Esso Australia Ltd.

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WELL COMPLETION REPORT

BLENNY-1
VOLUME 2
INTERPRETED DATA

GIPPSLAND BASIN
VICTORIA

ESSO AUSTRALIA RESOURCES LIMITED

Compiled By:- D. Barwick
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1. Summary of Well Results

Formation/Horizon	Pre-Drill Depth (MSS TVD)	Post Drill Depth (MSS TVD)
Gippsland Limestone (seafloor)	40	40
Top of Latrobe Group	1193	1207
Top of N1.1 reservoir	1213	1228.5
Lower N. asperus marker	1308	1332
TOTAL DEPTH	1400	1400

2. Introduction

The objective of the Blenny-1 well was to test the middle N. asperus aged estuarine sands which contain oil at the Dolphin field, 3.5km to the southwest of the Blenny -1 well location.

The Blenny structure is a highside fault closure along the Perch-Dolphin-Tarwhine anticlinal trend. The trap is a fault dependent closure mapped at the 'Top of N1.1 reservoir', similar to the Dolphin structure.

The well intersected the 'Top of the Latrobe Group' unconformity at 1230m RKB (1207 mSS), 14m low to prediction. The 'Top of N1.1 reservoir' was intersected at 1251.5m RKB (1228.5m SS), 15.5m low to prediction.

No hydrocarbons were encountered in the well, and it was plugged and abandoned as a dry hole.

3. Structure

The Blenny structure is a faulted anticline similar to the Dolphin and Perch fields. Closure is completely fault dependent, with a pre-drill maximum closure of 24m predicted at the 'Top of N1.1 reservoir' marker (top of porosity). Maximum pre-drill mapped fault throw of 40m occurred at the crest of the prospect at the N1.1 reservoir level. Post-drill mapping established the Blenny-1 location was outside of closure. The post-drill analysis indicated about 5 metres of closure may still be present updip from the Blenny-1 location.

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4. Stratigraphy

The Blenny-1 well was expected to encounter middle N. asperus aged estuarine sands beneath the Gurnard Formation glauconitic siltstones. The top of the reservoir at this location consisted of dolomitised glauconitic sandstones. The presence of glauconite in this sand is good evidence that the N1.1 reservoir may have been deposited as part of the transgressive Gurnard Formation.

The remaining Latrobe Group section penetrated by the well consisted of fluvial and estuarine sands, shales and coals of lower to middle N. asperus age. Evidence for a marginal marine (estuarine) environment of deposition can be seen as minor appearances of dinoflagellates in the section above the N1 coal (1285m RKB).

5. Geophysical Discussion

The Blenny-1 well penetrated the Top of the Latrobe Group 14m low to prediction. The top of the target reservoir section (N1.1 reservoir) was encountered at 1251.1 RKB, 15.5m low to prediction. This represents an error of 1.2%.

The post-drill mapping of the Blenny-1 area, encompassing the Dolphin field, was carried out using two dimensional seismic data primarily from G88A and G89A grids with a line spacing of approximately one half a kilometre. Other data ranging in vintage from 1974 to 1981 were also used to supplement the mapping in areas of poor data control.

Well ties were achieved at Blenny-1, Dolphin-1 and Torsk-1 via synthetic seismograms. Dolphin-2 was not tied to the seismic as neither sonic log nor velocity data were acquired for this well.

Post-Latrobe analysis of the average velocities to the Top of the Latrobe Group unconformity at each of the three well locations indicated a significant increase in the velocity field from Dolphin-1 to Blenny-1 and then northeast to Torsk-1. The increase in average velocity observed at Blenny-1 as compared to Dolphin-1 was sufficient to account for the error in depth prediction seen at the Top of the Latrobe Group and the top of the reservoir objective.

Due to the complex nature of lateral velocity variations within the post-Latrobe overburden, a number of different depth conversion techniques were applied.

Velocity data from the G88A grid only was used in the depth mapping. The G89A data was not incorporated as it was of limited coverage in the area of interest and was acquired with different parameters to the 1988 data making it incompatible for velocity analysis.

Raw normal move out velocities to the Top of the Latrobe Group, as taken from the stacking velocity analyses, were particularly poor and exhibited scatter in excess of 20m/sec on most lines. This is attributable to the choppy, variable amplitude stacking response of the Top of the Latrobe Group reflection event in this area.

Conventional Time-to-Depth conversion using well-corrected normal move out velocities to the mapped time horizon was attempted but failed to provide the necessary vertical resolution in depth at the Top of the Latrobe Group.

A dual Isopach depth conversion approach utilising an intermediate post-Latrobe horizon (near base high velocity unit) was also attempted but failed due to the reliance on unstable Top of Latrobe Group velocities. and the amount of smoothing necessary to make geological sense of the data.

The final and most successful of the three depth conversion techniques was to use reliable stacking velocity data from a strong, distinct and continuous reflector positioned somewhere near the critical N1.1 horizon. The Base Middle N. asperus coal marker (-1262.0m Blenny-1) was chosen as it had an unambiguous, high amplitude stacking response on the velocity analyses, allowing a good normal move out velocity measurement to be taken. This coal was mapped in time, and converted to depth using the well-corrected Vnmo data. Near constant thicknesses between the coal and the other mapped surfaces at both Dolphin-1 and Blenny-1 allowed simple isopach subtraction from the depth structure map on the middle N. asperus coal up to the Top of the N-1.1 reservoir (Enclosure 1).

6. General Discussion

Post-drill mapping shows that the Blenny-1 well was drilled outside of structural closure and hence was not a valid structural test. Approximately 5 metres of closure, which is less than the resolution of the seismic data, exists updip of the well location.

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FIGURES

LOCALITY MAP
BLENNY-1

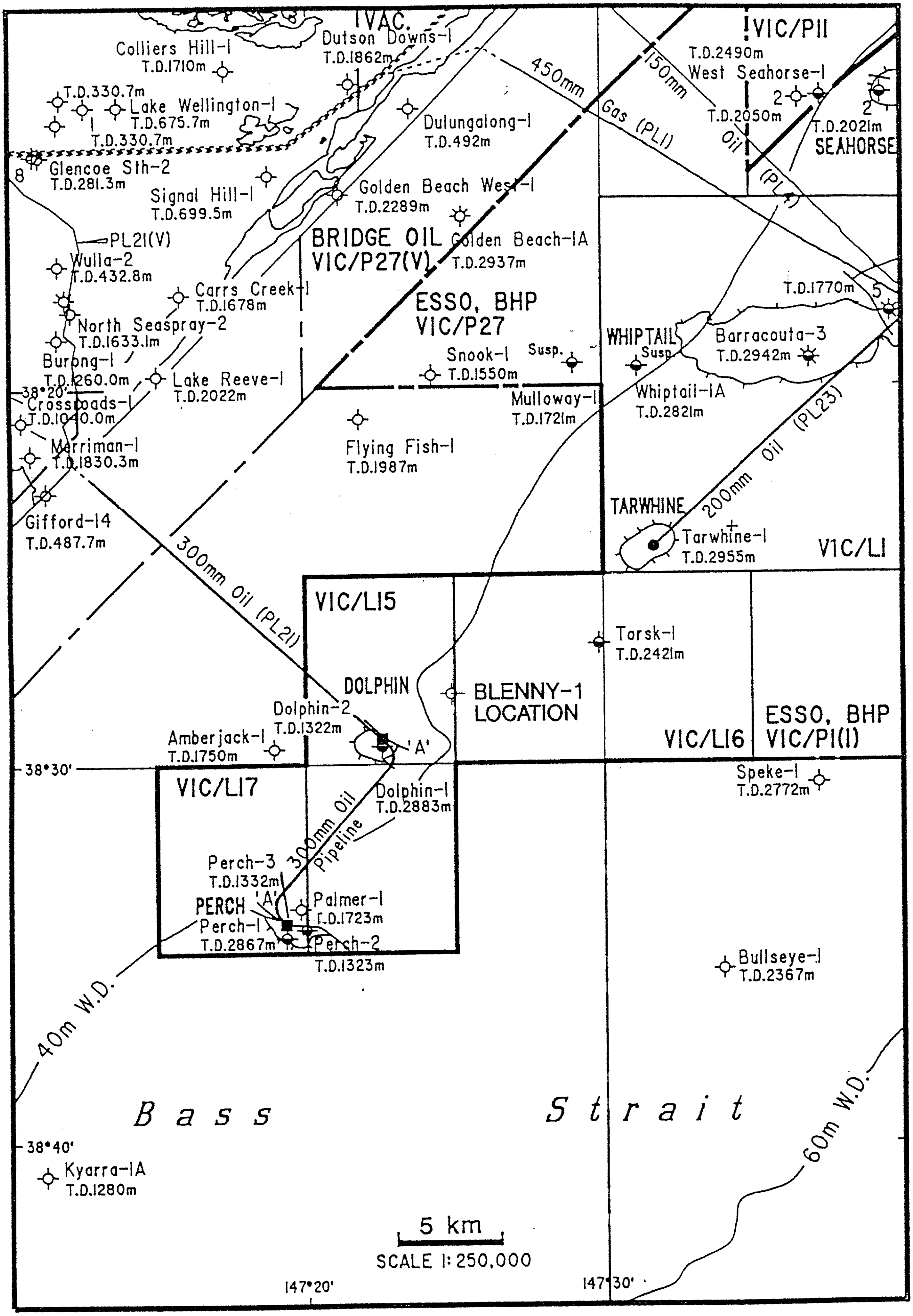

Figure 1

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APPENDIX
1

PALYNOLOGICAL ANALYSIS OF BLENNY-1
GIPPSLAND BASIN

by

A.D. PARTRIDGE
BIOSTRATA PTY LTD
A.C.N. 053 800 945

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INTRODUCTION

Twenty-six sidewall cores in Blenny-1 were examined, cleaned and split by author and then forwarded to Laola Pty Ltd in Perth for processing to extract organic microfossils (palynomorphs). All samples were examined by author for their contained spores, pollen and microplankton to derive the data and interpretations in this report.

Between 8 to 19 grams (average 12.2g) of each sidewall core was processed for palynological analysis. Residue yields were high in the Latrobe Group coarse clastic section, moderate in the overlying Gurnard Formation and low in basal Lakes Entrance Formation. Palynomorph concentration overall was high and preservation generally fair to good. As a consequence overall spore-pollen diversity was high averaging 28+ species per sample. Microplankton were generally of low abundance and limited diversity (1-7 species) in the Latrobe coarse clastic section but noticeably increase in abundance up-section through the Gurnard Formation from 2% to a maximum of 59%, and through the basal Lakes Entrance Formation from 42% to 85%. Microplankton diversity in these latter two units averaged 8+ species. Some samples were poorly preserved due to over-oxidation (see Table-3) and for all samples some degrading of preservation was caused by the use of polyvinyl alcohol (PVA) and EUKITT mounting medium.

Lithological units and palynological zones from the base of the Lakes Entrance Formation to Total Depth are given in the following summary. The interpretative data with zone identification and Old and New Confidence Ratings are recorded in Table-1 and basic data on residue yields, preservation and diversity are recorded on Tables-2 and 3. Twenty-two of the samples were counted, and percentage data for these counts are recorded in Tables 4 and 5. All species which have been identified with binomial names are tabulated on the accompanying range charts for spore-pollen and microplankton. Relinquishment lists for palynological slides and residues from samples analysed in Blenny-1 are provided at the end of the report.

PALYNOLOGICAL SUMMARY OF BLENNY-1

AGE	UNIT/FACIES		SPORE-POLLEN ZONES (DINOFLAGELLATE ZONES)	DEPTHS (mKB)
OLIGOCENE	Lakes Entrance Formation		*P. tuberculatus* Upper *N. asperus* *(P. comatum)*	1205.0-1214.5 1218.7-1227.6 (1227.6)
LATE EOCENE	LATROBE GROUP	Gurnard Formation	Upper *N. asperus* *(P. comatum)* Middle *N. asperus* *(C. incompositum)*	1230.5-1234.0 (1230.5-1234.0) 1236.7-1256.0 (1239.5-1249.5)
LATE EOCENE ——— MIDDLE EOCENE	LATROBE GROUP	Undifferentiated coastal plain sands, shales & coals	Middle *N. asperus* Lower *N. asperus* *(D. heterophlycta)*	1259.5-1262.0 1276.7-1339.0 (1298.5)

GEOLOGICAL COMMENTS

1. In Blenny-1 the palynological analysis was conducted over the basal 25 metres of the Lakes Entrance Formation (4 samples), through the 26.5 metres thick Gurnard Formation (9 samples) and from only the upper 82.5 metres (15 samples) of the 166.5 metres of undifferentiated, coarse clastic facies of the Latrobe Group penetrated in the well. In the total of 134 metres of section analysed four spore-pollen and four dinoflagellate zones were identified. The time interval sampled is from late Middle Eocene to probably no younger than Early Oligocene (approx. 30-42 Ma on the Haq *et al.*, 1987 time scale). No major time breaks are considered to be present over the section analysed to account for the low average depositional rate of <12 metres/million years (m/my). Instead both the Gurnard and the basal part of the Lakes Entrance Formation are considered to be condensed sections with depositional rates of <9 m/my and <5 m/my respectively. In contrast the depositional rate in the Latrobe coarse clastic facies is considered likely to be >40 m/my.

2. The record of the *D. heterophlycta* dinoflagellate Zone at 1298.5m combined with the above depositional rate makes it likely that at T.D. Blenny-1 is till in the upper part of the Lower *N. asperus* Zone.

3. The Lakes Entrance Formation is typically a marl or calcareous claystone (as described from the sidewall cores) and its base is placed above the shallowest sidewall core which contains significant glauconite. In Blenny-1 its boundary with the underlying Gurnard Formation is best placed at 1230m at the top of a sharp spike shaped increase on the Bulk Density log, as this is the most obvious change immediately above the first sidewall core to contain glauconite at 1230.5m. This pick for the top of the Gurnard Formation displays only a minor change on the gamma ray log. The fact that both the Upper *N. asperus* and *P. comatum* Zones straddle this boundary suggests that an environmental change rather than a significant age break is the reason for the disappearance of visible glauconite in the sidewall cores.

4. The Gurnard Formation is recognised over a 26.5 metre interval from 1230m to 1256.5m. Its base is placed at the gamma log break below the deepest sidewall core with any trace of glauconite. An "upper" and "lower" subdivision can be recognised over this 26.5 metre interval. Over the "upper" unit between 1230-1247m the hole is significantly out of gauge and this has affected the readings on the Bulk Density log. Over the "lower" unit between 1247-1256.5m the hole is in gauge and the Bulk Density log shows consistently higher readings relative to the overlying Lakes Entrance or underlying Latrobe Group undifferentiated coarse clastics. The "lower" unit is further subdivided by presence of a basal medium grained sandstone between 1251.5-1256.5m which is retained as part of the Gurnard Formation because of the presence of glauconite and relatively high bulk density. Although there is no age difference across the boundary between these units there may be a facies change as there is an increase in the abundance and overall diversity of dinoflagellates in the "upper" unit (see Tables 3 & 4). Similarly there is no apparent age difference between the Gurnard Formation and immediately underlying coarse clastics assigned to Middle *N. asperus* Zone.

5. Twenty-two of the 26 samples analysed in Blenny-1 were extensively counted. An average of 237 palynomorphs were counted per sample and results of these counts are presented on Tables 4 & 5. The spore-pollen and dinoflagellate zonations in the Gippsland Basin are principally based on species ranges and their first and last appearances with generally only a subordinate role given to the abundance of species when choosing zone boundaries. The well preserved assemblages from Blenny-1 where counted to attempt to find additional criteria to identify and perhaps further subdivide the zones.

Unfortunately the most obvious changes in the counts are more related to the increasing marine influence going up section and are likely to be of more environmental rather than age significance.

Abundance and diversity of angiosperm pollen type appearing in the counts are highest in the Latrobe coarse clastic facies and decrease slightly in the overlying marine Gurnard and Lakes Entrance Formations. Both gymnosperm pollen as spores increase in these unit. Most noticeable is increase in pollen of the *Araucariacites/ Dilwynites* complex (whose affinities lie within the extant *Araucaria* and *Agathis*) and the *Podocarpidites* spp. pollen. The dominance of these types is interpreted to be a manifestation of the "Neves effect", which is the tendency, for bisaccate pollen, certain buoyant spores, and other pollen with "comparatively great transportability" to have greater relative abundance the further offshore you go in any depositional basin (Traverse, 1988; p.413).

In the Latrobe coarse clastic facies a different effect is observed. In a costal plain setting environments are shifting more rapidly, exemplified by the near juxtaposition of coals and shaly beds containing abundant dinoflagellates. The latter are interpreted to signify local or regional marine incursions. The samples from the coarse clastic facies show characteristic "one off" abundances of species, as would be expected of the variable vegetational mosaic growing on the shifting micro-environments of a coastal plain. Some of the most conspicuous abundance peaks are *Phyllocladidites mawsonii* (22% at 1274.8m and 21% at 1289m), *Haloragacidites harrisii* (19% at 1298.5m and 1315m) and *Malvacipollis* spp. (4% at 1276.7m). Fungal spores and hyphae also show abundance peaks of 14% at 1249.5m and 12% at 1274.8m (as a percentage of total count, see Table-4).

The counts on dinoflagellate species show an increasing abundance going up section as the regional marine transgression floods the Blenny-1 location. Individual species abundances are highly variable but at this time no age significant patterns are recognised.

