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Mining Solutions

# Tenement Review and Exploration Strategy- EL007327 Dereel

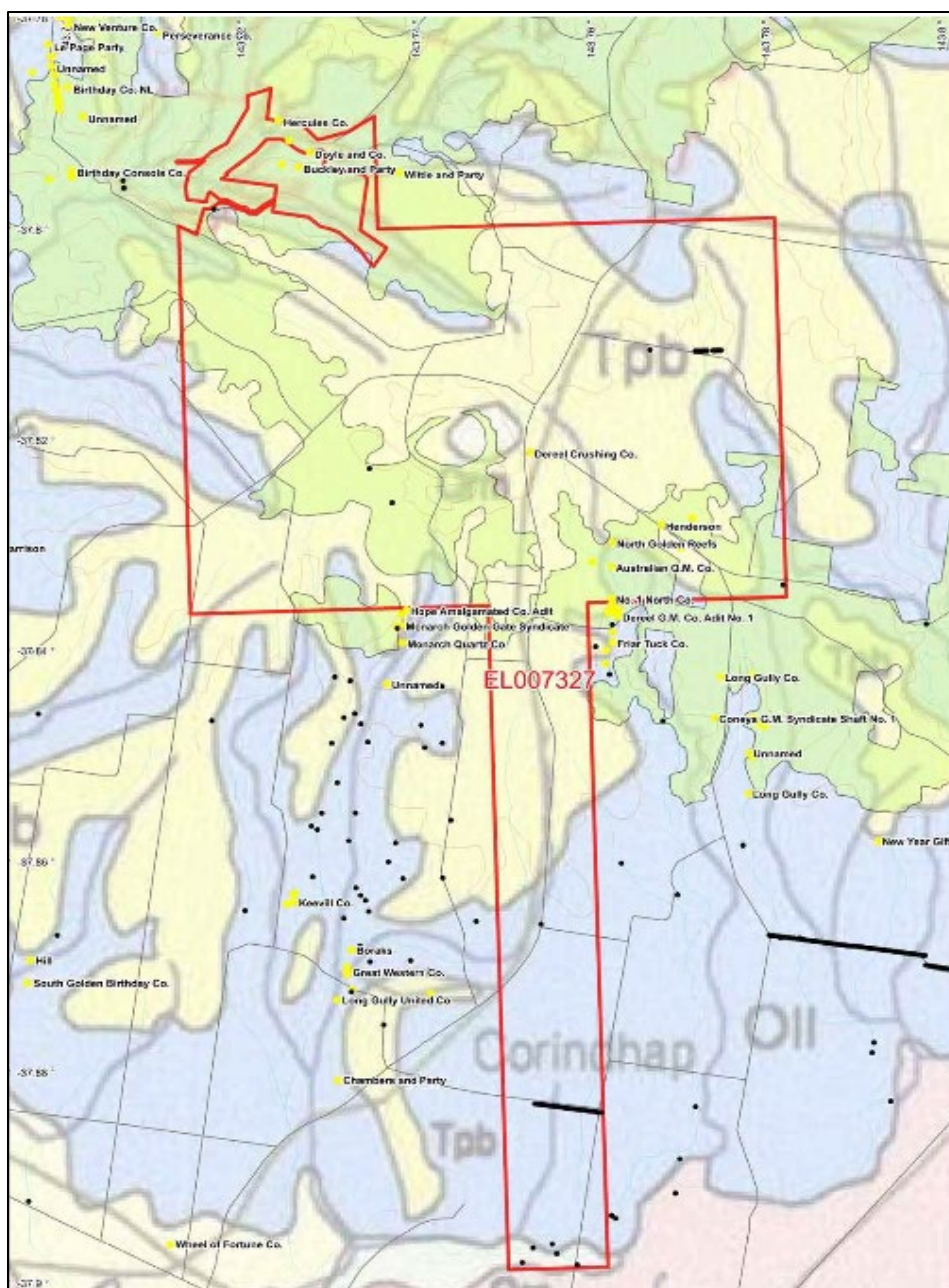
**Client: Red Rock Australasia**

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Revision:	0

## 1 Dereel- EL007327

Tenement ID	Local ID	Size (km <sup>2</sup> )	Mapping Sheet (1:100,000)	Municipality	Current Status
EL007327	Dereel	60	Ballarat	Golden Plains	Application

EEL007327 is located south-west of Ballarat around the Dereel area and extending south towards Rokewood (Figure 1).



