

388001

**PELICAN #2  
RAW DATA REPORT**

OR\_0352A

**CONTENTS**

DAILY REPORTS  
WEEKLY DRILLING REPORTS  
APPLICATION TO DRILL / NOTICE OF INTENTION TO DRILL

**FIGURES**

- |    |  |              |
|----|--|--------------|
| 1. | ORIENTATION MAP                                      | 1: 1,250,000 |
| 2. | STRUCTURE MAP ON AN UPPERMOST<br>M. DIVERSUS HORIZON | 1: 100,000   |

JG 51

388003

P8/2

29/7/20

Daily Report

Advan 2

Bolton footlog

4590'

progers 1560'

Drilling ahead  
Lithology

3030' - 3980'

100% lt grey marl

3980' - 4530'

oam marl - 50%

grey calcstone  
no shews

Gas readings 3030' - 4530'

cuttings - nil

Hot wire up to 3.

C1 20-350

C2 0-30

ej.

Ⓜ

JGS

388004

P8/2

Pelican 2  
Daily Report

4/8/70.

Bottom footage 7155'  
Progress 620'  
Dulley ahead

Lithology

6590 - 7190

0 - 80' Sandstone  
as before but  
becoming silty  
20 - 80' Siltstone  
0 - 90' coal  
Tr - 50' casing

Gas Readings

beatings 0  
Hot Wire 2 - 5  
C1 60 - 150  
C2 0 20

*[Signature]*

*[Initials]*

JGS

388005

P8/2

Daily Report 7/8/60

Run 2

Bottom footage 7772.

Progress 570'

Drilling ahead

Lithology

7190 - 7730

0 - 80' Sandstone  
shale (1) medium grain  
even

Increasing ↓  
abundance (2) fine medium  
(3) coarse

0 - 70' Siltstone  
0 - 80' loam  
& clays

Gas Readings

cuttings 0 - 5  
Hot wire 2 - 33  
G<sub>1</sub> 60 - 2500  
G<sub>2</sub> 0 - 150  
coal peak @ 7300'

JG  


JGS

Off

388006 PR/2

Daily Report 10/5/70

Well 2

Bottom footage 8870'  
Progress 1098'  
Drilling ahead (bit change done @ 9000')

Geology

7720 - 8320 up to 90855  
(fine - near fine  
interbedded i siltst)  
below 8000' sands dominant - up  
to 70%.

8320 - 8600 Sandstone 0-80%  
(near fine i sandstone)  
10-90% siltstone  
0-50% shale  
0-40% coal

~~8600~~ 8600 - 8850  
0-80% sandstone  
fine predominant i medium  
sandy, dark, carbonaceous  
matrix  
0-50% siltstone  
0-30% coal

10' sandstone 8820-30' no fluorescence

Gas Readings

7720 - 8320'  
Leakage 0-5'  
Hot water 3-40  
C<sub>1</sub> 100 - 4000  
C<sub>2</sub> 10 - 400

8320' - 8600'

Buttings 0 - 15

Hot wire 3 - 32

C1 90 - 1000

C2 5 - 100

8600 - 8850

Buttings 1 - 40

Hot wire 4 - 30

C1 80 - 950

C2 5 - 90

Local peaks at 7930'

8075'

8260'

8460'

8505'

8735'

Jf,

JGS.

388008

P8/2

Daily Report

Relian 2

F. J. [Signature]

11/8/70

Bottom footage

9085'

Progress

215'

Drilling ahead

Lithology

8850' - 9070'

0 - 40% sands

10 - 40% silt

20 - 60% shale

20 - 80% coal

(7' loose sand 9029 - 9036)

Gas

beddings

1 - 12

Hot wire

4 - 42

C<sub>1</sub>

10 - 2040

C<sub>2</sub>

5 - 170

coal streaks @ 8885'

8970'

8990'

9045'

9060'

No shows - no fluorescence

[Signature]

388008A

12/8/70

1/1BJ

Pelican II

Now 9322' - 237' for day

P82

circulating - drilling break  
change in lithology

9180' - Sandstone - minor fluorescence

Gas 9070 - 9150  
read.

0.25 - C3

9150 - 9180

up to C2

9180 - 9300

up to C2

0.60 - C3.

ops

IEC  
PMJ

388009

PS/2

Daily Report Release 2, 13/8/70

Bottom Footage 9495'

Progress 173.

Lithology 9300 - 9495'

20' coal

40' Slab

40' Sand

9440 - 75 Sandy interval - gas reading?  
to C4 but no fluorescence

Gas Readings

cuttings 10 - 65'

Hot Wire 11 - 250

C1 250 - 20,000

C2 10 - 1500

C3 0 - 200

C4 0 - 70.

Coal Peaks @ 9355' - 9375' - 9425'

Run IES 9480 - 5000

currently running Velocity Survey.  
will run Sonic - Density Log &  
FITS.

df

Duty Report Belvia 2.

14/5/70.

Bottom footage 9495

Frequency Nil

Ran Velocity Survey, sound  
& density logs.

Attempting FIT N°1 @ 9447

tool jammed in hole & cable

broken. Will replace cable

& recover tool this afternoon.

Surveys FITS @

9312

9215

9150

8957

J

J

JGS. 

388011

P8/2

Daily Report

Run 2.

17/8/70

Bottom footage 9595'

Logology 9495 - 9570

108 coal

1608 shale

323 dolomite sandstone

Gas Readings

cuttings

- 9-38

Hot wire

12-68

C1

250-3000

C2

20-250

C3

0 - Trace

none hit @ 9558'

3' coal interval at 9572'

Hot wire up to 240;

C1 - 11500

C2 - 13000

C3 - 400

C4 - 200

FIT N°1 - recovered tools - 9447

13,000 cc filtrate (water)

39 cft gas

766 cc oil

low point 490

56" API.

Static pressure 4316 psi.

