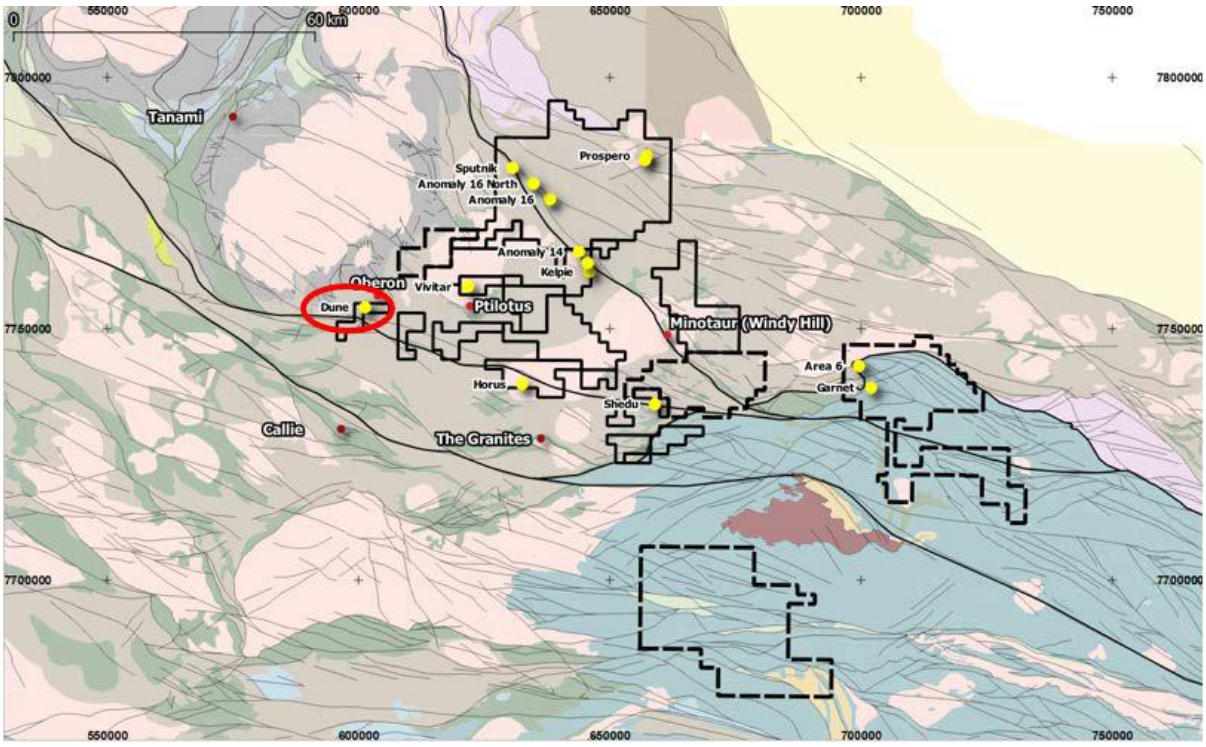
Drilling Collaboration Final Report
Newcrest Mining Ltd – Euro Project Joint Venture
EL 26590



Diamond Drilling Proposal
Prodigy Gold NL Joint Venture

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Map Sheet: SF5203_THE GRANITES

Datum: MGA94 (GDA94) Zone 52 South

1. Abstract

This document is a submission as part of the final reporting of NTGS Geophysics and Drilling Collaboration Programme – Dune Southwest (2019 – 2020). The document is submitted on behalf of Newcrest Mining Ltd who is in a joint venture with Prodigy Gold NL (previously ABM Resources Ltd). On the 18th May 2018 ABM Resources (ASX: ABU) changed Company Name to Prodigy Gold NL (ASX: PRX). On the 3rd July 2018 Prodigy Gold NL and Newcrest Operations Ltd, a wholly owned subsidiary of Newcrest Mining Ltd, executed a Farm-In Agreement for Euro Project in the Tanami. EL26590, where the relevant co-funded programme was conducted, is part of the Euro Project. Dune Southwest diamond drilling targeted an Oberon style fold-hosted orogenic gold (Au) system of significant bulk-tonnage amenable to Newcrest-scale operations. Shallow historic (<30m) drilling over the area was identified as ineffective in explaining the targeted magnetic anomaly due to an overlying cover sequence obscuring the geology and geochemistry. The 2km x 0.3km magnetic anomaly, remodelled from NTGS open file survey data, was interpreted to characterise an antiformal fold closure of Dead Bullock Soak Formation type stratigraphy, situated along a major structural splay to the Trans-Tanami Fault Corridor. One diamond drill hole (EUR0018) was completed to a depth of 600.5m. The drill program was conducted from 14/06/2019 to 28/06/2019. EUR0018 successfully intercepted arenaceous Killi Killi Formation (KKF) type sediments above a fault bounded and folded sequence of Dead Bullock Soak (DBS) Formation equivalent sediments. Stratigraphic comparison between EUR0018 and the DBS stratigraphy suggest the drill hole intercepted Madigan and Davidsons equivalent turbidite beds. Low detection multi-element analysis has facilitated regional stratigraphic fingerprinting which confirmed Dune Southwest stratigraphy as analogous to the DBS type stratigraphy via variations in Th/Sc and Zr/Sc ratios. Observations of bedding and sedimentary younging indicators in EUR0018 characterise tight parasitic type fold structures on the limb a larger F1 synform. The Dune Southwest anomaly did not return significant Au or pathfinder (As-Bi-Te) results with a maximum Au values of 0.15ppm.

2. Contents

3. Introduction

The Dune Southwest prospect area is located on EL26950 (Area - 28.98km²), immediately south (~2km) from the Oberon prospect (Figure 1). The targeted Dune Southwest anomaly can be located at -20.327322°, 129.958157°.

The area is accessible via the Tanami Rd – Tanami Downs Rd and Oberon access tracks from the north (Figure 1). The prospect area is characterised by east-west oriented aeolian sand dunes that growth in profile towards the south (**Error! Reference source not found.**). These dunes are interspersed by flat lying corridors of spinifex. The immediate Dune Southwest prospect area hosts abundant lateritic residuum at surface. To the east, a large north-east to south-west trending palaeodrainage system borders the tenement (Figure 8**Error! Reference source not found.**). The associated clay cover profile thickens to the east of the tenement.

