



WELL COMPLETION REPORT

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STONEFISH - 1

Esso Australia Ltd.

February, 1974

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WELL COMPLETION REPORT

STONEFISH - 1

ESSO AUSTRALIA LTD.

C.N. Curnow & I.F. Cris

December, 1973

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STONEFISH-1

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COMPLETION REPORT

I WELL DATA RECORD

Date 27/12/73

LOCATION

WELL NAME STONEFISH-1	STATE VICTORIA	PERMIT or LICENCE VIC./P1	GEOLOGICAL BASIN GIPPSLAND	FIELD N.F.W.C.
CO-ORDINATES		MAP PROJECTION	GEOGRAPHICAL DESCRIPTION	
Surface	Lat. 38° 15' 02.19"S	Long. 148° 33' 34.77"E	X 636471mE	Y 5,765,214mN
Bottom Hole			5.2 miles north-east of Flounder-1.	
		Australian National Spheroid UTM Projection A.M.G.		
<u>ELEVATIONS &amp; DEPTHS</u>				
ELEVATIONS	WATER DEPTH		TOTAL DEPTH	Avg. Angle
Ground	377'		M.D. 10,445'	Straight Hole
KB 32'			T.V.D.	
RT	PLUG BACK DEPTH		REASONS FOR P.B.	
Radon Head	582'		ABANDONMENT	
Top Deck Platform				
<u>DATES</u>				
MOVE IN	RIG UP	SPUDDED		
25/7/73	26/7/73	26/7/73		
RIG DOWN COMPLETE	RIG RELEASED	PROD. UNIT - Start Rigging Up		
28/8/73	29/8/73			
PROD. UNIT - Rig Down Complete		I.P. ESTABLISHED		
<u>MISCELLANEOUS</u>				
OPERATOR	PERMITTEE or LICENCEE	ESSO INTEREST	OTHER INTEREST	
ESSO	HEMATITE	WELL 100% OTHER NIL		
CONTRACTOR	RIG NAME	EQUIPMENT TYPE		
GLOBAL MARINE A/ASIA P/L.	"GLOMAR CONCEPTION"	FLOATING DRILLING VESSEL		
TOTAL RIG DAYS	DRILLING AFE NO.	COMPLETION NO.	TYPE COMPLETION	
34.91	233-012			
LANEE WELL	Before Drilling	New Field Wildcat		
CLASSIFICATION	After Drilling	Unsuccessful New Field Wildcat with minor shows of hydrocarbons.		



IV CASING - LINER - TUBING RECORD							
Type	Size	Weight	Grade	Thread	No. Joints	Amount	Depth
KB ELEVATION ABOVE CASING HEAD						400.00	400.00
20"/30" PILE JOINT						33.80	433.80
	20"	1x129.33# 8x91.51#	X52 LP	JV	9 + float shoe	386.12	819.92
KB ELEVATION ABOVE HANGER						404.00	404.00
	13-3/8"	54.5#	J-55	Butt	Hanger + 61 jts. + float collar	2403.02	2807.02
	13-3/8"	54.5#	J-55	Butt	1 + float shoe	40.22	2847.24
KB ELEVATION ABOVE HANGER						402.00	402.00
	9-5/8"	47#	N-80	Butt	Hanger + 209 jts. + float collar	7984.69	8386.69
	9-5/8"	47#	N-80	Butt	1 + float shoe	40.59	8427.28
PILE JOINT & WELLHEAD RECOVERED							

V CEMENT RECORD				
String	30"/20" Pile Joint	20"	13-3/8"	9-5/8"
Type of Cement	60 sx Aust N + 2% CaCl <sub>2</sub>	1100 sx Aust N + 350 sx Aust N + 2% CaCl <sub>2</sub>	800 sx Aust N	325 sx Aust N + 0.7% HR-12
Number of FT <sup>3</sup>	71	1711	944	384
Average weight of slurry	15.6 ppg	15.6 ppg	15.6 ppg	25.6 ppg
Cement Top	-	Sea Floor	1500' calc.	7500'
Casing Tested with	-	-	1500 psi	3000 psi
Number of Centralizers	-	6	10	17
Number of Scratchers	-	-	-	-
Stage Collar etc.	-	-	-	-
Remarks	-	-	Bumped plug, float held. FORMATION HELD @ 870 psi with 9.0#/gal.	Bumped plug.

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Engineer



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VII SAMPLES, CONVENTIONAL CORES, SW CORES					
INTERVAL	TYPE	RECOVERED	INTERVAL	TYPE	RECOVERED
980 - 10445	Washed and dried cuttings	Every 10-30 ft.			
980-10445	Unwashed sacked cuttings	Every 10-30 ft.			
980-10400	Canned cuttings	Every 100 feet.			
<u>SIDEWALL CORES</u>					
8558-10424	Gun # 1	Shot 30 Rec. 30			
3150-8420	Gun #2	Shot 30 Rec. 28			

VIII WIRELINE LOGS AND SURVEYS Incl. FIT)

Type & Scale	From	To	Type & Scale	From	To
ISF-SCT (2" & 5")	8476	- 2850			
FDC-CNL (2" & 5")	8482	- 5700			
GR/CAL	8482	- 2750			
CAL	2889	- 819			
FDC/CNL/GR	10444	- 8414			
SLK	2878	- 819			
GR	2878	- 409			
VELOCITY SURVEY FIT #1		10,069'			

Geologist



IX	FORMATION TOPS/Zones					REMARKS	
	NAME	Tops		Gross Interval (ft)	Net Pay (ft).		
		M.D.	Sub-sea		Gas		Oil
MIOCENE Gippaland Fm.	409'	- 377'	5505'				
OLIGOCENE	5914'	-5882'	6'				
EOCENE Latrobe Group Flounder Fm.	5920'	-5888'	240'				
PALEOCENE	6160'	-6128'	2602'				
LATE CRETACEOUS	8762'	-8730'	1683'+				

X GEOLOGIC ANALYSIS (Pre Drilling prognosis Vs actual results)

Pre Drill

The objective of Stonefish-1 was to test the hydrocarbon potential of the Paleocene and Upper Cretaceous section of the Latrobe Group on the northeast extension of the Halibut-Flounder anticline. The Stonefish structure is subdivided by normal faults into three blocks and lateral seals are anticipated to be developed by juxtaposing reservoir sands against shales across these faults. Two primary reservoir sand units were anticipated;

- the Lower Paleocene pay sand equivalent to that encountered in the Flounder wells,
- interbedded sands and shales of the Upper Cretaceous section equivalent to the accumulations of oil and gas in the Tuna field and gas in Flounder-1.

Post Drill

Structural Formation tops in Stonefish-1 came in close to prediction indicating velocity control in the area was reliable. The structural picture (Plate I) is as originally postulated.

Only minor traces of fluorescence were noted within the Latrobe Group in the interval 7300'-T.D. Log interpretation (Appendix 5) suggests that a number of thin oil-bearing sands are present in the interval 8831-10,074', totalling 29' net. Although these sands are porous they are impermeable and considered non-commercial.

The results confirmed the original geologic ideas and the anticipated stratigraphy was penetrated. However, shales of sufficient thickness to provide intra-Latrobe seals across fault planes were lacking, and this, plus the lack of sealing faults, mean that trapping mechanisms are not present in the area. Hydrocarbons may also not have been accumulated because of lack of sufficient source rock and unfavourable migration paths into the Stonefish area.

At the present time conflict exists between seismic and palynologic data over the bottom 200'. This interval contains volcanics and a greywacke type sandstone suggestive of Lower Cretaceous (Strzelecki Group) sediments. Seismic correlations also suggest that the well penetrated Strzelecki Group sediments.

Results of palynologic studies by L. Stover (Appendix 4) based on SWC's within this interval are dated within the N. senectus zone (Late Cretaceous, Scnonian in age).

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STONEFISH-1

APPENDIX 1

SAMPLE DESCRIPTIONS

## SAMPLE DESCRIPTIONS - STONEFISH-1

10/51

30.7.73

J.K. Davidson

J.R. Black

DEPTHS	%	DESCRIPTION
980-1220	80	Off white skeletal <u>limestone</u> , crinoids, bryozoans and forams, cephalopods and pelecypods
	20	<u>Marl</u> , light grey and soft
1220-2050	100	<u>Limestone</u> as above
2050-2890	100	<u>Marl</u> , fossiliferous as in limestone above, but generally finer grained and more shaley, soft to firm.
2890-2900		Drilled 2892 - casing 2847' (13-3/8)
2900-2960		<u>Marl</u> and cavings (cement and float collars)
2960-2970		<u>Marl</u> and cement
2970-3040	100	<u>Marl</u> , light grey, soft, fossils less common
3040-3440	100	<u>Marl</u> , less fossiliferous, forams and bryozoans
3440-3780	100	<u>Marl</u> as above, trace forams, bryozoans and pyrite
3780-3830	100	<u>Marl</u> as above, no fossils or pyrite
3830-4690	100	<u>Marl</u> as above, forams
4690-4770	100	<u>Marl</u> as above, a little firmer and more laminar
4770-4780	100	<u>Marl</u> , as above, (4779 new bit - XDG again)
4780-5880	100	<u>Marl</u> , as above
5880-5890		Top Lakes Entrance
	30	<u>Shale</u> , light grey, fissile, fine quartz & coal fragments, forams and calcite cement.
	70	<u>Marl</u> cavings as above
5890-5900	60	<u>Shale</u> as above
	40	<u>Cavings</u> as above
5900-5910	80	<u>Shale</u> as above
	20	<u>Cavings</u> as above
5910-5920	80	<u>Shale</u> as above
	20	<u>Cavings</u> as above
5920-5930	80	<u>Shale</u> as above
	20	<u>Cavings</u> as above.
		Trace very fine sandstone, light brown, very dirty, very poorly sorted, firm, 31 units on hotwire
5930-5940	80	<u>Shale</u> as above
	20	<u>Cavings</u> as above
5940-5950	80	<u>Shale</u> as above
	20	<u>Cavings</u> as above
		Trace yellow shale, very soft - probably a weathered zone
5950-5960	70	<u>Shale</u> as above
	30	<u>Cavings</u> as above
5960-5970)	70	<u>Shale</u> as above
5970-5980)	30	<u>Cavings</u> as above
		Trace of pyrite
		62 units on hotwire. Very fine sand in desander.

DEPTHS	%	DESCRIPTION
5980-5990	80 20	<u>Shale</u> as above <u>Cavings</u> Trace pyrite and coal
5990-6000	80 20	<u>Shale</u> as above <u>Cavings</u> Trace pyrite and coal
6000-6010	80 20	<u>Shale</u> as above <u>Cavings</u> Trace pyrite and coal
6010-6020	80 20	<u>Shale</u> as above <u>Cavings</u> Trace pyrite and coal
6020-6030	80 20	<u>Shale</u> as above <u>Cavings</u> Trace very fine sand
6030-6040	80 20	<u>Shale</u> as above <u>Cavings</u> Trace very fine sand
6040-6050	80 20	<u>Shale</u> as above <u>Cavings</u>
6050-6060	80 20	<u>Shale</u> as above <u>Cavings</u>
6060-6070	20 60 20	<u>Sandstone</u> , loose, coarse to very coarse, subangular to rounded grains <u>Shale</u> as above <u>Cavings</u> as above
6070-6080	30 50 20	<u>Sandstone</u> as above <u>Shale</u> as above <u>Marl cavings</u> as above
6080-6090	30 50 20	<u>Sandstone</u> as above <u>Shale</u> as above <u>Marl cavings</u> as above
6090-6100	20 80	<u>Sandstone</u> as above Trace pyrite <u>Marl and shale cavings</u> as above
6100-6110	20 80	<u>Sandstone</u> as above Trace pyrite <u>Marl and shale cavings</u> as above
6110-6120	10 90	<u>Sandstone</u> , medium to coarse as above <u>Shale and marl</u> as above
6120-6130	10 90	<u>Sandstone</u> , medium to coarse as above <u>Shale and marl</u> as above
6130-6140	10 90	<u>Sandstone</u> , medium to coarse, subangular to rounded grains as above Very fine off white, poorly sorted sandstone with lithics, trace of coal and pyrite <u>Cavings</u> mostly <u>shale</u> as above

NB: Very poor sample returns, large amounts of very fine sand in desander.

