WCR VOL 2

PILOTFISH - 1A

W793

ESSO EXPLORATION AND PRODUCTION AUSTRALIA INC.

128 pages
6 enclosures

WELL COMPLETION REPORT

W793 PILOTFISH-1A

VOLUME II - 5 DEC 1983

GIPPSLAND BASIN
VICTORIA

ESSO AUSTRALIA LIMITED

Compiled by : G. LINDSAY

September , 1983

PILOTFISH-1A

WELL COMPLETION REPORT

VOLUME II

(Interpretative Data)

CONTENTS

FIGURES

APPENDICES

ENCLOSURES

ATTACHMENTS

GEOLOGICAL AND GEOPHYSICAL ANALYSIS

AGE	FORMATION	DEPTH PREDICTED (mKB)	DEPTH DRILLED (mKB)	DEPTH DRILLED (mSS)
Miocene to Recent	Gippsland Limestone	231-2401	227-2535	206-2514
Miocene	Lakes Entrance formation	2401-2896	2535-2915	2514-2894
Upper Cretaceous Paleocene and Oligocene	Latrobe Group	2896-T.D.	2915-T.D.	2894-T.D.
	TOTAL DEPTH:	3521	3521	3500

INTRODUCTION

The primary objective of Pilotfish-1A was to test the hydrocarbon potential of an erosional closure at the top of the Latrobe Group.

Pilotfish-1A was a successful stratigraphic hole but did not encounter any hydrocarbons.

The well was also designed to provide stratigraphic information from within the Latrobe Group to aid in future exploration.

PREVIOUS DRILLING HISTORY

No wells had been drilled on the Pilotfish structure. The closest wells are Mackerel-1, 12km to the southwest and Flounder-6, 13km to the north. Both wells are within major oil fields.

GEOLOGICAL SUMMARY

Structure

The results of Pilotfish-1A did not change the structural interpretation. The well is interpreted to have tested a valid top of Latrobe Group closure.

The structure is a topographic high at the top of the Latrobe Group, produced by the combined effects of erosion and folding (Enclosures 1 and 2). The structure has an 85m height of closure, and is aligned along a NW-SE anticlinal trend. The Marlin channel and an older Cretaceous channel flank the structure.

STRATIGRAPHY

Latrobe Group

The stratigraphy encountered in the Pilotfish well was generally as expected but with some important variations.

The interval from T.D. to about 3150mKB was predicted to be a fluvio/deltaic sequence of sandstone, shale and coal. The sequence encountered in the well consists of thick sandstones, particularly towards the top of the interval, and thinner shales with very minor coal present. The log response of many of the sandstones showed a "coarsening upwards" character. The interval appeared to have been deposited in a nearshore marine to deltaic environment.

Between about 3150mKB and 3015mKB. The sequence consisted of thinly bedded sandstone, shale and coal. The quantity of sandstone was found to be much less than predicted. The sequence was possibly deposited in a lower delta plain/interdistributary environment. The Pilotfish location was probably very close to the shoreline at this time.

The interval from 3015mKB to the eroded top of the Latrobe Group is a progradational nearshore marine sandstone and shale unit. This unit is considered to be stratigraphically equivalent to the Flounder field seal and reservoir. The upper half of the interval between 2915mKB and 2950mKB is a glauconite rich unit similar to the Gurnard Formation but of late Palaeocene age. Palaeontological age determinations (Appendix 1 and 2) suggest that the top of the late Palaeocene interval has been reworked during the early Oligocene prior to the deposition of the Miocene Lakes Entrance Formation. This reworked interval (2915mKB to 2925mKB) contains less glauconite than the sediments beneath it and may represent a thin slice of Turrum formation.

Seaspray Group

The marls and limestones of the Lakes Entrance Formation and Gippsland limestone were encountered as expected.

HYDROCARBONS

The Pilotfish-1A well was plugged and abandoned as a dry hole. Post drill studies indicate that a valid closure still exists at the top of the Latrobe Group. Two possible explanations are proposed to explain the absence of any hydrocarbon accumulation. A third explanation, although unlikely, is that there is no closure.

The first theory suggests that the closure is breached by a permeable unit in the overlying Lakes Entrance Formation channel fill leaking any accumulating hydrocarbons up to the Halibut field. For this theory to be valid the permeable unit would need to be diachronous as the seismic horizons within the Lakes Entrance Formation still show closure over the Pilotfish area.

The second theory implies that the very low net unit between about 3015mKB and 3150mKB has acted as a barrier preventing any hydrocarbons entering the closure by diverting migrating fluids away to the east. The salinities of formation water in the low net unit are lower than the salinities stratigraphically above and below (Appendix 3). This salinity difference suggests that the low net unit has been at least partially isolated from the regional aquifer, thus forming a permeability barrier to fluid migration.

GEOPHYSICAL ANALYSIS

Pilotfish-1 was a test of an erosional feature at the Top of the Latrobe Group. The feature is situated in the Marlin Channel 12km northeast of Mackerel and 13km south of Flounder. The Mackerel and Flounder wells provide the nearest well control.

The 'Top Latrobe' seismic marker was mapped around the area as a prominent continuous seismic sequence boundary. Cycle terminations by onlap and downlap above and by truncation below are evident. The 'Top Latrobe' was assumed to be the top of porosity although there could well be sand stringers shed from the surrounding flanks of the Marlin Channel. There is no well control to support this hypothesis and the seismic data do not provide adequate control to resolve it.

A small time closure was mapped at the Pilotfish-1 location. Depth conversion was effected with smoothed Dix interval velocities for selected intervals above 'Top Latrobe'. The interval velocities were tied to the nearest wells in the area. The resultant average velocity field to 'Top Latrobe' exhibited a velocity slow across Pilotfish such that in depth Pilotfish had significant closure.

The predicted time and depth to 'Top Latrobe' were 2.112 sec (Two-way time) and 2895mKB respectively. The actual values are 2.142 sec and 2915mKB. A 0.7% error in the velocities in part compensated for the 1.4% error in the time pick such that the overall error in the depth prediction was 0.7%.

Post-drill mapping shows Pilotfish-1 drilled just within time closure. There is little reason to suspect the velocity field over the structure in view of the small error at the well; but it is possible the velocities trend in a fashion opposite to that established, spilling the closure in depth. The post-drill structure map on 'Top Latrobe' (Enclosure 1) shows Pilotfish-1 was a valid test of a 'Top Latrobe' closure. The well provides no fresh evidence of porosity above the Top of the Latrobe Group and no reason to change the 'Top Latrobe' pick away from the well.

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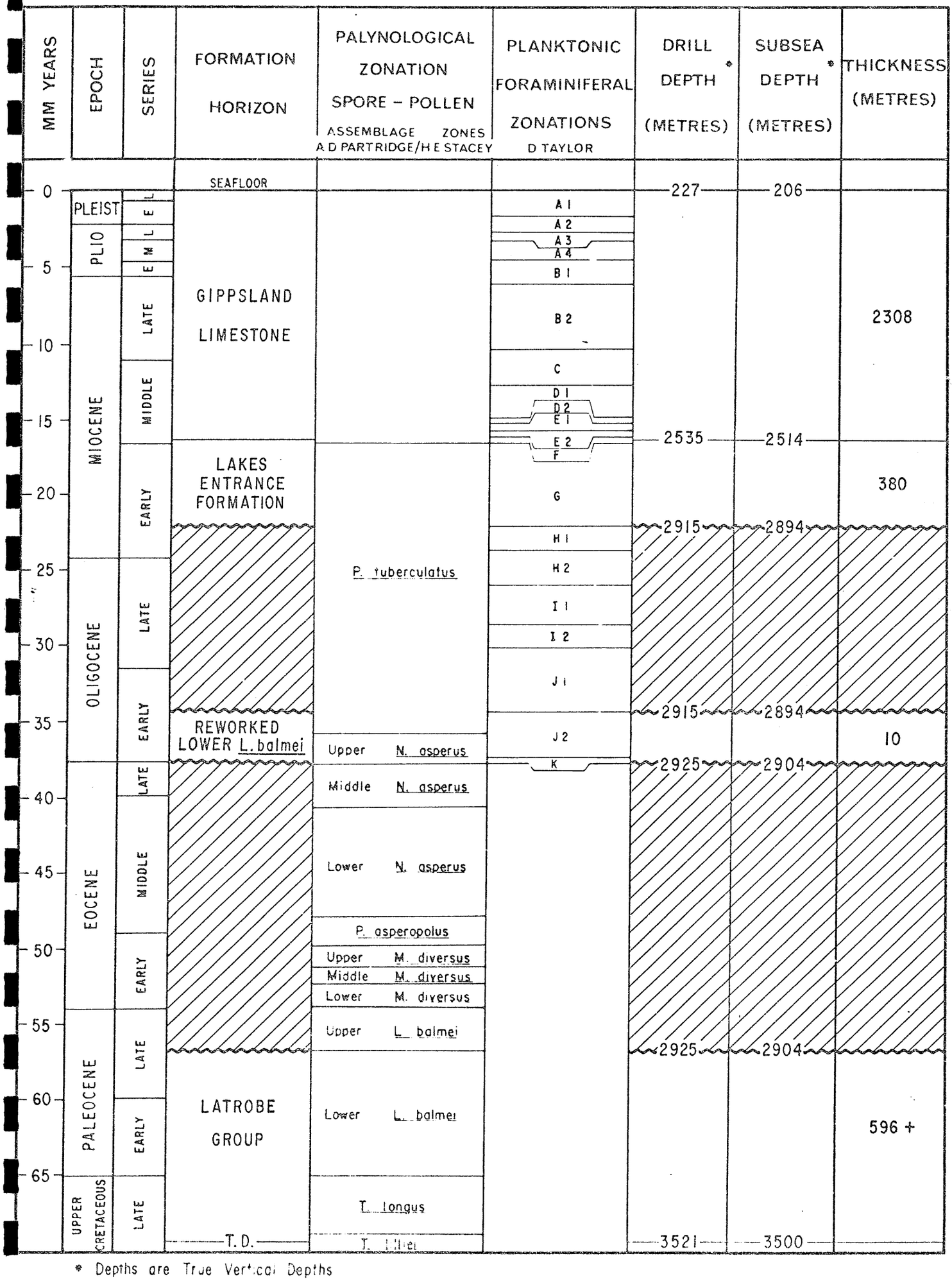
FIGURES

PILOTFISH-1A

STRATIGRAPHIC TABLE



* Depths are True Vertical Depths

Base Dwg 1107/OP/49

Dwg. 2131/OP/8

APPENDIX 1

PE900462

This is an enclosure indicator page.
The enclosure PE900462 is enclosed within the container PE902610 at this location in this document.

The enclosure PE900462 has the following characteristics:

ITEM_BARCODE	= PE900462
CONTAINER_BARCODE	= PE902610
NAME	= Range Chart : Foraminifera
BASIN	= GIPPSLAND
PERMIT	= VIC/L6
TYPE	= WELL
SUBTYPE	= DIAGRAM
DESCRIPTION	= Range Chart for Pilotfish-1A of Planktonic Foraminifera
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W793
WELL_NAME	= PILOTFISH-1A
CONTRACTOR	=
CLIENT_OP_CO	= ESSO AUSTRALIA LIMITED

(Inserted by DNRE - Vic Govt Mines Dept)

APPENDIX 1

MICROPALAEONTOLOGICAL ANALYSIS

APPENDIX

FORAMINIFERAL ANALYSIS, PILOTFISH-1A
GIPPSLAND BASIN

by

Michael J. Hannah.

Esso Australia Ltd.
Palaeontology Report 1983/16.
0467L

May, 1983.

PART 1

INTERPRETATIVE DATA

SUMMARY

GEOLOGICAL COMMENTS

BIOSTRATIGRAPHY

DATA SHEET

SUMMARY TABLE

SUMMARY

The foraminiferal bearing sediments from Pilotfish-1A range in age from Late Eocene to Middle-Late Pliocene. Two disconformities/condensed sequences occur in the section.

TABLE 1 - GEOLOGICAL SUMMARY, PILOTFISH-1A.

AGE	FORMATION	LITHOLOGY*	ZONE
----------Sea floor KB 206m----------			
Late Pliocene/ Early Miocene	Gippsland Limestone/ Lakes Entrance Formation	Dominantly Recrystalised Carbonate	A 3 (490.0m - 945.0m) B 1 (960.0m - 1250.0m) B 2 (1420.0, - 1910.0m) C (1980.0m - 2330.0m) D 2 (2400.0m) F (2470.0m - 2750.0m) G (2770.0, - 2915.0m
2915.0m			
Late Eocene/ Early Oligocene	Un-named unit	Fine quartz sand with mica, rare glauconite at base.	J 21 K (2915.0m - 2925.0m) Reworked lower *L. balmei* Beds.
2925.0m			
Lower Paleocene	Latrobe Group	Fine quartz sand with glauconite.	Lower *L. balmei* (2925.0m - 2948.0m)
T.D. 3505.0m.			

* Generalised Lithologies from washed residues/SWC description sheets.

GEOLOGICAL COMMENTS

Top of Latrobe.

Three units have been identified across the Latrobe Group/Lakes Entrance Formation Boundary.

1. Intra Latrobe Greensand (2950.0m to 2925.0m)
   Washed residue from this unit consists of a fine grained angular quartz with occasional high glauconite levels. All unprocessed material from this unit showed the characteristic green colour of high Glauconite content. The unit is dated as Palaeocene (Lower L. balmei Zone - Macphail 1983).

2. Unnamed unit (2925.0m to 2915.0m)
   This interval consists of a similar fine grained quartz sand to the Intra Latrobe Greensand but can be distinguished by: a) the very small amount of glauconite in either the washed residues or unprocessed material and b) large amounts of mica in the sediment.
   They are further distinguished by their ages. Although the palynomorphs derived from the unnamed unit would indicate a lower L. balmei age for the unit, several samples also yielded reasonable foraminiferal assemblages which allow a fairly confident Late Eocene/Early Oligocene (Zones K/J2) age to be assigned to the unit. This implies: a) a major hiatus between the two sands and b) the reworking of an entire Lower L. balmei assemblage with no perceivable admixture of younger spore pollen.

3. Marine Carbonates of the basal Lakes Entrance Formation.
   These consist of recrystalised carbonates yielding poorly preserved foraminifera. The age of the sediments immediately above the Latrobe Group is Early Miocene (Zone G) in age indicating a second disconformity in the section.

Timing of Maximum Tertiary Progradation

The time of maximum accumulation of marine carbonates in most Gippsland basin wells occurs during the Middle Miocene (Zone D). The closer the wells are to the shelf edge the younger this time of maximum progradation becomes. In Hapuku-1 the maximum rate of sediment accumulation occurs in the Late Miocene/Pliocene (Zones B and A). Pilotfish-1A follows the same general pattern, however the maximum sedimentary rate occurs earlier than Hapuku-1; commencing late in the Middle Miocene (Zone C).

Early Miocene Thickening.

Zones F & G, (Early Miocene) which are thin or absent in Hapuku-1 thicken up considerably in Pilotfish-1A. This may be a result of either:

1. The more shoreward position of Pilotfish-1A,
2. The accumulation of the Early Miocene sediments as channel fill in the vicinity of Pilotfish-1A.

BIOSTRATIGRAPHY

Zone K, Late Eocene, 2923.0m to 2921.0m.

Sidewall cores 44 and 45 at 2923.0m and 2921.0m respectively yielded a sparse poorly preserved assemblage. Nevertheless the recognition of Globigerina linaperta, Globigerina angiporoides and Globorotalia postcretaea means that they can be assigned to Zone K with a fair degree of confidence.

Zone J2/K, Late Eocene-Early Oligocene, 2917.0m.

An assemblage consisting entirely of Globigerina brevis was recovered from SWC 47 at 2917.0m providing a fairly firm J2/K date for the sample.

Zone G, Middle Miocene, 2915.0m - 2770.0m.

A thick pile of Zone G age sediments sit immediately on top of the Latrobe Group. This zonal determination is based on the occurrence of Globigerinoides quadrilobatus trilobus without Globigerinoides sicanus. Samples from this interval yielded in general poorly preserved assemblages of limited diversity consisting mainly of Globigerinoides quadrilobatus trilobus, Globorotalia mayeri, Globigerina juvenilis and Globigerina woodi. A slight increase in planktonic diversity occurs around sidewall core 63 at 2867.0m, coincident with a brief appearance of Catapsiderax dissimilis. Samples in which Globigerinoides quadrilobatus trilobus was absent are listed in the summary tables as indeterminate.

Zone F, late Early Miocene, 2750.0m to 2470.0m.

The appearance of Globigerinoides sicanus in sidewall core 72 at 2750.0m without Praeorbulina glomerosa or either form of Orbulina marks the base of Zone F. This zone is well developed in Pilotfish-1A, being some 280m thick.

Unlike other Gippsland wells, the index species Globigerinoides sicanus is consistently present throughout the zone. One exception is sidewall core 73 at 2730.0m which is listed as indeterminate on the summary sheets. With the incoming of the Globoquadrina dehiscens group near the base of the zone planktonic diversity improves. In addition, the rapid increase in Globorotalid diversity, which occurs within Zone F in the Seahorse area (Hannah 1982 1983), is recorded between SWC's 78 and 79 (at 2628.0m and 2611.0m respectively) in Pilotfish-1A. This confirms the usefulness of this datum in recognising Zone F even when Zonal species are absent.

Zone D2, Mid Miocene, 2400.0m.

Sidewall core 82 at 2400.0m contains Orbulina universa and a moderate diversity of Globigerinoides suggesting a Zone D2 age. The absence of Globorotalia peripheroacuta is supportive of this assignment. The lack of Zones E and D1 from the section is probably due to sampling gaps.

Zone C, late Mid Miocene, 2330.0m to 1980.0m.

The presence of Globorotalia miotumida miotumida, Globorotalia mayeri and the absence of Globorotalia acostaensis in samples from this interval enables a fairly confident Zone C assignment to be made. Plankton diversity is low to moderate and preservation in general is poor. One problem species appearing during Zone C in Pilotfish-1A is referred to Globorotalia miotumida cf. conomiozea. This species looks nearly identical to Globorotalia miotumida conomiozea and if care is not taken to separate the two, a "too young" age may be assigned.

Zone B2, Late Miocene, 1910.0m to 1420.0m.

The base of this zone is marked by the replacement of Globorotalia mayeri by Globorotalia acostaensis. It is considered to extend up as far as the first appearance of Globorotalia miotumida conomiozea. Towards the top of this zone preservation is very poor due to high levels of recrystalisation making zonal determination difficult or in some cases, impossible.

Zone B1, Late Miocene-Early Pliocene, 1250.0m to 960.0m.

The remaining sidewall cores are assigned to Zone B1 on the basis of their containing Globorotalia miotumida conomiozea and Globorotalia acostaensis and the absence of either the Globorotalia inflata group and Globorotalia puncticulata. Preservation is poor and species diversity is low throughout this interval.

Zone B1-A4, Late Miocene-Pliocene, 955m - 960m (Cuttings).
A single cuttings sample is assigned to this zonal interval because a) it contains Globorotalia puncticulata and Globorotalia miotumida conomiozea (this later species becomes extinct within A4). and b) They do not contain Globorotalia miotumida miotumida. The assignment carries a low degree of confidence.

Zone A3, Late-mid Pliocene, 945.0m to 490.0m (Cuttings).
Three cuttings samples are assigned to this zone because they contain large numbers of Globorotalia puncticulata and no Globorotalia miotumida conomiozea. The occasional appearance of Globigerina woodi is also indicative of a pre-Pleistocene age. There is also an odd dearth of Globorotalia inflata in the samples. Again this zonal determination can only carry a low degree of confidence.

TABLE 2

INTERPRETATIVE DATA - PILOTFISH-1A

SWC No.	DEPTH (m)	MICROFOSSIL YIELD	MICROFOSSIL PRESERVATION	PLANKTON DIVERSITY	ZONE (conf.rate)	AGE
Cuttings	360-370	NFF				
Cuttings	490-500	High	Moderate	High	A3 (3)	Late/Middle Pliocene
Cuttings	670-680	High	Moderate	High	A3 (3)	Late/Middle Pliocene
Cuttings	940-945	Moderate	Poor	Moderate	A3 (3)	Late/Middle Pliocene
Cuttings	955-960	Very Low	Very Poor	Low	A4-B1	Late Miocene/Mid Pliocene
SWC 102	960.0	Moderate	Moderate	Low	B1 (1)	Late Miocene/Early Pliocene
SWC 101	1025.0	Moderate	Good	Low	B1 (1)	Late Miocene/Early Pliocene
SWC 100	1100.0	Very Low	Very Poor	Very Low	Indeterminate	
SWC 99	1175.0	Low	Very Poor	Moderate	B1 (1)	Late Miocene/Early Pliocene
SWC 98	1250.0	Moderate	Poor	High	B1 (1)	Late Miocene/Early Pliocene
SWC 97	1350.0	Low	Poor	Low	Indeterminate	
SWC 96	1420.0	Moderate	Very Poor	Moderate	B2 (1)	Late Miocene
SWC 95	1490.0	Very Low	Very Poor	Very Low	Indeterminate	
SWC 94	1560.0	Moderate	Very Poor	Moderate	B2 (1)	Late Miocene
SWC 93	1630.0	Low	Very Poor	Moderate	B2 (1)	Late Miocene
SWC 92	1700.0	Very Low	Very Poor	Low	B2 (2)	Late Miocene
SWC 91	1770.0	Moderate	Poor	Moderate	B2 (1)	Late Miocene
SWC 90	1840.0	Low	Very Poor	Low	B2 (2)	Late Miocene
SWC 89	1910.0	Very Low	Poor	Moderate	B2 (1)	Late Miocene
SWC 88	1980.0	Low	Very Poor	Low	C (1)	Middle Miocene
SWC 87	2050.0	Very Low	Very Poor	Low	C (1)	Middle Miocene
SWC 86	2120.0	Low	Poor	Moderate	C (1)	Middle Miocene

TABLE 2

INTERPRETATIVE DATA - PILOTFISH-1A

SWC No.	DEPTH (m)	MICROFOSSIL YIELD	MICROFOSSIL PRESERVATION	PLANKTON DIVERSITY	ZONE (conf.rate)	AGE
SWC 85	2190.0	Moderate	Very Poor	Low	C (1)	Middle Miocene
SWC 84	2260.0	High	Moderate	Moderate	C (1)	Middle Miocene
SWC 83	2330.0	High	Moderate	Moderate	C (1)	Middle Miocene
SWC 82	2400.0	High	Moderate	High	D2 (1)	Early Middle Miocene
SWC 81	2470.0	Moderate	Moderate	High	F (1)	Late Early Miocene
SWC 80	2560.0	Moderate	Moderate	High	F (1)	Late Early Miocene
SWC 79	2611.0	Low	Poor	High	F (1)	Late Early Miocene
SWC 78	2628.0	Low	Poor	Moderate	F (1)	Late Early Miocene
SWC 77	2650.0	Low	Moderate	Low	F (2)	Late Early Miocene
SWC 76	2670.0	Moderate	Poor	Moderate	F (1)	Late Early Miocene
SWC 75	2690.0	Moderate	Very Poor	Low	F (2)	Late Early Miocene
SWC 74	2710.0	Moderate	Poor	Moderate	F (1)	Late Early Miocene
SWC 73	2730.0	Low	Poor	Low	Indeterminate	
SWC 72	2750.0	Moderate	Very Poor	Low	F (1)	Late Early Miocene
SWC 71	2770.0	Low	Very Poor	Low	G (2)	Early Miocene
SWC 70	2790.0	High	Moderate	High	G (1)	Early Miocene
SWC 69	2810.0	Low	Poor	Low	G (1)	Early Miocene
SWC 68	2830.0	High	Poor	Low	G (1)	Early Miocene
SWC 67	2847.0	Very Low	Poor	Very Low	Indeterminate	
SWC 66	2852.0	Low	Very Poor	Moderate	G (1)	Early Miocene
SWC 65	2857.0	Low	Poor	Low	G (1)	Early Miocene
SWC 64	2862.0	High	Moderate	Moderate	G (0)	Early Miocene

TABLE 2

INTERPRETATIVE DATA - PILOTFISH-1A

SWC No.	DEPTH (m)	MICROFOSSIL YIELD	MICROFOSSIL PRESERVATION	PLANKTON DIVERSITY	ZONE (conf.rate)	AGE
SWC 63	2867.0	Very Low	Very Poor	High	G (1)	Early Miocene
SWC 62	2872.0	High	Moderate	Moderate	G (1)	Early Miocene
SWC 61	2877.0	Low	Very Poor	Low	G (1)	Early Miocene
SWC 60	2882.0	Very Low	Very Poor	Low	Indeterminate	
SWC 59	2887.0	High	Very Poor	Low	G (1)	Early Miocene
SWC 58	2892.0	Moderate	Very Poor	Moderate	G (1)	Early Miocene
SWC 57	2897.0	Moderate	Poor	Low	G (1)	Early Miocene
SWC 56	2899.0	Moderate	Very Poor	Low	G (2)	Early Miocene
SWC 55	2901.0	Low	Poor	Low	G (2)	Early Miocene
SWC 54	2903.0	Moderate	Poor	Low	G (1)	Early Miocene
SWC 53	2905.0	Moderate	Poor	Low	G (2)	Early Miocene
SWC 52	2907.0	Low	Poor	Low	G (1)	Early Miocene
SWC 51	2909.0	Very Low	Very Poor	Low	G (2)	Early Miocene
SWC 50	2911.0	Low	Poor	Low	G (1)	Early Miocene
SWC 48	2915.0	Low	POor	Low	G (1)	Early Miocene
SWC 47	2917.0	Low	Poor	Very Low	J2/K (2)	Latest Eocene/Early Oligocene
SWC 46	2919	NFF				
SWC 45	2921.0	Low	Poor	Low	K (1)	Latest Eocene
SWC 44	2923.0	Low	Poor	Low	K (1)	Latest Eocene
SWC 41	2929.0	NFF				
SWC 39	2933.0	NFF				

NFF = No foraminifera found.

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HANNAH, M.J., 1983. A Reassessment of the Planktonic Foraminiferal Content of Hudbay West Seahorse-1, Gippsland Basin, Esso Australia Ltd. Palaeontology Report, 1983/5.

MACPHAIL, M.K., 1983 Palynological Analysis of Pilotfish-1A, Gippsland Basin, Esso Australia Ltd. Palaeontology Report 1983/20.

PART 2

BASIC DATA

SUMMARY

RANGE CHART

TABLE 3

BASIC DATA - PILOTFISH-1A

SWC No.	DEPTH (m)	MICROFOSSIL YIELD	MICROFOSSIL PRESERVATION	PLANKTON DIVERSITY
Cuttings	360-370	NFF		
Cuttings	490-500	High	Moderate	High
Cuttings	670-680	High	Moderate	High
Cuttings	940-945	Moderate	Poor	Moderate
Cuttings	955-960	Very Low	Very Poor	Low
SWC 102	960.0	Moderate	Moderate	Low
SWC 101	1025.0	Moderate	Good	Low
SWC 100	1100.0	Very Low	Very Poor	Very Low
SWC 99	1175.0	Low	Very Poor	Moderate
SWC 98	1250.0	Moderate	Poor	High
SWC 97	1350.0	Low	Poor	Low
SWC 96	1420.0	Moderate	Very Poor	Moderate
SWC 95	1490.0	Very Low	Very Poor	Very Low
SWC 94	1560.0	Moderate	Very Poor	Moderate
SWC 93	1630.0	Low	Very Poor	Moderate
SWC 92	1700.0	Very Low	Very Poor	Low
SWC 91	1770.0	Moderate	Poor	Moderate
SWC 90	1840.0	Low	Very Poor	Low
SWC 89	1910.0	Very Low	Poor	Moderate
SWC 88	1980.0	Low	Very Poor	Low
SWC 87	2050.0	Very Low	Very Poor	Low
SWC 86	2120.0	Low	Poor	Moderate
SWC 85	2190.0	Moderate	Very Poor	Low
SWC 84	2260.0	High	Moderate	Moderate
SWC 83	2330.0	High	Moderate	Moderate
SWC 82	2400.0	High	Moderate	High
SWC 81	2470.0	Moderate	Moderate	High
SWC 80	2560.0	Moderate	Moderate	High
SWC 79	2611.0	Low	Poor	High
SWC 78	2628.0	Low	Poor	Moderate
SWC 77	2650.0	Low	Moderate	Low
SWC 76	2670.0	Moderate	Poor	Moderate
SWC 75	2690.0	Moderate	Very Poor	Low
SWC 74	2710.0	Moderate	Poor	Moderate
SWC 73	2730.0	Low	Poor	Low

TABLE 3

BASIC DATA - PILOTFISH-1A

SWC No.	DEPTH (m)	MICROFOSSIL YIELD	MICROFOSSIL PRESERVATION	PLANKTON DIVERSITY
SWC 72	2750.0	Moderate	Very Poor	Low
SWC 71	2770.0	Low	Very Poor	Low
SWC 70	2790.0	High	Moderate	High
SWC 69	2810.0	Low	Poor	Low
SWC 68	2830.0	High	Poor	Low
SWC 67	2847.0	Very Low	Poor	Very Low
SWC 66	2852.0	Low	Very Poor	Moderate
SWC 65	2857.0	Low	Poor	Low
SWC 64	2862.0	High	Moderate	Moderate
SWC 63	2867.0	Very Low	Very Poor	High
SWC 62	2872.0	High	Moderate	Moderate
SWC 61	2877.0	Low	Very Poor	Low
SWC 60	2882.0	Very Low	Very Poor	Low
SWC 59	2887.0	High	Very Poor	Low
SWC 58	2892.0	Moderate	Very Poor	Moderate
SWC 57	2897.0	Moderate	Poor	Low
SWC 56	2899.0	Moderate	Very Poor	Low
SWC 55	2901.0	Low	Poor	Low
SWC 54	2903.0	Moderate	Poor	Low
SWC 53	2905.0	Moderate	Poor	Low
SWC 52	2907.0	Low	Poor	Low
SWC 51	2909.0	Very Low	Very Poor	Low
SWC 50	2911.0	Low	Poor	Low
SWC 48	2915.0	Low	POor	Low
SWC 47	2917.0	Low	Poor	Very Lowcene
SWC 46	2919	NFF		
SWC 45	2921.0	Low	Poor	Low
SWC 44	2923.0	Low	Poor	Low
SWC 41	2929.0	NFF		
SWC 39	2933.0	NFF		

NFF = No foraminifera found.

