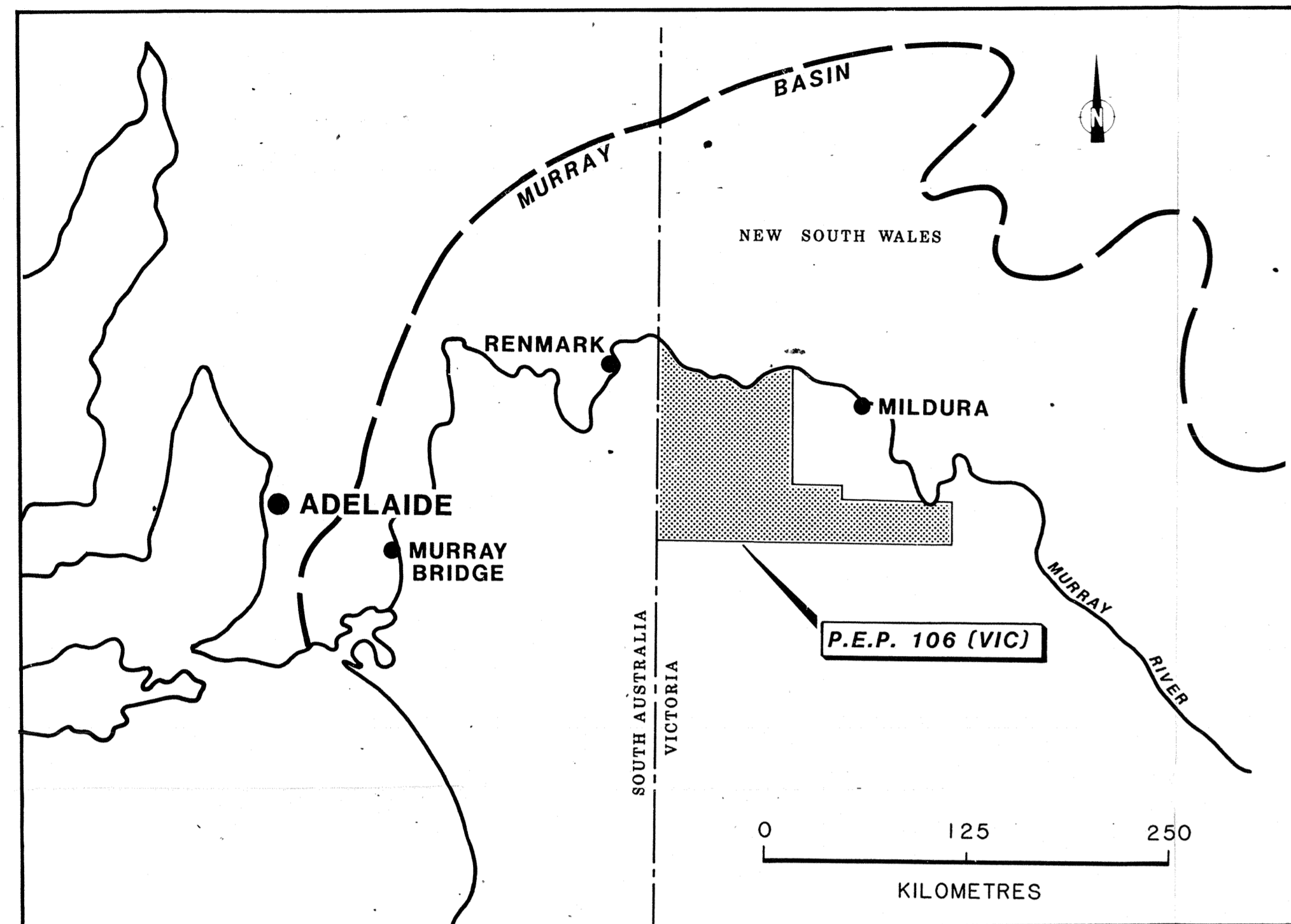