**Figure 1. EL007327 location and geology**

## 2 Regional Geology

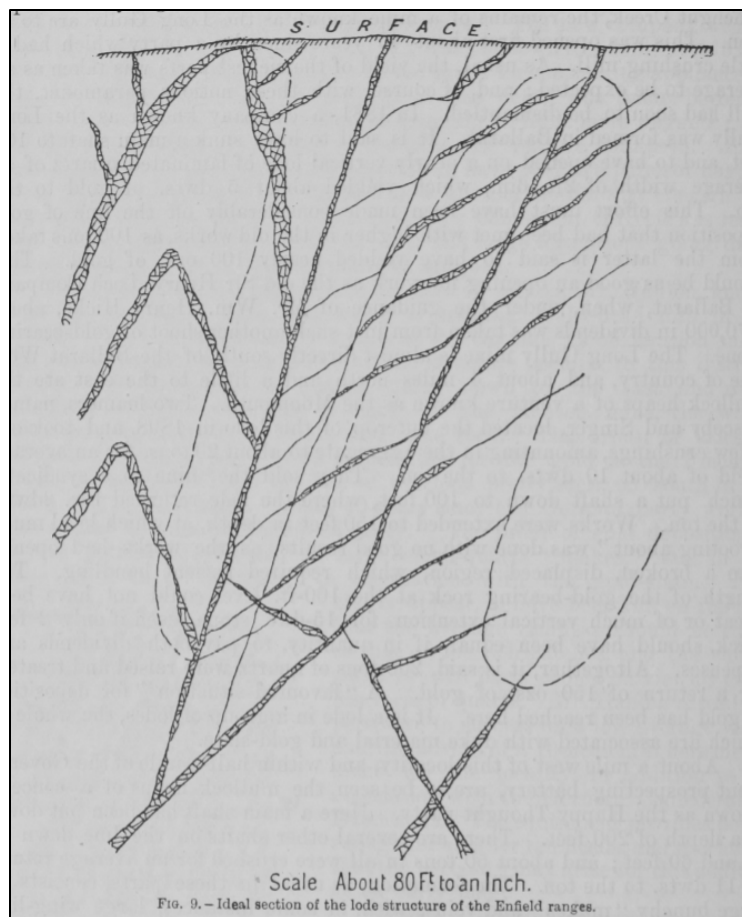
EL007327 lies entirely within the Bendigo-Ballarat Structural Zone. The basement geology across the tenement consists of folded Ordovician shale, sandstone and phyllite intruded in the west by Devonian granite.

### 1.1. Local Geology

The bedrock of the area consists of closely folded Lower Ordovician slates and sandstones (Lancefieldian). The Folds strike at 340-350 degrees and the strata are intersected by east and west dipping strike faults, and occasionally, cross-strike faults. Quartz occurs as "bedded" reefs in the form of saddle reefs and legs conformable with the strata, and as transgressive fissure reefs and spurs (Planet 1976). The Palaeozoic basement is locally overlain by gravels deposited in the Pliocene and by late Tertiary to early Quaternary basalt.

### 1.2. Mineralisation

The auriferous quartz reefs within and surrounding EL007327 occur as conformable saddle reefs and transgressive fissure reefs and spurs (Figure 2).



**Figure 2. Ideal section for the Enfield Goldfield- Gregory, 1903**

These reefs are concentrated in four main zones striking parallel to the regional trend, spaced between 200 m and 360 m (Gregory, 1903) and form the Jubilee, Berringa, Dereel and Pinchgut Creek areas (Planet, 1976).