MICROPALEONTOLOGICAL DATA SHEET

BASIN: GIPPSLAND ELEVATION: KB: 21.0 GL: -205.6

WELL NAME: PILOTFISH-1A TOTAL DEPTH: 3505

AGE		FORAM. ZONULES	HIGHEST DATA					LOWEST DATA				
			Preferred Depth	Rtg	Alternate Depth	Rtg	Two Way Time	Preferred Depth	Rtg	Alternate Depth	Rtg	Two W Time
PLEISTOCENE		A_1										
		A_2										
PLIOCENE		A_3	490.0	3				945.0	3			
		A_4										
MIOCENE	LATE	B_1	960.0	1				1250.0	1			
		B_2	1420.0	1				1910.0	1			
		C	1980.0	1				2330.0	1			
	MIDDLE	D_1										
		D_2	2400.0	1				2400.0	1			
		E_1										
		E_2										
	EARLY	F	2470.0	1				2750.0	1			
		G	2770.0	2	2790.0	1		2915.0	1			
		H_1										
OLIGOCENE	LATE	H_2										
		I_1										
		I_2										
	EARLY	J_1										
		J_2	2921.0	1								
EOCENE		K						2925.0	1			
		Pre-K										

COMMENTS: Cuttings at 955.0 to 960.0 are dated as A4/B1 - Late Miocene to Early Pliocene. The absence of Zone E is probably a result of a sample gap. SWC 47 at 2917.0m is dated as J2/K latest Eocene, Early Oligocene.

CONFIDENCE RATING:

0: SWC or Core - Complete assemblage (very high confidence).
1: SWC or Core - Almost complete assemblage (high confidence).
2: SWC or Core - Close to zonule change but able to interpret (low confidence).
3: Cuttings - Complete assemblage (low confidence).
4: Cuttings - Incomplete assemblage, next to uninterpretable or SWC with depth suspicion (very low confidence).

NOTE: If an entry is given a 3 or 4 confidence rating, an alternative depth with a better confidence rating should be entered, if possible. If a sample cannot be assigned to one particular zone, then no entry should be made, unless a range of zones is given where the highest possible limit will appear in one zone and the lowest possible limit in another.

DATA RECORDED BY: M.J. Hannah. DATE: May 21, 1983.

DATA REVISED BY: _____ DATE: _____

APPENDIX 2

APPENDIX 2

PALYNOLOGICAL ANALYSIS

APPENDIX

PALYNOLOGICAL ANALYSIS, PILOTFISH-1A

GIPPSLAND BASIN

by

M.K. Macphail.

Esso Australia Ltd.
Palaeontology Report 1983/20
0387L

March 1983.

INTERPRETATIVE DATA

INTRODUCTION

SUMMARY TABLE

GEOLOGICAL COMMENTS

DISCUSSION OF AGE ZONES

TABLE 1 : INTERPRETATIVE DATA

PALYNOLOGY DATA SHEET

INTRODUCTION

Forty five (45) sidewall cores were processed and examined for spore-pollen and dinoflagellates. Recovery was usually good and preservation adequate to enable confident age-determinations for most samples (see Table 1). A feature of this well is the unusually good sample control for the *T. longus* Zone section.

Palynological zones and lithological facies divisions from the base of the Lakes Entrance Formation to the total depth of the well are given below. The occurrences of the more stratigraphically important species are tabulated in the accompanying range chart.

SUMMARY

UNIT FACIES	ZONE	DEPTH (m)
Lakes Entrance Formation	*P. tuberculatus*	2914.9
	major unconformity	
Un-named unit	Lower *L. balmei* assemblage (reworked during Late Eocene to Early Oligocene)	2915.0-2925.0
	unconformity	
Gurnard Equivalent	Lower *L. balmei* (*T. evittii* Zone)	2927.0-2935.0
	Lower *L. balmei*	2937.0-2949.0
Latrobe Group Coarse Clastics	Upper *T. longus* (*I. druggii* Zone)	2961.1-2963.0
	Upper *T. longus*	3014.5-3400.1
	Lower *T. longus*	3424.5
	T. lilliei	3455.5-3496.0
		3505 TD

GEOLOGICAL COMMENTS

1. The Pilotfish-1A well contains an apparently continuous sequence of sediments from the Late Cretaceous T. lilliei Zone to the Paleocene Lower L. balmei (T. evittii) Zone. Lower L. balmei Zone sediments of E. crassitabulata and W. homomorpha Zone ages and Upper L. balmei Zone sediments recorded in Hapuku-1 (Partridge 1975) were not recognised and are almost certainly absent.

2. The base of the Lakes Entrance Formation, picked on lithological and log characteristics as occurring at 2915.0m corresponds to the first occurrence of a P. tuberculatus Zone flora. Foraminiferal data demonstrate the horizon is Early Miocene in age (Hannah 1983). The sample at 2917.0m contains Late Eocene-Early Oligocene (Zone J2/K) forams, indicating a major unconformity or very condensed sequence occupies most of the Oligocene as in Hapuku-1.

3. Gamma-ray and resistivity logs for the glauconite-containing interval between 2915.0m and 2949.0m indicate three sedimentary units are present. The uppermost of these, 2915.0 to 2925.0m, contains only trace amounts of glauconite and is identified as possible Turrum Formation. Samples in this interval contain good dinoflagellate assemblages diagnostic of the Lower L. balmei Zone T. evittii marine transgression (this report) and Late Eocene-Early Oligocene forams (Hannah, ibid). Hence the glauconite and palynomorphs have been derived by redeposition, probably through erosion and bioturbation of the underlying massive greensands. The same formation may be represented by a unit of fine grained sandstone and siltstones containing good Upper N. asperus Zone palynofloras in Hapuku-1. This is equivalent in age to the J2/K forams detailed by Hannah (1983) in Pilotfish-1A from 2915.0 to 2925.0m.

4. The middle and lower units, 2927.0 to 2935.0m and 2937.0 to 2949.0m are characterised by large amounts of non-pelletal glauconite but lack forams. Accordingly these greensands are not Gurnard Formation (sensu stricto) and are termed here Gurnard Equivalent. The middle unit contains abundant Palaeoperidinium pyrophorum and is therfore the chronostratigraphic equivalent of the T. evittii Zone marine transgression. The lower unit lacks this dinoflagellate species and accordingly represents a marine sequence chronologically positioned between the T. evittii and I. druggii marine transgressions (see Partridge 1975, 1976).

Glauconitic sediments in Hapuku-1 extends from the Lower L. balmei Zone to the Upper N. asperus Zone. This strengthens the case for considering that erosion of the greensand facies in Pilofish-1A has occurred, removing sediments of Lower L. balmei (E. crassitabulata) to Upper L. balmei Zone ages.

5. The Maastrichtian I. druggii marine transgression is recorded in the uppermost two samples of the T. longus Zone (2961.1 and 2963.0m). This section is separated from the overlying Lower L. balmei Zone greensands by a stratum of barren sandstones, part of which is carbonaceous. It is unclear whether these sediments were deposited in a marine or deltaic environment. No biological indicators of marine deposition are recorded below 2963.0m but the first coal is considerably deeper, at 3028m.

6. The Pilotfish-1A well bottomed in T. lilliei Zone sediments.

BIOSTRATIGRAPHY

The zone boundaries for Tertiary sediments have been established using the criteria of Stover & Evans (1973), Stover & Partridge (1973) and Partridge (1976). The Cretaceous sediments have been zoned according to the criteria proposed in Macphail (1983).

Tricolporites lilliei Zone: 3495.0 to 3455.5m.
As is usually the case with the deeper samples within the Late Cretaceous sediments, samples from this zone contained poorly preserved palynofloras dominated by gymnosperm and Proteacidites pollen. The two samples assigned to this zone contain species which first appear in the T. lilliei Zone, eg. Tricolpites waiparensis, Triporopollenites sectilis and Proteacidites reticuloconcavus (see Partridge 1975) and lack species indicative of the T. longus Zone. The occurrence of Periporopollenites polyoratus at 3496.0m supports the conclusion (Table 1 in Stover & Evans 1973) that, unlike in Bass Basin wells, the species ranges lower than the T. longus Zone in the Gippsland Basin. Tricolporites lilliei is first recorded at 3455.5m.

Lower T. longus Zone: 3424.5m.
One sample is assigned to this zone, based on the occurrence of the nominate species in an assemblage lacking indicator species of the Upper T. longus Zone.

Upper T. longus Zone: 3400.1 to 2961.1m.
The base of the zone is defined by the first appearance of Stereisporites (Tripunctisporis) punctatus at 3400.1m. This sample contains abundant Gambierina as well as the first occurrence of Proteacidites otwayensis. Proteacidites gemmatus is first recorded at 3383.5m and Proteacidities palisadus and Concolpites leptos at 3363.5m. Tetracolporites verrucosus occurs (with Proteacidites wahooensis) at 3263.1m and frequently thereafter within the section. Of interest is the occurrence, apparently in situ, of Beaupreadites elegansiformis/verrucosus at 3294m. This species complex is usually a reliable indicator of Middle M. diversus or younger sediments but may well be one of a small number of taxa with as yet unexplained disjunct age ranges. The sidewall core samples at 3039.0 and 3014.5m contained particularly rich palynofloras, including Grapnelispora evansii and Quadraplanus brossus as well as the typical T. longus indicator species. The latter (3014.5m) contained an undescribed Tricolporites species ca. 80/u in diameter. This species has been previously recorded in T. longus Zone sediments in Wahoo-1 and may prove to be stratigraphically useful.

The uppermost two samples, at 2963.0m and 2961.1m contained well preserved dinoflagellates in addition to diverse spore-pollen assemblages including Tricolpites longus. The occurrence of Isabelidinium cf. druggii and Deflandrea coronata strongly suggest the section is the chrono stratigraphically equivalent of those recording the I. druggii marine transgression (Partridge 1976) in wells closer to shore.

The upper boundary is placed at the highest occurrence of Tricolpites longus in a rich spore-pollen assemblage including distinctive and large named and unnamed Proteacidites spp. (2961.1m). This is overlain by 10m of barren sandstones.

Lower Lygistepollenites balmei Zone: 2949.0 to 2919.0m.
The section is characterised by species-poor spore-pollen assemblages and diverse, well-preserved dinoflagellates. Age-determinations are based entirely on the latter since reworked Upper Cretaceous species including Proteacidites otwayensis and P. reticuloconcavus occur throughout the section. Nevertheless it is noted that the poor diversity of the palynofloras, abundance of small indeterminate Proteacidites spp. and sporadic occurrences of Lygistepollenites balmei, Tetracolporites verrucosus, Australopollis obscurus, Basopollis spp., Stereisporites regium, Proteacidites gemmatus and Tricolpites gillii are entirely

consistent with a Lower L. balmei Zone age. The sole possible (see p. 5) anomaly noted is the occurrence of Beaupreadites verrucosus at 2925.0m. The presence of Parvisaccites catastus at 2921.0m and Tetracolporites multistrixus at 2941.0m demonstrate these samples are no older than Lower L. balmei Zone in age. The (?) algal species Amosopollis cruciformis is unusually infrequent within the zone. Excellent preservation suggests this sporomorph has been locally derived.

The base of the zone is provisionally placed at 2949.0m on the basis of a sparse Gambierina-Proteacidites assemblage in which a single specimen of Proteacidites reticuloconcavus is the sole Upper Cretaceous indicator species. It is noted that the sample immediately below (2951.0m) is lithologically part of the same glauconite unit and both samples contain the dinoflagellate Hystrichosphaeridium tubiferum, absent in the T. longus Zone interval.

The Lower L. balmei Zone indicator dinoflagellates Deflandrea medcalfii and Palaeoperidinium pyrophorum first occur at 2947.0m and 2935.0m respectively. The latter species occurs consistently from 2935.0 to 2919.0m indicating the section is chronostratigraphically equivalent to the T. evittii Zone. The highest occurrence of P. pyrophorum defines the top of the Lower L. balmei Zone in this well. As noted under Geological Comments, foraminiferal data indicate the interval 2917.0 to 2925.0m has been reworked during the Late Eocene to Early Oligocene.

REFERENCES

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PALYNOLOGY DATA SHEET

BASIN: GIPPSLAND ELEVATION: KB: 21.0m GL: -205.6m

WELL NAME: PILOTFISH-1A TOTAL DEPTH: 3505m

AGE	PALYNOLOGICAL ZONES	HIGHEST DATA					LOWEST DATA				
		Preferred Depth	Rtg	Alternate Depth	Rtg	Two Way Time	Preferred Depth	Rtg	Alternate Depth	Rtg	Two Way Time
NEOGENE	*T. pleistocenicus*										
	M. lipsis										
	C. bifurcatus										
	T. bellus										
	P. tuberculatus	2911.1	0				2914.9	0			
PALEOGENE	Upper *N. asperus*										
	Mid *N. asperus*										
	Lower *N. asperus*										
	P. asperopolus										
	Upper *M. diversus*										
	Mid *M. diversus*										
	Lower *M. diversus*										
	Upper *L. balmei*										
	Lower *L. balmei*	2919.0	1				2949.0	2	2935.0	1	
LATE CRETACEOUS	*T. longus*	2961.1	0				3424.5	0			
	T. lilliei	3455.5	2				3496.0	2			
	N. senectus										
	U. *T. pachyexinus*										
	L. *T. pachyexinus*										
	C. triplex										
	A. distocarinatus										
EARLY CRET.	*C. paradoxus*										
	C. striatus										
	F. asymmetricus										
	F. wonthaggiensis										
	C. australiensis										
PRE-CRETACEOUS											

COMMENTS: Ages of Late Cretaceous samples have been determined using criteria proposed by Macphail, M.K. (1983) Palynological Analysis, Pilotfish-1A, Gippsland Basin. Esso Australia Ltd. Palaeontology Report 1983/20.

CONFIDENCE RATING:
- 0: SWC or Core, Excellent Confidence, assemblage with zone species of spores, 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 spores and pollen or microplankton, or both.
- 4: Cuttings, No Confidence, assemblage with non-diagnostic spores, pollen and/or microplankton.

NOTE: If an entry is given a 3 or 4 confidence rating, an alternative depth with a better confidence rating should be entered, if possible. If a sample cannot be assigned to one particular zone, then no entry should be made, unless a range of zones is given where the highest possible limit will appear in one zone and the lowest possible limit in another.

DATA RECORDED BY: M.K. Macphail DATE: 8 March, 1983.

DATA REVISED BY: _____ DATE: _____

TABLE 1.

SUMMARY OF PALYNOLOGICAL ANALYSIS, PILOTFISH-1A, GIPPSLAND BASIN.

INTERPRETATIVE CHART

SAMPLE	DEPTH(m)	YIELD	DIVERSITY SPORE-POLLEN	LITHOLOGY	ZONE	AGE	CONFIDENCE RATING	COMMENTS
102	960.0	V. Low	Low	Lst., silty	Indeterminate		-	
76	2670.0	Good	Low	Slst.	Indeterminate		-	
52	2907.0	V. Low	Low	Slst.	Indeterminate		-	
50	2911.1	Good	Low	Slst.	P. tuberculatus		0	C. annulatus frequent.
48	2914.9	Good	Low	Slst.	P. tuberculatus		0	C. annulatus frequent, F. lacunosus.
47	2917.0	V. Low	Low	Ss.,Tr.glau.	Indeterminate		-	Reworked G. rudata, P. otwayensis.
46	2919.0	Good	Moderate	Ss.,Tr.glau.	Lower L. balmei	Paleocene	1	Palaeoperidinium pyrophormum, P.otwayensis.
45	2921.0	Fair	Low	Ss., glau	Lower L. balmei	Paleocene	1	P.pyrophormum, P.catastus, L.balmei, Allocysta circumtabulata, A.margarita
44	2923.0	Fair	Moderate	Ss., glau	Lower L. balmei	Paleocene	1	P.pyrophormum
43	2925.0	Good	Moderate	Ss., glau	Lower L. balmei	Paleocene	1	P.pyrophormum, S.regium, B.verrucosus
42	2927.0	Good	Low	Glau.	Lower L. balmei	Paleocene	1	P.pyrophormum
41	2929.0	Low	Low	Glau.	Lower L. balmei	Paleocene	1	P.pyrophormum, G.wahooensis
40	2931.0	Fair	High	Glau.	Lower L. balmei	Paleocene	1	L.balmei, T.verrucosus, C.leptos
39	2933.0	V. Low	Low	Glau.	Indeterminate	-	-	Ceratopsis diebelii
38	2935.0	Good	Moderate	Glau.	Lower L. balmei	Paleocene	1	P. pyrophormum
37	2937.0	Fair	Low	Ss., glau.	Lower L. balmei	Paleocene	2	Deflandrea medcalfi, frequent A. cruciformis P. otwayensis.
36	2939.0	V. Low	Low	Ss., glau.	Indeterminate	-	-	A. cruciformis
35	2941.0	Low	Low	Glau.	Lower L. balmei	Paleocene	2	T. multistrixus, L. balmei

TABLE 1.

SUMMARY OF PALYNOLOGICAL ANALYSIS, PILOTFISH-1A, GIPPSLAND BASIN.

INTERPRETATIVE CHART

SAMPLE	DEPTH(m)	YIELD	DIVERSITY SPORE-POLLEN	LITHOLOGY	ZONE	AGE	CONFIDENCE RATING	COMMENTS
34	2943.1	V. Low	Low	Glau.	Indeterminate	-	-	
33	2944.9	Fair	Low	Glau.	Lower *L. balmei*	Paleocene	2	*L. balmei*. *H.* cf. *harrisii*, *S. punctatus*, *D. medcalfii*
32	2947.0	Low	Low	Glau.	Lower *L. balmei*	Paleocene	2	*D. medcalfii*, frequent *H. tubiferum*.
31	2949.0	Low	Moderate	Glau.	Lower *L. balmei*	Paleocene	2	*S. regium*, *P. reticuloconcavus*
30	2951.0	V. Low	V. Low	Ss., glau.	Indeterminate	-	-	*H. tubiferum*
29	2953.0	Nil	-	Ss., carb.	-	-	-	
28	2955.0	Nil	-	Ss.	-	-	-	
27	2957.0	Nil	-	Ss.	-	-	-	
26	2959.1	Nil	-	Ss.	-	-	-	
25	2961.1	Good	V. High	Ss., silty	Upper *T. longus* (*l. druggii*)	Maastrichtian	0	*T. longus*, *T. securus*, *S. punctatus*, Deflandrea coronata
24	2963.0	Low	V. High	Ss., silty	Upper *T. longus*	Maastrichtian	0	*T. longus*, *T. waiparensis*, *P. pallsadus*, *P. wahooensis*, *D. coronata*, *l.*cf. *druggii*.
23	2965.0	Nil	-	Ss.	-	-	-	
22	3002.5	V. Low	V. Low	Slst.	Indeterminate	-	-	
21	3014.5	Good	Moderate	Ss., silty	Upper *T. longus*	Maastrichtian	0	*T. longus*, *Q. brossus*, *T. securus*.
20	3025.0	V. Low	V. Low	Slst.	Indeterminate	-	-	
19	3039.0	Good	High	Slst.	Upper *T. longus*	Maastrichtian	0	*T. longus*, *Q. brossus*, *T. waiparensis*, *T. lilliei*, Grapnelispora evansii.

TABLE 1.

SUMMARY OF PALYNOLOGICAL ANALYSIS, PILOTFISH-1A, GIPPSLAND BASIN.

INTERPRETATIVE CHART

SAMPLE	DEPTH(m)	YIELD	DIVERSITY SPORE-POLLEN	LITHOLOGY	ZONE	AGE	CONFIDENCE RATING	COMMENTS
16	3103.0	V. Low	V. Low	Slst.	Indeterminate	-	-	
15	3124.0	Fair	Moderate	Slst.	Upper T. longus	Maastrichtian	0	P. wahooensis, T. verrucosus
14	3148.5	V. Low	Low	Slst. carb.	Upper T. longus	Maastrichtian	1	T. verrucosus, E. notensis
13	3178.0	Fair	Moderate	Slst.	Upper T. longus	Maastrichtian	1	P. wahooensis, P. reticuloconcavus, P. otwayensis, T. securus, T. verrucosus.
12	3209.5	Low	Low	Slst. glau.	Indeterminate	-	-	Caved dinoflagellates
10	3253.0	Good	Low	Slst.	Upper T. longus	Maastrichtian	1	Abundant G.rudata, T. securus, T. verrucosus.
9	3263.1	Fair	Low	Slst.	Upper T. longus	Maastrichtian	1	Abundant G.rudata, T. verrucosus, P. wahooensis
8	3294.0	V. Low	Low	Slst.	Indeterminate	-	-	P. palyoratus, B. elegansiformis
7	3318.0	V. Low	Low	Slst., carb.	Upper T. longus	Maastrichtian	1	T. longus, T. sectilis
6	3363.5	Low	High	Ss.	Upper T. longus	Maastrichtian	1	P. palisadus, C. leptos, T. walparensis
5	3383.5	V. Low	V. Low	Slst.	Upper T. longus	Maastrichtian	2	P. gemmatus
4	3400.1	Fair	Moderate	Slst., carb.	Upper T. longus	Maastrichtian	0	S. punctatus, abundant G. rudata, P. reticuloconcavus, P.otwayensis, T. sectilis.
3	3424.5	Good	Moderate	Slst., carb.	Lower T. longus	Maastrichtian	0	T. longus, abundant G. rudata, T. walparensis
2	3455.5	V. Low	Moderate	Slst., carb.	T. lilliei	Maastrichtian	2	T. walparensis, P. cliniei, T. lilliei
1	3496.0	Low	Low	Ss.	T. lilliei	Maastrichtian	2	T. walparensis, P. polyoratus.

BASIC DATA

TABLE 2 : Palynological data.

RANGE CHART : Dinoflagellates.

RANGE CHART : Spore-Pollen.

TABLE 2.

BASIC DATA, PILOTFISH-1A, GIPPSLAND BASIN.

SAMPLE	DEPTH(m)	YIELD	DIVERSITY SPORE-POLLEN	LITHOLOGY
102	960.0	V. Low	Low	Lst. silty
76	2670.0	Good	Low	Slst.
52	2907.0	V. Low	Low	Slst.
50	2911.1	Good	Low	Slst.
48	2914.9	Good	Low	Slst.
47	2917.0	V. Low	Low	Ss.,Tr.glau
46	2919.0	Good	Moderate	Ss., tr.glau
45	2921.0	Fair	Low	Ss., glau
44	2923.0	Fair	Moderate	Ss., glau
43	2925.0	Good	Moderate	Ss., glau
42	2927.0	Good	Low	Glau.
41	2929.0	Low	Low	Glau.
40	2931.0	Fair	High	Glau.
39	2933.0	V. Low	Low	Glau.
38	2935.0	Good	Moderate	Glau.
37	2937.0	Fair	Low	Ss., glau.
36	2939.0	V. Low	Low	Ss., glau.
35	2941.0	Low	Low	Glau.
34	2943.1	V. Low	Low	Glau.
33	2944.9	Fair	Low	Glau.
32	2947.0	Low	Low	Glau.
31	2949.0	Low	Moderate	Glau
30	2951.0	V. Low	V. Low	Ss., glau
29	2953.0	Nil	-	Ss., carb.
28	2955.0	Nil	-	Ss.
27	2957.0	Nil	-	Ss.
26	2959.1	Nil	-	Ss.
25	2961.1	Good	V. High	Ss., silty
24	2963.0	Low	V. High	Ss., silty
23	2965.0	Nil	-	Ss.
22	3002.5	V. Low	V. Low	Slst.
21	3014.5	Good	Moderate	Ss., silty
20	3025.0	V. Low	V. Low	Slst.
19	3039.0	Good	High	Slst.
16	3103.0	V. Low	V. Low	Slst.
15	3124.0	Fair	Moderate	Slst.
14	3148.5	V. Low	Low	Slst.
13	3178.0	Fair	Moderate	Slst.
12	3209.5	Low	Low	Slst.
10	3253.0	Good	Low	Slst.
9	3263.1	Fair	Low	Slst.
8	3294.0	V. Low	Low	Slst.
7	3318.0	V. Low	Low	Slst.
6	3363.5	Low	High	Ss.
5	3383.5	V. Low	V. Low	Slst.
4	3400.1	Fair	Moderate	Slst.
3	3424.5	Good	Moderate	Slst.
2	3455.5	V. Low	Moderate	Slst.
1	3496.0	Low	Low	Ss.

PE900461

This is an enclosure indicator page.
The enclosure PE900461 is enclosed within the container PE902610 at this location in this document.

The enclosure PE900461 has the following characteristics:

ITEM_BARCODE	= PE900461
CONTAINER_BARCODE	= PE902610
NAME	= Range Chart : Spores, Pollen
BASIN	= GIPPSLAND
PERMIT	= VIC/L6
TYPE	= WELL
SUBTYPE	= DIAGRAM
DESCRIPTION	= Range Chart for Pilotfish-1A of Spores, Pollen and Dinoflagellates
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W793
WELL_NAME	= PILOTFISH-1A
CONTRACTOR	=
CLIENT_OP_CO	= ESSO AUSTRALIA LIMITED

(Inserted by DNRE - Vic Govt Mines Dept)

APPENDIX 3

APPENDIX 3

QUANTITATIVE LOG ANALYSIS

PILOTFISH #1A

QUANTITATIVE LOG ANALYSIS

Drilling history, mud log data, RFT data, SWC's and log analysis confirm that Pilotfish-1A was drilled to total depth without encountering hydrocarbons in the Latrobe Group.

An analysis was carried out at 0.25m intervals from 2950m to 3510m KB for porosity and salinity information.

LOGS USED

LLD,LLS, MSFL, GR, CNL, BHC and CALIPER.

The LLD, LLS, MSFL, GR and CNL were corrected for borehole and environmental effects. An RT "log" was then derived by correcting the LLD for invasion effects.

The RHOB curve was not used as the LDT malfunctioned during logging.

ANALYSIS AND SHALE PAREMETERS USED

a	0.62
m	2.15
n	2.00
Gamma Ray minimum	35 API units
Gamma Ray maximum	135 API units
Apparent Shale Neutron Porosity	0.23

a, m and n represent the Humble Formula. Gamma Ray maximum, Gamma Ray minimum and Appararent Shale Neutron Porosity were derived from cross plotting techniques.

FORMATION WATER SALINITIES

By assuming 100% water saturation throughout the Latrobe Group an Rw of between 0.035 ohm.m. and 0.050 ohm.m. (90,000 - 50,000 ppm NaCleq) was calculated in most sands. Two sands between 3045m and 3053m KB had calculated water saturations of 64% and 56% using an Rw of 0.045 ohm.m. (70,000 ppm NaCleq). As porosity is good (18% and 15%) these water saturations are considered too high to reflect productive hydrocarbon and too low to reflect residual oil saturation. Furthermore, since there were no shows on the mudlog, these sands are considered 100% water saturated with different salinities, Rw = 0.15 ohm.m. and 0.11 ohm.m., (17,000 - 26,000 ppm NaCleq) to the surrounding sands.

POROSITIES

In lieu of a valid density log, the minimum of sonic porosity and clay corrected neutron porosity was taken as being the best estimate of porosity.

This calculated porosity is presented in the form of the attached depth plot.

L.J. FINLAYSON

February, 1983.

Attach:

01731/31

PILOTFISH #1A

QUANTITATIVE LOG ANALYSIS

SUMMARY OF RESULTS

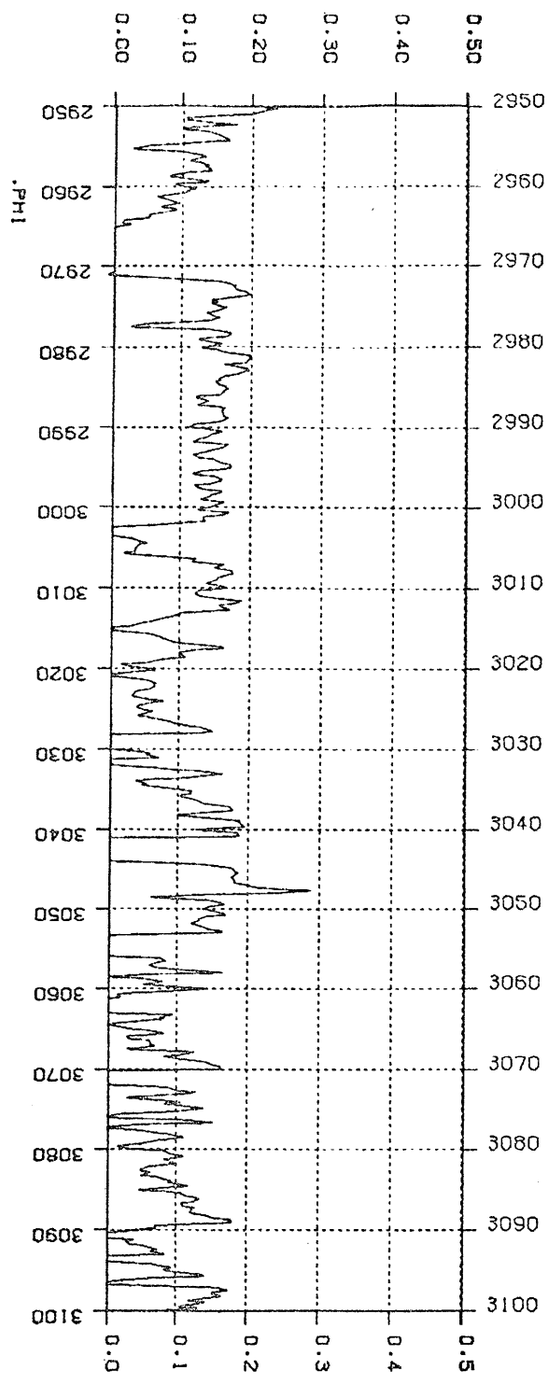
Interval mKB	Gross Thickness (m)	Net Porous Thickness (m)	Net/ Gross	Porosity Average	Porosity Range
2950-3000	50	36.50	0.730	0.150	0.100-0.235
3000-3150	150	48.00	0.320	0.143	0.100-0.286
3150-3300	150	69.50	0.463	0.135	0.100-0.192
3300-3400	100	31.00	0.310	0.128	0.100-0.171
3400-3500	100	20.75	0.208	0.117	0.100-0.150

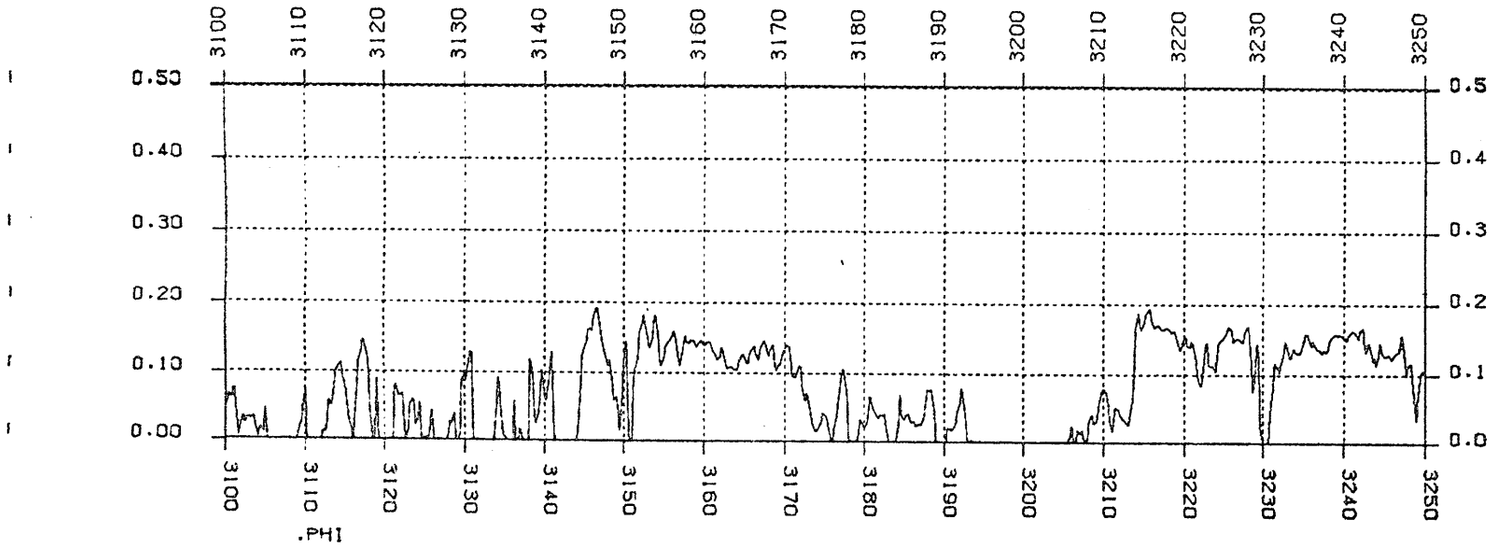
Remarks: Net Porous Thickness, Porosity Range and Porosity Average refer to those intervals where porosity is greater than 10%.