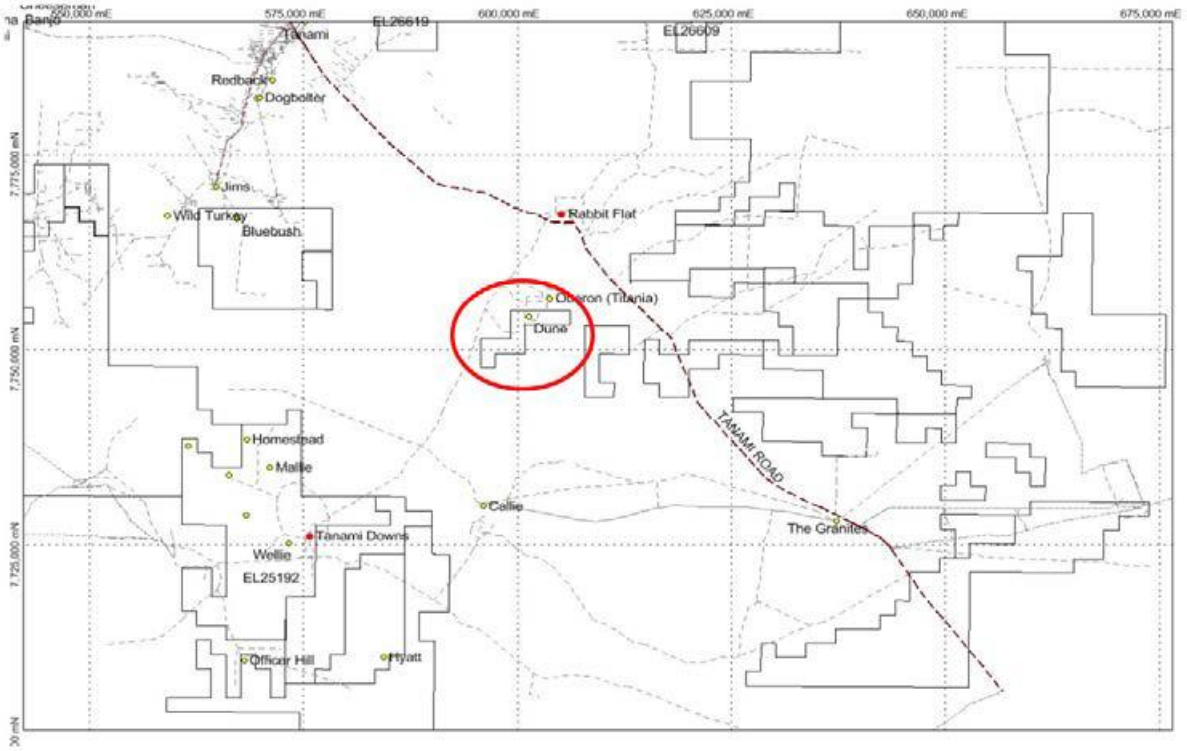

Figure 1. Dune Southwest regional location and access.

4. Regional Context

The Dune Southwest prospect is located adjacent to the Tran-Tanami fault corridor. The targeted magnetic anomaly is located upon a west-north-west trending splay structure that can be interpreted as regionally extensive from 2019 NTGS air magnetic survey and geochemical data (Figure 2). The surrounding broad low magnetic response and drilled felsic composed, micaceous sediments suggest the area is part of a low energy sedimentary basin environment peripheral to the centre of the orogeny. This geology characterises dominantly Killi Killi Formation sediments of the upper Tanami Group. Dune Southwest is located immediately south (~5km) of the Frankenia Dome Granite complex. Magnetic and mapping data suggest folding and faulting become more prominent towards the margin of the granite. Mapped and drilled occurrences of intermediate to mafic composed sediments suggest lower regional stratigraphy such as the

Dead Bullock Soak and Mt Charles Formation volcanics and volcanosediments are folded and uplifted towards the margin of the Granite.

The stratigraphy observed at the Oberon prospect is believed to represent the transition from the Killi Killi Formation to the upper Dead Bullock Formation which affirms the regional interpretation of folded and uplifted lower stratigrpahy (Silcock (2011). Silcock 2011 makes direct correlations between Oberon and Callie mine stratigraphy, namely the Pargee Sandstone and Madigan, Upper Blake Beds and Zebra Formation and Boudin Chert positions demonstrated at each prospect. This further indicates are regional stratigraphic position for the Oberon – Dune area at the within the Lower Killi Killi Formation to Upper Dead Bullock Soak Formation (Figure 12)

Oberon has a distinct magnetic and gravity pattern and is associated with a regional scale geochemical footprint. Extensions of the coincident Au As anomaly (based on public available information) trend in a northwest orientation onto EL26590 (Figure 4).