DEPTHS	%	DESCRIPTION
6140-6150	20	Medium to coarse <u>sandstone</u> as above. Base Flounder formation?
	80	<u>Shale and marl cavings</u> as above
6150-6160	20	<u>Sandstone</u> as above
	20	<u>Siltstone</u> , light brown, carbonaceous and firm
	10	<u>Coal</u> , black, sub vitreous
	50	<u>Cavings</u> as above
6160-6170	60	Coarse to very coarse <u>sandstone</u> , rounded loose grains
	10	<u>Siltstone</u> as above
	10	<u>Coal</u> as above
	20	<u>Cavings</u>
6170-6180	60	<u>Sandstone</u> as above
	10	<u>Siltstone</u> as above
	10	<u>Coal</u> as above
	20	<u>Cavings</u> as above
6180-6190	60	<u>Sandstone</u> as above
	10	<u>Siltstone</u> as above
	10	<u>Coal</u> as above
	20	<u>Cavings</u> as above
6190-6200	90	<u>Sandstone</u> as above
	10	<u>Cavings</u>
6200-6210	80	<u>Sandstone</u> as above
	10	<u>Siltstone</u> as above
	10	<u>Coal</u> as above. Trace <u>cavings</u>
6210-6220	80	<u>Sandstone</u> as above
	10	<u>Siltstone</u> as above
	10	<u>Coal</u> as above. Trace <u>cavings</u>
6220-6230	80	<u>Sandstone</u> as above
	10	<u>Siltstone</u> as above
	10	<u>Coal</u> as above. Trace <u>cavings</u>
6230-6240	80	<u>Sandstone</u> as above
	10	<u>Siltstone</u> as above
	10	<u>Coal</u> as above. Trace <u>cavings</u>
6240-6250	80	<u>Sandstone</u> as above
	10	<u>Siltstone</u> as above
	10	<u>Coal</u> as above. Trace <u>cavings</u>
6250-6260	80	<u>Sandstone</u> as above
	10	<u>Siltstone</u> as above
	10	<u>Coal</u> as above. Trace <u>cavings</u>
6260-6270	60	<u>Sandstone</u> as above
	10	<u>Siltstone</u> as above
	20	<u>Carbonaceous shale</u>
	10	<u>Cavings</u>
6270-6280	70	<u>Sandstone</u> as above
	10	<u>Siltstone</u> as above
	10	<u>Shale</u> as above
	10	<u>Coal</u> as above. Trace <u>cavings</u>
6280-6290	70	<u>Sandstone</u> as above
	10	<u>Siltstone</u> as above
	10	<u>Shale</u> as above
	10	<u>Coal</u> as above. Trace <u>cavings</u>

DEPTHS	%	DESCRIPTION
6290-6300	70 10 10 10	<u>Sandstone</u> as above <u>Siltstone</u> as above <u>Shale</u> as above <u>Coal</u> as above. Trace <u>cavings</u>
6300-6420	100	Very coarse loose rounded <u>sand</u> grains
6420-6440	100	<u>Sandstone</u> - milky white and clear, very coarse to coarse, subrounded quartz, unconsolidated.
6440-6460	100	<u>Sandstone</u> , pyritic
6460-6480	40 60	<u>Sandstone</u> , fine to coarse as above <u>Shale</u> , grey green marl, very calcareous (cavings?)
6480-6500	30 70	<u>Sandstone</u> - a majority of sand is going through shaker screen (fine) <u>Shale</u> - as above, with trace glauconitic cavings
6500-6520	50 50	<u>Sandstone</u> - coarse to very coarse, angular <u>Shale</u>
6520-6530	40 60	<u>Sandstone</u> - fine to very coarse, unconsolidated, subrounded to subangular <u>Shale</u> - grey green as above and light brown, slightly carbonaceous with trace coal
6530-6540	50 50	<u>Sandstone</u> <u>Shale</u> - brown, carbonaceous, fissile, moderately firm
6540-6550	60 40	<u>Sandstone</u> , milky white, subrounded to rounded, coarse to very coarse, unconsolidated quartz <u>Shale</u> - brown, carbonaceous, fissile, moderately firm, silty
6550-6570	60 40	<u>Sandstone</u> as above, but fine to very coarse <u>Shale</u>
6570-6580	70 20 10	<u>Sandstone</u> <u>Shale</u> <u>Coal</u> - black, brittle, hard
6580-6590	90 10	<u>Sandstone</u> - medium to very coarse, unconsolidated, subrounded to rounded quartz <u>Shale</u>
6590-6600	100	<u>Sandstone</u> , very pyritic
6600-6610	100	<u>Sandstone</u> , milky, white, very coarse, unconsolidated, rounded quartz
6610-6630	100	<u>Sandstone</u>
6630-6650	70 30	<u>Sandstone</u> as above <u>Coal</u> - black, brittle, firm
6650-6660	70 20 10	<u>Sandstone</u> <u>Coal</u> <u>Shale</u>
6660-6720	100	<u>Sandstone</u> - milky white, subrounded to rounded, coarse to very coarse, unconsolidated quartz, trace pyrite
6720-6730	100	<u>Sandstone</u>
6730-6740	90 10	<u>Sandstone</u> <u>Shale</u>

DEPTHS	%	DESCRIPTION
6740-6770	100	<u>Sandstone</u> as above
6770-6780	90	<u>Sandstone</u>
	10	<u>Shale</u> - grey, silty
6780-6790	70	<u>Sandstone</u>
	30	<u>Shale</u> - medium grey, silty
6790-6800	80	<u>Sandstone</u>
	10	<u>Shale</u>
	10	<u>Coal</u>
6800-6820	100	<u>Sandstone</u> - frosty white and clear, coarse to very coarse, subrounded to rounded, unconsolidated quartz with trace pyrite
6820-6840	80	<u>Sandstone</u>
	10	<u>Shale</u>
	10	<u>Coal</u>
6840-6860	10	<u>Sandstone</u> as above with few ferruginous stained grains
6860-6880	90	<u>Sandstone</u> , abundant pyrite
	10	<u>Shale</u> with trace coal
6880-6900	70	<u>Sandstone</u>
	20	<u>Shale</u>
	10	<u>Coal</u>
6900-6920	90	<u>Sandstone</u>
	10	<u>Shale</u>
6920-6940	30	<u>Sandstone</u>
	20	<u>Shale</u>
	50	<u>Coal</u>
6940-6960	20	<u>Sandstone</u>
	60	<u>Shale</u> - brown, soft, silty, carbonaceous
	20	<u>Coal</u>
6960-6980	50	<u>Sandstone</u>
	50	<u>Shale</u> - very carbonaceous with trace coal
6980-7000	100	<u>Sandstone</u> , as above, with abundant pyrite
7000-7080	100	<u>Sandstone</u>
7080-7100	90	<u>Sandstone</u>
	10	<u>Coal</u>
7100-7120	100	<u>Sandstone</u>
7120-7140	90	<u>Sandstone</u>
	10	<u>Shale</u>
7140-7160	80	<u>Sandstone</u>
	20	<u>Shale</u>
7160-7170	20	<u>Sandstone</u>
	80	<u>Coal</u> , black, brittle, clean with some shaley
7170-7180	50	<u>Sandstone</u>
	50	<u>Shale</u> - grey brown, carbonaceous, some silty, trace coal

DEPTHS	%	DESCRIPTION
7180-7190	90	<u>Sandstone</u>
	10	<u>Shale</u>
7190-7200	60	<u>Sandstone</u>
	40	<u>Shale</u>
7200-7220	30	<u>Sandstone</u>
	20	<u>Shale</u> - dark brown, carbonaceous
	50	<u>Coal</u>
7220-7230	70	<u>Sandstone</u>
	20	<u>Shale</u> - tan and brown, soft, carbonaceous
	10	<u>Coal</u>
7230-7240	30	<u>Sandstone</u>
	70	<u>Shale</u> - grey and brown, carbonaceous, moderately firm
7240-7250	10	<u>Sandstone</u>
	20	<u>Shale</u>
	70	<u>Coal</u> - black, brittle, blocky fracture
7250-7260	20	<u>Shale</u>
	80	<u>Coal</u>
8260-7280	20	<u>Sand</u>
	10	<u>Siltstone</u> - brown grey, moderately firm
	70	<u>Shale</u> - grey and brown carbonaceous, silty
7280-7290	10	<u>Sandstone</u>
	20	<u>Siltstone</u>
	50	<u>Shale</u>
	20	<u>Coal</u>
7290-7300	10	<u>Sandstone</u>
	20	<u>Siltstone</u> , grey, firm, slightly calcareous with <u>minor</u> fluorescence
	70	<u>Shale</u> - as above but some soft
7300-7310	70	<u>Sandstone</u> - very pyritic
	20	<u>Siltstone</u> - hard with <u>minor</u> fluorescence
	10	<u>Coal</u>
7310-7320	100	<u>Sandstone</u> , frosty white, rounded, coarse to very coarse, unconsolidated quartz
7320-7330	100	<u>Sandstone</u>
7330-7340	100	<u>Coal</u> , black, blocky fracture, brittle
7340-7350	30	<u>Sandstone</u>
	20	<u>Siltstone</u>
	30	<u>Shale</u>
	20	<u>Coal</u>
7350-7360	10	<u>Sandstone</u>
	70	<u>Shale</u>
	20	<u>Coal</u>
7360-7370	30	<u>Sandstone</u>
	20	<u>Shale</u>
	50	<u>Coal</u> , pyrite



DEPTHS	%	DESCRIPTION
7370-7380	30	<u>Sandstone</u>
	30	<u>Shale</u>
	40	<u>Coal</u> , pyrite
7380-7390	40	<u>Sandstone</u>
	20	<u>Siltstone</u>
	30	<u>Shale</u>
	10	<u>Coal</u>
7390-7400	60	<u>Sandstone</u>
	30	<u>Siltstone</u> - tan to brown, firm
	10	<u>Shale</u>
7400-7410	50	<u>Sandstone</u> as above
	30	<u>Siltstone</u> - tan, firm, dolomitic
	20	<u>Shale</u>
7410-7420	10	<u>Sandstone</u>
	10	<u>Shale</u>
	80	<u>Coal</u>
7420-7430	30	<u>Shale</u> , brown
	70	<u>Coal</u>
7430-7440	80	<u>Shale</u>
	20	<u>Coal</u>
7440-7450	100	<u>Shale</u> , grey and brown, carbonaceous, silty, splinters fractured, some with fine mica
7450-7460	100	<u>Shale</u> , brown, carbonaceous, firm, silty
7460-7470	100	<u>Shale</u>
7470-7480	50	<u>Shale</u>
	50	<u>Coal</u> , black, conchoidal fracture, some dirty, most clean
7480-7490	50	<u>Shale</u>
	50	<u>Coal</u> with some pyrite
7490-7500	10	<u>Shale</u>
	90	<u>Coal</u>
7500-7510	10	<u>Shale</u>
	90	<u>Coal</u>
7510-7520	20	<u>Siltstone</u> , grey and brown, soft
	20	<u>Shale</u>
	60	<u>Coal</u>
7520-7530	20	<u>Siltstone</u>
	70	<u>Shale</u> - brown, soft, finely micaceous, carbonaceous
	10	<u>Coal</u>
7530-7540	40	<u>Siltstone</u> , light brown, soft to firm
	50	<u>Shale</u>
	10	<u>Coal</u>
7540-7550	20	<u>Siltstone</u>
	70	<u>Shale</u>
	10	<u>Coal</u>

DEPTHS	%	DESCRIPTION
7550-7560	60 40	<u>Sandstone</u> , white, coarse to very coarse, rounded, unconsolidated quartz <u>Shale</u>
7560-7570	50 20 30	<u>Sandstone</u> as above, but very pyritic <u>Siltstone</u> - brown, firm <u>Shale</u> as above
7570-7580	10 80 10	<u>Sandstone</u> <u>Shale</u> , brown, very carbonaceous, silty <u>Coal</u>
7580-7590	50 50	<u>Shale</u> , tan/brown, carbonaceous, moderately firm, fissile <u>Coal</u> , black, splintery fracture, dirty to clean
7590-7600	40 10 40 10	<u>Sandstone</u> - coarse to very coarse, unconsolidated as above <u>Siltstone</u> <u>Shale</u> <u>Coal</u>
at 7605'		
7600-7610	30 50 20	<u>Sandstone</u> , mostly cavings <u>Shale</u> , mostly cavings <u>Coal</u> , mostly cavings
7610-7620	80 10 10	<u>Sandstone</u> , frosty and clear white, coarse to very coarse, subrounded to subangular, unconsolidated quartz, pyritic <u>Shale</u> <u>Coal</u>
7620-7630	80 10 10	<u>Sandstone</u> <u>Shale</u> <u>Coal</u>
7630-7640	100	<u>Sandstone</u> as above with pyrite
7640-7650	100	<u>Sandstone</u>
7650-7660	100	<u>Sandstone</u> , milky white, rounded to subangular, unconsolidated, coarse to very coarse and pebbly quartz, trace pink quartz grains, trace pyrite
7660-7670	100	<u>Sandstone</u> as above
7670-7680	100	<u>Sandstone</u> as above
7680-7690	100	<u>Sandstone</u> as above
7690-7700	100	<u>Sandstone</u> as above
7700-7730	100	<u>Sandstone</u> as above
7730-7740	100	<u>Sandstone</u> as above, increase in pyrite
7740-7750	90 10	<u>Sandstone</u> as above <u>Shale</u> - medium grey, silty, firm
7750-7780	90 10	<u>Sandstone</u> as above <u>Shale</u>
7780-7790	80 20	<u>Sandstone</u> as above, but some <u>dolomite</u> <u>Shale</u>

