

Cue Minerals N.L.,
155 Dorcas Street,
South Melbourne,
Victoria. 3205

REPORT 701/6

126001

QUARTERLY REPORT

ON

T14P

BASS BASIN, TASMANIA

FOR

THE CUE MINERALS N.L.

CONSORTIUM

General Geological Services

Work Order CUE 701

July, 1980

1.00	<u>Introduction</u>
2.00	<u>Operations Performed</u>
	2.10 Data Collection
	2.20 Geological and Geophysical Evaluation Programme
3.00	<u>Operations Planned</u>
	3.10 Interpretation
4.00	<u>Expenditure</u>
5.00	<u>Appendices</u>
	5.10 Seismic Data Past Survey Correlation
6.00	<u>Illustrations Accompanying Report</u>
	Cue 701/3 Evaluation Area 1:100,000 (Preliminary)

This report covers the work carried out for Cue Minerals N.L. with respect to T.14P for the period 1st April to 30th June 1980.

During the period data collection continued with the obtaining from B.H.P. (Hematite Petroleum Limited), the previous holders of the area, all of the seismic sections listed in 5.10. These are now in the process of been copied and collated.

Base map preparation continued so as to provide a suitable medium for re-contouring after seismic re-interpretation.

Interpretation of geology and geophysics has commenced. The aim is to select areas for new seismic work later in the year.

2.10 Data Collection

In order to fully understand the mechanisms of sedimentation, tectonics, and hydrocarbon entrapments in the basin, a full evaluation programme based on existing material has commenced. This has involved collection of available data within the permit, and also a regional evaluation of the Bass Basin so that a total picture of hydrocarbon trapping mechanisms can be obtained in order to assist in the outlining of prospective seismic evaluation areas.

Collection of previous geological and geophysical data is well underway and a list of seismic data collected and collated is presented in the Section 5.10 of this report. Also a study of past wells drilled in the basin has commenced; material collected to date on these is presented in Section 5.20.

The position of the seismic lines collected and the wells investigated to date are shown on Evaluation Area Plan Cue 701/3.

Data collection from the wells includes basic well logs, time depth curves, core/cuttings descriptions and interpreted sections where available, to enable various formation tops of interest to be selected. Literature studies and collection of available publications both from Government and Company sources is a slow but necessary operation which should be completed in the next quarter.

2.20 Geological and Geophysical Evaluation Programme

Base maps have been chosen to enable a complete evaluation of the area to begin; the position of the seismic lines to be used in re-evaluation is shown in Section 6 of this report.

3.00 Operations Planned3.10 Interpretation

This quarter saw the completion of the initial seismic and well compilation and also the completion of the initial collection of the majority of the published data on the basin and in particular the permit area.

At present and in the next quarter in particular, the following interpretative maps will be produced in a preliminary form to aid the selection of a seismic programme for the second year or hopefully the latter part of the first year. The following maps are in preparation.

Water Depth (1:250,000)Time Contour Maps (two way time)

These will cover the main litho-stratigraphic intervals at present identified in the basin by past explorers.

- A - Top of the Oligocene
- B - Top of the Eastern View Coal Measures
- C - Top of basement

Further intervals to be considered will be.

L-M Diversus Palynological Spore Pollen Horizon

U-M " " " " "

Following the production of the above maps, structure contour and isopach maps will be compiled using velocity data from past well surveys.

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T/14P part IV*

4.00 Expenditure

CUE MINERALS N.L.

PERMIT TAS T14P

QUARTERLY REPORT - EXPENDITURE

QUARTER ENDING: 30/6/80

LEASE FEES (RENTALS)	OFFICE OVERHEAD	OFFICE STUDIES	FIELD WORK		
			GEOLOGICAL	GEOPHYSICAL	DRILLING
5,000	2,500	11,000			

SIGNED: 

