

Pelican 1, Raw Data Report.

Esso Exploration and Production Australia Incorporated

Contents:

Application to Drill
Notice of Intention to Drill
Completion Report
Core Analysis Results
Weekly Drilling Reports

Figures:

1. Bass Basin Drilling
2. Structure Contour Map on Approx. Top of U.Cretaceous
3. Structure Contour Map on Paleocene Unconformity
4. Structural Cross Section
5. Structure Map on Uppermost M.diversus Horizon


Hematite Petroleum Proprietary Limited

440 COLLINS STREET, MELBOURNE • POSTAL ADDRESS: G.P.O. BOX 2752Y, MELBOURNE, VIC. 3001
 TELEPHONE: 60 0331 • TELEGRAPH: "HEMEX" MELBOURNE • TELEX 30785

Our Ref.

MAR:YEF-H

12th March, 1970.

Your Ref.

The Designated Authority,
 C/o Director of Mines,
 Department of Mines,
 G.P.O. Box 124B,
HOBART, Tas.7001

RECEIVED	CC & M	DESIGN
ANSWERED	DEPT. OF MINES	
REF. NO.		

Dear Sir,

EO3/1A Application to Drill Pelican No.1
 in Permit T/P6

I enclose herewith a Notice of Intention to drill Pelican No.1 Well in the Tasmanian waters of the Bass Basin.

Pelican No.1 location is 38 miles south-east of the Bass No.3 Well, and will be drilled by the "Ocean Digger" after the completion of Whelk No.1. The objective is to test Lower Paleocene and Upper Cretaceous sandstone of the Eastern View Coal Measures within a deep anticline. Proposed total depth is 12,000 feet.

Pelican is a large Upper Cretaceous to early Tertiary anticline which was truncated near the middle of the Paleocene. Near the top of the Upper Cretaceous, the structure has an area of about 60 square miles and a vertical closure of approximately 600 feet, (Fig.2). The structure map is based on a phantom reflection that cannot be correlated precisely throughout the area nor tied to well control. The presence of the large anticline is confirmed by deeper reflection segments.

The middle Paleocene truncation marked the end of folding in the area, and an unconformity (Fig.3) separates the lower and upper sections of the

Paleocene. Closure is not evident in the Upper Paleocene and overlying Eocene beds.

Normal faulting is apparent in strata of Eocene and Oligocene ages and, although it cannot be traced clearly, some minor local faulting is suspected within the Paleocene and Upper Cretaceous.

Depth estimates based on seismic reflection character and velocity analysis indicate that basement will be lower than 12,000 feet, whereas estimates based on the aeromagnetic survey of 1961 suggest basement at 8500 feet. It is felt from previous experience in the area, however, that the seismic interpretation is more likely to be correct.

The stratigraphic section at the Pelican prospect is expected to be similar to that drilled in the Bass 3 Well. The marine Miocene and Oligocene sections are composed of calcarenite, mudstone and shale and these overlie the Upper Eocene Demon's Bluff Formation composed of marine siltstone and shale. Conformably below the Demon's Bluff Formation is the Upper Eocene to Upper Cretaceous Eastern View Coal Measures with an unconformity developed at about mid-Paleocene time. This formation is made up of sandstone, coal and shale deposited in environments ranging from delta plain through beach front, and is very similar to the Latrobe Valley formation of the Gippsland Basin.

In the Bass 3 Well shales comprise about 44% of the Eocene part of the Eastern View formation, 53% of the Upper Paleocene, 73% of Lower Paleocene and 50% of Upper Cretaceous section. Both seal and reservoir conditions could be present, therefore, in the anticline below the unconformity. Although the gas show in Bass 3 was in the Upper Paleocene part of the section, it was nevertheless within a shale-sandstone sequence of the type expected in Pelican No.1.

The prognosis of Pelican 1 is as follows :-

3.

0-240 ft.	Water.
-5430 ft.	Torquay Group equivalent.
-5825 ft.	Demon's Bluff Formation.
5825-7100 ft.	Eastern View Coal Measures (Eocene - Upper Paleocene) unconformity.
7100-7720 ft.	Eastern View Coal Measures (Lower Paleocene)
-12,000 ft. (T.D.)	Eastern View Coal Measures (Upper Cretaceous)

(These are depths sub-sea; for drill depths add 99 feet).

The movement date of the vessel will be advised when the drilling of Whelk No.1 is further advanced.

Yours faithfully,

W.M. Lonie

W.M. Lonie, General Manager

Encl.

Petroleum (Submerged Lands)
Act 1967-68

Petroleum (Submerged Lands)
Act 1967

NOTICE OF INTENTION TO DRILL

To the Designated Authority, State of Tasmania:
We, Hematite Petroleum Proprietary Limited, being the holder of Petroleum Exploration Permit No.T/P6 herewith notify the intention to drill a well and request your permission to carry out the proposed operation :

1. Well: Pelican No.1.

Classification: Wildcat.
2. Operator: Esso Standard Oil (Australia) Ltd.,
380 Lansdale Street,
MELBOURNE.

Person in Charge:

M. Bates,
380 Lonsdale Street,
MELBOURNE.
Phone - 600401.

Geological Supervision:

A.C. Pierce,
Esso Standard Oil (Australia) Ltd.,
71-79 Macquarie Street,
SYDNEY, N.S.W.
Phone - 20557.
3. Drilling Contractor:

Ocean Drilling & Exploration Co.
(Australia) Ltd.,
180 Russell Street,
MELBOURNE.
Phone - 6634041.

Drilling rig: Ocean Digger.

Date of commencement: during March,
1970.
4. Details of Operation:

Capt Williams notified by phone 16/3
had
Location: Latitude 40° 20' 21" S.
Longitude 145° 50' 37" E.
Water Depth: 240 feet.
Drilling datum: D.F. 99 feet above
M.S.L.

Casing Programme: 20-inch at 500 feet.
13 3/8-inch at 2500 ft.
9 5/8-inch at 8500 ft.

2.

4. Details of Operation (Contd.)

- Logging programme:
- (1) Continuous mud logging from base 20-inch casing to T.D.
 - (2) At 13 3/8-inch casing point, IES and BHCS logs; take SWC's.
 - (3) At 9 5/8-inch casing point, IES, BHCS, FDC, CDM, possibly MLL and N logs, run a velocity survey; take SWC's. F.I.T.'s as required.
 - (4) At T.D. - as above in (3).

Samples: Catch 4 sets of cuttings at 10' intervals, plus one can of 10' samples every 100' from base 20-inch casing to T.D.

Coring: Core all significant hydrocarbon shows. One core at 5599 feet in Demon's Bluff Formation. One core at 5924 feet and one core at 7199 feet (drill depths) in Eastern View Coal Measures.

Proposed Total Depth: 12,000 feet.

Notification Date: 12th March, 1970.

W.M. Lonie
W.M. Lonie, General Manager

MAR:YEF
Melbourne.

5 cm

PEP 40

PEP 38

WILSONS PROMONTORY

V/P1

Mullet-1

Bluebone-1

T/3P

Cormorant

T/4P

Bass-1

Bass-2

FLINDERS ISLAND

KING ISLAND

Bass-3

40°00'

40°00'

Pelican

T/5P

T/6P

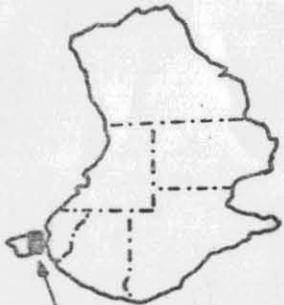
Clam-1

TASMANIA

TASMANIA

148°00'

144°00'



