

8 September 2022

## Ni-Cu-PGE Exploration Potential at Hart Project

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### Highlights

- **First-pass field reconnaissance exploration validates potential for Ni-Cu-PGE and V-Ti mineralisation in Enege's East Kimberley tenements.**
  - **Field campaign focus was several high-priority targets identified from recent desktop geological prospectivity review.**
  - **A magnetic gabbro sill analogous to hosts rocks of the Speewah Dome V-Ti-Fe resource was delineated.**
  - **A felsic rock unit prospective for low-sulfide style PGE-Cu-Ni mineralisation was defined as multiple horizons with an extensive lateral footprint.**
  - **A total of 214 rock samples were collected and a subset of approximately 140 samples have been submitted for multi-element analysis.**
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Enege Limited (ASX: ENX) is pleased to announce that a mapping, sampling and reconnaissance exploration campaign has been completed over its East Kimberley Hart Project located along the eastern margin of the Kimberley Basin, Western Australia. The Hart Project area is considered highly prospective for magmatic Nickel-Copper-Platinum Group Element (Ni-Cu-PGE) and Vanadium-Titanium (V-Ti) deposits with the area hosting a large unexplored, layered mafic intrusive complex.

### Enege Director Rae Clark commented:

*"We are pleased to have completed our first field campaign at our Hart project in the Kimberley and are excited by the identification of a strongly magnetic dolerite sill that is analogous to the prospective horizon at the Speewah Dome deposit directly to the north of our project.*

*We eagerly await the results from this campaign so that we can plan and execute follow-up exploration programs to quickly advance the project. The new data generated from this year's activities will be used to refine and develop our exploration models to prioritise targets for testing in the next field season."*