6. The *D. heterophlycta* Zone was identified at 1298.5m from a mottled (probably burrowed) sandstone recovered in a sidewall core shot near the bottom of a thin shaly bed identified on the gamma log between 1297.3-1299m. This shaly bed is probably the best candidate within the Latrobe coarse clastics in Blenny-1 for a **condensed section.** It would correlate with condensed sections centred at either 40 Ma or 41.2 Ma on the Haq *et al.* (1987, 1988) cycle charts. The zone is recognised by its diversity of dinoflagellates and not by dinoflagellate abundance. The dinoflagellates in the count on the sample represent <1% of the total palynomorph assemblage. This can be

contrasted with other assemblages within the Latrobe coarse clastics which may have significantly higher abundance but have very low or monospecific diversity (see counts on samples at 1262m, 1267m and 1276.7m). An implication of these observations is that it may be difficult to trace these condensed sections in other wells based on cuttings samples because of the likely rarity of the key species.

BIOSTRATIGRAPHY

Zone and age determinations are based on the spore-pollen zonation scheme proposed by Stover & Partridge (1973), partially modified by Stover & Partridge (1982) and Helby, Morgan & Partridge (1987), and a dinoflagellate zonation scheme which has only been published in outline by Partridge (1976). Other modifications and embellishments to both zonation schemes can be found in the many palynological reports on the Gippsland Basin wells drilled by Esso Australia Ltd. Unfortunately this work is not collated or summarised in a single report.

Author citations for most spore-pollen species can be sourced from Stover & Partridge (1973, 1982), Helby, Morgan & Partridge (1987) or other references cited herein. Author citations for dinoflagellates can be found in Lentin & Williams (1985, 1989). Species names followed by "ms" are unpublished manuscript names.

Lower *Nothofagidites asperus* Zone: 1276.7-1339.0 metres **Middle Eocene.**

The eight deepest samples analysed in Blenny-1 are confidently assigned to the Lower *N. asperus* Zone on the dominance of *Nothofagidites* spp. in all samples (31%-59%) and the occurrence of several important index species for this assemblage zone. The most important and frequent of these are *Nothofagidites falcatus*, *Proteacidites recavus* and *Tricolpites simatus* which occur in most samples.

The assemblages are difficult to distinguish from those recovered from the overlying Middle *N. asperus* Zone because species that are restricted or range no younger than this zone are very rare. The only notable exceptions are *Anacolosidites luteoides* at 1289m, *Proteacidites kopiensis* at 1315m and *P. tuberculiformis* at 1339m. Instead the top of the Lower *N. asperus* Zone is placed at the shallowest <u>consistent</u> presence of *Proteacidites pacypolus*. Anomalous ranges of species in this zone are the occurrence of *Verrucosisporites cristatus* at 1339m and *Tricolporites* sp. cf. *T. retequetrus* at 1324m.

Deflandrea heterophlycta Dinoflagellate Zone: 1298.5 metres **Middle Eocene.**

The co-occurrence of *Deflandrea heterophlycta* with the acritarch *Tritonites inaequalis* Marshall & Partridge 1988 from a mottled sandstone at 1298.5m confirm the occurrence of this zone. Other associate dinoflagellates have longer ranges and whilst not diagnostic of any particular age they do mean that this sample has the highest recorded microplankton diversity of all samples below the Gurnard Formation.

Middle *Nothofagidites asperus* Zone: 1236.7-1262.0 metres **Late Eocene.**

The spore-pollen assemblages from the twelve sidewall cores analysed over the interval 1236.7-1274.8m are all dominated by *Nothofagidites* pollen (47%-78%) and thus clearly assignable to the broad *N. asperus* Zone. Six of the sidewall cores could be more precisely defined as belonging to the Middle *N. asperus* Zone on the presence of the index species *Triorites magnificus* (in 4 samples), *Aglaoreidia qualumis* (at 1244m) and *Anacolosidites sectus* (at 1236.7m). In all of these latter samples the index species were represented by single recorded specimens and in the case of *T. magnificus* specimens of this distinctive pollen were generally poorly preserved or stripped of their sexine.

Other important species in this zone whose Last Appearance Datums (LADs) confirm an age no younger than the Middle *N. asperus* Zone are *Proteacidites adenanthoides* (LAD at 1239.5m), *P. pachypolus* (LAD at 1250.5m), and *P. crassus*, *P. recavus* and *Santalumidites cainozoicus* (the last three with LADs at 1257.8m).

Gippslandia extensa Dinoflagellate Zone: 1236.7-1262.0 metres **Late Eocene.**
Corrudinium incompositum Dinoflagellate Zone: 1239.5-1249.5 metres **Late Eocene.**

The observations in Blenny-1 confirm that the *G. extensa* and *C. incompositum* dinoflagellate Zones are time equivalents but preferentially are found in different but contiguous facies. The *Gippslandia extensa* Zone was originally informally proposed (as the *Deflandrea extensa* Zone) by Partridge (1975, 1976) as a total range zone for the eponymous species. In exploration wells drilled in later years, as the Gurnard Formation in the central part of the basin was better sampled with sidewall cores, the occurrence of *G. extensa* was found to be sporadic and the zone was renamed after the more cosmopolitan *Corrudinium incompositum*. Most recently Partridge (1990) in the Sawbelly-1 report speculated that the "typical" development of the *G. extensa* Zone occurred stratigraphically above the *C. incompositum* Zone. This is clearly refuted by the observations in Blenny-1. Here *G. extensa* occurs in 9 out of 10 samples over the zone interval from the "Latrobe coarse clastic facies" and

"Gurnard facies", while *C. incompositum* occurs in only three samples within the "Gurnard facies".

Both zones are identified on the total range of their nominated species. Accessory species which are also considered characteristic of the zones are mainly found in the "upper" more open marine part of the Gurnard Formation. The most important species are the dinoflagellates *Deflandrea leptodermata* at 1244m and 1249.5m, *Rhombodinium glabrum* at 1239.5m and the acritarch *Tritonites spinosus* at 1239.5m and 1244m. The shallowest sample over this interval at 1236.7m contains the common occurrence (8.2%) of a species very similar to *Stoveracysts kakanuiensis* Clowes 1985. The discussion in Clowes & Morgans (1984) suggests this assemblage would lie close to the Eocene/Oligocene boundary.

Upper *Nothofagidites asperus* Zone: 1218.7-1234.0 metres
Late Eocene - basal Oligocene.

Although moderate diversity spore-pollen assemblages were recorded from the four samples assigned to this zone few index species were recorded and the zone is identified as the stratigraphic interval above the last Middle *N. asperus* Zone indicator, in this case *Anacolosidites sectus* at 1236.7m and below the FAD for *Cyatheacidites annulatus*.

Species considered diagnostic but not restricted to the zone are *Proteacidites rectomarginis* at 1218.7m and 1230.5m and *P. stipplatus* also at 1230.5m. Other notable species present are *Nothofagidites longispina* (Couper) and *Kuylisporites waterbolki* at 1230.5m.

All samples are dominated by *Nothofagus* pollen (41-69%). The next most dominant types are the combined *Araucariacites australis, Dilwynites granulatus* and *D. tuberculatus* (6-28%), and *Casuarina (Haloragacidites harrisii)* pollen (2.5-9%). Notable by its absence is any significant abundance of the gymnosperm pollen *Phyllocladidites mawsonii*. Abundances of the last species are typical of this zone as developed in the onshore parts of the Gippsland Basin (Stover & Partridge, 1973, p.243) and this feature has been used as a secondary criteria for the zone by other workers. The availability of more numerous assemblage counts from all zones in the Gippsland Basin over the past decade has shown that abundances of *P. mawsonii* and related species can occur in the non-marine portions of the coastal plain facies in most Tertiary spore-pollen zone in the Gippsland Basin, and thus their usefulness for age dating and correlation must be treated cautiously.

***Phthanoperidinium comatum* Dinoflagellate Zone: 1227.6-1234.0 metres**
Late Eocene-basal Oligocene.

The section in Blenny-1 is amongst the best examples of the *Phthanoperidinium comatum* Zone in the Gippsland Basin. The zone is defined by the abundance of the eponymous species and in Blenny-1 the two deepest samples are dominated by *P. comatum* which has abundances of 53-56% of the dinoflagellate count or 23-33% of the total assemblage count. Both these samples are from the Gurnard Formation and there may be an environment factor in the high abundances. In the shallowest sample from the basal Lakes Entrance at 1227.6m the abundance of *P. comatum* drops back to 21% of the dinoflagellate count and less than 10% of the total count. The next sample above at 1218.7m which is assignable to the Upper *N. asperus* Zone lacks *P. comatum* and the dinoflagellate assemblage is overall more similar to those from the overlying *P. tuberculatus* Zone. Whilst it is considered that the *P. comatum* Zone is an exact marine correlative of the non-marine or continentally derived Upper *N. asperus* Zone this may be more of a reflection of the availability of samples in this very thin and irregularly distributed zone in the offshore portion of the basin. In most wells only one or at best two samples can be assigned to this zone. The abundance and species range data in Blenny-1 suggests there may be more complexity to the zone, but this will only be resolvable with much more detailed sampling.

Other dinoflagellates abundant in the zone in order of dominance are *Spiniferites* spp., *Achomosphaera* spp. especially *A. ramulifera*, and *Operculodinium centrocarpum*. Species whose local ranges extend no younger than this zone are *Deflandrea* spp., *Distatodinium* sp., *Phthanoperidinium eocenicum* and the undescribed form called *Kapetocysta cuneatus* ms. All specimens of *Deflandrea* recorded were so fragmented that species identification was not possible but most where thought to be *D. phosphoritica* or an undescribed closely related species or subspecies with a sparsely verrucate endophragm which is recorded as *Deflandrea* sp. cf. *heterophlycta*.

***Proteacidites tuberculatus* Zone: 1205.0-1214.5 metres Oligocene.**

Two sidewall core samples both of which gave meagre yields are assigned to the *P. tuberculatus* Zone on the occurrence of the key spore *Cyatheacidites annulatus* which is present in both samples. No other indicator spore-pollen species are present in these samples. The samples are dominated by microplankton (85% at 1214.5m, see Table-4) and the assemblages contain the typical Lakes Entrance Formation index dinoflagellate species *Protoellipsodinium simplex* ms and *Tectactodinium scabroellipticus* ms at 1214.5m. Overall the samples are dominated by the dinoflagellates *Spiniferites ramosus* s.l., *Operculodinium centrocarpum*, *Dapsilidinium pseudocolligerum* and *Lingulodinium machaerophorum*. Both samples also contain microforaminiferal liners.

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TABLE 1: INTERPRETATIVE PALYNOLOGICAL DATA FOR BLENNY-1, GIPPSLAND BASIN. SHEET 1 OF 2

SAMPLE TYPE	DEPTH (M)	SPORE-POLLEN ZONES	*CR OLD	*CR NEW	DINOFLAGELLATE ZONE OR ASSOCIATION	*CR OLD	*CR NEW	COMMENTS
SWC 30	1205.0	*P. tuberculatus*	0	B3	(*Operculodinium* spp.)	1	B2	*Cyatheacidites annulatus* present.
SWC 29	1214.5	*P. tuberculatus*	0	B2	(*Operculodinium* spp.)	1	B2	*Operculodinium centrocarpum* = 65%
SWC 28	1218.7	Upper *N. asperus*	2	B2				*Proteacidites rectomarginis* present.
SWC 26	1227.6	Upper *N. asperus*	2	B2	*P. comatum*	0	B1	*Phthanoperidinium comatum* = 21%
SWC 25	1230.5	Upper *N. asperus*	0	B1	*P. comatum*	0	B1	*P. comatum* = 53%
SWC 24	1234.0	Upper *N. asperus*	2	B1	*P. comatum*	1	B2	*P. comatum* = 56%
SWC 23	1236.7	Middle *N. asperus*	2	B4	*G. extensa*	2	B3	Transitional assemblage.
SWC 22	1239.5	Middle *N. asperus*	1	B1	*C. incompositum*	0	B2	LAD for *Triorites magnificus*.
SWC 21	1244.0	Middle *N. asperus*	1	B2	*C. incompositum*	0	B2	*Aglaoreidia qualumis* present.
SWC 20	1249.5	*N. asperus*	1	B2	*C. incompositum*	0	B2	No diagnostic spore-pollen.
SWC 19	1250.5	*N. asperus*	1	B2	*G. extensa*	1	B3	No diagnostic spore-pollen.
SWC 18	1252.5	*N. asperus*	1	B2	*G. extensa*	1	B3	No diagnostic spore-pollen.
SWC 17	1256.0	Middle *N. asperus*	1	B1	*G. extensa*	1	B3	*Triorites magnificus* present.
SWC 16	1257.8	*N. asperus*	1	B2				No diagnostic spore-pollen.
SWC 15	1259.5	Middle *N. asperus*	1	B1	*G. extensa*	1	B3	*T. magnificus* present.
SWC 14	1262.0	Middle *N. asperus*	1	B2	*G. extensa*	1	B3	FAD for *T. magnificus*.
SWC 12	1267.0	*N. asperus*	1	B2				No diagnostic spore-pollen.
SWC 11	1274.8	*N. asperus*	1	B3				No diagnostic spore-pollen.
SWC 10	1276.7	Lower *N. asperus*	2	B2				Shallowest consistent *Proteacidites pachypolus*.

TABLE 1: INTERPRETATIVE PALYNOLOGICAL DATA FOR BLENNY-1, GIPPSLAND BASIN.

SAMPLE TYPE	DEPTH (M)	SPORE-POLLEN ZONES	*CR OLD	*CR NEW	DINOFLAGELLATE ZONE OR ASSOCIATION	*CR OLD	*CR NEW	COMMENTS
SWC 8	1285.0	Lower *N. asperus*	2	B4				
SWC 7	1289.0	Lower *N. asperus*	1	B1				*Anacolosidites luteoides* present.
SWC 6	1293.7	Lower *N. asperus*	0	B1				*Cranwellia striatus* present.
SWC 5	1298.5	Lower *N. asperus*	0	B1	*D. heterophlycta*	1	B3	*Tritonites inaequalis* present.
SWC 4	1315.0	Lower *N. asperus*	1	B1				
SWC 3	1324.0	Lower *N. asperus*	1	B1				
SWC 2	1339.0	Lower *N. asperus*	1	B1				*Nothofagidites* spp. 59%

*CR = Confidence Ratings OLD & NEW

CONFIDENCE RATINGS

The concept of Confidence Ratings applied to palaeontological zone picks was originally proposed by Dr. L.E. Stover in 1971 to aid the compilation of micropalaeontological and palynological data and to expedite the revision of the then rapidly evolving zonation concepts in the Gippsland Basin. The original or OLD scheme which mixes confidence in fossil species assemblage with confidence due to sample type has gradually proved to be rather limiting as additional refinements to existing zonations have been made. With the development of the STRATDAT computer database as a replacement for the increasingly unwieldy paper based Palaeontological Data Sheet files a NEW set of Confidence Ratings have been proposed. Both OLD and NEW Confidence Ratings for zone picks are given on Table 1, and their meanings are summarised below:

OLD CONFIDENCE RATINGS

0 SWC or CORE, Excellent Confidence, assemblage with zone species of spore, pollen and microplankton.

1 SWC or CORE, Good Confidence, assemblage with zone species of spores and pollen or microplankton.

2 SWC or CORE, Poor Confidence, assemblage with non-diagnostic spores, pollen and/or microplankton.

3 CUTTINGS, Fair Confidence, assemblage with zone species of either spore and pollen or microplankton, or both.

4 CUTTINGS, No Confidence, assemblage with non-diagnostic spores, pollen and/or microplankton.

NEW CONFIDENCE RATINGS

Alpha codes: Linked to sample type

A Core

B Sidewall core

C Coal cuttings

D Ditch cuttings

E Junk basket

F Miscellaneous/unknown

G Outcrop

Numeric codes: Linked to fossil assemblage

1 **Excellent confidence:** High diversity assemblage recorded with key zone species.

2 **Good confidence:** Moderately diverse assemblage recorded with key zone species.

3 **Fair confidence:** Low diversity assemblage recorded with key zone species.

4 **Poor confidence:** Moderate to high diversity assemblage recorded without key zone species.

5 **Very low confidence:** Low diversity assemblage recorded without key zone species.

BASIC DATA

TABLE 2: BASIC SAMPLE DATA FOR BLENNY-1, GIPPSLAND BASIN.

SAMPLE TYPE	DEPTH (M)	LITHOLOGY	SAMPLE WT (g)	RESIDUE YIELD
SWC 30	1205.0	Calcareous claystone	9.3	Very low
SWC 29	1214.5	Calcareous claystone	11.7	Low
SWC 28	1218.7	Calcareous claystone	10.3	Moderate
SWC 26	1227.6	Calcareous claystone	9.9	High
SWC 25	1230.5	Glauconitic siltstone	14.0	Low
SWC 24	1234.0	Glauconitic claystone	12.8	Moderate
SWC 23	1236.7	Calcareous/glauc. claystone	15.5	High
SWC 22	1239.5	Glauconitic claystone	16.6	High
SWC 21	1244.0	Glauconitic claystone	14.3	Moderate
SWC 20	1249.5	Glauconitic claystone	15.9	Moderate
SWC 19	1250.5	Glauconitic sandy claystone	15.8	Moderate
SWC 18	1252.5	Med. sandstone/glauc./pyrite	14.8	Moderate
SWC 17	1256.0	Med. sandstone/tr. glauconite	19.0	Moderate
SWC 16	1257.8	Clayey sandstone/laminated	13.5	High
SWC 15	1259.5	Dk brn sandstone	10.8	High
SWC 14	1262.0	Laminated sandstone/claystone	11.4	High
SWC 12	1267.0	Laminated claystone/siltstone	10.4	High
SWC 11	1274.8	Laminated shale/siltstone	9.7	High
SWC 10	1276.7	Burrowed blk/brn shale	8.6	High
SWC 8	1285.0	Blk/brn claystone	9.6	High
SWC 7	1289.0	Blk/brn claystone	9.6	High
SWC 6	1293.7	Laminated sandstone/claystone	10.5	High
SWC 5	1298.5	Mottled sandstone med. grey	10.6	Moderate
SWC 4	1315.0	Burrowed sandstone	12.6	High
SWC 3	1324.0	Dk brn claystone	9.8	High
SWC 2	1339.0	Claystone/siltstone finely laminated	10.4	High

TABLE 3: BASIC PALYNOMORPH DATA FOR BLENNY-1, GIPPSLAND BASIN.

