

EARLIER FILES

LATER FILES

RECORDS DISPOSITION

ABANDONED.
SUSSESSFUL OUTPOST.

SPUD. 3-8-69.
COMPLETED 8-9-69
T.D. 9651.

38° 19' 19" S
147° 37' 03" E
W.D. 150' KB 31'.
GLOMMAR III

BARRACOUTA - 3

ESSO. WILDCAT. VIC L/I.
553.

- ✓ IES. Run 1. 294 - 2300. *Separate logs 2" and 5"*
- ✓ " " 2. 2683 - 5200. " " 2" " 5"
- ✓ " " 3. 4449 - 9629. " " 2 1/2" " 5 1/2"
- ✓ " " 1, 2 & 3. 294 - 9629. " " 2" " 5"
- ✓ BHCS. Run 1. 2317 - 5193. " " 2" " 5"
- ✓ " " 2. 5180 - 9630. " " 2 1/2" " 5 1/2"
- ✓ " " 1 & 2. 2317 - 9630. " " 2" " 5"
- ✓ FDC/GR. Run 1. { 2330 GR
3450 - 5199. " " 2" " 5"
- ✓ " " " 2. 5180 - 9628. " " 2 1/2" " 5 1/2"
- ✓ " " 1 & 2. 3450 - 9628. " " 2" " 5"
- ✓ Neutron Run 1. 3450 - 4600. " " 2 1/2" " 5"
- ✓ Temperature " 1. 2500 - 5000. " " 2" " 5"
- ✓ " " 2. " " " " " "
- ✓ CDM. " 1. 2" 71m - 921m. 500 SCALE. 2312 - 5188.
- ✓ " " 2. 5" 5180 - 9630.
- ✓ " " 1. 2 1/2" 2312 - 5188.
- ✓ FIT " 1. Tests 1-6.

EXECUTIVE

- ✓ Secretary
- ✓ Deputy Secretary
- ✓ Executive Director
- ✓ Executive Director
- ✓ Executive Director
- ✓ Executive Director
- ✓ Executive Director
- ✓ Executive Director
- ✓ Executive Director
- ✓ Executive Director

- Core Lab. Mudlog. 2350 - 9651.
- " " completion coregraph. Cores 1-3.
- Core Descriptions 1-3. **ESSO**
- " Analysis Report. Core Lab.
- " " Results by B. M. R.
- " " 3 off. *Core's ^{2, 3} cuttings are in Core Storage*

CORPORATE

- General Manager
- Chief Financial Officer
- Manager of Production
- Director of Operations
- Director of Marketing
- Director of Finance
- Director of Business Development
- Manager of Human Resources
- Manager of Information Systems
- Manager of Legal Affairs
- Manager of Public Relations
- Manager of Environmental Affairs

- S.W.C. shot 84. Rec 67. *control. " " " " " "*
- " Descriptions. Run 1, 13 descriptions only. Run 2. 1-30.
- Completion Report *(copy pages for release)*
- Time Depth Curve. *(Needs marking)*
- Palynological Report by L. E. Stover & A. D. Partridge. Plus revision.
- Palaeontology " " D. Taylor.
- Well completion Log. VITRINITE REFLECTANCE BY AMOC. 220486
- Core Lab. ~~show~~ Report.
- Structure Map on Top of Latrobe Group } with 1 completion ~~Report~~
- Cross section of after Drilling Picture }
- Structure Map. Barracouta Field Area. Top of Latrobe.

MINING

- Manager of Mining
- Manager of Mining
- Manager of Mining
- Manager of Mining
- Manager of Mining

PRIMARY SCIENTIFIC

- Manager of Primary Scientific
- Manager of Primary Scientific
- Chief of Primary Scientific
- Director of Primary Scientific
- Director of Primary Scientific
- Director of Primary Scientific

- Sketch of positions of core cuts.
- Weekly Reports. PROPERTIES OF COAL.
- WELLHEAD RECOVERY LOGS: CBL, TL.

14-8-74.

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ENCLOSURES

- 1.0 WELL COMPLETION LOG
- 2.0 GRAPHOLOG (MUD LOG)
- 3.0 TIME DEPTH CURVE

COMPLETION REPORT

I WELL DATA RECORD

Date 23rd June '70

LOCATION

WELL NAME BARRACOUTA 3	STATE VICTORIA	PERMIT or LICENCE Victoria L-1	GEOLOGICAL BASIN GIPPSLAND	FIELD BARRACOUTA
CO-ORDINATES Lat. Long. X Y Surface 38° 19' 19" 147° 37' 03" 554,703 274,201 Bottom Hole		MAP PROJECTION Australian Transverse Mercator	GEOGRAPHICAL DESCRIPTION Offshore 6 miles W S W of Barracouta -1	
<u>ELEVATIONS & DEPTHS</u>				
ELEVATIONS Ground KB 31 RT Braden Head Top Deck Platform	WATER DEPTH 150 FEET PLUG BACK DEPTH 360 FEET	TOTAL DEPTH M.D. 9651 FEET T.V.D. REASONS FOR P.B. ABANDONMENT	Avg. Angle	
<u>DATES</u>				
MOVE IN 2.8.69	RIG UP 2.8.69	SPUDED 3.8.69		
RIG DOWN COMPLETE 8.9.69	RIG RELEASED 8.9.69	PROD.UNIT - Start Rigging Up		
PROD.UNIT - Rig Down Complete		I.P. ESTABLISHED		
<u>MISCELLANEOUS</u>				
OPERATOR ESSO	PERMITTEE or LICENCEE ESSO	ESSO INTEREST 50%	OTHER INTEREST Hematite 50%	
CONTRACTOR GLOBAL MARINE	RIG NAME GLOMAR III	EQUIPMENT TYPE SHIP - SHAPE DRILLING VESSEL		
TOTAL RIG DAYS 37.3	DRILLING AFE NO. 239109	COMPLETION NO.	TYPE COMPLETION	
LAHEE WELL CLASSIFICATION	Before Drilling Drilling	Outpost Abandoned successful outpost		

