

MUSSEL-1

Location Offshore Otway Basin
 Latitude 38 57 45.9S
 Longitude 142 46 21.67E
 Water Depth = 85.3 m
 Total Depth Drilled (KB) = 2450 m
 KB Elevation = 30.2 m amsl
 Seismic line reference OE80A-1060.near.sp.2808
 Completed September, 1969 by Esso Australia Ltd
 Status = Plugged & abandoned
 Lithostratigraphy by Geoff Geary (1998)
 Lithological interpretation by Natalya Liberman (1998)
 Palynology by Partridge (1996)
 Produced by the Basin Studies Group 11-Mar-1998
 for Enclosure 23, VIMP55



Lithological legend

- | | | |
|-----------------------------|---------------------------------|-------------------|
| Carbonate Lithotypes | Siliciclastic Lithotypes | Others |
| Limestone | Conglomerate | Coal |
| Limestone, sandy | Sandstone, pebbly | Extrusive rocks |
| Limestone, dolomitic | Sandstone | Mafic sills |
| Dolomite | Sandstone, carbonaceous | Plutonic rocks |
| Dolomite, calcareous | Sandstone, argillaceous | Metamorphic rocks |
| Marl | Sandstone, glauconitic | |
| | "Greensand" | |
| | 'bedded sandstone & mudstone | |
| | Siltstone | |
| | Siltstone, carbonaceous | |
| | Mudstone (shale) | |
| | Mudstone, carbonaceous | |
| | Mudstone, calcareous | |
| | Claystone | |

Palynological scheme legend

- SPORE-POLLEN:**
 T. be = T. bellus
 P. tu = P. tuberculatus
 N. as = N. asperus
 P. as = P. asperopolus
 M. di = M. diversus
 L. ba = L. balmei
 F. lo = F. longus
 T. li = T. lilliei
 N. se = N. senectus
 T. ap = T. apoxyxinus
 P. ma = P. maeveoni
 H. un = H. uniformis (A. di = A. distocarinatus)
 P. pa = P. pannosus
 C. pa = C. paradoxa
 C. st = C. striatus
 C. hu = C. hughesii
 P. no = P. notensis
 F. wo = F. wonthaggiensis
 C. au = C. australiensis
 R. wa = R. watheroensis
- DINOFAGELLATES:**
 C. in = C. incompositum
 D. ho = D. heterophlycta
 A. hy = A. hyperacantha
 A. ho = A. homomorphom
 E. cr = E. crassitabulata
 T. ev = T. evittii
 M. dr = M. druggii
 I. ko = I. korjense
 X. au = X. australis
 N. ac = N. aceras
 I. cr = I. cretaceum
 O. po = O. porifera
 C. st = C. striatoconus
 P. in = P. infusorioides

Hydrocarbon shows legend

- ☉ Gas show (weak)
- ☼ Gas show (strong)
- ⊙ Gas well
- ⊖ Oil show (weak)
- ⊕ Oil show (strong)
- ⊖ Oil well
- ⊕ Oil/gas show (weak)
- ⊕ Oil/gas show (strong)
- ⊖ Oil fluorescence

Palynological environments legend

- non mar. - non marine environ.
 lac. - lacustrine environment
 estu. - estuarine
- marg. mar. - marginal marine
 nearshore - nearshore marine
 offshore - offshore marine

Pristane/Phytane Ratio legend

- Aqu - Aqueous, lacustrine or marine
 Int - Intermediate
 Ter - Terrestrial

S/W core - recovered

- Dino/Spore-pollen legend
 absent
 very low
 low
 moderate
 high
 very high

Accessory minerals legend

- C - carbonaceous debris (magenta)
 S - shell debris (blue)
 G - glauconite (green)
 M - mica (red)
- arrows indicate SWC range & abundance
 patterns indicate cuttings/core range & abundance
- trace
 minor
 common
 abundant

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