W642

Natural Resources and Environment

AGRICULTURE • RESOURCES • CONSERVATION • LAND MANAGEMENT

DEPT. NAT. RES & ENV
PE904978

MACKEREL-2
WELL SUMMARY

OFFSHORE G.B.

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

SUCCESSFUL OUTPOST.

SPUD. 14-2-72
COMPLETED. 30-3-72.
T.D. 8505'.

38° 29' 14.249"S
148° 20' 17.746"E
W.D. 304' KB 32'
GLOMAR CONCEPTIO

MACKEREL — 2

ESSO VIC. L/5. **642**

✓	IES	Run 1.	2" and 5". 2752 — 8483.	SEP. 2" AND 5"
✓	BHCS/CAL	" 1.	2" and 5". 2752 — 8470.	" 2" " 5"
✓	FDC/CAL	" 1.	2" & 5". 7454 — 8480.	
✓	SNP/GR	" 1.	2" and 5". 6420 — 8480. (3346R.)	" 2" " 5"
✓	Dipmeter Interpretation	2".	5220 — 8479.	
✓	"	" 5".	" " .	
✓	Barrod Mudlog.		860 — 8500	+ 2c 860 — [illegible]
✓	" A.D.T.		900 — 8500.	+ PART COPIES
✓	"d" exponent	"	" .	+ Part 1c
✓	FIT.	Run 1.	Tests 1 — 10.	
	Geodip Log.	Run 1.	7550' — 8474'	
—	Cores cut	1 — 13.		Received into store
✓	"	Description	1 — 13. ESSO	
✓	"	Analysis results	by Core Lab.	
✓	"	"	" BMR.	+ 1c
—	S.W.C.	Shot 82.	Rec. 75.	C.R.
	"	Descriptions	1 — ~~64~~ 40	
—	Cuttings.	~~4752 — 7899~~	840' — 8500'. IN STORE	C.R.
✓	Agnew's Subsurface Pressures with Kuster Gauge with FITS.			
	Completions Report.			+ 1 Copy.
	~~Rock Log Chart. Sheets. 7000 — 7500~~			
✓	Time Depth Curve			
X	Well Completion Log.			
X	Palaeontology Report	by D. Taylor.		
X	Palynology	"	" A. D. Partridge. Plus revision.	
X	Structure Map.	Top Latrobe	Group.	+ 1c
X	Geological Cross Section	A — A'.		+ 1c
X	Weekly Reports			
	~~Core Analysis Results BMR~~			

No cutting descriptions

No HDT but Dipmeter Interpretation

DA

MACKEREL-2

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ESSO STANDARD OIL (AUSTRALIA) LTD.

COMPLETION REPORT

Date April 11, 1972.

I WELL DATA RECORD

LOCATION

WELL NAME	STATE	PERMIT or LICENCE	GEOLOGICAL BASIN	FIELD
MACKEREL-2	Victoria	Vic L/5	Gippsland	Mackerel

CO-ORDINATES	Lat.	Long.	X	Y	MAP PROJECTION	GEOGRAPHICAL DESCRIPTION
Surface	38°29' 14.299'	148°20' 17.746"	616,717	5,739,252	A.M.G. Zone 55 Coordinates	Approx. 44 miles off-shore Victoria. 1 mile southwest of Mackerel - 1
Bottom Hole						

ELEVATIONS & DEPTHS

ELEVATIONS	WATER DEPTH	TOTAL DEPTH	Avg. Angle
Ground Sea Level KB 32 ft. RT Braden Head Top Deck Platform	304 feet	8505 feet driller	
	PLUG BACK DEPTH: 50 feet below mudline	REASONS FOR P.B.: Abandonment	

DATES

MOVE IN	RIG UP	SPUDDED
14 Feb. 1972	14 Feb. 1972	2000 hours 14 Feb. 1972
RIG DOWN COMPLETE: 26 Mar. 1972	RIG RELEASED: 30 Mar. 1972	PROD. UNIT - Start Rigging Up
PROD. UNIT - Rig Down Complete	I.P. ESTABLISHED	

MISCELLANEOUS

OPERATOR	PERMITTEE or LICENCEE	ESSO INTEREST	OTHER INTEREST
Esso Australia Pty. Ltd.	Esso - Hematite	50%	Hematite Petroleum Pty.Ltd 50%

CONTRACTOR	RIG NAME	EQUIPMENT TYPE
Global Marine Australasia Pty. Ltd.	Glomar Conception	Drilling Vessel

TOTAL RIG DAYS	DRILLING AFE NO.	COMPLETION NO.	TYPE COMPLETION
41.6	232-201		

LAHEE WELL CLASSIFICATION	Before Drilling	Outpost
	After Drilling	Successful Outpost

J.R. BLACK
Geologist

WELL MACKEREL # 2

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

J.M. MACONOCHIE
Engineer

WELL MACKEREL # 2

IV	CASING - LINER - TUBING RECORD						
Type	Size	Weight	Grade	Thread	No. Joints	Amount	Depth
Water Depth 304'	Kelly Bushing to MSL 32'						336
Conductor 30" x 20" Pile Joint							
	20	91.5		CIW	11	485.54	821.54
Surface	10-3/4	40.5	J-55	8rd/Butt	63	2419.33	2755.33
Note:	Pile Joint was salvaged prior to move off.						

V	CEMENT RECORD		
String	30"/20" Pile Jt	20"	10-3/4"
Type of Cement	75 sx Neat with 2% $CaCl_2$	850 sx preblended 6% Gel with 500 sx 2% $CaCl_2$	550 sx Neat in fresh water
Number of FT^3	88.5	2026.5	649.0
Average weight of slurry	15.6	13.7/15.3	14.5
Cement Top	-	Sea Floor	± 1100'
Casing Tested with	-	500 psi	1500 psi
Number of Centralizers	-	4	7
Number of Scratchers	-	-	-
Stage Collar etc.	-	-	-
Remarks	-	Gel Prehydrated	

BASIC

J.M. MACONOCHIE
Engineer

WELL MACKEREL # 2

VI SUBSURFACE COMPLETION EQUIPMENT

DATE COMPLETED ____________

Schematic	Equipment Description	Length	Depth

NOT APPLICABLE

J.M. MACONOCHIE
Engineer

WELL MACKEREL # 2

VII SAMPLES, CONVENTIONAL CORES, SW CORES

INTERVAL	TYPE	RECOVERED	INTERVAL	TYPE	RECOVERED
840-8505	Cuttings (Washed & Dryed)	Sampled every 10 ft.	7752-78 7778 -7810	Core # 6 # 7	3' 18'
840-8505	Cuttings (Sacked unwashed)	Sampled every 10 ft.	7810-7817 7817-41	# 8 # 9	4' 12'
840-8505	Cuttings (canned)	Sampled every 100 ft.	7841-74 7874-99	# 10 # 11	33' 25'
3000-8465	Sidewall cores	Attempted 82 Recovered 75	7899-7939 7939-46	# 12 #13	10' 1'6"
7586-7619	Conventional core # 1	21'			
7619-46	Core # 2	4'			
7648-92	# 3	1'2"			
7692-7722	# 4	3'6"			
7722-52	# 5	17'			

VIII WIRELINE LOGS AND SURVEYS Incl. FIT)

Type & Scale	From To	Type & Scale	From To
IES 2" & 5"	2752-8483 ✓	FIT # 9	7627 (Successful)
FDC 2" & 5"	7454-8480 ✓	# 10	7860 (Successful)
BHCS 2" & 5"	2752-8470 ✓		
SNP-GR 2" & 5"	6420-8480 ✓ (GR 334 - 8480)		
HDT	5222-8479		
Velocity Survey	2755-8505		
FIT # 1	7892 (Successful)		
# 2	7905 (Successful)		
# 3	7878 (Seal Failure)		
# 4	7880 (Seal Failure)		
# 5	7778 (Seal Failure)		
# 6	7592 (Successful)		
# 7	7842 (Successful)		
# 8	7758 (Successful)		

INTERPRETATIVE

J.R. BLACK
Geologist

WELL MACKEREL # 2

IX	FORMATION TOPS/Zones					
NAME	Tops		Gross Interval (ft)	Net Pay (ft).		REMARKS
	M.D.	Sub-sea		Gas	Oil	
Miocene Gippsland Fm.	Sea Floor	- 304				
Mid Miocene Marker	7110	-7078				
Oligocene	7315	-7283				
Top Latrobe Group	7578	-7546	316		316	7578-7894
L.balmei Zone	8040	-8008				

INTERPRETATIVE

X GEOLOGIC ANALYSIS (Pre Drilling prognosis Vs actual results)

Pre-drill. Re-interpretation of the Mackerel structure indicated the Mackerel-1 discovery well was drilled in a minor topographic depression on an irregular top latrobe topographic surface. Mackerel-2 was drilled to test the crestal area 1 mile south-west of Mackerel-1 where the top of the primary objective was expected 300' structurally higher than the discovery well.

Age	Formation	Formation Tops
	Water (depth)	(275')
Miocene	Gippsland Formation	-275'
Miocene	Mid Miocene seismic Marker	-7150'
Oligocene		-7450'
Paleocene	Latrobe Group	-7500'
PTD		-8500'

Depths from mean sea level; for drill depths add 32 feet.

Post-drill. The Mackerel-2 well confirmed the seismic interpretation of the Mackerel structure and the velocity to the top of the Latrobe was within 80'/sec of the previously interpreted value from velocity scans. As the well supported the interpretation of the structure only minimal changes were required in the immediate vicinity of the Mackerel-2 well and did not affect the interpretation of either of the south-westerly or north easterly fault blocks.

J.R. BLACK
Geologist

M A C K E R E L - 2

Attachments

Fig. 1. Structure map on Latrobe Group

Geologic Cross Section After Drilling

Completion Log

Paleontological summary

PE902788

This is an enclosure indicator page.
The enclosure PE902788 is enclosed within the container PE904978 at this location in this document.

The enclosure PE902788 has the following characteristics:

ITEM_BARCODE	= PE902788
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel Prospect Structure Map Top Latrobe group
BASIN	= GIPPSLAND
PERMIT	=
TYPE	= SEISMIC
SUBTYPE	= HRZN_CONTR_MAP
DESCRIPTION	= Mackerel Prospect Structure Map Top Latrobe group
REMARKS	=
DATE_CREATED	= 30/04/1972
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= ESSO
CLIENT_OP_CO	= ESSO

(Inserted by DNRE - Vic Govt Mines Dept)

PE902789

This is an enclosure indicator page.
The enclosure PE902789 is enclosed within the container PE904978 at this location in this document.

The enclosure PE902789 has the following characteristics:

ITEM_BARCODE	= PE902789
CONTAINER_BARCODE	= PE904978
NAME	= Geological Cross Section A-A' Mackerel 2 prospect
BASIN	= GIPPSLAND
PERMIT	=
TYPE	= WELL
SUBTYPE	= CROSS_SECTION
DESCRIPTION	= Geological Cross Section A-A' Mackerel 2 prospect
REMARKS	=
DATE_CREATED	= 30/04/1972
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= ESSO
CLIENT_OP_CO	= ESSO

(Inserted by DNRE - Vic Govt Mines Dept)

PE603295

This is an enclosure indicator page.
The enclosure PE603295 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603295 has the following characteristics:

ITEM_BARCODE	= PE603295
CONTAINER_BARCODE	= PE904978
NAME	= Well Completion Log
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= COMPLETION_LOG
DESCRIPTION	= Mackerel 2 Well Completion Log
REMARKS	=
DATE_CREATED	= 18/03/72
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Esso Exploration and Production Australia INC
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

2.0 Sample Descriptions

SAMPLE DESCRIPTION.

01 OCT 1986

MACKEREL-2
Bruce McKay
February 19, 1972

20" casing set at 814'.

900 - 920	100% Limestone (calcarenite) white, grey, or skeletal fragments, medium to very coarse, mostly unconsolidated, some grey limestone, occasionally rounded to subrounded, medium to coarse quartz grains, clear-frosted. Forams, bryozoa, shell fragments, coral.
920 - 980	100% framework limestone, as above, gastropods.
980 - 1020	80% Skeletal limestone, as above. 20% limestone, clear orange quartz grains and skeletal fragments in buff - orange limestone (micrific) matrix, not as strongly calcareous.
1020 - 50	100% limestone, white- light grey, skeletal, fine - medium grains with white calcareous cement, trace glauconite, large fossil fragments becoming rarer.
1050 - 80	100% Limestone as above, very good porosity, abundant bryozoa.
1080 - 1170	100% Limestone, as above.
1170 - 1200	100% Limestone, white-grey, skeletal, fine-coarse as above, trace glauconite.
1200 - 1230	100% Limestone, slightly finer, as above.
1230 - 1290	100% Limestone, (calcarenite) as above.
1290 - 1350	100% Limestone, as above.
1350 - 1410	100% Limestone, as above, increasing grey fraction.
1410 - 1530	100% Limestone, as above, abundant bryozoa.
1530 - 90	100% Limestone, white-grey, skeletal fragments, trace quartz grains.
1590 - 1710	100% Limestones, as above, trace clear calcite.
1710 - 1800	100% Limestone, as above.
1800 - 1830	100% Limestone, as above, some calcareous sand, trace quartz grains, unconsolidated - friable, white-grey-tan, fossil fragments, trace glauconite.
1830 - 60	100% Limestone, as above, abundant skeletal material, especially forams.
1860 - 2010	100% Limestone, as above, cement cavings common, Very little sample coming over shaker.
2010 - 2100	100% Limestone, as above, cement common.
2100 - 2130	100% Skeletal limestone, as above, forams common.
2130 - 2190	100% Limestone as above, (decrease in cement) increase in fine fraction, less porosity, better cemented.

