DESOTO RESOURCES

ACQUISITION OF HIGH-GRADE RARE EARTHS PROJECT IN THE NORTHERN TERRITORY

Best intercept of 50m @ 1.55% TREO, incl. 12m @ 4.51% TREO (14.9% Nd/Pr)

HIGHLIGHTS

- Binding term sheet signed to acquire the Spectrum Project ("**Spectrum**" or the "**Project**"), a privately held block (EL31475) with historic high-grade Rare Earth Element ("**REE**") intercepts in the Pine Creek region of the Northern Territory.
- Historic uranium-focused drilling, completed before REEs were recognised as a valuable critical minerals opportunity, intercepted high-grade REEs over 350m of a potential 4.5km strike along the Fenton Shear Zone (FSZ) corridor, with mineralisation open to the north and south.
- The Project also contains a large 2km by 0.5km untested strong semi-coincident Copper-Lead-Zinc geochemical and geophysical (EM and aeromagnetic) anomaly approximately 1.5km along strike of the historic REE prospect.
- Spectrum is strategically located inside DeSoto's existing Fenton Project, with the Company well positioned with a team on the ground ready to explore.
- Planning for ground geophysics and multiple Diamond Drill (DD) and Reverse Circulation (RC) programs underway.
- DeSoto to spend $2 million for exploration activities at Spectrum in its first 15 months, supported by the Company's A$6 million cash position.
- The acquisition creates a diversified precious metals and critical minerals company aligning with Australia's strategic minerals strategy and is bolstered by government support at all levels in this Tier-1 jurisdiction.
- The NT exploration season is 6-months, the Company is well advanced on delivering a high-grade complementary manganese Project, to be explored 12 months a year.

Rare Earths Potential:

- Historical diamond and RC drilling completed across a radiometric (Uranium) anomaly by Territory Uranium Company Ltd ("TUC") in 2010, intercepted wide zones of REE's (TREO – Total Rare Earth Oxide) over a 350m strike, including Neodymium-Praseodymium (Nd/Pr), best drill results include:
  - TDD8[1]: **50m @ 1.55% TREO** from 245m incl. **6m @ 6.55% TREO** from 248m;
  - TDD10[2]: **21.9m @ 2.55% TREO** from 276m, incl. **9.2m @ 3.78% TREO** from 288m;
  - TDD19[3]: **17m @ 1.0% TREO** from 254m, incl.**1m @ 6.42% TREO** from 254m.

[1]ASX Announcement: Territory Uranium Company (15 November 2010)
[2]ASX Announcement: Territory Uranium Company (21 March 2011)
[3]ASX Announcement: Territory Uranium Company (7th September 2011)

- The REE mineralisation also has associated Au-Ag within sulphides and is sitting under 50 to 100m of Cambrian limestone cover.
- First-pass, limited metallurgy (1 bulk composite) was completed by TUC on the TREO mineralisation, with key REE minerals allanite and bastnasite identified.
- Previously completed TUC liberation test work suggests a concentrate of >19% TREO could be produced and that the sulphide minerals could potentially be treated to liberate Au and Ag in a separate process[4].

Base Metals Potential:

- A strong coincident EM and magnetic anomaly 'Vesper' has been identified with associated historical Cu-Zn-Pb MMI soil geochemical anomalism including peak values of 8060ppb Cu, 3140ppb Zn and 980ppb Pb.
- Located within 1.5km of the REE Quantum prospect (Figures 1-2) and sitting within the same structure, the 2km by 0.5km well-defined discrete EM anomaly was detected by the 2023 DeSoto-NT Government co-funded AEM survey[5].
- Vesper is an undercover target, with about 40m Cambrian sediments overlying the basement response.
- Historic hole FEND13 drilled 50m to the west of the EM anomaly shows evidence of skarn system development with the presence of calcite-fluorite-garnet veining with pyrite, pyrrhotite and minor chalcopyrite. The hole is interpreted as being a "near-miss" and did not test the anomaly.
- Vesper is interpreted as a localised anticlinal dome on the eastern limb of a regional antiform, adjacent to the interpreted Fenton Shear Zone, which is a regional scale corridor of deformation and gold mineralisation as demonstrated by DeSoto drilling in 2023.
- Vesper represents a potential Proterozoic Cu-Au-U-REE skarn style target related to the intrusion and doming of the Cullen Batholith into calc-silicate rocks of the Koolpin Formation.

Commenting on the acquisition, Managing Director Chris Swallow:

"This highly complementary acquisition gives us a strategic, critical minerals position in the Northern Territory. With the confirmed mineralisation and supporting geophysical anomalies in the surrounding Fenton Project, we are now positioned for an accelerated phase of exploration and drilling.

Moreover, the recent government investment to expedite Rare Earths mining in the Northern Territory perfectly aligns with this new acquisition, enhancing our capacity to capitalise on the region's REE potential.

We have been actively investigating critical minerals opportunities since listing through lithium exploration in the Northern Territory and ongoing assessment of offshore manganese projects. The

[4]ASX Announcement: Territory Uranium Company (9th June 2011)

strategic synergy we are gaining with this acquisition strengthens our position in the critical minerals landscape."

Next Steps:

- Due diligence and compilation of project data.
- Ground gravity and ground Fixed Loop Electro Magnetic surveys over the Quantum and Vesper targets to assist in drill planning.
- Commitment of 3,500m of RC/DD drilling planned in first 15 months across the REE and base-metal targets.
- Develop working geological and mineralisation models for antiformal hinge zone style REE-Au-Ag mineralisation and base-metal +/- uranium skarn style deposits.
- Re-evaluate DeSoto and Homestake drilling results to determine if any analogous REE mineralisation is present.

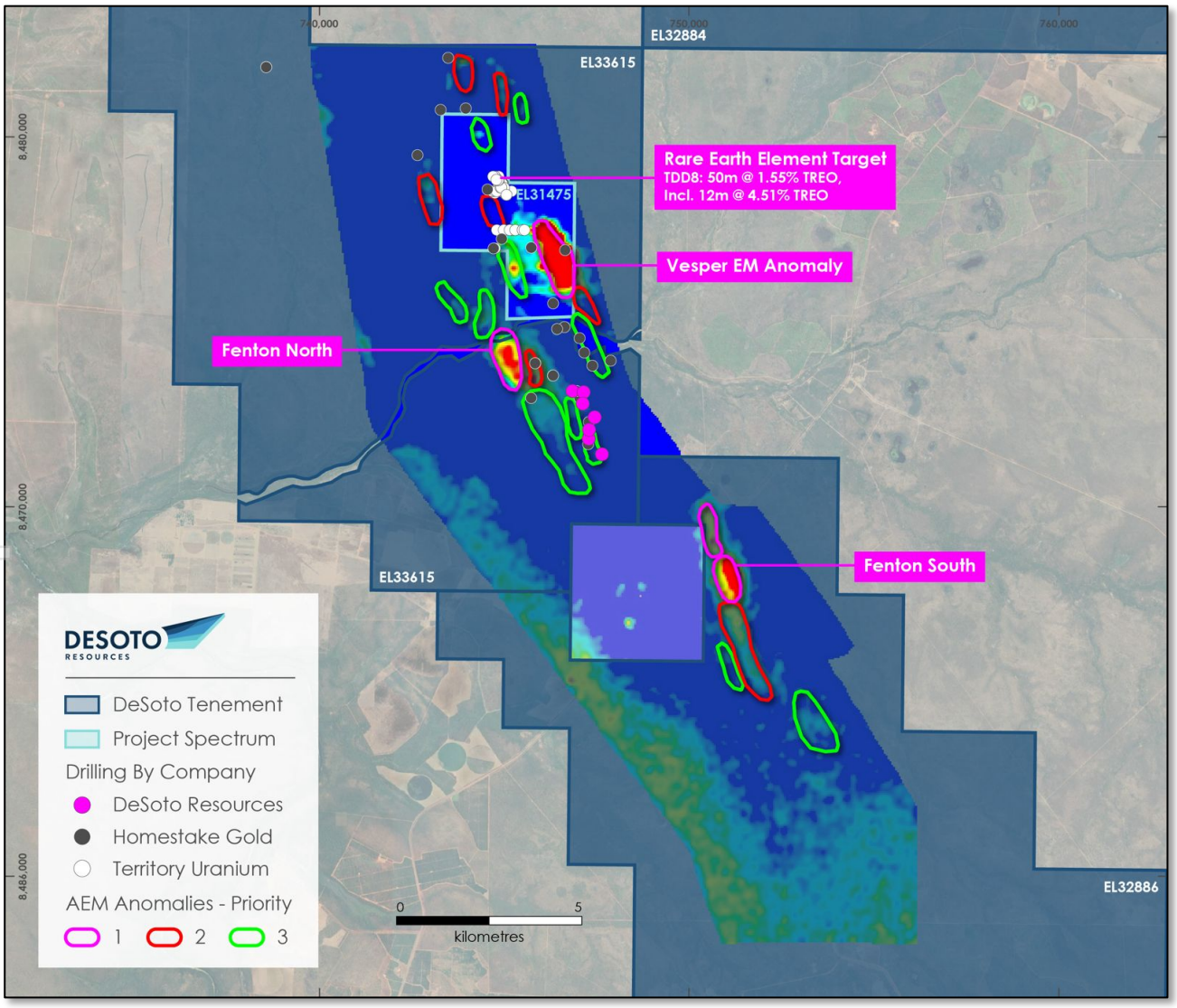

Figure 1. Location of Fenton and Spectrum Project licences on new EM conductivity (Ch34) survey with ranked anomalies.

