

WCR VOL 1

KAHAWAI-1 (W776)

**ESSO EXPLORATION AND PRODUCTION  
AUSTRALIA INC.**

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+ 2 enclosures.  
+ 11 pages,  
1 sheet.

**OIL and GAS DIVISION**  
**WELL COMPLETION REPORT**

**KAHAWAI - 1    21 DEC 1982**

**VOLUME 1    W 776**

**GIPPSLAND BASIN**  
**VICTORIA**

**ESSO AUSTRALIA LIMITED**

KAHAWAI-1

WELL COMPLETION REPORT

VOLUME 1

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ESSO AUSTRALIA LTD.

COMPLETION REPORT

1. WELL DATA RECORD

LOCATION

|                                                                                                    |                                                                                                  |                                                            |                                      |              |
|----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|------------------------------------------------------------|--------------------------------------|--------------|
| WELL NAME<br>KAHAWAI-1                                                                             | STATE<br>VIC                                                                                     | PERMIT or LICENCE<br>VIC/L4                                | GEOLOGICAL BASIN<br>GIPPSLAND        | FIELD<br>NEW |
| CO-ORDINATES<br>LATITUDE 38°10'20.85"<br>LONGITUDE 148°22'8.17"<br>X (mE) 619910<br>Y (mN) 5774150 |                                                                                                  | MAP PROJECTION<br>Transverse Mercator                      | GEOGRAPHICAL LOCATION<br>Bass Strait |              |
| <u>ELEVATIONS &amp; DEPTHS</u>                                                                     |                                                                                                  |                                                            |                                      |              |
| ELEVATIONS<br>KB 21m<br>RT                                                                         | WATER DEPTH<br>59.5m                                                                             | TOTAL DEPTH 2320m Average Angle<br>MEASURED DEPTH 2320m KB |                                      |              |
|                                                                                                    | PLUG BACK TYPE<br>P + A                                                                          | REASONS FOR PLUGGING BACK<br>Abandonment                   |                                      |              |
| <u>DATES</u>                                                                                       |                                                                                                  |                                                            |                                      |              |
| MOVE IN<br>23 May, 1982                                                                            | RIG UP<br>25 May, 1982                                                                           | SPUDED<br>26 May, 1982                                     |                                      |              |
| RIG DOWN COMPLETE<br>19 June, 1982                                                                 | RIG RELEASED<br>19 June, 1982                                                                    | PRODUCTION UNIT - RIG UP                                   |                                      |              |
| PRODUCTION UNIT - RIG DOWN                                                                         |                                                                                                  | INITIAL PRODUCTION ESTABLISHED                             |                                      |              |
| <u>MISCELLANEOUS</u>                                                                               |                                                                                                  |                                                            |                                      |              |
| OPERATOR<br>Esso Exploration and Production Australia Inc.                                         | PERMITTEE or LICENCEE<br>Esso Exploration & Production Aust. Inc.<br>Hematite Petroleum Pty. Ltd | ESSO INTEREST 50%<br>OTHER INTEREST 50%                    |                                      |              |
| CONTRACTOR<br>South Seas Drilling Company                                                          | RIG NAME<br>Southern Cross                                                                       | EQUIPMENT TYPE<br>Oilwell E-2000                           |                                      |              |
| TOTAL RIG DAYS<br>26.5                                                                             | DRILLING AFE NO.<br>05-00-308-232-003                                                            | COMPLETION NO.<br>-                                        | TYPE COMPLETION<br>-                 |              |
| WELL<br>CLASSIFICATION                                                                             | Before Drilling<br>After Drilling                                                                | Deeper Pool Test<br>Dry Deeper Pool Test                   |                                      |              |



### 3. CEMENT DATA

WELL KAHAWAI-1

| DATE   | DEPTH METRES | TYPE JOB                           | TYPE CEMENT | AMOUNT | ADDITIVES                       | REMARKS            |
|--------|--------------|------------------------------------|-------------|--------|---------------------------------|--------------------|
| 27 MAY | 199          | 20" CSG LEAD                       | CLASS N     | 627 SX | 3.33% GEL SEAWATER              |                    |
| 27 MAY | 199          | 20" CSG TAIL                       | CLASS N     | 350 SX | 2% CaCl <sub>2</sub> FRESHWATER |                    |
| 31 MAY | 791          | 13-3/8" CSG LEAD                   | CLASS N     | 790 SX | FRESHWATER                      |                    |
| 31 MAY | 791          | 13-3/8" CSG TAIL                   | CLASS N     | 250 SX | SEAWATER                        |                    |
| 15 JUN | 2320-2220    | P&A OPEN HOLE BALANCED PLUG        | CLASS N     | 230 SX | 1.4% HR6L FRESHWATER            |                    |
| 16 JUN | 1960 - 1868  | P&A OPEN HOLE BALANCED PLUG        | CLASS N     | 250 SX | 1.0% HR6L FRESHWATER            | TAGGED W/10klbs    |
| 16 JUN | 1450 - 1335  | P&A OPEN HOLE BALANCED PLUG        | CLASS N     | 323 SX | FRESHWATER                      | TAGGED W/10klbs    |
| 16 JUN | 840 - 740    | P&A HOLE/ CSG SHOE BALANCED PLUG   | CLASS N     | 315 SX | SEAWATER                        | TESTED TO 1000 PSI |
| 16 JUN | 207 - 159    | P&A SQUEEZED 13-3/8" x 20" ANNULUS | CLASS N     | 197 SX | SEAWATER                        | TESTED TO 1000 PSI |
| 16 JUN | 159 - 103    | P&A BALANCED PLUG ON RET.          | CLASS N     | 111 SX | SEAWATER                        | TESTED TO 1000 PSI |
|        |              |                                    |             |        |                                 |                    |

WELL : KAHAWAI-1

| 4. SAMPLES, CONVENTIONAL CORES, SIDEWALL CORES. |                                                                         |          |      |
|-------------------------------------------------|-------------------------------------------------------------------------|----------|------|
| INTERVAL                                        | TYPE                                                                    | INTERVAL | TYPE |
| 216 - 2320m                                     | 5 washed and dried samples and 1 sack unwashed cuttings every 5 metres. |          |      |
| 216 - 2320m                                     | Canned cuttings every 15 metres                                         |          |      |
| 1396.6 - 1410                                   | Conventional Core                                                       |          |      |
| 1410 - 1418                                     | Conventional Core                                                       |          |      |
| 1545.2 - 1558                                   | Conventional Core                                                       |          |      |
| 950 - 2307.5                                    | 132 Sidewall Cores                                                      |          |      |

| 5. WIRELINE LOGS AND SURVEYS     |      |       |                          |        |       |
|----------------------------------|------|-------|--------------------------|--------|-------|
| Type & Scale                     | From | To    | Type & Scale             | From   | To    |
| DIL BHC CAL GR<br>1:200<br>1:500 | 80   | 801m  | BHC GR<br>1:200<br>1:500 | 790    | 2313m |
| BHC (UNCOMP)<br>1:200<br>1:500   | 80   | 801m  | HDT<br>1:200             | 1350   | 2313m |
| DLL MSFL GR<br>1:200<br>1:500    | 790  | 1881m | RFT GR RUN 1-3<br>1:200  | 1390   | 2302m |
| DLL MSFL GR<br>1:200<br>1:500    | 1820 | 2315m | HPAA RUN 1-3<br>1:200    | 1390   | 2302m |
| DLL MSFL GR<br>1:200<br>1:500    | 790  | 2319m | CST RUN 1-3<br>1:200     | 2307.5 | 950m  |
| LDT CNL GR<br>1:200<br>1:500     | 790  | 2319m |                          |        |       |

