

493001

# T/15P

## DURROON BASIN

### TASMANIA

#### AUSTRALIA



TPR  
OR-390



BRIDGE OIL LIMITED

— THE ENERGETIC AUSTRALIAN —

**CONTENTS**

Summary

Introduction

Terms of Trade

Database

Regional Geology

Source Rock and Seals

Leads and Prospects

Drillable Prospects

Potential Markets

Conclusions

List of Figures

References

**T/15P  
DURROON BASIN  
TASMANIA**

**SUMMARY**

Potential exists for significant accumulations of hydrocarbons in a frontier exploration setting in the offshore Tasmanian exploration permit T/15P. This permit extends over much of the Cretaceous (98-80 Ma) Durroon Basin that underlies the Tertiary Bass Basin.

Bridge Oil Limited is offering, on behalf of itself and joint venture participants, a negotiable interest in the permit in return for drilling one well and participation in a critical seismic programme. Equity within the permit is currently distributed as follows:

BRIDGE OIL LIMITED	84.657%
CLUFF OIL (PACIFIC) LTD	7.006%
PEKO OIL LTD	5.211%
WEAVER OIL & GAS CORP	3.126%

The joint venture is seeking reimbursement, to the equity level desired by the farminee (to a maximum of 70%), of costs from 1 January, 1989 (estimated at A\$1,870,000 gross), and the ground floor participation of the farminee in the drilling of the obligatory well (estimated at a turnkey cost of A\$5,200,000 to 3000 mTD) and in the Bridge Durroon 1991 Seismic Survey to be acquired in September, 1991 (estimated at A\$550,000 gross).

Of relevance to the play concept(s) being presented, the permit database consists of 5000 km of modern seismic data, one well (Durroon-1) and regional gravity and magnetics data.

Recent interpretations indicate the presence of a number of attractive leads and prospects in an undrilled graben fill megasequence (Durroon Megasequence) which is age equivalent to the proven hydrocarbon bearing Golden Beach Megasequence in the adjacent Gippsland Basin. Two shallow prospects are mature for drilling. Several larger features, interpreted to be plunging structural noses with a counter regional dip component, require additional seismic delineation which will be the subject of the September, 1991 seismic programme.

The State of Tasmania relies on a limited supply of hydro-power for industrial purposes. Notwithstanding the attraction and marketability of any oil discovered, estimations of future requirements suggest that a market for industrial usage of natural gas exists within this state.

**T/15P  
DURROON BASIN  
TASMANIA**

**INTRODUCTION**

Bridge Oil Limited is offering on behalf of itself and joint venture participants a negotiable interest in T/15P in the Durroon Basin (Fig 1). Particulars of the permit are as follows:

Country:	Australia
Area:	Durroon Basin (SE Bass Basin)
Permit:	T/15P
Area:	8568 sq km
Operator:	Bridge Oil Limited

Interests:	
BRIDGE OIL LIMITED	84.657%
CLUFF OIL (PACIFIC) LTD	7.006%
PEKO OIL LTD	5.211%
WEAVER OIL & GAS CORP	3.126%
	100.000%

Date of Grant:	May 26, 1987
Term:	5 years

Work	Obligation:
Year	Minimum work:
1	permit data review
2	400 km seismic
3	200 km seismic
4	200 km seismic
5	1 well

Work	Completed:
Year	
1	permit data review
2	608 km seismic
3	BMR 1988 (1085km)
4	1103 km seismic

The permit is in good standing as of 26 May, 1991 and has a remaining commitment of 1 well to be spudded on or before May 26, 1992.

**TERMS OF TRADE**

The joint venture is seeking reimbursement, to the

## T/15P - DURROON BASIN - TASMANIA

---

equity level desired by the farminee (to a maximum of 70%), of costs from 1 January, 1989 (estimated at A\$1,870,000 gross), and the ground floor participation of the farminee in the drilling of the obligatory well (estimated at a turnkey cost of A\$5,200,000 to 3000 mTD) and the Bridge Durroon 1991 Seismic Survey to be acquired in September, 1991 (estimated at A\$550,000 gross).

### DATABASE

The permit contains 3 wells; Squid-1, Chat-1 and Durroon-1. Durroon-1, which was drilled by Esso Australia in 1972, is the only well of relevance to the concepts being promoted for drilling. The seismic database within the permit consists of approximately 5000 km of modern vintage (1982 and later) seismic data that are relevant to the play concept(s) under discussion. Regional gravity and magnetic data are also available.

### REGIONAL GEOLOGY

T/15P extends over much of the Durroon Basin, a Late Cretaceous basin (98-80 Ma) that lies beneath the Late Cretaceous/Tertiary Bass Basin (Baillie and Pickering, 1991). The Durroon Basin consists of three sub-basins, the Bark, Anderson and the Boobyalla respectively (Fig 2). The representative stratigraphy prognosed in the Boobyalla Sub Basin is shown in Figure 3.

Durroon-1, in the Anderson Sub-Basin, encountered interbedded Cenomanian(?) volcanics and sandstones under Turonian mudstones on the faulted culmination of a tilted block of Otway Group sediments. Depositional sequence mapping has established that the Otway Group is a pre-rift megasequence, terminated by the rupture of Australia from Antarctica at 98 Ma. The Durroon Formation, of which the Turonian mudstones at the well are an eroded and attenuated portion, is a syn-rift megasequence whose deposition ended with the sundering of Lord Howe Rise from Australia at 80 Ma. The age equivalent syn-rift sequence in the adjacent Gippsland Basin is a newly discovered but proven hydrocarbon habitat containing potential source rocks and reservoir objectives. Post-rift sediments are recognised in the Eastern View and Torquay Megasequences of the Gippsland and Otway Basins respectively. These sediments are host reservoirs to world class accumulations in the Gippsland Basin.

## T/15P - DURROON BASIN - TASMANIA

---

Cenomanian to Lower Campanian sedimentation began within T/15P with the rotation of three asymmetric blocks along northwest to southeast-orientated listric faults as indicated by the fault systems of Figure 2. These formed the sub-basins of the Boobyalla, Anderson, and Bark. The Boobyalla, nearest the incipient Tasman spreading centre, is the largest sub-basin of the three (Fig 4). The isopachs of the Durroon Megasequence are thickest within the Boobyalla Sub-Basin, where in excess of 5,000 m of sediments were deposited adjacent to its bounding listric fault. Owing to subsequent uplift (post 80 Ma) this megasequence is interpreted to be buried to present day depths of approximately 2,000 m. Isopachs greater than 3,000 m are measured within the Anderson Sub-Basin, while those within the southern Bark Sub-Basin are similarly reduced by erosion. Isopachs in excess of 2,500 m are measured at the northern end of the sub-basin.

A widespread volcanic terrain developed at the beginning of the rotation of the blocks within T/15P (circa 98 Ma). These episodes of vulcanism were separated by erosion and deposition of clastic sediments derived from the uplifting Otway blocks and the surrounding Palaeozoic and Pre-Cambrian rocks of Tasmania. Cenomanian volcanics and sandstones are succeeded by the Durroon Mudstones encountered at Durroon-1. This non-marine mudstone, a lacustrine deposit of Turonian age, was laid down during an eustatic high-stand and may be present over large areas of all three sub-basins. Its depositional thickness is unknown. It is likely that fluvial and deltaic conditions prevailed along the slopes of each sub-basin.

The marine incursion within the uppermost part of the Golden Beach Megasequence of the Gippsland Basin, (Duff *et al*, 1991) of Coniacian-Lower Campanian age, may have its counterpart within the sub-basins of the Durroon Basin. Both basins may have been contiguous, at least at their eastern ends (Fig 5). Initiation of spreading in the Tasman Sea (80 Ma) caused major upheavals within the Durroon-Gippsland region. The Bassian Rise, King Island High, Tasmania, and the Northern Platform of the Gippsland Basin were uplifted an estimated 3-4 km as indicated by recent seismic evidence. Recent Fission Track analysis supports this hypothesis (Dumitru *et al*, 1991). Sediment stripping initiated with uplift and continued into the Tertiary, during

## T/15P - DURROON BASIN - TASMANIA

---

which huge volumes of sediments were stripped from these areas and redeposited in the Gippsland and Bass basins. This erosional event is recognised as the Tasman breakup unconformity (the upper boundary of the Golden Beach and Durroon Megasequences of the Gippsland and Durroon Basins respectively; (Lowry, 1987)).

Current mapping indicates that the regime of faults created by the onset of spreading in the Tasman Sea were orientated in a WNW-ESE direction. These faults were overprinted on the earlier tectonic grain.

As a result of partial uplift, erosion and truncation in the Durroon Basin, the sedimentary depocentre shifted westward to the Bass Basin. The post-rift (Tertiary sag phase) beds overlying the sub-basins within T/15P thicken from a feather edge along the margins of the basin, to 1400 m at Durroon-1, and to 3,300 m at Poonboon-1 (Fig 2).

Bathymetry maps (Fig 6) of the area indicate the presence of a northwesterly dipping sea floor (0.5 m per km). Bathymetry appears to mimic the shallow Bark Sub-basin features as well as one of the Boobyalla Sub-basin leads.

### SOURCE ROCK AND SEALS

Direct correlations of source scenarios and maturation of the T/15P (Duroon) area with the Gippsland Basin are certainly invalid. Gippsland Basin oil sources (coal bearing, paludal sequences) are of the Upper Cretaceous (post 80 Ma) age subject to initial low heating rates and rapid burial in the Neogene (Upper Tertiary).

In the Durroon Basin the basal portions of the Durroon Megasequence were subject to rapid burial prior to partial uplift and exhumation during the Tasman Rift Phase (80 Ma event). The Durroon Mudstone in Durroon-1 is the only real evidence of the potentially favourable presence of lacustrine to ?marine mudstones and potential source rocks.

Nevertheless; Matoril modelling work suggests that source rocks (if present) are mature for generation of oil at approximately 2.4 seconds TWT. The Otway Formation is considered to be over mature everywhere in the Durroon Basin. The rocks at this TWT level are estimated to have, at one time, been buried much deeper (3-5 km) than the postulated

## T/15P - DURROON BASIN - TASMANIA

---

maturity window. The interpreted Durroon Megasequence is deeper than 2.4 seconds in the basinal deeps of the Durroon Basin. These areas, considered as potential hydrocarbon generating "kitchens" for updip structures, are located along the western faulted margin of the sub-basin, the south central end of the Anderson Sub-basin and the northern end of the Bark Sub-basin. Interpretive work completed thus far indicates that the most prospective source area is likely to be located adjacent to the northern end of the Bark Sub-basin as this area is also mooted as being a potential source for the Pelican and Yolla Tertiary age reservoirs. Depths are similar to the interpreted depths of source in the Boobyalla Sub-basin, however, the areal extent of the Bark Sub-basin source area appears to be much larger.

### LEADS AND PROSPECTS

The following section describes the major leads and prospects (Fig 2) that have been mapped to date. The following prospects are considered drillable at this time:

#### **Mature Prospects:**

##### **The Lachlan Structure:**

This feature (Fig 7) is the only lead mapped in the Anderson Sub-basin. The highest closure mapped along the updip culmination of the Otway Megasequence of the Anderson tilted block is interpreted as having formed at the onset of spreading in the Tasman Sea (80 Ma). A cover of Cenomanian and Turonian sediment is in trap position, juxtaposed against down faulted sediments of the Durroon Megasequence of the Boobyalla Sub-Basin. The Turonian mudstones would provide a seal to underlying clastic sediments of Cenomanian age.