FIT N°2 - tool stuck - recovered after fishing

& recovered small amount of mud

no pressure readings - test a pressure

decided to drill on a condition hole

before trying remaining FITS.



J.G.S.

388012

18/8/70

P8/2

Daily Report

Run 2

Bottom footage 9620

Progress 25'

Encountered 5' coal, shale with sandstone - fine/medium fine porosity & permeability slight fissures & good cat.

Welled out to core - gas stuck at 7477 - free - now conditioning for preparatory to coring.

Lithology

9570' - 9620'

108 coal

608 shale

309 Sandstone.

Below 9610' sandstone increasing to 40%.

Gas Readings.

9570 - 9580

Maximum readings are entered.

Hot Wire up to 240

C1 " 11,500

C2 " 13,000

C3 " 400

C4 " 200

9580' - 9620'

Scuttings 9 - 15.

Hot Wire 10 - 90

C1 100 - 600

C2 10 - 70.

J.G.S.

TGS

388013

PS/2

Daily Report

Pelican 2

19/4/70

Accurately coring,

Depth 9630 progress 10'

Run Gamma Ray, Density & ~~logs~~ <sup>caliper</sup> logs.

Run FIT No 3. 9149'

no recovery in main chamber  
aggregated - recovers 1 cf foot gas  
2200 cc of filtrate in slight  
menhous.

Shut in pressure 4001 psi

Discrepancy in T.D. between Sellmberger  
& Suller. Strip from FIT at 9570'  
has been abandoned at least for time being.

FITs planned at 9312, 9283 have  
been abandoned because caliper  
shows the hole to be too wide.

J. Q

JLS

P8/2

388014

19/8/70

Daily Report

Wellian 2

Bottom footage 9620  
logs nil

conditioned mud & pulling out.

Will run density log TO → 9200  
take caliper to 8200

Item 3 FITS

9150

8957

9600 (approx)

Following down take core &  
null on.

JLS

HEMATITE PETROLEUM PROPRIETARY LIMITED.WEEKLY DRILLING REPORT.

TENEMENT NUMBER: TAS/P5.  
 OPERATOR: Esso Standard Oil (Australia) Ltd.  
 DRILLING UNIT: "Ocean Digger".  
 WELL: Pelican - 2.  
 DATE OF REPORT: 3rd August, 1970.  
 LOCATION: Latitude 40<sup>o</sup> 18' 29" S.  
 Longitude 145<sup>o</sup> 49' 12" E.  
 WATER DEPTH: 255 feet.  
 PROGRESS: Current 4590 feet.  
 Previous 0 feet.  
 Progress 4590 feet.

OPERATIONS:

Pelican 2 Well was spudded at 1000 hours on July 28th. The 20" Casing was set at 867 feet with 100 sacks +2%gel, followed by 150 sacks neat cement, and 350 sacks +2% CaCl<sub>2</sub>, and the 13<sup>3</sup>/<sub>8</sub>" casing was set at 2983 feet. Currently drilling ahead at 4590 ft.

GAS READINGS:

| Interval<br>(ft) | Hot Wire<br>Cuttings | Hot Wire | C1.    | C2.  | C3. |
|------------------|----------------------|----------|--------|------|-----|
| 3030-4530        | -                    | 3        | 20-350 | 0-30 | -   |

LITHOLOGY:

| Interval<br>(ft) |  |
|------------------|--|
| 3030-3980        | - 100% light grey , fossiliferous, glauconitic <u>Marl</u> .                           |
| 3980-4530        | - Some <u>Marl</u> , as above, but with 50-90% grey-brown <u>Siltstone</u> , no shows. |

HEMATITE PETROLEUM PROPRIETARY LIMITED.WEEKLY DRILLING REPORT

TENEMENT NUMBER: TAS/P5  
 OPERATOR: Esso Standard Oil (Australia) Ltd.  
 DRILLING UNIT: "Ocean Digger".  
 WELL: Pelican - 2.  
 DATE OF REPORT: 10th August, 1970.  
 LOCATION: Latitude 40° 18' 29" S  
 Longitude 145° 49' 12" E  
 WATER DEPTH: 255 feet.  
 PROGRESS: Current 8870 feet.  
 Previous 4590 feet.  
 Progress 4280 feet.

OPERATIONS:

Currently drilling ahead.

GAS READINGS:

| Interval<br>(ft) | Hot Wire<br>Cuttings | Hot Wire | C1.      | C2.    | C3. | C4. |
|------------------|----------------------|----------|----------|--------|-----|-----|
| 4530-5530        | 0                    | 2-4      | 100-600  | 10-50  | -   | -   |
| 5530-6210        | 0                    | 3-9      | 100-600  | 10-65  | -   | -   |
| 6210-6590        | 0                    | 2-7      | 100-400  | 10-50  | -   | -   |
| 6590-7190        | 0                    | 2-5      | 60-150   | 0-20   | -   | -   |
| 7190-7730        | 0-5                  | 2-33     | 60-2500  | 0-150  | -   | -   |
| 7730-8320        | 0-5                  | 3-40     | 100-4000 | 10-400 | -   | -   |
| 8320-8600        | 0-15                 | 3-32     | 90-2000  | 5-100  | -   | -   |
| 8600-8850        | 1-14                 | 4-30     | 80-950   | 5-90   | -   | -   |

peaks associated with coal.

LITHOLOGY

Interval  
(ft)

4530-5530: Predom. Siltstone, medium grey to dark brown, slightly calcareous, firm, micaceous, glauconitic, pyritic, tends to silty Shale, also some buff, soft Siltstone.  
 10-20% Marl.

5530-5920: 60-90% Siltstone. light to dark brown, firm, pyritic, slightly calcareous, slightly carbonaceous.  
 0-20% Shale, light grey, firm.  
 10-30% Marl.

