

ANNUAL REPORTS

PERMIT No. 3; No. 4; No. 5 & No. 6

(1973- Hematite)

**TPR
OR-032**

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Period 5th year of permit ending 16th July 1973

Exploration Report Tasmanian Permit No. T/6P
Period 5th year of permit ending 16th July 1973

Enclosures

- OG 3208 T3P Aroo Prospect – Blue Horizon
- OG 3214 Toolka Prospect – Top Eastern View Coal Measures – Yellow Horizon
- OG 3215 Kalperri Prospect – Red Horizon
- OR 3185 Flinders Seismic Survey – Bass Basin
- OR 3185-1 Flinders Seismic Survey – Bass Basin
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- OR 3186 Cape Nelson to Cape Otway Seismic Survey – Proposed Programme
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Pelican Trend

TPR
OR-032

EXPLORATION REPORT TASMANIAN PERMIT T/3P

PERIOD - 5TH YEAR OF PERMIT ENDING 16TH JULY, 1973

T/3P covers part of two basin areas, the Otway in the west and the Bass in the east. Hematite Petroleum Pty. Ltd. operates the west and Esso Australia Limited operates the east under a farm out agreement from Hematite Petroleum Pty. Ltd.

Geophysical Studies and Operations

No geophysical surveys were carried out in the permit area during the six months period ending 30th June 1973.

In the Otway Basin, results from the interpretation of the Portland-King Island Seismic Survey submitted in March 1973, have indicated that additional seismic control is needed in the permit area in order to obtain a clearer understanding of the regional geological and structural configuration of the area and the possible delineation of any mappable structural anomalies.

In the Bass Basin, Esso Australia Ltd. continued their seismic interpretation and updated key regional structure maps. The interpretation of the seismic velocity data from the B72A survey was done so that it can be integrated with velocity maps previously constructed. Geophysical observers were present at the Konkon location during the recording of the well velocity survey. Processing of the B72A seismic data was completed in January, 1973 and the seismic sections and related information have been submitted previously.

Hematite Petroleum undertook evaluation of the Bass Basin area and have mapped three prospect leads, "Aroo", "Toolka" and "Kalperri". Further detailed seismic shooting will be required on all three leads and a programme for the "Aroo" feature has been submitted as part of the forthcoming Flinders Seismic Survey.

Geological Studies and Operations

In the Otway Basin area of the permit, further geological evaluation was continued during this period using data from the Portland-King Island Seismic Survey, and the available well and seismic data interpretation from T/3P and adjacent areas. Results of the studies when finalised will be included in a regional interpretation of the petroleum prospects of the area.

In the Bass Basin, Esso Australia Ltd. provided geological supervision at the Konkon-1 well location during the drilling operation. Office studies included the more detailed examination and written description of the side-wall cores and electric logs from the Konkon well in addition to the updating of regional maps and cross sections.

Further geological studies were undertaken by Hematite to assist the seismic interpretations of new prospect leads.

Drilling Operations

The Konkon-1 test was commenced on May 13th, 1973 and completed on May 29th, 1973, after reaching a total depth of 5043 feet. There were no indications of hydrocarbons encountered, and there were no formation interval tests made. This well successfully evaluated a play concept updip from the Cormorant-1 test, with discouraging results. The well completion report for Konkon-1 will be submitted in the near future.

Future Programme

In the Bass Basin, interpretation of three prospect leads are well advanced and we have arranged to shoot 39 miles of seismic lines over the "Aroo" closures. Further shooting programmes to detail the "Toolka" and "Kalperri" structures are under consideration and other areas for further seismic exploration are being worked. Future drilling programmes will be dependent upon the outcome of the office interpretation and new shooting.

In the Otway Basin, the Cape Nelson to Cape Otway Seismic Survey is proposed to be shot as a sequel survey to the Portland-King Island Seismic Survey. A total of 1228 line miles will be shot, of which 259 miles will be in the permit area. The programme is designed to provide complete grid coverage of the permit area using the same advanced technology methods as for the Portland-King Island Survey. It will include several lines extending into deep water, i.e. beyond the 500 fathom isobath (see map OG 3186).

The survey is expected to commence in late August to early September, 1973.

Attachments:

- "Aroo Prospect" Blue Horizon OG.3208 ✓
- "Toolka Prospect" Eastern View Coal Measures
Yellow Horizon OG.3214 ✓
- "Kalperri Prospect" Red Horizon OG.3215 ✓
- Flinders Seismic Survey Programme Map OG.3185-2(3)
- Cape Nelson Cape Otway Programme Map OG. 3186

*filed with
Otway/King.*

*SS.
27/7/73*

HEMATITE PETROLEUM PTY. LTD.EXPENDITURE STATEMENT - T/3PPERMIT YEAR 5 ENDING 16TH JULY, 1973

Geological Studies	22,769	22,769
Geophysical		
Portland-King Island Survey)	77,318	
B72A Survey)	97,886	
Processing	62,279	237,483
Interpretation		
Drilling		
Konkon-1	462,000	462,000
Rental	1,710	1,710
		<u>\$723,962</u>

Alman
3/7/73

EXPLORATION REPORT TASMANIAN PERMIT T/4P

PERIOD - 5TH YEAR OF PERMIT ENDING 16TH JULY 1973

Operations in the permit year included seismic and drilling which were entirely in the Bass Basin portion of the permit.

Geophysical Studies and Operations

The processing of the B72A data was completed during January, 1973. Copies of the processed seismic sections, and the operations reports for the B72A survey were submitted previously. There were no new field surveys carried out during the last six months. A well velocity survey was run at Dondu-1 on June 29, 1973 and these data are presently being plotted as a time-depth curve and will be used to reference the interpreted seismic sections with the stratigraphy interpreted from the bore hole data.

The interpretation of the B72A seismic sections was integrated with those from previous surveys in the potentially prospective areas. Maps and reports were completed which led to the recommendations to drill Dondu-1 and Yurongi. Regional interpretation, including the interpretation of seismic velocity data, is continuing in order to update the key structure maps which have been submitted with past permit reports.

