



SUMMARY

The data used for the preparation of the isochron maps is from the 1982 Mereenie survey carried out for Magellan by an SSL Vibroseis crew. Generally the data varies from poor in the north east around EM-1 to good in the south east. The older 1973 data which was shot using the thumper supports the 1982 survey.

The following units were identified: Horn Valley siltstone Pacoota members (P1, P2, P3, P4) Goyder formation
 Top Bitter Springs Bitter Springs Salt Basement.

The first three units were picked from time depth curves on EM-4 and EM-2. The top Goyder is a fairly strong marker horizon which is correlatable across the whole of the lease area. Where necessary the top of the Pacoota and Horn Valley units have been phantom. Top Bitter Springs is identified from the strong angular unconformity seen on M82-09. Within the Bitter Springs and above the basement considerable thickening is seen which is attributed to a salt intrusion. Basement is highly faulted.

A small reverse fault is interpreted across the crest of the anticline between EM-2 and EM-4. The fault is associated with the Main Mereenie Thrust on the southern flank and has a throw of about 100' over the crest. The throw decreases to the north where the fault dies out. It is postulated that this crossfault may have some influence on the oil distribution on the east end of the Mereenie structure.

MAGELLAN PETROLEUM (N.T.) PTY. LTD.
MEREENIE FIELD PROSPECT MAP
 O.L.5

JUNE 4, 1982

NORTHERN TERRITORY
 GEOLOGICAL SURVEY

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