SAMPLE TYPE	DEPTH (M)	PALYNOMORPH CONCENTRATION	FOSSIL PRESERVATION and No. Spore-Pollen Species*		MICROPLANKTON Abundance & No. of Species*	
SWC 30	1205.0	High	Fair-good	6+	Abundant	6+
SWC 29	1214.5	High	Poor	16+	Very abundant	12+
SWC 28	1218.7	High	Poor	14+	Abundant	8+
SWC 26	1227.6	High	Poor-fair	25+	Abundant	8+
SWC 25	1230.5	High	Good	32+	Abundant	7+
SWC 24	1234.0	High	Poor	26+	Abundant	6+
SWC 23	1236.7	Moderate	Poor-fair	27+	Abundant	10+
SWC 22	1239.5	High	Fair-good	28+	Abundant	17+
SWC 21	1244.0	High	Poor-fair	24+	Abundant	14+
SWC 20	1249.5	Moderate	Fair	21+	Common	14+
SWC 19	1250.5	Moderate	Poor-good	24+	Frequent	5+
SWC 18	1252.5	Moderate	Poor-good	24+	Rare	2+
SWC 17	1256.0	High	Excellent	44+	Rare	3+
SWC 16	1257.8	High	Fair-good	25+	Very rare	2+
SWC 15	1259.5	High	Fair-good	42+	Rare	1+
SWC 14	1262.0	High	Poor	22+	Common	3+
SWC 12	1267.0	High	Poor (over oxid.)	22+	Frequent	1+
SWC 11	1274.8	Moderate	Poor (over oxid.)	12+		
SWC 10	1276.7	High	Poor (over oxid.)	23+	Common	3+
SWC 8	1285.0	High	Fair (over oxid.)	35+		
SWC 7	1289.0	High	Fair	35+	Very rare	1+
SWC 6	1293.7	High	Good	41+	Very rare	2+
SWC 5	1298.5	High	Good	51+	Rare	7+
SWC 4	1315.0	High	Good	58+	Very rare	2+
SWC 3	1324.0	High	Fair (over oxid.)	29+		
SWC 2	1339.0	High	Good	45+	Very rare	1+

*Diversity: Very Low = 1- 5 species.
Low = 6-10 species.
Moderate = 11-25 species.
High = 26-74 species.
Very High = 75+ species.

TABLE-4: PALYNOMORPH PERCENTAGES FOR BLENNY-1 PAGE 1 OF 4						
	1214.5	1218.7	1227.6	1230.5	1234.0	1236.7
	SWC-29	SWC-28	SWC-26	SWC-25	SWC-24	SWC-23
MAJOR CATEGORIES %						
Spores %	2.6%	1.5%	3.8%	4.1%	4.9%	7.5%
Gymnosperm Pollen %	5.6%	8.1%	11.9%	13.2%	9.8%	18.9%
Angiosperm Pollen %	3.0%	12.1%	36.8%	21.9%	40.4%	40.1%
TOTAL SPORE-POLLEN %	11.1%	21.7%	52.5%	39.2%	55.1%	66.5%
Fungal Spores and Hyphae %		0.5%	1.9%	1.6%	1.7%	2.8%
Microforaminiferal liners%	3.8%	3.5%	3.1%		0.7%	0.6%
Dinoflagellates %	85.0%	74.2%	42.5%	59.2%	42.5%	30.1%
TOTAL COUNT	234	198	261	319	287	322
DINOFLAGELLATES						
Dinoflagellates Undiff.	4.0%	10.2%	7.2%	4.8%	9.0%	45.4%
Achomosphaera spp.			2.7%	21.2%	3.3%	11.3%
Corrudinium incompositum						
Dapsilidinium pseudocolligerum	3.0%					
Deflandrea spp.		X	0.9%			
Gippslandia extensa						X
Impagidinium spp.		2.0%			X	X
Lingulodinium macharophorum	1.5%	4.8%				
Operculodinium centrocarpum	62.8%	34.0%	23.4%	1.6%	X	7.2%
Phthanoperidinium comatum			20.7%	52.9%	55.7%	
Phthanoperidinium spp.				2.1%	9.8%	17.5%
Spindinium spp.						
Spiniferities spp.	28.6%	49.0%	45.0%	17.5%	22.1%	10.3%
Stoveracysta sp.						8.2%
Systematophora placacantha			X			
Tectatodinium marlum ms						
DINOFLAGELLATE COUNT	199	147	111	189	122	97
X = Present in assemblage but not in count.						

TABLE-4: PALYNOMORPH PERCENTAGES FOR BLENNY-1 PAGE 2 OF 4						
	1239.5	1244.0	1249.5	1250.5	1252.5	1256.0
	SWC-22	SWC-21	SWC-20	SWC-19	SWC-18	SWC-17
MAJOR CATEGORIES %						
Spores %	2.9%	4.3%	3.7%	1.6%	2.8%	1.7%
Gymnosperm Pollen %	11.8%	2.5%	5.9%	6.8%	9.1%	15.2%
Angiosperm Pollen %	52.2%	34.5%	54.3%	80.8%	84.6%	79.2%
TOTAL SPORE-POLLEN %	66.9%	41.2%	63.8%	89.2%	96.5%	96.1%
Fungal Spores and Hyphae %	3.7%	6.8%	13.8%	2.0%	0.8%	1.7%
Microforaminiferal liners%		0.3%	0.5%			
Dinoflagellates %	29.4%	51.7%	21.8%	8.8%	2.8%	2.2%
TOTAL COUNT	272	325	188	250	254	178
DINOFLAGELLATES						
Dinoflagellates Undiff.	28.8%	24.4%	26.8%	27.3%	57.1%	75.0%
Achomosphaera spp.						
Corrudinium incompositum	6.3%	X	X	?		
Dapsilidinium pseudocolligerum						
Deflandrea spp.	X	0.6%	4.9%			
Gippslandia extensa	1.3%	11.3%	7.3%	13.6%	42.9%	25.0%
Impagidinium spp.	X		X			
Lingulodinium macharophorum		14.3%				
Operculodinium centrocarpum	1.3%	6.5%	X	9.1%		X
Phthanoperidinium comatum		8.3%				
Phthanoperidinium spp.			X			
Spindinium spp.						
Spiniferities spp.	51.3%	32.7%	41.5%	50.0%		X
Stoveracysta sp.						
Systematophora placacantha		0.6%	19.5%			
Tectatodinium marlum ms	11.3%	1.2%				
DINOFLAGELLATE COUNT	80	168	41	22	7	4
X = Present in assemblage but not in count.						

TABLE-4: PALYNOMORPH PERCENTAGES FOR BLENNY-1 PAGE 3 OF 4						
	1259.5	1262.0	1267.0	1274.8	1276.7	1289.0
	SWC-15	SWC-14	SWC-12	SWC-11	SWC-10	SWC- 7
MAJOR CATEGORIES %						
Spores %	0.6%		0.9%	0.7%	2.6%	3.2%
Gymnosperm Pollen %	11.9%	6.7%	8.8%	20.3%	11.0%	22.1%
Angiosperm Pollen %	84.7%	54.3%	82.4%	66.7%	75.7%	74.3%
TOTAL SPORE-POLLEN %	97.2%	61.0%	92.1%	87.7%	89.3%	99.5%
Fungal Spores and Hyphae %	1.7%	5.8%	4.2%	12.3%	3.7%	
Microforaminiferal liners%						
Dinoflagellates %	1.1%	33.2%	3.7%		7.0%	0.5%
TOTAL COUNT	176	328	216	138	272	222
DINOFLAGELLATES						
Dinoflagellates Undiff.		8.3%	12.5%		15.8%	100.0%
Achomosphaera spp.						
Corrudinium incompositum						
Dapsilidinium pseudocolligerum						
Deflandrea spp.						
Gippslandia extensa	100.0%	91.7%				
Impagidinium spp.						
Lingulodinium macharophorum						
Operculodinium centrocarpum						
Phthanoperidinium comatum						
Phthanoperidinium spp.						
Spindinium spp.			87.5%		84.2%	
Spiniferities spp.						
Stoveracysta sp.						
Systematophora placacantha						
Tectatodinium marlum ms						
DINOFLAGELLATE COUNT	2	109	8		19	1

TABLE-4: PALYNOMORPH PERCENTAGES FOR BLENNY-1	PAGE 4 OF 4					
	1293.7	1298.5	1315.0	1339.0		
	SWC- 6	SWC- 5	SWC- 4	SWC- 2		
MAJOR CATEGORIES %						
Spores %	3.4%	2.3%	7.5%	7.7%		
Gymnosperm Pollen %	7.2%	12.1%	4.7%	11.2%		
Angiosperm Pollen %	85.6%	82.6%	67.7%	74.2%		
TOTAL SPORE-POLLEN %	96.2%	97.0%	79.9%	93.1%		
Fungal Spores and Hyphae %	3.4%	2.6%	19.7%	6.0%		
Microforaminiferal liners%						
Dinoflagellates %	0.4%	0.4%	0.4%	0.9%		
TOTAL COUNT	236	265	254	233		
DINOFLAGELLATES						
Dinoflagellates Undiff.	100.0%	X	100.0%			
Achomosphaera spp.						
Corrudinium incompositum						
Dapsilidinium pseudocolligerum						
Deflandrea spp.		X				
Gippslandia extensa						
Impagidinium spp.						
Lingulodinium macharophorum						
Operculodinium centrocarpum						
Phthanoperidinium comatum			X			
Phthanoperidinium spp.						
Spindinium spp.	X	100.0%		100.0%		
Spiniferities spp.						
Stoveracysta sp.						
Systematophora placacantha						
Tectatodinium marlum ms						
DINOFLAGELLATE COUNT	1	1	1	2		

TABLE-5: SPORE-POLLEN PERCENTAGES FOR BLENNY-1 PAGE 1 OF 4						
	1214.5	1218.7	1227.6	1230.5	1234.0	1236.7
	SWC-29	SWC-28	SWC-26	SWC-25	SWC-24	SWC-23
TRILETE SPORES undiff.	1.0%	X	2.2%	0.8%	1.9%	4.7%
Baculatisporites spp.			2.2%	0.8%	3.2%	
Cyathidites spp.	3.1%	7.0%	2.9%	5.6%	0.6%	2.8%
Gleicheniidites/Clavifera spp.	3.1%			1.6%	0.6%	0.5%
Stereisporites spp.	3.1%	X		X	X	2.3%
MONOLETE SPORES undiff.	1.0%				0.6%	
Laevigatosporites spp.				1.6%	1.9%	0.9%
TOTAL SPORES	11.3%	7.0%	7.3%	10.4%	8.9%	11.2%
GYMNOSPERM POLLEN						
Araucariacites australis	22.7%	16.3%	12.4%	8.8%	1.9%	5.1%
Dacrycarpidites australiensis				0.8%	0.6%	1.4%
Dilwynites spp.	11.3%	11.6%	2.9%	4.0%	4.4%	9.3%
Lygistepollenites florinii		X	0.7%	1.6%	1.3%	1.4%
Microcachryidites antarcticus					0.6%	0.5%
Phyllocladidites mawsonii	3.1%	4.7%	2.2%	8.0%	4.4%	6.1%
Podocarpidites spp.	10.3%	4.7%	4.4%	10.4%	4.4%	4.2%
Podosporites microsaccatus						0.5%
TOTAL GYMNOSPERM POLLEN	47.4%	37.2%	22.6%	33.6%	17.7%	28.5%
ANGIOSPERM POLLEN undiff.			0.7%	0.8%	0.6%	1.4%
Casuarina (H. harrisii)	2.1%	9.3%	5.1%	8.0%	2.5%	3.3%
Cupanieidites orthoteichus						
Ilexpollenites sp.			X	0.8%		
Malvacipollis spp.		X	0.7%	0.8%		0.9%
Myrtaceidites spp.		X		X	0.6%	
Nothofagidites "brassi" types A/B	30.9%	39.5%	50.4%	35.2%	39.2%	33.6%
Nothofagidites "brassi" type C	2.1%	2.3%	8.8%	4.8%	26.6%	11.7%
Nothofagidites "menziesii"			0.7%	X	0.6%	1.9%
Nothofagidites "fusca" type A/B	4.1%	4.7%	0.7%	0.8%	2.5%	4.2%
Periporopollenites spp.				X		
Proteacidites annularis				1.6%	X	
Proteacidites obscurus			X			
Proteacidites pachypolus						
Proteacidites spp.	1.0%	X	2.2%	0.8%	X	3.3%
Tricolp(or)ates undiff.	1.0%		0.7%	2.4%	0.6%	
TOTAL ANGIOSPERM POLLEN	41.2%	55.8%	70.1%	56.0%	73.4%	60.3%
TOTAL SPORES-POLLEN COUNT	97	43	137	125	158	214
X = Present in assemblage but not in count.						

TABLE-5: SPORE-POLLEN PERCENTAGES FOR BLENNY-1 PAGE 2 OF 4						
	1239.5	1244.0	1249.5	1250.5	1252.5	1256.0
	SWC-22	SWC-21	SWC-20	SWC-19	SWC-18	SWC-17
TRILETE SPORES undiff.	1.6%	3.7%	0.8%	0.9%	0.8%	1.2%
Baculatisporites spp.	X		0.8%	0.4%		0.6%
Cyathidites spp.	0.5%	3.7%	1.7%		0.4%	
Gleicheniidites/Clavifera spp.				X	0.8%	X
Stereisporites spp.	2.2%	1.5%	X	0.4%	0.4%	
MONOLETE SPORES undiff.		0.7%	0.8%		0.4%	
Laevigatosporites spp.		0.7%	1.7%		X	
TOTAL SPORES	4.4%	10.4%	5.8%	1.8%	2.9%	1.8%
GYMNOSPERM POLLEN						
Araucariacites australis	2.7%		0.8%	0.9%		X
Dacrycarpidites australiensis	0.5%		0.8%			0.6%
Dilwynites spp.	2.2%	3.0%		0.9%	1.2%	1.8%
Lygistepollenites florinii	2.7%	0.7%	1.7%	1.8%	0.8%	1.2%
Microcachryidites antarcticus						0.6%
Phyllocladidites mawsonii	4.9%	1.5%	5.8%	3.6%	5.7%	5.8%
Podocarpidites spp.	4.4%	0.7%	X		1.6%	5.8%
Podosporites microsaccatus				0.4%		
TOTAL GYMNOSPERM POLLEN	17.6%	6.0%	9.2%	7.6%	9.4%	15.8%
ANGIOSPERM POLLEN undiff.	1.6%	2.2%	2.5%	1.8%	0.4%	1.2%
Casuarina (H. harrisii)	8.8%	14.9%	5.8%	6.3%	6.5%	8.2%
Cupanieidites orthoteichus		0.7%				
Ilexpollenites sp.				0.9%		X
Malvacipollis spp.	0.5%	0.7%	0.8%	1.8%	0.4%	0.6%
Myrtaceidites spp.	1.1%		1.7%		0.4%	0.6%
Nothofagidites "brassi" types A/B	42.9%	43.3%	42.5%	55.6%	51.0%	40.9%
Nothofagidites "brassi" type C	8.2%	12.7%	14.2%	10.8%	13.5%	16.4%
Nothofagidites "menziesii"	0.5%			0.4%		0.6%
Nothofagidites "fusca" type A/B	4.9%	2.2%	4.2%	4.0%	4.5%	4.1%
Periporopollenites spp.						X
Proteacidites annularis	0.5%	1.5%	1.7%		0.4%	1.2%
Proteacidites obscurus		X				
Proteacidites pachypolus				0.4%		0.6%
Proteacidites spp.	6.6%	3.0%	9.2%	6.3%	6.1%	5.3%
TOTAL ANGIOSPERM POLLEN	78.0%	83.6%	85.0%	90.6%	87.8%	82.5%
TOTAL SPORES-POLLEN COUNT	182	134	120	223	245	171