Company Secretary

126008

T/14P part IV*

5.00 Appendices

T/14P part IV*

5.10 Seismic Data Review

AGE	EXPLORATION COMPANY & YEAR OF SURVEY	ESSO 1965 B.65	ESSO 1966 EB-66	ESSO 1967 ED-67	ESSO 1968 EF-68	ESSO 1969 B69-A	Hematite 1974 Flinders Survey	Generalized Strat. Richards Hopkins, 1969	
Pleistocene	Upper probably marine →	Prob. marl, shales, sands, shallow water limestones	Top of Oligocene	Top of Oligocene	Top of Oligocene	Top of Oligocene			
Pliocene									
Miocene									
Oligocene		Homogeneous marine strat. unit contains sand, shale & marl	Top of Eocene	Many volcanic build ups plus shale & mud- stone, some sand & tuffite	Shale, mud some sand & volcanics			Jan-Juc	
Eocene	Upper Eocene: change from dominantly continental to restricted marine	Unconformity	Unconformity	Demons bluff marine shales and muds			Mapped Yellow Horizon	Demon's Bluff	
Paleocene					Basal Boona sands, (good porosity), grade into continental sands, shales & coals.	uncomformity? Bass 2 data.		Top of Eastern View coal measures	Boona Sand peat, clay, sand, silt & gravel
Cretaceous				Upper	? age uncertain for this unit.				Red horizon within Eastern View coal measures
	Lower							?	
Palaeozoic		Probably Palaeozoic basement		Basement at Bass 2 Mesozoic volcanics at Bass 3 pre.E low grade metas.	Basement mapped Palaeozoic ?	Basement mapped Palaeozoic ?	Blue horizon mapped strat. position uncertain	Triassic to Palaeozoic basement.	

126010

T/14P part IV*

LIST OF SEISMIC DATA OBTAINED
OR IN THE PROCESS OF OBTAINING
BASS BASIN

<u>SURVEY</u>	<u>SECTIONS</u>	<u>REPORT</u>
B65	0	0
ET65	0	0
EB66	0	0
ES67	0	X
ED67	0	0
EF68	0	0
B69A	0	0
B69B	0	X
B70A	0	X
B71A	0	X
B72A	0	X
Flinders	0	0
HB73A	0	X
HB75A	0	X
HB77A	X	X

0 Obtained

X To be ordered

ESSO - 1965
Horizons Mapped

Unit 1 - PLIO-PLEISTOCENE
Probably contains shales,
sandstones, shallow water
limestones.

Unit 2 - UPPER MILOCENE
Probably Marine and contains
marls and sands.

Unit 3 - MIOCENE
A possible reef complex.

Unit 4 - OLIGO-MIOCENE
A homogeneous marine
stratigraphic unit
contains marls, shale, sands.

Unit 5 - Base of marine Tertiary

ESSO - 1966
Horizons Mapped

Top of Oligocene
Top of Eocene
Unconformity at Base
of Tertiary

ESSO - 1967 ED-67
Horizons Mapped

Top of Oligocene
Top of Eocene
Basement Structure

ESSO - 1968 EF-68
Horizons Mapped

Top of Oligocene
Top of Eocene
Top of Basement

ESSO - 1969 B69A
Horizons Mapped *Regional Interpretation
Changed.

Top of Oligocene
Top of Eocene
Top of Palaeocene
Cretaceous Unconformity
Basement.

HAEMATITE 1974 (Flinders Survey)

Yellow Horizon - Top of Eastern View Coal Measures
Red Horizon - Marker within Eastern View Measures
Blue Horizon - Stratigraphic Position Uncertain