DEPTHS	%	DESCRIPTION
7790-7800	70	<u>Sandstone</u>
	30	<u>Shale</u> - medium grey, moderately firm, fissile
7800-7810	60	<u>Sandstone</u>
	40	<u>Shale</u>
7810-7820	50	<u>Sandstone</u> as above, but some consolidated with dolomitic? cement
	50	<u>Shale</u>
7820-7830	90	<u>Sandstone</u> , tan-white, fine to coarse, consolidated dolomitic? cement, hard induration, poorly sorted
	10	<u>Shale</u>
7830-7840	70	<u>Sandstone</u> , about 60% unconsolidated and 40% cement dolomite as above
	30	<u>Shale</u> as above
7840-7850	70	<u>Sandstone</u> - as above, 40% unconsolidated, 60% dolomitic cement, fine to coarse, poorly sorted, subrounded to subangular, hard tight, trace minor fluorescence, poor porosity and permeability
	30	<u>Shale</u>
7850-7860	40	<u>Sandstone</u> , mostly unconsolidated with some <u>minor fluorescence</u>
	30	<u>Siltstone</u> , tan to grey, soft, trace <u>glauconite</u>
	30	<u>Shale</u>
7860-7870	60	<u>Sandstone</u> , consolidated, very <u>dolomitic</u> , hard, tight
	30	<u>Siltstone</u> , as above
	10	<u>Shale</u>
7870-7880	90	<u>Sandstone</u> , tan to brown, very fine to moderately silty, very <u>dolomitic</u> , hard
	10	<u>Shale</u>
7880-7890	30	<u>Sandstone</u> as above, very dolomitic, very hard, <u>minor fluorescence</u>
	40	<u>Siltstone</u> , trace <u>glauconite</u>
	30	<u>Shale</u>
7890-7900	30	<u>Sandstone</u>
	40	<u>Siltstone</u> , tan to brown, soft
	30	<u>Shale</u>
7900-7910	20	<u>Sandstone</u> , half dolomitic sand, half loose coarse grained sand
	10	<u>Siltstone</u>
	70	<u>Shale</u> , medium grey, slightly calcareous, fissile, firm
7910-7920	10	<u>Sandstone</u>
	30	<u>Siltstone</u> , brown, moderately soft, <u>glauconitic</u>
	60	<u>Shale</u>
7920-7930	10	<u>Sandstone</u>
	40	<u>Siltstone</u> - increase in glauconite
	50	<u>Shale</u>
7930-7940	10	<u>Sandstone</u> , white, unconsolidated, rounded, coarse quartz
	20	<u>Siltstone</u>
	70	<u>Shale</u>
7940-7950	20	<u>Sandstone</u>
	30	<u>Siltstone</u> , <u>very glauconitic</u>
	50	<u>Shale</u>
7950-7960	40	<u>Sandstone</u> , mostly unconsolidated, coarse to very coarse, rounded quartz, with trace dolomitic sand, hard, minor fluorescence

(Continued)

DEPTHS	%	DESCRIPTION
7950-7960 (Cont.)	20	<u>Siltstone</u> , abundant glauconite, brown, moderately soft, slightly calcareous
	40	<u>Shale</u> , grey to brown, calcareous; fissile
7960-7970	50	<u>Sandstone</u> as above, with traces of glauconite adhering to a few quartz grains
	20	<u>Siltstone</u> , abundant glauconite
	30	<u>Shale</u> as above
7970-7980	10	<u>Sandstone</u>
	30	<u>Siltstone</u> , glauconitic, very pyritic
	60	<u>Shale</u>
7980-7990 Top Flounder Pay Sand	90	<u>Sandstone</u> , frosty white, moderately to very coarse, subrounded to subangular, unconsolidated quartz, clean, good porosity and permeability, trace pyrite
	10	<u>Shale</u>
7990-8000	90	<u>Sandstone</u> as above with increase in pyrite
	10	<u>Shale</u> as above with some very glauconitic siltstone
8000-8010	100	<u>Sandstone</u> , frosty white, fine to very coarse, poorly sorted, unconsolidated, subrounded to subangular quartz, trace glauconite, abundant pyrite, good porosity and permeability, no show
8010-8020	100	<u>Sandstone</u> as above, trace glauconite
8020-8030	100	<u>Sandstone</u> as above, trace glauconite
8030-8040	30	<u>Sandstone</u> as above
	70	<u>Shale</u> , grey, soft, slightly calcareous, trace glauconite
8040-8050	10	<u>Sandstone</u> , predominantly fine to medium grained, very pyritic
	30	<u>Siltstone</u> , brown, sandy, soft, friable
	60	<u>Shale</u> , grey, slightly calcareous
8050-8060	30	<u>Sandstone</u> , fine to medium, unconsolidated white quartz
	40	<u>Siltstone</u> , brown, trace glauconite, soft
	30	<u>Shale</u> , brown, slightly carbonaceous and grey, slightly calcareous
8060-8070	10	<u>Sandstone</u> as above, very pyritic
	30	<u>Siltstone</u> as above, some glauconite (cavings?)
	60	<u>Shale</u> , brown, silty, slightly carbonaceous.
8070-8080	10	<u>Sandstone</u> as above, abundant pyrite
	40	<u>Siltstone</u> , tan to brown, friable, slightly calcareous
	50	<u>Shale</u> , brown, silty and grey, slightly carbonaceous
8080-8090	70	<u>Sandstone</u> , abundant pyrite
	20	<u>Siltstone</u> , some glauconite
	10	<u>Shale</u>
8090-8100	70	<u>Sandstone</u> as above
	20	<u>Siltstone</u>
	10	<u>Shale</u>
8100-8110	20	<u>Sandstone</u>
	50	<u>Siltstone</u>
	30	<u>Shale</u>
8110-8120	30	<u>Sandstone</u> - much pyrite
	30	<u>Siltstone</u> as above, sandy
	40	<u>Shale</u> - carbonaceous with few coal laminae

DEPTHS	%	DESCRIPTION
8120-8130	10 50 30 10	<u>Sandstone</u> , abundant pyrite <u>Siltstone</u> , brown, carbonaceous, soft <u>Shale</u> , silty, carbonaceous <u>Coal</u> , black, brittle
8130-8140	10 20 70	<u>Sandstone</u> <u>Siltstone</u> <u>Shale</u>
8140-8150	10 10 50 30	<u>Sandstone</u> <u>Siltstone</u> <u>Shale</u> <u>Coal</u> , black, brittle, thin bedded
8165' CB XDV		
8150-8160	10 20 70	<u>Sandstone</u> <u>Siltstone</u> <u>Shale</u>
8160-8170	10 90	<u>Siltstone</u> <u>Shale</u> , grey and brown carbonaceous
8170-8180	100	<u>Shale</u> , grey, calcareous and brown carbonaceous
8180-8190	100	<u>Shale</u> , brown, carbonaceous, some silty, trace pyrite, trace coal
8190-8200	100	<u>Shale</u>
8200-8210	20 70 10	<u>Sandstone</u> , white, medium to coarse, subangular, unconsolidated quartz, pyrite <u>Shale</u> <u>Coal</u>
8210-8220	70 20 10	<u>Sandstone</u> <u>Shale</u> <u>Coal</u>
8220-8230 CB at 8253	20 70 10	<u>Sandstone</u> <u>Shale</u> <u>Coal</u>
8230-8240	80 20	<u>Shale</u> (much cavings) <u>Coal</u>
8240-8250	100	<u>Shale</u> (much cavings)
8250-8260	10 90	<u>Sandstone</u> <u>Shale</u>
8260-8270	90 10	<u>Shale</u> <u>Coal</u>
8270-8280	10 90	<u>Siltstone</u> <u>Shale</u>
8280-8290	10 80 10	<u>Siltstone</u> <u>Shale</u> , brown, carbonaceous, platy <u>Coal</u>
8290-8300	10 90	<u>Siltstone</u> <u>Shale</u>

DEPTHS	%	DESCRIPTION
8300-8310	10 80 10	<u>Siltstone</u> <u>Shale</u> <u>Coal</u>
8310-8320	10 90	<u>Siltstone</u> <u>Shale</u>
8320-8330	30 70	<u>Siltstone</u> - grey, carbonaceous, sandy <u>Shale</u>
8330-8340	30 60 10	<u>Siltstone</u> <u>Shale</u> <u>Coal</u>
8340-8350	20 70 10	<u>Siltstone</u> <u>Shale</u> - brown, carbonaceous, laminated <u>Coal</u>
8350-8360	20 80	<u>Siltstone</u> - grey white, firm, sandy, trace minor fluorescence, slightly calcareous <u>Shale</u>
8360-8370	60 40	<u>Siltstone</u> , brown grey, sandy, hard, tight, fair to weak fluorescence with no cut, gas show on chromatograph, slightly calcareous, minor fluorescence (?), pyrite <u>Shale</u>
8370-8380	20 70 10	<u>Siltstone</u> with pyrite <u>Shale</u> <u>Coal</u>
8380-8390	10 20 70	<u>Sandstone</u> , medium to coarse white unconsolidated quartz <u>Siltstone</u> - grey brown, very pyritic, hard <u>Shale</u>
8390-8400	20 80	<u>Shale</u> <u>Coal</u> - black, splintery, brittle
8400-8410	10 80 10	<u>Siltstone</u> <u>Shale</u> <u>Coal</u>
8410-8420	10 20 70	<u>Sandstone</u> <u>Siltstone</u> , grey, sandy, firm, pyritic <u>Shale</u> - brown, platy, carbonaceous with trace coal
8420-8430	20 80	<u>Sandstone</u> , white, very fine to fine grained quartz, unconsolidated, very pyritic <u>Shale</u> - brown to dark brown, very carbonaceous, fissile
8430-8440	20 80	<u>Sandstone</u> - white, very fine to fine grained with some coarse grains quartz, trace pyrite, hard, silty, induration, tight <u>Shale</u> as above
8440-8450	20 80	<u>Sandstone</u> as above but increase in coarse unconsolidated quartz <u>Shale</u>
8450-8460	30 50 20	<u>Sandstone</u> , white, coarse to very coarse, unconsolidated subangular quartz <u>Shale</u> <u>Coal</u>

DEPTHS	%	DESCRIPTION
8460-8470	20 30 40 10	<u>Sandstone</u> <u>Siltstone</u> , abundant pyrite <u>Shale</u> <u>Coal</u>
8470-8480	10 30 30 30	<u>Sandstone</u> <u>Siltstone</u> <u>Shale</u> <u>Coal</u>
8480-8490	10 30 50 10	<u>Sandstone</u> <u>Siltstone</u> - very pyritic <u>Shale</u> <u>Coal</u>
8490-8500	10 90	<u>Shale</u> <u>Coal</u> - bleeding gas 12 $\frac{1}{4}$ " hole reached T.D. of 8500'. Preparing to run 9-5/8" casing and drill out with 8 $\frac{1}{2}$ " bit

A.J. Mebberson  
17.8.1973

DEPTHS	%	DESCRIPTION
8500-8510	50	<u>Cement Cavings</u>
	40	<u>Shale</u> , carbonaceous, light to dark grey, firm, occasionally fissile, slightly calcareous
	10	<u>Siltstone</u> , light brown, slightly carbonaceous
8510-8520	100	<u>Cavings</u> as above, generally shale as above
8520-8530	40	<u>Cement</u> as above
	40	<u>Siltstone</u> , light grey-brown, noncalcareous, moderately firm
	20	<u>Shale</u> , carbonaceous, grey as above
		Trace sandstone, well rounded, occasionally fractured, no show, frosted, loose, fine to coarse
8530-8540	20	<u>Cement</u>
	40	<u>Mudstone</u> , shaley, slightly carbonaceous, moderately soft
	30	<u>Siltstone</u> as above
	10	<u>Coal</u> and carbonaceous shale as above
8540-8550	70	<u>Sandstone</u> , white, loose, very coarse to gritty, very angular, occasionally frosted, occasionally fractured, no show. No drilling break
	30	<u>Shale and siltstone</u> as above
8500-8520	100	<u>Mudstone</u> , grey, moderately soft, non calcareous, trace shale, carbonaceous, trace sandstone as above, no show
8570-8580	60	Shaley <u>mudstone</u> as above
	30	<u>Cement</u> as above
	10	<u>Sandstone</u> as above. No show
8580-8600	60	<u>Sandstone</u> as above, with coarse, loose, occasional frosted trace pyrite. No show
	40	Shaley <u>siltstone</u> , grey-brown, moderately soft, slightly carbonaceous
8600-8610	80	Silty <u>mudstone</u> , grey-brown, soft to firm
	20	Carbonaceous <u>shale</u> as above
		Trace <u>sandstone</u> , no show
8600-8620	60	<u>Shale</u> , firm, fissile, carbonaceous
	40	<u>Siltstone</u> , shaley as above
8620-8640	50	<u>Shale</u> as above
	50	<u>Siltstone</u> as above
8640-8650	80	<u>Shale</u> , very carbonaceous, fissile, firm
	20	<u>Siltstone</u> as above
		Trace sandstone
8650-8660	40	<u>Coal</u> , black, lustrous, hard to brittle
	60	<u>Siltstone</u> , brown-grey, firm, carbonaceous
8660-8670	50	<u>Sandstone</u> , white to clear, coarse to very coarse, angular to subangular, well sorted, loose, no show, no drilling break.
	30	<u>Siltstone</u> as above
	20	<u>Coal</u> as above
8670-8680	50	<u>Sandstone</u> , very fine grained to silty, grey, subangular to rounded, moderately sorted, well cemented, grey matrix, no show.
	10	<u>Sandstone</u> , coarse as above
	40	<u>Siltstone and carbonaceous shale</u> as above
8680-8690	60	<u>Siltstone</u> , brown, carbonaceous, occasionally sandy
	20	<u>Sandstone</u> , very fine grained as above, no show
	10	<u>Coal</u> as above
	10	<u>Sandstone</u> , coarse as above