Separate studies by Hematite Petroleum of the Bass Basin area has led to the proposal to undertake the Flinders Seismic Survey.

Geological Studies and Operations

A wellsite geologist was on location at Dondu to record the bore hole data and supervise the electric log programme. Samples and cores were described on the rig whilst drilling, and progress reports prepared. Office work included additional interpretation of the Dondu-1 bore hole data and the integration of these results with previously constructed maps and cross sections.

Drilling Operations

Dondu-1 was commenced on May 30, 1973 and was at a total depth of 9603 feet and running logs on June 30, 1973. The results of these logs and other bore hole data are currently being studied in the office, but the interpretation of all available data at the wellsite indicate that there are no reservoir hydrocarbons present. A formation interval test (F.I.T.) at 9550 feet recovered 4500 cc of water. Pressures recorded were:- hydrostatic pressure 5550 psi and shut in pressure 5175 psi.

Yurongi-1 was spudded in on 3rd July and was abandoned at 6000 feet on 14th July. The well did not intersect any potentially productive zones.

Future Programme

The Flinders Seismic Survey will be shot during late August to early September and will comprise approximately 120 miles. The survey will infill the seismic grid in the south western part of the permit and the outcome of interpretation of the survey and current office studies will help determine any further drilling proposals for this area the coming permit year.

Attachments

"Proposed Programme
Flinders Seismic Survey (July 1973)"
OG 3185.
OG 3185-1

Handwritten initials and date: *RLB*
1973

HEMATITE PETROLEUM PTY. LTD.EXPENDITURE STATEMENT - T/4PPERMIT YEAR 5 ENDING 16TH JULY, 1973

Geological Studies	16,771	16,771
Geophysical		
B72A Seismic Survey Shooting	31,434	
Processing	39,523	
Interpretation	<u>70,735</u>	141,692
Drilling		
Dondu-1	762,300	762,300
Rental	1,970	<u>1,970</u>
		<u>\$922,733</u>

to Khan
3/7/73

EXPLORATION REPORT TASMANIAN PERMIT T/5P

PERIOD - 5TH YEAR OF PERMIT ENDING 10TH JULY 1973

T/5P covers part of two basin areas, the Otway in the west and the Bass in the east. Hematite Petroleum Pty. Ltd. operates the west and Esso Australia Ltd. operates the east under a farmout agreement from Hematite Petroleum Pty. Ltd.

Geophysical Studies and Operations

No geophysical surveys were carried out in the permit area during the six month period ending 30th June, 1973.

In the Bass Basin, the processing of the latest survey (B72A) was completed during January, 1973. Copies of the seismic sections and related data have been submitted previously.

Seismic interpretation continued with the updating of structure maps using the additional control from the B72A survey. Most of the effort was placed on structural leads and prospects. The re-interpretation of the Pelican trend (which extends into T/5P), including the seismic velocity interpretation, is essentially completed, and a copy of the structure contour map "Intra-Lower M. diversus" (1:50,000) is included with this report.

Hematite carried out its independent study of the Narimba prospect lead in the Pelican Trend and in this difficult area have mapped a structure with similar geometrical form.

In the Otway Basin area no new geophysical studies have been made except those necessary for regional geological studies.

Geological Studies

Regional stratigraphical studies were continued by Hematite in an attempt to arrive at a better subdivision of the Eastern View Coal Measures sequence, such studies involved reference to the existing well data and seismic sections in the Bass Basin. Similar work was carried out in the Otway Basin area in the Upper Cretaceous and later sections.

Drilling Operations

There was no drilling activity in the permit within the last six months.

Future Programme

Studies of the Pelican Trend with particular emphasis on the Narimba prospect are advancing and a decision for the siting of a test on the prospect will be taken shortly. Further exploration of the permit during the following year will depend upon the decision, and if a well, upon the results of that well. Additional evaluation of earlier work between the Tarook-1 and Pelican-2 locations will be undertaken, but there are no firm proposals for exploration programmes at this time. Favourable results from the Flinders Seismic Survey in the adjacent T/4P may lead to additional work in the T/5P area.

Attachment

Structure Contour Map

Pelican Trend "Intra-Lower M. diversus"

Drawing No. 1394/OP/57.

Handwritten signature and date:
2/1/73

HEMATITE PETROLEUM PTY. LTD.EXPENDITURE STATEMENT - T/5PPERMIT YEAR 5 ENDING 10TH JULY, 1973

Geological Studies	20,287	20,287
Geophysical		
B72A Survey	26,344	
Processing	30,610	
Interpretation	49,898	106,852
Drilling		
Tarook-1	534,605	534,605
Rental	1,585	1,585
		<u>\$663,329</u>

Allen
31/7/73

EXPLORATION REPORT TASMANIAN PERMIT T/6P

PERIOD - 5TH YEAR OF PERMIT ENDING 16TH JULY 1973

Geophysical Studies

In the Bass Basin the final processing of the data recorded during the B72A seismic survey was completed during January, 1973. There were no new field surveys carried out during the six month period ending 30th June, 1973.

New maps of the Pelican Trend were completed utilizing the new data, including seismic velocity from the B72A survey. This updated picture is essentially the same as the previous interpretation. However, the position of some of the faults, and the size of certain areas of closure are somewhat different.

Geological Studies

Broad stratigraphical studies were undertaken in the Hematite office involving all wells drilled in the permit. In Esso's office geological activity was limited to studies of the Pelican Trend in the northwestern portion of the permit. Cross sections and maps were updated in conjunction with the most recent seismic interpretation.

Drilling Operations

There was no drilling done during the report period.

Future Programme

The Pelican Trend represents an area where further drilling is possible during the 6th year of the permit. No firm commitment has been made at this time.