5920-6210: Trace - 60% Sandstone, three well sorted grades, very fine, medium and coarse to very coarse grained, all quartzose, sub-rounded, glauconitic with clay matrix.  
 10-40% Siltstone, as above, also black, carbonaceous  
Siltstone  
 10-50% Shale & Marl cavings.

6210-6590: 0-70% Sandstone, three varieties  
 (a) off white, medium to coarse grained, sub-angular to sub-rounded, moderately sorted with dolomitic matrix.  
 (b) fine grained well rounded & sorted, friable.  
 (c) coarse to very coarse grained, loose, sub-rounded to rounded.  
 10-60% Siltstone, as above, with black, carbonaceous fragments  
 0-10% Coal.  
 10-30% Shale & Marl Cavings.

LITHOLOGY (contin)Interval  
(ft)

- 6590-7190: 0-80% Sandstone, 3 varieties, as before.  
 (a) is predominant.  
 (b) becoming dirty below 7000 feet.  
 (c) only occasional.  
 20-80% Siltstone, as before  
 0-90% Coal  
 trace - 30% Cavings.
- 7190-7730: 0-80% Sandstone, three varieties  
 (a) medium grained, sub-rounded to rounded, well sorted, clean, friable with small amounts dolomitic matrix.  
 (b) fine to medium grained, sub-rounded to rounded, well sorted, friable, mostly clean, slightly carbonaceous, slightly dolomitic, interbedded with Siltstone,  
 (c) coarse, loose quartz, sub-angular to sub-rounded, very minor.  
 0-70% Siltstone.  
 0-80% Coal  
 minor cavings.
- 7730-8320: 0-90% Sandstone, two varieties, see (b) & (c) as above,  
 (b) predominant.  
 (c) minor.  
 20-70% Siltstone, as above  
 10-100% Coal.  
 trace - 20% cavings.
- 8320-8600: 0-80% Sandstone, fine to medium grained, sub-rounded to rounded, well sorted, friable, mostly clean, slightly carbonaceous, slightly dolomitic.  
 10-90% Siltstone, as above.  
 0-50% Shale, dark brown to black, very carbonaceous.  
 0-40% Coal.
- 8600-8850: 0-80% Sandstone, two varieties,  
 (a) fine grained, well sorted, sub-rounded, white, clay matrix, partly dirty with, carbonaceous matter and Siltstone, fair to good porosity and permeability.  
 (b) medium grained, well sorted, sub-angular to sub-rounded, friable, some dolomitic matrix.  
 (a) predominant.  
 (b) minor  
 Sands are thinly interbedded with Siltstone, generally 2 feet thick, 10 feet sand 8820-8830 feet.

*Beckman*  
11/8/70

HEMATITE PETROLEUM PROPRIETARY LIMITEDWEEKLY DRILLING REPORT

TENEMENT NUMBER: TAS/P5.  
 OPERATOR: ESSO STANDARD OIL (AUSTRALIA) LTD.  
 DRILLING UNIT: "OCEAN DIGGER".  
 WELL: PELICAN 2.  
 DATE OF REPORT: 17TH AUGUST, 1970.  
 LOCATION: Latitude 40<sup>o</sup> 18' 29" S.  
 Longitude 145<sup>o</sup> 49' 12" E.  
 WATER DEPTH: 255 FEET.  
 PROGRESS: CURRENT 9595 feet  
 PREVIOUS 8870 feet  
 PROGRESS 725 feet

OPERATIONS:

Following a velocity shoot and the running of I.E.S., Sonic and Density logs, two F.I.T.'s were attempted. On both occasions the tool became stuck in the hole; F.I.T. No. 1 recovered filtrate, gas and oil, and F.I.T. No. 2, recovered a small amount of mud.

GAS READINGS:

| <u>Interval</u><br>(ft) | <u>Hot Wire</u><br><u>Cuttings</u> | <u>Hot Wire</u> | <u>C1.</u>  | <u>C2.</u> | <u>C3.</u> | <u>C4.</u> |
|-------------------------|------------------------------------|-----------------|-------------|------------|------------|------------|
| 8850-9070               | 1-12                               | 4-42            | 100-2400    | 5-170      | -          | -          |
| 9070-9150               | 1-65                               | 8-205           | 100-16,000  | 10-1000    | 0-25       | -          |
| 9150-9180               | 12-16                              | 25-28           | 400-600     | 20-50      | -          | -          |
| 9180-9300               | 12-55                              | 25-200          | 1000-16,000 | 50-1000    | 0-60       | -          |
| 9300-9495               | 10-65                              | 11-280          | 250-20,000  | 10-1500    | 0-200      | 0-70       |
| 9495-9570               | 9-38                               | 12-68           | 250-3000    | 20-250     | 0-trace    | -          |

LITHOLOGY:

Interval  
(ft)

8850-9070 - 0-40% Sandstone, as before.  
 (9029-9036) - Sand, very coarse grained, subrounded, quartzose  
 10-40% Siltstone  
 20-60% Shale  
 20-80% Coal

9070-9150 - 20% Coal  
 20% Siltstone  
 60% Shale

9150-9180 - 10% Coal  
 20% Shale  
 70% Sandstone, fine grained, some minor fluorescence at 9180 feet, good cut.

9180-9300 - 10% Sandstone, dolomitic  
 10% Shale  
 80% Coal

- 2 -

LITHOLOGY (contin)Interval  
(ft)

9300-9495 - 20% Coal  
 40% Shale  
 40% Sandstone

(9440-9475) - sandy.

9495-9570 - 10% Coal  
 60% Shale  
 30% Sandstone

TESTING:F.I.T. No.Depth ft.

1

9447 - recovered 13,000 cc's filtrate, 39 cubic feet gas, 756 cc's oil, G.O.R. 8000, pour point 49°, 56° A.P.I. S.I.P. 4316 p.s.i.

2

9312 - recovered small amount of mud. Flowing pressure 0, S.I.P. not valid.