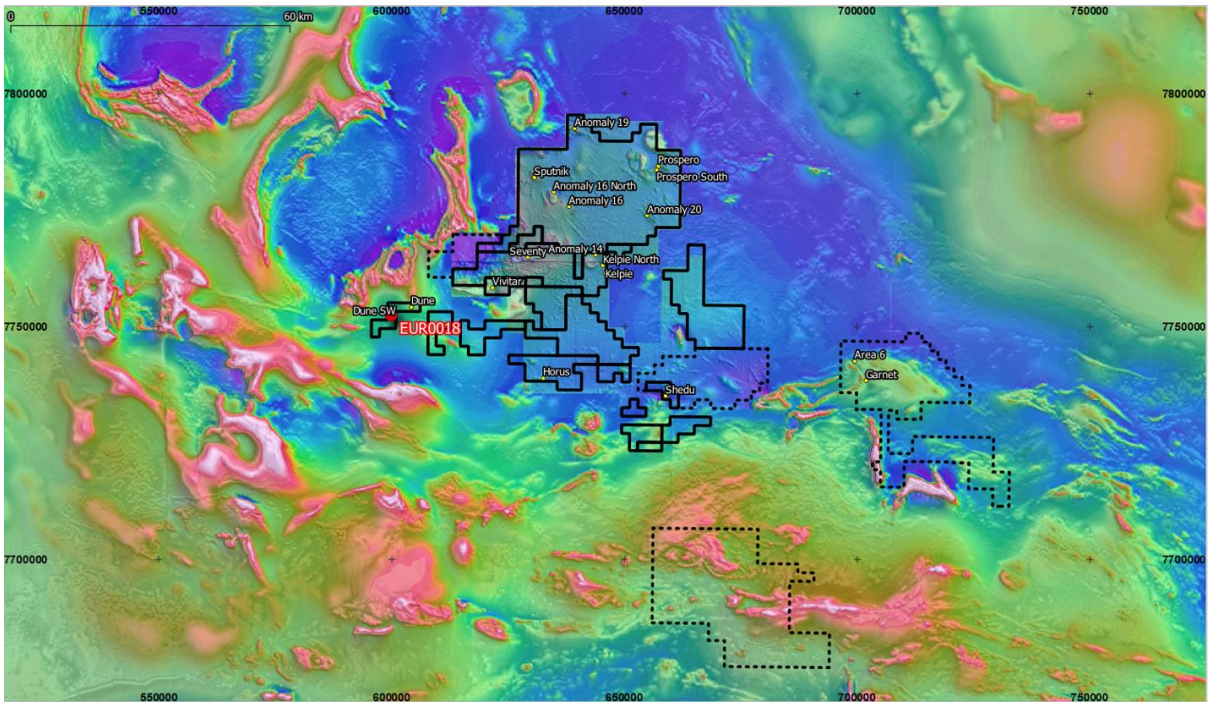

Figure 2. Dune (EUR0018) regional context - RTP air magnetics

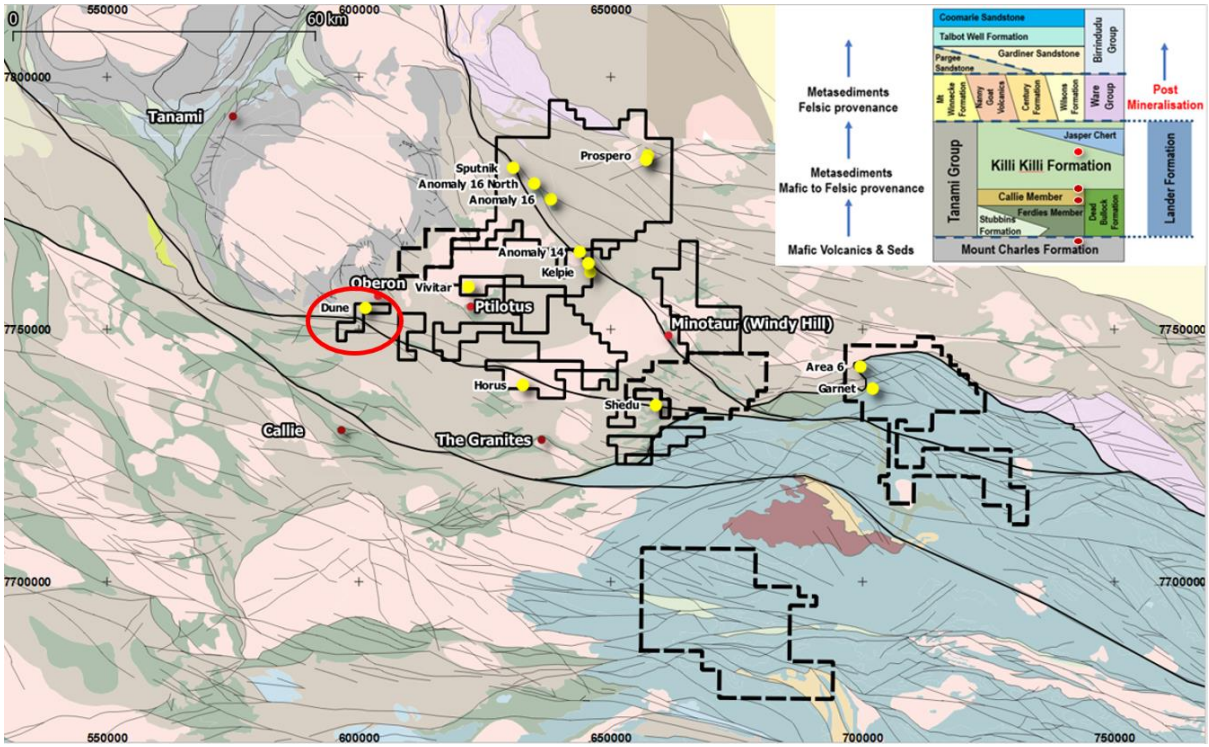

Figure 3. Dune (EUR0018) regional context - Regional geology from Leon Vandenberg, previously ABM Resources (Colour scheme and structural interp modified by NCM)

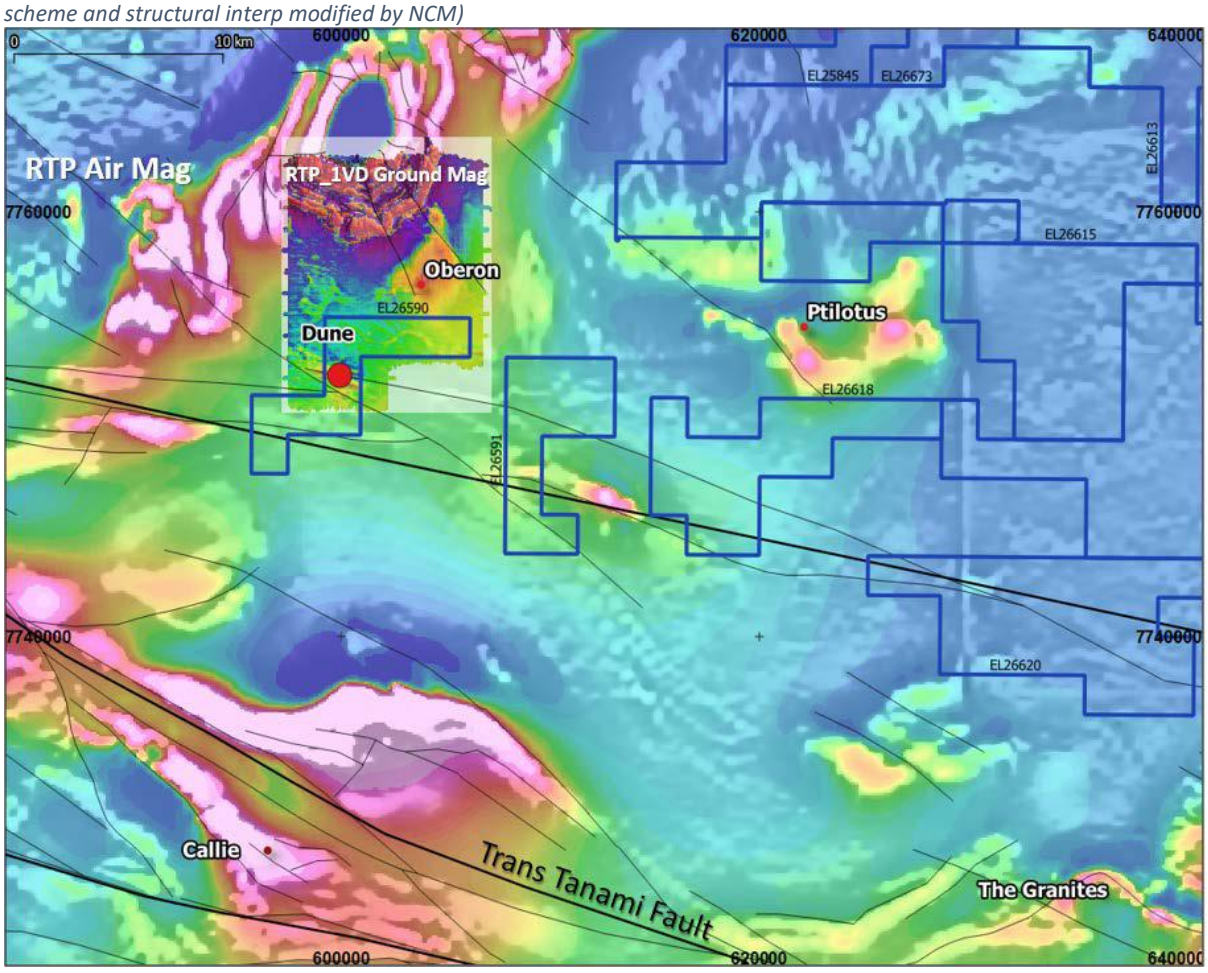

Figure 4. Camp setting demonstrating regionally extensive structural splay and concise magnetic anomalies at Dune Southwest and Oberon.

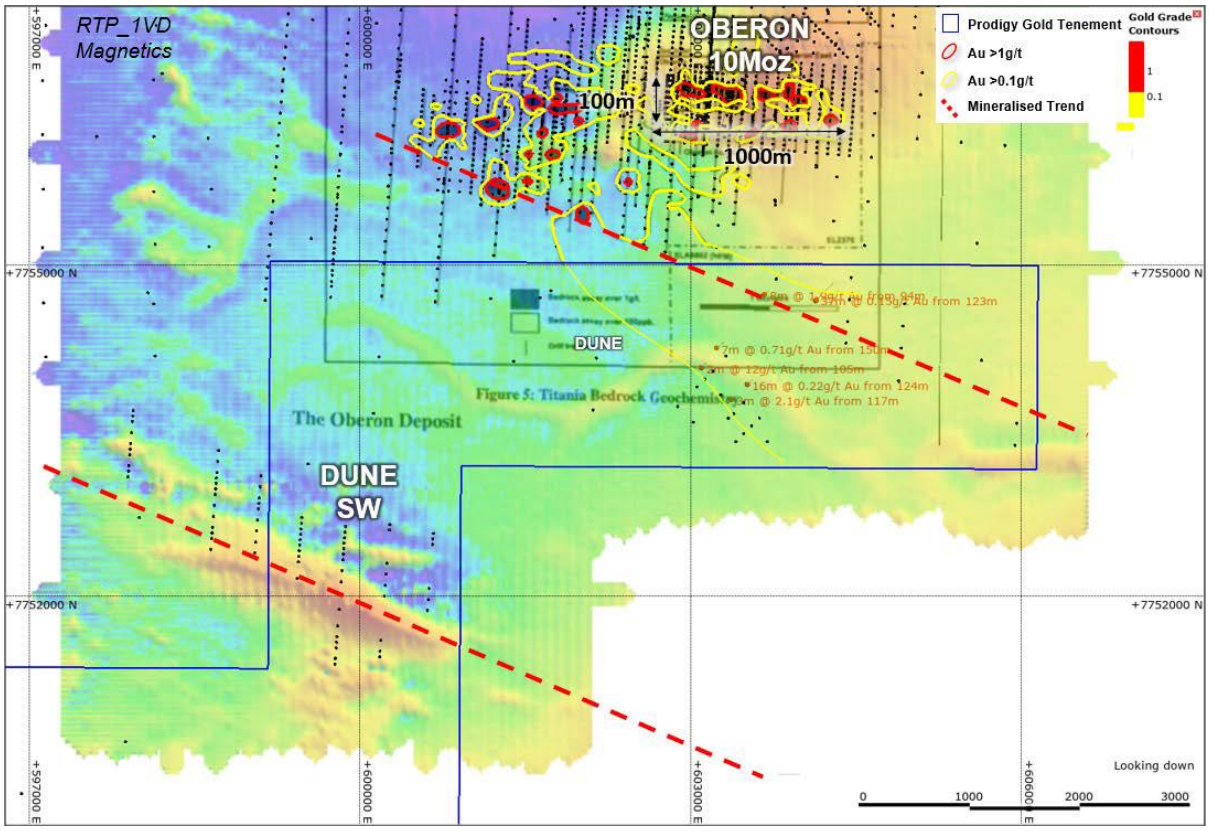

Figure 5. Inferred west-north-west trending structural controls and geochemical footprint.

