

22 July 2021

# Yerrida Drilling Update

## Key Points

- Maiden diamond hole at Yerrida is complete having intersected bands of sulphide mineralisation over a 39m zone from 295m including 1.8m of semi-massive pyrrhotite-pyrite and disseminated chalcopyrite
- Target YE09 lies within a broader 10km long zone of airborne electromagnetic (AEM) anomalies coincident with an 8km long magnetic anomaly
- The magnetic anomaly is interpreted to reflect concentrations of pyrrhotite along the synclinally folded margin of the Killara Formation
- YE09 and YE11 are two of the strong coincident geochemical, AEM, ground EM, and magnetic targets identified at Yerrida to date with a combined strike length of over 2.6km
- Follow-up drilling has commenced

**DGO Gold Limited** (ASX:DGO) is pleased to report on the progress of diamond drilling at **Yerrida**, 75km south of Sandfire Resources' DeGrussa copper-gold mine and 60km northeast of Meekatharra, Western Australia. The maiden diamond hole (21YEDD001) was completed at a depth of 634.3m and intersected a broad interval of stratabound bands of pyrrhotite-pyrite with disseminated chalcopyrite from 295 to 334m including a 1.8m interval of semi-massive pyrrhotite-pyrite from 302.2m (Figure 1).

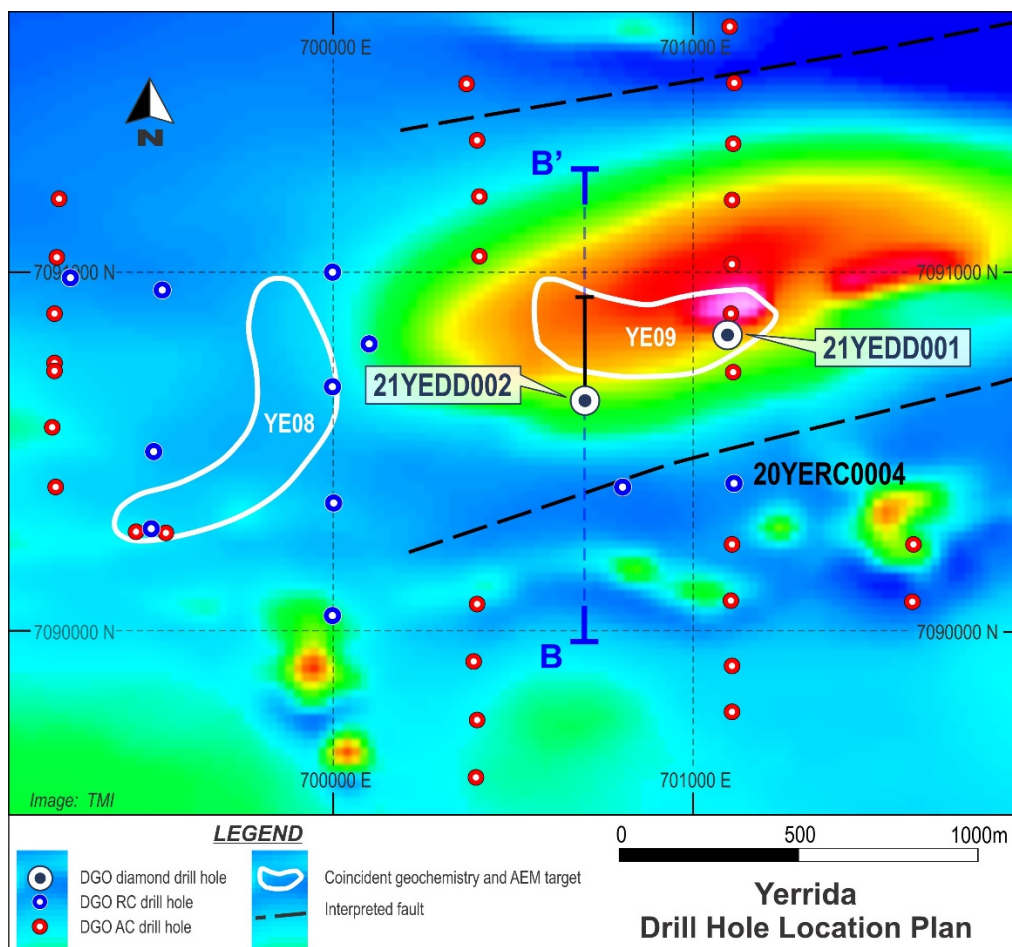


**Figure 1:** Semi-massive sulphides intersected in 21YEDD001  
*Sulphide textures suggest hydrothermal chalcopyrite and pyrrhotite overprinting pyrite*

