Natural Resources and Environment

AGRICULTURE • RESOURCES • CONSERVATION • LAND MANAGEMENT

BARRACOUTA 3

W553

WELL COMPLETION SUMMARY

1 Folio No	2 Referred to	3 Date	4 Clearing Officer's Initials	1 Folio No.	2 Referred to	3 Date	4 Clearing Officer's Initials

FILE COVER INSTRUCTIONS FOR ACTION OFFICERS

(1) FOLIO NUMBERS: Each subject paper attached to a file is to be given a consecutive number by the attaching officer. Papers must not be removed from or attached to a file without approval.

(2) REFERRAL TO OTHER OFFICERS: When an Officer completes action on the file and further action is required by some other Officer, please initial Column (4) and on the next vacant line, enter the relevant folio number in Column (1), indicate to whom the file is to be forwarded in Column (2) and record the date in Column (3).

(3) BRING UP MARKINGS: When action on a file is required at a later date, the officer will initial Column (4) and, on the next vacant line, enter the relevant folio number in Column (1), then write "B/U" followed by the action officer's name in Column (2) and the date the file is required in Column (3).

(4) PUTAWAY MARKINGS: When ALL action on a file is completed the officer concerned will initial Column (4) and, on the next vacant line, write "P/A" in column (2).

REGISTRY MUST BE NOTIFIED OF ANY FILE MOVEMENTS BETWEEN OFFICERS

LOCATION

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/1.

553.

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

✓ 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 " Core 2&3 & cuttings are in Core Store
Core No 1. 6" Rec missing.

S.W.C. Shot 84. Rec 67. N.T.

✓ " Descriptions. Run 1, 13 descriptions only. Run 2. 1—30.

Completion Report (Copy pages for release)

Time Depth Curve. (Needs masking)

✗ Palynological Report by L. E. Stover & A. D. Partridge. Plus revision

✗ Palaeontology " " D. Taylor.

✗ Well completion Log. VITRINITE REFLECTANCE BY AMOCO. 22.04.86

✓ 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.

✗ Sketch of positions of core cuts.

✗ Weekly Reports . PROPERTIES OF COAL.

WELLHEAD RECOVERY LOGS: CBL, TL.

EXECUTIVE
Secretary
Deputy
Executive
Executive
Executive
Executive
Executive
Executive
Executive
Executive
Executive

CORPORATE
General Manager
Chief Finance
Manager
Director
Director
Director
Director
Director
Manager
Manager
Manager
Manager
Manager
Manager

MINERAL
Manager
Manager
Manager
Manager
Manager
Manager

PRIMARY SCIENCE
Manager
Manager
Chief
Director
Director
Director
Director

14-8-74.

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W553
BARRACOUTA 3

ESSO STANDARD OIL (AUSTRALIA) LTD.

553.

COMPLETION REPORT

I WELL DATA RECORD

Date 23rd June'70

LOCATION

WELL NAME	STATE	PERMIT or LICENCE	GEOLOGICAL BASIN	FIELD
BARRACOUTA 3	VICTORIA	Victoria L-1	GIPPSLAND	BARRACOUTA

CO-ORDINATES	Lat.	Long.	X	Y	MAP PROJECTION	GEOGRAPHICAL DESCRIPTION
Surface	38° 19' 19"	147° 37'03"	554,703	274,201	Australian Transverse Mercator	Offshore 6 miles W S W of Barracouta -1
Bottom Hole						

ELEVATIONS & DEPTHS

ELEVATIONS	WATER DEPTH	TOTAL DEPTH	Avg.Angle
Ground		M.D. 9651 FEET	
KB 31	150 FEET	T.V.D.	
RT	PLUG BACK DEPTH	REASONS FOR P.B.	
Braden Head	360 FEET	ABANDONMENT	
Top Deck Platform			

DATES

MOVE IN	RIG UP	SPUDDED
2.8.69	2.8.69	3.8.69
RIG DOWN COMPLETE	**RIG RELEASED**	**PROD.UNIT - Start Rigging Up**
8.9.69	8.9.69	
PROD.UNIT - Rig Down Complete	**I.P. ESTABLISHED**	

MISCELLANEOUS

OPERATOR	PERMITTEE or LICENCEE	ESSO INTEREST	OTHER INTEREST
ESSO	ESSO	50%	Hematite 50%

CONTRACTOR	RIG NAME	EQUIPMENT TYPE
GLOBAL MARINE	GLOMAR III	SHIP - SHAPE DRILLING VESSEL

TOTAL RIG DAYS	DRILLING AFE NO.	COMPLETION NO.	TYPE COMPLETION
37.3	239109		

LAHEE WELL CLASSIFICATION		
	Before Drilling	Outpost
	Drilling	Abandoned successful outpost

P.M. COONEY
Geologist

WELL BARRACOUTA-3

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

_____
Engineer

WELL : BARRACOUTA #3

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

WELL BARRACOUTA-3

VI

SUBSURFACE COMPLETION EQUIPMENT

DATE COMPLETED ______________

Schematic	Equipment Description	Length	Depth

NOT APPLICABLE

______________ Engineer

WELL BARRACOUTA -3

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.				