01731/37

PILOTFISH-1A

POROSITY-DEPTH PLOT

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0.50
0.40
0.30
0.20
0.10
0.00
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0.4
0.3
0.2
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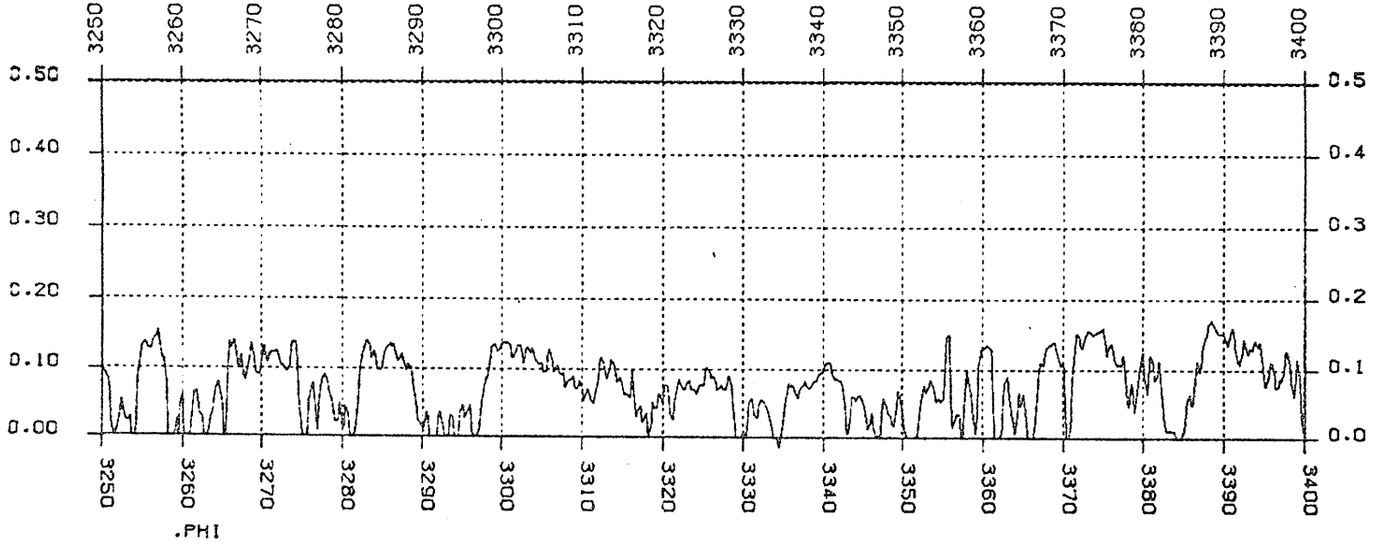
0.0
.PHI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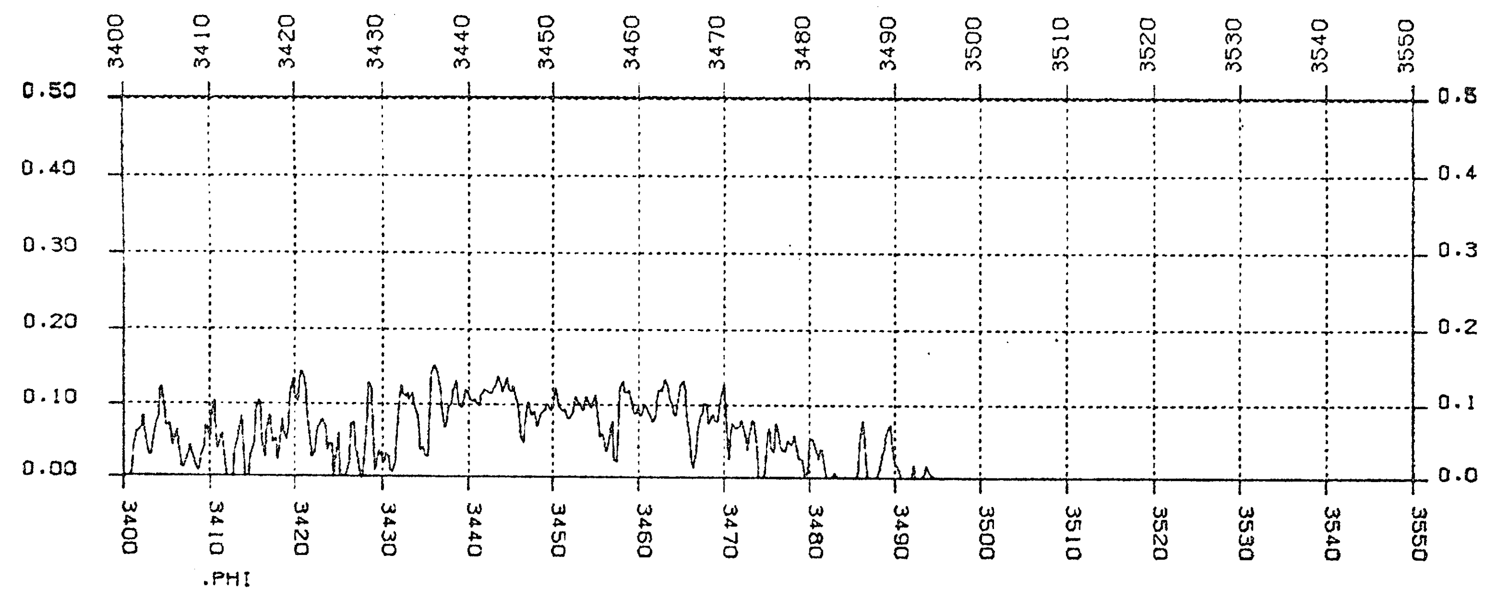
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3490
3500
3510
3520
3530
3540
3550
0.5
0.4
0.3
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0.0
.PHI

APPENDIX 4

APPENDIX 4

WIRELINE TEST REPORT

RFT PRETEST PRESSURES

SERVICE COMPANY: ..SCHLUMBERGER.....RFT RUN. NO: ...One.....

WELL : ...PILOTFISH.-.1A.....
DATE : ...14/1/83.....
OBSERVERS :..L..Finlayson....

SEAT NO.	DEPTH (m)	DEPTH (Ss)(m)	REASON 1 FOR TEST	GAUGE 2	TEMP 3 CORR.	UNITS 4	IHP psi	IHP ppg	FORMATION PRESSURE psi	FORMATION PRESSURE ppg	FHP psi	FHP ppg	TEST RESULT
1	2934.0	2913.0	Pretest	HP	Y	A	4719	9.41	4135	8.30			Valid
2	2973.5	2952.5	Pretest	HP	Y	A	4782	9.41	4187	8.29			Valid
3	2998.0	2977.0	Pretest	HP	Y	A	4819	9.40	4221	8.29			Valid
4	3007.5	2986.5	Pretest	HP	Y	A	4835	9.41	4234	8.29			Valid
5	3157.0	3136.0	Pretest	HP	Y	A	5074	9.40	4457	8.31			Valid
6	3215.0	3194.0	Pretest	HP	Y	A	5162	9.39	4549	8.33			Valid
7	3247.0	3226.0	Pretest	HP	Y	A	5215	9.39	4593	8.33			Valid

1. Pressure Test = PT
   Sample & Pressure Test = SPT

2. Gauges = SCH = Schlumberger Strain Gauge
   = HP = Hewlett Packard

3. Yes = Y
   No = N

4. PSIA = A
   PSIG = G

RFT PRETEST PRESSURES

SERVICE COMPANY: ..SCHLUMBERGER.....RFT RUN. NO: ...One.....

WELL : ..PILOTFISH..1A.....
DATE : ..14/1/83.....
OBSERVERS :..L..Finlayson.....

SEAT NO.	DEPTH (m)	DEPTH (Ss) (m)	REASON 1 FOR TEST	GAUGE 2	TEMP 3 CORR.	UNITS 4	IHP psi	IHP ppg	FORMATION PRESSURE psi	FORMATION PRESSURE ppg	FHP psi	FHP ppg	TEST RESULT
8	3301.0	3280.0	Pretest	HP	Y	A	5300	9.39	4670	8.33			Valid
9	3341.0	3320.0	Pretest	HP	Y	A	5363	9.39	4726	8.33			Valid
10	3438.0	3417.0	Pretest	HP	Y	A	5516	9.39	4865	8.32			Valid
11	3168.0	3147.0	Pretest	HP	Y	A	5084	9.39	4470	8.31			Valid

1. Pressure Test = PT
   Sample & Pressure Test = SPT

2. Gauges = SCH = Schlumberger Strain Gauge
   = HP = Hewlett Packard

3. Yes = Y
   No = N

4. PSIA = A
   PSIG = G

APPENDIX 5

ESSO AUSTRALIA LTD.

C15+ EXTRACT ANALYSES

BASIN - GIPPSLAND
WELL - PILOTFISH 1A

REPORT B - EXTRACTS % OF TOTAL

SAMPLE NO.		DEPTH	FORMATION	*HYDROCARBONS* SAT. %	AROM.%	*- NON-HYDROCARBONS -* NSO. %	ASPH.%	SULPH%	SAT/AR	HC/NHC	COMMENTS
72646	C	2935.00	GIPPSLAND LIMESTONE	8.3	8.1	50.9	32.8	.0	1.0	.2	IMMATURE,PREDOM.MARINE
72646	Y	2365.00	GIPPSLAND LIMESTONE	6.5	10.5	44.1	38.9	.0	.6	.2	IMMATURE,PREDOM.MARINE
72647	H	2695.00	LAKES ENTRANCE	3.3	11.4	43.5	41.8	.0	.3	.2	IMMATURE,PREDOM.MARINE
72648	I	2905.00	LAKES ENTRANCE	4.0	22.8	36.2	37.0	.0	.2	.4	IMMATURE,PREDOM.MARINE
72648	N	2989.00	LATROBE GROUP	3.3	18.7	48.0	30.0	.0	.2	.3	IMMATURE,NON-MARINE
72648	Y	3150.00	LATROBE GROUP	3.0	14.7	8.3	74.1	.0	.2	.2	IMMATURE,NON-MARINE
72649	W	3510.00	LATROBE GROUP	10.8	24.4	20.3	44.5	.0	.4	.5	IMMATURE,NON-MARINE

APPENDIX 5

GEOCHEMICAL REPORT

GEOCHEMICAL REPORT
PILOTFISH-1A WELL, GIPPSLAND BASIN
VICTORIA

by

J.K. Emmett.

Esso Australia Ltd.
Geochemical Report.
0566L

August 1983.

CONTENTS

INTRODUCTION

Various geochemical analyses were performed on samples of cuttings and sidewall cores collected during drilling of the Pilotfish-1A well. Wet canned cuttings composited over 15-metre intervals were collected from 351 m(KB) (ie. below the 20 inch casing shoe) down to 3521 m(KB) ie. Total depth (TD). Light hydrocarbon C_{1-4} headspace cuttings gas analyses were performed on alternate 15-metre intervals from 1615m(KB) down to TD. Between 2020m(KB) and 3510m(KB), succeeding alternate 15-metre intervals were analysed for C_{4-7} gasoline-range hydrocarbons. Samples were then hand-picked for more detailed analyses such as Total Organic Carbon (TOC), Rock-Eval pyrolysis, Kerogen isolation and elemental analysis and C_{15+} liquid and gas chromatography. Vitrinite Reflectance ($\bar{R}_v$ max) measurements were performed by Professor A.C. Cook of Wollongong.

DISCUSSION OF RESULTS

The detailed headspace C_{1-4} hydrocarbon gas analysis data are listed in Table-1, with a more convenient plot of the information given in Figure 1. Total C_{1-4} gas values vary from moderately rich to lean in the Gippsland Limestone and Lakes Entrance Formation sections, the majority of values being less than 2500 ppm. The hydrocarbon source potential of the afore-mentioned units is therefore low. In the Latrobe Group sediments penetrated, Total C_{1-4} headspace gas values are consistently higher but still only moderately rich. The highest Total C_{1-4} value (ie. 19,051 ppm) occurs in the interval 2950-2965 m(KB), part of the section logged as potential reservoir sands. However cuttings descriptions indicate the presence of a large percentage of calcareous siltstone (which may be caved material from the Lakes Entrance Formation above) as well as some sand, sandstone and siltstone. It is therefore problematical as to whether the relatively high cuttings gas value in the 2950-2965 m(KB) interval is indicating hydrocarbon migration from deeper in the section, or is due to the siltstone present in the cuttings, which however, had not previously indicated such a high C_{1-4} gas content. C_{1-4} headspace hydrocarbons were not determined on canned cuttings between 3150-3330 m(KB) as this interval was analysed for C_{4-7} hydrocarbons only.

The detailed C_{4-7} gasoline-range hydrocarbon data sheets are given in Appendix-1 and have also been plotted in Figure 2. The gasoline-range hydrocarbon values measured in the Gippsland Limestone and Lakes Entrance Formation are in general moderately rich, again indicating a fair-poor rating

for present day hydrocarbon source potential. C_{4-7} values in the Latrobe Group sediments are generally rich to very rich particularly where the section is coaly. The percentage of C_{6-7} hydrocarbons in the Latrobe Group sediments is also relatively high, indicating a good rating for hydrocarbon source potential for shales/siltstones in this unit.

Total Organic Carbon (TOC) values (Table 2) are fairly poor for both the Gippsland Limestone (average TOC=0.56%) and the Lakes Entrance Formation (average TOC=0.48%) indicating that these units have little hydrocarbon source potential. The Latrobe Group sediments have comparatively rich TOC values (average TOC=2.20%) which indicates a good hydrocarbon source potential.

Vitrinite reflectance data are presented in Table 3 and $\bar{R}_v$ max has beenplotted against depth in Figure 3. If the top of the organic maturity window for significant hydrocarbon generation is taken to be $\bar{R}_v$ max=0.65%, then the section penetrated in Pilotfish-1A is presently immature, but approaching early mature in the vicinity of T.D. Detailed vitrinite reflectance and exinite fluorescence data are given in Appendix 2 (Report by A.C. Cook).

In Table 4, the elemental analyses of selected kerogen samples isolated from Pilotfish-1A sidewall cores are listed. Approximate H/C, O/C and N/C atomic ratios for these samples are given in Table 5. These ratios are labelled 'approximate' since the oxygen % is calculated by difference and the naturally occurring sulphur %, which may be up to a few percent, was not determined. Figure 4 is a modified Van Krevelen Plot of atomic H/C ratio versus atomic O/C ratio, on which fields representing the major kerogen types have also been delineated. Comparison of Figure 4 with Figure 5, a similar plot which shows the principal products of kerogen evolution, confirms that the organic matter in the Latrobe sediments is basically immature and composed predominantly of Type III (ie. woody herbaceous) kerogen. Atomic H/C ratios indicate that the Latrobe Group sediments penetrated in Pilotfish-1A are more likely to generate gas/condensate rather than oil.

A suite of sidewall core samples with TOC values of 0.5% or more, were analysed by Rock-Eval pyrolysis, and the results are given in Table 6. In Figure 6 Rock-Eval Hydrogen Index (HI) values are plotted against T_{max} values, and in a similar vein to Figures 4 and 5, fields delineating the major kerogen types, and the oil generation window (differentiated by equivalent vitrinite reflectance values) are also shown. Figure 6 confirms that the Latrobe Group sediments in Pilotfish-1A are generally immature gas source.

The C_{15+} liquid chromatography results from selected canned cuttings are listed in Table 7. Total extract values for the samples in the Gippsland Limestone are moderately rich, and the samples from the Lakes Entrance Formation are considered to be poor. Non-hydrocarbon material (ie. N, S, O, -linked compounds and asphaltenes) predominates in the total extracts of both the Gippsland Limestone and Lakes Entrance Formation samples, indicating again that these sediments are presently immature. The corresponding C_{15+} saturate fraction chromatograms for the Gippsland Limestone and Lakes Entrance Formation samples are shown in Figures 7, 8 and Figures 9, 10 respectively. Figures 7-10 are basically similar in appearance, indicating immature, predominantly marine-derived organic matter as shown by the envelope of n-alkanes maximising about n-C_{20} to n-C_{23}, and beneath which there is an obvious unresolved hump of naphthenic compounds. The relatively high concentration of phytane (particularly in the Gippsland Limestone samples) also indicates a marine source.

Total extract values for the Latrobe Group sediments are moderately rich to rich, but again source rock immaturity is indicated by the fairly high amount of non-hydrocarbon material in the extracts. The Latrobe Group shales and siltstones do however have good potential to be a hydrocarbon source, if mature. The corresponding C_{15+} chromatograms for the Latrobe Group samples are shown in Figures 11-13. Figure 11 is very similar in appearance to Figure 9 (from the Lakes Entrance Formation) and probably represents caved material. The cuttings interval involved here is in the vicinity of the top of the Latrobe Group and cuttings descriptions lists calcareous siltstone (similar to that found in the Lakes Entrance Formation) as approximately 50% of the cuttings retrieved. Figures 12 and 13 represent typical immature terrestrially derived organic matter.

CONCLUSIONS

1. The entire section penetrated in Pilotfish-1A is presently immature for significant hydrocarbon generation.

2. The Gippsland Limestone and the Lakes Entrance Formation sediments are rated as having poor hydrocarbon source potential. The Latrobe Group sediments have good hydrocarbon source potential, but appear to be gas-prone.

3. Cuttings gas data indicate that hydrocarbons may have migrated into the Top of the Latrobe Group sediments from deeper in the section, although this is questionable.

C1-C4 HYDROCARBON ANALYSES
REPORT A - HEADSPACE GAS

BASIN - GIPPSLAND
WELL - PILOTFISH 1A

SAMPLE NO.	DEPTH	GAS CONCENTRATION (VOLUME GAS PER MILLION VOLUMES CUTTINGS) METHANE C1	ETHANE C2	PROPANE C3	IBUTANE IC4	NBUTANE C4	WET C2-C4	TOTAL C1-C4	WET/TOTAL PERCENT	GAS COMPOSITION (PERCENT) TOTAL GAS M	E	P	IB	NB	WET GAS E	P	IB	NB
72645 A	1630.00	1758	85	118	65	35	303	2061	14.70	85.	4.	6.	3.	2.	28.	39.	21.	12.
72645 D	1660.00	777	61	41	20	11	133	910	14.62	85.	7.	5.	2.	1.	46.	31.	15.	8.
72645 F	1690.00	2047	24	20	8	4	56	2103	2.66	97.	1.	1.	0.	0.	43.	36.	14.	7.
72645 H	1720.00	4045	54	143	33	22	252	4297	5.86	94.	1.	3.	1.	1.	21.	57.	13.	9.
72645 J	1750.00	581	6	8	4	2	20	601	3.33	97.	1.	1.	1.	0.	30.	40.	20.	10.
72645 L	1780.00	1676	16	20	13	7	56	1734	3.23	97.	1.	1.	1.	0.	29.	36.	23.	13.
72645 N	1810.00	1322	30	20	18	13	81	1403	5.77	94.	2.	1.	1.	1.	37.	25.	22.	16.
72645 P	1840.00	1415	11	35	12	7	65	1480	4.39	96.	1.	2.	1.	0.	17.	54.	18.	11.
72645 R	1870.00	2218	78	204	53	39	374	2592	14.43	86.	3.	8.	2.	2.	21.	55.	14.	10.
72645 T	1900.00	928	9	21	8	5	43	971	4.43	96.	1.	2.	1.	1.	21.	49.	19.	12.
72645 V	1930.00	1771	17	30	14	9	70	1841	3.80	96.	1.	2.	1.	0.	24.	43.	20.	13.
72645 X	1960.00	604	15	44	14	11	84	688	12.21	88.	2.	6.	2.	2.	18.	52.	17.	13.
72645 Z	1990.00	1402	21	27	16	13	77	1479	5.21	95.	1.	2.	1.	1.	27.	35.	21.	17.
72646 B	2020.00	497	10	18	6	5	39	536	7.28	93.	2.	3.	1.	1.	26.	46.	15.	13.
72646 D	2050.00	860	23	31	18	17	89	949	9.38	91.	2.	3.	2.	2.	26.	35.	20.	19.
72646 F	2080.00	2406	35	52	22	22	131	2537	5.16	95.	1.	2.	1.	1.	27.	40.	17.	17.
72646 H	2110.00	1354	53	71	45	48	217	1571	13.81	86.	3.	5.	3.	3.	24.	33.	21.	22.
72646 J	2140.00	1134	12	48	13	10	83	1217	6.82	93.	1.	4.	1.	1.	14.	58.	16.	12.
72646 L	2170.00	371	13	16	11	11	51	422	12.09	88.	3.	4.	3.	3.	25.	31.	22.	22.
72646 N	2200.00	1889	25	91	31	22	169	2058	8.21	92.	1.	4.	2.	1.	15.	54.	18.	13.
72646 P	2230.00	7995	66	268	83	75	492	8487	5.80	94.	1.	3.	1.	1.	13.	54.	17.	15.
72646 R	2260.00	486	23	119	30	22	194	680	28.53	71.	3.	17.	4.	3.	12.	61.	15.	11.
72646 T	2290.00	1375	33	60	25	25	143	1518	9.42	91.	2.	4.	2.	2.	23.	42.	17.	17.
72646 V	2320.00	323	12	33	13	12	70	393	17.81	82.	3.	8.	3.	3.	17.	47.	19.	17.
72646 X	2350.00	226	8	8	7	5	28	254	11.02	89.	3.	3.	3.	2.	29.	29.	25.	18.
72646 Z	2380.00	191	7	24	9	6	46	237	19.41	81.	3.	10.	4.	3.	15.	52.	20.	13.
72647 B	2410.00	973	19	23	21	18	81	1054	7.69	92.	2.	2.	2.	2.	23.	28.	26.	22.
72647 D	2440.00	321	17	97	30	22	166	487	34.09	66.	3.	20.	6.	5.	10.	58.	18.	13.
72647 F	2470.00	265	12	26	15	12	65	330	19.70	80.	4.	8.	5.	4.	18.	40.	23.	18.
72647 H	2500.00	158	8	24	11	5	48	206	23.30	77.	4.	12.	5.	2.	17.	50.	23.	10.
72647 J	2515.00	167	7	8	8	3	26	193	13.47	87.	4.	4.	4.	2.	27.	31.	31.	12.
72647 L	2560.00	790	54	120	64	21	259	1049	24.69	75.	5.	11.	6.	2.	21.	46.	25.	8.
72647 N	2590.00	972	56	91	81	25	253	1225	20.65	79.	5.	7.	7.	2.	22.	36.	32.	10.
72647 P	2620.00	685	54	127	74	28	283	968	29.24	71.	6.	13.	8.	3.	19.	45.	26.	10.
72647 R	2650.00	638	58	93	106	35	292	930	31.40	69.	6.	10.	11.	4.	20.	32.	36.	12.
72647 T	2680.00	485	38	73	96	37	244	729	33.47	67.	5.	10.	13.	5.	16.	30.	39.	15.
72647 V	2710.00	177	13	37	52	26	128	305	41.97	58.	4.	12.	17.	9.	10.	29.	41.	20.
72647 X	2740.00	193	14	37	66	28	145	338	42.90	57.	4.	11.	20.	8.	10.	26.	46.	19.
72647 Z	2770.00	185	19	40	63	30	152	337	45.10	55.	6.	12.	19.	9.	13.	26.	41.	20.
72648 B	2800.00	224	37	177	115	52	381	605	62.98	37.	6.	29.	19.	9.	10.	46.	30.	14.
72648 D	2830.00	214	32	94	191	81	398	612	65.03	35.	5.	15.	31.	13.	8.	24.	48.	20.
72648 F	2860.00	121	13	45	110	61	229	350	65.43	35.	4.	13.	31.	17.	6.	20.	48.	27.
72648 H	2890.00	1653	14	53	147	95	309	1972	15.67	84.	1.	3.	7.	5.	5.	17.	48.	31.
72648 I	2905.00	74	17	61	118	81	277	351	78.92	21.	5.	17.	34.	23.	6.	22.	43.	29.
72648 K	2935.00	1881	23	103	112	72	310	2191	14.15	86.	1.	5.	5.	3.	7.	33.	36.	23.
72648 M	2965.00	18793	33	63	111	51	258	19051	1.35	99.	0.	0.	1.	0.	13.	24.	43.	20.
72648 O	2995.00	3834	15	48	92	38	193	4027	4.79	95.	0.	1.	2.	1.	8.	25.	48.	20.

C1-C4 HYDROCARBON ANALYSES
REPORT A - HEADSPACE GAS

BASIN - GIPPSLAND
WELL - PILOTFISH 1A

SAMPLE NO.	DEPTH	GAS CONCENTRATION (VOLUME GAS PER MILLION VOLUMES CUTTINGS) METHANE C1	ETHANE C2	PROPANE C3	IBUTANE IC4	NBUTANE C4	WET C2-C4	TOTAL C1-C4	WET/TOTAL PERCENT	GAS COMPOSITION (PERCENT) TOTAL GAS M	E	P	IB	NB	WET GAS E	P	IB	NB
72648 Q	3025.00	2349	35	82	46	27	190	2539	7.48	93.	1.	3.	2.	1.	18.	43.	24.	14.
72648 Z	3165.00	655	105	51	18	16	190	845	22.49	78.	12.	6.	2.	2.	55.	27.	9.	8.
72649 A	3180.00	233	59	84	17	15	175	408	42.89	57.	14.	21.	4.	4.	34.	48.	10.	9.
72649 B	3195.00	217	108	64	24	23	219	436	50.23	50.	25.	15.	6.	5.	49.	29.	11.	11.
72649 C	3210.00	77	30	62	22	21	135	212	63.68	36.	14.	29.	10.	10.	22.	46.	16.	16.
72649 D	3225.00	88	54	62	30	26	172	260	66.15	34.	21.	24.	12.	10.	31.	36.	17.	15.
72649 E	3240.00	56	25	61	21	20	127	183	69.40	31.	14.	33.	11.	11.	20.	48.	17.	16.
72649 F	3255.00	2164	132	78	35	38	283	2447	11.57	88.	5.	3.	1.	2.	47.	28.	12.	13.
72649 G	3270.00	5398	171	135	41	48	395	5793	6.82	93.	3.	2.	1.	1.	43.	34.	10.	12.
72649 H	3285.00	179	73	101	29	29	232	411	56.45	44.	18.	25.	7.	7.	31.	44.	13.	13.
72649 I	3300.00	1780	112	177	44	54	387	2167	17.86	82.	5.	8.	2.	2.	29.	46.	11.	14.
72649 J	3315.00	1955	164	133	41	52	390	2345	16.63	83.	7.	6.	2.	2.	42.	34.	11.	13.
72649 L	3345.00	87	37	90	20	23	170	257	66.15	34.	14.	35.	8.	9.	22.	53.	12.	14.
72649 N	3375.00	3360	79	29	15	13	136	3496	3.89	96.	2.	1.	0.	0.	58.	21.	11.	10.
72649 P	3405.00	109	50	106	37	34	227	336	67.56	32.	15.	32.	11.	10.	22.	47.	16.	15.
72649 R	3435.00	2363	93	96	34	41	264	2627	10.05	90.	4.	4.	1.	2.	35.	36.	13.	16.
72649 T	3465.00	76	30	95	24	37	186	262	70.99	29.	11.	36.	9.	14.	16.	51.	13.	20.
72649 V	3495.00	2272	473	343	90	73	979	3251	30.11	70.	15.	11.	3.	2.	48.	35.	9.	7.
72649 X	3521.00	631	245	361	72	79	757	1388	54.54	45.	18.	26.	5.	6.	32.	48.	10.	10.

