

EXPLORATION METHODS(i) Program Basis

During the past five years, the Tasmanian Mines Department has bored about 80 rotary and cable tool percussion holes, averaging 400 -500 ft. in the basin area between Westbury, Cressy and Conara. Cuttings from these holes have been systematically sampled and described by A.D. Melzer for Tenneco Australia, Inc. This information was supplied to Getty Oil.

Using the bore hole logs, maps were drawn showing isopachs of the total sand-silt thicknesses and also the percentage sand-silt encountered in the holes. From these maps could be determined areas with inferred continuous sand units which might provide the criteria required by the Wyoming type host units. This data delineated the area from Conara, down the South Esk Valley, through Cressy-Longford to Bracknell-Bishopsbourne with a northern expression from Evandale west through Longford to Carrick.

To initially test this area, drill traverses were plotted normal to the trend (generally) at intervals of about four miles with drill sites one half mile apart along the traverse.

(ii) Drill hole location (Figs. 1 to 7)

The bulk of the area tested is covered by air photography designated "South Esk" flown in 1966 at 13,000 ft. and having a scale of 40 chains : 1 inch. The true scale was found from controlled maps and vehicle odometer observations to be about 40 chains : 0.94 inch.

The far western section (line T) is covered by the "Beaconsfield-Quamby" flying (1963 at 65 chains : 1 inch, true scale about 40 chains : 0.62 inch).

The proposed traverses were plotted on photographs and then examined in the field. Drill hole locations were often slightly modified in line with ease or availability of access, avoidance of crop paddocks and amenability of individual farmers. The sites as drilled, however, have been marked on the backs of the relevant photographs.

The altitude of drill sites was measured with initially a "Tamoya" altimeter and later a "Thommen" instrument, the heights being taken relative to existing Mines Department holes previously measured. Thus any one line would be correct relative to the nearest Mines Department hole and not necessarily correct compared to another line. The possibility of rapidly fluctuating barometric pressures makes this type of measurement open to some degree of error.

(iii) Drilling

A tender from Austral United Geophysical Pty. Ltd., of Brisbane, was accepted in November, 1972, to drill and log at least 30,000 ft. That contractor had mobilized one Mayhew 1000 rotary rig into the area by November 21, 1972, with drilling operations commencing on November 23, 1972. A further Mayhew 1000 rig commenced on December 7, 1972, and drilling was completed on January 28, 1973. Drilling was continuous on a 7-day week, 10-12 hour a day basis, apart from a break between December 22 and January 3, 1973.