This structure measures 1 km x 12 km and is likely to be sourced from deeply buried Turonian mudstones on the downthrown side of the fault, or from Turonian mudstones within the depocentre of the Anderson Sub-basin.

The Lachlan Structure is considered to be a drillable prospect at an estimated depth of 1000 m at sp 976 on line BB88-164 in 52 m of water.

##### **The Strathroy Block:**

This feature (Fig 8) is interpreted to be an northerly trending Otway Group horst block that has been

## T/15P - DURROON BASIN - TASMANIA

---

antithetically faulted during the late stages of the Tasman Rift period. The updip edges of this horst provide possible traps in Otway Group sediments. This drillable (projected TD of 600 m) fault dependent feature, is located at sp 383 on line BB90-185. It has an area of approximately 5 sq km and is located in approximately 69 m of water.

### **Mature Leads:**

Bridge Oil and co-venturers are currently planning to record an additional 360 km of seismic data over the leads described below. A map relating this programme to these leads is included as Figure 9.

The following leads require further delineation and have been selected for discussion on the basis of structural style and potential:

### **The Bridgewater Nose:**

This anticline (Fig 10), in beds of the Durroon Megasequence, was formed by drape over abutting synthetically and antithetically dipping blocks. The anticline plunges basinwards in a westerly direction.

The crest of the structure (550 mASL, line BB90-189, sp 1732) is eroded and highly faulted, and may represent down faulted keystone segments. Correlations within the crestal area are often difficult, though some seismic lines indicate that segments of the structure may show simple anticlinal attitudes. An intra-Durroon Mudstone event has been mapped over this feature in order to indicate the presence of structural closure. As mapped the feature measures 20 km x 5 km and is located in approximately 35 to 40 m of water.

Traps would, of necessity, be structural-stratigraphic. The Durroon Megasequence may be in a fluvial-estuarine depositional environment in these areas and sands may show a limited lateral distribution. The presence of the Durroon Mudstone is interpreted to infer the presence of seal. Further seismic is necessary to clearly map updip closure on this feature (Fig 9).

### **The Kingsbridge and Richmond Structures:**

Each of these structures demonstrates roll-over into listric faults. The Kingsbridge structure (Fig 11) shows downside dip into a fault on its north; the Richmond structure (Fig 12) shows downside dip into faults that bound its east and north.

## T/15P - DURROON BASIN - TASMANIA

---

The Kingsbridge structure plunges to the east and may coalesce to its west with the updip side of the Bridgewater Nose. A close grid seismic programme has been proposed over these leads to clarify updip closure as well as determine the structural relationship between these two structures (Fig 9). These features collectively cover approximately 55 sq km and are located in 40 m of water.

### **Derwent Nose:**

The Derwent Nose (Fig 13) is a post-depositional roll-over structure that developed along a series of en echelon faults caused by the onset of spreading in the Tasman Sea.

The structure changes from a simple roll-over, to a complex zone of faulted blocks, in a southeast direction. It is curvilinear in plan; parallels at least three en echelon faults, causing the crest of the structure to shift abruptly between faults; and plunges to the northwest. The structure always forms on the downside of the faults, and downside beds dip into the fault face. This feature measures approximately 1.5 X 10 km and is located in approximately 60 m of water. Updip closure on this feature is thought to be fault dependent.

### **Immature Leads:**

The following leads require further delineation, are structurally attractive and considered to be too small to be of economic value at this time.

### **The Batman Block:**

Syn-rift synthetic faults were overprinted on the Otway (98 Ma) fault system during the period of the separation of Australia from the Lord Howe Rise. The resultant structural form is an apparent collapsed graben feature that will provide structural traps along the up thrown edges of the fault blocks in Otway sediments. Although the area of this feature is approximately 100 sq km in area the individual traps are considered to be too small to be of economic value at this time.

### **The Ross Block:**

This thin linear structural feature is interpreted to be of Otway syn-rift origin and is interpreted to be a simple roll-over feature into the flank of the Strathroy Block. Albeit small in terms of area, this feature may provide reservoirs within the Durroon Formation.

Secondary prospects are mapped within the

## T/15P - DURROON BASIN - TASMANIA

---

Boobyalla Sub-basin. These are sub-unconformity truncation traps and traps within reverse drag folds on the downside of listric faults.

### The Victoria Nose:

The Victoria Nose is a roll-over structure that has developed on the downside of a normal listric fault that is over printed on an older NW-SE bounding fault of the southeastern corner in the Boobyalla Sub-basin. The structure plunges to the northwest and rapidly loses closure.

### The Bowen Nose:

This roll-over structure formed on the downthrown side of a fault block. Seismic data record divergent dips on both sides of a crestal zone that is highly faulted.

## DRILLABLE PROSPECTS

Of the prospects discussed the Lachlan Structure and the Strathroy Block may be considered mature for drilling at this time. These features are shallow (< 1000 m) but may contain sizeable reserves.

## POTENTIAL MARKETS

The State of Tasmania relies on a limited supply of hydro-power for industrial purposes. Estimations of future requirements suggest that a market for industrial usage of natural gas exists. To this end the Tasmanian Department of Resource Energy (TDRE) has recently initiated a series of studies that investigate the viability of a resource of this nature. They (TDRE) have recently announced (14 June, 1991) that a feasibility study investigating the *"viability of supplying natural gas and gas fired power generation for Tasmania is worth proceeding to the next step of the study"*.

In the event that oil is produced there are no restrictions on the export of oil from Australia.

## CONCLUSIONS

The Durroon Basin is a frontier basin, that lacks sufficient well control to evaluate prospective areas. The presence of a number of interpreted structures, each having a large degree of commonality with producing extensional basins of the world must, however, recommend this permit as an exploration area.

## T/15P - DURROON BASIN - TASMANIA

---

Post-depositional roll-over structures are the most common trap mapped within T/15P. Despite their lack of definitive data, roll-over structures on the Bassian Rise side of the Boobyalla Sub-Basin may be more attractive prospects than those against the southwest bounding faults. Here, fluvial and deltaic facies may have developed along the depositional hinge lines and dipping flanks of the half-graben during non-marine periods of deposition. The presence of lacustrine-?marine shales as regional and intra-formational seals will enhance the potential for structural-stratigraphic traps on these basinward plunging structures.

The bulk of petroleum found in extensional basins seems to be located on the upthrown side of tilted blocks. Durroon-1 was apparently drilled to test the potential of the cover of sediments on top of tilted Otway Group beds within the Anderson Sub-Basin. Current evidence suggests that this well was drilled out of closure.

A closed area along the updip culmination of the same block has now been mapped (Lachlan Structure). Here the Durroon Mudstones overlie Cenomanian sandstones and lavas on top of the Otway Group, juxtaposed against the down faulted Durroon Mudstones in the Boobyalla Sub-Basin.

## T/15P - DURROON BASIN - TASMANIA

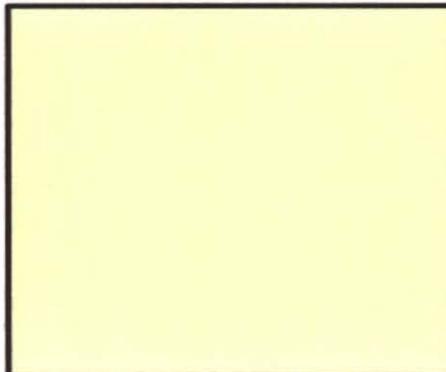
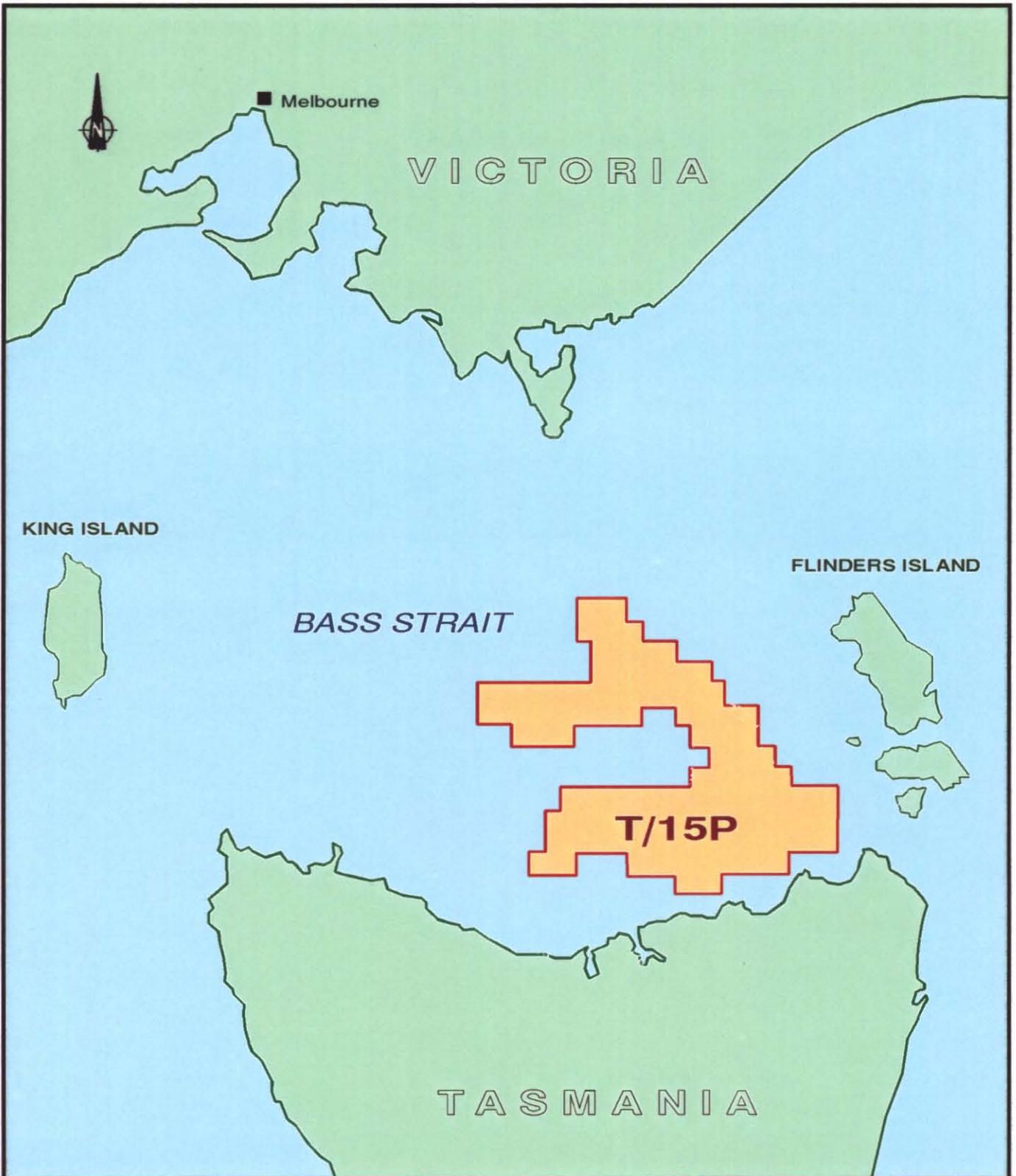
---

### LIST OF FIGURES

Figure 1	Location Map of T/15P
Figure 2	Leads, Prospects and Tectonic Elements
Figure 3	Prognosed Stratigraphic Chart Boobyalla Sub-basin
Figure 4	Generalised Cross sections of T/15P
Figure 5	Tasman Sea (circa 80 Ma)
Figure 6	Bathymetry Map
Figure 7 & 7a	Lachlan Structure
Figure 8 & 8a	Strathroy Block
Figure 9	Bridge Durroon 1991 Seismic Survey (Proposed)
Figure 10 & 10a	Bridgewater Nose
Figure 11	Kingsbridge Structure
Figure 12 & 12a	Richmond Structure
Figure 13 & 13a	Derwent Nose

