

13th October 1972

MARBLE BAR SEISMOLOGICAL STATION

A seismograph has been established at Marble Bar as an outstation of the Mundaring Geophysical Observatory. Records will be analysed and preliminary data distributed as for Mundaring data. Details of the station are given below.

CODE:

MBT

LOCATION:

Latitude  $21^{\circ}10.2' S$

Longitude  $119^{\circ}44.5' E$

ELEVATION:

200 metres

FOUNDATION:

Archean basic igneous

INSTRUMENTATION:

Seismometer - Vertical Willmore Mk II

To = 1.0 seconds

Recorder - Geotech Helicorder RV 301,  
60mm/minute

Timemarks - EMI crystal clock controlled by  
VNG (or ABC) radio pips

MAGNIFICATION:

20,000 at 1 seconds

100,000 at 0.2 second

ROUTINE RECORDING:

Commenced 0200 U.T. 12 October 1972

Any correspondence to -

OBSERVER-IN-CHARGE  
GEOPHYSICAL OBSERVATORY  
MUNDARING W.A. 6073  
W.A.



BUREAU OF MINERAL RESOURCES GEOLOGY AND GEOPHYSICS

MUNDARING GEOPHYSICAL OBSERVATORY

AUSTRALIA

PRELIMINARY SEISMOLOGICAL BULLETIN

MARBLE BAR (TOWN)

OCTOBER 1972

CODE MBT

LATITUDE  $21^{\circ}10.2'$  S

LONGITUDE  $119^{\circ}44.5'$  E

ELEVATION 200 m

FOUNDATION Archean Basic igneous

| COMPONENT | To<br>(Seconds) | Tg<br>(Seconds) | MAGNIFICATION<br>at To Peak |
|-----------|-----------------|-----------------|-----------------------------|
| SP Z      | 1.0             | -               | 20K 100K at 0.2 Sec.        |

ADDITIONAL ENQUIRIES TO - OBSERVER-IN-CHARGE  
GEOPHYSICAL OBSERVATORY  
MUNDARING W.A. 6073  
AUSTRALIA



| Date | Phase | Dir. | G.M.T. | Per.<br>(sec.) | Amp. | LogA/T |
|------|-------|------|--------|----------------|------|--------|
|------|-------|------|--------|----------------|------|--------|



MARBLE BAR (MBT)

October.

Station commenced on 12th.

|       |    |   |            |     |       |     |                   |
|-------|----|---|------------|-----|-------|-----|-------------------|
| *12   | iP | D | 16 49 47.9 | 1.0 | 123mu | 1.8 |                   |
| *12   | iP | C | 17 54 58.2 |     |       |     |                   |
| 12    | iP | D | 19 02 04.0 | 0.3 | 103mu | 2.5 |                   |
|       | eS |   | 04 02      |     |       |     |                   |
| 13    |    |   | Nil        |     |       |     |                   |
| *14   | iP | D | 00 11 18.9 |     |       |     |                   |
| 14    | eP |   | 02 15 07   |     |       |     |                   |
| 14    | eP |   | 03 50 39   |     |       |     | Local             |
|       | eS |   | 50 50      |     |       |     |                   |
| 14    | eP |   | 06 01 10   |     |       |     |                   |
| *14   | iP | C | 13 00 20.3 |     |       |     |                   |
| *15   | iP | C | 10 36 37.0 | 0.8 | 357mu | 2.6 |                   |
| 16    | eP |   | 02 42 13   |     |       |     | Local             |
|       | eS |   | 42 26      |     |       |     |                   |
| 16    | eP |   | 06 38 35   |     |       |     | Local             |
| *16   | iP | C | 06 59 22.5 |     |       |     |                   |
| *17   | iP | D | 20 21 45.5 |     |       |     |                   |
|       | eS |   | 22 38      |     |       |     |                   |
| 17    | eP |   | 20 42 38   |     |       |     |                   |
| 18    | eP |   | 02 39 34   |     |       |     | Local             |
|       | eS |   | 39 45      |     |       |     |                   |
| *18   | iP | C | 17 21 33.0 |     |       |     |                   |
| 18    | eP |   | 19 04 58   |     |       |     |                   |
| 19    | eP |   | 02 35 36   |     |       |     |                   |
| 20    | eP |   | 04 53 42   |     |       |     |                   |
| 20    | eP |   | 11 44 22   |     |       |     |                   |
| 20    | eP |   | 18 58 12   |     |       |     |                   |
| 21    | eP |   | 00 41 47   |     |       |     | Local             |
|       | eS |   | 42 13      |     |       |     |                   |
| *21   | eP |   | 02 34 58   |     |       |     | Gascoyne Junction |
|       | eS |   |            |     |       |     |                   |
| *21   | iP | D | 07 42 35.0 |     |       |     |                   |
| 21    | eP |   | 09 17 41   |     |       |     |                   |
| 22    | eP |   | 02 03 11   |     |       |     |                   |
| 22    | eP |   | 08 41 39   |     |       |     |                   |
| 23-25 |    |   | Nil        |     |       |     |                   |
| 26    | eP |   | 17 13 48   |     |       |     |                   |
| *26   | iP | D | 22 56 41.1 | 1.0 | 187mu | 2.3 |                   |
| 27    | eP |   | 09 31 29   |     |       |     |                   |
| 28    | eP |   | 01 06 42   |     |       |     |                   |
| 28    | eP |   | 02 33 18   |     |       |     |                   |
| *28   | iP | C | 03 25 01.4 |     |       |     |                   |
| *29   | iP | C | 07 29 48.9 |     |       |     |                   |
| *29   | iP | C | 13 38 39.1 |     |       |     |                   |
| 30    | eP |   | 08 18 46   |     |       |     |                   |
| *30   | iP | D | 10 38 07.6 | 0.9 | 65mu  | 1.9 |                   |
| 30    | eP |   | 16 55 16   |     |       |     |                   |
| 31    | eP |   | 03 48 58   |     |       |     | local             |
|       | eS |   | 49 11      |     |       |     | ML = 2.8          |
| 31    | eP |   | 04 34 53   |     |       |     |                   |