TOTAL ORGANIC CARBON REPORT

BASIN - GIPPSLAND
WELL - PILOTFISH 1A

SAMPLE NO.	DEPTH	AGE	FORMATION	AN	TOC%	AN	TOC%	AN	TOC%	DESCRIPTION
72646 C	2035.00	MIOCENE-RECENT	GIPPSLAND LIMESTONE	2	.80					
72646 I	2125.00	MIOCENE-RECENT	GIPPSLAND LIMESTONE	2	.71					
72646 K	2155.00	MIOCENE-RECENT	GIPPSLAND LIMESTONE	2	.62					
72646 M	2185.00	MIOCENE-RECENT	GIPPSLAND LIMESTONE	2	.56					
72646 O	2215.00	MIOCENE-RECENT	GIPPSLAND LIMESTONE	2	.60					
72646 Q	2245.00	MIOCENE-RECENT	GIPPSLAND LIMESTONE	2	.54					
72646 S	2275.00	MIOCENE-RECENT	GIPPSLAND LIMESTONE	2	.57					
72646 U	2305.00	MIOCENE-RECENT	GIPPSLAND LIMESTONE	2	.56					
72646 W	2335.00	MIOCENE-RECENT	GIPPSLAND LIMESTONE	2	.54					
72646 Y	2365.00	MIOCENE-RECENT	GIPPSLAND LIMESTONE	2	.55					
72647 A	2395.00	MIOCENE-RECENT	GIPPSLAND LIMESTONE	2	.44					
72647 C	2425.00	MIOCENE-RECENT	GIPPSLAND LIMESTONE	2	.48					
72647 E	2455.00	MIOCENE-RECENT	GIPPSLAND LIMESTONE	2	.53					
72647 G	2485.00	MIOCENE-RECENT	GIPPSLAND LIMESTONE	2	.49					
72647 I	2515.00	MIOCENE-RECENT	GIPPSLAND LIMESTONE	2	.45					

===> DEPTH : 227.00 TO 2535.00 METRES. <=== I ===> AVERAGE TOC : .56 % EXCLUDING VALUES GREATER THAN 10.00 % <===

72647 K	2545.00	MIOCENE-OLIGOCENE	LAKES ENTRANCE	2	.32					
72647 M	2575.00	MIOCENE-OLIGOCENE	LAKES ENTRANCE	2	.29					
72647 O	2605.00	MIOCENE-OLIGOCENE	LAKES ENTRANCE	2	.30					
72647 Q	2635.00	MIOCENE-OLIGOCENE	LAKES ENTRANCE	2	.38					
72647 S	2665.00	MIOCENE-OLIGOCENE	LAKES ENTRANCE	2	.49					
72647 U	2695.00	MIOCENE-OLIGOCENE	LAKES ENTRANCE	2	.40					
72647 W	2725.00	MIOCENE-OLIGOCENE	LAKES ENTRANCE	2	.42					
72647 Y	2755.00	MIOCENE-OLIGOCENE	LAKES ENTRANCE	2	.39					
72648 A	2785.00	MIOCENE-OLIGOCENE	LAKES ENTRANCE	2	.43					
72648 C	2815.00	MIOCENE-OLIGOCENE	LAKES ENTRANCE	2	.46					
72648 E	2845.00	MIOCENE-OLIGOCENE	LAKES ENTRANCE	2	.35					
72648 G	2875.00	MIOCENE-OLIGOCENE	LAKES ENTRANCE	2	.37					
72595 J	2901.00	MIOCENE-OLIGOCENE	LAKES ENTRANCE	1	.89					LT OLIVE GY MUDST,PYRITE
72595 V	2905.00	MIOCENE-OLIGOCENE	LAKES ENTRANCE	1	.67					MED GY MUDST,MICA
72648 I	2905.00	MIOCENE-OLIGOCENE	LAKES ENTRANCE	2	.39					
72595 U	2911.10	MIOCENE-OLIGOCENE	LAKES ENTRANCE	1	.67					MED DK GY MUDST,MICA
72595 T	2914.90	MIOCENE-OLIGOCENE	LAKES ENTRANCE	1	.94					DK GY SILTY MUDSTONE

===> DEPTH : 2535.00 TO 2915.00 METRES. <=== I ===> AVERAGE TOC : .48 % EXCLUDING VALUES GREATER THAN 10.00 % <===

72648 L	2950.00	PALEOCENE-LATE CRET.	LATROBE GROUP	2	.41					
72648 N	2980.00	PALEOCENE-LATE CRET.	LATROBE GROUP	2	.40					
72595 Z	3002.50	PALEOCENE-LATE CRET.	LATROBE GROUP	1	2.22					DK GY SLTST,PYRITE
72648 P	3010.00	PALEOCENE-LATE CRET.	LATROBE GROUP	2	.41					
72595 R	3025.00	PALEOCENE-LATE CRET.	LATROBE GROUP	1	3.08					DK GY SLTST,MICA

TOTAL ORGANIC CARBON REPORT

BASIN - GIPPSLAND
WELL - PILOTFISH 1A

SAMPLE NO.	DEPTH	AGE	FORMATION	AN	TOC%	AN	TOC%	AN	TOC%	DESCRIPTION
72595 Q	3039.00	PALEOCENE-LATE CRET.	LATROBE GROUP	1	9.68					GY-BL MUDST,COALY
72648 P	3045.00	PALEOCENE-LATE CRET.	LATROBE GROUP	2	1.02					
72595 P	3058.10	PALEOCENE-LATE CRET.	LATROBE GROUP	1	.35					LT GY SANDSTONE
72648 S	3060.00	PALEOCENE-LATE CRET.	LATROBE GROUP	2	13.40					
72595 O	3074.90	PALEOCENE-LATE CRET.	LATROBE GROUP	1	3.07					MED DK GY SILTSTONE
72648 T	3075.00	PALEOCENE-LATE CRET.	LATROBE GROUP	2	1.21					
72648 U	3090.00	PALEOCENE-LATE CRET.	LATROBE GROUP	2	1.31					
72595 N	3103.00	PALEOCENE-LATE CRET.	LATROBE GROUP	1	2.27					MED GY SLTST,MICA+PYRITE
72648 V	3105.00	PALEOCENE-LATE CRET.	LATROBE GROUP	2	.24					
72648 W	3120.00	PALEOCENE-LATE CRET.	LATROBE GROUP	2	37.50					
72595 A	3124.00	PALEOCENE-LATE CRET.	LATROBE GROUP	1	3.01					MED LT GY SLTST,PYRITE
72648 X	3135.00	PALEOCENE-LATE CRET.	LATROBE GROUP	2	1.11					
72595 L	3148.50	PALEOCENE-LATE CRET.	LATROBE GROUP	1	5.57					GY-BL SANDY SLTST,PYRITE
72648 Y	3150.00	PALEOCENE-LATE CRET.	LATROBE GROUP	2	1.06					
72595 K	3173.00	PALEOCENE-LATE CRET.	LATROBE GROUP	1	1.39					MED GY SANDST,CALC+FERR
72595 J	3209.50	PALEOCENE-LATE CRET.	LATROBE GROUP	1	5.08					DK GY SLTST,MICA+PYRITE
72595 I	3230.00	PALEOCENE-LATE CRET.	LATROBE GROUP	1	2.10					MED DK GY SANDY SLTST
72595 H	3253.00	PALEOCENE-LATE CRET.	LATROBE GROUP	1	3.43					DK GY SILTY MUDST,MICA
72595 G	3263.10	PALEOCENE-LATE CRET.	LATROBE GROUP	1	2.26					MED GY SLTST,PYRITE+MICA
72595 F	3294.00	PALEOCENE-LATE CRET.	LATROBE GROUP	1	3.71					MED DK GY SILTY MUDSTONE
72595 E	3318.00	PALEOCENE-LATE CRET.	LATROBE GROUP	1	3.68					MED DK GY SILTY MUDSTONE
72649 K	3330.00	PALEOCENE-LATE CRET.	LATROBE GROUP	2	1.27					
72649 M	3360.00	PALEOCENE-LATE CRET.	LATROBE GROUP	2	1.48					
72595 D	3383.50	PALEOCENE-LATE CRET.	LATROBE GROUP	1	2.08					MED DK GY SILTY MUDSTONE
72595 C	3400.10	PALEOCENE-LATE CRET.	LATROBE GROUP	1	2.52					MED DK GY SLTST,PYRITIC
72649 O	3420.00	PALEOCENE-LATE CRET.	LATROBE GROUP	2	.56					
72595 B	3424.50	PALEOCENE-LATE CRET.	LATROBE GROUP	1	2.01					DK GY SLTST,IRON & MICA
72649 S	3450.00	PALEOCENE-LATE CRET.	LATROBE GROUP	2	.54					
72595 A	3455.60	PALEOCENE-LATE CRET.	LATROBE GROUP	1	3.54					DK GY SILTY MUDST,PYRITE
72649 U	3480.00	PALEOCENE-LATE CRET.	LATROBE GROUP	2	2.15					
72649 W	3510.00	PALEOCENE-LATE CRET.	LATROBE GROUP	2	.54					

===> DEPTH : 2915.00 TO 3510.00 METRES. <=== I ===> AVERAGE TOC : 2.20 % EXCLUDING VALUES GREATER THAN 10.00 % <===

VITRINITE REFLECTANCE REPORT

BASIN - GIPPSLAND
WELL - PILOTFISH 1A

SAMPLE NO.	DEPTH	AGE	FORMATION	AN	MAX. RO	FLUOR. COLOUR	NO.CNTS.	MACERAL TYPE
72596 O	2937.00	PALEOCENE-LATE CRET.	LATROBE GROUP	5	.46	YEL-OR	4	I>V>E,DOM SPARSE
72596 I	2949.00	PALEOCENE-LATE CRET.	LATROBE GROUP	5	.43	YEL-OR	1	I>E>V,DOM SPARSE
72595 O	3039.00	PALEOCENE-LATE CRET.	LATROBE GROUP	5	.58	YEL-BRN	20	V>>E>I,DOM ABUNDANT
72595 P	3098.10	PALEOCENE-LATE CRET.	LATROBE GROUP	5	.58	YEL	5	I>V>E,DOM SPARSE
72595 L	3148.50	PALEOCENE-LATE CRET.	LATROBE GROUP	5	.56	YEL-BRN	28	V>I>E,DOM ABUNDANT
72595 F	3316.00	PALEOCENE-LATE CRET.	LATROBE GROUP	5	.58	YEL-DULL OR	30	I>V>E,DOM COMMON
72595 A	3455.60	PALEOCENE-LATE CRET.	LATROBE GROUP	5	.59	GRN-YEL-BRN	30	V>E>/=I,DOM COMMON

KEROGEN ELEMENTAL ANALYSIS REPORT

BASIN - GIPPSLAND
WELL - PILOTFISH 1A

SAMPLE NO.	DEPTH	SAMPLE TYPE	--- ELEMENTAL % (ASH FREE) ---						COMMENTS
			N%	C%	H%	S%	O%	ASH%	
72596 X	2919.00	SWC	1.21	74.68	4.50	.00	19.61	8.07	
72596 W	2921.00	SWC	1.24	68.35	4.91	.00	25.51	23.17	HIGH ASH
72596 U	2925.00	SWC	1.56	70.67	4.50	.00	23.27	3.45	
72596 T	2927.00	SWC	1.90	74.81	4.55	.00	18.74	5.56	
72596 O	2933.00	SWC	3.45	66.92	5.39	.00	24.24	12.69	HIGH ASH
72596 M	2941.00	SWC	1.26	76.49	4.27	.00	17.98	4.56	
72596 C	2961.00	SWC	.95	72.85	5.04	.00	21.16	17.14	HIGH ASH
72595 Z	3002.50	SWC	.92	75.05	4.43	.00	19.60	9.30	
72595 S	3014.50	SWC	1.32	76.60	4.20	.00	17.88	5.21	
72595 R	3025.00	SWC	1.22	74.77	4.73	.00	19.29	4.80	
72595 Q	3039.00	SWC	.95	64.58	5.41	.00	29.07	21.97	HIGH ASH
72595 P	3058.10	SWC	1.36	77.61	4.24	.00	16.78	5.25	
72595 O	3074.90	SWC	1.18	74.50	4.25	.00	20.08	7.50	
72595 N	3103.00	SWC	1.25	72.54	4.31	.00	21.90	13.91	HIGH ASH
72595 M	3124.00	SWC	1.27	77.61	4.30	.00	16.83	4.80	
72595 L	3144.50	SWC	.84	70.19	4.03	.00	24.95	17.82	HIGH ASH
72595 K	3178.00	SWC	1.70	75.26	4.95	.00	18.08	6.54	
72595 J	3209.50	SWC	1.35	79.33	4.44	.00	14.88	8.80	
72595 I	3230.00	SWC	1.25	78.42	4.31	.00	16.02	7.38	
72595 H	3253.00	SWC	1.34	77.08	4.65	.00	16.92	6.88	
72595 G	3263.10	SWC	1.15	74.20	4.44	.00	20.21	16.27	HIGH ASH
72595 F	3294.00	SWC	1.21	77.12	4.14	.00	17.53	7.64	
72595 E	3316.00	SWC	.93	60.25	4.02	.00	34.80	15.43	HIGH ASH
72595 D	3383.50	SWC	1.43	79.43	4.82	.00	14.33	2.48	
72595 C	3400.10	SWC	1.30	77.85	4.31	.00	16.54	7.34	
72595 B	3424.50	SWC	1.56	73.03	4.57	.00	20.84	11.64	HIGH ASH
72595 A	3455.60	SWC	1.52	78.73	5.16	.00	14.59	3.77	
72595 X	3496.00	SWC	1.51	74.02	4.96	.00	19.52	13.67	HIGH ASH

KEROGEN ELEMENTAL ANALYSIS REPORT

BASIN - GIPPSLAND
WELL - PILOTFISH 1A

SAMPLE NO.	DEPTH	SAMPLE TYPE	AGE	FORMATION	ATOMIC RATIOS H/C	O/C	N/C	COMMENTS
72596 X	2919.00	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.72	.20	.01	
72596 W	2921.00	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.86	.28	.02	HIGH ASH
72596 U	2925.00	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.76	.25	.02	
72596 T	2927.00	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.73	.19	.02	
72596 O	2933.00	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.97	.27	.04	HIGH ASH
72596 N	2941.00	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.67	.18	.01	
72596 C	2961.00	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.83	.22	.01	HIGH ASH
72595 Z	3002.50	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.71	.20	.01	
72595 S	3014.50	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.66	.18	.01	
72595 P	3025.00	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.76	.19	.01	
72595 N	3039.00	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	1.00	.34	.01	HIGH ASH
72595 B	3058.10	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.66	.16	.02	
72595 D	3074.90	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.68	.20	.01	
72595 H	3105.00	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.71	.23	.01	HIGH ASH
72595 M	3124.00	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.66	.16	.01	
72595 L	3148.50	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.69	.27	.01	HIGH ASH
72595 K	3178.00	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.79	.18	.02	
72595 J	3209.50	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.67	.14	.01	
72595 I	3230.00	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.66	.15	.01	
72595 H	3253.00	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.72	.16	.01	
72595 G	3263.10	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.72	.20	.01	HIGH ASH
72595 F	3294.00	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.64	.17	.01	
72595 E	3318.00	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.80	.43	.01	HIGH ASH
72595 D	3383.50	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.73	.14	.02	
72595 C	3400.10	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.66	.16	.01	
72595 B	3424.50	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.75	.21	.02	HIGH ASH
72595 A	3455.60	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.79	.14	.02	
72595 X	3496.00	SWC	PALEOCENE-LATE CRET.	LATROBE GROUP	.80	.20	.02	HIGH ASH

ESSO AUSTRALIA LTD.

ROCK EVAL ANALYSES

BASIN - GIPPSLAND
WELL - PILOTFISH 1A

REPORT A - SULPHUR & PYROLYZABLE CARBON

SAMPLE NO.	DEPTH	SAMPLE TYPE	AGE	TMAX	S1	S2	S3	PI	S2/S3	PC	COMMENTS
72595 W	2901.0	SWC	MIOCENE-OLIGOCENE	424.	.30	.83	.19	.27	4.37	.09	
72595 V	2905.0	SWC	MIOCENE-OLIGOCENE	424.	.30	.41	.11	.42	3.73	.06	
72595 U	2911.1	SWC	MIOCENE-OLIGOCENE	425.	.31	.47	.01	.40	47.00	.06	
72595 T	2914.9	SWC	MIOCENE-OLIGOCENE	424.	.19	.49	.01	.28	49.00	.06	
72595 S	3014.5	SWC	PALEOCENE-LATE CRET.	422.	.26	.71	.10	.27	7.10	.08	
72595 R	3025.0	SWC	PALEOCENE-LATE CRET.	433.	.48	3.17	.17	.13	18.65	.30	
72595 Q	3039.0	SWC	PALEOCENE-LATE CRET.	426.	2.25	30.25	1.21	.07	25.00	2.70	
72595 O	3074.9	SWC	PALEOCENE-LATE CRET.	430.	.36	.85	.36	.30	2.36	.10	
72595 N	3103.0	SWC	PALEOCENE-LATE CRET.	430.	.46	.97	.25	.32	3.88	.12	
72595 M	3104.0	SWC	PALEOCENE-LATE CRET.	425.	.24	.34	.12	.41	2.83	.05	
72595 L	3146.5	SWC	PALEOCENE-LATE CRET.	431.	.95	6.70	.29	.12	23.10	.63	
72595 K	3178.0	SWC	PALEOCENE-LATE CRET.	433.	.09	.10	.18	.47	.56	.02	
72595 J	3209.5	SWC	PALEOCENE-LATE CRET.	430.	.27	.93	.02	.22	46.50	.10	
72595 I	3230.0	SWC	PALEOCENE-LATE CRET.	429.	.27	.65	.07	.29	9.29	.08	
72595 H	3253.0	SWC	PALEOCENE-LATE CRET.	431.	.34	2.16	.10	.14	21.60	.21	
72595 G	3263.1	SWC	PALEOCENE-LATE CRET.	429.	.51	.99	.11	.34	9.00	.12	
72595 F	3294.0	SWC	PALEOCENE-LATE CRET.	430.	.28	1.22	.11	.19	11.09	.12	
72595 E	3318.0	SWC	PALEOCENE-LATE CRET.	430.	.29	1.03	.03	.22	34.33	.11	
72595 D	3363.5	SWC	PALEOCENE-LATE CRET.	436.	.39	1.38	.03	.22	46.00	.15	
72595 C	3400.1	SWC	PALEOCENE-LATE CRET.	424.	.26	.97	.05	.21	19.40	.10	
72595 B	3424.5	SWC	PALEOCENE-LATE CRET.	425.	.28	1.05	.09	.21	11.67	.11	
72595 A	3495.6	SWC	PALEOCENE-LATE CRET.	429.	.26	2.23	.19	.10	11.74	.21	

PI=PRODUCTIVITY INDEX PC=PYROLYZABLE CARBON TC=TOTAL CARBON HI=HYDROGEN INDEX OI=OXYGEN INDEX

ROCK EVAL ANALYSES

BASIN - GIPPSLAND
WELL - PILOTFISH 1A

REPORT B - TOTAL CARBON,H/O INDICES

SAMPLE NO.	DEPTH	SAMPLE TYPE	FORMATION	TC	HI	OI	HI/OI	COMMENTS
72595 W	2901.0	SWC	LAKES ENTRANCE	.89	93.	21.	4.43	
72595 V	2905.0	SWC	LAKES ENTRANCE	.67	61.	16.	3.81	
72595 U	2911.1	SWC	LAKES ENTRANCE	.67	70.	1.	70.00	
72595 T	2914.9	SWC	LAKES ENTRANCE	.94	52.	1.	52.00	
72595 S	3014.5	SWC	LATROBE GROUP	2.22	31.	4.	7.75	
72595 R	3025.0	SWC	LATROBE GROUP	3.08	102.	5.	20.40	
72595 Q	3039.0	SWC	LATROBE GROUP	9.68	312.	12.	26.00	
72595 O	3074.9	SWC	LATROBE GROUP	3.07	27.	11.	2.45	
72595 N	3103.0	SWC	LATROBE GROUP	2.27	42.	11.	3.82	
72595 M	3124.0	SWC	LATROBE GROUP	3.01	11.	3.	3.67	
72595 L	3148.5	SWC	LATROBE GROUP	5.57	120.	5.	24.00	
72595 K	3178.0	SWC	LATROBE GROUP	1.39	7.	12.	.58	
72595 J	3209.5	SWC	LATROBE GROUP	5.08	18.	1.	18.00	
72595 I	3230.0	SWC	LATROBE GROUP	2.10	31.	3.	10.33	
72595 H	3253.0	SWC	LATROBE GROUP	3.43	62.	2.	31.00	
72595 G	3263.1	SWC	LATROBE GROUP	2.26	43.	4.	10.75	
72595 F	3294.0	SWC	LATROBE GROUP	3.71	32.	2.	16.00	
72595 E	3318.0	SWC	LATROBE GROUP	3.68	27.	1.	27.00	
72595 D	3383.5	SWC	LATROBE GROUP	2.08	66.	1.	66.00	
72595 C	3400.1	SWC	LATROBE GROUP	2.52	38.	1.	38.00	
72595 B	3424.5	SWC	LATROBE GROUP	2.01	52.	4.	13.00	
72595 A	3455.6	SWC	LATROBE GROUP	3.54	62.	5.	12.40	

PI=PRODUCTIVITY INDEX PC=PYROLYZABLE CARBON TC=TOTAL CARBON HI=HYDROGEN INDEX OI=OXYGEN INDEX

C15+ EXTRACT ANALYSES

BASIN - GIPPSLAND
WELL - PILOTFISH 1A

REPORT A - EXTRACT DATA (PPM)

SAMPLE NO.	DEPTH	TYPE	AN	AGE	TOTAL EXTRACT	HYDROCARBONS SATS.	HYDROCARBONS AROMS.	HYDROCARBONS TOTAL H/CARBS	NON-HYDROCARBONS ASPH.	NON-HYDROCARBONS ELUTED NSO	NON-HYDROCARBONS NON-ELT NSO	NON-HYDROCARBONS TOTAL NSO	NON-HYDROCARBONS SULPHUR	NON-HYDROCARBONS TOTAL NON/HCS
72646 C	2035.00	CTS	2	MIOCENE-RECENT	458.	38.	37.	75.	150.	163.	70.	233.	0.	383.
72646 Y	2365.00	CTS	2	MIOCENE-RECENT	247.	16.	26.	42.	96.	109.	0.	109.	0.	205.
72647 U	2695.00	CTS	2	MIOCENE-OLIGOCENE	184.	6.	21.	27.	77.	80.	0.	80.	0.	157.
72648 I	2905.00	CTS	2	MIOCENE-OLIGOCENE	276.	11.	63.	74.	102.	100.	0.	100.	0.	202.
72648 N	2980.00	CTS	2	PALEOCENE-LATE CRET.	300.	10.	56.	66.	90.	92.	52.	144.	0.	234.
72648 Y	3150.00	CTS	2	PALEOCENE-LATE CRET.	3406.	102.	501.	603.	2524.	191.	92.	283.	0.	2807.
72649 W	3510.00	CTS	2	PALEOCENE-LATE CRET.	843.	91.	206.	297.	375.	137.	34.	171.	0.	546.

PE601316

This is an enclosure indicator page.
The enclosure PE601316 is enclosed within the container PE902610 at this location in this document.

The enclosure PE601316 has the following characteristics:

ITEM_BARCODE	= PE601316
CONTAINER_BARCODE	= PE902610
NAME	= C1-4 Cuttings Gas Log
BASIN	= GIPPSLAND
PERMIT	=
TYPE	= WELL
SUBTYPE	= WELL_LOG
DESCRIPTION	= C1-4 Cuttings Gas Log
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	= 5/12/83
W_NO	= W793
WELL_NAME	= Pilotfish-1A
CONTRACTOR	= ESSO
CLIENT_OP_CO	= ESSO

(Inserted by DNRE - Vic Govt Mines Dept)

PE601313

This is an enclosure indicator page.
The enclosure PE601313 is enclosed within the container PE902610 at this location in this document.

The enclosure PE601313 has the following characteristics:

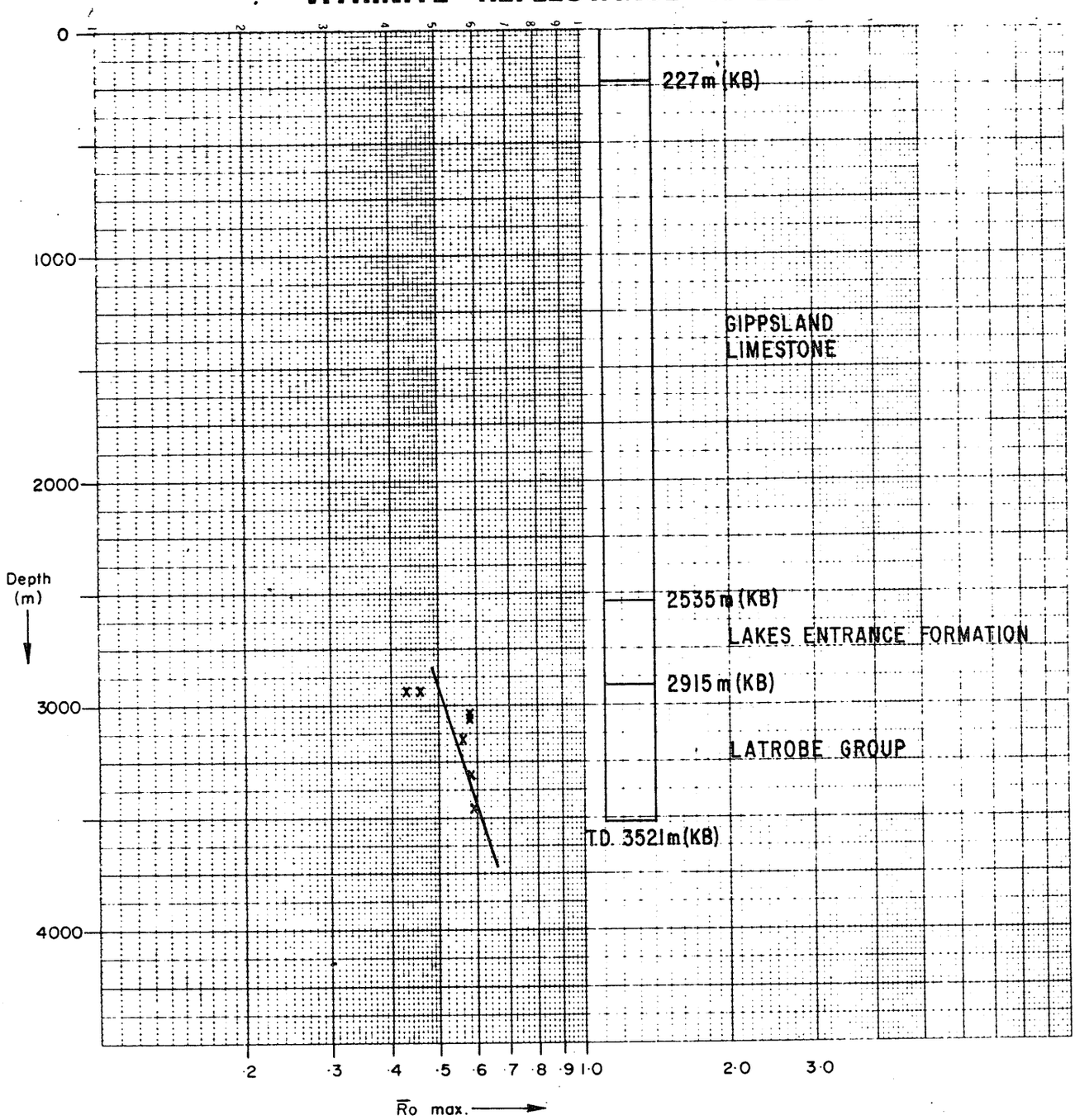
ITEM_BARCODE	= PE601313
CONTAINER_BARCODE	= PE902610
NAME	= Geochemical Log
BASIN	= GIPPSLAND
PERMIT	=
TYPE	= WELL
SUBTYPE	= WELL_LOG
DESCRIPTION	= Geochemical Log
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	= 5/12/83
W_NO	= W793
WELL_NAME	= Pilotfish-1A
CONTRACTOR	= ESSO
CLIENT_OP_CO	= ESSO

(Inserted by DNRE - Vic Govt Mines Dept)

PILOTFISH – 1A

FIG. 3

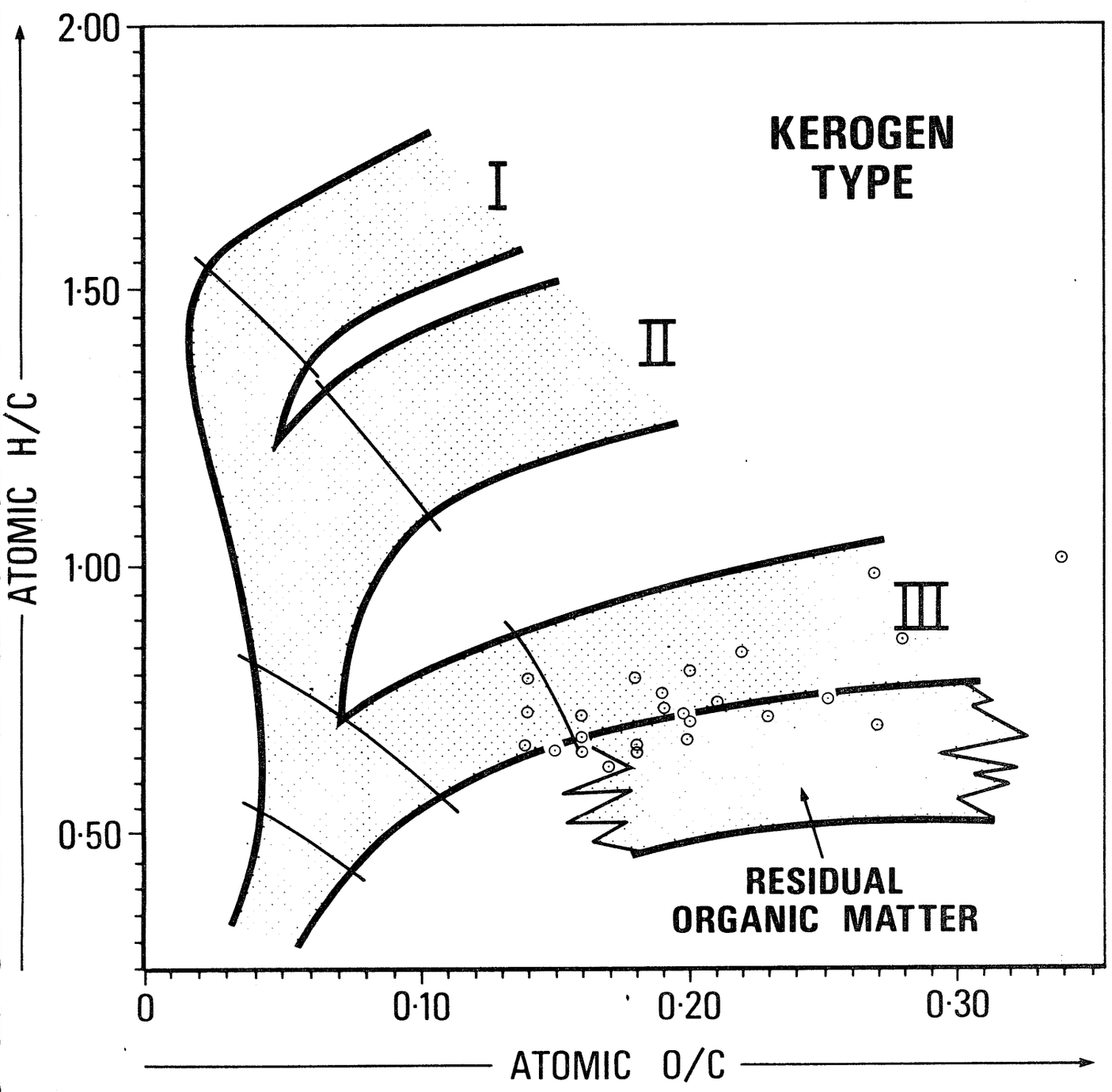
VITRINITE REFLECTANCE vs DEPTH



Dwg. 2131/OP/14

FIG. 4

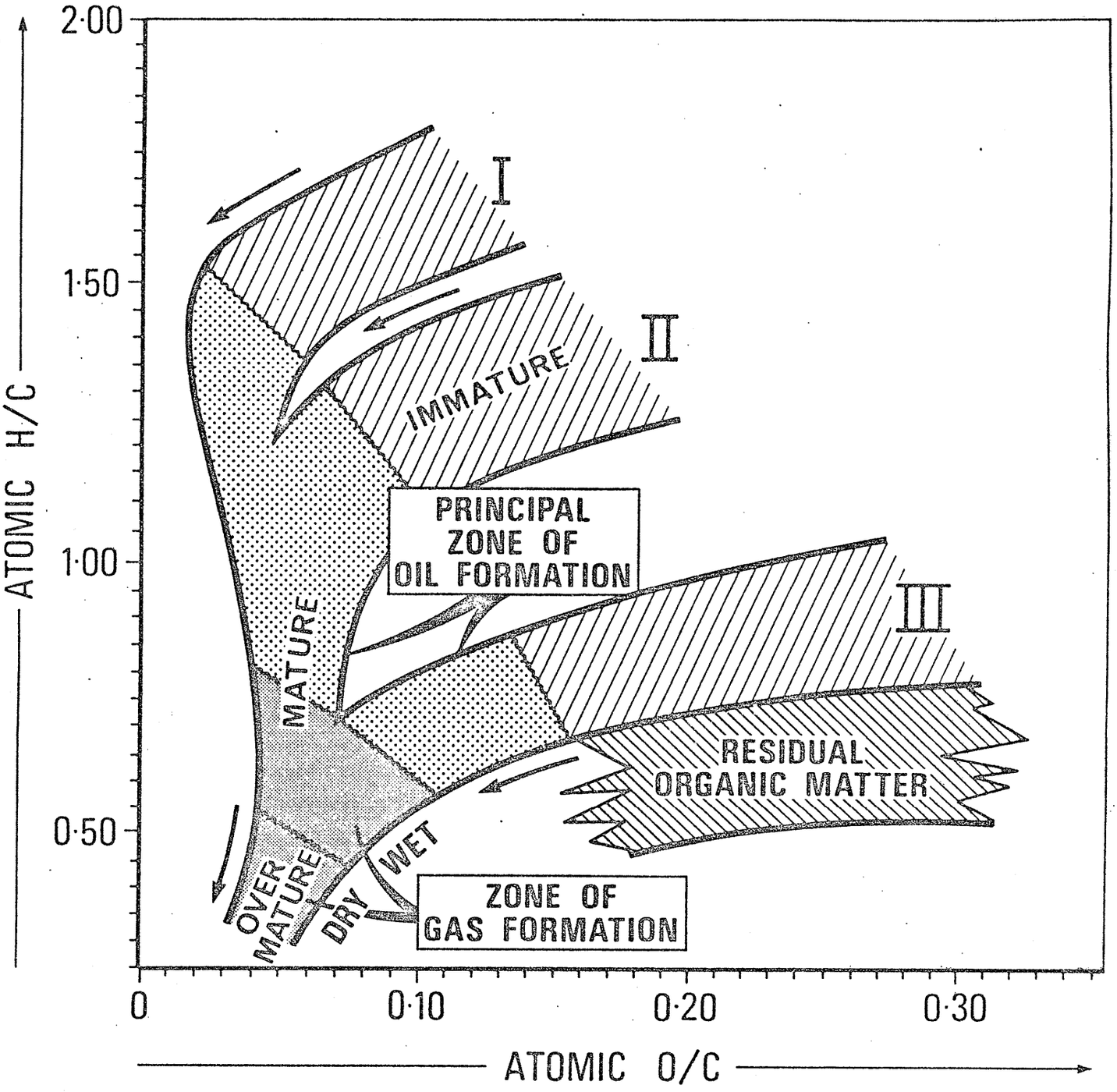
PILOTFISH – 1A



⊙ LATROBE GROUP

Dwg. 2131/OP/12

Figure 5.