2190 - 2220	100% Limestone (calcarenite) as above, increase in calcarenite rather than skeletal framework fragments.
2220 - 50	50% Skeletal fragments. 50% Limestone, fine-medium grained, slightly marly, light grey, (detrital limestone).
2250 - 2340	100% Limestone, skeletal, detrital, as above.
2340 - 70	100% Limestone, becoming mainly detrital. More cement cavings.
2370 - 2430	100% Limestone, white-grey, friable-firm, predominantly detrital with skeletal fragments, (bryozoa, forams common) rare quartz grains.
2430 - 2520	100% Limestone, detrital, skeletal.
2520 - 2640	100% Limestone, as above, glauconite common.
2640 - 70	100% Limestone (calcarenite) detrital and skeletal,white-grey, occasional grains.
2670 - 2730	100% Limestone as above.
2730 - 2760	100% Limestone as above.

CHANGE OVER MUD TO FRESH WATER GEL.

2760 - 2790	90% Limestone as above. 10% Calcareous mudstone - siltstone, light grey, calcareous with trace glauconite and black organic material.
2790 - 2820	80% Limestone as above. 20% Calcareous siltstone as above, tending to marl.
2820 - 2850	As above.
2850 - 2880	50% Limestone 50% Marl,slightly firm, calcareous.
2880 - 2900	90% Limestone 10% Marl.

2900 - CIRCULATE BOTTOMS UP.

POOH TO RUN 10-3/4" CASING.

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MACKEREL-2

SAMPLE DESCRIPTIONS

J. Mebberson
D. Gentile

Feb. '72.

2910' - 2940'	100% Cement.
2940' - 2970'	100% Cement.
2970' - 3000'	100% Limestone or marl (Sample mostly cement)
3000' - 3030'	100% Limestone as above (Sample mostly cement)
3030' - 3060'	100% Limestone as above (Sample mostly cement)
3060' - 3120'	Lost samples - possibly marl silt-dissolved.
3120' - 3180'	Samples consist of metal fragments and cement. Viscosity of mud raised to 41. Lithology probably unchanged (from drilling rate).
3180' - 3300'	As above samples consist mainly of cement and metal fragments traces of white limestone and quartz grains.
NOTE: -	Checked Desilter - Sample 100% Marl - light brown-grey, trace silty - very fine sandstone quartz with lithic grains, abundant microfossils (predominantly). Suspect clayey matrix is being dissolved and grains and microfossil material falling through shaker screen.
3300' - 3400'	As above 100% Marl - light - medium grey, very fossiliferous
3400' - 3500'	As above 100% Marl - slight drop in drilling rate.
3500' - 3600'	As above with slight siltiness. Drilling rate slightly erratic. Samples taken partially from desilter.
3600' - 3700'	Silty marl 100% as above.
3700' - 3850'	100% Marl, silty, light grey, very fine quartz grains, abundant microfossils.
3850' - 3880'	100% Marl, as above, firming up slightly, slightly coarser grained samples.
3880' - 4010'	Marl, light grey to light brown grey, increasingly silty with fine quartz grains, microfossils common.
4010' - 4100'	90% Marl as above and siltstone, light grey, traces of quartz calcareous (increase in sample over shaker, formation firming up?)
4100' - 4260'	Marl, light grey - light brown, very silty, as above (reasonably good samples over shaker) Decrease in microfossil content.
4260' - 4440'	100% Marl as above
4440' - 4500'	100% silty marl as above. Generally soft - some moderately firm.

LOGS

Descriptions.

4/17

4500' - 4650'	100% Marl, silty, very calcareous, fine grained, light grey - light brown-grey, firm to soft, some microfossils, generally, as above.
4650' - 4710'	100% Marl as above.
4710' - 4900'	100% Marl, light grey - light brown grey, silty-very silty, argillaceous, firm-soft, trace microfossils, grades to a dirty argillaceous limestone in part, (firmer light brown grey sample) (dolomite?).
4900' - 5070'	100% Marl, as above, no limestone, 4950 - Minor dolomite, light-medium brown, dense crypto-microxlline, concoidal fracture.
5070' - 5160'	100% Marl, light-medium grey, silty, calcareous, trace microfossils, very argillaceous, soft-firm in part.
5160' - 5340	100% Marl, light grey, silty, calcareous, microfossils, soft, as above.
[illegible]' - 5370'	100% Marl, light grey-medium grey, calcareous, very silty, argillaceous, medium-firm, microfossils.
5370' - 5470'	100% Marl, as above.
5470' - 5570'	As above.
5570' - 5700'	100% Marl, light-medium grey (as above), soft-firm argillaceous, microfossiliferous/forams, silty, traces of quartz grains, very calcareous, (the lighter grey is gummy soft).
5700' - 5800'	Marl as above.
5800' - 5900'	Marl as above.
5900' - 6000'	Marl as above appears to be an increase in darker-medium grey marl, firm, <u>less</u> silty and microfossiliferous.
[illegible]0' - 6260'	Marl as above, predominantly dark-medium grey type as above.
6260'- 6400'	Marl as above, soft light grey and mdedium-dark grey, firm.
6410' - 7650'	Marl as above.
6760' - 6900'	<u>Marl</u>, light grey, soft, gummy, foramiferal, trace silty, and trace quartz grains and <u>Mudstones</u> - mdeium-dark grey, firm, trace silty, trace fossiliferous, (forams & o[illegible]) pyritized stems noted, calcareous.
6900' - 6930'	Marl and Mudstone - shale, as above.
6930' - 6940'	Marl & Mudstone, as above with minor light brown buff limestone - skeletal detrital, silty and traces sandstone, light brown-buff, coarse quartz, subangular, very calcareous traces glauconite and pyrite (coarse quartz in limy matrix). Drilling rate decrease ≥80'/hr. to 40'/hr.)
6940' - 6980'	Marl, light grey, soft gummy, foramiferal, silty, and mudstone medium grey - dark grey, firm silty calcareous, trace microfossils. With traces of coarse quartz, grains, subrounded, and light brown-buff limestone.

MACKEREL - 2

MUD & ROCK LOGS

D. Gentile/J. Mebberson

Feb.'72

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6980' - 6990' (Circ. 6994')	60% Mudstone - Shale, medium-dark grey, firm to fissile trace silty, calcareous, trace microfossils, trace pyrite. 40% Marl - light frey - soft gummy, microfollsiferous, (forams) silty and trace sandy,coarse,subrounded, quartz grains Traces looseunconsolidated coarse, pink-clear, subrounded subangular, quartz grains.
6990' - 7000'	75% Mudstone - Shale) as above trace pyritic, foraminiferal. 25% Marl) Trace limestone buff-tan brown dense and sandstone buff coarse quartzose in limy matrix (cavings?)
7000' - 7060'	as above, Mudstone - Shale - medium - dark grey. Marl - light grey, soft, gummy.
7060' - 7080'	Essentially Mudstone - Shale, as above * Traces of grey-green (first appearance) trace of limestone light brown-tan, silty, dense.
7080' - 7140'	Shale medium - dark grey, firm-fissile, calcareous, silty, tr. forams. Minor marl - light grey, soft, gummy, foraminiferal.
7140' - 7160'	Shale as above. Increase in Marl light grey, trace coarse quartz grains.
7160' - 7170' (Circ. 7172')	Shale as above. Traces limestone, light brown-buff, skeletal detrital, silty, hard, microgranular.

MACKEREL
MUD & ROCK LOGS

MACKEREL-2

SAMPLE DESCRIPTIONS

J. Black
D. Eyles

6/7

Feb. - March, '72

7172	Milling on junk and fishing - 10" iron bar and wiper rubber in steel ring.
	Pipe strapped in and out at 7172'.
7170' - 7180'	100% shale, light - medium grained, calcareous, soft, trace glauconite.
7180' - 7190'	100% shale, as above.
7190' - 7200'	100% Shale, as above with trace light green. mottley shale
7200' - 7210'	100% Shale, as above with trace fine grained quartz.
7210' - 7240'	100% Shale, as above with trace fine grained sand & trace glauconite.
	Bit change at 7248'
7240' - 7250'	100% Shale - medium grained calcareous fissile, few forams.
7250' - 7260'	100% Shale, medium grained calcareous fissile, few forams.
7260' - 7270'	100% Shale - medium grained very calcareous, fissile, trace apple green shale, trace fine-medium graind round quartz.
7270' - 7280'	100% Shale, as above, trace fine grained sand.
7280' - 7290'	100% Shale, as above, trace fine grained sand.
7290' - 7300'	100% shale, as above, trace fine grained sand.
7300' - 7310'	100% Shale, as above, trace fine grained sand.
7310' - 7320'	100% Shale, as above, trace fine grained sand, with trace pyrite.
7320' - 7330'	100% Shale, as above, trace fine grained sand.
7330' - 7340'	100% Shale - medium grained, very calcareous, fissile, silty with trace fine grained loose quartz.
7340' - 50'	100% Shale, as above.
7350' - 7360'	100% Shale, as above, with trace fine-medium grained, loose sand.
7360' - 7370'	100% Shale, as above, with trace fine grained sand.
7370' - 7380'	60% Shale, as above.
	40% Marl, light grey, very soft, gummy, silty.
7380' - 7390'	60% Shale
	40% Marl
7390' - 7400'	70% Shale as above, with trace glauconite.
	30% Marl.
7400' - 7410'	70% Shale & 30% Marl as above.
7410' - 7420'	80% Shale
	20% Marl, silty, soft, gummy, trace fine grained loose sand.
7420' - 7430'	80% Shale
	20% Marl
7430' - 7440'	70% Shale
	30% Marl
7440' - 7480'	40% Shale
	60% Marl. Increase in Marl.
7480' - 7490'	90% Shale,medium grained, fissile, firm calcareous, trace fine grained sand.
	10% Marl
7490' - 7500	100% Shale

MACKEREL-2

SAMPLE DESCRIPTIONS

J. Black
D.Eyles
March 3, 1972

7/7

7500' - 7510'	100% Shale, medium grey, firm, fissile, calcareous pyrite.
7510 - 7420'	100% Shale,medium grey, firm, fissile, calcareous, pyrite.
7520' - 7530'	100% Shale,as above.
7530' - 7540'	80% Shale
	20% Marl
7540' - 7550'	100% Shale
7550' - 7580'	100% Shale as above, trace fine grained sand.
7580' - 7585'	60% Shale
	40% Sand, clean and frosty, white, coarse, unconsolidated,
TOP OF LATROBE	quartz, subrounded to rounded, trace medium grained sandstone, good cut, fair fluorescence.

Drillers depths are questionable due to error in pipe tally

Strap out depth 7586'.

2.1 Core Descriptions

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

Core No. 1

WELL: MACKEREL-2

Interval Cored 7586-7619 ft., Cut 33 ft., Recovered 21 ft., (64 %) Fm. LATROBE

Bit Type C-20, Bit Size 8 15/32 in., Desc. by JRB & DE Date 4th MAR 72

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
0 1 2			7586-89	Sand- frosty & clear white qtz, fine to coarse, subrnd to rnd, friable, clean, good fluor, odor, stain & cut. Good por & perm. Scattered dark gray grains chert(?). Massive, poorly sorted, without structures.
			7589-95	Sand- as above, but fewer coarse grains, trace mica.
			7595-7601	Sand- as above, but more coarse grains, as 7586-89. Some massive pyrite & pyritic cement. Still friable & easily broken with finger.
			7601-07	Sand- as above but coarser. Ranges m. to coarse, almost conglomeratic

REMARKS:

← Waxed sample for EPRCO (4-5")

← Sample for overburden analysis (2")

RI indicates 39° API Gravity

Oil is med. brn.

2725

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

Core No. 1

WELL: MACKEREL-2

Interval Cored 7586-7619 ft., Cut 33 ft., Recovered 21 ft., (64 %) Fm. LATROBE

Bit Type C-20, Bit Size 8 15/32 in., Desc. by JRB & DRE Date 4TH MAR 72

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
7586 0 1 2				
7619				

REMARKS:

← Waxed sample for EPRCO (4-5")

← Sample for overburden analysis (2")

3 of 25

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

Core No. 2

WELL: MACKEREL-2

Interval Cored 7619-7646 ft., Cut 27 ft., Recovered 4 ft., (15 %) Fm. LATROBE

Bit Type C-20, Bit Size 8 15/32 in., Desc. by JRB & DRE Date 5th MAR '72

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
19 0 2 4 6 8		●	7619-21	Sand — frosty wh & clear qtz subrnd to rnd, good odor, fluor & cut, m to cse & v. cse gr, friable
		●	7621-23	Sand — frosty wh & clear qtz, subrnd to rnd, f. to crse gr but f. gr predom, some clay choking, less friable than above, good fluor, odor & cut, much tighter than above
25				
30				
35				
39				

REMARKS:

← Waxed sample for EPRCO (4-5")

⇇ Sample for overburden analysis (2")

4 of 25

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

Core No. 2

WELL: MACKEREL-2

Interval Cored 7619-7646 ft., Cut 27 ft., Recovered 4 ft., (15 %) Fm. LATROBE

Bit Type C-20, Bit Size 8 15/32 in., Desc. by JRB & DRE Date 5th MAR '72

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
39 0 2 4 6 8				
46				

REMARKS:

Suspected junk under the core head
Catcher replaced

5 of 25

ESSO STANDARD OIL (AUSTRALIA) LTD.