DEPTHS	%	DESCRIPTION
8690-8700	50 30 20	<u>Siltstone</u> as above Very coarse <u>sandstone</u> as above Very fine grained <u>sandstone</u> as above interbedded in thin stringers in siltstone
8700-8710	60 30 10	<u>Siltstone</u> as above, grades into - <u>Sandstone</u> , very fine grained- silty as above, carbonaceous, no show, trace pyrite <u>Sandstone</u> , very coarse as above
8710-8720	20 60 20	<u>Siltstone</u> <u>Sandstone</u> , very fine grained to silty, carbonaceous, pyritic, micaceous as above, no show <u>Sandstone</u> , very coarse as above, occasionally loose grained
8720-8730	70 30	<u>Siltstone</u> as above, slightly sandy <u>Sandstone</u> , very fine grained, silty, grading into siltstone above, no show Trace loose coarse grains, no show
PO 8747		Suspected washout in drill string. Depth <del>corrections</del>
8730-8760	40 40 20	<u>Sandstone</u> , fine grained, well cemented, carbonaceous as above <u>Siltstone</u> as above Loose <u>sandstone</u>
8760-8770	50 20 30	<u>Sandstone</u> , very fine grained grades to siltstone, carbonaceous, occasionally brown in fluorescence, no cut, no show Loose <u>sandstone</u> as above, pyritic, no show <u>Siltstone</u> Trace carbonaceous <u>shale</u>
8770-8780	40 30 20 10	<u>Carbonaceous shale</u> , fissile, firm Very fine grained <u>sandstone</u> as above, no show <u>Siltstone</u> as above Loose coarse <u>sandstone</u> , no show
8780-8790	30 40 20 10	<u>Sandstone</u> , very fine grained as above, no show <u>Carbonaceous shale</u> , firm as above <u>Siltstone</u> as above <u>Sandstone</u> , coarse as above
8790-8800	90 10	<u>Coal</u> , black, lustrous <u>Carbonaceous shale</u> as above
8800-8810	50 30 20	<u>Carbonaceous shale</u> as above Trace <u>coal</u> as above <u>Sandstone</u> , very fine grained to medium grained as above, occasional minor fluorescence, no show <u>Siltstone</u> as above
8810-8820	20 50 30	<u>Coal</u> as above <u>Sandstone</u> , very fine grained as above <u>Carbonaceous shale and mudstone</u> as above
8820-8830	30 40 30	<u>Coal</u> as above <u>Sandstone</u> , very fine grained as above <u>Siltstone</u> as above
8830-8840	30 30 40	<u>Sandstone</u> , very fine grained as above <u>Sandstone</u> , loose, very coarse grained, angular to subrounded, well sorted, frosted, no show <u>Carbonaceous shale and siltstone</u> as above

DEPTHS	%	DESCRIPTION
8840-8850	50 30 10 10	<u>Siltstone</u> , carbonaceous as above <u>Sandstone</u> , very fine grained, occasional dull brown minor fluorescence, no show Carbonaceous <u>shale and coal</u> as above <u>Sandstone</u> , loose, very coarse as above, no show
8850-8860	30 30 20 20	<u>Coal</u> as above <u>Siltstone</u> as above <u>Sandstone</u> , very fine grained as above ) no show <u>Sandstone</u> , very coarse as above )
8860-8870	50 30 20	<u>Sandstone</u> , very fine grained as above, no show Carbonaceous <u>shale</u> , as above <u>Siltstone</u> as above
8870-8880	40 40 20	<u>Coal</u> as above <u>Sandstone</u> as above <u>Siltstone</u> as above
8880-8890	70 30	<u>Sandstone</u> , very fine grained to silty, no show <u>Siltstone</u> as above Trace <u>coal</u> as above
8890-8900	80 20	<u>Sandstone</u> , fine grained, carbonaceous, well cemented, firm, moderately sorted, silty, no show Carbonaceous <u>shale and siltstone</u> as above
8900-8910	80 20	<u>Sandstone</u> as above, no show Carbonaceous <u>shale</u> as above
8910-8940	50 40 10	<u>Sandstone</u> as above, no show <u>Siltstone</u> as above Carbonaceous <u>shale</u> as above
8940-8950	60 30 10	<u>Sandstone</u> , very fine to occasionally medium grained, no show <u>Siltstone</u> as above Carbonaceous <u>shale</u> as above
8950-8960	40 30 30	<u>Sandstone</u> , very fine grained, occasionally pyritic, no show <u>Siltstone</u> as above Carbonaceous <u>shale</u> as above
8960-8970	60 30 10	<u>Sandstone</u> as above <u>Siltstone</u> as above <u>Shale</u> as above
8970-8980	50 30 20	<u>Sandstone</u> as above, no show <u>Siltstone</u> <u>Shale</u> as above
8980-8990	50 20 30	<u>Sandstone</u> as above, no show <u>Siltstone</u> as above Carbonaceous <u>shale and coal</u> as above
8990-9000	60 30 10	<u>Coal</u> , dirty - good, shaley in part <u>Sandstone</u> as above, no show <u>Siltstone</u> as above
9000-9010	80 20	<u>Sandstone</u> as above, very carbonaceous, very fine grained to medium grained, moderately sorted, soft to firm, no show Carbonaceous <u>shale</u> as above

DEPTHS	%	DESCRIPTION
9010-9020	70	<u>Sandstone</u> as above, no show
	20	Carbonaceous <u>shale</u> and grey shale
	10	<u>Siltstone</u> , grey to brown, firm, carbonaceous
9020-9030	40	<u>Siltstone</u> , very carbonaceous, grey to brown, as above
	30	<u>Sandstone</u> as above, no show
	30	<u>Shale</u> as above
9030-9040	50	<u>Siltstone</u> as above
	30	Carbonaceous <u>shale</u> as above, trace <u>coal</u>
	20	<u>Sandstone</u> as above, no show

## SAMPLE DESCRIPTIONS

## STONEFISH-1

J. Mebberson  
J. Black  
P. Edwards

28/51

DEPTHS	%	DESCRIPTION
9040-9050	50	<u>Siltstone</u> , sandy, carbonaceous, grey-brown, firm to soft
	40	Carbonaceous <u>shale and coal</u> (trace)
	10	<u>Sandstone</u> , very fine grained, very silty, no show
9050-9060	70	Carbonaceous <u>siltstone</u> , occasionally sandy as above
	30	<u>Sandstone</u> as above
9060-9070	60	<u>Coal</u> , black, dull, dirty.
	20	<u>Siltstone</u> as above
	10	<u>Sandstone</u> as above, no show.
9070-9080	10	<u>Sandstone</u> , white, very fine grained to silty, tight, firm, slightly carbonaceous.
	30	<u>Siltstone</u> , brown, sandy, carbonaceous, firm.
	60	<u>Shale</u> , brown, very carbonaceous, some silty, platy fracture, fissile, firm
9080-9090	90	<u>Sandstone</u> , frosted white, coarse to very coarse, unconsolidated, subangular to subrounded quartz, good porosity and permeability, trace pyrite, trace light green quartz ? grains
	10	<u>Shale</u>
9090-9100	30	<u>Sandstone</u> as above with some consolidated medium to fine grained white sandstone.
	30	<u>Siltstone</u> , grey, sandy, carbonaceous
	40	<u>Shale</u> as above
9100-9110	60	<u>Sandstone</u> , white, very fine to fine grained, unconsolidated and friable, subrounded quartz with lithics, carbonaceous.
	20	<u>Siltstone</u> as above and micaceous, sandy, carbonaceous
	20	<u>Shale</u> as above
9110-9120	20	<u>Sandstone</u> as above with some coarse, unconsolidated grains.
	40	<u>Siltstone</u> , grey white, very sandy, hard, tight, carbonaceous
	40	<u>Shale</u> , grey and brown, very silty, carbonaceous
9120-9130	10	<u>Sandstone</u>
	60	<u>Siltstone</u>
	30	<u>Shale</u>
9130-9140	40	<u>Sandstone</u> - frosty white, coarse to very coarse, unconsolidated quartz, subangular to subrounded
	20	<u>Siltstone</u>
	40	<u>Shale</u>
9140-9150	20	<u>Sandstone</u> , fine to very coarse, white quartz, unconsolidated with few consolidated very friable pieces, poorly sorted, subangular with some lithics, fair porosity and permeability
	80	<u>Shale</u> , brown, very carbonaceous with many carbonaceous laminae, some silty, platy fracture.
9167		(Lost pump pressure, drill pipe wash out). Pulled out of hole. CB (J-33) laid down 2 joints, washed out drill pipe, serviced Bumper Subs and slipped line.
9150-9160		No sample (in hole on bit change)
9160-9170	20	<u>Siltstone</u> , grey white, firm
	80	<u>Shale</u> , brown and dark grey splintery fracture, firm, carbonaceous
9170-9180	30	<u>Sandstone</u> , white, very fine to fine grained, silty, firm to moderately friable, consolidated. Poor porosity and permeability, subrounded to subangular with lithics, carbonaceous
	20	<u>Siltstone</u> , brown grey, firm, carbonaceous
	50	<u>Shale</u> , brown and dark grey, silty, carbonaceous, firm, some splintery fracture

DEPTHS	%	DESCRIPTION
9180-9190	10	<u>Sandstone</u> , trace pyrite, fine grained
	10	<u>Siltstone</u>
	50	<u>Shale</u>
	30	<u>Coal</u> , black, brittle
9190-9200	10	<u>Siltstone</u>
	70	<u>Shale</u> , dark brown, platy fracture, very carbonaceous
	20	<u>Coal</u>
9200-9210	10	<u>Siltstone</u>
	90	<u>Shale</u>
9210-9220	10	<u>Sandstone</u>
	90	<u>Shale</u>
9220-9230	30	<u>Sandstone</u> , grey, very fine to fine consolidated, silty, firm, subrounded quartz with abundant lithics, poor porosity and permeability
	20	<u>Siltstone</u> , grey, firm
	50	<u>Shale</u> , with trace coal
9230-9240	10	<u>Sandstone</u>
	20	<u>Siltstone</u>
	70	<u>Shale</u>
9240-9250	20	<u>Siltstone</u> with trace sandstone
	80	<u>Shale</u>
9250-9260	20	<u>Siltstone</u> as above
	80	<u>Shale</u> , brown, very carbonaceous, silty, with trace coal
9260-9270	20	<u>Siltstone</u>
	80	<u>Shale</u> , trace of bleeding gas
9270-9280	20	<u>Sandstone</u> , milky white, medium to very coarse, unconsolidated subangular quartz
	10	<u>Siltstone</u>
	70	<u>Shale</u> , brown, carbonaceous with trace coal
9280-9290	10	<u>Siltstone</u>
	80	<u>Shale</u>
	10	<u>Coal</u>
9290-9300	10	<u>Sandstone</u>
	90	<u>Shale</u>
9300-9310	20	<u>Sandstone</u> , white, very fine grained, silty, firm with few coarse grains. Poor porosity and permeability, hard, tight.
	80	<u>Shale</u> , brown and dark brown, some silty, very carbonaceous
9310-9320	10	<u>Siltstone</u> as above
	80	<u>Shale</u> as above
	10	<u>Coal</u> as above
9320-9330	10	<u>Siltstone</u> as above
	80	<u>Shale</u> as above
	10	<u>Coal</u> as above
9330-9340	20	<u>Sandstone</u> , white, predominantly very fine grained to silty with scattered coarse grains, poorly sorted, friable, trace unconsolidated, some lithics, poor porosity and permeability.
	70	<u>Shale</u>
	10	<u>Coal</u>

DEPTHS	%	DESCRIPTION
9340-9350	50	<u>Sandstone</u> , milky white, coarse to very coarse, unconsolidated, subangular to angular quartz, good porosity and permeability. <u>No show</u>
	50	<u>Shale</u> as above with trace coal
9350-9360	70	<u>Shale</u>
	30	<u>Coal</u> , black, platy, shaley, bleeding gas
9360-9370	10	<u>Sandstone</u> , very fine grained, subrounded, unconsolidated with occasional coarse quartz grains.
	70	<u>Shale</u> , brown and dark grey, carbonaceous, some silty
	20	<u>Coal</u>
9370-9380	20	<u>Siltstone</u> - grey white, moderately firm, slightly carbonaceous
	80	<u>Shale</u> brownish grey, silty, carbonaceous
9380-9390	60	<u>Shale</u>
	40	<u>Coal</u> , black, brittle, cone-fractured
9390-9400	70	<u>Shale</u>
	30	<u>Coal</u> - <u>bleeding gas</u>
9400-9410	70	<u>Shale</u> , brown and dark grey, very carbonaceous, silty
	30	<u>Sandstone</u> , white, fine to very coarse, poorly sorted, very silty, moderately friable, very coarse grains, unconsolidated, pyrite, poor porosity and permeability
		<u>Trace bright yellow fluorescence with fair streaming cut leaving light clear yellow fluorescent oil residue.</u>
9410-9420	10	<u>Sandstone</u> - <u>trace fluorescence, fair streaming cut</u>
	80	<u>Shale</u>
	10	<u>Coal</u>
9420-9430	20	<u>Shale</u>
	80	<u>Coal</u> - black, conchoidal fracture
9430-9440	10	<u>Siltstone</u> - grey, sandy, firm
	90	<u>Shale</u>
9440-9450	10	<u>Sandstone</u> , white, very fine grained, moderately friable, thin bedded, <u>trace fluorescence, good cut and residue</u>
	90	<u>Shale</u> with trace coal.
9450-9460	10	<u>Sandstone</u> , white, very fine grained as above, <u>trace fluorescence, good yellow streaming cut, light brown residue</u>
	90	<u>Shale</u> , with trace coal
9460-9470	10	<u>Sandstone</u> , white, very fine grained as above, <u>trace yellow fluorescence</u>
	90	<u>Shale</u>
9470-9480	10	<u>Sandstone</u> , <u>trace yellow fluorescence</u>
	70	<u>Shale</u>
	20	<u>Coal</u>
9480-9490	10	<u>Sandstone</u> , <u>trace yellow fluorescence</u>
	80	<u>Shale</u>
	10	<u>Coal</u>
9490-9500	100	<u>Shale</u> , brown, carbonaceous, silty, trace sandstone, trace coal
9500-9510	10	<u>Sandstone</u> , white, fine to medium grained, poorly sorted, <u>trace fluorescence</u>
	80	<u>Shale</u>
	10	<u>Coal</u> - bleeding gas

