W662

Natural Resources and Environment

AGRICULTURE • RESOURCES • CONSERVATION • LAND MANAGEMENT

FLOUNDER-4 (G.B.)

WELL SUMMARY

OFFSHORE ESSO

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

FLOUNDER-4

TABLE OF CONTENTS

ESSO STANDARD OIL (AUSTRALIA) LTD.

COMPLETION REPORT

I WELL DATA RECORD

Date 19/4/73

LOCATION

WELL NAME	STATE	PERMIT or LICENCE	GEOLOGICAL BASIN	FIELD
FLOUNDER-4	VICTORIA (OFFSHORE)	VIC/P-1	GIPPSLAND	

CO-ORDINATES	Lat.	Long.	X	Y	MAP PROJECTION	GEOGRAPHICAL DESCRIPTION
Surface	38° 18' 23.868" S	148° 29' 46.836" E	630,830 E	5,759,089 N	AMG Zone 55	Approx. 1.4 mls. northeast of Flounder-3 and 80 mls. from Sale (offshore).
~~Bottom Hole~~						

ELEVATIONS & DEPTHS

ELEVATIONS	WATER DEPTH	TOTAL DEPTH	
~~XXXXX~~ MSL	392'	M.D. 8608'	Avg.Angle Straight hole
KB 32'		T.V.D.	
RT	PLUG BACK DEPTH	REASONS FOR P.B.	
Braden Head	470'	ABANDONED HOLE	
Top Deck Platform			

DATES

MOVE IN	RIG UP	SPUDDED
27/12/72	27/12/72	28/12/72
RIG DOWN COMPLETE	RIG RELEASED	PROD.UNIT - Start Rigging Up
27/1/73	27/1/73	
PROD.UNIT - Rig Down Complete		I.P. ESTABLISHED

MISCELLANEOUS

OPERATOR	PERMITTEE or LICENCEE	ESSO INTEREST	OTHER INTEREST
ESSO	HEMATITE PETROLEUM PTY.LTD.	100%	

CONTRACTOR	RIG NAME	EQUIPMENT TYPE
GLOBAL MARINE A/ASIA PTY.LTD.	GLOMAR CONCEPTION	FLOATING DRILLING VESSEL

TOTAL RIG DAYS	DRILLING AFE NO.	COMPLETION NO.	TYPE COMPLETION
30.82	232-310		PLUGGED & ABANDONED

LAHEE WELL CLASSIFICATION		
	Before Drilling	Outpost
	After Drilling	Successful outpost (oil confirmation gas discovery)

THRELFALL & SHORT

Geologist

WELL FLOUNDER #4

VII SAMPLES, CONVENTIONAL CORES, SW CORES

INTERVAL	TYPE	RECOVERED	INTERVAL	TYPE	RECOVERED	
				Conventional	Cut	Rec.
875-8606	Cuttings (washed and dried)	Sampled every 10 - 30'	8203-8260	Core #1	57'	57'
			8260-8318	Core #2	58'	12'
875-8606	Cuttings (Sacked, unwashed)	Sampled every 10 - 30'	8318-8332	Core #3	14'	11'
			8332-8371	Core #4	39'	28'
875-8606	Cuttings (canned)	Sampled every 100'	3258-8560	SW Cores	Rec.	56
					Att.	60

VIII WIRELINE LOGS AND SURVEYS (Incl. FIT)

Type & Scale	From	To	Type & Scale	From	To
BHCS-Cal 2" & 5"	8587	2913			
with GR	2999	400			
ISF 2" & 5"	8581	2916			
GR-FDC-CNL-Cal	8588	6100			
2" & 5"	GR-Cal 8588	2916			
Velocity Survey	9 shots 8522	3138			
FIT 1	8338'				
FIT 2	8338'				
FIT 3	8338'				
FIT 4	8325'				
FIT 5	8260'				
FIT 6	8187'				
FIT 8	8306'				
FIT 9	8348'				

THRELFALL, SHORT

Geologist

WELL FLOUNDER #4

IX	FORMATION TOPS/Zones					
NAME	Tops		oss Interval (ft)	Net Pay (ft).		REMARKS
	M.D.	Sub-sea		Gas	Oil	
GIPPSLAND FORMATION	424'	- 392'				
OLIGOCENE	6339'	- 6307'				
LATROBE GROUP (Flounder Fm.)	6406'	- 6374'				
P. asperopolus	6406'	- 6374'				
PALEOCENE	6992'	- 6960'				
Top pay	8254'	- 8222'	96'	47'	43'	Basal 8' oil pay has questionable effectiveness
Gas/oil Contact	8301'	- 8269'				
Base of Oil	8350'	- 8318'				

X GEOLOGIC ANALYSIS (Pre Drilling prognosis vs actual results)

Pre-Drill: The Flounder-4 well was designed to test the oil potential of the most easterly fault block of the Flounder structure. The reservoir sand had a mapped vertical closure (above the oil-water contact) of approximately 350'. The critical factor was the vertical displacement of the two fault blocks, since this would determine the juxtaposition of the reservoir sand against the sealing marine shale. If displacement on the faults exceeded the thickness of the shale, no trap would exist.

The predicted tops were:-

AGE	FORMATION	DEPTH SUBSEA
	(Water Depth)	- 380'
Miocene - Younger	Gippsland Fm.	- 380'
Eocene	Latrobe Gp. (Flounder Fm.)	-6150'
Paleocene (base channel)		-7070'
" Top pay zone		-7960'
" (T. longus)		-7960'
" Oil/water contact		-8314'

Post-Drill: The 96' of gross hydrocarbon column discovered by Flounder-4 confirmed the structural concept. However, 47' of the gross column was in the form of a gas cap, which was not anticipated since gas was not found in the other three wells. The same reservoir sand at the same structural level elsewhere contains high GOR oil. The reason for this anomaly is not understood at present. This factor, plus the possibility of a gas cap sitting above the structural level tested in the other three wells, makes evaluation of the reservoir difficult.

The top of the Latrobe Group was 224' deeper than predicted and the top of the pay zone was 262' deeper than predicted. This was due to velocity variations not apparent, from the data available, immediately prior to spudding the well.

Threlfall & Short

Geologist

WELL FLOUNDER-4

IV	CASING - LINER - TUBING RECORD						
Type	Size	Weight	Grade	Thread	No. Joints	Amount	Depth
KB ELEVATION ABOVE CASING HEAD						411.00	411.00
20"/30" PILE JOINT						32.30	443.20
	20"	91.5#	X-52	JV	10 + float	383.30	826.50
KB ELEVATION ABOVE HANGER						421.50	421.50
	10-3/4"	40.5#	J-55	Butt	65 + float shoe & collar	2498.71	2920.21

V	CEMENT RECORD		
String	20"/30" Pile Joint	20"	10-3/4"
Type of Cement	60 sx Aust. 'N' neat with 2% $CaCl_2$	1100 sx Aust 'N' neat	540 sx Aust. 'N' neat
Number of FT^3	71	1298	637
Average weight of slurry	15.6 ppg	15.6 ppg	15.6 ppg
Cement Top		Sea Floor	1300' (by Schlum.)
Casing Tested with		-	1500 psi
Number of Centralizers		6	10
Number of Scratchers			
Stage Collar etc.			
Remarks		Tailed in with 350 sx Aust. 'N' neat with 2% $CaCl_2$	Cemented without returns

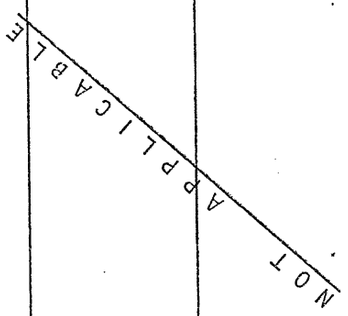
Kroknay

Engineer

WELL

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

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



_____
Engineer

WELL

VI SUBSURFACE COMPLETION EQUIPMENT

DATE COMPLETED ______

Schematic	Equipment Description	Length	Depth
	NOT APPLICABLE		

______
Engineer

Flounder - 4.

LIST OF ENCLOSURES

(1) CROSS SECTION A-A' (missing) } Flounder Field file

(2) STRUCTURE MAP TOP OF T/1 RESERVOIR (missing)

(3) COMPLETION LOG

TIME-DEPTH CURVE

PE603239

This is an enclosure indicator page.
The enclosure PE603239 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603239 has the following characteristics:

ITEM_BARCODE	= PE603239
CONTAINER_BARCODE	= PE904929
NAME	= Well Completion Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Well Completion Log
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	=
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE904930

This is an enclosure indicator page.
The enclosure PE904930 is enclosed within the container PE904929 at this location in this document.

The enclosure PE904930 has the following characteristics:

ITEM_BARCODE	= PE904930
CONTAINER_BARCODE	= PE904929
NAME	= Time-Depth Curve
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= VELOCITY
DESCRIPTION	= Flounder 4 Time-Depth Curve
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	=
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE905987

This is an enclosure indicator page.
The enclosure PE905987 is enclosed within the container PE904929 at this location in this document.

The enclosure PE905987 has the following characteristics:

ITEM_BARCODE	PE905987
CONTAINER_BARCODE	PE904929
NAME	Flounder Structure Correlation Section A-A'
BASIN	GIPPSLAND BASIN
PERMIT	VIC/P1
TYPE	WELL
SUBTYPE	CROSS_SECTION
DESCRIPTION	Flounder Structure Correlation Section A-A' (enclosure from WCR) for Flounder-4
REMARKS	
DATE_CREATED	28/02/73
DATE_RECEIVED	
W_NO	W662
WELL_NAME	FLOUNDER-4
CONTRACTOR	
CLIENT_OP_CO	ESSO EXPLORATION AND PRODUCTION AUSTRALIA LTD

(Inserted by DNRE - Vic Govt Mines Dept)

PE904932

This is an enclosure indicator page.
The enclosure PE904932 is enclosed within the container PE904929 at this location in this document.

The enclosure PE904932 has the following characteristics:

ITEM_BARCODE	= PE904932
CONTAINER_BARCODE	= PE904929
NAME	= Structure Map Top of Pay
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= MAP
DESCRIPTION	= Flounder Field Structure Map Top of Pay (Top T. Iongus). Plate 1 from Authorization to drill Flounder 4.
REMARKS	=
DATE_CREATED	= 31/12/72
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	=
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE904933

This is an enclosure indicator page.
The enclosure PE904933 is enclosed within the container PE904929 at this location in this document.

The enclosure PE904933 has the following characteristics:

ITEM_BARCODE	= PE904933
CONTAINER_BARCODE	= PE904929
NAME	= Magnetometer Plot
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= SEISMIC
SUBTYPE	= SECTION
DESCRIPTION	= Magnetometer Plot (Line G69A-263). In Flounder 4 Well Summary Folder.
REMARKS	=
DATE_CREATED	= 31/01/69
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Geophysical Service International
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE904934

This is an enclosure indicator page.
The enclosure PE904934 is enclosed within the container PE904929 at this location in this document.

The enclosure PE904934 has the following characteristics:

ITEM_BARCODE	= PE904934
CONTAINER_BARCODE	= PE904929
NAME	= Preliminary Stack
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= SEISMIC
SUBTYPE	= SECTION
DESCRIPTION	= Preliminary Strack (Line G72A-581). In Flounder 4 Well Summary Folder.
REMARKS	=
DATE_CREATED	= 31/10/72
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Geophysical Service International
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

2.0 Core Descriptions

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

Core No. 1

WELL: FLOUNDER - 4

Interval Cored 8203-8260 ft., Cut 57 ft., Recovered 57 ft., (100 %) Fm. LATROBE

Bit Type C-22, Bit Size 8 15/32 x 4 in., Desc. by BLACK & SHORT Date 18 JAN 1973

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
0				NOTE: STRONG GAS ODOR ON FRESHLY BROKEN SURFACES THROUGHOUT CORE. WHERE PYRITE WAS ESPECIALLY ABUNDANT GAS ODOR WAS SOUR (H_2S)
03		←	8203-33'	SILTSTONE - DK TO MED GRAY, GLAUCONITIC, PYRITIC, V. HARD, INDUR, CARB. IN PLACES, SOME PLATY LAMINAE BUT MOST DESTROYED BY ABUNDANT BURROWING. BURROWS OFTEN RICH IN PYRITE & GLAUCONITE. V. POOR POR & PERM.
05				
		←		
10				
15		←		
20		←		
25				
		←		
30				
		←	8233-39'	SILTSTONE - DK GRAY, V. HARD, INDUR., F. MICAC. LESS GLAUC. THAN ABOVE, PYRITE, SLI. CALC. FEW HORIZ. BANDS OF CARB MATERIAL, LESS BURROWING.
35				
		←	8239-41	SILTSTONE - AS ABOVE, LESSENING GLAUC. NO BURROWING, HORIZONTAL BEDS.
40				2" BANDED BRIGHT YELLOW FLOR. W/ FAINT CUT AT 8241' & 8242'
		←	8241-42	SILTSTONE - AS ABOVE BUT W/ SLUMP STRUCT.
43				

REMARKS:

← CHIP SPLS FOR PALYNOLOGY

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

Core No. 1
(PAGE 2)

WELL: FLOUNDER-4

Interval Cored 8203-8260 ft., Cut 57 ft., Recovered 57 ft., (100 %) Fm. LATROBE

Bit Type C-22, Bit Size 8 15/32 X 4 in., Desc. by BLACK & SHORT Date 18 JAN 1973

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
43			8242-45'	SILTSTONE - AS ABOVE BUT V. GLAUCONITIC, THIN HORZ. BED'G., CARB., SOME SCOUR & FILL (?)
45			8245-51'	SILTSTONE - GRAY, V. GLAUC., PYR., HARD, INDUR SLI. CARB., HIGHLY BURROWED.
50			8251-53'	SANDSTONE - GR WH, VFG., V. SILTY, SLI. CARB LAMINATED, NO BURROWS.
55			8253-58'	SILTSTONE - GRAY, V. GLAUC., PYR., V. HARD INDUR., HIGHLY DISTORTED W/ BURROWING.
60			8258-60	SANDSTONE - GRAY, V.F.G., V. SILTY, W/ CLAY CASTS, RICH GLAUC., S.R. QTZ., V. TIGHT POOR POR & PERM. BOTTOM ½" HAS WELL ROUNDED PEA SIZE QTZ PEBS.

REMARKS:

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

Core No. 2

WELL: FLOUNDER #4

Interval Cored 8260-8318 ft., Cut 58 ft., Recovered 12 ft., (20 %) Fm. LATROBE

Bit Type C.20, Bit Size 8 15/32 in., Desc. by BLACK & SHORT. Date 19th. JAN. 1973

Depth & Coring Rate (min./ft.)	Graphic (1" = 5')	Shows	Interval (ft.)	Descriptive Lithology
60		←	8260-68.	Sst m.-coarse gr. with occasional pebbles; friable; clear qtz, subang. to subround. gr; sli. calc.; spotty fluor, oil odor.
				Sst a.a. some bedding present.
65				
			6268-71	Sst, a.a. slightly dolomitic, considerably harder & more consolidated.
70				
		←	8271-72	Sst, a.a.; no dolomite, quite friable, good even fluor, good cut.
72				

Coring Rate 5 min/ft

REMARKS:
← Chips for palynology.
←, Sample for E.P.R.Co.
←← Sample for Core Labs.

ESSO STANDARD OIL (AUSTRALIA) LTD.

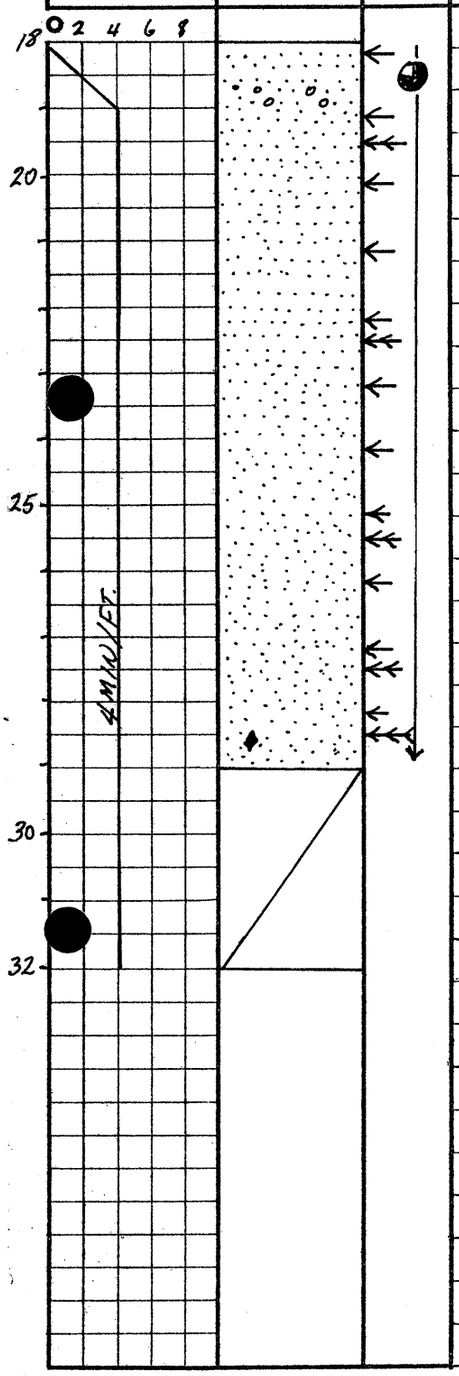
CORE DESCRIPTION

Core No. 3

WELL: FLOUNDER-4

Interval Cored 8318-8332 ft., Cut 14 ft., Recovered 11 ft., (80 %) Fm. LATROBE

Bit Type C-22, Bit Size 8 15/32 X 4 in., Desc. by BLACK & SHORT Date 20 JAN 1973



Interval (ft.)	Descriptive Lithology
8318-26'	SANDSTONE - WH. M/CRSE & V.CRSE G. QTZ, SA/S.R., UNCONSOL., SCATTERED PEBS. TO 3/4" DIAM. IN TOP 1 FT., GOOD POR. & PERM., GOOD EVEN YELLOW FLUORESENCE & GOOD CUT, GOOD ODOR IN TOP PART OF CORE, BUT SOME SOUR (H_2S) ODOR IN LOWER 3 FT.
8326-29'	SANDSTONE - SAME AS ABOVE BUT CONSOLIDATED, V. V. FRIABLE. LOWER 1 FT. OF CORE HAS MINOR PYRITE.

