

2. EXPLORATION COMPLETED 1981-82

2.1 RED HILLS (J.G. Purvis, M.J. Hutton)

2.1.1 Introduction

Following evaluation of past exploration data from the Red Hills area, and in the light of preliminary results of the Mt. Read Volcanics Alteration Study (Eastoe, 1980), it was decided that there was potential for further mineralisation along the prospective horizon hosting the DDH RH5 massive sulphide lens.

Initially a geophysical approach was tried: a 10.5 line-km applied potential survey on close-spaced lines between 16S and 40S, and an 80 line-km Sirotem time-domain E.M. Survey between lines 4S and 40S. Detailed mapping of the alteration assemblages was also completed.

Despite disappointing results from the geophysical surveys, two diamond drill holes on lines 4S and 16S, were planned to test the prospective horizon north of previous drilling.

Only the drill hole on 16S (DDH RH12 of 307m) was drilled. The hole encountered insignificant amounts of disseminated sphalerite, galena and chalcopyrite within altered rhyolitic volcanoclastics. The best intersections were 2m of 0.92% Zn at 40-42m, and 4m of 0.53% Zn, 0.12% Pb, 4ppm Ag, at 144-148m.

2.1.2 Access

1. Trackcutting

A new metric grid of close-spaced lines (total 15.34 line-km) was cut from line 4S to line 40S and pegged at 20m intervals (see Table a in Appendix A). The line numbering system of the old grid was adopted and the peg numbers were estimated to be the metric distance from the old baseline.

2. Roadworks

The four-wheel-drive track from Henty Camp to Red Hills was upgraded in preparation for the drilling program. Two short access tracks and two drill sites were also prepared.

2.1.3. Geology

1. Introduction

Mapping of the alteration assemblages in volcanic rocks in the Red Hills area was undertaken by Dr. C.J. Eastoe during March, 1982. Figure 1 shows the results of this work. The following sections are taken directly from Eastoe's report "Red Hills Prospect, Alteration Mapping Report for the Mt. Lyell Mining and Railway Company Limited".

2. Background Geology (C. Eastoe)

Previous workers (e.g. Corbett, Econ. Geol. 1981) have established the following sequence in the Red Hills - Gooseneck - Mt. Julia area:

	Owen Conglomerate
	(Tyndall Group (Jukes breccia, quartz and plagioclase phyric lavas and tuffs))
Mt. Read Volcanics	(Central Sequence (lavas and pyroclastics, largely plagioclase - phyric only))