6. SUMMARY OF FORMATION TEST PROGRAMME

| TEST | SEAT | DEPTH<br>(METRES)<br>K. B. | CHAMBER     | RECOVERY (LITRES) |                |                      |                    |          | HEWLETT-PACKARD<br>FORMATION PRESSURE |        | HEWLETT-PACKARD<br>HYDROSTATIC PRESSURE |        | HORIZONTAL<br>PERMEABILITY | REMARKS                                                      |
|------|------|----------------------------|-------------|-------------------|----------------|----------------------|--------------------|----------|---------------------------------------|--------|-----------------------------------------|--------|----------------------------|--------------------------------------------------------------|
|      |      |                            |             | OIL               | COND.          | GAS                  | FORMATION<br>WATER | FILTRATE | MPag                                  | Psig   | MPag                                    | Psig   | millidarcys                |                                                              |
| 1    | 1    | 1394.5                     | Pretest     |                   |                |                      |                    |          | -                                     | -      | 17.12                                   | 2484   |                            | Seal failure                                                 |
| 1    | 2    | 1394.0                     | "           |                   |                |                      |                    |          | 14.02                                 | 2033   | 17.11                                   | 2482   |                            |                                                              |
| 1    | 3    | 1403.0                     | "           |                   |                |                      |                    |          | 13.99                                 | 2030   | 17.22                                   | 2498   |                            |                                                              |
| 1    | 4    | 1408.0                     | "           |                   |                |                      |                    |          | 14.04                                 | 2036   | 17.30                                   | 2509   |                            |                                                              |
| 1    | 5    | 1414.0                     | "           |                   |                |                      |                    |          | 14.09                                 | 2044   | 17.37                                   | 2520   |                            |                                                              |
| 1    | 6    | 1767.5                     | "           |                   |                |                      |                    |          | 17.60                                 | 2553   | 21.76                                   | 3157   |                            |                                                              |
| 1    | 7    | 1861.0                     | "           |                   |                |                      |                    |          | 18.47                                 | 2679   | 22.95                                   | 3329   |                            |                                                              |
| 1    | 8    | 1903.5                     | "           |                   |                |                      |                    |          | 18.81                                 | 2729   | 23.35                                   | 3387   |                            |                                                              |
| 1    | 9    | 1928.0                     | "           |                   |                |                      |                    |          | 19.14                                 | 2776   | 23.65                                   | 3431   |                            |                                                              |
| 1    | 10   | 1964.0                     | "           |                   |                |                      |                    |          | 19.54                                 | 2834   | 24.08                                   | 3493   |                            |                                                              |
| 1    | 11   | 2070.0                     | "           |                   |                |                      |                    |          | 20.56                                 | 2982   | 25.38                                   | 3682   |                            |                                                              |
| 1    | 12   | 2126.0                     | "           |                   |                |                      |                    |          | -                                     | -      | 26.06                                   | 3781   |                            |                                                              |
| 1    | 13   | 2126.5                     | "           |                   |                |                      |                    |          | 20.59                                 | 2986   | 26.09                                   | 3785   | Not Valid                  |                                                              |
| 1    | 14   | 2154.0                     | "           |                   |                |                      |                    |          | 20.32                                 | 2948   | 26.43                                   | 3834   |                            |                                                              |
| 1    | 15   | 2185.5                     | "           |                   |                |                      |                    |          | 20.61                                 | 2989   | 26.82                                   | 3890   |                            |                                                              |
| 1    | 16   | 2226.0                     | "           |                   |                |                      |                    |          | 20.99                                 | 3046   | 27.30                                   | 3960   |                            |                                                              |
| 1    | 17   | 2259.0                     | "           |                   |                |                      |                    |          | 21.35                                 | 3097   | 27.71                                   | 4019   |                            |                                                              |
| 1    | 18   | 2302.0                     | "           |                   |                |                      |                    |          | 22.89                                 | 3320   | 28.26                                   | 4099   |                            |                                                              |
| 1    | 19   | 1393.5                     | "           |                   |                |                      |                    |          | 14.05                                 | 2038   | 17.15                                   | 2487   |                            |                                                              |
| 1    | 20   | 1403.0                     | "           |                   |                |                      |                    |          | 14.00                                 | 2032   | 17.22                                   | 2498   |                            |                                                              |
| 1    | 21   | 1403.0                     | "           |                   |                |                      |                    |          | 13.97                                 | 2027   | 17.22                                   | 2498   |                            |                                                              |
| 1    | 22   | 1404.0                     | "           |                   |                |                      |                    |          | 14.00                                 | 2031   | 17.22                                   | 2498   |                            |                                                              |
| 1    | 23   | 1405.0                     | "           |                   |                |                      |                    |          | 14.00                                 | 2031   | 17.22                                   | 2498   |                            |                                                              |
| 1    | 24   | 1393.5                     | "           |                   |                |                      |                    |          | 14.00                                 | 2031   | 17.08                                   | 2478   |                            |                                                              |
| 2    | 25   | 1403.0                     | 3.8<br>22.7 | Sample<br>15 L    | Preserved<br>- | 1.06 ft <sup>3</sup> |                    |          | 13.98                                 | 2027.5 | 17.28                                   | 2507.0 |                            | HP Gauge on Runs 2 & 3                                       |
| 3    | 26   | 1393.5                     | Pretest     |                   |                |                      |                    |          | 14.002                                | 2031.1 | 17.15                                   | 2487.2 |                            | Seal Failure<br>Seal Failure<br>Seal Failure<br>Seal Failure |
| 3    | 27   | 1393.5                     | "           |                   |                |                      |                    |          |                                       |        | 17.15                                   | 2487.0 |                            |                                                              |
| 3    | 28   | 1394.0                     | "           |                   |                |                      |                    |          |                                       |        | 17.17                                   | 2490.0 |                            |                                                              |
| 3    | 29   | 1372.5                     | "           |                   |                |                      |                    |          | -                                     | -      | 14.39                                   | 2087.0 |                            |                                                              |
| 3    | 30   | 1373.5                     | "           |                   |                |                      |                    |          | -                                     | -      | 14.41                                   | 2090.0 |                            |                                                              |