INFORMATION TO BE COLLECTEDFROM MINES DEPT.TASMANIA

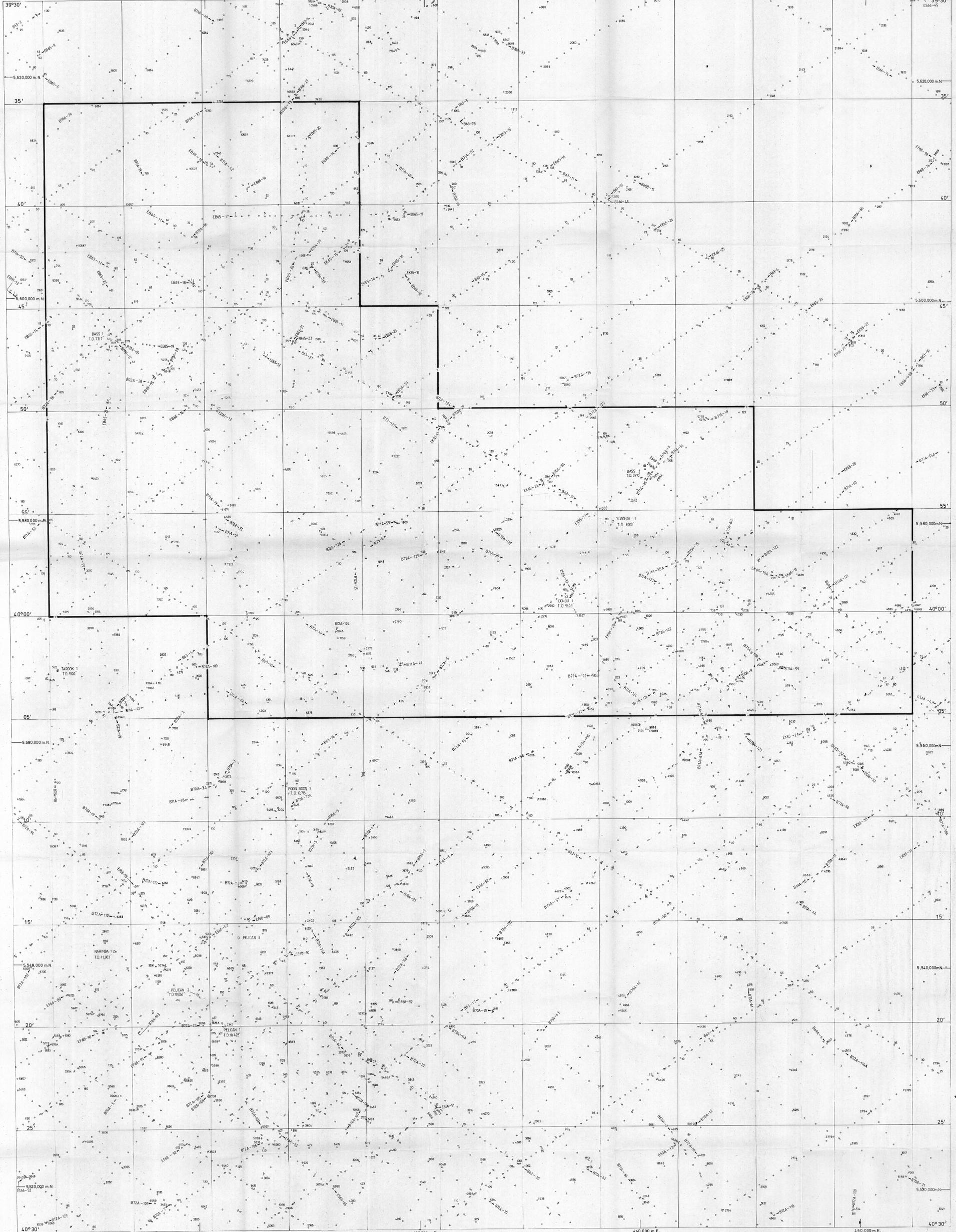
<u>MINES DEPARTMENT</u> <u>FILE</u>	<u>SURVEY</u>	<u>REQUIRED</u>
Offshore 5	HB77A	Shot point maps Final Report.
Offshore 16	B72A	Shot point maps Final Report
Offshore 70	HB73A	Shot point maps Final Report
Offshore 24	B69B B70A	Shot point maps Final Report
Offshore 32	B71A	Shot point maps Final Report
Offshore 44 46 48	HB75A	Shot point maps Final Report
Offshore 63	B70A	Shot point maps Final Report

T/14P part IV*

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T/14P part IV*

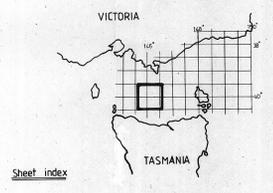
6.00 Illustrations Accompanying Report



Scale 1 : 100,000
KILOMETRES
Projection UTM Zone 55 C.M. 147°E
Compiled by Cue Minerals N.L.



SHOT POINT MAP
EVALUATION AREA



Sheet index

- MAPPING INFORMATION - GENERAL**
- Permit Area
 - Preliminary Seismic Programme
 - Oil Well
 - Oil & Gas Well
 - Analog Seismic Shot Point
 - Digital Seismic Shot Point
 - Oil Show
 - Gas Show
 - Oil & Gas Shows
 - Drilling
 - Dry hole (abandoned)
 - Petroleum Tenement Boundary

- MAPPING INFORMATION - DEPTH**
- 100 Contour in metres
 - 100 Isopach contour in metres
 - U Fault, 'U' downthrown side

- MAPPING INFORMATION - TIME**
- Times in msec below sea level
 - Contour interval 50 msec
 - Contour based on four seismic data
 - Contour based on conjecture

Datum: Sea Level
Contour interval:
Author: C. CLAZZIBROOK
Date: 26-4-80
Drawn by: M. DUCKWORTH
Checked by:
Revised:

SHEET CUE. 701/3