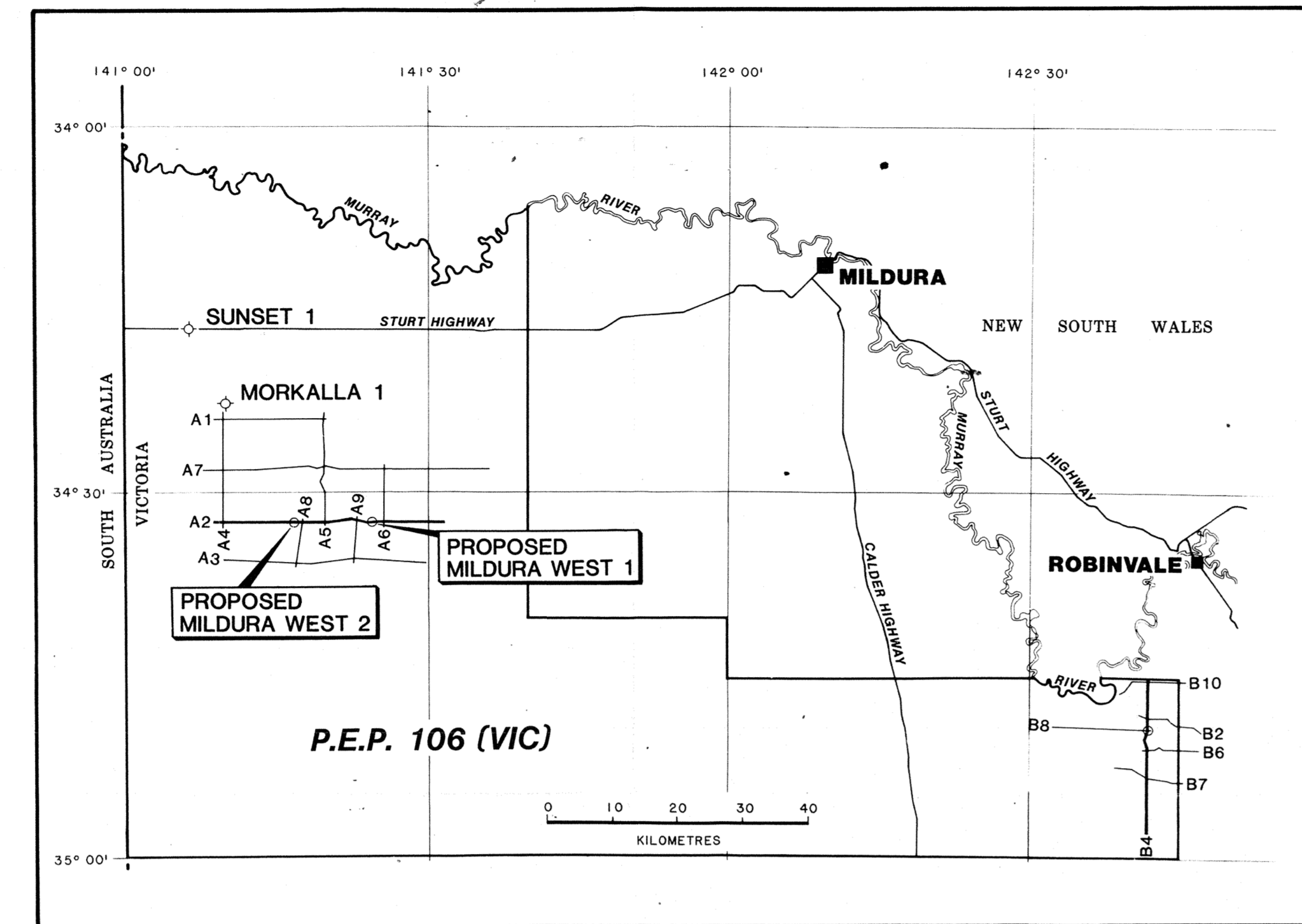