SUMMARY OF FORMATION TEST PROGRAMME

| <u>TEST</u> | <u>SEAT</u> | <u>DEPTH</u><br><u>(METRES)</u><br><u>K. B.</u> | <u>CHAMBER</u> | <u>RECOVERY (LITRES)</u> |              |                     |                                  |                 | <u>HEWLETT-PACKARD</u><br><u>FORMATION PRESSURE</u> |             | <u>HEWLETT-PACKARD</u><br><u>HYDROSTATIC PRESSURE</u> |             | <u>HORIZONTAL</u><br><u>PERMEABILITY</u> | <u>REMARKS</u> |
|-------------|-------------|-------------------------------------------------|----------------|--------------------------|--------------|---------------------|----------------------------------|-----------------|-----------------------------------------------------|-------------|-------------------------------------------------------|-------------|------------------------------------------|----------------|
|             |             |                                                 |                | <u>OIL</u>               | <u>COND.</u> | <u>GAS</u>          | <u>FORMATION</u><br><u>WATER</u> | <u>FILTRATE</u> | <u>MPag</u>                                         | <u>Psig</u> | <u>MPag</u>                                           | <u>Psig</u> | <u>millidarcys</u>                       |                |
| 3           | 31          | 1373.5                                          | Pretest        |                          |              |                     |                                  |                 | -                                                   | -           | 14.41                                                 | 2090.0      |                                          | Seal Failure   |
| 3           | 32          | 1387.0                                          | "              |                          |              |                     |                                  |                 | 14.01                                               | 2032.0      | 17.30                                                 | 2510.1      |                                          |                |
| 3           | 33          | 1393.0                                          | "              |                          |              |                     |                                  |                 | -                                                   | -           | 17.37                                                 | 2520.8      |                                          | Seal Failure   |
| 3           | 34          | 1393.0                                          | "              |                          |              |                     |                                  |                 |                                                     |             | 17.38                                                 | 2521.0      |                                          |                |
| 3           | 35          | 1414.0                                          | "              |                          |              |                     |                                  |                 |                                                     |             | 17.63                                                 | 2557.7      |                                          |                |
| 3           | 36          | 1373                                            | "              |                          |              |                     |                                  |                 | -                                                   | -           | 17.14                                                 | 2486.2      |                                          | Tight          |
| 3           | 37          | 1393.0                                          | 3.8            | -                        | Scum         | 0.18ft <sup>3</sup> | 3.75L                            | -               | 13.99                                               | 2029.7      | 17.12                                                 | 2483.9      |                                          |                |
|             |             |                                                 | 22.7           | -                        | -            | 0.11ft <sup>3</sup> | 0.60L                            | -               |                                                     |             |                                                       |             |                                          |                |

7. KAHAWAI - 1 TEMPERATURE RECORD

| LOGGING RUN  | THERMOMETER DEPTH (m) | MAX. RECORDED TEMPERATURE (C°) | CIRCULATION TIME (t <sub>k</sub> ) (hours) | TIME AFTER CIRCULATION STOPPED ( t ) | HORNER* TEMPERATURE (C°) | GEO THERMAL GRADIENT (C°/km) |
|--------------|-----------------------|--------------------------------|--------------------------------------------|--------------------------------------|--------------------------|------------------------------|
| ISF BHC GR   | 804.0                 | 45.0                           | 2                                          | 18                                   | -                        | -                            |
| DLL MSFL GR* | 1886.0                | 74.4                           | 2                                          | 10                                   | -                        | -                            |
| DLL MSFL GR  | 2320.0                | 76.6                           | 2                                          | 4                                    | 96.0                     | 4.06°/100m                   |
| LDT CNL GR   | 2319.0                | 81.6                           | -                                          | 8                                    |                          |                              |
| BHC GR       | 2313.0                | 86.3                           | -                                          | 13                                   |                          |                              |
| HDT          | 2313.0                | 95.0                           | -                                          | 23                                   |                          |                              |

\* Tool hung up, ran wiper trip.

