

NT GEOPHYSICAL SURVEYS PROGRESSING

DeSoto Resources Limited (ASX:DES or 'Company') advises that two geophysical contractors are completing surveys at the Spectrum and Fenton Projects, located in the Northern Territory.

Key Points

- Ground geophysical surveys to follow-up the Vesper and Fenton South AEM anomalies ahead of 2024 drilling programs are progressing well.
- Zonge Engineering has completed three loops of the ground FLEM (Fixed Loop Electro-Magnetic) survey at Fenton South and are now working at the Spectrum project area (Figures 1-2).
- Gravity geophysical contractor Atlas Geophysics mobilised to site on 11th July to commence a high resolution 125m by 250m spaced ground gravity survey over Fenton South, and Spectrum projects Vesper and Quantum (Figure 2).
- The Fenton South area has now been completed and both teams are now working at the Spectrum project area. The gravity survey is expected to be completed within 7-10 days and the FLEM approximately 3 weeks with the IP survey to follow.
- Preliminary gravity and FLEM data expected to be available in the coming weeks ahead of final drill planning.



Figure 1 –Fenton South Zonge FLEM survey station being read.

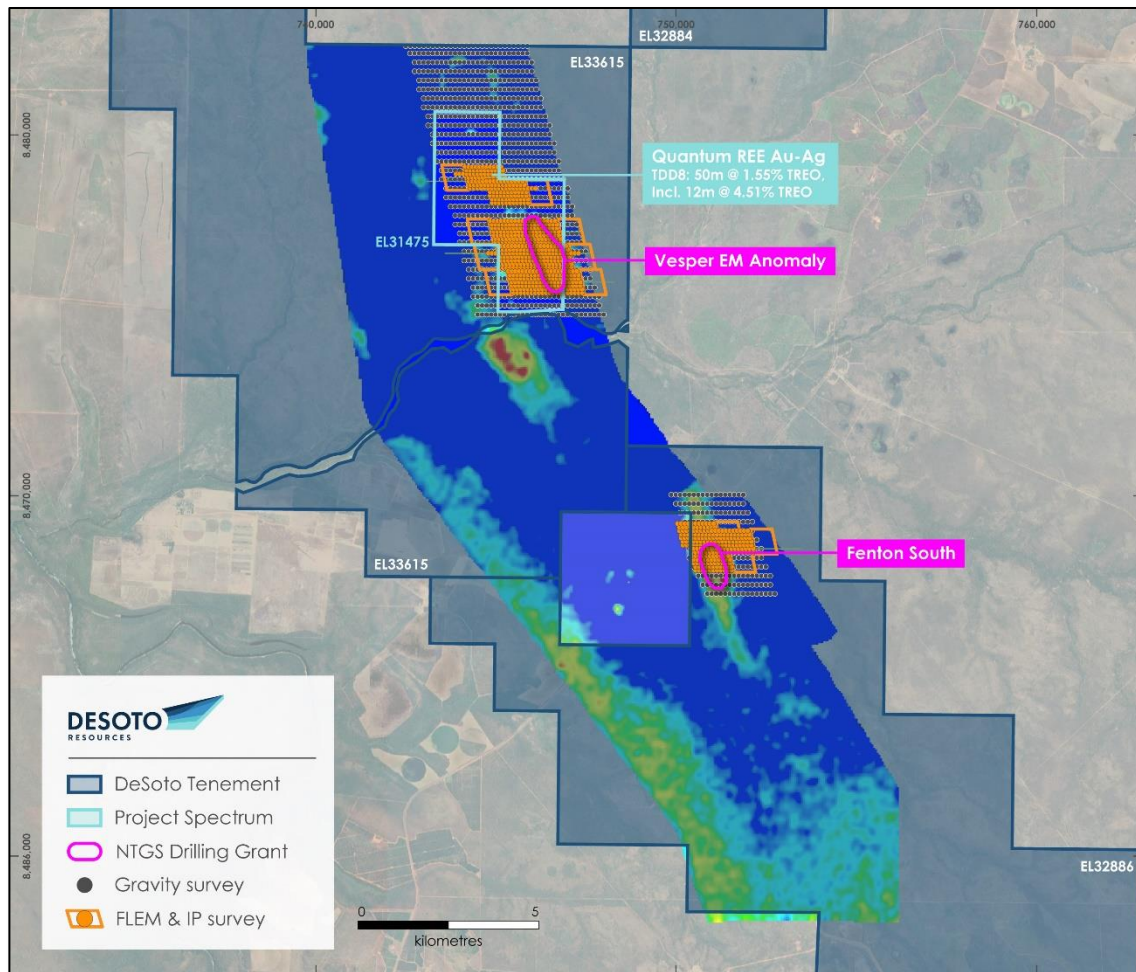


Figure 2 – Fenton and Spectrum Project locations.

Discussion and context

Geophysics, and its interpretation, plays a critical role in mineral discoveries for projects under cover such as Fenton and Spectrum. DeSoto has employed gravity and aeromagnetic gradients (“worms”) to guide the Company’s under-cover interpretation, integrated with the mapping of key faults and structures (Figure. 3).

Longer faults typically have deeper roots and can be more mineralised or provide pathways for mineralising fluids to focus along. Hence, a proxy for deep faults is the inferred strike length. DeSoto’s analysis highlights long NNW-SSE trending structures along the structural grain of the basement and a series of intersecting NE-SW faults.