\* Sent by telegram to N.O.A.A.



BUREAU OF MINERAL RESOURCES GEOLOGY AND GEOPHYSICS



MUNDARING GEOPHYSICAL OBSERVATORY

AUSTRALIA

PRELIMINARY SEISMOLOGICAL BULLETIN

MARBLE BAR (TOWN)

NOVEMBER 1972

CODE MBT

LATITUDE  $21^{\circ}10.2'$  S

LONGITUDE  $119^{\circ}44.5'$  E

ELEVATION 200 m

FOUNDATION Archean Basic igneous

| COMPONENT | To<br>(Seconds) | Tg<br>(Seconds) | MAGNIFICATION<br>at To Peak |
|-----------|-----------------|-----------------|-----------------------------|
| SP Z      | 1.0             | -               | 20K 100K at 0.2 Sec.        |

ADDITIONAL ENQUIRIES TO - OBSERVER-IN-CHARGE  
GEOPHYSICAL OBSERVATORY  
MUNDARING W.A. 6073  
AUSTRALIA



| Date<br>1972 | Phase | Dir. | G.M.T. | Per.<br>(sec.) | Amp. | LogA/T |
|--------------|-------|------|--------|----------------|------|--------|
|--------------|-------|------|--------|----------------|------|--------|

MARBLE BAR (MBT)

November.