SSS
27/7/73

HEMATITE PETROLEUM PTY. LTD.EXPENDITURE STATEMENT - T/6PPERMIT YEAR 5 ENDING 16TH JULY, 1973

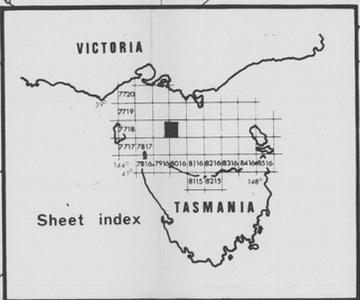
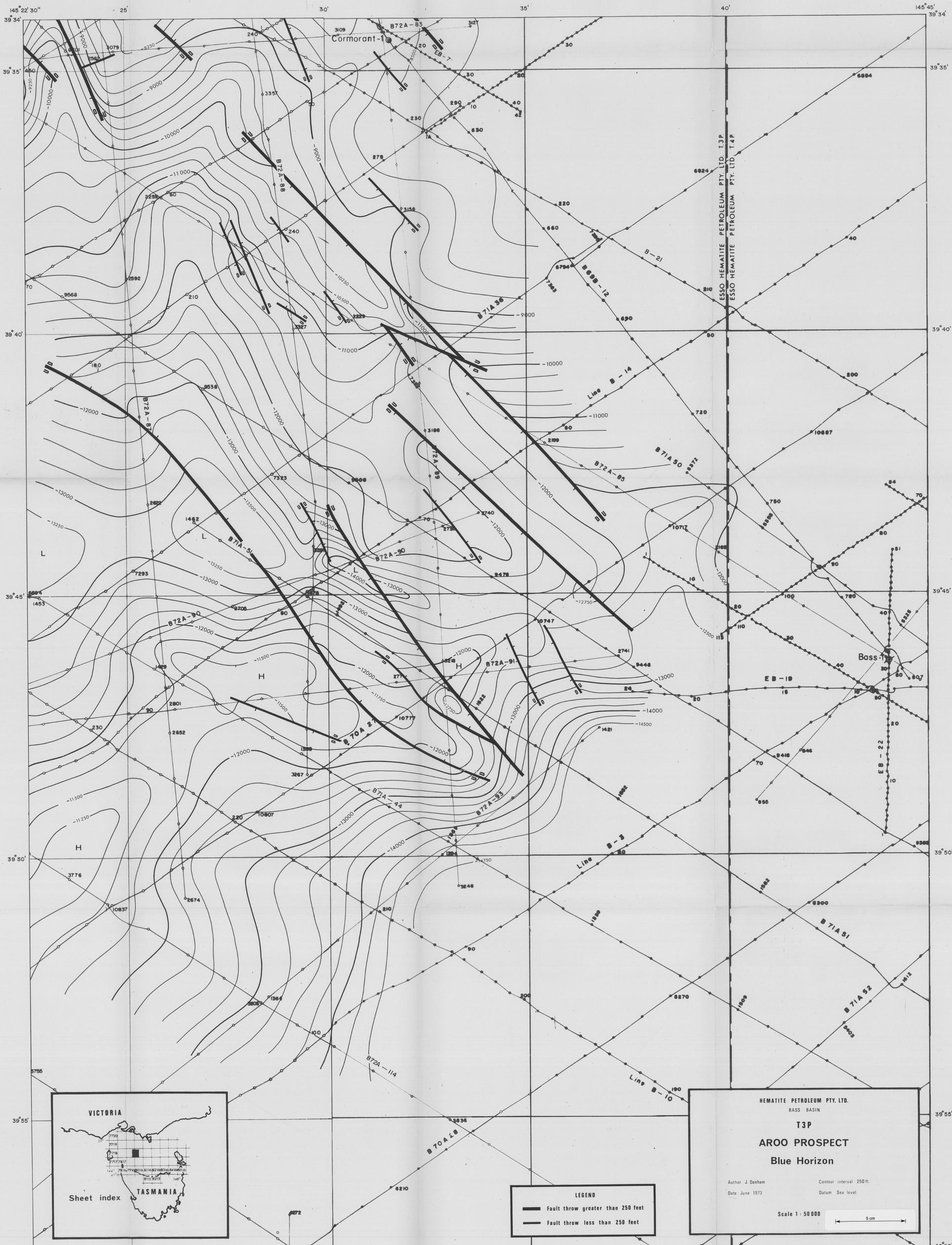
Geological Studies	33,104	33,104
Geophysical		
B72A Survey	32,383	
Processing	44,142	
Interpretation	70,498	147,023
Drilling		
Poonboon-1	1,037,573	
Durroon-1	926,428	1,964,001
Rental	2,000	2,000
		<u>\$2,146,128</u>