HEMATITE PETROLEUM PROPRIETARY LIMITEDWEEKLY DRILLING REPORT

TENEMENT NUMBER: TAS/P5.  
 OPERATOR: ESSO STANDARD OIL (AUSTRALIA) LTD.  
 DRILLING UNIT: "OCEAN DIGGER".  
 WELL: PELICAN 2.  
 DATE OF REPORT: 24TH AUGUST, 1970.  
 LOCATION: Latitude 40<sup>0</sup> 18' 29" S.  
 Longitude 145<sup>0</sup> 49' 12" E.  
 WATER DEPTH: 255 FEET.  
 PROGRESS: CURRENT 10,058 feet  
 PREVIOUS 9,595 feet  
 PROGRESS 463 feet

OPERATIONS:

During the week three conventional cores were cut, with an aggregate footage of 82 feet. Recovery was 100%. A successful F.I.T. was run at 9149 feet. Currently drilling ahead prior to logging.  
 Note depth correction 9620=9598 feet.

GAS READINGS:

| <u>Interval</u><br>(ft) | <u>Hot Wire</u><br><u>Cuttings</u>     | <u>Hot Wire</u><br><u>C1.</u> | <u>C2</u>  | <u>C3</u>   | <u>C4.</u> |
|-------------------------|--|-------------------------------|------------|-------------|------------|
| 9570-9558               | -                                      | to 240 to 11,500              | to 13,000  | to 400      | to 200     |
| 9558-9598               | 9-15                                   | 10-19 100-600                 | 10-70      | -           | -          |
| 9620-9782               | { 2-11                                 | 6-41 90-2500                  | 10-300     | -           | - }        |
|                         | Peaks associated with coal.            |                               |            |             |            |
| 9812-9890               | { 8-60                                 | 15-165 500-8000               | 40-1500    | 0-35        | 0-15 }     |
|                         | Peaks associated mostly with coal.     |                               |            |             |            |
| 9890-9901               | 32                                     | 300 5000-25,000               | 4000       | 300         | 80         |
| 9931-9943               | 21                                     | 15-60 450-5000                | 40-350     | -           | -          |
| 9943-9960               | { 55                                   | 30-800 2000-25,000            | 900-10,000 | 40-<br>1000 | 20-250 }   |
|                         | Peaks associated with coal, no P.V.'s. |                               |            |             |            |
| 9960-9994               | { 25-32                                | 20-200 600-12,000             | 60-3000    | 0-150       | 0-65 }     |
|                         | 9962' - peak sand.                     |                               |            |             |            |
| 9994-10040              | 4-12                                   | 15-110 200-8500               | 40-300     | 0 trace     | -          |

LITHOLOGY:

Interval  
(ft)

9570-9598 - 10% Coal.  
60% Shale.  
30% Sandstone.  
40% Sandstone below 9610 feet, fine to medium grained, fair porosity, permeability fair, some fluorescence, good cut and stain.

Core No. 1 9598-9620 - cut 22 feet, recovered 22 feet-Laminated Siltstone, silty Shale: very small, thinly current bedded ripples, some carbonaceous debris.  
No shows.

9620-9670 - Siltstone and Shale , as above.

9670-9730 - Siltstone, light grey, fine grained, dolomitic matrix, becoming coarser below 9710 feet. No shows. Few coal bands 9700-9710 feet.

9730-9770 - Interbedded Shale and Siltstone.

9770-9775 - Coal Stringers

9775-9782 - Sandstone.

Core No. 2 9782-9812 - cut 30 feet, recovered 30 feet.

4 feet Sandstone, fine to medium grained, light tan, well sorted, blue-white fluorescence, yellow ribbon cut.

2 feet Shale.

9 feet Sandstone, fine to very fine grained, light grey to white, well sorted, argillaceous, slight cut.

4 feet interbedded Sandstone and Shale.

11 feet Shale.

9812-9890 - Interbedded Shale and Coal, with occasional sand stringers.

9890-9901 - Sandstone, quartzose, white, fine to medium grained, some white, clay matrix, some fair visible porosity, blue-white fluorescence, yellow ribbon cut.

Core No. 3 9901-9931 - cut 30 feet, recovered 30 feet.

9901-9907, Sandstone, quartzose, light grey, fine to medium grained, sub-angular, well sorted, poor to pin point visible porosity, blue-white fluorescence, slow ribbon cut, good odour.

9907-9910, Interbedded Siltstone and Shale  
Siltstone, light grey and sandy.

Shale, grey-black, slightly fissile, hard carbonaceous

9910-9919, Shale, as above.

9919-9928, Sandstone, as above, but very fine to fine grained, clay choked, poor visible porosity, scattered carbonaceous debris, very spotty blue-white fluorescence, very slow ribbon cut at top, no show for lower footage.

9928-9931, Interlaminated Sandstone and Shale both as above.

LITHOLOGY (contin)

Interval  
(ft)

- 9931-9943 - Shale, with occasional interbedded Coal.  
Shale, brown-grey, silty, micaceous, carbonaceous.
- 9943-9960 - Thin Sandstone beds interbedded with Shale.  
Sandstone, 2-4' thick, white to light grey, fine grained, clay choked, blue white-yellow fluorescence, cut.
- 9960-9994 - Shale and Coal, a thin sand at about 9962 feet.
- 9994-10030 - Thin Sandstone beds with interbedded Shale, occasional Coal.  
Sandstone, as above, but no show.
- 10030-10040 - Shale and Coal.

TESTING

F.I.T. No.  
3

Depth (ft)  
9149

Main chamber, piston jammed, recovered 16,000 cc's filtrate.  
Hydrostatic pressure 4800 p.s.i.  
F.I.P. 57 p.s.i.  
F.S.I.P. 0  
Segregator 1 cub. ft. gas, 2200 cc's filtrate, with slight rainbow.  
Surface Pressure 300 p.s.i.  
F.I.P. 294 p.s.i.  
F.S.I.P. 4001 p.s.i.