P.M. COONEY
Geologist

II INITIAL PRODUCTION TEST					
Date	WELL COMPLETION AS: Oil Well _____ Gas Well _____ Dry Hole _____				
Choke size, inch			Calculated P.I.		
Length of Test			Calculated A.O.F.		
Oil, BPD			Perforations		
Water, BPD			Shut-In BHP		
Gas, MCFD			Flowing BHP		
Gas Liquids, BPD			Shut-In Tubing Press		
Gas-Oil Ratio			Flowing-Tubing Press		
Gravity, API			Flowing Temperature		

III PERFORATING RECORD (Prod.test, Completion, DST, FIT)						
INTERVAL	HPF	TOTAL SHOTS	SERV. CO.	DIFF. PRESS.	PERFORATION FLUID	SIZE AND TYPE GUN

NOT A PERFORATING RECORD

Engineer

IV CASING - LINER - TUBING RECORD							
Type	Size	Weight	Grade	Thread	No. Joints	Amount	Depth
Conductor	30"	310 & 196	H-40	Vetco	3	123.47	294
Surface	13-3/8"	54.5	J-55	Butt.	54	2147	2317
Inter- mediate	9-5/8"	47	N-80	Butt.	2	81.50	
	9-5/8"	40	N-80	Butt.	12	4927.59	5180

V CEMENT RECORD			
String	30"	13-3/8"	9-5/8"
Type of Cement	400 sx w/2% CaCl ₂ and seawater	1380 sx w/2% Gel plus 300 sx Neat	1000 sx Neat w/0.2% HR-4
Number of FT ³	472	2575	1180
Average weight of slurry	15.2	13.6/15.6	15.35
Cement Top	Sea Floor	Sea Floor	3350' Temp.
Casing Tested with	0	9500 psi	No Test Recorded
Number of Centralizers	0	6	17
Number of Scratchers	0	0	0
Stage Collar etc.	0	0	0
Remarks		Gel Prehydrated	

R.L. Wood
Engineer

VII SAMPLES, CONVENTIONAL CORES, SW CORES					
INTERVAL	TYPE	RECOVERED	INTERVAL	TYPE	RECOVERED
2350 - 9640	Cuttings	Sampled every 10'			
2424 - 9610	Sidewall Core	84 shot 67 recovered			
3824 - 3864	Conventional	6"			
3864 - 3888	"	17'			
3888 - 3924	"	30'			
VIII WIRELINE LOGS AND SURVEYS (Incl. FIT)					
Type & Scale	From	To	Type & Scale	From	To
IES 2" & 5"	294	- 9629			
FDC 2" & 5"	3450	- 9628			
BHCS 2" & 5"	2317	- 9641			
Neutron 2" & 5"	3450	- 4600			
CDM 2" & 5"	2312	- 9651			
Velocity Survey	2329	- 5149			
FIT (6)	3858, 3840, 3827, 3820, 3812, 3800.				

BARRACOUTA
 LOG

P.M. COONEY
Geologist

WELL BARRACOUTA-3

IX	FORMATION TOPS/Zones					REMARKS	
	NAME	Tops		Gross Interval (ft)	Net Pay (ft).		
		M.D.	Sub-sea		Gas		Oil
Gippsland Fmn.	Sea Floor	-150	2259				
Lakes Entrance Fmn.	2440	-2409	1152				
Latrobe Group	3592	-3561					
(<u>N. goniatus</u>)	3592	-3561	939	151	-	3592-3806	
<u>M. diversus</u>	4531	-4500	800				
<u>L. balmei</u>	5331	-5300	2374				
<u>T. lilliei</u>	7705	-7674					

