235001

BRIDGE BASS 1985

SEISMIC SURVEYS

IN T-19-P

BASS BASIN

523/64/TL
May, 1986

TPR
OR_0219

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235002

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Figure 1 : Permit map with Leads & Prospects

A. Summary

In 1985 Bridge Oil Ltd, on behalf of the joint venture partners, conducted two seismic surveys in T-19-P permit. The first BB85 seismic survey was conducted in April, 1985 (ref: 1 and 2) by Western Geophysical Co. of America, and the second BB85 (phase two), also called East/West Wing seismic survey, was conducted in November, 1985 (ref: 3 and 4) by GSI. The data from both surveys were processed by Western Geophysical Co. in their Singapore Digital Centre, in June-July and November-December 1985, respectively (ref: 5 and 6). (Fig. 1).

As a result of the first survey, the Seal lead was confirmed as a prospect (ref: 7), and was drilled in February, 1986. The East/West Wing seismic survey revealed two weak leads (ref: 8), but neither was considered drillable. (Fig. 1).

Note: Five reports (ref. 1, 2, 5, 7 and 8) have been submitted previously and three reports (ref 3, 4 and 6) are attached to this report.

B. Purpose

The main purpose of the 404 km BB85 seismic programme in April 1985 was to provide detail coverage over the Manatee and Seal leads located in what was recognised as the most prospective portion of the permit.

The objective of the 669 km East/West Wing seismic programme in November, 1985 was to highgrade those deemed prospective areas of the permit which were not adequately covered by modern marine seismic data.

C. BB85 Seismic Survey

a. Acquisition

The BB85 seismic survey in T-19-P commenced on April 20, 1985 and ended on April 27, 1985. The total seismic data acquired amounted to 404 km. The contractor used for the survey was Western Geophysical Co. of America and the vessel used was the M.V. Western Odyssey (for details see ref: 1 and ref: 2).

b. Processing

The processing of BB85 seismic data was conducted in Singapore Digital Centre of Western Geophysical Co. of America during May-June 1985. The procedure and programmes utilized in processing the data are described in the digital processing report (ref: 5).

c. Interpretation

Exploration Associates International of Houston was contracted to conduct an interpretation of the BB85 seismic survey. As a result of their interpretation the Seal lead was confirmed as a drillable prospect with four-way dip closure at the top of the Eocene-EVCM levels (ref. 7). The Seal -1 well was drilled in February 1986.

D. East/West Wing Seismic Survey - BB85 (phase two)

a. Acquisition

The East/West Wing seismic survey in T-19-P commenced on November 17, 1985 and ended on November 23, 1985. The total seismic data acquired amounted to 669 km. The contractor used for the survey was GSI and the vessel used was Eugene McDermott II (for details see ref: 3 and 4).

b. Processing

The processing of BB85 (phase two) seismic data was conducted in the Singapore Digital Centre of Western Geophysical Co. of America during December, 1985-January 1986. The processing parameters used were similar to the BB85 data, which were processed in July (ref: 6).

c. Interpretation

Two leads have evolved from the 1985 East/West Wing Seismic Survey with West Wing lead being the most promising. A time structure map was constructed on the top of an interpreted alluvial fan in the Central graben area and portrayed a large structure. An alternative interpretation that the structure is caused by volcanics is also possible. (ref: 8).

E. Conclusions

1,073 km of seismic data was acquired during 1985 in the T-19-P permit (enclosure 1). Seal -1 well was drilled in February 1986 on a structure matured by the BB85 seismic data.

Several weak leads remain in the permit, but none is considered drillable (enclosure 2 and 3).

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F. References

1. Final report of operation and field work, Bass Strait offshore Australia by Western Geophysical Co. of America.

2. Seismic supervision report in Permit areas T-15-P, T-16-P and T-19-P, Bass Basin survey 1985, for Bridge Oil Ltd (April, 1985) by F. Renton, ECL Australia Pty Ltd.

