

633001

FINAL INTERPRETATION

TASMAN-BASS STRAIT MARINE SEISMIC SURVEY
NORTHWESTERN TASMANIA AREA

PERMITS T/2P & T/10P

for MAGELLAN PETROLEUM AUSTRALIA LIMITED

by

J.E. MILNER
CONSULTING GEOPHYSICIST

OR_081

DECEMBER 1969, BRISBANE,
QUEENSLAND.

ABSTRACT

A reconnaissance seismic sparker and magnetic survey was conducted by Teledyne Exploration for Magellan Petroleum Southern Pty. Ltd. in Exploration Permits T/2P and T/10P offshore Northwestern Tasmania, during September, 1969.

Results showed that approximately 175 sq. miles of the Permits lie within the 100 fathom line and the sea bed makes a steep western plunge from that line to depths of approximately 7,500 ft. Magnetic Basement was successfully located over most of the southern two-thirds of the area, and base of Tertiary over all of it. Events between these two horizons lie in water deeper than 3,000 ft. and could be followed only over limited areas.

Within the 100 fathom line approximately 3,000 ft. of Tertiary rocks lie close above basement. Potential hydrocarbon accumulation in this area would be in situations where these Tertiary rocks form drape structures over, or stratigraphic traps against Basement anticlinal features, however only one basement anticline has been traced into this shallow water area. The Tertiary rocks thin from north to south and east to west; approximate thicknesses in the North are: east side, 5,000 ft. to west side, 3,000 ft. and in the South: east side, 3,000 ft. to west side, 1,000 ft.

Westward from the 100 fathom line to approximately 6,000 ft. depth of Basement (roughly coincident with the 600 fathom line) in the southern half of the Permits the sedimentary section increases to approximately 4,000 ft. the increase being taken up by pre-Tertiary rocks. West of the 600 fathom line these pre-Tertiary rocks increase rapidly in thickness and diversity to in excess of 10,000 ft. in the north, thinning to approximately 6,000 ft. in the south, and provide a potential source of hydrocarbon accumulations.

Further exploration will require refined methods employing multiple coverage and digital processing; re-evaluation of data from adjoining permits would be necessary. Established leads are confined to the one basement anticline traceable under the shallow water area at SP 05 Line M-28-0.

ILLUSTRATIONS

| | |
|---------|--|
| Plate 1 | Horizon Approximate Top Magnetic Basement |
| 2 | Horizon Approximate Base of Tertiary |
| 3 | Events between Basement and Tertiary Section |
| 4 | Water Depth Map |
| 5 | Section Line M-2-0 |
| 6 | " Line M-8-0 |
| 7 | " Line M-14-0 |
| 8 | " Line M-28-0 |
| 9 | " Line M-40-0 (SP 21-65) |
| 10 | " Line M-2-W |

Figure 1 Location Map

RESULTS

GENERAL

The quality of the seismic results was fair to good over almost all the area. Below approximately 100 fathoms a distinct event was received from the sea bed. A generally strong event occurring close to the base of Tertiary section was present over all the area (Plate 2). Over most of the southern two-thirds of the surveyed area an event approximately corresponding to the magnetic basement was present. Between these two horizons a series of other events could be seen; their extent and comments on their appearance are shown on Plate 3.

In addition to these primary events the following multiples appeared variously over the area:

- First multiple of sea bed.
- First multiple of Tertiary horizon.
- First multiple of Basement horizon.
- Multiple of sea bed-surface-Tertiary-surface.
- Multiple of sea bed-surface-Basement-surface.
- Sundry multiples of sea bed-surface-random event-surface.
- Parts of the shallow water area showed a tendency to sea bed-surface reverberations.

The magnetic data tended on occasions to be very noisy, however several useful anomalies were apparent and estimates to basement from them are included on the Basement map Plate 1.

The horizons mapped on Plates 1 and 2 have been prepared in two way time. A replacement correction was made for the water depth using a replacement velocity of 6,000 ft/sec.

Whenever possible the data has been tied to the existing data from adjacent leases, and horizons have been identified from reports on that data. In particular, the results were integrated with those from the following reports:

Offshore Otway Basin Marine Seismic and Magnetic Survey, EP-67; Offshore Otway ER-68 Seismic and Magnetic Survey; and Tasmania EE-68 Marine Seismic and Magnetic Survey (all by Esso Exploration and Production Australia Inc).

WATER DEPTH MAP (Plate 4)

Except in the shallow water area (where the fathometer tapes were used) this map was constructed from the water bottom event occurring on the sections. A velocity of 5,000 ft/second was used to convert time to depth and the map was integrated with adjacent data. It is apparent that a rapid deepening of water is occurring westward, and the shelf slope is often heavily channelled (Plates 5 to 10).

Approximately 175 sq. miles of the permit lie within the 100 fathom line and the westward plunge shows water depths of up to 7,500 ft.

APPROXIMATE MAGNETIC BASEMENT (Plate 1)

Over the area of their occurrence reflections on this horizon varied from poor to good, the enclosed plates 7, 8, 9 and 10 show the variation in quality.

Generally speaking, the relief on the horizon is large and from approximately line M-25-0 southwards the features trend NNW-SSE, approximately the trend of the edge of the continental shelf. The trend north of line M-25-0 is north-south. At least one of the possible anticlines (that at M-28-0, SP 05) extends under the area of shallow water. It was not possible to determine whether other anticlinal features continued under this region due to the generally poor quality of results here and the short eastward extent of most lines from the edge of the shelf. The reports previously mentioned did not contain a basement map for the adjacent area.

In at least one location (Plate 8, M-28-0, SP 75) the surface giving rise to the reflection was an erosional high and tertiary beds sit immediately on basement.

As mentioned before the magnetic data tend on occasions to be noisy, however, at the locations where estimates have been made the respective anomalies are well defined. All estimates from such anomalies appear to agree well with the approximate depth of the Basement reflection, and can be considered reliable within the limitations of the method. The method used was to equate magnetic depth to the horizontal length of the constant gradient of a total magnetic intensity positive anomaly.

Depths to basement vary from approximately 3,500 ft. in the region of lines M-12-0, M-30-0, M-15-0, M-27-0 and M-18-0 increasing to approximately 6,000 to 7,000 ft. at the arc NNW-W-S-SSE at approximately 10 miles from these lines and then plunge rapidly to depths in excess of 10,000 ft. over the remainder of the permits. Water Depths over the same limits vary from 400 ft. to 3,500 ft. to 7,500 ft. giving total sediment thickness of 3,000 ft. to 4,000 ft. to well in excess of 7,000 ft. respectively.

TERTIARY BEDS (Plate 2)

Results on the horizon approximating Base of Tertiary were good over all the area except the shallow water areas. It is felt this event arises from some unit within the lower Tertiary and very close to its base. Examination of several of the sections show that small amounts of Tertiary sediments may exist below this very strong event.

Except for the region immediately below the sea bed surface, where events follow the shape of the sea bed, most of the section to the Base Tertiary event appears to be conformable with that event and is probably all of Tertiary age. These beds appear to have been deeply eroded prior to the deposition of recent sediments and have been cut by several deep channels (Plates 5 - 10).

Generally speaking the interval Base Tertiary to Sea Bed is thinning fairly rapidly to the west. In addition, it is much thinner in the south than the north (Compare Plates 5 and 6 with 7, 8 and 10).

Thicknesses vary from the north: east side, 5,000 ft. to west side, 3,000 ft. to the south: east side, 3,000 ft. to west side, 1,000 ft.

The deterioration in quality of the Base Tertiary event in the shallow water areas appears to be due to a combination of reverberations and defractions. However, in certain areas the unit giving rise to this event may not have been deposited (see Plate 8, M-28-0, SP 20 to 010). In all the shallow water area the event is close to magnetic basement.

There are no structural leads apparent on the Base Tertiary event.

The horizon was tied to available subsidy maps for data in adjacent areas. The ties were not absolute and small modifications had to be made to previous contours. The portion of these maps so modified is defined by a broken line on the enclosed Plate 2.

EVENTS BETWEEN BASEMENT AND TERTIARY (Plate 3)

Plate 3 was designed to summarise the events occurring between the two principal horizons. Three of the events are traceable over several lines and are worthy of mention.

Event A occurs on most of the sections from about the centre of the survey going northwards (Plates 5, 6 and 7). It occurs closely below the Base Tertiary event, but is not conformable with it. Tertiary events converge on Event A at the western side of its southern limit of occurrence and at the northern extremity. To the east it is generally lost in multiples, but thickening of the interval A-Tertiary is evident eastward. Event A locally shows terracing in contrast to general west dip. These localities have the appearance of indicating former high zones on this horizon.