DEPTHS	%	DESCRIPTION
9510-9520	10 90	<u>Sandstone</u> , <u>trace yellow fluorescence</u> <u>Shale</u>
9520-9530	70 30	<u>Shale</u> <u>Coal</u> , black, brittle, conchoidal fracture
9530-9540	80 20	<u>Shale</u> <u>Coal</u>
9540-9550	10 80 10	<u>Sandstone</u> , white, fine grained to silty friable, trace yellow fluorescence <u>Shale</u> <u>Coal</u>
9550-9560	10 70 20	<u>Sandstone</u> <u>Shale</u> <u>Coal</u>
9560-9570	20 80	<u>Sandstone</u> , white, very fine to fine grained, silty, friable, thin bedded, <u>fair yellow fluorescence</u> , good streaming cut. <u>Shale</u> , brown, carbonaceous, soft, some silty, trace coal
9570-9580	10 90	<u>Sandstone</u> as above, <u>trace yellow fluorescence</u> , good cut <u>Shale</u> with trace coal
9580-9590	100	<u>Shale</u> with trace coal
9590-9600	100	<u>Shale</u>
9600-9610	100	<u>Shale</u> , brown, very carbonaceous, silty, trace coal
9610-9620	30 70	<u>Siltstone</u> , tan, sandy, firm <u>Shale</u> as above
9620-9630	90 10	<u>Shale</u> , brown and dark brown, very carbonaceous with coal laminae <u>Coal</u>
9630-9640	10 90	<u>Siltstone</u> as above <u>Shale</u>
9640-9650	70 30	<u>Sandstone</u> , white, fine to medium grained, consolidated, silty, very hard, tight, slightly calcareous, poor porosity and permeability. No show. <u>Shale</u>
9650-9660	30 60 10	<u>Sandstone</u> <u>Shale</u> <u>Coal</u>
9660-9670	10 40 50	<u>Sandstone</u> as above <u>Siltstone</u> , brown, firm, sandy <u>Shale</u>
9670-9680	40 60	<u>Siltstone</u> <u>Shale</u>
9680-9690	20 80	<u>Siltstone</u> <u>Shale</u> , brown, silty, carbonaceous with coal laminae
9690-9700	10 90	<u>Sandstone</u> , tan white, fine grained to silty, thin bedded, fair fluorescence, fair cut <u>Shale</u>
9700-9710	90 10	<u>Shale</u> <u>Coal</u>

DEPTHS	%	DESCRIPTION
9710-9720	10 90	<u>Siltstone</u> <u>Shale</u>
9720-9730	10 90	<u>Siltstone</u> <u>Shale</u> with trace coal
9730-9740	10 90	<u>Siltstone</u> <u>Shale</u> , brown, very carbonaceous, silty in part, coaly
9738		Made 10 Stand wiper trip
9740-9750	20 80	<u>Siltstone</u> , trace yellow fluorescence, fair cut <u>Shale</u>
9750-9760	10 80 10	<u>Siltstone</u> , no show <u>Shale</u> <u>Coal</u>
9760-9770	90 10	<u>Shale</u> , light brown and dark grey, carbonaceous, some silty <u>Coal</u>
9770-9780	80 20	<u>Shale</u> <u>Coal</u>
9780-9790	90 10	<u>Shale</u> <u>Coal</u>
9790-9800	60 40	<u>Shale</u> <u>Coal</u>
9800-9810	30 70	<u>Sandstone</u> , tan, fine to medium grained, silty quartz, with lithics, dolomitic, some calcareous, hard, tight, poor porosity and permeability, no show - dull mineral fluorescence, no cut. <u>Shale</u>
9810-9820	10 80 10	<u>Sandstone</u> <u>Shale</u> <u>Coal</u>
9820-9830	20 70 10	<u>Sandstone</u> <u>Shale</u> <u>Coal</u>
9830-9840	20 70 10	<u>Sandstone</u> , tan as above and white friable fine grained, subrounded quartz with tan lithics (feldspar), very clay choked, poor porosity and permeability. Tan sandstone has dull yellow mineral fluorescence. White, fine grained sandstone has <u>trace bright yellow fluorescence with fair cut.</u> <u>Shale</u> , bleeding gas <u>Coal</u>
9840-9850	10 70 20	<u>Siltstone</u> , brown, very hard, tight <u>Shale</u> , dark brown, very carbonaceous, fissile. <u>Coal</u>
9850-9860	90 10	<u>Shale</u> as above, bleeding gas <u>Coal</u>
9860-9870	90 10	<u>Shale</u> , dark brown, very carbonaceous, fissile, coaly <u>Coal</u> , bleeding gas
9870-9880	90 10	<u>Shale</u> <u>Coal</u>



DEPTHS	%	DESCRIPTION
9880-9890	10 80 10	<u>Siltstone</u> , brown, hard <u>Shale</u> <u>Coal</u>
9890-9900	30  70	<u>Sandstone</u> , grey, white, fine to medium grained, silty, subangular quartz with lithics, pyritic, slightly calcareous, some dolomite. Poor porosity and permeability. Predominantly dull yellow, mineral fluorescence with <u>some bright yellow fluorescence that has a good cut</u> . Latter is in more friable pieces. <u>Shale</u> as above.
9900-9910	90 10	<u>Shale</u> , dark brown, very carbonaceous, coaly, bleeding gas <u>Coal</u> , black, brittle, conchoidal fracture
9910-9920	90 10	<u>Shale</u> <u>Coal</u>
9920-9930	10 10 70 10	<u>Sandstone</u> , trace fluorescence with good cut <u>Siltstone</u> <u>Shale</u> <u>Coal</u>
9930-9940	50  50	<u>Sandstone</u> , tan, white, fine grained, silty, abundant lithics, calcareous, dolomitic, hard, tight, <u>trace bright yellow fluorescence, good cut</u> . <u>Shale</u>
9940-9950	10 20 30 40	<u>Sandstone</u> , white, fine grained, <u>trace fluorescence, good streaming cut</u> <u>Siltstone</u> , brown, carbonaceous, hard <u>Shale</u> as above <u>Coal</u> , black, brittle, conchoidal fracture
9950-9960	80 20	<u>Shale</u> <u>Coal</u>
9960-9970	20 70 10	<u>Siltstone</u> , tan, sandy, very firm <u>Shale</u> <u>Coal</u> , bleeding gas
9970		Wash out (lost pump press.). Pulled out to C.B. Washed out Bumper Sub. Tested stack and went in with new J-33.
9970-9980	70 30	Poor sample (in hole at time of trip) <u>Shale</u> as above <u>Coal</u>
9980-9990	90 10	<u>Shale</u> , dark brown, very carbonaceous, splintery fracture <u>Coal</u>
9990-10000	90 10	<u>Shale</u> as above with trace fine grained sandstone with trace fluorescence and good cut <u>Coal</u>
10000-10010	10 70 20	<u>Sandstone</u> , white, fine grained, silty, consolidated, firm, <u>trace bright yellow fluorescence with good cut</u> , non calcareous <u>Shale</u> , dark brown, very carbonaceous, some with splintery fracture <u>Coal</u>
10010-10020	10 80 10	<u>Siltstone</u> <u>Shale</u> <u>Coal</u>
10020-10030	50 50	<u>Shale</u> , dark brown, very carbonaceous <u>Coal</u> , black, brittle, conchoidal fracture

DEPTHS	%	DESCRIPTION
10030-10040	90	<u>Shale</u> as above, but silty
	10	<u>Coal</u>
10040-10050	10	<u>Siltstone</u>
	80	<u>Shale</u>
	10	<u>Coal</u>
10050-10060	10	<u>Siltstone</u>
	80	<u>Shale</u>
	10	<u>Coal</u>
10060-10070	20	<u>Siltstone</u>
	70	<u>Shale</u>
	10	<u>Coal</u>
10070-10080	20	<u>Sandstone</u> , white, fine grained to medium grained, few unconsolidated white quartz grains; fine grained sand is consolidated, hard and tight. The few pieces that have porosity have <u>fair bright yellow fluorescence with good streaming cut.</u>
Increase in gas on chromatograph	10	<u>Siltstone</u>
	60	<u>Shale</u>
	10	<u>Coal</u>
10080-10090	20	<u>Siltstone</u> , tan, firm, sandy, trace sandstone with fluorescence, pyritic
	70	<u>Shale</u>
	10	<u>Coal</u>
10090-10100	10	<u>Siltstone</u> with scattered, very few grains unconsolidated coarse quartz
	90	<u>Shale</u> , brown, silty, carbonaceous
10100-10110	50	<u>Siltstone</u> , grey white, containing scattered grains subangular to angular, coarse lithics and quartz grains, very hard dense with occasional large piece of white calcite.
	50	<u>Shale</u>
10110-10120	90	<u>Siltstone</u> as above with more coarse grains of lithics and some green tinged quartz grains probably reworked Strzelecki, abundant calcite, no porosity or permeability, very hard and indurated, dull gold, mineral fluorescence, (calcite)
	10	<u>Shale</u>
10120-10130	100	<u>Sandstone</u> , grey white with tinge of light green, abundant calcite. Matrix is abundant dense siltstone, grains are angular quartz, reworked? volcanics, light green with small phenocrysts, occasional pieces plagioclase feldspar
10130-10140	100	<u>Sandstone?</u> as above, quartzitic
10140-10150	100	<u>Sandstone</u> agglomerate? as above
10150-10160	100	<u>Sandstone</u> agglomerate? as above
10160-10170	100	<u>Sandstone</u> as above
10170-10180	100	<u>Sandstone</u> as above
10180-10190	100	<u>Sandstone</u> , grey white, fine grained to silty matrix with coarse grains, angular quartz and reworked volcanics, trace carbonaceous matter, trace coal, trace shale, some reworked green tinged quartz from Strzelecki, abundant calcite

DEPTHS	%	DESCRIPTION
10190-10200	50 40 10	<u>Sandstone</u> as above, lessening calcite with increase in green grains <u>Siltstone</u> , tan white, hard, dense, trace carbonaceous matter <u>Shale</u> , brown, carbonaceous, firm, trace pyrite
10200-10210	80 10 10	<u>Sandstone</u> , grey white, siltstone matrix with predominance of coarse grained angular lithics including volcanics, angular coarse quartz, very hard, dense and indurated, increasing dark green grains (olovine?) in fine grained sandstone matrix <u>Siltstone</u> as above, lessening large calcite pieces <u>Shale</u> , trace brown dolomite
10210-10220	30 70	<u>Sandstone</u> as above <u>Volcanics?</u> (in Situ?) - rhyolite, light grey with few small phenocrysts
10220-10240	10 90	<u>Sandstone</u> as above <u>Volcanics</u> - in situ - rhyolite - light grey green with small phenocrysts, definitely acid type, abundant calcite probably from filled fracture, gold yellow mineral fluorescence.
10240-10250	50 40 10	<u>Sandstone</u> , white, fine to medium grained, poorly sorted, predominantly quartz with some lithics, trace pyrite, very hard, indurated, poor porosity and permeability <u>Volcanics</u> <u>Shale</u> as above
10250-10260	30 20 50	<u>Sandstone</u> , white, fine to coarse grained, angular, poorly sorted, hard, tight, poor porosity and permeability, pyritic <u>Siltstone</u> , white, hard, indurated, some large calcite fragments <u>Shale</u> - brown, very carbonaceous
10260-10270	30 10 60	<u>Sandstone</u> as above with large calcite pieces <u>Siltstone</u> <u>Shale</u> - brown, very carbonaceous, needle fracture
10270-10280	10 80 10	<u>Sandstone</u> <u>Shale</u> , dark brown, coaly <u>Coal</u>
10280-10290	20 70 10	<u>Sandstone</u> , as above, trace fluorescence <u>Shale</u> <u>Coal</u>
10290-10300	20 30 40 10	<u>Sandstone</u> <u>Siltstone</u> , white, firm, hard. <u>Shale</u> <u>Coal</u>
10300-10310	10 10 80	<u>Sandstone</u> as above, greywacke, scattered calcite <u>Volcanics</u> <u>Shale</u> , brown, carbonaceous
10310-10320	10 10 70 10	<u>Sandstone</u> (greywacke) <u>Volcanics</u> <u>Shale</u> <u>Coal</u>
10320-10330	10 80 10	<u>Siltstone</u> <u>Shale</u> <u>Coal</u>
10330-10340	10 90	<u>Sandstone</u> , greywacke <u>Shale</u> , brown, very carbonaceous, firm, silty