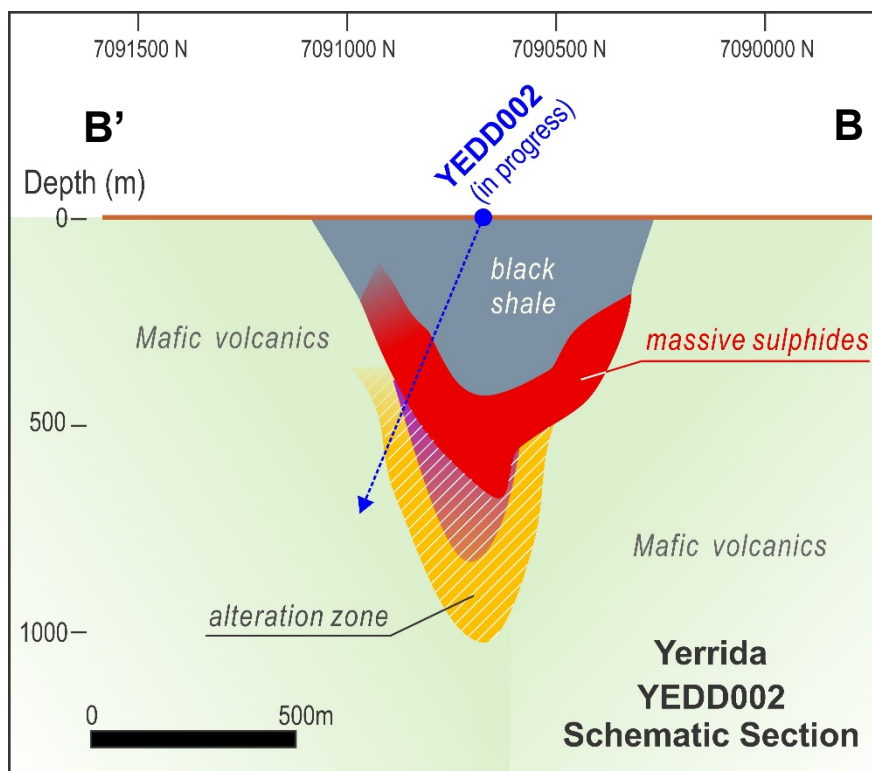
DGO's exploration and detailed analysis at Yerrida has identified coincident electromagnetic, magnetic, and soil geochemistry anomalies. These coincident anomalies are within a geological sequence of the right lithology, age, and structure for hosting DeGrussa style VHMS mineralisation. RC drilling at this location identified alteration and anomalous base metals consistent with proximity to VHMS mineralisation. The diamond hole completed by DGO this week identified disseminated copper sulphide within semi-massive pyrrhotite-pyrite in the target zone. These observations suggest that the hole may have intersected the edge of a VHMS system. Follow up drilling of a diamond hole 400m to the west has now commenced.

The sulphide mineralisation has been sampled and delivered to the lab and prioritised for analysis. Downhole EM and petrophysical analysis of the core will also be conducted in the near future.

DGO Executive Chairman Eduard Eshuys said *"Following 2 years of exploration using an evidence based scientific approach, the discovery potential shown by the sulphide mineralisation is an exciting development. DGO holds a commanding position over the prospective stratigraphy identified by the diamond drilling and looks forward to updating the market with results from the follow up drilling."*



**Figure 2:** DGO drilling and coincident VHMS geochemical signatures and AEM targets over reprocessed TMI airborne magnetics



**Figure 3:** Schematic section of the Yerrida VHMS target

## Technical Detail

The diamond drilling program is currently testing target YE09 which is approximately 650m long and was originally defined in a 2019 airborne electromagnetic (AEM) survey (ASX: DGO 21 October 2019). Following the AEM survey, soil geochemistry at Yerrida identified anomalies of the key VHMS mineralisation pathfinder elements thallium, barium and tin (ASX: DGO 9 April 2020) suggesting the presence of massive sulphides at depth. In particular, tin is a key discriminator for VHMS mineralisation. The comparison with VHMS deposits and with DeGrussa soil sample results is shown in Table 1 and 2 respectively. YE09 was one of 10 targets with coincident VHMS geochemical signatures and AEM anomalies.

