

## NORTHERN TERRITORY DRILLING COMMENCES

### HIGHLIGHTS

#### Fenton South

- Diamond drilling underway at the Company's 100%-owned Fenton South Au-Cu Project, located in the Northern Territory (Fig.1).
- The Company identified Fenton South from its 2023 AEM survey with IP, gravity and FLEM survey's having been completed during the 2024 field season.
- Fenton South is a large and untested semi-coincident gravity, magnetic, AEM and IP chargeability anomaly with the potential for Au-Cu mineralisation.
- The Company has undertaken extensive 3D modelling, with a two-hole program designed to test the large, modelled EM and gravity anomaly.



Figure 1 – Drilling underway at the Fenton South Cu/Au Project, location in the Northern Territory.

#### Spectrum Project

- Spectrum is fully drill permitted (including Native Title and Environmental clearances) for a 20-hole Reverse Circulation (RC) and Diamond Drill (DD) program.
- Drilling to commence in the coming weeks, testing Spectrum's numerous REE-Au-Cu targets along the Fenton Shear Zone.

**Commenting on drilling commencement in the Northern Territory, MD Chris Swallow:**

*“Since listing in late 2022, the Company has been working on its NT Projects, while frustrated by weather and permitting issues for the 2023/24 field seasons, the 2025 drill season will see the Company test its highest priority targets at both Spectrum and Fenton South. With the wet season mostly behind us, we have been able to gain early access to Fenton South, with further drilling at Spectrum expect to commence in the coming weeks.*

*Supported by the Company’s ~\$8million cash balance, the Company is now drilling on two continents with auger drilling ongoing at our Guinea Siguiiri Basin Projects and diamond drilling now underway in the Northern Territory.”*

**DeSoto Resources Limited (ASX:DES or ‘Company’)** is pleased to advise that diamond drilling has commenced at its Fenton South Project. The Company’s Northern Territory Projects, including Spectrum and Fenton South, are located approximately 150km south of Darwin, and 50 km west of Pine Creek (Fig.2).

Access to the Pine Creek Project is from the sealed Stuart Highway Hayes Creek which cuts through the Eastern portion of the licences.