3. Final operations report, marine seismic survey, T-19-P, GSI, 1986

4. Seismic supervision report for Bridge Oil Ltd in Block T-19-P of the Bass Basin, November 1985, by F. Renton, ECL Australia Pty Ltd.

5. Digital processing report, T-15-P, T-16-P and T-19-P seismic survey for Bridge Oil Ltd, June-July 1985 by Western Geophysical Co. of America.

6. Digital processing report, T-19-P (phase two) seismic survey for Bridge Oil Ltd, December 1985-January 1986 by Western Geophysical Co. of America.

7. Bridge Oil Ltd, Bass Basin T-19-P, 1985 seismic interpretation project by EAI of Houston.

8. Bass Basin permit T-19-P, an interpretation of the 1985 East/West Wing seismic survey and recommendations for future strategy, 523/64/TL/HH, April, 1986.

G. Appendices

The following reports are attached as appendices to this report.

1. Final operations report, marine seismic survey, T-19-P, GSI, 1986

2. Seismic supervision report for Bridge Oil Ltd in Block T-19-P of the Bass Basin, November 1985, by F. Renton, ECL Australia Pty Ltd.

3. Digital processing report, T-19-P (phase two) seismic survey for Bridge Oil Ltd, December 1985-January 1986 by Western Geophysical Co. of America.

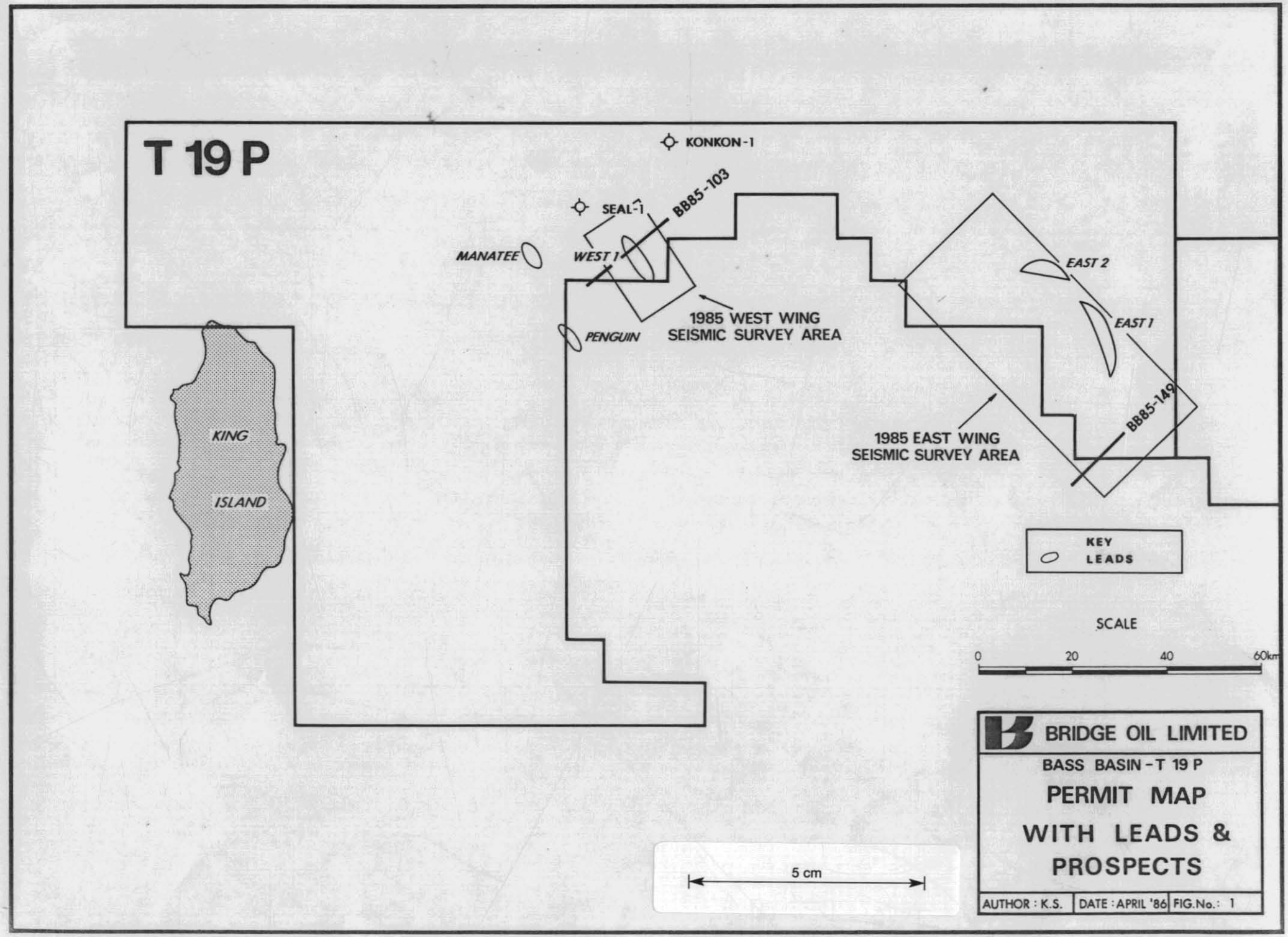
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H. Enclosures