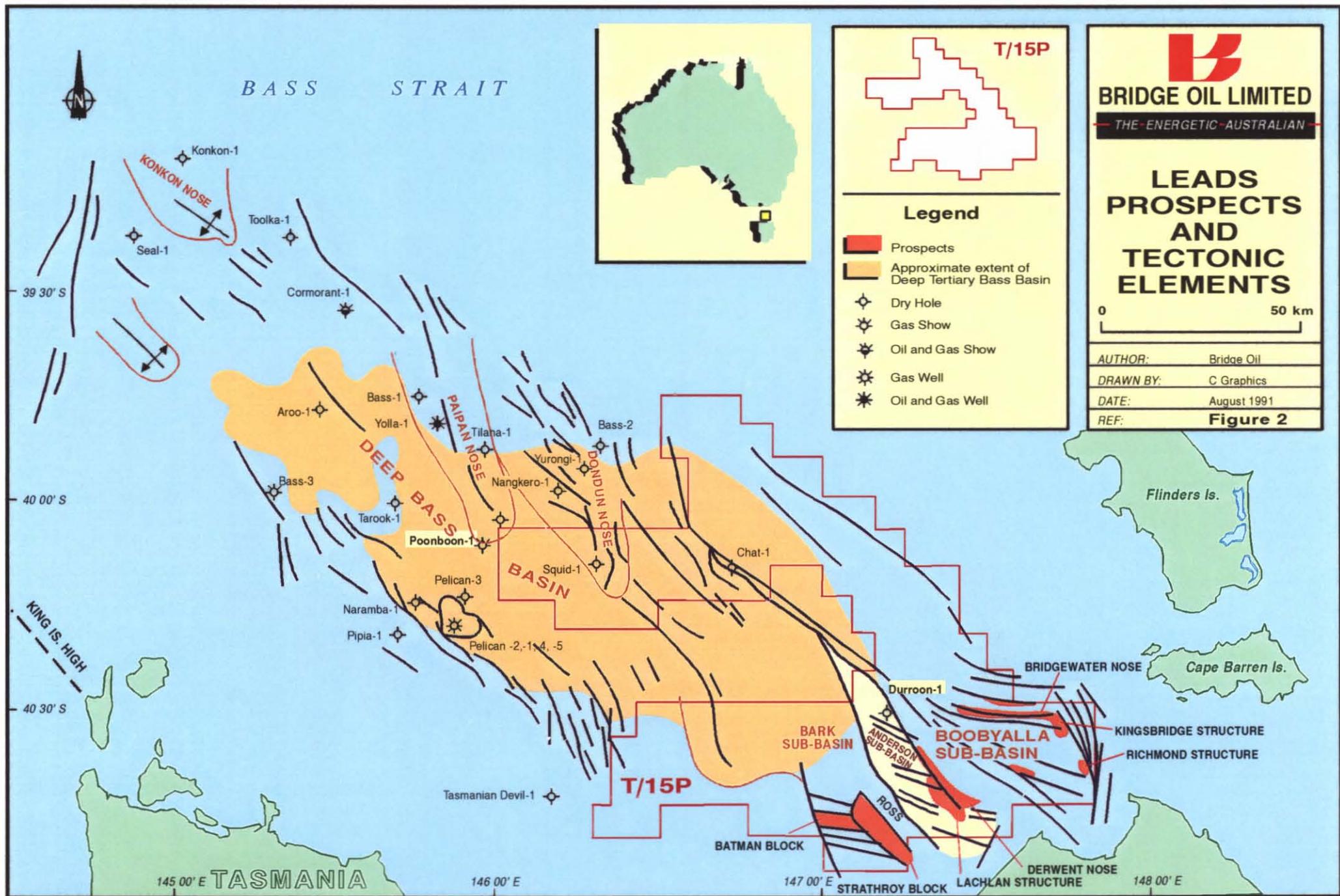
### REFERENCES

- Baillie P., and Pickering R., (1991). 'Tectonic evolution of the Durroon Basin, Tasmania'. *Exploration Geophysics* (1991) 22, 13-18.
- Duff B.A., Grollman N.A., Mason N.G., Questiaux J.M., Omerod D.S., Lays P. 'Tectonostratigraphic evolution of the south-east Gippsland Basin'. *APEA* (1991) 31, 116-130.
- Dumitru T.A., Hill K.C., Coyle D.A., Duddy I.R., Foster D.A., Gleadow A.J.W., Green P.F., Kohn B.P., Laslett G.M., O'Sullivan A.J. 'Fission track Thermochronology: Application to continental rifting of South-eastern Australia'. *APEA* (1991) 31, 131-142.
- Lowry, D., 1987. 'A New Play in the Gippsland Basin'. *APEA* 27 (1), 164-172.
- Morgan R., 1991. 'New Palynology of the Durroon Mudstone'. Unpublished report for Bridge Oil Limited;
- Pickering R., (1991). 'The Bridge Bass 1990 seismic survey final report'. Unpublished report for Bridge Oil Limited.



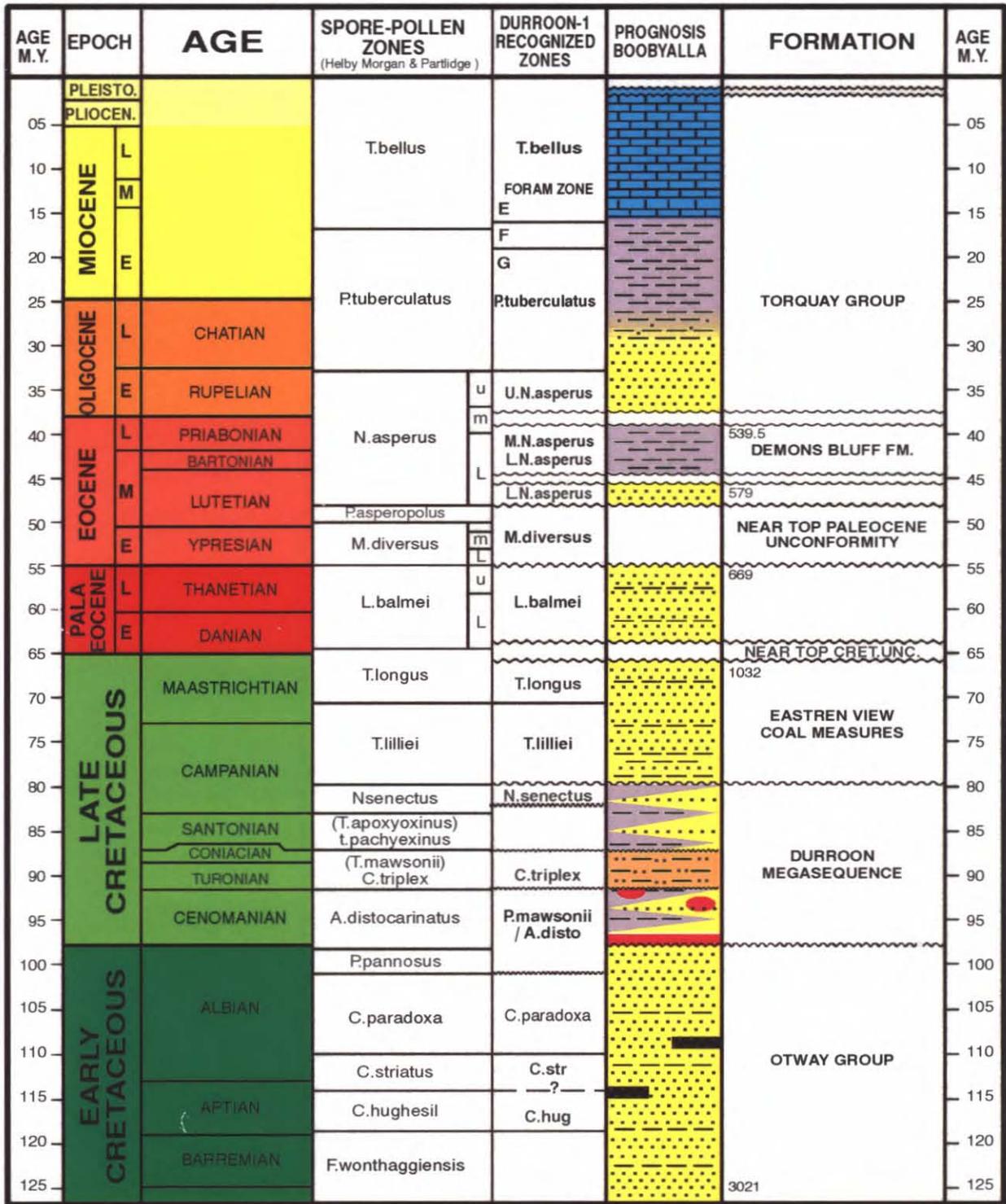
	
<b>BRIDGE OIL LIMITED</b>	
— THE ENERGETIC AUSTRALIAN —	
<b>DURROON BASIN T/15P</b>	
<b>LOCATION MAP</b>	
0 ————— 100 km	
AUTHOR: R. Pickering	DATE: August 1991
DRAWN BY: C. GRAPHICS	REF: <b>Figure 1</b>

5 cm



5 cm

493015



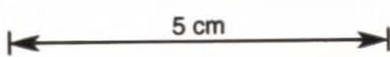
**Legend**

- Limestone
- Shale
- Volcanics
- Sandstone
- Mudstone

**BRIDGE OIL LIMITED**  
THE ENERGETIC AUSTRALIAN

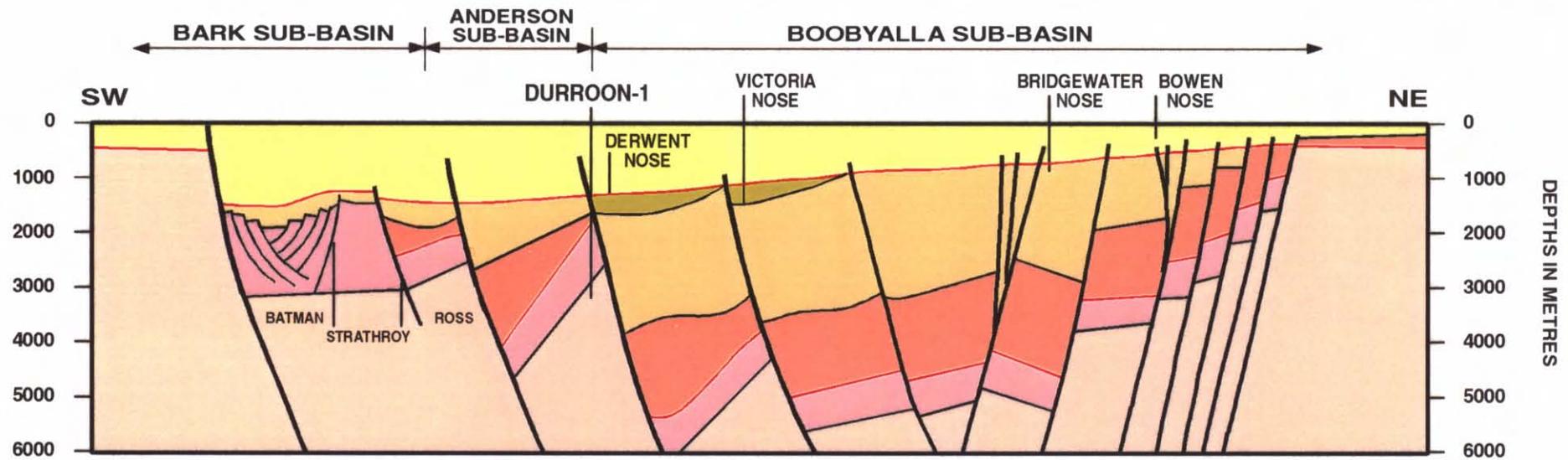
**PROGNOSED STRATIGRAPHIC CHART**  
**BOOBYALLA SUB-BASIN**

AUTHOR: Bridge Oil      DATE: August 1991  
DRAWN BY: C GRAPHICS      REF: **Figure 3**