P.M. COONEY
Geologist

WELL BARRACOUTA-3

IX FORMATION TOPS/Zones

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

X GEOLOGIC ANALYSIS (Pre Drilling prognosis Vs actual results)

Pre-drilling:

Formation	Depth
Water	145'
Gippsland Formation	145'
Lakes Entrance Formation	3480'
Latrobe Delta Group	3620'
(*M. diversus*) (top A-3 oil sand)	4830'
Intra *L. balmei*	6820'

Depths from mean sea level; for drill depths add 31'.

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.

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.

Post-drill: Formation tops as in section IX.

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.

The intra *M. diversus* (A-3 oil sand) is structurally low and devoid of hydrocarbons.

P.M. Cooney
Geologist

CORE DESCRIPTION & ANALYSIS RESULTS.

2nd Copy

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

Core No. 1

WELL: BARRACOUTA 3

Interval Cored 3824 - 3864 ft., Cut 40 ft., Recovered 6" ft., (12 %) 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 - 63½ NO RECOVERY.		3824 - 3863½	NO RECOVERY.
	3864	☼	3863½ - 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-whit pin point 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.

ESSO STANDARD OIL (AUSTRALIA) LTD.

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
0	3864	✲	3864 - 3881	SANDSTONE. 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 cut. Petroliferous odour (H_2S ?) Oil staining weak.
		✲	3881 - 3888	No recovery.

REMARKS: Barrel Jammed.

ESSO STANDARD OIL (AUSTRALIA) LTD.

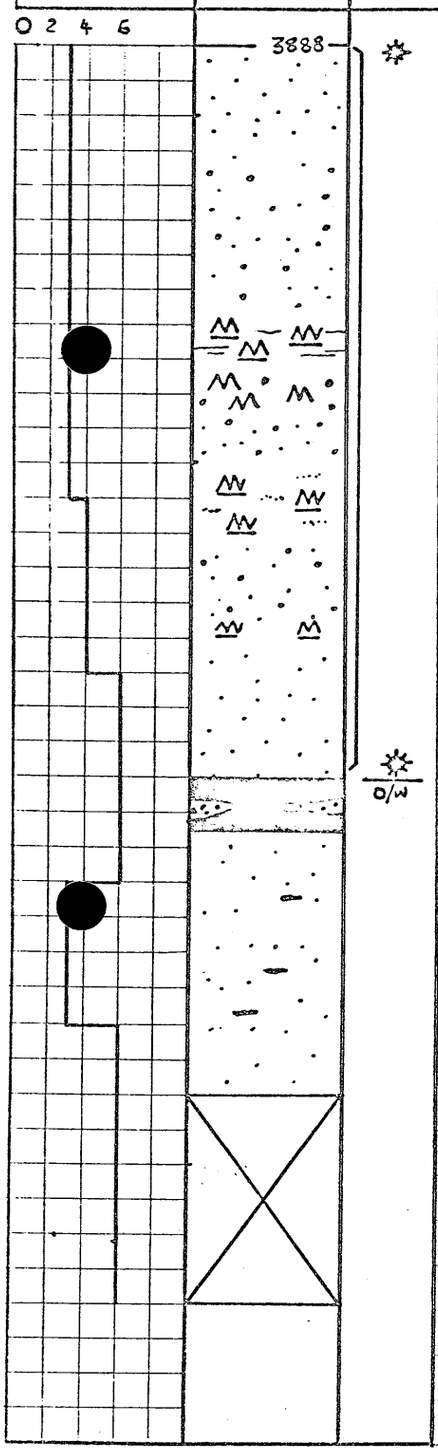
CORE DESCRIPTION

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.