Figures

# LOCALITY MAP

SCALE 1:250000

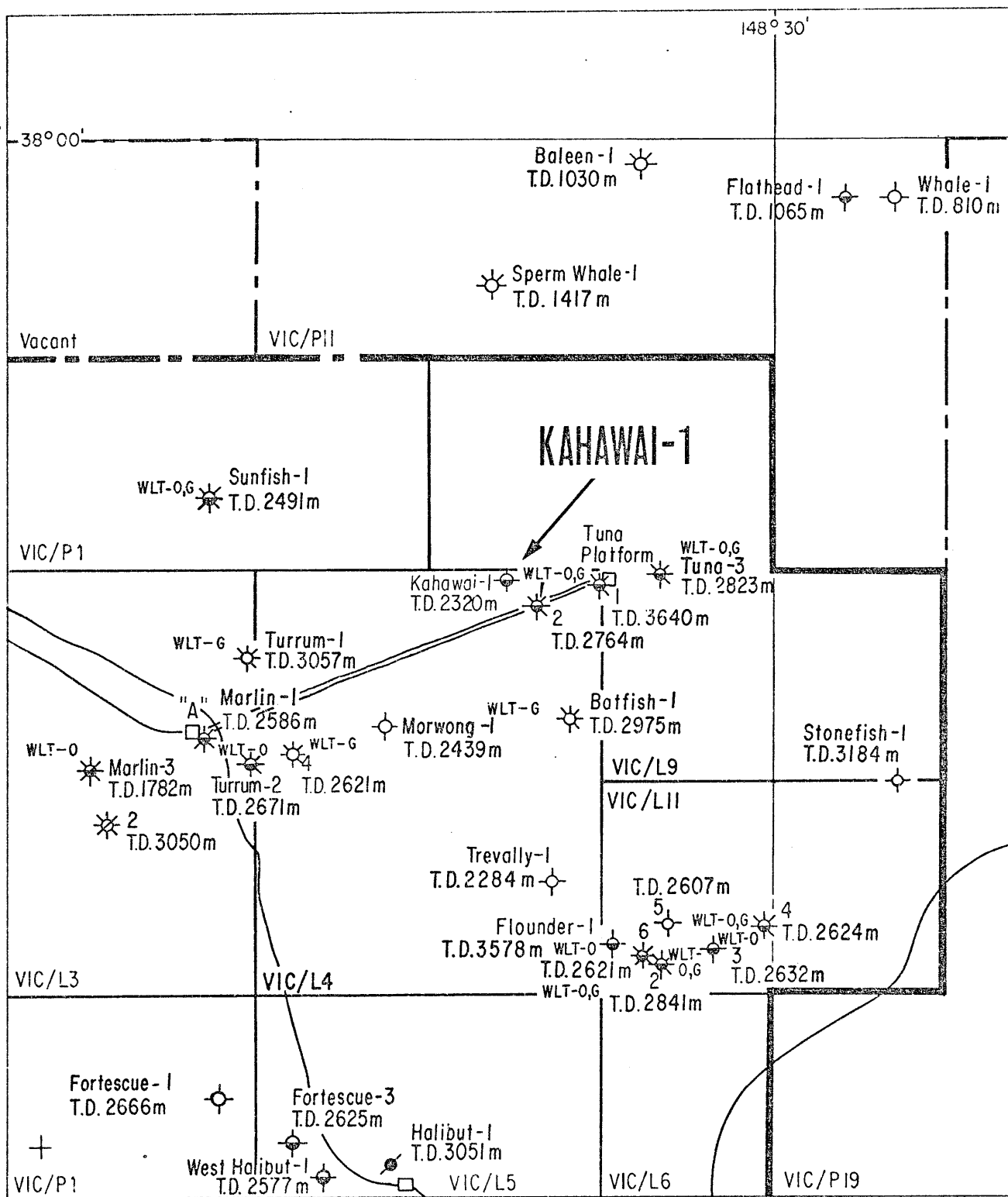


FIGURE 1



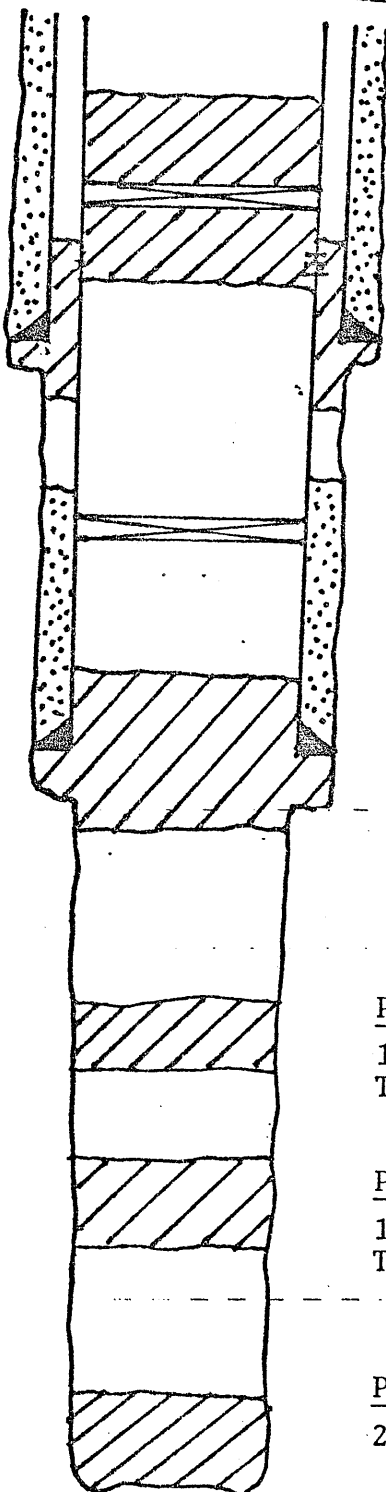
ABANDONMENT SCHEMATIC

WELL: KAHAWAI-1

RKB

80.5m

59.5m



PLUG No. 5.

ANNULUS: 207-159  
CASING: 159-103  
TESTED TO 6.9 MPa (1000 PSI)

PERFS @ 158.4-159.6m

13-3/8" BRIDGE PLUG @ 331m

PLUG No. 4.

840-740m  
TESTED TO 6.9 MPa (1000 PSI)

PLUG No. 3.

1450-1335m  
TAGGED W/10k lbs

PLUG No. 2.

1960-1868m  
TAGGED W/10k lbs

PLUG No. 1.