Event B (Plate 9) situated south of central is again an event occurring just below the Base Tertiary and unconformable with it.

It shows evidence of being overlapped by Tertiary to the north, west and south and like Event A is lost in the multiples to the east. This event originates from a horizon older than Event A.

Event C (Plate 9) is the oldest horizon of the three and occurs over most of the area occupied by Event B and is overlapped by it in all positions except to the south-west in which direction the B-C interval appears to be thickening. Event C shows one distinct anticlinal and one distinct synclinal trend and is unconformable to other events.

To the south of the area covered by the B and C events all lines show several events in the interval Tertiary-Basement which are generally conformable to the Tertiary events (Plate 10).

In general the interval Tertiary-Basement thickens rapidly with the steep western plunge of the basement marker, and the rocks in this interval are increasing in diversity and thickening to the west. As with the Tertiary the interval is thinning from north to south (Compare Plate 5 with Plate 10). However, less than 500 ft. of these rocks appear east of the approximate 100 fathom water depth line and a gradual increase to a thickness of approximately 1,500 ft. occurs from this line west to the approximate 6,000 ft. depth of Basement line (approximately coincident with the 600 fathom line in the southern half of the permits). The rapid westerly Basement plunge starts at the 600 fathom line. West of this dropoff thicknesses vary from approximately 6,000 ft. in the south to in excess of 10,000 ft.

CONCLUSIONS AND RECOMMENDATIONS

The EP-67 report, previously mentioned, postulated a long basement ridge extending southward from King Island. The southern half of this survey successfully defined the western edge of that ridge where it appears in T/2P and T/10P. It seems reasonable to assume that this ridge separates the Otway from the Bass Basin and that the thick sequence of sediments occurring west of the basement high are a southern extension of the Otway Basin. It is recommended that a comparison of the data from Prawn No. 1 well and Clam No. 1 well be made to test the strength of this hypothesis.

The same report showed a line depicting Basement Sub-crop on the Base Tertiary horizon extending into Magellan's area. However, both Base Tertiary and Basement events are recognisable over most of the permit area within that line, but converge in the shallow water area.

The extension of basement features such as the anticline passing through approximately SP 05, line M-28-0 provide the best chance for entrapment of hydrocarbons within the 100 fathom line both in drape structures over them and stratigraphic traps along their flanks. The quality of current data is such that the only Basement feature recognisable as extending into this shallow water area is the one on line M-28-0. Further work will have to be undertaken to determine the presence of others. The existence of reverberations and the precision required for the location of stratigraphic traps necessitates the use of a refined method employing multiple coverage and digital processing for exploration of this area of the permit. As possible traps are likely to extend into adjacent leases a complete review of data from these leases should be undertaken, however these data have poor quality and sparse coverage exists along most of the common boundary. Therefore, future exploration should extend into the adjacent lease.

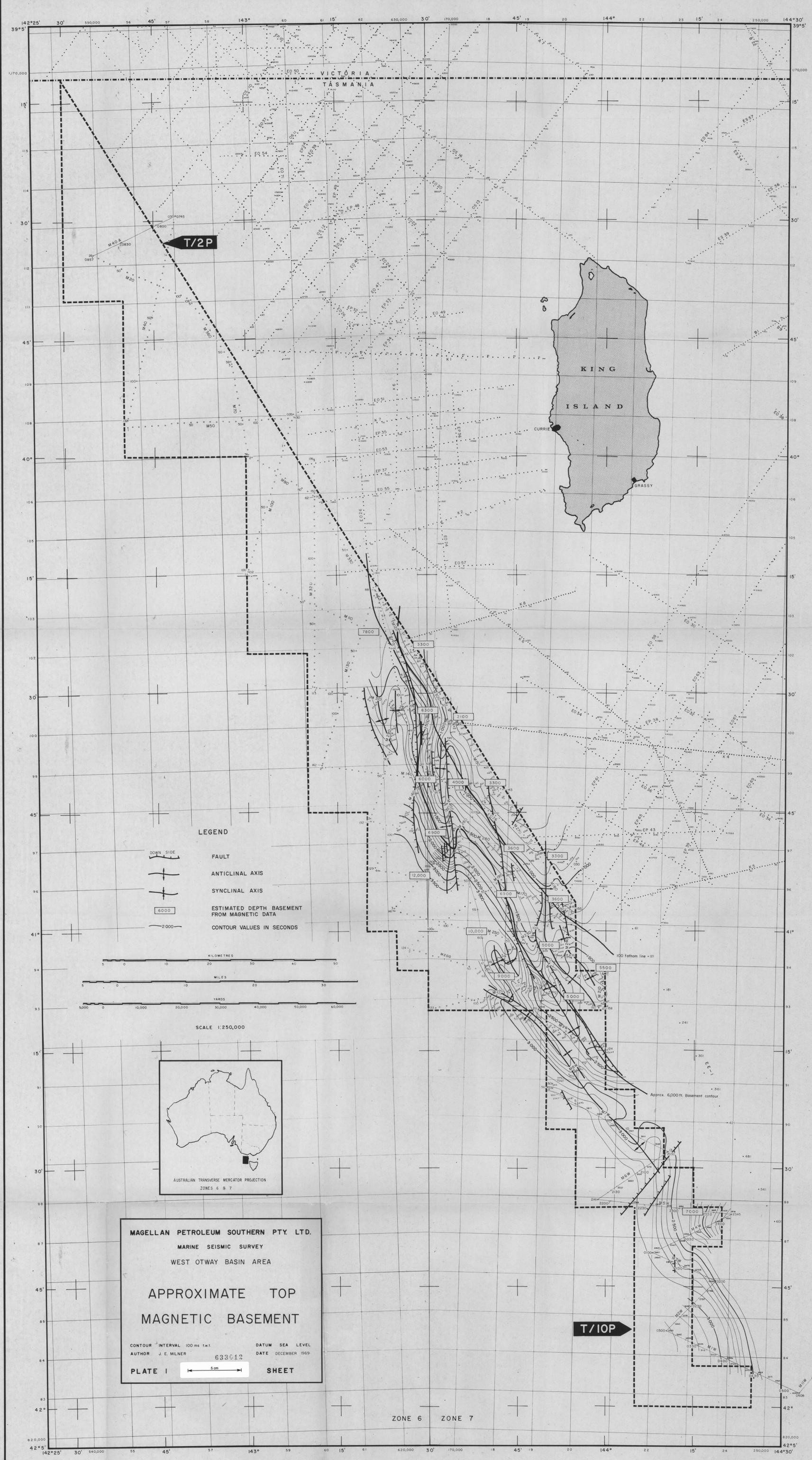
Also of interest as a potential trap is the thick sequence of Pre-Tertiary sediment onlapping the western Basement plunge. Events A and B from this sequence are overlapped by Tertiary rocks principally on the western side, and show thickening to the east. This suggests that a small sub-basin existed between the basement ridge mentioned above and the western margins of the area, at least in immediate pre-Tertiary time. The former anticlinal axis postulated for Event A would have been close to the western edge of this sub-basin. Event C however is more in keeping with the westward synclinal axis indicated by the general basement structure. The principal problem associated with delineation of this sequence is the lack of reflection from it requiring refined methods of exploration. It should be pointed out that the region of rapidly increasing thickness in these rocks lies in water deeper than 3,500 ft.

The survey tools used were successful in reconnoitering the area and the results are felt to be reliable. With the exception of the modifications mentioned above the results agreed with the finding of previous surveys, and provided a logical westward extension of them.

Respectfully submitted,

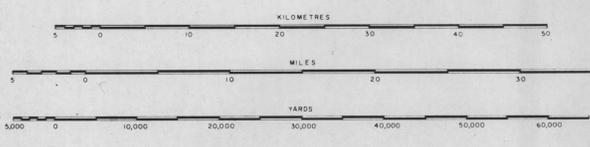
A handwritten signature in cursive script, appearing to read "J.E. Milner".