CORE ANALYSIS

|             | <u>Depth</u><br>(ft) | <u>Oil</u><br><u>Sat'n %</u> | <u>Water</u><br><u>Sat'n %</u> | <u>Porosity</u><br>% | <u>Permeability</u><br>m.d. |
|-------------|----------------------|------------------------------|--------------------------------|----------------------|-----------------------------|
| CORE NO. 2. | 9783                 | 0                            | 38                             | ( 13- )              | ( 0 )                       |
|             | 9789                 | 0                            | 41                             | ( 24% )              | ( )                         |
|             | 9793                 | 9.6                          | 61                             | ( )                  | ( )                         |
|             | 9797                 | 1.6                          | 31                             | ( )                  | ( )                         |
| CORE NO. 3. | 9901                 |                              |                                | 21.0                 | ( 0 )                       |
|             | 9903                 | 0                            | 33                             | 26.9                 | ( )                         |
|             | 9905                 |                              |                                | 23.7                 | ( )                         |
|             | 9907                 |                              |                                | 19.7                 | ( )                         |
|             | 9920                 | 0                            | 41                             | 21.9                 | ( )                         |
|             | 9922                 | 4                            | 32                             | 25.8                 | ( )                         |
|             | 9924                 |                              |                                | 23.9                 | ( )                         |
|             | 9926                 | 3                            | 21                             | 26.8                 | ( )                         |
| 9928        |                      |                              | 17.3                           | ( )                  |                             |

*AK*

HEMATITE PETROLEUM PROPRIETARY LIMITEDWEEKLY DRILLING REPORT.

TENEMENT NUMBER: TAS/P5.  
OPERATOR: ESSO STANDARD OIL (AUSTRALIA) LTD.  
DRILLING UNIT: "OCEAN DIGGER".  
WELL: PELICAN 2.  
DATE OF REPORT: 31ST AUGUST, 1970.  
LOCATION: Latitude 40° 18' 29" S.  
Longitude 145° 49' 12" E.  
WATER DEPTH: 255 FEET.  
PROGRESS: CURRENT 10,066 feet.  
PREVIOUS 10,058 feet.  
PROGRESS 8 feet.

OPERATIONS:

During the week 7 F.I.T.'s were run, 5 of which were successful. I.E.S. and G.R.D. logs were also run. Currently logging and shooting S.W.C.'s prior to running F.I.T. No. 11.

GAS READINGS:

| <u>Interval</u><br>(ft)                      | <u>Hot Wire</u><br><u>Cuttings</u> | <u>Hot Wire</u> | <u>C1.</u> | <u>C2.</u> | <u>C3.</u> | <u>C4.</u> |
|--|------------------------------------|-----------------|------------|------------|------------|------------|
| 10,040-10,066<br>(Coal peak at 10,040 feet). | 12-28                              | 8-180           | 200-10,000 | 30-500     | 0-80       | 0-40       |

LITHOLOGY:

| <u>Interval</u><br>(ft) |                        |
|-------------------------|------------------------|
| 10,040-10,066           | <u>Shale and Coal.</u> |

TESTING:

| <u>F.I.T. No.</u> | <u>Depth (ft)</u> |  |
|-------------------|-------------------|--|
| 4                 | 10,007            | No recovery.   |
| 5                 | 9,784             | No recovery. Hydrostatic pressure 5182 p.s.i.<br>F.I.P. 0<br>S.I.P. 0  |
| 6                 | 9,906             | Recovered 0.4 cubic feet gas, 1500 cc's filtrate.  |
| 7                 | 9,706             | Recovered 3.7 cubic feet gas, 16,300 cc's filtrate.<br>Hydrostatic pressure 5130 p.s.i.<br>F.I.P. 330 p.s.i.<br>S.I.P. 4377 p.s.i.                             |
| 8                 | 10,006            | Recovered 0.2 cubic feet gas.<br>Hydrostatic pressure 5400 p.s.i.<br>F.I.P. 5400.<br>S.I.P. 200.   |
| 9                 | 9,785             | Recovered 0.2 cubic feet gas, 3400 cc's filtrate.<br>Schlumberger Hydrostatic Pressure 5300 p.s.i.<br>F.I.P. 250 p.s.i.<br>S.I.P. no build up in main chamber. |



TESTING (contin):F.I.T. No.    Depth (ft)

9                    9,785

Agnew Hydrostatic Pressure 5091 p.s.i.  
F.I.P.    195 p.s.i.  
S.I.P.    4796 p.s.i.  
Main chamber.

10                   9,904

Recovered 0.3 cubic feet gas,  
1500 cc's filtrate. |  
Segregator  
Recovered 1-2 cubic feet gas,  
2000 cc's filtrate. |*Blakeman*

HEMATITE PETROLEUM PROPRIETARY LIMITED.WEEKLY DRILLING REPORT

TENEMENT NUMBER: TAS/P5.  
 OPERATOR: ESSO STANDARD OIL (AUSTRALIA) LTD.  
 DRILLING UNIT: "OCEAN DIGGER".  
 WELL: PELICAN 2.  
 DATE OF REPORT: 7TH SEPTEMBER, 1970.  
 LOCATION: Longitude 145° 49' 12" E.  
 Latitude 40° 18' 29" S.  
 WATER DEPTH: 255 FEET.  
 PROGRESS: Current 10,066 feet.  
 Previous 10,066 feet.  
 Progress 0 feet.

OPERATIONS:

During the week HDT and BHCS logs were run. F.I.T. No. 11 and C.S.T.'s Nos. 2 & 3 were also run. Five abandonment plugs have been set, and 7 anchors pulled. Currently waiting on weather prior to abandoning the site.