# MILDURA WEST 1 & 2 PROSPECT SHEET

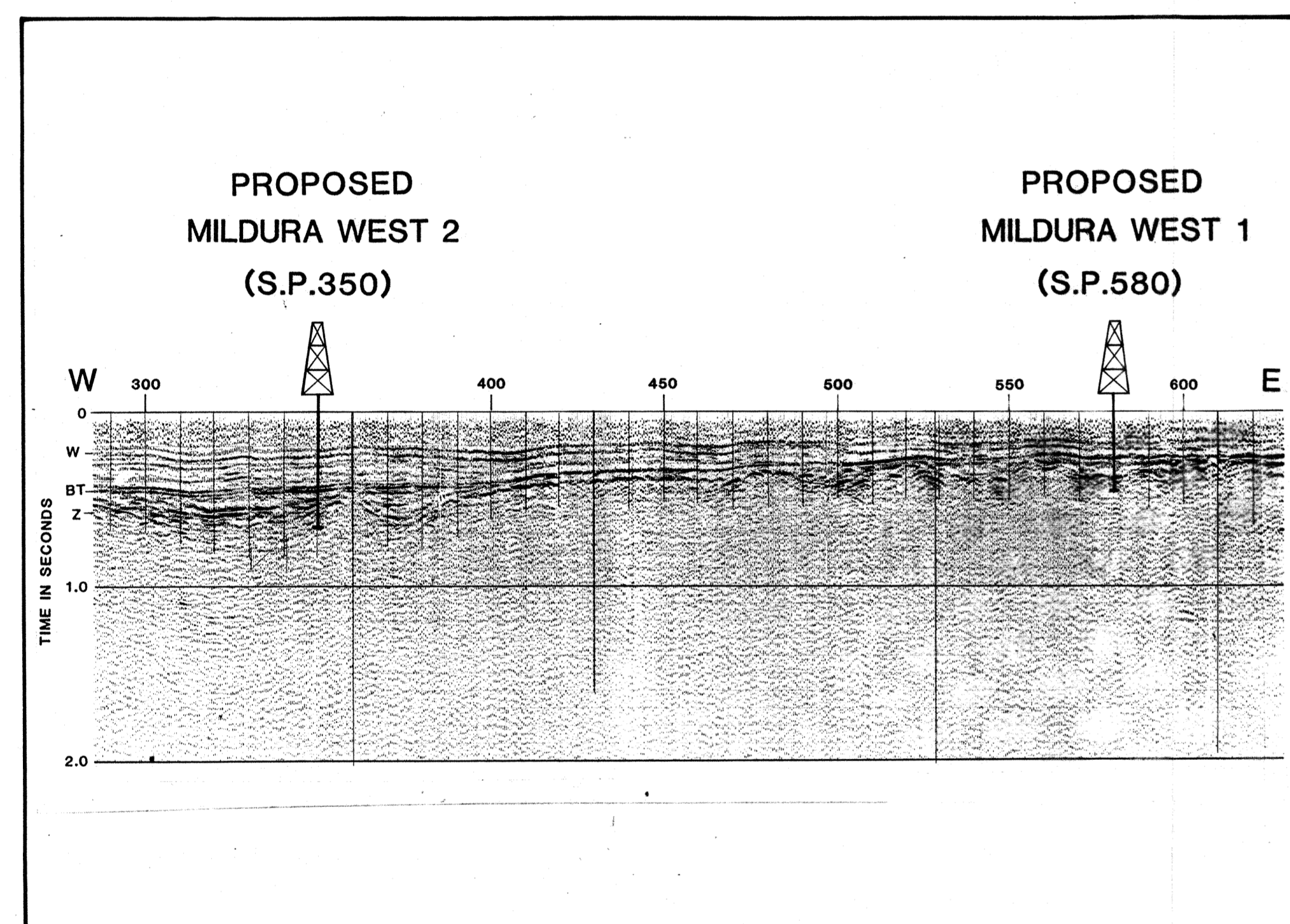
(1) LOCALITY MAP