J.E. Milner,
Consulting Geophysicist

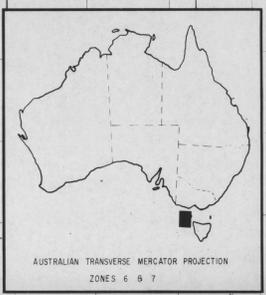


LEGEND

- DOWN SIDE
- FAULT
- ANTICLINAL AXIS
- SYNCLINAL AXIS
- ESTIMATED DEPTH BASEMENT FROM MAGNETIC DATA
- CONTOUR VALUES IN SECONDS



SCALE 1:250,000



MAGELLAN PETROLEUM SOUTHERN PTY. LTD.
MARINE SEISMIC SURVEY
WEST OTWAY BASIN AREA

**APPROXIMATE TOP
MAGNETIC BASEMENT**

CONTOUR INTERVAL 100 ms t.w.t. DATUM SEA LEVEL
AUTHOR J. E. MILNER DATE DECEMBER 1969

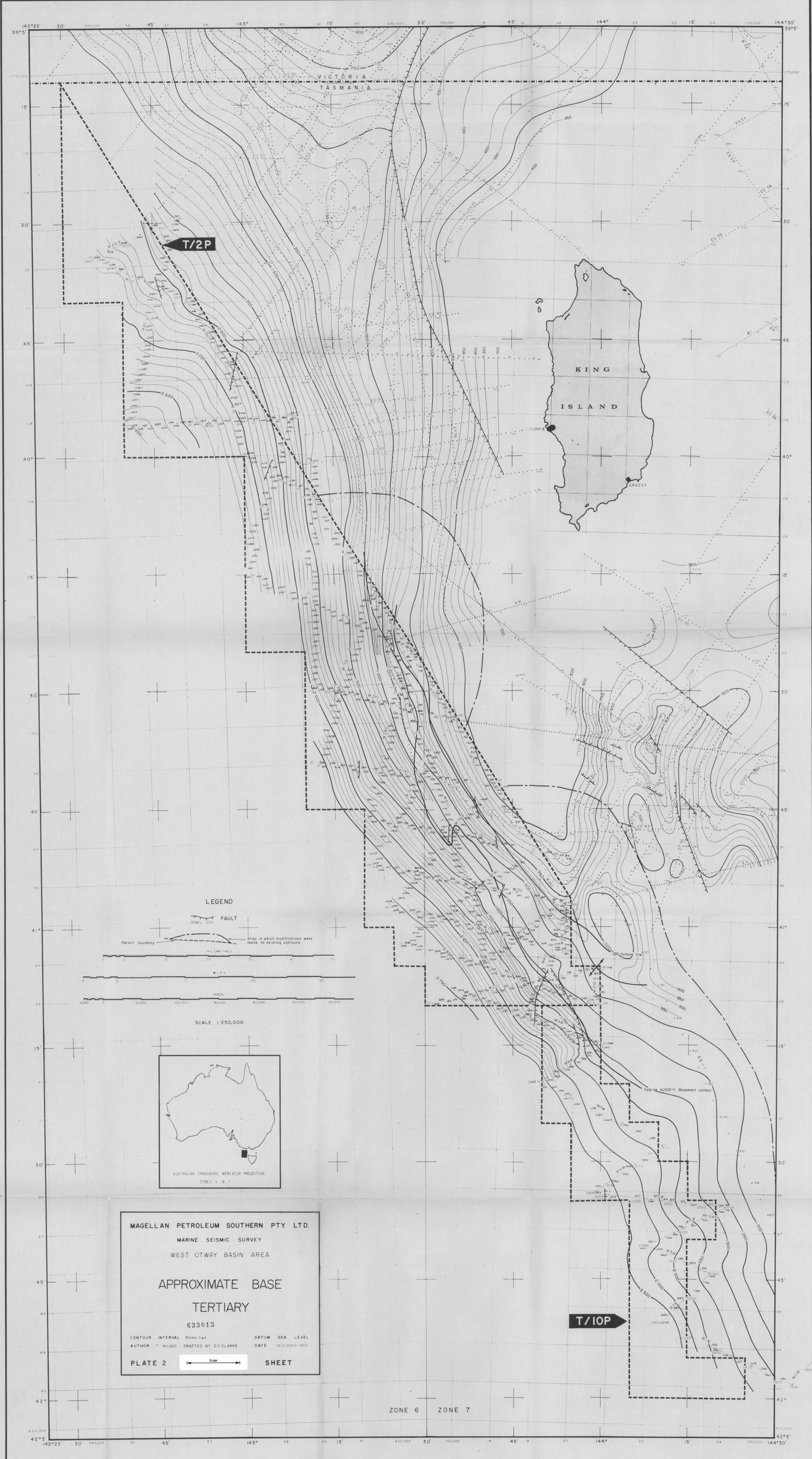
633012

PLATE I 5 cm SHEET

ZONE 6 ZONE 7

T/2P P1

FILE NO T 203
OR_081



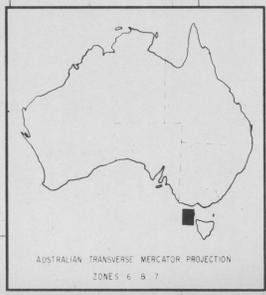
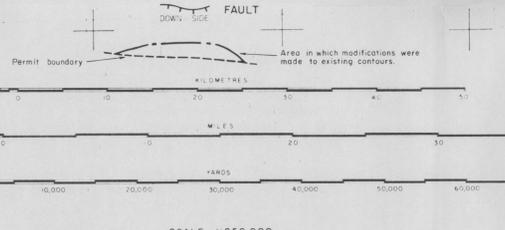
VICTORIA
TASMANIA

KING
ISLAND

T/2P

T/10P

LEGEND



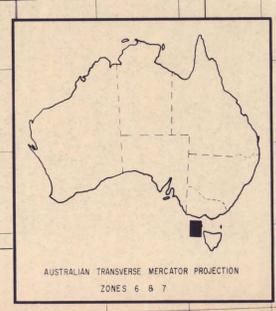
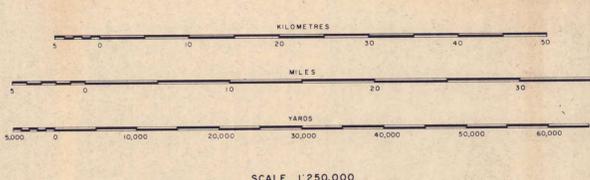
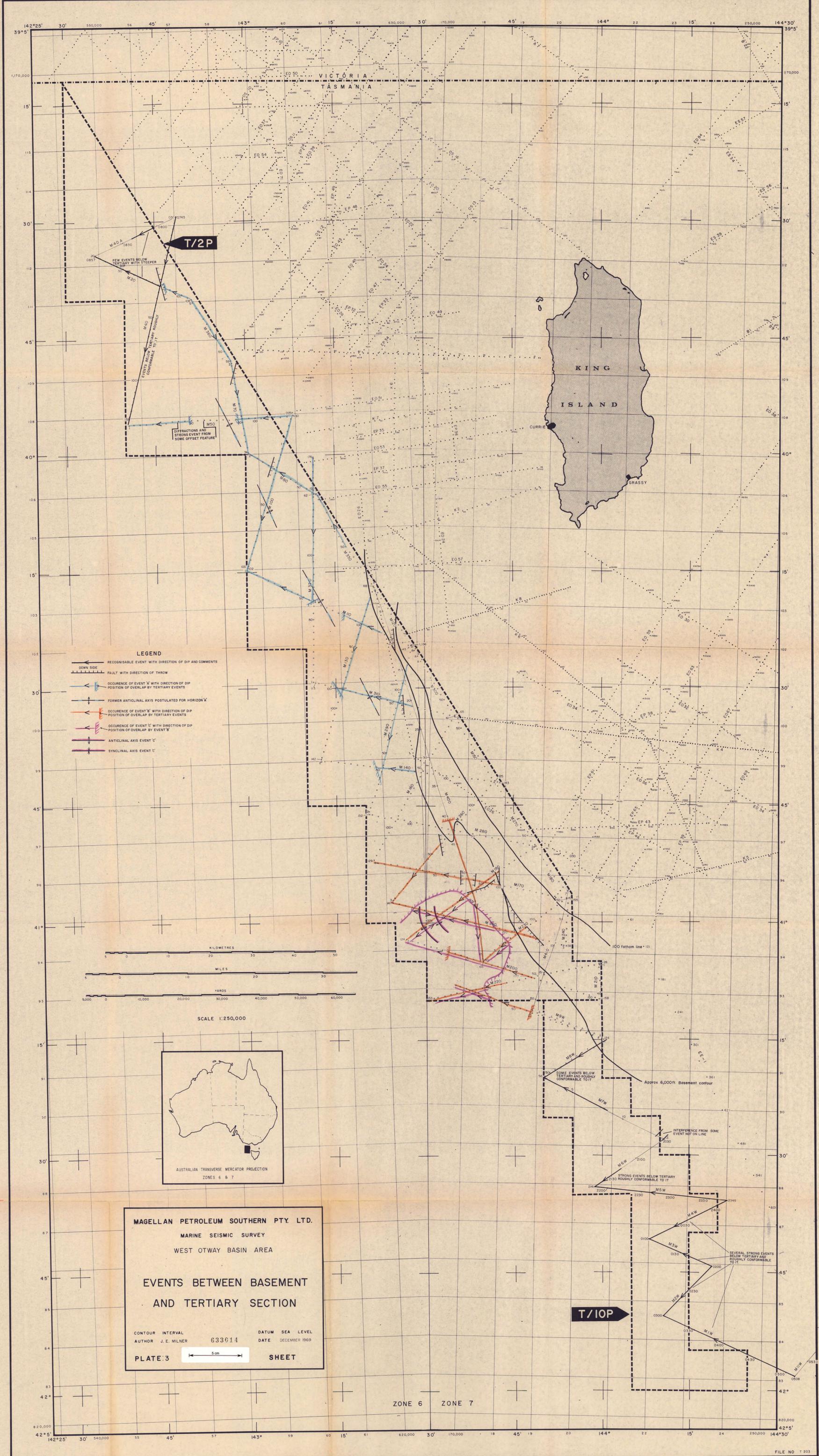
MAGELLAN PETROLEUM SOUTHERN PTY. LTD.
MARINE SEISMIC SURVEY
WEST OTWAY BASIN AREA