5. Previous Exploration

The broader Tanami project area has been previously held and explored for gold by Zapopan (and partners of the Tanami JV), Normandy / North Flinders Mines and most recently Newmont. There are numerous historic tenements IDs, the most recent being EL2370. Previous exploration has focussed on remote sensing, ground truthing, surface geochemical sampling. These earlier programs of work culminated in drilling of 74 RAB holes (RRB449-552) along 7 traverses over the magnetic anomaly (Figure 7). These vertical holes were spaced at 100m intervals with some infill completed at 50m drill centres. Average hole depth reached 30m, although many ended at shallower depths. 20m). RRB506 as an example 'finished at 66m without reaching bedrock' (Walters M 2002).

Geochemical response was hence subdued due to failure to intercept target zone. Lack of anomalous results previously interpreted to be the cause of overlying cover sequence and failure to intercept basement rocks (Figure 6).

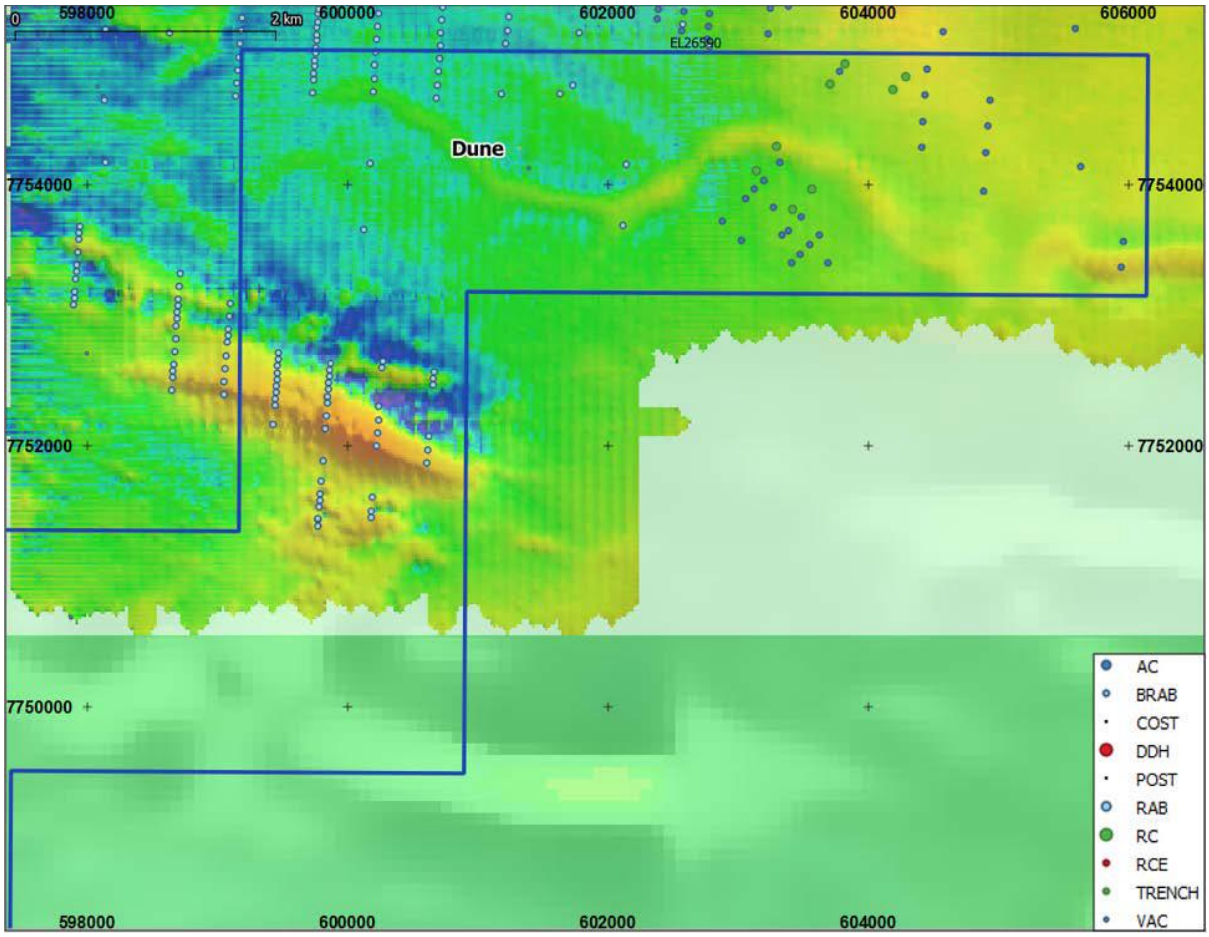

Figure 6. Previous exploration demonstrating earlier shallower RAB drilling across the Dune Southwest magnetic anomaly.

6. Exploration Concept

The Exploration target at Dune Southwest was an upright, near isoclinal antiformal fold sequence of DBS style stratigraphy with potential gold bearing vein array, analogous to the Oberon (Figure 7).

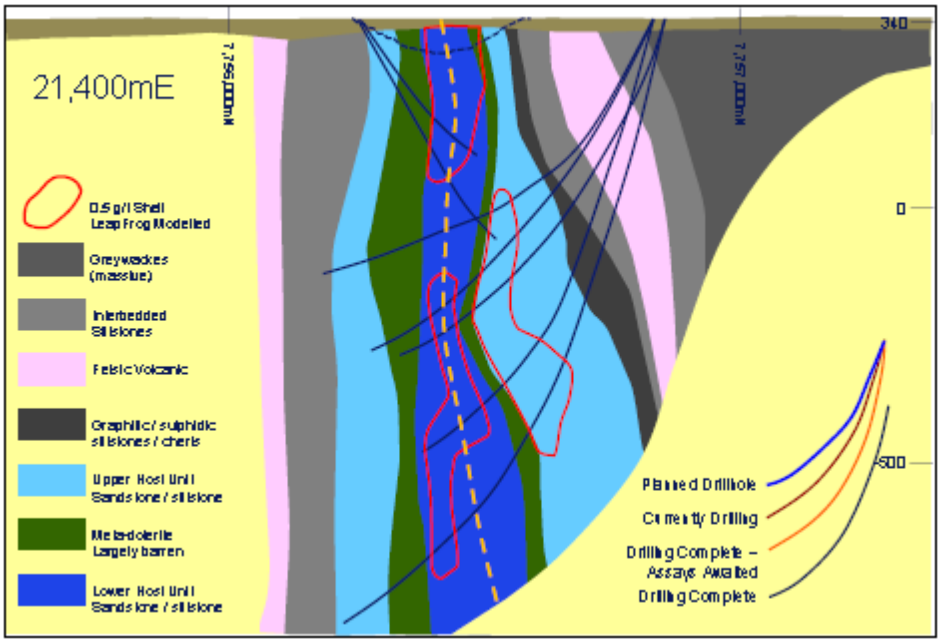

Figure 7. Oberon cross-section demonstrating folded KLF to DBS type sediments and ore shoot geometries.

