Well Name : Melville-1

Operator : Bass Strait Oil Company
Well Code : MELVILLE-1
Lat/Long : 38°41' 3.00"S 147°59' 8.00"E
Interval : 2200m - 3350m Palynomorph Range Chart for Melville-1
Scale : 1:2000 Sample interval 2230 to 3328m
Chart date: 11 November 2003 Microscope Analysis by Alan D. Partridge

Melville-1

Biostrata Pty Ltd
AUSTRALIA

Data from Biostrata Reports 2002/1 & 2003/17

Depth | Stratigraphy: Formation | Gamma Ray (GAPI) 0–300 | Lithology | Sonic Log (USIM) 120–40 | Spore-Pollen: Zone | Microplankton: Zone | Samples (metres)

Swordfish Formation
EOW
Devilfish Sandstone
Gurnard Formation
Kingfish Formation
Kate Shale
Volador Formation
Volcanics
Chimaera Formation
Curlip Fm Unit A
Curlip Fm Unit B
Unit C
Curlip Formation Unit D
Intrusive
TD 3350m

P. tuberculatus
Operculodinium Superzone
D. heterophlycta
Lower N. asperus
E. partridgei
Lower M. diversus
A. homomorphum
Upper L. balmei
A. reburrus Acme
Lower L. balmei
T. evittii Acme
Upper F. longus
Lower F. longus
N. senectus
T. apoxyexinus or oblei
Phyllocladidites mawsonii Zone

Spores

% of Melville S+G+A (30mm=100%)

Cyathacaidites annulatus
Cyathidites australis (large species)
Cyathidites spp. (small species)
Dictyophyllidites spp.
Foveotriletes spp.
Gleicheniidites circinidites
Laevigatosporites major
Laevigatosporites ovatus
Baculatisporites comaumensis
Rohypsosporites irregularis sp. nov
Rohypsosporites parvimurus
Triplex spores undiff.
Triplex trilobata forma
Matonisporites ornamentalis
Plicatella tuberculata
Matonisporites gigantis comb. nov.
Cyathidites concavus
Cyathidites splendens
Cyathidites subtilis (type)
Lakiesporites crassa
Triporoletes reticulatus
Triporoletes rosewoodensis
Ibatisporites spp.
Rogalskaisporites angulus
Rogalskaisporites spp. nov.
Rouseisporites stellatus sp. nov.
Verrucosisporites spp.
Arachaeisporites spp. (thread)
Arachaeisporites spp. (granulose)
Triporoletes reticulatus
Aequitriradites spinulosus
Aequitriradites spinosa sp. nov.
Aequitriradites verrucosus forma
Camarozonosporites buttatus
Osmundacidites wellmanii
Stereisporites spp.
Stereisporites regium
Stereisporites rosewoodensis sp. nov.
Stereisporites equalis
Stereisporites psilata sp. nov.
Perotrilites gemula sp. nov.
Aequitriradites verrucosus
Aequitriradites spinulosus (type)
Cicatricosisporites australiensis
Cicatricosisporites hughesii
Neoraistrickia truncata
Neoraistrickia spp.
Cicatricosisporites dorogensis
Cicatricosisporites thodarocs sp. nov.
Cicatricosisporites spp.
Cicatricosisporites hughesii
Manumonilites intravenucatus
Manumonilites spp.
Perotrilites jubatus
Perotrilites minutus
Arcellites discoformis
Arcellites spp. (thick)
Osmundacidites murrayi sp. nov.
Araucariacites australis
Lygistepollenites florinii
Microcachryidites antarcticus
Podocarpidites spp.
Dilwynites tuberculatus
Phyllocladidites mawsonii
Trichotomosulcites subgranulatus
Dacrycarpites australiensis
Dacrycarpites sp.
Microalatites palaeogenicus
Phyllocladidites echinatus
Phyllocladidites eurochus sp. nov.
Phyllocladidites spp. undiff.
Vitreipollis signatus
Dilwynites pusillus sp. nov.
Dilwynites spp.
Haloragacidites harrisii