2320-2220m

ALL DEPTHS ARE IN METERS RKB

FIGURE 3

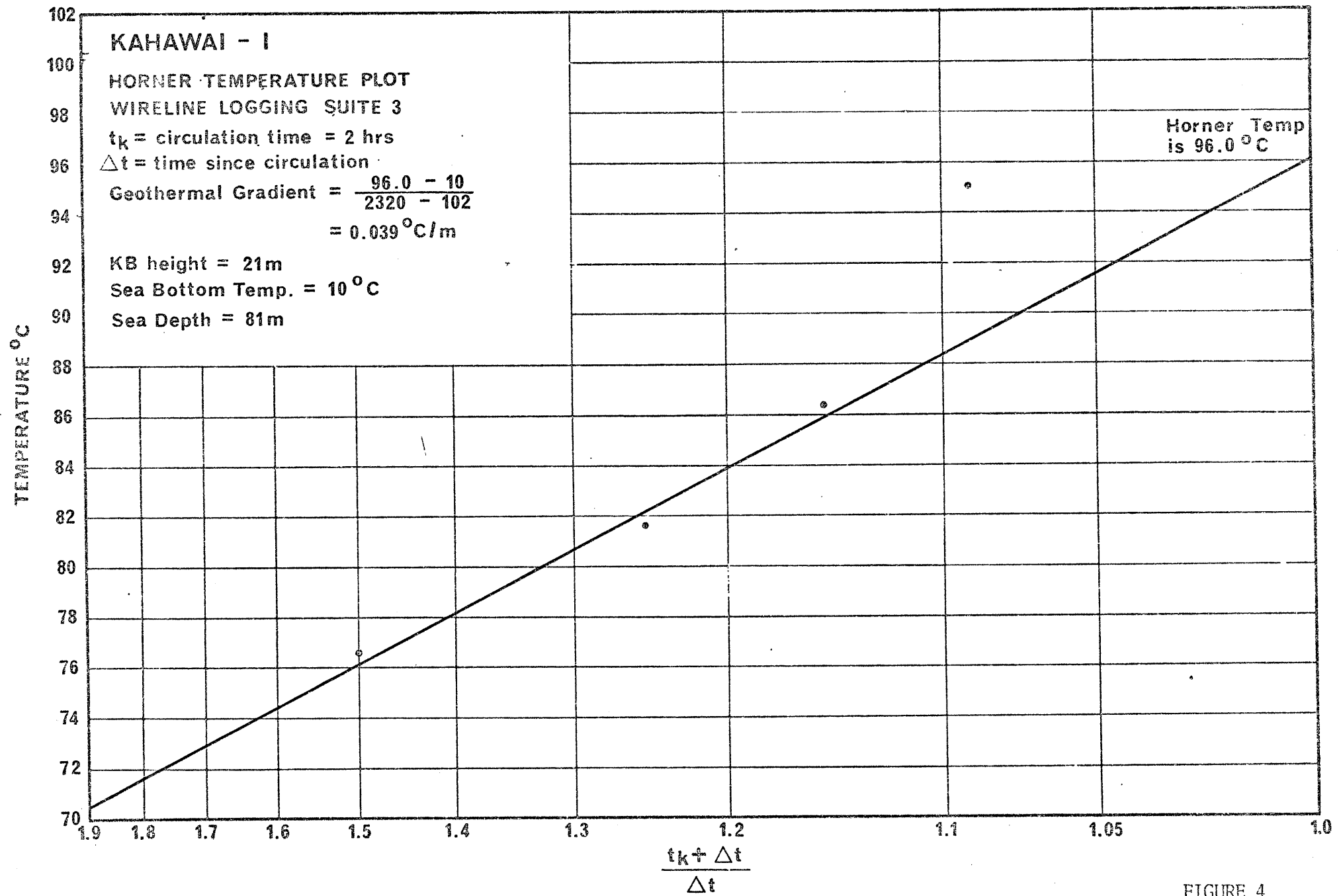


FIGURE 4

Appendix 1



APPENDIX 1

LITHOLOGICAL DESCRIPTIONS

KAHAWAJ - 1

| <u>DEPTH (KB)</u> |                |  | <u>LITHOLOGICAL DESCRIPTIONS</u>                                                                                                                                                             |
|-------------------|----------------|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 216 - 220m        | 70             |  | LIMESTONE: white, light brown, dark brown, grey, coquina, consisting of shell fragments, forams, bryozoans and calcareous aggregates of feldspar, mica and very well rounded rock fragments. |
|                   | 30             |  | SANDSTONE: clear to frosty white, coarse grained, unconsolidated quartz, angular to rounded, moderate sorting.                                                                               |
| 220 - 225m        | 70             |  | LIMESTONE: as above, but light grey calcareous aggregates more common.                                                                                                                       |
|                   | 30             |  | SANDSTONE: as above.                                                                                                                                                                         |
| 225 - 230m        | 70             |  | LIMESTONE: as above.                                                                                                                                                                         |
|                   | 30             |  | SANDSTONE: as above.                                                                                                                                                                         |
| 230 - 235         | 70             |  | LIMESTONE: as above.                                                                                                                                                                         |
|                   | 30             |  | SANDSTONE: as above.                                                                                                                                                                         |
| 235 - 240m        | 95             |  | LIMESTONE: predominantly light grey, well cemented calcilutite with less coquina of shell fragments and bryozoans than above.                                                                |
|                   | 5              |  | SANDSTONE: clear to frosty white, quartzose, coarse grained, angular to rounded.                                                                                                             |
|                   | trace<br>trace |  | LITHIC FRAGMENTS<br>MICA                                                                                                                                                                     |
| 240 - 245m        | 80             |  | LIMESTONE: predominantly coquina of very coarse shell fragments, some light grey, well cemented calcilutite, as above.                                                                       |
|                   | 20             |  | SANDSTONE: as above.                                                                                                                                                                         |
| 245 - 250m        | 80             |  | LIMESTONE: as above.                                                                                                                                                                         |
|                   | 20             |  | SANDSTONE: as above.                                                                                                                                                                         |
| 250 - 255m        | 80             |  | LIMESTONE: as above.                                                                                                                                                                         |
|                   | 20             |  | SANDSTONE: as above.                                                                                                                                                                         |
| 255 - 260m        | 80             |  | LIMESTONE: cream, tan and light grey, fine to medium grained, calcitic cement, trace dark very fine carbonaceous (?) flecks, common shell fragments, very coarse.                            |
|                   | 20             |  | SANDSTONE: as above.                                                                                                                                                                         |
| 260 - 265m        | 80             |  | LIMESTONE: as above.                                                                                                                                                                         |
|                   | 20             |  | SANDSTONE: as above.                                                                                                                                                                         |
| 265 - 270m        | 95             |  | LIMESTONE: as above.                                                                                                                                                                         |
|                   | 5              |  | SANDSTONE: as above.                                                                                                                                                                         |
|                   | trace          |  | MICA                                                                                                                                                                                         |
| 270 - 275m        | 95             |  | LIMESTONE: as above.                                                                                                                                                                         |
|                   | 5              |  | SANDSTONE: as above.                                                                                                                                                                         |
| 275 - 280m        | 95             |  | LIMESTONE: as above.                                                                                                                                                                         |
|                   | 5              |  | SANDSTONE: as above.                                                                                                                                                                         |
| 280 - 285m        | 90             |  | LIMESTONE: as above.                                                                                                                                                                         |
|                   | 10             |  | SANDSTONE: as above.                                                                                                                                                                         |
| 285 - 290m        | 80             |  | LIMESTONE: as above.                                                                                                                                                                         |
|                   | 20             |  | SANDSTONE: as above.                                                                                                                                                                         |

|            |              |                          |                                                                                                                                                                       |
|------------|--------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 290 - 295m | 80<br>20     | LIMESTONE:<br>SANDSTONE: | as above.,<br>as above.                                                                                                                                               |
| 295 - 300m | 80<br>20     | LIMESTONE:<br>SANDSTONE: | as above.<br>as above.                                                                                                                                                |
| 300 - 305m | 80<br>20     | LIMESTONE:<br>SANDSTONE: | as above.<br>as above.                                                                                                                                                |
| 305 - 310m | 90<br>10     | LIMESTONE:<br>SANDSTONE: | as above.<br>as above.                                                                                                                                                |
| 310 - 315m | 95<br>5      | LIMESTONE:<br>SANDSTONE: | as above.<br>as above.                                                                                                                                                |
| 315 - 320m | 100<br>trace | LIMESTONE:<br>SANDSTONE: | as above.<br>as above.                                                                                                                                                |
| 320 - 325m | 100<br>trace | LIMESTONE:<br>SANDSTONE: | as above.<br>as above.                                                                                                                                                |
| 325 - 330m | 100<br>trace | LIMESTONE:<br>SANDSTONE: | as above.<br>as above.                                                                                                                                                |
| 330 - 335m | 100<br>trace | LIMESTONE:<br>SANDSTONE: | as above.<br>as above.                                                                                                                                                |
| 335 - 340m | 100<br>trace | LIMESTONE:<br>SANDSTONE: | as above.<br>as above.                                                                                                                                                |
| 340 - 345m | 100<br>trace | LIMESTONE:<br>SANDSTONE: | as above.<br>as above.                                                                                                                                                |
| 345 - 350m | 100          | LIMESTONE:               | with occasional very light grey,<br>very soft, water sensitive calcilutite with very<br>fine dark carbonaceous ? flecks and a trace of<br>shell fragments and forams. |
| 350 - 355m | 100          | LIMESTONE:               | as above.                                                                                                                                                             |
| 355 - 360m | 100          | LIMESTONE:               | as above.                                                                                                                                                             |
| 360 - 365m | 100          | LIMESTONE:               | as above.                                                                                                                                                             |
| 365 - 370m | 100          | CALCILUTITE:             | very light grey, very soft, water<br>sensitive, with dark very fine carbonaceous<br>flecks and occasional fossils.                                                    |
| 370 - 375m | 100          | CALCILUTITE:             | as above.                                                                                                                                                             |
| 375 - 380m | 100          | CALCILUTITE:             | occasionally very soft, as above,<br>otherwise firm.                                                                                                                  |
| 380 - 385m | 100          | CALCILUTITE:             | as above.                                                                                                                                                             |
| 385 - 390m | 100          | CALCILUTITE:             | as above.                                                                                                                                                             |
| 390 - 395m | 100          | CALCILUTITE:             | as above.                                                                                                                                                             |
| 395 - 400m | 100          | CALCILUTITE:             | as above.                                                                                                                                                             |
| 400 - 405m | 100          | CALCILUTITE:             | as above.                                                                                                                                                             |
| 405 - 410m | 100          | CALCILUTITE:             | medium light grey to light grey,<br>predominantly firm to hard, occasionally very<br>soft.                                                                            |