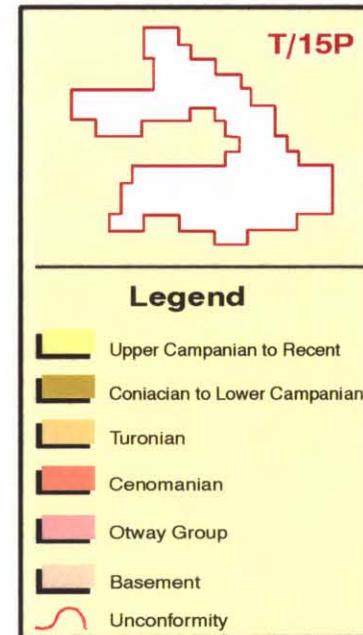
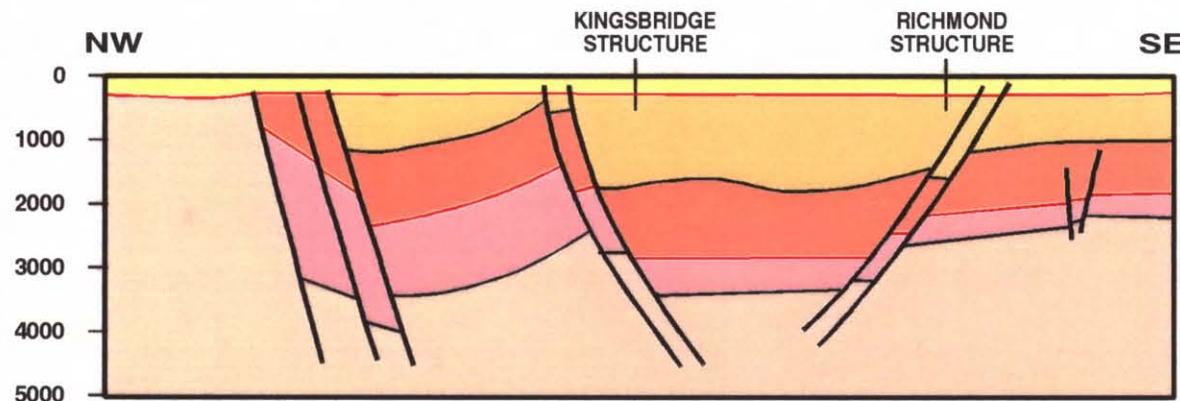


# DURROON BASIN

493017



# BOOBYALLA SUB-BASIN



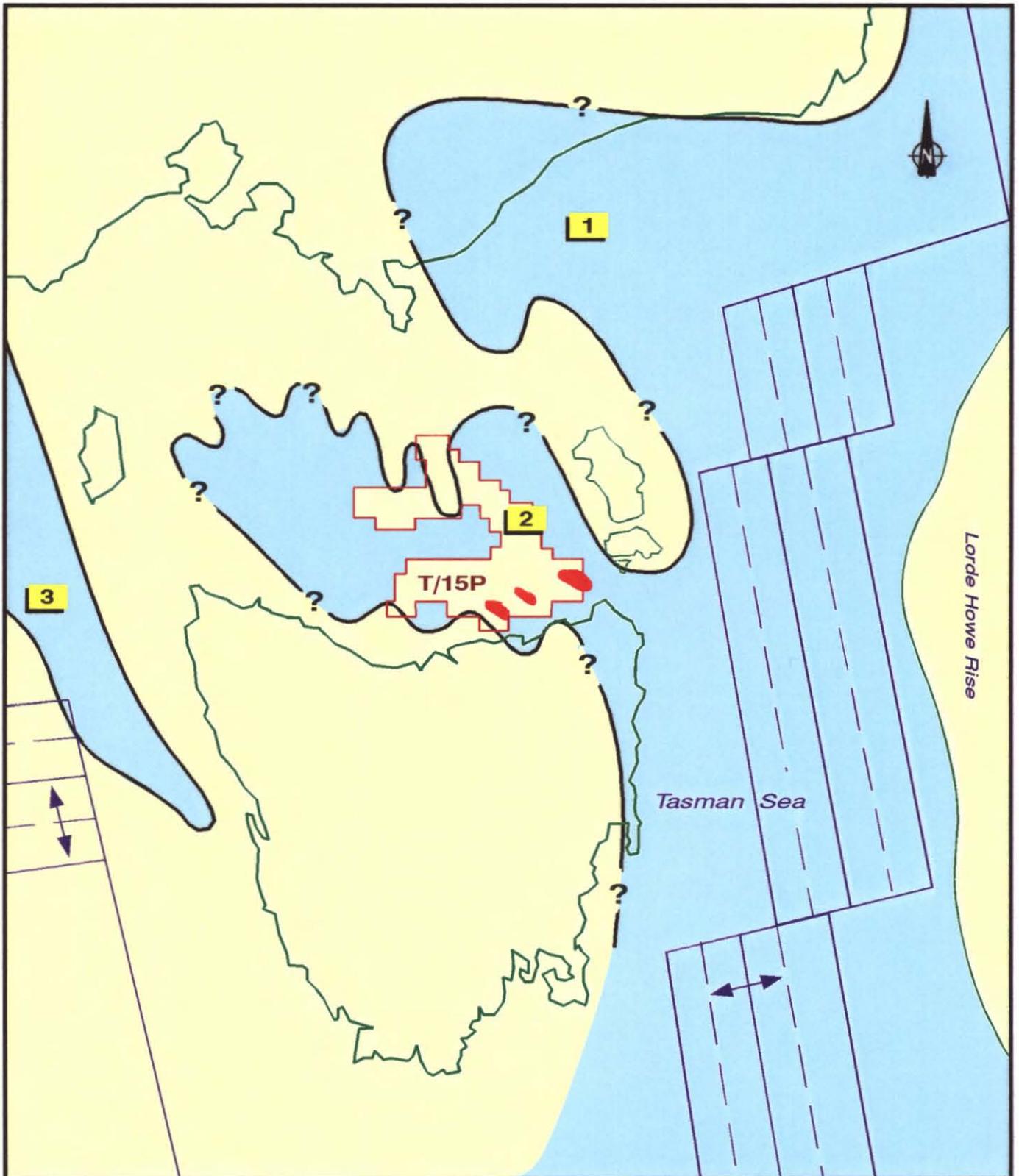


**BRIDGE OIL LIMITED**  
THE ENERGETIC AUSTRALIAN

**GENERALISED  
CROSS SECTIONS  
of T/15P**

AUTHOR:	D.W. Edgerley
DRAWN BY:	C Graphics
DATE:	August 1991
REF:	<b>Figure 4</b>

5 cm



**LEGEND**

DEPOSITIONAL LIMITS OF :

- 1** Golden Beach
- 2** Durroon
- 3** Part of Sherbrook

MEGASEQUENCES

- Prospects

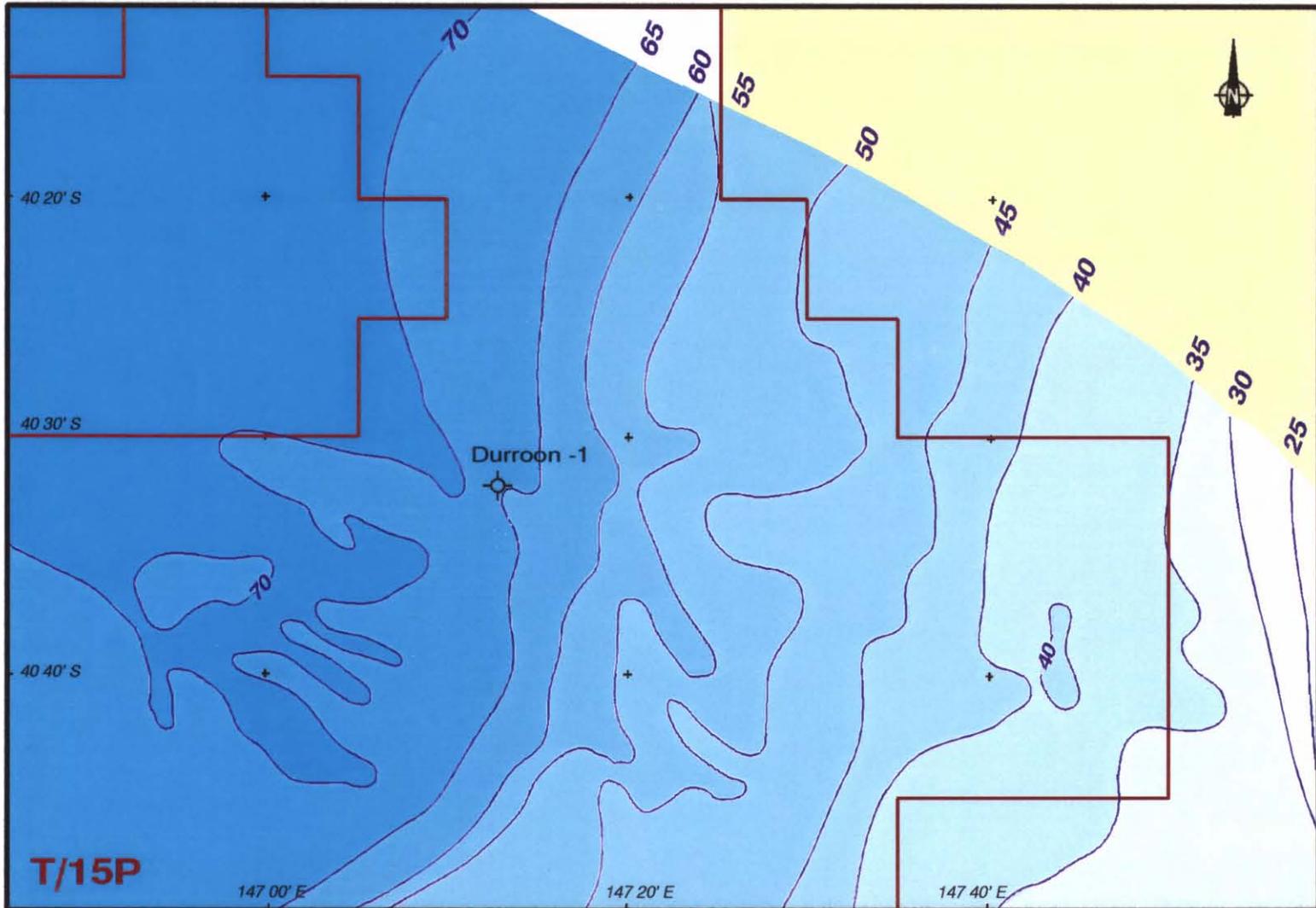
**BRIDGE OIL LIMITED**  
— THE ENERGETIC AUSTRALIAN —