Gymnosperm Pollen

% of Melville S+G+A (30mm=100%)

Nothofagidites vansteenisii
Nothofagidites emarcidus/heterus
Nothofagidites dennulus
Nothofagidites flemingii
Proteacidites spp. (multiple species)
Nothofagidites brachyreticulosus
Proteacidites pachypolus
Proteacidites tuberculiformis
Proteacidites orthoteichus
Proteacidites incurvatus
Proteacidites adenanthoides
Proteacidites grandis
Proteacidites (Proteacidites) reticulosaratus
Proteacidites (Proteacidites) tuberculatus
Tricolpites (Rhoipites) sphaerica
Austrotelesia obducta
Tricolpites (Tricolpites) reticulatus
Tricopordites spp. (multiple species)
Tricopordites spp. (Tricopordites) annulatus
Gambierina edwardsii
Gambierina rudata
Tricopordites antiquus
Tricopordites spp. undiff.
Tricolpites marginatus sp. nov.
Tricolpites marginatus sp. nov.
Angiosperms species undiff.
Proteacidites cinis sp. nov.
Proteacidites microcorpus sp. nov.
Quadraplanus brossus
Tricolpites sp. cf. T. lilliei
Tricolpites lilliei
Batteripollis sectilis
Rhoipites microechinatus
Tetracolporites verrucosus
Proteacidites (cf. Beauprealdites) orbiculatus
Proteacidites (Cheetahspollis) palaedictyus
Ilaciotes spp.
Proteacidites (Proteacidites) cotonoides
Ilaciotes ilaciformis
Tricolpites waiparaensis
Proteacidites tuberculiformis sp. nov.
Arecipites spp.
Foraminisporis sp. nov.
Gambierina sp. P
Tricolpites spp. (small species)

Angiosperm Pollen

% of Melville S+G+A (30mm=100%)

Microplankton

% of Melville SP+MP (30mm=100%)

Adnatosphaeridium multispinosum
Hystrichosphaeridium tubiferum
Impagidinium spp.
Impagidinium sphaericum
Micrhystridium spp.
Nematosphaeropsis balcombiana
Operculodinium centrocarpum
Operculodinium spp.
Polysphaeridium zoharyi
Protoperidinium simplex sp. nov
Spiniferites cf. S. ramosus
Spiniferites spp.
Systematophora placacantha
Tectatodinium pellitum
Habibacysta tectata sp. nov.
Pterodictyum hexacanthum
Reticulatosphaera actinocoronata
Reticulatosphaera actinocoronata sp. nov.
Reticulatosphaera bidata
Reticulatosphaera wilsonii
Vozzhennikovia rotunda
Cymatiosphaera perforata
Cymatiosphaera vestita
Deflandrea spp. (indet. fragments)
Deflandrea spp. (thick)
Hystrichosphaeridium tubiferum
Hystrichosphaeridium spp.
Pterodictyum hexacanthum
Thalassiphora pelagica
Thalassiphora reticulata
Apectodinium hyperacanthum
Apectodinium spp.
Nuwaubaidinium tintorium
Nuwaubaidinium spp. nov.
Deflandrea cf. phosphoritica
Deflandrea dartmoria
Diphyes colligerum
Diphyes ramosum
Heterosphaeridium difficile
Senegalinium obscurum
Senegalinium olevinense
Amosopollis cruciformis
Alisocysta margarita
Alisocysta reticulata
Pseudoschizea spp.
Pseudoschizea circulata
Schizocystia spp.
Sebarya spp.
Spinidinium echinoideum
Micrhystridium sp. A
Micrhystridium spp.
Sigmopollis carbonis
Fungal spores & hyphae
Microforaminiferal linings
Scolecodont remains
Reworked palynomorphs
Reworked dinoflagellates
Fungal fruiting bodies
Indeterminate palynomorphs

Other

% of Melville SP+Misc (30mm=100%)