Map Area

AUSTRALIA

BASS BASIN DRILLING

BASS BASIN

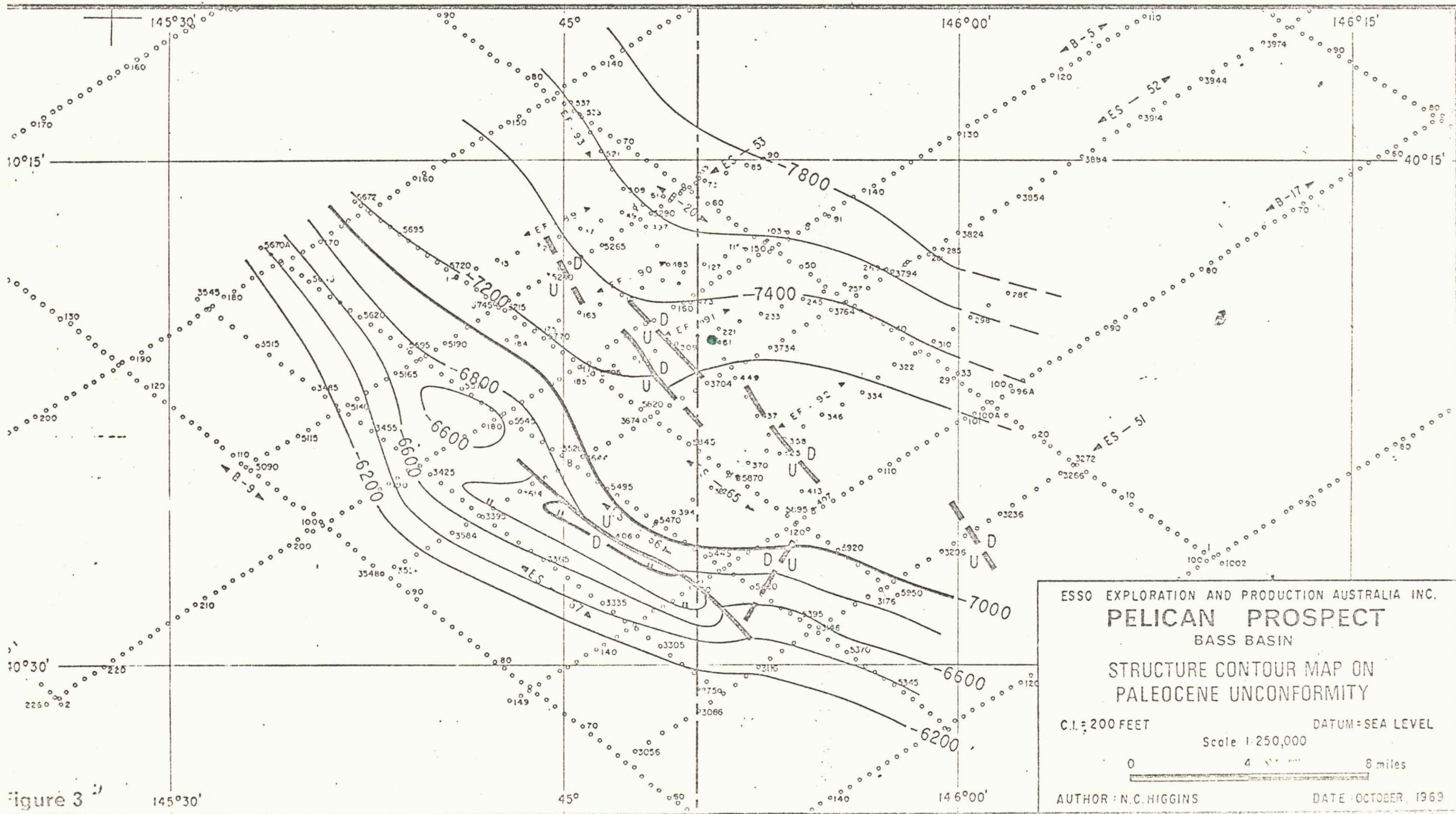
Scale 1:1,250,000



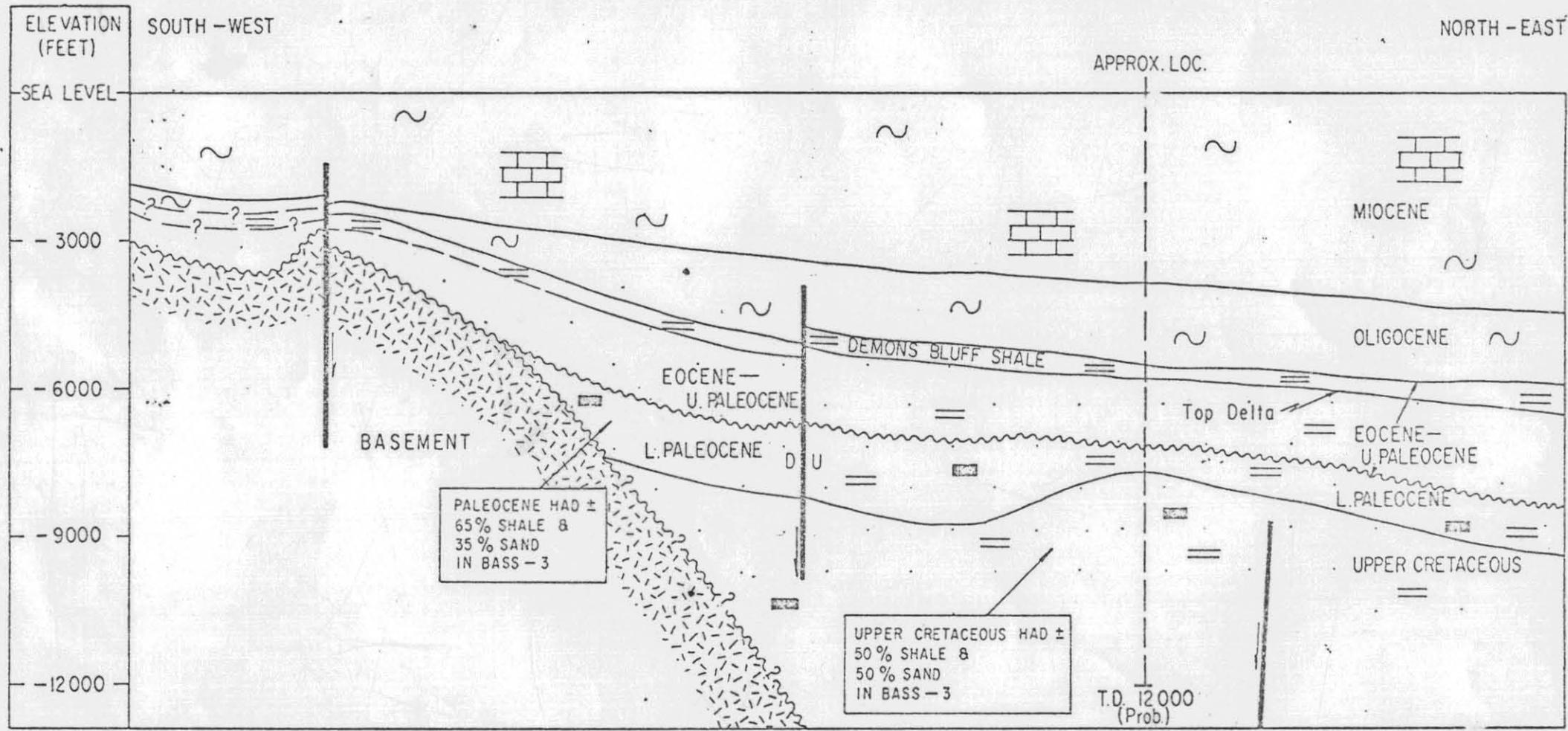
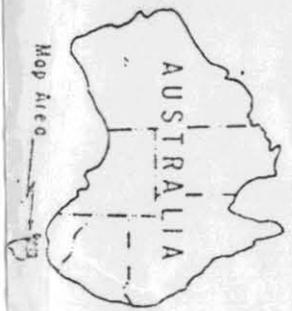
FIGURE 1.

DATE DECEMBER 1969

5 cm



5 cm



LEGEND

Shale	Limestone	Marl
Coal	Basement	Sandstone

ESSO EXPLORATION AND PRODUCTION AUSTRALIA INC
PELICAN PROSPECT
 BASS BASIN

STRUCTURAL CROSS SECTION

Scale 1: 250 000

Vertical Scale 1 inch = 3000 Feet

0 4 Miles

Author: M. J. GUNNS, J. B. G. ACK. DATE: OCT 1972

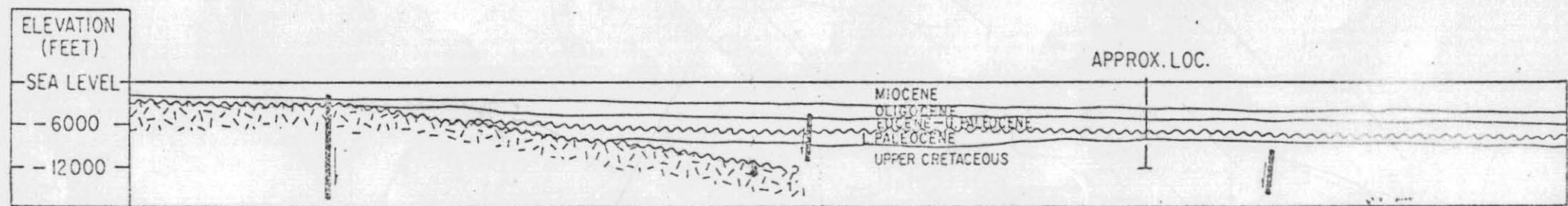


Fig. 4

ACTUAL SCALE: VERTICAL & HORIZONTAL = 1: 250 000

COMPLETION REPORT

385008

I WELL DATA RECORD

Date 17.7.70

LOCATION

WELL NAME PELICAN 1	STATE TASMANIA AUSTRALIA	PERMIT or LICENCE T/P6	GEOLOGICAL BASIN BASS	FIELD Wildcat
CO-ORDINATES Lat. Long. X Y		MAP PROJECTION	GEOGRAPHICAL DESCRIPTION	
Surface 40°20'20.8"S 145°50'37.1"E		Zone 7	39.8 miles NE of Rocky Cape, Tasmania	
Bottom Hole 385469 1030611				