DeSoto Resources Limited (ASX:DES) ("DES" or the "Company") is pleased to announce an acquisition within its exploration landholding in the Northern Territory. This acquisition encompasses a historical drilling dataset targeting Rare Earth Elements (REE).

The new project tenement EL31475, is strategically located within DeSoto's existing Fenton tenement position. Notably, this expansion integrates seamlessly with the Company's ongoing exploration efforts, leveraging significant anomalies identified in previous exploration conducted by DeSoto.

Location and Access

The Spectrum Project licence EL31475 is located wholly within DeSoto tenement EL33615 (Figure 1 & 9) on Douglas West pastoral station and is accessible via an extensive network of local road and pastoral tracks from Oolloo Road. No known Aboriginal Land Claims are registered over the licence area and environmentally sensitive areas are excluded from the tenement and form the southern boundary of the project.

Project Background

Homestake Australia

Exploration by Homestake in the 1990's as part of their Fenton Gold Project included drilling holes FEND10-13, FEND15 and FENRC20 targeting the Koolpin Formation for Cosmo Howley style gold mineralisation within the area now covered by EL31475. Holes FEND10-13 and 15 intersected narrow low-level gold (0.1-0.3g/t Au) mineralisation and low-level Ba-Pb-Zn anomalism which confirmed the prospectivity of the Koolpin Formation. Following diamond drilling Homestake conducted a MMI soil survey over the southern portion of the project area which revealed a strong, coherent Cu-Zn-Pb- soil anomaly with peak values of 8060ppb Cu, 3140 ppb Zn and 980 ppb Pb (Figure 2.)

Territory Uranium Company (TUC)

Territory Uranium Company discovered the Quantum uranium mineralisation in 2010 (Figure 2 - 3) when pitchblende was noted during relogging of FEND10, and re-assaying returned **0.5m @ 0.42% U_3O_8 from 497.5m**, including a 6.8m zone of elevated Au, Ag, Bi and Zn from 481.1m with maximum grades of 0.7 g/t Au, 4.3 g/t Ag, 0.07% Bi and **15.6% Zn**. The mineralisation is hosted within a hornfels calcsilicate rock with abundant fluorite and is interpreted to be a contact metamorphosed section of the lower Koolpin Formation. Homestake logged this zone as a sphalerite-pyrrhotite-fluorite-pyroxenite skarn.

TUC subsequently completed downhole gamma surveys of Homestake drill holes FEND7-8, 10-13 and FRC020. A significant 100m section of elevated gamma response was identified in FEND13 from the upper section of Koolpin Formation. To date this broad gamma response has not been evaluated for uranium mineralisation.

The Quantum REE-Au-Ag mineralisation was discovered by TUC in October 2010 during RC drill testing of a 4.5km long coincident radiometric and magnetic anomaly that was off set to the north of the FEND10 uranium mineralisation. The interpretation was that this radiometric anomaly could possibly be a blind uranium deposit.

An initial fence of RC holes across the radiometric anomaly intersected **33m @ 1.76% TREO from 245m to EOH** including **6m @ 6.55% TREO from 248m in hole TDD8**[6] (Figure 4-5). The mineralisation was intersected in an interpreted upright antiformal fold hinge within the Upper Koolpin Formation. A diamond tail extended the mineralised intercept to **50m @ 1.55% TREO from 245m in TDD8**[7]. Associated with the TREO mineralisation are zones of gold and silver mineralisation with 13m @ 0.49 g/t Au and 1.78 g/t

[6]ASX Announcement: Territory Uranium Company (26th October 2010)
[7]ASX Announcement: Territory Uranium Company (15th November 2010)

Ag from 247m and 3m @ 0.75 g/t Au from 290m (Table 1). The anomalous Au and Ag is hosted within quartz-fluorite-massive sulphide (pyrite-pyrrhotite-arsenopyrite-chalcopyrite) veining to breccia.

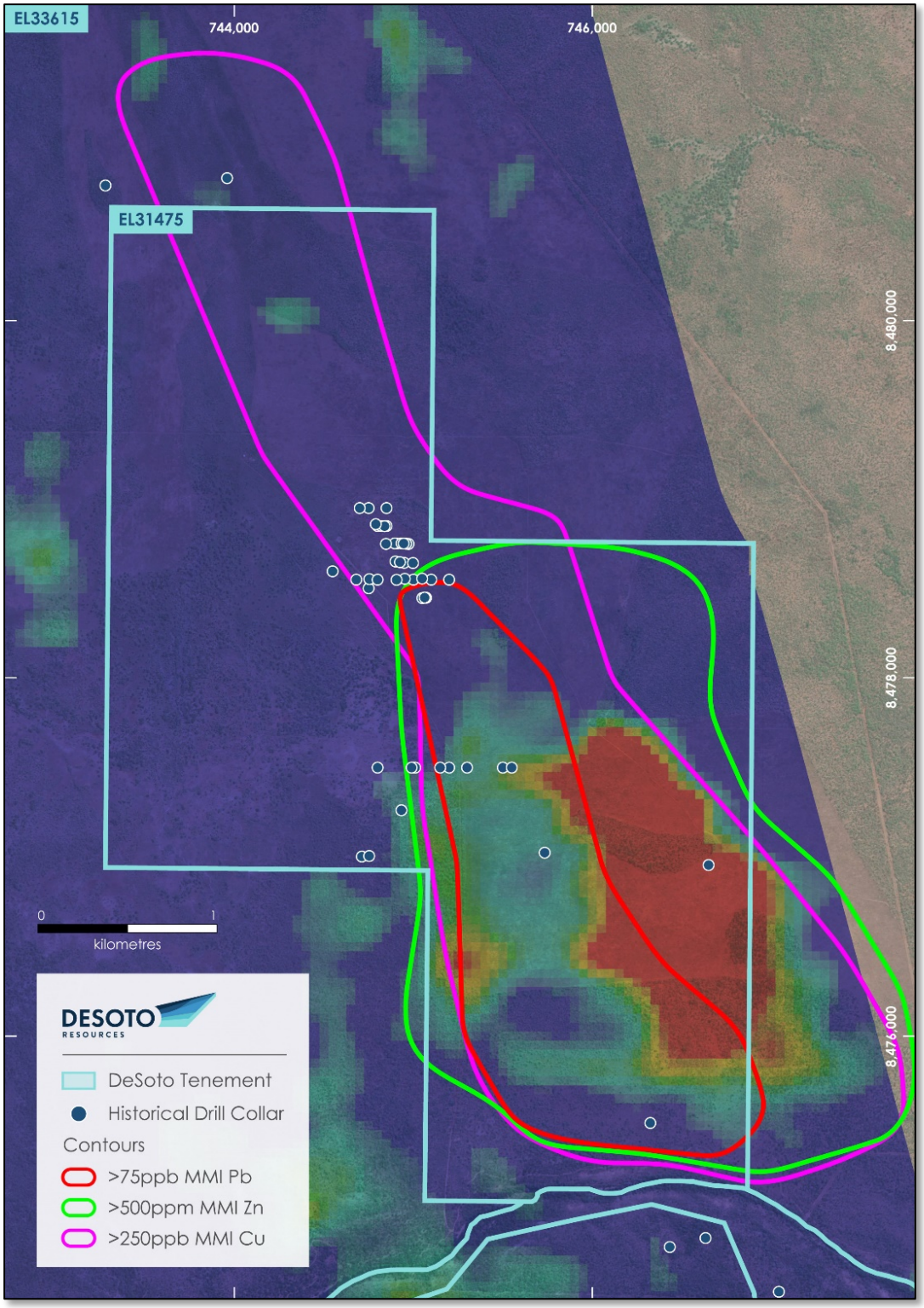

Figure 2. Location of historical drilling and anomalous Cu-Zn-Pb MMI soil geochemistry over the Vesper EM anomaly.