**TASMAN SEA**  
( circa 80 Ma )

0 100 km

AUTHOR: Bridge Oil	DATE: August 1991
DRAWN BY: C GRAPHICS	REF: <b>Figure 5</b>

5 cm



5 cm

**T/15P**

**Legend**

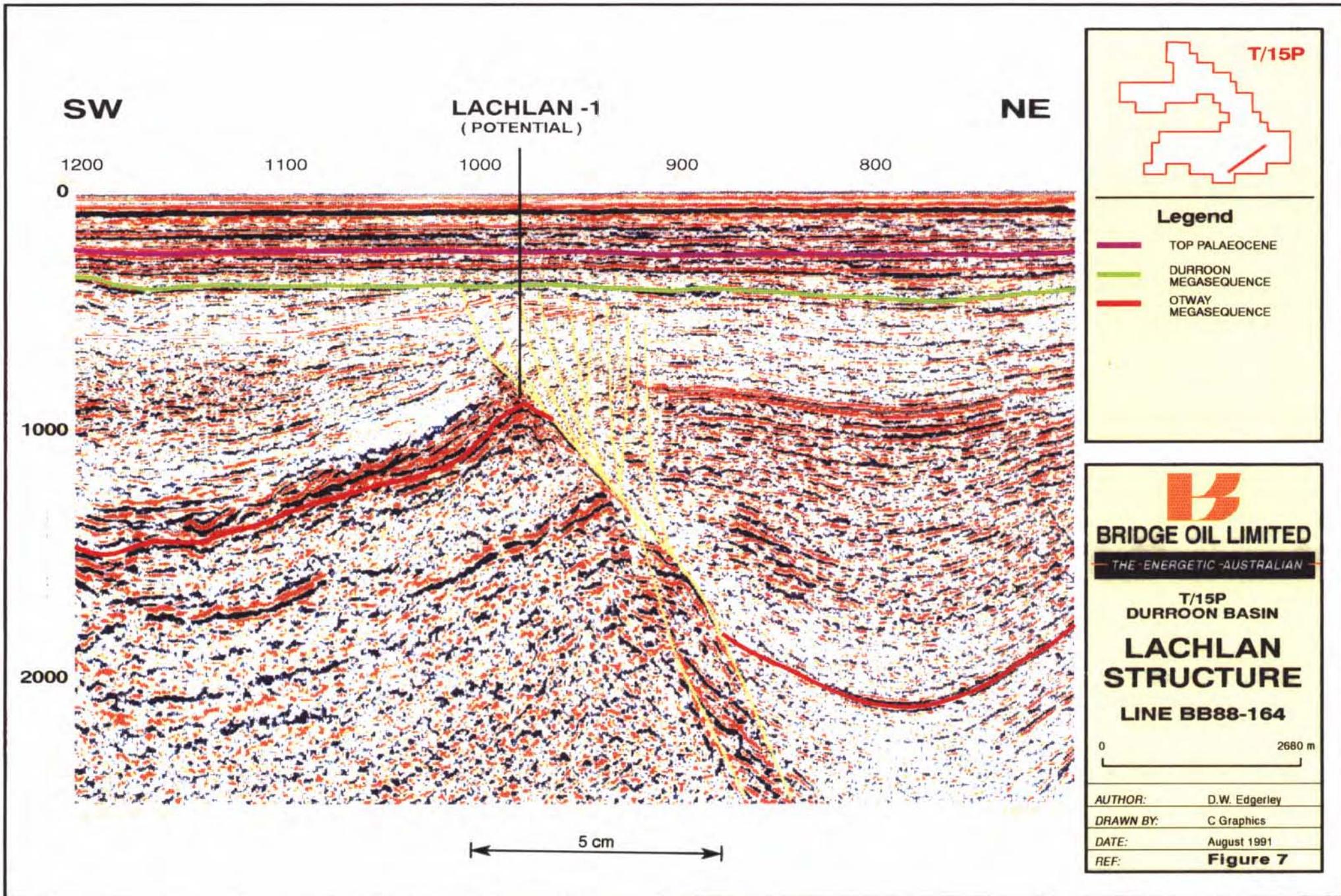
— 40 — Water Depth (metres)

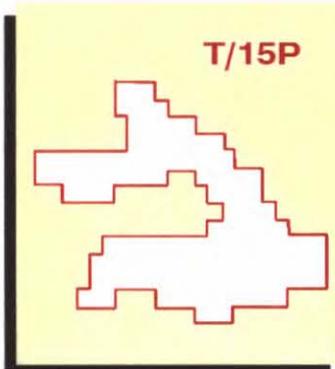
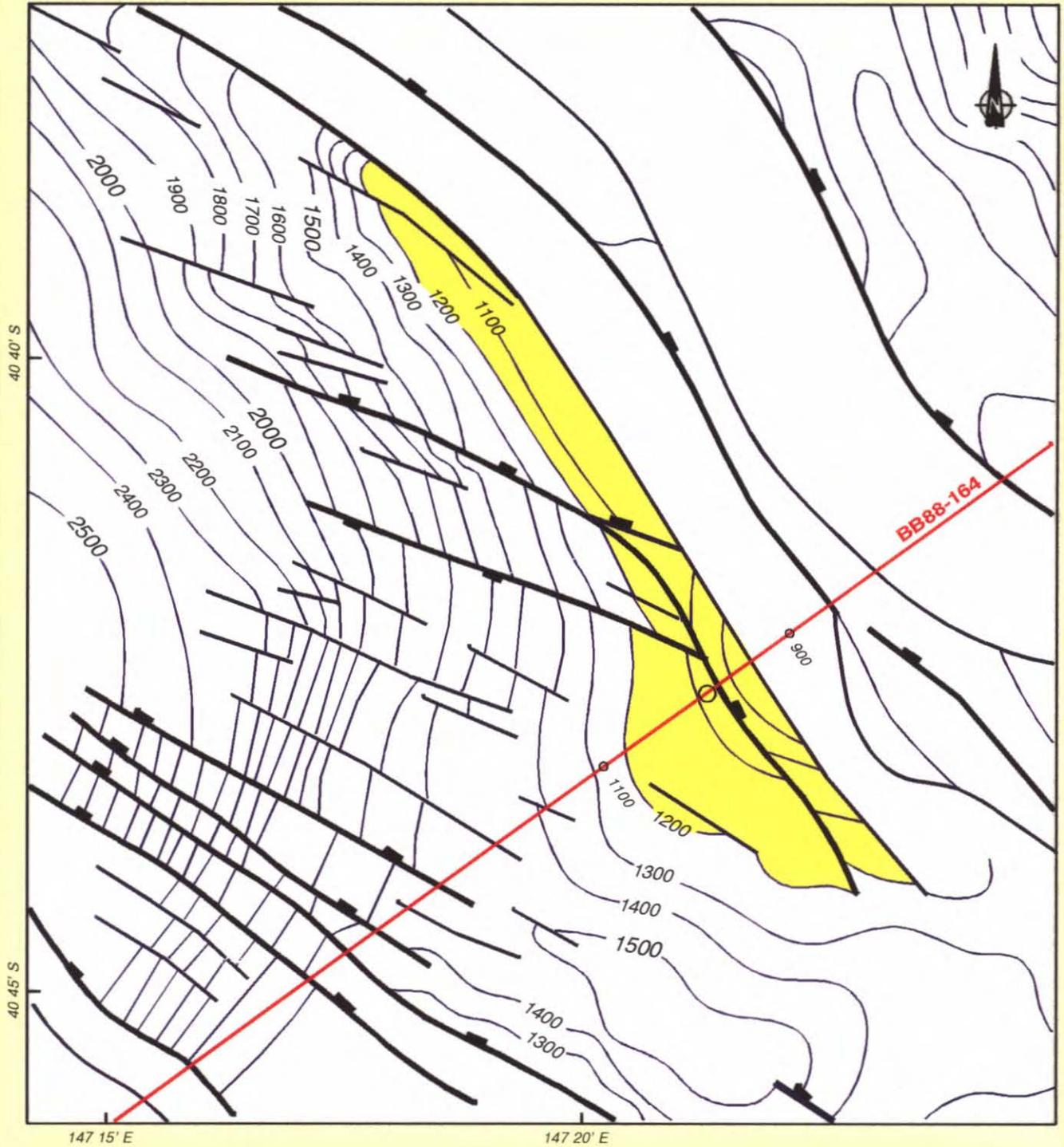
**BRIDGE OIL LIMITED**  
— THE ENERGETIC AUSTRALIAN —

**T/15P**  
**BATHYMETRY**  
**MAP**

0 5 10 15 km

AUTHOR:	R. Pickering
DRAWN BY:	C Graphics
DATE:	August 1991
REF:	<b>Figure 6</b>





**Legend**

-  Major fault
-  Minor fault
-  Contour Interval 100 msec
-  Seismic line BB88-164
-  Otway Formation (TWT)
-  LACHLAN-1 Potential Location

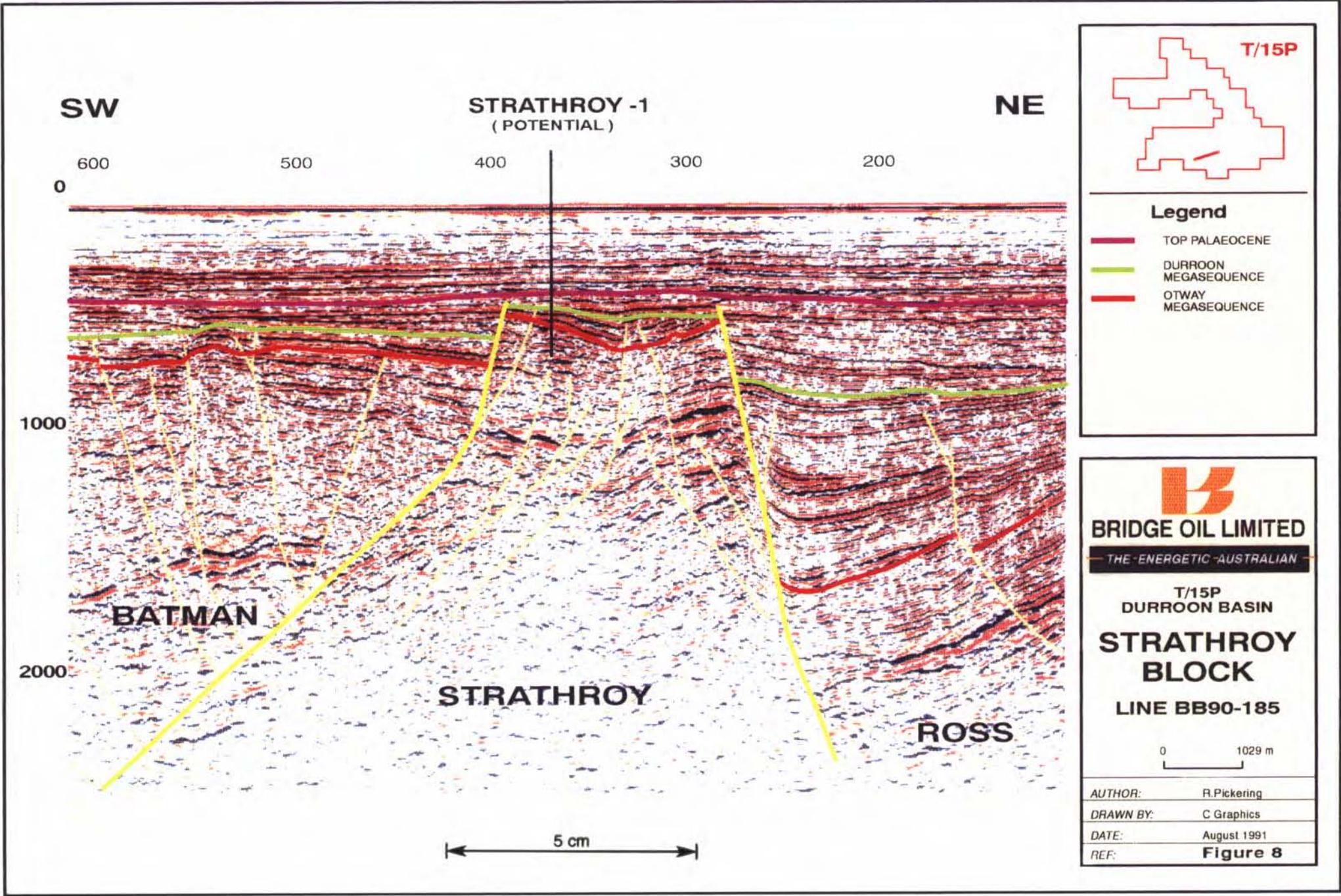
**BRIDGE OIL LIMITED**  
 THE ENERGETIC AUSTRALIAN