Ore Deposit Target	Anomalous Elements															
	Co	Cu	Zn	As	Se	Mo	Ag	Sn	Sb	Te	Ba	Pt	Au	Tl	Pb	Bi
VHMS	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓			✓	✓	✓
Johnson Cairn FM Black Shale	✓	✓	✓	✓		✓	✓			✓		✓	✓			✓
DGO Anomaly																
YE08; YE09;	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓

Table 1: VHMS Pathfinder Trace Elements

	DeGrussa <sup>1</sup>	DGO YE08	DGO YE09
Gold	1.3– 7.2 ppb	>20 ppb	>20 ppb
Copper	32 – 57 ppm	66-123 ppm	65-100 ppm
Silver	13 – 24 ppb	>300 ppb	100-200 ppb
Arsenic	4.2 – 5.7 ppm	10-20 ppm	10-20 ppm
Bismuth	0.27 – 0.4 ppm	1-2 ppm	1-2 ppm
Antimony	0.2 – 0.3 ppm	0.8-1.9 ppm	0.8-1.9 ppm
Cobalt	7.3 – 24 ppm	>12 ppm	>12 ppm
Zinc	20 – 47 ppm	>70 ppm	>70 ppm
Tin	No data	>2.2 ppm	2-3 ppm
Thallium	No data	>0.45	>0.45

Table 2: DeGrussa soil geochemistry compared to DGO targets YE08 and YE09<sup>2</sup>.

<sup>1</sup> Nobel et al (2015); <sup>2</sup>This comparison does not take in to account the differences in regolith of the two areas.

DGO's maiden RC drilling at Yerrida identified a significant east-west oriented, variably hematitic, alteration zone approximately two kilometres long and open along strike. Within this, 20YERC0004 intersected 132m at 1.3g/t silver from 56m in a broad zone of anomalous Au, As, Cu, Pb and Zn, and a significant high-grade intersection of 2m @ 9.2g/t gold from 71m in quartz veining (ASX DGO 3 September 2020). These results suggested the potential for VHMS mineralisation under cover at the contact of the Johnson Cairn Formation shales with the Killara Formation mafics. The Killara