ELEVATIONS & DEPTHS

ELEVATIONS	WATER DEPTH	TOTAL DEPTH	Avg. Ang
Ground Sea Level	251 FEET	M.D. 10,428 FEET	
KB 100'		T.V.D.	
RT	PLUG BACK DEPTH	REASONS FOR P.B.	
Braden Head	500 FEET	ABANDONMENT	
Top Deck Platform			

DATES

MOVE IN	RIG UP	SPUDED
17.3.70	18.3.70	19.3.70
RIG DOWN COMPLETE	RIG RELEASED	PROD.UNIT - Start Rigging Up
1.5.70	1.5.70	
PROD.UNIT - Rig Down Complete	I.P. ESTABLISHED	

MISCELLANEOUS

OPERATOR ESSO	PERMITTEE or LICENCEE Hematite Petroleum Pty.Ltd.	ESSO INTEREST Well 100% Permit Nil	OTHER INTEREST
CONTRACTOR ODECO	RIG NAME OCEAN.DIGGER	EQUIPMENT TYPE SEMI-SUBMERSIBLE DRILLING VESSEL	
TOTAL RIG DAYS 45.1	DRILLING AFE NO. 230202	COMPLETION NO.	TYPE COMPLETION
LAHEE WELL	Before Drilling	Wildcat	
CLASSIFICATION	After Drilling	Abandoned with shows of hydrocarbons.	

II

INITIAL PRODUCTION TEST - None
Wire Line Test Data attached on page 3

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 Temper- ature	

III

PERFORATING RECORD (Prod.test, Completion, DST, FIT)

INTERVAL	HPF	TOTAL SHOTS	SERV. CO.	DIFF. PRESS.	PERFORATION FLUID	SIZE AND TYPE C
8367		1	Schlumberger			F.I.T

Engineer

IV

CASING - LINER - TUBING RECORD

Type	Size	Weight	Grade	Thread	No. Joints	Amount	Dr
Conductor	30"x16-3/4" Pile Joint						
	20"	104	X55LP	Vetco	11	478.16	8
Surface	13-3/8"	54.5	J-55	Butt.	56	2162.00	25
Inter-mediate	9-5/8"	43.5	N-80	Butt.	82	3346.32	
	9-5/8"	40.0	N-80	Butt.	121	4854.40	85
NOTE:	Pile Joint was salvaged prior to rig down.						

V

CEMENT RECORD

String	20"	13-3/8"	9-5/8"
Type of Cement	940 sx w/2% Gel & 500 sx w/2% CaCl ₂	375 sx w/2% Gel & 300 sx w/2% CaCl ₂	640 sx w/.8% H ₂ O
Number of FT ³	2100	958	755
Average weight of slurry	13.7 / 15.5	13.7 / 15.3	15.2
Cement Top	Sea Floor	1450' Temp. Survey	6400' (Calc)
Casing Tested with	500 psi	1500 psi	3000 psi
Number of Centralizers	0	5	12
Number of Scratchers	0	0	0
Stage Collar etc.	0	0	0
Remarks	Gel Prehydrated	Gel Prehydrated Seal Leaked on Test	

Engineer

WELL.

VII

SAMPLES, CONVENTIONAL CORES, SW CORES

INTERVAL	TYPE	RECOVERED	INTERVAL	TYPE	RECOVERED
5600 - 5630	Core No.1	Cut 30'. Rec 30'			
5840 - 5861	Core No.2	Cut 21'. Rec.21'			
7110 - 7130	Core No.3	Cut 20'. Rec.20'			
7749 - 7777	Core No.4	Cut 28'. Rec 28'			
8354 - 8384	Core No.5	Cut 30'. Rec 30'			
8540 - 8570	Core No.6	Cut 30'. Rec.30'			
9263 - 9283	Core No.7	Cut 20'. Rec.20'			
9426 - 9456	Core No.8	Cut 30'. Rec.28'			
10058 - 10038	Core No.9	Cut 30'. Rec.30'			
10386 - 10398	Core No.10	Cut 12'. Rec.12'			
865 - 10428	Sidewall	114' Sidewall Core.			
865 - 10428	Cuttings	10' samples.			
865 - 10428	Canned Cuttings	100' samples.			

VIII

WIRELINE LOGS AND SURVEYS (Incl. FIT) *

Type & Scale	From	To	Type & Scale	From	To
IES	2" & 5"	10414' - 871'		Test 9 @	942'
BHCS-GR	2" & 5"	2530' - 871'		" 10 @	937'
BHCS	2" & 5"	10408' - 2512'		" 11 @	916'
FDC-GR	2" & 5"	10408' - 2512'		" 12 @	910'
GR-N	2" & 5"	10414' - 7100'		" 13 @	898'
LL-7	2" & 5"	10408' - 8540'		" 14 @	864'
MLL		10414' - 7320'		" 15 @	836'
CDM	2" & 5"	10408' - 2512'			
FIT	<u>Run 1</u>				
	Test 1 to 6	8600' - 2512'			
		Test 1 @ 8557			
		" 2 @ 8484			
		" 3 @ 8367			
		" 4 @ 8138			
		" 5 @ 8115			
		" 6 @ 8515			
FIT	<u>Run 2</u>				
	Test 1 to 15	10428' - 8540'			
		Test 1 @ 10368			
		" 2 @ 10372			
		" 3 @ 10033			
		" 4 @ 10045			
		" 5 @ 9858			
		" 6 @ 9474			
		" 7 @ 10041			
		" 8 @ 9422			

*Schlumberger Measure

Burt. L. Gulp.
Geologist

IX NAME	FORMATION TOPS/Zones		Gross Interval (ft)	Net Gas	Pay (ft). Oil	REMARKS
	M.D.	Sub-sea				
Gellibrand Marl	351'	-251	3549'	8110-24 (14)		Proved
Jan Juc -	3900'	-3800	1465'	8352-74 (18)		Proved
Demons Bluff	5365'	-5265	395'	8473-90 (11)		Proved
Eastern View				8554-60 (6)		Probable
(Top of Boonah sand-marine)	5760'	-5660	183'	8627-53 (19)		Probable
(Top of non-marine)	5943'	-5843	4485'+	8950-9026(57)		Proved
				9100-94 (81)		Probable
				9372-9442(66)		Proved
				9469-78 (9)		Probable
				9822-64 (34)*		Probable
				10029-59(23)*		Proved
				10365-74(9)*		Proved
				347		

*Abnormal Pressure

X GEOLOGIC ANALYSIS (Pre Drilling prognosis Vs actual results)

OBJECTIVE: To test Lower Paleocene and Upper Cretaceous sandstones of the Eastern View sandstone complex on a deep seated anticlinal closure of Upper Cretaceous and Lower Paleocene age.