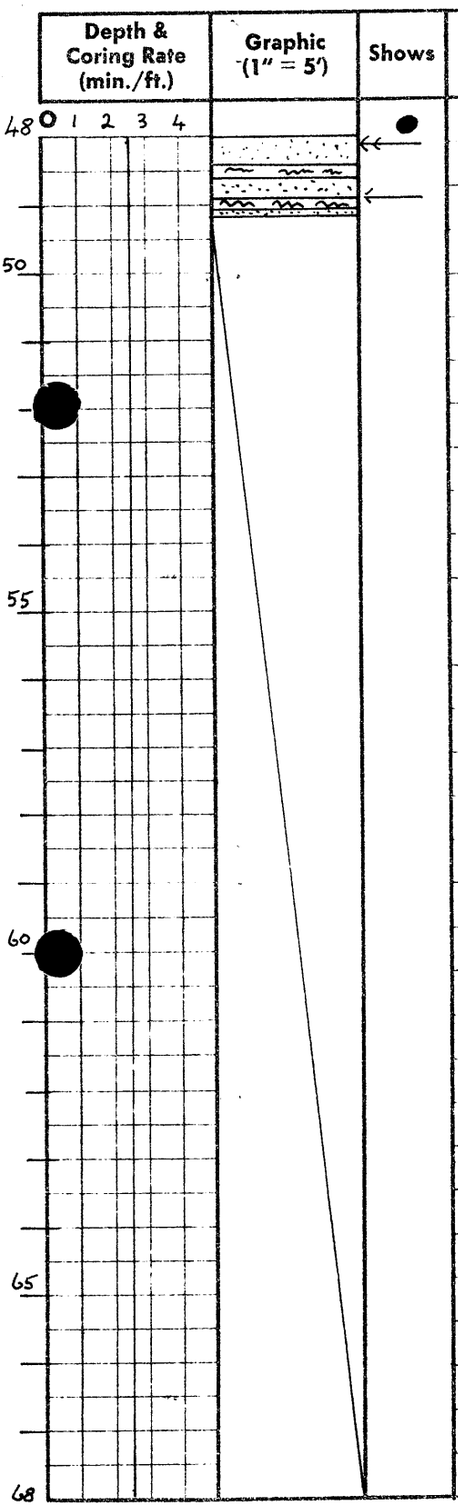
CORE DESCRIPTION

Core No. 3

WELL: MACKEREL-2

Interval Cored 7648-7692 ft., Cut 44 ft., Recovered 1' 2" ft., (3 %) Fm. LATROBE

Bit Type C-20, Bit Size 8 15/32 in., Desc. by JRB & DRE Date 6th MAR '72



Interval (ft.)	Descriptive Lithology
7648'-49'2"	Sand - wh. clear & frosty q/z. subrnd to rnd, friable, m. to cse gr., good fluor. cut and odor
4"	Siltstone - wh and dk gy. hard, sandy with fair fluor in patches, sd is f. gr., well indurated

REMARKS:

Interval 7646-48 was drilled with bit to recover junk

← Waxed sample for EPRCO (4-5")

← Sample for overburden analysis (2")

R.I indicates 39° API gravity

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

Core No. 3

WELL: MACKEREL-2

Interval Cored 7648-7692 ft., Cut 44 ft., Recovered 1' 2" ft., (3 %) Fm. LATROBE

Bit Type C-20, Bit Size 8 15/32 in., Desc. by JRB & DRE Date 6th MAR '72

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
0 1 2 3 4				

68
70
75
80
85
88

REMARKS:

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

Core No. 3

WELL: MACKEREL-2

Interval Cored 7648-7692 ft., Cut 44 ft., Recovered 1' 2" ft., (3 %) Fm. LATROBE

Bit Type C-20 , Bit Size 8 15/32 in., Desc. by JRB & DRE Date 6TH MAR '72

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
0 1 2 3 4				

REMARKS:

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

Core No. 4

WELL: MACKEREL-2

Interval Cored 7692-7722 ft., Cut 30 ft., Recovered 3½ ft., (12 %) Fm. LATROBE

Bit Type C-20, Bit Size 8 15/32 in., Desc. by JRB & DRE Date 6th MAR '72

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
0 1 2 3 4			7692-92¼	Shale – dk grey, hard, indurated, massive
			7692¼-7695½	Sand – frosty & clear wh. subrnd to rnd qtz, f to cse gr. Poorly sorted with trace of mica. Good fluor, cut & odor.

92

95

7700

05

10

7712

REMARKS:

Junk in hole ruined core head

← Waxed sample for EPRCO (4-5")

← Sample for overburden analysis (2")

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

Core No. 4

WELL: MACKEREL-2

Interval Cored 7692 - 7722 ft., Cut 30 ft., Recovered 3½ ft., (12 %) Fm. LATROBE

Bit Type C-20, Bit Size 8 15/32 in., Desc. by JRB & DRE Date 6th MAR '72

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
7712 0 1 2 3 4				
15				
20				
22				

REMARKS:

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

Core No. 5

N.B. CORRECTED 7720 - 7751. AFTER DESCRIBING A.I.R.

WELL: MACKEREL #2

Interval Cored 7722-7752 ft., Cut 30' ft., Recovered 17' ft., (56 %) Fm. LATROBE.

Bit Type C-17, Bit Size 8 7/16 / 3 in., Desc. by A.J.R. Date 8-3-72

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
0 2 4 6 8	7722		7722' - 7722'2".	SHALE: hard, massive, non-lamin dk gry.
	24		7722'2" - 7732'	SANDSTONE: Consolidated, med → f. gr, some coarse qtz grains. Clear to frosted, well to mod sorted, grains r → s.a.; sandstone firm to hard, bleeding oil in part. Tr. of pyrite & glauconite. Coarse grains define rough laminations - gen massive. Good → spotty blue fluorescence and blue-white cut. Estimated good φ & K. Increases in gr. size sl towards base.
	26			
	28			
	30			
	32		7732 - 7733'.	SILTSTONE: m → c. gr, sandy in part - laminated, micaceous parts massive.
	34		7733' - 7738' (inc).	SANDSTONE: Gen unconsolid. to soft, m → c. grained some fines, gen m. sorted, grains qtz r → s.a. Tr. glauc & pyr. Parts bleeding oil. Gen massive. Good blue fluor & blue-white cut. Estimated good φ & K.
	36			
	38			
	39			
	40 No Recovery.			
	42			

ESSO BAIN DATA

REMARKS:

← WAXED SAMPLE (4"-5") - to E.P.R.Co.

←← SAMPLE FOR OVERBURDEN ANALYSIS (2" cube)

←←← SAMPLE FOR PALAEO.

Junk in hole rimed new core head.

11 of 25
2/2.

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

Core No. 5

WELL: MACKEREL #2

Interval Cored 7722-7752 ft., Cut 30 ft., Recovered 17' ft., (56 %) Fm. LATROBE

Bit Type C-17, Bit Size 8 7/16 (3 in., Desc. by A.J.R Date 8-3-72.

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
0	42			
	44			
	46 No Recovery			
	48			
	50			
	52.			

ESSO BASIC DATA

REMARKS:

12 9 25
1/2

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

Core No. 6

WELL: MACKEREL #2

Interval Cored 7752 - 7778 ft., Cut 26 ft., Recovered 3 ft., (12 %) Fm. LATROBE

Bit Type C-22, Bit Size 8 1/16 x 5 in., Desc. by A.J.R. & A.D.P. Date 9.3.72

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
0 2 4 6 8	7752	◐	7752' - 7752' 2"	SHALE : med. - light gry., with pebbles of qtz, biotite & glauconite, variation in gr size of pebbles producing some laminations.
	55	◐	7752'2" - 7753'	SANDSTONE : Consolidated med. → c. grained, some v. coarse, tr. fines, m. sorted ; qtz gr mainly clear s.a → r, some angular. Abundant glauconite & pyrite. Not laminated. Estmated good Ø & K Good cut & blue flourescence w/. tr. oil.
	56			
	58			
	60			
	NO RECOVERY		7753' - 7755'	SANDSTONE : Consolidated & hard, f → med. gr. w/. abundant fines & tending towards argillaceous. Poorly sorted; qtz. grains mainly clear some frosted s.a → ang. Abundant glauconite and pyrite. Thin to thick lamina. formed by variations in gr. size w/. occassional thin argillaceous bands Estimated good Ø and maybe quite low K Good flour, no cut & tr. of oil.
	62			
	64			
	66			
	68			
	70			
	72			

REMARKS:

← Waxed sample (4"-5") to E.P.R.Co

←← Sample for overburden analysis (2" cube)

←←← Sample for paleo.

Barrel jammed after cutting 26 feet of core.

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

Core No. 6

WELL: MACKEREL #2

Interval Cored 7752-7778 ft., Cut 26 ft., Recovered 3 ft., (12 %) Fm. LATROBE

Bit Type ....., Bit Size ..... in., Desc. by A.J.R & A.D.P. Date 9.3.72

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
0	72			
	74 NO RECOVERY			
	76			
	78			

REMARKS:

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

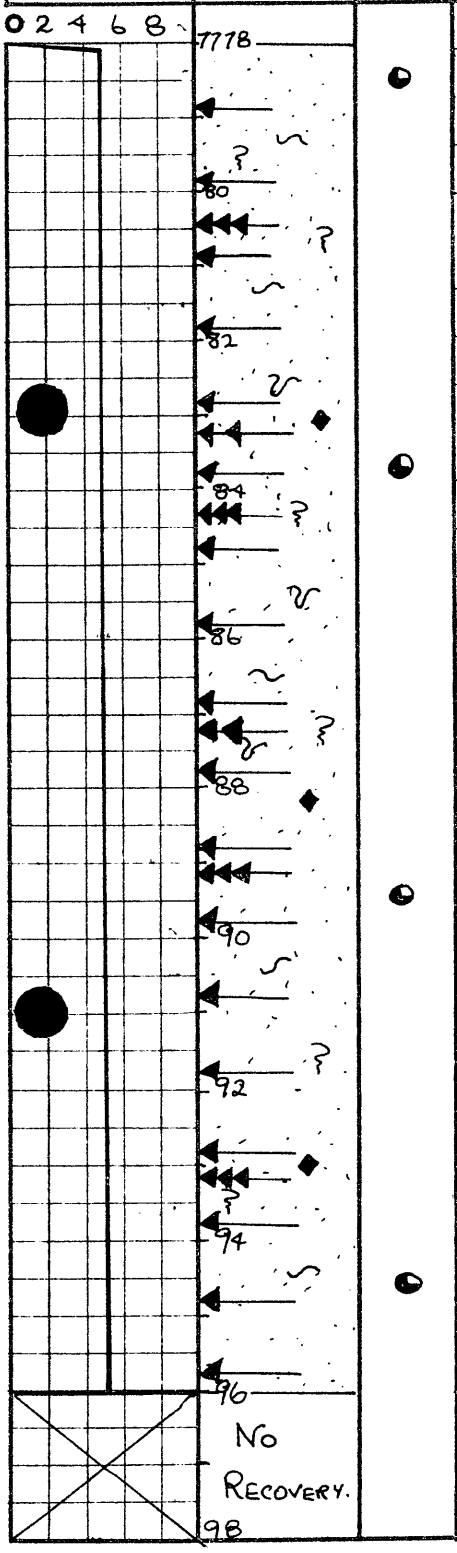
Core No. 7

WELL: MACKEREL #2

Interval Cored 7778-7810 ft., Cut 32 ft., Recovered 21 ft., (%) Fm. LATROBE

Bit Type C-22 FD, Bit Size 8 7/16 / 4 in., Desc. by A.J.R & A.D.P. Date 9-3-72

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology



7778-7781 SANDSTONE: unconsolidated friable: f-med grained with abundant fines. Extremely argillaceous in parts with up to 30% clay: mod. to poorly sorted qtz grains, mainly clear but some frosted, s.a to rounded; tr. to occasionally abundant glauc. & pyr.
Similar generally to basal 2' of Core #6 - with estimated fair to good ϕ and maybe low to mod. K.
Good fluor (blue), good cut (blue-white) & tr of oil.
Strong odour of H_2S.

7781-7788 As above although consolidated. Some parts show well-defined burrowing together with occ. shale partings.

7788-7795 As for 7778-7781 - with questionable presence of burrowing.

7795-7796 As for 7781-7788 - consolidated

* A strong odour of H_2S accompanied the whole of the core - but not known if only derived from one section. A kick was registered on H_2S detection equipment both prior to, and during coring.

REMARKS: 1) Recovery of 21' included 3' of cavings - semi-consolidated blocks of (?) Lakes Entrance formation. This 3' is counted in the recovery, even though only 18' of actual reservoir was recovered. Samples were taken but the remainder was not retained as part of the core.

2) ◄— WAXED SAMPLE TO E.P.R.Co (4-5")
◄◄— SAMPLE FOR OVERBURDEN ANALYSIS.
◄◄◄— SAMPLE FOR PALAEO.

3) Barrell jammed.

2/2.