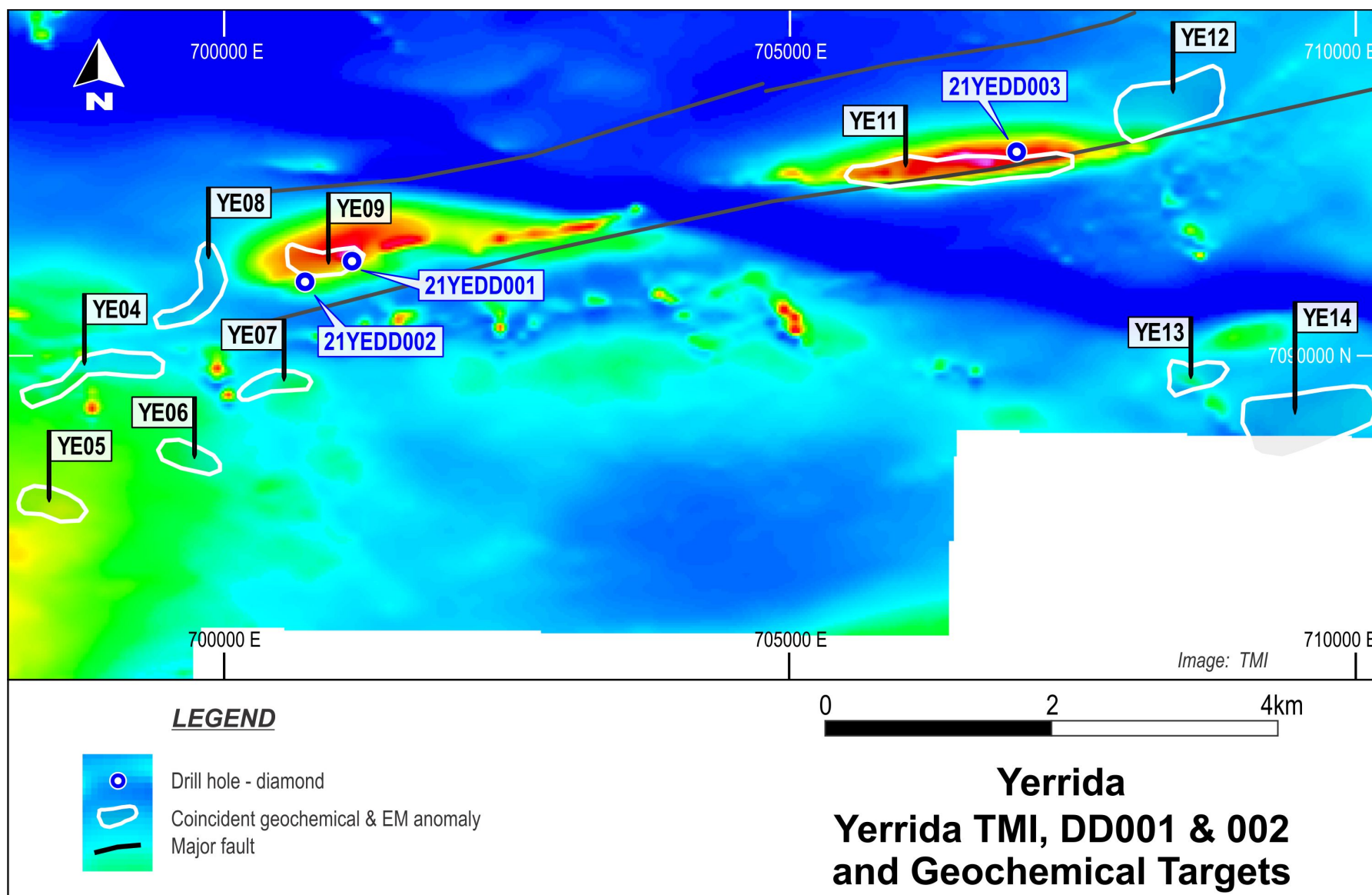
Formation is the stratigraphic equivalent to the Narracoota Volcanics which host Sandfire Resource's DeGrussa Cu-Au deposit.

The current diamond drilling program was designed to test for VHMS mineralisation at the sediment-mafic contact within the axis of a broad synclinal trough. 21YEDD0001 was drilled 400m north of RC hole 20YERC0004 at the eastern end of target YE09. Recent reprocessing of ground EM results over YE09 has identified two east-northeast trending conductors. 21YEDD0001 intersected the edge of one of these conductors.

The pyrrhotite-pyrite observed in the diamond hole is hosted in coarser grained interbeds within a moderately to steeply dipping sequence of shales, mudstones and siltstones. The observed sulphide textures suggest hydrothermal pyrrhotite and chalcopyrite has overprinted pre-existing pyrite. The prevalence of pyrrhotite indicates that the mineralising fluids were hot (>300-350°C) and reducing suggesting favourable conditions for forming significant copper and gold mineralisation. The sulphide intersections support a VHMS model developed for Yerrida.

The predominance of magnetic pyrrhotite in 21YEDD0001 suggests the magnetic anomaly coincident with YE09 is reflecting concentrations of pyrrhotite. This indicates that the strongly coincident VHMS geochemical signatures, AEM anomalies, and magnetic anomalies at targets YE09 and YE11 are defining the centre of the massive sulphide bodies. Future drilling will target the deeper magnetic highs extending for over seven kilometres between YE09 and YE11 (refer Figure 4) within the Johnson Cairn shales on the margin of the Killara Formation volcanics.





