WOOLSTHORPE_1

Location: OTWAY BASIN
Latitude: 38.13555555556 S
Longitude: 142.4963888889 E

Total Depth Drilled (KB) = 1971 m
KB Elevation = 125 m amsl
Seismic line reference: OPX86A-35 SP 312

Completed by Interstate Oil Ltd 1968
Status = P&A

Lithostratigraphy by C. Lavin 1996
Lithological interpretation WCR
Palynology by Dettmann 1968, Morgan 1988, 1992
Produced by the Basin Studies Group 26-Oct-2001

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"
- l'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. watheroensis

DINOFLAGELLATES:

C. in	= C. incompositum
D. he	= D. heterophylcta
A. hy	= A. hyperacantha
A. ho	= A. homomorphom
E. cr	= E. crassitabulata
T. ev	= T. evittii
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.

Depth(kb) | Casing | CALI 3 IN 23 | SP -20 MV 150 | GR 0 GAPI 200 | Lithologies | Sidewall | Core | Accessory minerals C P G M | SN 0.2 OHMM 2000 | IND 0.2 OHMM 2000 | DRHO -0.4 G/CC 0.1 | RHOB 1.95 G/CC 2.95 | NPHI 0.45 V/V -0.15 | Sonic Log 140 US/F 40 | TWT (ms) datum (msl) | Lithostratigraphy | Palynologists' palaeoenvirons nm lac est mm ns om | Spore/pollen zones | Dino zones | Hydrocarbon shows/tests: Show | Tests | Description | Pristane/Phytane: Ratio | Environ | Palaeoenvironment from integrated analysis | Sequence stratigraphic scheme | Depth(kb)

Depth (kb)	TWT (ms) datum (msl)	Lithostratigraphy	Spore/pollen zones	Dino zones	Show	Tests	Description	Pristane/Phytane Ratio	Pristane/Phytane Environ	Palaeoenvironment from integrated analysis	Sequence stratigraphic scheme
		Newer Volcanics									
	0	Heytesbury Gp.									
300	300	Eumeralla Fmn.	C. st								
		Heathfield Sst.									
600	500		up C. hu								
	600	Eumeralla Fmn.	lw C. hu								
1100	1000		C. hu								
1500	1100	Crayfish Group	F. wo - C. h		♂		C1,C2 kick on mud gas detector	5.54 6.7			
	1200				◔		blu-wht fluor. Pres. of min. live oil in core	3.1			
1900	1300	Casterton Fmn.	F. wo R. wo - C. a							Deep lacustrine	J2 seq.(HST)?
										Deepening lacustrine fill?	J2 seq. (TST)?
										Continental volcanics	Volcanics on SB ??