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

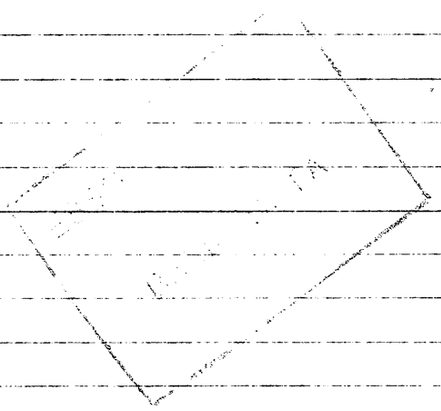
Core No. 7

WELL: MACKEREL #2.

Interval Cored 7778-7810 ft., Cut 32 ft., Recovered 21 ft., (%) Fm. LATROBE

Bit Type C-22 FD, Bit Size 8 7/16 | 4 in., Desc. by A.J.R & A.D.P Date 9-3-72.

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
0	7798			
	7800			
	7802			
	No Recovery.			
	7804			
	7806			
	7808			
	7810.			



REMARKS:

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

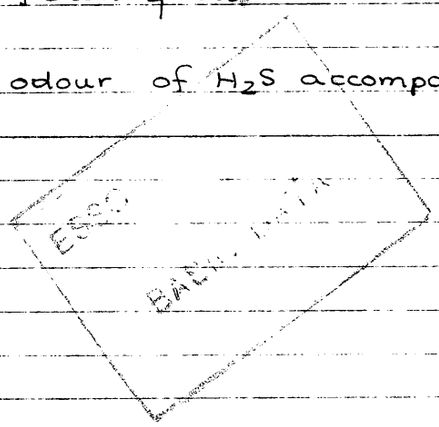
Core No. 8

WELL: MACKEREL #2

Interval Cored 7810 - 7817 ft., Cut 7 ft., Recovered 4 ft., (57 %) Fm. LATROBE

Bit Type C-22FD, Bit Size 8 7/16/4 in., Desc. by A.J.R & A.D.P Date 14-3-72

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
0 2 4 6 8	7810	●	7810 - 7811	SANDSTONE : consolidated, c.gr. w/. some conglomeritic bands with pebbles up to 4 m.m. and an absence of fines. Grains rounded to sub-rounded, well sorted, mainly clear to white qtz. Micaceous – v. sl. pyritic & glauc. Estimated good Ø & K Good fluor (blue-white) & good blue-white cut.
	12			
	13	●		
	14			
	15 NO RECOVERY		7811 - 7814	SANDSTONE : unconsolidated to partly consolidated, f. → med. gr, mod. well-sorted, grains rounded to sub-angular, white → cl. qtz, tr. mica. Appears to be fine-grained equivalent of sand above. Band around 7812' 6" may be fine-grained argillaceous as for Core-7 Estimate good Ø & K. Good flour. & cut.
	16			
	7817			* A distinct odour of H_2S accompanied core.



REMARKS: ← WAXED SAMPLE TO E.P.R.Co.

← SAMPLE FOR OVERBURDEN ANALYSIS.

Barrel jammed after cutting only 7 feet.

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

1/2

Core No. 9

WELL: Mackerel -2

Interval Cored 7817' - 7841' ft., Cut 24 ft., Recovered 12 ft., (50 %) Fm. Latrobe

Bit Type Christensen C-22 Bit Size 8 7/16" x4 in., Desc. by J.R.B & A.J.M Date 14-3-72

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
0 2 4 6 8				
17			7817'-22'	- SANDSTONE: Quartzose, frosty white & clear grns, with scattered dark grey grains, medium to coarse grained, with coarse grains predominant (60/40), very poorly sorted, subrounded to rounded, clean, friable to very friable, very good ϕ & K, good odour, cut & fluorescence. No sedimentary structures apparent.
20			7822'-29'	SANDSTONE: As above, but grain size ranges from medium to very coarse, with coarse and very coarse grains predominant (≈ 70/30). Good ϕ & K, scattered dark grains (chert?), trace of mica.
25			7829'-41'	NO RECOVERY
29				
30		N.R.		
35				

ESSO BASIC DATA

REMARKS:

← E.P.R.Co. sample (4"-5")

<< Overburden sample. (2")

* No odour of H_2S was noted in this core. A "DRÄGER" H_2S detector was used, but failed to register any gas.

18 of 25

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

2/2.

Core No. 9

WELL: Mackerel-2

Interval Cored 7817'-7841' ft., Cut 24 ft., Recovered 12 ft., (50 %) Fm. Latrobe

Bit Type Christensen C-22, Bit Size 8 7/16" x 4 in., Desc. by J.R.B & A.J.M. Date 14-3-72

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
0 2 4 6 8		N.R.		
38				
40				
41				

ESSO BASIC DATA

REMARKS:

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

Core No. 10

WELL: MACKERAL - 2

Interval Cored 7841' - 7874' ft., Cut 33 ft., Recovered 33 ft., (100 %) Fm. Latrobe

Bit Type C-19, Bit Size 8 7/8" x 4" in., Desc. by JRB & A.J.M. Date 15-4-72

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
0 5 10 15 20				
41			7841-59'	SANDSTONE - Quartzose, Clear to frost wh med-crse & pebbly (up to 3mm.) v. friable, poorly sorted, tr pyrite, tr mica, tr shale pebbles, clean, predom. crse G., crse fraction well rnd., med fraction subang to rnd., good fluor., odor & cut. No structures good por & perm.
42				
45				
50				
55			7859-64	SANDSTONE - as above but f/m grn'd w/ some crse grns. poorly sorted but med. grns predominate less, friab. fair por. & perm. tr mica, tr sh pebbles as above. contact w/ above is abrupt
60				

ESSO BASIC DATA

REMARKS:

← WAX PACKED SPL (4"-5") FOR EPRCO

<< 2" SPL NOT WAXED FOR OVERBURDEN ANALYSIS

<<< SMALL CORE CHIP FOR PALEO.

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

Core No. 10

WELL: MACKERA-2

Interval Cored 7841-7874 ft., Cut 33 ft., Recovered 33 ft., (100 %) Fm. LATROBE

Bit Type C-19, Bit Size 8 7/8" X 4" in., Desc. by JRB & A.J.M Date 15-4-72

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
61				
			7863-63½'	HORZ. PEBBLY BAND OF WELL RND. QTZ W/ GOOD POR PERM & FLUOR.
65			7864-72½'	SANDSTONE - CLEAR & FROSTY WH F.G. QTZ, SUB RND TO SUBANG W/ SILTY GRNS. NON CALC, NON ARG., V. hard, Tight & BLEEDING yellowish BRN OIL, POOR PERM & POR., MANY CARB STREAKS, SEVERAL LEAF IMPRINTS & WOODY FIBER MATERIAL, SLIGHTLY LAMINATED, GOOD TO PATCHY FLUOR, GOOD CUT & ODOR., TR OF PYRITE ASSOC. W/ LEAF & WOOD MATERIAL
70				
			7872½-74	SANDSTONE - AS DESCRIBED FOR INTERVAL 7841'-59'
74				

REMARKS:

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

1/2

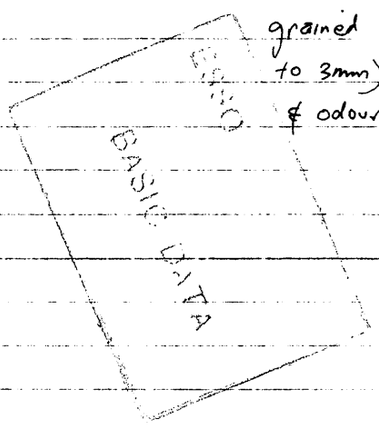
Core No. 11

WELL: Mackerel - 2

Interval Cored 7874'-7899 ft., Cut 25' ft., Recovered 25' ft., (100 %) Fm. Latrobe

Bit Type Christensen C-19, Bit Size 8 7/16" x 4 in., Desc. by JRB & AJM Date 16 March 1972

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
74 0 2 4 6 8			7874'-75'	SANDSTONE: As at base of Core #10. Qtzse., clear to frosty white, med. to coarse grnd., friable, poorly, std, tr mica, tr sh. pebbles, clean, good fluor, odour & cut. Good Φ & K, no structures.
75			7875'-75'8"	SANDSTONE: Gen as above, fine grained, carbonaceous, tight, poor perm + por., bleeding oil.
80			7875'8"-80'	SANDSTONE: As for 74'-75'.
			7880'-81'	SANDSTONE: As above, somewhat tighter with some horizontal carb. laminae.
85			7881'-7899'	SANDSTONE: Gen. as for 7874'-75'. Med. to coarse grained with some scattered pebbles (up to 3mm), friable, good Φ & K, fluor, cut & odour.
90				
94				



REMARKS:

← Waxed packed sample for EPRCo.

←← Overburden sample.

←←← Core chip for paleo.

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

2/2

Core No. 11

WELL: Mackerel - 2

Interval Cored 7874'-7899' ft., Cut 25 ft., Recovered 25' ft., (100 %) Fm. Latrobe

Bit Type Christensen C-19, Bit Size 8 7/16" x 4 in., Desc. by JRB & AJM Date 16 March 1971

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
0 2 4 6 8				
94				
95				
99				

REMARKS:

23/25

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

Core No. 12

WELL: MACKERAL-2

Interval Cored 7899-7939 ft., Cut 40 ft., Recovered 10 ft., (25 %) Fm. LATROBE

Bit Type C-19 F/O , Bit Size 8 7/16" x 4" in., Desc. by J.R.B. & A.J.M Date 16 MAR 1972

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
0 5 10 15 20		WTR.	7899-7909	SANDSTONE - clear to frosty WH, QTZSE med-CRSE Gen'd w/ scattered Pebbles, FRIABLE, Clean, good POR & PERM, POORLY SORTED, Tr. Pyrite, Tr. Chloxite, subang to RND, Pebbles all well rnd. Good even yellow FLUOR., ODOR Cut 7899-7901
				GOOD sharp OIL-WATER CONTACT AT 7901
			7909-7939	NO RECOVERY

ESSO BASIC DATA

REMARKS:

← WAX PACKED SPL FOR EPRCO

←← SPL FOR OVERBURDEN ANALYSIS

←←← CORE Chip FOR PALEO.

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

Core No. 12

WELL: MACKERAL-2

Interval Cored 7899-7939 ft., Cut 40 ft., Recovered 10 ft., (25 %) Fm. LATROBE

Bit Type C-19 F/D , Bit Size 8 7/16 x 4 in., Desc. by JRB & AJM Date 16 MAR 1972

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
0 5 10 15 20				

19 20 25 30 35 39

ESSO BASIC DATA

REMARKS:

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

Core No. 13

WELL: Mackerel - 2

Interval Cored 7939' - 7946' ft., Cut 7' ft., Recovered 1½' ft., (22 %) Fm. Latrobe

Bit Type Christensen C-19, Bit Size 8 7/16" x 4 in., Desc. by JRB & AJM Date 18 March 1972

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
0 2 4 6 8				
39			7939'-7	SANDSTONE: Quartzose, clear-frosty wh., med-v. coarse gnd, scatt. pebbles, subang-subr., v. poorly sorted, friable, good ϕ & K, no shows.
				1½" Shale cavings (Lakes Entrance?) at top.
40		NR.		
45				
46				CORE BARREL JAMMED.

ESSO BASIC DATA

REMARKS:

← Waxed spls for EPRCo

↞ Spl. for overburden analysis

↞↞ Core chip for paleo

2.2 Side Wall Core Descriptions

PAGE 3 OF 3

ATT 82 REC 75

DATE 23/3/72

ESSO AUSTRALIA LTD.