PLUGS:

| <u>Plug No.</u> | <u>Depth Tagged (ft)</u> | <u>Cement</u>           |
|-----------------|--------------------------|-------------------------|
| 1               | 9760                     | 250 sacks + 0.4% D.B. R |
| 2               | 9440                     | 330 sacks + 0.4% D.B. R |
| 3               | 8905                     | 665 sacks + 0.4% D.B. R |
| 4               | 5713                     | 210 sacks + 0.3% D.B. R |
| 5               | 2730                     | 315 sacks neat cement.  |
|                 | <u>Interval Set (ft)</u> |                         |
| 6               | 750-450                  | 200 sacks neat cement.  |

TESTING:

| <u>F.I.T. No.</u> | <u>Depth (ft)</u> |   |
|-------------------|-------------------|---|
| 11                | 9784              | Recovered 0.2 cubic feet gas, 3000 cc's filtrate (1200 ppm) |
|                   |                   | <u>Segregator</u>   |
|                   |                   | Recovered 0.4 cubic feet gas, 2300 cc's filtrate.           |
|                   |                   | <u>Pressure Data</u>  |
|                   |                   | <u>Agnew</u>  |
|                   | Hydrostatic       | 5095 p.s.i.   |
|                   | Flowing           | 50 p.s.i.   |
|                   | Shut In           | 4824 p.s.i.   |
|                   |                   | <u>Schlumberger</u>   |
|                   |                   | 5350 p.s.i.   |
|                   |                   | 200 p.s.i.  |
|                   |                   | 4750 p.s.i.   |

*Blkham*

388026

HEMATITE PETROLEUM PROPRIETARY LIMITED.

WEEKLY DRILLING REPORT.

TENEMENT NUMBER: TAS/P5.  
OPERATOR: ESSO STANDARD OIL (AUSTRALIA) LTD.  
DRILLING UNIT: "OCEAN DIGGER".  
WELL: PELICAN 2.  
DATE OF REPORT: 14TH SEPTEMBER, 1970.  
LOCATION: Longitude 145° 49' 12" E.  
Latitude 40° 18' 29" S.  
WATER DEPTH: 255 FEET.  
PROGRESS: Current 10,066 feet.  
Previous 10,066 feet.  
Progress 0 feet.

OPERATIONS:

The "Ocean Digger" abandoned the Pelican No. 2 Well location at 1530 hours on 7th September, 1970. This is the final report.

Hematite Petroleum Proprietary Limited



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

EAH:YEF-H

10th July, 1970.

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

|          |                |
|----------|----------------|
| RECEIVED | 7 5 JUL 1970   |
| ANSWERED | DEPT. OF MINES |
| REF. NO. | 4715/70        |

Dear Sir,

*Reply: Permission is granted for the drilling of the above well*

EO3/1A Application to Drill Pelican No.2  
in Permit T/P5

I enclose herewith a Notice of Intention to drill Pelican No.2 stepout well in the Tasmanian waters of the Bass Basin.

Pelican No.2 location is 2.5 miles north-west of Pelican No.1 Well, and will be drilled by the "Ocean Digger" after completion of the Cormorant No.1 Well. The primary objectives of this confirmation test are to aid in determining the size of the gas-condensate bearing structure discovered by Pelican No.1 Well and to possibly determine if an oil column exists downstructure. Proposed total depth is 10,200 feet  $\pm$  or to the high pressure zone tentatively interpreted to be at 9,800 feet  $\pm$  (driller), whichever is first encountered.

The proposed location of Pelican No.2 is approximately 375 feet structurally low to the Pelican 1 Well as correlated on a lowermost M. diversus phantom horizon. This horizon lies 940 feet beneath the first pay zone of the Pelican 1 Well. Mapping is not complete at this level and is therefore not included with this application. The attached map shows the uppermost M. diversus horizon, 1320 feet above the lower M. diversus horizon and approximately 380 feet above the first pay zone of Pelican No.1. It has been

## 2.

mapped as the base of a zone of continuous reflections. At the Pelican 1 well site the 1320 feet interval between the lowermost and uppermost M. diversus horizons contains 125 feet of nett pay out of 281 feet total normally pressured nett pay.

The main Pelican structural complex trends northwest-southeast. Areal closure, using a down dip limit of 9500 feet on the lowermost M. diversus horizon, is presently estimated to be approximately 40 square miles, but work on this horizon is continuing. Vertical closure is of the order of 900 feet. Structural growth of the Pelican anticline appears to have been mainly during M. diversus time and there is evidence of almost 300 feet of thinning of the lowermost to uppermost M. diversus interval over the primary feature.

The stratigraphic section at the Pelican-2 prospect is expected to be similar to that drilled in the Pelican-1 discovery well located 2.5 miles to the southeast. The marine Miocene and Oligocene sections are composed of calcarenites, mudstones and shales conformably overlying Eocene beds.

The Upper Eocene Demons Bluff formation is conformable with the underlying Eastern View sandstone complex. The Demons Bluff is composed of marine shales and siltstones which have good source rock potential.

The Eastern View Complex in Pelican-1 is made up of sandstones, interbedded with lesser shales and coals of Eocene age. This unit includes sediments deposited in environments ranging from delta plain through beach front. Overall the Eastern View section is remarkably similar to the Latrobe Delta Complex of the Gippsland Basin both as a reservoir and a source rock.

Cores of Eastern View sandstones from the Pelican No.1 Well had permeabilities reaching a maximum value of 452 millidarcies with porosities as high as 25.1%. In general, however, good reservoir sandstones had core porosities of about 20%  $\pm$  and permeabilities in the 150  $\pm$  millidarcy range.

3.

Abnormally high pressure sandstones were encountered in the Pelican No.1 Well below 9822 feet (driller), but the actual top of the zone occurs some 400-600 feet higher.