INTERPRETATIVE

X	GEOLOGIC ANALYSIS (Pre Drilling prognosis Vs actual results)															
Pre-drilling:	<table border="0"> <tr> <td><u>Formation</u></td> <td style="text-align: right;"><u>Depth</u></td> </tr> <tr> <td>Water</td> <td style="text-align: right;">145'</td> </tr> <tr> <td>Gippsland Formation</td> <td style="text-align: right;">145'</td> </tr> <tr> <td>Lakes Entrance Formation</td> <td style="text-align: right;">3480'</td> </tr> <tr> <td>Latrobe Delta Group</td> <td style="text-align: right;">3620'</td> </tr> <tr> <td>(<u>M. diversus</u>) (top A-3 oil sand)</td> <td style="text-align: right;">4830'</td> </tr> <tr> <td>Intra <u>L. balmei</u></td> <td style="text-align: right;">6820'</td> </tr> </table>	<u>Formation</u>	<u>Depth</u>	Water	145'	Gippsland Formation	145'	Lakes Entrance Formation	3480'	Latrobe Delta Group	3620'	(<u>M. diversus</u>) (top A-3 oil sand)	4830'	Intra <u>L. balmei</u>	6820'	
<u>Formation</u>	<u>Depth</u>															
Water	145'															
Gippsland Formation	145'															
Lakes Entrance Formation	3480'															
Latrobe Delta Group	3620'															
(<u>M. diversus</u>) (top A-3 oil sand)	4830'															
Intra <u>L. balmei</u>	6820'															
	<p>Depths from mean sea level; for drill depths add 31'.</p> <p>Barracouta 3 is located on or near the crest of the Barracouta anticline, but on the downthrown side of a northwest-southeast trending normal fault, as mapped on Top Latrobe Group and intra-Latrobe horizon. This fault separates this well from all other wells drilled on the Barracouta anticline.</p> <p>Objectives of this well will be to determine the continuity and possibly communication of the Barracouta gas reservoir at the top of the Latrobe, and to determine if an associated oil column is present in this fault block. Intra-Latrobe objectives will be to partially evaluate the oil and gas potential of intra-Latrobe sands.</p>															
Post-drill:	<p>Formation tops as in section IX.</p> <p>The fault between Barracouta-3 and Barracouta-1 does not seal. Hence the two wells have a common gas-water contact at -3775 and the gas reservoir is confirmed over the structure as mapped.</p> <p>The intra <u>M. diversus</u> (A-3 oil sand) is structurally low and devoid of hydrocarbons.</p>															

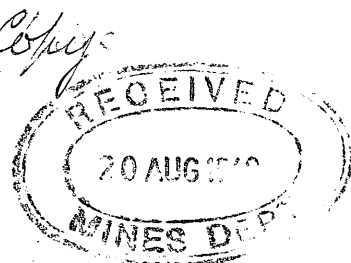
P.M. Cooney
 Geologist

CORE DESCRIPTION
& ANALYSIS RESULTS.

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

Core No. 1



WELL: BARRACOUTA 3

Interval Cored 3824 - 3864 ft., Cut 40 ft., Recovered 6" ft., (1.2 %) Fm. LATROBE.

Bit Type C11, Bit Size 8 5/16 in., Desc. by ANDY WHITTLE. Date 10/8/69.

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
0 3				
	3824 - 63 1/2 NO RECOVERY.		3824 - 3863 1/2	NO RECOVERY.
	3864	☼	3863 1/2 - 3864	Sandstone thinly interbedded with shale.
				SANDSTONE - wh - lt grey fine - medium grained. sub angular - sub rounded. well sorted. unconsolidated to weakly consolidated. micaceous with grey argillaceous matrix in part.
				Porosity & Permeability excellent to fair depending on shaliness.
				Strong blue - white pinpoint fluorescence.
				Strong instantaneous streaming cut.
				Petroliferous odour.
				SHALE. - dark grey soft to firm. micaceous.
				strong petroliferous odour.

REMARKS: The 6" recovery was stuck in the catcher & probably represents the last 6" cored.

CORE DESCRIPTION

Core No. 2



WELL: BARRACOUTA - 3

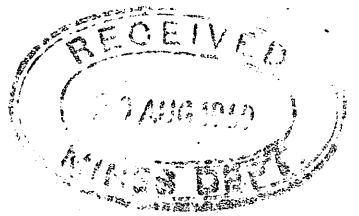
Interval Cored 3864-3888 ft., Cut 24 ft., Recovered 17 ft., (68 %) Fm. LATROBE.

Bit Type C14, Bit Size 8 7/16 in., Desc. by ANDY WHITTLE. Date 10/8/69.

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
		<p>* * *</p>	<p>3864 - 3881</p>	<p><u>SANDSTONE</u>. light grey dominantly medium grained. occasionally fine or coarse grained. sub angular to sub rounded well sorted. unconsolidated to weakly consolidated where it is very friable. Two 6" streaks are silty - brn. micaceous firm carbonaceous with thin discontinuous coal laminae. Porosity and permeability good to excellent. Strong blue-white pin point fluorescence. Instantaneous out. Petroliferous odour (H₂S ?) Oil staining weak.</p>
			<p>3881 - 3888 No recovery.</p>	

REMARKS: Barrel Jammed.

CORE DESCRIPTION



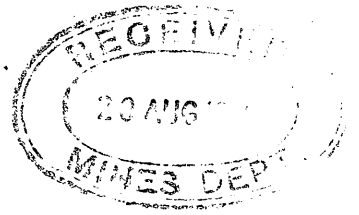
Core No. 3

WELL: BARRACOUTA-3

Interval Cored 3888 - 3924 ft., Cut 36 ft., Recovered 30 ft., (83 %) Fm. LATROBE.

Bit Type C14, Bit Size 8 7/16 in., Desc. by ANDY WHITTLE. Date 10/8/69.