SIDEWALL CORE DESCRIPTIONS

IES RUN NO 1 SWC RUN NO 1

WELL MACKEREL-2

GEOLOGIST A.K. SVALBE

SERVICE CO SCHLUMBERGER

NO.	DEPTH	REC	ROCK TYPE	MODIFIERS	CAL	COLOR	INDUR DEG	GRAIN SIZE	SRTG	RND	DISS CLAY	STAIN	FLOURESCENCE				CUT FLUOR.		CUT RESIDUE		SHOW	PROB PROD	REMARKS - GAS
													%	DISTR	INTEN	COLOR	INTEN	COLOR	QUAN	COLOR			
1a	1	2	3	4	5	6	7	8	9	10	11	12	RK	14	15	16	17	18	19	20	21	22	23
65	7565	2	Sh	Pyr.	-	dk gy	Hd	sl.slty	-	-	100												
66	7555	2	Marl	-	-	dk gy	Hd		-	-	100												
67	7535	2	Marl	-	-	dk gy	Hd		-	-	100												
68	7515	1 3/4	Marl	-	-	dk gy	HD		-	-	100												
69	7501	1½	Marl	-	-	dk gy	Hd		-	-	100												
70	7465	1 7/8	Marl	-	-	dk gy	Hd		-	-	100												
71	7414	2	Marl	-	-	dk gy	Hd		-	-	100												
72	7313	1½	Marl	-	-	dk gy	Hd		-	-	100												
73	7270	1 7/8	Marl	-	-	dk gy	Hd		-	-	100												
74	7200	2	Marl	-	-	dk gy	Hd		-	-	100												
75	7100	2	Marl	-	-	dk gy	Hd		-	-	100												
76	7000	1 3/4	Marl	-	-	dk gy	Hd		-	-	100												
77	6850	1 5/8	Marl	-	-	dk gy	Hd		-	-	100												
78	6600	1½	Marl	-	-	dk gy	Hd		-	-	100												
79	6350	1 1/8	Marl	-	-	dk gy	Hd		-	-	100												
80	6100	1½	Marl	-	-	dk gy	Hd		-	-	100												
81	5850	1½	Marl	-	-	dk gy	Hd		-	-	100												
82	5600	1½	Marl	-	-	dk gy	Hd		-	-	100												
83	5350	1 1/8	Marl	-	-	dk gy	Hd		-	-	100												
84	5110	1	Marl	-	-	dk gy	Hd		-	-	100												
85	4800	1	Marl	-	-	dk gy	Hd		-	-	100												
86	4500	0	NR																				
87	4200	1 1/8	Marl	-	-	dk gy	Hd		-	-	100												
88	3914	1½	Marl	-	-	dk gy	Hd		-	-	100												
89	3500	1½	Marl	-	-	dk gy	Hd		-	-	100												
90	3000	1 3/4	Marl	-	-	dk gy	Hd		-	-	100												

FORM R 257 3/72

ESSO AUSTRALIA LTD.
SIDEWALL CORE DESCRIPTIONS

PAGE 2 OF 3 | ATT 82 REC 75 | DATE 23/3/72 | SWC RUN NO 1 | IES RUN NO 1

WELL MACKEREL-2 | GEOLOGIST A.K. SVALBE | SERVICE CO SCHLUMBERGER

NO. 1a	DEPTH 1	REC 2	ROCK TYPE 3	MODIFIERS 4	CAL 5	COLOR 6	INDUR DEG 7	GRAIN SIZE 8	SRTG 9	RND 10	DISS CLAY 11	STAIN 12	FLOURESCENCE % RK	FLOURESCENCE DISTR 14	FLOURESCENCE INTEN 15	FLOURESCENCE COLOR 16	CUT FLUOR. INTEN 17	CUT FLUOR. COLOR 18	CUT RESIDUE QUAN 19	CUT RESIDUE COLOR 20	SHOW 21	PROB PROD 22	REMARKS - GAS C1/C2/C3/C4/C5
37	7896	1'	Ss	Qtz. tr.py	-	Lt.gy	Fri	M-Cg	Gd	sa sr	10	Wk	90	Ev	Br	Wh-blu	Br	Wh-yel	Hvy	Yell	0	0	2200/100/500/1100/7
38	7895	1½m	Ss	Qtz. tr.py	-	wh Lt.gy	V.Fri	Cg	Med	sa -sr	10	Wk-Nil	60	Ev-Sp	Dull	Wh-bl	Dull	Yell	Lt	Yell	0?	0?	1600/50/300/700/70
39	7893	1	Ss	Qtz.	-	Lt.gy	Fri	VC-Med	pr	sa -a	15	Wk	90	ev	Br	Wh-bl	Br-dull	Yell	M	Yell	0	0	3500/100/800/2100/
40	7880	¾	Ss	Qtz.	-	Lt.gy	Fri	VC-mg	m-pr	sa -sr	20	Wk	90	ev	br	wh-bl	br.	yell	M	yell	0	0	1900/200/400/1000/6
41	7873	¾	Ss	Qtz.-glauc?	-	Lt.gy	Fri	c-mg	m-pr	sa -sr	10	Nil	70	ev-pchy	br-dull	wh-bl	Dull	yell	Lt	yell	0?	0	
42	7845	½	Ss	Qtz	-	wh	Fri	mg	gd	sr	20	Wk	90	ev	br	wh-bl	Dull	yell	M	yell	0	0	1500/100/500/1400/10
43	7822	½	Ss	Qtz	-	wh	Fri.	m-c	pr	sa	20	wk	90	ev	br	wh-bl	br-	yell	M-hv	yell	0	0	3500/100/1000/2400/
44	7817	¼	Ss	Qtz	-	wh-gy	Fri	m-c	mod	sa	30	wk	70	ev-pch	br	wh-bl	br	yell	M-hv	yell	0	0	1200/100/400/1000/ 8
45	7790	½	Ss	Qtz	-	wh	Fri	m-c	med	sa -r	30	wk	90	ev	br	wh-bl	br	yell	M-hv	yell	0	0	3000/100/900/2700/16
46	7767	½	Ss	Qtz	-	wh	Fri	m-c	m-pr	sa -sr	30	wk	80	ev	br	wh-bl	dull-br	yell	M-hv	yell	0	0	No reading
47	7760	1	Ss-	Qtz-py-Arg Glau	-	wh	Fri	m-f	m-pr	sa -sr	60	wk	90	ev	br	wh-bl	br	yell	M-hv	yell	0	0	1600/200/500/1200/7
48	7750	1¼	Ss-sh	Qtz glau-py Arg	-	dk gy	Cons	si-cg	pr	sa -sr	60	W	50	patch	dull-br	wh-bl	dull	yell	M-lt	yell	0	0	2000/100/500/1100/6
49	7745	1	Ss	Qtz glau-py Arg	-	dk gy	Fri	f-cg	pr	sa -sr	40	W	60	ev-patch	D-br	wh-bl	dull	yell	M-lt	yell	0	0	1200/100/400/1100/5
50	7720	1	Ss	Qtz	-	wh	Fri	m-cg	m	sa	10	W	90	ev	Br	wh-bl	br	wh-yell	hvy	yell	0	0	8500/300/2100/5000/26
51	7710	1	Ss	Qtz-arg.	-	wh	Fri	m-cg	m	sa	30	W	70	ev	dull-br	wh-bl	dull	wh-yell	med	yell	0	0	4500/100/1400/3500/19
52	7700	1	Ss	Qtz-arg.	-	wh-gy	Fri	m-cg	pr	sa	30	W	70	ev-pch	dull-br	wh-bl	dull	wh-yell	med	yell	0	0	2400/200/1000/2600/14
53	7690	1	Ss	Qtz -	-	wh	Fri	M	m	sa	10	Wk	90	ev	br	wh-bl	br	wh	hvy	yell	0	0	5500/200/1200/2900/15
54	7680	½	Ss	Qtz-V py.	-	wh-br	Fr-hd	M	m	sa	20	W	60	ev-pat	dull-br	wh-bl	br	wh	med	yell	0	0	600/100/200/700/600
55	7670	1	Ss	Otz-Wk Arg	-	wh-gy	Fr.	M	med	sa	30	W	70	ev	dull-br	wh-bl	dull	wh-yell	med	yell	0	0	2500/200/700/1600/9
56	7665	¾	Ss	Qtz	-	wh-gy	Fr	m-c	med	sa	10	W	80	ev-pch	dull-br	wh-bl	dull	wh-yell	med	yell	0	0	No reading
57	7655	¾	Ss	Qtz-Wk Arg	-	wh-gy	Fr	m	med	sa	25	W	80	ev	dull-br	wh-bl	dull	wh-yell	med	yell	0	0	5000/100/1700/4400/25
58	76[illegible]	¾	Ss	Qtz-tr py	-	wh	Fr	m-c	pr	sa	20	W	90	ev	br	wh-bl	br	wh	med	yell	0	0	600/100/200/600/500
59	7635	½	Ss	Qtz	-	wh	Fri	m-	gd	sr	10	Wk	100	ev	br	wh-bl	br	wh-yel	hvy	yell	0	0	1300/100/550/1500/21
60	7615	¾	Ss	Qtz	-	wh	Fri	m-cg	m-br	sr	10	Wk	30	ev	br-dull	wh-bl	dull	wh-yel	med	yell	0	0	
61	7610	¾	Ss	Qtz,py,glauc	-	wh-gy	Firm	m-vc	[illegible]	sa -sr	30	Wk	60	patchy	dull-br	wh-bl	dull	wh-yell	med	yell	0	0	
62	7580	0	NR																				
63	7578	1	Ss	Ab. pyr. glauc argill.	-	dk. gy	Frm.	vc-m	pr	sa -sr	-	NIL	10	spty	dull	bl wh	v dull	yell-wh	H	yell	0	0?	V.arg. tight pyr.
64	7574	1-¾	Sh	Silty glauc	-	dk.gy	Hd	vf slty	-	-	100												v. silty matrix.

FORM R 257 3/72

PAGE 1 OF 3

ATT 82 REC 75

DATE 23/3/72

ESSO AUSTRALIA LTD.

SIDEWALL CORE DESCRIPTIONS

SWC RUN NO 1

IES RUN NO 1

WELL MACKEREL-2

GEOLOGIST A.K. SVALDE

SERVICE CO SCHLUMBERGER

NO. 1a	DEPTH 1	REC 2	ROCK TYPE 3	MODIFIERS 4	CAL 5	COLOR 6	INDUR DEG 7	GRAIN SIZE 8	SRTG 9	RND 10	DISS CLAY 11	STAIN 12	FLOURESCENCE % RK	FLOURESCENCE DISTR 14	FLOURESCENCE INTEN 15	FLOURESCENCE COLOR 16	CUT FLUOR. INTEN 17	CUT FLUOR. COLOR 18	CUT RESIDUE QUAN 19	CUT RESIDUE COLOR 20	SHOW 21	PROB PROD 22	REMARKS - GAS C1/ C2/ C3 /C4 /C5
1	8465	½"	Ss	qtz. glauc	-	Lt.gry	Frm	Med	W	rd	+15	-	-	-	-	-	-	-	-	-	NS	-	C1- tr.
2	8455	0	NR																				
3	8425	0	NR																				
4	8386	½"	Ss	qtz	-	Grey	Fri	Med	W	subr	+ 15	-	-	-	-	-	-	-	-	-	NS	-	No Cl shows
5	8360	½"	Ss	qtz. mica	-	Grey	Fri	Med	W	subr	+ 15	-	-	-	-	-	-	-	-	-	NS	-	"
7	8300	1"	Ss	qtz	-	Grey	Fri	VC	W	subr		-	-	-	-	-	-	-	-	-	NS	-	"
8	8267	5/8'	Ss	qtz	-	White	Fri	Med	W	rd	-	-	-	-	-	-	-	-	-	-	NS	-	"
9	8218	0	NR																				
11	8194	½"	Ss	qtz.glauc ? Py	-	Lt.gry	Fri	Med	P	ang-rd	-	-	-	-	-	-	-	-	-	-	NS	-	"
13	8160	1"	Ss	qtz	-	Lt.gry	Fri	Med	W	subr	+15	-	-	-	-	-	-	-	-	-	NS	-	"
14	8130	1"	Ss	qtz	-	Lt.gry	Fri	C	W	sub ang-rd	-	-	-	-	-	-	-	-	-	-	-	-	"
16	8065	½"	Ss	qtz	-	Dk gry	Fri	Fine	W	subr	5	-	-	-	-	-	-	-	-	-	-	-	"
17	8040	7/8'	Ss	qtz,mica	-	Dk gry	Fri	Med-Fine	Mod	subr-ang	+ 15	-	-	-	-	-	-	-	-	-	-	-	"
19	7975	5/8½	Ss	qtz. chert	-	White	Fri	VC	W	rd	-	-	-	-	-	-	-	-	-	-	-	-	"
20	7925	½"	Ss	qtz	-	white	Fri	C	W	Subr	-	-	-	-	-	-	-	-	-	-	-	-	"
22	7919	5/8"	Ss	qtz	-	White	Fri	C	W	rd	-	Nil	25	spty	dull	bl.wh	V. wk	-	None	-	NS	N	No chrom. reading
23	7910	3/4'	Ss	qtz. pyr.	-	White	Fri	V.c-C	W	sub ang-rd	-	Nil	25	spty	fnt	Yellow white	fnt	wh-yel	Lt	-	0?	0?	300/50/TR/TR/500
25	7905	3/4'	Ss	qtz.rk.frg. pyr	-	gry,wh	Fri	F-C	Mod	Subr	+15	Nil	90	Ev	br-dull	bl-wh	dull	white	M	yel-wh	0	0	400/250/TR/TR/600
26	7900	3/4"	Ss	qtz.tr.pyr.	-	gry.wh	Fri	M-Cg	Mod	s-r	10	Wk	90	Ev	dll-brt	wh. bl	br.	white	Hvy	yel-wh	0	0	500/100/TR/5000/47
27	7895	0	NR																				
28	7890	3/4"	Ss	Qtz.tr.py	-	gry.wh	Fri	M-Cg	Mod	s-r	-	Wk	90	Ev	br.	wh-bl	br	wh-yel	hvy	yel-wh	0	0	600/100/100/7000/ 700
29	7888	1¼"	Ss	Qtz.clay choked	-	gry.wh	Fri	Med	W	s-r	+ 30	Nil	90	Ev	br.	wh-bl	br	wh-yel	hvy	Yellow	0	0	450/150/150/4750/4
31	8465	¼"	Ss	qtz.glauc.py	-	Dk.gy	Fri	Med	W	s-r s-a	+ 15	Nil	-	Nil	-	-	-	-	-	-	NS	-	
32	8455	0	NR																				
33	8425	½"	Sltst	Qtz, mica	-	Dk.gr.	Frm	F	Med	sa	+ 75	Nil	-	-	-	-	-	-	-	-	NS	-	
34	8300	½"	Ss	Qtz, clay Pyr,	-	Dk.gr	Sft	F-	M-C	sa	+ 90	Nil	-	-	-	-	-	-	-	-	NS	-	
35	8218	½"	Ss+Slt	Qtz,clay carb	-	gy	Sft	F-C	M-Pr	sa-r	+ 50	Nil	-	-	-	-	-	-	-	-	NS	-	C1/C2/C3/C4/C5
36	7898	1	Ss	Qtz,Clay Ch.	-	Lt.gy	Fri	C-Vc	Pr	sa-r	40	Wk	90	ev	Br	Wh-blu	dull	Wh-Yel	M	Yell	0?	0	

FORM R 257 3/72

2.3 Core Analysis Results

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. MACKERAL NO. 2

DATE ANALYSIS COMPLETED 22 May 1973

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				
1	7589'		Sst;m.gr. to v.c.gr.	22.7	N.D.	212	2.09	2.71	N.D.	N.D.	N.D.	N.D.	good blue yellow spotted	N.D.
2	7622'		Sst;m.gr. to c.gr.	22.3	N.D.	572	2.08	2.67	N.D.	N.D.	N.D.	N.D.	good yellow spotted	N.D.
4	7695'		Sst;f.gr.to c.gr.slty	22.8	N.D.	250	2.09	2.71	N.D.	N.D.	N.D.	N.D.	good even blue	N.D.
5	7728'		as above	19.9	N.D.	197	2.12	2.65	N.D.	N.D.	N.D.	N.D.	good even blue	m N.D.
6	7753'		as above	14.7	N.D.	1.1	2.32	2.72	N.D.	N.D.	N.D.	N.D.	good blue yellow spotted	N.D.
6	7754'		as above	20.4	N.D.	53	2.13	2.68	N.D.	N.D.	N.D.	N.D.	good yellow spotted	N.D.
7	7781'		Sst;m.gr. to c.gr.	27.8	N.D.	3,429	1.94	2.68	N.D.	N.D.	N.D.	N.D.	good yellow spotted	N.D.
9	7821'		Sst;m.gr. to v.c.gr.	20.0	N.D.	368	2.12	2.64	N.D.	N.D.	N.D.	N.D.	good yellow spotted	N.D.