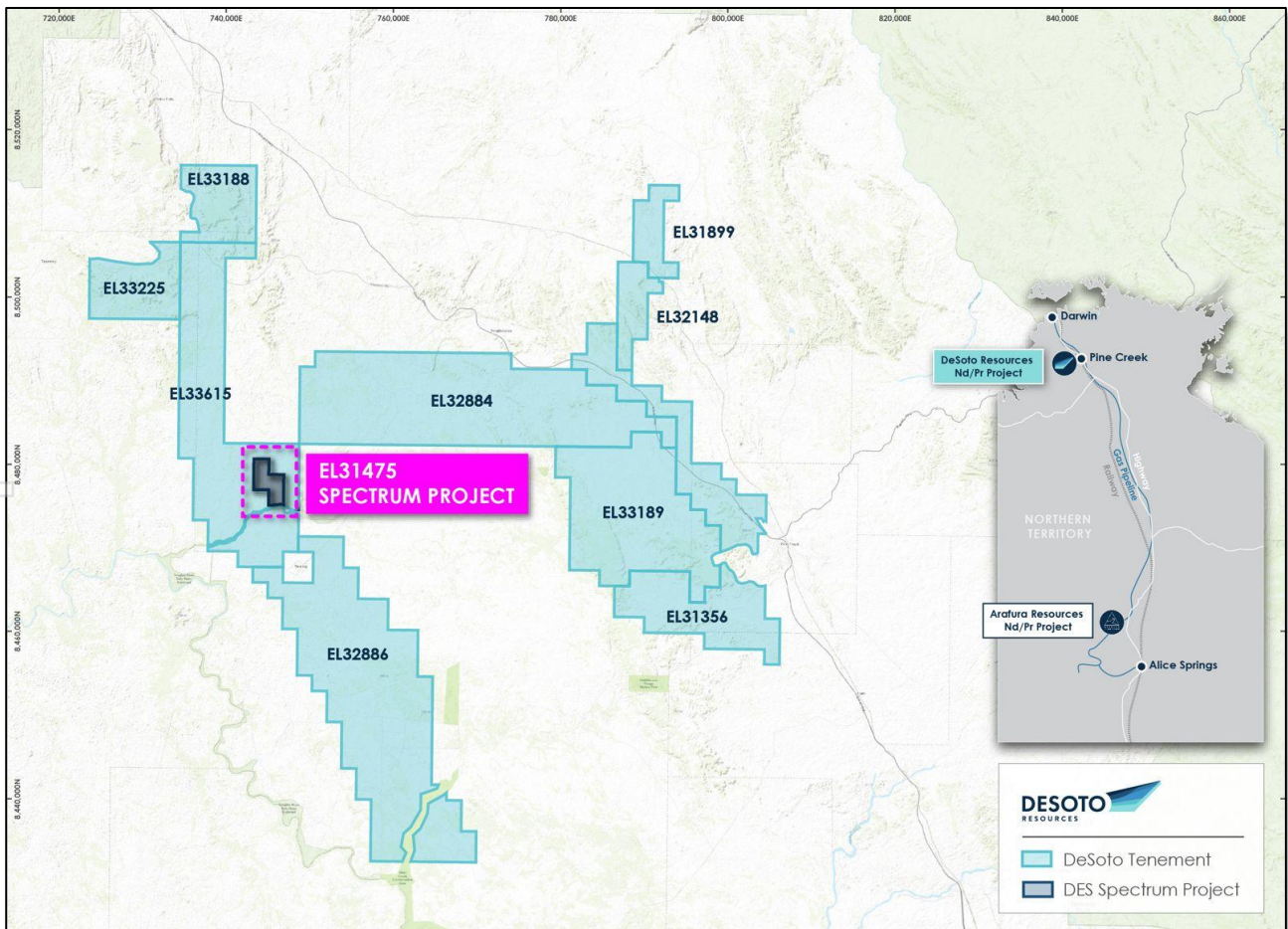


Figure 2 – DeSoto’s Northern Territory Project Portfolio.

### Northern Territory Projects Background

DeSoto was the last ASX-listing of 2022, having acquired a significant ground position covering the Fenton Shear Zone (FSZ), the western licences cover a 55km strike length of the FSZ, which is a major regional structure sub-parallel to the gold mineralised Pine Creek Shear Zone (17Moz Au). Drilling of the FSZ has confirmed gold mineralisation, highlighting the prospectivity of the structure which is undercover.

Following a longer than usual wet season in 2023, the Company was only able to complete four (4) drill holes late in the exploration season<sup>1</sup>, with the Company making the decision to complete for an NT-Government co-funded AEM survey, which identified 18 prospective conductivity targets north, south and west of the drilled area, including the Fenton South and Spectrum Projects (Fig. 3).