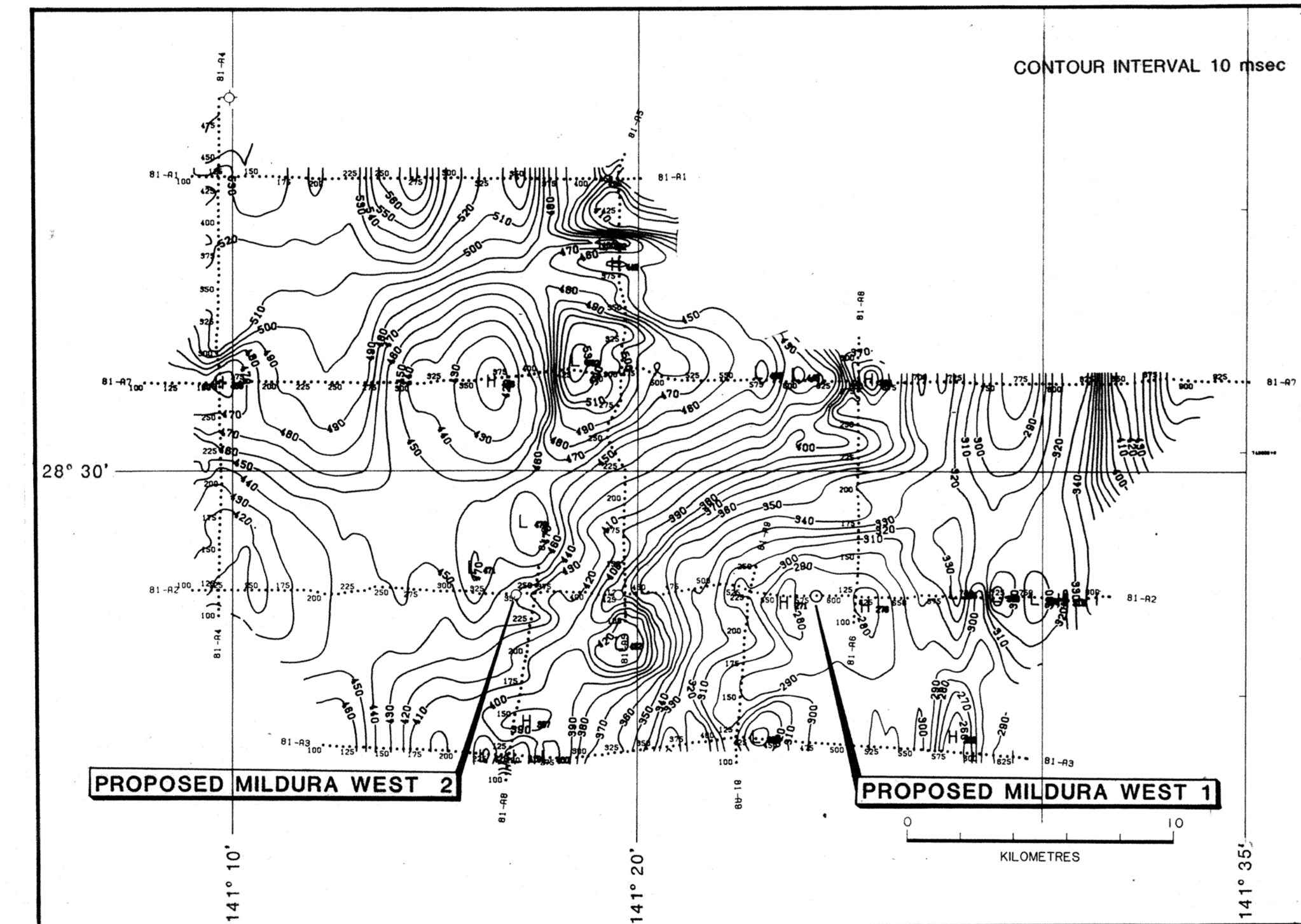
(2) WELL SITE AND SEISMIC LINE LOCATIONS