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
0 2 4 6	3888	*	3888 - 3890 1/2	SANDSTONE. light grey. medium grained. sub angular to sub rounded. well sorted. unconsolidated to weakly consolidated. occ. rounded lithic grains. Porosity and permeability good. Patchy fluorescence (blue-white) streaming out. Petroliferous odour. Suspect oil flushed by filtrate.
	M M M		3890 1/2 - 3895 1/2	SANDSTONE. medium brown. fine to coarse grained poorly sorted. consolidated. friable. brown argillaceous matrix (clay choked) Dark brown silty laminae, carbonaceous. micaceous. soft. Also thin black coal laminae. P & P poor to fair. Scattered patchy fluorescence.
	M M M		3895 1/2 - 3897	SILTY MUDSTONE. light grey brown with thin darker discontinuous wavy carbonaceous laminae running approx. horizontal. Scattered brown fluorescing oil globules where silty.
	M M M	* o/w	3897 - 3898 1/2	SILTSTONE. dark brown. firm. micaceous. with occasional scattered sub-angular sand grains.
	M M M		3898 1/2 - 3900	SANDSTONE AS PER 3890 1/2 - 3895 1/2
	M M M		3900 - 3902	MUDSTONE. dark brown. carbonaceous. micaceous. with horizontal discontinuous silty laminae occ. brown oil stains.
	X		3902 - 3904 1/2	SANDSTONE AS PER 3890 1/2 - 3895 1/2
	X		3904 1/2 - 3905	MUDSTONE brown firm micaceous with medium grained sandstone lenses and coal lenses. scattered coarse grained sand grains. patchy oil staining of sand lenses.
	X		3905 - 3909	SANDSTONE loosely consolidated as per 3888 - 3890 1/2
	X		3909 - 3910 1/2	COAL black. brittle with coarse grained sand lenses.
REMARKS:			3910 1/2 - 3918	SANDSTONE. medium brown. fine grained. very well sorted. micaceous. carbonaceous. firm. with brown argillaceous matrix. occasional very thin carbonaceous streaks. Porosity and Permeability fair. Very weak fluorescence in interval 3912 1/2 - 13. weak cut.



FIELD DATA CORE ANALYSIS REPORT

DATE AUGUST 1969

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCY'S HOR VERT	POROSITY PERCENT	RESIDUAL LIQUID SATURATION			PORE WATER CHLORIDES	REMARKS
				% VOL OIL	% PORE	TOTAL WATER % PORE		
1	3863 1/2 - 1	T00 FRI	23.8	1.7	7.1	45.4		CORE 1
2	3872-70	T00 FRI	31.6	0.7	2.2	76.0	4558	CORE 2
3	3879-80	T00 FRI	32.5	0.5	1.5	81.0		" "
4	3890 1/2 - 1	T00 FRI LAB	31.8	1.2	3.8	75.5		CORE 3
5	3891 1/2 - 2	" "	24.1	1.3	5.4	77.2		" "
6	3894 1/2 - 5	" "	29.2	0.9	3.1	76.7		" "
7	3898-00	" "	27.6	0.7	2.5	78.3		" "
8	3902-03	" "	27.2	0.9	3.3	72.4		" "
9	3903-04	" "	29.0	0.7	2.4	73.8		" "
10	3905-06	" "	32.5	0.7	2.15	74.2		" "
11	3907-08	" "	33.2	0.7	2.1	73.8	4358	" "
12	3909 1/2 - 9	" "	32.6	0.7	2.1	75.8		" "
13	3915	1490 : 736	31.7	0.2	0.6	80.2	4298	" "
NOTE: SAMPLES 1 TO 12 INCLUSIVE T00 FRIABLE TO ALLOW HANDLING AS CONVENTIONAL PERMEABILITY SAMPLES.								

COMPANY ESSO STD OIL WELL BARRACOUTA 3
 COUNTY AUST STATE VIC FIELD BARRACOUTA ELEVATION 31'KB
 LOCATION _____

CL 572

CORE ANALYSIS RESULTS

OIL and GAS DIVISION

NOTE: (i) Unless otherwise stated, porosities and permeabilities were determined on two plugs (V&H) cut vertically and horizontally to the axis of the core. Ruska porosimeter and permeameter were used with air and dry nitrogen as the saturating and flowing media respectively. (ii) Oil and water saturations were determined using Soxhlet type apparatus. (iii) Acetone test precipitates are recorded as Neg., Trace, Fair, Strong or Very Strong.

