IONA-1

Location: Onshore Otway Basin
Latitude: 38 34 30.46 S
Longitude: 143 01 57.33 E

G.L. Elevation = 126.5 m
Total Depth Drilled (KB) = 1490 m; Depth logged (KB) = 1487.27 m
KB Elevation = 131.4 m amsl
Seismic line reference: OB81A-62, sp 235

Completed March 23, 1988 by Beach Petroleum N.L.
Status = Gas Producer

Lithostratigraphy by Geoff Geary (1998)
Lithological interpretation by Natalia Liberman (1998)
Palynology by Morgan (1988) Dinoflagellate zonation updated by Patridge (1996)
Produced by the Basin Studies Group 04-Jun-200

State Government Victoria AUSTRALIA — Department of Primary Industries

Lithological legend

Carbonate Lithotypes
- Limestone
- Limestone, sandy
- Limestone, dolomitic
- Dolomite
- Dolomite, calcareous
- Marl

Siliciclastic Lithotypes
- Conglomerate
- Sandstone, pebbly
- Sandstone
- Sandstone, calcareous
- Sandstone, argillaceous
- Sandstone, glauconitic
- "Greensand"
- I'bedded sandstone & mudstone
- Siltstone
- Mudstone (shale)
- Mudstone, calcareous
- Claystone
- Coal

Others
- Extrusive rocks
- Mafic sills
- Plutonic rocks
- Metamorphic rocks

N.B. Not all lithological patterns in the legend have been used in this wellsheet.

Accessory minerals legend

C - carbonaceous debris
P - pyrite
G - glauconite
M - mica
Arrowheads indicate SWC range & abundance
Patterns indicate cuttings/core range & abundance

trace · minor · common · abundant

Pristane/Phytane Legend

< 1.5 Anoxic - Subaqueous (lacustrine or marine)
1.5 - 3.0 Trans - Transitional environment
> 3.0 Oxic - Subaerial environment

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. apoxyexinus
P. ma	= P. mawsonii
H. un	= H. uniforma (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. watherooensis

DINOFLAGELLATES:

W. th	= W. thompsonae
C. in	= C. incompositum
H. ta	= H. tasmaniense
D. he	= D. heterophylcta
A. hy	= A. hyperacantha
A. ho	= A. homomorphom
E. cr	= E. crassitabulata
T. ev	= T. evittii
P. py	= P. pyrophorum
M. dr	= M. druggii
I. ko	= I. korojenense
X. au	= X. australis
N. ac	= N. aceras
I. ro	= I. rotundatum
I. cr	= I. cretaceum
O. po	= O. porifera
C. st	= C. striatoconus
P. in	= P. infusorioides

N.B. Not all palynological zones in the legend have been used in this wellsheet.

Palynologists' environments legend

nm - non marine
lac - lacustrine
est - estuarine
mm - marginal marine
ns - nearshore marine
om - offshore marine

N.B. Environments are based on spore-pollen/dino ratios.

Hydrocarbon shows/tests legend

- Gas show (weak)
- Gas show (strong)
- Gas zone
- Oil show (weak)
- Oil show (strong)
- Oil zone
- Oil/gas show (weak)
- Oil/gas show (strong)
- Oil fluorescence
- CO_2 zone
- RFT test

N.B. Not all hydrocarbon symbols in the legend have been used in this wellsheet.