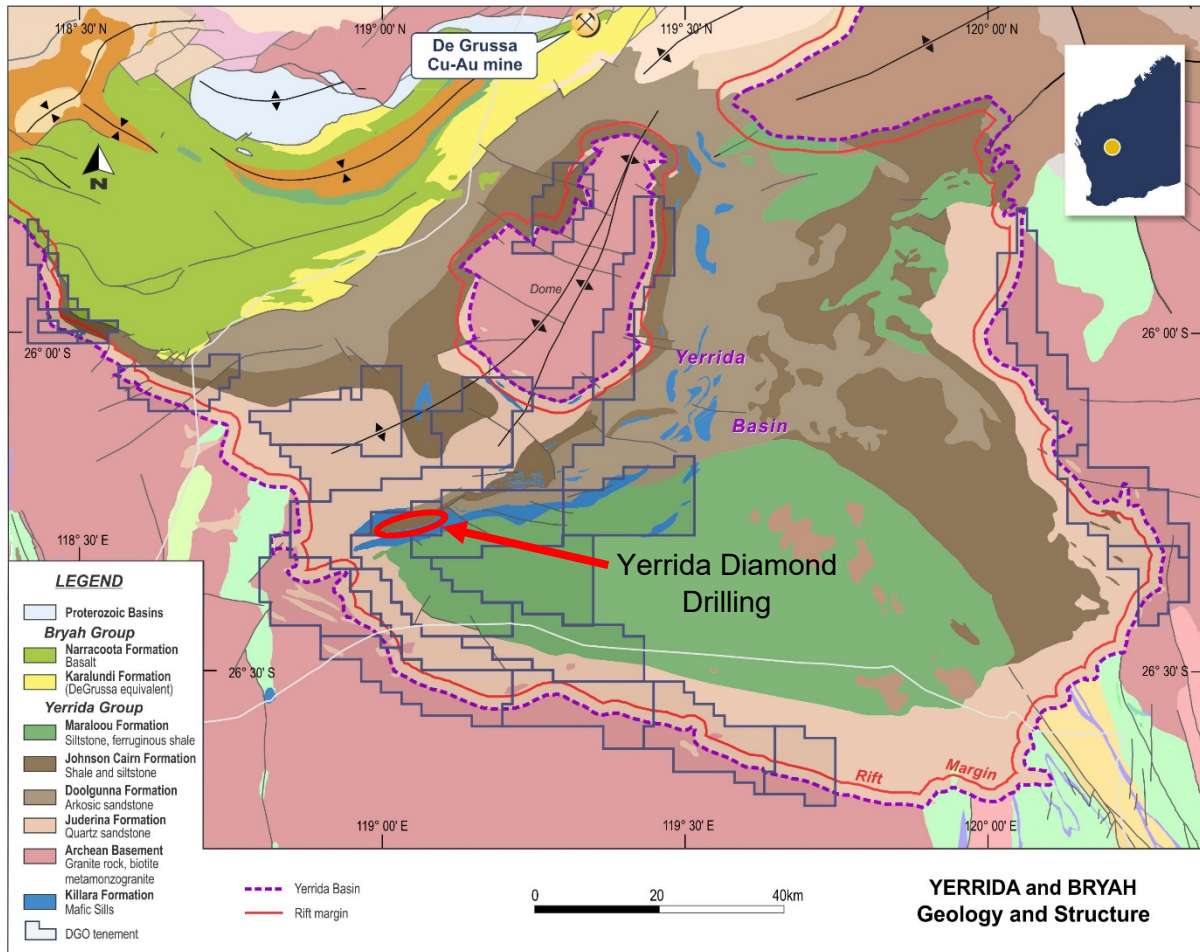
**Figure 4:** DGO diamond holes and coincident VHMS geochemical signatures and AEM targets over reprocessed TMI airborne mag

## Summary of Previous Announcements

<b>21 October 2019</b> Airborne Electromagnetic Survey	An AEM survey over 35km of strike completed to evaluation a 25km long gold, copper and zinc anomaly associated with East-North-East trending shear structures. 18 targets identified, including 7 within the equivalent formations to those that host the DeGrussa Cu-Au mine.
<b>9 April 2020</b> Soil Geochemistry	The Yerrida geochemical analysis identified 10 high priority targets anomalous in the key VHMS pathfinder elements tin, barium, and thallium suggesting massive sulphides are present at depth. These DeGrussa style VHMS mineralisation signatures are coincident with priority anomalies identified in DGO's October 2019 EM survey and gossanous outcrops. DeGrussa was discovered by following up of a weak surface soil geochemical anomaly.
<b>3 September 2020</b> RC Drilling Results	<p>The broad spaced drilling identified substantial zones of alteration and signature multi-element assays consistent with proximity to volcanic hosted massive sulphide (VHMS) style mineralisation at the contact of shales and mafic volcanics, similar to the position of Sandfire Resource's DeGrussa copper-gold deposit. 75km to the north.</p> <p>Hole 20YERC0004 which intersected 132m at 1.3g/t silver from 56m in a broad zone of anomalous Au, As, Cu, Pb and Zn. Research into VHMS deposits shows that increasing concentrations of these metals with depth is an indicator of massive sulphides at depth. This suggested the potential for VHMS mineralisation at the contact of the Johnson Cairn shales with the Killara Formation mafics. The Killara Formation is the stratigraphic equivalent to the Narracoota Volcanics which host Sandfire Resource's DeGrussa Cu-Au deposit.</p>
<b>28 April 2021</b> Air Core Drilling Results	Drilling intersected low levels of base metal anomalism in the vicinity of the Killara contacts due to limited drill penetration into the Killara mafic units which proved to be more extensive than mapped.
<b>1 July 2021</b> Diamond Drilling Commencement	Testing gold and copper geochemical anomalies at the sediment-mafic contact for VHMS style mineralisation.
<b>6 July 2021</b> Diamond Drilling Update	1.8m of semi-massive sulphides intersected within +30m of sulphide mineralisation containing disseminated chalcopyrite within intervals of pyrrhotite-pyrite.

