renewable energy sources
- Natural gas for domestic consumption
- The exploration for precious metals

### **CORPORATE**

During the quarter Enege raised \$440,000 (before costs) via an oversubscribed placement of 20,000,000 ordinary fully paid shares at \$0.022 (2.2 cents) per share with attached 1 for 2 unlisted options to be granted (subject to shareholder approval) on the basis of one option for every two shares subscribed, exercisable at \$0.03 (3 cents) on or before 31 August 2022.

Enege also conducted a pro-rata shareholder entitlement offer on the same terms as the placement. Eligible shareholders were invited to subscribe for their pro-rata entitlement shares on the basis of 1 new share for every 3 shares held and the grant of 1 new option for no additional consideration on the basis of 1 new option for every 2 shares subscribed for under the entitlement offer. The offer raised \$553,852 with 24,647,043 new shares issued and 12,323,617 options granted. Following the end of the quarter the rights issue shortfall of 8,852,869 shares was placed at \$0.04 (4 cents) per share to raise a further \$354,115. No new options were offered or granted as part of the shortfall placement.

#### **By Order of the Board**



**R J Wright**  
Company Secretary  
Melbourne, Australia  
30 October 2020

## Additional Information Required by Listing Rules 5.3.3 and 5.4.3

### Mining Tenements held/applied for at the end of the quarter and their location

Tenement	Egex interest	Km2	Tenement status
<b>Western Australia (Kimberley Region)</b>			
E 80/5354	100%	373.79	Application
E 80/5355	100%	350.22	Application
<b>Western Australia (South-West Terrane)</b>			
E 70/5439	100%	203.55	Application
E 70/5440	100%	206.21	Application
E 70/5441	100%	203.55	Application
E 70/5442	100%	82.40	Application
E 70/5446	100%	207.76	Application
E 70/5459	100%	207.64	Application
E 70/5457	100%	207.55	Application
E 70/5458	100%	208.00	Application
E 70/5460	100%	207.71	Application
E 70/5463	100%	207.97	Application
E 70/5444	100%*	204.00	Application
E 70/5445	100%*	203.93	Application
E 70/5566	100%	203.78	Application
E 70/5567	100%	204.06	Application
E 70/5568	100%	203.47	Application
E 70/5569	100%	203.83	Application
E 70/5570	100%	203.45	Application
E 70/5571	100%	203.72	Application
E 70/5580	100%	214.18	Application
E 70/5631	100%	115.06	Application

\* via First Right of Refusal

### Tenements acquired during the quarter and their location

Tenement	Egex interest	Tenement status
<b>Western Australia (South-West Terrane)</b>		
E 70/5566	100%	Application
E 70/5567	100%	Application
E 70/5568	100%	Application
E 70/5569	100%	Application
E 70/5570	100%	Application
E 70/5571	100%	Application
E 70/5580	100%	Application
E 70/5631	100%	Application

### Tenements disposed of during the quarter and their location

Nil.

### Beneficial percentage interests held in farm-in or farm-out agreements at the end of the Quarter:

Nil

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## **Additional Information Required by Listing Rule 5.3.5**

### **Payments to related parties during the quarter included in Appendix 5B – Quarterly Cash Flow Report**

Payments were made to directors and their associates during the quarter totalling approximately \$18,000. Payments were for contracted services.