The prognosis of Pelican No.2 is as follows :-

| <u>Formation Tops</u> | <u>Formation</u>                            | <u>Age</u>        |
|-----------------------|---|-------------------|
| 240                   | Torquay Group equivalent                    | Miocene-Oligocene |
| 5412                  | Demon's Bluff Formation                     | Eocene            |
| 5764                  | Eastern View Coal<br>measures (top of sand) | Eocene            |
| 8322                  | 1st M. diversus pay<br>(approximate)        | Eocene            |
| 9700                  | *1st high pressure zone<br>(approximate)    | Eocene            |

\*The prediction of the depth of high pressure is based on the assumption that the top of the high pressure zone follows time-stratigraphic horizons.

Water depth is 240 feet. Depths given above are sub-sea; for drill depths add 100 feet.

Pelican No.2 Well will probably spud around the middle of July.

Yours faithfully,

*B Hopkins*

*for* R.P. Harrison,  
Manager Operations

Encls.

COMMONWEALTH OF AUSTRALIA

STATE OF TASMANIA

Petroleum (Submerged Lands)  
Act 1967-68Petroleum (Submerged Lands)  
Act 1967NOTICE 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/P5 here-  
 with notify the intention to drill a well and request  
 your permission to carry out the proposed operation :

1. Well: Pelican No.2.  
 Classification: Wildcat confirmation  
 test.

2. Operator: Esso Standard Oil (Australia) Ltd.,  
 380 Lonsdale 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 and Exploration Co.  
 (Australia) Ltd.,  
 180 Russell Street,  
 MELBOURNE.  
 PHONE - 6634041.

Drilling Rig: "Ocean Digger".

Date of Commencement: Mid July, 1970.

Drilling Days: 35.

4. Details of Operation:

Location: Longitude 145° 49' 12.270" E.  
 Latitude 40° 18' 28.426" S.

Water Depth: 240 feet.

Drilling datum: D.F. 100 feet above  
 M.S.L.

2.

## 4. Details of Operation (contd.)

Casing Programme: 20-inch @ 500 feet penetration.  
13 3/8-inch @ 3000 feet.  
9 5/8-inch @ 9400 feet.

Logging Programme: 1. At a depth of  $\pm$  9400' run IES and FDC logs for correlation purposes. If a decision is made to set protective casing at that depth, continue the logging program by running BHCS, CDM and possibly MLL and N logs. Run velocity survey and take sidewall cores. Run FIT if necessary.

2. At total depth run a complete logging program as described above with the exclusion of the velocity survey.

Continuous mud logging from the base of the 20" casing to total depth.

Samples: Catch 5 sets of washed and dried cuttings at 10' intervals from the base of the 20" casing to total depth. Collect one can of 10' samples every 100 feet from the 20" casing to total depth.

Coring: Continuously core all significant shows of gas and/or oil. A possible 300'  $\pm$  of core is anticipated.

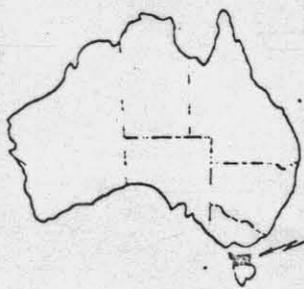
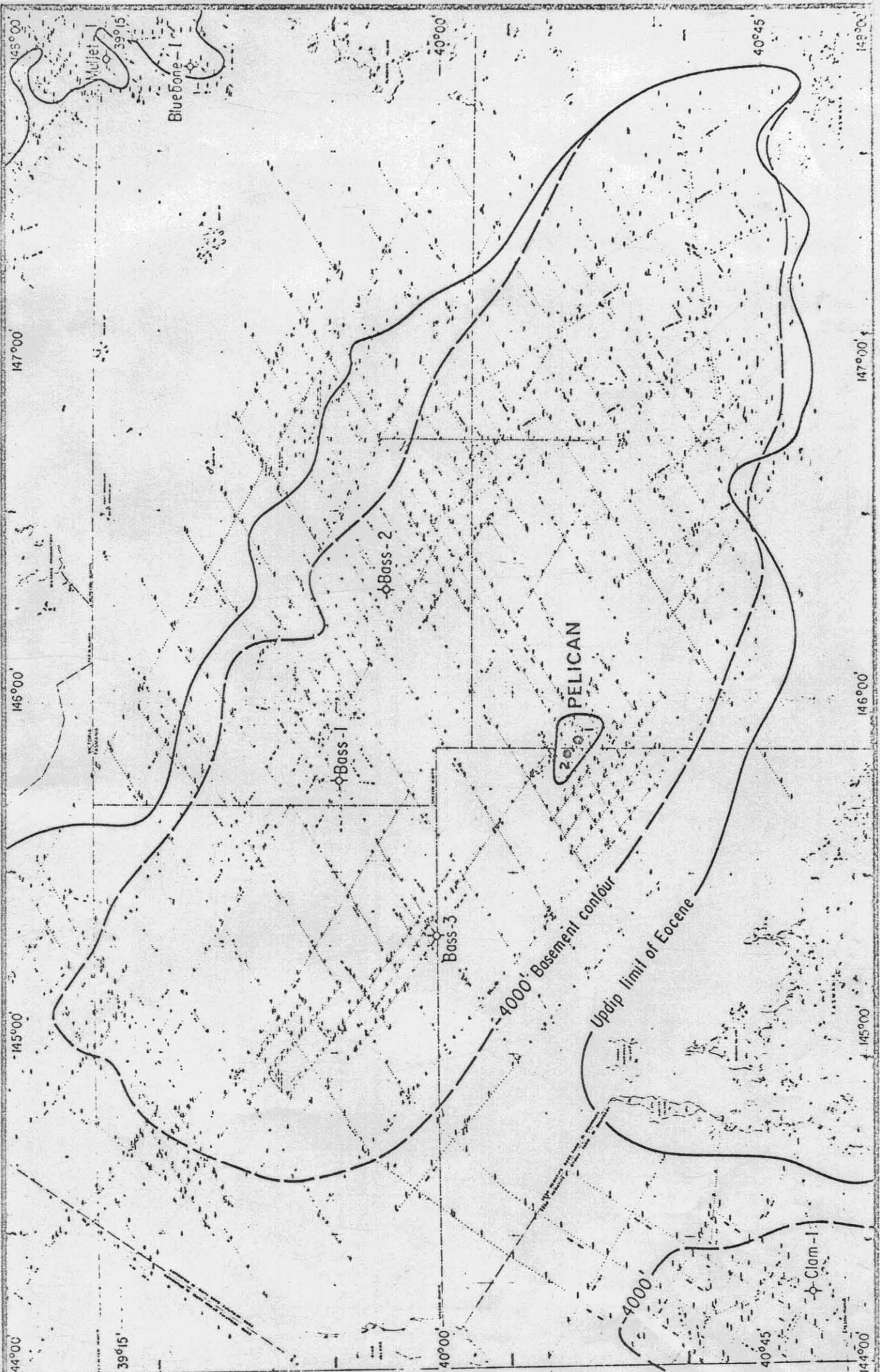
Proposed Total Depth: 10,200  $\pm$  to the high pressure zone tentatively interpreted to be at 9,800'  $\pm$  (driller) whichever is first encountered.