|     |    |   |            |     |        |       |
|-----|----|---|------------|-----|--------|-------|
| 01  | eP |   | 15 35 10   |     |        |       |
| 01  | eP |   | 21 28 08   |     |        |       |
| *01 | iP | C | 22 02 51.0 | 0.5 | 40mu   | 1.9   |
| *02 | iP | C | 01 39 07.4 | 0.5 | 400mu  | 2.9   |
| *02 | iP | D | 09 55 59.0 |     |        |       |
| *02 | iP | C | 17 14 12.8 |     |        |       |
| 02  | eP |   | 20 03 43   |     |        |       |
| 03  | eP |   | 15 14 48   |     |        |       |
| 03  | iP | C | 16 23 25.0 |     |        |       |
| 03  | iP | C | 22 51 06.1 |     |        |       |
| 04  | iP | C | 03 58 17.6 |     |        |       |
| 04  | eP |   | 04 35 15   |     |        |       |
| 04  | eP |   | 08 11 21   |     |        |       |
| 04  | eP |   | 09 53 15   |     |        |       |
| *04 | iP | C | 21 39 21.0 | 0.6 | 1220mu | 3.2   |
| 04  | eP |   | 23 56 46   |     |        |       |
| *05 | iP | D | 00 08 31.7 | 0.6 | 600mu  | 2.8   |
| *05 | iP | C | 20 13 56.3 |     |        |       |
| 05  | eP |   | 22 15 24   |     |        |       |
| 06  |    |   | Nil        |     |        |       |
| *07 | iP | D | 13 46 24.0 |     |        |       |
| *07 | iP | C | 18 25 47.8 |     |        |       |
| 08  |    |   | Nil        |     |        |       |
| *09 | iP | C | 08 17 53.8 |     |        |       |
| 09  | iP | D | 08 18 33.2 | 0.7 | 600mu  | 2.9   |
| *09 | iP | D | 16 45 22.9 |     |        |       |
| *09 | iP | D | 18 49 24.7 |     |        |       |
| 10  |    |   | Nil        |     |        |       |
| 11  |    |   | Nil        |     |        |       |
| 12  |    |   | No record  |     |        |       |
| 13  |    |   | Nil        |     |        |       |
| 14  | eP |   | 15 30 38   |     |        |       |
| 14  | eP |   | 16 33 25   |     |        |       |
| 14  | eP |   | 22 31 48   |     |        |       |
|     | e  |   | 35 39      |     |        |       |
| 15  | eP |   | 04 26 28   |     |        |       |
|     | eS |   | 28 24      |     |        |       |
| 15  | eP |   | 08 28 01   |     |        |       |
|     | e  |   | 31 00      |     |        |       |
| 15  | eP |   | 16 25 19   |     |        |       |
| 16  | eP |   | 12 54 28   |     |        |       |
|     | e  |   | 54 56      |     |        |       |
| 17  | eP |   | 00 33 41   |     |        |       |
| 18  | eP |   | 02 34 05   |     |        |       |
| 18  | eP |   | 04 12 02   |     |        |       |
|     | eS |   | 12 13      |     |        | Local |
| 19  | eP |   | 04 55 13   |     |        |       |
| 19  | eP |   | 06 55 32   |     |        |       |
| *19 | iP | D | 08 23 54.2 |     |        |       |
| 20  | eP |   | 13 16 21   |     |        |       |
| 21  | eP |   | 02 32 09   |     |        |       |
|     | eS |   | 32 40      |     |        | Blast |
| 21  | eP |   | 03 36 38   |     |        |       |
|     | eS |   | 36 50      |     |        | Local |
| 21  | eP |   | 04 06 11   |     |        |       |
| 21  | eP |   | 17 14 34   |     |        |       |
| 21  | eP |   | 21 48 43   |     |        |       |



| Date | Phase | Dir. | G.M.T. | Per.<br>(sec.) | Amp. | LogA/T |
|------|-------|------|--------|----------------|------|--------|
|------|-------|------|--------|----------------|------|--------|



International  
Seismological  
Centre

# MARBLE BAR (MBT)

November.

|     |    |   |            |     |       |       |
|-----|----|---|------------|-----|-------|-------|
| 22  | eP |   | 03 41 41   |     |       | Local |
|     | eS |   | 41 53      |     |       |       |
| *22 | iP | C | 13 59 24.0 |     |       |       |
| 23  |    |   | Nil        |     |       |       |
| 24  | eP |   | 03 41 41   |     |       | Local |
|     | eS |   | 41 55      |     |       |       |
| 24  | eP |   | 11 17 04   |     |       | Local |
|     | eS |   | 17 43      |     |       |       |
| 24  | eP |   | 13 27 42   |     |       |       |
| *24 | iP | C | 15 00 00.1 |     |       |       |
| 25  | eP |   | 03 22 01   |     |       |       |
| 25  | eP |   | 18 53 28   |     |       |       |
| *25 | iP | D | 19 05 02.1 |     |       |       |
| *26 | iP | D | 04 27 36.8 | 0.7 | 370mu | 2.7   |
| *26 | iP | C | 07 55 37.1 |     |       |       |
| 26  | eP |   | 12 51 30   |     |       |       |
| 26  | eP |   | 15 07 52   |     |       |       |
|     | eS |   | 10 03      |     |       |       |
| 26  | eP |   | 15 41 42   |     |       |       |
| 27  | eP |   | 02 53 22   |     |       |       |
|     | e  |   | 55 02      |     |       |       |
| 27  | eP |   | 06 47 17   |     |       |       |
| 27  | eP |   | 09 00 53   |     |       |       |
| 27  | eP |   | 15 21 15   |     |       |       |
| 27  | eP |   | 20 41 31   |     |       |       |
| 28  | eP |   | 09 25 00   |     |       | Local |
|     | eS |   | 25 10      |     |       |       |
| 29  | eP |   | 03 27 11   |     |       |       |
|     | eS |   | 29 17      |     |       |       |
| *30 | iP | C | 02 55 56.2 |     |       |       |
| 30  | eP |   | 04 40 08   |     |       |       |
|     | e  |   | 40 38      |     |       |       |