Diamond drilling defined antiformal hinge zone style mineralisation with REE-Au-Ag mineralisation preferentially developed within the fold hinge with narrow continuous mineralisation down each fold limb.

Mineralisation has been reported over a vertical distance of 150m with the mineralised fold hinge having approximate dimensions of 50m x 50m and fold limbs having a thickness of 2 to 5m (true thickness).

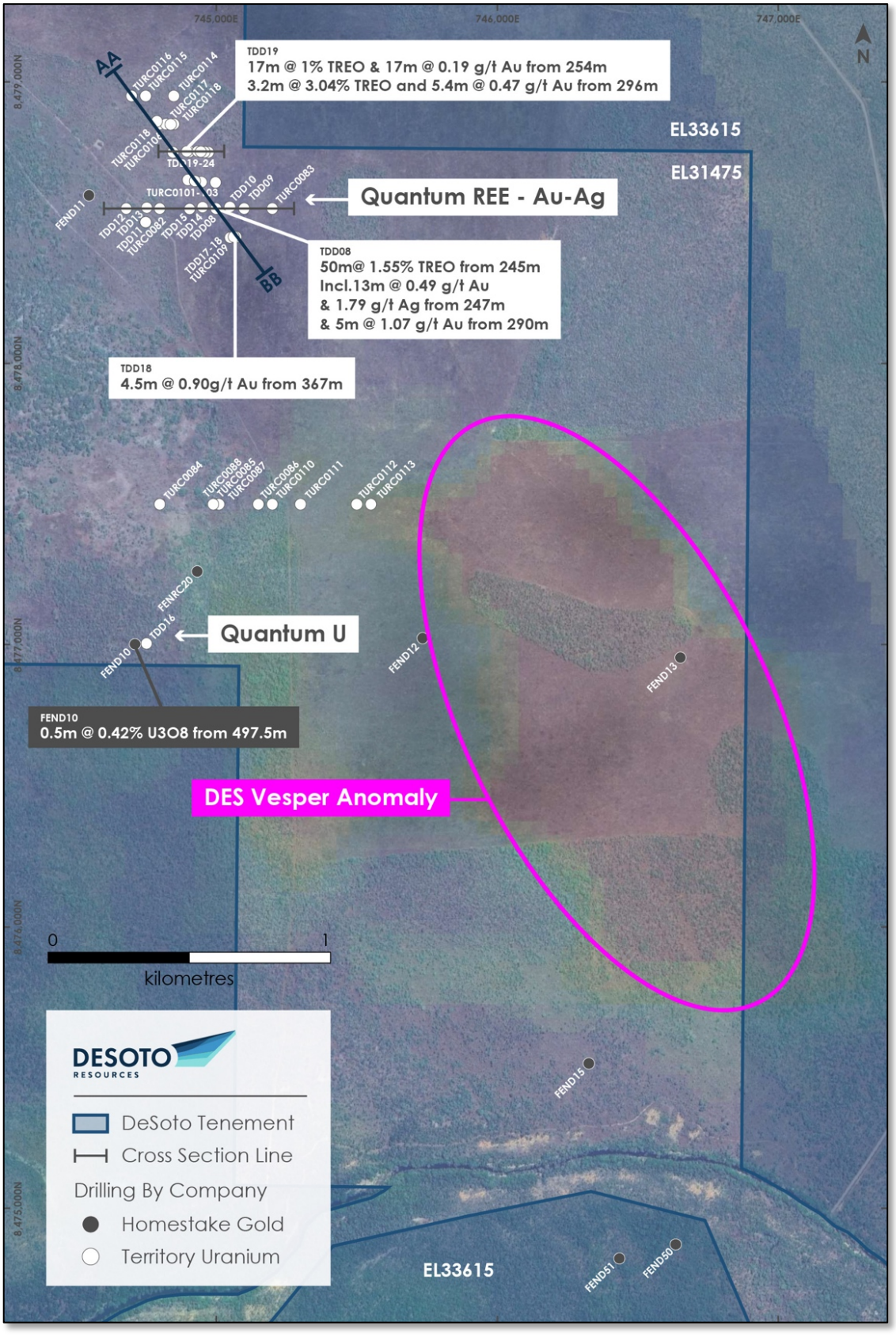

Figure 3. Spectrum Project EL31475 showing historical drilling results, targets and new Vesper EM anomaly. Cross section locations shown as black lines.

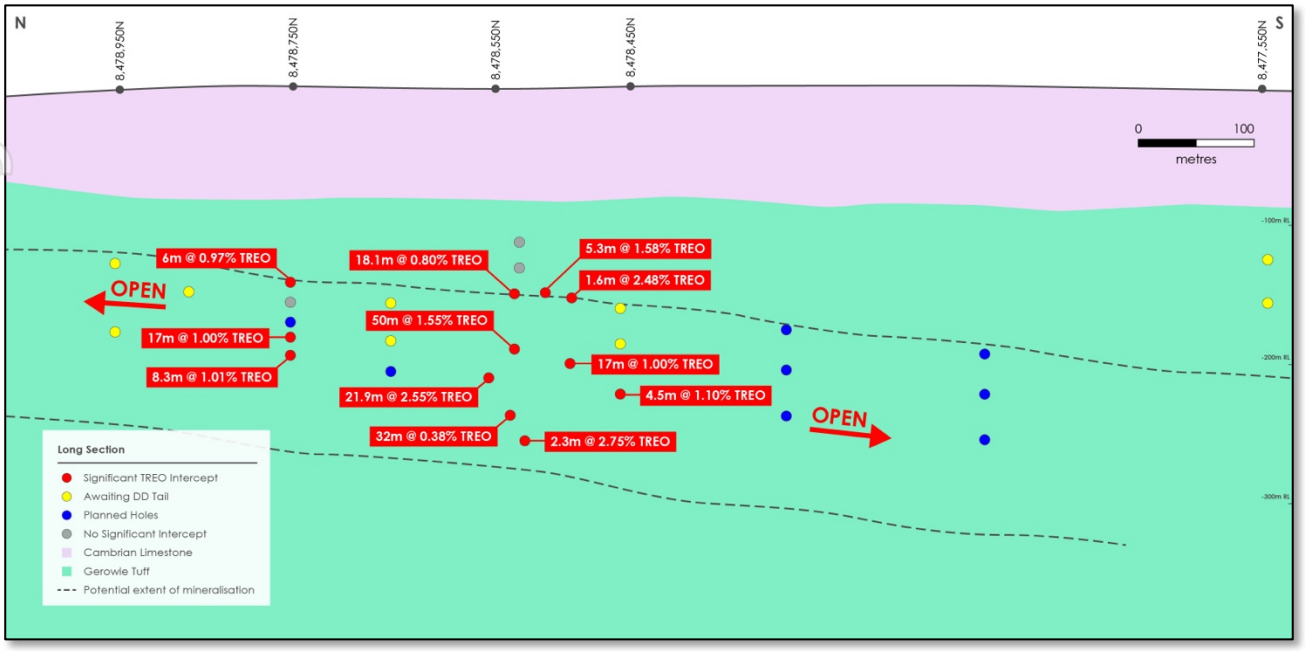

Figure 4 - Spectrum Long-Section AA-BB, looking east highlighting historic REE intercepts from TUC, with mineralisation remaining open to the North and South.