APPROXIMATE BASE
TERTIARY
633013

CONTOUR INTERVAL 50 ms fwt DATUM SEA LEVEL
AUTHOR T. MILNER DRAFTED BY D.C. CLARKE DATE DECEMBER 1969

PLATE 2 5m SHEET

ZONE 6 ZONE 7



MAGELLAN PETROLEUM SOUTHERN PTY. LTD.
MARINE SEISMIC SURVEY
WEST OTWAY BASIN AREA

EVENTS BETWEEN BASEMENT AND TERTIARY SECTION

CONTOUR INTERVAL 633014 DATUM SEA LEVEL
AUTHOR J. E. MILNER DATE DECEMBER 1969

PLATE 3 SHEET

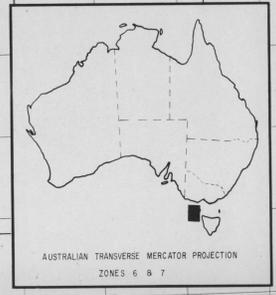
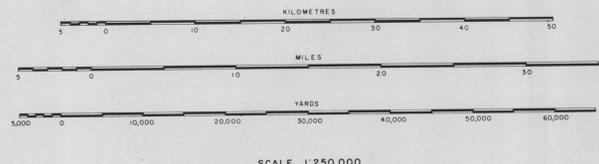
5 cm

ZONE 6 ZONE 7

T/10P

T/2P

T/10P



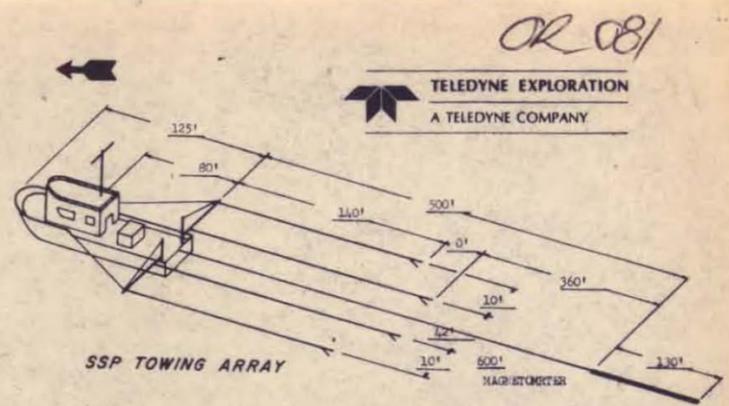
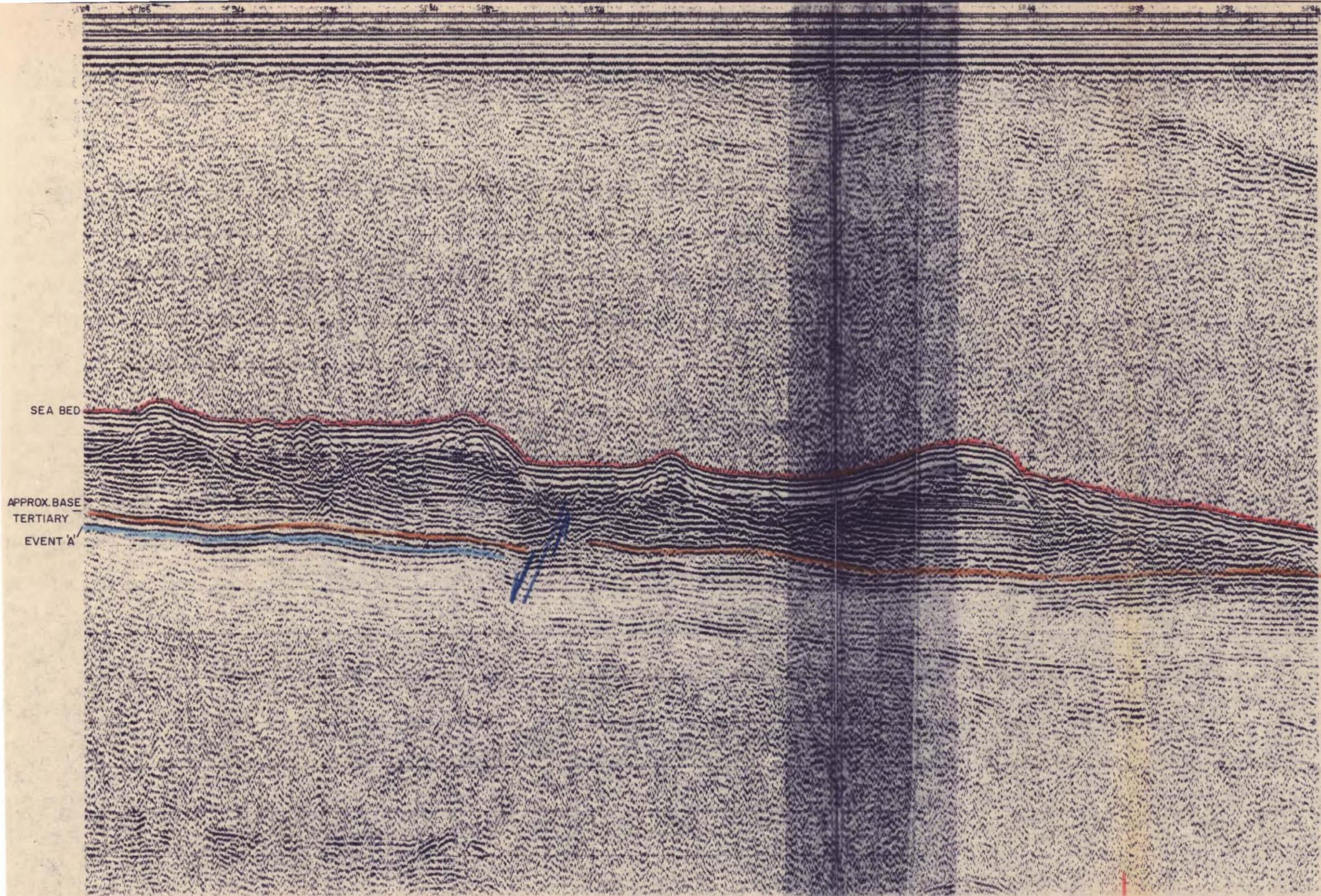
MAGELLAN PETROLEUM SOUTHERN PTY. LTD.
MARINE SEISMIC SURVEY
WEST OTWAY BASIN AREA

WATER DEPTHS

633615
CONTOUR INTERVAL 500, 50 FEET DATUM SEA LEVEL
AUTHOR J. E. MILNER DRAFTED BY D. C. CLARKE DATE DECEMBER 1969

PLATE 4 5 cm SHEET

ZONE 6 ZONE 7



LINE M-2 0
 CLIENT MAGELLAN PETROLEUM AUSTRALIA
 PROSPECT WEST CTXAY
 DATE 8 SEPTEMBER 1969
 W.O. NO. 112-631

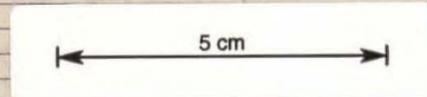
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 WEATHER BEAUFORT 4
 MOTOR VESSEL TELEND X IV
 VESSEL SPEED 10 KNOTS
 FIX INTERVAL 5 SHOT POINT