REMARKS: BARREL JAMMED

← 4" WAX PACKED FOR EPRCO (1/3 SLICE OF REMAINDER FOR FACIES STUDY)

<< CORE CHIP FOR PALYNOLOGY

<<< 2" PIECE FOR OVER BURDEN ANALYS.

REMAINING 2/3 SLICE OF 8"/FT. WAX PACKED & MARKED ESSO

ESSO STANDARD OIL (AUSTRALIA) LTD.

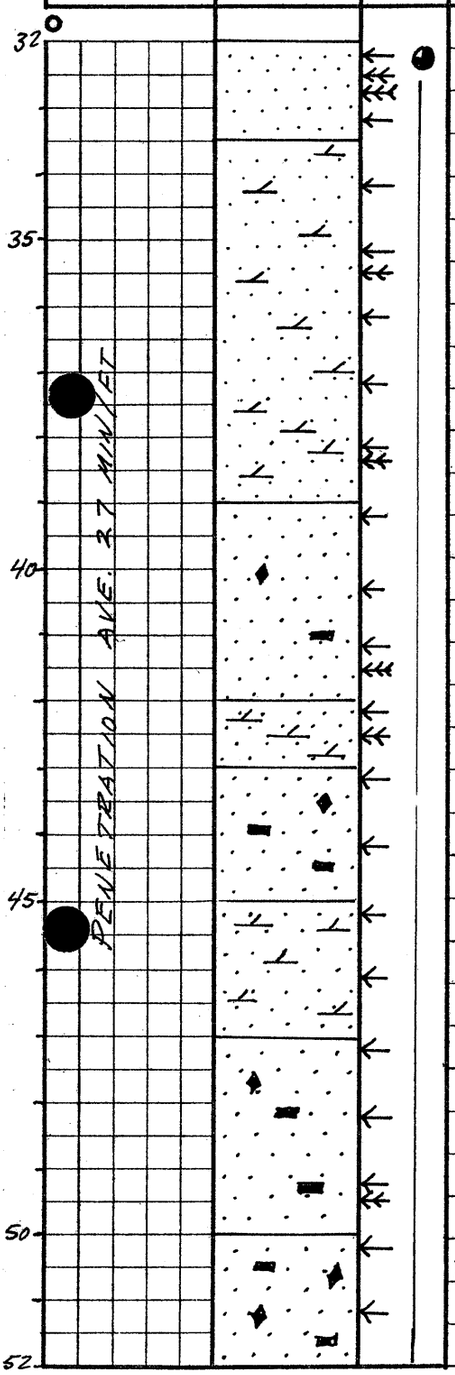
CORE DESCRIPTION

Core No. 4

WELL: FLOUNDER-4

Interval Cored 8332 - 8371 ft., Cut 39 ft., Recovered 28 ft., (72 %) Fm. LATROBE

Bit Type C-22 (F.D.), Bit Size 8 15/32 X 4 in., Desc. by BLACK & SHORT Date 21 JAN. 1973



Interval (ft.)	Descriptive Lithology
8332 - 33½'	SANDSTONE - WH., M/CRSE QTZ., FRIABLE, GOOD FLUORESENCE & CUT, H_2S ODOR.
8333½ - 39'	SANDSTONE - BRN'SH WH, M/CRSE SA/SR QTZ V. DOLO., V. HARD & INDURATED, DULL GOLD YELLOW MINERAL FLUOR.
8339 - 42	SANDSTONE - WH & BRN'SH WH., MOSTLY M. g. W/ FEW CRSE gs. QTZ, CONSOL. TO MOD. FRIABLE, SOME PYRITE & SCATTERED CARB. FRAGS. INCREASING DOWNWARD GOOD EVEN YELLOW FLUOR. W/ GOOD CUT, H_2S
8342 - 43'	SANDSTONE - DOLO. AS 8333½ - 39'
8343 - 45'	SANDSTONE - AS AT 8339 - 42
8345 - 47'	SANDSTONE - AS AT 8333½ - 39', V. DOLO.
8347 - 50'	SANDSTONE - BRN'SH WH F/M. g. QTZ, FRIAB GOOD FLUOR & CUT W/ LT BRN RESIDUE H_2S ODOR.
8350 - 53'4"	SANDSTONE - SAME AS ABOVE BUT MORE CARB. MATTER, BURROWED., SPOTTY FLUOR, GOOD CUT, STRONG H_2S, V. PYRITIC

REMARKS:

← 4" WAX PACKED SPL FOR EPRCO (REMAINING 8" WAXED AFTER SLABBING 1" SLICE)

←← CORE CHIP FOR PALYNOLOGY

←←← 2" SPL FOR OVER BURDEN ANALYS.

ESSO STANDARD OIL (AUSTRALIA) LTD.

CORE DESCRIPTION

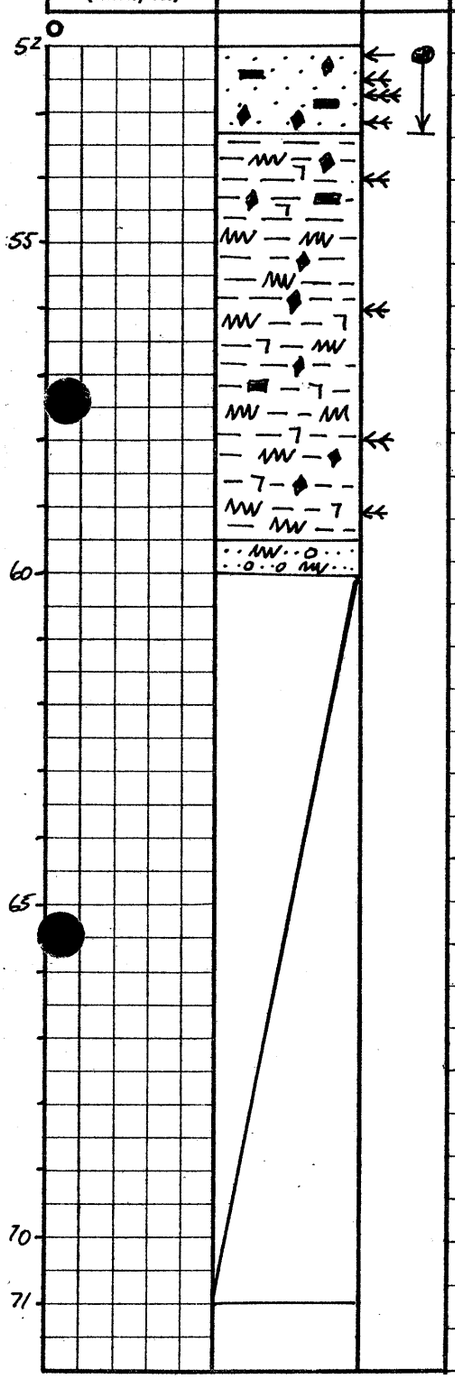
Core No. 4

PAGE 2

WELL: FLOUNDER-4

Interval Cored 8332-8371 ft., Cut 39 ft., Recovered 28 ft., (72 %) Fm. LATROBE

Bit Type C-22 (F.D.), Bit Size 8 15/32 X 4 in., Desc. by BLACK & SHORT Date 21 JAN 1973



Interval (ft.)	Descriptive Lithology
8353'4"-59'6"	SHALE - DK. GR., V. SILTY, FIRM, INDUR. F. MICAC, SLI. MICAC.
8359'6"- 60'	SANDSTONE - BRN'SH GR, VF/PEBBLY, V. SILTY, MOD. INDUR., DIRTY, POOR POR. & PERM., CARB, WATER WET, NO SHOW.
	NOTE: OIL/WTR. CONTACT IS BELOW 8353'4" AND ABOVE 8359½' (DRILLER'S DEPTH) CORE IS PROB. LOCATED AT LEAST 7FT. TOO LOW.
8360-71	NO RECOVERY

REMARKS:

2.1 Sample Descriptions

662

BASIC

SAMPLE DESCRIPTIONS

FLOUNDER-4

9th January, 1973.

Andy Rigg/W. Fischer

7000'-7020' 50% Sandstone: generally unconsolidated; very coarse grained to coarse grained, subangular to rounded (predominantly subrounded) clear to white quartz grains. Trace coating pyrite. Some massive pyrite. Trace fine to medium grained consolidated sandstone. No shows.
20% Siltstone: carbonaceous to very carbonaceous, dark brown to brown.
10% Shale - dark grey, hard
20% Coal: black, shiny, conchoidal fracture.

7020-7030' 90% Sandstone: as above. All very coarse grained to coarse grained.
10% Siltstone: as above.
Trace coal and pyrite

7030-7040' 70% Sand: as above, trace pebbly grains
Trace pyrite. Some quartz grains fractured. Moderately well sorted.
20% Siltstone: as above
10% Coal: as above

7040-7050 80% Sand: as above
10% Siltstone: as above
10% Coal: as above

7050'-7060' 80% Sand: as above
20% Siltstone: as above
Trace coal

7060-7070' 90% Sand: unconsolidated, medium to coarse grained, subangular to subrounded (trace rounded), clear to white (some smokey) quartz grains, moderately to well sorted, good porosity and permeability. Trace pyrite. No shows
10% Siltstone: Carbonaceous, dark brown to brown.
Trace coal.

7070-7080' 90% Sandstone:
Consisting of:
70% Sand - generally medium to coarse grained, trace pebbles, clear to white quartz grains. Good porosity and permeability. Unconsolidated. Trace pyrite coating. No shows. Moderate sorting.
20% Sandstone - fine to medium grained, consolidated, firm sandstone. Trace fines, argillaceous. Poorly sorted, poor porosity and permeability.
10% Siltstone: light brown to dark brown, carbonaceous, argillaceous. Trace coal.

Circulate sample up at 7077 - Drilling Break -550'/hr for 5'

7080-7090' 80% Sandstone: medium to coarse grain, subangular to subrounded, clear to white moderately sorted, unconsolidated, no shows. Trace consolidated sandstone, fine to medium grain.
20% Siltstone: light brown to light grey, argillaceous, Trace coal.

7090-7100' 90% Sandstone: coarse to very coarse grain, clear to white, trace pebbles, well sorted. No shows, subangular to subrounded, unconsolidated. Moderate porosity and permeability. Trace consolidated sandstone, fine to medium grain.
10% Siltstone: dark brown to light grey, argillaceous, carbonaceous.

Trace pyrite. Trace coal. Trace dolomite.

.../2

A.J. Rigg
W. Fischer

January 9, 1973.

7100-7110' 100% Sandstone: unconsolidated, generally coarse to very coarse, moderately well sorted, clear to white (trace smoky) quartz grains. Est. good porosity and permeability. Trace coal and pyrite. Trace carbonaceous siltstone. No shows.

7110-7120' 90% Sandstone: generally as above - less well sorted, medium to very coarse grained.
10% Siltstone: light brown to dark brown. Moderately carbonaceous
Trace coal.

7120-7130' 100% Sandstone: coarse grain, clear to white quartz, unconsolidated, moderately well sorted, est. reasonable porosity and permeability, trace coarse grains, trace consolidated sandstone, medium to coarse grains.
No shows, grains subangular to subrounded.
Trace coal, trace siltstone.

7130-40' 100% Sandstone: as above except medium to coarse grain, well sorted. Trace consolidated sandstone, fine to medium grain.

7140-50' 70% Coal:
30% Sandstone: coarse to very coarse grain, clear to white quartz grains, subrounded, moderately well sorted. No shows.
Trace siltstone. Trace glauconitic siltstone.

7150-60' 90% Sandstone: coarse to very coarse, clear to white quartz grains, subrounded to rounded, moderately well sorted, est. moderate porosity and permeability, unconsolidated.
No shows. Trace consolidated sandstone, fine to medium grains.
10% Siltstone: medium brown to light grey, trace of glauconite, carbonaceous.
Trace coal.

7160-70' 90% Sandstone: coarse to very coarse grain, clear to white quartz grains, unconsolidated, subangular to rounded, moderately sorted, est. moderate porosity and permeability.
One grain of consolidated, fine to medium grain sandstone, spotty fluorescence, poor cut.
10% Siltstone: dark brown to light grey, calcareous, argillaceous.
Trace coal.

7170-80' 80% Sandstone: coarse to very coarse grains, clear to white quartz grains, trace pebbles, subangular to rounded, moderately sorted, unconsolidated, moderate porosity and permeability
Trace consolidated sandstone, fine to medium grain, show weak fluorescence, poor cut.

20% Siltstone: dark brown to light grey, micaceous, some carbonaceous
Trace coal.

7180-90' 100% Sandstone: coarse grains, trace very coarse grain, clear to white quartz grains, subrounded to rounded, moderately well sorted, est. moderate porosity and permeability, unconsolidated,
No shows. Trace pyrite coating. Trace consolidated sandstone, fine to medium grain. Trace siltstone. Trace coal.

7190-7200' 100% Sandstone: Generally coarse to very coarse, angular to subrounde fractured quartz grains, clear to white, well sorted, occasional pyrite. Trace very coarse/pebbly rounded to subrounded smokey/white quartz grains. No shows.
Trace coal and carbonaceous siltstone.

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7200-10' As above

Circulate Sample up at 7207' - drilling break - 52'-120'/hr for 15'.

7210-20' As above

7220-30' 90% Sandstone: generally coarse to very coarse grains, clear to white quartz grains, well sorted, unconsolidated, angular to subrounded, trace pyrite coating.
Trace consolidated sandstone, fine to medium grains, subangular to subrounded, moderate fluorescence, no cut (caving?) calcareous cement.
10% Siltstone: micaceous glauconitic, dark brown to medium grey, carbonaceous. Trace coal.

7230-40' 60% Sandstone: clear to white quartz grains, subangular to rounded, moderately sorted, unconsolidated, some grains fractured.
Trace consolidated sandstone, fine to medium grain, weak fluorescence, calcareous cement.
40% Coal: trace siltstone

7240-50' 60% Sandstone: clear to white quartz grains, some grains fractured, angular to subrounded, moderately well sorted, unconsolidated, trace pyrite coating.
Trace consolidated sandstone, fine to medium grains. No shows.
30% Siltstone: dark brown to brown, micaceous, carbonaceous.
10% Coal:

7250-60' 90% Sandstone: clear to white quartz grains, angular to subrounded, moderately well sorted, coarse grains, trace very coarse grains, fractured quartz grains, unconsolidated.
Trace consolidated sandstone, fine to medium grains, subangular to subrounded, fluorescence, calcareous cement.
10% Siltstone: micaceous, medium brown to light grey, glauconitic traces, trace coal.

7260-70' 100% Sandstone: angular to subangular, clear to white quartz grains, very well sorted, unconsolidated, coarse grains, trace rounded very coarse grains, grains quite fractured in general, trace consolidated sandstone, fine to medium grains, moderate fluorescence (calcareous cement?)
Trace coal. Trace siltstone.

7270-80' 100% Sandstone: as above, unconsolidated, coarse to very coarse grain, angular to subangular, clear to white quartz grains.
Trace consolidated sandstone, fine to medium grain.
Trace coal and siltstone as above.

7280-90' 100% Sandstone: as above, unconsolidated, coarse to very coarse grained, angular to subangular, clear to white quartz grains,
Trace consolidated sandstone, fine to medium grained.
Trace coal and siltstone, as above.

7280-90' 90% Sandstone: as above. Trace fine to medium consolidated sandstone, argillaceous - poorly sorted.
10% Siltstone: light brown to dark brown, some very carbonaceous, very pyritic.
Trace coal.

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A.J. Rigg/W. Fischer.
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7290-7300' 90% Sandstone:
70% coarse to very coarse grain, unconsolidated, fractured, subrounded to angular, clear to white quartz grains, moderate to well sorted. No shows.
20% fine to medium grained, well rounded, consolidated, subrounded to rounded, argillaceous, poorly sorted. No shows.

10% Siltstone: dark brown to light brown, firm to hard, pyritic, occasionally very carbonaceous.

7300-10' 60% Sandstone:
50% coarse to very coarse grained, unconsolidated, as above
10% fine to medium grained, consolidated, as above
30% Siltstone: as above
10% Coal

7310-20' 100% Sandstone: generally very coarse to coarse grained, as above.
Trace consolidated fine to medium grained sandstone.
Trace coal and siltstone

7320-30' 50% Sandstone: as above
50% Coal
Trace siltstone

7330-40' 80% Sandstone
50% unconsolidated very coarse to coarse grained, subangular to subrounded, no shows.
30% consolidated, fine to medium grained, subrounded to rounded, trace fines, calcareous (probably dolomitic) cement. Fluorescence (mineral), and no cut.
10% Siltstone
10% Coal

7340-50' 80% Sandstone: as above, consolidated sandstone has (dolomitic) fluorescence - no cut.
20% Siltstone: generally light to medium brown, firm to hard, occasionally carbonaceous.
Trace massive pyrite.

7350-60' 60% Sandstone:
30% unconsolidated, very coarse to coarse grained, angular to subrounded, no shows.
30% consolidated, fine to medium grained, subrounded to rounded, calcareous (dolomitic) cement. Mineral fluorescence. No cut.
30% Siltstone: light brown to brown black. Some very carbonaceous, firm to hard.
10% Coal.

7360-70' 90% Coal
10% Siltstone: as above
Trace coarse grained unconsolidated and fine to medium grained, consolidated sandstone (fine to medium grained has mineral fluorescence).

7370-80' 60% Coal
20% Sandstone: both loose unconsolidated sandstone and consolidated fine to medium grained (+fluorescence)
20% Siltstone: as above

7380-90' 50% Coal
50% Sandstone: predominantly unconsolidated, coarse to very coarse grained, subangular to subrounded, fractured, white to clear quartz grains. No shows. Trace consolidated fine to medium grained sandstone. Trace siltstone.