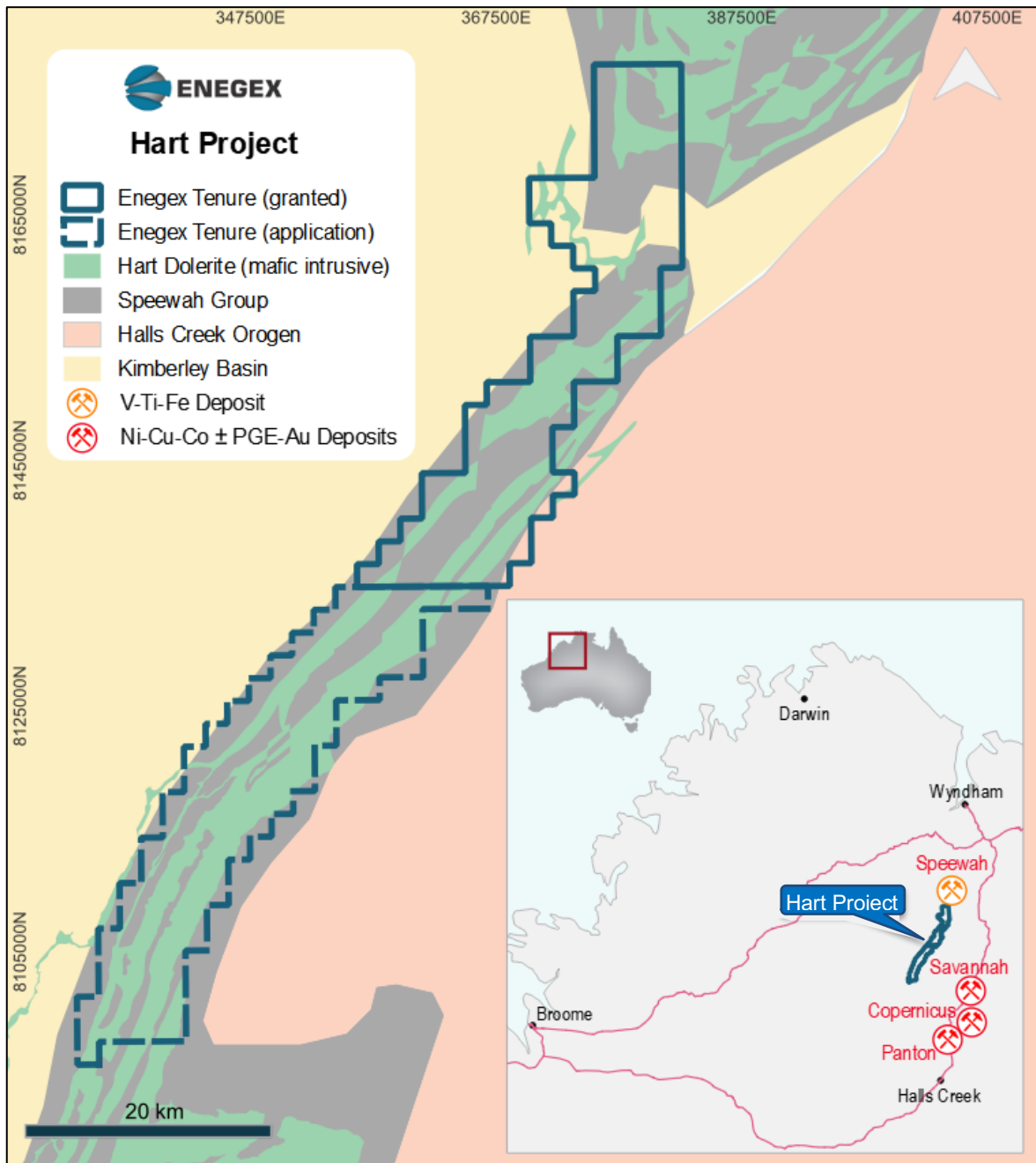


**Figure 1.** Geological mapping and sampling at the Hart Project.

## Hart Project Overview

The Hart Project consists of 2 contiguous tenements (**Figure 2**) that cover an area of 724km<sup>2</sup>. The northern tenement (E80/5354) was granted in November 2020 and the southern tenement (E80/5355) is under application.

The project is located 12km to the south west of the King River Resources, Speewah Project, 322 million tonne V-Ti-Fe resource<sup>11</sup>. The resource is hosted by a gabbro horizon containing disseminated magnetite within the Hart Dolerite layered intrusive suite of rocks. This same suite of rocks occurs throughout the EnegeX tenements.



**Figure 2.** EnegeX Hart Dolerite Project location.

<sup>11</sup>Measured Resource of 322 million tonnes at 0.32% V<sub>2</sub>O<sub>5</sub>, 3.4% TiO<sub>2</sub> and 14.9% Fe. King River Resources Limited. Vanadium Resource Amendment. 1 April 2019.

Historical work in the Enege Hart Project area focused on gold and diamond exploration and the project area is unexplored for magmatic Ni-Cu-PGE and V-Ti styles of mineralisation. Previous sampling was restricted to early-stage stream sediment, soil and rock chip sampling and no drilling has been completed in the tenement area.

### Desktop Prospectivity Analysis

A desktop prospectivity review of the Hart project area was completed by Dr. Karin Orth, with results from the review forming the foundation for the 2022 field reconnaissance and sampling exploration campaign across the area (**Figure 3**). Dr Orth's resulting new geological interpretation of the area integrated historical geochemical and geophysical data with Enege's newly acquired Worldview-3 high resolution imagery providing a framework and strategy to assess the tenements prospectivity. The Worldview-3 imagery has provided constraints from shortwave infra-red (SWIR) bands to identify areas with clay, propylitic, silica and iron related alteration to assist target generation. Six exploration target areas generated from Dr Orth's review were the focus of the field program.

### Exploration Field Program

The field program incorporated a 3½ week remote field campaign completed between July and August 2022 using 4WD vehicles and helicopter support for the northern target areas. Exploration activities completed included conceptual target ground validation, rock chip sampling, traverse mapping, magnetic susceptibility data collection and pXRF data on collected rocks across the main target areas (**Figure 4**).