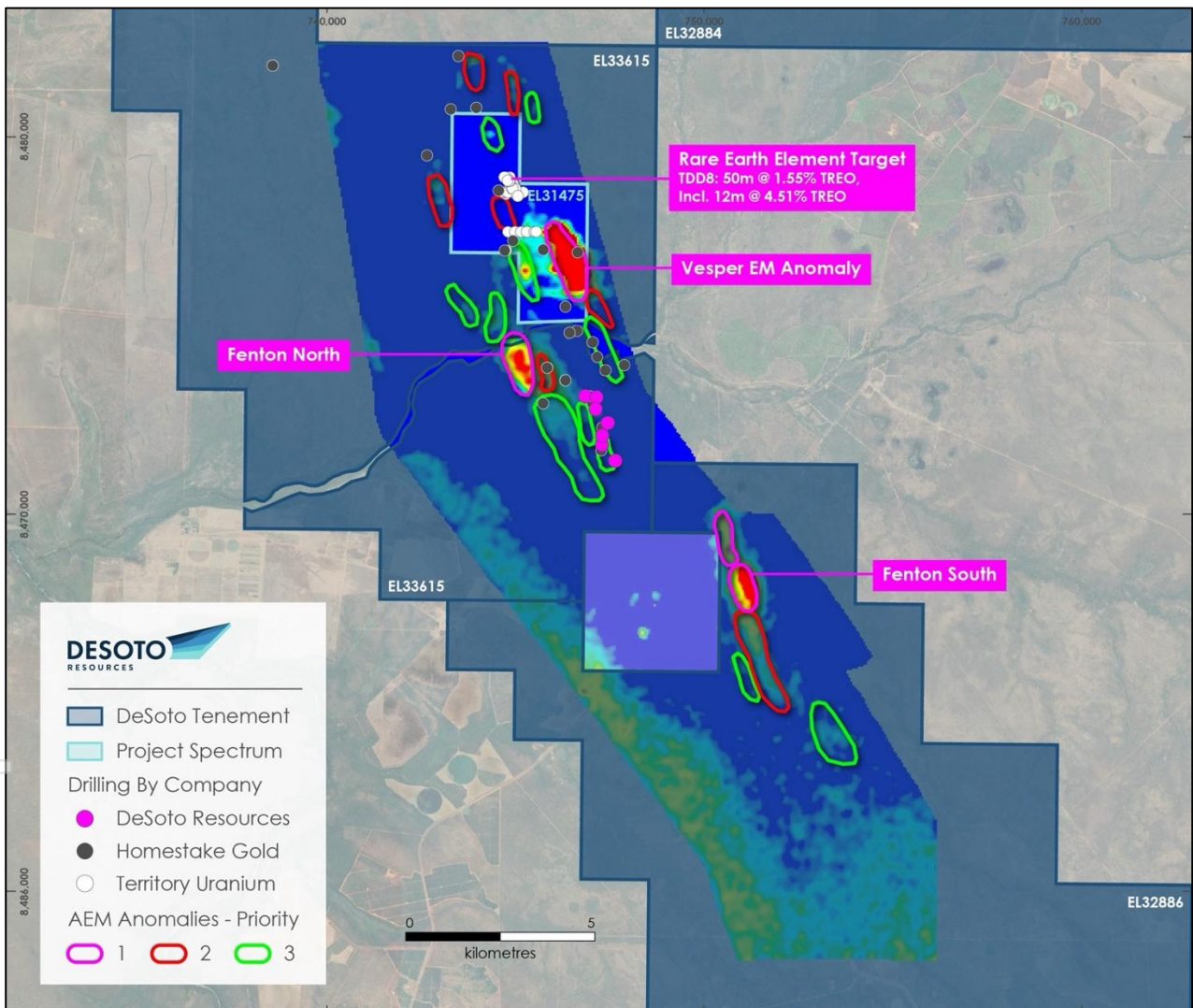


Figure 3 – DeSoto’s Fenton South and Spectrum Projects, located in the Pine Creek Region of the Northern Territory.

The Company was unable to drill the projects in 2024, due to changes in the NT’s permitting process. However, it completed extensive and comprehensive geophysical programs to provide drill targets for the 2025 drill season. Fenton South is the first of these to be tested this season.

<sup>1</sup>DES ASX Announcement: Drilling and Geophysics Confirm Scale of Fenton Gold System (29 January 2024)

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## Fenton South

During October 2023, a high resolution SkyTEM survey was successfully completed over the FSZ corridor and the greater tenement package. In total, 853 line-km of data was flown along 200m spaced east-west orientated flight lines. The survey was co-funded by the NTGS<sup>2</sup>.

The program was designed as an infill to the existing regional scale Rum Jungle TEMPEST survey (1.5km and 5 km spaced lines). Re-processing of selected lines from the regional survey demonstrated the ability of AEM to map each of these responses in an undercover environment.

The objective of the 2023 AEM survey was to map the depth to basement interface, and to identify conductivity responses/targets in the basement. In total, 18 priority bedrock conductivity anomalies were identified, including Spectrum and Fenton South.

In tandem with this, a helicopter assisted gravity survey undertaken by the NTGS included DES-funded infill over the Fenton Shear Zone corridor. This revealed a much clearer understanding of the basement structure and a major granitic mass immediately west of the corridor<sup>3</sup>.

Fenton South was identified as a priority undrilled target from the AEM, gravity and magnetic data. It is centred on an interpreted antiformal structure that is analogous to and located 7km south along strike of the Fenton Prospect. Anticlinal positions are favoured target structures in the Pine Creek region.

Fenton South consists of strong late time conductivity anomalies with semi-coincident magnetic responses that are consistent with the geological sequence that hosts gold mineralisation at Fenton. This highly prospective structure represents seven kilometres of strike that remains untested by drilling.