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7390-7400' As above

7400-10' 30% Sandstone: as above. Trace fine to medium grained consolidated sandstone with mineral fluorescence. (cavings?)
40% Siltstone: as above
30% Calcareous mudstone? Cavings - very hard, trace coal

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7410-20' As above

7420-30' 40% Sandstone:
20% very coarse to coarse unconsolidated subangular, No shows.
20% consolidated, fine to medium subrounded. No shows.
40% Calcareous shale: light grey to green-grey, firm, very calcareous (abundance may preclude cavings)
20% Carbonaceous siltstone: light brown to brown black, some very carbonaceous
Trace Coal and Pyrite (massive)

7430-40' 60% Sandstone: predominantly coarse grained, unconsolidated, trace fine grained, consolidated.
20% Siltstone: carbonaceous as above
10% Calcareous shale: as above
10% Coal: as above

7440-50' 50% Sandstone: as above
40% Coal
10% Siltstone: as above

7450-60' 50% Sandstone: predominantly coarse to very coarse grained, subangular to subrounded, (some angular) fractured unconsolidated, white to clear quartz grains. No shows.
30% Coal: as above
20% Siltstone: light brown to dark brown, very carbonaceous, in part.
Trace Calcareous Shale

7460-70' 70% Sandstone: as above
20% Coal as above
10% Siltstone: as above

7470-80' 90% Sandstone: as above
10% Siltstone: as above
Trace coal

7480-90' 90% Sandstone:
70% coarse to very coarse grained (some pebbly) unconsolidated, generally fractured, subrounded to angular, (large grains rounded), clear to white quartz.
20% consolidated, fine to medium grained sandstone.
10% Siltstone: light brown to dark brown, argillaceous, carbonaceous

7490-7500' 20% Sandstone:
10% coarse to very coarse grained. As above
10% fine to medium grained, consolidated. As above
80% Coal
Trace siltstone

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7500-10' 10% Sandstone: both coarse to very coarse grained. As above both fine to medium grained, as above (some very fine)
10% Siltstone: as above
80% Coal: as above

7510-20' 50% Siltstone: light brown - buff, granular, some sand sized grains.
50% Carbonaceous Siltstone: dark brown to brown, carbonaceous stringers - generally fine grained.
Trace sand. Trace calcareous shale

7520-30' 20% Sandstone:
10% coarse grained, unconsolidated
10% fine to very fine grained, consolidated.
80% Carbonaceous Siltstone: as above
Trace pyrite and glauconite (cavings?)

7530-40' 90% Sandstone: clear to white quartz grains, unconsolidated, angular to subrounded, general fracturing displayed, coarse grain, trace very coarse grains.
10% Siltstone: carbonaceous, dark brown to grey, carbonaceous
Trace pyrite coating, trace coal

7540-50' 10% Sandstone: clear to white quartz grains, subangular to subrounded, unconsolidated, some fractured grains, coarse grains, trace consolidated sandstone, fine to medium grain, angular to subangular.
90% Siltstone: dark brown to medium grey, carbonaceous, generally fine grained, micaceous,
Trace pyrite. Trace coal. No shows.

7550-60' 80% Sandstone: as above except unconsolidated grains, angular to subrounded, trace very coarse grains. Trace min. fluorescence.
20% Siltstone: carbonaceous, dark brown to grey, trace of calcareous siltstone.
Trace coal. Trace pyrite coating.

7560-70' 70% Sandstone: clear to white quartz grains, angular to subrounded, unconsolidated, 10% rounded grains, coarse to very coarse grains, moderately sorted.
20% Siltstone: dark brown to light brown, micaceous, fine grained.
10% Coal. No shows.

7570-80' 80% Sandstone: coarse to very coarse grains, angular to subrounded, clear to white/smokey, moderately sorted, quartz grains quite fractured, unconsolidated. Trace fluorescence (cavings?)
20% Siltstone: medium brown to light grey, carbonaceous, micaceous, some pieces granular. Trace coal. Trace pyrite.

7580-90' 80% Sandstone: medium to very coarse quartz grains, 40% very coarse, 30% coarse, 10% medium grained, clear to white, unconsolidated, subangular to rounded, moderately sorted.
Trace consolidated sandstone, fine to medium grains, argillaceous, glauconitic.
20% Siltstone: dark brown to medium grey, carbonaceous, fine grained. Trace coal. Trace pyrite and pyrite coating.
No shows.

7590-7600' 70% Sandstone: medium to coarse grains, well sorted, clear to white quartz grains, subangular to subrounded,
30% Siltstone: dark brown to light grey, carbonaceous.
Trace coal. Trace pyrite, no shows.

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7600-10' 50% Sandstone: coarse to very coarse quartz grains, clear to white, poorly sorted, angular to subrounded, unconsolidated, grains quite fractured.
Trace consolidated sandstone, fine to medium grain, argillaceous, no shows.
50% Siltstone: dark brown to light grey, granular, micaceous, carbonaceous, calcareous (cavings?)
Trace coal.

7610-20' 50% Sandstone: clear to white quartz grains, angular to subrounded, generally fracturing, poorly sorted, unconsolidated. No shows.
Trace consolidated sandstone, fine to medium grain, glauconite traces.
30% Siltstone: dark brown to grey, granular in some cases, carbonaceous stringers.
Trace calcareous (cavings?)
20% Coal

7620-30' 10% Sandstone: medium to coarse grains, clear to white quartz grains, angular to subrounded. Trace very coarse grains, no shows.
90% Siltstone: dark brown to light grey, carbonaceous stringers, calcareous in some fragments.
Trace coal.

7630-40' 70% Siltstone: as above, micaceous traces. No shows.
30% Coal
Trace sandstone

7640-50' 10% Sandstone: unconsolidated, medium to coarse grains, trace very coarse grains, angular to subrounded, quartz grains, generally fracturing. No shows. Trace consolidated sandstone, fine to medium grain.
90% Siltstone: dark brown to dark grey, carbonaceous, stringers, some calcareous, trace glauconite, trace coal.

7650-60' 100% Siltstone: as above plus argillaceous, trace granular siltstone
Trace coal. Trace sandstone. No shows.

7660-70' 100% Siltstone: as above. No shows. Trace sandstone. Trace coal. Trace pyrite.

7670-80' 10% Sandstone: unconsolidated, medium to coarse grains, trace very coarse, angular to subrounded, clear to white. Trace consolidated sandstone, fine to medium grain, subangular to subrounded, pale fluorescence. (calc. cement)
90% Siltstone: carbonaceous stringers, dark brown to medium grey, calcareous fragments sometimes, generally granular. trace argillaceous.
Trace glauconite. Trace coal. Trace pyrite.

7680-90' 50% Sandstone: medium to coarse quartz grains, trace very coarse, subangular to subrounded, clear to white grains, unconsolidated, moderately well sorted, generally grains fractured.
Trace consolidated, sandstone, fine to medium grain, subrounded grains, glauconitic traces, trace pale mineral fluorescence.
50% Siltstone: dark brown to grey, argillaceous, occasionally granular, carbonaceous, calcareous in some cases (cavings?)
Trace pyrite. Trace coal.

7690-7700' 40% Sandstone: angular to subangular, clear to white quartz grains, moderately well sorted, unconsolidated, coarse grains, trace very coarse grains, most grains severely fractured. No shows.
60% Siltstone: dark brown to light grey, granular in general, carbonaceous, occasionally calcareous, trace argillaceous.
Trace pyrite, Trace coal.

7700-10' 20% Sandstone: as above. No shows.
70% Siltstone: as above except not as granular
10% Coal

7710-20' 90% Sandstone: unconsolidated, subangular to subrounded, coarse to very coarse grained, well sorted quartz grains, clear to white (some smokey) - some fractured grains.
No shows.
Fair porosity and permeability. Trace pyrite.
10% Siltstone: very carbonaceous with carbonaceous stringers.
Generally dark brown to brown
Trace Coal and Pyrite

7720-30' 100% Sandstone: as above. Trace pyrite. No shows.
Trace massive pyrite and siltstone

7730-40' 100% Sandstone: as above. Good porosity, fair permeability.
Massive pyrite and coarse pebbles/ subrounded to rounded quartz

7740-50' 100% Sandstone: as above. Trace fine to medium grained, consolidated sandstone.
Trace massive pyrite.

7750-60' 100% Sandstone: as above. Trace fine grained consolidated sandstone.
Trace pyrite, trace siltstone

7760-70' As above

7770-80' As above
Trace Carbonaceous Siltstone: Pyrite (massive) and Coal

7780-90' As above
Trace Carbonaceous Siltstone

7790-7800' As above
Increase in Carbonaceous Siltstone. Trace pyrite

7800-10' As above
Slight increase in pyrite

7810-20' As above. Most grains with pyrite coating.
- some massive pyrite.
Trace Carbonaceous Siltstone

7820-30' As above. Slight decrease in pyrite.

7830-40' As above

7840-50' As above

7850-60' As above, slight pyrite coating
Trace of siltstone, non carbonaceous.

7860-70' As above. No pyrite coating, trace massive pyrite, clean, well sorted, subangular to subrounded.

7880-80' 100% Sandstone: unconsolidated, very coarse to coarse grained, fractured quartz grains, subangular to subrounded, clear to white. No shows. Increase in carbonaceous siltstone.

7880-90' As above

7890-7900' As above

7900-10' As above: except 90% coarse grains, 10% very coarse grains.
Trace carbonaceous siltstone, Trace massive and coating pyrite.
Trace glauconite.

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Trip at 7910 - bit torqued up. Samples logged before trip.

January 11, 1973

7910-20' 90% Shale: sample probably contaminated with cavings, dark brown to grey, generaly fine grained, trace of calcareous shale, trace glauconitic siltstone, some shale fragments quite argillaceous.
10% Sandstone: coarse grained, clear to white quartz grains, angular to subrounded, generally grains fractured, no shows. Trace coal.

7920-30' 90% Shale: as above
10% Sandstone: hard, well consolidated, fine grained quartz, milky colour, grains subangular to subrounded , fragments are angular, no shows.
Trace coal.

7930-40' 10% Sandstone: as above plus trace consolidated sandstone, very fine to fine grained, shows weak fluorescence (mineral probably dolomitic cement)
90% Shale: as above
Trace siltstone, trace coal.

SAMPLE DESCRIPTIONS

FLOUNDER-4

January 11, 1973.
Andy Rigg
Wolfgang Fischer

7940-50' 10% Sandstone: coarse grained, clear to white quartz grains, angular to subrounded, unconsolidated. Trace consolidated sandstone, very fine to medium grain, subangular to subrounded, hard.
90% Shale: As above, plus traces of granular siltstone. Trace coal. Trace glauconite.

7950-60' 20% Sandstone: As above plus generally grains fractured
80% Shale: generally as above except some fragments argillaceous. Trace glauconite, Trace coal. Trace tan dolomite

Trip at 7955' - bit torqued up badly (? dolomite)
Drilled 7' while reaming - recovered samples, very contaminated predominantly calcareous siltstone. Ran junk basket at 7962'. from bottom of junk basket recovered SANDSTONE as described below plus DOLOMITE and CALCAREOUS SHALE. SANDSTONE thought to come originally from this depth.

January 15, 1973.

SHALE: calcareous, dark grey, argillaceous, moderately hard.

DOLOMITE: dark tan colour, hard.

SANDSTONE: consolidated, medium to coarse grained quartz, angular to subrounded, clear coloured in general but occasionally white, grains held together with calcareous cement, quite hard, Matrix a medium grey colour, to medium brown, fine to very fine grained, spotty yellow fluorescence, good cut (blue-yellow) shows spheroidal type fracturing into layers approximately 0.25 inches thick; probably due to effect of weight of drill pipe on rock which was cored (Baroid measured ± 1% porosity zero perm.)

7962-7965' 50% Sandstone: consolidated, poorly sorted, subangular to subrounded, quartz grains, clear to white, some smokey. Dolomite cemented. Poor spotty fluorescence - no cut. Trace fine grained moderately well sorted consolidated sandstone.
30% Siltstone - light brown - dark brown, granular in part.
20% Shale: dark grey - light grey, hard, calcareous.

Trip at 7974 (?) bit torqued up - little penetration.

16th January, 1973
J. Black/G. Short

7980 - checked depth with strap in (adj. down 6')

7965-7970' No reliable samples

7970-7980' 40% Sandstone: consolidated, clear and frosty quartz, medium to coarse, subangular to angular, calcareous, very dolomitic, hard tight. Spotty to fair fluorescence, fair cut, no show on chromatograph due to slow drilling, trace pyrite.
60% Shale: with some siltstone (cavings?)

7980-85' 90% Sandstone - clear and frosty white quartz, consolidated, very hard, tight, well indurated, medium to very coarse poorly sorted, slightly calcareous, dolomitic, even, fair fluorescence, faint cut, no show on chromatograph due to slow drilling. Few shards of shattered quartz from pebbles, Some unconsolidated, subrounded coarse grains.
10% Shale - light grey to greenish grey, very silty.

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7985-90'	80% Sandstone - as above, fair fluorescence with faint cut, good mineral fluorescence. 20%: Shale - as above (probable cavings)
7990-95'	50% Sandstone - mostly mineral fluorescence, faint fluorescence. 20% Siltstone - grey, firm 30% Shale
7995-8000'	70% Sandstone: mostly unconsolidated, coarse, subrounded, clear and frosty white quartz, some consolidated sandstone with mineral fluorescence, no show 30% Shale
8000-05'	80% Sandstone: as above, very little of sandstone is consolidated, mineral fluorescence in consolidated sandstone 20% Shale
8005-10'	90% Sandstone - coarse grained, subangular to subrounded, clear, frosty white quartz, minor consolidated, but most unconsolidated, no fluorescence in unconsolidated, minor mineral fluorescence in consolidated. No show 10% Shale
8010-13' Circulation Sample	70% Sandstone: as above, traces of pyrite 20% Shale 10% Siltstone, grey brown, firm, dolomitic.

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8013-20'	40% Sandstone: unconsolidated, and consolidated, as above, mineral fluorescence. 30% Siltstone, grey, sandy, firm. 30% Shale, medium grained, silty
8020-25'	60% Sandstone, consolidated, mainly, low porosity and permeability 20% Siltstone 20% Shale
8025-30'	20% Sandstone, medium grained, unconsolidated, and consolidated. 50% Siltstone, grey brown, firm, pyritic 30% Shale
8030-40'	30% Sandstone 20% Siltstone 50% Shale: grey, silty firm, - trace coal (?)
8040-52' Circulation Sample	40% Sandstone: as above, both unconsolidated, and consolidated 30% Siltstone: as above with trace glauconite 30% Shale - as above
8052-55'	20% Sandstone, brown white matrix, medium to very coarse, consolidated, hard. 20% Siltstone 60% Shale
8055-60'	10% Sandstone 70% Siltstone: brownish grey, hard, indurated, slightly sandy 20% Shale
8060-70'	20% Sandstone 10% Siltstone 70% Shale
8070-80'	10% Sandstone- pyritic 30% Siltstone as above with trace glauconite 60% Shale: medium grey, silty

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FLOUNDER-4

January 8, 1973.
J. Black/G. Short

8080-90'	10% Sandstone - pyrite 30% Siltstone - traces of glauconite 60% Shale
8090-8100'	30% Siltstone 70% Shale
8100-8110 '	40% Siltstone Traces of glauconite, sand and coal 60% Shale
8110-20'	30% Siltstone - as above with slightly spotty fluorescence faint cut. Small show on chromatograph $C_1 - C_3$ 70% Shale
8120-25'	10% Sandstone, medium - coarse grained, quartz, angular to subrounded. Most consolidated - low porosity and permeability slightly spotty fluorescence, faint cut 50% Siltstone, brown-grey, moderately firm, pyritic. 40% Shale
8125-30'	30% Siltstone: as above with trace fluorescence, faint cut 70% Shale
8130-40'	50% Siltstone as above, trace sandstone and coal 50% Shale
8140-50	40% Siltstone: grey brown, firm, pyritic, glauconitic (traces) trace of sand and coal 60% Shale
8150-60'	20% Siltstone as above with increase in glauconite 80% Shale - medium grey to light brown, firm, fissile with trace glauconite
8160-70'	20% Siltstone: as above 80% Shale
8170-75	10% Siltstone 90% Shale increase in glauconite
8175-80'	10% Sandstone, glauconitic 40% Siltstone 50% Shale, trace coal
8180-87'	70% Siltstone, brownish grey, sandy, firm very glauconitic, trace fluorescence, faint cut, good gas chromatograph show. 30% Shale
8187-90	90% Siltstone - as above, more glauconite, pyrite, trace show 10% Shale
8190-95'	20% Sandstone - white very fine to fine grained, consolidated, with some unconsolidated subrounded, scattered medium coarse, unconsolidated. 70% Siltstone - very glauconitic, brownish grey, sandy, firm 10% Shale
8195-8200'	40% Sandstone - fine to medium greenish, white quartz consolidated with some unconsolidated medium to coarse subrounded quartz, trace glauconite, good chromatograph shows 40% Siltstone, very glauconitic, brown, sandy, firm 20% Shale
8200-03 Circulation Sample	30% Sandstone 50% Siltstone 20% Shale

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FLOUNDER-4

January 17, 1973.
J.R. Black/G. Short

8203-8260' Cut Core #1 Recovered 57' (100%)

Siltstone - medium to light grey, very hard, indurated, very pyritic, glauconitic, sandy near base, no show. of fluorescence but good gas show on chromatograph.

8371 - Base of core #4. January 21, 1973.