Age	PREDICTED TOPS		ACTUAL TOPS	
	Formation	Subsea Depth	Formation	Subsea Depth
Miocene	Gellibrand marl	-251 (sea floor)	Gellibrand marl	-251 (sea floor)
Oligocene	Jan Juc	-3800	Jan Juc	-3800
Eocene	Demons Bluff	-5430	Demons Bluff	-5265
Eocene -	Eastern View	-5825	Eastern View	-5660 probably
U. Paleocene	(Top of Sand - Boonah)			Eocene to T.D.
Lower Paleocene		-7100		Not encountered
Upper Cretaceous		-7720		Not encountered

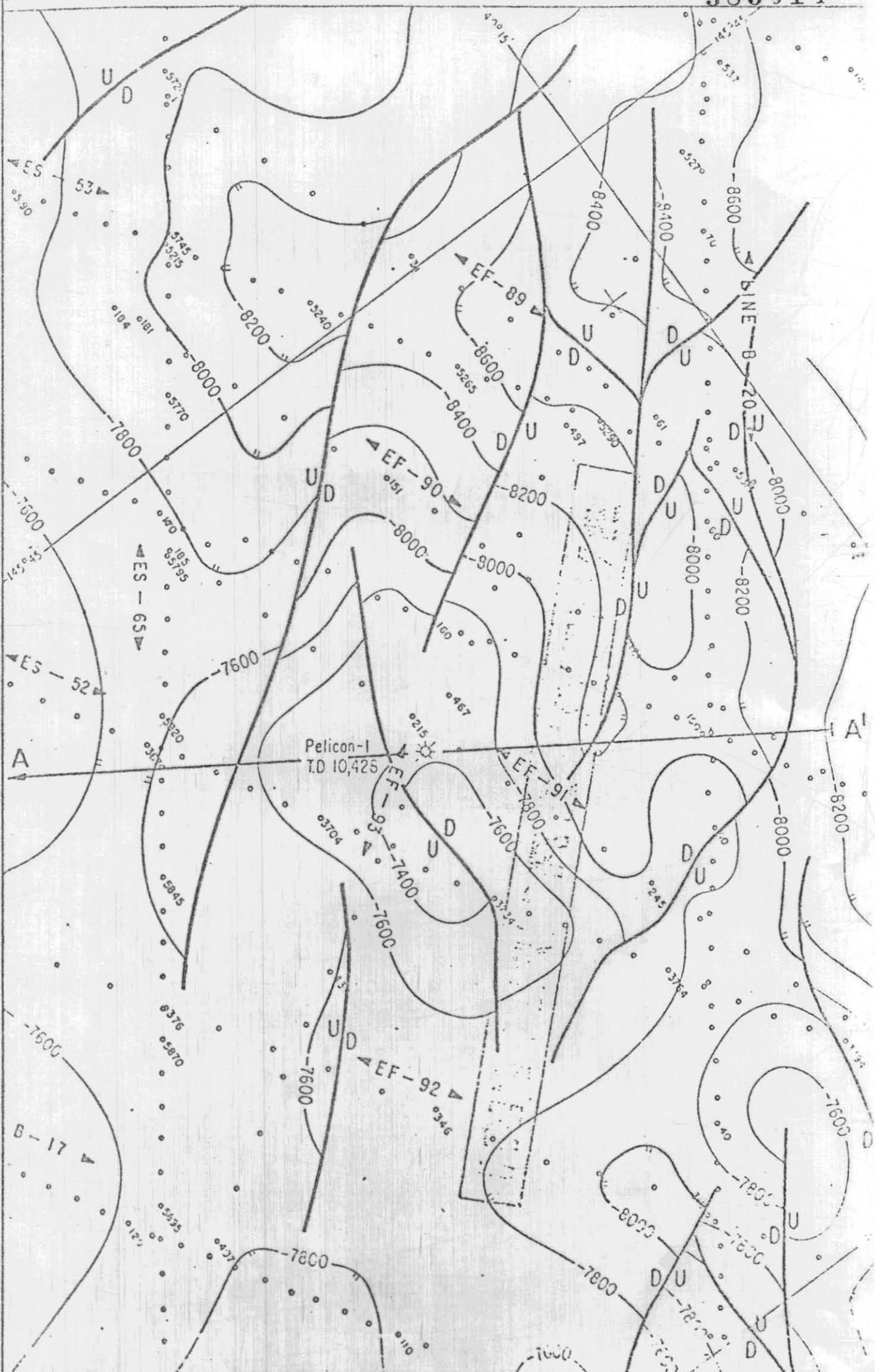
The deep anticlinal closure was encountered as predicted below approximately -7500'. The age of the strata from -7100' to a total depth of 10,428' (driller) was however, found to be Eocene (M.diversus) with a possibility of Upper Paleocene (L.balmei) only in the very bottom of the hole, and not Paleocene and Upper Cretaceous as previously interpreted.

The first gas-condensate pay zone was encountered at 8110' (driller). A total of 12' sand (see IX above) contained gas-condensate: 9 above high pressure and 3 within the high pressure. Wireline tests indicate condensate yields varying from 106-252 barrels per million cubic feet of wet gas. The three tested sands below 9822' (driller) were found have abnormally high pressures. The top of this high pressure zone is interpreted to occur as high as -9350 subsea based on pressure data derived from wire line testing.

Reservoir qualities of the sandstone within the Eastern View section were found to be satisfactory with porosities generally in the 20% range and permeabilities in the neighborhood of 200 millidarcies. These sandstones were found to be separated and interbedded with impermeable siltstones and shales capable of sealing the traps. Sediments within the gross producing zone are tentatively interpreted to have been deposited in environments varying from deltaic plain to deltaic front. The remainder of the Eastern View section is also interpreted to be non-marine with the exception of the Boonah sandstone member which is considered a near shore deposit.

Additional drilling will be required to delineate the Pelican structure and lateral extent of the productive intervals.

B.L. Culp
Geologist



STRUCTURE MAP ON
UPPERMOST *M. diversus* HORIZON

FIGURE 5

SCALE 1:100,000

5 cm

SL STEPHENS

CORE ANALYSIS RESULTS

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

WELL NAME AND NO. PELICAN NO. 1DATE ANALYSIS COMPLETED AUGUST 28, 1970

Core No.	Sample Depth		Lithology	Average Effective Porosity two plugs (% Bulk Vol.)	Absolute Permeability (Millidarcy)		Average Density (gm/cc.)		Fluid Saturation (% pore space)		Core Water Salinity (p.p.m. NaCl)	Acetone Test	Fluorescence of freshly broken core	Fluorescence of Sample "cut" in Tetrachlorethylene
	From	To			V	H	Dry Bulk	Apparent Grain	Water	Oil				
1	5604'11"	5605'6"	Sh.	17	N.D.	N.D.	2.12	2.56	80	Nil	N.D.	Neg.	Nil	Nil
2	5848'3"	5849'10"	Sst; aren arg.	28	0.43	1.2	2.06	2.87	47	Nil	N.D.	Neg.	Nil	Nil
2	5860'0"	5860'6"	As above	25	0.50	1.3	2.10	2.80	44	Nil	N.D.	Neg.	Nil	Nil
3	7126'10"	7127'2"	Sst; v.f. gr. slty. carb	13	<0.1	0.17	2.30	2.73	30	Nil	N.D.	Neg.	Nil	Nil
4	7763'7"	7764'2"	Sst; f.gr. sh. intbd.	11	0.74	0.13	2.42	2.72	52	Nil	N.D.	Neg.	Very dull even orange spotted	Faint trace
4	7766'3"	7766'8"	Sst; f.gr. carb.	14	0.19	0.64	2.34	2.74	48	Nil	N.D.	Neg.	"	Trace
4	7774'3"	7774'11"	Sst; f.gr. arg. slty	13	<0.1	<0.1	2.61	3.01	56	Nil	N.D.	Neg.	"	Nil
5	8354'4"	8354'9"	Sst; f.gr. carb. mic.	17	2.8	14	2.22	2.67	16	Nil	N.D.	Neg.	"	Nil

Remarks: - * FRACTURED

General File No. 69/1414

Well File No. _____

385016

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

CORE ANALYSIS RESULTS

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

WELL NAME AND NO. PELICAN NO. 1DATE ANALYSIS COMPLETED AUGUST 28, 1970

Core No.	Sample Depth		Lithology	Average Effective Porosity two plugs (% Bulk Vol.)	Absolute Permeability (Millidarcy)		Average Density (gm/cc.)		Fluid Saturation (% pore space)		Core Water Salinity (p.p.m. NaCl)	Acetone Test	Fluorescence of freshly broken core	Fluorescence of sample "cut" in Tetrachlorethylene
	From	To			V	H	Dry Bulk	Apparent Grain	Water	Oil				
5	8356'6"	8357'0"	Sst; m.gr. mic. carb.	21	21	214	2.09	2.65	4.2	0.64	N.D.	Faint trace	Even blue-white spotted	Faint trace
5	8361'10	8362'5"	Sst; m.gr. mic.	21	85	134	2.09	2.65	3.6	Nil	N.D.	Neg.	Dull even yellow spotted	Very faint trace
5	8365'0"	8365'7"	Sst; f.gr.	19	9.8	131	2.13	2.64	3.5	0.76	N.D.	Trace	"	Faint trace
5	8372'3"	8372'9"	Sst; f.gr. mic.	18	1.7	6.9	2.20	2.68	14	Nil	N.D.	Neg.	Very dull yellow spotted	Nil
6	8540'0"	8540'5"	Sst; coaly mic.	11	<0.1	0.14	2.45	2.75	23	Nil	N.D.	Neg.	"	Very faint trace
6	8549'1"	8549'8"	Sst; m.gr. sl. carb.	22	652	N.D.	2.07	2.65	2.1	0.73	N.D.	Faint trace	Dull even yellow spotted	Faint trace
6	8554'11"	8555'4"	Sst; v.f. gr.	4.8	<0.1	<0.1	2.69	2.81	17	Nil	N.D.	Neg.	"	Nil
6	8561'3"	8561'9"	Sst; f.gr. mic. carb.	13	0.21	0.26	2.39	2.74	14	Nil	N.D.	Neg.	Dull even blue	Nil