Interval (ft.)	Descriptive Lithology
3888 - 3890½	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 cut. Petroliferous odour. Suspect oil flushed by filtrate.
3890½ - 3895½	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.
3895½ - 3897	SILTY MUDSTONE. light grey brown with thin darker discontinuous wavy carbonaceous laminae running approx. horizontal. Scattered brown fluorescing oil globules where silty.
3897 - 3898½	SILTSTONE. dark brown. firm. micaceous. with occasional scattered sub-angular sand grains.
3898½ - 3900	SANDSTONE AS PER 3890½ - 3895½
3900 - 3902	MUDSTONE. dark brown. carbonaceous. micaceous. with horizontal discontinuous silty laminae occ. brown oil stains.
3902 - 3904½	SANDSTONE AS PER 3890½ - 3895½
3904½ - 3905	MUDSTONE brown firm micaceous with medium grained sandstone lenses and coal lenses. scattered coarse grained sand grains. patchy oil staining of sand lenses.
3905 - 3909	SANDSTONE loosly consolidated as per 3888 - 3890½
3909 - 3910½	COAL black. brittle with coarse grained sand lenses.
3910½ - 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 3912½ - 13. weak cut.

REMARKS:

SIDEWALL CORE DESCRIPTIONS

WELL BARRACOUTA 3 | SERV. CO. [illegible] | DATE 18/8/69 | LOG RUN NO. 1 | GEOLOGIST R. L. G.

REF. # | FIELD WILDCAT | STATE VICTORIA | ATT. 30 REC. 13 |

NO.	DEPTH	REC	LITHOLOGY	COLOR	DISS CLAY	CONS	CALC	ODOR	FIDO	FLUORESENCE DIST	FLUORESENCE INT	FLUORESENCE COL	CUT QUAN	CUT COL	CUT FLUOR. INT	CUT FLUOR. COL	SHOW	PROB. PROD.
1	5188	1¼"	SANDSTONE: lt grey, m.gr, qtzose, ang-subrnd, sl. carb., firm, porous + perm	lt grey	mod.	firm-friable	—	—	—	—	—	—	—	—	—	—	—	—
2	5170	1¼"	SANDSTONE: qtzose, f-mgr, ang-subang, micaceous, sl. carb. P+P. fair.	lt grey	clay choked	firm	—	—	—	—	—	—	—	—	—	—	—	—
3	5020	1¼"	SHALE: sl. silty in parts, finely laminated, micaceous, sl. carbon.	pale yellow brown	sl. silty	firm	—	—	—	—	—	—	—	—	—	—	—	—
4	4900	1½"	SANDSTONE: qtzose, crs-granular, ang-subrounded, sl. carb + mic, v. por. + perm.	yellow grey	little	friable	—	—	—	—	—	—	—	—	—	—	—	—
5	4872	1¾"	CLAY: clean, ~~prob~~ kaolinitic, non swelling, greasy when wet	lt grey.	—	firm-hd.	—	—	—	—	—	—	—	—	—	—	—	—
6	4853	1¼"	SANDSTONE: f-mgr, w/ some silt, fair P+P. laminated w/ carb. + micac - streaks	lt grey	mod	mod. hd	—	—	—	—	—	—	—	—	—	—	—	—
10	4630	1½"	SANDSTONE: silty-v.f.gr, laminated, tight w/ carb. + mic. streaks (some blue fluor in carb.)	lt grey	mod	firm	—	—	—	—	—	—	—	—	—	—	—	—
11	4491	2"	CLAY: laminated, sl. carb, greasy when wet.	brown		mod hd	—	—	—	—	—	—	—	—	—	—	—	—
12	4458	1¼"	CLAY. as above	pale yellow brown		soft	—	—	—	—	—	—	—	—	—	—	—	—
14	4288	1¼	SHALE. silty, carbonaceous, micaceous	pale brown	✓	hd	—	—	—	—	—	—	—	—	—	—	—	—
16	3842	1¾"	SANDSTONE: crs-granular, well sorted, rounded-subrounded. P+P. v.g.	Olive grey	little	friable	—	fair	—	—	—	—	v. faint w/ conc.	w/ HCl.	v. faint	yellow	—	—
17	3750	½"	SANDSTONE: med-crs. grained, fair sorting, qtzose, P+P. fair-good.	lt grey	little	friable	—	fair	—		faint	pale blue	—	—	faint	pale blue	✓	fair-good.
24	3490	2"	Mudstone: silty, fossiliferous, glauconitic, pyritic	grey	clayey	hd	✓	—	—	—	—	—	—	—	—	—	—	—.
													RUN		No 2			
1	5114	¾"	SHALE: laminated, micac., carbon.	lt olive grey	✓	mod hd	—	—	—	—	—	—	—	—	—	—	—	—
2	5043	¾"	COAL + SANDY SILTSTONE — clayey, micac. + carbon.	lt olive grey	✓	mod hd	—	—	—	—	—	—	—	—	—	—	—	—
3	4950	1¼"	SANDSTONE: qtzose, crs-v.crs, well sorted, sb ang., sl. carb, v. porous + perm.	lt grey	very little	soft + friable	—	—	—	—	—	—	—	—	—	—	—	—
4	4908	1¼"	Contact between SANDSTONE + COAL (boundary heavily pyritised) s.s. is	lt. grey	little	friable	—	—	—	—	—	—	—	—	—	—	—	—
			med-granular, poo[illegible] sorted, qtzose, pyritic, ang-subang [illegible]orous + perm fair.															
5	4840	¾"	SANDSTONE: qtz, m-granular, sub rnd-sub ang, fair sorting. Por + Perm good	lt grey	very little	soft + friable	—	—	—	—	—	—	—	—	—	—	—	—

