

## DESOTO AWARDED RESOURCING THE TERRITORY GRANT FOR FENTON GOLD PROJECT

### HIGHLIGHTS

- Desoto Resources is the successful recipient of an exploration grant for Innovative Targeting for the Fenton Project with the NT Government co-contributing a total of \$96,283.
- The funds will be used for a High resolution AEM (Airborne Electro-Magnetic) survey to infill an existing regional scale Rum Jungle TEMPEST survey over the gold endowed Fenton Shear Zone corridor.
- This co-funded undercover program will help constrain depth to basement and map conductive responses in Paleoproterozoic Pine Creek basement. This will aid in detailed exploration planning for the drill program scheduled later in the year.
- Geophysical program to define targets under cover for maiden diamond drilling program at Fenton.
- Hon. Nicole Manison, the Minister for Mining and Industry, announced the results of the grants program under the Round 16 of the Geophysics and Drilling Collaborations (GDC) program funded by the Resourcing the Territory initiative.
- A record total of \$3.7M (GST-inclusive) of co-funding for exploration activities for 30 companies was announced across the Northern Territory.
- Awarding of the Grant highlights the Northern Territory as a mining and exploration friendly jurisdiction which actively supports companies doing innovative exploration.

### Commenting on the results, DeSoto Managing Director Chris Swallow:

*"We are pleased and thankful to have been awarded an Innovative Targeting Grant. On behalf of the Board of Desoto, we would like to thank the NT Government and the Minister for Mining and Industry for providing funding and such an exploration-friendly environment for Desoto to conduct its activities.*

*Fenton has the structural scale and geological potential to host a multi-million-ounce gold deposit, this funding will go a long way to helping us make a discovery."*