## Yerrida Background

The Yerrida project is located 75km south of Sandfire Resources' (ASX: SFR) DeGrussa copper-gold mine, where DGO has built a strategic land position of 14 exploration licenses covering 2,501 km<sup>2</sup> of the Yerrida Basin. The Yerrida Basin is considered to be stratigraphically equivalent to the adjacent Bryah Basin which hosts the DeGrussa and Monty VHMS copper-gold deposits and the Morck's Well prospect. To date, 10 priority VHMS targets have been identified and are being systematically explored. (Figure 3).



**Figure 5:** Yerrida and Bryah regional geology and tenements

In addition to the VHMS targets, DGO's detailed data review and analysis has also confirmed that the Yerrida Basin is a favourable, basin setting of the right age to host stratiform sediment-hosted copper (SSH Cu) deposits analogous to the world-class Zambian Copper Belt (ZCB). DGO's analysis has identified nine ZCB style targets which warrant additional work.



- ENDS –

This announcement is authorised for release by Mr Eduard Eshuys, Executive Chairman.

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**Competent person statement**

*Exploration or technical information in this release has been prepared by David Hamlyn, who is the General Manager - Exploration of DGO Gold Limited and a Member of the Australasian Institute of Mining and Metallurgy. Mr Hamlyn has sufficient experience which is relevant to the style of mineralisation under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (the JORC Code). Mr Hamlyn consents to the report being issued in the form and context in which it appears.*

**DGO GOLD**

DGO's strategy is to build a portfolio of Western Australian gold discovery opportunities primarily through strategic equity investment and also through tenement acquisition and joint ventures. DGO seeks to identify and invest in gold discovery opportunities that meet three key criteria:

**Low-finding cost** – Brownfield gold discovery opportunities where finding costs are assessed to be comparable to the brownfields average of \$20 per ounce.

**Potential for scale** – Initial resource potential of greater than 3 million ounces, required to support successful development.

**Upside Optionality** – Potential for long term resource growth well beyond 3 million ounces and potential for upside surprise via either a world class discovery (+5 million ounces) or substantial high-grade mineralisation.

DGO holds strategic gold and copper/gold exploration land positions in Western Australia and South Australia where it would expect to participate as a funded joint venture partner or shareholder by way of equity exchange.

The Company's exploration strategy is led by Executive Chairman, Eduard Eshuys, supported by a specialist consultant team comprising, Professor Ross Large AO, former head of the Centre for Ore Deposits and Earth Sciences (CODES), Professor Neil Phillips, former head of Minerals at CSIRO and a specialist in Witwatersrand basin gold mineralization, Dr Stuart Bull, a sedimentary basin and Zambian Copper Belt specialist, and Barry Bourne of Terra Resources, a highly experienced mineral exploration geophysicist.

HOLEID	EASTING MGA94, Z50	NORTHING MGA94, Z50	RL	DIP	AZIMUTH	DEPTH	STATUS
21YEDD001	701,107	7,090,820	500	-90		634.3	Complete
21YEDD002	700,700	7,090,640	500	-60	360		In Progress
21YEDD003_PH	707,000	7,091,800	500	-90			Planned

**Table 1:** Yerrida diamond drill hole locations