OFFSHORE 25

Alham
3/17/73

OR-032

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LEGEND

— Fault throw greater than 250 feet

— Fault throw less than 250 feet

HEMATITE PETROLEUM PTY. LTD.
BASS BASIN

T3P
AROO PROSPECT
Blue Horizon

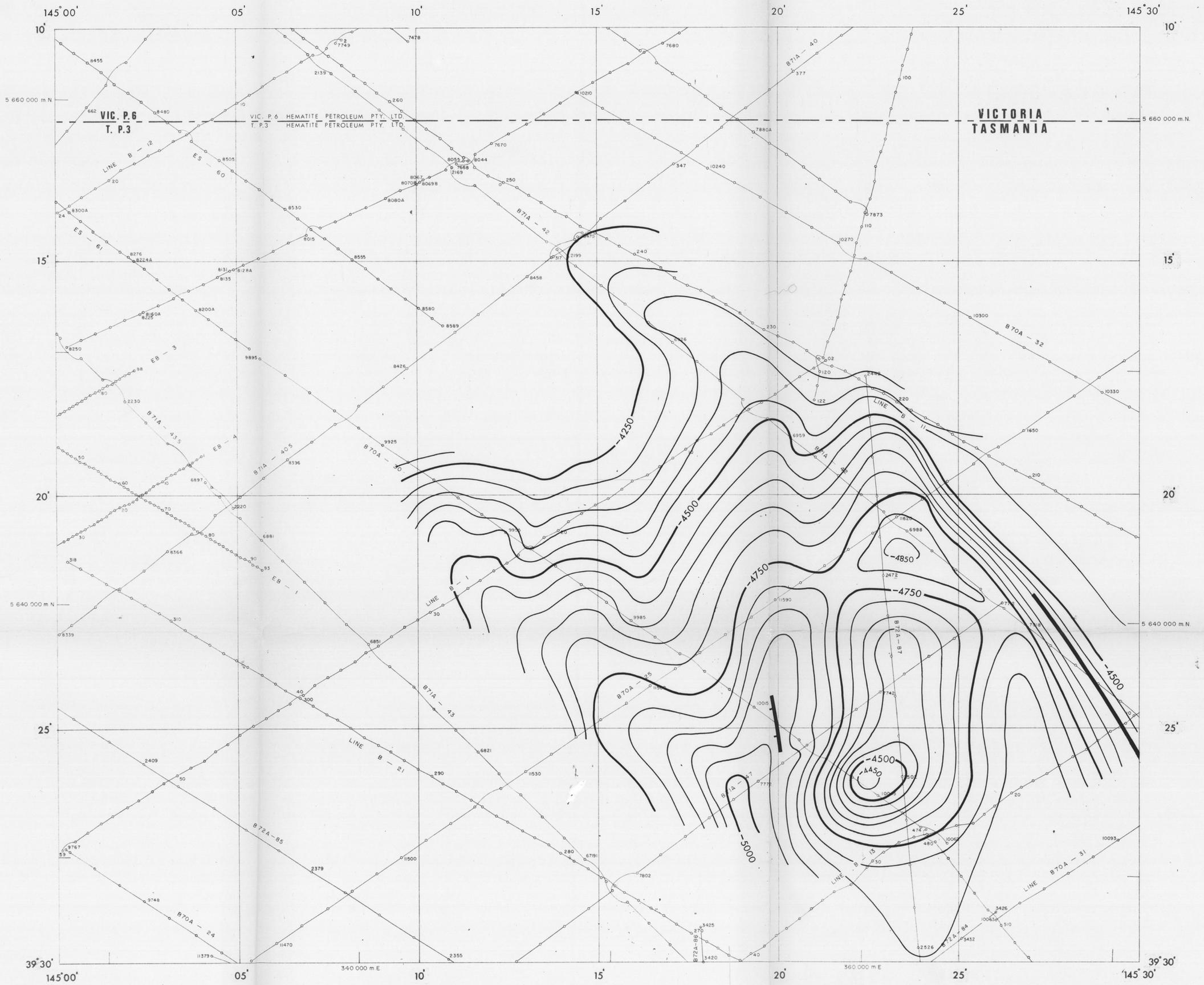
Author J. Denham
Date June 1973

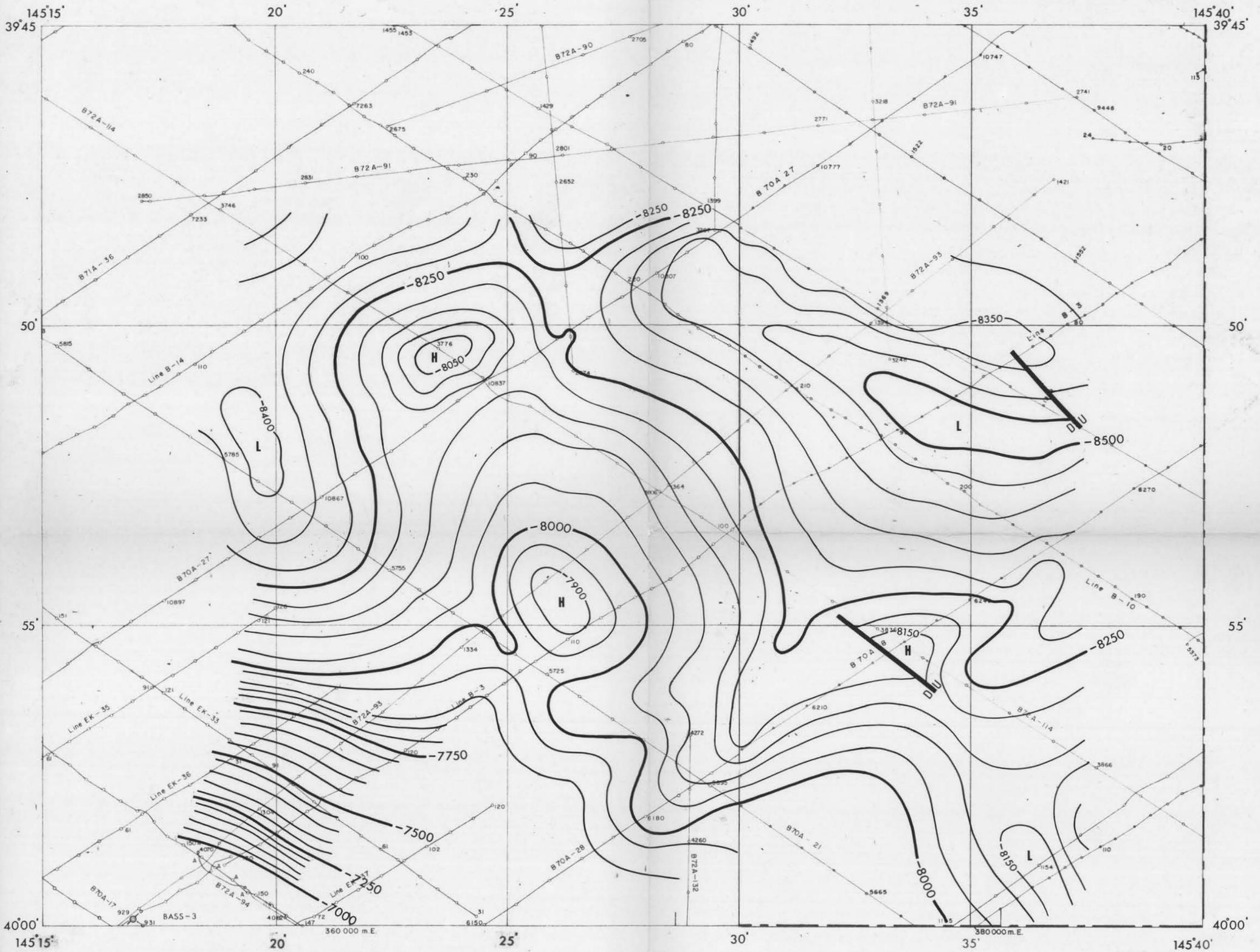
Contour interval 250 ft.
Datum Sea level

Scale 1 : 50 000

5 cm

INTERPRETATI





Scale 1:100,000

MILES



KILOMETRES



Compiled by Hematite Petroleum Pty. Ltd.