8371-8380' 50% Sandstone, medium/coarse grained, subrounded grains of frosted quartz, mainly unconsolidated, minor consolidated, good cut and fluorescence - (probably cavings)
50% Shale, grey, fissile, slightly silty, traces coal

8380-90' 60% Sandstone as above, traces of pyrite, spotty fluorescence, traces glauconite.
40% Shale

8390'8400' 60% Sandstone
40% Shale

8400-10' 80% Sandstone, medium to coarse, subrounded, quartz frosted, mainly unconsolidated, very minor fluorescence
20% Shale, sub fissile, some trace of dolomite and coal

8410-20' 90% Sandstone as above, reasonably well sorted
10% Shale - as above quite silty

January 22, 1973

8420-30' 80% Sandstone of this sand 40% is as above, 40% has a different character, it is fine grained, reasonably well rounded, quartz sand with a dolomitic cement.- The dolomite has good mineral fluorescence. No fluorescence in other sand, no cut in either
20% Shale as above, silty, trace of coal

8430-40' 70% Sandstone as above
30% Shale, grey - grey brown, silty, sub fissile, micaceous, pyritic trace coal

8440-50' 60% Sandstone as above
40% Shale

8450-60' 60% Sandstone as above (15% dolomitic)
40% Shale quite silty

8460-70' 70% Sandstone as above
30% Shale

8470-80' 90% Sandstone - most unconsolidated, medium coarse grained, frosted subrounded quartz, reasonably well sorted. Minor dolomitic cemented finer sandstone - trace glauconite
10% Shale

8480-90' 60% Sandstone as above, but about 25% is finer grained with dolomite cement.
40% Shale often silty

8490-8500' 40% Sandstone, light brown to white, fine to coarse grained, approximately half (the coarser fraction) is unconsolidated subrounded grains while the finer fraction also quartz is dolomite cemented.
30% Siltstone, grey, pyritic, firm.
30% Shale

8500-10' 40% Sandstone - partly dolomitic
40% Shale
20% Coal, black, bituminous, hard,brittle

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FLOUNDER-4

January 22, 1973.
J.R. Black/G. Short

8510-20'	40% Sandstone, minor dolomitic cement, very pyritic 30% Shale, trace coal 30% Siltstone
8520-30'	30% Sandstone, white, coarse, subrounded quartz, unconsolidated, but predominantly tan, fine to medium grained, very dolomitic with mineral fluorescence 50% Siltstone - brownish grey, fine, micaceous, slightly carbonaceous 20% Shale
8530-40'	30% Sandstone - as above, tan dolomitic 40% Siltstone 30% Shale
8540-50'	50% Sandstone, white, fine grained unconsolidated with few coarse subrounded quartz grains and abundant tan consolidated dolomitic hard fine grained sandstone with mineral fluorescence. 30% Siltstone - pyritic 20% Shale
8550-60'	50% Sandstone grey white, very fine to fine grained, subrounded grains, some tan dolomitic sand and few coarse subrounded quartz grains 30% Siltstone 20% Shale
8560-70'	30% Sandstone 30% Siltstone 40% Shale - with trace coal
8570-80'	30% Sandstone - abundant dolomitic fine grained, hard, mineral fluorescence 20% Siltstone 50% Shale with trace coal
8580-90'	40% Sandstone - mostly tan dolomitic, fine grained, hard, indurated 30% Siltstone 30% Shale
8590-8606'	10% Sandstone 20% Siltstone 60% Shale dark grey and brown carbonaceous, silty 10% Coal, black, brittle.

2.2 SIDE WALL CORE DESCRIPTIONS

BASIC 1 of 2

LITHOLOGICAL DESCRIPTIONS of SIDEWALL CORES

from FLOUNDER-4

by. David Taylor.....1-2-73

Sidewall Core No.	Depth	Description of untreated core	Description of residue
60	3258	Light grey micritic limestone	Fine grained calcite
59	3450	" " " "	" " "
58	3616	" " " "	" " "
57	3906	" " " "	" " " + rare ang. qtz.
56	4068	" " " "	" " " + biogenic debris
55	4586	" " " "	" " " + rare ang. qtz.
54	4870	" " " "	" " " + siliceous sponge spicules
53	4966	" " " "	" " " " " "
52	5100	" " " "	" " " " " " + rare ang qtz
51	5500	" " " "	" " "
50	5774	" " " "	" " "
49	6150	Medium grey calcareous clay	Clay fragments + globigerinids
48	6200	" " " "	" " " "
47	6230	" " " "	Globigerinid ooze + clay fragments
46	6260	" " " "	" " " " " + Rare ang. qtz. + pyrite
45	6290	" " " " + glauconite	" " " " " + glauconite moulds
44	6320	" " " "	" " " " " + rare ang. qtz.
43	6335	" " " "	" " " " "
42	6345	" " " "	Recrystallized globigerinid ooze
41	6360	Silty qtz. glauconite sandstone	f-m ang. qtz., ang. glauconite, fragments brown sandstone ? siderite
40	6386	" " " "	" " " " " " + mica
39	6400	" " " "	" " " " " " , fragments brown sandstone ? siderite

1 of 2

LITHOLOGICAL DESCRIPTIONS of SIDEWALL CORES

from FLOUNDER-4

by. David Taylor.....1-2-73

Sidewall Core No.	Depth	Description of untreated core	Description of residue
38	6410	Light grey silty sand	f-m ang. clear qtz
37	6460	medium grey mudstone + 2mm lamination of white sand	f-m ang. qtz., abundant glauconite pellets, rare mica, Bathysiphon
36	6510	Laminated light grey siltstone and brown sandstone	f ang qtz., + rare pyrite & mica
35	6560	Dark grey mudstone	f ang qtz., + rare disseminated & disc pyrite, rare glauconite. Bathysiphon
34	6610	" " " " + pyrite & visible Bathysiphon	f ang qtz., + disseminated & disc pyrite, rare glauconite. Bathysiphon
33	6660	As above + mica	as above + abundant mica
32	6705	As above but no mica	as above but no mica
31	6748	As above	as above
30	6774	Dark grey mudstone with single lamination of white sand. Visible Bathysiphon	F. ang. qtz. Bathysiphon
29	6806	Laminations of dark grey mudstone & brown fine sandstone	f-m ang qtz., mudstone fragments with carbonaceous matter Bathysiphon
28	6836	as above + pyrite	f-m ang qtz., abundant disseminated pyrite
27	6914	Laminated brown sandy siltstone	f-m ang qtz., disseminated pyrite, mica, rare glauconite.

N.B. The characteristic constituents of the Flounder Formation are pyrite discs (.3mm diameter, probably of biogenic orign and probably 3 distinct "species") and Bathysiphon angleseaensis - a tubular siliceous foraminifera of up to 10mm long and visible with naked eye.

BASIC

ESSO AUSTRALIA LTD.

SIDEWALL CORE DESCRIPTIONS

PAGE 1 OF 3

ATT 60 REC 56

DATE 25/1/73

IES RUN NO 1 SWC RUN NO 1

WELL FLOUNDER-4

GEOLOGIST J. Black

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 C_1 C_2 23 C_3 C
1	8560	1"	SS	Qtzs,carb.	-	Wh.	Fri.	vf/m	mod.	sr	+15%	-	-	-	-	-	-	-	-	-	-	wtr.	300-175-100-100
2	8498	3/4	Sh	F. micac.	-	Dk.Gr	Frm	-	-	-													-200- -
3	8422	5/8	Sltst	Sdy.	-	Gr.Wh	Frm	vf	-	-	30%	-	-	-	-	-	-	-	-	-	-		
4	8330	7/8	Ss.	Qtzs.	Sl.	Wh.	Fri	f/c	P	sr/sa	-	tan	100	ev.	Bri.	Lt.Yel	Bri.	Lt.yel	Hvy.	Lt.Brn	0	Oil	600-200-200-700
5	8314	3/4	Ss	Qtzs.	-	Wh.	V.Fri	m/c	P	sr	-	lt.tan	100	ev.	Bri.	Lt.Yel	Bri.	Lt.yel	Hvy	Lt.Brn	0	Oil	2500-9000-3M-9
6	8304	7/8	SS/cgl	Qtzs.	-	Wh.	Uncon	vc/pbl	P	sr/r	-	tan	100	ev.	Bri.	Lt.Yel	Bri.	Lt.yel	M.	Lt.Brn	0	Oil	4.6M-12M-3.5M-
7	8294	7/8	SS	Qtzs.	-	Wh.	Uncon	c/vc	P	sr	-	tan	100	ev.	Dul	Yel.	Dul.	Yel.	M.	Clear	GC	G/O	2.1M-2.5M-1M-3.
8	8274	3/4	SS	Qtzs.	-	Wh.	Uncon	m/pbl	P	sr/sa	-	tan	100	ev.	Dul	Yel.	Dul.	Yel.	Lt.	Clear	GC	G/O	2. 9M-2M-1.5M-6M-
9	8257	3/4	SS	Qtzs.	-	Wh.	Uncon	m/pbl	P	sr/sa	-	tan	100	ev.	Dul	Yel.	Dul.	Yel.	Lt.	Clear	GC	G/O	600-600-300-1.6
10	8252	3/4	Sltst	Sandy	-	Gr.	Frm	-	-	-	+15%	-	-	-	-	-	-	-	-	-	-	-	600-400-100-500
11	8248	-	-	NO RECOVERY																			- - - -
12	8187	7/8	SS	V. glauc.	V	LtBrn	Frm	vf	mod.	sr	+20%	-	15	Spty	Fnt	DkYel	Dul	Dk.Yel	Tr.	Dk.Yel	-	-	300-2.8M-2.4M-8
13	8096	1/2	Sh	Slty,F.mica	-	dk.gr.	Frm	-	-	-													
14	7984	7/8	Sh	Sli.slty.	-	dk.gr.	Frm	-	-	-													
15	7972	-	-	NO RECOVERY																			
16	7940	-	-	NO RECOVERY																			
17	7920	5/8	Sltst	Sandy	Sl.	Gr.	M.Frm	vf	-	-	25	-	100	ev.	Dul.	Org. Yel.	Min.	-	-	-			
18	7778	3/4	Sh	sli. carb.	-	DkGr	M.Frm	-	-	-													
19	7611	1"	Sh	f. mica	-	Dk Gr	M.Frm	-	-	-													
20	7501	1¼	Coal	Shaly	-	Blk.	Frm	-	-	-													
21	7408	1"	Sh	Hrz Str. Slts.	-	Gr.	Frm	-	-	-													
22	7236	1"	Sst.	Qtz. Silty	-	Gr/Wh	Frm	vf/m	P	sa	20	-	-	-	-	-	-	-	-	-	-	Wtr.	
23	7113	1"	Sst.	Slty,Mica	Sl.	Gr/Wh	Fri	vf/c	P	sa/sr	+15%	-	100	ev.	Dul.	Gold	Min.	-	-	-	-	Wtr.	300-200-100-200
24	7104	1/2"	Sh	F. micac.	-	Dk.Gr	-	-	-	-													
25	7008	1"	Sst.	Qtz.Carb.	-	Brn Wh	Fri	vf/c	P	sa	+15%	brn.	100	ev.	Dul.	Yel.	Bri.	Yel.	Tr.	Clear	GC	G/C	28M-300-100-500
26	6989	-	-	NO RECOVERY																			
27	6914	1¼	Sh.	Foss.	-	Brn/Gr	Fr	-	-	-													
28	6836	1½	Sh	Pyr.	M	Brn.	Frm.	-	-	-													

FORM R 257 3/72

ESSO AUSTRALIA LTD.
SIDEWALL CORE DESCRIPTIONS

WELL Flounder-4 PAGE 2 OF 3
GEOLOGIST J. Black ATT 60 REC 56
SERVICE CO Schlumberger IES RUN NO 1 SWC RUN NO 1 & 2 DATE 26/1/73

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 C_1 C_2 C_3 C_4 C_5
29	6806	1"	Sh	Sli. micac	M	brn	frm	-	-	-													
30	6774	1 3/8	Sh	Silty	Sl.	brn	frm	-	-	-													
31	6748	1"	Sh	Slty,F.Mica	Sl.	brn	frm	-	-	-													
32	6705	1¼	Sh	F. mica	Sl.	dk.brn	sft/ frm	-	-	-													
33	6660	1 3/8	Sh	F. mica	M	dk.brn	sft.	-	-	-													
34	6610	1⅛	Sh	Mica	M	dk.brn	sft.	-	-	-													
35	6560	1"	Sh	Micac.	M	dk.brn	sft.	-	-	-													
36	6510	5/8	Sh	F. micac.	M	dk.brn	sft.	-	-	-													
37	6460	1 3/8	Sltst	v. glauc.	M	Brn.	frm	-	-	-													
38	6410	1⅛	SS	Mica	Sli	Gr/Wh.	fri.	vf/f	W	sr	15	-	100	Ev.	Dul	Org/ yel	Fnt.	dul yel	-	-	-	-	200-0-0-0-1700
39	6400	1⅛	SS	Slt.V.glauc	V	Grn/ Brn	fri.	vf/f	W	sr	30	-	10	Spty	Fnt.	Org.	Fnt.	Fnt.	-	-	-	-	500-22M-15M-4M-
40	6386	1¼	Sltst	Sdy,V.glauc.	V	Grn/ Brn	frm	vf	P	sr	-	-	-	-	-	-	-	-	-	-	-	-	500-200-400-1M-
41	6360	1"	Sltst	Sdy,V.glauc.	V	Grn/ Brn.	frm	vf/c.	-	-													2.8M-400-150-10
42	6345	½	Sltst	Glauc.	V	Tan	frm	-	-	-													300-100-0-0-0
43	6335	1½	Sh.	Arg.,	V	Lt.Grey	sft.	-	-	-													
44	6320	1½	Sh		V	Lt.Grey	sft.	-	-	-													
45	6290	1 1/8	Sh	VSilty	V	Lt.Grey	sft	-	-	-													
46	6260	1½	Sh.	Arg.,	V	Lt.Grey	frm	-	-	-													
47	6230	1½	Sh	sl. slty	V	Lt.Grey	frm	-	-	-													
48	6200	1½	Sh.		V	Lt. Grm	frm	-	-	-													
49	6150	1½	Sh	Silty	V	Grey	sft.	-	-	-													
50	5774	1	Sh	Arg.	V	Grey	sft.	-	-	-													4M-150-0-0-0
51	5500	¼	Sh		V	Grey	frm	-	-	-													
52	5100	½"	Sh	Sl. Silty	V	Lt.Gr	frm	-	-	-													300-50-0-0-0
53	4966	½"	Sltst	Arg.	V	Gr.	frm	-	-	-													400-100-0-0-0
54	4870	½"	Sltst	Arg.	V	Gr.	frm	-	-	-													
55	4586	3/4	Sltst	V. Arg.	V	Lt.Gr	sft.	-	-	-													800-0-0-0-0
56	4068	5/8	Sltst	Glauc.Sdy		Lt.Gr	fri	-	-	-													200-0-0-0-0

FORM R 257 3/72

ESSO AUSTRALIA LTD.
SIDEWALL CORE DESCRIPTIONS

WELL Flounder-4 PAGE 3 OF 3
GEOLOGIST J. Black ATT 60 REC 56
SERVICE CO Schlumberger IES RUN NO 1 SWC RUN NO 1 DATE 26/1/73

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 23
57	3906	1/2	Sltst	Glauc.	V	Lt.Gr	sft.	-	-	-													0-0-0-0-0
58	3616	3/4	Sltst	Arg.	V	Lt.Gr.	sft	-	-	-													0-0-0-0-0
59	3450	5/8	Sltst	Sdy,glauc.	V	Lt.Gr.	fri	-	-	-													0-0-0-0-0
60	3258	1 1/8	Sltst	Sdy	V	Lt.Gr	frm	-	--	-													0-0-0-0-0

FORM R 257 3/72

2.3 CORE / WELL LOG ANALYSIS REPORT

CORE ANALYSIS REPORT

WELL LOGGING SERVICE

COMPANY ESSO AUSTRALIA LTD. COUNTY GIPPSLAND BASIN

WELL FLOUNDER NO. 4 STATE VICTORIA

FIELD WILDCAT TYPE OF CORE CHRISTENSEN DIAMETER 4"

DEPTH	LITHOLOGY	PERM. md.	POROSITY %	SATURATIONS % PORE SPACE		% GAS BULK VOL.	REMARKS
				OIL	WATER		
	CORE NO. 1						
8208	SILTSTONE	—	9	—	85.1	1.3	NONPRODUCTIVE
8214	"	.6	11.3	—	74.3	2.9	"
8224	"	—	12.4	—	91.7	1.0	"
8232	"	—	4.5	—	—	4.5	"
8240	"	3.6	21.1	—	41.4	12.3	"
8246	"	.7	13.3	—	58.3	5.5	"
8253	"	4.2	20.7	—	37.8	12.9	"
8259	"	—	19.7	—	5.2	18.6	"
	CORE NO. 2						
8260	SAND	580	21.7	—	44.7	12.0	
8271	"	419	20.3	—	33.7	13.5	
	CORE NO. 3						
8318	SAND	980	27.5	2.5	45.8	14.2	
8329	"	248	22.1	3.2	50.0	10.3	
	CORE NO. 4						
8332	SAND	198	21.5	2.3	45.8	11.1	
8342	"	4.6	19.6	2.9	48.0	9.6	
8351	"	3	20.8	2.5	48.8	10.0	
8357	"	2.6	12.2	2.3	92.0	3.8	

WELL LOG ANALYSIS REPORT

TO WELL FILE

c.c. B.R. GRIFFITHS(2)
W.F. Threlfall

INTERPRETATIVE

OPERATOR ESSO AUSTRALIA WELL FLOUNDER-4 DATE 25th JAN, 1973.