DEPTHS	%	DESCRIPTION
10340-10350	80 20	<u>Shale</u> <u>Coal</u>
10350-10360	70 30	<u>Shale</u> <u>Coal</u>
10360-10370	80 20	<u>Shale</u> , brown, very carbonaceous, firm <u>Coal</u>
10370-10380	10 80 10	<u>Siltstone</u> , light brown, firm <u>Shale</u> , dark brown, very carbonaceous <u>Coal</u>
10380-10390	10 50 40	<u>Sandstone</u> , tan, fine to medium grained, very hard, tight, with <u>trace fluorescence and good streaming cut</u> <u>Siltstone</u> , trace black (basalt?) volcanics with phenocryst, very soft <u>Shale</u> , brown, carbonaceous, silty
10390-10400	20 60 20	<u>Shale</u> <u>Graywacke sandstone</u> (hard, tight), clay matrix, angular, feldspar grains <u>Volcanics</u> as above
10400-10410	90 10	<u>Graywacke sandstone</u> , tan to grey, hard, dense, abundant feldspar, clay matrix <u>Shale</u>
10410-10420	80 20	<u>Graywacke sandstone</u> , as above <u>Shale</u>
10420-10430	40 10 50	<u>Graywacke sandstone</u> as above <u>Volcanics</u> <u>Shale</u> as above
10430-10440	20 70 10	<u>Graywacke sandstone</u> <u>Shale</u> <u>Volcanics</u>
10440-10445 T.D.	20 70 10	<u>Graywacke</u> <u>Shale</u> <u>Volcanics</u>

WELL COMPLETION REPORT

STONEFISH - 1

APPENDIX 2

SIDEWALL CORE DESCRIPTIONS

38/51

NO.	DEPTH	REC	ROCK TYPE	MODIFIERS	CAL	COLOR	INDUR DEG	GRAIN SIZE	SRTG	RND	DISS CLAY	STAIN	FLOURESCENCE			CUT FLUOR.		CUT RESIDUE		SHOW	PROB PROD	REMARKS - GAS								
													% RK	DISTR 14	INTEN 15	COLOR 16	INTEN 17	COLOR 18	QUAN 19			COLOR 20	21	22	C1	C2	C3	C4	C5	
1	8420	3/4	Clst	Sl.sdy&slty	Sl	Med.gy	Sft	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	300	100						
	2566.46																													
2	8272	3/4	Clst	Sl.sdy&slty	Sl	Gy-bn	Sft	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	600	150						
	2521.36																													
3	8150	1/2	Clst	Sl.sdy,slty	Sl	Med.gy	Sft	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100							
	2484.12			mica																										
4	7870	-	Misfire																											
5	7552	3/4	Ss	Slty	-	Gy	Sft	v.fn/ med.	Poor	Fair	Tr	-	-	-	-	-	-	-	-	-	-	-								
6	7465	1 1/2	Clst	v.sl.sdy, slty,mica.	-	Dk.bn	Firm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4500	400						
	2275																													
7	7245	-	Misfire																											
8	6870	3/4	Slstst	V.argil,v. sdy,mica.	Sl	Med/dk gy.	Firm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
9	6522	1 1/2	Slstst	As above,sl & Sh. slty,carb, mica.	Sl	Med/dk gy dk.gy	Firm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
10	6280	1 1/2	Coal			Blk		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
11	6150	1 1/2	Ss	Slty,mica, glauc.	Sl	Med.gy	Sft	v.fn	Fair	Poor	In	-	-	-	-	-	-	-	-	-	-	-	100	200						
12	6050	1 1/2	Ss	As above	"	"	"	"	"	"	"	-	-	-	-	-	-	-	-	-	-	-	150							
13	5955	3/4	Slstst	Sdy,cly		Med.gy	Sft	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-								
14	5922	3/4	Slstst	As above		Med.gy	Sft	in	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400	100	100	Tr	10			
			&Clst	Sl.sdy&slty		Dk.bn	Firm	mix																						

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PAGE 2 OF 3  
ATT 30 REC 28

ESSO AUSTRALIA LTD.  
SIDEWALL CORE DESCRIPTIONS

WELL STONEFISH-1  
GEOLOGIST W. HALLSTEIN  
SERVICE CO SCHLUMBERGER

DATE 8 AUGUST 1973  
IES RUN NO 2  
SWC RUN NO 1

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				CUT FLUOR.		CUT RESIDUE		SHOW 21	PROB PROD 22	REMARKS - GAS						
													% RK	DISTR 14	INTEN 15	COLOR 16	INTEN 17	COLOR 18	QUAN 19	COLOR 20			C1	C2	C3	C4	C5		
15	5914	1 1/4	Clst	Sdy		Y1	Firm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	250	100	100			
16	5890	2"	Clst	V.s.l.sdy & slty	S1	Med.gy	Firm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400	100	100			
17	5850	1 1/2	Clst	Slty, sdy, mic	S1	Med.gy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400	100	100			
18	5790	1 - 3/4	Clst	Slty, sdy, mic	S1	Med.gy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	700	200				
19	5785	1 1/2	Clst	As above	S1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	350	100				
20	5770	1 1/4	Clst	Slty, py	Fair	Med.gy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	400	150				
21	5740	1 - 3/4	Clst	Calc. →		Med.gy	Firm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	300					
22	5720	2"	Clst	As above				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	450					
23	5660	1 1/2	Clst	As above				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	300					
24	5630	1 1/2	Clst	A.a.silty zones				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	250	50				
25	5540	1 - 3/4	Clst	A.a.sl.silty				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	350	100				
26	4868	1 1/4	Clst	A.a.more calc.				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	250	50				
27	4390	1"	Clst	A.a.				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100					
28	4000	1"	Clst	A.a.				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150					

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PAGE 3 OF 3  
 ATT 30 REC 28  
 DATE 8 AUGUST 1973

ESSO AUSTRALIA LTD.  
 SIDEWALL CORE DESCRIPTIONS

WELL STONEFISH-1  
 GEOLOGIST W. HALLSTEIN  
 SERVICE CO. SCHLUMBERGER

IES RUN NO 2 SWC RUN NO 1

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			CUT FLUOR.		CUT RESIDUE		SHOW 21	PROB PROD 22	REMARKS - GAS 23	
													% RK	DISTR 14	INTEN 15	COLOR 16	INTEN 17	COLOR 18	QUAN 19				COLOR 20
29	3500 1066	1 1/2	Clst	Sl.silty	Fr	Med.gy		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C1 100
30	3150	1 1/2	Clst	A.a.				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100



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ESSO AUSTRALIA LTD.  
SIDEWALL CORE DESCRIPTIONS

IES RUN NO 2 SWC RUN NO 1

WELL STONEISL-1  
GEOLOGIST J. BLACK  
SERVICE CO SCHLUMBERGER

NO.	DEPTH	REC	ROCK TYPE	MODIFIERS	CAL	COLOR	INDUR	GRAIN	SRTG	RND	DISS	CLAY	STAIN	FLOURESCENCE			CUT FLUOR.		CUT RESIDUE		SHOW	PROD	REMARKS - GAS
														%	DISTR	INTEN	COLOR	INTEN	COLOR	QUAN			
1a	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	C1, C2, C3, C4, C5
1	10,424	1/2	Sh	Sltty, Sdy	v. sl	Dk.gr.	Sft	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Tr/ 0/ 0/ 0/
2	10,406	5/8	Sltst	Sdy, arg.	sl	Wh.	Sft	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Tr/ 0/ 0/ 0/
3	10,374	5/8	Sltst	Sdy, arg, pyr, micac.	sl	Gr.	Sft	f.g.	Poor	Sa	+25%	-	30	Spty	Fnt	Yell.	Dull	Yell.	Lt.	Lt.brn	0	None	500/100/100/ 0/
4	10,314	1/2	Gray-wacke	Rk. frag.		Lt.grn	Hd.	f/crs	Poor	Sa/Sr	+25%	-	-	-	-	-	-	-	-	-	-	-	Tr/ 0/ 0/ 0/
5	10,254	1/2	Sltst	Carb.	-	Gr.brn	Frm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200/ 0/ 0/ 0/
6	10,210	1/8	Sltst	Mostly vein of calcite	v	Brn & Lt.grn	Sft	-	-	-	+15%	-	90	Even	Bri.	Dull Yell.	Min.fluor.	-	-	-	-	None	0/ 0/ 0/ 0/
7	10,184	1/2	Volc.	Lith., arg.	sl	Lt.gr.	Sft	v/f.m.	Poor	Sr.	+25%	-	60	Spty	Fnt	Yell.	Dull	Yell.	Lt.	Lt.brn	0	None	500/200/200/ 0/
8	10,110	1"	Volc.	V. arg. detr. carb.	v	Lt.gr.	Sft	v.f.	Poor	Sr.	+25%	-	60	Spty	Fnt	Yell.	Dull	Yell.	Lt.	Lt.brn	0	None	100/ 0/ 0/ 0/
9	10,069	3/4	Ss.	arg., thin bd, brn.sh.	-	Lt.gr.	St.	f/crs	Poor	Sr	+25%	-	30	Spty	Fnt	Yell.	Dull	Yell.	Lt.	Lt.brn	0?	None	300/ 50/ 0/ 0/
10	10,030	5/8	Sh.	Indur.	-	Dk.gr.	Frm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200/100/ 50/ 0/
11	9,959	3/4	Sltst	Sli.carb.sdy	sl	Gr.	Frm	v.f.	-	-	+25%	-	-	-	-	-	-	-	-	-	-	-	1700/600/ 50/ 0/
12	9,828	3/4	Ss.	Sltty	-	Wh.	Fri.	f.g.	Mod.	Sa	+15%	-	100	Even	Fnt	Yell.	Dull	Yell.	Lt.	Lt.brn	0	None	0/ 0/ 0/ 0/
13	9,820	3/4	Sltst	Sdy, arg.	-	Gr.	Sft	f.g.	-	-	+25%	-	-	-	-	-	-	-	-	-	-	-	0/ 0/ 0/ 0/
14	9,731	1	Sh.	V. carb, coaly	-	Dk.brn	Frm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200/1100 /700/0/
15	9,643	1	Ss.	Cln, good por. & perm. qtz.	-	Wh.	Fri.	m.g.	w.	Sr	-	-	-	-	-	-	-	-	-	-	-	-	100/ 0/ 0/ 0/
16	9,548	1	Ss.	Carb. lam. cln qtz good por&per	-	Wh.	Fri.	f/m	w	Sr	-	-	100	Even	Bri.	Yell.	Bri.	Yell.	Hvy	Brn	0	Oil	200/250/150/300/
17	9,496	3/4	Sh.	Sltty, carb, micac.	-	Dk.brn	Frm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200/ 0/ 0/ 0/
18	9,402	1	Sst	Carb. qtz fr. por&perm	-	Brn.wh	Fri.	f/m	Mod.	Sa	+15%	-	20	Spty	Fnt.	Yell.	Dull	Yell.	Lt.	Lt.brn	0	None	400/200/200/200/
19	9,352	1 3/8	Coal	Shaly, drty	-	Blk	Frm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9000/1300/200/ 0/
20	9,280	1/2	Sltst	Sdy	-	Gry	Frm	f	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Tr/ 0/ 0/ 0/
21	9,120	1/2	Sltst	Sdy	-	Gry	Sft	f	-	-	-	-	-	-	-	-	-	-	-	-	-	-	700/200/ 0/ 0/
22	9,046	3/4	Sh	Sli.sltty, micac.	-	Gry	Sft	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200/150/ 50/ 0/

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PAGE 2 OF 2  
ATT 30 REC 30  
DATE 26 AUGUST, 1973

ESSO AUSTRALIA LTD.  
SIDEWALL CORE DESCRIPTIONS  
IES RUN NO 2 SWC RUN NO 1

WELL STONEFISH-1  
GEOLOGIST J. BLACK  
SERVICE CO. SCHLUMBERGER

NO.	DEPTH	REC	ROCK TYPE	MODIFIERS	CAL	COLOR	INDUR DEG	GRAIN SIZE	SRTG	RND	DISS CLAY	STAIN	FLOURESCENCE			CUT FLUOR.		CUT RESIDUE		SHOW	PROB PROD	REMARKS - GAS	
													%	DISTR	INTEN	COLOR	INTEN	COLOR	QUAN				COLOR
1a	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
23	8,993	1 1/2	Sh	V.coaly	-	Blk	Frm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C1, C2, C3, C4, C 25, 11, 4. 000/000/000/200/
24	8,931	1 1/2	Sh.	Carb,silty	-	Dk.brn	Frm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Tr/ 0/ 0/ 0/
25	8,893	3/4	Sh.	F.micac	-	Grey	Frm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1400/600/100/ 0/
26	8,836	5/8	Ss.	Clean qtz good por& perm.	-	Tan.wh.	Fri.	f/c	Poor	Sa/ Sr	-	-	-	-	-	-	-	-	-	-	-	-	Wtr 0/ 0/ Tr/100/45
27	8,810	5/8	Slt	Sltly	-	Gry	Frm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100/200/ 50/ 0/
28	8,746	5/8	Sltst	Shly,micac. carb.	sl.	Gry	Frm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100/ 0/ 0/ 0/
29	8,687	5/8	Sltst	Shly	-	Gry	Frm	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100/ Tr/ 0/ 0/
30	8,558	3/4	Sltst	Sdy,F.micac	sl	Lt.gr.	Frm	f.g.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0/ 0/ 0/ 0/

WELL COMPLETION REPORT

STONEFISH-1

APPENDIX 3

PALAEONTOLOGICAL DATA SUMMARY

by D.J. Taylor

BASIN GIPPSLAND

BY David TAYLOR

Form R193 3/71

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WELL NAME STONEFISH - 1

DATE 10-10-73

ELEV. \_\_\_\_\_

Foram Zonules

		Highest Data	Quality	2 Way Time	Lowest Data	Quality	2 Way Time
MIOCENE	A	Alternate					
	B	Alternate					
	C	Alternate			3150	1	
	D	3500	1		4390	0	
	D <sub>1</sub>	Alternate					
	D <sub>2</sub>	Alternate	4868	0	4868	0	
	E	*5540	0		5540	0	
	E	Alternate					
	F	Alternate	5630	0	5720	0	
	G	Alternate	5740	0	5790	0	
	H <sub>1</sub>	Alternate	5850	0	5890	1	
H <sub>2</sub>	Alternate						
OLIGOCENE	I <sub>1</sub>	Alternate					
	I <sub>2</sub>	Alternate					
	J <sub>1</sub>	@5914	1		5914	1	
	J <sub>2</sub>	Alternate					
EOC.	K	Alternate					
	Pre K						

\* 5540 is at the base of E = E-2

@ The low diversity fauna makes it impossible to distinguish between J-1 and J-2.