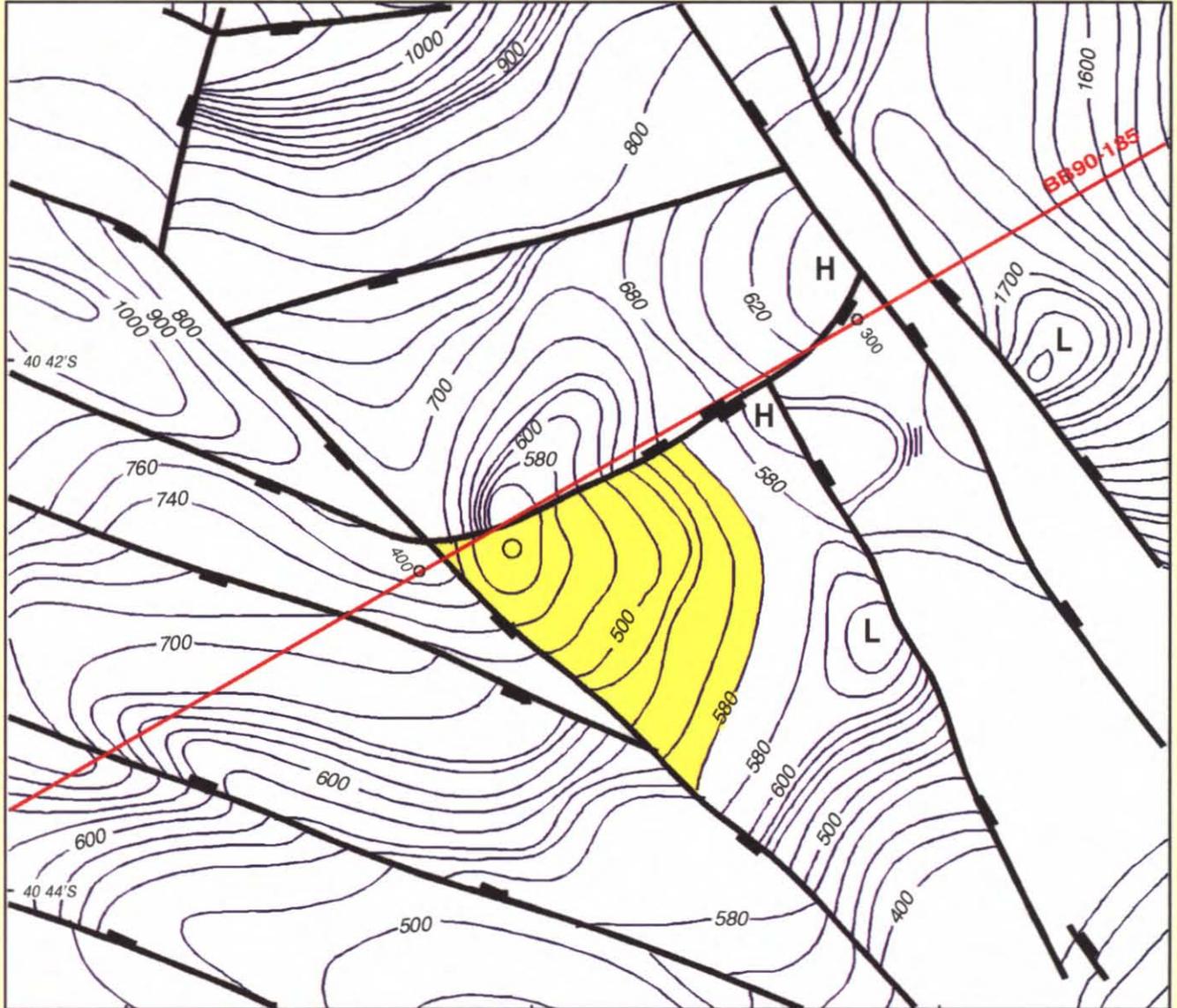
**T15/P DURROON BASIN**  
**LACHLAN**  
**STRUCTURE MAP**

0 5 km

AUTHOR: D.W. Ederley	DATE: August 1991
DRAWN BY: C GRAPHICS	REF: <b>Figure 7a</b>

5 cm

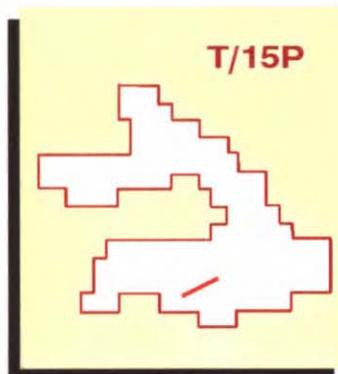




147 02'E

147 04'E

147 06'E



T/15P

**Legend**

- Faulting
- Scissor Fault
- Contour Interval 20 msec
- Seismic line BB90-185
- Otway Formation (TWT)
- STRATHROY-1 Potential Location

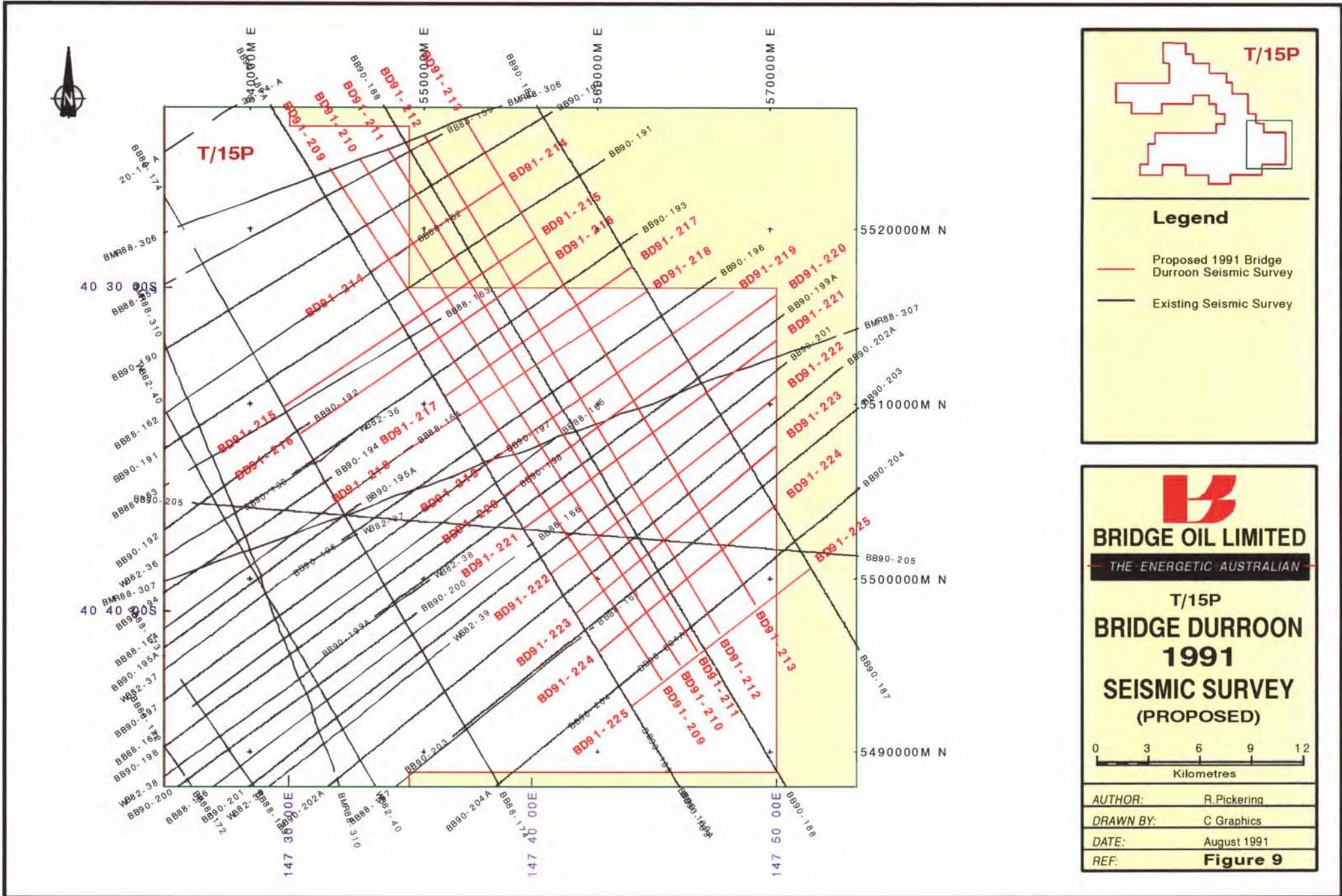
**BRIDGE OIL LIMITED**  
 THE ENERGETIC AUSTRALIAN

**T15/P DURROON BASIN  
 STRATHROY BLOCK  
 STRUCTURE MAP**

0 5 km

AUTHOR: R. Pickering DATE: August 1991  
 DRAWN BY: C GRAPHICS REF: **Figure 8a**

