

PETROGRAPHY OF SANDSTONES FROM PELICAN
1,2 and 3

1. INTRODUCTION AND SUMMARY

Twelve rocks were submitted by Esso Australia Ltd for petrographic examination. A discrepancy was noted between the list of samples and the numbering on the rocks submitted and the sample from Pelican-1, Core 8 will be referred to as collected from 9427' as marked on the rock. A list of the samples is therefore as follows:

Pelican-1, Core 5	8358'	
6	8551'	
8	9427'	
9	10062'	
9	10072'	
Pelican-2, Core 2	9794'	
Pelican-3, Core 2	9415'	
2	9442'	
3	9488'	
3	9496'	
3	9905'	9505
3	9924'	9524

*This is correct
AW.*

The samples are referred to in the following discussion by their depths.

The rocks fall into three groups:

1. Sample 9496' is a sandstone, which has been extensively dolomitised (65% dolomite). The rock is completely impermeable and this may be related entirely to the extent of dolomitisation.
2. Samples 10062' and 10072' are coarse argillaceous sandstones showing abundant evidence of dissolution of silica and development of sutures and microstylolites. Many of the quartz grains have been fractured and/or deformed and recrystallised. Pore space has been almost entirely eliminated from 10072' by these compaction processes.