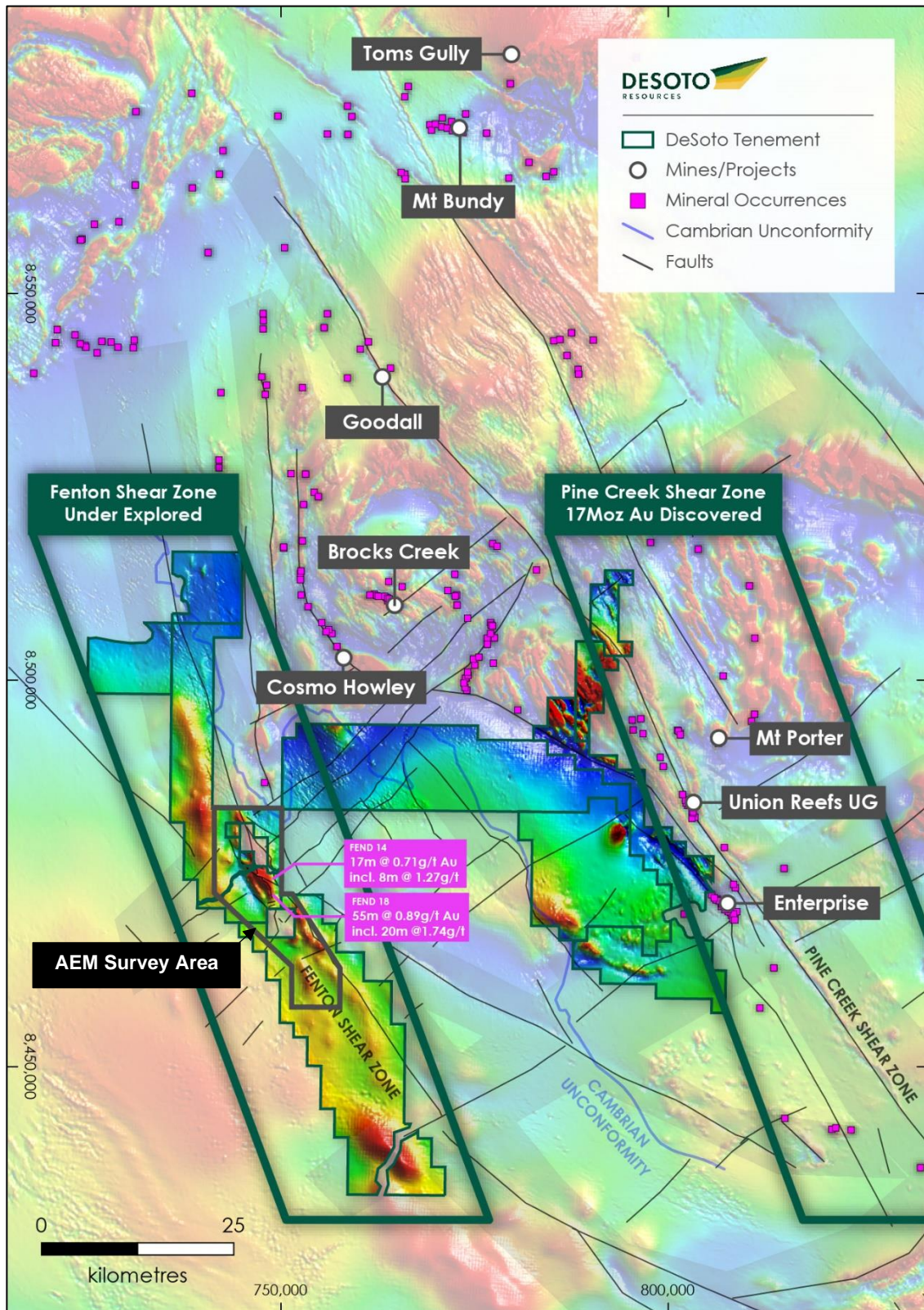


Figure 1 - Fenton Shear Zone, host to the Fenton Gold Project parallel to the 17Moz Pine Creek Shear Zone, AEM Survey shown in black.

**DeSoto Resources Limited (ASX:DES or 'Company')** is pleased to provide an update on its 100%-owned Fenton Gold Project, located in the Northern Territory.

The Fenton Gold Project is an under-cover, structurally complex Palaeoproterozoic hosted gold target zone that extends for over 20km along strike by 4km across strike on the western edge of the Pine Creek inlier. It is covered by 50-200m of Cambrian limestones and mudstones of the Daly Basin.

A major structure, the Fenton Shear Zone (FSZ), is interpreted from regional geophysics (gravity and magnetics) along the eastern edge of the Fenton anticlinorium. It is comparable in scale to the Pine Creek Shear Zone (Fig. 1) through the central part of the Pine Creek Orogen which hosts significant gold resources.

Observations on historic Homestake Mining Company (Homestake) drillcore demonstrate the correlation of elevated gold intervals with intensely sheared pyrrhotite-rich zones. Deformation produced a strong foliation in the sulphide enriched rocks and was likely a focus for fluid flow and gold mineralisation.

The deformed zones in FEND18 and FEND14 are located towards the end of hole and are interpreted as a continuous shear zone (FSZ). This structure is correlated with high magnetic susceptibility in core and a strong aeromagnetic gradient is detected along the eastern edge of the folded stratigraphy.

The potential ore zones are predicted to have a high conductivity response to Electrical Magnetic surveys and a high resistivity/chargeability response to an Induced Polarisation (IP) geophysical survey.

The Company is planning to acquire a high resolution AEM survey over the Fenton Shear Zone corridor. This has two specific objectives- to map the depth to basement interface and to map the conductivity response in the basement. The program is designed as an infill (on 200m lines) to the existing regional scale Rum Jungle TEMPEST survey (1.5km and 5 km spaced lines; Fig. 2).

Re-processing of selected lines from the regional survey demonstrate the ability of AEM to map each of these responses in an undercover environment. It is anticipated that the infill AEM survey will significantly increase the geological understanding of an underexplored, highly prospective margin to the Pine Creek Orogen.

In addition to this AEM co-funded survey, ground Fixed Loop Electrical Magnetic (FLEM) and Induced Polarisation (IP) geophysical surveys are scheduled to commence shortly. All these geophysical techniques are expected assist the Company more effectively targeting the prospective FSZ under cover in the maiden diamond drilling program later in the year.