11 DEC 1985

WELL NAME AND NO. BARRACOUTA NO. 3

DATE ANALYSIS COMPLETED 29/6/73

Core No.	Sample Depth		Lithology	Average Effective Porosity two plugs (% Bulk Vol.)	Absolute Permeability (Millidarcy)		Average Density (gm/cc.)		Fluid Saturation (% pore space)		Core Water Salinity (p.p.m. NaCl)	Acetone Test	Fluorescence of freshly broken core	Sample "cut" in tetrachlorethylene
	From	To			V	H	Dry Bulk	Apparent Grain	Water	Oil				
2	3854'	3856'	Sst; f.gr. c.gr. slty	29.5	N.D.	N.D.	1.90	2.70	N.D.	N.D.	N.D.	N.D.	N.D.	Nil
3	3890'	3891'	Slst; aren v. carb.	11.4	1.5	0.91	2.26	2.66	88	6.1	N.D.	Strong	Nil	Nil
3	3893'	3893'6"	Sst; f.gr. slty, carb	22.8	182	139	1.98	2.56	24	0.59	N.D.	Fair Blue	Nil	Nil
3	3899'	3900'	Sst; v.f.gr carb lam.	17.6	3.6	5.2	2.14	2.56	34	4.1	N.D.	Strong	Nil	Nil
3	3905'	3906'	Sst; v.f.gr coal lam.	12.0	<0.1	1.3	2.20	2.56	37	6.2	N.D.	Strong	Nil	Nil
3	3908'	3909'	Sst; m.gr. c.gr carb. to	25.1	356	461	1.96	2.62	78	2.5	N.D.	Fair	Nil	Nil
3	3911'6"	3912'	Sst; f.gr. slty carb	23.7	9.29	212	1.97	2.58	21	4.4	N.D.	Strong	Nil	Nil
3	3913'6"	3914'	As above	31.4	927	1,185	1.79	2.60	6.5	0.5	N.D.	Trace	Nil	Nil

Remarks: -

General File No. 72/2914
Well File No. _____

CORE ANALYSIS RESULTS

NOTE: (i) Unless otherwise stated, porosities and permeabilities were determined on two plugs (V&H) cut vertically and horizontally to the axis of the core. Ruska porosimeter and permeameter were used with air and dry nitrogen as the saturating and flowing media respectively. (ii) Oil and water saturations were determined using Soxhlet type apparatus. (iii) Acetone test precipitates are recorded as Neg., Trace, Fair, Strong or Very Strong.

WELL NAME AND NO. BARRACOUTA NO. 3

DATE ANALYSIS COMPLETED 29/6/73

Core No.	Sample Depth		Lithology	Average Effective Porosity two plugs (% Bulk Vol.)	Absolute Permeability (Millidarcy)		Average Density (gm/cc.)		Fluid Saturation (% pore space)		Core Water Salinity (p.p.m. NaCl)	Acetone Test	Fluorescence of freshly broken core	Sample "cut" in tetrachlorethylene
	From	To			V	H	Dry Bulk	Apparent Grain	Water	Oil				
3	3914'	3915'	Sst; f. gr. carb, mic.	28.7	391	1,146	1.84	2.58	12	0.3	N.D.	Trace	Nil	Nil
3	3916'	3916'6"	As above	27.8	152	412	1.87	2.59	18	4.2	N.D.	Fair	Nil	Nil
3	3917'	3918'	As above	27.4	101	293	1.88	2.59	37	1.0	N.D.	Trace	Nil	Nil

Remarks: -

General File No. 72/2914
Well File No. _____

PALYNOLOGY (miscellaneous)

Foram Zones

		Highest Data	Quality	2 Way Time	Lowest Data	Quality	2 Way Time
MIOCENE	A	Alternate					
	B	Alternate					
	C	Alternate					
	D ₁	Alternate					
	D ₂	Alternate			2350	4	
	E	Alternate	2350	4	2300	3	
	F	Alternate	2434	2	2600	3	
	G	Alternate			2550	2	
	H ₁	Alternate	2600	3	3000	3	
	H ₂	Alternate	3050	3	3200	2	
	I ₁	Alternate	3250	3	3350	3	
	OLIGOCENE	I ₂	Alternate			3400	1
J ₁		Alternate					
J ₂		Alternate					
J ₃		Alternate	3460	3	3504	4	
EOC.	K	Alternate			3480	1	
	Pre K						

COMMENTS:

Note: If highest or lowest data is a 3 or 4, then an alternate 0, 1, 2 highest or lowest data will be filled in if control is available.

If a sample cannot be interpreted to be one zone, as apart from the other, no entry should be made.

- 0 SWC or Core - Complete assemblage (very high confidence).
- 1 SWC or Core - Almost complete assemblage (high confidence).
- 2 SWC or Core - Close to zone 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).

Date Revised _____

By _____

BASIN

GIPPSLAND

DATE

WELL NAME

BARRACOUTA -3

ELEVATION

+ 31 feet.

AGE	PALYNOLOGIC ZONES	HIGHEST DATA				LOWEST DATA					
		Preferred Depth	Rtg.	Alternate Depth	Rtg.	2 way time	Preferred Depth	Rtg.	Alternate Depth	Rtg.	2 way time
Eocene	<u>P. tuberculatus</u>										
	<u>U. N. asperus</u>										
	<u>M. N. asperus</u>	3604	1				3632	1			
	<u>L. N. asperus</u>	4062	1				4288	1			
	<u>P. asperopolus</u>	4491	1				4820	2	4491	1	
	<u>U. M. diversus</u>	4853	1				5020	1			
	<u>M. M. diversus</u>										
	<u>L. M. diversus</u>										
PALEOCENE	<u>U. L. balmei</u>	5714	2	6300	1						
	<u>L. L. balmei</u>						7300	3			
	<u>T. longus</u>	7726	2				7748	2			
CRETACEOUS	<u>T. lilliei</u>	8414	1				8844	2			
	<u>N. senectus</u>										
	<u>C. trip./T.pach.</u>										
	<u>C. distocarin.</u>										
	<u>T. pannosus</u>										
EARLY CRETACEOUS											
PRE-CRETACEOUS											

COMMENTS:

Deflandrea extensa Dinoflagellate Zone 3604 (1) - 3632 (1)

In this well it is not possible to distinguish the Upper and Lower L. balmei Zones

- RATINGS: 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 spore and pollen or microplankton, or both.
- 4; CUTTINGS, NO CONFIDENCE, assemblage with non-diagnostic spores, pollen and/or microplankton.