|            |                                |                                                               |                                                                                                    |
|------------|--------------------------------|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| 410 - 415m | 100                            | CALCILUTITE:                                                  | as above.                                                                                          |
| 415 - 420m | 100                            | CALCILUTITE:                                                  | as above, rare forams, and echinoid spines.                                                        |
| 420 - 425m | 100                            | CALCILUTITE:                                                  | as above, but predominantly very soft.                                                             |
| 425 - 430m | 100                            | CALCILUTITE:                                                  | as above.                                                                                          |
| 430 - 435m | 100                            | CALCILUTITE:                                                  | as above.                                                                                          |
| 435 - 440m | 100                            | CALCILUTITE:                                                  | as above.                                                                                          |
| 440 - 445m | 100<br>trace<br>trace<br>trace | CALCILUTITE:<br>CALCISILTITE:<br>BRYOZOANS<br>SHELL FRAGMENTS | light to very light grey,<br>relatively hard, very fine carbonaceous flecks.<br>medium light grey. |
| 445 - 450m | 100<br>trace                   | CALCILUTITE:<br>GLAUCONITE                                    | as above.                                                                                          |
| 450 - 455m | 100<br>trace<br>trace          | CALCILUTITE:<br>BIVALVES<br>ECHINOID SPINES                   | as above.                                                                                          |
| 455 - 460m | 100                            | CALCILUTITE:                                                  | as above.                                                                                          |
| 460 - 465m | 100<br>trace<br>trace<br>trace | CALCILUTITE:<br>CORAL<br>BIVALVES<br>FORAMS                   | as above.                                                                                          |
| 465 - 470m | 100                            | CALCILUTITE:                                                  | as above.                                                                                          |
| 470 - 475m | 100                            | CALCILUTITE:                                                  | as above.                                                                                          |
| 475 - 480m | 100<br>trace                   | CALCILUTITE:<br>CORAL                                         | as above.                                                                                          |
| 480 - 485m | 100                            | CALCILUTITE:                                                  | as above.                                                                                          |
| 485 - 490m | 100<br>trace                   | CALCILUTITE:<br>GASTROPODS                                    | as above.                                                                                          |
| 490 - 495m | 100<br>trace<br>trace<br>trace | CALCILUTITE:<br>BRYOZOANS<br>ECHINOID SPINES<br>FORAMS        | as above.                                                                                          |
| 495 - 500m | 100<br>trace<br>trace<br>trace | CALCILUTITE:<br>BRYOZOANS<br>ECHINOID SPINES<br>FORAMS        | as above.                                                                                          |
| 500 - 505m | 100                            | CALCILUTITE:                                                  | as above                                                                                           |
| 505 - 510m | 100                            | CALCILUTITE:                                                  | as above.                                                                                          |
| 510 - 515m | 100<br>trace                   | CALCILUTITE:<br>CORAL                                         | as above.                                                                                          |
| 515 - 520m | 100<br>trace                   | CALCILUTITE:<br>FORAMS                                        | as above.                                                                                          |

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| 520 - 525m | 100<br>trace<br>trace                   | CALCILUTITE: as above.<br>BRYOZOANS<br>FORAMS                                                                                                                                                                                                                                                 |
| 525 - 530m | 100<br>trace<br>trace<br>trace<br>trace | CALCILUTITE: as above.<br>BRYOZOANS<br>ECHINOID SPINES<br>FORAMS<br>CRUSTACEAN FRAGMENTS                                                                                                                                                                                                      |
| 530 - 535m | 100<br>trace                            | CALCILUTITE: as above.<br>CORAL                                                                                                                                                                                                                                                               |
| 535 - 540m | 100<br>trace<br>trace<br>trace          | CALCILUTITE: as above.<br>CORAL<br>ECHINOID SPINES<br>BIVALVE FORAMS                                                                                                                                                                                                                          |
| 540 - 545m | 100                                     | CALCILUTITE: as above                                                                                                                                                                                                                                                                         |
| 545 - 550m | 100                                     | CALCILUTITE: as above, but rare white to very light grey pieces.                                                                                                                                                                                                                              |
| 550 - 555m | 100                                     | CALCILUTITE: medium light grey to rare white, well cemented, moderately hard to soft and sticky, skeletal grainstone, grains consist of forams and other fossil material (bryozoans, corals and echinoid spines), accessories include rare glauconite and very fine dark carbonaceous flecks. |
| 555 - 560m | 100                                     | CALCILUTITE: as above.                                                                                                                                                                                                                                                                        |
| 560 - 565m | 100                                     | CALCILUTITE: as above.                                                                                                                                                                                                                                                                        |
| 565 - 570m | 100                                     | CALCILUTITE: as above, but with rare micropyrritic agglomerates.                                                                                                                                                                                                                              |
| 570 - 575m | 100                                     | CALCILUTITE: as above, but with white to very light grey calcisiltite and greater proportion of loose forams.                                                                                                                                                                                 |
| 575 - 580m | 100<br>trace                            | CALCILUTITE: medium light grey to white, crystalline matrix, hard, otherwise as above.<br>SANDSTONE: quartzose, well rounded, coarse grained, fossiliferous.                                                                                                                                  |
| 580 - 585m | 100                                     | CALCILUTITE: as above, but softer.                                                                                                                                                                                                                                                            |
| 585 - 590m | 100                                     | CALCILUTITE: as above.                                                                                                                                                                                                                                                                        |
| 590 - 595m | 100                                     | CALCILUTITE: as above.                                                                                                                                                                                                                                                                        |
| 595 - 600  | 100<br>trace<br>trace<br>trace          | CALCILUTITE: as above.<br>GLAUCONITE<br>FORAMS<br>BRYOZOANS                                                                                                                                                                                                                                   |
| 600 - 605m | 100<br>trace                            | CALCILUTITE: as above.<br>CALCISILTITE: quartzose silt with calcitic cement.                                                                                                                                                                                                                  |
| 605 - 610m | 100                                     | CALCILUTITE: as above.                                                                                                                                                                                                                                                                        |
| 610 - 615m | 100<br>trace                            | CALCILUTITE: as above.<br>SANDSTONE: rounded, coarse grained, clear to frosty quartz.                                                                                                                                                                                                         |