TABLE-5: SPORE-POLLEN PERCENTAGES FOR BLENNY-1 PAGE 3 OF 4						
	1259.5	1262.0	1267.0	1274.8	1276.7	1289.0
	SWC-15	SWC-14	SWC-12	SWC-11	SWC-10	SWC- 7
TRILETE SPORES undiff.				0.8%	0.4%	1.4%
Baculatisporites spp.						X
Cyathidites spp.					0.4%	0.5%
Gleicheniidites/Clavifera spp.			0.5%	X		0.9%
Stereisporites spp.					X	
MONOLETE SPORES undiff.						
Laevigatosporites spp.	0.6%		0.5%		2.1%	0.5%
TOTAL SPORES	0.6%		1.0%	0.8%	2.9%	3.2%
GYMNOSPERM POLLEN						
Araucariacites australis	0.6%		0.5%			
Dacrycarpidites australiensis						
Dilwynites spp.					0.4%	
Lygistepollenites florinii	0.6%	1.0%				
Microcachryidites antarcticus		0.5%	0.5%			0.5%
Phyllocladidites mawsonii	9.9%	8.0%	7.5%	22.3%	11.1%	20.8%
Podocarpidites spp.	0.6%	1.0%	1.0%	0.8%	0.4%	0.9%
Podosporites microsaccatus	0.6%	0.5%			0.4%	
TOTAL GYMNOSPERM POLLEN	12.3%	11.0%	9.5%	23.1%	12.3%	22.2%
ANGIOSPERM POLLEN undiff.	2.3%	0.5%			1.6%	1.4%
Casuarina (H. harrisii)	3.5%	6.5%	1.5%	14.0%	8.6%	7.7%
Cupanieidites orthoteichus	X				0.4%	0.5%
Ilexpollenites sp.	X	1.0%			0.8%	X
Malvacipollis spp.	0.6%	0.5%	3.0%	0.8%	4.1%	1.4%
Myrtaceidites spp.						0.9%
Nothofagidites "brassi" types A/B	58.5%	41.0%	50.3%	32.2%	41.2%	45.2%
Nothofagidites "brassi" type C	12.3%	28.0%	27.6%	14.0%	16.0%	10.9%
Nothofagidites "menziesii"	X	0.5%	0.5%		X	
Nothofagidites "fusca" type A/B	3.5%	3.0%		2.5%	2.1%	
Periporopollenites spp.	2.9%	1.0%				X
Proteacidites annularis	X				X	X
Proteacidites obscurus	X	0.5%	X			X
Proteacidites pachypolus					X	X
Proteacidites spp.	2.9%	5.5%	5.0%	9.9%	9.1%	6.3%
Tricolp(or)ates undiff.	0.6%	1.0%	1.5%	2.5%	0.8%	0.5%
TOTAL ANGIOSPERM POLLEN	87.1%	89.0%	89.4%	76.0%	84.8%	74.7%
TOTAL SPORES-POLLEN COUNT	171	200	199	121	243	221

TABLE-5: SPORE-POLLEN PERCENTAGES FOR BLENNY-1	PAGE 4 OF 4					
	1293.7	1298.5	1315.0	1339.0		
	SWC- 6	SWC- 5	SWC- 4	SWC- 2		
TRILETE SPORES undiff.	1.8%	0.4%	2.0%	1.8%		
Baculatisporites spp.			X	1.4%		
Cyathidites spp.	X	1.2%	3.9%	2.8%		
Gleicheniidites/Clavifera spp.	0.4%	X	X	0.9%		
Stereisporites spp.			1.0%	X		
MONOLETE SPORES undiff.		0.8%	1.5%			
Laevigatosporites spp.	1.3%	X	1.0%	1.4%		
TOTAL SPORES	3.5%	2.3%	9.4%	8.3%		
GYMNOSPERM POLLEN						
Araucariacites australis	0.9%	X	X	0.5%		
Dacrycarpidites australiensis			0.5%			
Dilwynites spp.	0.4%	0.8%	X	0.5%		
Lygistepollenites florinii		1.2%	X	0.9%		
Microcachryidites antarcticus		X	0.5%			
Phyllocladidites mawsonii	5.3%	8.6%	3.0%	7.8%		
Podocarpidites spp.	0.9%	1.9%	1.0%	0.9%		
Podosporites microsaccatus			1.0%	1.4%		
TOTAL GYMNOSPERM POLLEN	7.5%	12.5%	5.9%	12.0%		
ANGIOSPERM POLLEN undiff.	1.3%	1.2%	3.0%	2.8%		
Casuarina (H. harrisii)	12.3%	19.5%	19.2%	13.8%		
Cupanieidites orthoteichus	2.2%	0.8%	1.5%	X		
Ilexpollenites sp.		X	0.5%	X		
Malvacipollis spp.	1.3%	1.2%	2.5%	0.9%		
Myrtaceidites spp.	1.8%		0.5%			
Nothofagidites "brassi" types A/B	40.1%	34.6%	23.6%	29.5%		
Nothofagidites "brassi" type C	8.8%	9.7%	4.9%	13.4%		
Nothofagidites "menziesii"			X			
Nothofagidites "fusca" type A/B	0.9%	1.2%	3.0%	4.1%		
Periporopollenites spp.	0.4%	0.4%	2.0%			
Proteacidites annularis	X	X	0.5%	0.5%		
Proteacidites obscurus		1.6%		0.5%		
Proteacidites pachypolus	0.9%	X	1.5%	X		
Proteacidites spp.	13.7%	11.3%	14.8%	8.8%		
Tricolp(or)ates undiff.	5.3%	3.9%	7.4%	5.5%		
TOTAL ANGIOSPERM POLLEN	89.0%	85.2%	84.7%	79.7%		
TOTAL SPORES-POLLEN COUNT	227	257	203	217		

RELINQUISHMENT LIST - PALYNOLOGICAL SLIDES

WELL NAME & NO: BLENNY-1

PREPARED BY: A.D. PARTRIDGE

DATE: 24 SEPTEMBER 1992

SHEET 1 OF 2

SAMPLE TYPE	DEPTH (M)	CATALOGUE NUMBER	DESCRIPTION
SWC 30	1205.0	P196021	Kerogen slide sieved/unsieved fractions
SWC 30	1205.0	P196022	Kerogen slide unsieved fraction
SWC 30	1205.0	P196023	Oxidized slide 2 (1/4 cover slip)
SWC 29	1214.5	P196024	Kerogen slide sieved/unsieved fractions
SWC 29	1214.5	P196025	Kerogen slide unsieved fraction
SWC 29	1214.5	P196026	Oxidized slide 2 (1/4 cover slip)
SWC 28	1218.7	P196027	Kerogen slide sieved/unsieved fractions
SWC 28	1218.7	P196028	Kerogen slide unsieved fraction
SWC 28	1218.7	P196029	Oxidized slide 2
SWC 26	1227.6	P196030	Kerogen slide sieved/unsieved fractions
SWC 26	1227.6	P196031	Kerogen slide unsieved fraction
SWC 26	1227.6	P196032	Oxidized slide 2
SWC 26	1227.6	P196033	Oxidized slide 3
SWC 25	1230.5	P196034	Oxidized slide 2 (1/2 cover slip)
SWC 24	1234.0	P196035	Oxidized slide 2
SWC 24	1234.0	P196036	Oxidized slide 3
SWC 23	1236.7	P196037	Oxidized slide 2
SWC 23	1236.7	P196038	Oxidized slide 3
SWC 22	1239.5	P196039	Oxidized slide 2
SWC 22	1239.5	P196040	Oxidized slide 3
SWC 21	1244.0	P196041	Oxidized slide 2
SWC 21	1244.0	P196042	Oxidized slide 3
SWC 20	1249.5	P196043	Oxidized slide 2
SWC 20	1249.5	P196044	Oxidized slide 3
SWC 19	1250.5	P196045	Oxidized slide 2
SWC 19	1250.5	P196046	Oxidized slide 3
SWC 18	1252.5	P196047	Oxidized slide 2
SWC 18	1252.5	P196048	Oxidized slide 3
SWC 17	1256.0	P196049	Oxidized slide 2
SWC 17	1256.0	P196050	Oxidized slide 3
SWC 16	1257.8	P196051	Kerogen slide sieved/unsieved fractions
SWC 16	1257.8	P196052	Kerogen slide unsieved fraction
SWC 16	1257.8	P196053	Oxidized slide 2
SWC 16	1257.8	P196054	Oxidized slide 3
SWC 15	1259.5	P196055	Kerogen slide sieved/unsieved fractions
SWC 15	1259.5	P196056	Kerogen slide unsieved fraction
SWC 15	1259.5	P196057	Oxidized slide 2
SWC 15	1259.5	P196058	Oxidized slide 3
SWC 14	1268.0	P196059	Kerogen slide sieved/unsieved fractions
SWC 14	1268.0	P196060	Kerogen slide unsieved fraction
SWC 14	1268.0	P196061	Oxidized slide 2
SWC 14	1268.0	P196062	Oxidized slide 3

RELINQUISHMENT LIST - PALYNOLOGICAL SLIDES

WELL NAME & NO: BLENNY-1

PREPARED BY: A.D. PARTRIDGE

DATE: 24 SEPTEMBER 1992

SHEET 2 OF 2

SAMPLE TYPE	DEPTH (M)	CATALOGUE NUMBER	DESCRIPTION
SWC 12	1267.0	P196063	Kerogen slide sieved/unsieved fractions
SWC 12	1267.0	P196064	Kerogen slide unsieved fraction
SWC 12	1267.0	P196065	Oxidized slide 2
SWC 12	1267.0	P196066	Oxidized slide 3
SWC 11	1274.8	P196067	Kerogen slide sieved/unsieved fractions
SWC 11	1274.8	P196068	Kerogen slide unsieved fraction
SWC 11	1274.8	P196069	Oxidized slide 2
SWC 11	1274.8	P196070	Oxidized slide 3
SWC 10	1276.7	P196071	Kerogen slide sieved/unsieved fractions
SWC 10	1276.7	P196072	Kerogen slide unsieved fraction
SWC 10	1276.7	P196073	Oxidized slide 2
SWC 10	1276.7	P196074	Oxidized slide 3
SWC 8	1285.0	P196075	Kerogen slide sieved/unsieved fractions
SWC 8	1285.0	P196076	Kerogen slide unsieved fraction
SWC 8	1285.0	P196077	Oxidized slide 2
SWC 8	1285.0	P196078	Oxidized slide 3
SWC 7	1289.0	P196079	Kerogen slide sieved/unsieved fractions
SWC 7	1289.0	P196080	Kerogen slide unsieved fraction
SWC 7	1289.0	P196081	Oxidized slide 2
SWC 7	1289.0	P196082	Oxidized slide 3
SWC 6	1293.7	P196083	Kerogen slide sieved/unsieved fractions
SWC 6	1293.7	P196084	Kerogen slide unsieved fraction
SWC 6	1293.7	P196085	Oxidized slide 2
SWC 6	1293.7	P196086	Oxidized slide 3
SWC 5	1298.5	P196087	Kerogen slide sieved/unsieved fractions
SWC 5	1298.5	P196088	Kerogen slide unsieved fraction
SWC 5	1298.5	P196089	Oxidized slide 2
SWC 4	1315.0	P196090	Kerogen slide sieved/unsieved fractions
SWC 4	1315.0	P196091	Kerogen slide unsieved fraction
SWC 4	1315.0	P196092	Oxidized slide 2
SWC 4	1315.0	P196093	Oxidized slide 3
SWC 3	1324.0	P196094	Kerogen slide sieved/unsieved fractions
SWC 3	1324.0	P196095	Kerogen slide unsieved fraction
SWC 3	1324.0	P196096	Oxidized slide 2
SWC 3	1324.0	P196097	Oxidized slide 3
SWC 2	1339.0	P196098	Kerogen slide sieved/unsieved fractions
SWC 2	1339.0	P196099	Kerogen slide unsieved fraction
SWC 2	1339.0	P196100	Oxidized slide 2
SWC 2	1339.0	P196101	Oxidized slide 3

RELINQUISHMENT LIST - PALYNOLOGICAL RESIDUES

WELL NAME & NO: BLENNY-1

PREPARED BY: A.D. PARTRIDGE

DATE: 24 SEPTEMBER 1992

SAMPLE TYPE	DEPTH (M)	DESCRIPTION
SWC 26	1227.6	Kerogen residue
SWC 24	1234.0	Kerogen residue
SWC 23	1236.7	Kerogen residue
SWC 22	1239.5	Kerogen residue
SWC 21	1244.0	Kerogen residue
SWC 20	1249.5	Kerogen residue
SWC 19	1250.5	Kerogen residue
SWC 18	1252.5	Kerogen residue
SWC 17	1256.0	Kerogen residue
SWC 16	1257.8	Oxidized residue
SWC 15	1259.5	Oxidized residue
SWC 14 SWC 14	1268.0 1268.0	Kerogen residue Oxidized residue
SWC 12 SWC 12	1267.0 1267.0	Kerogen residue Oxidized residue
SWC 11 SWC 11	1274.8 1274.8	Kerogen residue Oxidized residue
SWC 10 SWC 10	1276.7 1276.7	Kerogen residue Oxidized residue
SWC 8 SWC 8	1285.0 1285.0	Kerogen residue Oxidized residue
SWC 7 SWC 7	1289.0 1289.0	Kerogen residue Oxidized residue
SWC 6	1293.7	Kerogen residue
SWC 3	1324.0	Kerogen residue
SWC 2 SWC 2	1339.0 1339.0	Kerogen residue Oxidized residue

PE900779

This is an enclosure indicator page.
The enclosure PE900779 is enclosed within the container PE902043 at this location in this document.

The enclosure PE900779 has the following characteristics:

ITEM_BARCODE = PE900779
CONTAINER_BARCODE = PE902043
NAME = Spore-Pollen Range Chart
BASIN = GIPPSLAND
PERMIT = VIC/L5
TYPE = WELL
SUBTYPE = DIAGRAM
DESCRIPTION = Spore-Pollen Range Chart For Blenny-1, Gippsland Basin. From appendix 1 of WCR volume 2.
REMARKS =
DATE_CREATED =
DATE_RECEIVED = 26/01/1993
W_NO = W1062
WELL_NAME = Blenny-1
CONTRACTOR =
CLIENT_OP_CO = Esso Australia Limited

(Inserted by DNRE - Vic Govt Mines Dept)

PE900780

This is an enclosure indicator page.
The enclosure PE900780 is enclosed within the container PE902043 at this location in this document.

The enclosure PE900780 has the following characteristics:

ITEM_BARCODE =	PE900780
CONTAINER_BARCODE =	PE902043
NAME =	Microplankton Range Chart
BASIN =	GIPPSLAND
PERMIT =	VIC/L5
TYPE =	WELL
SUBTYPE =	DIAGRAM
DESCRIPTION =	Microplankton Range Chart for Blenny-1, Gippsland Basin. From appendix 1 of WCR volume 2.
REMARKS =	
DATE_CREATED =	
DATE_RECEIVED =	26/01/1993
W_NO =	W1062
WELL_NAME =	Blenny-1
CONTRACTOR =	
CLIENT_OP_CO =	Esso Australia Limited

(Inserted by DNRE - Vic Govt Mines Dept)

APPENDIX 2

APPENDIX 2

BLENNY-1

QUANTITATIVE LOG ANALYSIS

Interval	:	1250-1365m MDKB
Analyst	:	A. A. Mills
Date	:	August, 1992

BLENNY-1 QUANTITATIVE LOG ANALYSIS

Wireline log data from the Blenny-1 exploration well have been quantitatively analysed over the interval 1250-1365m MDKB, for effective porosity and effective water saturation. Results are presented in full as a depth plot (MD) and tabular listing, and are summarised and discussed below.

Logs Used:

GR	(gamma ray)
LLD	(deep laterolog)
RHOB	(bulk density)
NPOR	(neutron porosity)
CALI	(caliper)

Resistivity logs were environmentally corrected and an invasion corrected Rt calculated for use in water saturation calculations.

Analysis Methodology

Porosities and water saturations were calculated using an iterative technique which converges into a preselected grain density window by appropriately incrementing or decrementing shale volume. Initial shale volume was calculated from the gamma ray response. The model incorporates porosity calculation from density-neutron crossplot algorithms, water saturation from the dual water relationship, hydrocarbon corrections to the porosity logs where applicable, and convergence upon the preselected grain density window (calculated from hydrocarbon and shale corrected density and neutron logs) by shale volume adjustment. Algorithms used are shown in Appendix 1.

Analysis Parameters

Parameters used in the analysis are tabulated below in Table 1. Formation water salinity was estimated by using the Rwa method.

Summary of Results

Quantitative log analysis indicates that the entire section at Blenny 1 is wet.

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TABLE 1

BLENNY_1

ANALYSIS PARAMETERS.

Tortuosity; 'a'................................	: 1.00
Cementation factor; 'm'........................	: 2.00
Saturation exponent; 'n'.......................	: 2.00
Fluid density..................................	: 1.00
Gamma Ray value in clean formation (grmin)......	: 30
Gamma Ray value in shale (grmax)................	:110
Apparent shale resistivity.....................	:20.00
Apparent bulk density of shale.................	: 2.500
Apparent neutron porosity of shale.............	: 0.330
Input hydrocarbon density......................	: 0.70
Lower limit of grain density	: 2.645
Upper limit of grain density...................	: 2.675
Formation Water entered in terms of SALINITY.	
Formation water salinity.......................	: 3000
Measured Rmf...................................	: 0.110
Temperature at which Rmf measured..............	: 64.0 deg.C
Sxo derived from Sw (Sxo = Sw**z).	
Z (where Sxo=SW**Z)............................	: 0.30
Logged TD......................................	: 2403
Logged bottom hole temperature.................	: 64 deg.C
Est. sea bed temperature.......................	: 10 deg.C
Water depth....................................	: 40.0
KB height......................................	: 22.0
Irreducible water saturation...................	: 0.025
Vsh upper limit for effective porosity..........	: 0.65
Minimum effective porosity for hydrocarbons.....	: 0.03

TABLE 2

BLENNY_1

ANALYSIS SUMMARY.

Net porosity cut-off..........: 0.120 volume per volume

Net Porous Interval based on Porosity cut-off only.