\* Sent by telegram to USCGS



BUREAU OF MINERAL RESOURCES GEOLOGY AND GEOPHYSICS



MUNDARING GEOPHYSICAL OBSERVATORY

AUSTRALIA

PRELIMINARY SEISMOLOGICAL BULLETIN

MARBLE BAR (TOWN)

DECEMBER 1972

CODE MBT

LATITUDE  $21^{\circ}10.2'$  S

LONGITUDE  $119^{\circ}44.5'$  E

ELEVATION 200 m

FOUNDATION Archean Basic igneous

COMPONENT

To  
(Seconds)

Tg  
(Seconds)

MAGNIFICATION  
at To Peak

SP Z

1.0

-

20K 100K at 0.2 Sec.

ADDITIONAL ENQUIRIES TO - OBSERVER-IN-CHARGE  
GEOPHYSICAL OBSERVATORY  
MUNDARING W.A. 6073  
AUSTRALIA



| Date<br>1972            | Phase | Dir. | G.M.T.     | Per.<br>(sec.) | Amp. | LogA/T |
|-------------------------|-------|------|------------|----------------|------|--------|
| <u>MARBLE BAR (MBT)</u> |       |      |            |                |      |        |
| December.               |       |      |            |                |      |        |
| 01                      | eP    |      | 14 58 42   |                |      |        |
| *02                     | iP    | C    | 00 25 39.3 |                |      |        |
| *02                     | iP    | C    | 01 46 37.5 |                |      |        |
| 02                      | eP    |      | 02 27 56   |                |      |        |
| *02                     | iP    | C    | 04 02 06.4 |                |      |        |
| 02                      | eP    |      | 04 37 06   |                |      |        |
| *02                     | iP    | D    | 05 54 06.8 |                |      |        |
| 02                      | eP    |      | 10 00 06   |                |      |        |
| 02                      | eP    |      | 10 42 00   |                |      |        |
| *02                     | iP    | C    | 11 32 40.4 |                |      |        |
| 03                      | eP    |      | 01 07 32   |                |      |        |
| 03                      | eP    |      | 01 32 43   |                |      |        |
| 03                      | eP    |      | 03 10 23   |                |      |        |
| *03                     | iP    | C    | 07 50 50.5 |                |      |        |
| *03                     | iP    | C    | 11 21 55.0 |                |      |        |
| 03                      | eP    |      | 19 31 18   |                |      |        |
| 03                      | eP    |      | 20 41 32   |                |      |        |
| 04                      | eP    |      | 07 22 15   |                |      |        |
| *04                     | iP    | C    | 10 25 56.9 |                |      |        |
| *04                     | iP    | D    | 12 00 22.8 |                |      |        |
| 04                      | eP    |      | 15 00 42   |                |      |        |
| *04                     | iP    | D    | 15 10 07.1 |                |      |        |
| 04                      | eP    |      | 17 56 52   |                |      |        |
| *05                     | iP    | D    | 02 51 49.5 |                |      |        |
| 05                      | eP    |      | 04 20 54   |                |      |        |
| 05                      | eP    |      | 05 29 45   |                |      |        |
|                         | eS    |      | 30 17      |                |      |        |
| 05                      | eP    |      | 06 08 48   |                |      |        |
| 05                      | eP    |      | 09 29 55   |                |      |        |
|                         | eS    |      | 30 28      |                |      |        |
| 05                      | eP    |      | 14 13 25   |                |      |        |
| 05                      | eP    |      | 16 54 25   |                |      |        |
| *05                     | iP    | C    | 22 05 23.5 |                |      |        |
| 05                      | eP    |      | 22 37 17   |                |      |        |
| 05                      | eP    |      | 22 52 24   |                |      |        |
| 06                      | eP    |      | 01 43 59   |                |      |        |
| 06                      | eP    |      | 02 31 08   |                |      |        |
| *06                     | iP    | C    | 03 46 58.0 |                |      |        |
| *06                     | iP    | D    | 05 40 52.0 |                |      |        |
| 07                      | eP    |      | 07 04 16   |                |      |        |
| 07                      | eP    |      | 07 45 10   |                |      |        |
|                         | eS    |      | 45 46      |                |      |        |
| 07                      | eP    |      | 11 47 00   |                |      |        |
| 07                      | eP    |      | 14 55 44   |                |      |        |
| *07                     | iP    | D    | 23 47 52.9 |                |      |        |
| 08                      | eP    |      | 04 21 05   |                |      |        |
|                         | eS    |      | 21 36      |                |      |        |
| 08                      | eP    |      | 07 54 27   |                |      |        |
| 08                      | eP    |      | 10 24 00   |                |      |        |
| 08                      | eP    |      | 17 01 08   |                |      |        |
| *08                     | iP    | D    | 18 11 12.1 |                |      |        |
| 02                      | eP    |      | 12 29 53   |                |      |        |