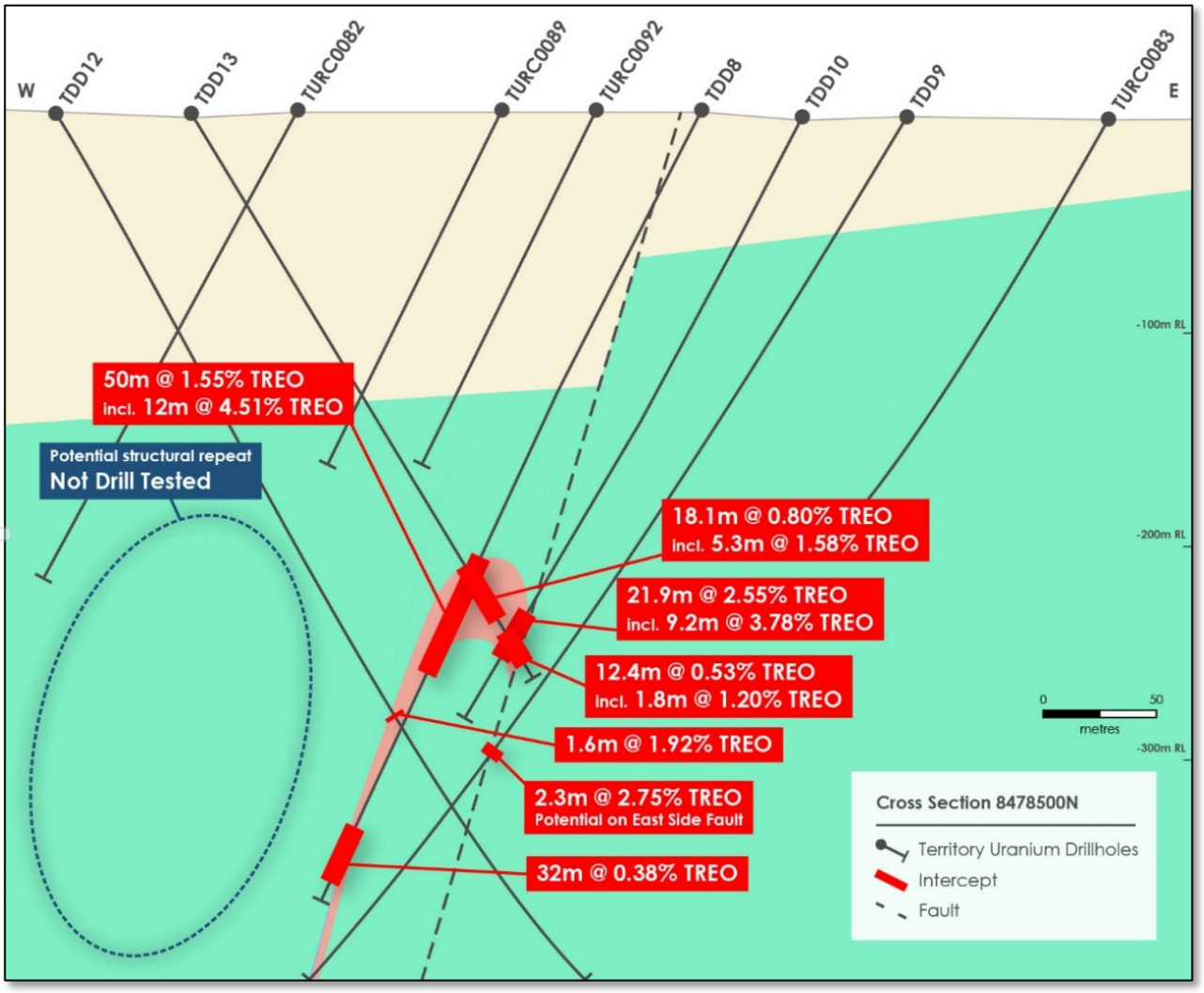

Figure 5- Quantum REE north looking schematic cross section 8478500N showing discovery hole TDD8 and persistence of TREO mineralisation down each fold limb (after TUC ASX Announcement 15 February 2011).

Three holes were drilled 125m south of TDD8 but only 2 were diamond tailed. Hole TDD18 successfully intersected **4.55m @ 1.10% TREO from 367m** and **4.5m @ 0.90 g/t Au from 367m** (Figure 3). This drill hole appears to have tested the eastern limb of the TREO mineralisation only, not the fold hinge zone. The TREO mineralisation remains open to the south. Step out drilling to the north of the initial discovery also intercepted REE-Au-Ag-Bi mineralisation in the same stratigraphic and structural position with hole TDD19 (Figure 6) returning **17m @ 1% TREO and 17m @ 0.19 g/t Au from 254m** and a second zone of mineralisation at 296m returning **3.2m @ 3.04% TREO and 5.4m @ 0.49 g/t Au**[8]. This hole demonstrated the potential for multiple zones of mineralisation to be present at the prospect.

A number of RC pre-collars drilled to the north did not test the stratigraphic and structural position of the TREO mineralisation as diamond tails were not completed. Consistent REE-Au-Ag mineralisation has been intercepted over a 350m strike length with mineralisation still open to the north and south. The REE-Au-Ag mineralisation has been intercepted in the same stratigraphic and structural position and there is potential for repeats of the mineralisation in similar parallel settings. The total potential strike extent of REE-Au-Ag mineralisation within EL31475 is 4.5km based on the radiometric and magnetic signature.

All significant intercepts are reported in Table 1 with hole locations shown on Figure 2 and in Table 2.

Table 1: Territory Uranium Company Significant Historical REE-Au-Ag Intersections

HoleID	TREO*	Au	Ag
TDD8	**50m @ 1.55% TREO from 245m** **incl. 12 @ 4.51% TREO from 246m** 32m @ 0.38% TREO from 389m	**13m @ 0.49 g/t Au from 247m** 8m @ 0.13 g/t Au from 277m 3m @ 0.75 g/t Au from 290m 2.8m @ 0.29 g/t Au from 305m	13m @ 1.78 g/t Ag from 247m 9m @ 1.3 g/t Ag from 277m 3m @ 0.73 g/t Ag from 290m 2.8m @ 1.5 g/t Ag from 305m
TDD9	2.3m @ 2.75% TREO from 374m	2m @ 0.28 g/t Au from 375m	16.2m @ 1.11 g/t Ag from 365m
TDD10	**21.9m @ 2.55% TREO from 276m** **incl. 9.2m @ 3.78% TREO from 288m**	2.8m @ 0.33 g/t Au from 206m 6.4m @ 0.38 g/t Au from 276m **11m @ 0.85 g/t Au from 286m**	**5.2m @ 73.50 g/t Ag from 225m** 17m @ 1.08 g/t Ag from 276m
TDD11	8.1m @ 1.4% TREO from 331m	4.2m @ 0.61 g/t Au from 330m	9.8m @ 0.79 g/t Ag from 330m
TDD12	1.6m @ 2.48% TREO from 354m	**1.6m @ 1.57 g/t Au from 324m**	**20m @ 5.42 g/t Ag from 102m**
TDD13	5.3m @ 1.58% TREO from 249m 6m @ 0.85% TREO from 306m	5.3m @ 0.56 g/t Au from 249m 3.2m @ 0.22 g/t Au from 261m 5.9m @ 0.21 g/t Au from 304m	19.6m @ 0.75 g/t Ag from 251m
TDD16			4.3m @ 6.66 g/t Ag from 275m
TDD18	4.5m @ 1.10% TREO from 367m	**4.5m @ 0.90 g/t Au 367m**	
TDD19	**17m @ 1.0% TREO from 254m** **incl. 1m @ 6.42% TREO from 254m** 3.2m @ 3.04% TREO from 296m	17m @ 0.19 g/t Au from 254m 5.4m @ 0.49 g/t Au from 295m	11m @ 1.00 g/t Ag from 261m 3.2m @ 0.79 g/t Ag from 296m
TDD20	8.3m @ 1.01% TREO from 297m **incl. 2.4m @ 2.97% TREO from 297m**	1.4m @ 0.31 g/t Au from 297m	12m @ 1.62 g/t Ag from 292m
TURC097	6m @ 0.97% TREO from 240m incl. 2m @ 1.75% TREO from 244 (EOH)	6m @ 0.15 g/t Au from 240m	

*Total REO's have been calculated by addition of REO Values for Ce, Dy, Er, Eu,Gd, Ho, La, Lu, Nd, Pr, Sm, Tb, Tm, Yb, Y. REO values have been calculated from REE ppm grades after analysis by lithium metaborate fusion and ICPMS. The total REO is calculated as the sum of all REE as REE_2O_3, with the exception of Ce, Pr, Tb; which are calculated as CeO_2, Pr_6O_{11} and Tb_4O_7, respectively, in accordance with geochemical conventions.