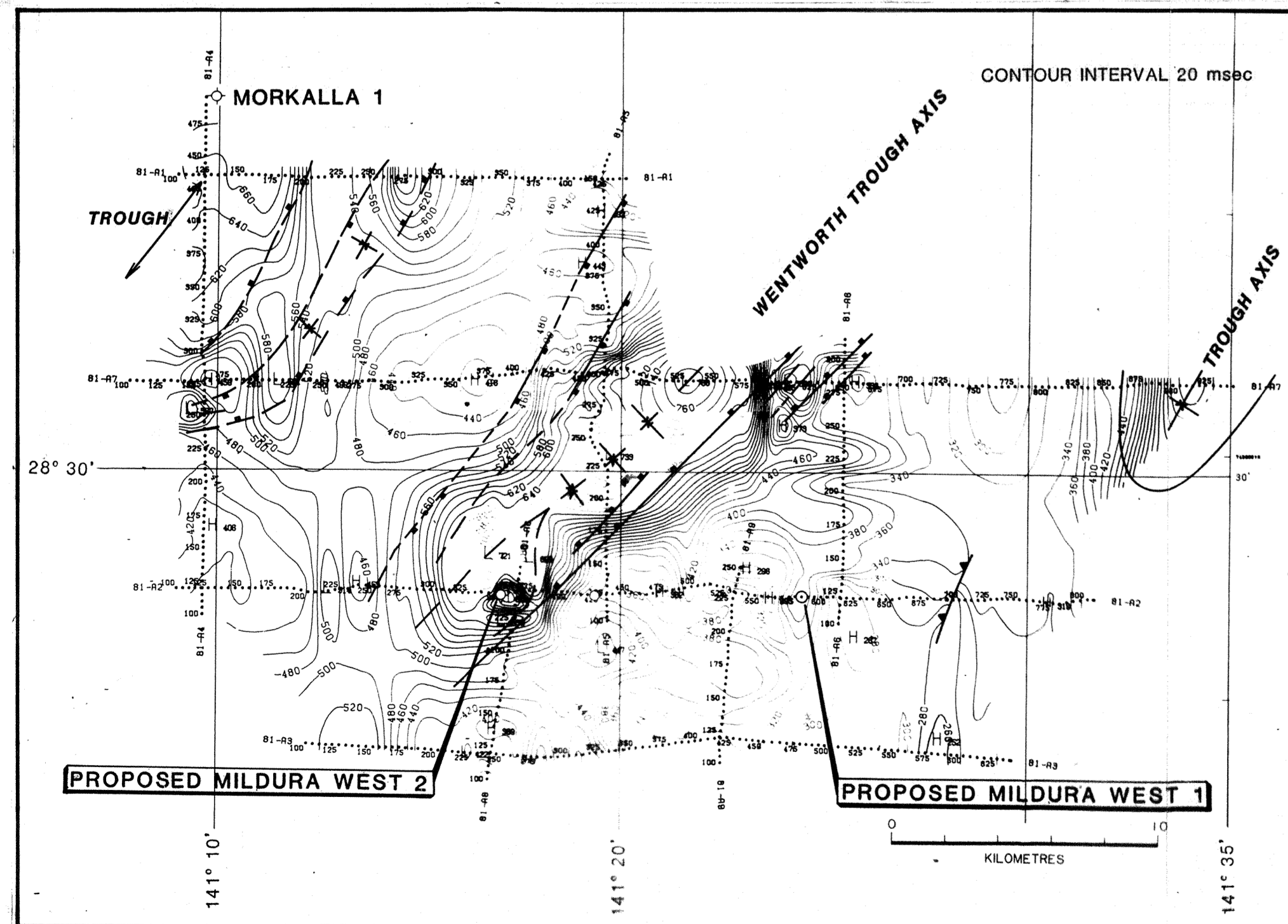
(3) SEISMIC LINE A2