Projection, UTM. Zone 55 C.M. 147°E

HEMATITE PETROLEUM PTY. LTD.
BASS BASIN

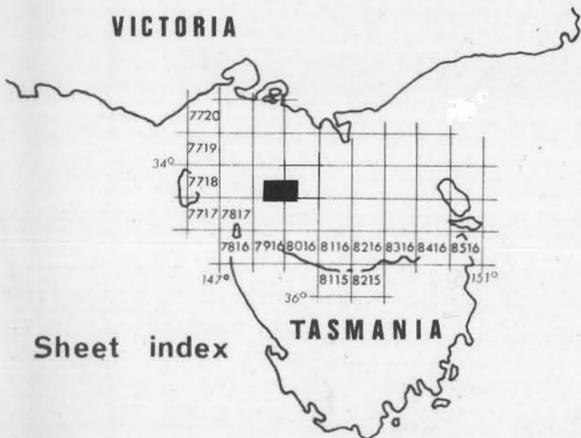
RED HORIZON

KALPERRI PROSPECT

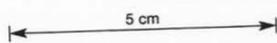
Contour interval: 50 feet Datum: Sea level

Author: E. G. Urschel Date: July 1973

VICTORIA



Sheet index



INTERPRETA

016016

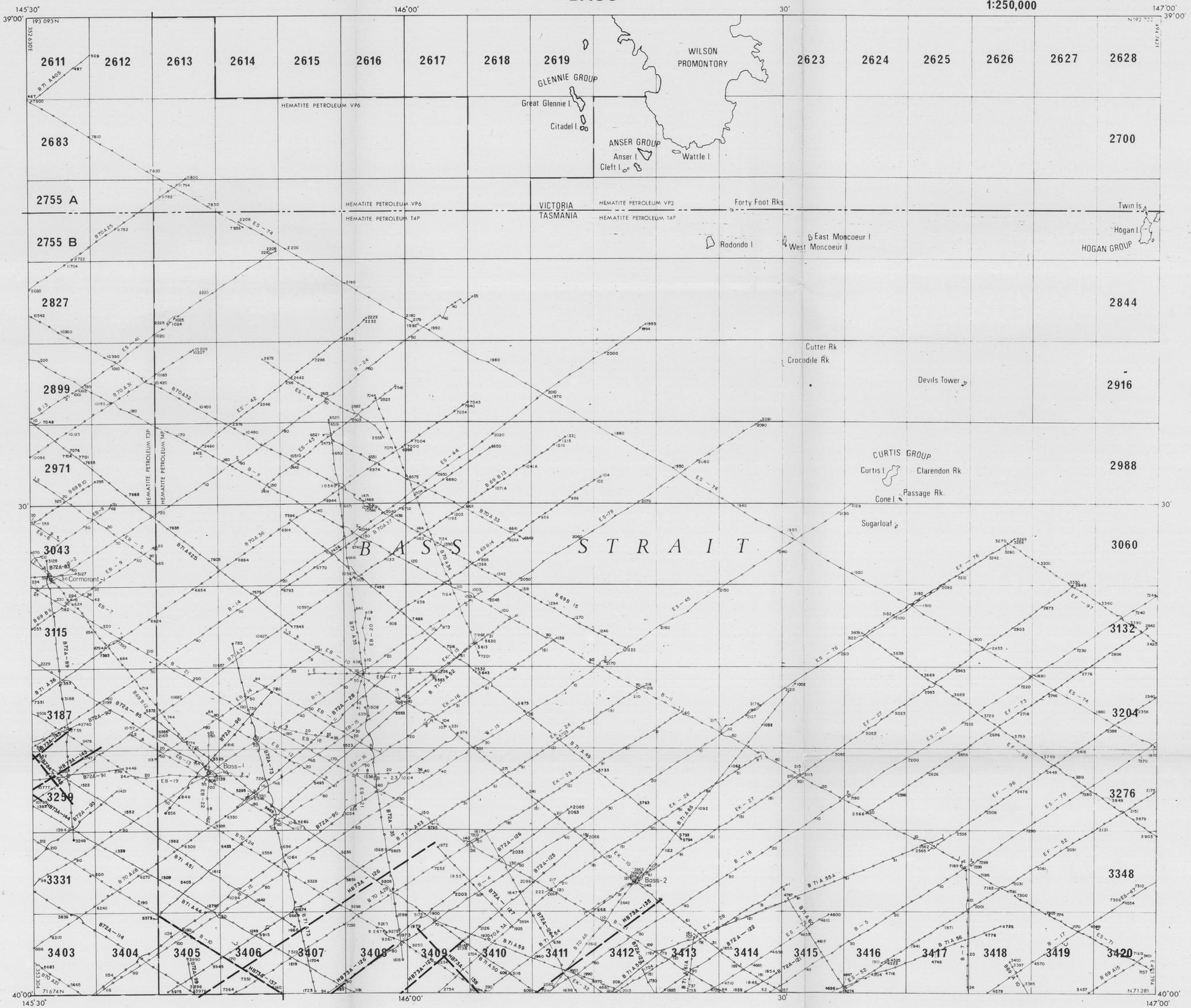
OR-032

OFFSHORE 25

OG 3215

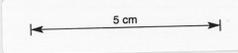
BASS

1:250,000



INDEX TO ADJOINING SHEETS

QUEENSLAND	WARRAGUL	SALE
KING	BASS	FLINDERS
HUNTER	WYNARD	CAPE BARREN



Scale 1:250,000

MILES



KILOMETRES

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The five minute Graticular Sections are shown thus 1777
 They are designated by:
 1. The name of the Map Sheet 1:100,000 series.
 2. The block number.
 3. The Longitude and Latitude of the North West corner.
 e.g. MELBOURNE 1777 Long. 148° 00' E. Lat. 38° 00' S.