[8]ASX Announcement: Territory Uranium Company: (7th September 2011)

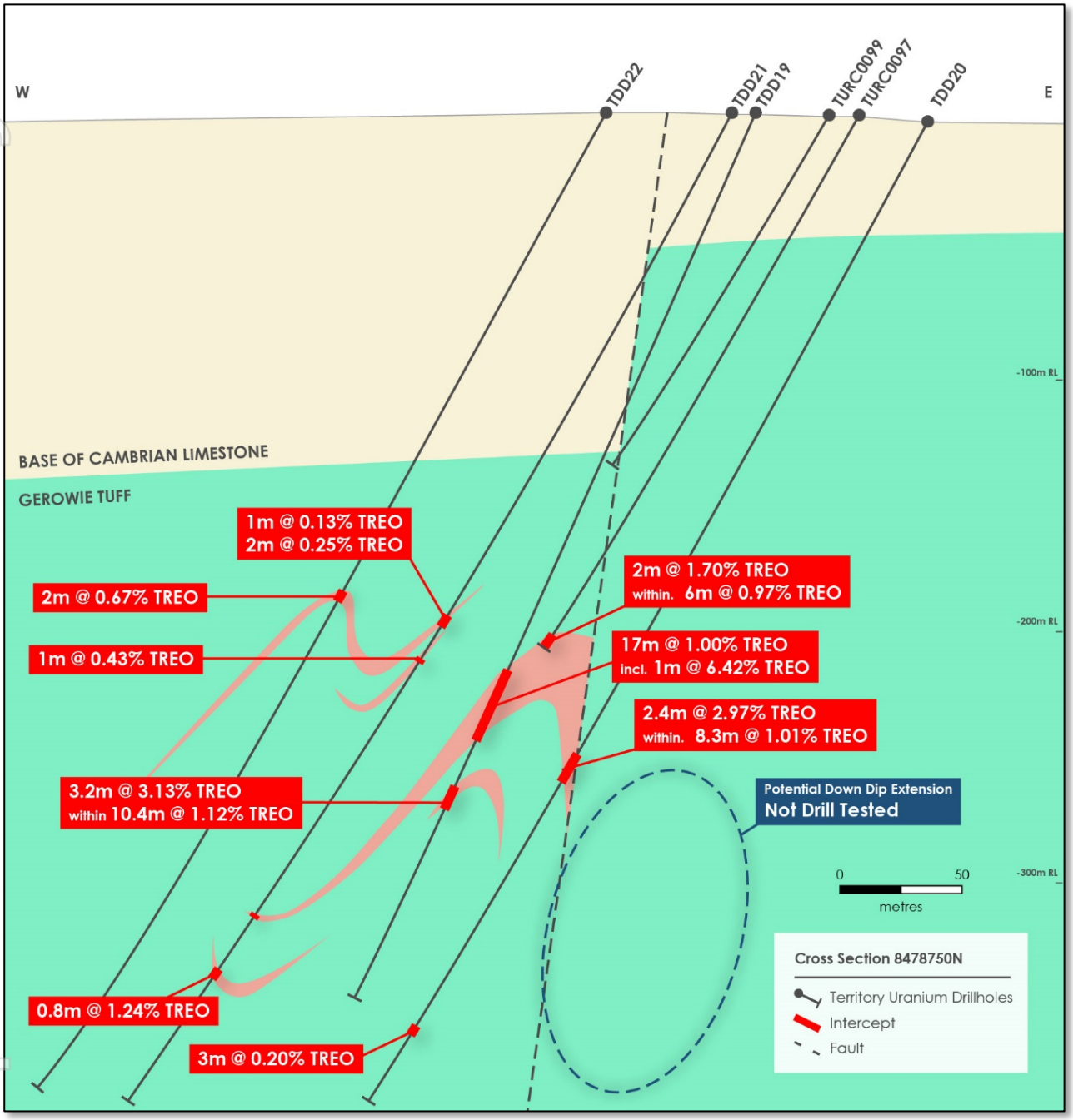

Figure 6 - Quantum REE schematic section 8478750N showing TREO mineralisation in TDD19 and TDD20 intercepted 200m north of discovery hole TDD8 (after TUC ASX Announcement 7 September 2011).

Quantum TREO Mineralogy

Initial TREO metallurgical testwork completed by TUC identified bastnasite (a carbonate-fluoride, typically enriched in La and Ce) as one of the major TREO bearing minerals in the mineralisation along with allanite.

The initial mineralogy of the Quantum REE-Au-Ag mineralisation was completed on a single bulk composite sample from TDD8 and revealed a robust hydrothermal vein and alteration system with high concentrations of REE-rich allanite crystals variably altered to secondary high-grade REE minerals including bastnasite, synchysite and other REE-rich carbonate minerals which occur within veins and fissures, or as rims to allanite crystals.

The presence of these higher grade REE minerals, within a favourable environment, suggests advantageous mineral processing options[9].

TUC completed liberation test work suggested that a concentrate of >19% TREO could be produced and that the separated sulphides could potentially be treated to liberate the Au and Ag in a separate process[10].

Vesper Target: AEM Anomaly

In addition to the REE potential, the project area contains a strong EM anomaly identified by the DeSoto-NT Government co-funded SkyTEM survey. This 2km long by 0.5km wide anomaly known as "Vesper" is located approximately 1.5km to the southwest of the Quantum REE-Au-Ag discovery (Figure 1-3, & 7-8).

The discrete mid to late time EM anomaly is associated with a high magnetic intensity anomaly which is interpreted as forming a domal (doubly plunging) anticlinal fold. It is also associated with a strong, semi-coincident MMI soil Cu-Pb-Zn anomaly identified by Homestake. Peak MMI values include 8060ppb Cu, 3140 ppb Zn and 980 ppb Pb (Figure 2).

In 1998, Homestake targeted the magnetic anomaly with FEND13 which failed to test the magnetic target and did not test the new EM target. Encouragingly FEND13 shows evidence of skarn system development with the presence of calcite-fluorite-garnet veining with pyrite, pyrrhotite and minor chalcopyrite. The combined geophysical and soil anomaly has not been effectively tested and FEND13 is interpreted as being a 'near miss' from testing the EM target.

The geological model for mineralisation is broadly based on the Proterozoic Elaine Dorothy/Mary Kathleen Cu-Au-U-REE skarn system of the Mary Kathleen Domain of the Cloncurry area, Queensland. The Vesper EM anomaly may represent the skarn contact zone, a later massive sulphide enriched phase of the same mineralising event that formed the REE-Au-Ag mineralisation at Quantum and is related to the intrusion and doming of the Cullen Batholith.

Depth to basement in the project area is ~40m deep, enabling shallower drilling than with the Company's first drilling program in 2023, which tested the Fenton Shear Zone under thicker cover further to the south.

[9]ASX Announcement: Territory Uranium Company (24 January 2011)
[10]ASX Announcement: Territory Uranium Company (9 June 2011)