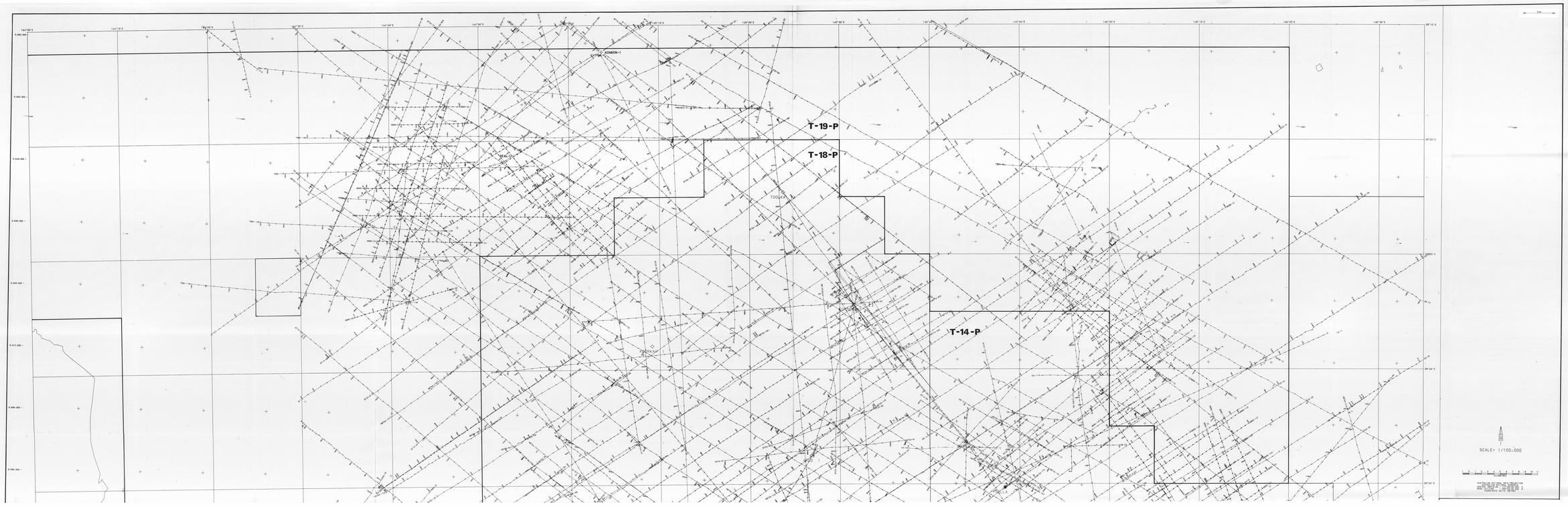
1. Base map 1:100,000 scale.