These reefs are present in the area within and surrounding the licence area and are listed below from west to east:

- 1) The Jubilee zone in the north-western section, containing the Jubilee group of mines;
- 2) the Berringa-Staffordshire Reef zone
- 3 Corindhap-Dereel zone (on the tenement) containing the Break O'Day, Frenchmans and Monarch reefs, and extending north of Dereel to the Cockatoo line of reef on Mt Misery
- 4) the Pinchgut Creek - Long Gully zone. A majority of the workings on Pinchgut Creek are directly to the south of the tenement.

A review of historical reports by Planet Resources, 1976, indicated that fine quartz veining and spurry formations with widths in excess of 30 m occur at a number of localities within and adjacent to the tenement, particularly in the vicinity of Dereel and Pinchgut Creek.

Shallow gravels that included angular clasts of quartz covered by a cemented wash were worked around the Dereel area (Gregory, 1903).

Pinchgut Creek drains part of a large area of Lower Pliocene gravels situated just outside the western boundary of this block, several hand dug shafts have been sunk below the Pinchgut road crossing. Pinchgut Creek occurs in a deeply incised, narrow, steep walled gully and is unlikely to produce large quantities of mineable gravels (EPOCH, 1985).

### 3 Mining History/Production

No significant historical mines are located on the tenement.

Multiple small primary and shallow gravel mines were worked predominately on the northern section of the tenement on the auriferous gravels in the Dereel area with production figures not at hand. Mining of these workings commences in the late 1850's and continued sporadically until the early 1900's with a slight resurgence in the 1950's. Production figures are limited. A report by Gregory in 1903 mentions high grades in several shallow primary mines in the Dereel area.

Several minor deep leads were worked on the southern portion of the tenement. Production figures are limited with modest production figures reported from several mines listed in Table 1.

**Table 1. Deep lead production from the southern portion of EL007327 (GSV Database)**

Mine	Production (oz)
Standbrooks Freehold	44
Wheel of Fortune	547
Hanlon Co. No.2	450

The Rokewood Goldfield occurs directly to the east of the tenement with alluvial and reef production totalling 3,188 kilograms of gold. Minor hardrock workings have been reported, but the majority of gold was derived from deep leads (Finlay et al, 1992).

### 3.1 Nearby Mining Activity

No active mines are located near the tenement.

## 4 Exploration History

Exploration work completed by previous tenement holders in the area has focussed mostly on areas outside of the tenement, with the Berringa and Pitfield goldfields being the priority areas. This is due to the lack of significant mines being located on the tenement compared to the surrounding goldfields.

### **Planet Mining, 1975-1976**

Geological reconnaissance and mapping over the licence area located a number of spurry quartz formations which were prospected by panning. One area 2 km south-east of Dereel hosted fine quartz veining over a width of 30 m. Rock chip sampling showed traces of fine free gold and was selected for bulk sampling. Several trenches were dug with sample weights averaging 30 kg per linear metre of trenching. The sampling showed that very little gold was contained in either the quartz or surrounding sediments.

### **Metex 1993-1999**

Two 100 m soil sampling traverses were conducted near the Delaccas Rd (1 km northeast of Dereel) with a total of 14 samples collected at 20 m spacings. The peak result was 11.5 ppb Au and 16 ppm As. Road cuttings along the Dereel - Mt Mercer Rd and Delaccas Rd were channel sampled. An unknown number of samples were collected with the peak result of 2 m @ 4.85 g/t Au from the Delaccas Rd cutting (McMickan 1996). A 136 sample outcrop/dump rock chip sampling program was conducted within this tenement as well as the nearby Staffordshire Reef and Italian Gully tenements. Better results did not occur within this tenement.

There was a mention of 3 RC holes drilled at Dereel on EL3750. The existence of these holes has not been confirmed in a research of available literature.

### **Epoch 1985- EL1370**

Work was restricted to checking the main drainage systems for evidence of early mining activity, nothing of interest was reported.

## 5 Exploration Strategy

Exploration strategy for EL007327 would include the following;

- Review elevated Geochemical results, with a focus on the Delaccas Road cutting.
- Explore the potential for northern extension to leads from Rokewood with the target being the source for the deep leads on the tenement.
- Identify high grade areas around Dereel with the potential for a geochemical sampling program if trends are identified.

## 6 References

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