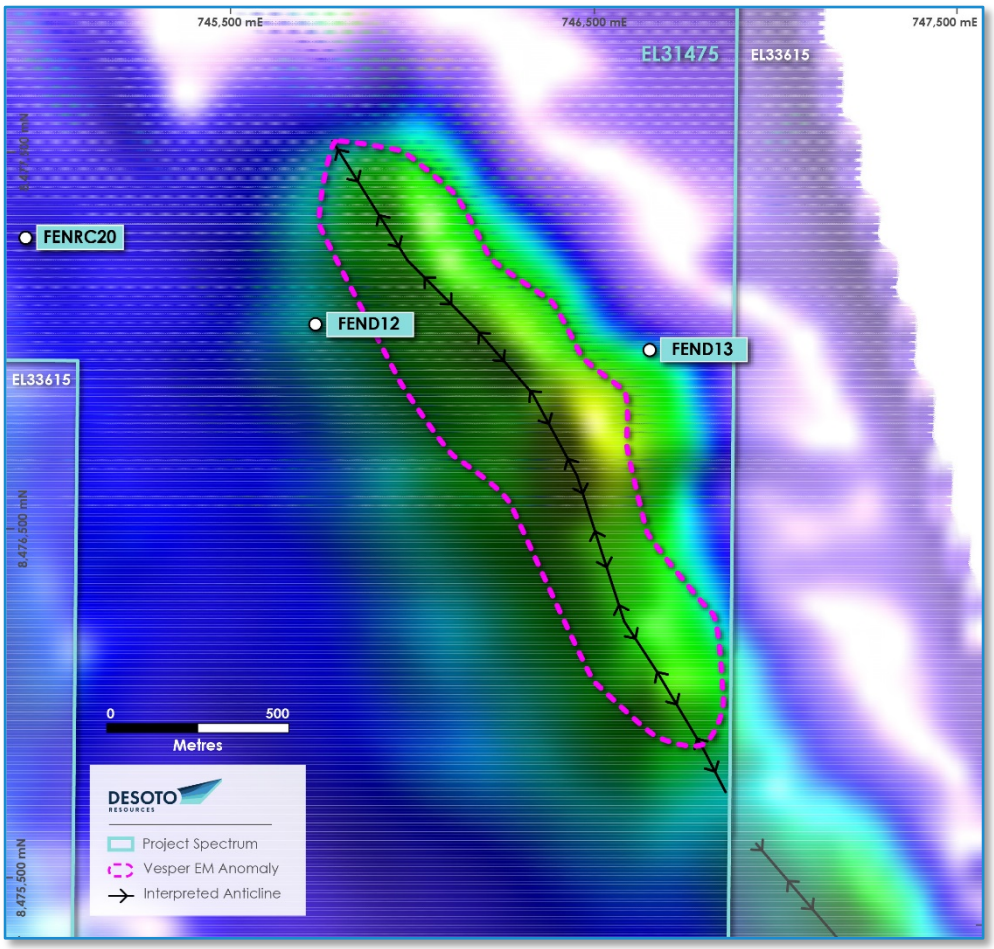

Figure 7: AEM conductivity depth slice outlining the Vesper AEM anomaly, historical Homestake drilling did not test the target.

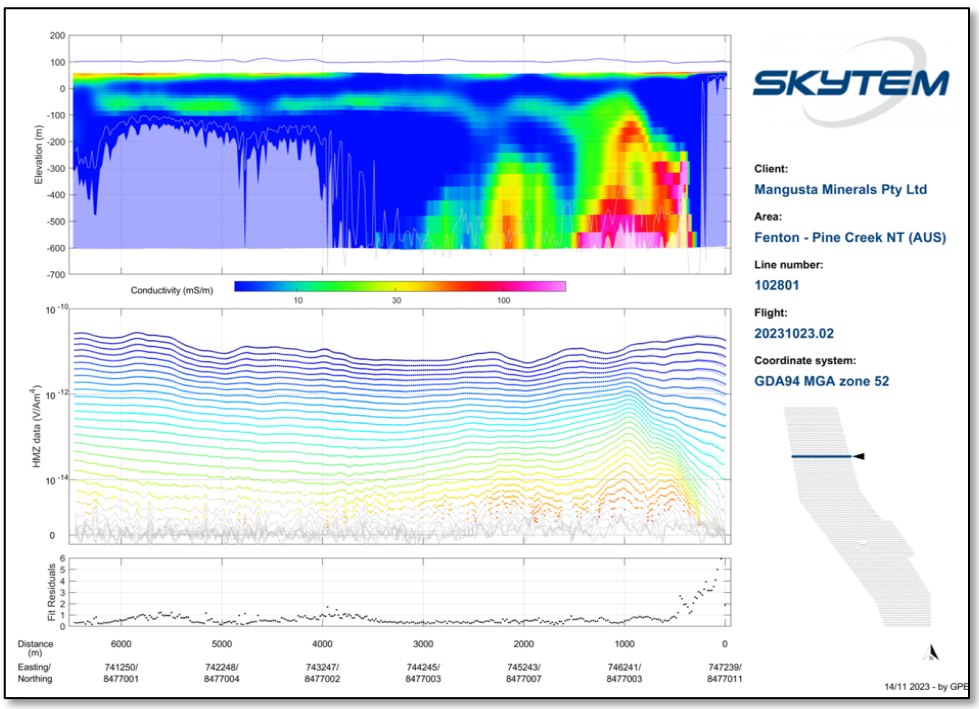

Figure 8. Vesper AEM conductivity anomaly section.

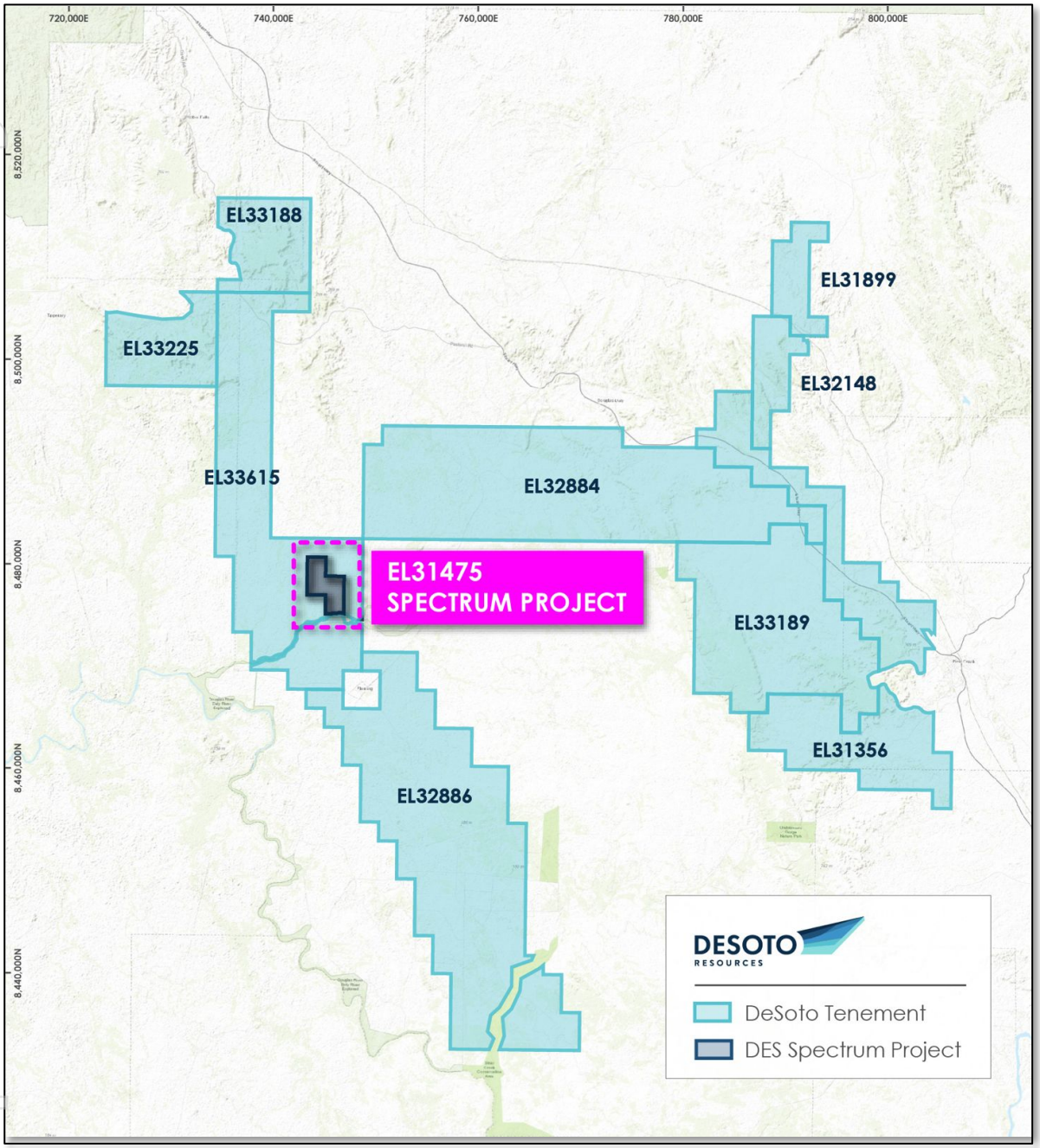

Figure 9. DeSoto Project Tenure showing location of Spectrum Project wholly enclosed by EL33615.

Emerging Rare Earths Hub in Australia

In the Northern Territory, the emergence of rare earths exploration is gaining traction, signifying a significant turning point for the region. A prime example is the Nolans Rare Earths Project, owned by Arafura Resources (ASX:ARU), which aims to mine and process rare earth minerals. These minerals are vital components in various high-tech and green energy applications.

Backing this initiative is the Australian Government, committing up to $840 million (US$550 million) to support the development of Australia's inaugural combined rare earths mine and refinery in the Northern Territory. This investment not only promises to create local job opportunities but also solidifies the Northern Territory's position as a pivotal player in the critical minerals sector.

The Northern Territory is poised to establish itself as a key hub for critical minerals, contributing significantly to both local economic growth and Australia's broader renewable energy ambitions.