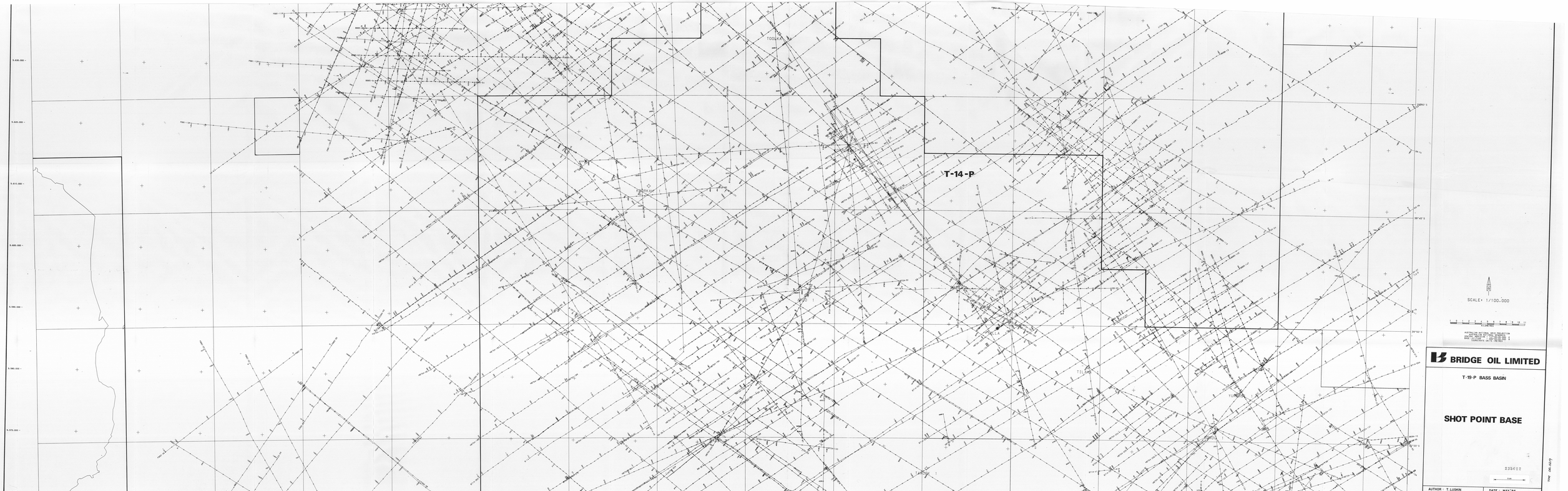
2. Time structure map on Top EVCM, 1:100,000 scale.