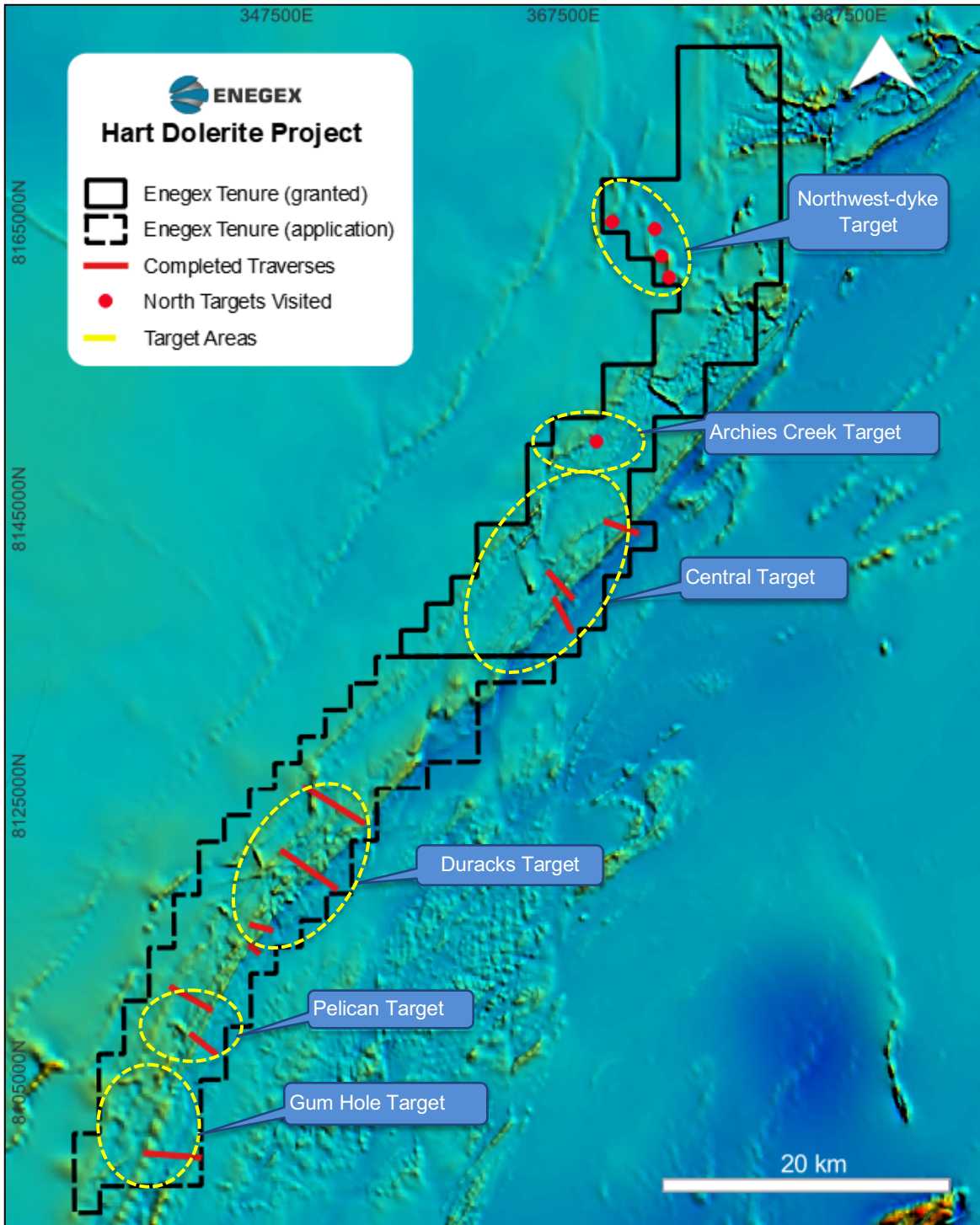
A total of 214 samples were collected with a subset of approximately 140 samples selected and submitted for multi-element analysis at Genalysis Intertek, Perth. All samples were analysed by pXRF in the field to screen samples for laboratory analysis and for preliminary geochemical classification. Several samples have been selected for petrographic analysis.

The multi-element laboratory geochemistry will enable an assessment of prospectivity of the disseminated magnetite gabbro horizon and enable the characterisation of mineralised pathfinder signatures to further explore the region. Field results and geochemistry will be integrated to vector towards the higher-grade parts of any mineralised systems.