The ranking of 5914 as 1 refers to the J determination and not to J-1.

No fauna was found in S.W.Cs at 5922, 5955, 6050 & 6150

COMMENTS: The "greensand" of S.W.C. 5914 has been oxidized suggesting a hiatus immediately above it. This is confirmed by the apparent absence of I and H-2 in the sequence.

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 \_\_\_\_\_

STONEFISH - †

. = 1-20 specimens  
I = over 20 specimens

STONEFISH-1 SPECIES LIST.

Sheet 1  
of 4 sheets

Depth not to scale	3150	3500	4000	4390	4868	5540	5630	5660	5720	5740	5770	5785	5790	5850	5890	5910	5922	5955	6050	6150
Side wall cores	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
PLANKTONICS																				
1. Orbulina universa	I		.	I	I												N	N	N	N
2. Globigerina apertura	I	I		I	I	I	I	I	I	I	I	I	I	I	I		O	O	O	O
3. G. woodi woodi	I	I		I	I	I	I	I	I	I	I	I	I	I	I					
4. G. bulloides	I	I	I	I	I	I	I	I	I								F	F	F	F
5. Globorotalia mayeri mayeri	I																A	A	A	A
6. G. miozea conoidea	I	.	L	I													U	U	U	U
7. G. menardii	.																N	N	N	N
8. G. mayeri barisaensis		.		I	I												A	A	A	A
9. Globigerinoides trilobus		.	.		I	I	I	I	I	I	I	I	I							
10. Globorotalia peripheroacuta				.	.												F	F	F	F
11. G. peripheroronda					.	I		I									O	O	O	O
12. G. miozea miozea						.	I	I	I		I	I					U	U	U	U
13. Globoquadrina dehiscens							I	I	I	I							N	N	N	N
14. G. advena							I					I	I	I	I		D	D	D	D
15. Globigerinoides bisphericus							I		I	I										
16. G. glomerosa curva							I													
17. Globorotalia praescitula								I		I	I	I								
18. Globigerina woodi connecta									I	I	I	I	I	I	I					
19. Globorotalia zealandica										I	I	I								
20. Globoquadrina praedehiscens														I						
21. Globigerina preabulloidis											I	I	I	I						
22. Globorotalia cf. miozea												I	I	I						
23. G. kugleri																				
24. G. opima continuosa																		I		
25. Globigerina angioporoides																				I
26. G. trilocularis																				I
Sidewall core	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
ZONE	C	D-1	D-1	D-1	D-2	E-2	F	F	F	G	G	G	G	H-1	H-1	J	NO FAUNA FOUND			
Depth not to scale	3150	3500	4000	4390	4868	5540	5630	5660	5720	5740	5770	5785	5790	5850	5890	5914	5922	5955	6050	6150

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. = 1-20 specimens

STONEFISH - 1 - SPECIES LIST

Sheet 2

I = more than 20 specimens

of 4 sheets

Depth <u>not to scale</u>	3150	3500	4000	4390	4868	5540	5650	5660	5720	5740	5770	5785	5790	5850	5890	5914	5922	5955	6050	6150
Sidewall core	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
CALCAREOUS BENTHONICS I																				
27. Cibicides thiara	I		I	I		I											N	N	N	N
28. C. lobatulus (convex)	I		I	I	I												G	O	O	O
29. C. cygnorum		I	I																	
30. C. medicris		I	I														F	F	F	F
31. C. lobatulus (irregular)			I														A	A	A	A
32. Anomalinoidea macroglabra			I														U	U	U	U
33. Karreria maoria																	N	N	N	N
34. Gyroidinoidea subzelandica																	A	A	A	A
35. Anomalina aotea																				
36. Melonis sp?																	F	F	F	F
37. Osangularia bengalensis																	O	O	O	O
38. Anomalinoidea procolligera																	U	U	U	U
39. Gyroidina broekiana																	N	N	N	N
40. Cibicides karreriformis										I							D	D	D	D
41. Alabamina sp?																				
42. Cibicides cf. mundulus																				
43. Laticarinina sp?																				
44. Gyroidinoidea tenera																				
45. G. zelandica																				
46. Anomalinoidea vitrinoda																				
47. "Planulina" wullerstorfi																				
48. Cibicides perforatus																				I
CALCAREOUS BENTHONICS II & III not present																				
CALCAREOUS BENTHONICS IV																				
49. Cassidulina carinata	I	I		I	I															
50. Sphaeroidina bulloides		I		I	I	I				I	I	I		I	I					
51. CASSIDULINA subglobosa				I																I
52. Chilostomella spp.																				
53. Nonionella sp.																				
54. Pullenia spp																				
Sidewall core	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
ZONE	C	D-1	D-1	D-1	D-2	E-2	F	F	F	G	G	G	G	H-1	H-1	J				

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. = 1-20 specimens  
I = over 20 specimens.

STONEFISH - 1 SPECIES LIST

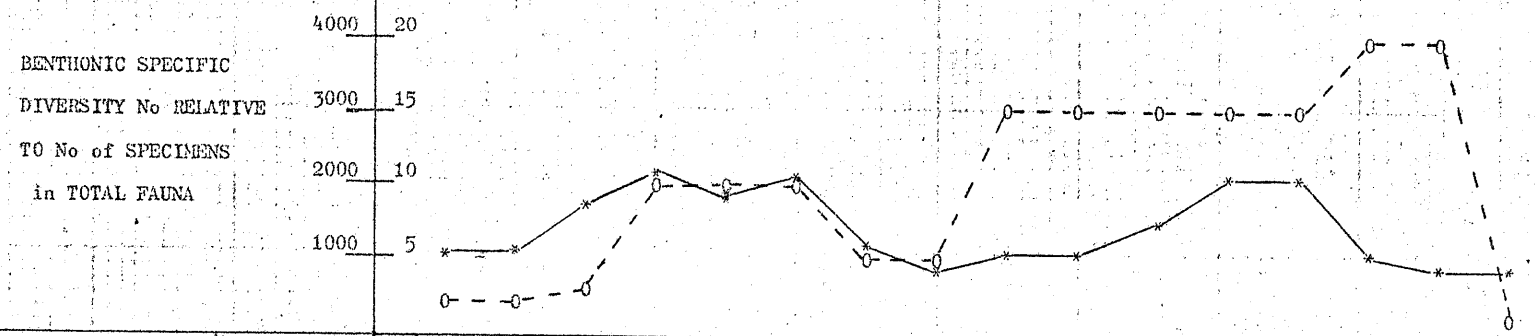
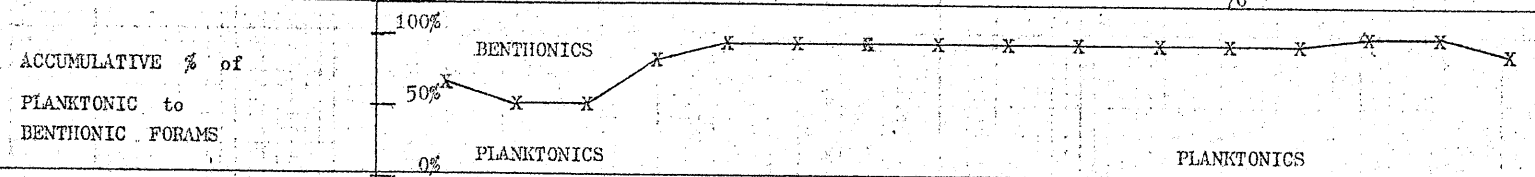
Sheet 3  
of 4 sheets

Depth <u>not to scale</u>	3150	3500	4000	4390	4868	5540	5630	5660	5720	5740	5770	5785	5790	5850	5890	5914	5922	5955	6050	6150
Sidewall core	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
CALC. BENTHONICS V																				
55. Pleurostomella sp?		.																		
56. Euvigerina miozea			I	I																
57. E maynii				I			I													
58. Globobulimina pacifica												.			.					
59. Brizalina noblis																				
CALC. BENTHONICS VI																				
60. Lagena spp.	I						I		I		I	I		.						
61. Lenticulina spp.	I	.	.		I				.	.	.	I	.							
62. Nodosaria spp.	I								.	.	.		.							
63. Glandulina sp?										.										
64. Lenticulina mamilligera																				
CALC. BENTHONICS VII																				
65. miliolids spp.				.		.														
66. Sigmoidopsis schlumbergi					.			.												
67. Triloculina sp. (carinate)											.		.		.					
ARENACEOUS BENTHONICS - PRIMITIVE																				
68. Ammodiscus sp. (smooth)						.				.										
69. Avelophragmium cf. incisa						.				.										
70. Discammina compressa						.			I	.		.	.		.					
71. Rhabdammina spp						.			I	.	.	.	.		.					
72. Bathysiphon sp.B						.				.	.	.	.		.					
73. Reophax sp.						.				.	.	.	.		.					
ARENACEOUS BENTHONICS - COMPLEX																				
74. Martinotiella communis					.															
75. Kareriella bradyi					.		.			.	.	.	.		.					
76. Vulvulina granulosa					.		.			.	.	.	.		.					
77. Gaudyrina convexa					.		.			.	.	.	.		.					
OTHER FAUNA																				
Sponge spicules	I	.																		
Echinoid spines														.						

STONEFISH - 1 SPECIES LIST.

Sheet 4  
of 4 sheets.

Depth <u>not to scale</u>	3150	3500	4000	4390	4868	5540	5630	5660	5720	5740	5770	5785	5790	5850	5890	5914	5922	5955	6050	6150
ZONE	C	D-1	D-1	D-1	D-2	E-2	F	F	F	G	G	G	G	H-1	H-1	J	NO	FAUNA	FOUND	
Side wall core	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T	T
ENVIRONMENTAL ASSEMBLAGES	7	7	7	7/6	6/5	5	5	5	4	4	4	4/3	4/3	3	3	9/8				
	OUTER	SHELF			SHELF/SLOPE BREAK		UPPER	SLOPE	LOWER	SLOPE	BASE	SLOPE	CONTINENTAL RISE	TRANSGRESSIVE HIATUS BETWEEN 5914 & 5890						
DIAGNOSTIC SPECIES IN ENVIRONMENTAL ANALYSIS	28	29	28	28	28	37	56	37	37	39	37	42	37	47	47	48				
	49	30	29	33	49	68	75	39	40	68	39	43	44	66	57					
		49	30	49	66	69		66	70	71	66	57	66	69	66					
	Sponge spics		31	56	74	70			71	75	71	58	70		70					
			56	57		71					75	69			75					
						75						70								
												71								
												75								
												76								



\* — \* = benthonic specific diversity      0 - - - 0 = relative no of specimens in total fauna

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LITHOLOGICAL DESCRIPTION of SIDEWALL CORES

from STONEFISH - 1

by David Taylor.....10-10-73

Sidewall

Core No.	Depth	Description of untreated core	Description of residue
	3150	light grey micrite	f. grained calcite, disseminated pyrite, rare ang. qtz + abundant sponge spicules, forams relatively rare
	3500	" " "	as above, but sponge spicules rare
	4000	" " "	f. grained calcite, forams relatively rare.
	4390	grey/brown marl	marl fragments, forams relatively abundant
	4868	grey/brown micrite	f. grained calcite, disseminated pyrite, globigerinids abundant but recrystallized and in smallest specimen size range.
	5540	medium grey micrite	as above but globigerinids specimens within normal size range
	5630	light grey micrite	as above
	5660	" " "	as above
	5720	medium grey micrite	as above
	5740	" " "	as above
	5770	light grey micrite	as above but globigerinid specimens very small size
	5785	" " "	as above but globigerinid specimens in normal size range
	5790	medium grey micrite	as above
	5850	" " "	mainly globigerinids ( normal size range) = GLOBIGERINID OOZE + diss. pyr.
	5890	" " "	as above + rare glauconite pellets & ang. qtz.
HIATUS			
	5914	light to dark brown silty sand with limonite	orange stained m-c ang qtz, limonite pellets (after glauconite), forams, qtz. sandstone fragment with sideritic cement. Therefore sediment is an oxidized "greensand".
	5922	dark grey mudstone & grey/green qtz sandy silt	f-m ang. qtz, mica, carbonaceous matter, brown f. qtz sandstone, no fauna
	5955	grey/green f. qtz sandy silt	f-m ang. qtz, mica, carbonaceous matter, no fauna
	6050	laminated dark grey & green grey f. qtz sandy silt	as above + f. qtz sanstone fragments
	6150	grey/green silty clay	f-m ang. qtz with rare orange ssm f. qtz sandstone fragments