STATE VICTORIA ELEV. 32'KB

DEPTH INTERVAL	POROSITY ESTIMATE	WATER SAT. ESTIMATE	REMARKS
6408-10 (2	17-18.3	85.92	Shaley sand, possible show
6418-25 (5	16.2-18.3	78-82	" " " "
6426-28 (2	18.8-20	91-100	" " " "
6441-45 (4	17.6-18.8	87-91	" " " "
6786-88 (2	23-24.3	73-77	" " " "
6799-6803 (4	23-24.3	78-83	" " " "
6819-21 (2	19.5-20.6	93-100	" " " "
6841-58 (17	25.5-27.3	100	Clean, water sand
8184-88 (4	12.7-14.5	37-43	Shaley sand, probable show
8188-89 (1	11-12,2	-	Too thin for resolution
8254-58 (4	21.3 - 22.5	7	Gas Productive
[illegible]8-65 (7	24.9-26.1	6	" "
[illegible]5-69 (4	27.3-28.5	3-4	" "
[illegible]9-73 (4	20.6-21.8	4-5	" "
8273-77 (4	24.3-25.5	4-5	" "
8277-87 (10	21.3-22.5	4-5	" "
8287-93 (6	24.9-26.1	4	" "
8293-96 (3	14-15.5	7-8	" "
8296-8301(5	25.5-26.7	6	" "
8301-06 (5	21.8-23.7	6-7	Gas and/or oil productive
8306-11 (5	25.5-26.7	7-8	" " " " "
8311-19 (8	24.3-25.5	14	" " " " "
8319-24 (5	23-24.3	18-19	Oil productive
8324-31 (7	22.5-23.7	29-31*	" "
8335-40 (5	21.3-22.5	44-47 *	" "
8340-42 (2	11-12.2		To thin for resolution
8342-45 (3	20-21.3	62-66*	Effectiveness questionable
8345-47 (2	17-18.3	77-83*	" "
8347-50 (3	19.5-21.3	70-77*	" "
8360-63 (3	14-15.2	90-100	Water productive
[illegible]4-77 (3	19.5-20.6	83-89 *	" "
[illegible]2-85 (3	23.24.3	100 *	" "
8387-89 (2	17.6-18.8	100 *	" "
8393-96 (3	17.6-18.8	84.90	" "
8396-8403 (7	25.5-27.3	100	" "
IES DEPTHS			*Silty sands not noted in remarks

TESTS:

FORMATION:

LATROBE

LOGS:

ISF. BHC.
CNL-FDC-GR.

COMMENTS:

All sands from the top of the Latrobe to the first massive clean water sand are listed. Water sands are then skipped until the first recognized hydrocarbon show. A gain all sands are listed until no show is recognized.

BY [signature]

3.0 Palynology of Flounder-4 Gippsland Basin

THE PALYNOLOGY OF FLOUNDER-4, GIPPSLAND BASIN

by

A.D. Partridge

Palaeontological Report: 1973/3

March 1973

SUMMARY

The following spore-pollen zones are recognised in Flounder-4.

Zone	Depth in Feet & Rating: Highest Data	Lowest Data	Age
Proteacidites tuberculatus	6335 (2)	6400 (0)	Oligocene-Miocene
------ UNCONFORMITY ------			
Proteacidites asperopolus	6460 (1)	6550 (3)	Early Eocene
Upper *Malvacipollis diversus*	6560 (0)	6748 (0)	Early Eocene
------ DISCONFORMITY ------			
Lower *Malvacipollis diversus*	6774 (1)	6914 (0)	Early Eocene
------ UNCONFORMITY ------			
Lygistepollenites balmei	7008 (1)	8096 (2)	Paleocene
Tricolpites longus	8232 (1)	8560 (1)	Paleocene

The following two *Wetzeliella* dinoflagellate zones are also present in the Flounder Formation in Flounder-4.

Zone	Highest Data	Lowest Data
Wetzeliella thompsonae Zone	6450 (3)	6550 (3)
Wetzeliella brachycysta Zone	6560 (1)	6748 (0)

These two dinoflagellate zones represent finer subdivisions of the *P. asperopolus* and Upper *M. diversus* Zones.

SIGNIFICANT POINTS

1. Age of greensand

The sidewall cores between 6360 and 6400 feet from a greensand unit at the top of the Latrobe Group contain both spore-pollen and dinoflagellates diagnostic of the *P. tuberculatus* Zone, and are equivalent in age to the foraminiferal zone J1. The palynology assemblages also contain, reworked spore-pollen and dinoflagellates from the *L. balmei* Zone and from the immediately underlying Flounder Formation as well as reworked Middle Eocene (Lower *N. asperus* Zone A subdivision) dinoflagellates. Because these latter Middle Eocene dinoflagellates are characteristic of the greensands of the Gurnard Formation it is suggested that the greensand in Flounder-4 was originally deposited in the Middle Eocene and later reworked during the early Oligocene.

2. Wetzeliella Zones

Flounder-4 has only the middle two of the four Wetzeliella zones indentified in the adjacent Flounder-3 well. The two zones missing are the W. edwardsii Zone the youngest zone recognised in Flounder-3 and the W. parva Zone the oldest zone recognised. The W. edwardsii Zone shows a marked thinning from west to east from Flounder-1 to Flounder-3, so it is not surprising that it is absent in Flounder-4. The zone could possibly be present in the 40 feet sampling gap at the top of the Flounder Formation, between 6410 and 6450 feet, but this is considered unlikely as the zone species has not been observed in any of the cuttings examined. The W. parva Zone is absent because of a disconformity between the Upper M. diversus and Lower M. diversus Zones in Flounder-4.

3. Lower M. diversus Zone in the Flounder Formation.

Flounder-4 contains the oldest sediments which fall within the concept of the Flounder Formation. These sediments are referred to the Lower M. diversus Zone (6774 - 6914 feet) and are represented by similar lithologies and environments to the younger parts of the Flounder Formation belonging to the Upper M. diversus and P. asperopolus Zones. Dinoflagellates are found in all samples in the Lower M. diversus Zone in similar abundance to the younger parts of formation, and formainifera were found in the sidewall cores at 6774 and 6806 feet. It is not possible to determine whether this Lower M. diversus section is from the upper or lower part of the zone. However its general similarity to the Lower M. diversus section in Tuna-3 raises the question of whether in that well the Lower M. diversus section is also part of the Flounder Formation.

4. Unconformities

The following unconformities are recognised in Flounder-4:

a) At the base of the Tuna-Flounder Channel between the Lower M. diversus Zone and the 'Lower' subdivision of the L. balmei Zone representing the loss of part of the Lower M. diversus Zone and the 'Upper' L. balmei Zone.

b) Within the Flounder Formation between the Lower M. diversus and Upper M. diversus Zones, between 6748 and 6774 feet, with the loss the lower part of the Upper M. diversus Zone.

c) At the top of the Flounder Formation between 6400 and 6460 feet between Early Oligocene and Early Eocene.

d) Between the foraminifera zone F and J1 at 6335 and 6345 feet respectively representing the loss of most of the Oligocene and early Miocene.

5. Reworking.

Aside from reworking found within the Early Oligocene greensand and already discussed, reworked Permian spore-pollen are present sporadically in the Flounder Formation and younger marine section and Early Cretaceous spores are present through the L. balmei and T. longus Zones.

.../3

COMMENTS ON ZONES

The top of the T. longus Zone (8232-8560 feet) is identified by the extinction of the species Proteacidites otwayensis, P. gemmatus, P. reticuloconcavus, Tricolpites longus, T. waiparaensis, T. confessus and Tricolporites lilliei which occur in the highest two samples referred to this zone. Samples from near the base of the overlying L. balmei Zone are very poorly preserved so it was not possible to find any of the species whose first appearance in the section can be taken as diagnostic of the L. balmei Zone. These latter samples are referred to the L. balmei Zone on the negative evidence of the lack of T. longus Zone indicator species. The L. balmei Zone also, is represented only by the 'Lower' subdivision.

The samples from the Flounder Formation, from the Lower M. diversus to P. asperopolus Zones all contain good spore-pollen and dinoflagellate assemblages. The only exception is that the zone fossil Wetzeliella thompsonae is only found in cuttings from 6450 - 60 feet and 6550 - 60 feet and not in the sidewall cores in this interval.

The P. tuberculatus Zone is identified principally by the presence of the spore Cyatheacidites annulatus. The highest sample from this zone lies within the foraminiferal zonule F which is usually referred to the T. bellus spore-pollen zone. However in this well no spore-pollen species were found that are diagnostic of the T. bellus Zone.

SAMPLE	SAMPLE EXAMINED DEPTH IN FEET	ZONE
Cuttings	6140-60*	? T. bellus Zone
"	6240-60*	"
SWC 43	6335* P,B	P. tuberculatus Zone
Cuttings	6340-60*	"
SWC 42	6345*	"
SWC 41	6360* E,M	"
SWC 40	6386* B,E,M	"
SWC 39	6400* P,B,E	"
SWC 38	6410	Indeterminant
Cuttings	6450-60*	P. asperopolus/W. thompsonae Zones
SWC 37	6460* P,B	P. asperopolus Zone
SWC 36	6510*	"
Cuttings	6550-60*	P. asperopolus/W. thompsonae Zones
SWC 35	6560*	Upper M. diversus/W. brachycysta Zones
SWC 34	6610*	Upper M. diversus Zone
SWC 33	6660*	"
Cuttings	6660-70*	"
SWC 32	6705*	"
SWC 31	6748*	Upper M. diversus/ W. brachycysta Zones
Cuttings	6750-60*	"

../4

SAMPLE	DEPTH IN FEET	ZONE
SWC 30	6774*	Lower M. diversus Zone
SWC 29	6806* K,B	"
SWC 28	6836* B	"
Cuttings	6870-90*	Indeterminant
SWC 27	6914*B	Lower M. diversus Zone
Cuttings	6960-70	Indeterminant
SWC 25	7008* K	L. balmei Zone
Cuttings	7010-20	"
SWC 24	7104*	"
SWC 22	7236	Barren
Cuttings (coal)	7360-70	L. balmei Zone
SWC 21	7408*K	"
SWC 20 (coal)	7501	"
SWC 19	7611*	"
Cuttings	7660-70	"
SWC 18	7778*	"
SWC 14	7984	"
SWC 13	8096*K?	"
SWC 12	8187*	Indeterminant
Core-1	8207*	"
Core-1	8232*K	T. longus Zone
SWC 10	8252	"
Core-1	8260	"
Core-3	8356*	"
SWC 2	8498*K	"
SWC1	8560	"

* Dinoflagellates present

Reworked spore-pollen and dinoflagellates present in the samples are indicated by the following letters given after the depth.

P = Permian
K = Early Cretaceous
B = Reworked L. balmei Zone fossils
E = Early Eocene fossils reworked from Flounder Formation
M = Middle Eocene dinoflagellates reworked from Eocene greensand.

BASIN GIPPSLAND DATE 22nd FEBRUARY, 1973

WELL NAME FLOUNDER-4 ELEVATION + 32 feet.

AGE	PALYNOLOGIC ZONES	HIGHEST DATE					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	6335	2				6400	0			
EOCENE	U. N. asperus										
	L. N. asperus										
	P. asperopolus	6460	1				6550	3	6510	1	
	U. M. diversus	6560	0				6748	0			
	L. M. diversus	6774	1				6914	0			
PALEO-CENE	L. balmei	7008	1				8096	2	7611	1	
	T. longus	8232	1				8560	1			
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											

COMMENTS: Wetzeliella thompsonae Zone Top 6450 (3) - Bottom 6550 (3)

Wetzeliella brachycysta Zone Top 6560 (0) - Bottom 6748 (0)

The W. edwardsii and W. parva Zones are not present in this well!

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 22 February, 1973

DATA REVISED BY: _____ DATE _____

Form R 193 3/71

BASIN GIPPSLAND BY David J. Taylor

WELL NAME FLOUNDER-4 DATE 5/2/73 ELEV. +32

Foram Zonules

		Highest Data	Quality	2 Way Time	Lowest Data	Quality	2 Way Time
MIOCENE	A						
	Alternate						
	B						
	Alternate						
	C						
	Alternate						
	D_1	3258	1		5100	1	
	Alternate						
	D_2	5500	2		5774	1	
	Alternate	5774	1				
	E	6150	1		6200	1	
	Alternate						
	F	6230	0		6335	1	
	Alternate						
	G						
	Alternate						
	H_1						
	Alternate						
	H_2						
	Alternate						
OLIGOCENE	I_1						
	Alternate						
	I_2						
	Alternate						
	J_1	6345	1		6345	1	
	Alternate						
	J_2						
	Alternate						
EOC.	K						
	Alternate						
	Pre K *	6610	1		6748	1	

COMMENTS: * Equals Lower Eocene determined on planktonic fauna, on benthonic foraminifera the Lower Eocene interval is probably between 6460 - 6806 feet.

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 FLOUNDER-4 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-OLIGO.	P. tuberculatus	6335	2				6400	0			
EOCENE	U. N. asperus										
	M. N. asperus										
	L. N. asperus										
	P. asperopolus	6460	1				6550	3	6510	1	
	U. M. diversus	6560	0				6748	0			
	M. M. diversus										
	L. M. diversus	6774	1				6914	0			
PALEOCENE	U. L. balmei	7008	1				7778	1			
	L. L. balmei	7984	2				8096	2			
	T. longus	8232	1				8560	1			
LATE CRETACEOUS	T. lilliei										
	N. senectus										
	C. trip./T.pach.										
	C. distocarin.										
	T. pannosus										
EARLY CRETACEOUS											
PRE-CRETACEOUS											

COMMENTS: DINOFLAGELLATE ZONES:
Wetz. thompsonae Zone 6450(3) – 6550(3)
Wetz. ornata Zone 6560(0) – 6748(0)
Note: in comparison to Flounder 1, 2 & 3 the W. edwardsii & W. waiparaensis Zones are absent in this section !!
Wetz. homomorpha Zone 7008(1) – 7778(8)

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 Feb. 1973.

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

FORM N. 8-215 12/72

3.1 Foraminiferal Distribution

FLOUNDER - 4, FORAMINIFERAL DISTRIBUTION

by D.J. Taylor

12 February, 1973

SUMMARY OF BIOSTRATIGRAPHY

		Top	Bottom
Upper Miocene	ZONE D-1	3258	5100
	ZONE D-2	?5500	5774
	ZONE E	6150	6200
Lower Miocene	ZONE F	6230	6335
Oligocene	ZONE J-1	6345	6345
LowerEocene		6610	6748

BASE OF FORAMINIFERAL SEQUENCE = 6806

DISTRIBUTION SHEETS

Sheet - 1 - Distribution of planktonic foraminifera and biostratigraphy.

Sheets - 2 & 3-Distribution of benthonic foraminifera.

Sheet - 4 - Statistical & environmental log.

KEY TO DISTRIBUTION SHEETS

T = side wall cores at 3258; 3450; 3616; 3906; 4068; 4586; 4870; 4966; 5100; 5500; 5774; 6150; 6200; 6230; 6260; 6290; 6320; 6335; 6345; 6360 (N.F.F.); 6386; (N.F.F.); 6400; 6410; (N.F.F.); 6460; 6510; 6560; 6610; 6660; 6705; 6748; 6774; 6806; 6836; (N.F.F.); 6914 (N.F.F.)

N.F.F. = no foraminifera found.

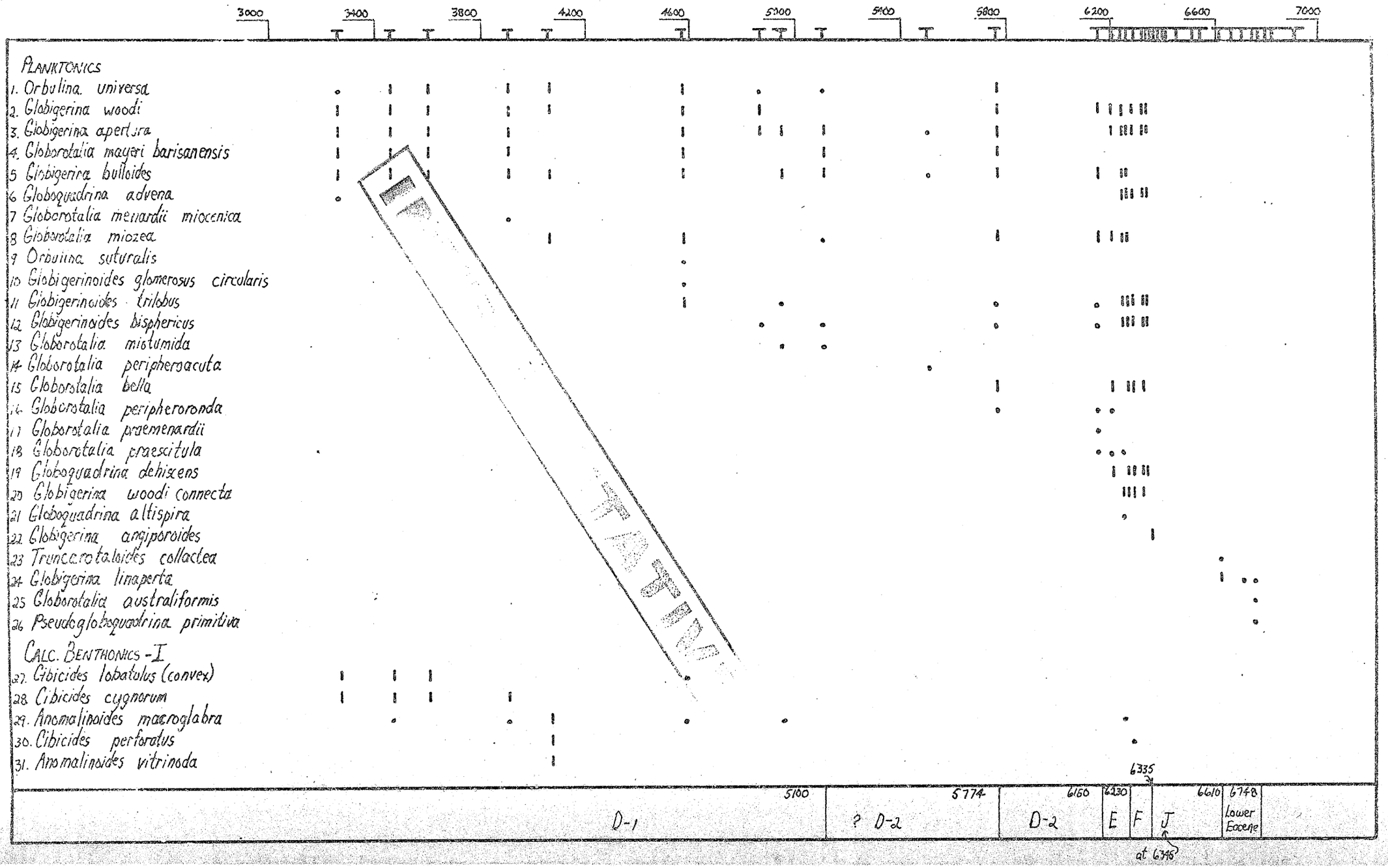
Not rotary cutting samples or conventional cores were examined.