PRINCIPAL PRODUCTS OF KEROGEN EVOLUTION

CO_2, H_2O

OIL

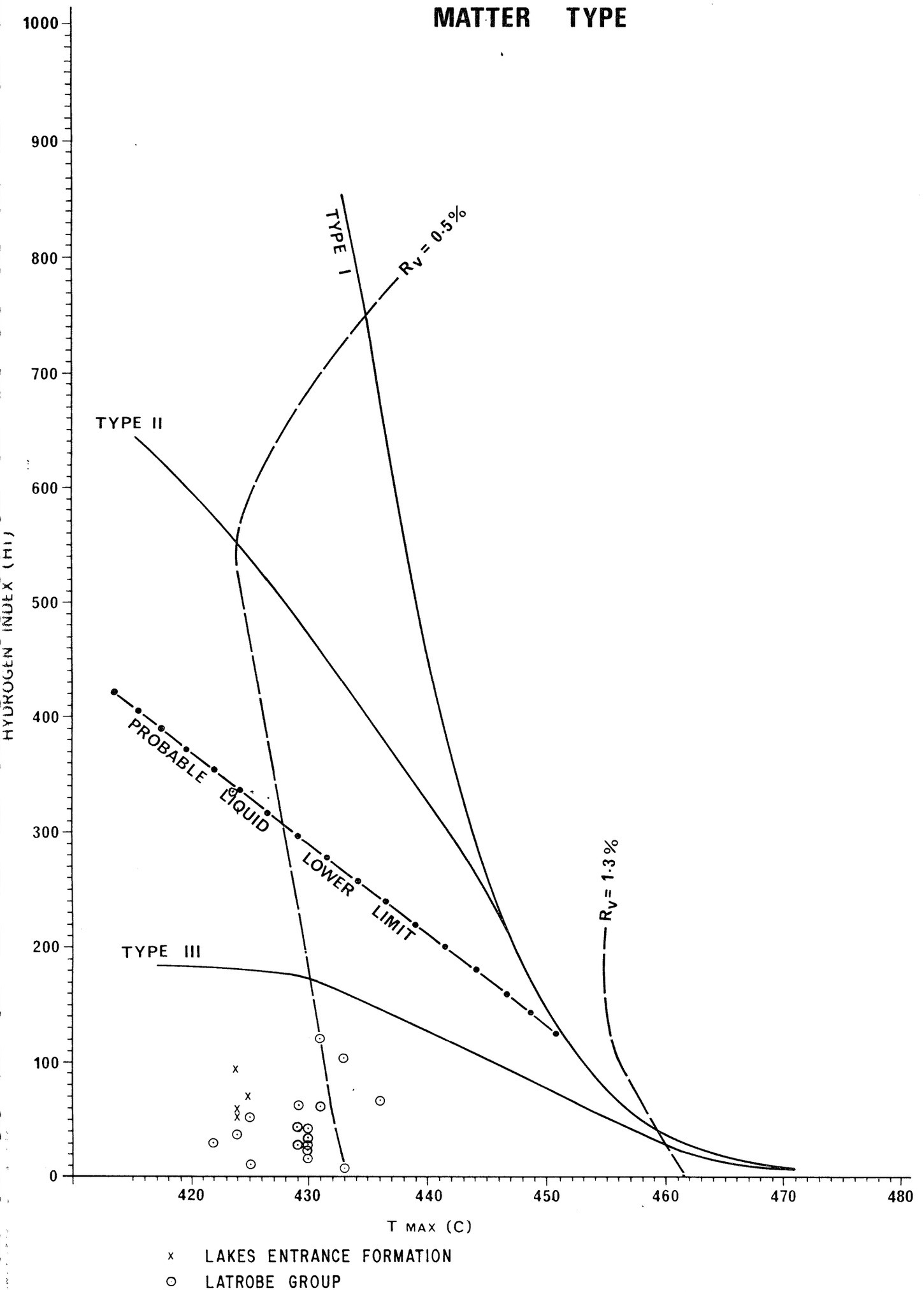
GAS

RESIDUAL ORGANIC MATTER
(NO POTENTIAL FOR OIL OR GAS)

1380/BS/75

FIG. 6

PILOTFISH – 1A
ROCKEVAL MATURATION AND ORGANIC MATTER TYPE



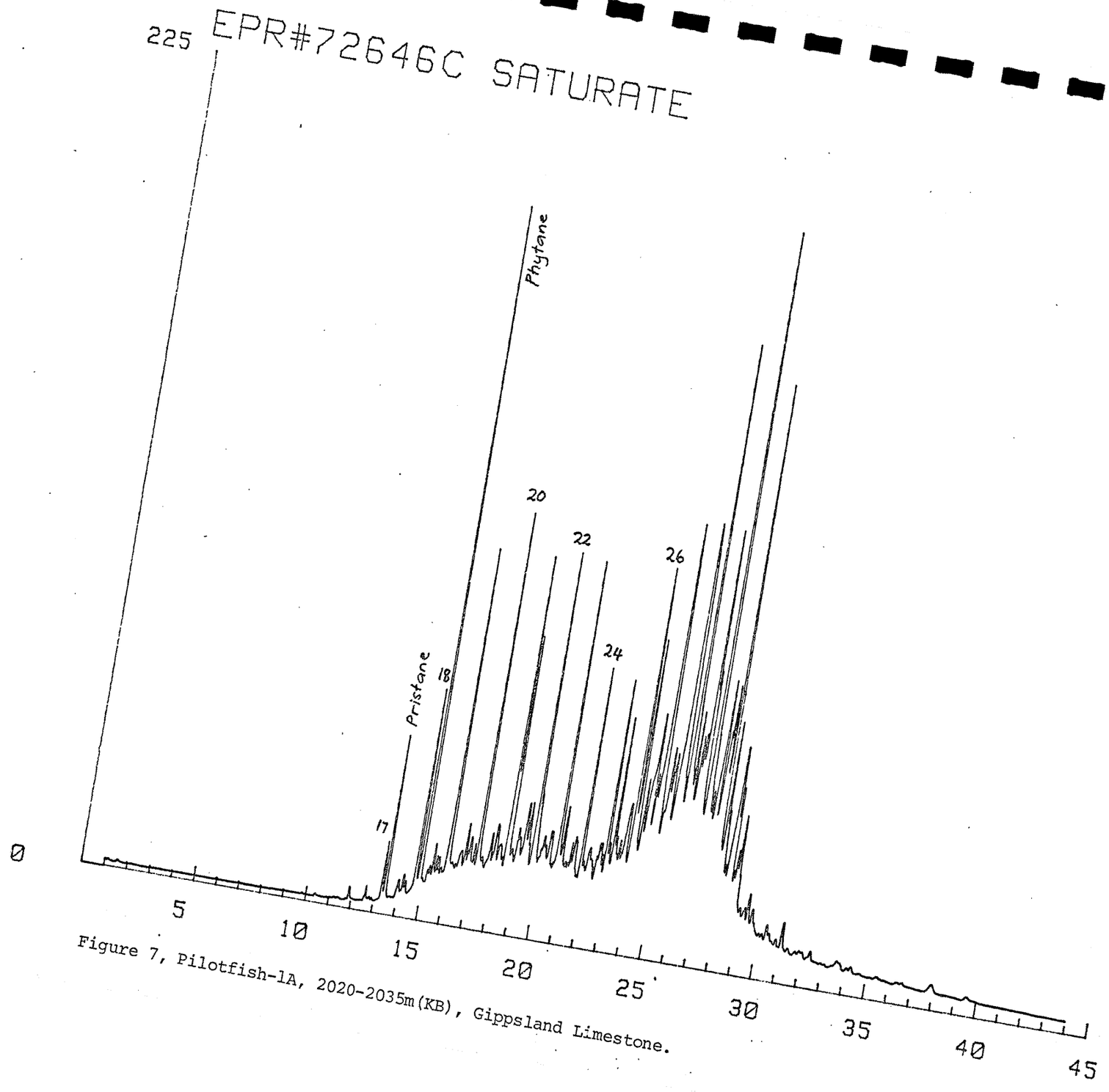


Figure 7, Pilotfish-1A, 2020-2035m(KB), Gippsland Limestone.

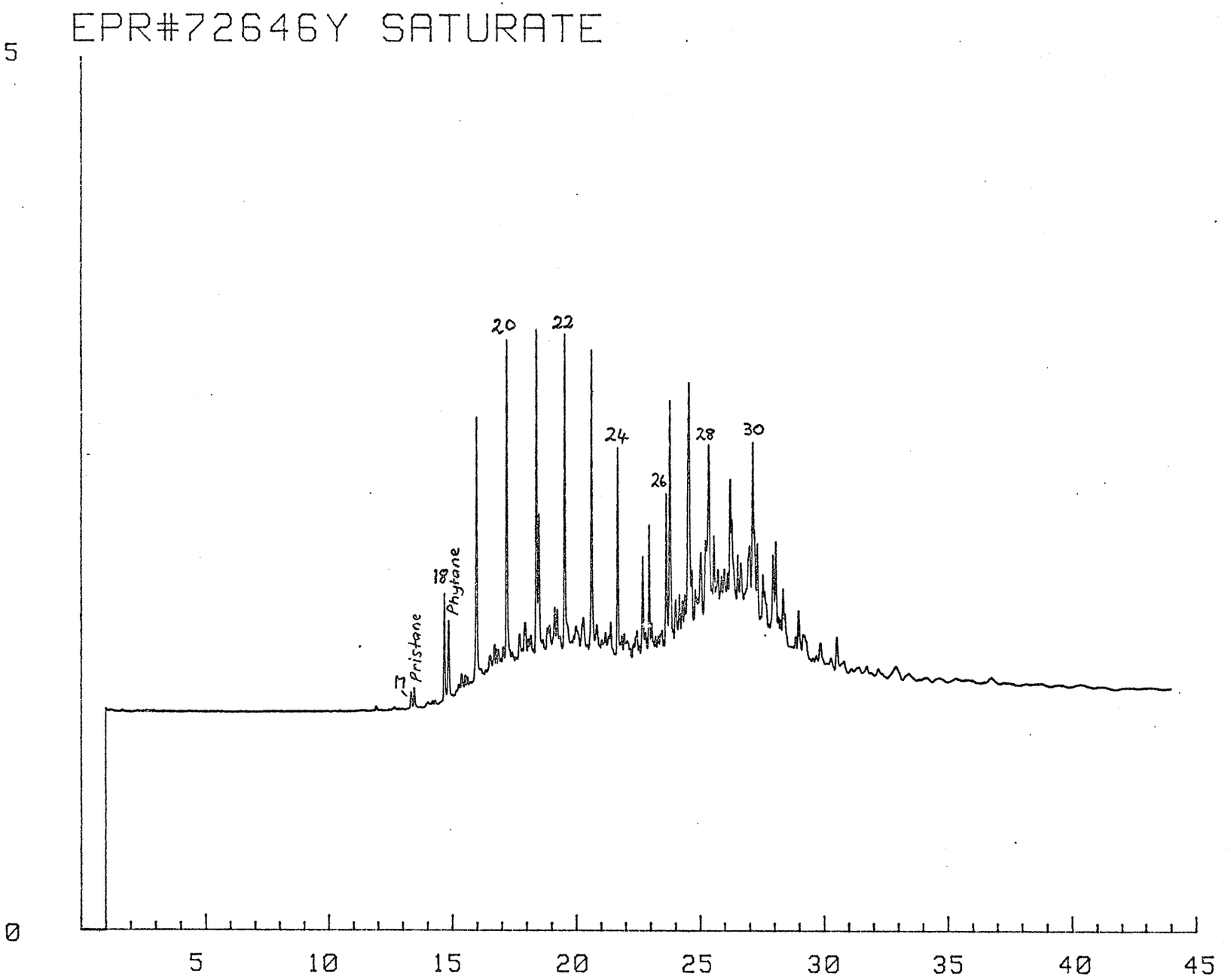


Figure 8, Pilotfish-1A, 2350-2365m(KB), Gippsland Limestone.

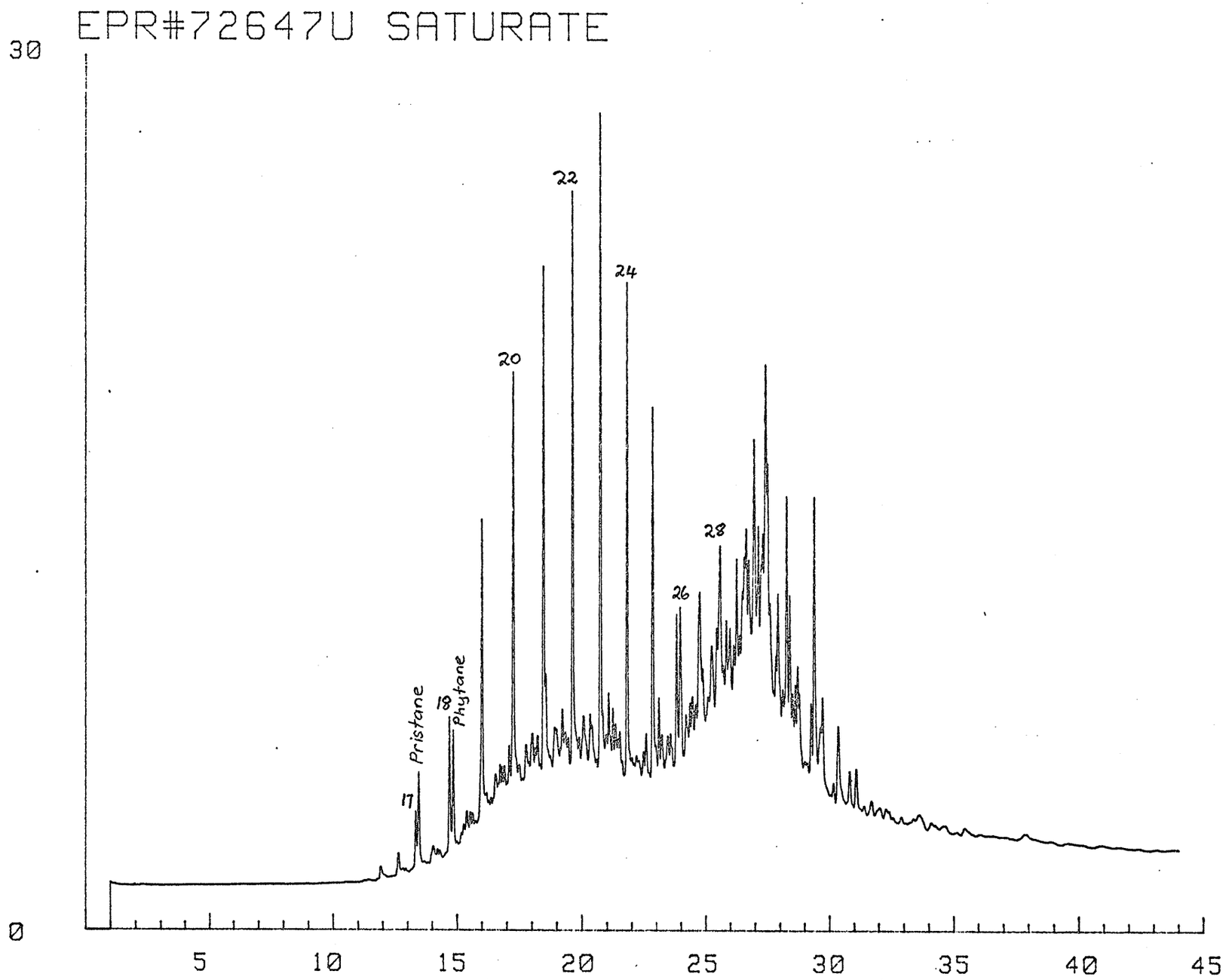


Figure 9, Pilotfish-1A, 2680-2695m(KB), Lakes Entrance Formation.

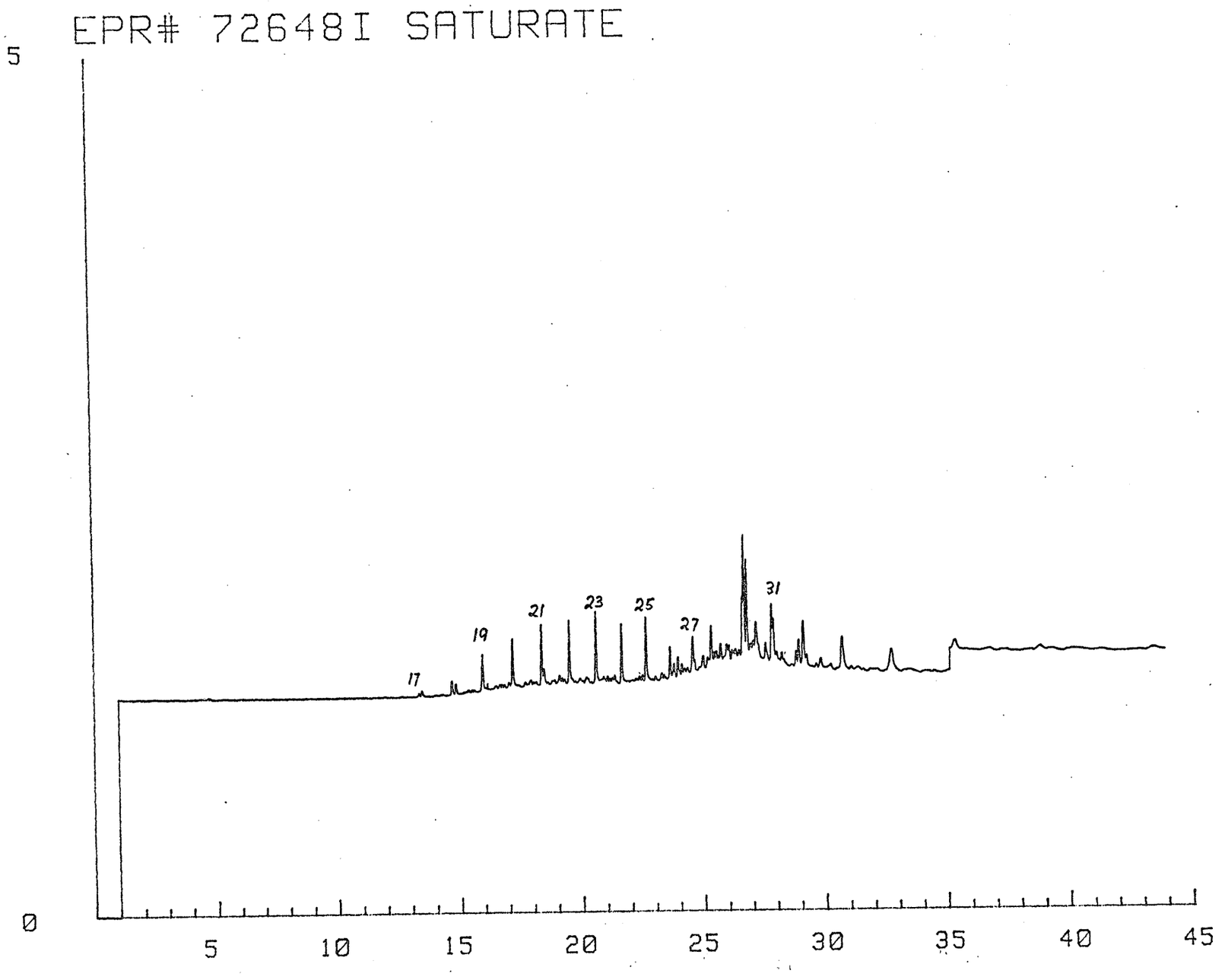


Figure 10, Pilotfish-1A, 2890-2905m(KB), Lakes Entrance Formation.

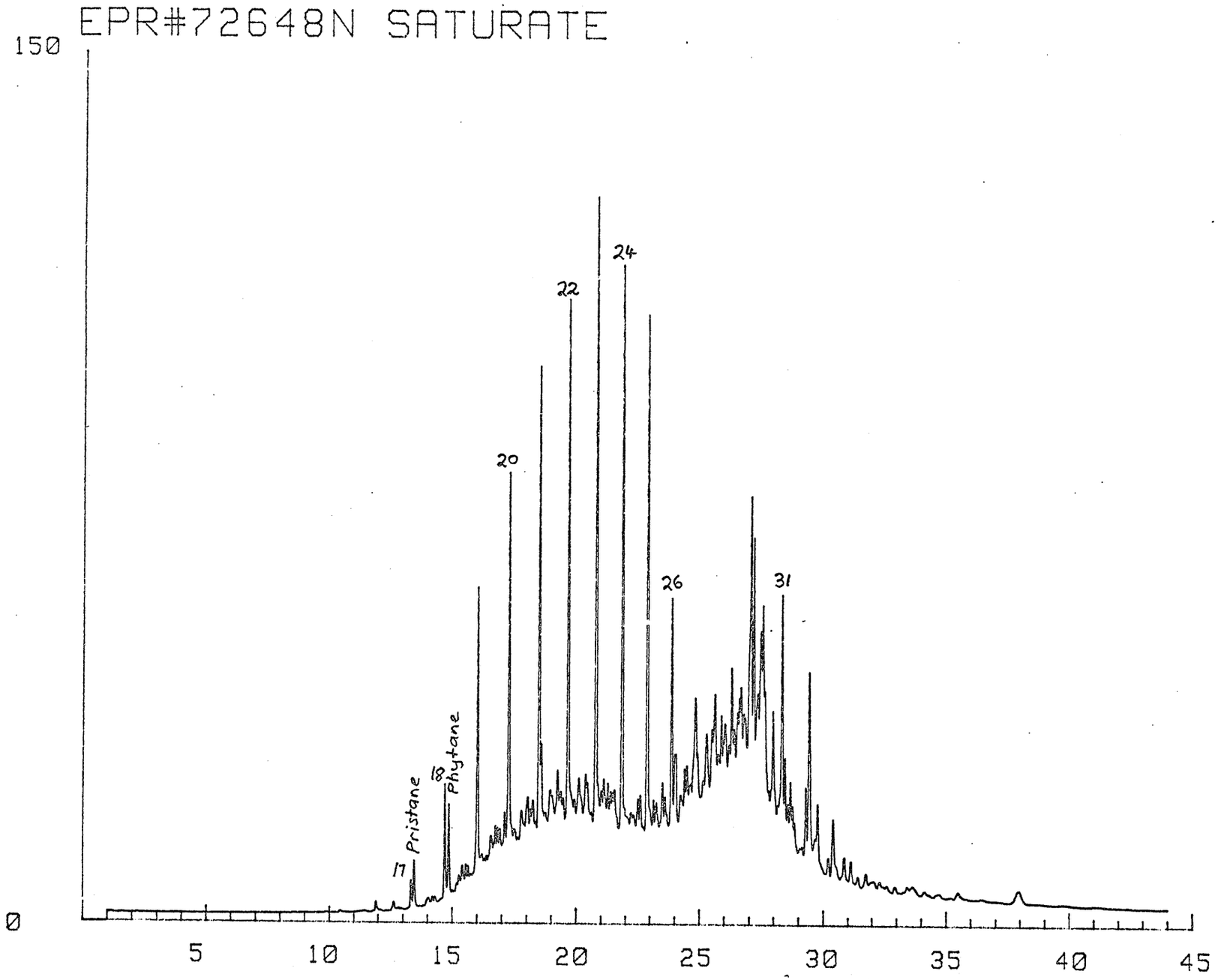


Figure 11, Pilotfish-1A, 2965-2980m(KB), Latrobe Group.

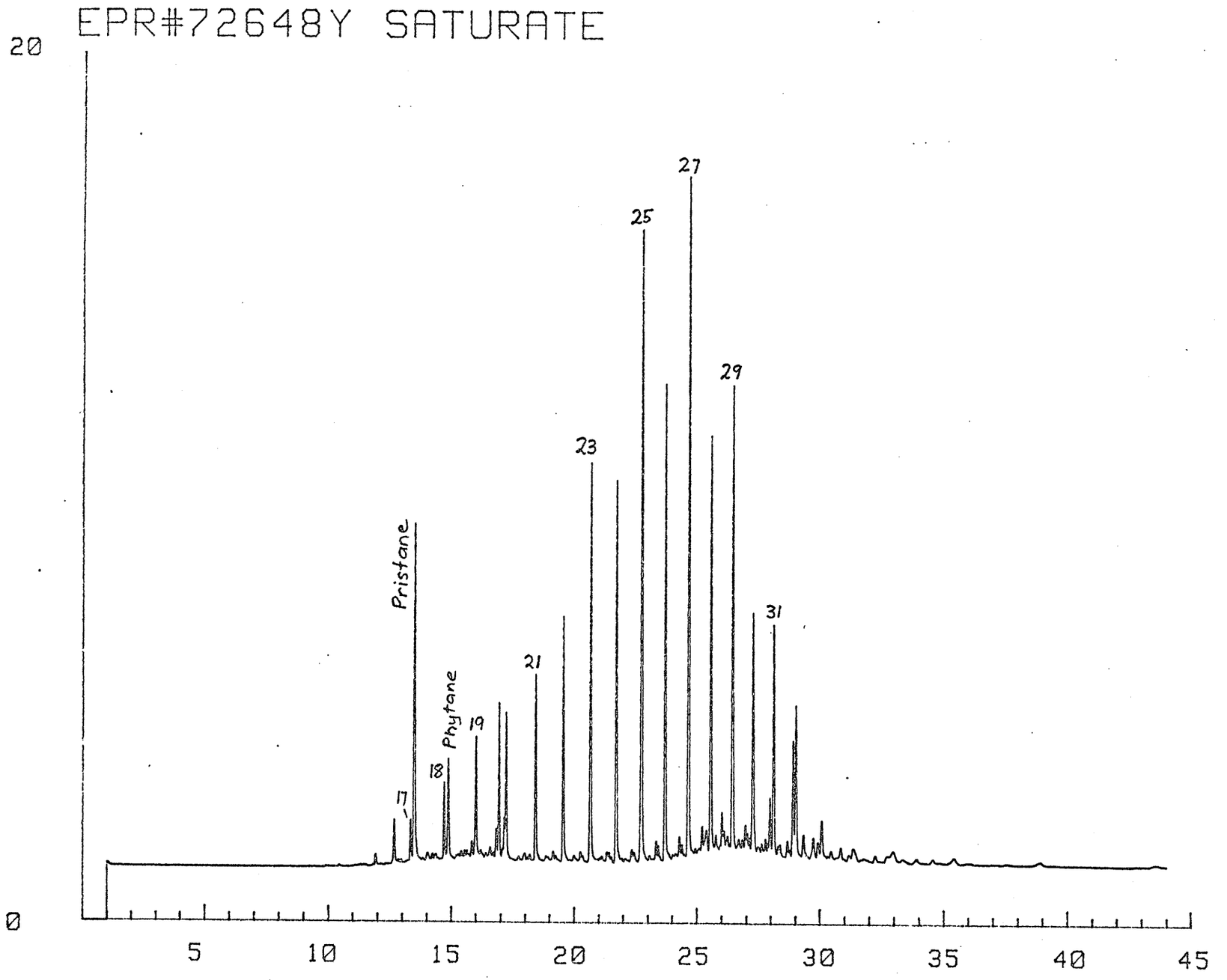


Figure 12, Pilotfish-1A, 3135-3150m(KB), Latrobe Group.