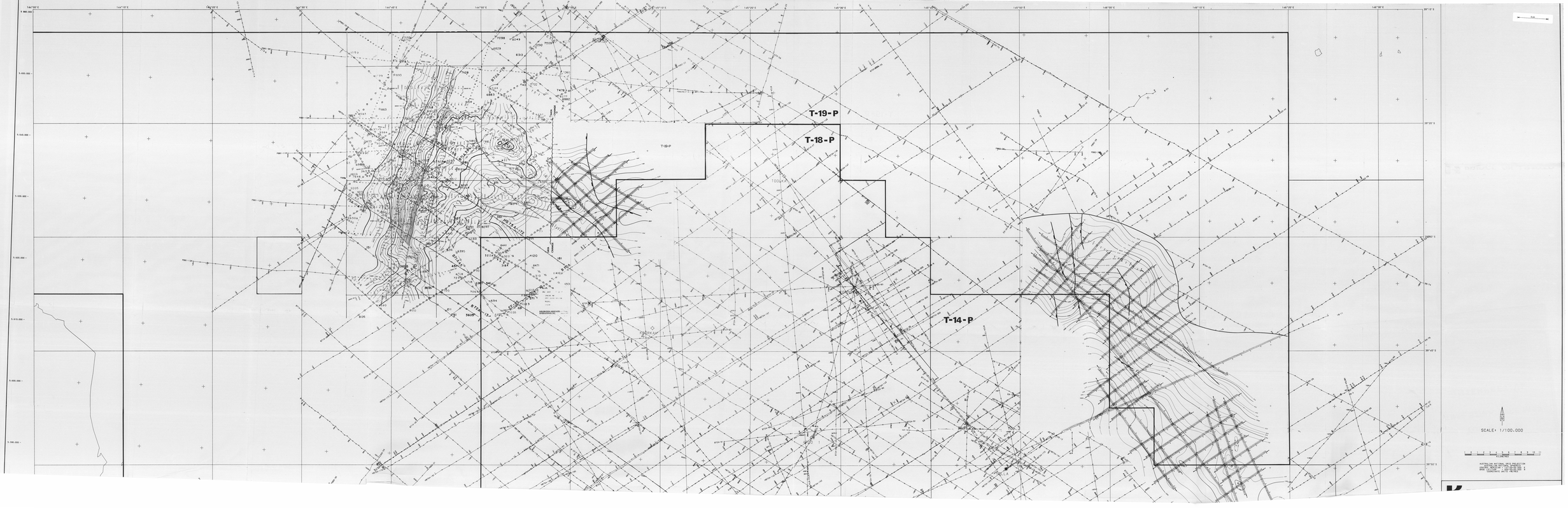
3. Time structure map on Mid. Cretoceous unconformity, 1:100,000 scale.