Vein geometries at Oberon are dominantly described as stockwork in nature with minor strataform mineralisation styles (Silcock 2011). The vein mineral assemblage is quartz-calcite-arseonpyrite±pyrite within ore zones.

This is associated with peripheral chlorite alteration and pervasive sericite-albite alteration in zones of increased veining.

Arsenopyrite occurs typically as euhedral to semi-hederal grains and aggregates, dominantly disseminated through the country rock, but also within veins. Free gold grains, ranging from nano particles up to 3mm in diameter, have been observed within sulphides (Cook et al. 2013). Unlike sulphide associated mineralisation at The Granites, Dead Bullock Soak - Auron, the host stratigraphic units do not appear to have been strongly ferruginous.

Controls to mineralisation appear to be the oblique angle of mineralising structures to the axial plane of the antiform. This fault appears to have been accompanied by the introduction of mineralising fluids, as high grades occur where this structure intersects favourable stratigraphy. This is noted as the sandstone-siltstone horizons and at the contacts of the meta-dolerite which may present a rheological contract and depressurisation site for ore forming fluids.

7. Details of the Collaborative Program

EUR0018 was located approximately 5km southwest of the Oberon prospect (Figure 8).

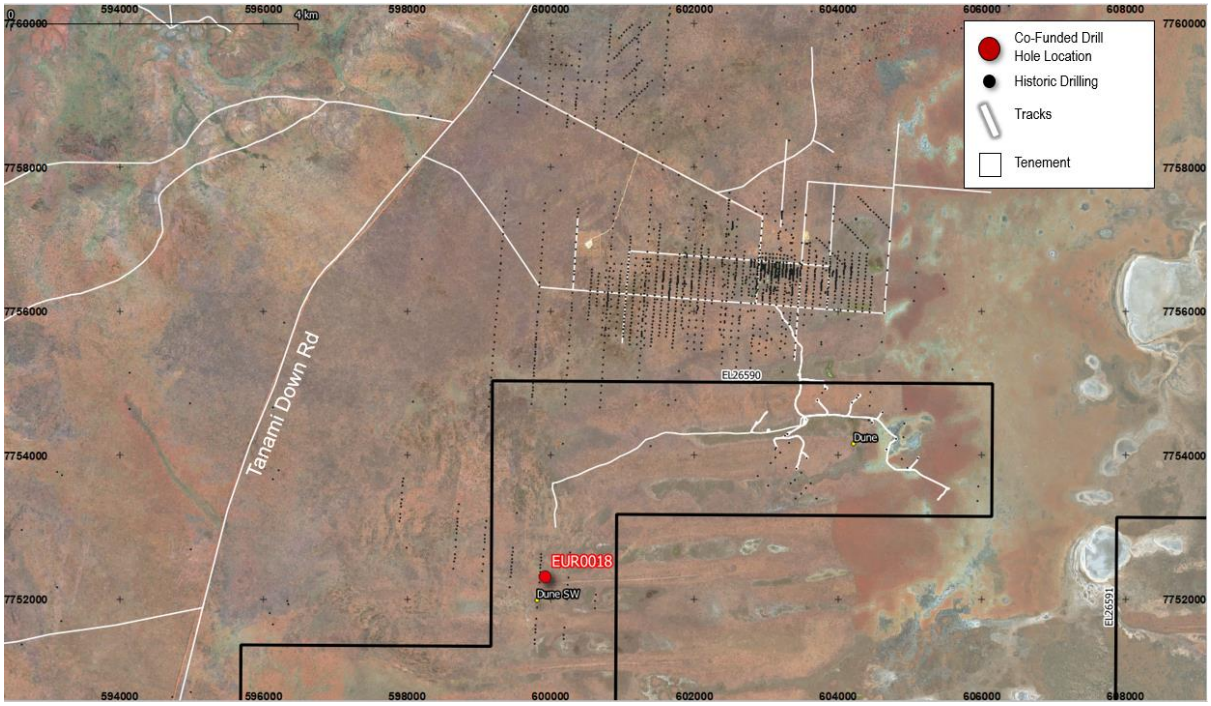

Figure 8. Dune Southwest and EUR0018 prospect location (EL26590).

Details of the planned co-funded drill hole (DUDD001) are listed in Table 1. Details of the completed co-funded drill hole (EUR0018) are listed in Table 2.

Planned ID	East (MGA)	North (MGA)	Lat	Long	Elevation	Dip	Azi (MGA)	Depth (m)
DUDD001	599920	7752304	-20.324635	129.957154	340	-60	200	600

Table 1. Planned co-funded drill hole details

Hole ID	East (MGA)	North (MGA)	Lat	Long	Elevation	Dip	Azi (MGA)	Depth (m)
EUR0018	599924	7752310	-20.324581	129.957192	342	-70	200	600.5

Table 2. Completed co-funded drill hole details

Logging of drill core included observations and measurements of lithology, alteration, mineralisation and structural orientations utilising Geosoft MX Deposit logging software on Samsung Galaxy tablets. A library of logging codes is available in Appendix 1.

Magnetic susceptibility measurements were recorded for each metre interval using a handheld KT-2 magnetometer at a location designated by the geologist along the core. Magnetic susceptibility was recorded in x10^3 SI. All drill hole core smaller than PQ was taken out of the tray to be measured. Measurements were taken ensuring the device was calibrated by zeroing the device in the air prior to each measurement. Measurements were taken without holding the core to avoid interference from the person taking the measurement. Plastic core trays were utilised to avoid interference from metallic trays.

Pre-liminary geochemical data was captured in the field utilising Boart Longyear Truscan XRF equivalent technology.

Sampling of drill core was completed on 1m intervals. Core was cut into quarter core in PQ and half core in HQ and NQ diameters. A summary of core intervals is provided in Table 3. Summary of EUR0018 core sampling intervals.

SAMPLES SUBMITTED:			
Core Intervals:		Core Diameter:	PQ (0-134.5m) HQ (134.5-401.8) NQ (401.8-600.5)
		No. of Core Trays:	55 x PQ, 79 HQ, 47 NQ
		No. of Pallets:	9
		No. of Cutting Samples:	0
		Comments (e.g. 5 trays missing, trays 1-3 damaged)	
Cutting Intervals:	All core cut,		
	PQ ¼ Core		
	HQ and NQ ½ Core		

Table 3. Summary of EUR0018 core sampling intervals.

All samples were submitted to Bureau Veritas Laboratory in Adelaide. All samples were analysed for Au via Fire Assay methods (AA and ICP-MS) finish with a low detection of 10ppb Au. Every second meter was submitted for low detection 4-acid digest multi-element (ICP-MS & ICP-AES finish).

QAQC samples were submitted along with core samples. Field QC procedures involve the use of commercial certified reference materials (CRMs) and in house blanks. The insertion rate of these is at an average of 1:20. Bags were provided to the lab for field replicates to be analysed from crushed sample splits.

8. Results and Interpretation

EUR0018 successfully intercepted the targeted magnetic anomaly. Observed lithologies confirmed the stratigraphic targeting concept and structural setting of a fault bounded, folded DBS type sedimentary sequence (Figure 10).

EUR0018 intercepted the Killi Killi formation hosting sporadic quartz-K feldspar ±pyrite veining to 271.5m (Figure 9A). The hole intercepted a shear zone with quartz-pyrite veining from 271.5 - 280.1m within a black shale horizon (Figure 9B). From 280.1m the hole intercepted Dead Bullock Formation style stratigraphy again hosting sporadic quartz-K feldspar±pyrite veining sporadically to the end of hole (Figure 9C).