**Figure 3.** Dr Karin Orth mapping and sampling intrusion sequences at the Central target.



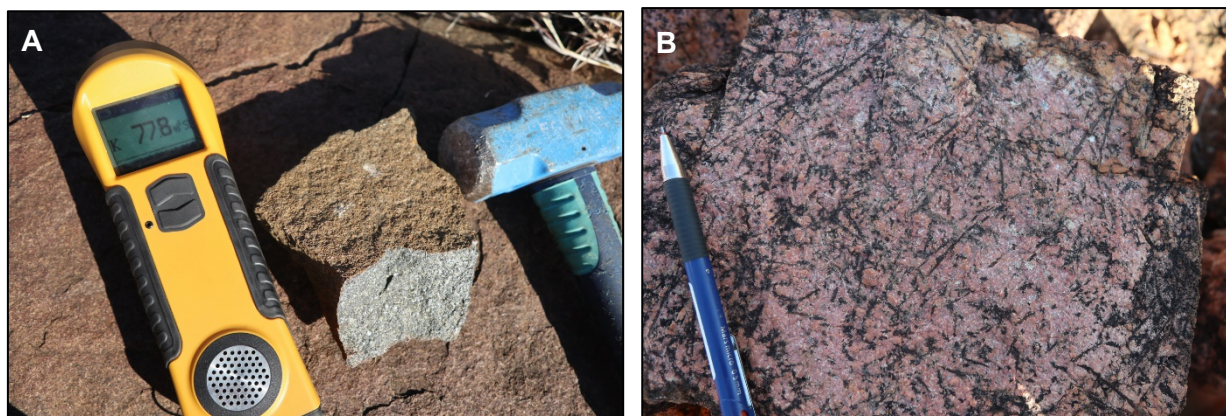


**Figure 4.** Completed field traverses and sites visited over total magnetic image.

## Traverse Targets

A series of 9 systematic traverse lines up to 5km long were completed (**Figure 4**) over 4 target areas across the Hart Dolerite intrusive complex. Each traverse line was designed to intercept prospective target horizons defined in Dr Orth's prospectivity study. Target horizons included disseminated magnetite gabbro sill, felsic differentiated horizons and various mafic sill horizons.

Systematic traverse mapping results highlight a strongly magnetic gabbroic sill with high magnetic susceptibility (up to  $92 \times 10^{-3}$  SI) (**Figure 5**). This magnetic gabbroic sill is considered to be the same prospective horizon that hosts the Speewah V-Ti-Fe resource.



**Figure 5.** A) Disseminated magnetite gabbro sample with a magnetic susceptibility metre reading ( $10^{-3}$  SI units) and B) felsic differentiated sample from the Duracks target area.

## Northern Targets

Two targets were investigated via helicopter in the northern tenement. The Northwest Dyke target area is a dolerite dyke with a distinct magnetic and elevated potassium radiometric response that is coincident with a Worldview-3 exploration target (**Figure 6**). The Archies Creek target area is covered by a detailed airborne electromagnetic survey that contains several geophysical anomalies associated with dolerite contacts and structures, as well as a Worldview-3 exploration target to the east.



**Figure 6.** Contact zone between dolerite (foreground) and altered sandstone (background) at the Northwest-dyke target area.

Further work to assess these target areas in more detail is planned for the next field campaign. Due to limited helicopter availability, time spent investigating the Archies Creek target was restricted and an additional target in the far north of the northern tenement was not able to be visited.

### **Next Steps**

Results from the 2022 initial reconnaissance and sampling program will guide assessment of the prospectivity of the intrusion sequence across the Hart project area and future activities.

Laboratory assay results from rock samples are anticipated within 5-6 weeks and include analysis of a suite of 53 elements. Petrographic analysis is anticipated to be completed within a similar timeframe. Once received, data will be used to assess the prospectivity and to refine and update the exploration model and to prioritise target areas for further work at the commencement of the next dry season.

### **West Yilgarn Project Update**

Access negotiations have been continuing with landholders at the Miamoon, Miling and Walebing projects and have just commenced at the Goomalling and Green Hills projects. Negotiations are currently being focused on the landowners at EnegeX's high priority Spitfire drill target that has an Exploration Incentive (EIS) grant available to co-fund any drilling. Reconnaissance field visits are also continuing and areas where prospective ultramafic rock units were identified will be mapped in more detail.

### **For more information**

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