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| 615 - 620m | 100<br>trace                   | CALCILUTITE: as above.<br>BRYOZOANS                                                                                                                                                                                                                      |
| 620 - 625m | 100                            | CALCILUTITE: as above.                                                                                                                                                                                                                                   |
| 625 - 630m | 60<br>30<br>10                 | CALCILUTITE: as above, with common coarse to very coarse shell fragments.<br>DOLOMITE: moderately hard, light brown to tan, cemented very fine angular grains.<br>SANDSTONE: quartzose, frosty to clear grains, medium to coarse, angular to subrounded. |
| 630 - 635m | 90<br>10<br>trace              | CALCILUTITE: as above.<br>SANDSTONE: as above.<br>DOLOMITE                                                                                                                                                                                               |
| 635 - 640m | 100<br>trace<br>trace          | CALCILUTITE: medium light grey to white, very hard to very friable.<br>SANDSTONE: as above.<br>DOLOMITE: as above                                                                                                                                        |
| 640 - 645m | 100                            | CALCILUTITE: as above.                                                                                                                                                                                                                                   |
| 645 - 650m | 100<br>trace                   | CALCILUTITE: as above.<br>MICROPYRITE                                                                                                                                                                                                                    |
| 650 - 655m | 100<br>trace<br>trace<br>trace | CALCILUTITE: as above<br>MICROPYRITE<br>SHELL FRAGMENTS<br>ECHINOID SPINES                                                                                                                                                                               |
| 655 - 660m | 100                            | CALCILUTITE: as above.                                                                                                                                                                                                                                   |
| 660 - 665m | 100                            | CALCILUTITE: as above.                                                                                                                                                                                                                                   |
| 665 - 670m | 100                            | CALCILUTITE: as above, very hygroscopic, water sensitive, soft, fluffy clays.                                                                                                                                                                            |
| 670 - 675m | 100                            | CALCILUTITE: as above.                                                                                                                                                                                                                                   |
| 675 - 680m | 100                            | CALCILUTITE: as above.                                                                                                                                                                                                                                   |
| 680 - 685m | 100                            | CALCILUTITE: as above.                                                                                                                                                                                                                                   |
| 685 - 690m | 100                            | CALCILUTITE: as above.                                                                                                                                                                                                                                   |
| 690 - 695m | 100<br>trace                   | CALCILUTITE: as above, very hygroscopic, when water is applied to dried sample individual grains dissolve.<br>DOLOMITE                                                                                                                                   |
| 695 - 700m | 100                            | CALCILUTITE: as above.                                                                                                                                                                                                                                   |
| 700 - 705m | 100<br>trace<br>trace          | CALCILUTITE: as above.<br>BIVALVES<br>DOLOMITE                                                                                                                                                                                                           |
| 705 - 710m | 100                            | CALCILUTITE: as above.                                                                                                                                                                                                                                   |
| 710 - 715m | 100<br>trace                   | CALCILUTITE: as above.<br>FORAMS                                                                                                                                                                                                                         |
| 715 - 720m | 100                            | CALCILUTITE: as above.                                                                                                                                                                                                                                   |
| 720 - 725m | 100<br>trace                   | CALCILUTITE: as above.<br>DOLOMITE                                                                                                                                                                                                                       |

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| 725 - 730m | 100                            | CALCILUTITE:                                 | as above, high proportion of hygroscopic clays.                                                                               |
| 730 - 735m | 100<br>trace                   | CALCILUTITE:<br>DOLOMITE                     | predominantly soft, no fossils.                                                                                               |
| 735 - 740m | 100                            | CALCILUTITE:                                 | as above.                                                                                                                     |
| 740 - 745m | 100                            | CALCILUTITE:                                 | as above.                                                                                                                     |
| 745 - 750m | 100<br>trace<br>trace<br>trace | CALCILUTITE:<br>CORALS<br>FORAMS<br>DOLOMITE | as above.                                                                                                                     |
| 750 - 755m | 100<br>trace<br>trace          | CALCILUTITE:<br>FORAMS<br>DOLOMITE           | as above.                                                                                                                     |
| 755 - 760m | 100                            | CALCILUTITE:                                 | as above.                                                                                                                     |
| 760 - 765m | 100<br>trace                   | CALCILUTITE:<br>FORAMS                       | predominantly hard, medium grey, subfissile.                                                                                  |
| 765 - 770m | 100                            | CALCILUTITE:                                 | as above, but predominantly very soft, interpreted lithology as interbedded hard and soft calcilutite with occasional forams. |
| 770 - 775m | 100                            | CALCILUTITE:                                 | as above.                                                                                                                     |
| 775 - 780m | 100                            | CALCILUTITE:                                 | as above.                                                                                                                     |
| 780 - 785m | 100                            | CALCILUTITE:                                 | as above.                                                                                                                     |
| 785 - 790m | 100                            | CALCILUTITE:                                 | as above.                                                                                                                     |
| 790 - 795m | 100                            | CALCILUTITE:                                 | as above.                                                                                                                     |
| 795 - 800m | 100                            | CALCILUTITE:                                 | as above.                                                                                                                     |
| 800 - 805m | 100                            | CALCILUTITE:                                 | as above, very soft, water sensitive.                                                                                         |
| 805 - 806m | 100<br>trace                   | GRAB SAMPLE<br>CALCILUTITE:<br>DOLOMITE:     | as above.<br>sucrosic.                                                                                                        |
| 806 - 810m | 100                            | CALCILUTITE:                                 | as above, contaminated with cement.                                                                                           |
| 810 - 816m | 100<br>trace                   | CALCILUTITE:<br>MICROCRYSTALLINE PYRITE      | as above, contaminated by cement.                                                                                             |
| 816 - 820m | 100                            | CALCILUTITE:                                 | as above.                                                                                                                     |
| 820 - 825m | 100                            | CALCILUTITE:                                 | as above, cuttings difficult to wash due to fluffy white - grey clay binding them together.                                   |
| 825 - 830m | 100                            | CALCILUTITE:                                 | as above.                                                                                                                     |
| 830 - 835m | 100                            | CALCILUTITE:                                 | as above.                                                                                                                     |
| 835 - 840m | 100                            | CALCILUTITE:                                 | as above.                                                                                                                     |
| 840 - 845m | 100                            | CALCILUTITE:                                 | as above.                                                                                                                     |