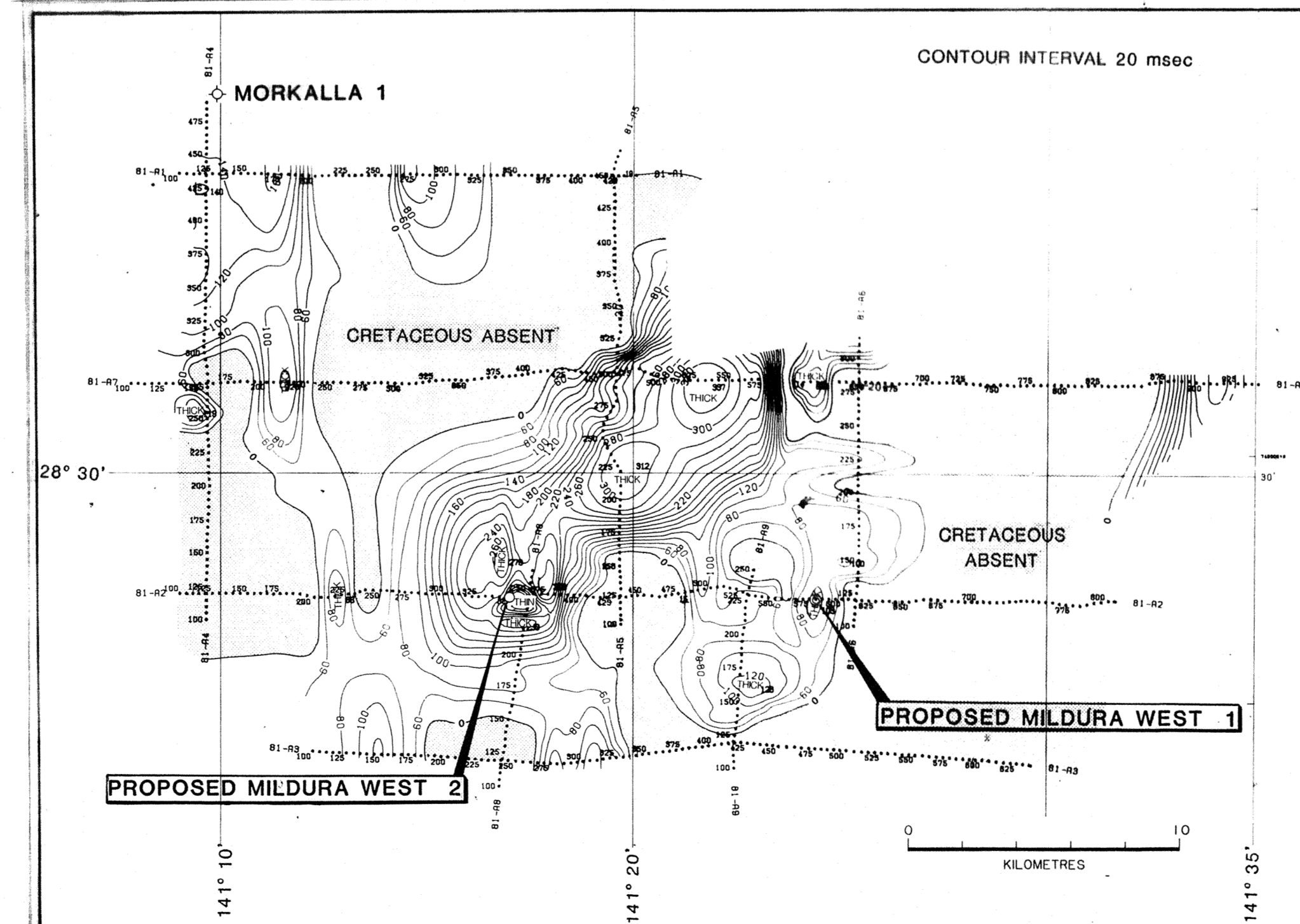
(4) BT TWO WAY TIME MAP ( BASE OF TERTIARY )