The Company has modelled the gravity, magnetic and AEM data in 3D. The effect of cover on the modelled locations of the basement targets were optimised to give best fit of the data. Two drillholes are planned in the first instance over the most prospective basement target at Fenton South (Fig. 4).

## Northern Territory Forward Plan

- Two holes to be completed at **Fenton South**.
- Drill contractors appointed to **Spectrum South** with rigs expected to be mobilised to site by the end of May, subject to no late rains.
- **Spectrum** is fully permitted for up to 20-holes of Reverse Circulation (RC) and Diamond Drilling (DD).
- Drill permitting is also being completed on DeSoto's 100%-owned **Quantum North** (EL33615) with up to 20 RC-holes being permitted.
- The Company is well supported logistically by local drilling contractor and shareholder Australian Mineral & Waterwell Drilling (AMWD).

<sup>2</sup>DES ASX Announcement: Drilling and Geophysics Confirm Scale of Fenton Gold System (29 January 2024)

<sup>3</sup>DES ASX Announcement: Spectrum Exploration Update (12<sup>th</sup> March 2025)

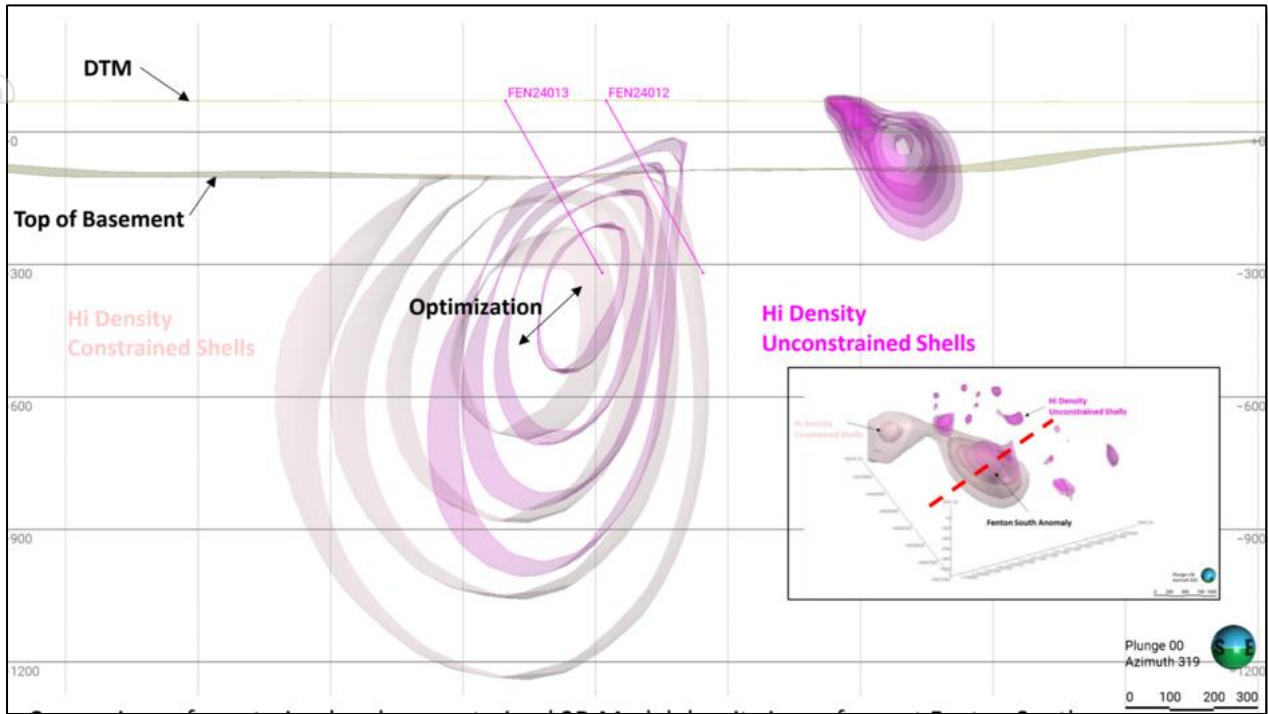


Figure 4 - Fenton South section view Looking NW of the Constrained and unconstrained 3D Model density isosurfaces with 2025 Proposed Drill Program.