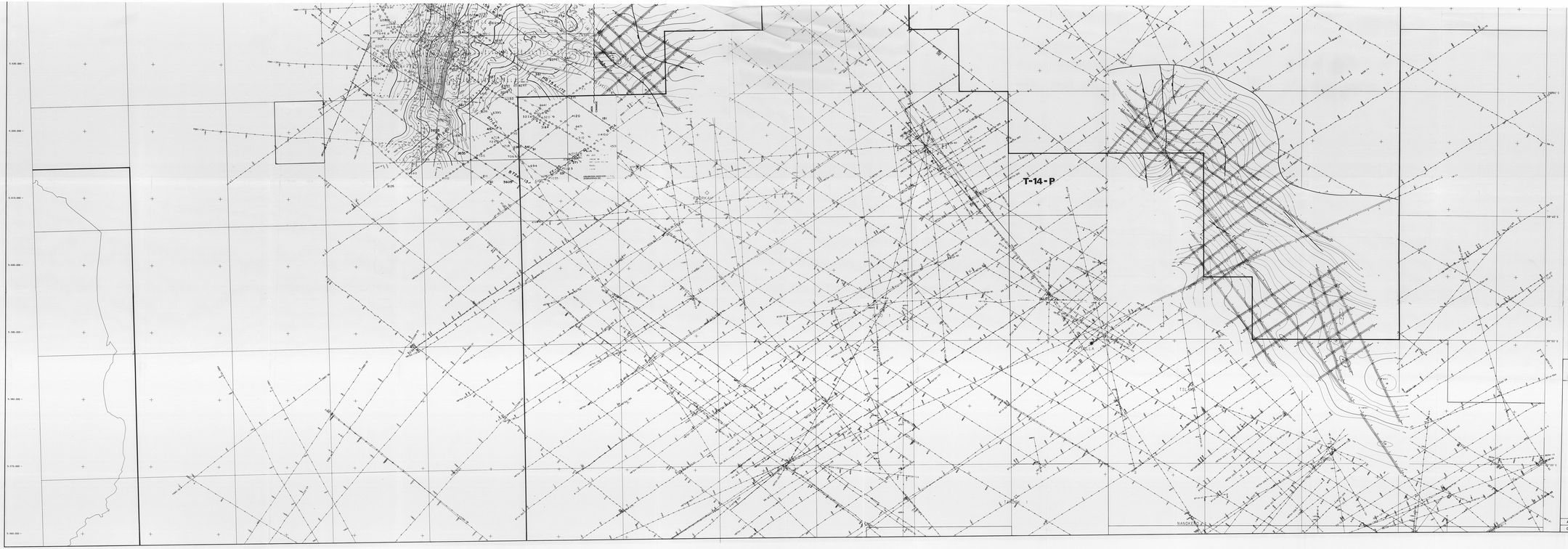

T 19 P
KONKON-1
SEAL-1
BB85-103
MANATEE
WEST 1
EAST 2
EAST 1
PENGUIN
1985 WEST WING
SEISMIC SURVEY AREA
1985 EAST WING
SEISMIC SURVEY AREA
BB85-149
KING
ISLAND
KEY
LEADS
SCALE
0
20
40
60km
5 cm
BRIDGE OIL LIMITED
BASS BASIN - T 19 P
PERMIT MAP
WITH LEADS &
PROSPECTS
AUTHOR : K.S.
DATE : APRIL '86
FIG.No.: 1

2350111


T-19-P
T-18-P
T-14-P
KONNON-1
SCALE: 1/100.000


T-14-P
SCALE: 1/100.000
BRIDGE OIL LIMITED
T-19-P BASS BASIN
SHOT POINT BASE
AUTHOR : T. LUSKIN
DATE : MAY '86
ENCLOSURE Nº 1