Remarks: -

General File No. 69/1414
Well File No. _____

385017

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

CORE ANALYSIS RESULTS

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

WELL NAME AND NO. PELICAN NO. 1

DATE ANALYSIS COMPLETED AUGUST 18, 1970

Core No.	Sample Depth		Lithology	Average Effective Porosity two plugs (% Bulk Vol.)	Absolute Permeability (Millidarcy)		Average Density (gm/cc.)		Fluid Saturation (% pore space)		Core Water Salinity (p.p.m. NaCl)	Acetone Test	Fluorescence of freshly broken core	Fluorescence of sample "cut" in Tetrachlorethylene
	From	To			V	H	Dry Bulk	Apparent Grain	Water	Oil				
7	9265'11"	9266'5"	Sst; v.f. gr. sh. lam.	11	0.24	0.34	2.40	2.72	11	Nil	N.D.	Neg.	Dull even yellow spotted	Nil
8	9427'5"	9428'0"	Sst; m.gr. to c.gr arg.	14	1.4	1.8	2.28	2.66	51	Nil	N.D.	Neg.	"	Nil
8	9433'4"	9433'11"	Sst; m.gr. carb. lam.	20	4.7	9.3	2.15	2.68	47	Nil	N.D.	Neg.	"	Nil
8	9440'4"	9440'11"	As above	20	5.4	8.1	2.14	2.68	48	Nil	N.D.	Neg.	"	Nil
8	9448'10"	9449'3"	Sst; sl. carb.	11	<0.1	<0.1	2.53	2.82	13	Nil	N.D.	Neg.	"	Nil
9	10060'3"	10060'10"	Sst; c.gr. to v.c.gr.	16	65	101	2.25	2.68	9.4	Nil	N.D.	Neg.	"	Nil
9	10063'1"	10063'9"	Sst; c.gr. arg.	19	15	37	2.27	2.79	10	Nil	N.D.	Neg.	"	Nil
9	10070'1"	10070'8"	Sst; c.gr. carb.	17	67	92	2.21	2.66	17	Nil	N.D.	Neg.	"	Nil

Remarks: -

General File No. 69/1414
Well File No. _____

CORE ANALYSIS RESULTS

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

WELL NAME AND NO. PELICAN NO. 1

DATE ANALYSIS COMPLETED AUGUST 28, 1970

Core No.	Sample Depth		Lithology	Average Effective Porosity two plugs (% Bulk Vol.)	Absolute Permeability (Millidarcy)		Average Density (gm/cc.)		Fluid Saturation (% pore space)		Core Water Salinity (p.p.m. NaCl)	Acetone Test	Fluorescence of freshly broken core	Fluorescence of sample "cut" in Tetrachlorethylene
	From	To			V	H	Dry Bulk	Apparent Grain	Water	Oil				
9	10076'4"	10076'9"	Sst;v.f.gr sl. carb.	14	0.29	0.41	2.33	2.71	28	Nil	N.D.	Neg.	Dull even yellow spotted	Nil
9	10082'1"	10082'7"	Sst; f.gr. carb.	17	0.49	0.65	2.27	2.72	21	Nil	N.D.	Neg.	"	Nil
10	10387'1"	10387'7"	Slst; sl. carb.	8.5	<0.1	<0.1	2.58	2.81	22	Nil	N.D.	Neg.	"	Very faint trace

Remarks: -

General File No. 69/1414
Well File No. _____

HEMATITE PETROLEUM PROPRIETARY LIMITEDWEEKLY DRILLING REPORT

TENEMENT NUMBER: Tas/P6.
OPERATOR: Esso Standard Oil (Australia) Ltd.
DRILLING UNIT: "Ocean Digger".
WELL: Pelican-1.
DATE OF REPORT: 23rd March, 1970.
LOCATION: Latitude 40° 20' 21" South.
Longitude 145° 50' 37" East.
WATER DEPTH: 251 feet.
PROGRESS: Current 2550 feet
Previous 0 feet
Progress 2550 feet

OPERATIONS:

Pelican-1 was spudded at 1615 hours on 19th March. A 20-inch casing string was set at 900 feet, and a 13 3/8-inch string set at 2512 feet. IES and GR-BHCS logs were run, and 14 side-wall cores were shot, 13 of which were recovered.

GAS READINGS:

<u>Interval</u> <u>(ft.)</u>	<u>Hot Wire</u> <u>Cuttings</u>	<u>Hot Wire</u>	<u>C1</u>	<u>C2</u>	<u>C3</u>
900-2550	0-1	0-3	0-10	-	-

LITHOLOGY:

<u>Interval</u> <u>(ft.)</u>	
900-1900	<u>Coquina</u> , unconsolidated.
1900-2550	Calcarenite, medium to coarse-grained, with shell fragments cemented with calcite, trace pyrites and glauconite.

W.M. Lonie

W.M. LONIE *RL*

MES:YEF
Melbourne.

HEMATITE PETROLEUM PROPRIETARY LIMITEDWEEKLY DRILLING REPORT

TENEMENT NUMBER: Tas/P6.
OPERATOR: Esso Standard Oil (Australia) Ltd.
DRILLING UNIT: "Ocean Digger".
WELL: Pelican-1.
DATE OF REPORT: 31st March, 1970.
LOCATION: Latitude 40° 20' 21" South
Longitude 145° 50' 37" East
WATER DEPTH: 251 feet.
PROGRESS: Current 7713 feet
Previous 2550 feet
Progress 5163 feet

OPERATIONS:

During the week, a progress of 5163 feet was made, following a delay caused by the repair of a leaking seal in the casing assembly at 2550 feet. Three conventional cores were cut, with an aggregate footage of 71 feet, yielding 100% recovery. Currently drilling ahead.

GAS READINGS:

<u>Interval</u> <u>(ft.)</u>	<u>Hot Wire</u> <u>Cuttings</u>	<u>Hot</u> <u>Wire</u>	<u>C1</u>	<u>C2</u>	<u>C3</u>
2550-4830	trace-2	1-3	3-50	-	-
4830-5230	trace-2	3-12	40-980	0-36	-
5230-5460	trace-2	3-6	40-240	-	-
5460-5600	1-2	4-7	30-180	-	-
5600-5760	1-7	3-8	72-352	-	-
5760-5810	2-4	2-4	39-82	-	-
5810-5830	trace-2	trace-2	trace-39	-	-
5830-6290	0	1-2	0-20	-	-
6290-6820	0-2	1-7	10-150	0-40	-
6820-7140	0-8	1-2	20-500	0-70	-
7140-7713	0-2	1-16	20-1500	0-200	-

(Small peaks below 6280 feet attributed to coal)

LITHOLOGY:Interval
(ft.)

- 2820-2860 - 30% Limestone.
- 70% Marl.
- 2860-3860 - 100% Marl, light grey, abundant forams, bryozoa, echinoid spines, occasional pyrite.
- 3860-4834 - 0-70% Marl.
0-60% Shale, light grey, fissile firm, calcareous, slightly carbonaceous.
0-80% Siltstone, light grey to medium brown, sparingly fossiliferous, calcareous, carbonaceous, pyritic.
- 4834-5230 - 10-20% Marl.
0-40% Shale, light grey, fissile, firm, calcareous.
40-80% Siltstone.
- 5230-5460 - 0-20% Limestone.
10-60% Marl, slightly pyritic.
20-80% Siltstone, dark to medium brown, very coarse-grained siltstone to very fine-grained Sandstone, slightly calcareous, pyritic; also black, fine to coarse Siltstone very pyritic.
- 5460-5600 - Trace-30% Marl.
0-10% Shale.
50-90% Siltstone, chocolate brown, medium siltstone to very fine grained Sandstone, pyritic.