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 SOURCE DEPTH 25 FEET
 FIRING RATE 4 SECONDS
 HYDROPHONE TYPE AND SER. NO. HP-7 WALL LOG S/N F-23
 HYDROSTREAMER DEPTH 35 FEET
 TOWING NOISE 80 MICRONVOLTS

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 TRACES/INCH 45*
 AMPLIFIER TYPE 98 111
 FILTERS HI 47-1 LO 15-2
 AMP 1 IS USED AS THRESHOLD CH.
 AMP 2 IS USED AS EXPANDER CH. (AGC)
 AMPS 384 ARE USED WITH TAPE, IF TAPE IS USED
 INPUTS TO 182 ARE PARALLEL
 INPUTS TO 384 ARE PARALLEL
 SIGNAL CONDITIONER MASTER GAIN IS 100 MICRONVOLTS
 PRESUPPRESSION ISV IS NOT USED

TAPE RECORDER TYPE AMPSX SP300 1/2 INCH. S/N 1093
 TAPE FILTERS 125-1 15-2
 TAPE SPEED 3.75 IPS
 TAPE NO. D#603

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 2358Z 0858L STARTED ON LINE M-2 0, (115°), SHOT POINT No 26, TAPE D#603 @ 520 REVS.
 9 SEPTEMBER 1969
 0019Z 1019L COMPLETED LINE M-2 0, SHOT POINT No 108, TAPE D#603 @ 884 REVS.



CREW NO. MS 631
 OPERATORS INITIALS B.S. H.S.
 CLIENT REPRESENTATIVE AL SABITAY
 CREW CHIEF W.R. SPILLIGOR

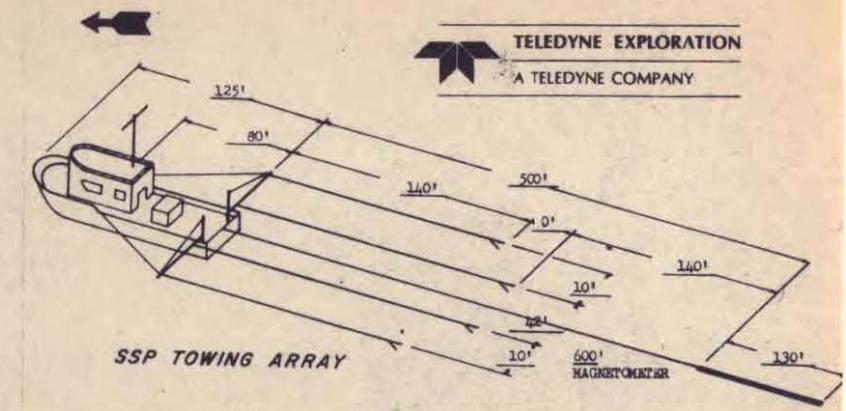
633016

T/2P A-1

PLATE 5

OR-081

TELEDYNE EXPLORATION
A TELEDYNE COMPANY



LINE M-8 O,
 CLIENT MAGELLAN PETROLEUM AUSTRALIA
 PROSPECT WEST OTWAY
 DATE 9 SEPTEMBER 1969
 W.O. NO. 142-631

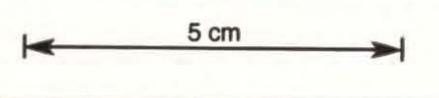
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 WEATHER BEAUFORT 5
 MOTOR VESSEL TELEDEX IV
 VESSEL SPEED 10 KNOTS
 FIX INTERVAL 5 SHOT POINT.

ACOUSTIC SOURCE SSP 160KJ
 SOURCE DEPTH 25 FEET
 FIRING RATE 4 SECONDS
 HYDROPHONE TYPE AND SER. NO. MP-7 WELL LOG S/N 1093
 HYDROSTREAMER DEPTH 35 FEET
 TOWING NOISE 80 MICROVOLTS

FACSIMILE RECORDER TYPE RAYTHEON EER-196-A-2
 TRACES/INCH 45
 AMPLIFIER TYPE GS 111
 FILTERS HI 47-1 LO 16-2
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 AMP 2 IS USED AS EXPANDER CH. (ACC)
 AMPS. 3B4 ARE USED WITH TAPE, IF TAPE IS USED
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 INPUTS TO 3B4 ARE PARALLEL
 SIGNAL CONDITIONER MASTER GAIN IS 100 MICROVOLTS
 PRESUPPRESSION IS NOT USED

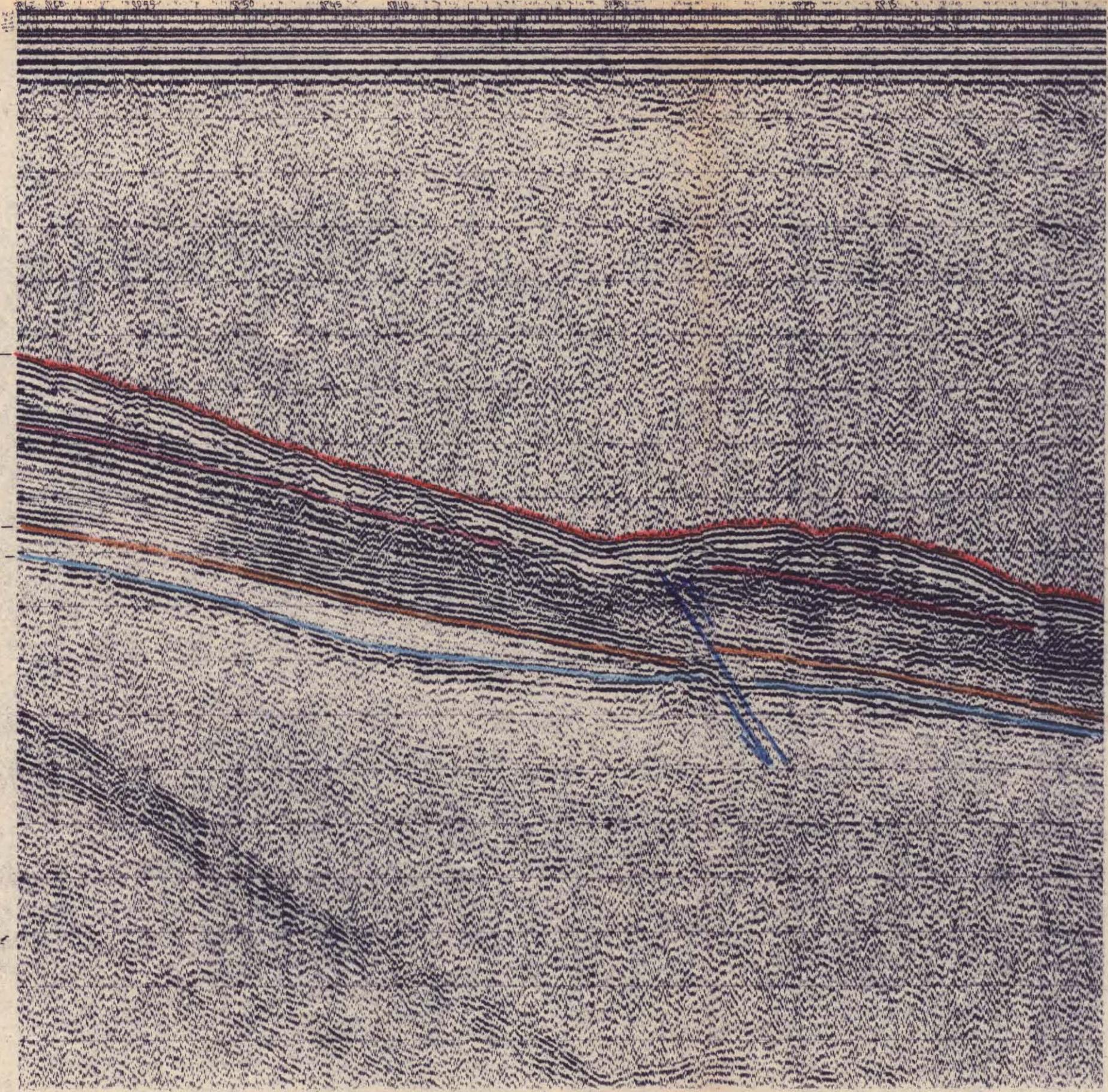
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 TAPE SPEED 3.75 IPS
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 0323Z 1323L CHANGED TO TAPE D*605/
 0330Z 1330L COMPLETED LINE M-8 O. SHOT POINT No 62. TAPE D*605 @ 62 REVS.
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 0404Z 1404L RESUMED FULL SPEED. SHORAN BACK IN THE AIR. SHOT POINT No 25.
 0505Z 1505L COMPLETED LINE M-33 O. SHOT POINT No 88. TAPE D-605 @ 611 REVS.