Reference: Petroleum (Submerged Lands) Act 1967-68 of the Commonwealth of Australia.
 Petroleum (Submerged Lands) Act 1967-68 of the State concerned.

- LEGEND**
- Oil
 - ⊛ Gas
 - ⊛ Oil & Gas
 - ⊛ Oil show
 - ⊛ Gas show
 - ⊛ Oil & Gas shows
 - Drilling
 - ⊘ Dry hole (Abandoned)
 - Proposed seismic.

HEMATITE PETROLEUM PTY. LTD.
BASS BASIN

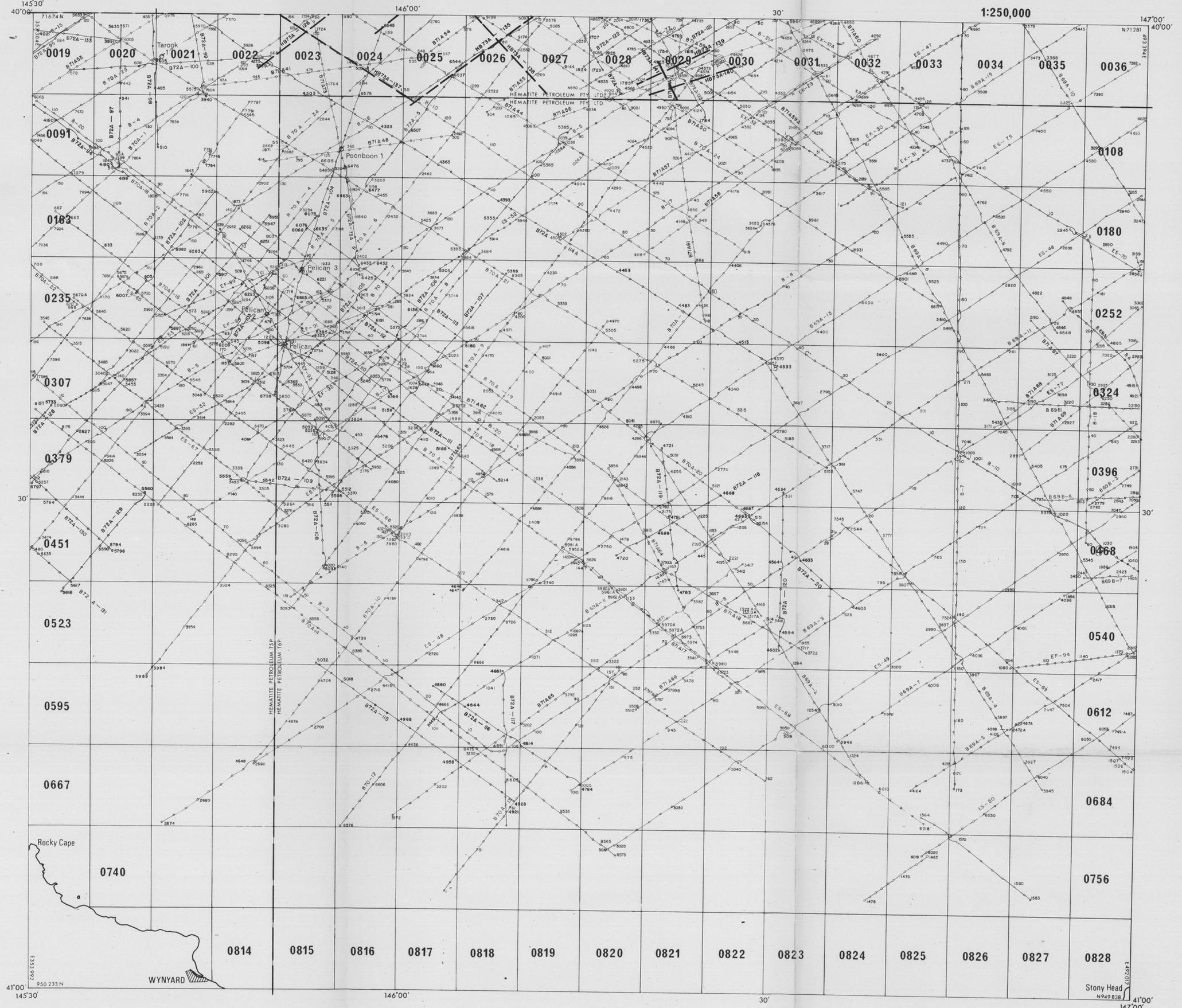
PROPOSED PROGRAMME

FLINDERS SEISMIC SURVEY
(July 1973)

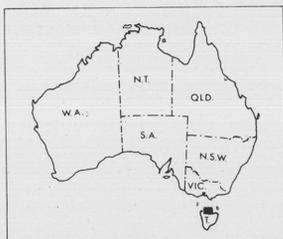
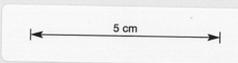
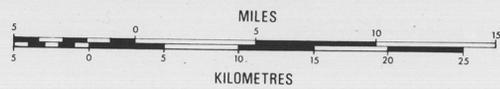
016017

BASS or J55-14

WYNYARD



Scale 1:250,000



INDEX TO ADJOINING SHEETS

KING	BASS	FLINDERS
HUNTER	WYNYARD	CAPE BARRÉN
SMITHTON	DEVONPORT	LAUNCESTON

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 e.g. MELBOURNE 1777 Long. 148° 00' E. Lat. 38° 00' S.

Reference: Petroleum (Submerged Lands) Act 1967 68 of the Commonwealth of Australia.
 Petroleum (Submerged Lands) Act 1967 68 of the State concerned.