CORE NO.1

- 5600-5630, cut 30 feet, recovered 30 feet, Shale, chocolate brown, silty, slightly calcareous and pyritic, partly fossiliferous, gastropods, pelecypods, bryozoa, forams, spicular.
- 5630-5760 - 0-100% Siltstone, chocolate, as above.
0-10% Shale, as above.
- 5760-5810 - 90% Siltstone, as above.
10% Sandstone light brown, fine grained, calcareous, clay choked.
- 5810-5830 - 50-90% Siltstone, as above.
20-50% Sandstone, same as above, some medium to coarse-grained, to very coarse-grained, sub-rounded, dolomitic matrix, poorly sorted, and some light green, fine-grained, well sorted, sub-angular to sub-rounded, glauconitic.

3.

CORE NO.1 (Contd.)

5830-5840 - Mainly Sandstone, as above.

CORE NO.2

5840-5861, cut 21 feet, recovered 21 feet, Sandstone green very fine to very coarse-grained, sub-angular to sub-rounded, dolomitic, glauconitic, pyritic, and very fine Sandstone, well sorted with festoon cross-bedding, scouring and burrowing, no shows.

5821-6290 - 0-10% Marl, with loose fossils.
0-10% Shale, as above.
30-80% Siltstone, as above.
10-70% Sandstone, light grey, fine-grained, calcareous and white, coarse-grained, dolomitic.

(10-40% Coal, black pyritic, laminated from 6250 to 6280 feet)

6290-6820 - 0-90% Coal, as above, more conchoidal.
0-20% Shale, black, pyritic, carbonaceous.
0-70% Siltstone.
0-90% Sandstone medium to coarse-grained.

6820-7110 - 0-100% Coal.
0-10% Shale, carbonaceous.
0-60% Siltstone.
0-90% Sandstone.

CORE NO.3

7110-7130, cut 20 feet, recovered 20 feet, mainly Shale, light brown to black, coaly; Coal, black bituminous from 7122-7123½ feet; some Siltstone to very fine-grained Sandstone, light grey with coal stringers in lower part.

7130-7140 - Sandstone and Siltstone with Coal as above.

7140-7713 - 0-100% Coal.
0-50% Shale, carbonaceous.
0-80% Siltstone, as above.
0-90% Sandstone, as above, becoming friable and increasingly carbonaceous.
0-20% Cavings.

W. M. Lonie
mak

HEMATITE PETROLEUM PROPRIETARY LIMITEDWEEKLY DRILLING REPORT

TENEMENT NUMBER: Tas/P6.

OPERATOR: Esso Standard Oil (Australia) Ltd.

DRILLING UNIT: "Ocean Digger".

WELL: Pelican-1.

DATE OF REPORT: 6th April, 1970.

LOCATION: Latitude 40° 20' 21" South
Longitude 145° 50' 37" East.

WATER DEPTH: 251 feet.

PROGRESS: Current 8600 feet
Previous 2550 feet
Progress 6050 feet

OPERATIONS:

Three conventional cores were cut with a total footage of 88 feet, yielding 100% recovery. A velocity survey was run, 56 Sidewall Cores were shot, 52 of which were recovered. The following logs were run - IES, SP Sonic, GR-FDC, MLL, GRR, CDM and F.I.T. Currently running second F.I.T. at 8484 feet.

GAS READINGS:

<u>Interval (ft.)</u>	<u>Hot Wire Cuttings</u>	<u>Hot Wire</u>	<u>C1</u>	<u>C2</u>	<u>C3</u>	<u>C4</u>
7713-7749	4-22	1-13	60-1000	0-200	-	-
7777-7890	4	1-13	60-1000	10-200	-	-
(Peaks associated with coal)						
7890-8020	2-12	1-12	200-1100	10-90	-	-
8020-8110	5-35	4-10	100-600	20-100	-	-
8110-8118	60	240	20,000	4,200	600	150
8118-8130	10-25	11-13	400-600	40-60	20-25	tr.
8130-8250	4-25	5-21	200-2000	10-150	0-10	-
(Peak associated with coal at 8200 feet).						
8250-8350	8-65	5-85	200-6500	20-800	-	-
(Peak associated with coal at 8280 and 8325 feet).						
8350-8354	55	68	9000	1000	90	20
8384-8450	10-30	5-27	300-3500	20-150	-	-
8500-8540	8-60	4-62	200-6400	10-450	0-25	-
8570-8600	6-40	5-43	300-4500	220-250	-	-

2.

LITHOLOGY:Interval
(ft.)

7713-7749 - 30% Coal.
60% Siltstone, brown, firm, grading to very fine grained Sandstone.

CORE NO.47749-7777, cut 28 feet, recovered 28 feet.

7749-7753 - Shale, dark brown, very carbonaceous, well indurated.

7753-7754½ - Shale and Coal interbedded.

7754½-7756 ¾ - Coal, black, vitreous lustre, conchoidal.

7756 ¾ -
7758 - Shale and Coal, as above.

7758-7764 - Shale, dark brown, very carbonaceous.

7764-7767 - Shale, interbedded with thin Siltstone, dark brown, hard.

7767-7770 - Siltstone, white, very hard, indurated, some sandy.

7770-7777 - Sandstone, white, very fine-grained, silty, clay choked, hard, indurated, non-calcareous, no porosity and permeability, some thin, horizontal, carbonaceous, laminae.

7777-7890 - 10% Coal.
40% Shale.
50% Sandstone, very fine to medium grained, silty, unconsolidated to consolidated, clay choked, very calcareous, no shows.

7890-8020 - 10% Coal.
30% Shale.
60% Sandstone, white, very fine to fine grained, friable, clay choked, poor porosity and permeability.

8020-8110 - 10% Coal.
60% Shale.
30% Siltstone, brown, firm to soft, trace fluorescence, good cut.

3.

3.

CORE NO.4 (contd.)

- 8110-8130 - 10% Coal. 30% Shale.
60% Sandstone, white, fine-grained, friable,
sub-angular to sub-rounded, fair porosity and
permeability.
- 8130-8350 - 10% Coal.
20% Siltstone.
60% Shale dark brown, very carbonaceous.
10% Sandstone.
- 8350-8354 - Sandstone, with gas kick and slight
fluorescence.

CORE NO.58354-8384, cut 30 feet, recovered 30 feet.

- 8354-8364 - Sandstone, white, fine to medium-grained,
sub-rounded, well indurated, non-calcareous,
some clay matrix, even sorting, a few thin
horizontal, carbonaceous streaks, sugary
texture, good even blue/yellow fluorescence,
strong, sweet odour, good cut.
- 8364-8370 - Thinly interbedded Siltstone and Shale
Siltstone, white, hard, dense Shale,
dark brown, finely micaceous, carbonaceous,
strong gold fluorescence which dissipated.
- 8370-8374½ - Siltstone, as above, non-calcareous, no
fluorescence.
- 8374½-8379 - Siltstone and Shale, interbedded, as above.
- 8379-8384 - Shale, chocolate brown, firm to hard,
carbonaceous, few thin lenses of Siltstone,
white and Shale, as above, with fluorescence.
- 8384-8450 - 80% Shale, as above, with occasional
traces of fluorescence.
20% Sandstone, white, fine grained, very
silty, no shows.
- 8450-8540 - 60% Sandstone, fine grained, hard, calcareous
cement, no shows.
0-10% Coal.
0-40% Siltstone, shaly.

4.

4.

CORE NO.68540-8570, cut 30 feet, recovered 30 feet.

- 8540-8542 - Siltstone, light grey to light brown, firm, hard, non-calcareous, micaceous, with thin carbonaceous lenses.
- 8542-8543 - Coal, black, shiny.
- 8543-8549 - Shale, silty in lower 3 feet, grey brown, firm, hard, non-calcareous, micaceous, scattered pyrite.
- 8549-8549½ - Coal.
- 8549½-8558½ - Sandstone, light grey to white, fine grained, well sorted, sub-angular to sub-rounded, with white clay matrix, occasional silty laminae with steep depositional dip of 5-6°, scattered carbonaceous lenses. Bottom 1½ feet hard and tight with calcareous cement, no shows. Top part had pale yellow fluorescence, good odour and cut.
- 8558½-8570 - Siltstone, as above.
- 8570-8600 - 50-70% Siltstone, as above.
30-50% Shale, as above.
Minor Coal at 8594 feet.