A lack of deformational fabric was noted throughout EUR0018. Shearing was localised and preferentially exploited ductile black shale horizons. Bedding measurements and changes in sedimentary younging indicators suggest the hole intercepted steeply southwest dipping stratigraphy and tightly folded parasitic folds. The majority of younging features indicated antiformal vergence to the north-east, suggesting drilling was progressing to a larger synformal fold closure (Figure 11). EUR0018 intercepts apparently massive beds with bedding at low angles to the core axis from ~400m onwards. It is interpreted the hole drill down stratigraphy inhibiting hole lift as intended.

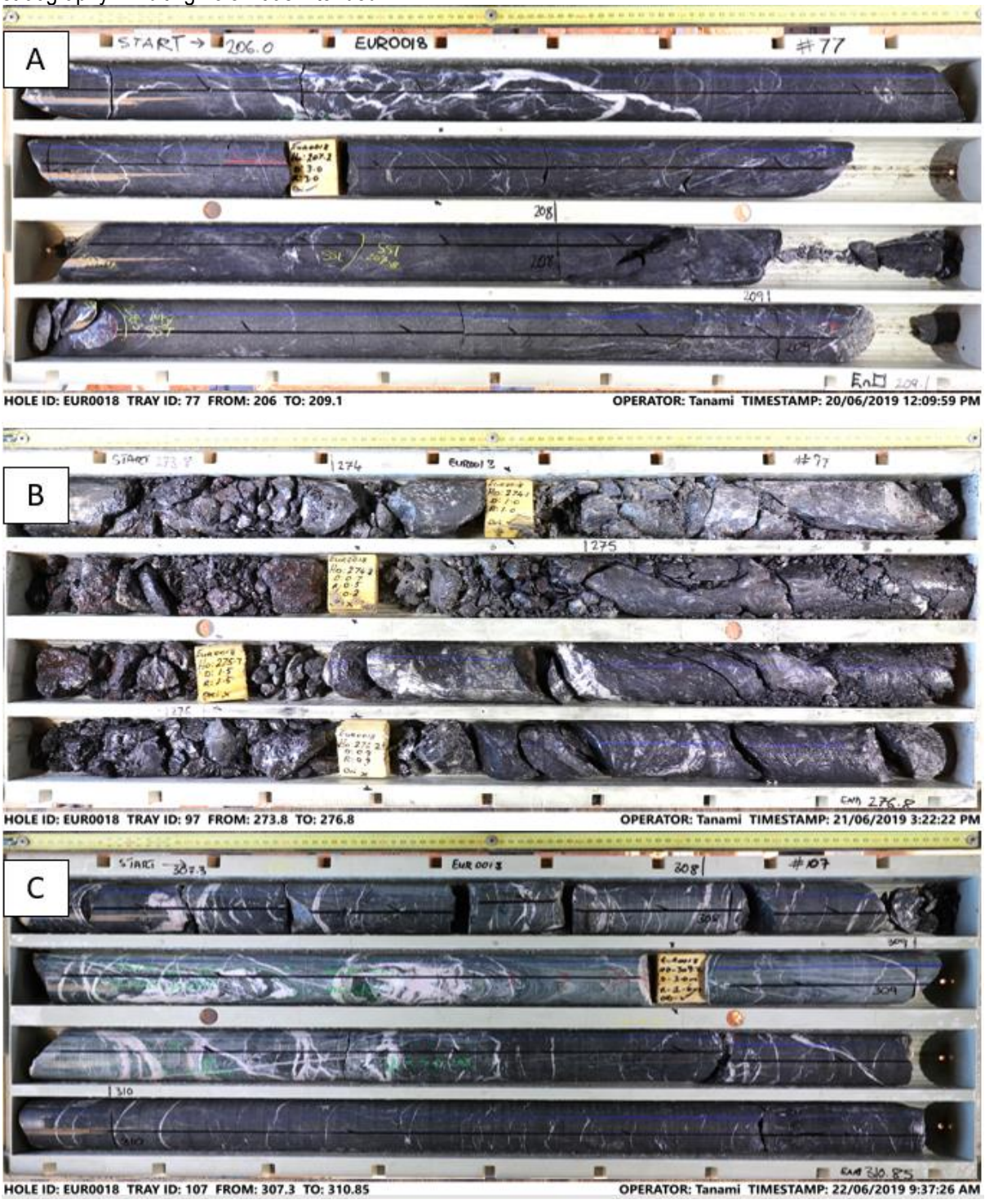

Figure 9. A) Feldspathic KKF sediments hosting quartz veining. B) Shear zone exploiting black shales at margin of magnetic body. C) DBS style sediments including silicic chert horizons, quartz veining and disseminated magnetite.

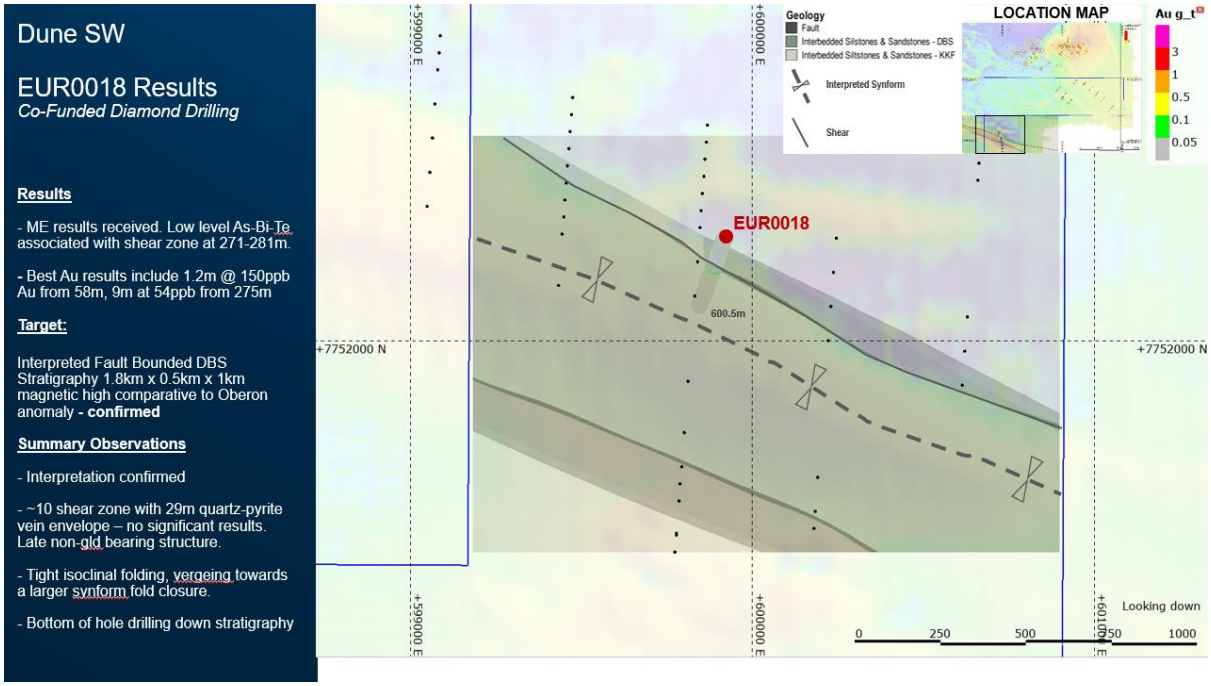

Figure 10. Plan view of Dune Southwest (EUR0018) drilling and interpreted geology