LEGEND

- Oil
- ⊛ Gas
- ⊛ Oil & Gas
- Oil show
- Gas show
- ⊛ Oil & Gas shows
- Drilling
- ⊘ Dry hole (Abandoned)
- Proposed seismic.

HEMATITE PETROLEUM PTY. LTD.
BASS BASIN

PROPOSED PROGRAMME

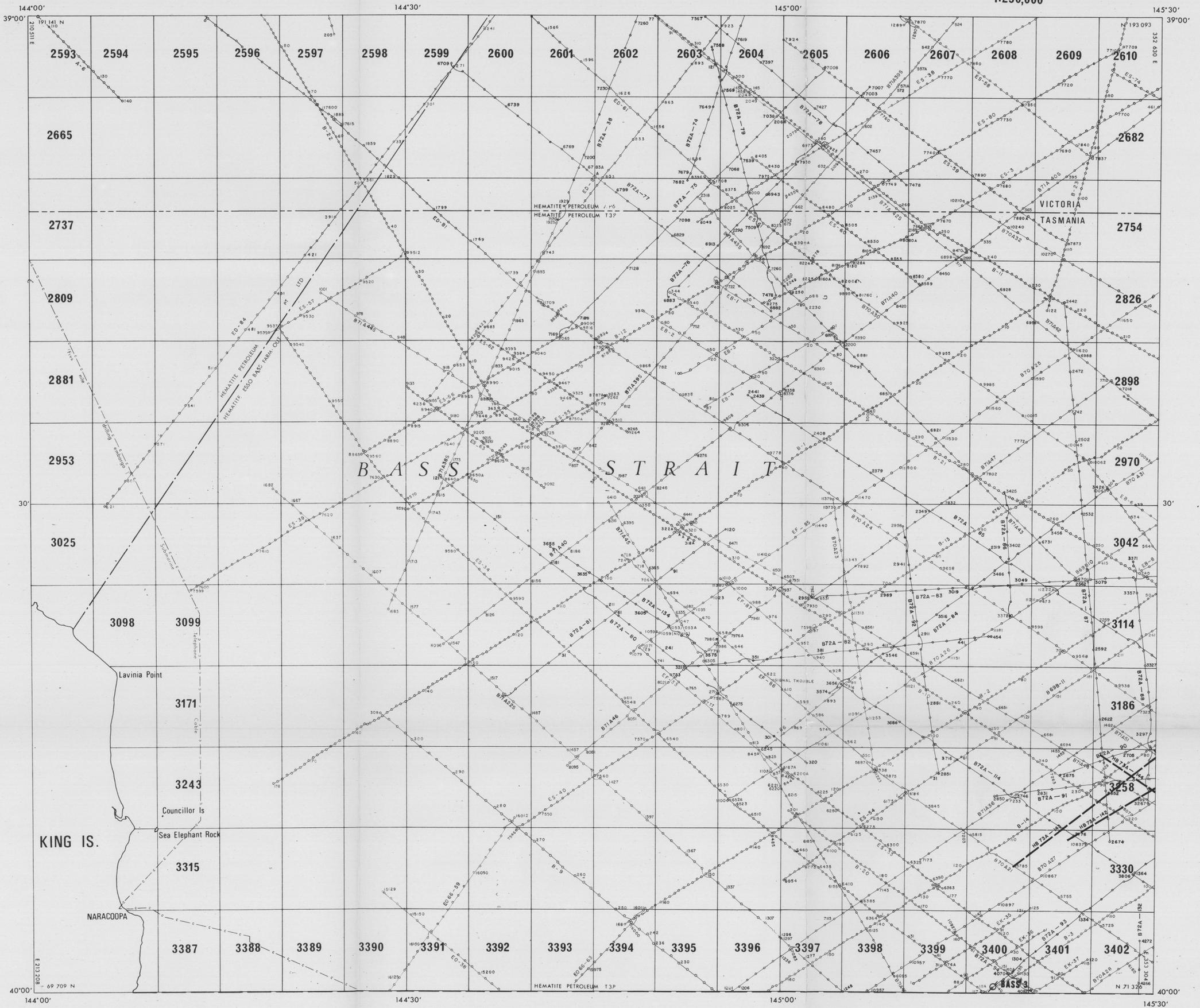
FLINDERS SEISMIC SURVEY
(July 1973)

016018

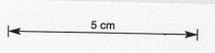
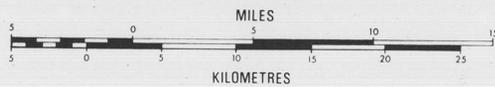
WYNYARD or K55-2

KING

1:250,000



Scale 1:250,000



HEMATITE PETROLEUM PTY LTD
BASS BASIN

PROPOSED PROGRAMME

FLINDERS SEISMIC SURVEY
(July 1973)

LEGEND

- --- Oil
- ★ --- Gas
- ★ --- Oil & Gas
- --- Oil show
- ★ --- Gas show
- ★ --- Oil & Gas shows
- --- Drilling
- ∅ --- Dry hole (Abandoned)

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The five minute Graticular Sections are shown thus 1777. They are designated by:
1. The name of the Map Sheet 1:1,000,000 series.
2. The block number.
3. The Longitude and Latitude of the North West corner.
eg MELBOURNE 1777 Long 148°00' E Lat 38°00' S

Reference: Petroleum (Submerged Lands) Act 1967 68 of the Commonwealth of Australia
Petroleum (Submerged Lands) Act 1967 68 of the State concerned