CORE ANALYSIS:

<u>Core No.</u>	<u>Depth (ft.)</u>	<u>Porosity %</u>	<u>Permeability (MD)</u>	<u>Water Satⁿ%</u>	<u>Oil Satⁿ%</u>
5.	8355	22.6	24	57	trace*
	8357	21.0	452	-	-
	8359	22.0	105	-	-
	8361	22.3	129	-	-
	8364	22.8	358	56	trace*
*Possibly lost light ends by evaporation.					
6.	8551	25.1	290	-	-
	8552	23.6	38	46	trace
	8553	22.9	11	-	-
	8554	21.6	11	-	-
	8555	21.1	4	53	0
	8556	22.6	89	41	trace.

5.

HEMATITE PETROLEUM PROPRIETARY LIMITEDWEEKLY DRILLING REPORT

TENEMENT NUMBER: Tas/P6.

OPERATOR: Esso Standard Oil (Australia) Ltd.

DRILLING UNIT: "Ocean Digger".

WELL: Pelican-1.

DATE OF REPORT: 13th April, 1970.

LOCATION: Latitude 40° 20' 21" South
Longitude 145° 50' 37" East

WATER DEPTH: 251 feet.

PROGRESS: Current 8600 feet
Previous 8600 feet
Progress 0 feet

OPERATIONS:

Five additional Formation Interval Tests were run, all of which were successful. The 9 5/8 inch casing string was set at 8547 feet using 640 sacks of neat cement + 8/10 of 1% HR7, but drilling was delayed due to a leaking seal in the well head assembly. Satisfactory seal was not obtained until 13th April, a.m., and preparations are currently being made to drill ahead.

TESTING:

	Depth (ft.)	
F.I.T. No.2	8484	- Recovered 118 cubic feet gas, 2500 cc's light oil, 7500 cc's filtrate, A.P.I. 56.5° at 60°F p.p.44° G.O.R. 7500.
F.I.T. No.3	8367	- Recovered 108.2 cubic feet gas, 3250 cc's light oil 6250 cc's filtrate, A.P.I. 61° @ 60°F p.p. 45° G.O.R.5300.
F.I.T. No.4	8138	- Recovered 21,500 cc's filtrate.
F.I.T. No.5	8115	- Recovered 26.5 cubic feet gas, 1000 cc's light oil, 10,000 cc's filtrate A.P.I. 55° A.P.I. @ 60° p.p. 49° G.O.R. 4200.

TESTING (contd.)

	Depth (ft.)	
F.I.T. No.6	8515	- Recovered 125 cc's filtrate, tight test.

W. M. Lonie *mak*
W.M. LONIE

MES:YEF
Melbourne.

HEMATITE PETROLEUM PROPRIETARY LIMITEDWEEKLY DRILLING REPORT

TENEMENT NUMBER: Tas/P6.

OPERATOR: Esso Standard Oil (Australia) Ltd.

DRILLING UNIT: "Ocean Digger".

WELL: Pelican-1.

DATE OF REPORT: 20th April, 1970.

LOCATION: Latitude 40° 20' 21" South
Longitude 145° 50' 37" East.

WATER DEPTH: 251 feet.

PROGRESS: Current 10,428 feet
Previous 8,600 feet
Progress 1,828 feet

OPERATIONS:

Four conventional cores were cut with an aggregate footage of 92 feet, and a recovery of 90 feet. Currently conditioning the hole, prior to logging.

GAS READINGS:

<u>Interval</u> <u>(ft.)</u>	Hot <u>Wire</u> <u>Cuttings</u>	Hot <u>Wire</u>	<u>C1</u>	<u>C2</u>	<u>C3</u>	<u>C4</u>	<u>C5</u>
8600-8630	5-62	12-95	400-10,000	40-450	60	trace	-
8630-8650	50	150	20,000	2,200	300	200	-
8650-8800	5-15	18-180	300-20,000	70-1500	5-250	0-40	-
8800-8910	5-100	50-300	1000-20,000	200-2500	50-600	0-100	-
8910-8990	10-90	12-330	950-25,000	100-3000	50-400	0-100	-
8990-9020	10-30	25-360	2000-25,000	200-3000	100- 400	0-200	-
9020-9060	25-100	20-320	2000-25,000	150-1000	50-200	0-50	-
9060-9150	15-60	15-315	1500-24,000	100-2000	40-800	0-200	-
9150-9263	5-38	18-260	400-15,000	60-1300	20-300	0-60	-
9283-9390	6-55	20-220	950-12,000	90-2000	7-600	0-95	-
9390-9426	10	75	4000	450	80	35	-
(9456-9613	8-94	15-700	1000-23,000+	100-2000+20-320		0-120	-)
High readings associated with coal)							
9613-9640	25	52	6000	300	60	0	-
9640-9660	60	600	40,000	6000	800	180	42
9660-9670	60	110	12,000	400	100	20	-
9670-9830	12-55	30-600	1000- 40,000	600-6000	40-950	6-500	-
9830-9860	22	1400	60,000	16,000	4400	1700	-
9860-9900	20-40	20-120	1100- 11,000	95-1100	20-90	7-40	-

GAS READINGS (Contd.)

Interval (ft.)	Hot Wire Cuttings	Hot Wire	C1	C2	C3	C4	C5
9900-9940	28	110	8000	850	75	25	-
9940-10,000	20	60	6000	400	40	10	-
10,000- 10,030	15-25	22-135	1500-7000	120-600	20-95	0-20	-
10,030- 10,058	10	40	4000	450	50	15	-
10,058- 10,088	-	72,000	60,000	30,000	3500	2500	-
10,088- 10,130	25-35	50-120	3000-6500	200-650	20-65	0-25	-
10,130- 10,230	25-180	50-2000+	3500-60,000	400-30,000	15-5500	20-3500	-
10,230- 10,300	35-150	65-350	2000-20,000	200-2000	70-700	20-200	-
10,300- 10,378	65-100	62-350	3500-9000	600-3000	80-1000	55-600	-
10,378- 10,386	250	2000+	60,000	15,000	3500	2500	-
10,398- 10,420	25-95	150-250	4000-12,000	900-4200	250-650	150-400	-
10,420- 10,428	90	1900	30,000	5000	800	700	-

LITHOLOGY:

Interval (ft.)	
8600-8630	- 70% <u>Siltstone</u> , brown, firm, carbonaceous, micaceous 30% <u>Coal</u> .
8630-8650	- 30-50% <u>Coal</u> . 50-70% <u>Siltstone</u> . Trace Sandstone, white, fine grained, tight, no shows.
8650-8800	- 80-100% <u>Siltstone</u> Trace-20% <u>Coal</u> .
8800-8910	- 30-100% <u>Coal</u> 0-70% <u>Siltstone</u> .

3.

Interval
(ft.)

- 8910-8990 - 20-60% Sandstone, white, very fine to fine grained, hard, tight, with dolomitic cement, gives yellow mineral fluorescence.
30-70% Siltstone.
Trace-10% Coal.
- 8990-9020 - 80% Sandstone, fine to medium grained, hard, fairly tight with yellow, mineral fluorescence.
20% Siltstone, as above.
- 9020-9030 - Sandstone, as above.
- 9030-9060 - Siltstone and Coal.
- 9060-9150 - Sandstone, white, fine grained, moderately sorted, slightly micaceous, scattered lithics, slightly dolomitic, clay matrix, hard, tight, poor porosity and permeability, occasional aggregates show pinpoint light blue fluorescence, nil to very slight cut.
- 9150-9263 - Siltstone.
Shale, dark brown, silty, carbonaceous, fissile.
Coal.

CORE NO.7

- 9263-9283, cut 20 feet, recovered 20 feet.
Siltstone, Shale, and silty Shale with thin, sub-parallel, wavy, discontinuous current, rippled laminae and lenses of silty to very fine-grained Sandstone, very hard, tight, no porosity and permeability patchy, light blue fluorescence and cut in Sandstone and Shale; fluorescence dissipates with time and has the appearance of volatile condensate.
- 9283-9390 Siltstone and Coal, as above.
- 9390-9426 Sandstone, white, fine-grained, sub-angular, moderate sorting, white clay matrix, poor porosity and permeability, patchy to light blue fluorescence, slow weak cut.

CORE NO.8, cut 30 feet, recovered 28 feet.

- 9426-9444 Sandstone, white, very fine to fine-grained, sub-angular, quartzose, moderate to poor sorting, abundant clay matrix, hard, poor porosity and permeability, shale clasts common, sharp contact at base, patchy light, blue fluorescence associated with peripheries of shale clasts and laminae in the Sandstone.

CORE NO.8 (contd.)