. = 1 - 20 specimens

| = over 20 specimens

FLOUNDER-4

Sheet 1 of 4 sheets



FLOUNDER-4

32. Astrononion sp.
33 Discobinella biconcava
34 Gyroidinoides tenera
35 Cibicides subhaigdingeri
36 Cibicides thiara
37 Gyroidinoides zelandica
38 Osangularia bengalensis
39 Planulina wuellerstorfi
40 Siphonina australis
41 Anomalinoides sp.
42 Anomalina sp.

CALC. BENTHONICS - II
43 Elphidium crassatum

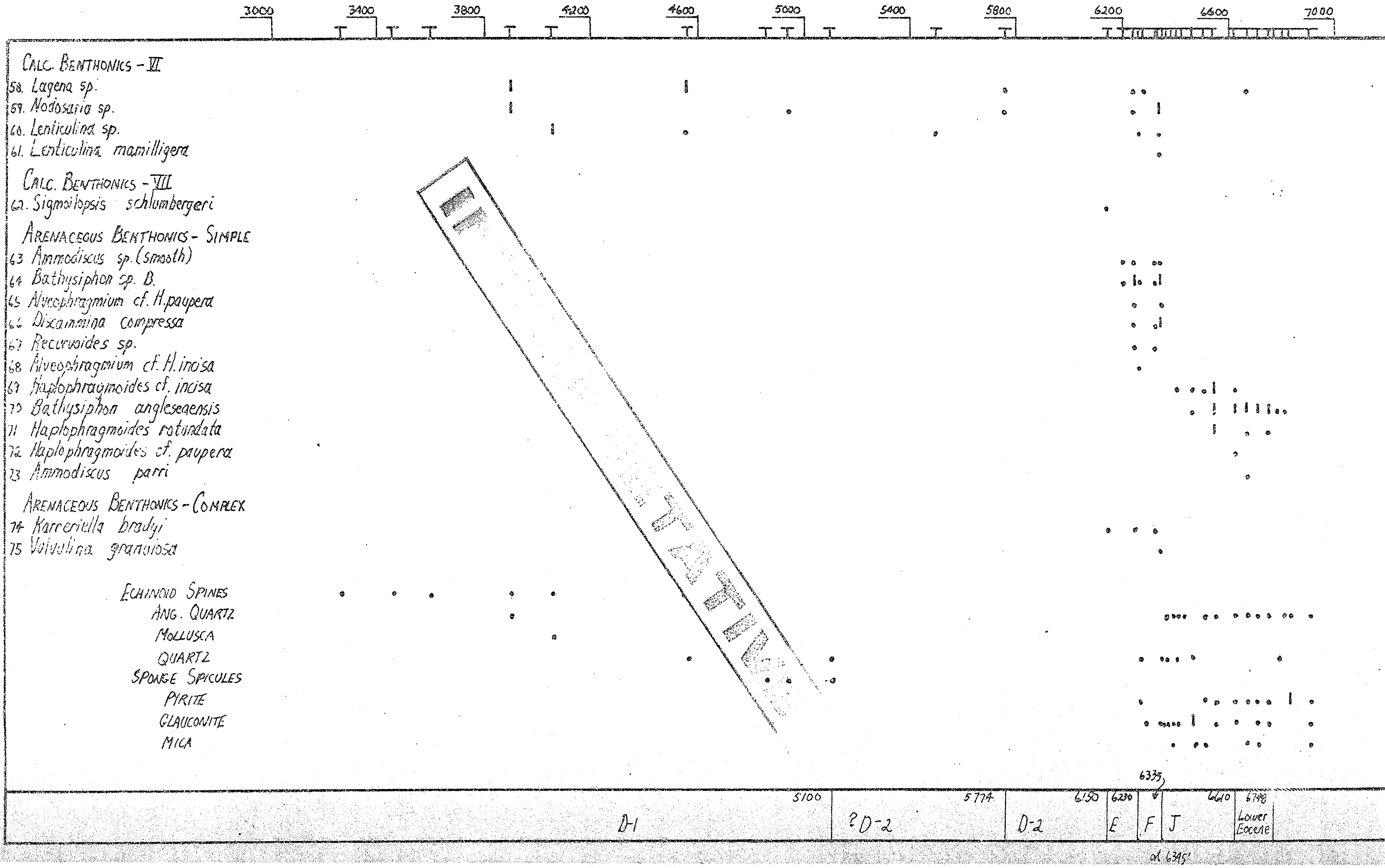
CALC. BENTHONICS - III
44 Sphaeroidina bulloides
45 Cassidulina carinata
46 Pullenia sp.
47 Melonella sp.
48 Cassidulina sp.

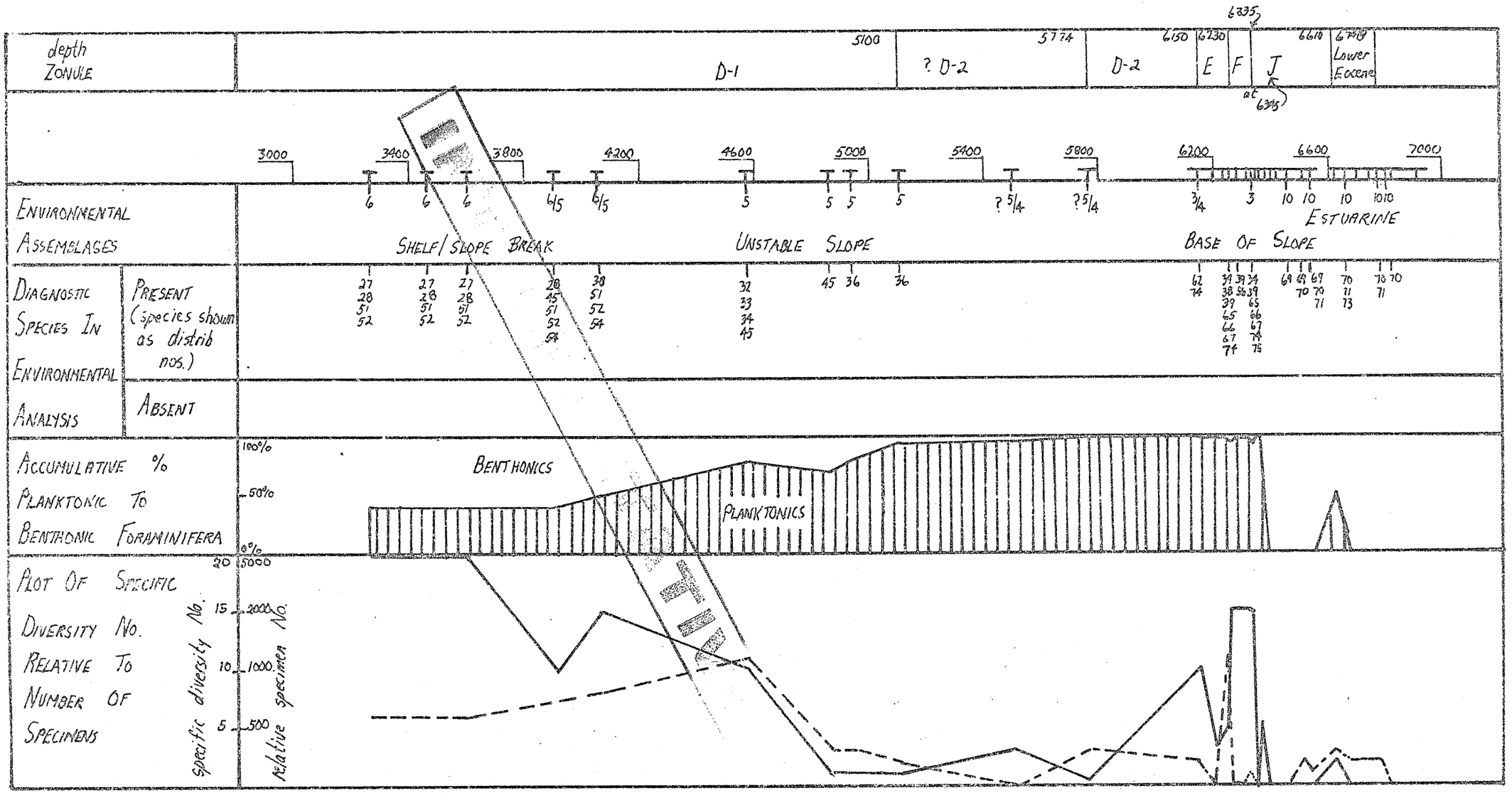
CALC. BENTHONICS - V
49 Brizalina alata
50 Euuvigerina peregrina
51 Euuvigerina mioschwageri
52 Euuvigerina miocea
53 Brizalina miocena
54 Euuvigerina maynei
55 Brizalina zedirecta
56 Bulliminella truncanella
57 Bolimina marginata

3000 3400 3800 4200 4600 5000 5100 5800 6200 6600 7000

5100 D-1 | 5774 ? D-2 | 6190 D-2 | 6230 E | F | 6335 J ↖ at 6346 | 6610 | 6778 Lower Eocene

FLOUNDER - 4.


3000
3400
3800
4200
4600
5000
5400
5800
6200
6600
7000
CALC. BENTHONICS - VI
58. Lagena sp.
59. Nodosaria sp.
60. Lenticulina sp.
61. Lenticulina mamilligera
CALC. BENTHONICS - VII
62. Sigmoilopsis schlumbergeri
ARENACEOUS BENTHONICS - SIMPLE
63 Ammodiscus sp. (smooth)
64 Bathysiphon sp. B.
65 Alveophragmium cf. H. paupera
66 Dixammina compressa
67 Recurvoides sp.
68 Alveophragmium cf. H. incisa
69 Haplophragmoides cf. incisa
70 Bathysiphon angleseaensis
71 Haplophragmoides rotundata
72 Haplophragmoides cf. paupera
73 Ammodiscus parri
ARENACEOUS BENTHONICS - COMPLEX
74 Karreriella bradyi
75 Volvulina granulosa
ECHINOID SPINES
ANG. QUARTZ
MOLLUSCA
QUARTZ
SPONGE SPICULES
PYRITE
GLAUCONITE
MICA
6335
5100
5774
6150
6230
6610
6748
D-1
?D-2
D-2
E
F
J
Lower Eocene
at 6345'


depth
ZONULE
D-1
5100
? D-2
5774
D-2
6150
E
6230
F
J
6335
at 6315
6610
Lower Eocene
3000
3400
3800
4200
4600
5000
5400
5800
6200
6600
7000
ENVIRONMENTAL ASSEMBLAGES
SHELF/SLOPE BREAK
UNSTABLE SLOPE
BASE OF SLOPE
ESTUARINE
DIAGNOSTIC SPECIES IN ENVIRONMENTAL ANALYSIS
PRESENT (species shown as distrib nos.)
ABSENT
ACCUMULATIVE % PLANKTONIC TO BENTHONIC FORAMINIFERA
100%
50%
0%
BENTHONICS
PLANKTONICS
PLOT OF SPECIFIC DIVERSITY NO. RELATIVE TO NUMBER OF SPECIMENS
specific diversity No.
relative specimen No.
20
15
10
5
5000
2000
1000
500
specimen number
specific diversity

4.0 F.I.T. DATA.

FIT RECORD **BASIC** WELL: Flounder #4 179

FIT #1 @ 8338 FEET (FDC Log Depth) GEOLOGIST J. Black

DATE: 24th January, 1973.

) DATA: Rmf .45 @ 70 °F Equiv. Cl^- 8400 ppm (Resistivity)

Cl^- 5000 ppm $NO_3^=$ 140 ppm (Titration)

) SAMPLE TAKEN AT
) END OF LAST
) CIRCULATION.
)

MAIN CHAMBER

Recovered	1 cft	GAS
(MAIN CHAMBER)	scum cc	OIL
	8,200 cc	WATER Filtrate
	0 cc	MUD
	500 cc	SAND

Properties: (MAIN CHAMBER)

GAS	C_1	C_2	C_3	C_4	C_5	H_2S	CO_2
(ppm)	.31 M	70 M	80 M	35M	4600	0	0

OIL ____ °API @ ____ °F, Pour Point ____ °F, GOR ____.

WATER Cl^- 4500ppm $NO_3^=$ 187 ppm (By Colorimeter)

Rrf .67 @ 70 °F, Equiv. Cl^- 5500ppm (By Resistivity)

Baroid 6,540

Pressures: (MAIN CHAMBER)

	Schlumberger	Agnew (Dual Ameradas)	
		Gauge 11,800	Gauge 8,500
Initial Shut-In	- 0		
Sampling	1700 psi	1446.5psi ,	1443.7 psi
Final Shut-in	- psi	- psi ,	- psi
Hydrostatic	4660 psi	Init. 4499.6psi ,	4522.9 psi
Sampling Time	5 min	Final 4481.2	
Shut-in Time	- min		

SEGREGATOR

Recovered (SEGREGATOR) Number ____

____ cft	GAS
____ cc	OIL
____ cc	WATER
____ cc	MUD
____ cc	SAND

Properties: (SEGREGATOR)

GAS	Cl	C_2	C_3	C_4	C_5	H_2S
(ppm)	___M	___M	___M	____	____	____

OIL ____ °API @ ____ °F, Pour Point ____ °F, GOR ____.

WATER Cl^- ____ppm $NO_3^=$ ____ppm (By Titration)

Rrf ____@____ °F, Equiv.Cl^- ____ppm (By Resistivity)

Pressures: (SEGREGATOR)

	Schlumberger	Agnew (Dual Ameradas)	
		Gauge ____	Gauge ____
Sampling	____psi	____psi ,	____ psi
Final Shut-in	____psi	____psi ,	____ psi
Hydrostatic	____psi	____psi ,	____ psi
Sampling Time	____min		
Shut-in Time	____min		

Temperatures (Max. Recording) 181 °F , 181 °F (Max. Depth Tool Reached ____ft.)

(Time since circulation ____hours)

Remarks: Circulated on clean out trip till 7 am. 24 January

Tool open 0 - Fired charge. Flared 2 min. & lost seal. Recovered cup of unconsolidated medium grained sand in flow lines.

FIT RECORD

WELL: FLOUNDER-4

GEOLOGIST J. Black,

DATE: 24th January, 1973

FIT 2 @ 8338 FEET (IES Log Depth)

DATA: Rmf .452 @ 70 °F Equiv. Cl^- 8400 ppm (Resistivity)

Cl^- 5000 ppm $NO_3^=$ 140 ppm (Titration)

) SAMPLE TAKEN AT END OF LAST CIRCULATION.

MAIN CHAMBER

Recovered (MAIN CHAMBER)

_____	cft	GAS
_____	cc	OIL
_____	cc	WATER
_____	cc	MUD
_____	cc	SAND

Misrun (Segregator seal valve not open)

Properties: (MAIN CHAMBER)

GAS	C_1	C_2	C_3	C_4	C_5	H_2S
(ppm)	___M	___M	___M	____	____	____

OIL ____°API @ ____°F, Pour Point ____°F, GOR ____.

WATER Cl^- ____ppm $NO_3^=$ ____ppm (By Titration)

Rrf ____ @ ____°F, Equiv. Cl^- ____ppm(By Resistivity)

Pressures: (MAIN CHAMBER)

	Schlumberger	Agnew (Dual Ameradas) Gauge 8500	Gauge 11,800
Sampling	____psi	3660.4 psi ,	3653.7 psi
Final Shut-in	____psi	3690.6 psi ,	3678.2 psi
Hydrostatic	____psi	Int. 4548.8 psi ,	4493.4 psi
Sampling Time	____min	Final 4510	4493.4
Shut-in Time	____min		

SEGREGATOR

Recovered (SEGREGATOR) Number ____

_____	cft	GAS
_____	cc	OIL
_____	cc	WATER
_____	cc	MUD
_____	cc	SAND

Properties: (SEGREGATOR)

GAS	C_1	C_2	C_3	C_4	C_5	H_2S
(ppm)	___M	___M	___M	____	____	____

OIL ____°API @ ____°F, Pour Point ____°F, GOR ____.

WATER Cl^- ____ppm $NO_3^=$ ____ppm (By Titration)

Rrf ____@____°F, Equiv.Cl^- ____ppm (By Resistivity)

Pressures: (SEGREGATOR)

	Schlumberger	Agnew (Dual Ameradas) Gauge ____	Gauge ____
Sampling	____psi	____psi ,	____ psi
Final Shut-in	____psi	____psi ,	____ psi
Hydrostatic	____psi	____psi ,	____ psi
Sampling Time	____min		
Shut-in Time	____min		

Temperatures (Max. Recording) 182 °F , 184 °F (Max. Depth Tool Reached 8677 ft.)

(Time since circulation 13 hours)

Remarks: Valve in chamber failed - misrun

Good seat. Action of top section was perfect. Valve was not opened during servicing of segregator.

3 of 9

FIT RECORD

WELL: FLOUNDER-4

GEOLOGIST J. Black

FIT 3 @ 8338 FEET (IES Log Depth)

DATE: 24th January, 1973.

DATA: Rmf .45 @ 70 °F Equiv. Cl^- 8400 ppm (Resistivity)

Cl^- 5000 ppm NO_3^- 140 ppm (Titration)

SAMPLE TAKEN AT END OF LAST CIRCULATION.

MAIN CHAMBER

Recovered (MAIN CHAMBER)

0	cft	GAS
0	cc	OIL
0	cc	WATER
4000	cc	MUD
100	cc	SAND

Properties: (MAIN CHAMBER)

GAS (ppm) C_1 ___M C_2 ___M C_3 ___M C_4 ____ C_5 ____ H_2S ____

OIL ____°API @ ____°F, Pour Point ____°F, GOR ____.