NOTE: If a sample cannot be assigned to one particular zone, then no entry should be made. Also, if an entry is given a 3 or 4 confidence rating, an alternate depth with a better confidence rating should be entered, if possible.

DATA RECORDED BY: LES/ADPDATE June 1971; Dec. 1971.DATA REVISED BY: A.D.P.DATE Jan. 1975.

4.0 Geochem

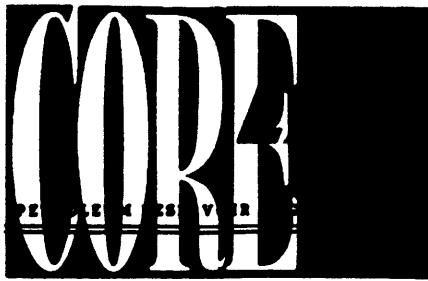
OIL and GAS DIVISION

AQUITAINE

03 FEB 1983

PROPERTIES OF COAL

WELL	SAMPLE DEPTH (FT)	VITRINITE (%)	EXINITITE (%)	INERTITE (%)	TOC (%)	CPI	PR/PH	PR/C ₁₇	PH/C ₁₈	H.I.
MARLIN A-6 (COAL)	6000-6100	86.6	7.4	4.0	66.8	1.84	4.07	0.70	0.22	161
	6450-6530	-	-	-	64.5	2.32	6.44	1.78	0.32	153
	6900-7000	79.4	10.6	10.0	63.5	2.38	6.20	2.34	0.41	127
	7400-7500	-	-	-	58.3	2.40	7.38	1.69	0.28	146
	8050-8150	84.0	10.2	5.8	63.6	2.02	5.61	1.26	0.26	156
	8600-8700	82.2	6.2	11.6	66.9	1.76	7.42	1.62	0.27	154
	9200-9300	-	-	-	64.6	1.72	5.19	1.39	0.32	163
	9800-9900	86.6	3.6	9.4	78.3	1.50	8.81	2.94	0.35	186
	10470-10550	-	-	-	64.1	1.41	4.0	1.29	0.36	266
	10750-10850	89.2	7.4	2.8	71.4	1.51	4.67	1.30	0.32	226
BARRACOUTA 3 (COAL)	5540-5610	68.0	9.8	20.6	-	-	-	-	-	-
	8590-8780	90.4	8.2	1.0	-	-	-	-	-	-



FIELD DATA CORE ANALYSIS REPORT

DATE AUGUST 1969

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCS HOR VERT	POROSITY PERCENT	RESIDUAL LIQUID SATURATION			PORE WATER CHLORIDES	REMARKS
				% VOL OIL	% PORE	TOTAL WATER % PORE		
1	3863 $\frac{1}{2}$ -A	T00 FRI	23.8	1.7	7.1	45.4		CORE 1
2	3878-79	T00 FRI	31.6	0.7	2.2	76.0	4558	CORE 2
3	3879-80	T00 FRI	32.6	0.5	1.5	81.0		" "
4	3890 $\frac{1}{2}$ -1	T00 FRI AB	31.8	1.2	3.8	75.5		CORE 3
5	3891 $\frac{1}{2}$ -2	" "	24.1	1.3	5.4	77.2		" "
6	3894 $\frac{1}{2}$ -5	" "	29.2	0.9	3.1	76.7		" "
7	3899-00	" "	27.6	0.7	2.5	78.3		" "
8	3902-03	" "	27.2	0.9	3.3	72.4		" "
9	3903-04	" "	29.0	0.7	2.4	73.8		" "
10	3905-06	" "	32.5	0.7	2.15	74.2		" "
11	3907-08	" "	33.2	0.7	2.1	73.8	4358	" "
12	3908 $\frac{1}{2}$ -9	" "	32.6	0.7	2.1	75.8		" "
13	3915	1490: 736	31.7	0.2	0.6	80.2	4298	" "
NOTE: SAMPLES 1 TO 12 INCLUSIVE T00 FRIABLE TO ALLOW HANDLING AS CONVENTIONAL PERMEABILITY SAMPLES.								

COMPANY ESSO STD OIL WELL BARRACOUTA 3
 COUNTY AUST STATE VIC FIELD BARRACOUTA ELEVATION 31'KB
 LOCATION _____

Operator ESSO STANDARD OIL (AUST.) LTD.
Well BARRACOUTA NO. 3 AUSTRALIA State VICTORIA

No. 1
Date 9 AUGUST 1969
CLANo. PL-155-16L

DESCRIPTION OF SHOW:

Show Interval 3,590 To 3,890
Color of Flu NIL Intensity of Flu --
% Sand ~~XXX~~ in Sample 50-100 % of Sand ~~XXX~~ / Flu NIL
Cut: Visual NIL Flu NIL
Lithology of Section: Mudstone to Sandstone

GAS UNITS:

Mud	HOT WIRE		Mud	P/H/D (CHROMATOGRAPH)					
	Hi	Lo		Methane C ₁	Ethane (+) C ₂ (+)	Ethane C ₂	Propane C ₃	Butane C ₄	Pentane C ₅
From:	2	-	From:	250	NIL	-	-	-	-
To:	270	-	To:	63,000	-	13,000	5,500	2,000	TR.
Cuttings			Cuttings		NOT	MEASURED			
From:	0	=	From:						
To:	100		To:						

ADDITIONAL INFORMATION:

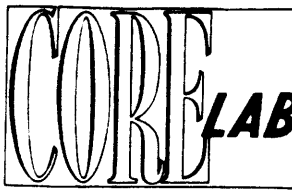
Bit Condition New _____ Worn X Dull _____
Drilling Break Yes X No _____
Average Drilling Rate Controlled Rate _____ Before Break 0.8 MIN/FT During Break 0.3 M/FT
Weight on Bit Changes Increased _____ Decreased _____ No Change _____
Circulated Out Yes X No _____ Depth CO 3610 & Every 10' thereafter
Chloride Changes Before _____ After _____

FIELD EVALUATION:

Minor _____ Poor _____ Fair _____ Good X Remarks: Gas producing zone from 3,590 - 3,890'

FINAL EVALUATION: (It is recognized that other information such as other shows, side wall samples, etc. are necessary for the best evaluation. Consequently, this final opinion will be given at the end of the job after this data is available.)

Cores 1, 2 and 3 indicate partial condensate saturation down to 3,890



CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

COMPANY ESSO STANDARD OIL (AUSTRALIA) LTD FILE NO. FL-155-16L
 WELL BARRACOUTA-3 DATE AUGUST 1969 ENGRS. THM-ES
 FIELD BARRACOUTA FORMATION _____ ELEV. 31'KB
 COUNTY VICTORIA STATE AUST. DRLG. FLD. SPERSENE XP 20 CORES 1-3
 LOCATION _____ REMARKS _____

COMPLETION COREGRAPH

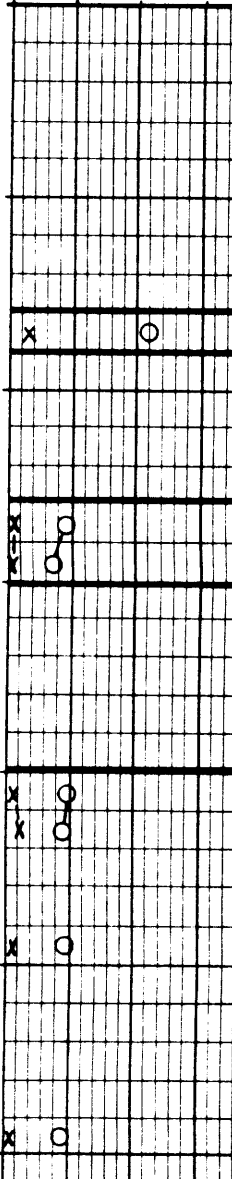
These analyses, opinions or interpretations are based on observations and material supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations as to the productivity, proper operation, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

SAND LIMESTONE CONGLOMERATE CHERT ANHYDRITE
 SHALE DOLOMITE OOLITES

SAMPLE CHARACTERISTICS: F = Fured L = Laminated FG; MG; CG = Type Grain Size S = Stylolitic V = Vuggy
 PROBABLE PRODUCTION: O = Oil W = Water G = Gas T = Transitional

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY, MD.		POROSITY %	RESIDUAL SATURATION % PORE SPACE		PERMEABILITY MILLIDARCY	POROSITY PERCENT		
		* = Horizontal Perm Plug			OIL	TOTAL WATER		X---X	X	
		HORIZ	VERT							
*** INDICATES SAMPLE TOO FRIABLE FOR ANALYSIS										
1	3863-61	***	***	23.9	7.1	45.4	2000	1000	30	15
2	3872-72	***	***	31.6	2.2	76.7			X-X	
3	3879-79	***	***	32.6	1.5	81.7			X-X	
4	3890-81	***	***	31.3	3.3	73.5			X-X	
5	3891-82	***	***	24.1	8.4	77.2			X-X	
6	3894-85	***	***	27.2	3.1	76.7			X	
7	3902-93	***	***	27.6	2.5	79.3			X	

TOTAL WATER PERCENT PORE SPACE
 75 50 25
 OIL SATURATION PERCENT PORE SPACE
 25 50 75



CORE ANALYSIS RESULTS

NOTE: (i) Unless otherwise stated, porosities and permeabilities were determined on two plugs (V&H) cut vertically and horizontally to the axis of the core. (ii) Oil and water saturations were determined using Soxhlet type apparatus. (iii) Acetone test precipitates are recorded as Neg., Trace, Fair, Strong or Very Strong.