	GROSS INTERVAL (metres) (top) -(base)	Gross Metres	NET POROUS INTERVAL Net Metres	Net to Gross	Mean Vsh	(Std.) (Dev.)	Mean Porosity	(Std.) (Dev.)	Mode Porosity
MDKB	1254.4-1277.4	23.0	13.6	59 %	0.27	(0.143)	0.21	(0.046)	0.22
MDKB	1278.6-1283.8	5.2	4.4	85 %	0.22	(0.088)	0.24	(0.038)	0.24
MDKB	1293.6-1322.6	29.0	26.6	92 %	0.12	(0.102)	0.24	(0.040)	0.26
MDKB	1324.0-1336.8	12.8	12.6	98 %	0.09	(0.100)	0.24	(0.029)	0.22
MDKB	1339.6-1349.0	9.4	9.0	96 %	0.19	(0.109)	0.22	(0.046)	0.19
MDKB	1355.0-1365.0	10.0	10.0	100 %	0.14	(0.099)	0.25	(0.026)	0.27

APPENDIX 1

ALGORITHMS AND LOGIC USED IN THE QUANTITATIVE ANALYSIS.

Initial shale volume calculated from GR response.

```
vsh = (gr-grmin)/(grmax-grmin)
```

Apparent total porosity and shale porosity calculated from one of two sources, at the analyst's discretion:

1) Density-Neutron Crossplot Porosity.

   Initial estimate of total porosity from density-neutron crossplot algorithms, using bulk density and neutron porosity (limestone matrix, decimal p.u.) log values.

```
h = 2.71 - rhob + nphi*(rhof-2.71)
   if (h < 0) rho[matrix] = 2.71 - 0.64*h
   else       rho[matrix] = 2.71 - 0.5*h
phit = (rho[matrix]-rhob)/(rho[matrix]-rhof)
```

   Similarly, apparent shale porosity is calculated using apparent shale bulk density and shale neutron porosity values as input to the same algorithms

2) Sonic Porosity.

   Calculated using the following relationship derived in zones of good hole conditions by cross-plotting density-neutron crossplot porosity against DT:

```
phis = 0.0055 * dt - 0.2925
```

   Similarly, apparent shale porosity is calculated from shale transit time, using the same relationship.

Effective porosity is derived by shale correcting the apparent total porosity.

```
     phie = phit-(vsh*phish)
or,  phie = phis - (vsh*phish)
```

Water saturation (total) calculated using dual water relationship:

```
1/rt=(swt**n)*(phit**m)/(a*rw)+swt**(n-1)*(swb*(phit**m)/a)*((1/rwb)-(1/rw))
      This is solved for Sw by Newtons solution
       exsw=0
       sw  =0.9
       aa  =((phiti**m)/(a*rwi))
       bb  =((swb*(phiti**m)/a)*((1/rwb)-(1/rwi)))
           repeat
             fx1=(aa*(sw**n))+(bb*(sw**(n-1)))-(1/res)
             fx2=(n*aa*(sw**(n-1)))+((n-1)*bb*(sw**(n-2)))
                if((abs(fx2)) < 0.0001)
                 fx2=0.0001
             swp=sw
             sw =swp-(fx1/fx2)
             exsw=exsw+1
           until (exsw > 4 or (abs(sw-swp)) <= 0.01)
       swt=sw
              [ where:swb = bound water saturation             ]
              [       swb = max(0,(min(1,(vsh*phish/phit))))   ]
```

If appropriate, invaded zone saturation (Sxo) is then calculated using the same algorithms, replacing Rt with Rxo, and Rw with Rmfi (resistivity of mud filtrate at formation temperature),where:

```
  rmfi= rmf*((trmf+6.77)/(ti+6.77))
   where: [ ti = temperature at zone of interest (degrees F)   ]
          [ ti = ((bht-sbt)/(td-wd-kb))*(depth-wd-kb) + sbt    ]
          [ rmf= measured rmf value                            ]
          [trmf= temperature(F) at which rmf was measured      ]
```

Alternatively, if no Rxo log is available, Sxo is estimated by the relationship Sxo = Sw**Z, where Z is an analyst input.

The bulk density and neutron porosity log responses are then corrected for hydrocarbon effects, using the following algorithms, which incorporate calculated Sxo and analyst input hydrocarbon density (rhoh).

```
 rhobh=rhob+1.07*phit*(1-sxot)*((1.11-0.1*p)*rhof-1.15*rhoh)
 phinh=nphi+(1.3*phit*(1-sxot)*(rhof*(1-p)-1.5*rhoh+0.2))/(rhof*(1-p))
          where:[  p = mud filtrate salinity in parts per unity ]
                [  p = 0.1778*(3/(rmf*(trmf+7)-1))**(1.05)      ]
```

Total porosity is then recalculated from the density-neutron crossplot algorithm, using the hydrocarbon corrected porosity logs, Sw and Sxo recalculated, and replacement hydrocarbon corrections calculated using the latest Sxo. This process is repeated until the latest total porosity calculated is within 0.008pu (0.8% porosity) of the previously calculated value. At this stage, clay corrections are made to the hydrocarbon corrected bulk density and neutron porosity logs, and apparent matrix density calculated from the density-neutron crossplot algorithm.

```
rhobc = (rhobh - vsh*rhobsh)/(1 - vsh)
phinc = (phinh - vsh*phinsh)/(1 - vsh)
h  = 2.71 - rhobc + phinc*(rhof-2.71)
   if (h < 0)  rhogc = 2.71 - 0.64*h
   else        rhogc = 2.71 - 0.5*h
```

The apparent matrix density is compared to the analyst input grain density window. If it falls within this window, effective porosity and water saturation are calculated, and the processing sequence finished. If it falls outside the specified grain density window, shale volume is incremented or decremented, and the whole processing sequence repeated, until the calculated grain density falls within the grain density window.

Effective porosity and water saturation are derived from calculated total porosity and water saturation as follows:

```
phie= max(0.001,(phit-(vsh*phish)))
swe = max(swirr,( 1 - ((phit/phie)*(1-swt))))
sxo =1 - ((phit/phie)*(1-sxot))
sxo = min(sxo,swe,1)
   if (vsh > vshco) {
      swt  = 1
      swe  = 1
      sxo  = 1
      phie = 0
   }
   if (vsh > (vshco-0.2)) {
      phie= phie*((vshco-vsh)/0.2)
      swe = 1-((1-swe)*((vshco-vsh)/0.2))
      sxo = 1-((1-sxo)*((vshco-vsh)/0.2))
   }
```

At high shale volumes, the final calculated effective porosity and water saturation are modified as follows:

```
if (vsh > vshco)  phie = 0, swe  = 1
else if (vsh > (vshco-0.2))
   phie = phie*((vshco-vsh)/0.2)
   swe  = 1-((1-swe)*((vshco-vsh)/0.2))
```

where: vshco = analyst defined vsh cut-off value

BLENNY_1

Well Data Listing

DEPTH (mRKB)	GR api	RT ohmm	RHOB g/cc	NPHI frac	DT us/m	VSH frac	PHIE frac	SWE frac
1250.0	76	6.4	2.536	0.385	338	1.000	0.000	1.000
1250.2	75	6.2	2.547	0.385	339	1.000	0.000	1.000
1250.4	76	6.3	2.559	0.378	336	1.000	0.000	1.000
1250.6	74	8.2	2.574	0.346	331	1.000	0.000	1.000
1250.8	75	7.5	2.589	0.357	327	1.000	0.000	1.000
1251.0	74	7.8	2.604	0.339	330	1.000	0.000	1.000
1251.2	73	9.9	2.591	0.316	314	1.000	0.000	1.000
1251.4	75	9.6	2.544	0.295	298	0.896	0.000	1.000
1251.6	69	12.6	2.498	0.255	291	0.668	0.000	1.000
1251.8	60	13.6	2.465	0.232	293	0.551	0.032	1.000
1252.0	54	10.8	2.431	0.229	305	0.513	0.051	1.000
1252.2	58	10.7	2.430	0.242	303	0.586	0.020	1.000
1252.4	54	11.9	2.482	0.232	290	0.659	0.000	1.000
1252.6	49	16.0	2.543	0.182	279		Dolomite	
1252.8	49	77.5	2.593	0.109	223		Dolomite	
1253.0	51	135.3	2.668	0.094	199		Dolomite	
1253.2	50	165.4	2.736	0.114	187		Dolomite	
1253.4	50	197.1	2.729	0.090	206		Dolomite	
1253.6	50	256.4	2.721	0.072	197		Dolomite	
1253.8	48	416.4	2.716	0.070	194		Dolomite	
1254.0	51	430.1	2.700	0.069	191		Dolomite	
1254.2	52	264.4	2.700	0.061	195		Dolomite	
1254.4	52	194.9	2.706	0.047	194		Dolomite	
1254.6	53	121.0	2.704	0.057	189		Dolomite	
1254.8	52	48.0	2.664	0.082	195		Dolomite	
1255.0	53	11.3	2.589	0.139	230		Dolomite	
1255.2	52	7.1	2.510	0.187	259		Dolomite	
1255.4	53	10.1	2.455	0.195	284	0.314	0.110	1.000
1255.6	54	12.6	2.414	0.185	293	0.274	0.120	1.000
1255.8	54	13.8	2.399	0.185	331	0.272	0.121	1.000
1256.0	71	15.1	2.417	0.182	312	0.252	0.124	1.000
1256.2	92	15.3	2.410	0.287	310	0.531	0.075	1.000
1256.4	106	13.0	2.348	0.388	297	0.951	0.000	1.000
1256.6	139	6.8	2.360	0.240	296	0.386	0.133	1.000
1256.8	150	10.1	2.395	0.234	307	0.360	0.137	1.000
1257.0	152	10.8	2.356	0.248	318	0.318	0.165	1.000
1257.2	114	13.7	2.343	0.254	323	0.355	0.158	1.000
1257.4	96	13.0	2.337	0.282	333	0.415	0.163	1.000
1257.6	98	16.6	2.282	0.288	341	0.327	0.201	1.000
1257.8	101	13.2	2.238	0.316	353	0.405	0.198	1.000
1258.0	100	15.5	2.234	0.321	345	0.457	0.177	1.000
1258.2	95	17.5	2.247	0.322	347	0.512	0.114	1.000
1258.4	93	24.9	2.266	0.347	352	0.606	0.035	1.000
1258.6	88	19.4	2.257	0.368	345	0.654	0.000	1.000
1258.8	74	11.1	2.268	0.279	330	0.308	0.199	1.000
1259.0	68	14.0	2.275	0.242	319	0.160	0.219	1.000
1259.2	69	12.2	2.253	0.241	320	0.128	0.231	1.000
1259.4	67	12.5	2.234	0.232	324	0.080	0.241	1.000
1259.6	70	12.8	2.232	0.289	326	0.286	0.216	1.000
1259.8	84	13.4	2.240	0.279	342	0.254	0.219	1.000
1260.0	108	14.8	2.231	0.320	345	0.389	0.208	1.000
1260.2	104	18.4	2.224	0.359	356	0.500	0.153	1.000
1260.4	96	18.0	2.201	0.382	351	0.592	0.056	1.000
1260.6	85	16.6	2.203	0.350	335	0.476	0.178	1.000

BLENNY_1 (page 2 of data listing)

DEPTH (mRKB)	GR api	RT ohmm	RHOB g/cc	NPHI frac	DT us/m	VSH frac	PHIE frac	SWE frac
1260.8	83	12.4	2.225	0.248	328	0.172	0.220	1.000
1261.0	98	11.6	2.241	0.248	326	0.141	0.233	1.000
1261.2	181	13.3	2.225	0.321	341	0.383	0.212	1.000
1261.4	221	15.5	2.238	0.334	342	0.484	0.156	1.000
1261.6	182	14.7	2.272	0.324	337	0.507	0.120	1.000
1261.8	146	16.9	2.283	0.313	336	0.485	0.137	1.000
1262.0	129	21.9	2.283	0.333	346	0.549	0.082	1.000
1262.2	125	31.2	2.280	0.380	364	0.933	0.000	1.000
1262.4	113	17.3	2.279	0.400	371	1.000	0.000	1.000
1262.6	101	11.0	2.295	0.426	368	0.914	0.000	1.000
1262.8	84	9.5	2.312	0.358	357	0.675	0.000	1.000
1263.0	75	10.1	2.290	0.334	344	0.556	0.076	1.000
1263.2	69	14.5	2.273	0.270	331	0.300	0.193	1.000
1263.4	85	19.8	2.283	0.318	329	0.514	0.109	1.000
1263.6	90	26.1	2.296	0.373	348	0.764	0.000	1.000
1263.8	92	28.5	2.294	0.427	366	Coal		
1264.0	92	30.6	2.207	0.548	389	Coal		
1264.2	94	17.4	2.094	0.559	401	Coal		
1264.4	85	13.2	2.083	0.394	391	Coal		
1264.6	72	10.7	2.162	0.309	359	Coal		
1264.8	72	11.0	2.195	0.270	346	0.172	0.242	1.000
1265.0	66	11.7	2.202	0.283	346	0.206	0.242	1.000
1265.2	63	11.3	2.197	0.297	340	0.235	0.247	1.000
1265.4	68	12.9	2.203	0.274	341	0.130	0.262	1.000
1265.6	70	13.0	2.206	0.254	342	0.088	0.259	1.000
1265.8	96	14.7	2.206	0.267	341	0.164	0.242	1.000
1266.0	91	14.1	2.213	0.307	340	0.332	0.217	1.000
1266.2	80	14.0	2.225	0.263	334	0.155	0.241	1.000
1266.4	49	11.9	2.218	0.248	331	0.120	0.247	1.000
1266.6	47	12.6	2.227	0.282	331	0.241	0.221	1.000
1266.8	70	17.8	2.259	0.269	333	0.299	0.193	1.000
1267.0	72	20.2	2.283	0.350	347	0.618	0.025	1.000
1267.2	70	17.2	2.272	0.429	353	0.826	0.000	1.000
1267.4	61	8.5	2.248	0.369	353	0.510	0.144	1.000
1267.6	54	9.7	2.209	0.248	351	0.065	0.266	1.000
1267.8	51	9.2	2.177	0.261	347	0.086	0.273	1.000
1268.0	47	9.7	2.166	0.241	348	0.005	0.284	1.000
1268.2	46	9.9	2.150	0.238	346	0.000	0.284	1.000
1268.4	51	9.8	2.152	0.234	345	0.000	0.280	1.000
1268.6	60	11.3	2.174	0.230	346	0.000	0.277	1.000
1268.8	119	12.3	2.179	0.263	345	0.107	0.261	1.000
1269.0	160	14.3	2.192	0.296	340	0.292	0.222	1.000
1269.2	164	19.3	2.220	0.345	338	0.545	0.091	1.000
1269.4	133	24.2	2.241	0.428	343	1.000	0.000	1.000
1269.6	108	20.4	2.229	0.412	335	0.914	0.000	1.000
1269.8	58	13.6	2.225	0.268	335	0.202	0.229	1.000
1270.0	53	11.3	2.214	0.267	329	0.137	0.258	1.000
1270.2	71	9.5	2.176	0.283	341	0.086	0.289	1.000
1270.4	97	11.4	2.162	0.285	343	0.103	0.284	1.000
1270.6	119	12.1	2.167	0.318	344	0.266	0.252	1.000
1270.8	163	14.4	2.192	0.331	342	0.393	0.218	1.000
1271.0	180	15.8	2.215	0.329	339	0.461	0.180	1.000
1271.2	176	17.0	2.237	0.358	347	0.588	0.052	1.000
1271.4	155	21.3	2.244	0.435	356	1.000	0.000	1.000
1271.6	113	23.0	2.255	0.402	369	0.926	0.000	1.000
1271.8	100	25.1	2.294	0.396	366	0.874	0.000	1.000

BLENNY_1 (page 3 of data listing)