CREW NO. MS 631
 OPERATORS INITIALS R.S. M.S.
 CLIENT REPRESENTATIVE AL SABITAY
 CREW CHIEF W.B. SPRINGER

SEA BED
 APPROX BASE
 TERTIARY
 EVENT 'A'



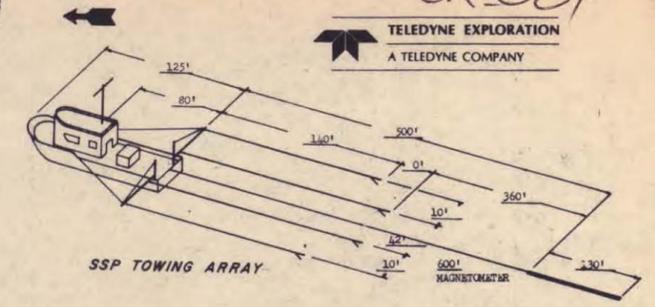
633017

T/2P PFI

PLATE 6

OR 081

TELEDYNE EXPLORATION
A TELEDYNE COMPANY



LINE M-14 O
 CLIENT MACELLAN PETROLEUM AUSTRALIA
 PROSPECT WSPY CTWAY
 DATE 9 SEPTEMBER 1969
 W.O. NO. 142-531

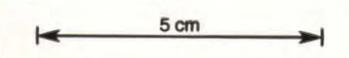
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 MOTOR VESSEL THERMIST IV
 VESSEL SPEED 10 KNOTS
 FIX INTERVAL 5 SHOT POINT

ACOUSTIC SOURCE SSP 160 KJ
 SOURCE DEPTH 25 FEET
 FIRING RATE 4 SECONDS
 HYDROPHONE TYPE AND SER. NO. ME-7 WEL LOG S/N 7-23
 HYDROSTREAMER DEPTH 35 FEET
 TOWING NOISE 80 MICROVOLTS

FACSIMILE RECORDER TYPE RAYTHEON PER-176-A-2
 TRACES/INCH 45
 AMPLIFIER TYPE GS 111
 FILTERS HI 47-1 LO 16-2
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 AMP 2 IS USED AS EXPANDER CH. (AGC)
 AMPS 3B & ARE USED WITH TAPE, IF TAPE IS USED
 INPUTS TO 1B & 2 ARE PARALLEL
 INPUTS TO 3B & 4 ARE PARALLEL
 SIGNAL CONDITIONER MASTER GAIN IS 100 MICROVOLTS
 PRESUPPRESSION 100/ IS NOT USED

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 TAPE SPEED 3.75 IPS
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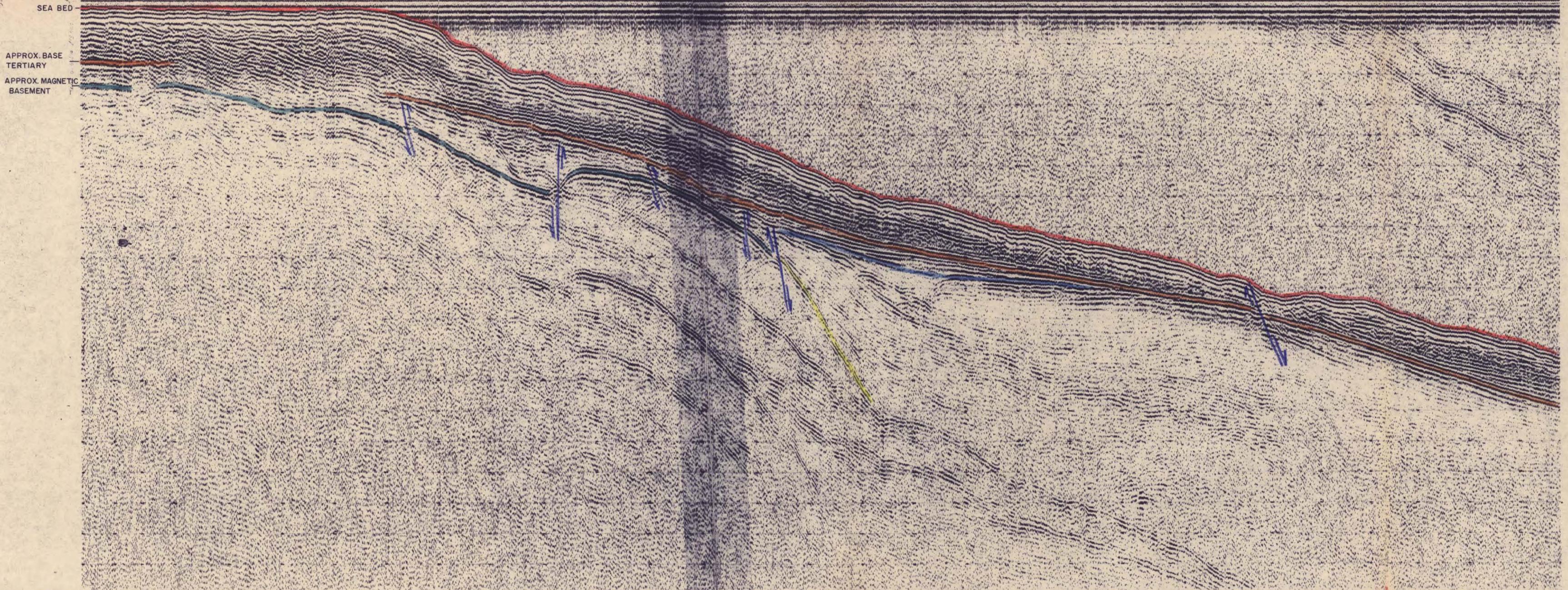
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 1041Z 2041L CHANGED TO TAPE D-607. SHOT POINT No 105.
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 1114Z 2114L STARTED ON LINE M-15 O, (300°), SHOT POINT No 1. TAPE D-607 @ 277 REVS.
 1238Z 2238L COMPLETED LINE M-15 O. SHOT POINT No 61. TAPE D-607 @ 669 REVS.

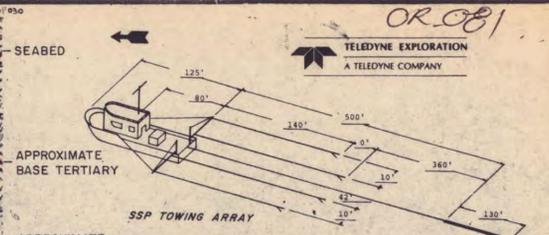
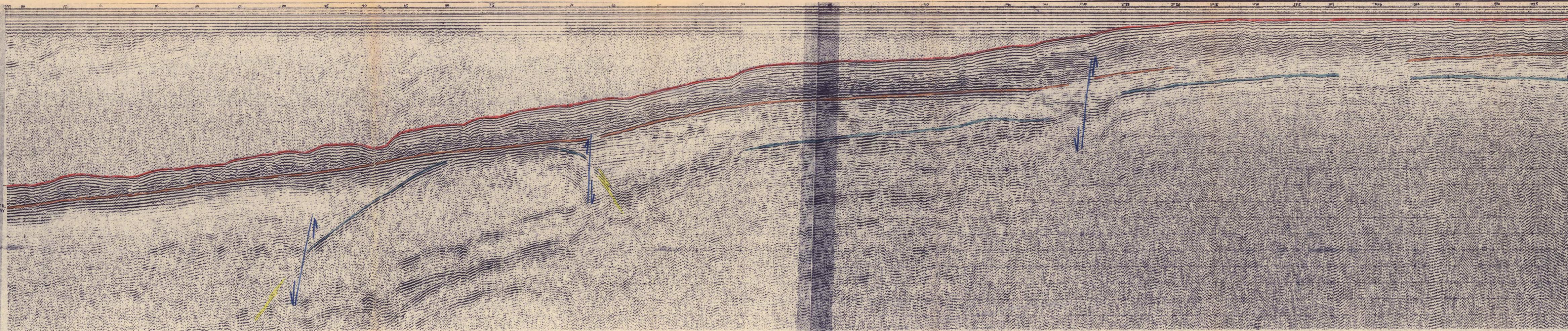