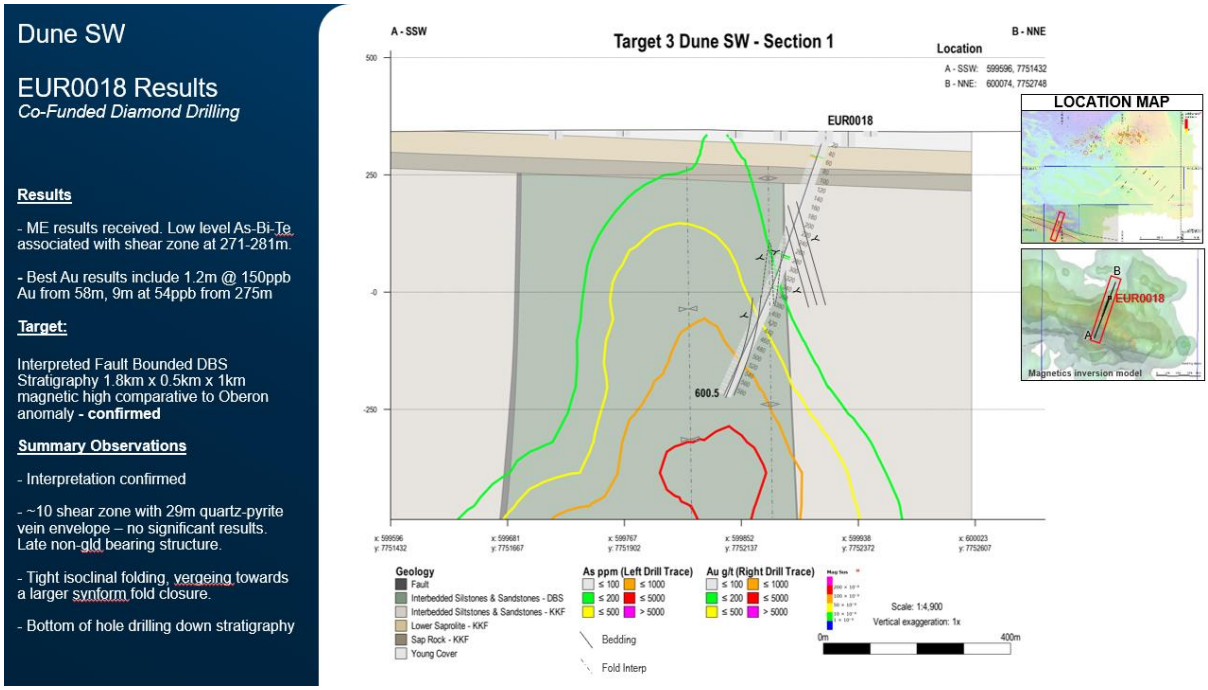

Figure 11. Cross-section of Dune Southwest Geology (EUR0018) characterising intercepted DBS style sediments correlating with magnetic inversion shells (reg-green).

Comparison of stratigraphic horizons between known deposits at Callie and Oberon suggest the lower, very fine grained, laminated, chlorite altered dark sediments intercepted from 280.1m onwards are correlative to the upper

turbiditic sequence of Madigan to Davidson beds. These low energy laminated sediments are characteristics of a subaqueous turbiditic fan depositional environment.

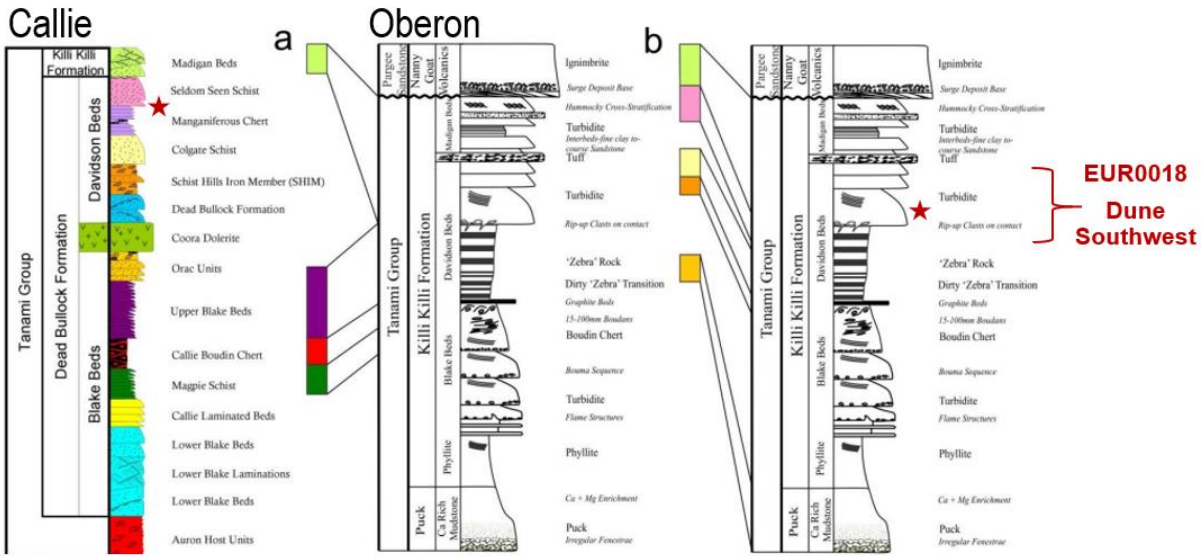

Figure 12. Stratigraphic comparisons of Oberon and Callie with interpreted Dune South (EUR0018) position (Silcock 2011)

Analysis of multi-element data assisted in fingerprinting the EUR0018 stratigraphy against regionally compiled data (Figure 13) confirming observations of DBS style stratigraphy. Variations in Th/Sc and Zr/Sc ratios provide a broad categorisation of sediments from juvenile mafic composed volcanics and volcanosediments sediments of the lower Tanami Group stratigraphy (Mt Charles) to mafic-intermediate sediments (DBS) into dominantly felsic sediments and intrusions (KKF), demonstrating EUR0018 and the Dune area as a key stratigraphic environment (Figure 14 & Figure 15).

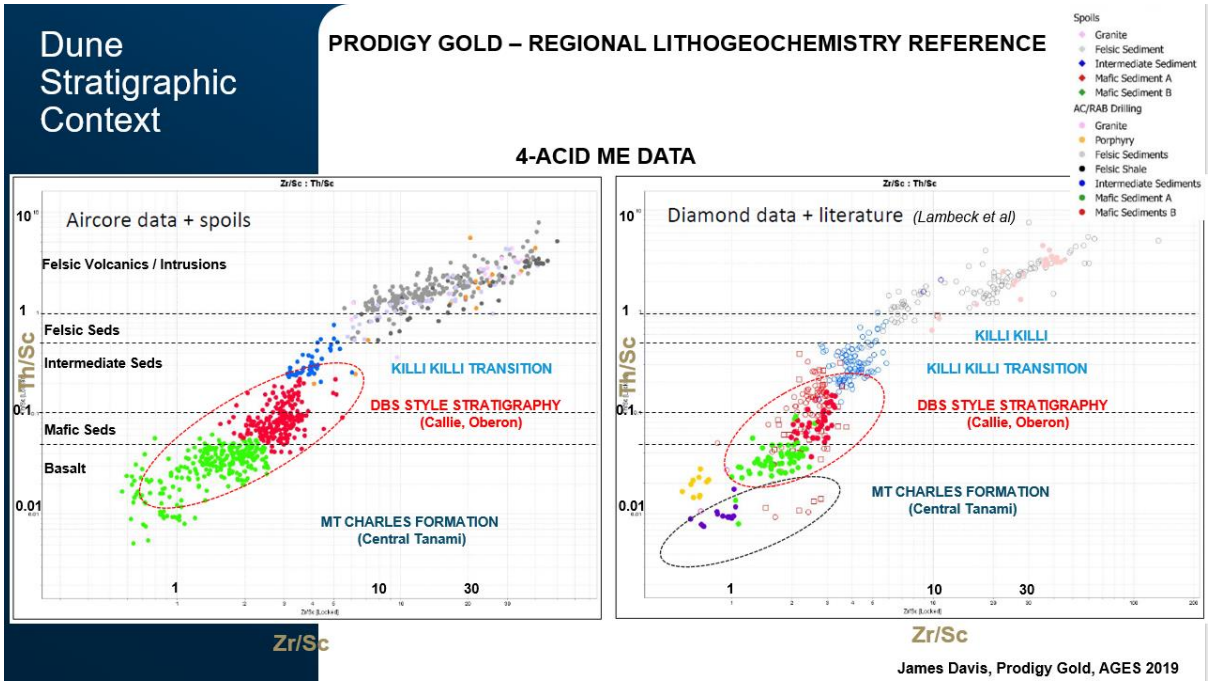

Figure 13. Regional stratigraphic lithogeochemical reference - James Davis, Prodigy Gold adapted from (Lambeck 2010).