DEPTH (mRKB)	GR api	RT ohmm	RHOB g/cc	NPHI frac	DT us/m	VSH frac	PHIE frac	SWE frac
1272.0	91	12.4	2.318	0.332	344	0.564	0.067	1.000
1272.2	86	10.4	2.257	0.260	338	0.160	0.237	1.000
1272.4	92	11.8	2.173	0.327	337	0.277	0.257	1.000
1272.6	95	11.1	2.145	0.339	352	0.307	0.258	1.000
1272.8	100	12.5	2.165	0.332	350	0.309	0.250	1.000
1273.0	118	15.4	2.209	0.355	350	0.438	0.223	1.000
1273.2	134	21.3	2.235	0.344	359	0.434	0.214	1.000
1273.4	120	22.4	2.240	0.419	355	0.928	0.000	1.000
1273.6	67	18.5	2.257	0.312	344	0.359	0.211	1.000
1273.8	47	14.7	2.261	0.227	323	0.088	0.238	1.000
1274.0	62	11.7	2.260	0.257	327	0.157	0.239	1.000
1274.2	98	13.9	2.263	0.277	333	0.245	0.220	1.000
1274.4	103	18.0	2.279	0.281	333	0.337	0.190	1.000
1274.6	104	20.1	2.293	0.356	337	0.700	0.000	1.000
1274.8	103	27.6	2.315	0.361	347	0.865	0.000	1.000
1275.0	100	30.4	2.327	0.368	360	0.881	0.000	1.000
1275.2	98	24.6	2.310	0.398	366	0.826	0.000	1.000
1275.4	96	12.3	2.248	0.423	362	0.813	0.000	1.000
1275.6	91	15.8	2.227	0.336	351	0.473	0.171	1.000
1275.8	91	19.7	2.266	0.285	340	0.396	0.173	1.000
1276.0	91	22.7	2.292	0.332	342	0.560	0.071	1.000
1276.2	105	22.6	2.288	0.385	346	0.887	0.000	1.000
1276.4	112	12.9	2.296	0.355	353	0.649	0.000	1.000
1276.6	118	14.8	2.309	0.331	337	0.602	0.034	1.000
1276.8	115	9.2	2.320	0.341	324	0.656	0.000	1.000
1277.0	112	5.5	2.305	0.286	326	0.451	0.153	1.000
1277.2	114	17.0	2.297	0.295	313	0.501	0.107	1.000
1277.4	100	25.8	2.346	0.282	256	0.663	0.000	1.000
1277.6	89	84.7	2.477	0.156	226	Dolomite		
1277.8	88	188.7	2.619	0.106	196	Dolomite		
1278.0	84	310.5	2.662	0.089	193	Dolomite		
1278.2	84	480.6	2.657	0.095	181	Dolomite		
1278.4	84	728.4	2.655	0.096	196	Dolomite		
1278.6	83	528.6	2.657	0.107	196	Dolomite		
1278.8	83	62.7	2.576	0.148	232	Dolomite		
1279.0	85	16.2	2.416	0.283	275	Dolomite		
1279.2	85	15.6	2.290	0.286	334	0.268	0.220	1.000
1279.4	83	12.6	2.231	0.277	342	0.185	0.244	1.000
1279.6	82	12.7	2.201	0.288	346	0.218	0.242	1.000
1279.8	78	12.6	2.184	0.300	367	0.212	0.255	1.000
1280.0	81	12.3	2.165	0.269	347	0.055	0.288	1.000
1280.2	86	11.6	2.163	0.275	350	0.074	0.286	1.000
1280.4	87	11.7	2.185	0.285	350	0.161	0.261	1.000
1280.6	86	14.2	2.209	0.245	340	0.122	0.237	1.000
1280.8	86	19.6	2.277	0.236	306	0.289	0.164	1.000
1281.0	85	18.6	2.349	0.244	278	0.403	0.131	1.000
1281.2	85	16.3	2.315	0.287	281	0.356	0.189	1.000
1281.4	85	14.7	2.232	0.294	311	0.209	0.251	1.000
1281.6	87	13.1	2.188	0.287	339	0.173	0.259	1.000
1281.8	88	12.6	2.171	0.283	339	0.137	0.268	1.000
1282.0	89	13.0	2.176	0.309	339	0.246	0.252	1.000
1282.2	82	12.8	2.178	0.313	338	0.271	0.246	1.000
1282.4	82	12.4	2.174	0.335	343	0.324	0.247	1.000
1282.6	68	11.5	2.166	0.319	348	0.259	0.256	1.000
1282.8	67	11.7	2.177	0.300	352	0.172	0.271	1.000
1283.0	68	11.7	2.181	0.314	346	0.172	0.285	1.000

BLENNY_1 (page 4 of data listing)

DEPTH (mRKB)	GR api	RT ohmm	RHOB g/cc	NPHI frac	DT us/m	VSH frac	PHIE frac	SWE frac
1283.2	66	11.3	2.173	0.329	350	0.230	0.277	1.000
1283.4	66	11.9	2.175	0.338	346	0.357	0.240	1.000
1283.6	81	15.2	2.204	0.362	338	0.623	0.022	1.000
1283.8	103	22.0	2.276	0.307	327	Coal		
1284.0	98	27.3	2.338	0.345	360	Coal		
1284.2	86	34.6	2.147	0.515	396	Coal		
1284.4	80	30.0	1.907	0.538	410	Coal		
1284.6	86	19.9	1.921	0.478	411	Coal		
1284.8	83	21.9	2.039	0.462	411	Coal		
1285.0	81	24.2	2.010	0.488	419	Coal		
1285.2	71	36.2	1.908	0.507	431	Coal		
1285.4	42	98.0	1.766	0.561	440	Coal		
1285.6	25	196.1	1.521	0.659	451	Coal		
1285.8	19	269.6	1.310	0.595	468	Coal		
1286.0	19	206.4	1.230	0.549	467	Coal		
1286.2	18	186.3	1.220	0.551	470	Coal		
1286.4	18	241.0	1.209	0.580	474	Coal		
1286.6	20	271.1	1.211	0.637	481	Coal		
1286.8	23	260.9	1.238	0.662	473	Coal		
1287.0	24	311.1	1.279	0.684	468	Coal		
1287.2	25	422.6	1.266	0.852	468	Coal		
1287.4	26	366.3	1.237	0.974	436	Coal		
1287.6	28	73.7	1.298	0.684	385	Coal		
1287.8	38	31.1	1.563	0.375	350	Coal		
1288.0	41	42.0	2.005	0.198	347	1.000	0.000	1.000
1288.2	47	51.1	2.136	0.316	366	Coal		
1288.4	53	45.0	1.903	0.590	405	Coal		
1288.6	73	42.6	1.864	0.575	415	Coal		
1288.8	84	24.8	2.035	0.467	436	Coal		
1289.0	81	37.2	2.174	0.391	421	Coal		
1289.2	76	56.1	2.025	0.470	420	Coal		
1289.4	51	108.6	1.720	0.720	446	Coal		
1289.6	35	191.5	1.379	0.991	461	Coal		
1289.8	28	202.4	1.209	0.691	467	Coal		
1290.0	24	245.1	1.171	0.552	467	Coal		
1290.2	23	292.7	1.173	0.657	468	Coal		
1290.4	24	349.7	1.175	0.638	466	Coal		
1290.6	23	289.0	1.178	0.719	468	Coal		
1290.8	23	254.2	1.181	0.695	467	Coal		
1291.0	24	282.7	1.178	0.621	468	Coal		
1291.2	23	343.1	1.178	0.654	466	Coal		
1291.4	21	496.8	1.177	0.727	464	Coal		
1291.6	25	498.2	1.179	0.799	461	Coal		
1291.8	27	341.8	1.185	0.737	457	Coal		
1292.0	30	158.6	1.202	0.848	465	Coal		
1292.2	48	70.5	1.268	0.753	464	Coal		
1292.4	94	45.9	1.417	0.639	471	Coal		
1292.6	110	35.8	1.647	0.669	454	Coal		
1292.8	111	27.4	1.928	0.480	417	Coal		
1293.0	96	11.9	2.123	0.327	373	Coal		
1293.2	87	18.0	2.278	0.325	340	0.590	0.000	1.000
1293.4	92	19.1	2.317	0.311	332	0.584	0.000	1.000
1293.6	97	24.8	2.323	0.345	339	0.816	0.000	1.000
1293.8	87	18.8	2.330	0.361	342	0.772	0.000	1.000
1294.0	61	11.1	2.309	0.308	335	0.383	0.192	1.000
1294.2	52	12.4	2.255	0.257	331	0.220	0.215	1.000

BLENNY_1 (page 5 of data listing)

DEPTH (mRKB)	GR api	RT ohmm	RHOB g/cc	NPHI frac	DT us/m	VSH frac	PHIE frac	SWE frac
1294.4	52	13.8	2.240	0.300	334	0.330	0.204	1.000
1294.6	54	16.7	2.263	0.291	331	0.363	0.186	1.000
1294.8	53	19.0	2.302	0.259	328	0.290	0.183	1.000
1295.0	51	18.5	2.327	0.264	311	0.318	0.174	1.000
1295.2	51	19.0	2.334	0.273	309	0.409	0.152	1.000
1295.4	55	17.9	2.350	0.262	309	0.430	0.135	1.000
1295.6	60	23.3	2.378	0.304	316	0.708	0.000	1.000
1295.8	73	23.7	2.407	0.303	312	0.683	0.000	1.000
1296.0	64	17.8	2.406	0.232	309	0.360	0.134	1.000
1296.2	54	14.9	2.360	0.209	306	0.178	0.180	1.000
1296.4	48	15.5	2.318	0.237	306	0.221	0.192	1.000
1296.6	48	15.9	2.300	0.246	310	0.231	0.195	1.000
1296.8	50	18.7	2.304	0.261	304	0.248	0.195	1.000
1297.0	52	20.7	2.317	0.233	305	0.273	0.169	1.000
1297.2	54	24.9	2.334	0.227	298	0.305	0.150	1.000
1297.4	99	34.4	2.372	0.222	295	0.366	0.123	1.000
1297.6	101	49.1	2.415	0.226	296	0.493	0.064	1.000
1297.8	101	43.5	2.450	0.239	283	0.580	0.022	1.000
1298.0	97	33.7	2.454	0.213	286	0.478	0.065	1.000
1298.2	103	29.5	2.444	0.219	291	0.456	0.086	1.000
1298.4	106	31.1	2.417	0.263	301	0.572	0.035	1.000
1298.6	108	28.7	2.408	0.296	303	0.691	0.000	1.000
1298.8	89	22.9	2.399	0.248	303	0.487	0.086	1.000
1299.0	50	13.6	2.350	0.195	304	0.192	0.160	1.000
1299.2	45	13.0	2.279	0.224	299	0.183	0.194	1.000
1299.4	48	16.0	2.262	0.231	301	0.225	0.184	1.000
1299.6	69	20.8	2.320	0.222	301	0.329	0.137	1.000
1299.8	78	25.3	2.409	0.289	294	0.724	0.000	1.000
1300.0	63	18.6	2.439	0.256	296	0.508	0.073	1.000
1300.2	53	13.9	2.369	0.198	297	0.163	0.178	1.000
1300.4	44	13.6	2.290	0.213	307	0.088	0.222	1.000
1300.6	40	12.9	2.260	0.234	308	0.130	0.225	1.000
1300.8	39	13.1	2.266	0.226	303	0.107	0.225	1.000
1301.0	39	15.3	2.279	0.220	298	0.108	0.215	1.000
1301.2	38	16.9	2.294	0.215	294	0.102	0.206	1.000
1301.4	41	16.5	2.297	0.240	297	0.167	0.203	1.000
1301.6	38	14.8	2.279	0.242	305	0.131	0.222	1.000
1301.8	33	12.3	2.254	0.222	312	0.033	0.246	1.000
1302.0	33	11.1	2.245	0.236	315	0.035	0.253	1.000
1302.2	33	11.3	2.243	0.247	315	0.062	0.252	1.000
1302.4	31	11.6	2.234	0.241	312	0.013	0.266	1.000
1302.6	31	11.5	2.217	0.241	309	0.012	0.270	1.000
1302.8	31	11.0	2.213	0.238	309	0.013	0.266	1.000
1303.0	30	11.5	2.225	0.244	308	0.030	0.261	1.000
1303.2	32	11.9	2.226	0.253	306	0.054	0.259	1.000
1303.4	33	12.0	2.227	0.247	308	0.037	0.260	1.000
1303.6	31	11.8	2.228	0.249	306	0.044	0.260	1.000
1303.8	32	11.8	2.222	0.241	306	0.025	0.261	1.000
1304.0	31	11.8	2.229	0.257	302	0.074	0.256	1.000
1304.2	31	11.7	2.243	0.246	306	0.015	0.267	1.000
1304.4	31	11.5	2.234	0.258	311	0.070	0.261	1.000
1304.6	30	11.3	2.217	0.268	313	0.062	0.272	1.000
1304.8	32	11.5	2.202	0.282	314	0.109	0.267	1.000
1305.0	31	11.7	2.206	0.259	313	0.078	0.259	1.000
1305.2	31	11.5	2.226	0.230	307	0.013	0.259	1.000
1305.4	30	11.8	2.235	0.237	304	0.000	0.267	1.000

DEPTH (mRKB)	GR api	RT ohmm	RHOB g/cc	NPHI frac	DT us/m	VSH frac	PHIE frac	SWE frac
1305.6	29	12.6	2.228	0.232	299	0.000	0.265	1.000
1305.8	29	13.0	2.231	0.231	295	0.000	0.258	1.000
1306.0	29	13.5	2.255	0.249	293	0.150	0.219	1.000
1306.2	30	12.7	2.276	0.227	296	0.060	0.232	1.000
1306.4	30	12.3	2.277	0.221	301	0.001	0.249	1.000
1306.6	31	13.2	2.257	0.244	299	0.045	0.255	1.000
1306.8	34	13.1	2.223	0.269	302	0.110	0.253	1.000
1307.0	36	13.1	2.206	0.217	301	0.015	0.257	1.000
1307.2	37	13.0	2.214	0.232	306	0.061	0.254	1.000
1307.4	39	12.7	2.217	0.228	307	0.027	0.261	1.000
1307.6	37	12.5	2.217	0.216	305	0.000	0.261	1.000
1307.8	37	12.8	2.229	0.226	303	0.060	0.248	1.000
1308.0	38	12.7	2.239	0.206	302	0.015	0.243	1.000
1308.2	36	12.3	2.248	0.214	302	0.043	0.240	1.000
1308.4	35	11.6	2.235	0.218	306	0.031	0.248	1.000
1308.6	35	12.6	2.225	0.230	305	0.059	0.249	1.000
1308.8	35	13.5	2.234	0.202	306	0.000	0.250	1.000
1309.0	33	14.8	2.246	0.218	302	0.036	0.243	1.000
1309.2	33	15.0	2.249	0.231	298	0.037	0.244	1.000
1309.4	33	14.6	2.255	0.193	299	0.005	0.235	1.000
1309.6	37	14.1	2.260	0.187	299	0.000	0.234	1.000
1309.8	40	14.3	2.257	0.217	303	0.069	0.235	1.000
1310.0	46	14.4	2.246	0.232	306	0.074	0.245	1.000
1310.2	45	13.6	2.234	0.265	313	0.162	0.244	1.000
1310.4	48	12.3	2.204	0.274	318	0.165	0.256	1.000
1310.6	51	13.3	2.173	0.269	314	0.139	0.261	1.000
1310.8	53	15.5	2.183	0.245	314	0.134	0.239	1.000
1311.0	55	14.2	2.227	0.249	317	0.160	0.230	1.000
1311.2	52	12.0	2.232	0.287	324	0.215	0.246	1.000
1311.4	51	11.2	2.180	0.301	331	0.168	0.277	1.000
1311.6	51	10.4	2.146	0.292	337	0.107	0.293	1.000
1311.8	52	10.3	2.143	0.276	336	0.071	0.296	1.000
1312.0	52	11.3	2.160	0.259	332	0.033	0.293	1.000
1312.2	53	13.1	2.175	0.250	325	0.073	0.268	1.000
1312.4	47	14.9	2.194	0.270	323	0.119	0.265	1.000
1312.6	42	15.2	2.204	0.232	322	0.000	0.281	1.000
1312.8	40	14.7	2.201	0.235	319	0.038	0.267	1.000
1313.0	40	13.3	2.209	0.238	317	0.071	0.253	1.000
1313.2	40	13.1	2.212	0.196	314	0.000	0.252	1.000
1313.4	42	13.4	2.217	0.215	312	0.005	0.256	1.000
1313.6	50	14.3	2.229	0.228	310	0.073	0.243	1.000
1313.8	52	14.6	2.246	0.239	308	0.154	0.223	1.000
1314.0	47	15.6	2.276	0.203	304	0.095	0.211	1.000
1314.2	46	17.3	2.300	0.181	293	0.078	0.191	1.000
1314.4	48	19.7	2.329	0.178	288	0.132	0.169	1.000
1314.6	51	20.3	2.353	0.182	286	0.173	0.157	1.000
1314.8	55	16.8	2.364	0.209	295	0.223	0.162	1.000
1315.0	62	14.9	2.325	0.289	305	0.376	0.187	1.000
1315.2	69	14.3	2.254	0.304	320	0.255	0.243	1.000
1315.4	65	14.4	2.223	0.296	323	0.287	0.225	1.000
1315.6	59	13.6	2.245	0.278	321	0.267	0.218	1.000
1315.8	51	11.8	2.230	0.236	326	0.051	0.262	1.000
1316.0	41	10.7	2.203	0.225	330	0.000	0.277	1.000
1316.2	40	10.5	2.192	0.244	324	0.033	0.274	1.000
1316.4	40	10.6	2.189	0.257	320	0.090	0.266	1.000
1316.6	40	10.5	2.181	0.270	319	0.125	0.263	1.000