SIDEWALL CORE DESCRIPTIONS

WELL BARRACOUTA 3 | SERV. CO. | DATE 18/8/69 | LOG RUN NO. 2 | GEOLOGIST R.L.G.

REF.# | FIELD WILDCAT | STATE VICTORIA | ATT. 30 REC. 30 | PAGE 2 OF 2 PAGES

NO.	DEPTH	REC	LITHOLOGY	COLOR	DISS CLAY	CONS	CALC	ODOR	FIDO	FLUORESCENCE DIST	FLUORESCENCE INT	FLUORESCENCE COL	CUT QUAN	CUT COL	CUT FLUOR. INT	CUT FLUOR. COL	SHOW	PROB. PROD.
6	4826	1"	SANDSTONE: qtzose, mgr, well sorted, sl. carb, subang-subrnd. Poor Perm v.g.	lt grey	✓	firm + friable	—	—	—	—	—	—	—	—	—	—	—	—
7	4820	1½"	CLAY - clean, sl. carb, swells a little mostly kaolinitic.	buff	✓	hd	sl.	—	—	—	—	—	—	—	—	—	—	—
8	4798	1¼"	SANDSTONE - qtzose w/ some dk lithics, ang-subrnd, sl. carb, ers-vers. Poor+Perm V.g	lt grey	very little	soft + friable	sl	—	—	—	—	—	—	—	—	—	—	—
9	4530	¾"	SHALY SILTSTONE: finely laminated, micac. dcarb.	lt olive grey	✓	mod hd	—	—	—	—	—	—	—	—	—	—	—	—
10	4315	2"	CLAY. clean, non swelling, kaolinitic sl carb + pyritic	yellow grey	✓	soft	—	—	—	—	—	—	—	—	—	—	—	—
11	4200	1"	SHALE : V. carbonaceous, micaceous + clayey	brown	✓	mod hd	—	—	—	—	—	—	—	—	—	—	—	—
12	4062	1¼"	SHALE : V. carb., micac.. Clayey.	brown	✓	mod hd	—	—	—	—	—	—	—	—	—	—	—	—
13	4030	1½"	SANDSTONE: V.f-fgr. qtz, subang-subrnd carb, micac, clay clasts. Tight.	lt grey	✓	firm	—	—	—	—	—	—	—	—	—	—	—	—
14	3950	1¼"	SANDSTONE: qtzose, A-pebble sma, poorly sorted, carb, dk lithics, Poros+Perm fair-good.	lt olive gray	very little	soft + friable	—	—	—	—	—	—	—	—	—	—	—	—
15	3810	1½"	SANDSTONE: qtzose, m-crs gr, ang, fair sorting borrowed, sl. carb. Poros+Perm good.	lt grey	✓	firm + friable	—	Strong	—		Strong	blue	—	—	str.	blue	✓	good
16	3662	1"	SHALE carb. + micac w/ SILTSTONE carb micac. in bands	banded brn+. gry	✓	firm	—	—	—	—	—	—	—	—	—	—	—	—
17	3608	1½"	SHALE: dk brown carb + micac. .	dk brown	✓	firm	—	—	—	—	—	—	—	—	—	—	—	—
18	3604	1"	SHALE AS ABOVE	..	--	--	—	—	—	—	—	—	—	—	—	—	—	—
19	3584	2"	SILTY MUDSTONE: V. pyritic + glauconitic Carbon.	brown	✓	mod hd	—	—	—	—	—	—	—	—	—	—	—	—
20	3550	2"	As Above but V. glauconitic	brown	✓	mod hd	—	—	—	—	—	—	—	—	—	—	—	—
21	3504	2"	As Above but more pyritic and sl. calc.	brown	✓	mod hd	sl	—	—	—	—	—	—	—	—	—	—	—
22	3490	2"	As Above	brown	✓	mod hd	sl	—	—	—	—	—	—	—	—	—	—	—
23	3400	1½"	Mudstone : sl glauc, sl micac.	olive grey	✓	mod hd	✓	—	—	—	—	—	—	—	—	—	—	—
24	3300	1½"	As above : sl fossiliferous	olive grey	✓	mod hd	✓	—	—	—	—	—	—	—	—	—	—	—
25	3200	2"	Skeletal micritic MUDSTONE - V. fossil, glauconitic	olive grey	✓	mod hd	✓	—	—	—	—	—	—	—	—	—	—	—
26	3100	1½"	SILTY MUDSTONE: calcareous, sl. fossilif, sl micaceous	olive grey	✓	mod hd	✓	—	—	—	—	—	—	—	—	—	—	—
27	2750	1"	SILTY MUDSTONE : calcareous, prob. fossil.	lt grey	✓	mod hd	✓	—	—	—	—	—	—	—	—	—	—	—
28	2661	1¾"	MUDSTONE : sl silty, fossilif.	olive grey	✓	mod hd	✓	—	—	—	—	—	—	—	—	—	—	—
29	2550	1½"	MICRITIC - SKELETAL CLAYSTONE V. glauconitic	White	✓	mod soft	✓	—	—	—	—	—	—	—	—	—	—	—
30	2424	1"	SILTY MUDSTONE : calc, fossil.	olive grey	✓	mod hd	✓	—	—	—	—	—	—	—	—	—	—	—