CREW NO. MS 631
 OPERATORS INITIALS R.S. M.S.
 CLIENT REPRESENTATIVE AL-SABITAY
 CREW CHIEF W.B. SPRINGM

633018

T/2P Pt 1





SEABED
APPROXIMATE BASE TERTIARY
APPROXIMATE MAGNETIC BASEMENT

LINE M-280
CLIENT MACELIAN PETROLEUM AUSTRALIA
PROSPECT WEST OMAH
DATE 11 SEPTEMBER 1969
W.G. NO. 142-633

POSITIONING SHORAN
WEATHER READPORT NO. 7
MOTOR VESSEL TELEDEX IV
VESSEL SPEED 10 KNOTS APPROX.
FIX INTERVAL FIVE SHOTSPOINTS

ACoustic SOURCE SSP 160 KJ
SOURCE DEPTH 25 FEET
FIRING RATE 4 SECONDS
HYDROPHONE TYPE AND SER. NO. SP-7, WELL LOG 6/81 P-23
HYDROFREAMER DEPTH 35 FEET
TOWING NOISE 80 MICROVOLTS

FACSIMILE RECORDER TYPE RAYTHEON PER 196-A-2
TRACES INCH 45
AMPLIFIER TYPE GBC 111
FILTERS HI 41-1 LO 16-2
AMP 1 IS USED AS THRESHOLD CH
AMP 2 IS USED AS EXPANDER CH (AGC)
AMPS 3 & 4 ARE USED WITH TAPE, IF TAPE IS USED
INPUTS TO 1 & 2 ARE PARALLEL
INPUTS TO 3 & 4 ARE PARALLEL
SIGNAL CONDITIONER MASTER GAIN IS 100 MICROVOLTS
PRESHORTCIRCUITING IS NOT USED

TAPE RECORDER TYPE AMPLEX SP-300, 1/2 INCH 6/81 1093
TAPE FILTERS 12.5 & 16.4
TAPE SPEED 3.75 IPS
TAPE NO. D-617-619

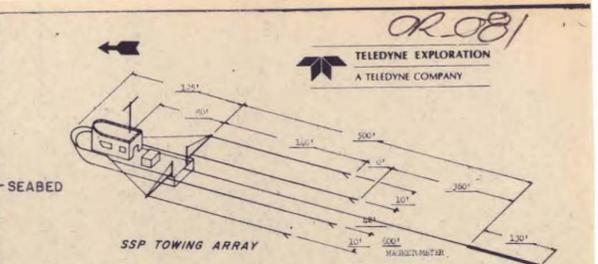
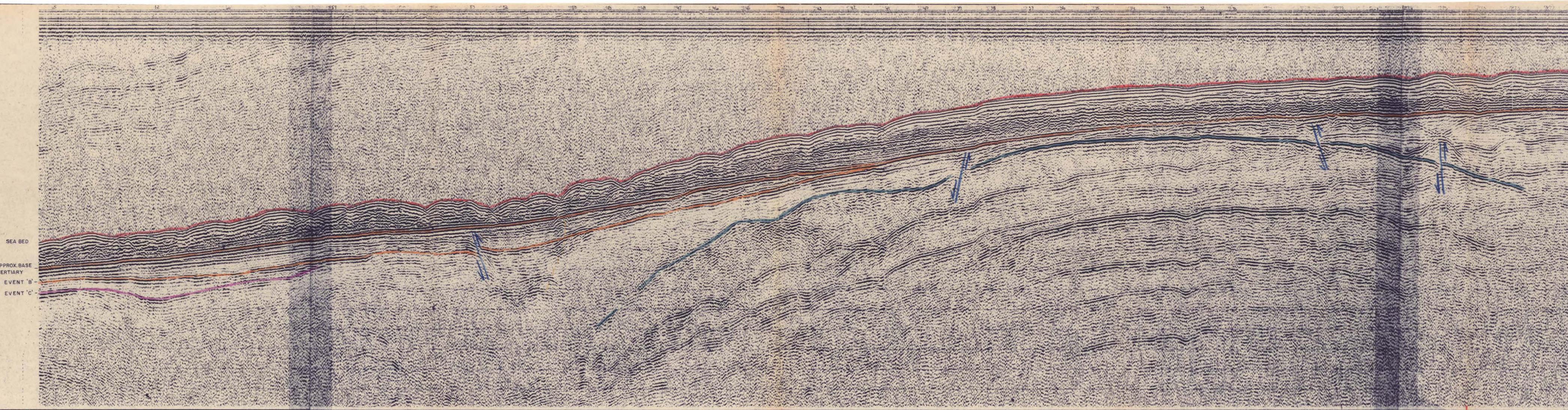
REMARKS 0000 - CONTINUED SHOOTING ON LINE M-280, 280', SP 40. VESSEL SPEED 5 KNOTS APPROX. STILL WORKING ON THE STD. MAIN ENGINE. READPORT NO. 7.
0100 - VESSEL RESUMED FULL SPEED, SP 75, TAPE D-617 & 730 REVS.
0208 - CHANGED TO TAPE D-618 & 999 REVS, SP 115.
0227 - END OF LINE M-280, 280', SP133, TAPE D-618 & 123 REVS.
0229 - STARTED RECORDING LINE M-290, 025', SP2, TAPE D-618 & 170 REVS.
0240 - PUSHED THE AMPLEX "RECORD" BUTTON WHICH WAS ACCIDENTALLY MISSED SINCE 170 REVS. TAPE D-618 & 232 REVS.
0242 - SP 15, TAPE D-618 & 251 REVS.
0443 - END OF LINE M-290, 025', SP146, TAPE D-618 & 850 REVS.
0445 - STARTED RECORDING LINE M-300, 150', SP 2, TAPE D-619 & 0 REV.
0513 - SHORAN SIGNAL WENT OFF THE AIR; "KING ISLAND" SHORAN STATION IMPERATIVE, SP 20, TAPE D-619 & 148 REVS.

CREW NO. 142
OPERATORS INITIALS R.S., H.S., J.D., S.D.
CLIENT REPRESENTATIVE AL SABLITAY
CREW CHIEF NELSON B. SPRINGER

633019

PLATE 8

T/OP PH



TELEDYNE EXPLORATION
A TELEDYNE COMPANY

LINE M-40 D
CLIENT TELE-DYNE INTERNATIONAL
PROSPECT 200 100 AT
DATE 12 SEPTEMBER 1969
W.G. NO. 142-031

POSITIONING TOLLAC
WEATHER 20/01/0 5
MOTOR VESSEL 2000 T IV
VESSEL SPEED 10 KNOTS
FIX INTERVAL 3 SHOT POINT

ACOUSTIC SOURCE SSP 160 K2
SOURCE DEPTH 25 FATH
FIRING RATE 1.5 SHOTS
HYDROPHONE TYPE AND SER NO. 10-2 384 100 5/2 F-23
HYDROSTREAMER DEPTH 15 FATH
TOWING NOISE 80 METERS/SEC

APPROX. MAG. BASEMENT

FACSIMILE RECORDER TYPE RAYDEN FM-101-A-3
TRACES/INCH 45
AMPLIFIER TYPE 10 111
FILTERS H 5-1 LO 11-2
AMP 1 IS USED AS THRESHOLD CH.
AMP 2 IS USED AS EXPANDER CH. (AGC)
AMPS 384 ARE USED WITH TAPE, IF TAPE IS USED
INPUTS TO 1 & 2 ARE PARALLEL
INPUTS TO 3 & 4 ARE PARALLEL
SIGNAL CONDITIONER MASTER GAIN IS 100 HIGHLIGHTS
PRESUPPRESSION NR. IS NOT USED

TAPE RECORDER TYPE ARIEX OF 900 1/2 INCH. 5/8 1093
TAPE FILTERS 125-1 15-2
TAPE SPEED 1500 RPM
TAPE NO. D422 & 623

REMARKS:

0108 0108 STARTED ON LINE M-40 D, (165°), SHOT POINT NO 1, TAPE D-622 @ 0 RAYS.
11 SEPTEMBER 1969
0027 1028 CHANGED TO TAPE D-623, SHOT POINT NO 42
0045 1045 COMPLETED LINE M-40 D, SHOT POINT NO 65, TAPE D-623 @ 732 RAYS.
0046 1046 CHANGED TO LINE M-23 D, (065°), SHOT POINT NO 49, TAPE D-623 @ 780 RAYS.
0362 1362 CHANGED TO TAPE D-624, SHOT POINT NO 95
0411 1411 COMPLETED LINE M-23 D, SHOT POINT NO 125, TAPE D-624 @ 435 RAYS.
0412 1412 STARTED ON LINE M-41 D, (200°), SHOT POINT NO 2, TAPE D-624 @ 280 RAYS.
0582 1582 COMPLETED LINE M-41 D, SHOT POINT NO 22, TAPE D-624 @ 821 RAYS.