(5) Z TWO WAY TIME MAP ( TOP OF CAMBRIAN )



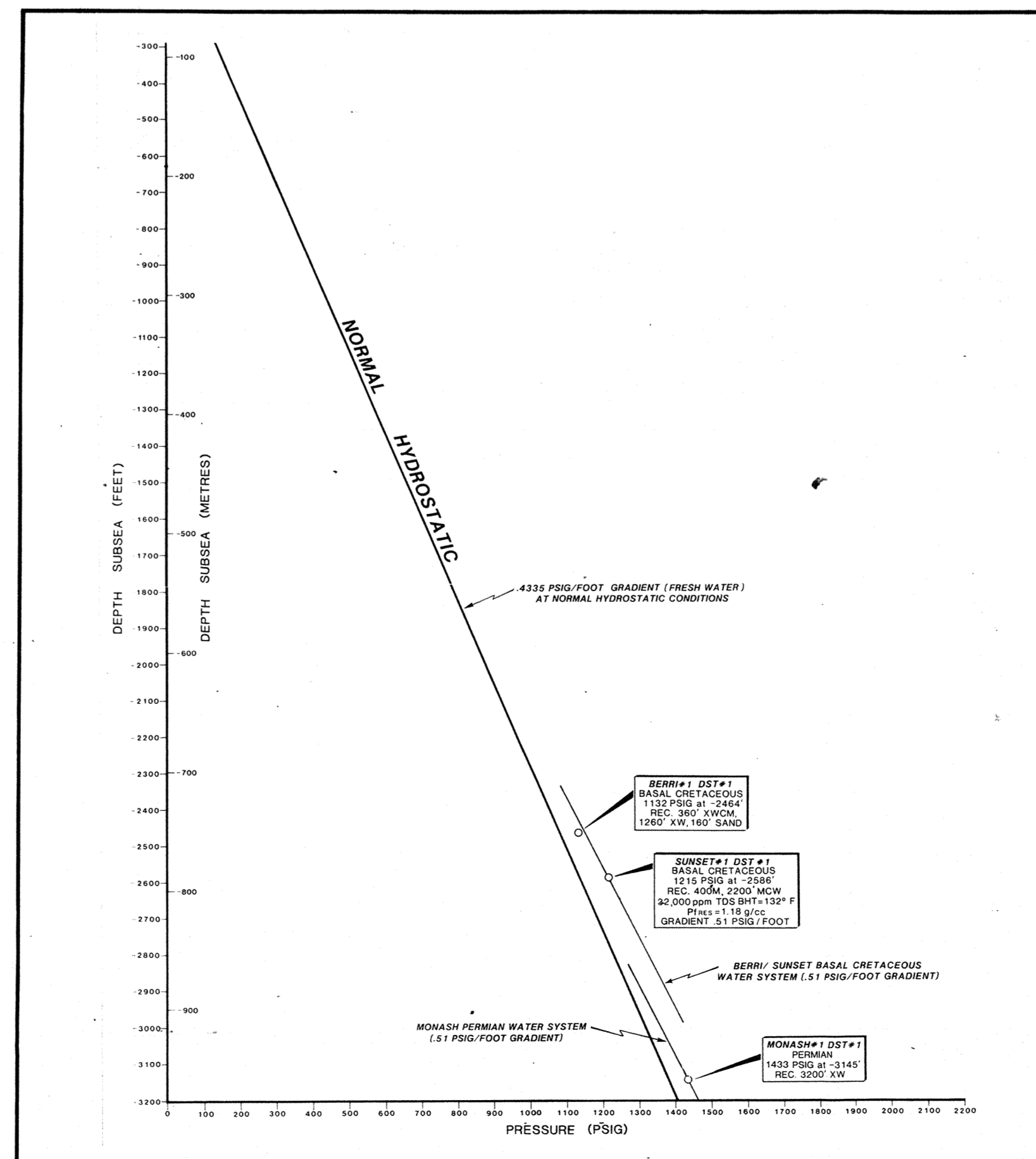
(6) BT-Z ISOTIME MAP



(7) STRATIGRAPHIC PROGNOSIS ( MILDURA WEST 1 & 2 )

| AGE        | FOR-MATION            | DEPTH G.L. (metres)  |        | LITH- OLOGY | DESCRIPTION   | OBJECT. AND TESTING   | CASING           | CORING | LOGGING | MONITORING | ANALYSIS |
|------------|-----------------------|----------------------|--------|-------------|---|---|------------------|--------|---------|------------|----------|
|            |                       | M.W. 1               | M.W. 2 |             |   |   |                  |        |         |            |          |
| QUATERNARY | BLANCKE WATER CLAY    | 0                    | 0      |             | Sandy clay, s/s reddish yellow, limonite. Fine to med. grained. |   | 9 5/8 TO 10 1/2" |        |         |            |          |
| TERTIARY   | MIOCENE & PLEISTOCENE | PARILLA SAND         | 30     | 30          |   | Sandy brownish yellow. Fine to med. grained.  | 7' O.D. TO 100 M |        |         |            |          |
|            |                       | BOOKLA JUNCTION BEDS | 80     | 80          |   | Sandy gravel, light grey. Friable, slightly mica-cemented.  | 7' O.D. TO 150 M |        |         |            |          |
|            |                       | DUDDO LIMESTONE      | 100    | 100         |   | Silty s/s with interbedded clayey sandstone & marl.   |                  |        |         |            |          |
| MESOZOIC   | EARLY CRETACEOUS      | OLNEY FORMATION      | 225    | 225         |   | Marly limestone and alternating marl-lime. Light grey-marly and slightly fossiliferous, slightly porous to porous.                              |                  |        |         |            |          |
|            |                       | WARINA FORMATION     | 243    | 243         |   | Siltstone, silty-sandstone, s/s with minor lignite stringers. Fossiliferous with numerous sharp teeth.  |                  |        |         |            |          |
|            |                       | COOMBOOL MEMBER      | 313    | 348         |   | Sand, light-brownish grey. Fine grained. Some coarse grained sand interbeds. Calcareous siltstone. Claystone, grey and carbonaceous.            |                  |        |         |            |          |
|            |                       | PIYAP MEMBER         | 433    | 483         |   | Clayite, black, soft, sylvite, with carbonized wood fragments. Sandy gravel.  |                  |        |         |            |          |
| PALAEOZOIC | CAMBRIAN              | UNDIFFERENTIATED     | 488    | 793         |   | Interbedded sandstone, siltstone and shale.   |                  |        |         |            |          |
|            |                       | KANAMITOC GROUP      | 498    | 803         |   | Interbedded siltstone and shale. Sandstone at base. Siltstone. Sandstone and minor shale interbeds. Shales sandstones. Metamorphosed sediments. |                  |        |         |            |          |

(8) PRESSURE DEPTH PLOT



**SYNOPSIS**

Mildura West 1 and 2 are proposed exploration wells in P.E.P. 106 of the Victorian portion of the Murray Basin. The interest holders are Conserv 408, SAOGC 608. For which SAOGC will be operators.

The wells will be located in the southern portion of the Murray Basin. Mildura West 1 is approximately 23 kms southeast of Morkalla 1. Mildura West 2 is approximately 21 kms south-southwest of Morkalla 1.