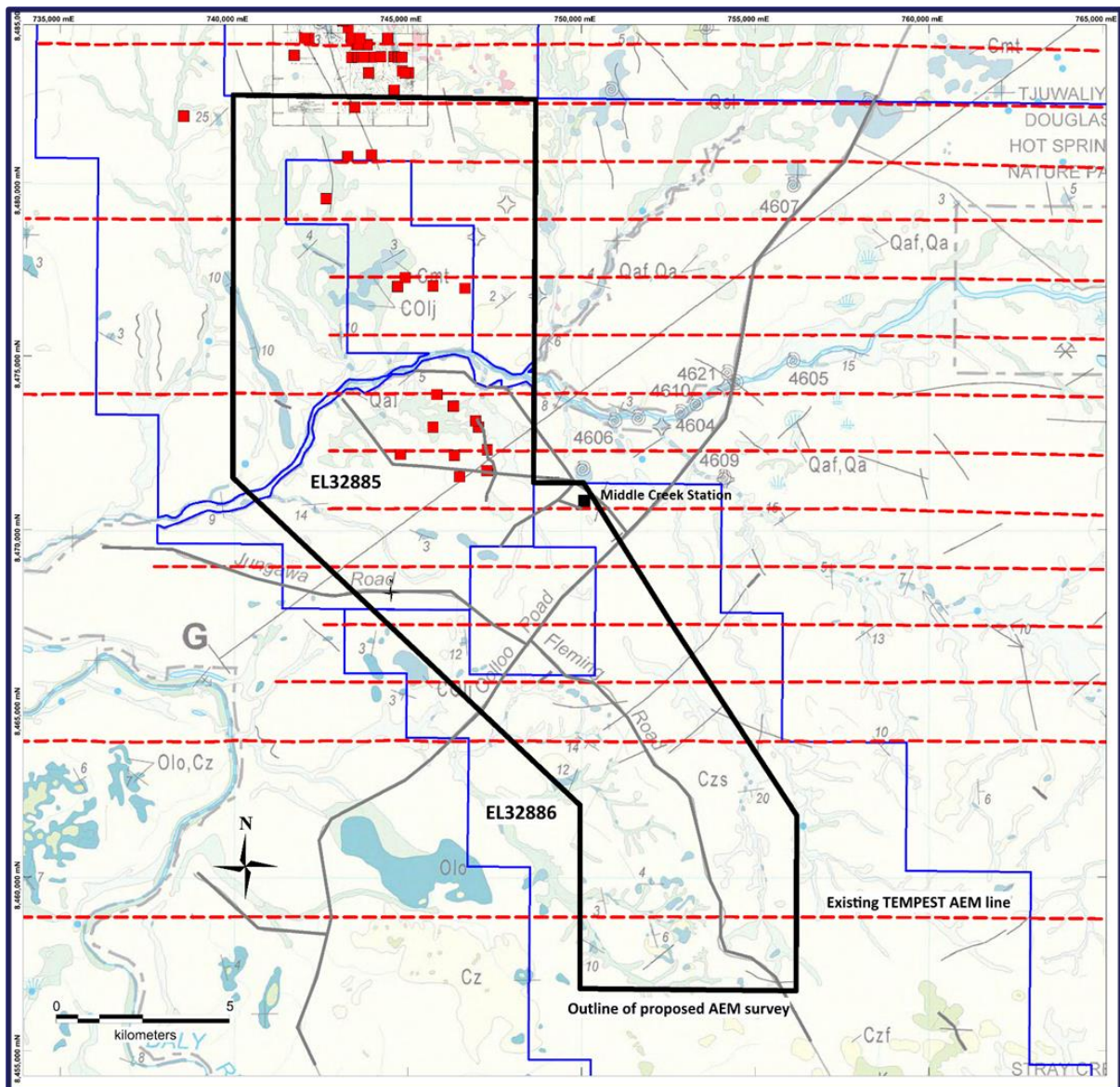


Figure 2. Location of Fenton AEM survey on 1:250K Pine Creek geology showing proposed AEM survey (black rectangle), existing Rum Jungle TEMPEST lines (red dashed lines), historic drilling (red dots) and company tenure (blue lines).

## Fenton Gold Project Background

For over a century the Pine Creek Orogen (PCO) has produced gold, beginning in the 1870s through to the early 1900s, about 2.3 tonne of gold extracted. Since the 1980's, systematic geological mapping, geochemical surveys and drilling, were conducted around previously known occurrences such as Enterprise, Cosmo Howley and Golden Dyke. These deposits have been mined.

The Pine Creek gold field contains approximately 17 Moz of recorded gold deposits hosted in a 60km-long and 1km-wide, NW-SE trending belt along the Pine Creek Shear Zone (PCSZ), the dominant gold hosting structure in the region (Fig. 3).

In the mid-1990's, Homestake Gold (now Barrick Gold), undertook a global search for deposits analogous to the +40Moz Lead Gold deposit in South Dakota. Fenton was identified due to its resemblance to the host rocks and structure found at Lead, particularly within the South Alligator Group. Subsequent drilling by Homestake Gold at Fenton returned good grades including FEND18 (55m at 0.89g/t gold from 418m incl. 20m at 1.74 g/t gold from 423m) and FEND14 (17m at 0.71g/t gold from 610m). The applicability of the Homestake model remains to be determined. However, the regional scale shear zone (historically termed the Fenton or Blue Ant Suture) represents an under-explored region in the PCO.

The first phase of exploration is to develop an integrated geological and structural model for the Project to generate drill targets. This will be based on results from the ground geophysics program that is about to commence in June.