DEPTH (mRKB)	GR api	RT ohmm	RHOB g/cc	NPHI frac	DT us/m	VSH frac	PHIE frac	SWE frac
1316.8	38	10.7	2.184	0.254	317	0.105	0.258	1.000
1317.0	40	10.9	2.189	0.255	317	0.094	0.265	1.000
1317.2	41	10.9	2.177	0.264	320	0.073	0.283	1.000
1317.4	40	10.8	2.171	0.258	320	0.036	0.291	1.000
1317.6	39	10.5	2.180	0.264	317	0.086	0.276	1.000
1317.8	39	10.5	2.184	0.233	317	0.000	0.283	1.000
1318.0	39	11.0	2.168	0.247	320	0.025	0.285	1.000
1318.2	39	11.9	2.157	0.293	319	0.113	0.285	1.000
1318.4	37	12.1	2.165	0.272	317	0.091	0.284	1.000
1318.6	35	11.6	2.164	0.263	316	0.038	0.293	1.000
1318.8	34	10.6	2.162	0.258	318	0.045	0.288	1.000
1319.0	33	10.3	2.171	0.258	321	0.043	0.287	1.000
1319.2	34	10.4	2.170	0.290	318	0.081	0.290	1.000
1319.4	35	10.5	2.163	0.271	318	0.059	0.291	1.000
1319.6	32	10.7	2.153	0.291	316	0.055	0.300	1.000
1319.8	33	11.0	2.152	0.252	315	0.036	0.283	1.000
1320.0	40	11.1	2.158	0.259	316	0.067	0.276	1.000
1320.2	41	11.0	2.163	0.277	319	0.132	0.269	1.000
1320.4	40	11.3	2.160	0.274	318	0.119	0.272	1.000
1320.6	39	11.3	2.177	0.263	316	0.110	0.265	1.000
1320.8	42	10.5	2.192	0.270	313	0.151	0.250	1.000
1321.0	41	10.5	2.196	0.274	314	0.136	0.257	1.000
1321.2	38	10.5	2.189	0.319	314	0.225	0.260	1.000
1321.4	40	10.1	2.171	0.307	316	0.149	0.279	1.000
1321.6	40	10.5	2.142	0.334	318	0.216	0.281	1.000
1321.8	43	10.9	2.142	0.292	319	0.128	0.285	1.000
1322.0	42	10.3	2.148	0.296	323	0.145	0.284	1.000
1322.2	42	10.3	2.150	0.266	320	0.054	0.290	1.000
1322.4	41	10.5	2.160	0.270	315	0.107	0.276	1.000
1322.6	41	8.8	2.168	0.289	317	0.134	0.277	1.000
1322.8	42	6.9	2.172	0.292	308		Coal	
1323.0	46	5.9	2.160	0.315	318		Coal	
1323.2	48	7.2	2.051	0.394	358		Coal	
1323.4	52	12.4	1.682	0.540	384		Coal	
1323.6	74	23.9	1.506	0.481	372		Coal	
1323.8	99	21.6	1.700	0.376	328		Coal	
1324.0	96	17.3	2.176	0.343	288		Coal	
1324.2	97	15.1	2.383	0.268	284	0.447	0.138	1.000
1324.4	67	14.7	2.333	0.261	294	0.304	0.183	1.000
1324.6	46	14.9	2.298	0.230	314	0.112	0.231	1.000
1324.8	45	12.4	2.251	0.265	317	0.121	0.260	1.000
1325.0	43	12.1	2.205	0.312	331	0.163	0.276	1.000
1325.2	47	12.7	2.185	0.323	332	0.243	0.258	1.000
1325.4	47	12.5	2.193	0.334	329	0.334	0.238	1.000
1325.6	46	11.5	2.198	0.298	324	0.195	0.252	1.000
1325.8	46	10.9	2.195	0.300	323	0.201	0.252	1.000
1326.0	46	13.0	2.204	0.278	324	0.175	0.254	1.000
1326.2	46	14.7	2.199	0.280	328	0.140	0.271	1.000
1326.4	46	13.9	2.179	0.292	331	0.143	0.282	1.000
1326.6	45	11.8	2.166	0.257	333	0.002	0.301	1.000
1326.8	43	10.2	2.178	0.279	326	0.127	0.271	1.000
1327.0	45	9.0	2.199	0.263	322	0.158	0.245	1.000
1327.2	50	9.0	2.221	0.268	322	0.162	0.246	1.000
1327.4	55	10.6	2.214	0.257	328	0.132	0.251	1.000
1327.6	56	14.3	2.211	0.254	327	0.110	0.252	1.000
1327.8	52	16.0	2.218	0.232	321	0.063	0.251	1.000

DEPTH (mRKB)	GR api	RT ohmm	RHOB g/cc	NPHI frac	DT us/m	VSH frac	PHIE frac	SWE frac
1328.0	47	16.9	2.216	0.229	319	0.065	0.246	1.000
1328.2	47	18.3	2.211	0.245	320	0.153	0.231	1.000
1328.4	48	18.0	2.213	0.219	318	0.075	0.235	1.000
1328.6	44	13.6	2.230	0.234	314	0.144	0.222	1.000
1328.8	44	10.4	2.242	0.198	306	0.029	0.233	1.000
1329.0	47	9.6	2.261	0.178	289	0.000	0.228	1.000
1329.2	49	11.2	2.285	0.174	282	0.000	0.223	1.000
1329.4	47	14.9	2.305	0.184	293	0.030	0.215	1.000
1329.6	45	21.5	2.277	0.184	302	0.011	0.221	1.000
1329.8	43	21.0	2.242	0.187	307	0.000	0.232	1.000
1330.0	41	18.7	2.225	0.205	311	0.022	0.239	1.000
1330.2	41	16.3	2.236	0.168	309	0.000	0.229	1.000
1330.4	42	14.8	2.237	0.153	308	0.000	0.222	1.000
1330.6	42	14.0	2.222	0.183	307	0.000	0.237	1.000
1330.8	43	14.5	2.219	0.181	307	0.000	0.237	1.000
1331.0	45	15.7	2.251	0.164	301	0.000	0.224	1.000
1331.2	45	16.1	2.269	0.183	304	0.008	0.226	1.000
1331.4	44	16.2	2.264	0.191	303	0.028	0.224	1.000
1331.6	44	16.5	2.272	0.170	307	0.000	0.216	1.000
1331.8	51	15.3	2.288	0.165	308	0.000	0.209	1.000
1332.0	52	13.7	2.292	0.187	306	0.063	0.206	1.000
1332.2	50	12.5	2.289	0.192	309	0.000	0.239	1.000
1332.4	49	13.0	2.282	0.196	311	0.000	0.271	1.000
1332.6	54	13.9	2.241	0.220	313	0.000	0.293	1.000
1332.8	57	15.5	2.186	0.227	312	0.000	0.278	1.000
1333.0	54	20.8	2.175	0.223	317	0.028	0.259	1.000
1333.2	44	22.3	2.171	0.219	330	0.000	0.264	1.000
1333.4	40	20.4	2.190	0.210	329	0.000	0.263	1.000
1333.6	38	14.2	2.199	0.229	333	0.007	0.270	1.000
1333.8	38	11.5	2.180	0.236	333	0.045	0.261	1.000
1334.0	42	10.3	2.156	0.226	326	0.055	0.249	1.000
1334.2	49	12.0	2.176	0.204	321	0.064	0.224	1.000
1334.4	52	14.8	2.254	0.215	322	0.095	0.219	1.000
1334.6	46	14.6	2.263	0.248	327	0.142	0.238	1.000
1334.8	40	12.3	2.221	0.255	325	0.095	0.262	1.000
1335.0	48	11.1	2.192	0.249	330	0.000	0.298	1.000
1335.2	49	13.0	2.172	0.296	314	0.116	0.293	1.000
1335.4	47	15.7	2.168	0.251	304	0.064	0.272	1.000
1335.6	46	16.1	2.203	0.238	295	0.077	0.250	1.000
1335.8	46	11.9	2.225	0.275	294	0.197	0.231	1.000
1336.0	48	10.6	2.165	0.291	305	0.310	0.204	1.000
1336.2	47	11.3	2.043	0.272	300	0.271	0.198	1.000
1336.4	47	11.2	2.018	0.243	319	0.218	0.198	1.000
1336.6	44	10.6	2.142	0.239	320	0.172	0.207	1.000
1336.8	44	8.6	2.259	0.228	308	Coal		
1337.0	60	8.3	2.287	0.248	312	Coal		
1337.2	70	11.2	2.239	0.353	360	Coal		
1337.4	72	24.7	2.017	0.697	402	Coal		
1337.6	78	31.5	1.752	0.654	411	Coal		
1337.8	88	33.8	1.811	0.446	391	Coal		
1338.0	92	29.3	2.115	0.406	370	Coal		
1338.2	104	20.5	2.301	0.403	347	0.922	0.000	1.000
1338.4	92	28.7	2.321	0.347	348	Coal		
1338.6	90	33.7	2.312	0.377	364	Coal		
1338.8	87	42.3	2.202	0.448	386	Coal		
1339.0	85	39.9	1.970	0.451	383	Coal		

DEPTH (mRKB)	GR api	RT ohmm	RHOB g/cc	NPHI frac	DT us/m	VSH frac	PHIE frac	SWE frac
1339.2	99	36.6	1.929	0.378	382	Coal		
1339.4	108	25.5	2.127	0.403	367	Coal		
1339.6	109	21.5	2.301	0.405	354	0.917	0.000	1.000
1339.8	110	14.6	2.297	0.299	335	0.427	0.175	1.000
1340.0	106	16.7	2.327	0.255	320	0.276	0.187	1.000
1340.2	106	15.9	2.303	0.254	318	0.209	0.212	1.000
1340.4	111	17.9	2.268	0.258	320	0.225	0.209	1.000
1340.6	118	17.4	2.269	0.306	326	0.439	0.177	1.000
1340.8	116	16.5	2.272	0.309	335	0.390	0.197	1.000
1341.0	92	15.3	2.238	0.271	341	0.126	0.262	1.000
1341.2	94	14.6	2.192	0.276	343	0.077	0.285	1.000
1341.4	76	14.1	2.175	0.313	343	0.204	0.271	1.000
1341.6	74	14.9	2.177	0.292	344	0.122	0.283	1.000
1341.8	76	14.6	2.179	0.300	347	0.169	0.273	1.000
1342.0	76	14.3	2.178	0.313	348	0.202	0.271	1.000
1342.2	69	14.2	2.168	0.265	348	0.011	0.302	1.000
1342.4	65	14.4	2.153	0.260	344	0.015	0.298	1.000
1342.6	52	14.7	2.151	0.256	335	0.064	0.278	1.000
1342.8	49	14.1	2.171	0.253	329	0.090	0.265	1.000
1343.0	50	15.1	2.201	0.255	327	0.158	0.239	1.000
1343.2	58	17.6	2.230	0.247	319	0.167	0.222	1.000
1343.4	57	20.5	2.262	0.256	310	0.278	0.190	1.000
1343.6	56	23.5	2.290	0.218	299	0.202	0.182	1.000
1343.8	54	24.6	2.310	0.189	296	0.094	0.195	1.000
1344.0	53	22.2	2.297	0.242	302	0.231	0.194	1.000
1344.2	51	18.5	2.273	0.275	315	0.264	0.215	1.000
1344.4	51	17.5	2.240	0.294	318	0.263	0.234	1.000
1344.6	52	18.6	2.220	0.281	319	0.220	0.239	1.000
1344.8	53	18.8	2.224	0.253	319	0.171	0.229	1.000
1345.0	61	20.4	2.247	0.238	311	0.204	0.198	1.000
1345.2	67	28.2	2.294	0.209	301	0.250	0.152	1.000
1345.4	69	40.0	2.351	0.231	290	0.404	0.118	1.000
1345.6	68	41.2	2.395	0.221	285	0.355	0.126	1.000
1345.8	65	33.3	2.400	0.203	287	0.261	0.141	1.000
1346.0	63	27.4	2.375	0.225	292	0.263	0.164	1.000
1346.2	59	21.2	2.325	0.222	305	0.150	0.205	1.000
1346.4	55	17.7	2.286	0.231	310	0.157	0.214	1.000
1346.6	59	19.5	2.291	0.219	303	0.185	0.191	1.000
1346.8	73	20.7	2.327	0.218	303	0.188	0.185	1.000
1347.0	64	19.3	2.318	0.244	309	0.212	0.202	1.000
1347.2	58	18.4	2.273	0.240	321	0.138	0.230	1.000
1347.4	55	16.9	2.245	0.245	318	0.105	0.248	1.000
1347.6	64	16.6	2.234	0.224	328	0.005	0.266	1.000
1347.8	72	16.9	2.206	0.271	338	0.130	0.260	1.000
1348.0	71	15.0	2.188	0.305	344	0.248	0.246	1.000
1348.2	65	12.6	2.172	0.254	342	0.081	0.267	1.000
1348.4	62	11.8	2.170	0.247	330	0.008	0.290	1.000
1348.6	71	14.0	2.182	0.260	319	0.139	0.245	1.000
1348.8	104	21.3	2.245	0.288	314	0.482	0.121	1.000
1349.0	113	33.6	2.357	0.303	322	0.722	0.000	1.000
1349.2	109	35.2	2.400	0.375	329	0.991	0.000	1.000
1349.4	96	26.5	2.406	0.317	321	0.819	0.000	1.000
1349.6	89	19.5	2.384	0.275	319	Coal		
1349.8	86	26.1	2.321	0.281	325	Coal		
1350.0	84	26.9	2.188	0.365	351	Coal		
1350.2	84	18.7	2.083	0.471	373	Coal		

BLENNY_1 (page 10 of data listing)

DEPTH (mRKB)	GR api	RT ohmm	RHOB g/cc	NPHI frac	DT us/m	VSH frac	PHIE frac	SWE frac
1350.4	85	33.2	2.105	0.436	379	Coal		
1350.6	82	24.8	2.149	0.519	366	Coal		
1350.8	82	11.1	2.116	0.383	357	Coal		
1351.0	73	15.5	2.050	0.375	364	Coal		
1351.2	60	21.7	1.844	0.490	383	Coal		
1351.4	73	9.1	1.755	0.483	404	Coal		
1351.6	82	26.5	1.916	0.441	384	Coal		
1351.8	81	18.4	2.199	0.450	381	0.940	0.000	1.000
1352.0	79	10.5	2.279	0.464	395	Coal		
1352.2	79	21.3	2.206	0.490	427	Coal		
1352.4	63	57.9	1.944	0.563	443	Coal		
1352.6	40	115.3	1.594	0.791	462	Coal		
1352.8	34	70.5	1.316	0.823	470	Coal		
1353.0	30	41.5	1.200	0.748	472	Coal		
1353.2	30	92.2	1.190	0.836	478	Coal		
1353.4	28	305.5	1.193	0.923	479	Coal		
1353.6	28	253.5	1.197	0.752	472	Coal		
1353.8	31	229.2	1.210	0.677	474	Coal		
1354.0	33	165.8	1.229	0.675	481	Coal		
1354.2	54	109.2	1.260	0.608	478	Coal		
1354.4	85	67.4	1.389	0.481	425	Coal		
1354.6	111	53.4	1.770	0.456	363	Coal		
1354.8	128	40.6	2.440	0.371	311	Coal		
1355.0	101	27.4	2.406	0.332	314	0.717	0.000	1.000
1355.2	70	21.9	2.310	0.335	328	0.495	0.141	1.000
1355.4	60	21.9	2.242	0.303	336	0.342	0.216	1.000
1355.6	50	19.6	2.216	0.330	343	0.284	0.255	1.000
1355.8	44	17.0	2.189	0.337	344	0.263	0.271	1.000
1356.0	45	15.4	2.181	0.283	343	0.128	0.278	1.000
1356.2	46	15.1	2.187	0.291	341	0.196	0.260	1.000
1356.4	46	16.6	2.183	0.318	341	0.206	0.270	1.000
1356.6	46	17.6	2.162	0.291	341	0.164	0.273	1.000
1356.8	46	18.5	2.178	0.259	337	0.079	0.272	1.000
1357.0	44	21.0	2.212	0.254	334	0.116	0.255	1.000
1357.2	46	22.5	2.217	0.267	336	0.175	0.244	1.000
1357.4	48	22.4	2.202	0.276	340	0.190	0.250	1.000
1357.6	46	24.9	2.196	0.287	337	0.197	0.254	1.000
1357.8	44	25.1	2.206	0.273	339	0.172	0.244	1.000
1358.0	49	27.8	2.234	0.264	335	0.233	0.215	1.000
1358.2	47	25.0	2.246	0.234	333	0.128	0.230	1.000
1358.4	47	22.5	2.237	0.220	332	0.027	0.253	1.000
1358.6	50	23.8	2.222	0.229	327	0.064	0.251	1.000
1358.8	48	29.8	2.227	0.226	329	0.013	0.269	1.000
1359.0	47	32.6	2.217	0.246	332	0.088	0.260	1.000
1359.2	44	23.7	2.214	0.251	343	0.115	0.254	1.000
1359.4	45	21.2	2.218	0.259	342	0.123	0.257	1.000
1359.6	45	21.0	2.206	0.252	340	0.094	0.262	1.000
1359.8	46	26.6	2.200	0.220	344	0.000	0.268	1.000
1360.0	43	26.7	2.189	0.234	346	0.017	0.277	1.000
1360.2	43	21.1	2.132	0.262	345	0.074	0.281	1.000
1360.4	45	18.0	2.093	0.291	350	0.182	0.267	1.000
1360.6	44	18.3	2.119	0.349	353	0.321	0.263	1.000
1360.8	43	19.8	2.117	0.313	353	0.168	0.289	1.000
1361.0	43	19.7	2.118	0.269	342	0.070	0.293	1.000
1361.2	40	22.6	2.116	0.271	349	0.101	0.281	1.000
1361.4	40	23.4	2.097	0.248	350	0.041	0.282	1.000

DEPTH (mRKB)	GR api	RT ohmm	RHOB g/cc	NPHI frac	DT us/m	VSH frac	PHIE frac	SWE frac
1361.6	40	24.6	2.138	0.213	350	0.000	0.270	1.000
1361.8	39	22.8	2.155	0.317	354	0.293	0.238	1.000
1362.0	41	23.4	2.185	0.309	342	0.263	0.241	1.000
1362.2	39	20.7	2.187	0.279	332	0.117	0.263	1.000
1362.4	39	17.8	2.180	0.281	338	0.115	0.268	1.000
1362.6	41	19.2	2.188	0.290	338	0.173	0.255	1.000
1362.8	44	17.5	2.231	0.282	328	0.170	0.245	1.000
1363.0	44	19.0	2.256	0.252	329	0.175	0.221	1.000
1363.2	42	23.0	2.233	0.231	328	0.058	0.256	1.000
1363.4	42	29.5	2.137	0.257	324	0.093	0.269	1.000
1363.6	44	30.4	2.079	0.255	327	0.109	0.259	1.000
1363.8	45	27.7	2.151	0.211	342	0.039	0.242	1.000
1364.0	44	26.8	2.240	0.237	343	0.177	0.206	1.000
1364.2	44	24.4	2.261	0.269	331	0.241	0.207	1.000
1364.4	45	21.4	2.288	0.247	312	0.133	0.237	1.000
1364.6	49	20.4	2.256	0.242	311	0.058	0.267	1.000
1364.8	47	24.3	2.253	0.233	305	0.034	0.268	1.000
1365.0	41	25.8	2.264	0.200	298	0.017	0.239	1.000

PE600824

This is an enclosure indicator page.
The enclosure PE600824 is enclosed within the container PE902043 at this location in this document.