| Date<br>1972                  | Phase | Dir. | G.M.T.     | Per.<br>(sec.) | Amp.  | LogA/T |
|-------------------------------|-------|------|------------|----------------|-------|--------|
| <u>MARBLE BAR (MBT)</u> Cont. |       |      |            |                |       |        |
| December.                     |       |      |            |                |       |        |
| 08                            | eP    |      | 18 18 49   |                |       |        |
| 08                            | eP    |      | 20 22 57   |                |       |        |
| *08                           | iP    | C    | 20 48 01.2 |                |       |        |
| 08                            | eP    |      | 22 08 05   |                |       |        |
| *09                           | iP    | D    | 06 15 53.9 |                |       |        |
| 09                            | eP    |      | 06 33 43   |                |       |        |
| *09                           | iP    | D    | 13 01 45.0 |                |       |        |
| *10                           | iP    | C    | 02 34 46.7 |                |       |        |
|                               | e     |      | 36 33      |                |       |        |
| 10                            | eP    |      | 04 39 08   |                |       |        |
|                               | i     |      | 39 16.4    |                |       |        |
| 10                            | eP    |      | 18 37 26   |                |       |        |
|                               | e     |      | 37 39      |                |       |        |
| 11                            | eP    |      | 00 21 22   |                |       |        |
| 11                            | eP    |      | 05 05 12   |                |       |        |
| *11                           | iP    | D    | 23 26 03.7 |                |       |        |
| 12                            | eP    |      | 05 00 26   |                |       |        |
| 12                            | eP    |      | 05 59 07   |                |       |        |
| 12                            | eP    |      | 17 52 44   |                |       |        |
| *12                           | iP    | C    | 18 06 33.9 |                |       |        |
| *13                           | iP    | C    | 15 31 16.4 |                |       |        |
| *14                           | iP    | C    | 08 47 18.7 |                |       |        |
| 14                            | eP    |      | 20 56 31   |                |       |        |
| *15                           | iP    | D    | 02 01 43.7 |                |       |        |
| *15                           | iP    | D    | 06 25 11.3 |                |       |        |
| 15                            | eP    |      | 08 23 12   |                |       |        |
| 16                            | eP    |      | 02 32 15   |                |       |        |
|                               | eS    |      | 33 22      |                |       |        |
| *16                           | iP    | D    | 04 14 49.3 |                |       |        |
| *16                           | iP    | C    | 11 37 26.8 |                |       |        |
|                               | e     |      | 39 44      |                |       |        |
| 16                            | eP    |      | 23 54 07   |                |       |        |
| 17                            | eP    |      | 00 29 47   |                |       |        |
| *17                           | iP    | D    | 14 20 11.0 |                |       |        |
| 17                            | eP    |      | 18 07 47   |                |       |        |
| *18                           | iP    | D    | 07 02 23.3 | 0.5            | 119mu | 2.4    |
| 18                            | eP    |      | 07 20 15   |                |       |        |
| *18                           | iP    | C    | 10 08 56.3 |                |       |        |
| 18                            | eP    |      | 11 29 12   |                |       |        |
| 18                            | eP    |      | 14 02 49   |                |       |        |
| *19                           | iP    | D    | 00 18 32.5 |                |       |        |
|                               | e     |      | 18 44      |                |       |        |
| 19                            | iP    | C    | 02 46 12.0 |                |       |        |
|                               | eS    |      | 46 43      |                |       |        |
| 19                            | eP    |      | 04 35 12   |                |       |        |
| 19                            | eP    |      | 09 24 01   |                |       |        |
|                               | e     |      | 24 42      |                |       |        |
| *19                           | iP    | D    | 14 40 02.1 |                |       |        |
|                               | eS    |      | 42 01      |                |       |        |
| 19                            | eP    |      | 15 28 18   |                |       |        |
| *19                           | iP    | D    | 15 57 20.5 |                |       |        |
| 19                            | eP    |      | 17 21 09   |                |       |        |