WELL NAME AND NO. PARACOURA NO. 3

DATE ANALYSIS COMPLETED 29/6/73

Core No.	Sample Depth		Lithology	Average Effective Porosity (% Bulk Vol. two plugs)	Absolute Permeability (Millidarcy)		Average Density (gm/cc.)		Fluid Saturation (% pore space)		Core Water Salinity (p.p.m. NaCl)	Acetone Test	Fluorescence of freshly broken core	Sample "cut" in tetrachlorethylene
	From	To			V	H	Dry Bulk	Apparent Grain	Water	Oil				
2	3854'	3856'	Sst; f.Gr. c.Gr. slty	29.5	H.D.	H.D.	1.90	2.70	H.D.	H.D.	N.D.	H.D.	N.D.	NIL
3	3890'	3891'	Sst; aren v. carb.	11.4	1.5	0.91	2.26	2.66	88	6.1	N.D.	Strong	NIL	NIL
3	3893'	3893'6"	Sst; f.Gr. slty, carb	22.8	182	139	1.98	2.56	24	0.59	H.D.	Fair Blue	NIL	NIL
3	3899'	3900'	Sst; v.f.Gr carb lam.	17.6	3.6	5.2	2.14	2.56	34	4.1	H.D.	Strong	NIL	NIL
3	3905'	3906'	Sst; v.f.Gr. coal lam.	12.0	<0.1	1.3	2.20	2.56	37	6.2	H.D.	Strong	NIL	NIL
3	3908'	3909'	Sst; m.Gr. c.Gr carb.	25.1	356	461	1.96	2.62	78	2.5	H.D.	Fair	NIL	NIL
3	3911'6"	3912'	Sst; f.Gr. slty carb	23.7	9.29	212	1.97	2.58	21	4.4	N.D.	Strong	NIL	NIL
3	3913'6"	3914'	As above	31.4	927	1,185	1.79	2.60	6.5	0.5	N.D.	Trace	NIL	NIL

General File No. 72/2914
Well File No.

CORE ANALYSIS RESULTS

NOTE: (i) Unless otherwise stated, porosities and permeabilities were determined on two plugs (VH) cut vertically and horizontally to the axis of the core. Ruska porometer and permeator were used with air and dry nitrogen as the saturating and flowing media respectively. (ii) Oil and water saturations were determined using Soxhlet type apparatus. (iii) Acetone test precipitates are recorded as Neg., Trace, Fair, Strong or Very Strong.

WELL NAME AND NO. PARRAGOMA NO. 3

DATE ANALYSIS COMPLETED 29/6/73

Core No.	Sample Depth		Lithology	Average Effective Porosity (% Bulk Vol. two plugs)	Absolute Permeability (Millidarcy)		Average Density (gm/cc.)	Fluid Saturation (% pore space)	Core Water Salinity (p.p.e. NaCl)	Acetone Test	Fluorescence of freshly broken core	Sample "cut" in tetrachloroethylene	
	From	To			V	H							Dry Bulk
3	3914'	3915'	Sst; f. grs. carb, mic.	28.7	391	1,146	1.84	2.58	12	0.3	N.D.	Trace	NH1
3	3916'	3916'6"	As above	27.8	152	412	1.87	2.59	18	4.2	N.D.	Fair	NH1
3	3917'	3918'	As above	27.4	101	293	1.88	2.59	37	1.0	N.D.	Trace	NH1

Remarks: -

General File No. 72/2914
Well File No. _____

5.0 Lithology

PE601489

This is an enclosure indicator page.
The enclosure PE601489 is enclosed within the
container PE903965 at this location in this
document.

The enclosure PE601489 has the following characteristics:

ITEM_BARCODE = PE601489
CONTAINER_BARCODE = PE903965
NAME = Well Completion log
BASIN = GIPPSLAND
PERMIT =
TYPE = WELL
SUBTYPE = COMPLETION_LOG
DESCRIPTION = Well Completion Log Barracouta 3
REMARKS =
DATE_CREATED = 03/08/1969
DATE_RECEIVED =
W_NO = W553
WELL_NAME = Barracouta-3
CONTRACTOR = ESSO
CLIENT_OP_CO = ESSO

(Inserted by DNRE - Vic Govt Mines Dept)

PE603683

This is an enclosure indicator page.
The enclosure PE603683 is enclosed within the
container PE903965 at this location in this
document.

The enclosure PE603683 has the following characteristics:

ITEM_BARCODE = PE603683
CONTAINER_BARCODE = PE903965
NAME = Barracouta 3 Grapholog (Mud Log)
BASIN = GIPPSLAND
PERMIT = VIC/L1
TYPE = WELL
SUBTYPE = MUD_LOG
DESCRIPTION = Barracouta 3 Grapholog (Mud Log)
REMARKS =
DATE_CREATED = 8/08/69
DATE_RECEIVED =
W_NO = W553
WELL_NAME = Barracouta-3
CONTRACTOR = Core Laboratories Inc
CLIENT_OP_CO = Esso Australia Ltd

(Inserted by DNRE - Vic Govt Mines Dept)

PE902847

This is an enclosure indicator page.
The enclosure PE902847 is enclosed within the
container PE903965 at this location in this
document.

The enclosure PE902847 has the following characteristics:

ITEM_BARCODE = PE902847
CONTAINER_BARCODE = PE903965
NAME = Time Depth Curve
BASIN = GIPPSLAND
PERMIT =
TYPE = WELL
SUBTYPE = VELOCITY_CHART
DESCRIPTION = Time Depth Curve
REMARKS =
DATE_CREATED = 08/09/1969
DATE_RECEIVED =
W_NO = W553
WELL_NAME = Barracouta-3
CONTRACTOR = ESSO
CLIENT_OP_CO = ESSO

(Inserted by DNRE - Vic Govt Mines Dept)