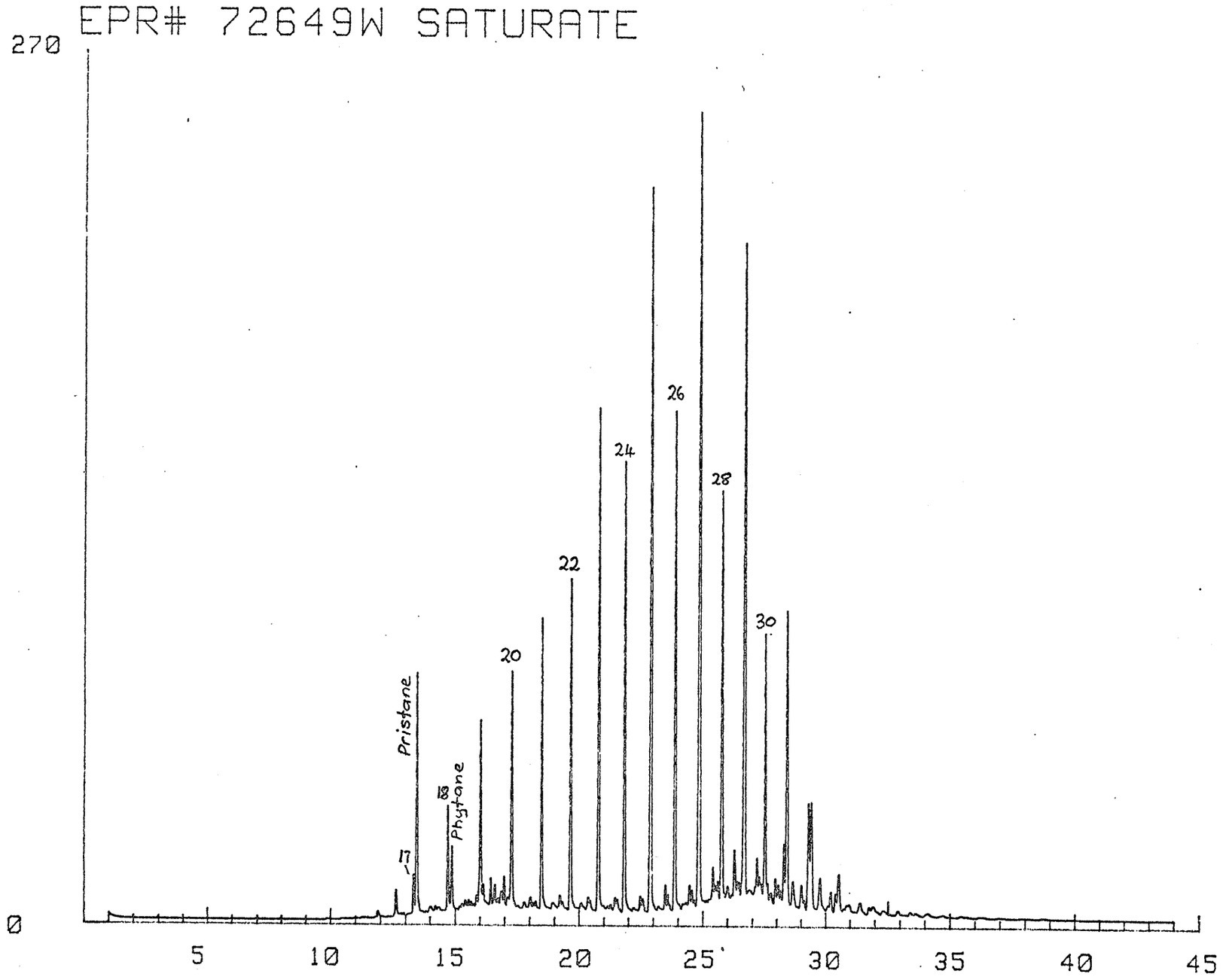


Figure 13, Pilotfish-1A, 3495-3510m(KB), Latrobe Group.

APPENDIX-1

C_{4-7} Detailed Data Sheets

14 JUL 83

72646C AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2020-2035 M

	TOTAL PPB	NORM PERCENT
METHANE	0.0	
ETHANE	0.0	
PROPANE	0.0	
IBUTANE	14.6	0.50
NBUTANE	28.8	0.98
IPENTANE	190.8	6.50
NPENTANE	109.4	3.73
22-DMB	3.6	0.12
CPENTANE	13.1	0.45
23-DMB	23.0	0.78
2-MP	213.6	7.28
3-MP	147.2	5.02
NHEXANE	194.4	6.63
MCP	395.5	13.48
22-DMP	0.0	0.00
24-DMP	12.0	0.41
223-TMB	0.0	0.00
CHEXANE	34.0	1.16
33-DMP ,	0.0	0.00
11-DMCP	0.0	0.00
2-MHEX ,	123.3	4.20
23-DMP ,	61.5	2.10
3-MHEX ,	200.8	6.84
1C3-DMCP	153.2	5.22
1T3-DMCP	110.0	3.75
1T2-DMCP	190.7	6.50
3-EPENT	0.0	0.00
224-TMP	0.0	0.00
NHEPTANE	246.2	8.39
1C2-DMCP	70.8	2.41
MCH	397.6	13.55

	TOTALS PPB	NORM PERCENT
ALL COMP	2934.	
GASOLINE	2934.	
NAPHTHENES	1365.	46.52
C6-7	2190.	74.64

SIG COMP RATIOS

C1/C2	0.60
A /D2	2.19
C1/D2	2.76
CH/MCP	0.09
PENT/IPENT,	0.57

	PPB	NORM PERCENT
MCP	395.5	47.8
CH	34.0	4.1
MCH	397.6	48.1
TOTAL	827.1	100.0

PARAFFIN INDEX 1	0.714
PARAFFIN INDEX 2	16.228

14 JUL 83

72646E AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2050-2065 M

	TOTAL PPB	NORM PERCENT
METHANE	0.0	
ETHANE	0.0	
PROPANE	0.0	
IBUTANE	21.8	0.48
NBUTANE	58.0	1.27
IPENTANE	238.4	5.21
NPENTANE	150.6	3.29
22-DMB	6.5	0.14
CPENTANE	14.7	0.32
23-DMB	23.2	0.51
2-MP	234.9	5.13
3-MP	167.9	3.67
NHEXANE	193.3	4.22
MCP	445.4	9.73
22-DMP	0.0	0.00
24-DMP	10.6	0.23
223-TMB	0.8	0.02
CHEXANE	52.1	1.14
33-DMP ,	0.0	0.00
11-DMCP	0.0	0.00
2-MHEX ,	167.2	3.65
23-DMP ,	75.0	1.64
3-MHEX ,	308.0	6.73
1C3-DMCP	207.8	4.54
1T3-DMCP	159.8	3.49
1T2-DMCP	257.6	5.63
3-EPENT	0.0	0.00
224-TMP	0.0	0.00
NHEPTANE	359.6	7.85
1C2-DMCP	256.7	5.61
MCH	1168.6	25.52

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	4578.		C1/C2	1.05
GASOLINE	4578.		A /D2	1.80
NAPHTHENES	2563.	55.97	C1/D2	4.51
C6-7	3662.	79.99	CH/MCP	0.12
			PENT/IPENT,	0.63

	PPB	NORM PERCENT
MCP	445.4	26.7
CH	52.1	3.1
MCH	1168.6	70.1
TOTAL	1666.1	100.0

PARAFFIN INDEX 1	0.760
PARAFFIN INDEX 2	13.051

14 JUL 83

72646G AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2080-2095 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	226.6	3.26
ETHANE	0.0		1T2-DMCP	382.4	5.51
PROPANE	0.0		3-EPENT	0.0	0.00
IBUTANE	27.9	0.40	224-TMP	0.0	0.00
NBUTANE	80.7	1.16	NHEPTANE	421.9	6.08
IPENTANE	617.3	8.90	1C2-DMCP	225.7	3.25
NPENTANE	346.3	4.99	MCH	936.4	13.49
22-DMB	12.6	0.18			
CPENTANE	36.1	0.52			
23-DMB	56.8	0.82			
2-MP	544.8	7.85			
3-MP	406.2	5.85			
NHEXANE	420.9	6.06			
MCP	1006.2	14.50			
22-DMP	0.0	0.00			
24-DMP	18.4	0.27			
223-TMB	3.0	0.04			
CHEXANE	76.2	1.10			
33-DMP ,	2.4	0.04			
11-DMCP	0.0	0.00			
2-MHEX ,	247.6	3.57			
23-DMP ,	121.0	1.74			
3-MHEX ,	413.7	5.96			
1C3-DMCP	308.9	4.45			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	6940.		C1/C2	0.59
GASOLINE	6940.		A /D2	2.04
NAPHTHENES	3198.	46.09	C1/D2	3.05
C6-7	4811.	69.33	CH/MCP	0.08
			PENT/IPENT,	0.56

	PPB	NORM PERCENT
MCP	1006.2	49.8
CH	76.2	3.8
MCH	936.4	46.4
TOTAL	2018.8	100.0

PARAFFIN INDEX 1	0.721
PARAFFIN INDEX 2	13.448

14 JUL 83

726461 AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2110-2125 M

	TOTAL PPB	NORM PERCENT
METHANE	0.0	
ETHANE	0.0	
PROPANE	0.0	
IBUTANE	35.5	0.48
NBUTANE	76.0	1.02
IPENTANE	447.0	6.03
NPENTANE	272.5	3.67
22-DMB	7.9	0.11
CPENTANE	24.5	0.33
23-DMB	41.7	0.56
2-MP	390.3	5.26
3-MP	308.0	4.15
NHEXANE	318.9	4.30
MCP	760.9	10.26
22-DMP	0.0	0.00
24-DMP	17.3	0.23
223-TMB	3.0	0.04
CHEXANE	83.6	1.13
33-DMP ,	2.4	0.03
11-DMCP	0.0	0.00
2-MHEX ,	254.2	3.43
23-DMP ,	114.4	1.54
3-MHEX ,	485.9	6.55
1C3-DMCP	335.3	4.52
1T3-DMCP	246.5	3.32
1T2-DMCP	456.7	6.16
3-EPENT	0.0	0.00
224-TMP	0.0	0.00
NHEPTANE	588.2	7.93
1C2-DMCP	414.9	5.59
MCH	1732.5	23.36

	TOTALS PPB	NORM PERCENT
ALL COMP	7418.	
GASOLINE	7418.	
NAPHTHENES	4055.	54.66
C6-7	5815.	78.39

SIG COMP RATIOS

C1/C2	0.94
A /D2	1.87
C1/D2	4.27
CH/MCP	0.11
PENT/IPENT,	0.61

	PPB	NORM PERCENT
MCP	760.9	29.5
CH	83.6	3.2
MCH	1732.5	67.2
TOTAL	2577.0	100.0

PARAFFIN INDEX 1	0.713
PARAFFIN INDEX 2	13.679

14 JUL 83

72646K AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2140--2155 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	143.2	3.75
ETHANE	0.0		1T2-DMCP	214.2	5.61
PROPANE	0.0		3-EPENT	0.0	0.00
IBUTANE	35.6	0.93	224-TMP	0.0	0.00
NBUTANE	36.5	0.96	NHEPTANE	383.6	10.05
IPENTANE	211.9	5.55	1C2-DMCP	140.7	3.69
NPENTANE	142.7	3.74	MCH	729.3	19.11
22-DMB	3.3	0.09			
CPENTANE	12.2	0.32			
23-DMB	19.1	0.50			
2-MP	218.1	5.72			
3-MP	177.4	4.65			
NHEXANE	204.6	5.36			
MCP	347.7	9.11			
22-DMP	0.0	0.00			
24-DMP	13.6	0.36			
223-TMB	0.0	0.00			
CHEXANE	55.4	1.45			
33-DMP ,	1.2	0.03			
11-DMCP	0.0	0.00			
2-MHEX ,	177.0	4.64			
23-DMP ,	74.7	1.96			
3-MHEX ,	289.9	7.60			
1C3-DMCP	184.5	4.84			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	3816.		C1/C2	0.93
GASOLINE	3816.		A /D2	2.03
NAPHTHENES	1827.	47.88	C1/D2	3.32
C6-7	2960.	77.55	CH/MCP	0.16
			PENT/IPENT,	0.67

	PPB	NORM PERCENT
MCP	347.7	30.7
CH	55.4	4.9
MCH	729.3	64.4
TOTAL	1132.4	100.0

PARAFFIN INDEX 1	0.862
PARAFFIN INDEX 2	17.028

14 JUL 83

72646M AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2170-2185 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	90.4	4.19
ETHANE	0.0		1T2-DMCP	57.2	2.65
PROPANE	0.0		3-EPENT	0.0	0.00
IBUTANE	17.9	0.83	224-TMP	0.0	0.00
NBUTANE	38.5	1.78	NHEPTANE	173.3	8.04
IPENTANE	200.9	9.33	1C2-DMCP	23.0	1.07
NPENTANE	112.5	5.22	MCH	231.3	10.73
22-DMB	2.4	0.11			
CPENTANE	7.4	0.35			
23-DMB	20.9	0.97			
2-MP	208.7	9.69			
3-MP	166.9	7.75			
NHEXANE	159.8	7.42			
MCP	229.7	10.66			
22-DMP	0.0	0.00			
24-DMP	10.6	0.49			
223-TMB	0.0	0.00			
CHEXANE	22.1	1.03			
33-DMP ,	0.0	0.00			
11-DMCP	0.0	0.00			
2-MHEX ,	112.2	5.21			
23-DMP ,	42.9	1.99			
3-MHEX ,	133.2	6.18			
1C3-DMCP	93.0	4.32			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	2155.		C1/C2	0.74
GASOLINE	2155.		A /D2	2.50
NAPHTHENES	754.	35.00	C1/D2	2.75
C6-7	1379.	63.98	CH/MCP	0.10
			PENT/IPENT,	0.56

	PPB	NORM PERCENT
MCP	229.7	47.6
CH	22.1	4.6
MCH	231.3	47.9
TOTAL	483.1	100.0

PARAFFIN INDEX 1	1.020
PARAFFIN INDEX 2	18.135

14 JUL 83

726460 AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2200-2215 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	54.1	3.92
ETHANE	0.0		1T2-DMCP	43.8	3.17
PROPANE	0.0		3-EPENT	0.0	0.00
IBUTANE	21.4	1.55	224-TMP	0.0	0.00
NBUTANE	37.0	2.68	NHEPTANE	160.3	11.62
IPENTANE	86.1	6.24	1C2-DMCP	10.3	0.75
NPENTANE	72.0	5.22	MCH	190.2	13.79
22-DMB	2.4	0.17			
CPENTANE	12.9	0.94			
23-DMB	10.1	0.73			
2-MP	93.2	6.76			
3-MP	72.4	5.25			
NHEXANE	111.9	8.12			
MCP	143.8	10.43			
22-DMP	0.0	0.00			
24-DMP	5.1	0.37			
223-TMB	0.0	0.00			
CHEXANE	34.1	2.47			
33-DMP ,	0.0	0.00			
11-DMCP	0.0	0.00			
2-MHEX ,	71.1	5.16			
23-DMP ,	31.0	2.25			
3-MHEX ,	70.6	5.12			
1C3-DMCP	45.2	3.28			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	1379.		C1/C2	0.99
GASOLINE	1379.		A /D2	3.86
NAPHTHENES	534.	38.75	C1/D2	4.18
C6-7	972.	70.45	CH/MCP	0.24
			PENT/IPENT,	0.84

	PPB	NORM PERCENT
MCP	143.8	39.1
CH	34.1	9.3
MCH	190.2	51.7
TOTAL	368.1	100.0

PARAFFIN INDEX 1	0.990
PARAFFIN INDEX 2	22.883

14 JUL 83

726460 AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2230-2245 M

	TOTAL PPB	NORM PERCENT
METHANE	0.0	
ETHANE	0.0	
PROPANE	0.0	
IBUTANE	22.9	1.67
NBUTANE	41.3	3.02
IPENTANE	92.0	6.74
NPENTANE	76.8	5.62
22-DMB	3.0	0.22
CPENTANE	15.3	1.12
23-DMB	14.2	1.04
2-MP	98.9	7.24
3-MP	73.6	5.38
NHEXANE	114.1	8.35
MCP	75.0	5.49
22-DMP	0.0	0.00
24-DMP	7.4	0.55
223-TMB	0.0	0.00
CHEXANE	35.2	2.58
33-DMP ,	0.0	0.00
11-DMCP	0.0	0.00
2-MHEX ,	71.5	5.23
23-DMP ,	31.8	2.33
3-MHEX ,	71.3	5.22
1C3-DMCP	45.9	3.36
1T3-DMCP	55.2	4.04
1T2-DMCP	44.5	3.26
3-EPENT	0.0	0.00
224-TMP	0.0	0.00
NHEPTANE	167.2	12.24
1C2-DMCP	10.7	0.78
MCH	198.6	14.53

	TOTALS PPB	NORM PERCENT
ALL COMP	1366.	
GASOLINE	1366.	
NAPHTHENES	480.	35.16
C6-7	929.	67.95

SIG COMP RATIOS

C1/C2	1.32
A /D2	3.95
C1/D2	4.28
CH/MCP	0.47
PENT/IPENT,	0.83

	PPB	NORM PERCENT
MCP	75.0	24.3
CH	35.2	11.4
MCH	198.6	64.3
TOTAL	308.8	100.0

PARAFFIN INDEX 1	0.981
PARAFFIN INDEX 2	23.182

14 JUL 83

72646S AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2260-2275 M

	TOTAL PPB	NORM PERCENT
METHANE	0.0	
ETHANE	0.0	
PROPANE	0.0	
IBUTANE	31.5	3.07
NBUTANE	51.0	4.96
IPENTANE	182.7	17.76
NPENTANE	73.3	7.13
22-DMB	1.1	0.11
CPENTANE	5.1	0.49
23-DMB	16.2	1.57
2-MP	123.4	11.99
3-MP	111.0	10.79
NHEXANE	95.4	9.27
MCP	81.4	7.91
22-DMP	0.0	0.00
24-DMP	6.1	0.59
223-TMB	0.0	0.00
CHEXANE	9.5	0.92
33-DMP ,	0.0	0.00
11-DMCP	0.0	0.00
2-MHEX ,	50.2	4.88
23-DMP ,	21.0	2.04
3-MHEX ,	49.9	4.85
1C3-DMCP	24.4	2.37
1T3-DMCP	11.1	1.08
1T2-DMCP	12.4	1.20
3-EPENT	0.0	0.00
224-TMP	0.0	0.00
NHEPTANE	53.9	5.24
1C2-DMCP	0.0	0.00
MCH	18.2	1.77

	TOTALS PPB	NORM PERCENT
ALL COMP	1029.	
GASOLINE	1029.	
NAPHTHENES	162.	15.75
C6-7	433.	42.13

SIG COMP RATIOS

C1/C2	0.60
A /D2	2.99
C1/D2	1.56
CH/MCP	0.12
PENT/IPENT,	0.40

	PPB	NORM PERCENT
MCP	81.4	74.6
CH	9.5	8.7
MCH	18.2	16.7
TOTAL	109.1	100.0

PARAFFIN INDEX 1	2.092
PARAFFIN INDEX 2	21.501

14 JUL 83

72646U AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2290-2305 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	197.3	4.52
ETHANE	0.0		1T2-DMCP	98.6	2.26
PROPANE	0.0		3-EPENT	0.0	0.00
IBUTANE	47.0	1.08	224-TMP	0.0	0.00
NBUTANE	75.5	1.73	NHEPTANE	390.6	8.96
IPENTANE	470.4	10.79	1C2-DMCP	48.4	1.11
NPENTANE	158.0	3.62	MCH	874.1	20.04
22-DMB	5.5	0.13			
CPENTANE	16.3	0.37			
23-DMB	42.0	0.96			
2-MP	274.3	6.29			
3-MP	242.7	5.57			
NHEXANE	237.2	5.44			
MCP	388.5	8.91			
22-DMP	0.0	0.00			
24-DMP	15.4	0.35			
223-TMB	0.0	0.00			
CHEXANE	141.7	3.25			
33-DMP ,	2.4	0.05			
11-DMCP	0.0	0.00			
2-MHEX ,	176.1	4.04			
23-DMP ,	87.1	2.00			
3-MHEX ,	220.7	5.06			
1C3-DMCP	151.3	3.47			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	4361.		C1/C2	1.35
GASOLINE	4361.		A /D2	2.84
NAPHTHENES	1916.	43.94	C1/D2	5.41
C6-7	3029.	69.46	CH/MCP	0.36
			PENT/IPENT,	0.34

	PPB	NORM PERCENT
MCP	388.5	27.7
CH	141.7	10.1
MCH	874.1	62.2
TOTAL	1404.3	100.0

PARAFFIN INDEX 1	0.887
PARAFFIN INDEX 2	16.692

14 JUL 83

72646W AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2320-2335 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	81.9	3.96
ETHANE	0.0		1T2-DMCP	50.7	2.45
PROPANE	0.0		3-EPENT	0.0	0.00
IBUTANE	20.5	0.99	224-TMP	0.0	0.00
NBUTANE	35.5	1.72	NHEPTANE	228.4	11.05
IPENTANE	171.2	8.28	1C2-DMCP	20.5	0.99
NPENTANE	69.7	3.37	MCH	426.4	20.64
22-DMB	2.1	0.10			
CPENTANE	8.1	0.39			
23-DMB	18.8	0.91			
2-MP	134.5	6.51			
3-MP	115.9	5.61			
NHEXANE	122.3	5.92			
MCP	173.2	8.38			
22-DMP	0.0	0.00			
24-DMP	9.0	0.44			
223-TMB	0.0	0.00			
CHEXANE	47.6	2.30			
33-DMP ,	0.0	0.00			
11-DMCP	0.0	0.00			
2-MHEX ,	90.1	4.36			
23-DMP ,	46.5	2.25			
3-MHEX ,	121.8	5.90			
1C3-DMCP	71.3	3.45			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	2066.		C1/C2	1.42
GASOLINE	2066.		A /D2	2.88
NAPHTHENES	880.	42.57	C1/D2	4.63
C6-7	1490.	72.10	CH/MCP	0.27
			PENT/IPENT,	0.41

	PPB	NORM PERCENT
MCP	173.2	26.8
CH	47.6	7.4
MCH	426.4	65.9
TOTAL	647.2	100.0

PARAFFIN INDEX 1	1.040
PARAFFIN INDEX 2	19.609

14 JUL 83

72646Y AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2350-2365 M

	TOTAL PPB	NORM PERCENT
METHANE	0.0	
ETHANE	0.0	
PROPANE	0.0	
IBUTANE	23.2	0.85
NBUTANE	23.0	0.85
IPENTANE	182.9	6.74
NPENTANE	93.6	3.45
22-DMB	2.0	0.07
CPENTANE	9.1	0.34
23-DMB	18.5	0.68
2-MP	142.7	5.26
3-MP	125.8	4.64
NHEXANE	154.9	5.71
MCP	204.1	7.52
22-DMP	0.0	0.00
24-DMP	10.7	0.39
223-TMB	0.0	0.00
CHEXANE	69.6	2.57
33-DMP ,	1.9	0.07
11-DMCP	0.0	0.00
2-MHEX ,	110.8	4.08
23-DMP ,	58.0	2.14
3-MHEX ,	126.8	4.67
1C3-DMCP	90.6	3.34
1T3-DMCP	104.0	3.83
1T2-DMCP	66.9	2.47
3-EPENT	0.0	0.00
224-TMP	0.0	0.00
NHEPTANE	338.8	12.49
1C2-DMCP	30.3	1.12
MCH	724.9	26.72

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	2713.		C1/C2	1.83
GASOLINE	2713.		A /D2	3.89
NAPHTHENES	1299.	47.90	C1/D2	7.16
C6-7	2092.	77.12	CH/MCP	0.34
			PENT/IPENT,	0.51

	PPB	NORM PERCENT
MCP	204.1	20.4
CH	69.6	7.0
MCH	724.9	72.6
TOTAL	998.6	100.0

PARAFFIN INDEX 1	0.909
PARAFFIN INDEX 2	20.022

14 JUL 83

72647A AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2380-2395 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	85.7	3.97
ETHANE	0.0		1T2-DMCP	51.6	2.39
PROPANE	0.0		3-EPENT	0.0	0.00
IBUTANE	48.2	2.23	224-TMP	0.0	0.00
NBUTANE	46.1	2.14	NHEPTANE	257.0	11.91
IPENTANE	172.9	8.01	1C2-DMCP	22.0	1.02
NPENTANE	66.1	3.06	MCH	505.5	23.42
22-DMB	2.1	0.10			
CPENTANE	5.9	0.27			
23-DMB	15.5	0.72			
2-MP	110.2	5.11			
3-MP	100.6	4.66			
NHEXANE	116.2	5.38			
MCP	150.6	6.98			
22-DMP	0.0	0.00			
24-DMP	8.1	0.37			
223-TMB	0.0	0.00			
CHEXANE	46.7	2.17			
33-DMP ,	0.0	0.00			
11-DMCP	0.0	0.00			
2-MHEX ,	98.3	4.56			
23-DMP ,	42.7	1.98			
3-MHEX ,	136.8	6.34			
1C3-DMCP	69.7	3.23			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	2159.		C1/C2	1.71
GASOLINE	2159.		A /D2	2.73
NAPHTHENES	938.	43.44	C1/D2	4.76
C6-7	1591.	73.70	CH/MCP	0.31
			PENT/IPENT,	0.38

	PPB	NORM PERCENT
MCP	150.6	21.4
CH	46.7	6.7
MCH	505.5	71.9
TOTAL	702.8	100.0

PARAFFIN INDEX 1	1.136
PARAFFIN INDEX 2	19.863

14 JUL 83

72647C AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2410-2425 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	43.5	2.54
ETHANE	0.0		1T2-DMCP	0.9	0.05
PROPANE	0.0		3-EPENT	0.0	0.00
IBUTANE	36.6	2.14	224-TMP	0.0	0.00
NBUTANE	65.0	3.79	NHEPTANE	138.5	8.09
IPENTANE	225.9	13.19	1C2-DMCP	12.9	0.75
NPENTANE	88.5	5.17	MCH	134.4	7.85
22-DMB	0.8	0.04			
CPENTANE	7.0	0.41			
23-DMB	22.6	1.32			
2-MP	161.1	9.41			
3-MP	172.9	10.10			
NHEXANE	125.9	7.35			
MCP	151.1	8.82			
22-DMP	0.0	0.00			
24-DMP	9.7	0.56			
223-TMB	0.0	0.00			
CHEXANE	21.0	1.22			
33-DMP ,	0.0	0.00			
11-DMCP	0.0	0.00			
2-MHEX ,	81.3	4.75			
23-DMP ,	37.2	2.17			
3-MHEX ,	106.9	6.24			
1C3-DMCP	68.6	4.01			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	1712.		C1/C2	0.85
GASOLINE	1712.		A /D2	2.47
NAPHTHENES	439.	25.66	C1/D2	2.21
C6-7	932.	54.42	CH/MCP	0.14
			PENT/IPENT,	0.39

	PPB	NORM PERCENT
MCP	151.1	49.3
CH	21.0	6.8
MCH	134.4	43.8
TOTAL	306.5	100.0

PARAFFIN INDEX 1	1.666
PARAFFIN INDEX 2	21.906

14 JUL 83

72647E AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2440-2455 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	67.4	4.33
ETHANE	0.0		1T2-DMCP	31.6	2.03
PROPANE	0.0		3-EPENT	0.0	0.00
IBUTANE	14.9	0.96	224-TMP	0.0	0.00
NBUTANE	34.4	2.21	NHEPTANE	135.1	8.68
IPENTANE	193.7	12.45	1C2-DMCP	8.1	0.52
NPENTANE	78.0	5.01	MCH	134.5	8.64
22-DMB	0.5	0.03			
CPENTANE	5.4	0.35			
23-DMB	23.0	1.47			
2-MP	145.0	9.32			
3-MP	143.6	9.23			
NHEXANE	104.7	6.72			
MCP	149.9	9.64			
22-DMP	0.0	0.00			
24-DMP	8.7	0.56			
223-TMB	0.0	0.00			
CHEXANE	22.1	1.42			
33-DMP ,	0.0	0.00			
11-DMCP	0.0	0.00			
2-MHEX ,	70.8	4.55			
23-DMP ,	38.5	2.48			
3-MHEX ,	90.2	5.80			
1C3-DMCP	56.2	3.61			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	1556.		C1/C2	0.73
GASOLINE	1556.		A /D2	2.66
NAPHTHENES	475.	30.55	C1/D2	2.52
C6-7	918.	58.98	CH/MCP	0.15
			PENT/IPENT,	0.40

	PPB	NORM PERCENT
MCP	149.9	48.9
CH	22.1	7.2
MCH	134.5	43.9
TOTAL	306.5	100.0

PARAFFIN INDEX 1	1.037
PARAFFIN INDEX 2	20.892

14 JUL 83

726476 AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2470-2485 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	79.8	5.02
ETHANE	0.0		1T2-DMCP	41.6	2.62
PROPANE	0.0		3-EPENT	0.0	0.00
IBUTANE	17.6	1.10	224-TMP	0.0	0.00
NBUTANE	24.7	1.55	NHEPTANE	169.9	10.69
IPENTANE	156.4	9.84	1C2-DMCP	16.7	1.05
NPENTANE	49.9	3.14	MCH	321.1	20.20
22-DMB	0.0	0.00			
CPENTANE	2.9	0.18			
23-DMB	16.6	1.04			
2-MP	100.9	6.35			
3-MP	96.4	6.07			
NHEXANE	73.2	4.60			
MCP	114.3	7.19			
22-DMP	0.0	0.00			
24-DMP	9.7	0.61			
223-TMB	0.0	0.00			
CHEXANE	22.1	1.39			
33-DMP ,	0.0	0.00			
11-DMCP	0.0	0.00			
2-MHEX ,	73.1	4.60			
23-DMP ,	42.5	2.67			
3-MHEX ,	94.4	5.94			
1C3-DMCP	65.7	4.13			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	1589.		C1/C2	1.31
GASOLINE	1589.		A /D2	2.58
NAPHTHENES	664.	41.79	C1/D2	4.41
C6-7	1124.	70.73	CH/MCP	0.19
			PENT/IPENT,	0.32

