

- Angler-1 Preliminary Petrology Report
- SE Gippsland Basin Vitrinite Reflectance and Maceral Analysis, Hermes-1, Angler-1 and Anemone - 1A (located in Hermes-1 Well Box #180213).
- Angler-1 List of Appendices (From WCR)



PE903240

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container PE903239 at this location in this
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CONTAINER_BARCODE = PE903239
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 BASIN = GIPPSLAND
 ONSHORE? = N
 DATA_TYPE = WELL
 DATA_SUB_TYPE = REPORT
 DESCRIPTION = Angler-1 List of appendices from Well
 Completion Report, VIC/P20, W993.
 REMARKS = PERMIT: VIC/P20
 DATE_WRITTEN = 22-FEB-1990
DATE_PROCESSED =
DATE_RECEIVED = 23-FEB-1990
RECEIVED_FROM = Petrofina Exploration Australia S.A.
 WELL_NAME = Angler-1
 CONTRACTOR = Petrofina Exploration Australia S.A.
 AUTHOR =
 ORIGINATOR = Petrofina Exploration Australia S.A.
 TOP_DEPTH =
 BOTTOM_DEPTH =
ROW_CREATED_BY = xls_hc07

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BASIN = GIPPSLAND
ONSHORE? = N
DATA_TYPE = WELL
DATA_SUB_TYPE = PETROLOGY_RPT
DESCRIPTION = Angler-1 Preliminary Petrology Report -
Angler-1 Reserves Estimate for the
Campanian "B" Sandstones, by National
Centre for Petroleum Geology and
Geophysics for Petrofina Exploration
Australia.
REMARKS = PERMIT: VIC/P20
DATE_WRITTEN = 23-JUN-1989
DATE_PROCESSED =
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RECEIVED_FROM = Petrofina Exploration Australia S.A.
WELL_NAME = Angler-1
CONTRACTOR = Petrofina Exploration Australia S.A.
AUTHOR = Dr. N. M. Lemon
ORIGINATOR = Petrofina Exploration Australia S.A.
TOP_DEPTH =
BOTTOM_DEPTH =
ROW_CREATED_BY = xls_hc07

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ANGLER-1 RESERVES ESTIMATE FOR THE CAMPANIAN "B" SANDSTONESINTRODUCTION

High gas readings of up to 10% total gas were recorded in a shallow marine sandstones penetrated below 4213m at Angler-1. These high gas values persisted down to 4222m before rapidly declining to less than 1% below that depth. The presence of gas condensate in these sandstones, was subsequently confirmed by the RFT pressure data, which further showed a clear GWC at 4239m.

Detailed analyses on a RFT sample recovered at 4226m showed that this gas condensate had the following properties:

Dew point:	5545 psi
Gas Formation Factor (Bg):	0.00373
Gas Liquid Ratio:	1 BBL @ standard conditions per 37126 SCF

RESERVES

Log analysis and RFT results confirm that net reservoir conditions ($\text{por} > 6\%$; $\text{Sw} < 50\%$; and $\text{vshale} < 40\%$) are present in the interval between the top of the reservoir and the GWC (4213m-4239m). To compute reserves, the entire sandstone interval has been divided into three separate zones and the bulk rock volume in each zone computed from a Top Campanian map isopached down to the top of each zone.

Reservoir parameters used in the reserve computations come from the final log evaluation done for Angler-1 while the Bg value was obtained from analyses done on the RFT sample at 4226m. Parameters and results are listed in Table 1.

Table 1RESERVOIR PARAMETERS AND RESERVES IN CAMPANIAN "B" SANDSTONE

ZONE	TOP mbkb	BOTTOM mbkb	THICKNESS m	BULK ROCK VOLUME ($10^6 m^3$)	N/G (%)	POR. (%)	Sw (%)	Bg	GIP BCF
1	4213	4237	24	230	77	13	29.5	268	154.7
2	4246	4259	13	97	65	12.5	29.5	268	53.0
3	4266	4292	26	149	23	12	29.5	268	28.6

GWC = 4239mbkb

TOTAL: 236.3

CONCLUSION

Total gas in place in Campanian "B" Sandstones is 236.3 BCF.

**SOUTHEAST GIPPSLAND BASIN VITRINITE REFLECTANCE
AND MACERAL ANALYSIS, HERMES-1, ANGLER-1 AND
ANEMONE-1A (PE 903160)**

This report is located in the Well Box for Hermes-1 (PE180213).

PE 903160
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**SOUTHEAST GIPPSLAND BASIN
VITRINITE REFLECTANCE AND
MACERAL ANALYSIS, HERMES-1,
ANGLER-1 & ANEMONE-1A**

PETROLEUM DIVISION

20 OCT 1993

Esso Australia Ltd

**Chris Jenkins
October 1994**