49/51

WELL COMPLETION REPORT

STONEFISH - I

APPENDIX 4

PALYNOLOGICAL REPORT

by L. Stover

BASIN

Gippsland

DATE

August 1973

51/51

WELL NAME

Stonefish-1

ELEVATION

KB-32'; DF-31'

AGE	PALYNOLOGIC ZONES	HIGHEST DATA				LOWEST DATA					
		Preferred Depth	Rtg.	Alternate Depth	Rtg.	2 way time	Preferred Depth	Rtg.	Alternate Depth	Rtg.	2 way time
OLIGO-MIOC.	<u>T. bellus</u>										
	<u>P. tuberculatus</u>										
EOCENE	<u>U. N. asperus</u>										
	<u>L. N. asperus</u>										
	<u>P. asperopolus</u>										
	<u>U. M. diversus</u>	5922	1				6150	1			
	<u>L. M. diversus</u>										
PALEO-CENE	<u>L. balmei</u>	6522	1				7456	1	7552	2	
	<u>T. longus</u>	8150	1				8764	1			
LATE CRETACEOUS	<u>T. lilliei</u>	8893	1				9496	1			
	<u>N. senectus</u>	9548	1				10424	1			
	<u>C. trip./T.pach.</u>										
	<u>C. distocarin.</u>										
	<u>T. pannosus</u>										
EARLY CRETACEOUS	<u>C. paradoxa</u>										
	<u>C. striatus</u>										
	<u>U. C. hughesii</u>										
	<u>L. C. hughesii</u>										
	<u>C. stylosus</u>										
	Pre-Cretaceous										

COMMENTS:

- RATINGS: 0; SWC or CORE, EXCELLENT CONFIDENCE, assemblage with zone species of spores, pollen and microplankton.
- 1; SWC or CORE, GOOD CONFIDENCE, assemblage with zone species of spores and pollen or microplankton.
- 2; SWC or CORE, POOR CONFIDENCE, assemblage with non-diagnostic spores, pollen and/or microplankton.
- 3; CUTTINGS, FAIR CONFIDENCE, assemblage with zone species of either spores and pollen or microplankton, or both.
- 4; CUTTINGS, NO CONFIDENCE, assemblage with non-diagnostic spores, pollen and/or microplankton.

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

DATE RECORDED BY: L. E. Stover DATE November 1973

DATA REVISED BY: \_\_\_\_\_ DATE \_\_\_\_\_

BASIN GIPPSLAND

DATE \_\_\_\_\_

WELL NAME STONEFISH-1

ELEVATION \_\_\_\_\_

AGE	PALYNOLOGIC ZONES	HIGHEST DATA				LOWEST DATA					
		Preferred Depth	Rtg.	Alternate Depth	Rtg.	2 way time	Preferred Depth	Rtg.	Alternate Depth	Rtg.	2 way time
Eocene	<u>P. tuberculatus</u>										
	<u>U. N. asperus</u>										
	<u>M. N. asperus</u>										
	<u>L. N. asperus</u>										
	<u>P. asperopolus</u>	5922	1				6150	1			
	<u>U. M. diversus</u>										
	<u>M. M. diversus</u>										
	<u>L. M. diversus</u>										
Paleocene	<u>U. L. balmei</u>	6522	0				6870	1			
	<u>L. L. balmei</u>	7465	1				7552	1			
	<u>T. longus</u>	8150	1				8764	1			
Cretaceous	<u>T. lilliei</u>	8893	1				9496	1			
	<u>N. senectus</u>	9548	1				10424	1			
	<u>C. trip./T.pach.</u>										
	<u>C. distocarin.</u>										
	<u>T. pannosus</u>										
EARLY CRETACEOUS											
PRE-CRETACEOUS											

COMMENTS: The Wetzeliella Dinoflagellate Zones were not identified in the P. asperopolus Zone indicating marginal marine conditions only. The W. homomorpha Zone is present however at 6522!

- 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: L.E.S.

DATE Nov. 1973.

DATA REVISED BY: A.D.P.

DATE Jan. 1975.

WELL LOG ANALYSIS REPORT

51A

TO WELL FILE  
STONEFISH-1 APPENDIX 5.

OPERATOR Esso Australia Ltd WELL Stonefish-1 DATE 29th August 1973

STATE Victoria ELEV. 32' K.B.

DEPTH INTERVAL	POROSITY ESTIMATE	WATER SAT. ESTIMATE	REMARKS
8831-8835 (4)	19-20	29-30	See below
9397-9404 (7)	20-21	35-38	
9548-9550 (2)	20-21	Too thin for resolution	
9641-9648 (7)	19.5-21	29-31	
10065-10074 (9)	17-18	15-16	

TESTS:

FIT at 10069. Rec'd 50 cc. oil cut mud

FORMATION:

Latrobe

LOGS:

ISF-SLK,  
FDC-CNL-GR

COMMENTS:

Only the zones identified as having hydrocarbon shows are listed.

On the basis of the FIT recovery, it appears that the CNL porosities are too low. Since we have not used this tool in this size hole before we do not know if there is a fault in the automatic bore hole correction circuitry or if this is the normal response which would require different interpretation techniques. Schlumberger has been advised of this potential problem.

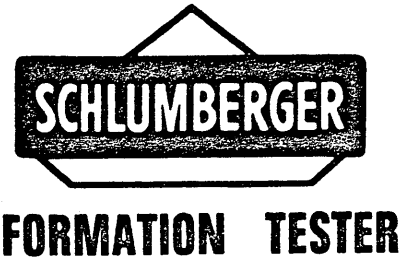
*R.D. King*

**STONEFISH - 1.**

FORMATION TESTER RECOVERY DATA **FTI DATA**

TEST No. <u>1</u>	RECOVERY DATA	TOOL DATA
TEST DEPTH <u>10.069</u>	Gas (Total) <u>0.2</u> cuft	Type of tool <u>FTI COMBO</u>
OPEN HOLE TEST <input checked="" type="checkbox"/>	Condensate <u>-</u> cc	Type of Sample shot <u>CONTRACT &amp; SC</u>
CASED HOLE TEST <input type="checkbox"/>	Oil <u>-</u> cc	Sample Unit size <u>22,165</u> cc
	Water <u>-</u> cc	Choke size <u>0.030</u>
	Mud <u>50</u> cc	
	Sand <u>-</u> cc	
PRESSURE DATA	RECOVERY ANALYSIS	MUD FILTRATE DATA
Initial Shut in <u>-</u> psi	Free Gas <u>0</u> cuft	Rmf <u>40</u> @ <u>70</u> °F
Shut in Time <u>-</u> min	Oil <u>-</u>	Equivalent Cl <u>-</u> ppm
Sampling <u>0</u> psi	API Gravity <u>-</u> @ <u>-</u> °F	Rw <u>-</u> @ <u>-</u> °F
Sampling Time <u>7 1/2</u> min	GOR <u>-</u>	Equivalent Cl <u>-</u> ppm
Final Shut in <u>-</u> psi	Water <u>-</u>	REMARKS <u>0.2 CUB GAS REPRESENTS</u>
Shut in Time <u>-</u> min	Rrf (Filtered) <u>-</u> @ <u>-</u> °F	<u>THE S.C. WHICH WAS FIRED AFTER</u>
Hydrostatic <u>5,500</u> psi	Equivalent Cl <u>-</u> ppm	<u>4 MINS</u>
Surface Chamber <u>0</u> psi		

COMPANY ESSO AUSTRALIA LTD.  
 WELL STONEFISH I  
 FIELD WILD CAT  
 COUNTRY AUSTRALIA STATE VICTORIA



PE906350

This is an enclosure indicator page.  
The enclosure PE906350 is enclosed within the  
container PE902331 at this location in this  
document.

The enclosure PE906350 has the following characteristics:

- ITEM\_BARCODE = PE906350
- CONTAINER\_BARCODE = PE902331
  - NAME = Structure Contour Map
  - BASIN = GIPPSLAND
  - PERMIT = VIC/P1
  - TYPE = SEISMIC
  - SUBTYPE = HRZN\_CNTR\_MAP
- DESCRIPTION = Structure Contour Map on Mid-Paleocene  
Seismic Marker for Stonefish-1
- REMARKS =
- DATE\_CREATED = 31/01/74
- DATE\_RECEIVED =
- W\_NO = W673
- WELL\_NAME = STONEFISH-1
- CONTRACTOR =
- CLIENT\_OP\_CO = ESSO AUSTRALIA LIMITED

(Inserted by DNRE - Vic Govt Mines Dept)

PE601443

This is an enclosure indicator page.  
The enclosure PE601443 is enclosed within the  
container PE902331 at this location in this  
document.

The enclosure PE601443 has the following characteristics:

- ITEM\_BARCODE = PE601443
- CONTAINER\_BARCODE = PE902331
- NAME = Well Completion Log
- BASIN = GIPPSLAND
- PERMIT =
- TYPE = WELL
- SUBTYPE = COMPLETION\_LOG
- DESCRIPTION = Well Completion Log
- REMARKS =
- DATE\_CREATED = 29/08/73
- DATE\_RECEIVED =
- W\_NO = W673
- WELL\_NAME = Stonefish-1
- CONTRACTOR = ESSO
- CLIENT\_OP\_CO = ESSO

(Inserted by DNRE - Vic Govt Mines Dept)



PE906351

This is an enclosure indicator page.  
The enclosure PE906351 is enclosed within the  
container PE902331 at this location in this  
document.

The enclosure PE906351 has the following characteristics:

ITEM\_BARCODE = PE906351  
CONTAINER\_BARCODE = PE902331  
NAME = Geological Cross-section  
BASIN = GIPPSLAND  
PERMIT = VIC/P1  
TYPE = WELL  
SUBTYPE = CROSS-SECTION  
DESCRIPTION = Geological Cross-section (Pre-drill)  
for Stonefish-1  
REMARKS =  
DATE\_CREATED = 30/06/73  
DATE\_RECEIVED =  
W\_NO = W673  
WELL\_NAME = STONEFISH-1  
CONTRACTOR =  
CLIENT\_OP\_CO = ESSO AUSTRALIA LIMITED

(Inserted by DNRE - Vic Govt Mines Dept)

PE906352

This is an enclosure indicator page.  
The enclosure PE906352 is enclosed within the  
container PE902331 at this location in this  
document.

The enclosure PE906352 has the following characteristics:

ITEM\_BARCODE = PE906352  
CONTAINER\_BARCODE = PE902331  
    NAME = Time-Depth Curve  
    BASIN = GIPPSLAND  
    PERMIT = VIC/P1  
    TYPE = WELL  
    SUBTYPE = VELOCITY\_CHART  
    DESCRIPTION = Time-Depth Curve for Stonefish-1  
    REMARKS =  
    DATE\_CREATED = 17/08/73  
    DATE\_RECEIVED =  
    W\_NO = W673  
    WELL\_NAME = STONEFISH-1  
    CONTRACTOR =  
    CLIENT\_OP\_CO = ESSO AUSTRALIA LIMITED

(Inserted by DNRE - Vic Govt Mines Dept)

PE603666

This is an enclosure indicator page.  
The enclosure PE603666 is enclosed within the  
container PE902331 at this location in this  
document.

The enclosure PE603666 has the following characteristics:

ITEM\_BARCODE = PE603666  
CONTAINER\_BARCODE = PE902331  
NAME = Mud Log  
BASIN = GIPPSLAND  
PERMIT = VIC/P1  
TYPE = WELL  
SUBTYPE = MUD\_LOG  
DESCRIPTION = Mud Log for Stonefish-1  
REMARKS =  
DATE\_CREATED = 25/08/73  
DATE\_RECEIVED =  
W\_NO = W673  
WELL\_NAME = STONEFISH-1  
CONTRACTOR = BAROID  
CLIENT\_OP\_CO = ESSO AUSTRALIA LIMITED

(Inserted by DNRE - Vic Govt Mines Dept)

PE905977

This is an enclosure indicator page.  
The enclosure PE905977 is enclosed within the  
container PE902331 at this location in this  
document.

The enclosure PE905977 has the following characteristics:

ITEM\_BARCODE = PE905977  
CONTAINER\_BARCODE = PE902331  
NAME = Geological Cross-Section A-A' (Post  
Drill)  
BASIN = GIPPSLAND BASIN  
PERMIT = VIC/P1  
TYPE = WELL  
SUBTYPE = CROSS\_SECTION  
DESCRIPTION = Stonefish Prospect Geological Cross  
Section A-A', Post Drill, (from WCR)  
for Stonefish-1  
REMARKS =  
DATE\_CREATED = 31/01/74  
DATE\_RECEIVED =  
W\_NO = W673  
WELL\_NAME = STONEFISH-1  
CONTRACTOR =  
CLIENT\_OP\_CO = ESSO EXPLORATION AND PRODUCTION  
AUSTRALIA INC.