	PPB	NORM PERCENT
MCP	114.3	25.0
CH	22.1	4.8
MCH	321.1	70.2
TOTAL	457.5	100.0

PARAFFIN INDEX 1	0.895
PARAFFIN INDEX 2	18.669

14 JUL 83

72647I AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2500-2515 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	58.4	3.46
ETHANE	0.0		1T2-DMCP	27.3	1.62
PROPANE	0.0		3-EPENT	0.0	0.00
IBUTANE	47.2	2.80	224-TMP	0.0	0.00
NBUTANE	53.7	3.19	NHEPTANE	166.4	9.87
IPENTANE	255.1	15.14	1C2-DMCP	6.2	0.37
NPENTANE	74.9	4.44	MCH	149.0	8.84
22-DMB	0.6	0.04			
CPENTANE	4.2	0.25			
23-DMB	26.5	1.57			
2-MP	154.9	9.19			
3-MP	127.5	7.57			
NHEXANE	107.0	6.35			
MCP	117.6	6.98			
22-DMP	0.0	0.00			
24-DMP	10.3	0.61			
223-TMB	0.0	0.00			
CHEXANE	18.2	1.08			
33-DMP ,	0.0	0.00			
11-DMCP	0.0	0.00			
2-MHEX ,	78.8	4.68			
23-DMP ,	46.9	2.78			
3-MHEX ,	98.7	5.86			
1C3-DMCP	55.9	3.31			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	1685.		C1/C2	0.93
GASOLINE	1685.		A /D2	2.77
NAPHTHENES	437.	25.92	C1/D2	2.49
C6-7	941.	55.82	CH/MCP	0.16
			PENT/IPENT,	0.29

	PPB	NORM PERCENT
MCP	117.6	41.3
CH	18.2	6.4
MCH	149.0	52.3
TOTAL	284.8	100.0

PARAFFIN INDEX 1	1.255
PARAFFIN INDEX 2	23.783

14 JUL 83

72647K AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2530-2545 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	5.9	0.95
ETHANE	0.0		1T2-DMCP	5.6	0.90
PROPANE	0.0		3-EPENT	0.0	0.00
IBUTANE	49.1	7.83	224-TMP	0.0	0.00
NBUTANE	70.4	11.22	NHEPTANE	85.7	13.66
IPENTANE	75.5	12.04	1C2-DMCP	0.0	0.00
NPENTANE	54.3	8.65	MCH	62.8	10.01
22-DMB	0.9	0.15			
CPENTANE	2.1	0.33			
23-DMB	6.9	1.10			
2-MP	36.6	5.84			
3-MP	27.7	4.42			
NHEXANE	55.9	8.92			
MCP	20.1	3.20			
22-DMP	0.0	0.00			
24-DMP	3.9	0.62			
223-TMB	0.0	0.00			
CHEXANE	6.9	1.10			
33-DMP ,	0.0	0.00			
11-DMCP	0.0	0.00			
2-MHEX ,	20.8	3.32			
23-DMP ,	10.4	1.66			
3-MHEX ,	17.9	2.85			
1C3-DMCP	7.7	1.22			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS		
ALL COMP	627.		C1/C2	2.30	
GASOLINE	627.		A /D2	7.93	
NAPHTHENES	111.	17.71	C1/D2	5.07	
C6-7	304.	48.41	CH/MCP	0.34	
			PENT/IPENT,		0.72

	PPB	NORM PERCENT
MCP	20.1	22.4
CH	6.9	7.7
MCH	62.8	69.9
TOTAL	89.8	100.0

PARAFFIN INDEX 1	2.012
PARAFFIN INDEX 2	38.293

14 JUL 83

72647M AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2560-2575 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	43.3	2.32
ETHANE	0.0		1T2-DMCP	20.4	1.09
PROPANE	0.0		3-EPENT	0.0	0.00
IBUTANE	76.2	4.07	224-TMP	0.0	0.00
NBUTANE	41.0	2.19	NHEPTANE	150.3	8.03
IPENTANE	426.6	22.80	1C2-DMCP	0.0	0.00
NPENTANE	107.2	5.73	MCH	195.5	10.45
22-DMB	3.7	0.20			
CPENTANE	8.4	0.45			
23-DMB	50.4	2.69			
2-MP	181.1	9.68			
3-MP	86.2	4.61			
NHEXANE	110.3	5.89			
MCP	96.1	5.14			
22-DMP	0.0	0.00			
24-DMP	17.4	0.93			
223-TMB	0.0	0.00			
CHEXANE	50.2	2.69			
33-DMP ,	0.0	0.00			
11-DMCP	0.0	0.00			
2-MHEX ,	67.6	3.61			
23-DMP ,	51.7	2.76			
3-MHEX ,	51.9	2.77			
1C3-DMCP	35.3	1.89			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	1871.		C1/C2	1.61
GASOLINE	1871.		A /D2	5.02
NAPHTHENES	449.	24.01	C1/D2	6.04
C6-7	890.	47.57	CH/MCP	0.52
			PENT/IPENT,	0.25

	PPB	NORM PERCENT
MCP	96.1	28.1
CH	50.2	14.7
MCH	195.5	57.2
TOTAL	341.8	100.0

PARAFFIN INDEX 1	1.206
PARAFFIN INDEX 2	22.553

14 JUL 83

726470 AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2590-2605 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	57.8	2.11
ETHANE	0.0		1T2-DMCP	23.6	0.86
PROPANE	0.0		3-EPENT	0.0	0.00
IBUTANE	120.0	4.39	224-TMP	0.0	0.00
NBUTANE	91.7	3.35	NHEPTANE	149.3	5.46
IPENTANE	859.3	31.42	1C2-DMCP	0.0	0.00
NPENTANE	173.2	6.33	MCH	117.9	4.31
22-DMB	4.8	0.18			
CPENTANE	9.0	0.33			
23-DMB	77.1	2.82			
2-MP	300.6	10.99			
3-MP	162.2	5.93			
NHEXANE	147.3	5.39			
MCP	146.3	5.35			
22-DMP	0.0	0.00			
24-DMP	19.1	0.70			
223-TMB	2.1	0.08			
CHEXANE	19.1	0.70			
33-DMP ,	0.0	0.00			
11-DMCP	0.0	0.00			
2-MHEX ,	84.1	3.08			
23-DMP ,	56.8	2.08			
3-MHEX ,	64.4	2.35			
1C3-DMCP	49.5	1.81			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	2735.		C1/C2	0.80
GASOLINE	2735.		A /D2	4.61
NAPHTHENES	423.	15.47	C1/D2	3.43
C6-7	937.	34.26	CH/MCP	0.13
			PENT/IPENT,	0.20

	PPB	NORM PERCENT
MCP	146.3	51.7
CH	19.1	6.7
MCH	117.9	41.6
TOTAL	283.3	100.0

PARAFFIN INDEX 1	1.135
PARAFFIN INDEX 2	23.982

14 JUL 83

726470 AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2620-2635 M

	TOTAL PPB	NORM PERCENT
METHANE	0.0	
ETHANE	0.0	
PROPANE	0.0	
IBUTANE	123.3	2.24
NBUTANE	102.6	1.87
IPENTANE	1244.7	22.65
NPENTANE	549.8	10.00
22-DMB	6.7	0.12
CPENTANE	19.0	0.35
23-DMB	118.5	2.16
2-MP	526.7	9.58
3-MP	284.3	5.17
NHEXANE	238.5	4.34
MCP	279.5	5.08
22-DMP	0.0	0.00
24-DMP	36.7	0.67
223-TMB	4.3	0.08
CHEXANE	53.7	0.98
33-DMP ,	0.4	0.01
11-DMCP	0.0	0.00
2-MHEX ,	197.1	3.59
23-DMP ,	126.8	2.31
3-MHEX ,	191.7	3.49
1C3-DMCP	133.2	2.42
1T3-DMCP	127.8	2.33
1T2-DMCP	107.0	1.95
3-EPENT	0.0	0.00
224-TMP	0.0	0.00
NHEPTANE	374.1	6.81
1C2-DMCP	15.4	0.28
MCH	634.1	11.54

	TOTALS PPB	NORM PERCENT
ALL COMP	5496.	
GASOLINE	5496.	
NAPHTHENES	1370.	24.92
C6-7	2520.	45.86

SIG COMP RATIOS

C1/C2	1.34
A /D2	3.20
C1/D2	4.62
CH/MCP	0.19
PENT/IPENT,	0.44

	PPB	NORM PERCENT
MCP	279.5	28.9
CH	53.7	5.6
MCH	634.1	65.6
TOTAL	967.3	100.0

PARAFFIN INDEX 1	1.057
PARAFFIN INDEX 2	19.224

14 JUL 83

72647S AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2650-2665 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	83.6	1.79
ETHANE	0.0		1T2-DMCP	65.7	1.41
PROPANE	0.0		3-EPENT	0.0	0.00
IBUTANE	150.1	3.21	224-TMP	0.0	0.00
NBUTANE	125.8	2.69	NHEPTANE	180.3	3.85
IPENTANE	1503.9	32.15	1C2-DMCP	7.1	0.15
NPENTANE	433.4	9.27	MCH	235.1	5.03
22-DMB	6.5	0.14			
CPENTANE	15.7	0.33			
23-DMB	111.9	2.39			
2-MP	505.0	10.80			
3-MP	313.4	6.70			
NHEXANE	185.1	3.96			
MCP	274.3	5.86			
22-DMP	0.0	0.00			
24-DMP	24.3	0.52			
223-TMB	2.5	0.05			
CHEXANE	31.2	0.67			
33-DMP ,	0.0	0.00			
11-DMCP	0.0	0.00			
2-MHEX ,	119.5	2.55			
23-DMP ,	80.3	1.72			
3-MHEX ,	134.5	2.88			
1C3-DMCP	88.8	1.90			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	4678.		C1/C2	0.74
GASOLINE	4678.		A /D2	2.72
NAPHTHENES	802.	17.13	C1/D2	2.87
C6-7	1512.	32.33	CH/MCP	0.11
			PENT/IPENT,	0.29

	PPB	NORM PERCENT
MCP	274.3	50.7
CH	31.2	5.8
MCH	235.1	43.5
TOTAL	540.6	100.0

PARAFFIN INDEX 1	1.066
PARAFFIN INDEX 2	17.691

14 JUL 83

72647U AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2680-2695 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	127.2	2.41
ETHANE	0.0		1T2-DMCP	104.5	1.98
PROPANE	0.0		3-EPENT	0.0	0.00
IBUTANE	221.2	4.18	224-TMP	0.0	0.00
NBUTANE	365.5	6.92	NHEPTANE	236.7	4.48
IPENTANE	998.9	18.90	1C2-DMCP	10.7	0.20
NPENTANE	557.8	10.56	MCH	266.9	5.05
22-DMB	2.7	0.05			
CPENTANE	16.0	0.30			
23-DMB	109.7	2.08			
2-MP	541.9	10.25			
3-MP	413.7	7.83			
NHEXANE	211.9	4.01			
MCP	382.8	7.24			
22-DMP	0.0	0.00			
24-DMP	32.1	0.61			
223-TMB	2.8	0.05			
CHEXANE	41.6	0.79			
33-DMP ,	0.0	0.00			
11-DMCP	0.0	0.00			
2-MHEX ,	175.8	3.33			
23-DMP ,	112.8	2.13			
3-MHEX ,	216.4	4.09			
1C3-DMCP	135.3	2.56			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	5285.		C1/C2	0.64
GASOLINE	5285.		A /D2	2.07
NAPHTHENES	1085.	20.53	C1/D2	2.24
C6-7	2057.	38.93	CH/MCP	0.11
			PENT/IPENT,	0.56

	PPB	NORM PERCENT
MCP	382.8	55.4
CH	41.6	6.0
MCH	266.9	38.6
TOTAL	691.3	100.0

PARAFFIN INDEX 1	1.069
PARAFFIN INDEX 2	16.705

14 JUL 83

72647W AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2710-2725 M

	TOTAL PPB	NORM PERCENT
METHANE	0.0	
ETHANE	0.0	
PROPANE	0.0	
IBUTANE	111.7	3.67
NBUTANE	110.5	3.63
IPENTANE	537.0	17.66
NPENTANE	342.8	11.27
22-DMB	2.6	0.08
CPENTANE	8.0	0.26
23-DMB	63.6	2.09
2-MP	335.4	11.03
3-MP	266.8	8.77
NHEXANE	136.2	4.48
MCP	224.2	7.37
22-DMP	0.0	0.00
24-DMP	16.3	0.53
223-TMB	0.0	0.00
CHEXANE	19.6	0.64
33-DMP ,	0.0	0.00
11-DMCP	0.0	0.00
2-MHEX ,	105.3	3.46
23-DMP ,	57.2	1.88
3-MHEX ,	138.6	4.56
1C3-DMCP	76.5	2.52
1T3-DMCP	71.9	2.36
1T2-DMCP	57.6	1.89
3-EPENT	0.0	0.00
224-TMP	0.0	0.00
NHEPTANE	142.0	4.67
1C2-DMCP	6.8	0.22
MCH	211.1	6.94

	TOTALS PPB	NORM PERCENT
ALL COMP	3042.	
GASOLINE	3042.	
NAPHTHENES	676.	22.22
C6-7	1263.	41.53

SIG COMP RATIOS

C1/C2	0.77
A /D2	2.01
C1/D2	2.42
CH/MCP	0.09
PENT/IPENT,	0.64

	PPB	NORM PERCENT
MCP	224.2	49.3
CH	19.6	4.3
MCH	211.1	46.4
TOTAL	454.9	100.0

PARAFFIN INDEX 1	1.184
PARAFFIN INDEX 2	16.145

14 JUL 83

72647Y AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2740-2755 M

	TOTAL PPB	NORM PERCENT
METHANE	0.0	
ETHANE	0.0	
PROPANE	0.0	
IBUTANE	257.6	6.52
NBUTANE	186.7	4.73
IPENTANE	623.9	15.79
NPENTANE	291.2	7.37
22-DMB	2.5	0.06
CPENTANE	6.7	0.17
23-DMB	64.8	1.64
2-MP	436.7	11.05
3-MP	354.5	8.97
NHEXANE	162.7	4.12
MCP	226.3	5.73
22-DMP	0.0	0.00
24-DMP	22.2	0.56
223-TMB	1.7	0.04
CHEXANE	19.4	0.49
33-DMP ,	0.0	0.00
11-DMCP	0.0	0.00
2-MHEX ,	165.7	4.19
23-DMP ,	86.7	2.19
3-MHEX ,	222.1	5.62
1C3-DMCP	109.0	2.76
1T3-DMCP	105.1	2.66
1T2-DMCP	95.5	2.42
3-EPENT	0.0	0.00
224-TMP	0.0	0.00
NHEPTANE	206.0	5.21
1C2-DMCP	8.0	0.20
MCH	295.9	7.49

	TOTALS PPB	NORM PERCENT
ALL COMP	3951.	
GASOLINE	3951.	
NAPHTHENES	866.	21.92
C6-7	1726.	43.69

SIG COMP RATIOS

C1/C2	0.88
A /D2	1.66
C1/D2	2.17
CH/MCP	0.09
PENT/IPENT,	0.47

	PPB	NORM PERCENT
MCP	226.3	41.8
CH	19.4	3.6
MCH	295.9	54.6
TOTAL	541.6	100.0

PARAFFIN INDEX 1	1.252
PARAFFIN INDEX 2	15.778

14 JUL 83

72648A AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2770-2785 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	135.4	2.07
ETHANE	0.0		1T2-DMCP	137.5	2.10
PROPANE	0.0		3-EPENT	0.0	0.00
IBUTANE	266.0	4.06	224-TMP	0.0	0.00
NBUTANE	265.0	4.04	NHEPTANE	217.4	3.31
IPENTANE	1705.9	26.01	1C2-DMCP	14.6	0.22
NPENTANE	530.7	8.09	MCH	322.1	4.91
22-DMB	6.5	0.10			
CPENTANE	14.4	0.22			
23-DMB	120.5	1.84			
2-MP	745.4	11.37			
3-MP	638.2	9.73			
NHEXANE	277.9	4.24			
MCP	417.5	6.37			
22-DMP	0.0	0.00			
24-DMP	27.3	0.42			
223-TMB	4.3	0.06			
CHEXANE	37.1	0.57			
33-DMP ,	0.0	0.00			
11-DMCP	0.0	0.00			
2-MHEX ,	190.8	2.91			
23-DMP ,	108.8	1.66			
3-MHEX ,	235.2	3.59			
1C3-DMCP	139.8	2.13			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	6558.		C1/C2	0.65
GASOLINE	6558.		A /D2	2.11
NAPHTHENES	1218.	18.58	C1/D2	2.34
C6-7	2266.	34.55	CH/MCP	0.09
			PENT/IPENT,	0.31

	PPB	NORM PERCENT
MCP	417.5	53.8
CH	37.1	4.8
MCH	322.1	41.5
TOTAL	776.7	100.0

PARAFFIN INDEX 1	1.032
PARAFFIN INDEX 2	14.262

14 JUL 83

72648C AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2800-2815 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	361.2	2.69
ETHANE	0.0		1T2-DMCP	191.9	1.43
PROPANE	225.3		3-EPENT	0.0	0.00
IBUTANE	882.4	6.58	224-TMP	0.0	0.00
NBUTANE	985.3	7.35	NHEPTANE	583.3	4.35
IPENTANE	2954.7	22.04	1C2-DMCP	36.4	0.27
NPENTANE	853.3	6.36	MCH	932.5	6.95
22-DMB	10.6	0.08			
CPENTANE	29.8	0.22			
23-DMB	221.2	1.65			
2-MP	1380.4	10.30			
3-MP	1118.7	8.34			
NHEXANE	535.8	4.00			
MCP	737.4	5.50			
22-DMP	0.0	0.00			
24-DMP	51.8	0.39			
223-TMB	8.6	0.06			
CHEXANE	95.8	0.71			
33-DMP ,	2.4	0.02			
11-DMCP	0.0	0.00			
2-MHEX ,	476.4	3.55			
23-DMP ,	225.0	1.68			
3-MHEX ,	418.5	3.12			
1C3-DMCP	314.9	2.35			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	13633.		C1/C2	0.92
GASOLINE	13408.		A /D2	2.67
NAPHTHENES	2700.	20.14	C1/D2	3.60
C6-7	4972.	37.08	CH/MCP	0.13
			PENT/IPENT,	0.29

	PPB	NORM PERCENT
MCP	737.4	41.8
CH	95.8	5.4
MCH	932.5	52.8
TOTAL	1765.7	100.0

PARAFFIN INDEX 1	1.031
PARAFFIN INDEX 2	16.195

14 JUL 83

72648E AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2830-2845 M

	TOTAL PPB	NORM PERCENT
METHANE	0.0	
ETHANE	0.0	
PROPANE	203.8	
IBUTANE	989.7	5.57
NBUTANE	956.2	5.38
IPENTANE	4063.6	22.86
NPENTANE	855.4	4.81
22-DMB	18.9	0.11
CPENTANE	22.6	0.13
23-DMB	383.1	2.16
2-MP	2215.2	12.46
3-MP	1609.1	9.05
NHEXANE	778.5	4.38
MCP	747.8	4.21
22-DMP	0.0	0.00
24-DMP	109.7	0.62
223-TMB	15.7	0.09
CHEXANE	92.7	0.52
33-DMP ,	3.6	0.02
11-DMCP	0.0	0.00
2-MHEX ,	897.7	5.05
23-DMP ,	385.0	2.17
3-MHEX ,	774.4	4.36
1C3-DMCP	394.4	2.22
1T3-DMCP	479.0	2.69
1T2-DMCP	201.9	1.14
3-EPENT	0.0	0.00
224-TMP	0.0	0.00
NHEPTANE	682.2	3.84
1C2-DMCP	38.6	0.22
MCH	1059.5	5.96

	TOTALS PPB	NORM PERCENT
ALL COMP	17978.	
GASOLINE	17775.	
NAPHTHENES	3037.	17.08
C6-7	6661.	37.47

SIG COMP RATIOS

C1/C2	1.10
A /D2	1.89
C1/D2	2.65
CH/MCP	0.12
PENT/IPENT,	0.21

	PPB	NORM PERCENT
MCP	747.8	39.4
CH	92.7	4.9
MCH	1059.5	55.8
TOTAL	1900.0	100.0

PARAFFIN INDEX 1	1.555
PARAFFIN INDEX 2	13.725

14 JUL 83

726480 AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2860-2875 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	1026.8	2.16
ETHANE	0.0		1T2-DMCP	535.3	1.12
PROPANE	739.6		3-EPENT	0.0	0.00
IBUTANE	2867.6	6.02	224-TMP	0.0	0.00
NBUTANE	2371.7	4.98	NHEPTANE	1433.3	3.01
IPENTANE	11155.8	23.44	1C2-DMCP	108.5	0.23
NPENTANE	3062.7	6.43	MCH	2234.3	4.69
22-DMB	30.0	0.06			
CPENTANE	64.0	0.13			
23-DMB	755.8	1.59			
2-MP	6276.5	13.19			
3-MP	4716.3	9.91			
NHEXANE	2552.6	5.36			
MCP	2365.0	4.97			
22-DMP	0.0	0.00			
24-DMP	163.9	0.34			
223-TMB	17.9	0.04			
CHEXANE	244.5	0.51			
33-DMP ,	6.5	0.01			
11-DMCP	0.0	0.00			
2-MHEX ,	2148.1	4.51			
23-DMP ,	672.3	1.41			
3-MHEX ,	1946.2	4.09			
1C3-DMCP	845.2	1.78			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	48340.		C1/C2	0.95
GASOLINE	47601.		A /D2	2.05
NAPHTHENES	7424.	15.60	C1/D2	2.38
C6-7	16300.	34.24	CH/MCP	0.10
			PENT/IPENT,	0.27

	PPB	NORM PERCENT
MCP	2365.0	48.8
CH	244.5	5.0
MCH	2234.3	46.1
TOTAL	4843.8	100.0

PARAFFIN INDEX 1	1.701
PARAFFIN INDEX 2	12.921

14 JUL 83

726481 AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2890-2905 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	430.0	2.00
ETHANE	0.0		1T2-DMCP	215.9	1.00
PROPANE	251.7		3-EPENT	0.0	0.00
IBUTANE	673.1	3.13	224-TMP	0.0	0.00
NBUTANE	777.5	3.62	NHEPTANE	607.1	2.83
IPENTANE	6685.6	31.11	1C2-DMCP	44.8	0.21
NPENTANE	1670.0	7.77	MCH	1128.4	5.25
22-DMB	15.7	0.07			
CPENTANE	49.9	0.23			
23-DMB	353.5	1.65			
2-MP	2547.9	11.86			
3-MP	1909.3	8.89			
NHEXANE	1042.4	4.85			
MCP	1099.2	5.12			
22-DMP	0.0	0.00			
24-DMP	59.1	0.28			
223-TMB	7.5	0.04			
CHEXANE	136.6	0.64			
33-DMP ,	2.5	0.01			
11-DMCP	0.0	0.00			
2-MHEX ,	727.7	3.39			
23-DMP ,	269.6	1.25			
3-MHEX ,	670.9	3.12			
1C3-DMCP	362.7	1.69			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS		
ALL COMP	21739.		C1/C2	0.93	
GASOLINE	21487.		A /D2	2.46	
NAPHTHENES	3468.	16.14	C1/D2	2.97	
C6-7	6804.	31.67	CH/MCP	0.12	
			PENT/IPENT,		0.25

	PPB	NORM PERCENT
MCP	1099.2	46.5
CH	136.6	5.8
MCH	1128.4	47.7
TOTAL	2364.2	100.0

PARAFFIN INDEX 1	1.387
PARAFFIN INDEX 2	13.338

14 JUL 83

72648L AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2935-2950 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	590.3	3.01
ETHANE	0.0		1T2-DMCP	299.1	1.53
PROPANE	292.3		3-EPENT	0.0	0.00
IBUTANE	870.8	4.44	224-TMP	0.0	0.00
NBUTANE	936.5	4.78	NHEPTANE	630.4	3.22
IPENTANE	3885.4	19.83	1C2-DMCP	163.6	0.84
NPENTANE	1355.6	6.92	MCH	1242.3	6.34
22-DMB	12.5	0.06			
CPENTANE	38.0	0.19			
23-DMB	329.8	1.68			
2-MP	2437.2	12.44			
3-MP	1889.0	9.64			
NHEXANE	918.3	4.69			
MCP	1227.2	6.26			
22-DMP	0.0	0.00			
24-DMP	75.2	0.38			
223-TMB	9.0	0.05			
CHEXANE	152.2	0.78			
33-DMP ,	3.7	0.02			
11-DMCP	0.0	0.00			
2-MHEX ,	882.6	4.50			
23-DMP ,	324.8	1.66			
3-MHEX ,	819.7	4.18			
1C3-DMCP	502.5	2.56			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	19888.		C1/C2	0.82
GASOLINE	19596.		A /D2	1.89
NAPHTHENES	4215.	21.51	C1/D2	2.78
C6-7	7841.	40.01	CH/MCP	0.12
			PENT/IPENT,	0.35

	PPB	NORM PERCENT
MCP	1227.2	46.8
CH	152.2	5.8
MCH	1242.3	47.4
TOTAL	2621.7	100.0

PARAFFIN INDEX 1	1.223
PARAFFIN INDEX 2	11.572

14 JUL 83

72648N AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2965-2980 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	244.0	2.60
ETHANE	0.0		1T2-DMCP	117.4	1.25
PROPANE	329.9		3-EPENT	0.0	0.00
IBUTANE	836.5	8.90	224-TMP	0.0	0.00
NBUTANE	863.1	9.19	NHEPTANE	292.6	3.11
IPENTANE	1730.8	18.42	1C2-DMCP	25.8	0.28
NPENTANE	930.4	9.90	MCH	510.4	5.43
22-DMB	6.9	0.07			
CPENTANE	18.8	0.20			
23-DMB	149.9	1.60			
2-MP	942.4	10.03			
3-MP	697.2	7.42			
NHEXANE	357.1	3.80			
MCP	520.2	5.54			
22-DMP	0.0	0.00			
24-DMP	41.2	0.44			
223-TMB	5.4	0.06			
CHEXANE	73.1	0.78			
33-DMP ,	0.8	0.01			
11-DMCP	0.0	0.00			
2-MHEX ,	353.6	3.76			
23-DMP ,	154.1	1.64			
3-MHEX ,	312.0	3.32			
1C3-DMCP	210.7	2.24			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	9724.		C1/C2	0.84
GASOLINE	9394.		A /D2	2.08
NAPHTHENES	1720.	18.31	C1/D2	3.01
C6-7	3218.	34.26	CH/MCP	0.14
			PENT/IPENT,	0.54

	PPB	NORM PERCENT
MCP	520.2	47.1
CH	73.1	6.6
MCH	510.4	46.2
TOTAL	1103.7	100.0

PARAFFIN INDEX 1	1.164
PARAFFIN INDEX 2	12.898

14 JUL 83

72648P AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 2995-3010 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	98.7	1.62
ETHANE	0.0		1T2-DMCP	82.6	1.36
PROPANE	97.8		3-EPENT	0.0	0.00
IBUTANE	478.3	7.85	224-TMP	0.0	0.00
NBUTANE	482.6	7.92	NHEPTANE	160.0	2.63
IPENTANE	1400.8	23.00	1C2-DMCP	7.5	0.12
NPENTANE	703.2	11.54	MCH	228.8	3.76
22-DMB	5.5	0.09			
CPENTANE	14.0	0.23			
23-DMB	119.5	1.96			
2-MP	658.4	10.81			
3-MP	452.5	7.43			
NHEXANE	220.2	3.61			
MCP	316.9	5.20			
22-DMP	0.0	0.00			
24-DMP	29.8	0.49			
223-TMB	2.6	0.04			
CHEXANE	40.8	0.67			
33-DMP ,	0.0	0.00			
11-DMCP	0.0	0.00			
2-MHEX ,	176.2	2.89			
23-DMP ,	100.6	1.65			
3-MHEX ,	206.6	3.39			
1C3-DMCP	104.7	1.72			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	6189.		C1/C2	0.73
GASOLINE	6091.		A /D2	1.84
NAPHTHENES	894.	14.68	C1/D2	2.16
C6-7	1776.	29.16	CH/MCP	0.13
			PENT/IPENT,	0.50

	PPB	NORM PERCENT
MCP	316.9	54.0
CH	40.8	7.0
MCH	228.8	39.0
TOTAL	586.5	100.0

PARAFFIN INDEX 1	1.338
PARAFFIN INDEX 2	13.343

14 JUL 83

72648R AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 3030-3045 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	1201.8	2.02
ETHANE	0.0		1T2-DMCP	2102.0	3.53
PROPANE	645.1		3-EPENT	0.0	0.00
IBUTANE	1639.5	2.75	224-TMP	0.0	0.00
NBUTANE	3012.2	5.06	NHEPTANE	2138.7	3.59
IPENTANE	8440.5	14.17	1C2-DMCP	423.7	0.71
NPENTANE	7304.7	12.26	MCH	4042.2	6.78
22-DMB	60.5	0.10			
CPENTANE	1550.3	2.60			
23-DMB	739.6	1.24			
2-MP	4740.4	7.96			
3-MP	2884.8	4.84			
NHEXANE	3832.8	6.43			
MCP	8867.8	14.88			
22-DMP	0.0	0.00			
24-DMP	46.0	0.08			
223-TMB	10.3	0.02			
CHEXANE	2377.5	3.99			
33-DMP ,	0.0	0.00			
11-DMCP	0.0	0.00			
2-MHEX ,	850.7	1.43			
23-DMP ,	810.2	1.36			
3-MHEX ,	1036.1	1.74			
1C3-DMCP	1470.2	2.47			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS		
ALL COMP	60228.		C1/C2	0.52	
GASOLINE	59583.		A /D2	5.76	
NAPHTHENES	22036.	36.98	C1/D2	7.02	
C6-7	29210.	49.02	CH/MCP	0.27	
			PENT/IPENT,		0.87