Acquisition Terms

On 24th May 2024, DeSoto Resources Limited ("DeSoto" or "the Company") entered into a binding Term Sheet with Copperoz Pty Ltd, the 100% owner of the Spectrum Project ("Spectrum" or "the Project"), to earn a 70% interest in Spectrum by spending a minimum of A$5 million over the next 39 months and the right to acquire 100% of the Project upon completion of a Positive Feasibility Study.

Conditions Precedent

1. Completion of a 1-month due diligence period on the Project to the satisfaction of DeSoto;
2. Third Party approvals to complete the transaction.

Consideration and Escrow

1. 3,636,000 fully paid ordinary shares in the Company (Shares) based on a deemed issue price of $0.066 per share (Consideration Shares);

2. 1,600,000 unlisted options exercisable at $0.23 and an expiry date of five years from the date of issue (Consideration Options); and

3. $80,000 cash payment to be made within 6 months from the execution date.

The issue of the Consideration Shares will be subject to voluntary escrow for a period of 12 months from the date of issue.

Earn-in, Free Carry and Buy-out Option

1. DeSoto has an exclusive right to earn an undivided 70% earned interest in the Spectrum Project by completing exploration expenditure of not less than $5,000,000 on the Project (Earn-in Expenditure) commencing on the earn-in start date and in two stages:

    a) Stage 1: During the first 15 months, DeSoto agrees to spend a minimum of $2 million (Stage 1 Earn-in Requirement) including a minimum of 3,500m of RC/DD drilling with the Project; and

    b) Stage 2: During the next 24 months spend a minimum of $3,000,000 in Earn-in Expenditure (Stage 2 Earn-in Requirement).

2. If Desoto earns the 70% interest, the Company will sole fund all activities towards completion of a Feasibility Study. Upon Completion of a Positive Feasibility Study, DeSoto has an option to buy-out the remaining 30% of Copperoz interest through an agreed buy-out process.

-END-

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

For further information visit our website at DeSotoresources.com or contact:

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Table 2 – Territory Uranium Company Historical Drill Collar Locations

HoleID	East	North	RL (m)	Grid	Max Depth	DD Start	Hole Type
TDD8	745000	8478550	84	AMG84z52	433.2	286	DD
TDD9	745100	8478550	84	AMG84z52	527.6	150	DD
TDD10	745049	8478556	84	AMG84z52	338.5	100	DD
TDD11	744750	8478502	84	AMG84z52	367.9	160	DD
TDD12	744681	8478550	83	AMG84z52	516	202	DD
TDD13	744754	8478553	85	AMG84z52	369.9	108	DD
TDD14	744952	8478555	85	AMG84z52	299.1	202.4	DD
TDD15	744906	8478549	85	AMG84z52	351	192.2	DD
TDD16	744753	8477006	70	AMG84z52	493.2	256.8	DD
TDD17	745050	8478447	83	AMG84z52	404.4	107.7	DD
TDD18	745071	8478449	83	AMG84z52	402	90.4	DD
TDD19	744905	8478752	85	AMG84z52	386.9	153.4	DD
TDD20	744973	8478750	82	AMG84z52	449.9	180.8	DD
TDD21	744896	8478753	85	AMG84z52	461	45	DD
TDD22	744847	8478750	86	AMG84z52	407.7	253.3	DD
TDD23	744934	8478753	84	AMG84z52	164	164	DD
TDD24	744959	8478751	84	AMG84z52	397.7	110.7	DD
TURC0097	744946	8478752	84	AMG84z52	246		RC
TURC0101	744948	8478644	81	AMG84z52	30		RC
TURC0102	744900	8478652	81	AMG84z52	280		RC
TURC0103	744998	8478643	80	AMG84z52	90		RC
TURC0104	744925	8478648	80	AMG84z52	186		RC
TURC0106	744800	8478850	93	AMG84z52	60		RC
TURC0107	744822	8478850	90	AMG84z52	18		RC
TURC0108	744850	8478850	93	AMG84z52	16		RC
TURC0109	745063	8478450	86	AMG84z52	130		RC
TURC0110	745150	8477500	73	AMG84z52	215		RC
TURC0111	745300	8477500	73	AMG84z52	59		RC
TURC0112	745500	8477500	73	AMG84z52	53		RC
TURC0113	745550	8477500	73	AMG84z52	121		RC
TURC0114	744850	8478950	87	AMG84z52	137		RC
TURC0115	744750	8478950	89	AMG84z52	221		RC
TURC0116	744700	8478950	90	AMG84z52	221		RC
TURC0117	744839	8478849	93	AMG84z52	29		RC
TURC0118	744790	8478860	85	AMG84z52	77		RC

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.

CAUTIONARY STATEMENT

Geochemical and geological information in this release were reported under a pre-2012 edition of the JORC Code and is considered as historical by nature. While care has been taken review previous reports, data and ASX releases, ground testing and confirmation work is yet to be completed by the Company. The historical assaying and metallurgical test work was conducted on drill core, RC samples and soil samples by reputable laboratories in the Northern Territory and Western Australia. However, there is no guarantee that these results are representative of the Spectrum REE-Au-Ag mineralisation until further drilling and sampling are conducted by the Company.

Table 3 - JORC CODE – HISTORIC DRILLING & SAMPLING

Section 1: Sampling Techniques and Data – Territory Uranium

Criteria	JORC Code Explanation	Commentary
Sampling Technique	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. 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.	Territory Uranium Corp (TUC) completed a program of reverse circulation (RC) pre-collared diamond drill (DD) holes from August 2010 to September 2011 DD – all core was metre marked and oriented where applicable prior to logging and sampling activities. Core was cut in half with a core saw. Drillhole sample intervals were assigned based upon lithological contacts, with a minimum sample length of 30cm and a maximum of 600cm sampled and submitted to a commercial assay lab for analysis. RC pre-collar samples were collected directly from the rig cyclone in green PVC bags. There is no mention if a riffle splitter was used. Composite 6m samples were collected by through the Cambrian limestone and 1m samples once the drill hole entered the target formations. All sampling was supervised by TUC geologists and field technicians. Homestake Gold (CR2000-0018) completed a geochemical soil sampling program in 1997. Soil sampling for a total of 995 samples was taken on 400m lines at 100m spaced sample sites. Samples were collected as minus 10 mesh and split with one half assayed using an Enzyme partial leach (or MMI leach) for Li, Be, Cl, Sc, Ti, V, Mn, Co, Ni, Cu, Pb, Zn, Ga, Ge, As, Se, Br, Rb, Sr, Y, Zr, Nb, Mo, Ru, Rh, Pd, Ag, Cd, In, Sn, Sb, Te, I, Cs, Ba, La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, Hf, Ta, W, Re, Os, Ir, Pt, Au, Hg, Tl, Bi, Th, V. Of the remainder half the samples were assayed for Au, Ag, Ni, Co, Pd, Cd, Cu, Pb, and Zn using a standard aqua-regia digest and AAS analysis. The Fenton SkyTEM airborne Time-domain electromagnetic (AEM) and magnetic survey was flown along 122 x E-W lines (090°) at a nominal flying height of 55m at line spacing of 200m for a total of 853 line km. • EM System: SkyTEM312HPMT • Base Frequency: 12.5Hz • Tx Area: 342m2 • Tx Current: 230A (High Moment) • Tx Turns: 12 • The airborne magnetic data was collected using a Caesium Vapour magnetometer sensor (Geometrics G822A), mounted on the front of the Tx loop frame. The base magnetometer was a GEM Systems GSM19 with a sample interval of 1 Hz. The magnetometer base station was located at Douglas Daly (747998.86E/ 8467784.38N) • Raw binary data was processed using SkyTEM proprietary software.

