

UR1981-47

1981/47. A new Late Cambrian fossil locality from the Smithton Quadrangle.

P.W. Baillie

#### INTRODUCTION

This report records a previously unknown Late Cambrian fossil locality situated in a road-metal quarry some six kilometres west of Smithton Aerodrome on the Montagu Road [CQ335807].

#### REGIONAL GEOLOGY

The sequence occurs within the Smithton Trough (Williams, 1978) in the tract of country that includes the late Middle Cambrian rocks of the Christmas Hills area (Jago and Buckley, 1971).

The stratigraphic relationship between the new locality and the Christmas Hills sites is not certain, but stratigraphic and structural continuity is probable.

#### THE NEW LOCALITY

The fauna occurs in grey-coloured, porous, well-bedded siltstone. The siltstones are fairly well sorted and prior to leaching may have had a carbonate cement.

The most common fossil found is the dendroid *Dictyonema* which is very abundant on some bedding planes. Colonies are usually incomplete, and the maximum length preserved is 30 mm with a width of 20 mm. Several species may be present.

Hydroids are not uncommon and probably include *Archaeolofoea*.

Disarticulated trilobites are extremely common and have been examined by Dr J.B. Jago (13.10.81) who identified the agnostids *Pseudagnostus* and ?*Connagnostus*, together with the polymerids *Corynexolithus*, cf. *Olenus* and cf. *Stigmatoa*. Dr Jago suggests an Idamean (early Late Cambrian) age for the fauna.

Small inarticulate brachiopods are also present.

#### REFERENCES

- JAGO, J.B.; BUCKLEY, J.H. 1971. An abrupt upper Middle Cambrian faunal change, Christmas Hills, Tasmania, Australia. *Pap.Proc.R.Soc.Tasm.* 105:83-85.
- WILLIAMS, E. 1978. Tasman Fold Belt in Tasmania. Explanatory notes for the 1:500 000 structural map of pre-Carboniferous rocks of Tasmania. *Department of Mines, Tasmania.*

[15 October 1981]