The enclosure PE600824 has the following characteristics:

ITEM_BARCODE =	PE600824
CONTAINER_BARCODE =	PE902043
NAME =	Quantitative Log
BASIN =	GIPPSLAND
PERMIT =	
TYPE =	WELL
SUBTYPE =	WELL_LOG
DESCRIPTION =	Quantitative Log
REMARKS =	
DATE_CREATED =	10/08/1992
DATE_RECEIVED =	26/01/1993
W_NO =	W1062
WELL_NAME =	Blenny-1
CONTRACTOR =	ESSO
CLIENT_OP_CO =	ESSO

(Inserted by DNRE - Vic Govt Mines Dept)

APPENDIX
3

APPENDIX 3

BLENNY RFT REPORT

L M de Jong
OCT 1992

SUMMARY

The RFT survey for the Blenny 1 well was conducted on the 8th of May 1992. The RFT measurements confirmed the absence of hydrocarbons as indicated by the logs. A water gradient of 1.42 psi/m was observed. Relative to the RFT measurements from the Dolphin-2 well, the pressure has not drawn down significantly in the past three years. However relative to the original basin gradient, as determined by E G Woods (Ref 1), the region is drawdown by approximately 57 psi.

RESULTS

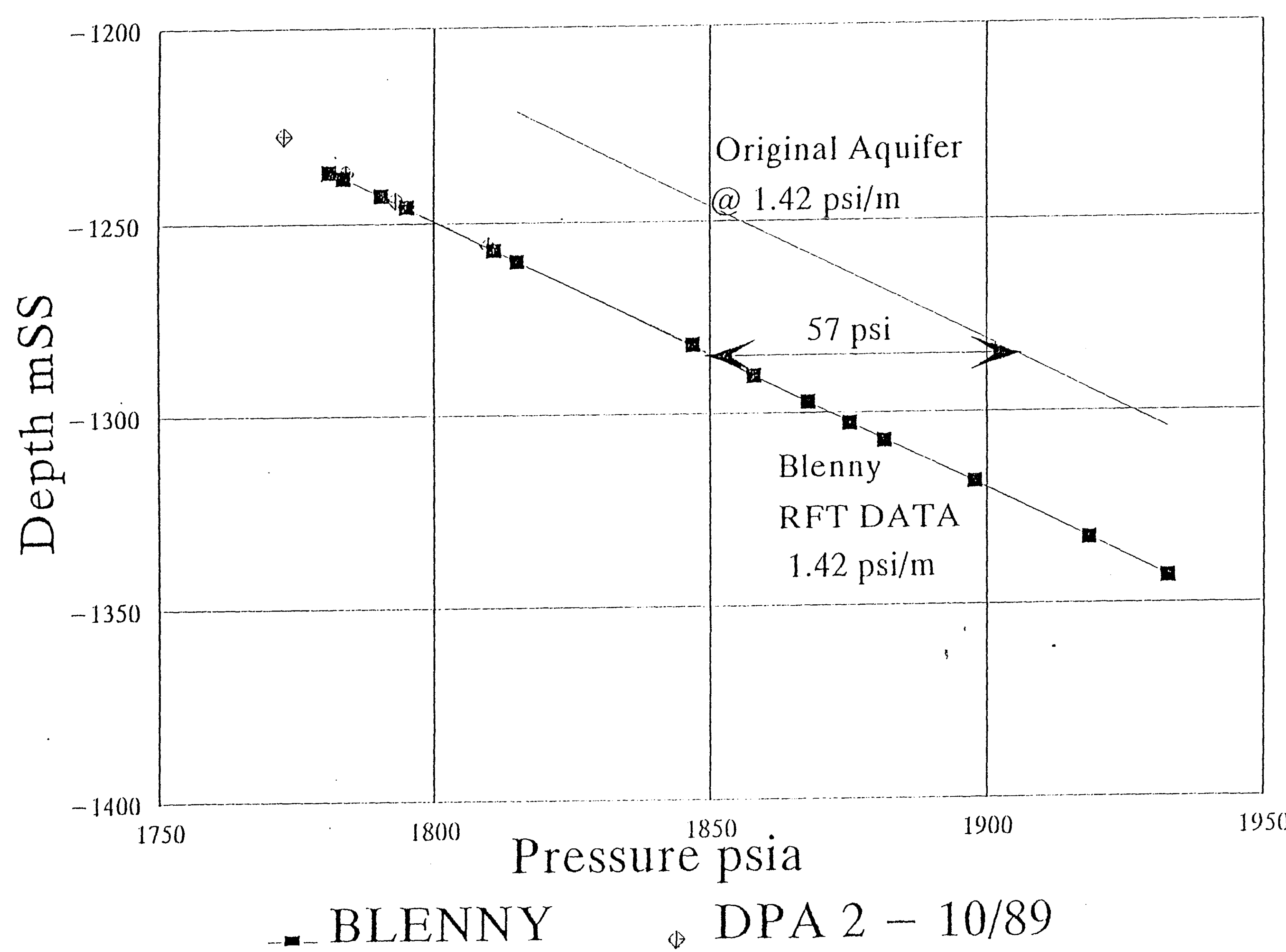
The Blenny RFT program consisted of one pretest run and one sample only run. In total 16 pretest seats were attempted, of which only 14 were successful. The results of the pretest program are summarised in the table below. A plot of the Blenny pressures follows, this also includes the original aquifer pressures and Dolphin 2 pressures.

Blenny Pretest - Run 1

Seat	Depth TVDSS	Formation Pressure psig
1	1229	TIGHT
2	1232.5	TIGHT
3	1236.5	1781
4	1242.5	1790.4
5	1245.5	1795
6	1257	1810.8
7	1260	1815
8	1282	1846.8
9	·1290	1857.9
10	1297	1867.6
11	1302.5	1875.1
12	1307	1881.4
13	1318	1897.7
14	1333	1918.7
15	1343	1932.8
16	1238	1783.6

Reference 1:
Reservoir Simulation of the Gippsland Basin, THE APEA JOURNAL 1984

Blenny RFT Pressure Plot



ENCLOSURES

PE902044

This is an enclosure indicator page.
The enclosure PE902044 is enclosed within the container PE902043 at this location in this document.

The enclosure PE902044 has the following characteristics:

ITEM_BARCODE =	PE902044
CONTAINER_BARCODE =	PE902043
NAME =	Depth Structure Map
BASIN =	GIPPSLAND
PERMIT =	
TYPE =	SEISMIC
SUBTYPE =	HRZN_CONTR_MAP
DESCRIPTION =	Depth Structure Map
REMARKS =	
DATE_CREATED =	31/01/1993
DATE_RECEIVED =	26/01/1993
W_NO =	W1062
WELL_NAME =	Blenny-1
CONTRACTOR =	ESSO
CLIENT_OP_CO =	ESSO

(Inserted by DNRE - Vic Govt Mines Dept)

PE600825

This is an enclosure indicator page.
The enclosure PE600825 is enclosed within the container PE902043 at this location in this document.

The enclosure PE600825 has the following characteristics:

ITEM_BARCODE =	PE600825
CONTAINER_BARCODE =	PE902043
NAME =	Formation Evaluation Log
BASIN =	GIPPSLAND
PERMIT =	Vic/L15
TYPE =	WELL
SUBTYPE =	well log
DESCRIPTION =	Formation Evaluation Log
REMARKS =	
DATE_CREATED =	07/05/1992
DATE_RECEIVED =	26/01/1993
W_NO =	W1062
WELL_NAME =	Blenny-1
CONTRACTOR =	ESSO
CLIENT_OP_CO =	ESSO

(Inserted by DNRE - Vic Govt Mines Dept)

PE600826

This is an enclosure indicator page.
The enclosure PE600826 is enclosed within the container PE902043 at this location in this document.

The enclosure PE600826 has the following characteristics:

ITEM_BARCODE =	PE600826
CONTAINER_BARCODE =	PE902043
NAME =	Well Completion Log
BASIN =	GIPPSLAND
PERMIT =	
TYPE =	WELL
SUBTYPE =	COMPOSITE_LOG
DESCRIPTION =	Well Completion Log Blenny 1
REMARKS =	
DATE_CREATED =	31/10/92
DATE_RECEIVED =	26/01/93
W_NO =	W1062
WELL_NAME =	Blenny-1
CONTRACTOR =	Esso Australia
CLIENT_OP_CO =	Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

BLENNY-1

Well to Seismic Tie

Minor editing of the electric sonic log was necessary to obtain a reasonable well to seismic tie at Blenny-1, SP 2220 on line G88A-9138. The five metre sand extending from 1251.5mkb to 1256.5mkb (N-1.1 reservoir) has a two metre dolomite cemented zone within it that produces high acoustic impedence contrasts at both the top and base of the high velocity dolomite.

If the assumption is made that the dolomitized portion of the sand has a lateral continuity away from the well bore of less than horizontal resolution of the data, i.e. 16-40 metres then the reflection characteristics due to the high impedence dolomite would be averaged out over this offset, and the seismic character at the well bore would have a somewhat different appearance to that of the synthetic. Alternatively the strike of the dolomite streak may be perpendicular to the direction of line G88A-9138 and the width of the dolomite zone quite thin, resulting in poor seismic imaging of the dolomitized body.

With this assumption in mind the dolomite streak was removed from the sonic log trace and replaced with the transit time of the undolomitized portion of the sand. The synthetic seismogram was recalculated and a more favourable well to seismic tie achieved.

The log trace editing can be observed upon comparison of the sonic logs for the two synthetic seismograms at the TN1.1 marker in enclosures X and Y.

A description of the seismic markers annotated on the synthetic seismograms is as follows:-

BHVU	-	Near base high velocity unit
TOL	-	Top of Latrobe Group
TN1.1	-	Top of N1.1 reservoir unit
TCOAL	-	Top of base middle N. asperus coal

Blenny-1 Well Depths

		mKB	mSS
BHVU	-	961.5	-938.5
TOL	-	1230	-1207.0
TN1.1	-	1251.5	-1228.5
TCOAL	-	1285.0	-1262.0

pr:lt:misc39

FROM BLENNY-1 WCR. VOLUME 2.

PE600827

This is an enclosure indicator page.
The enclosure PE600827 is enclosed within the container PE902043 at this location in this document.

The enclosure PE600827 has the following characteristics:

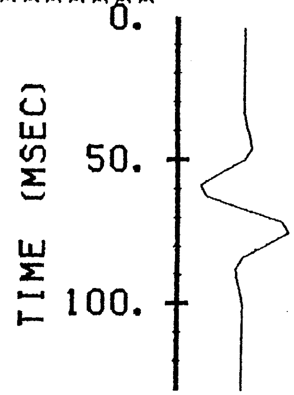
ITEM_BARCODE = PE600827
CONTAINER_BARCODE = PE902043
NAME = Synthetic Seismogram
BASIN = GIPPSLAND
PERMIT =
TYPE = WELL
SUBTYPE = SYNTH_SEISMOGRAPH
DESCRIPTION = Synthetic Seismogram
REMARKS =
DATE_CREATED =
DATE_RECEIVED = 26/01/1993
W_NO = W1062
WELL_NAME = Blenny-1
CONTRACTOR = ESSO
CLIENT_OP_CO = ESSO

(Inserted by DNRE - Vic Govt Mines Dept)

FROM BLENNY-1 WELL COMPLETION REPORT VOLUME 2.

```
*********************************************************
QUIKLOG  REV: 1.4  1989
SIERRA GEOPHYSICS, INC.
28-OCT-92 14:12
BLENNY-1-4
*********************************************************
       LIS COMMENT RECORDS FOR LOG SUITE 1
WELL NAME: BLENNY-1                                  WELL ID: BLENNY-1
DEPTHS:    180.0000 TO  1410.0000 METRES

**************** WELL LOG DESCRIPTION *******************
KELLY BUSHING HEIGHT  =        23.0      METERS ABOVE SEA LEVEL
GROUND ELEVATION  =           0.000      METERS ABOVE SEA LEVEL
SEISMIC DATUM  =              0.000      METERS ABOVE SEA LEVEL
STARTING DEPTH  =              22.8      METERS
ENDING DEPTH    =         0.141E+04      METERS
SAMPLED DEPTH INTERVAL  =     0.300      METERS
**************** PROCESSING SEQUENCE *******************
DENSITY MODEL  =              GARDNER LAW
WAVELET TYPE  =               RICKER (ZERO-PHASE)
WAVELET LENGTH =                124.     MSEC
WAVELET MAX. AMP.  =            1.00
WAVELET MIN. AMP.  =           -1.00
WAVELET CENTER FREQUENCY  =     40.0     HZ
POLARITY          =           NEGATIVE
CLIPPING LEVEL =               1.000
TRACE OVERLAP     =            2.0000
WHITE NOISE PERCENTAGE =         0.0
MULTIPLES INCLUDED  =         NO
```




```
**************** PLOTTING PARAMETERS *******************
TIME SAMPLE INTERVAL =         4.00      MSEC
HORIZONTAL SCALE   =           2.67      INCH/LOG
VERTICAL SCALE   =             7.84      INCH/SEC
STARTING TIME   =             0.000      MSEC
ENDING TIME     =         0.110E+04      MSEC
*********************************************************
```

PE600828

This is an enclosure indicator page.
The enclosure PE600828 is enclosed within the container PE902043 at this location in this document.

The enclosure PE600828 has the following characteristics:

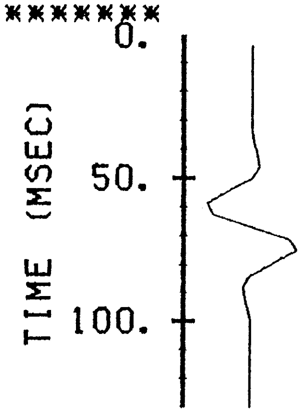
ITEM_BARCODE = PE600828
CONTAINER_BARCODE = PE902043
NAME = Synthetic Seismogram
BASIN = GIPPSLAND
PERMIT =
TYPE = WELL
SUBTYPE = SYNTH_SEISMOGRAPH
DESCRIPTION = Synthetic Seismogram
REMARKS =
DATE_CREATED =
DATE_RECEIVED = 26/01/1993
W_NO = W1062
WELL_NAME = Blenny-1
CONTRACTOR = ESSO
CLIENT_OP_CO = ESSO

(Inserted by DNRE - Vic Govt Mines Dept)

FROM BLENNY-1 WELL COMPLETION REPORT VOLUME-2.


```
*****************************************************************
QUIKLOG  REV: 1.4  1989
SIERRA GEOPHYSICS, INC.
28-OCT-92 10:51
BLENNY-1-3
*****************************************************************
      LIS COMMENT RECORDS FOR LOG SUITE 1
WELL NAME: BLENNY-1                                  WELL ID: BLENNY-1
DEPTHS:   180.0000 TO  1410.0000 METRES

***************** WELL LOG DESCRIPTION *******************
KELLY BUSHING HEIGHT  =        23.0      METERS ABOVE SEA LEVEL
GROUND ELEVATION  =           0.000      METERS ABOVE SEA LEVEL
SEISMIC DATUM  =              0.000      METERS ABOVE SEA LEVEL
STARTING DEPTH  =              22.8      METERS
ENDING DEPTH    =             0.141E+04  METERS
SAMPLED DEPTH INTERVAL  =     0.300      METERS
***************** PROCESSING SEQUENCE ********************
DENSITY MODEL  =              DENSITY CURVE
WAVELET TYPE   =              RICKER (ZERO-PHASE)
WAVELET LENGTH =               124.      MSEC
WAVELET MAX. AMP.  =           1.00
WAVELET MIN. AMP.  =          -1.00
WAVELET CENTER FREQUENCY  =    40.0      HZ
POLARITY        =             NEGATIVE
CLIPPING LEVEL =               1.000
TRACE OVERLAP    =             2.0000
WHITE NOISE PERCENTAGE =        0.0
MULTIPLES INCLUDED  =         NO
```




```
***************** PLOTTING PARAMETERS ********************
TIME SAMPLE INTERVAL =         4.00      MSEC
HORIZONTAL SCALE   =           2.67      INCH/LOG
VERTICAL SCALE   =             7.84      INCH/SEC
STARTING TIME   =             0.000      MSEC
ENDING TIME     =             0.110E+04  MSEC
*****************************************************************
```

PE600829

This is an enclosure indicator page.
The enclosure PE600829 is enclosed within the container PE902043 at this location in this document.

The enclosure PE600829 has the following characteristics:

ITEM_BARCODE = PE600829
CONTAINER_BARCODE = PE902043
NAME = Seismic Calibration Log
BASIN = GIPPSLAND
PERMIT =
TYPE = WELL
SUBTYPE = VELOCITY_CHART
DESCRIPTION = Seismic Calibration Log
REMARKS =
DATE_CREATED = 21/05/1992
DATE_RECEIVED = 26/01/1993
W_NO = W1062
WELL_NAME = Blenny-1
CONTRACTOR = ESSO
CLIENT_OP_CO = ESSO