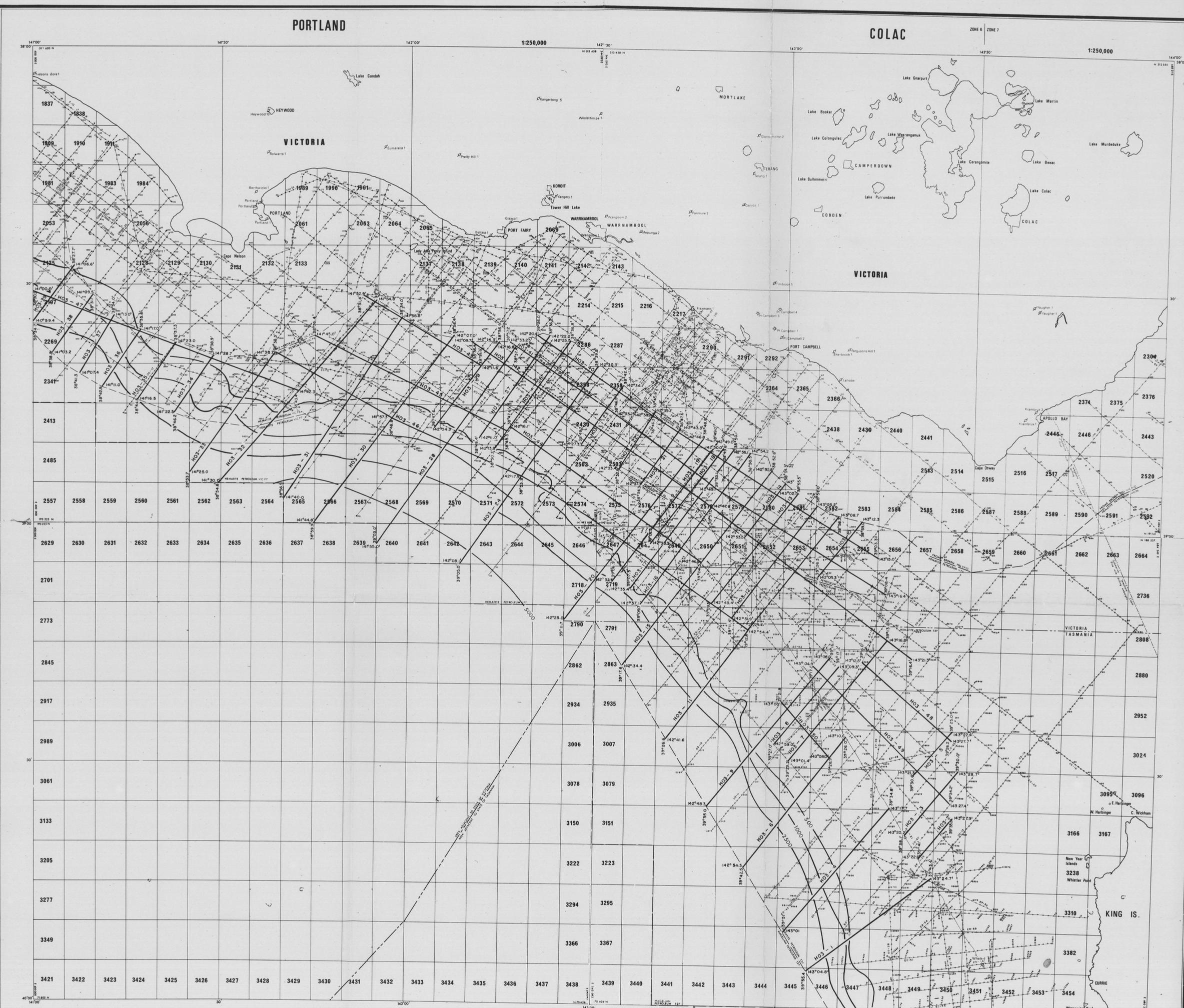


INDEX TO ADJOINING SHEETS

COLAC	QUEENSLIFF	WARRAGUL
WICKHAM	KING	BASS
STOKES	HUNTER	WYNARD

KING or J55-13

016019



PORTLAND

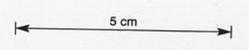
COLAC

VICTORIA

VICTORIA

KING IS.

Scale 1:500,000



INDEX TO ADJOINING SHEETS

NORTHWEST ISLANDS	PORTLAND	COLAC
	GRANT	WICKHAM
		WICKHAM

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 Transverse Mercator Projection.
 The five minute Graticular Sections are shown thus 1777
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 1 The name of the Map Sheet 1:500,000 series
 2 The block number
 3 The Longitude and Latitude of the North West corner
 eg. MELBOURNE 1777 Long 148°00' E. Lat. 38°00' S
 Reference Petroleum (Submerged Lands) Act 1967 68 of the Commonwealth of Australia
 Petroleum (Submerged Lands) Act 1967 68 of the State concerned

LEGEND

- Oil
- Gas
- ★ Oil & Gas
- Oil show
- Gas show
- Oil & Gas shows
- Drilling
- Dry Hole (Abandoned)

GRANT or J54-15

HEMATITE PETROLEUM PTY. LTD.
 CAPE NELSON TO CAPE OTWAY SEISMIC SURVEY

PROPOSED PROGRAMME

Bathymetric contour in feet

016020

WICKHAM or J54-16

OTWAY/KING PART-X*

OFFSHORE 25

06 3166

OR-032

PORTLAND

COLAC

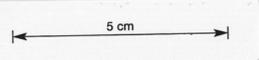
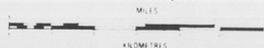
1:250,000

1:250,000

VICTORIA

VICTORIA

Scale 1:500,000



GRANT or J54-15

CAPE NELSON TO CAPE OTWAY SEISMIC SURVEY

LINE LOCATION

1:500 000

Bathymetric contour in feet.

July 1974

WICKHAM or J54-16

016021

GRANT/KING PART-X*

OFFSHORE 41

DR-032

OG 3186-2



INDEX TO ADJOINING SHEETS

WESTERN BELONG	PORTLAND	COLAC
GRANT	WICKHAM	
		STONES

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The five minute Straticular Sections are shown thus 1177 They are designated by:
 1 The name of the Map Sheet 1:1000 000 series
 2 The block number
 3 The longitude and latitude of the North West corner
 eg. MILDURUM 1177 Long 148 00 E Lat 38 00 S
 Reference: Petroleum Submerged Lands Act 1967 68 of the Commonwealth of Australia
 Petroleum Submerged Lands Act 1967 68 of the State of Victoria

LEGEND

- Oil
- Oil & Gas
- Oil show
- Gas show
- Oil & Gas show
- Drilling
- Dry Hole Abandoned