Remarks: - CORE 3 - INSUFFICENT SAMPLE

General File No. ~~62/399~~ 72/2914
Well File No.

Petroleum T[illegible]ology Laboratory, Bureau of Mineral Resources, [illegible]ogy 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. MACKERAL NO. 2

DATE ANALYSIS COMPLETED 22 May 1973

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				
10	7843'		Sst;f.gr. to c.gr.	24.7	N.D.	549	2.03	2.69	N.D.	N.D.	N.D.	N.D.	good even yellow	N.D.
10	7855'		Sst;f.gr. to m.gr.	16.7	N.D.	5.1	2.21	2.66	N.D.	N.D.	N.D.	N.D.	good yellow spotted	N.D.
10	7864'		Sst;m.gr. to v.c.gr.	28.0	N.D.	1,608	1.94	2.70	N.D.	N.D.	N.D.	N.D.	fair even yellow spotted	N.D.
11	7877'		as above	26.8	N.D.	516	1.96	2.68	N.D.	N.D.	N.D.	N.D.	good yellow spotted	N.D.
11	7899'		Sst;m.gr. to c.gr.	23.9	N.D.	435	2.01	2.64	N.D.	N.D.	N.D.	N.D.	good yellow spotted	N.D.
12	7906'		Sst;c.gr. to v.c.gr.	27.9	N.D.	467	2.03	2.82	N.D.	N.D.	N.D.	N.D.	NIL	N.D.
13	7940'		as above	27.2	N.D.	494	1.96	2.69	N.D.	N.D.	N.D.	N.D.	NIL	N.D.

Remarks: -

General File No. ~~52/399~~ 72/2914
Well File No.

-511-2

CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

DALLAS, TEXAS

Company Esso Aust. Ltd. Formation _____ Page 1 of 1

Well Mackerel No.2 Cores DIAMOND File AP-1-CA

Field Wildcat Drilling Fluid _____ Date Report 7 Apr 72

County _____ State Vic. Elevation _____ Analysts G.A.J.

Location Offshore Remarks Simulate Overburden Pressure 2165 P.S.I.

CORE ANALYSIS RESULTS

(Figures in parentheses refer to footnote remarks)

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYS HORIZONTAL	PERMEABILITY MILLIDARCYS VERTICAL	POROSITY PERCENT	RESIDUAL SATURATION % VOLUME % PORE	RESIDUAL SATURATION TOTAL WATER % PORE	PROBABLE PRODUCTION	REMARKS
	← should read S not 5							
1	572 7587	45		16.7				
2	573	18		18.5				
3	574	33		16.8				
4	575	881		22.1				
5	576	310		21.6				
6	577	82		20.1				
7	578	1208		25.2				
8	579	524		22.2				
9	580	1806		26.4				
0	581	1524		27.3				
1	582	2.9		14.2				
2	583	0.1		11.1				
3	584	2244		29.6				
4	585	157		21.7				
5	586	3970		31.6				
6	587	1250		30.4				
7	588	322		22.5				
8	589	430		24.2				
9	590	626		25.8				
0	591	389		27.0				
1	592	958		26.3				
2	593	940		26.3				
3	594	.62		15.6				

Sample No.	Well	Core No.	Depth (feet)
S 72		Core 1	7587
73		1	7597
74		1	7607
75		2	7623
76		3	7649
77		4	7695
78		Core 5	7723
79		5	7730
80		5	7738
81		6	7752
82		7	7783
83		7	7787
84		8	7810
85		Core 9	7817
86		9	7829
87		10	7853
88		10	7863
89		10	7873
90		11	7879
91		11	7889
92		12	7899
93		12	7901
94		Core 13	7939

BASIC DATA

NOTE:
(1) REFER TO ATTACHED LETTER.
INCOMPLETE CORE RECOVERY—INTERPRETATION RESERVED.
(2) OFF LOCATION ANALYSES—NO INTERPRETATION OF RESULTS.

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential

2.4 Rock Log Chart

BASIC

ROCK LOG CHART

SAMPLE QUALITY: Fair

LOGGED BY: J.M. & D.J.G. DATE: Feb. 72

LOCATION: MACKEREL-2

SHEET: 15 OF:

Depth	Accessories	Colour	Description
	·m 9	m-dk gy	
	oF	minor lt gy	Shale - m-dk gy (some mudst.) firm - fissile, silty, v. calcareous minor interbedded marl lt gy soft gummy, foraminiferal
			traces pyrite
		tr gy-green	
7100			
			Trace ls ltbrn-tan, detrital, silty
7200			
	mm a		Trace f. gr. qtz sd.
	F		
7300			
			Marl — lt. gr. v. soft, gummy, silty
7400			
			Increase in marl
7500			

3.0 PALYNOLOGY / PALAEONTOLOGY

PALYNOLOGY OF
MACKEREL - 2
GIPPSLAND BASIN

A.D. Partridge

ESSO AUSTRALIA LTD.

Palaeontological
Report 1972/07

12th April 1972

INTRODUCTION

Samples from Mackerel - 2 were received for palynological analysis during March, 1972, and preliminary reports were issued during March. Unfortunately the greater part of the core and SWC material available from the Latrobe Group in Mackerel - 2 is of unfavourable lithology for palynological study, hence the number of barren samples and lack of age dating in the interval between 7574 feet and 8040 feet. The samples examined, and the results for Mackerel - 2 are summarised in the following:-

SUMMARY

Sample	Depth (in feet)	Zone	Age
SWC 64	7574 *	P. tuberculatus	Oligocene
SWC 63	7578	Sample barren	
Core 1	7607	" "	
Core 2	7692	" "	
Core 3	7693½	" "	
Core 5	7722	" "	
"	7732 ft. 5 in.	" "	
"	7732 ft. 9 in.	" "	
Core 6	7752	Indeterminant	Early Eocene-Paleocene
Core 7	7784-85	Sample barren	
"	7793	" "	
SWC 17	8040 *	L. balmei	Paleocene
SWC 16	8065	"	"
SWC 11	8194 *	"	"
SWC 35	8218	"	"
SWC 5	8360 *	"	"
SWC 4	8386 *	"	"
SWC 33	8425 *	"	"
SWC 31	8463 *	"	"

* Dinoflagellates present.

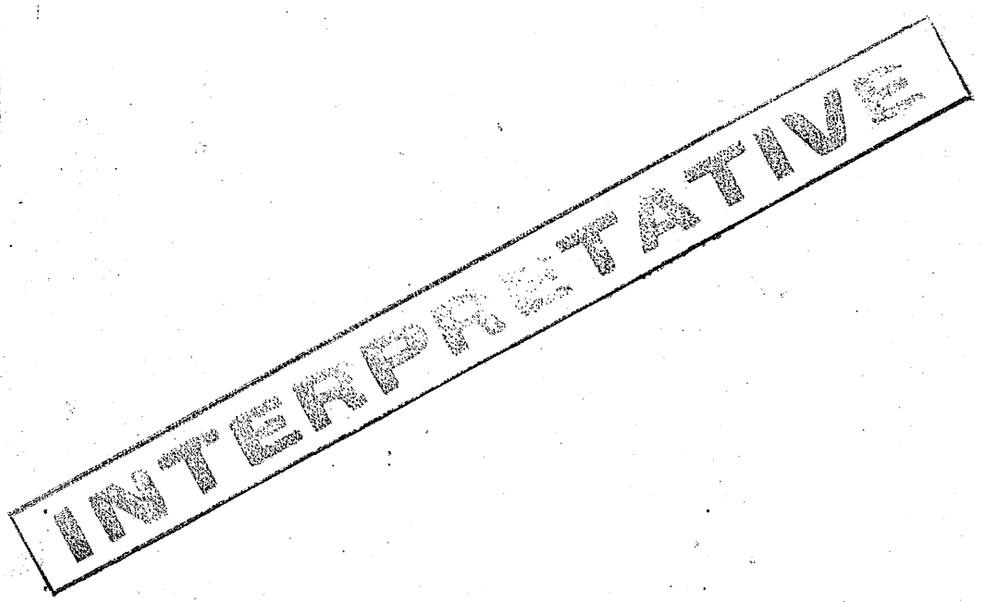
INTERPRETATIVE

COMMENTS

The SWC at 7574 feet contains pollen, spores and dinoflagellates of the P. tuberculatus Zone, which is in agreement with the I1 age. determined from the foraminiferal data.

The SWC's below 8040 feet in the Latrobe Group contain good *L. balmei* Zone assemblages, and the majority of samples as indicated contain dinoflagellates.

With the exception of the shale band at 7752 feet from the top of Core 6 all samples processed from the first 460 feet of the Latrobe Group are barren or contain only obvious spore-pollen and dinoflagellate contaminants from the drilling mud. The most suitable lithologies from Core 5 and 6 were processed twice without improving the original results. The sample from 7752 feet in Core 6 contains very poorly preserved dinoflagellates, but no spores or pollen, although the lack of the latter may be more of a preservational rather than an environmental factor. The dinoflagellates appear to belong predominently to one species but are unidentifiable to either genus or species, with the exception of a poorly preserved specimen of *Cyclonophelium retintextum*. This species has a known range of *L. balmei* Zone into lower *M. diversus* Zone and therefore suggests a Paleocene to early Eocene age for this sample.



BASIN GIPPSLAND DATE 12th APRIL 1972

WELL NAME MACKEREL -2 ELEVATION

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
OLIGO-MIOC.	T. bellus										
	P. tuberculatus	7574	0				7574	0			
EOCENE	U. N. asperus										
	L. N. asperus										
	P. asperopolus										
	U. M. diversus										
	L. M. diversus										
EO-CENE	L. balmei	8040	0				8463	2	8425	0	
	T. longus										
LATE CRETACEOUS	T. lilliei										
	N. senectus										
	C. trip./T.pach.										
	C. distocarin.										
	T. pannosus										
EARLY CRETACEOUS	C. paradoxa										
	C. striatus										
	U. C. hughesii										
	L. C. hughesii										
	C. stylosus										
Pre-Cretaceous											

INTERPRETATIVE

COMMENTS:

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 spores 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.

DATE RECORDED BY: A. D. Partridge DATE 12th April 1972

DATA REVISED BY: DATE

Form R 193 3/71

BASIN GIPPSLAND BY D.J. Taylor

WELL NAME MACKEREL-2 DATE April 1972 ELEV. _____

Foram Zonules

		Highest Data	Quality	2 Way Time	Lowest Data	Quality	2 Way Time
MIOCENE	A						
	Alternate						
	B						
	Alternate						
	C	3000	1		3000	1	
	Alternate						
	D_1	3500	1		5600	1	
	Alternate						
	D_2	5850	1		6600	1	
	Alternate						
	E	E_1 6850	1		7000	1	
	Alternate						
	F	7100	1		7200	0	
	Alternate						
	G	7270	0		7270	0	
	Alternate						
	H_1	7313	0		7465	1	
	Alternate						
	H_2	7501	1		7535	1	
	Alternate						
OLIGOCENE	I_1	7535	0		7565	0	
	Alternate				7574	2	
	I_2						
	Alternate						
	J_1						
	Alternate						
	J_2						
	Alternate						
EOC.	K						
	Alternate						
	Pre K						

INTERPRETATION

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 MACKEREL -2 ELEVATION +32 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
MIO-EOCENE	P. tuberculatus	7574	0				7574	0			
	U. N. asperus										
	M. N. asperus										
	L. N. asperus										
	P. asperopolus										
	U. M. diversus										
	M. M. diversus										
	L. M. diversus										
PALEOCENE	U. L. balmei	8040	0				8218	2	8194	0	
	L. L. balmei	8360	1				8463	0			
	T. longus										
CRETACEOUS	T. lilliei										
	N. senectus										
	C. trip./T.pach.										
	C. distocarin.										
	T. pannosus										
EARLY CRETACEOUS											
PRE-CRETACEOUS											

COMMENTS: Dinoflagellate Zones:

Wetz. homomorpha 8040 (1) — 8194 (1)

Eisenackia crassitabulata 8386 (1) — 8463 (1)

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: A.D.P. DATE April 1972.