5 cm



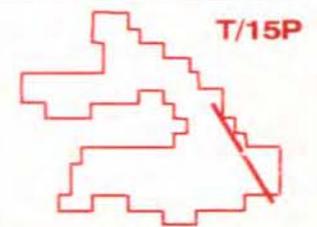
NW

SE

BB90-191

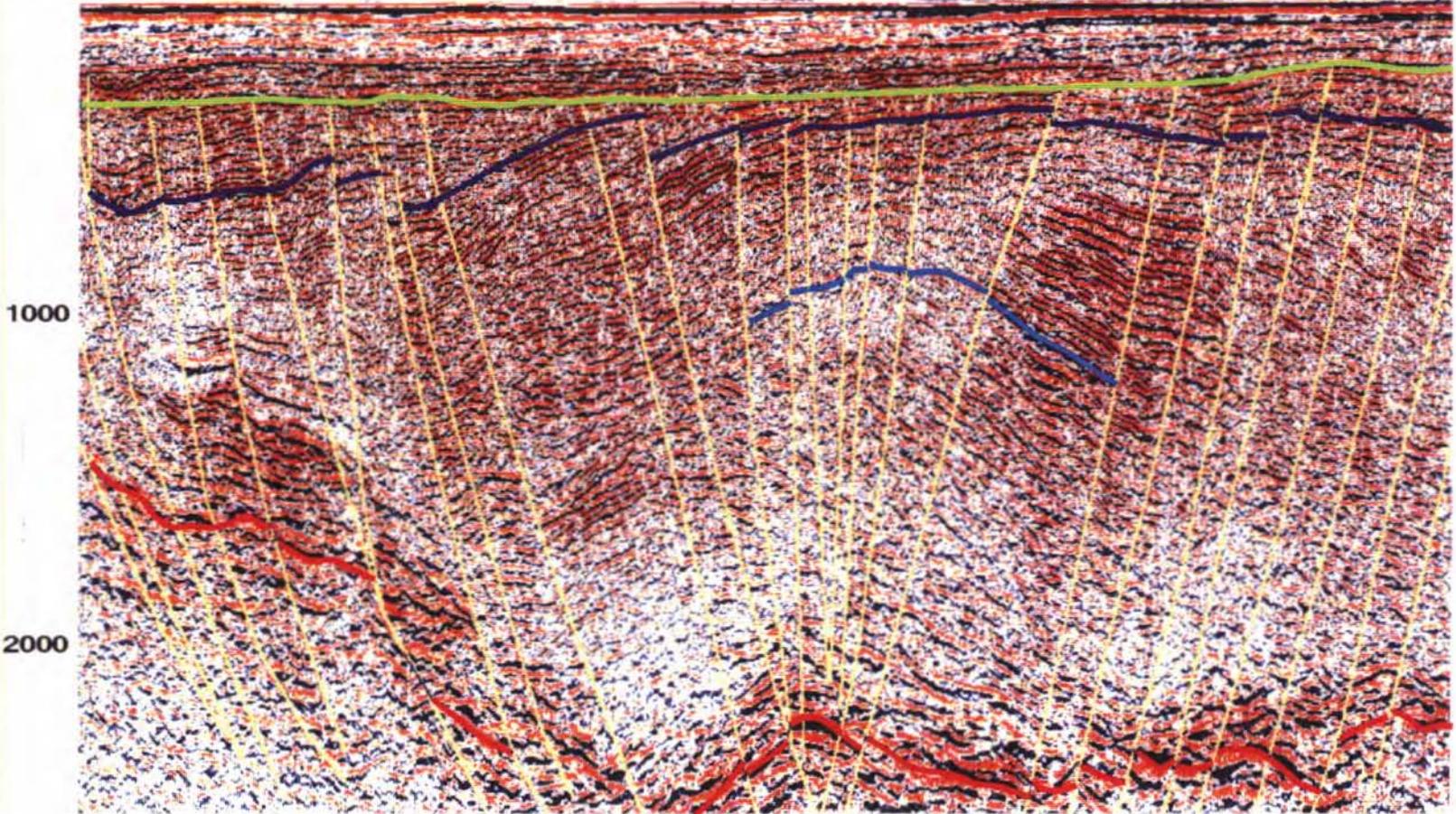
BB90-196

2300 2200 2100 2000 1900 1800 1700 1600 1500 1400 1300



**Legend**

- DURROON MEGASEQUENCE
- EVENT WITHIN DURROON MEGASEQUENCE
- DEEP DURROON MEGASEQUENCE
- OTWAY MEGASEQUENCE



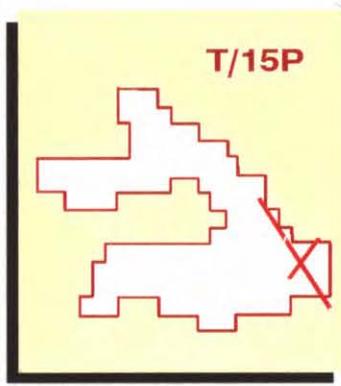
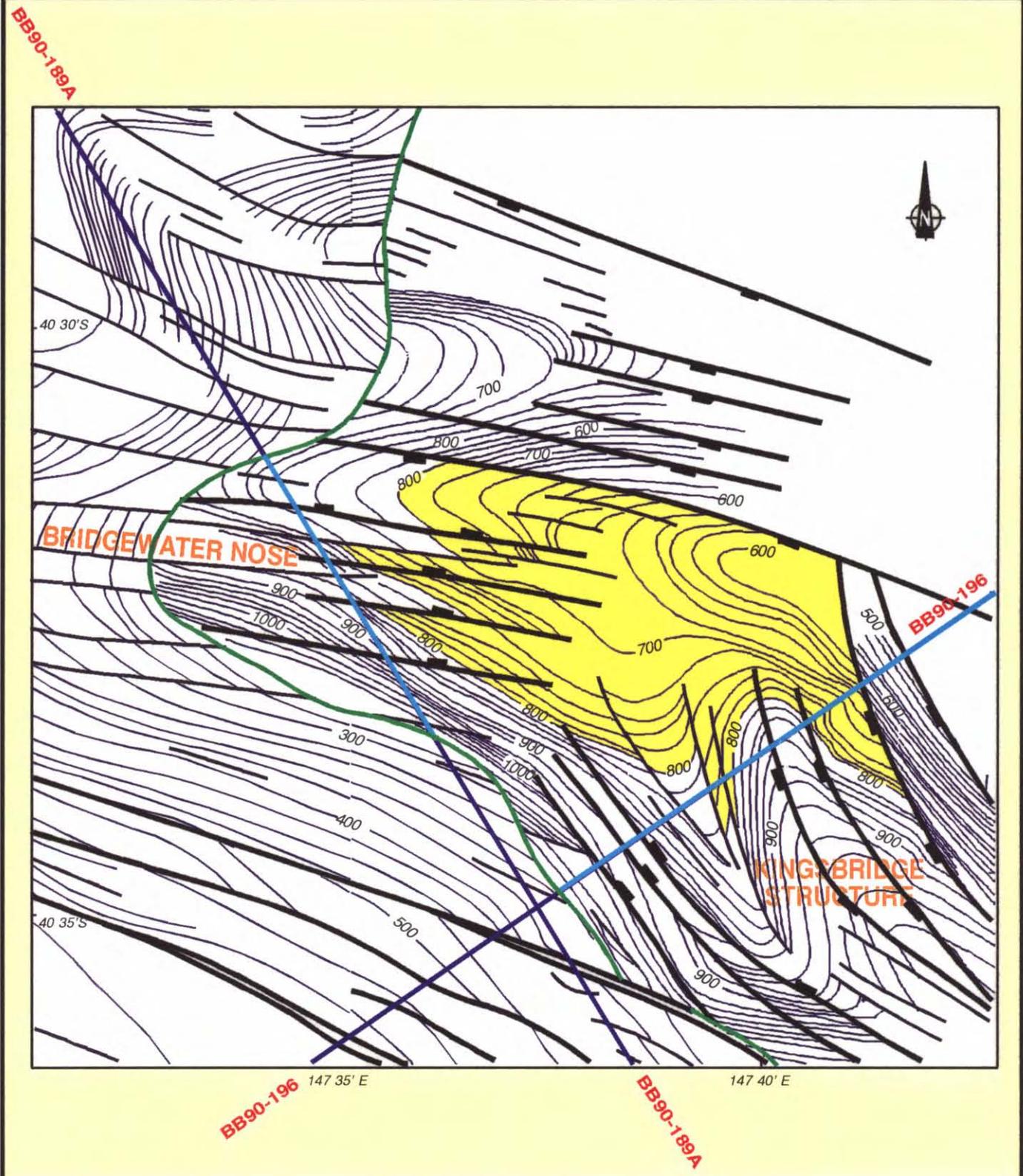
5 cm



T/15P  
DURROON BASIN  
**BRIDGEWATER NOSE**  
LINE BB90-189

0 2066 m

AUTHOR:	D.W. Edgerley
DRAWN BY:	C Graphics
DATE:	August 1991
REF:	<b>Figure 10</b>



**Legend**

- Major fault
- Minor fault
- Contour Interval 20 msec
- Durroon Megasequence
- Deep Durroon Megasequence
- Deep Durroon Megasequence limits
- Deep Durroon Megasequence

**BRIDGE OIL LIMITED**  
 THE ENERGETIC AUSTRALIAN

**T15/P DURROON BASIN  
 BRIDGEWATER NOSE  
 & KINGSBRIDGE  
 STRUCTURE MAP**

0 5 km

AUTHOR: D.W. Egerly	DATE: August 1991
DRAWN BY: C GRAPHICS	REF: <b>Figure 10a</b>

5 cm

SW

NE

BB90-189

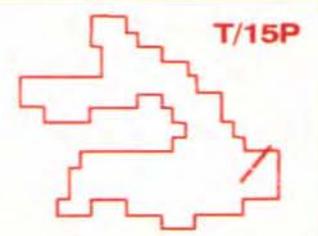
BB90-188

0 300 400 500 600 700 800

1000

2000

5 cm



**Legend**

-  DURROON MEGASEQUENCE
-  EVENT WITHIN DURROON MEGASEQUENCE
-  DEEP DURROON MEGASEQUENCE
-  OTWAY MEGASEQUENCE

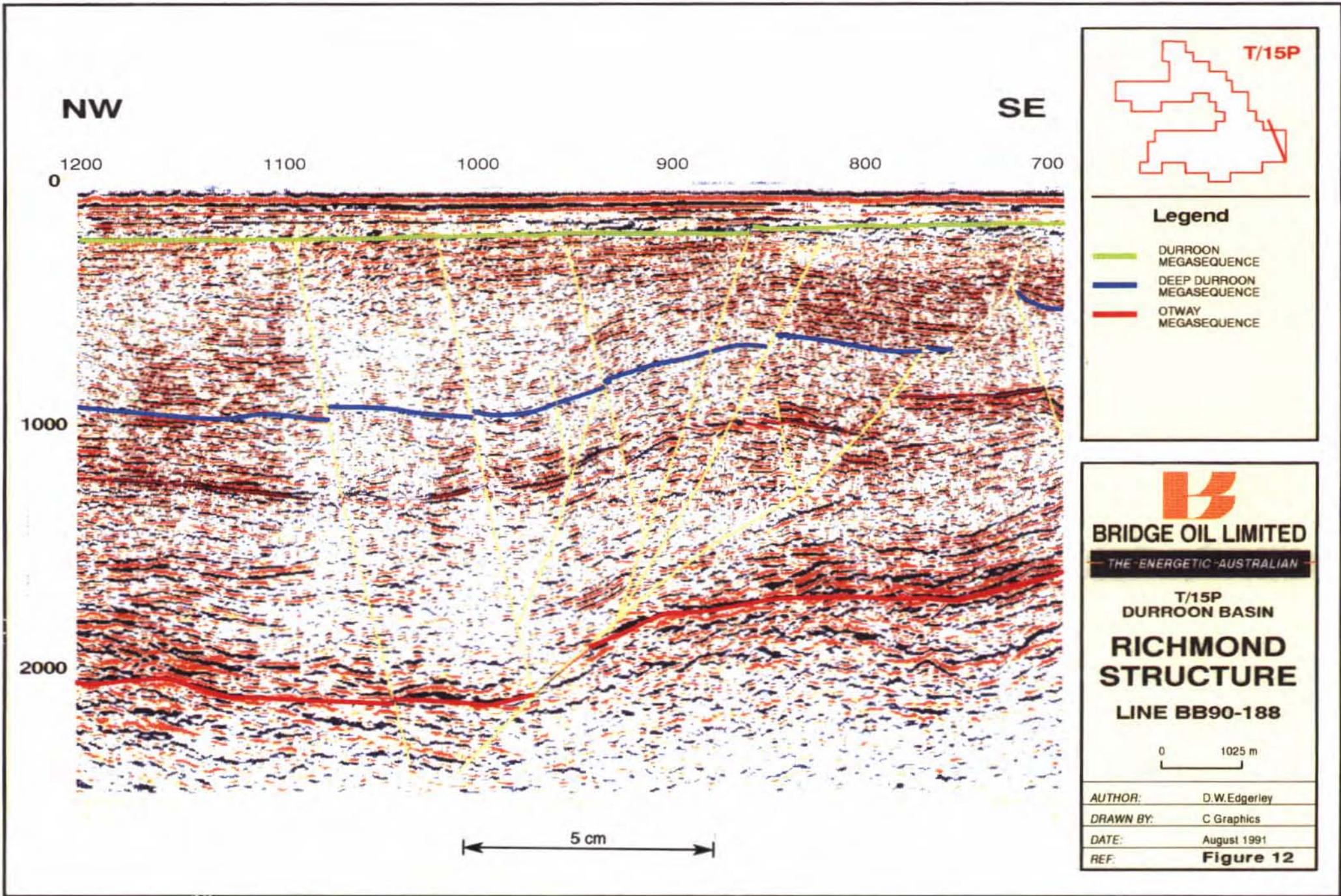


**BRIDGE OIL LIMITED**  
 THE ENERGETIC AUSTRALIAN

T/15P  
 DURROON BASIN  
**KINGSBRIDGE STRUCTURE**  
 LINE BB90-196

0 1024 m

AUTHOR:	D.W. Edgerley
DRAWN BY:	C Graphics
DATE:	August 1991
REF:	<b>Figure 11</b>