Mt. Tom  
Price



| Date<br>1972 | Phase | Dir. | G.M.T. | Per.<br>(sec.) | Amp. | LogA/T |
|--------------|-------|------|--------|----------------|------|--------|
|--------------|-------|------|--------|----------------|------|--------|

MARBLE BAR (MBT) Cont.

December.

|     |    |   |            |     |       |     |
|-----|----|---|------------|-----|-------|-----|
| 20  | eP |   | 07 42 36   |     |       |     |
| 20  | eP |   | 08 09 01   |     |       |     |
| 20  | eP |   | 10 12 11   |     |       |     |
| 20  | eP |   | 15 31 38   |     |       |     |
| *20 | iP | D | 16 30 04.7 |     |       |     |
|     | e  |   | 32 23      |     |       |     |
| 20  | eP |   | 18 02 04   |     |       |     |
| *20 | iP | C | 19 06 04.3 |     |       |     |
| *21 | iP | C | 09 58 06.1 |     |       |     |
| 21  | eP |   | 19 57 28   |     |       |     |
| *22 | iP | C | 08 58 49.6 |     |       |     |
|     | eS |   | 09 01 33   |     |       |     |
| *22 | iP | C | 10 47 39.2 |     |       |     |
| *22 | iP | C | 16 32 40.1 |     |       |     |
| *22 | iP | D | 23 44 50.8 | 0.6 | 73mu  | 2.1 |
| 23  | eP |   | 01 31 17   |     |       |     |
|     | eS |   | 31 48      |     |       |     |
| *23 | iP | C | 05 09 04.1 |     |       |     |
| 24  | eP |   | 20 39 04   |     |       |     |
| *25 | iP | D | 03 41 09.2 |     |       |     |
| 25  | eP |   | 18 01 04   |     |       |     |
| *25 | iP | D | 19 08 10.8 | 1.0 | 110mu | 2.0 |
| *26 | iP | C | 22 16 42.6 |     |       |     |
| 27  | eP |   | 07 36 09   |     |       |     |
| 27  | eP |   | 10 05 39   |     |       |     |
| *27 | iP | D | 14 16 49.0 |     |       |     |
| 28  | eP |   | 00 07 33   |     |       |     |
| *28 | iP | D | 05 59 53.0 |     |       |     |
| 28  | eP |   | 09 08 18   |     |       |     |
| *28 | iP | C | 10 46 47.7 |     |       |     |
| *28 | iP | D | 17 09 08.1 |     |       |     |
| 28  | eP |   | 19 30 06   |     |       |     |
| *29 | iP | D | 08 53 59.3 |     |       |     |
| 29  | eP |   | 19 13 49   |     |       |     |
| 29  | eP |   | 19 54 06   |     |       |     |
| *29 | iP | C | 21 16 24.2 |     |       |     |
| *29 | iP | D | 22 26 45.5 |     |       |     |
| 30  | eP |   | 07 17 01   |     |       |     |
| 31  | eP |   | 19 58 44   |     |       |     |

Mt. Tom Price

\* Sent by telegram to NOAA