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

FORM No R 315 12/72

4.0 Formation Interval Test

(F.I.T)

Data

R. D. AGNEW (VIC) PTY. LTD
582 ST. KILDA ROAD
MELBOURNE, VICTORIA 3004

ESSO AUSTRALIA LIMITED | MACKEREL | MACKEREL No. 2
MARCH 20-23, 1972

PURPOSE: OBTAIN SUBSURFACE PRESSURES WITH KUSTER GAUGE FROM SCHLUMBERGER FORMATION INTERVAL TESTER

TOOLS USED: 1 KUSTER 10,250 PSI SER No. 8757 12 HOUR CLOCK

ESSO
BASIC DATA

OPERATION SCHEDULE

HOURS	REMARKS
MARCH 20	
0730	DEPART LONGFORD FOR GLOMAR 'CONCEPTION'
MARCH 21	
0400	START & SET UP TOOLS. INTO HOLE WITH TOOLS - STACK DISENGAGED COME OUT OF HOLE
0805	PERFORM FORMATION INTERVAL TEST No. 1 @ 7892'
1048	PERFORM FORMATION INTERVAL TEST No. 2 @ 7905'
1340	PERFORM FORMATION INTERVAL TEST No. 3 @ 7878' (GUN MALFUNCTION - MUD RUN ONLY) HYDROSTATIC 4125 PSI
1556	PERFORM FORMATION INTERVAL TEST No. 4 @ 7880' (GUN MALFUNCTION - MUD RUN ONLY) HYDROSTATIC 4161 PSI
1809	PERFORM FORMATION INTERVAL TEST No. 5 @ 7878' (GUN MALFUNCTION - MUD RUN ONLY) HYDROSTATIC 4115 PSI
2025	PERFORM FORMATION INTERVAL TEST No. 6 @ 7592'
MARCH 22	
0643	PERFORM FORMATION INTERVAL TEST No. 7 @ 7842'
0914	PERFORM FORMATION INTERVAL TEST No. 8 @ 7758'
1143	PERFORM FORMATION INTERVAL TEST No. 9 @ 7627'
1612	PERFORM FORMATION INTERVAL TEST No. 10 @ 7860'
MARCH 23	
0900	ARRIVE LONGFORD

OPERATOR: KEITH WEDLOCK

R. D. AGNEW (VIC) PTY. LTD
582 ST. KILDA ROAD
MELBOURNE, VICTORIA 3004

ESSO AUSTRALIA LIMITED | MACKEREL | MACKEREL NO. 2
MARCH 21, 1972

PURPOSE: OBTAIN SUBSURFACE PRESSURES WITH KUSTER GAUGE FROM SCHLUMBERGER FORMATION INTERVAL TESTER

TOOLS USED: 1 KUSTER 10,250 PSI SER NO. 8757 12 HOUR CLOCK

ESSO
BASIC DATA

F.I.T. TEST NO. 1 @ 7892' RT

HOURS	MINS	DEFL.	PSIG	REMARKS
		.786	4161	INITIAL HYDROSTATIC
0906	0	.786	4161	SET PACKER & OPEN TOOL
0908	2	.157	803	
0910	4	.137	723	
0912	6	.138	728	
0914	8	.134	706	
0916	10	.133	701	CHAMBER FILLED
0918	12	.416	2217	
0920	14	.634	3365	
0921	15	.634	3365	FINAL SHUT IN & OPEN SEGREGATOR
0923	17	.577	3065	
0925	19	.594	3154	
0927	21	.596	3165	UNSEAT PACKER
		.786	4161	FINAL HYDROSTATIC MAXIMUM TEMP. 196°F

F.I.T. TEST NO. 2 @ 7905' RT

HOURS	MINS	DEFL.	PSIG	REMARKS
		.787	4166	INITIAL HYDROSTATIC
1201	0	.787	4166	SET PACKER & OPEN TOOL
1203	2	.639	3391	
1205	4	.639	3391	
1207	6	.639	3391	CHAMBER FILLED
1209	8	.645	3322	
1211	10	.645	3322	
1213	12	.645	3322	
1215.5	14.5	.645	3322	CLOSE TOOL
		.645	3322	FINAL SHUT IN
		.790	4181	FINAL HYDROSTATIC

OPERATOR: KEITH WEDLOCK

R. D. AGNEW (VIC) PTY. LTD
582 ST. KILDA ROAD
MELBOURNE, VICTORIA 3004

ESSO AUSTRALIA LIMITED | MACKEREL | MACKEREL NO. 2
MARCH 22, 1972

PURPOSE: OBTAIN SUBSURFECE PRESSURES WITH KUSTER GAUGE FROM SCHLUMBERGER FORMATION INTERVAL TESTER

TOOLS USED: 1 KUSTER 10,250 PSI SER NO. 8757 12 HOUR CLOCK

ESSO
BASIC DATA

F.I.T. TEST NO. 7 @ 7842' RT

HOURS	MINS	DEFL.	PSIG	REMARKS
		.778	4119.8	INITIAL HYDROSTATIC
0846	0	.778	4119.8	OPEN TOOL
0848	2	.451	2401.5	
0850	4	.610	3238.4	
0852	6	.602	3196.30	
0854	8	.597	3170.0	
0856	10	.593	3148.9	
0858	12	.590	3133.1	
0900	14	.588	3122.6	
0902	16	.587	3117.3	CHAMBER FILLED
0904	18	.634	3364.7	
0906	20	.634	3364.7	
0908	22	.634	3364.7	
				OPEN SEGREGATOR FOR APPROXIMATELY 3 MINS. THIS PART OF CHART OBSCURED BY UNSEATING.
		.778	4119.8	FINAL HYDROSTATIC

F.I.T. TEST NO. 8 @ 7758' RT

HOURS	MINS	DEFL.	PSIG	REMARKS
		.769	4073.3	INITIAL HYDROSTATIC
	0	.769	4073.3	OPEN TOOL
	2	.516	2743.6	
	4	.468	2491.0	
	6	.460	2448.8	
	8	.459	2443.6	
	10	.459	2443.6	
	12	.460	2448.8	
	14	.461	2454.2	
	16	.462	2459.4	
	17	.462	2459.4	CHAMBER FILLED
	18	.620	3291.0	
	20	.632	3354.2	
	22	.633	3359.4	
	24	.633	3359.4	OPEN SEGREGATOR
		.635	3369.4	FINAL SHUT IN
		.769	4073.3	FINAL HYDROSTATIC

R. D. AGNEW (VIC) PTY. LTD
582 ST. KILDA ROAD
MELBOURNE, VICTORIA 3004

ESSO AUSTRALIA LIMITED | MACKEREL | MACKEREL NO. 2
MARCH 21, 1972

PURPOSE: OBTAIN SUBSURFACE PRESSURES WITH KUSTER GAUGE FROM SCHLUMBERGER FORMATION INTERVAL TESTER

TOOLS USED: 1 KUSTER 10,250 PSI SER NO. 8757 12 HOUR CLOCK

ESSO
BASIC DATA

F.I.T. TEST NO. 6 @ 7592' RT

HOURS	MINS	DEFL.	PSIG	REMARKS
		.754	3905.8	INITIAL HYDROSTATIC
2122	0	.754	3905.8	
2124	2	.003	16.2	
2126	4	.013	50.11	
2128	6	.014	55.8	
2130	8	.014	55.8	
2132	10	.014	55.8	
2134	12	.014	55.8	FIRE SHAPE CHARGE
2136	14	.023	104.6	
2138	16	.022	99.2	
2140	18	.022	99.2	
2142	20	.021	93.8	
2144	22	.021	93.8	
2146	24	.020	88.4	
2148	26	.020	88.4	
2150	28	.019	82.9	
2152	30	.019	82.9	
2154	32	.019	82.9	
2156	34	.018	77.5	
2158	36	.018	77.5	
2159	37	.018	77.5	OPEN SEGREGATOR
2201	39	.010	34.2	
2203	41	.011	39.5	
2205	42	.020	88.4	WELL SHUT IN
2207	44	.554	2943.6	
2209	46	.616	3270	
2211	48	.617	3275	
2213	50	.617	3275	

FINAL HYDROSTATIC OBSCURED

OPERATOR KEITH WEDLOCK

R. D. AGNEW (VIC) PTY. LTD
582 ST. KILDA ROAD
MELBOURNE, VICTORIA 3004

ESSO AUSTRALIA LIMITED | MACKEREL | MACKEREL NO. 2
MARCH 22, 1972

PURPOSE: OBTAIN SUBSURFECE PRESSURES WITH KUSTER GAUGE FROM SCHLUMBERGER FORMATION INTERVAL TESTER

TOOLS USED: 1 KUSTER 10,250 PSI SER NO. 8757 12 HOUR CLOCK

ESSO

BASIC DATA

F.I.T. TEST NO. 9 @ 7627' RT

HOURS	MINS	DEFL.	PSIG	REMARKS
		.748	3964.7	INITIAL HYDROSTATIC
	0	.748	3964.7	SET PACKER & OPEN TOOL
	2	.258	1378.3	
	4.	.572	3038.4	
	6	.570	3027.8	
	8	.569	3022.6	
	10	.569	3022.6	
	12	.569	3022.6	
	14	.569	3022.6	
	16	.569	3022.6	
	17	.570	3027.8	CHAMBER FILLED
	18	.623	3306.8	
	20	.623	3306.8	
	22	.623	3306.8	
	23	.623	3306.8	OPEN SEGREGATOR FOR APPROXIMATELY
	24.5	.620	3291.0	1-1/2 MINUTES & UNSEAT PACKER
				FINAL HYDROSTATIC OBSCURED IN UNSEATING MARKS

OPERATOR: KEITH WEDLOCK

R. D. AGNEW (VIC) PTY. LTD
582 ST. KILDA ROAD
MELBOURNE, VICTORIA 3004

ESSO AUSTRALIA LIMITED | MACKEREL | MACKEREL NO. 2
MARCH 22, 1972

PURPOSE: OBTAIN SUBSURFACE PRESSURES WITH KUSTER GAUGE FROM SCHLUMBERGER FORMATION INTERVAL TESTER

TOOLS USED: 1 KUSTER 10,250 PSI SER NO. 8757 12 HOUR CLOCK

ESSO
BASIC DATA

F.I.T. TEST NO. 10 @ 7860' RT

HOURS	MINS	DEFL.	PSIG	REMARKS
		.777	4114.7	INITIAL HYDROSTATIC
	0	.777	4114.7	SET PACKER & OPEN TOOL
	4.5			FIRE SHAPE CHARGE
	6	.432	2311.5	
	8	.033	158.8	
	10	.024	110.0	
	12	.020	88.4	
	14	.017	72.1	
	16	.016	66.7	
	18	.014	55.8	
	20	.013	50.4	
	22	.012	45.0	
	24	.011	39.6	
	26	.010	34.2	
	28	.009	28.7	
	30	.009	28.7	
	32	.008	23.3	
	34	.008	23.3	
	36	.007	17.9	
	38	.007	17.9	
	40	.007	17.9	CHAMBER FILLED
	42	.008	23.3	
	44	.010	34.2	
	46	.012	45.0	
	47	.013	50.4	OPEN SEGREGATOR
	48	.000	0	
	49	.000	0	
	51	.000	0	
	52	.014	55.8	
	53	.049	245.5	
	54	.216	1150.7	
	56	.612	3248.9	
	58	.613	3254.2	
	59	.614	3259.4	FINAL SHUT IN - UNSEAT PACKER
				FINAL HYDROSTATIC OBSCURED BY UNSEATING

OPERATOR: KEITH WEDLOCK

PE904979

This is an enclosure indicator page.
The enclosure PE904979 is enclosed within the container PE904978 at this location in this document.