These cross-cutting structures control the emplacement of Cullen Suite granitoids and can localise Uranium occurrences, such as along the Hayes Creek Fault (HCF) zone.

The SW extension of the HCF towards the FSZ was identified by DeSoto as a high priority regional scale fault intersection target in the first instance. Fault intersections are targeted as being areas of structural complexity, fluid flow and mineralisation.

DeSoto is undertaking a comprehensive grid-based gravity program to better define structural features in the basement that will assist in targeting, at both Vesper and Quantum targets, combined with Fixed Loop Ground Electro-Magnetic (FLEM) surveys over the Vesper AEM plates to better define drill targets.

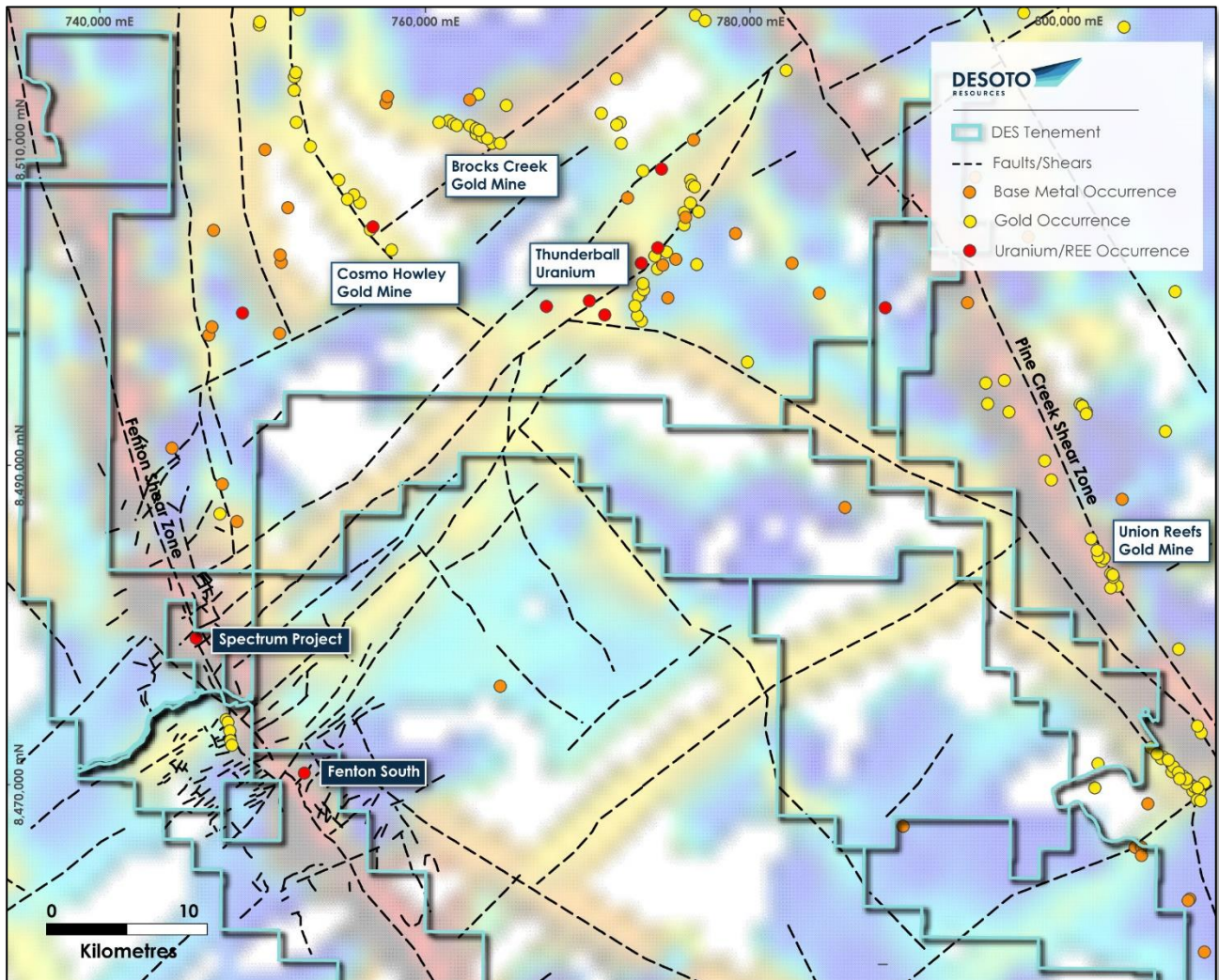


Figure 3 - Regional structural setting of the Spectrum Project at the intersection of the Fenton Shear Zone and the Hayes Creek Fault Zone and locations of known gold, base metal and uranium+/-REE mineralisation. The underlying colour image is of interpreted fault length (longer faults shown as warmer colours). This highlights long and by inference deep structures. The fault length image is derived from integrated interpretation of magnetic, gravity and mapped fault data sets.

No new exploration results are reported and the company is not aware of any new information.

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This release is authorised by the Board of Directors of DeSoto Resources Limited.

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COMPETENT PERSONS STATEMENT

The information in this report that relates to exploration results is based on and fairly represents information and supporting documentation prepared by Ms Bianca Manzi.

Ms Manzi is an employee of the company, is a member of the Australian Institute of Geoscientists and has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to the activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Ms Manzi consents to the inclusion in this report of the matters based on this information in the form and context in which they appear.