

REPORT ON CAMBRIAN FOSSILS FROM LIMESTONE

BOULDERS IN DIAMOND DRILL HOLE MAC 20

The fossils occur in limestone boulders from within a conglomerate intersected in Diamond Drill Hole MAC 20 of Aberfoyle Resources exploration programme in the Hellyer area. The boulders were obtained from Mr. Andrew McNeill of Aberfoyle Resources Exploration Division on December 18, 1990.

Trilobite cross-sections could be seen clearly in two limestone boulders within MAC 20 - one boulder was intersected at a depth of about 364m and the other at a depth of about 353m. The boulder intersected at 364m was quite richly fossiliferous, and most of the fossils listed below come from that boulder. However, no real difference could be seen in the faunas from the two blocks so they are discussed below as a single fauna.

In order to extract the fossils the limestone was placed in an electric furnace at about 800°C for an hour prior to quenching in water. This split most of the limestone with some further mechanical preparation required.

Fossils Present

All fossils seen were trilobites (listed below) with the great majority being polymeroid trilobites. It is quite a rich fauna of shallow water aspect and includes some genera not previously recorded in Tasmania. Many of the specimens show a slight tectonic distortion.

Agnostoid trilobites: Peronopsis(?)

Polymeroid trilobites:

Amphoton

Liopeshania

Monocephalites(?)

a member of the Anomocarellidae

a possible member of the Damesellidae

a possible member of the Solenopleuridae