-END-

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

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

Chris Swallow  
**Managing Director**  
P: +61 412 174 882  
E: [cs@desotoresources.com](mailto:cs@desotoresources.com)

## 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 Mr Nick Payne.

Mr Payne 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. Mr Payne consents to the inclusion in this report of the matters based on this information in the form and context in which they appear.

### TABLE 1 – JORC CODE – GEOPHYSICS RESULTS

Section 1: Sampling Techniques and Data		
Criteria	JORC Code Explanation	Commentary
Sampling Technique	<p>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report.</p> <p>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</p>	<p><b>NTGS GROUND GRAVITY SURVEY</b> The NTGS Pine Creek Ground Gravity Survey is a partially helicopter assisted program that covers an area of over 40 000 square km stretching from the northwest coastline across to Kakadu National Park in the east and extending as far south as Katherine. The survey was funded through the Northern Territory Government's <i>Resourcing the Territory</i> program with industry contributions funding acquisition of over one third of the total readings acquired. Contract management for the survey is being undertaken by Geoscience Australia in collaboration with NTGS. Initial release of data covers most of the Pine Creek region at an average station spacing of 4km.</p> <p><b>DESOTO GROUND GRAVITY SURVEY</b> Infill of areas of interest to DeSoto were collected at 250x125km station spacing.</p> <p>The survey was by Atlas Geophysics Pty Ltd, an independent geophysical contractor. The survey used the following equipment: One CG05 Autograv Gravity Meter One CHCi70+GNSs Rover Receiver One ESVE300PRO GNSS Receiver</p>
Drilling	<p>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</p>	<p>This release has no reference to previously unreported drill results.</p>

<b>Drill Sample Recovery</b>	<p>Method of recording and assessing core and chip sample recoveries and results assessed.</p> <p>Measures taken to maximise sample recovery and ensure representative nature of the samples.</p> <p>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</p>	<p>This release has no reference to previously unreported drill results.</p>
<b>Logging</b>	<p>Whether core and chip samples have been geologically and geotechnical logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</p> <p>Whether logging is qualitative or quantitative in nature. Core (or costean/Trench, channel, etc) photography.</p> <p>The total length and percentage of the relevant intersections logged.</p>	<p>This release has no reference to previously unreported drill results.</p>
<b>Sub-Sampling Technique and Sample Preparation</b>	<p>If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</p> <p>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</p> <p>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</p> <p>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled.</p>	<p>This release has no reference to previously unreported drill results.</p>
<b>Quality of Assay Data and Laboratory Tests</b>	<p>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</p> <p>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</p> <p>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</p>	<p>A total of 10,130 gravity stations were collected by the NTGS Survey.</p> <p>A total of 881 gravity stations on a 250m x 125m grid were acquired as part of DeSoto's infill grids. A total of 3% of gravity stations were repeated.</p> <p>Data QAQC was completed by the acquisition contractor and verified by an independent consultant geophysicist using industry standard software</p>