Notification Date: 10th July, 1970.

*B. Harrison*  
for R.P. HARRISON,  
Manager Operations

EAH:YEF  
Melbourne.

388032



AUSTRALIA

5 cm

Map Area

ESSO EXPLORATION AND PRODUCTION AUSTRALIA INC.

# PELICAN PROSPECT

BASS BASIN

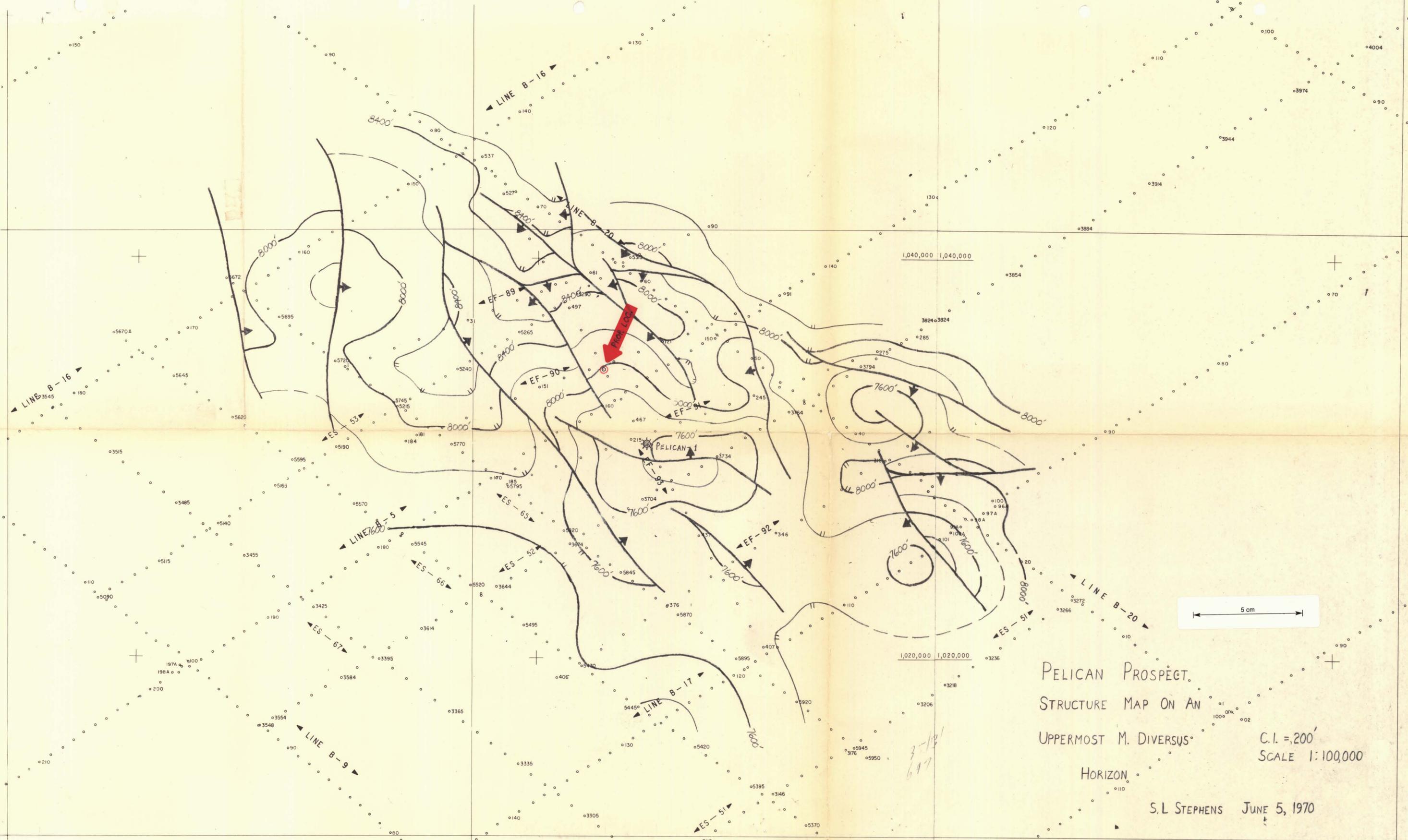
ORIENTATION MAP

Fig. 1

Scale 1:1,250,000

0 20 40 miles

OR 352A



PELICAN PROSPECT.  
 STRUCTURE MAP ON AN  
 UPPERMOST M. DIVERSUS\*  
 HORIZON

C.I. = 200'  
 SCALE 1:100,000

S. L. STEPHENS JUNE 5, 1970

OR-352A

388033

Fig 2.