The enclosure PE904979 has the following characteristics:

ITEM_BARCODE	= PE904979
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 F.I.T. Data
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= FIT
DESCRIPTION	= Mackerel 2 Formation Interval Test (F.I.T.) Data. Test number 1 - 10. From section 4.0 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Schlumberger
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

5.0 ENCLOSURES

PE603299

This is an enclosure indicator page.
The enclosure PE603299 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603299 has the following characteristics:

ITEM_BARCODE	= PE603299
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Mud Log
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= MUD_LOG
DESCRIPTION	= Mackerel 2 Mud Log. Enclosure 5.1 of Well Summary. Page 1 of 18.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Baroid
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603300

This is an enclosure indicator page.
The enclosure PE603300 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603300 has the following characteristics:

ITEM_BARCODE	= PE603300
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Mud Log
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= MUD_LOG
DESCRIPTION	= Mackerel 2 Mud Log. Enclosure 5.1 of Well Summary. Page 2 of 18.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Baroid
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603301

This is an enclosure indicator page.
The enclosure PE603301 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603301 has the following characteristics:

ITEM_BARCODE	= PE603301
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Mud Log
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= MUD_LOG
DESCRIPTION	= Mackerel 2 Mud Log. Enclosure 5.1 of Well Summary. Page 3 of 18.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Baroid
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603302

This is an enclosure indicator page.
The enclosure PE603302 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603302 has the following characteristics:

ITEM_BARCODE	= PE603302
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Mud Log
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= MUD_LOG
DESCRIPTION	= Mackerel 2 Mud Log. Enclosure 5.1 of Well Summary. Page 4 of 18.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Baroid
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603303

This is an enclosure indicator page.
The enclosure PE603303 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603303 has the following characteristics:

ITEM_BARCODE	= PE603303
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Mud Log
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= MUD_LOG
DESCRIPTION	= Mackerel 2 Mud Log. Enclosure 5.1 of Well Summary. Page 5 of 18.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Baroid
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603304

This is an enclosure indicator page.
The enclosure PE603304 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603304 has the following characteristics:

ITEM_BARCODE	= PE603304
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Mud Log
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= MUD_LOG
DESCRIPTION	= Mackerel 2 Mud Log. Enclosure 5.1 of Well Summary. Page 6 of 18.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Baroid
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603305

This is an enclosure indicator page.
The enclosure PE603305 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603305 has the following characteristics:

ITEM_BARCODE	= PE603305
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Mud Log
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= MUD_LOG
DESCRIPTION	= Mackerel 2 Mud Log. Enclosure 5.1 of Well Summary. Page 7 of 18.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Baroid
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603306

This is an enclosure indicator page.
The enclosure PE603306 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603306 has the following characteristics:

ITEM_BARCODE	= PE603306
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Mud Log
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= MUD_LOG
DESCRIPTION	= Mackerel 2 Mud Log. Enclosure 5.1 of Well Summary. Page 8 of 18.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Baroid
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603307

This is an enclosure indicator page.
The enclosure PE603307 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603307 has the following characteristics:

ITEM_BARCODE	= PE603307
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Mud Log
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= MUD_LOG
DESCRIPTION	= Mackerel 2 Mud Log. Enclosure 5.1 of Well Summary. Page 9 of 18.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Baroid
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603308

This is an enclosure indicator page.
The enclosure PE603308 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603308 has the following characteristics:

ITEM_BARCODE	= PE603308
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Mud Log
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= MUD_LOG
DESCRIPTION	= Mackerel 2 Mud Log. Enclosure 5.1 of Well Summary. Page 10 of 18.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Baroid
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603309

This is an enclosure indicator page.
The enclosure PE603309 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603309 has the following characteristics:

ITEM_BARCODE	= PE603309
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Mud Log
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= MUD_LOG
DESCRIPTION	= Mackerel 2 Mud Log. Enclosure 5.1 of Well Summary. Page 11 of 18.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Baroid
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603310

This is an enclosure indicator page.
The enclosure PE603310 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603310 has the following characteristics:

ITEM_BARCODE	= PE603310
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Mud Log
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= MUD_LOG
DESCRIPTION	= Mackerel 2 Mud Log. Enclosure 5.1 of Well Summary. Page 12 of 18.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Baroid
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603311

This is an enclosure indicator page.
The enclosure PE603311 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603311 has the following characteristics:

ITEM_BARCODE	= PE603311
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Mud Log
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= MUD_LOG
DESCRIPTION	= Mackerel 2 Mud Log. Enclosure 5.1 of Well Summary. Page 13 of 18.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Baroid
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603312

This is an enclosure indicator page.
The enclosure PE603312 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603312 has the following characteristics:

ITEM_BARCODE	= PE603312
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Mud Log
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= MUD_LOG
DESCRIPTION	= Mackerel 2 Mud Log. Enclosure 5.1 of Well Summary. Page 14 of 18.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Baroid
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603313

This is an enclosure indicator page.
The enclosure PE603313 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603313 has the following characteristics:

ITEM_BARCODE	= PE603313
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Mud Log
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= MUD_LOG
DESCRIPTION	= Mackerel 2 Mud Log. Enclosure 5.1 of Well Summary. Page 15 of 18.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Baroid
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603314

This is an enclosure indicator page.
The enclosure PE603314 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603314 has the following characteristics:

ITEM_BARCODE	= PE603314
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Mud Log
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= MUD_LOG
DESCRIPTION	= Mackerel 2 Mud Log. Enclosure 5.1 of Well Summary. Page 16 of 18.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Baroid
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603315

This is an enclosure indicator page.
The enclosure PE603315 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603315 has the following characteristics:

ITEM_BARCODE	= PE603315
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Mud Log
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= MUD_LOG
DESCRIPTION	= Mackerel 2 Mud Log. Enclosure 5.1 of Well Summary. Page 17 of 18.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Baroid
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603316

This is an enclosure indicator page.
The enclosure PE603316 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603316 has the following characteristics:

ITEM_BARCODE	= PE603316
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Mud Log
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= MUD_LOG
DESCRIPTION	= Mackerel 2 Mud Log. Enclosure 5.1 of Well Summary. Page 18 of 18.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Baroid
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603296

This is an enclosure indicator page.
The enclosure PE603296 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603296 has the following characteristics:

ITEM_BARCODE	= PE603296
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Mud Log
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= MUD_LOG
DESCRIPTION	= Mackerel 2 Mud Log. Enclosure 5.2 of Well Summary. Page 1 of 3.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Baroid
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603297

This is an enclosure indicator page.
The enclosure PE603297 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603297 has the following characteristics:

ITEM_BARCODE	= PE603297
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Mud Log
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= MUD_LOG
DESCRIPTION	= Mackerel 2 Mud Log. Enclosure 5.2 of Well Summary. Page 2 of 3.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Baroid
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603298

This is an enclosure indicator page.
The enclosure PE603298 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603298 has the following characteristics:

ITEM_BARCODE	= PE603298
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Mud Log
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= MUD_LOG
DESCRIPTION	= Mackerel 2 Mud Log. Enclosure 5.2 of Well Summary. Page 3 of 3.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Baroid
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE902787

This is an enclosure indicator page.
The enclosure PE902787 is enclosed within the container PE904978 at this location in this document.

The enclosure PE902787 has the following characteristics:

ITEM_BARCODE	= PE902787
CONTAINER_BARCODE	= PE904978
NAME	= Time Depth Curve
BASIN	= GIPPSLAND
PERMIT	=
TYPE	= WELL
SUBTYPE	= VELOCITY_CHART
DESCRIPTION	= Time Depth Curve
REMARKS	=
DATE_CREATED	= 31/03/1972
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= ESSO
CLIENT_OP_CO	= ESSO

(Inserted by DNRE - Vic Govt Mines Dept)

PE603317

This is an enclosure indicator page.
The enclosure PE603317 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603317 has the following characteristics:

ITEM_BARCODE	= PE603317
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Drilling Data Record
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= WELL_LOG
DESCRIPTION	= Mackerel 2 Drilling Data Record with ""d"" Exponent and Kf = Apparent formation drillability. Enclosure 5.4 of Well Summary. Page 1 of 16
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Esso Exploration
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603318

This is an enclosure indicator page.
The enclosure PE603318 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603318 has the following characteristics:

ITEM_BARCODE	= PE603318
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Drilling Data Record
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= WELL_LOG
DESCRIPTION	= Mackerel 2 Drilling Data Record with ""d"" Exponent and Kf = Apparent formation drillability. Enclosure 5.4 of Well Summary. Page 2 of 16
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Esso Exploration
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603319

This is an enclosure indicator page.
The enclosure PE603319 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603319 has the following characteristics:

ITEM_BARCODE	= PE603319
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Drilling Data Record
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= WELL_LOG
DESCRIPTION	= Mackerel 2 Drilling Data Record with ""d"" Exponent and Kf = Apparent formation drillability. Enclosure 5.4 of Well Summary. Page 3 of 16
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Esso Exploration
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603320

This is an enclosure indicator page.
The enclosure PE603320 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603320 has the following characteristics:

ITEM_BARCODE	= PE603320
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Drilling Data Record
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= WELL_LOG
DESCRIPTION	= Mackerel 2 Drilling Data Record with ""d"" Exponent and Kf = Apparent formation drillability. Enclosure 5.4 of Well Summary. Page 4 of 16
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Esso Exploration
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603321

This is an enclosure indicator page.
The enclosure PE603321 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603321 has the following characteristics:

ITEM_BARCODE	= PE603321
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Drilling Data Record
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= WELL_LOG
DESCRIPTION	= Mackerel 2 Drilling Data Record with ""d"" Exponent and Kf = Apparent formation drillability. Enclosure 5.4 of Well Summary. Page 5 of 16
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Esso Exploration
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603322

This is an enclosure indicator page.
The enclosure PE603322 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603322 has the following characteristics:

ITEM_BARCODE	= PE603322
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Drilling Data Record
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= WELL_LOG
DESCRIPTION	= Mackerel 2 Drilling Data Record with ""d"" Exponent and Kf = Apparent formation drillability. Enclosure 5.4 of Well Summary. Page 6 of 16
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Esso Exploration
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603323

This is an enclosure indicator page.
The enclosure PE603323 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603323 has the following characteristics:

ITEM_BARCODE	= PE603323
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Drilling Data Record
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= WELL_LOG
DESCRIPTION	= Mackerel 2 Drilling Data Record with ""d"" Exponent and Kf = Apparent formation drillability. Enclosure 5.4 of Well Summary. Page 7 of 16
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Esso Exploration
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603324

This is an enclosure indicator page.
The enclosure PE603324 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603324 has the following characteristics:

ITEM_BARCODE	= PE603324
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Drilling Data Record
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= WELL_LOG
DESCRIPTION	= Mackerel 2 Drilling Data Record with ""d"" Exponent and Kf = Apparent formation drillability. Enclosure 5.4 of Well Summary. Page 8 of 16
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Esso Exploration
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603325

This is an enclosure indicator page.
The enclosure PE603325 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603325 has the following characteristics:

ITEM_BARCODE	= PE603325
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Drilling Data Record
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= WELL_LOG
DESCRIPTION	= Mackerel 2 Drilling Data Record with ""d"" Exponent and Kf = Apparent formation drillability. Enclosure 5.4 of Well Summary. Page 9 of 16
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Esso Exploration
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603326

This is an enclosure indicator page.
The enclosure PE603326 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603326 has the following characteristics:

ITEM_BARCODE	= PE603326
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Drilling Data Record
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= WELL_LOG
DESCRIPTION	= Mackerel 2 Drilling Data Record with ""d"" Exponent and Kf = Apparent formation drillability. Enclosure 5.4 of Well Summary. Page 10 of 16
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Esso Exploration
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603327

This is an enclosure indicator page.
The enclosure PE603327 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603327 has the following characteristics:

ITEM_BARCODE	= PE603327
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Drilling Data Record
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= WELL_LOG
DESCRIPTION	= Mackerel 2 Drilling Data Record with ""d"" Exponent and Kf = Apparent formation drillability. Enclosure 5.4 of Well Summary. Page 11 of 16
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Esso Exploration
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603328

This is an enclosure indicator page.
The enclosure PE603328 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603328 has the following characteristics:

ITEM_BARCODE	= PE603328
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Drilling Data Record
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= WELL_LOG
DESCRIPTION	= Mackerel 2 Drilling Data Record with ""d"" Exponent and Kf = Apparent formation drillability. Enclosure 5.4 of Well Summary. Page 12 of 16
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Esso Exploration
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603329

This is an enclosure indicator page.
The enclosure PE603329 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603329 has the following characteristics:

ITEM_BARCODE	= PE603329
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Drilling Data Record
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= WELL_LOG
DESCRIPTION	= Mackerel 2 Drilling Data Record with ""d"" Exponent and Kf = Apparent formation drillability. Enclosure 5.4 of Well Summary. Page 13 of 16
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Esso Exploration
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603330

This is an enclosure indicator page.
The enclosure PE603330 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603330 has the following characteristics:

ITEM_BARCODE	= PE603330
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Drilling Data Record
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= WELL_LOG
DESCRIPTION	= Mackerel 2 Drilling Data Record with ""d"" Exponent and Kf = Apparent formation drillability. Enclosure 5.4 of Well Summary. Page 14 of 16
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Esso Exploration
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603331

This is an enclosure indicator page.
The enclosure PE603331 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603331 has the following characteristics:

ITEM_BARCODE	= PE603331
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Drilling Data Record
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= WELL_LOG
DESCRIPTION	= Mackerel 2 Drilling Data Record with ""d"" Exponent and Kf = Apparent formation drillability. Enclosure 5.4 of Well Summary. Page 15 of 16
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Esso Exploration
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)

PE603332

This is an enclosure indicator page.
The enclosure PE603332 is enclosed within the container PE904978 at this location in this document.

The enclosure PE603332 has the following characteristics:

ITEM_BARCODE	= PE603332
CONTAINER_BARCODE	= PE904978
NAME	= Mackerel 2 Drilling Data Record
BASIN	= GIPPSLAND
PERMIT	= VIC/L5
TYPE	= WELL
SUBTYPE	= WELL_LOG
DESCRIPTION	= Mackerel 2 Drilling Data Record with ""d"" Exponent and Kf = Apparent formation drillability. Enclosure 5.4 of Well Summary. Page 16 of 16
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W642
WELL_NAME	= Mackerel-2
CONTRACTOR	= Esso Exploration
CLIENT_OP_CO	= Esso Standard Oil (Australia) LTD.

(Inserted by DNRE - Vic Govt Mines Dept)