	PPB	NORM PERCENT
MCP	8867.8	58.0
CH	2377.5	15.6
MCH	4042.2	26.4
TOTAL	15287.5	100.0

PARAFFIN INDEX 1	0.395
PARAFFIN INDEX 2	13.342

14 JUL 83

72648S AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 3045-3060 M

	TOTAL PPB	NORM PERCENT
METHANE	0.0	
ETHANE	0.0	
PROPANE	430.3	
IBUTANE	1530.6	2.33
NBUTANE	3180.4	4.83
IPENTANE	7181.2	10.91
NPENTANE	5781.5	8.79
22-DMB	43.2	0.07
CPENTANE	1829.9	2.78
23-DMB	753.4	1.14
2-MP	5905.6	8.97
3-MP	3777.5	5.74
NHEXANE	4043.7	6.14
MCP	12458.8	18.93
22-DMP	0.0	0.00
24-DMP	36.3	0.06
223-TMB	5.9	0.01
CHEXANE	2529.6	3.84
33-DMP ,	0.0	0.00
11-DMCP	0.0	0.00
2-MHEX ,	1188.8	1.81
23-DMP ,	1058.5	1.61
3-MHEX ,	1389.4	2.11
1C3-DMCP	1891.2	2.87
1T3-DMCP	1536.6	2.33
1T2-DMCP	2654.1	4.03
3-EPENT	0.0	0.00
224-TMP	0.0	0.00
NHEPTANE	2632.9	4.00
1C2-DMCP	411.9	0.63
MCH	3986.7	6.06

	TOTALS PPB	NORM PERCENT
ALL COMP	66238.	
GASOLINE	65808.	
NAPHTHENES	27299.	41.48
C6-7	35824.	54.44

SIG COMP RATIOS

C1/C2	0.41
A /D2	4.81
C1/D2	5.55
CH/MCP	0.20
PENT/IPENT,	0.81

	PPB	NORM PERCENT
MCP	12458.8	65.7
CH	2529.6	13.3
MCH	3986.7	21.0
TOTAL	18975.1	100.0

PARAFFIN INDEX 1	0.424
PARAFFIN INDEX 2	13.954

14 JUL 83

72648T AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 3060-3075 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	197.8	2.00
ETHANE	0.0		1T2-DMCP	345.9	3.49
PROPANE	266.3		3-EPENT	0.0	0.00
IBUTANE	357.2	3.61	224-TMP	0.0	0.00
NBUTANE	746.9	7.54	NHEPTANE	331.4	3.35
IPENTANE	1258.0	12.71	1C2-DMCP	25.6	0.26
NPENTANE	1242.2	12.55	MCH	560.6	5.66
22-DMB	9.7	0.10			
CPENTANE	230.2	2.33			
23-DMB	113.7	1.15			
2-MP	795.0	8.03			
3-MP	504.3	5.09			
NHEXANE	611.9	6.18			
MCP	1537.6	15.53			
22-DMP	0.0	0.00			
24-DMP	9.3	0.09			
223-TMB	0.0	0.00			
CHEXANE	316.2	3.19			
33-DMP ,	0.0	0.00			
11-DMCP	0.0	0.00			
2-MHEX ,	168.8	1.70			
23-DMP ,	108.8	1.10			
3-MHEX ,	219.9	2.22			
1C3-DMCP	209.2	2.11			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	10167.		C1/C2	0.45
GASOLINE	9900.		A /D2	4.29
NAPHTHENES	3423.	34.58	C1/D2	4.75
C6-7	4643.	46.90	CH/MCP	0.21
			PENT/IPENT,	0.99

	PPB	NORM PERCENT
MCP	1537.6	63.7
CH	316.2	13.1
MCH	560.6	23.2
TOTAL	2414.4	100.0

PARAFFIN INDEX 1	0.516
PARAFFIN INDEX 2	13.478

14 JUL 83

72648U AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 3075-3090 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	94.4	2.09
ETHANE	0.0		1T2-DMCP	129.7	2.87
PROPANE	88.6		3-EPENT	0.0	0.00
IBUTANE	165.9	3.67	224-TMP	0.0	0.00
NBUTANE	308.6	6.83	NHEPTANE	136.7	3.03
IPENTANE	738.6	16.35	1C2-DMCP	12.3	0.27
NPENTANE	584.7	12.94	MCH	303.2	6.71
22-DMB	3.5	0.08			
CPENTANE	74.3	1.64			
23-DMB	71.6	1.58			
2-MP	384.0	8.50			
3-MP	256.8	5.68			
NHEXANE	207.8	4.60			
MCP	519.6	11.50			
22-DMP	0.0	0.00			
24-DMP	12.7	0.28			
223-TMB	1.4	0.03			
CHEXANE	127.0	2.81			
33-DMP ,	0.0	0.00			
11-DMCP	0.0	0.00			
2-MHEX ,	93.9	2.08			
23-DMP ,	63.8	1.41			
3-MHEX ,	124.6	2.76			
1C3-DMCP	102.4	2.27			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	4606.		C1/C2	0.61
GASOLINE	4518.		A /D2	2.76
NAPHTHENES	1363.	30.17	C1/D2	4.21
C6-7	1930.	42.72	CH/MCP	0.24
			PENT/IPENT,	0.79

	PPB	NORM PERCENT
MCP	519.6	54.7
CH	127.0	13.4
MCH	303.2	31.9
TOTAL	949.8	100.0

PARAFFIN INDEX 1	0.669
PARAFFIN INDEX 2	11.627

14 JUL 83

72648V AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 3090-3105 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	273.8	2.42
ETHANE	0.0		1T2-DMCP	467.1	4.13
PROPANE	83.1		3-EPENT	0.0	0.00
IBUTANE	145.6	1.29	224-TMP	0.0	0.00
NBUTANE	462.8	4.09	NHEPTANE	354.9	3.14
IPENTANE	1138.0	10.05	1C2-DMCP	36.6	0.32
NPENTANE	1376.0	12.16	MCH	944.9	8.35
22-DMB	12.1	0.11			
CPENTANE	247.2	2.18			
23-DMB	136.6	1.21			
2-MP	915.0	8.08			
3-MP	624.3	5.52			
NHEXANE	831.8	7.35			
MCP	1640.6	14.49			
22-DMP	0.0	0.00			
24-DMP	16.0	0.14			
223-TMB	2.4	0.02			
CHEXANE	694.7	6.14			
33-DMP ,	0.0	0.00			
11-DMCP	0.0	0.00			
2-MHEX ,	181.9	1.61			
23-DMP ,	161.3	1.43			
3-MHEX ,	378.8	3.35			
1C3-DMCP	276.5	2.44			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	11402.		C1/C2	0.68
GASOLINE	11319.		A /D2	3.13
NAPHTHENES	4581.	40.48	C1/D2	4.81
C6-7	6261.	55.32	CH/MCP	0.42
			PENT/IPENT,	1.21

	PPB	NORM PERCENT
MCP	1640.6	50.0
CH	694.7	21.2
MCH	944.9	28.8
TOTAL	3280.2	100.0

PARAFFIN INDEX 1	0.551
PARAFFIN INDEX 2	9.505

14 JUL 83

72648W AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 3105-3120 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	392.5	2.22
ETHANE	0.0		1T2-DMCP	701.6	3.98
PROPANE	607.8		3-EPENT	0.0	0.00
IBUTANE	670.9	3.80	224-TMP	0.0	0.00
NBUTANE	1461.1	8.28	NHEPTANE	515.3	2.92
IPENTANE	1927.8	10.93	1C2-DMCP	157.5	0.89
NPENTANE	2090.9	11.85	MCH	1879.9	10.66
22-DMB	20.6	0.12			
CPENTANE	323.3	1.83			
23-DMB	177.8	1.01			
2-MP	1077.8	6.11			
3-MP	787.6	4.46			
NHEXANE	1032.9	5.85			
MCP	2146.5	12.17			
22-DMP	0.0	0.00			
24-DMP	18.6	0.11			
223-TMB	4.7	0.03			
CHEXANE	1014.0	5.75			
33-DMP ,	0.0	0.00			
11-DMCP	0.0	0.00			
2-MHEX ,	238.4	1.35			
23-DMP ,	204.7	1.16			
3-MHEX ,	397.1	2.25			
1C3-DMCP	401.0	2.27			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	18250.		C1/C2	0.82
GASOLINE	17643.		A /D2	3.90
NAPHTHENES	7016.	39.77	C1/D2	7.89
C6-7	9105.	51.61	CH/MCP	0.47
			PENT/IPENT,	1.08

	PPB	NORM PERCENT
MCP	2146.5	42.6
CH	1014.0	20.1
MCH	1879.9	37.3
TOTAL	5040.4	100.0

PARAFFIN INDEX 1	0.425
PARAFFIN INDEX 2	8.970

14 JUL 83

72648X AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 3120-3135 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	539.3	1.94
ETHANE	0.0		1T2-DMCP	1050.4	3.77
PROPANE	1024.6		3-EPENT	0.0	0.00
IBUTANE	1218.0	4.37	224-TMP	0.0	0.00
NBUTANE	2223.6	7.98	NHEPTANE	1115.0	4.00
IPENTANE	3492.6	12.53	1C2-DMCP	257.4	0.92
NPENTANE	2814.1	10.10	MCH	2273.5	8.16
22-DMB	22.6	0.08			
CPENTANE	575.7	2.07			
23-DMB	278.4	1.00			
2-MP	2010.3	7.21			
3-MP	1292.5	4.64			
NHEXANE	1758.0	6.31			
MCP	3983.5	14.30			
22-DMP	0.0	0.00			
24-DMP	19.6	0.07			
223-TMB	2.4	0.01			
CHEXANE	1031.3	3.70			
33-DMP ,	0.0	0.00			
11-DMCP	0.0	0.00			
2-MHEX ,	416.1	1.49			
23-DMP ,	348.8	1.25			
3-MHEX ,	499.2	1.79			
1C3-DMCP	643.1	2.31			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	28890.		C1/C2	0.57
GASOLINE	27865.		A /D2	5.75
NAPHTHENES	10354.	37.16	C1/D2	7.45
C6-7	13938.	50.02	CH/MCP	0.26
			PENT/IPENT,	0.81

	PPB	NORM PERCENT
MCP	3983.5	54.7
CH	1031.3	14.2
MCH	2273.5	31.2
TOTAL	7288.3	100.0

PARAFFIN INDEX 1	0.410
PARAFFIN INDEX 2	14.084

14 JUL 83

72648Y AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 3135-3150 M

	TOTAL PPB	NORM PERCENT
METHANE	0.0	
ETHANE	0.0	
PROPANE	21243.4	
IBUTANE	18091.3	9.68
NBUTANE	22875.2	12.23
IPENTANE	28352.2	15.16
NPENTANE	18233.5	9.75
22-DMB	47.9	0.03
CPENTANE	5433.5	2.91
23-DMB	1608.5	0.86
2-MP	13270.4	7.10
3-MP	8297.2	4.44
NHEXANE	8429.5	4.51
MCP	23019.9	12.31
22-DMP	0.0	0.00
24-DMP	50.6	0.03
223-TMB	0.0	0.00
CHEXANE	3895.9	2.08
33-DMP ,	0.0	0.00
11-DMCP	0.0	0.00
2-MHEX ,	2384.0	1.28
23-DMP ,	1780.4	0.95
3-MHEX ,	2802.7	1.50
1C3-DMCP	3811.2	2.04
1T3-DMCP	3168.6	1.69
1T2-DMCP	5192.0	2.78
3-EPENT	0.0	0.00
224-TMP	0.0	0.00
NHEPTANE	4807.9	2.57
1C2-DMCP	1217.4	0.65
MCH	10198.6	5.45

	TOTALS PPB	NORM PERCENT
ALL COMP	208212.	
GASOLINE	186968.	
NAPHTHENES	55937.	29.92
C6-7	70759.	37.85

SIG COMP RATIOS

C1/C2	0.45
A /D2	4.72
C1/D2	5.88
CH/MCP	0.17
PENT/IPENT,	0.64

	PPB	NORM PERCENT
MCP	23019.9	62.0
CH	3895.9	10.5
MCH	10198.6	27.5
TOTAL	37114.4	100.0

PARAFFIN INDEX 1	0.426
PARAFFIN INDEX 2	12.639

14 JUL 83

72649K AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 3315-3330 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	485.1	1.20
ETHANE	0.0		1T2-DMCP	961.6	2.37
PROPANE	320.9		3-EPENT	0.0	0.00
IBUTANE	478.2	1.18	224-TMP	0.0	0.00
NBUTANE	1470.2	3.63	NHEPTANE	3449.2	8.51
IPENTANE	3136.9	7.74	1C2-DMCP	94.3	0.23
NPENTANE	4422.7	10.92	MCH	6116.3	15.10
22-DMB	86.3	0.21			
CPENTANE	405.6	1.00			
23-DMB	385.9	0.95			
2-MP	3179.8	7.85			
3-MP	1812.7	4.47			
NHEXANE	5320.2	13.13			
MCP	2644.0	6.53			
22-DMP	0.0	0.00			
24-DMP	86.7	0.21			
223-TMB	11.9	0.03			
CHEXANE	2772.0	6.84			
33-DMP ,	0.0	0.00			
11-DMCP	0.0	0.00			
2-MHEX ,	1045.1	2.58			
23-DMP ,	615.2	1.52			
3-MHEX ,	1097.4	2.71			
1C3-DMCP	436.0	1.08			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	40834.		C1/C2	2.15
GASOLINE	40513.		A /D2	7.99
NAPHTHENES	13915.	34.35	C1/D2	9.05
C6-7	25135.	62.04	CH/MCP	1.05
			PENT/IPENT,	1.41

	PPB	NORM PERCENT
MCP	2644.0	22.9
CH	2772.0	24.0
MCH	6116.3	53.0
TOTAL	11532.3	100.0

PARAFFIN INDEX 1	1.138
PARAFFIN INDEX 2	20.316

14 JUL 83

72649M AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 3345-3360 M

	TOTAL PPB	NORM PERCENT
METHANE	0.0	
ETHANE	0.0	
PROPANE	675.7	
IBUTANE	1053.3	1.15
NBUTANE	2996.6	3.29
IPENTANE	6974.4	7.65
NPENTANE	8969.6	9.83
22-DMB	138.8	0.15
CPENTANE	1672.5	1.83
23-DMB	808.0	0.89
2-MP	6476.0	7.10
3-MP	3917.9	4.30
NHEXANE	10507.8	11.52
MCP	9453.9	10.37
22-DMP	0.0	0.00
24-DMP	96.7	0.11
223-TMB	18.9	0.02
CHEXANE	7709.7	8.45
33-DMP ,	0.0	0.00
11-DMCP	0.0	0.00
2-MHEX ,	1783.5	1.96
23-DMP ,	1132.0	1.24
3-MHEX ,	1965.1	2.15
1C3-DMCP	1513.0	1.66
1T3-DMCP	1417.5	1.55
1T2-DMCP	2809.2	3.08
3-EPENT	0.0	0.00
224-TMP	0.0	0.00
NHEPTANE	5906.7	6.48
1C2-DMCP	770.4	0.84
MCH	13110.1	14.37

	TOTALS PPB	NORM PERCENT
ALL COMP	91877.	
GASOLINE	91202.	
NAPHTHENES	38456.	42.17
C6-7	58195.	63.81

SIG COMP RATIOS

C1/C2	1.42
A /D2	8.35
C1/D2	11.50
CH/MCP	0.82
PENT/IPENT,	1.29

	PPB	NORM PERCENT
MCP	9453.9	31.2
CH	7709.7	25.5
MCH	13110.1	43.3
TOTAL	30273.7	100.0

PARAFFIN INDEX 1	0.653
PARAFFIN INDEX 2	15.816

14 JUL 83

726490 AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 3405-3420 M

	TOTAL PPB	NORM PERCENT
METHANE	0.0	
ETHANE	0.0	
PROPANE	0.0	
IBUTANE	238.9	2.78
NBUTANE	354.2	4.13
IPENTANE	494.8	5.77
NPENTANE	1687.4	19.67
22-DMB	24.9	0.29
CPENTANE	146.9	1.71
23-DMB	130.0	1.52
2-MP	939.9	10.96
3-MP	519.9	6.06
NHEXANE	1244.3	14.51
MCP	676.3	7.88
22-DMP	0.0	0.00
24-DMP	20.7	0.24
223-TMB	2.0	0.02
CHEXANE	464.2	5.41
33-DMP ,	0.0	0.00
11-DMCP	0.0	0.00
2-MHEX ,	195.2	2.28
23-DMP ,	92.9	1.08
3-MHEX ,	217.1	2.53
1C3-DMCP	72.4	0.84
1T3-DMCP	79.0	0.92
1T2-DMCP	136.6	1.59
3-EPENT	0.0	0.00
224-TMP	0.0	0.00
NHEPTANE	393.5	4.59
1C2-DMCP	7.6	0.09
MCH	439.7	5.13

	TOTALS PPB	NORM PERCENT
ALL COMP	8578.	
GASOLINE	8578.	
NAPHTHENES	2023.	23.58
C6-7	4041.	47.11

SIG COMP RATIOS

C1/C2	1.13
A /D2	7.55
C1/D2	5.06
CH/MCP	0.69
PENT/IPENT,	3.41

	PPB	NORM PERCENT
MCP	676.3	42.8
CH	464.2	29.4
MCH	439.7	27.8
TOTAL	1580.2	100.0

PARAFFIN INDEX 1	1.432
PARAFFIN INDEX 2	18.821

14 JUL 83

72649S AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 3435-3450 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	101.1	1.28
ETHANE	0.0		1T2-DMCP	188.5	2.38
PROPANE	60.7		3-EPENT	0.0	0.00
IBUTANE	149.7	1.89	224-TMP	0.0	0.00
NBUTANE	484.3	6.12	NHEPTANE	371.5	4.69
IPENTANE	843.5	10.65	1C2-DMCP	14.5	0.18
NPENTANE	1137.0	14.36	MCH	727.2	9.18
22-DMB	12.6	0.16			
CPENTANE	112.1	1.42			
23-DMB	83.0	1.05			
2-MP	627.2	7.92			
3-MP	358.9	4.53			
NHEXANE	867.5	10.96			
MCP	655.3	8.28			
22-DMP	0.0	0.00			
24-DMP	13.2	0.17			
223-TMB	0.0	0.00			
CHEXANE	634.1	8.01			
33-DMP ,	0.0	0.00			
11-DMCP	0.0	0.00			
2-MHEX ,	145.9	1.84			
23-DMP ,	92.9	1.17			
3-MHEX ,	200.0	2.53			
1C3-DMCP	98.5	1.24			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	7979.		C1/C2	1.42
GASOLINE	7919.		A /D2	6.20
NAPHTHENES	2531.	31.97	C1/D2	7.54
C6-7	4110.	51.91	CH/MCP	0.97
			PENT/IPENT,	1.35

	PPB	NORM PERCENT
MCP	655.3	32.5
CH	634.1	31.4
MCH	727.2	36.1
TOTAL	2016.6	100.0

PARAFFIN INDEX 1	0.891
PARAFFIN INDEX 2	14.514

14 JUL 83

72649U AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 3465-3480 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	388.9	2.44
ETHANE	0.0		1T2-DMCP	282.4	1.77
PROPANE	121.1		3-EPENT	0.0	0.00
IBUTANE	224.7	1.41	224-TMP	0.0	0.00
NBUTANE	614.0	3.85	NHEPTANE	1171.9	7.35
IPENTANE	1687.7	10.58	1C2-DMCP	33.0	0.21
NPENTANE	1533.4	9.61	MCH	1675.2	10.50
22-DMB	22.4	0.14			
CPENTANE	143.9	0.90			
23-DMB	190.1	1.19			
2-MP	1502.5	9.42			
3-MP	965.0	6.05			
NHEXANE	1729.5	10.84			
MCP	1187.7	7.45			
22-DMP	0.0	0.00			
24-DMP	51.1	0.32			
223-TMB	4.3	0.03			
CHEXANE	829.0	5.20			
33-DMP ,	0.0	0.00			
11-DMCP	0.0	0.00			
2-MHEX ,	605.9	3.80			
23-DMP ,	235.5	1.48			
3-MHEX ,	572.7	3.59			
1C3-DMCP	299.4	1.88			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	16071.		C1/C2	1.42
GASOLINE	15950.		A /D2	5.07
NAPHTHENES	4839.	30.34	C1/D2	5.43
C6-7	9066.	56.84	CH/MCP	0.70
			PENT/IPENT,	0.91

	PPB	NORM PERCENT
MCP	1187.7	32.2
CH	829.0	22.5
MCH	1675.2	45.4
TOTAL	3691.9	100.0

PARAFFIN INDEX 1	1.214
PARAFFIN INDEX 2	19.336

14 JUL 83

72649W AUSTRALIA, PILOTFISH-1A, GIPPSLAND BASIN, 3495-3510 M

	TOTAL PPB	NORM PERCENT		TOTAL PPB	NORM PERCENT
METHANE	0.0		1T3-DMCP	60.3	2.24
ETHANE	0.0		1T2-DMCP	52.7	1.96
PROPANE	103.1		3-EPENT	0.0	0.00
IBUTANE	122.7	4.57	224-TMP	0.0	0.00
NBUTANE	312.6	11.63	NHEPTANE	94.0	3.50
IPENTANE	353.2	13.14	1C2-DMCP	4.6	0.17
NPENTANE	325.0	12.09	MCH	186.2	6.93
22-DMB	0.0	0.00			
CPENTANE	49.9	1.86			
23-DMB	22.6	0.84			
2-MP	204.1	7.59			
3-MP	126.5	4.71			
NHEXANE	180.1	6.70			
MCP	321.1	11.94			
22-DMP	0.0	0.00			
24-DMP	2.6	0.10			
223-TMB	0.0	0.00			
CHEXANE	90.0	3.35			
33-DMP ,	0.0	0.00			
11-DMCP	0.0	0.00			
2-MHEX ,	54.3	2.02			
23-DMP ,	25.6	0.95			
3-MHEX ,	56.7	2.11			
1C3-DMCP	43.4	1.61			

	TOTALS PPB	NORM PERCENT	SIG COMP RATIOS	
ALL COMP	2791.		C1/C2	0.69
GASOLINE	2688.		A /D2	4.84
NAPHTHENES	808.	30.07	C1/D2	5.83
C6-7	1172.	43.58	CH/MCP	0.28
			PENT/IPENT,	0.92

	PPB	NORM PERCENT
MCP	321.1	53.8
CH	90.0	15.1
MCH	186.2	31.2
TOTAL	597.3	100.0

PARAFFIN INDEX 1	0.710
PARAFFIN INDEX 2	14.172

APPENDIX-2

Detailed Vitrinite Reflectance and Exinite Fluorescence Data -
Report by A.C. Cook.

27.4.83

PILOTFISH No. 1

KK No.	Esso No.	Depth m	$\bar{R}_v$ max %	Range R_v max %	N	Exinite fluorescence (Remarks)
			LAKES ENTRANCE FORMATION			
17112	BS/ 72595-W	2901 SWC	-		-	Rare dinoflagellates, greenish yellow to orange. (Calcareous claystone, with sparse calcareous fossils. D.o.m. rare, E>I, no V. Bright green fluorescing inclusion is probably oil but is likely to be a contaminant. Pyrite sparse.)
			PALEOCENE-LATE CRETACEOUS			
			LATROBE GROUP			
17113	BS/ 72596-Q	2933 SWC	-		-	Rare orange sporinite. (Calcareous, glauconitic arenite. D.o.m. rare, I>E, no V. Inertinite rare. No oil-cut in fluorescence, but some minor green fluorescence associated with the lumens in inertinite could be oil-related.)
17114	BS/ 72596-O	2937 SWC	0.46	0.41-0.48	4	Rare sporinite yellow to orange. Glauconitic sandy siltstone. D.o.m. sparse, I>V>E. Inertinite and vitrinite rare. Rare bright yellow interstitial fluorescence probably associated with carbonate. Slight green haze developed in the oil after about 5 minutes, may be due to weak oil-cut. Small patches of bright green ?fluorinite may also be oil-related. Pyrite common.)
17115	BS/ 72596-I	2949 SWC	0.43		1	Rare sporinite, yellow to orange. (Calcareous, glauconitic arenite. D.o.m. sparse. I>E>V, Inertinite and vitrinite rare. No evidence of an oil-cut in fluorescence-mode. Pyrite sparse.)
17116	BS/ 72596-D	2959.1 SWC				No exinite present. (Sandstone. D.o.m. absent. Pyrite and iron oxides abundant carbonate sparse.)
17117	BS/ 72595-Q	3039 SWC	0.58	0.52-0.66	20	Abundant cutinite, yellow to brown, abundant sporinite, yellow to orange, sparse resinite, green and yellow and sparse suberinite, brown. (Claystone. D.o.m. abundant, V>E>>I. Vitrinite and exinite abundant. Inertinite rare. Weak green oil cut from cracks in vitrinite. Common iron oxides. Abundant pyrite.)
17267	BS/ 72595-P	3058 SWC	0.58	0.47-0.70	5	Rare sporinite, yellow. (Silty sandstone, d.o.m. sparse, I>V>E. Inertinite sparse, vitrinite rare, both occurring as irregular sand-sized clasts. Much of the vitrinite contains suberinite and some grains were not included in the reflectance mean due to the presence of suberinite. Strong green interstitial fluorescence could be oil but is not associated with any oil-cut. Rare irregular yellow fluorescing interstitial patches in silty grains appear to be dead oil. This material is rare and occurs only in the more clay-rich grains. Pyrite sparse.)

27.4.83

PILOTFISH No. 1

KK No.	Esso No.	Depth m	$\bar{R}_v$ max %	Range R_v max %	N	Exinite fluorescence (Remarks)
17118	BS/ 72595-L	3148.5 SWC	0.56	0.46-0.68	28	Common cutinite, yellow to brown. Sparse sporinite, yellow to orange, sparse suberinite, brown and rare fluorinite, green. (Siltstone>>claystone> sandstone. D.o.m. abundant, V>I>E>. Vitrinite and inertinite abundant. Exinite common. Coaly inclusions of clarite and duroclarite in siltstone. Much of the inertinite is relatively massive and of low reflectance. Pyrite abundant.)
17119	BS/ 72595-E	3318 SWC	0.58	0.48-0.72	30	Sparse cutinite, yellow to dull orange, sparse sporinite, yellowish orange and rare suberinite, brown. (Siltstone>>sandstone. D.o.m. common to abundant, I>V>E. Vitrinite and inertinite common. Exinite sparse. Common iron oxides. Abundant pyrite.)
17120	BS/ 72595-A	3455.5 SWC	0.59	0.50-0.72	30	Common cutinite, greenish yellow to brown and common sporinite, yellowish orange to orange. (Siltstone>>sandstone>claystone. D.o.m. common to abundant, V>E>or=I. Vitrinite common and exinite, and inertinite sparse to common. Sparse iron oxides Abundant pyrite.)

APPENDIX 6

APPENDIX 6

APPENDIX 6

SYNTHETIC SEISMIC TRACE

SYNTHETIC SEISMIC TRADE

PARAMETERS

Well:	Pilotfish-1A
T.D.:	3521mKB
KB:	21m
Water Depth:	206m
Polarity:	Trough represents acoustic impedance increase
Pulse Type:	Zero phase, second derivative, gaussian function
Peak Frequency:	25hz
Sample Frequency:	2 metres
Check Shot Corrections:	Yes
Comments:	Sonic and Density log were edited as follows.

Sonic 910-935mKB Log value held constant at 380 s/m. Casing shoe.

Density 375-950mKB Log value held constant at 2.15 gm/cc. No log

2380-2915mKB Log value held to 2.4 gm/cc or greater as merited by log. Hole caved.

PE601314

This is an enclosure indicator page.
The enclosure PE601314 is enclosed within the container PE902610 at this location in this document.

The enclosure PE601314 has the following characteristics:

ITEM_BARCODE	= PE601314
CONTAINER_BARCODE	= PE902610
NAME	= Checkshot survey
BASIN	= GIPPSLAND
PERMIT	=
TYPE	= WELL
SUBTYPE	= VELOCITY_CHART
DESCRIPTION	= Checkshot survey
REMARKS	=
DATE_CREATED	= 28/01/83
DATE_RECEIVED	= 5/12/53
W_NO	= W793
WELL_NAME	= Pilotfish-1A
CONTRACTOR	= ESSO
CLIENT_OP_CO	= ESSO

(Inserted by DNRE - Vic Govt Mines Dept)

ENCLOSURES

ENCLOSURES.

PE902611

This is an enclosure indicator page.
The enclosure PE902611 is enclosed within the container PE902610 at this location in this document.

The enclosure PE902611 has the following characteristics:

ITEM_BARCODE	= PE902611
CONTAINER_BARCODE	= PE902610
NAME	= Structure Map Post Drill
BASIN	= GIPPSLAND
PERMIT	=
TYPE	= SEISMIC
SUBTYPE	= HRZN_CONTR_MAP
DESCRIPTION	= Structure Map Post Drill, Top of Latrobe Group (enclosure from WCR) for Pilotfish-1A
REMARKS	=
DATE_CREATED	= 1/06/83
DATE_RECEIVED	= 5/12/83
W_NO	= W793
WELL_NAME	= Pilotfish-1A
CONTRACTOR	= ESSO
CLIENT_OP_CO	= ESSO

(Inserted by DNRE - Vic Govt Mines Dept)

PE902612

This is an enclosure indicator page.
The enclosure PE902612 is enclosed within the container PE902610 at this location in this document.

The enclosure PE902612 has the following characteristics:

ITEM_BARCODE	= PE902612
CONTAINER_BARCODE	= PE902610
NAME	= Geological Cross Section A-A
BASIN	= GIPPSLAND
PERMIT	=
TYPE	= WELL
SUBTYPE	= CROSS_SECTION
DESCRIPTION	= Geological Cross Section A-A
REMARKS	=
DATE_CREATED	= 1/08/83
DATE_RECEIVED	= 5/12/83
W_NO	= W793
WELL_NAME	= Pilotfish-1A
CONTRACTOR	= ESSO
CLIENT_OP_CO	= ESSO

(Inserted by DNRE - Vic Govt Mines Dept)

PE601315

This is an enclosure indicator page.
The enclosure PE601315 is enclosed within the container PE902610 at this location in this document.

The enclosure PE601315 has the following characteristics:

ITEM_BARCODE	= PE601315
CONTAINER_BARCODE	= PE902610
NAME	= Well Completion Log
BASIN	= GIPPSLAND
PERMIT	=
TYPE	= WELL
SUBTYPE	= COMPLETION_LOG
DESCRIPTION	= Well Completion Log
REMARKS	=
DATE_CREATED	= 9/12/82
DATE_RECEIVED	=
W_NO	= W793
WELL_NAME	= Pilotfish-1A
CONTRACTOR	= ESSO
CLIENT_OP_CO	= ESSO

(Inserted by DNRE - Vic Govt Mines Dept)