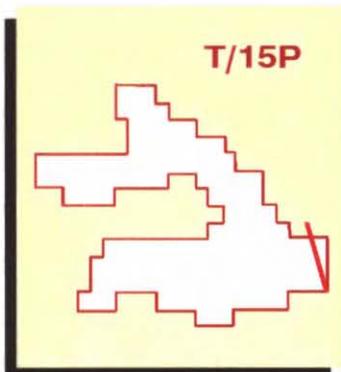


BB90-188



147 45' E

BB90-188



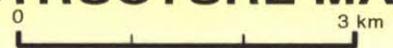
T/15P

**Legend**

- Major fault
- Minor fault
- Contour Interval 20 msec
- Deep Durroon Megasequence
- Deep Durroon Megasequence limits
- Deep Durroon Megasequence

**BRIDGE OIL LIMITED**  
THE ENERGETIC AUSTRALIAN

T/15P DURROON BASIN  
**RICHMOND  
STRUCTURE MAP**



AUTHOR: D.W.Edgerley    DATE: August 1991  
DRAWN BY: C GRAPHICS    REF: **Figure 12a**



SW

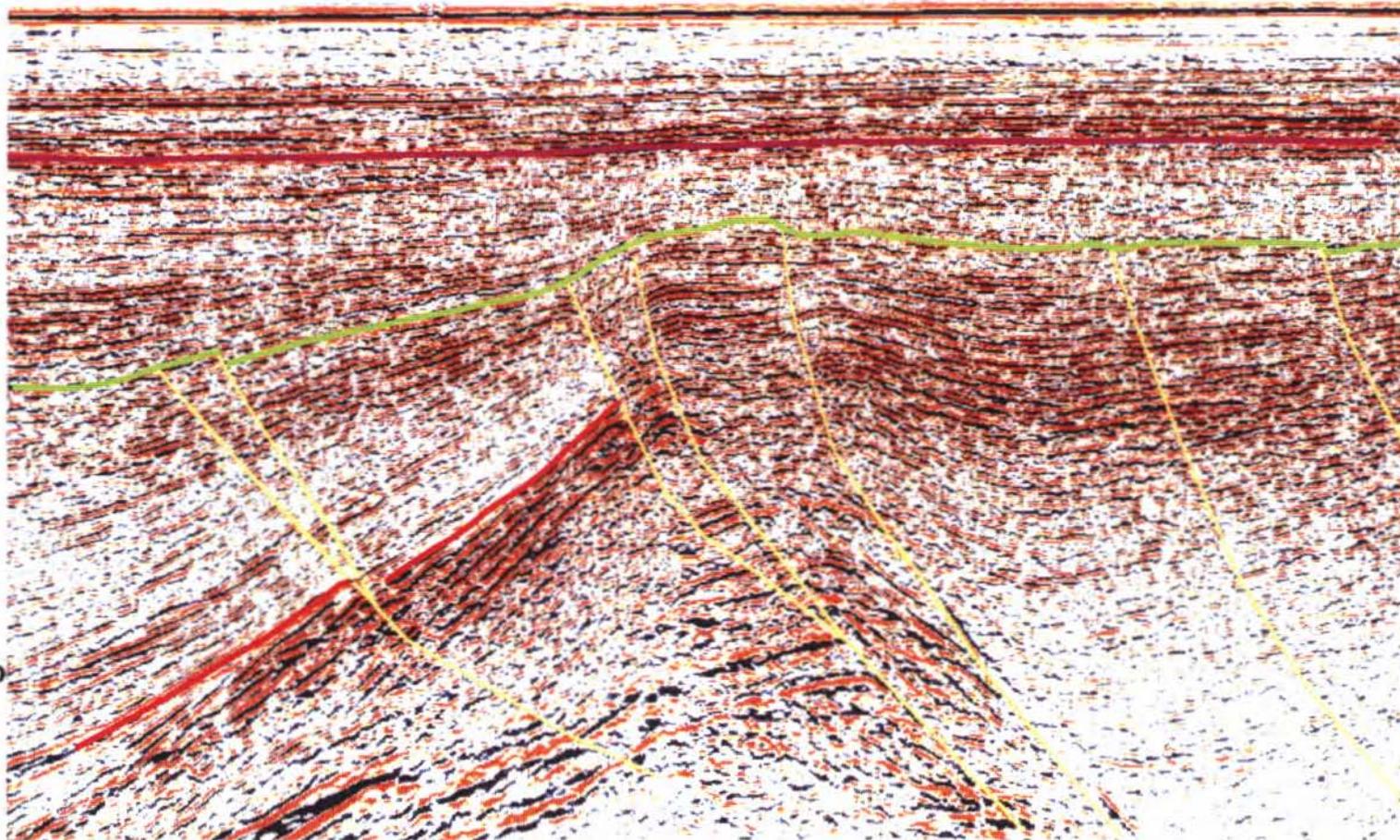
NE

1100 1200 1300 1400 1500 1600

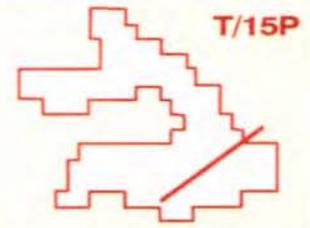
0

1000

2000



5 cm



**Legend**

- TOP PALAEOCENE
- DURROON MEGASEQUENCE
- OTWAY MEGASEQUENCE



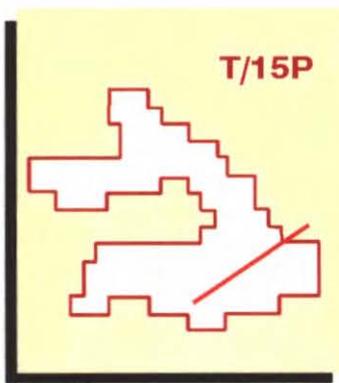
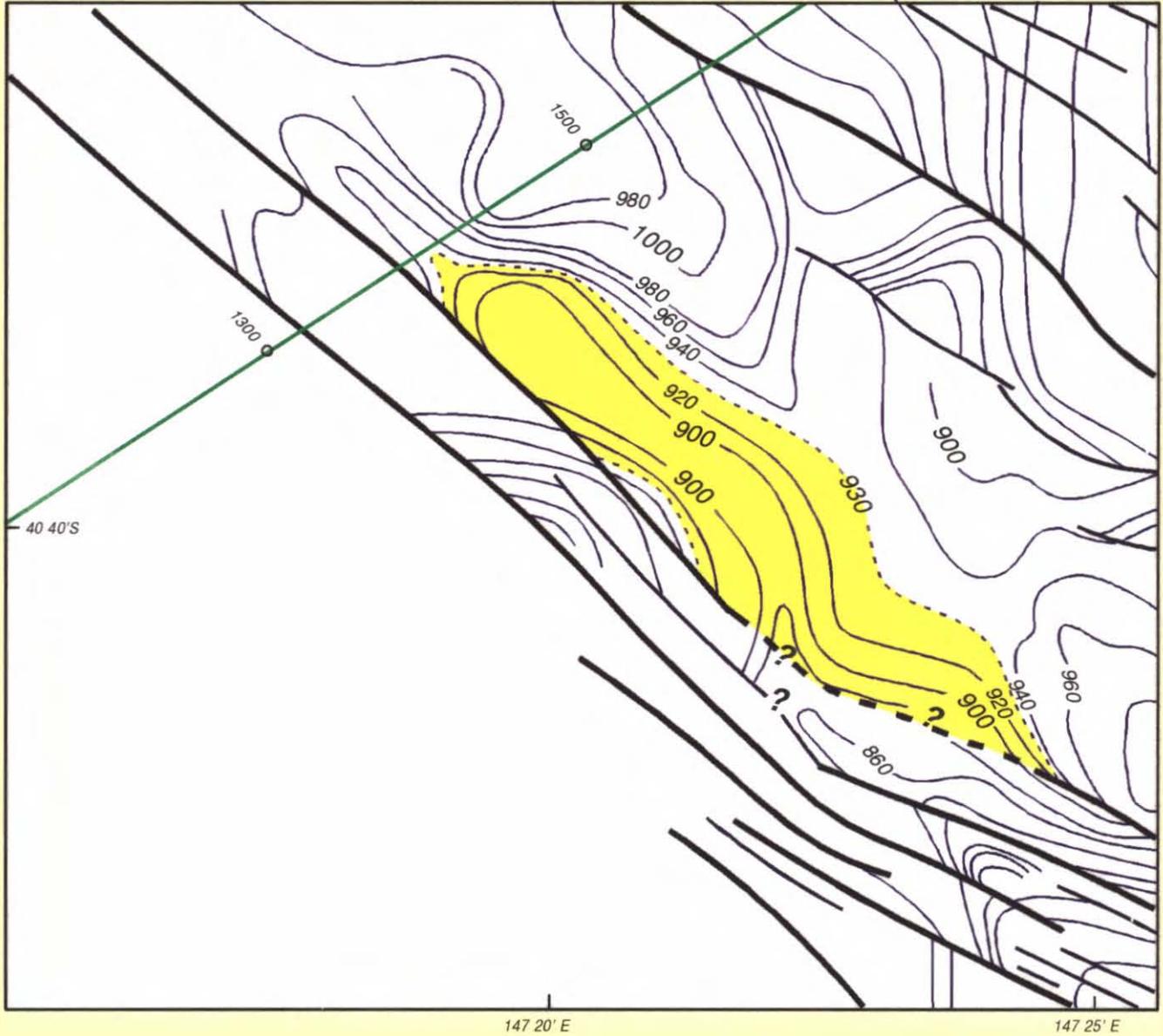
**BRIDGE OIL LIMITED**  
 THE ENERGETIC AUSTRALIAN

T/15P  
 DURROON BASIN  
**DERWENT NOSE**  
 LINE BB90-191

0 1024 m

AUTHOR:	D.W.Edgerley
DRAWN BY:	C Graphics
DATE:	August 1991
REF:	<b>Figure 13</b>

BB90-191



**Legend**

- Major fault
- Minor fault
- Contour Interval 20 msec
- Durroon Megasequence
- Durroon Megasequence ( TWT )

**BRIDGE OIL LIMITED**  
 THE ENERGETIC AUSTRALIAN

**T15/P DURROON BASIN**  
**DERWENT NOSE**  
**STRUCTURE MAP**

0 5 km

AUTHOR: D.W.Edgerley	DATE: August 1991
DRAWN BY: C GRAPHICS	REF: <b>Figure 13a</b>

5 cm