WATER Cl^- ____ppm NO_3^- ____ppm (By Titration)

Rrf ____ @ ____°F, Equiv. Cl^- ____ppm(By Resistivity

Pressures: (MAIN CHAMBER)

	Schlumberger	Agnew (Dual Ameradas) Gauge ____	Gauge ____
Sampling	0 psi	____psi ,	____psi
Final Shut-in	- ____psi	____psi ,	____psi
Hydrostatic	4590 psi	____psi ,	____psi

Sampling Time 2.5 min

Shut-in Time ____min

SEGREGATOR

Recovered (SEGREGATOR)

Number ____

____	cft	GAS
____	cc	OIL
____	cc	WATER
____	cc	MUD
____	cc	SAND

Properties: (SEGREGATOR)

GAS (ppm) C_1 ___M C_2 ___M C_3 ___M C_4 ____ C_5 ____ H_2S ____

OIL ____°API @ ____°F, Pour Point ____°F, GOR ____.

WATER Cl^- ____ppm NO_3^- ____ppm (By Titration)

Rrf ____@____°F, Equiv.Cl^- ____ppm (By Resistivity

Pressures: (SEGREGATOR)

	Schlumberger	Agnew (Dual Ameradas) Gauge ____	Gauge ____
Sampling	____psi	____psi ,	____ psi
Final Shut-in	____psi	____psi ,	____ psi
Hydrostatic	____psi	____psi ,	____ psi

Sampling Time ____min

Shut-in Time ____min

Temperatures (Max. Recording) 196 °F , 196 °F (Max. Depth Tool Reached 8550+ ft.)

(Time since circulation 16 hours)

Remarks: Lost seal - mud run, ports and flow line had about teacup of unconsolidated sand from seal rupture.

FIT RECORD

WELL: FLOUNDER-4

GEOLOGIST J. Black

FIT 4 @ 8325 FEET (IES Log Depth) DATE: 25th January, 1973.

DATA: Rmf .45 @ 70 °F Equiv. Cl^- 8400 ppm (Resistivity)) SAMPLE TAKEN AT END OF LAST CIRCULATION.

Cl^- 5000 ppm NO_3^- 140 ppm (Titration))

MAIN CHAMBER

Recovered (MAIN CHAMBER)	26.2	cft	GAS
	3100	cc	OIL
	14700	cc	WATER Filtrate 1400 Surface shut-in
	0	cc	MUD
	50	cc	SAND

Properties: (MAIN CHAMBER)

GAS	C_1	C_2	C_3	C_4	C_5	H_2S	CO_2
(ppm)	170 M	130 M	40 M	14M	1900	0	1400

OIL 43.6°API @ 64 °F, Pour Point 56 °F, GOR 1,200.

WATER Cl^- 4600 ppm NO_3^- 200 ppm (By Titration)

Rrf .560 @ 74 °F, Equiv. Cl^- 6050 ppm (By Resistivity

Pressures: (MAIN CHAMBER)

	Schlumberger	Agnew (Dual Ameradas)	
	Surface Shut-In	Gauge 11,800	Gauge 8,500
Sampling	900 psi	3592.5 psi ,	3,587.0 psi
Final Shut-in	3440 psi	3623.1 psi ,	3621.5 psi
Hydrostatic	4380 psi	Init. 4493.4 psi ,	4535.9 psi
Sampling Time	30.5 min	Final 4481.3	4492.8
Shut-in Time	1 min		

SEGREGATOR

Recovered (SEGREGATOR) Number #5 MONEL

_____	cft	GAS
_____	cc	OIL
_____	cc	WATER
_____	cc	MUD
_____	cc	SAND

Properties: (SEGREGATOR)

GAS	C_1	C_2	C_3	C_4	C_5	H_2S
(ppm)	M	M	M			

OIL °API @ °F, Pour Point °F, GOR .

WATER Cl^- ppm NO_3^- ppm (By Titration)

Rrf @ °F, Equiv. Cl^- ppm (By Resistivity

Pressures: (SEGREGATOR)

	Schlumberger	Agnew (Dual Ameradas)	
		Gauge	Gauge
Sampling	psi	psi ,	psi
Final Shut-in	psi	psi ,	psi
Hydrostatic	psi	psi ,	psi
Sampling Time	min		
Shut-in Time	min		

Temperatures (Max. Recording) 198 °F , 198 °F (Max. Depth Tool Reached 8550 ft.)

(Time since circulation 19 hours)

Remarks: Charged choke size .030 to .020. Better test.

FIT RECORD

WELL: FLOUNDER-4

GEOLOGIST J. Black

DATE: 25th January, 1973.

FIT # 5 @ 8260 FEET (IES Log Depth)

DATA: Rmf .45 @ 70 °F Equiv. Cl^- 8400 ppm (Resistivity)) SAMPLE TAKEN AT END OF LAST CIRCULATION.

Cl^- 5000 ppm NO_3^- 140 ppm (Titration))

MAIN CHAMBER

Recovered (MAIN CHAMBER)	162.7	cft	GAS
	1850	cc	CONDENSATE 2,000# psi
	0	cc	WATER
	450	cc	MUD
	50	cc	SAND

Properties: (MAIN CHAMBER)

GAS	C_1	C_2	C_3	C_4	C_5	H_2S	CO_2
(ppm)	170 M	130 M	42 M	20M	4M	0	5,000+

OIL 60.4°API @ 54°F, Pour Point ____°F, GOR 14,000

WATER Cl^- ____ppm NO_3^- ____ppm (By Titration)

Rrf ____ @ ____°F, Equiv. Cl^- ____ppm(By Resistivity)

Pressures: (MAIN CHAMBER)

	Schlumberger	Agnew (Dual Ameradas) Gauge 11,800	Gauge 8,500
Sampling	3500 psi	3653.7 psi ,	3647.4 psi
Final Shut-in	3500 psi	3659.9 psi ,	3651.7 psi
Hydrostatic	4290 psi	Init. 4468.9 psi ,	4475.6 psi
Sampling Time	est.12 min	Final 4444.3	4432.5
Shut-in Time	est.3.5 min		

SEGREGATOR

Recovered (SEGREGATOR) Number 24

____	cft	GAS
____	cc	OIL
____	cc	WATER
____	cc	MUD
____	cc	SAND

Properties: (SEGREGATOR)

GAS	C_1	C_2	C_3	C_4	C_5	H_2S
(ppm)	___M	___M	___M	___	___	___

OIL ____°API @ ____°F, Pour Point ____°F, GOR ____.

WATER Cl^- ____ppm NO_3^- ____ppm (By Titration)

Rrf ____@____°F, Equiv.Cl^- ____ppm (By Resistivity)

Pressures: (SEGREGATOR)

	Schlumberger	Agnew (Dual Ameradas) Gauge ____	Gauge ____
Sampling	____psi	____psi ,	____ psi
Final Shut-in	____psi	____psi ,	____ psi
Hydrostatic	____psi	____psi ,	____ psi
Sampling Time	____min		
Shut-in Time	____min		

Temperatures (Max. Recording) 200 °F , 200 °F (Max. Depth Tool Reached 8500+ ft.)

(Time since circulation 22 hours)

Remarks: Condensate is light yellowish white

FIT RECORD

WELL: FLOUNDER-4

GEOLOGIST J. Black

FIT # [redacted] @ 8187 FEET (IES Log Depth)

DATE: 25th January, 1973.

D DATA: Rmf .45 @ 70 °F Equiv. Cl^- 8400 ppm (Resistivity)

Cl^- 5000 ppm NO_3^- 140 ppm (Titration)

) SAMPLE TAKEN AT
) END OF LAST
) CIRCULATION.
)

MAIN CHAMBER

Recovered (MAIN CHAMBER)

.4	cft	GAS
0	cc	OIL
2,500	cc	WATER Filtrate
0	cc	MUD
50	cc	SAND Very very fine grained quartz and silt

Surface Chamber 0

Properties: (MAIN CHAMBER)

GAS	C_1	C_2	C_3	C_4	C_5	H_2S
(ppm)	M	M	M			

OIL ____ °API @ ____ °F, Pour Point ____ °F, GOR ____.

WATER Cl^- 4300 ppm NO_3^- 106 ppm (By Titration)

Rrf .63 @ 70 °F, Equiv. Cl^- 5600 ppm (By Resistivity)

Pressures: (MAIN CHAMBER)

	Schlumberger	Agnew (Dual Ameradas)	
		Gauge 11,800	Gauge 8,500
Sampling	0 psi	- psi ,	- psi
Final Shut-in	- psi	3617.0 psi ,	3617.2 psi
Hydrostatic	psi	Int. 4407.5 psi ,	4419.6 psi
Sampling Time	min	Fin. 4370.7	4367.9
Shut-in Time	min		

SEGREGATOR

Recovered (SEGREGATOR) Number ____

Trace	cft	GAS
0	cc	OIL
350	cc	WATER filtrate
0	cc	MUD
0	cc	SAND

Properties: (SEGREGATOR)

GAS	C_1	C_2	C_3	C_4	C_5	H_2S
(ppm)	M	M	M			

OIL ____ °API @ ____ °F, Pour Point ____ °F, GOR ____.

WATER Cl^- ____ ppm NO_3^- ____ ppm (By Titration)

Rrf ____ @ ____ °F, Equiv. Cl^- ____ ppm (By Resistivity)

Pressures: (SEGREGATOR)

	Schlumberger	Agnew (Dual Ameradas)	
		Gauge	Gauge
Sampling	psi	psi ,	psi
Final Shut-in	psi	psi ,	psi
Hydrostatic	psi	psi ,	psi
Sampling Time	min		
Shut-in Time	min		

Temperatures (Max. Recording) 200 °F , 200 °F (Max. Depth Tool Reached 8500+ ft.)

(Time since circulation 26 hours)

Remarks: Tight test

FIT RECORD

WELL: FLOUNDER-4

GEOLOGIST J. Black

FIT #7 @ 8290 FEET (IES Log Depth)

DATE: 25th January, 1973.

MUD DATA: Rmf .45 @ 70 °F Equiv. Cl^- 8400 ppm (Resistivity)
Cl^- 5000 ppm NO_3^- 140 ppm (Titration)

) SAMPLE TAKEN AT
) END OF LAST
) CIRCULATION.

MAIN CHAMBER

Recovered	158.4	cft	GAS
(MAIN CHAMBER)	2,300	cc	OIL Condensate
	0	cc	WATER
	0	cc	MUD
	50	cc	SAND

2,100 psi on Main Chamber

Properties: (MAIN CHAMBER)

GAS	C_1	C_2	C_3	C_4	C_5	H_2S	CO_2
(ppm)	175 M	125 M	45 M	33M	5,500	0	5000+

OIL 61.5 °API @ 50 °F, Pour Point ____ °F, GOR 11,000

WATER Cl^- ____ ppm NO_3^- ____ ppm (By Titration)

Rrf ____ @ ____ °F, Equiv. Cl^- ____ ppm (By Resistivity

Pressures: (MAIN CHAMBER)

	Schlumberger	Agnew (Dual Ameradas) Gauge 11,800	Gauge 8,500
Sampling	3640 psi	3635.4 psi ,	3630.1 psi
Final Shut-in	3640 psi	3647.6 psi ,	3647.4 psi
Hydrostatic	4440 psi	Int. 4468.9 psi ,	4475.6 psi
Sampling Time	12 min	Fin. 4462.8	4462.7
Shut-in Time	3.5 min		

SEGREGATOR

Recovered (SEGREGATOR) Number 16

____	cft	GAS
____	cc	OIL
____	cc	WATER
____	cc	MUD
____	cc	SAND

Properties: (SEGREGATOR)

GAS	C_1	C_2	C_3	C_4	C_5	H_2S
(ppm)	____ M	____ M	____ M	____	____	____

OIL ____ °API @ ____ °F, Pour Point ____ °F, GOR ____.

WATER Cl^- ____ ppm NO_3^- ____ ppm (By Titration)

Rrf ____ @ ____ °F, Equiv. Cl^- ____ ppm (By Resistivity

Pressures: (SEGREGATOR)

	Schlumberger	Agnew (Dual Ameradas) Gauge ____	Gauge ____
Sampling	____ psi	____ psi ,	____ psi
Final Shut-in	____ psi	____ psi ,	____ psi
Hydrostatic	____ psi	____ psi ,	____ psi
Sampling Time	____ min		
Shut-in Time	____ min		

Temperatures (Max. Recording) 202 °F , 202 °F (Max. Depth Tool Reached 8550 ft.)
(Time since circulation 29 hours)

Remarks: ____

FIT RECORD

WELL: FLOUNDER-4

GEOLOGIST J. Black

DATE: 25th January, 1973.

8 of 9

FIT #8 @ 8306 FEET (IES Log Depth)

DATA: Rmf :45 @ 70 °F Equiv. Cl^- 8400 ppm (Resistivity)

Cl^- 5000 ppm NO_3^- 140 ppm (Titration)

) SAMPLE TAKEN AT END OF LAST CIRCULATION.

MAIN CHAMBER

Recovered (MAIN CHAMBER)

107.6	cft	GAS
13,900	cc	OIL
0	cc	WATER
0	cc	MUD
50	cc	SAND

Oil set up as wax when exposed to air.

Surface chamber 1900 psi

Properties: (MAIN CHAMBER)

GAS	C_1	C_2	C_3	C_4	C_5	H_2S
(ppm)	M	M	M			

OIL 43.9 °API @ 71 °F, Pour Point 60 °F, GOR 1230.

WATER Cl^- ppm NO_3^- ppm (By Titration)

Rrf @ °F, Equiv. Cl^- ppm (By Resistivity)

Pressures: (MAIN CHAMBER)

	Schlumberger	Agnew (Dual Ameradas)	
		Gauge 11,800	Gauge 11,800
Sampling	3360 psi	3635.4 psi	3638.8 psi
Final Shut-in	3480 psi	3635.4 psi	3656.0 psi
Hydrostatic	4340 psi	Init. 4462.8 psi	4540.2 psi
Sampling Time	12 min	Fin. 4425.9	4467.0
Shut-in Time	2.5 min		

SEGREGATOR

Recovered (SEGREGATOR) Number 27

	cft	GAS
	cc	OIL
	cc	WATER
	cc	MUD
	cc	SAND

Properties: (SEGREGATOR)

GAS	C_1	C_2	C_3	C_4	C_5	H_2S
(ppm)	M	M	M			

OIL °API @ °F, Pour Point °F, GOR .

WATER Cl^- ppm NO_3^- ppm (By Titration)

Rrf @ °F, Equiv. Cl^- ppm (By Resistivity)

Pressures: (SEGREGATOR)

	Schlumberger	Agnew (Dual Ameradas)	
		Gauge	Gauge
Sampling	psi	psi	psi
Final Shut-in	psi	psi	psi
Hydrostatic	psi	psi	psi
Sampling Time	min		
Shut-in Time	min		

Temperatures (Max. Recording) 202 °F , 202 °F (Max. Depth Tool Reached 8480+ ft.)

(Time since circulation 31 hours)

Remarks: Good test, used .020" choke

FIT RECORD

WELL: FLOUNDER-4 — 979

GEOLOGIST J. Black

FIT #9 @ 8348 FEET (IES Log Depth) DATE: 25th January, 1973.

DATA: Rmf .45 @ 70 °F Equiv. Cl^- 8400 ppm (Resistivity)

Cl^- 5000 ppm NO_3^- 140 ppm (Titration)

) SAMPLE TAKEN AT END OF LAST CIRCULATION.

MAIN CHAMBER

Recovered (MAIN CHAMBER)

0	cft	GAS
0	cc	OIL
0	cc	WATER
0	cc	MUD
0	cc	SAND

Surface Chamber 0 psi

Properties: (MAIN CHAMBER)

GAS	C_1	C_2	C_3	C_4	C_5	H_2S
(ppm)	M	M	M			

OIL ____ °API @ ____ °F, Pour Point ____ °F, GOR ____.

WATER Cl^- ____ ppm NO_3^- ____ ppm (By Titration)

Rrf ____ @ ____ °F, Equiv. Cl^- ____ ppm (By Resistivity)

Pressures: (MAIN CHAMBER)

	Schlumberger	Agnew (Dual Ameradas) Gauge 11,800	Gauge 8,500
Sampling	0 psi	8653.7 psi ,	3647.4 psi
Final Shut-in	- psi	3659.9 psi ,	3664.7 psi
Hydrostatic	- psi	Init. 4487.3 psi ,	4553.1 psi
Sampling Time	- min	Fin. 4438.2	4462.7
Shut-in Time	- min		

SEGREGATOR

Recovered (SEGREGATOR) Number ____

	cft	GAS
	cc	OIL
	cc	WATER
	cc	MUD
	cc	SAND

Properties: (SEGREGATOR)

GAS	C_1	C_2	C_3	C_4	C_5	H_2S
(ppm)	M	M	M			

OIL ____ °API @ ____ °F, Pour Point ____ °F, GOR ____.

WATER Cl^- ____ ppm NO_3^- ____ ppm (By Titration)

Rrf ____ @ ____ °F, Equiv. Cl^- ____ ppm (By Resistivity)

Pressures: (SEGREGATOR)

	Schlumberger	Agnew (Dual Ameradas) Gauge	Gauge
Sampling	psi	psi ,	psi
Final Shut-in	psi	psi ,	psi
Hydrostatic	psi	psi ,	psi
Sampling Time	min		
Shut-in Time	min		

Temperatures (Max. Recording) 202 °F , 202 °F (Max. Depth Tool Reached 8500+ ft.)

(Time since circulation 34 hours)

Remarks: Valve failed to open in segregator, no recovery. O ring failure

Accidentally fired shot and took 2 min. to fill flow lines (approx. 200 cc.)

indicates tight test.