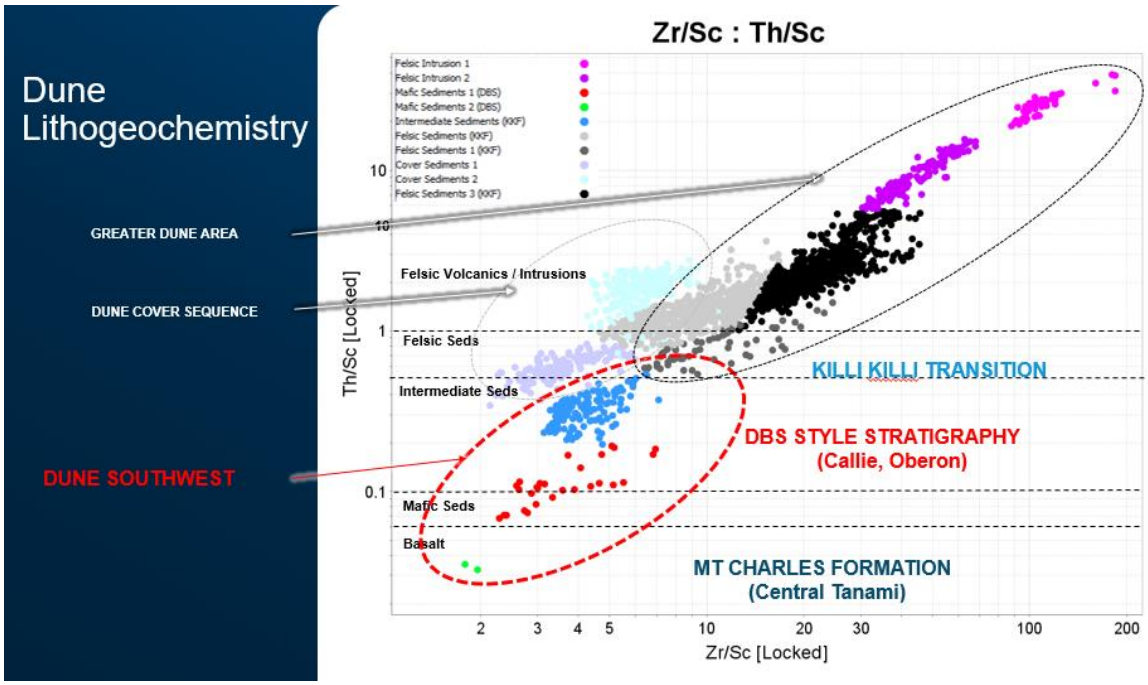

Figure 14. Dune lithogeochemical groupings with Dune Southwest (EUR0018) data highlighed in red - DBS style stratigraphy.

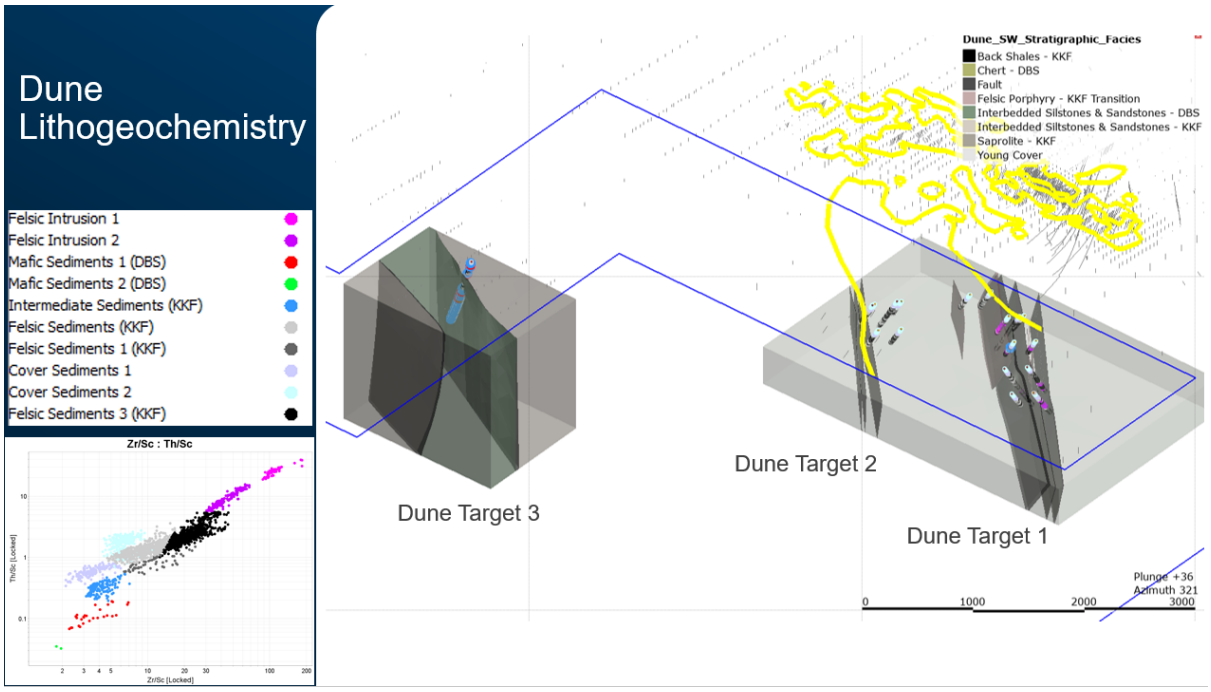

Figure 15. Overview of Dune Southwest lithogeochemical groupings in relation to Dune and Oberon camp setting.

No anomalous gold intercepts were returned from EUR0018 with a maximum Au value of 0.15ppm. This suggests the structure interceptsed from 271m is post mineralisation. Results for the final multi-elements confirmed on low levels of As-Bi-Te associated with the shear. When compared with anomalous footprints of the targeted deposit styles (Oberon / Callie) this lack of anomalism suggests the target area is lacking a mineralising Au event. Despite the confirmation of a favourable geological setting to host mineralisation, that lack of anomalism suggests there is likely not the required volume remaining to deliver a Newcrest size target at Target 3 - Dune SW.

9. Conclusion

The Dune southwest co-funded diamond drilling programme (EUR0018) successfully confirmed the stratigraphic targeting concept and structural setting of a fault bounded, folded DBS sedimentary package. The magnetic anomaly was explained by and dramatic increase disseminated magnetite content upon interception of the DBS type stratigraphy. Poor Au results and lack of pathfinder anomalism suggest this is not a mineralised sequence of DBS. Veining observed is interpreted as post the regional gold mineralising event and non-prospective. No further targeting work is proposed at Dune Southwest.

Targeting upon magnetics data at Dune Southwest has been successful in defining favourable structural and stratigraphic settings to host a Tanami-style mineralised Au system. Petrological and petrophysical studies may facilitate further investigation into the ranking and prioritisation of these magnetic anomalies regionally. This may improve understanding of which anomalies are likely the product on metamorphic or metasomatic derived magnetite, inherent in the stratigraphy, in comparison to those derived from pyrrhotite associated with strataform mineralised horizons as observed at Callie (Petrella et al. 2019).

10. References

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