		• Navigation used a real-time Novatel OEM729 DGPS system with a Terrastar high precision real time differential correction service. Base GPS data was also recorded as a back-up.
Drilling	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).	Reverse circulation (RC) pre-collared diamond (DD) holes were completed. A number of pre-collars were completed using PCD drilling. RC pre-collars were drilled and were drilled to a maximum depth of 260m. The RC hammer size is not mentioned but is assumed to be 5 inch or greater. Samples were collected at 1m intervals and then sampled to form 6m composite samples through the Cambrian limestone and 1m samples thereafter. All diamond drilling was NQ2 sized and was oriented (method not mentioned by TUC).
Drill Sample Recovery	Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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.	Drill core: Sample recoveries were measured by standard industry practices for diamond drill core. Core recoveries were generally good with some minor intervals of lost core in heavy fractured fault zones. Significant sample bias is not expected with cut core. RC chips: Each 1 metre drill sample was collected and bagged off the rig. TUC have not recorded sample recovery for RC samples or if the sample was wet. DeSoto is not able to determine if there is any sample bias from RC or Diamond drilling.
Logging	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. Whether logging is qualitative or quantitative in nature. Core (or costean/Trench, channel, etc) photography. The total length and percentage of the relevant intersections logged.	All drill samples were logged systematically for lithology, weathering, alteration, veining, structure and minor minerals. Minor minerals were estimated quantitively. A core orientation device was employed enabling orientated structural measurements to be taken, however the type of core orientation device is not recorded by TUC. A magnetic susceptibility meter was utilised to collect readings for each metre of diamond core. TUC also completed a SG measurement using the weight in air and weight in water method for each metre of diamond drilling. TUC also completed RQD logging for each metre of diamond drilling. All logging is both qualitative and quantitative.
Sub-Sampling Technique and Sample Preparation	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. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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.	The diamond drill samples were collected by longitudinally splitting core using a core saw. Half of the core was sent to the laboratory for assay. The sampling method is considered adequate for a diamond drilling program of this type. The RC sample collection method is not recorded by TUC however it is noted that each 1 metre sample was collected from the rig into a green plastic bag. It is unknown if riffle splitting was used or if spear sampling from the green plastic bag was employed (or both). TUC have not recorded if any quality control procedures were adopted to maximise the representivity of the samples. There is no record of any repeat or duplicate sampling. Sample weights have not been recorded. AEM -The SkyTEM system is one-time calibrated allowing for direct comparison with ground based or borehole EM datasets together with complete traceability back to the established TEM reference model. This also ensures that data from repeat or contiguous SkyTEM surveys can be seamlessly and confidently processed and combined. Two repeat lines were included in the survey. Calibration factors and time shift been applied to the delivered EM data, and therefore the data does not need to be scaled or the window times do not need to be shifted prior to modelling/inversion. Full details contained in report.

Quality of Assay Data and Laboratory Tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. 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.	All samples were prepared by Amdel in Darwin and sent to Amdel in Adelaide for sample analysis. Sample prep involved weighing each sample and then drying the samples at 100˚C. Each sample was then whole crushed to 5mm and then a 250g subsample pulverised to 90% passing 106 microns. Au (1ppb), Pt (ppb) and Pd (1 ppb) were assayed by standard Fire-Assay 50 method. U (4ppm) was assayed by standard XRF analysis. Ba (10ppm), Ca (10ppm), Cr (2ppm), Cu (2ppm), Fe (100pm), K (10ppm), Mg (10ppm), Mn (5ppm), Na (10ppm), Ni (2ppm), P (10ppm), Pb (5ppm), Ti (10ppm) and V (ppm) were assayed by a multi-acid digest followed by ICP-OES and ICP-MS Ag (0.1ppm), As (0.5ppm), Bi (0.1ppm), Co (0.2ppm), Mo (0.1ppm), Sb (0.5ppm), Se (0.5ppm), Sn, (0.5ppm), Te (0.2ppm), Th (0.1ppm), U (0.1ppm), W (0.5ppm) and Zn (0.5ppm) were assayed by a HF acid digest followed by ICP-MS. Dy (0.02ppm), Er (0.05ppm), Eu (0.5ppm), Gd (0.05ppm), Ho (0.5ppm), Lu (0.02ppm), Nd (0.02ppm), Pr (0.05ppm), Sm (0.02ppm), tb (0.02ppm), Tm (0.05ppm), Yb (0.05ppm), Ce (0.05ppm), La (0.5ppm) and Y (0.05ppm) were assayed by HF/multi-acid digested followed by ICP-MS. AEM - QAQC was completed by the acquisition contractor and verified by an independent consultant geophysicist.
Verification of Sampling and Assaying	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	No hole twinning or independent verification of intersections has been conducted at this stage. AEM- Two repeat lines were included in the survey to validate data.
Location of Data points	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	Drill hole collar locations were recorded at the completion of each hole by hand-held GPS ±5m. Downhole orientation of each drill hole was established with the use of a single-shot magnetic surveying tool. Downhole surveys were performed every 25 to 30m providing an adequate locational position of each drill hole. Positional data was recorded in projection AMG84 Zone 52. No topographic control has been applied. AEM - Navigation used a real-time Novatel OEM729 DGPS system with a Terrastar high precision real time differential correction service. Only the TerraStar HP differentially corrected GPS position information were used for the survey. AEM data was recorded in WGS84 datum and then transformed to Transverse Mercator, GDA94 datum Zone 52S. Elevation data was derived by subtracting laser altimeter (height above ground) data from the GPS altitude (height above the GRS80 ellipsoid) data, to yield the height of the ground above the GRS80 ellipsoid. The ellipsoid-geoid separation (N-value) was then subtracted to yield the elevation of the ground above the Australian Height Datum (AHD). ElevationAHD = GPS_HeightGRS80 – Laser_Altimeter – N_Value The subtracted N-values were interpolated from the AUSGeoid09 grid values obtained via the Geoscience Australia website.
Data Spacing and Distribution	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 diamond drill holes were designed to test REE-Au-Ag mineralisation first intersected in TDD8 and to extend the intercepted mineralisation to the north and south. Drill holes were also designed to test the down dip extensions of the mineralisation. Drillhole is not considered adequate for Mineral Resource estimation as an appropriate understanding of mineralisation continuity has not yet been established. Composite sampling has been applied to the RC drill samples but not to the diamond core samples.

		AEM- survey data line spacing is 200m.
Orientation of Data in Relation to Geological Structure	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.	Holes were planned approximately perpendicular to the intercepted mineralisation and angled to intercept the mineralisation orthogonally so as to provide an indication of the true width of mineralisation. AEM - The survey consisted of 853 line km of data collected along 200m spaced E-W (090-270) flight lines. Sampling is believed to be unbiased.
Sample Security	The measures taken to ensure sample security	Sample security measures have not been recorded by TUC. It is not known if the original drill core, RC chip trays or assay pups still exist.
Section 2 Reporting of Exploration Results		
Mineral Tenement and Land Tenure Status	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 1,893 km^2. 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 Oolloo Roads and then via well maintained gravel roads. The TUC drill program was only conducted within the area of what is now EL31475. The SkyTEM survey was flown over licences EL32886 and EL33615 and EL31475 held by private company CopperOz Pty Ltd.
Exploration Done by Other Parties	Acknowledgment and appraisal of exploration by other parties.	The majority of past exploration work within the Spectrum Project area (including drilling, surface sampling; geophysical surveys, geological mapping) has been largely completed by Territory Uranium Company from 2010 to 2011 and Homestake Gold in from 1996 to 1998. 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 www.desotoresources.com
Geology	Deposit type, geological setting and style of mineralisation.	The Spectrum 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, and Finniss 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. The Spectrumm Project REE-Au-Ag appears to be an antiformal hinge zone style hydrothermal replacement mineralisation with hydrothermal fluids being granitic in nature.
Drill Hole Information	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: • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • dip and azimuth of the hole • down hole length and interception depth • hole length • If the exclusion of this information is justified on the basis that the information is not	Information is presented in Tables and on plans in the release.

	Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data Aggregation Methods	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. 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. The assumptions used for any reporting of metal equivalent values should be clearly stated.	Au and Ag exploration results reported in this release are calculated using a 0.1g/t Au cut off grade and include up to 2m of internal waste. Weighted average gold grades are used where sample widths are greater or less than 1m. TREO exploration results have been reported in this release by the sum of common oxide values for Ce, Dy, Er, Gd, Ho, La, Lu, Nd, Pr, Sm, Tb, Tm, Yb, Y and have been calculated from REE ppm grades. Weighted average TREO grades are used where sample widths and greater or less than 1m. No metal equivalents are reported.
Relationship Between Mineralisation Widths and Intercept Lengths	These relationships are particularly important in the reporting of Exploration Results 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').	The overall orientation of mineralised zones is not yet known or properly understood. Geometry of the TREO-Au-Ag mineralisation is uncertain at this stage of exploration, so all intersections are reported as downhole lengths.
Diagrams	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.	See Figures in this release.
Balanced Reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	The company believes this announcement is a balanced report, and that all material information has been reported.
Other Substantive Exploration Data	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 (FEND10 to FEND13 and FEND15 holes 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.
Further Work	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 further RC/DD drilling, geological modelling, metallurgical test work and further geophysical surveys.