Both wells are designed to test the possibility of hydrocarbon reservoirs in the Early Cretaceous sediments and in addition Mildura West 2 will test a probable Early Permian sequence.

**LOCATION AND OBJECTIVES**

|                   |  |  |
|-------------------|--|--|
| Well Names:       | Mildura West 1                         | Mildura West 2                         |
| Petroleum Permit: | P.E.P. 106 (Vic) Conserv 408 SAOGC 608 | P.E.P. 106 (Vic) Conserv 408 SAOGC 608 |

**Location:**

|                   |   |   |
|-------------------|---|---|
| (a) Seismic:      | 81-A2(580)  | 81-A2 (350)   |
| (b) Geographic:   | Lat: 34°32'30.84" Long: 141°24'26.28" (Subject to survey) | Lat: 34°32'29.04" Long: 141°17'04.92" (Subject to survey) |
| (c) Geologic:     | Central Murray Basin                                      | Central Murray Basin                                      |
| (d) Nearby Wells: | 29 kms southeast of Morkalla 1                            | 21 kms south-south east of Morkalla 1.                    |

**Elevation**

|                    |                             |                             |
|--------------------|-----------------------------|-----------------------------|
| (a) Ground level:  | +63m (subject to survey)    | + 58m (subject to survey)   |
| (b) Kelly Bushing: | (subject to rig allocation) | (subject to rig allocation) |
| Proposed T.D.      | 498m (G.L.) 435m (B.S.L.)   | 803m (G.L.) 745m (B.S.L.)   |

**Objectives:**

Mildura West 1 is a proposed exploration well sited to test stratigraphic trapping on the eastern limb of the southern part of the Wentworth Trough. Primary targets are the sandstones of the Early Cretaceous, Merreti and Coombool Members.

Mildura West 2 is a proposed exploration well sited to test structural closure in the thicker Pre-Tertiary sediments towards the centre of the southern end of the Wentworth Trough.

Primary Targets are the sandstones of the Early Cretaceous and Early Permian sequences.

**STRUCTURE AND SEISMIC INTERPRETATION**

The mapping of the Mildura West area was made using 9 lines of the 1981 Mildura West Seismic Survey. The Survey covers the southern end of the Wentworth Trough which is an infrabasin to the main Murray Basin. In addition to the Tertiary Murray Basin sequence the Wentworth Trough is thought to contain sediments of Early Cretaceous and Early Permian age.

Mapping of the structure was conducted using three seismic reflectors W5, W2 and Z corresponding to the top of the Warina Formation; base of the Tertiary; and top of Cambrian, respectively. Well control is very poor since the nearest well, Morkalla 1, lies several hundred metres from seismic line A4.

**STRATIGRAPHY**

Stratigraphic control is poor, and has had to be made using regional trends and also well data from Sunset 1 and Morkalla 1. The prognosis for the Tertiary sequence has the best control, and uses data from Sunset 1 and Morkalla 1, whilst the Cretaceous prognosis can only be considered as a rough estimate. There is no well control for the Early Permian but it is predicted from the seismic that Mildura West 2 may penetrate an Early Permian sequence.

**RESERVOIR QUALITY AND HYDROCARBONS**

Hydrocarbon reservoirs are most likely to be located in the Early Cretaceous and Early Permian sequences. No significant shows have been recorded in nearby wells.

Reservoir quality in the Lower Cretaceous is expected to be good with good porosity (20 - 30%) and good permeability. No data on the reservoir quality of the Early Permian is available.

**SOURCE ROCK AND MATURITY**

Since no source rock or maturity data exists, one of the objectives of this drilling programme is to assess the hydrocarbon potential of the deeper sedimentary section.

**DRILLING DATA**

|                |  |                |
|----------------|--|----------------|
| Hole Size      | Depth Interval   | Hole Size      |
| Mildura West 1 | Mildura West 2   | Mildura West 2 |
| 0m - 100m      | 0m - 150m  | 9 5/8"         |
| 100m - T.D.    | 150m - T.D.  | 6"             |
| Casing         | 7" O.D. casing will be set into the Duddo Limestone prior to drilling 6" hole. |                |

OIL and GAS DIVISION 2 5 MAY 1983

SOUTH AUSTRALIAN OIL & GAS CORPORATION PTY. LTD.

PROSPECT SHEET  
MILDURA WEST 1 & 2

INTERP. D.R. & R.J.S. DATE APRIL '83 DWNG. NO. MU000.2750  
DRAWN C.K. & J.D. SCALE VARIOUS