FIELD DATA CORE ANALYSIS REPORT

DATE AUGUST 1969

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYS HOR VERT	POROSITY PERCENT	RESIDUAL LIQUID SATURATION OIL % VOL	OIL % PORE	TOTAL WATER % PORE	PORE WATER CHLORIDES	REMARKS
1	3863½-4	TOO FRI	23.8	1.7	7.1	45.4		CORE 1
2	3878-79	TOO FRI	31.6	0.7	2.2	76.0	4558	CORE 2
3	3879-80	TOO FRI	32.6	0.5	1.5	81.0		" "
4	3890½-1	TOO FRIAB	31.8	1.2	3.8	75.5		CORE 3
5	3891½-2	" "	24.1	1.3	5.4	77.2		" "
6	3894½-5	" "	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	3908½-9	" "	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 TOO 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

BARRACOUTA 3

Petroleum Technology Laboratory, Bureau of Mineral Resources, Geology and Geophysics, Canberra

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				
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. to c.gr carb.	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.

Petroleum Technology Laboratory, Bureau of Mineral Resources, Geology and Geophysics, Canberra

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)

Form R 193 3/71

553

BASIN GIPPSLAND BASIN BY David TAYLOR

WELL NAME BARRACOUTA-3 DATE 16 April 1971 ELEV. +31'

Foram Zonules

		Highest Data	Quality	2 Way Time	Lowest Data	Quality	2 Way Time
MIOCENE	A						
	Alternate						
	B						
	Alternate						
	C						
	Alternate						
	D_1						
	Alternate						
	D_2				2350	4	
	Alternate				2300	3	
	E	2350	4		2600	3	
	Alternate	2434	4		2530	4	
	F						
	Alternate						
	G	2600	3		3000	3	
	Alternate						
	H_1	3050	3		3200	2	
	Alternate						
	H_2	3250	3		3350	3	
	Alternate						
OLIGOCENE	I_1	3400	1		3400	1	
	Alternate						
	I_2						
	Alternate						
	J_1	3450	3		3504	4	
	Alternate				3490	1	
	J_2						
	Alternate						
EOC.	K						
	Alternate						
	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 zonule, 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 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).

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 (MIO.)	P. tuberculatus										
	U. N. asperus										
	M. N. asperus	3604	1				3632	1			
	L. N. asperus	4062	.1				4288	1			
	P. asperopolus	4491	1				4820	2	4491	1	
	U. M. diversus	4853	1				5020	1			
	M. M. diversus										
	L. M. diversus										
PALEOCENE	U. L. balmei	5714	2	6300	1						
	L. L. balmei						7300	3			
	T. longus	7726	2				7748	2			
LATE CRETACEOUS	T. lilliei	8414	1				8844	2			
	N. senectus										
	C. trip./T.pach.										
	C. distocarin.										
	T. pannosus										
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/ADP DATE June 1971; Dec. 1971.

DATA REVISED BY: A.D.P. DATE Jan. 1975.

FORM No. R 315 12/72

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)