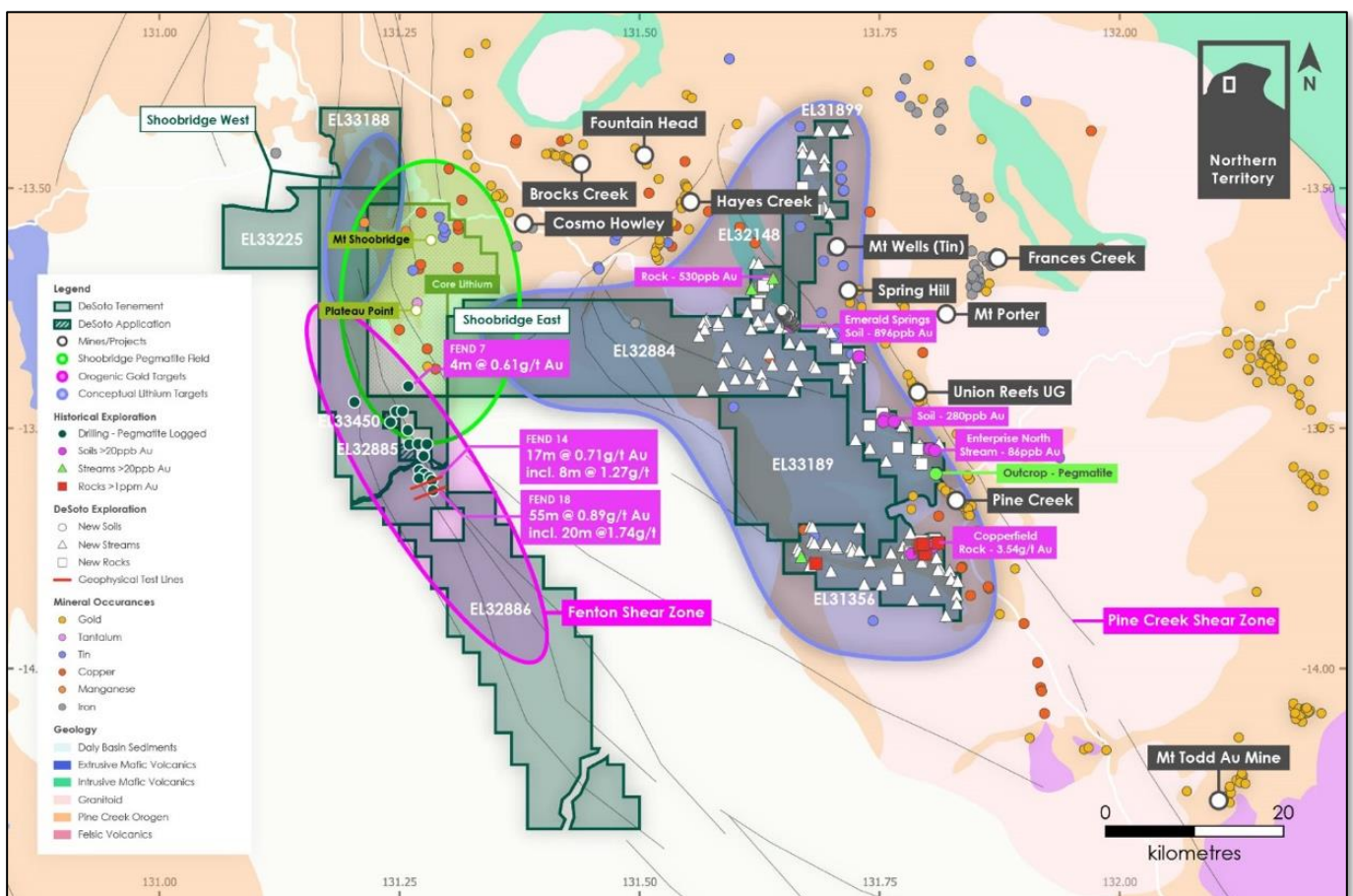


Figure 3 - Fenton and Fenix gold-lithium projects located in the Northern Territory, overlain historic drilling and sampling.

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

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For further information visit our website at [Desotoresources.com](http://Desotoresources.com) or contact:

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## **ABOUT DES AND PROJECTS**

DeSoto is a gold and battery-metal exploration Company with a 1,893km<sup>2</sup> landholding located in the Northern Territory's prolific Pine Creek gold and pegmatite province. The Company's immediate focus is the ongoing exploration of these exciting assets with an experienced Board that uses a distinctive exploration method and capability which sets us apart from our peers.

With strong mineral-finding capability and a systematic geophysics and geochemical approach to gold exploration, DeSoto is well positioned to make new mineral discoveries. The Company has already identified important indicators of lithium potential in our Northern Territory projects, including pegmatites in some historical core and known tin occurrences.

## **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.

## **COMPLIANCE STATEMENT**

DeSoto advises that it is not aware of any new information or data that materially affects the previous exploration results or mineral resource estimate contained in this announcement and all material assumptions and technical parameters underpinning the mineral resource estimate continue to apply and have not materially changed.