- 9444-9454 Interlaminated Siltstone and Shale, medium to dark grey, very micaceous, carbonaceous, large scale cross-bedding, some even and parallel, hard, fissile.
- 9454-9613 Siltstone, Coal and minor Sandstone.
- 9613-9640 Sandstone, white fine to medium-grained, sub-angular, moderate to poor sorting, abundant clay matrix, poor porosity and permeability, occasional light blue fluorescence with very slight cut.
- 9640-9660 Coal and Shale, carbonaceous, with good light blue fluorescence and yellow cut, oil stained.
- 9660-9670 Sandstone as above.
- 9670-9830 Coal and Shale, carbonaceous and Siltstone.
- 9830-9860 Sandstone, loose grains, fine to coarse-grained, but mostly medium-grained, sub-angular, moderate sorting, trace white and brown clay on grain surfaces, moderate porosity and permeability, no fluorescence, good gas kick.
- 9860-9900 Coal, Shale, carbonaceous and Siltstone.
- 9900-9940 Sandstone, as above.
- 9940-10,030 Coal, Siltstone and Shale.
- 10,030-10,058 Sandstone, white, loose in part, mainly medium-grained, abundant clay matrix, no fluorescence.

CORE NO.9

- 10,058-10,088, cut 30 feet, recovered 30 feet.
26 feet Sandstone, white, medium to coarse-grained, becoming silty towards base, poorly sorted; thin laminae of Coal, Siltstone and Shale with patchy light blue to yellow fluorescence associated with laminae.
4 feet carbonaceous Siltstone and Shale.
- 10,088-10,230 Sandstone, as above, and Coal, Shale, carbonaceous; and Siltstone.
- 10,230-10,300 Sandstone, white, fine to medium-grained, sub-angular, quartz, silty, abundant white clay matrix, poor porosity and permeability partly coarse-grained and friable.
- 10,300-10,378 Coal, Siltstone, Shale with minor Sandstone.

5.

10,378-10,386 Sandstone, as above, no fluorescence.

CORE NO.10

10,386-10,398, cut 12 feet, recovered 12 feet.

10,386-10,392 Siltstone and Shale, carbonaceous, thinly laminated to massive.

10,392-10,398 Shale, carbonaceous, and Coal (Core grades from Coal at base to Siltstone, at top; Coal and Shale bleeding gas).

10,398-10,420 Coal and Shale, carbonaceous.

10,420-10,428 Sandstone, as above.

CORE ANALYSIS:Core No.8

Average porosity 19%
Average permeability 2-3 md*
Water 43%
Oil Nil.

*Values doubtful.

Core No.9

Average porosity 18% (range 10.5 to 21.6%), permeability ranging from 350 to 40 md. over top 14 feet, ranging to 0 over bottom 5 feet. Water saturations 42 to 68%, no oil saturation.

W. M. Lonie
W.M. LONIE *W*

MES:YEF
Melbourne.

HEMATITE PETROLEUM PROPRIETARY LIMITEDWEEKLY DRILLING REPORT

TENEMENT NUMBER: Tas/P6.

OPERATOR: Esso Standard Oil (Australia) Ltd.

DRILLING UNIT: "Ocean Digger".

WELL: Pelican-1.

DATE OF REPORT: 27th April, 1970.

LOCATION: Latitude: 40° 20' 20" South
Longitude 145° 50' 37" East.

WATER DEPTH: 251 feet.

PROGRESS: Current 10,428 feet
Previous 10,428 feet
Progress 0 feet

OPERATIONS:

IES and FDC logs were run, and seven F.I.T.'s were conducted between 10,372 and 9473 feet, four of which were successful. The shut-in pressures of the zones tested proved to be as high as 5900 p.s.i., and were subsequently plugged prior to running the Laterolog, GRN and Dipmeter logs. Five side-wall core guns were operated, three of which were successful, and 68 cores were recovered. Three cement plugs were set prior to running two additional F.I.T.'s. Currently running F.I.T. No.16 at 9378 feet.

CEMENT:

<u>Plug No.</u>	<u>Interval (ft.)</u>	<u>Cement</u>
1	10,428-10,083	115 sacks neat cement and 0.5% HR7. Top tagged.
2	10,083-9676	115 sacks neat cement and 0.5% HR7. Tagged.
3	9676-9615	56 sacks neat cement. Tagged.

TESTING:

	<u>Depth (ft.)</u>	
F.I.T. No.7	10,368	Mechanical failure.
F.I.T. No.8	10,372	Recovered 7.8 cubic feet gas, 100 cc's light oil. 51° A.P.I., p.p. 45° in main chamber; and 29.7 cubic feet gas and 450 cc's light oil in segregator. S.I.P. 5900 p.s.i.,

2.

TESTING (contd.)

	<u>Depth</u> <u>(ft.)</u>	
		still building up.
F.I.T. No.9	10,033	Mechanical failure.
F.I.T. No.10	10,045	Mechanical failure.
F.I.T. No.11	9,858	Recovered 3000 cc's filtrate, in main chamber; and 1800 cc's greasy filtrate in segregator. S.I.P. 5100 p.s.i.
F.I.T. No.12	9,473	Recovered 19,000 cc's filtrate, in main chamber; and 2000 cc's filtrate in segregator. S.I.P. 4400 p.s.i.
F.I.T. No.13	10,041	Recovered 3.2 cubic feet gas, 20,500 cc's filtrate in main chamber; and 450 flow pr. in segregator. S.I.P. 5450 p.s.i.
F.I.T. No.14	9,422	Recovered 150 cc's mud, in main chamber; segregator did not operate; no build up when shut-in; tool was open for 56 minutes.
F.I.T. No.15	9,424	Recovered 0.2 cubic feet gas in main chamber; 0.2 cubic feet gas, with 100 cc's filtrate in segregator. S.I.P. 4300 p.s.i.

W.M. Lonie
W.M. LONIE *WML*

MES:YEF
 Melbourne.

HEMATITE PETROLEUM PROPRIETARY LIMITEDWEEKLY DRILLING REPORT

TENEMENT NUMBER: Tas/P6.

OPERATOR: Esso Standard Oil (Australia) Ltd.

DRILLING UNIT: "Ocean Digger".

WELL: Pelican-1.

DATE OF REPORT: 4th May, 1970.

LOCATION: Latitude: 40° 20' 20" South
Longitude: 145° 50' 37" East

WATER DEPTH: 251 feet.

PROGRESS: Current 10,428 feet
Previous 10,428 feet
Progress 0 feet

OPERATIONS:

Six F.I.T.'s were conducted, all of which were successful. Five additional cement plugs were set, prior to abandoning the site at 1600 hours on 1st May. "Ocean Digger" then moved to the Albacore-1 site, located in Licence Vic/5, in the Gippsland Basin.

CEMENT:

<u>Plug No.</u>	<u>Interval (ft.)</u>	<u>Cement</u>
4	9501 to 9216	115 sacks. Tagged.
5	9200 to 8825	160 sacks. Tagged.
6	8650 to 8453	140 sacks. Tagged.
7	8445 to 8015	140 sacks.
8	800 to 500	110 sacks.

TESTING:

	<u>Depth (ft.)</u>	
F.I.T. No.16	9378	Recovered 3500 cc's filtrate, plus 2000 cc's filtrate. Flow-in pressure 50 p.s.i. S.I.P. 4326 p.s.i.
F.I.T. No.17	9167	Recovered 1000 cc's filtrate plus 750 cc's filtrate. Flow-in pressure 150 p.s.i. S.I.P. 4250 p.s.i.

2.

TESTING (contd.)

	<u>Depth (ft.)</u>	
F.I.T. No.18	9107	Recovered 300 cc's filtrate in segregator and several hundred cc's filtrate in main chamber, flow line was plugged, so no shut in pressure; flow-in pressure 100 p.s.i.
F.I.T. No.19	8985	Recovered 69.8 cubic feet gas, 1100 cc's condensate, 57.2 A.P.I.@ 60°F, p.p. 45°F, also 1500 cc's filtrate. Flow-in pressure 3950 p.s.i., shut-in pressure, 4100 p.s.i. (G.O.R. (calculated) 10,000).
F.I.T. No.20	8640	Recovered 22,500 cc's filtrate. Flow-in pressure, 3000 p.s.i., shut-in pressure, 3950 p.s.i.
F.I.T. No.21	8367	Recovered 139 cubic feet gas, 6000 cc's filtrate. Flow-in pressure, 3750 p.s.i., shut-in pressure, 3770 p.s.i.

W.M. Lonie
W.M. LONIE

MES:YEF
 Melbourne.