BASIC
AGNEW-NICHOLSON PTY. LTD.
582 ST. KILDA ROAD
MELBOURNE, VICTORIA 3004

ESSO AUSTRALIA LIMITED

FLOUNDER

FLOUNDER No. 4
JANUARY 24, 1973

PURPOSE: OBTAIN SUBSURFACE PRESSURES WITH AMERADA GAUGES RUN IN TANDEM WITH SCHLUMBERGER FORMATION INTERVAL TESTER.

TOOLS USED: 1 AMERADA 11,800 PSI ELEMENT SERIAL No. 8282-N 12 HOUR CLOCK
1 AMERADA 8,500 PSI ELEMENT SERIAL No. 9391 12 HOUR CLOCK

F.I.T. TEST No. 1 @ 8338' M.D.

HOURS	PSIG 8,500	PSIG 11,800	REMARKS
1551			RUN IN HOLE
1711	4522.9	4499.6	SET PACKER - INITIAL HYDROSTATIC
1715			OPEN TOOL
1716	42.1	42.0	
1717	42.1	42.0	
1718	42.1	42.0	
1719			FIRE SHAPE CHARGE
1720	1547.2	1523.9	
1721	1443.7	1446.5	
1722			LOST SEAL - SEAL SEGREGATOR
1723	4510.7	4481.2	FINAL HYDROSTATIC

F.I.T. TEST No. 2 @ 8338' M.D.

HOURS	PSIG 8,500	PSIG 11,800	REMARKS
1935			RUN IN HOLE
2010	4548.8	4493.4	SET PACKER - INITIAL HYDROSTATIC
2014			OPEN TOOL
2015		3047.7	
2016	3660.4	3647.6	
2017	3660.4	3653.7	
2018	3660.4	3653.7	
2019	3660.4	3653.7	
2020	3660.4	3653.7	
2021	3660.4	3653.7	
2022	3660.4	3653.7	
2023	3660.4	3653.7	
2024	3660.4	3653.7	
2025	3660.4	3653.7	
2026	3660.4	3653.7	
2027			OPEN SEGREGATOR
2028	3690.6	3684.3	
2029	3690.6	3678.2	CLOSE SEGREGATOR
2030			UNSEAT PACKER
	4510.0	4493.4	FINAL HYDROSTATIC

AGNEW-GO-WESTERN PTY. LTD.
582 ST. KILDA ROAD
MELBOURNE, VICTORIA 3004

ESSO AUSTRALIA LIMITED FLOUNDER FLOUNDER No. 4
JANUARY 24-25, 1973

PURPOSE: OBTAIN SUBSURFACE PRESSURES WITH AMERADA GUAGES RUN IN TANDEM WITH SCHLUMBERGER FORMATION INTERVAL TESTER.

TOOLS USED: 1 AMERADA 11,800 PSI ELEMENT SERIAL No. 8282 -N 12 HOUR CLOCK
1 AMERADA 8,500 PSI ELEMENT SERIAL No. 9391 12 HOUR CLOCK

F.I.T. TEST No. 3

NO RESULTS - MUD RUN

F.I.T. TEST No. 4 @ 8325' M.D.

HOURS	PSIG 8,500	PSIG 11,800	REMARKS
0027			RUN IN HOLE
0138	4535.9	4493.4	SET PACKER - INITIAL HYDROSTATIC
0140			OPEN TOOL
0145	903.3	908.1	
0150	811.7	804.0	
0155	1292.7	1297.2	
[illegible]	2497.7	2515.3	
0205	3336.3	3359.8	
0210	3543.8	3574.1	
0211	3587.0	3592.5	
0212			SHUT TOOL - OPEN SEGREGATOR
0213	1517.6	1493.2	
0214	2035.2	2068.7	
0215	2744.1	2778.4	
0216	3621.5	3623.1	
0217			SHUT SEGREGATOR
0218			UNSEAT PACKER
	4492.8	4487.3	FINAL HYDROSTATIC

ACNEW-GO-WESTERN PTY. LTD.
582 ST. KILDA ROAD
MELBOURNE, VICTORIA 3004

ESSO AUSTRALIA LIMITED FLOUNDER FLOUNDER No. 4
JANUARY 25, 1973

PURPOSE: OBTAIN SUBSURFACE PRESSURES WITH AMERADA GUAGES RUN IN TANDEM WITH SCHLUMBERGER FORMATION INTERVAL TESTER.

TOOLS USED: 1 AMERADA 11,800 PSI ELEMENT SERIAL No. 8282 -N 12 HOUR CLOCK
1 AMERADA 8,500 PSI ELEMENT SERIAL No. 9391 12 HOUR CLOCK

F.I.T. TEST No. 5 @ 8260' M.D.

HOURS	PSIG 8,500	PSIG 11,800	REMARKS
0430			RUN IN HOLE
0548	4475.6	4468.9	SET PACKER - INITIAL HYDROSTATIC
0550	3215.3		OPEN TOOL
0552	3587.0	3072.2	
0554	3587.0	3598.6	
0556	3647.4	3598.6	
0558	3647.4	3647.6	
0600	3647.4	3653.7	
0602	3647.4	3653.7	
0604	3647.4	3653.7	
0606			CLOSE TOOL - OPEN SEGREGATOR
0608	3651.7	3659.9	
0609	3651.7	3659.9	
0610	3651.7	3659.9	SEAL SEGREGATOR
0612			UNSEAT PACKER
	4432.5	4444.3	FINAL HYDROSTATIC

F.I.T. TEST No. 6 @ 8187' M.D.

HOURS	PSIG 8,500	PSIG 11,800	REMARKS
0748			RUN IN HOLE
0841	4419.6	4407.5	SET PACKER - INITIAL HYDROSTATIC
0844			OPEN TOOL
0845			
0846			PRESSURE TO SMALL TO MEASURE
0847			FIRE SHAPE CHARGE
0852			OPEN SEGREGATOR
0857			CLOSE SEGREGATOR
0859	1098.8	1119.6	
0901	3236.9	3231.3	
0903	3539.4	3531.3	BUILD UP IN FLOW LINE ONLY
0905	3604.2	3598.6	
0907	3617.2	3617.0	
	4367.9	4370.7	UNSEAT PACKER - FINAL HYDROSTATICS

AGNEW-SO-WESTERN PTY. LTD.
582 ST. KILDA ROAD
MELBOURNE, VICTORIA 3004

ESSO AUSTRALIA LIMITED FLOUNDER FLOUNDER No. 4
JANUARY 25, 1973

PURPOSE: OBTAIN SUBSURFACE PRESSURES WITH AMERADA GUAGES RUN IN TANDEM WITH SCHLUMBERGER FORMATION INTERVAL TESTER.

TOOLS USED: 1 AMERADA 11,500 PSI ELEMENT SERIAL No. 8282 -N 12 HOUR CLOCK
1 AMERADA 8,500 PSI ELEMENT SERIAL No. 9391 12 HOUR CLOCK

F.I.T. TEST No. 7 @ 8290' M.D.

HOURS	PSIG 8,500	PSIG 11,000	REMARKS
1103			RUN IN HOLE
1148	4475.6	4468.9	SET PACKER - INITIAL HYDROSTATIC
1149			OPEN TOOL
1151	3608.5	3617.0	
1153	3608.5	3623.1	
1155	3630.1	3623.1	
1157	3630.1	3641.5	
1159	3630.1	3635.4	
1201	3630.1	3635.4	
1203	3630.1	3635.4	
1205			SEAL TOOL - OPEN SEGREGATOR
1206	3647.4	3635.4	
1207	3647.4	3647.6	
1208	3647.4	3647.6	SEAL SEGREGATOR
120[illegible]			UNSEAT PACKER
	4462.7	4462.8	FINAL HYDROSTATIC

AGNEW-GO-WESTERN PTY. LTD.
582 ST. KILDA ROAD
MELBOURNE, VICTORIA 3004

ESSO AUSTRALIA LIMITED | FLOUNDER | FLOUNDER No.4
JANUARY 25, 1973

PURPOSE: OBTAIN SUBSURFACE PRESSURES WITH AMERADA GUAGES RUN IN TANDEM WITH SCHLUMBERGER FORMATION INTERVAL TESTER.

TOOLS USED: 1 AMERADA 11,300 PSI ELEMENT SERIAL No. 8282 -N 12 HOUR CLOCK
1 AMERADA 8,500 PSI ELEMENT SERIAL No. 9391 12 HOUR CLOCK

F.I.T. TEST No. 8 @ 8306' M.D.

HOURS	PSIG 8,500	PSIG 11,800	REMARKS
1348			RUN IN HOLE
1427	4540.2	4462.8	SET PACKER - INITIAL HYDROSTATIC
1429			OPEN TOOL
1431	3517.8	3506.8	
1433	3517.8	3512.9	
1435	3517.3	3598.6	
1437	3638.8	3635.4	
1439	3638.8	3635.4	
1441	3638.8	3635.4	
1443	3638.8	3635.4	
1444			OPEN SEGREGATOR
1446	3656.0	3635.4	
1448	3656.0	3635.4	
1450	3656.0	3635.4	
1451			UNSEAT PACKER
	4467.0	4425.9	FINAL HYDROSTATIC

ASHTON-GO-WESTERN PTY. LTD.
352 ST. KILDA ROAD
MELBOURNE, VICTORIA 3004

ESSO AUSTRALIA LIMITED FLOUNDER FLOUNDER No.4
JANUARY 25, 1973

PURPOSE: OBTAIN SUBSURFACE PRESSURES WITH AMERADA GUAGES RUN IN TANDEM WITH SCHLUMBERGER FORMATION INTERVAL TESTER.

TOOLS USED: 1 AMERADA 11,800 PSI ELEMENT SERIAL No. 8282 -N 12 HOUR CLOCK
1 AMERADA 8,500 PSI ELEMENT SERIAL No. 9391 12 HOUR CLOCK

F.I.T. TEST No. 9 @ 8348' M.D.

HOURS	PSIG 8,500	PSIG 11,800	REMARKS
1625			RUN IN HOLE
1714	4353.1	4487.3	SET PACKER - INITIAL HYDROSTATIC
1716			OPEN TOOL
1718	3647.4	3653.7	
1720	3647.4	3653.7	
1722	3647.4	3653.7	
1724	3647.4	3653.7	
1726	3647.4	3653.7	
1727			~~OPEN SEGREGATOR~~ FIRED SHAPED CHARGE
1728	3621.5	3653.7	
1729	3638.8	3659.9	Build up in flowline
[illegible]30	3643.1	3659.9	
[illegible]31	3651.7	3659.9	
1732	3664.7	3659.9	~~SGR SEGREGATOR~~
1734		4438.2	UNSEAT PACKER
	4462.7		FINAL HYDROSTATIC

Note. Segregator was never opened.
Pressure of 3659 = MAXSIP in flowline
A.P. Wing.

5.0 ENCLOSURES

PE603240

This is an enclosure indicator page.
The enclosure PE603240 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603240 has the following characteristics:

ITEM_BARCODE	= PE603240
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 1 of 25. Enclosure 5.1 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603241

This is an enclosure indicator page.
The enclosure PE603241 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603241 has the following characteristics:

ITEM_BARCODE	= PE603241
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 2 of 25. Enclosure 5.1 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603242

This is an enclosure indicator page.
The enclosure PE603242 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603242 has the following characteristics:

ITEM_BARCODE	= PE603242
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page3 of 25. Enclosure 5.1 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603243

This is an enclosure indicator page.
The enclosure PE603243 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603243 has the following characteristics:

ITEM_BARCODE	= PE603243
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 4 of 25. Enclosure 5.1 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603244

This is an enclosure indicator page.
The enclosure PE603244 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603244 has the following characteristics:

ITEM_BARCODE	= PE603244
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 5 of 25. Enclosure 5.1 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603245

This is an enclosure indicator page.
The enclosure PE603245 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603245 has the following characteristics:

ITEM_BARCODE	= PE603245
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 6 of 25. Enclosure 5.1 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603246

This is an enclosure indicator page.
The enclosure PE603246 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603246 has the following characteristics:

ITEM_BARCODE	= PE603246
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 7 of 25. Enclosure 5.1 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603247

This is an enclosure indicator page.
The enclosure PE603247 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603247 has the following characteristics:

ITEM_BARCODE	= PE603247
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 8 of 25. Enclosure 5.1 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603248

This is an enclosure indicator page.
The enclosure PE603248 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603248 has the following characteristics:

ITEM_BARCODE	= PE603248
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 9 of 25. Enclosure 5.1 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603249

This is an enclosure indicator page.
The enclosure PE603249 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603249 has the following characteristics:

ITEM_BARCODE	= PE603249
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 10 of 25. Enclosure 5.1 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603250

This is an enclosure indicator page.
The enclosure PE603250 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603250 has the following characteristics:

ITEM_BARCODE	= PE603250
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 11 of 25. Enclosure 5.1 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603251

This is an enclosure indicator page.
The enclosure PE603251 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603251 has the following characteristics:

ITEM_BARCODE	= PE603251
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 12 of 25. Enclosure 5.1 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603252

This is an enclosure indicator page.
The enclosure PE603252 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603252 has the following characteristics:

ITEM_BARCODE	= PE603252
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 13 of 25. Enclosure 5.1 of Well Sumary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603253

This is an enclosure indicator page.
The enclosure PE603253 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603253 has the following characteristics:

ITEM_BARCODE	= PE603253
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 14 of 25. Enclosure 5.1 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603254

This is an enclosure indicator page.
The enclosure PE603254 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603254 has the following characteristics:

ITEM_BARCODE	= PE603254
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 15 of 25. Enclosure 5.1 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603255

This is an enclosure indicator page.
The enclosure PE603255 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603255 has the following characteristics:

ITEM_BARCODE	= PE603255
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 16 of 25. Enclosure 5.1 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603256

This is an enclosure indicator page.
The enclosure PE603256 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603256 has the following characteristics:

ITEM_BARCODE	= PE603256
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 17 of 25. Enclosure 5.1 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603257

This is an enclosure indicator page.
The enclosure PE603257 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603257 has the following characteristics:

ITEM_BARCODE	= PE603257
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 18 of 25. Enclosure 5.1 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603258

This is an enclosure indicator page.
The enclosure PE603258 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603258 has the following characteristics:

ITEM_BARCODE	= PE603258
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 19 of 25. Enclosure 5.1 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603259

This is an enclosure indicator page.
The enclosure PE603259 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603259 has the following characteristics:

ITEM_BARCODE	= PE603259
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 20 of 25. Enclosure 5.1 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603260

This is an enclosure indicator page.
The enclosure PE603260 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603260 has the following characteristics:

ITEM_BARCODE	= PE603260
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 21 of 25. Enclosure 5.1 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603261

This is an enclosure indicator page.
The enclosure PE603261 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603261 has the following characteristics:

ITEM_BARCODE	= PE603261
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 22 of 25. Enclosure 5.1 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603262

This is an enclosure indicator page.
The enclosure PE603262 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603262 has the following characteristics:

ITEM_BARCODE	= PE603262
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 23 of 25. Enclosure 5.1 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603263

This is an enclosure indicator page.
The enclosure PE603263 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603263 has the following characteristics:

ITEM_BARCODE	= PE603263
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 24 of 25. Enclosure 5.1 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603264

This is an enclosure indicator page.
The enclosure PE603264 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603264 has the following characteristics:

ITEM_BARCODE	= PE603264
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 25 of 25. Enclosure 5.1 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603265

This is an enclosure indicator page.
The enclosure PE603265 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603265 has the following characteristics:

ITEM_BARCODE	= PE603265
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 1 of 2. Enclosure 5.2 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603266

This is an enclosure indicator page.
The enclosure PE603266 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603266 has the following characteristics:

ITEM_BARCODE	= PE603266
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Mud Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Mud Log Page 2 of 2. Enclosure 5.2 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603267

This is an enclosure indicator page.
The enclosure PE603267 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603267 has the following characteristics:

ITEM_BARCODE	= PE603267
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Drill Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Drill Log Page 1 of 8. Enclosure 5.3 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603268

This is an enclosure indicator page.
The enclosure PE603268 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603268 has the following characteristics:

ITEM_BARCODE	= PE603268
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Drill Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Drill Log Page 2 of 8. Enclosure 5.3 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603269

This is an enclosure indicator page.
The enclosure PE603269 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603269 has the following characteristics:

ITEM_BARCODE	= PE603269
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Drill Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Drill Log Page 3 of 8. Enclosure 5.3 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603270

This is an enclosure indicator page.
The enclosure PE603270 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603270 has the following characteristics:

ITEM_BARCODE	= PE603270
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Drill Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Drill Log Page 4 of 8. Enclosure 5.3 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603271

This is an enclosure indicator page.
The enclosure PE603271 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603271 has the following characteristics:

ITEM_BARCODE	= PE603271
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Drill Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Drill Log Page 5 of 8. Enclosure 5.3 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603272

This is an enclosure indicator page.
The enclosure PE603272 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603272 has the following characteristics:

ITEM_BARCODE	= PE603272
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Drill Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Drill Log Page 6 of 8. Enclosure 5.3 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603273

This is an enclosure indicator page.
The enclosure PE603273 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603273 has the following characteristics:

ITEM_BARCODE	= PE603273
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Drill Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Drill Log Page 7 of 8. Enclosure 5.3 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)

PE603274

This is an enclosure indicator page.
The enclosure PE603274 is enclosed within the container PE904929 at this location in this document.

The enclosure PE603274 has the following characteristics:

ITEM_BARCODE	= PE603274
CONTAINER_BARCODE	= PE904929
NAME	= Flounder 4 Drill Log
BASIN	= GIPPSLAND
ON_OFF	= OFFSHORE
PERMIT	= VIC/P1
TYPE	= WELL
SUBTYPE	= LOG
DESCRIPTION	= Flounder 4 Drill Log Page 8 of 8. Enclosure 5.3 of Well Summary.
REMARKS	=
DATE_CREATED	=
DATE_RECEIVED	=
W_NO	= W662
WELL_NAME	= Flounder 4
CONTRACTOR	= Baroid Well Logging Service
CLIENT_OP_CO	= Esso Australia

(Inserted by DNRE - Vic Govt Mines Dept)