T-19-P
T-18-P
T-14-P
SCALE: 1/100.000



SCALE: 1/100.000

BRIDGE OIL LIMITED

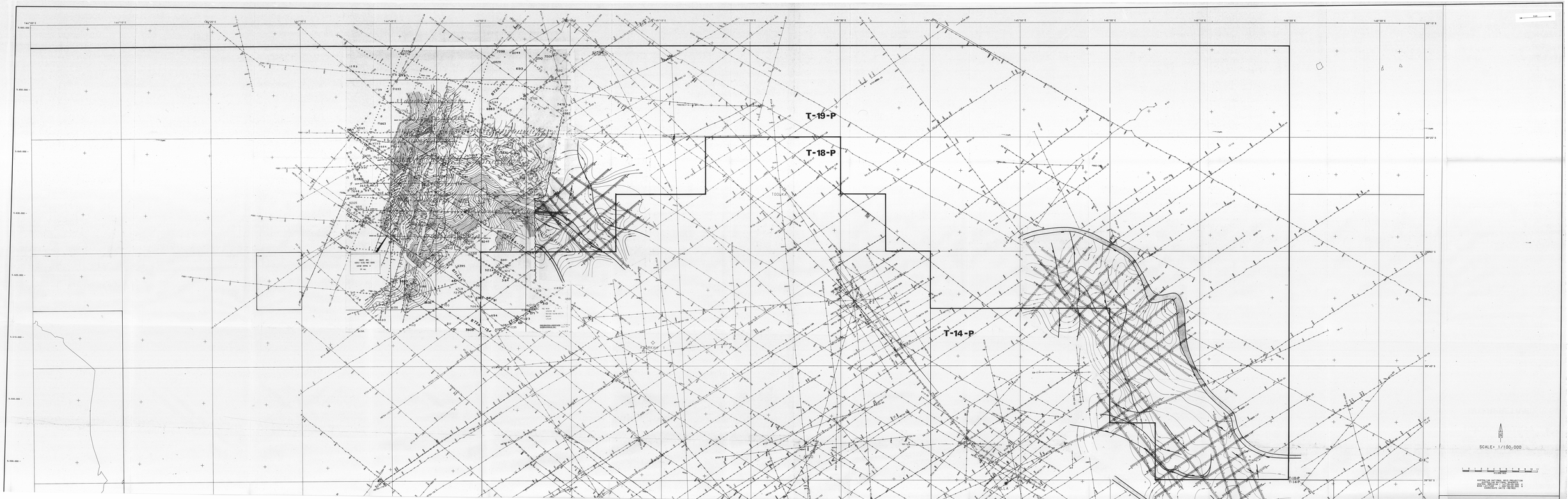
T-19-P, BASS BASIN

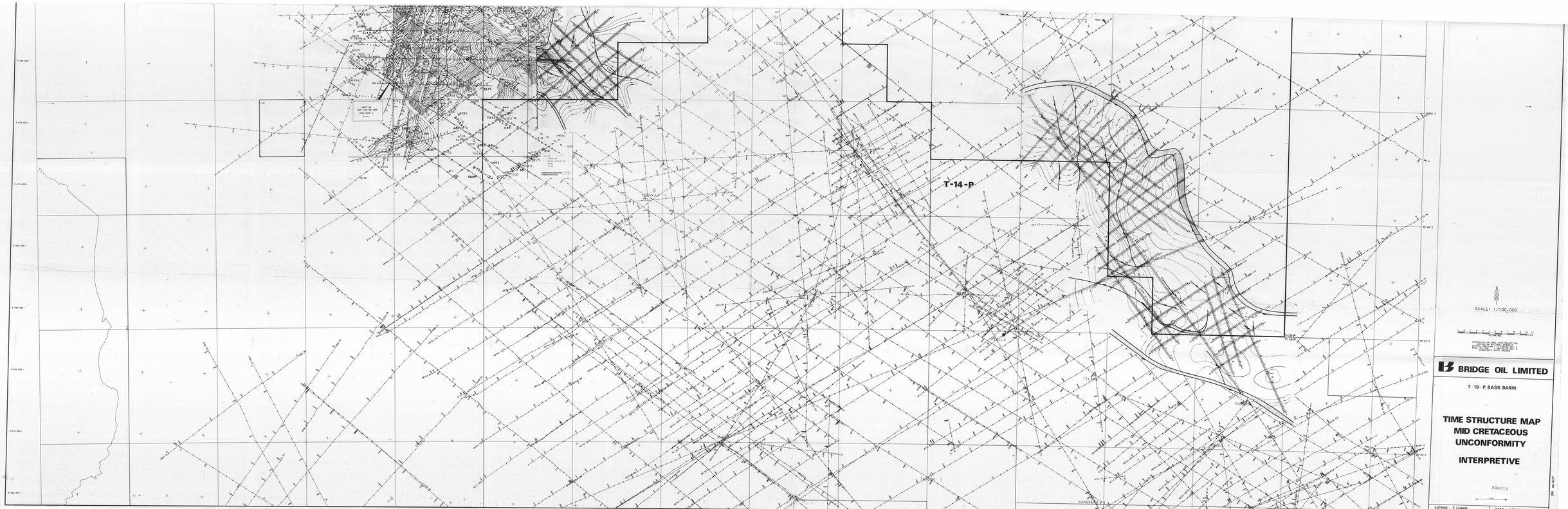
TOP E.V.C.M.
TIME STRUCTURE MAP

INTERPRETIVE

239f13

AUTHOR : T. LUSKIN	DATE : MAY '86
C.I. : 25 % 20 m sec.	ENCLOSURE N° 2


T-19-P
T-18-P
T-14-P
SCALE= 1/100,000


T-14-P
SCALE: 1/100,000
BRIDGE OIL LIMITED
T-19-P, BASS BASIN
TIME STRUCTURE MAP
MID CRETACEOUS
UNCONFORMITY
INTERPRETIVE
233614
AUTHOR - T. LUSKIN
DATE - MAY '86
C.I. - 20, 50 & 100 m sec.
ENCLOSURE Nº 3