<b>Verification of Sampling and Assaying</b>	The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes The verification of significant intersections by either independent or alternative company personnel. Discuss any adjustment to assay data	Data QAQC was completed by the acquisition contractor and verified by an independent consultant geophysicist.  This release has no reference to previously unreported drill results, sampling, assays or mineralisation.
<b>Location of Data points</b>	Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.  Specification of the grid system used Quality and adequacy of topographic control	Positional data was recorded in projection MGA1994 Zone 52S.
<b>Data Spacing and Distribution</b>	Data spacing for reporting of Exploration Results  Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.  Whether sample compositing has been applied	The NTGS survey station spacing is at an average of 2x2km. The DES survey was on a 250m x 125m grid. This data spacing is sufficient to establish geological continuity over the surveyed areas
<b>Orientation of Data in Relation to Geological Structure</b>	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.  If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	NTGS survey was collected on a 2x2km grid, covering the whole range of geological structures.  Desoto's infill surveys collected on a 250x125m grid along E-W oriented lines which is approximately perpendicular to strike of units in the Proterozoic basement.
<b>Sample Security</b>	The measures taken to ensure sample security	This release has no reference to previously unreported drill results, sampling, assays or mineralisation.
<b>Section 2 Reporting of Exploration Results</b>		
<b>Mineral Tenement and Land Tenure Status</b>	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	The Pine Creek Project comprises nine contiguous exploration licences (EL31356, EL32148, EL31899, EL32884, 32886, EL33188-33189, EL33225 and EL33615 (amalgamation of EL32885 and EL33450) covering an area of 1,565 km <sup>2</sup> . The licences are held by Mangusta Minerals Pty Ltd, a 100% owned Desoto subsidiary. The Spectrum Project is held by CopperOz Pty Ltd and sits within exploration license EL31475 which is wholly enclosed within DeSoto exploration license EL33615.  The Project is located approximately 150 km south of Darwin, and 8 km north of Pine Creek in the Northern Territory. Access to the Pine Creek Project is from the sealed Stuart Highway Hayes Creek via the sealed Dorat Road and Ooloo Roads and then via well maintained gravel roads.
<b>Exploration Done by Other Parties</b>	Acknowledgment and appraisal of exploration by other parties.	The majority of past exploration work within the Project area (including drilling, surface sampling; geophysical surveys, geological mapping) has been largely completed by Homestake Gold of Australia, North Mining, Newmont Australia, St George Mining Pty Ltd, Aztec Mining Ltd, AngloGold Australia, Davos Resources and Thundelarra Exploration  The relevant reports are available on the Northern Territory Geological Survey GEMIS open file database library. A summary of previous work completed can be found in the company prospectus at <a href="http://www.desotoresources.com">www.desotoresources.com</a>
<b>Geology</b>	Deposit type, geological setting and style of mineralisation.	The Fenton Project is located in the western and central sections of the Central Domain of the Pine Creek Orogen and comprises units of the Cosmo Supergroup which include the South Alligator Group,

		<p>and Finnis River Group. The stratigraphic sequences are dominated by mudstones, siltstones, greywackes, sandstones, tuffs, and limestones. These sedimentary units, as well as basic intrusions, were folded, metamorphosed, and then subsequently intruded by the Cullen Batholith. Pegmatites occur throughout the region in close proximity to the Cullen Granites. The project area is overlain by younger Cambrian basin sedimentary sequences.</p> <p>The Fenton Project is considered prospective for orogenic Pine Creek gold mineralisation and pegmatite hosted lithium (spodumene) mineralisation. The majority of known gold deposits are hosted by the South Alligator Group and the lower parts of the Finnis River Group along anticlines, strike-slip shear zones and thrusts proximal to the Cullen Granite.</p> <p>The REE mineralisation reported here is hosted within sheared dolerite and Banded Iron Formation units with quartz-pyrite-pyrrhotite veining. The origin of the REE mineralisation is not yet understood but is assumed to be related to the intrusion of granites near the Fenton Shear Zone.</p>
<b>Drill Hole Information</b>	<p>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</p> <ul style="list-style-type: none"> <li>• easting and northing of the drill hole collar</li> <li>• elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>• dip and azimuth of the hole</li> <li>• down hole length and interception depth</li> <li>• hole length</li> <li>• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	Information is presented in plans in the release.
<b>Data Aggregation Methods</b>	<p>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</p> <p>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</p> <p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	No data aggregation methods have been used in results reported in this release.
<b>Relationship Between Mineralisation Widths and Intercept Lengths</b>	<p>These relationships are particularly important in the reporting of Exploration Results</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</p>	No drilling or mineralisation results are reported in this release that have not been previously released and referenced.
<b>Diagrams</b>	<p>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</p>	See Figures 1-3.
<b>Balanced Reporting</b>	<p>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be</p>	The company believes this announcement is a balanced report, and that all material information has been reported.

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	practiced avoiding misleading reporting of Exploration Results.	
<b>Other Substantive Exploration Data</b>	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Exploration drilling for gold by previous explorers has been conducted by Homestake Gold of Australia (FEND14 and FEND 18 holes in particular), Newmont Australia (KAD0001-3) in the current area. The Company is also aware of regional scale aeromagnetic and AEM surveys, and geological mapping programmes undertaken by past explorers and has access to versions of the data that is available in reports.
<b>Further Work</b>	The nature and scale of planned further work (eg tests for lateral extensions or large scale step out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Planned further work includes up to 10,000m of RC and Diamond drilling over the Spectrum, Vesper and Fenton South projects.