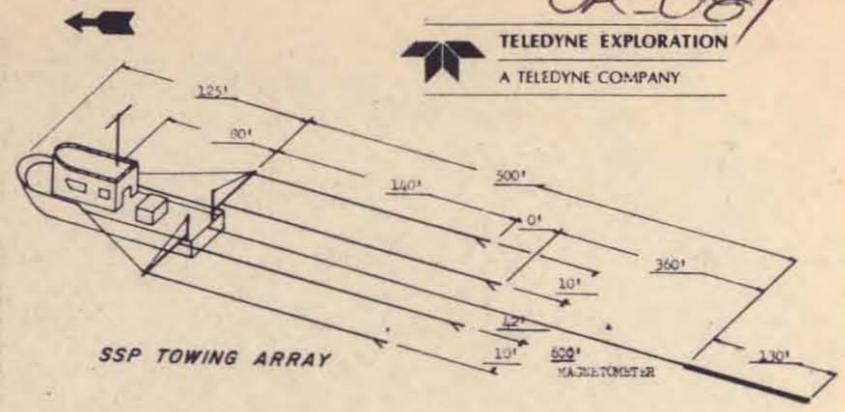
5 cm

CREW NO. 631
OPERATORS INITIALS R.S. M.S.
CLIENT REPRESENTATIVE *
CREW CHIEF W.L. SPENCER

633020

T/2P A1

PLATE 9



LINE M-2 W.
 CLIENT MAGELLAN PETROLIM AUSTRALIA
 PROSPECT WEST TASMANIA
 DATE 13 SEPTEMBER 1969
 W.O. NO. 142-631

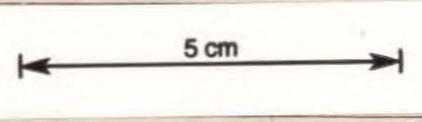
POSITIONING DEAD RECKONING
 WEATHER BEAUFORT 4
 MOTOR VESSEL TELEDYNE IV
 VESSEL SPEED 10 KNOTS
 FIX INTERVAL 30 MINUTES

ACOUSTIC SOURCE SSP 160KJ
 SOURCE DEPTH 35 FEET
 FIRING RATE 4 SECONDS
 HYDROPHONE TYPE AND SER. NO. MP 7 WELL LOG S/N P-23
 HYDROSTREAMER DEPTH 35 FEET
 TOWING NOISE 80 MICROVOLTS

FACSIMILE RECORDER TYPE HAYDON PER-196-A-2
 TRACES/INCH 45
 AMPLIFIER TYPE GS 111
 FILTERS HI 17-1 LO 16-2
 AMP 1 IS USED AS THRESHOLD CH.
 AMP 2 IS USED AS EXPANDER CH. (AGC)
 AMPS 3&4 ARE USED WITH TAPE, IF TAPE IS USED
 INPUTS TO 1&2 ARE PARALLEL
 INPUTS TO 3&4 ARE PARALLEL
 SIGNAL CONDITIONER MASTER GAIN IS 100 MICROVOLTS
 PRESUPPRESSION IS NOT USED

TAPE RECORDER TYPE AMPEX SP300 1/2 INCH. 3/4 1093
 TAPE FILTERS 125-1 16-2
 TAPE SPEED 1.75 IPS
 TAPE NO. D-627 THRU 629

REMARKS:
 1345Z 2345L STARTED ON LINE M-4 W. (255°), TAPE D-627 @ 630 REVS.
 1500Z 0100L COMPLETED LINE M-4 W. TAPE D-627 @ 952 REVS.
 STARTED ON LINE M-3W. (125°), TAPE D-628 @ 0 REVS.
 1600Z 0200L COMPLETED LINE M-3 W. TAPE D-628 @ 340 REVS.
 STARTED ON LINE M-2 W. (290°), TAPE D-628 @ 430 REVS.
 1700Z 0300L COMPLETED LINE M-2 W. TAPE D-628 @ 729 REVS.
 STARTED ON LINE M-1 W. (125°), TAPE D-628 @ 780 REVS.
 1759Z 0357L CHANGED TO TAPE D-629.
 1900Z 0530L COMPLETED LINE M-1 W. TAPE D-629 @ 406 REVS.

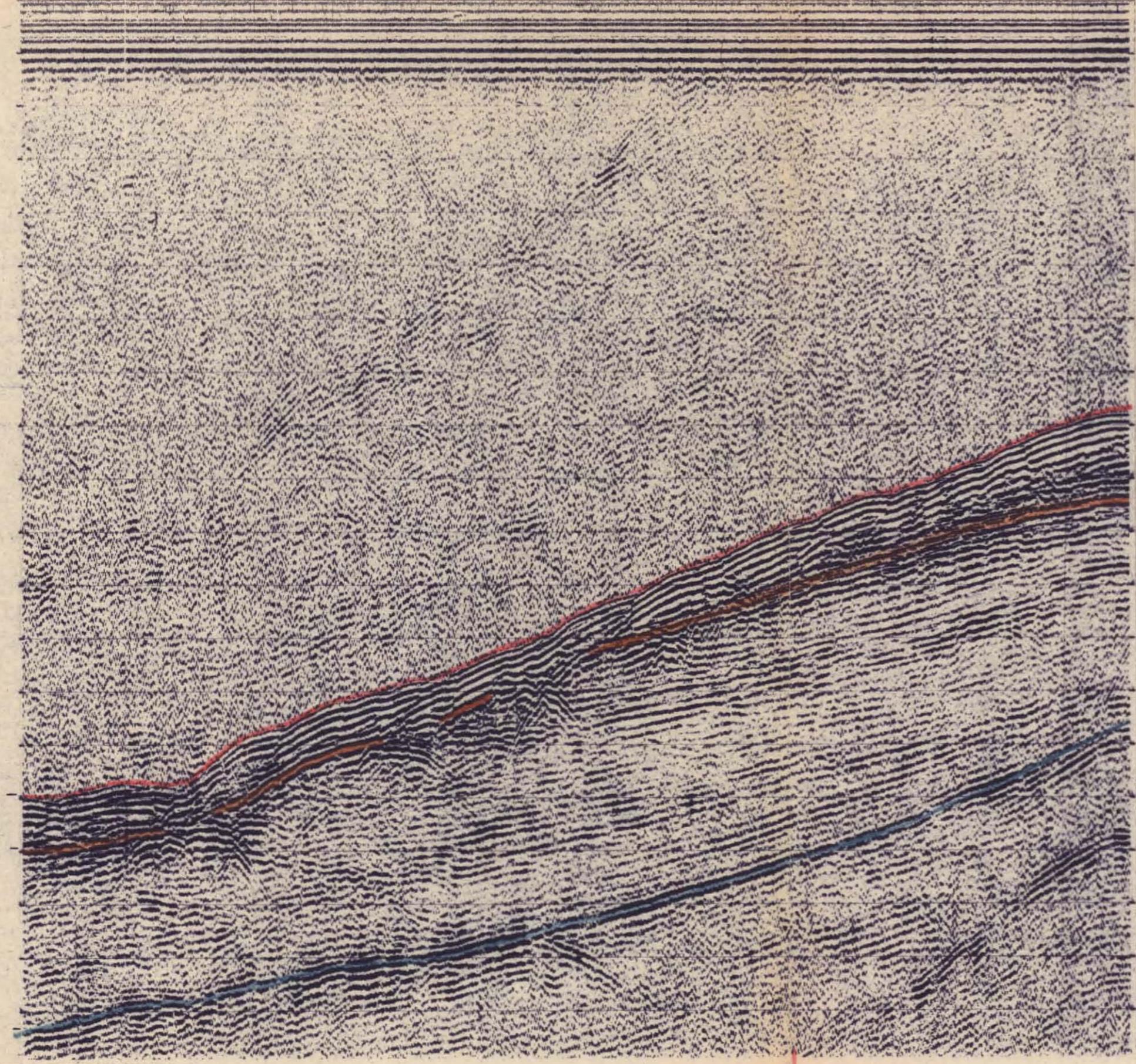


CREW NO. MS 631
 OPERATORS INITIALS R.S. M.S.
 CLIENT REPRESENTATIVE *
 CREW CHIEF W.B. SPRINGER

633021

T/2P Pt 1

PLATE 10



SEA BED

APPROX. BASE
TERTIARY

APPROX. MAGNETIC
BASEMENT