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| 845 - 850m | 100                   | CALCILUTITE: sample difficult to describe due to presence of a light grey fluffy clay engulfing cuttings. Cutting medium to soft, grey, occasional large carbonate grain but mostly fine grained, grades to a siltstone, carbonaceous flecks.                                         |
| 850 - 855m | 100<br>trace          | CALCILUTITE: as above.<br>FORAMS                                                                                                                                                                                                                                                      |
| 855 - 860m | 100                   | CALCILUTITE: very light grey to medium light grey, very hard siltstone to very soft water sensitive fluffy clay (gumbo), occasionally coarse grain carbonate but mainly fine grained, trace forams, very fine grained dolomite and dark carbonaceous flecks, microcrystalline pyrite. |
| 860 - 865m | 100<br>trace          | CALCILUTITE: as above.<br>SILTSTONE: fossiliferous, very hard.                                                                                                                                                                                                                        |
| 865 - 870m | 100<br>trace          | CALCILUTITE: as above.<br>CARBONATE: coarse grained                                                                                                                                                                                                                                   |
| 870 - 875m | 100                   | CALCILUTITE: as above.                                                                                                                                                                                                                                                                |
| 875 - 880m | 100<br>trace<br>trace | CALCILUTITE: as above.<br>MICROCRYSTALLINE PYRITE<br>FORAMS                                                                                                                                                                                                                           |
| 880 - 885m | 100                   | CALCILUTITE: grading to CALCISILTITE.                                                                                                                                                                                                                                                 |
| 888 - 890m | 100                   | CALCILUTITE: as above                                                                                                                                                                                                                                                                 |
| 890 - 895m | 100                   | CALCILUTITE/MARL: large sand sized angular grains of carbonate held in a calcareous mud matrix, grains white to clear, angular to subrounded. Marly matrix very soft, light grey with carbonaceous flecking.                                                                          |
| 895 - 900m | 100                   | CALCILUTITE/MARL: as above.                                                                                                                                                                                                                                                           |
| 900 - 905m | 100                   | CALCILUTITE/MARL: as above.                                                                                                                                                                                                                                                           |
| 905 - 910m | 100                   | CALCILUTITE/MARL: as above.                                                                                                                                                                                                                                                           |
| 910 - 915m | 100                   | CALCILUTITE/MARL: as above.                                                                                                                                                                                                                                                           |
| 915 - 920m | 100                   | CALCILUTITE/MARL: as above.                                                                                                                                                                                                                                                           |
| 920 - 925m | 100                   | CALCILUTITE/MARL: as above.                                                                                                                                                                                                                                                           |
| 925 - 930m | 100                   | CALCILUTITE/MARL: as above.                                                                                                                                                                                                                                                           |
| 930 - 935m | 100                   | CALCILUTITE/MARL: as above.                                                                                                                                                                                                                                                           |
| 935 - 940m | 100                   | CALCILUTITE/MARL: as above.                                                                                                                                                                                                                                                           |
| 940 - 945m | 100                   | CALCILUTITE/MARL: as above.                                                                                                                                                                                                                                                           |
| 945 - 950m | 60<br>40              | CALCILUTITE/MARL: as above.<br>SILTSTONE: medium to dark grey, moderately hard, cuttings angular to subangular, calcareous, carbonaceous flecking.                                                                                                                                    |
| 950 - 955  | 50<br>50              | CALCILUTITE/MARL: sand sized calcareous grains held in a fine grained marly matrix.<br>SILTSTONE: as above.                                                                                                                                                                           |



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| 955 - 960m   | 60<br>40                   | SILTSTONE: as above.<br>CALCILUTITE/MARL: as above.                                                                                                                                                                                                     |
| 960 - 965m   | 60<br>40                   | SILTSTONE: as above.<br>MARL: as above, with occasional coarse carbonate grains.                                                                                                                                                                        |
| 965 - 970m   | 60<br>40                   | SILTSTONE: medium to dark grey, firm to hard, subangular to angular cuttings, calcareous, carbonaceous flecking.<br>MARL: white to light grey, very soft, fluffy, carbonaceous.                                                                         |
| 970 - 975m   | 60<br>40                   | SILTSTONE: as above.<br>MARL: as above.                                                                                                                                                                                                                 |
| 975 - 980m   | 50<br>50<br>trace<br>trace | SILTSTONE: as above.<br>MARL: as above.<br>PYRITE: microcrystalline.<br>CARBONACEOUS FLECKS                                                                                                                                                             |
| 980 - 985m   | 60<br>40<br>trace          | SILTSTONE: as above.<br>MARL: as above.<br>PYRITE: microcrystalline.                                                                                                                                                                                    |
| 985 - 990m   | 60<br>40                   | SILTSTONE: as above.<br>MARL: as above.                                                                                                                                                                                                                 |
| 990 - 995m   | 60<br>35<br>5<br>trace     | SILTSTONE: as above.<br>MARL: as above.<br>CRYSTALLINE CARBONATE: coarse grained.<br>QUARTZ                                                                                                                                                             |
| 995 - 1000m  | 60<br>35<br>5<br>trace     | SILTSTONE: as above.<br>MARL: as above.<br>CARBONATE: as above.<br>QUARTZ                                                                                                                                                                               |
| 1000 - 1005m | 40<br>60<br>trace          | SILTSTONE: as above.<br>MARL: as above.<br>QUARTZ                                                                                                                                                                                                       |
| 1005 - 1010  | 40<br>60                   | SILTSTONE: as above.<br>MARL: as above.                                                                                                                                                                                                                 |
| 1010 - 1015m | 30<br>70<br>trace          | SILTSTONE: medium light grey, rarely light lemon, soft and friable to very hard respectively, blocky subangular to angular cuttings.<br>MARL: very light grey to medium light grey, soft to very soft, fluffy, water sensitive clays (gumbo).<br>FORAMS |
| 1015 - 1020  | 30<br>70                   | SILTSTONE: as above.<br>MARL: as above.                                                                                                                                                                                                                 |
| 1020 - 1025m | 30<br>70<br>trace          | SILTSTONE: as above.<br>MARL: as above.<br>PYRITE: microcrystalline.                                                                                                                                                                                    |
| 1025 - 1030m | 30<br>70                   | SILTSTONE: as above, and trace very dark grey carbonaceous, blocky, very hard cuttings.<br>MARL: as above.                                                                                                                                              |

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| 1030 - 1035m | 50    | SILTSTONE: as above.                                                                                                                         |
|              | 50    | MARL: as above.                                                                                                                              |
|              |       | Note: Difficult to judge relative proportions due to fluffy clay (gumbo).                                                                    |
| 1035 - 1040m | 50    | SILTSTONE: as above.                                                                                                                         |
|              | 50    | MARL: as above.                                                                                                                              |
|              | trace | PYRITE: microcrystalline.                                                                                                                    |
| 1040 - 1045m | 70    | SILTSTONE: medium to dark grey, moderately soft to firm, cuttings angular to subrounded, platy, carbonaceous flecking.                       |
|              | 30    | MARL: light grey, very soft, "fluffy" (gumbo).                                                                                               |
|              | trace | QUARTZ GRAINS: subrounded, coarse, clear - dirty, hard.                                                                                      |
|              | trace | PYRITE: black/gold, hard, angular, fine grained.                                                                                             |
|              | trace | COAL?: black, angular, very hard.                                                                                                            |
|              | trace | VOLCANIC GRAIN: dominantly red with minor grey patches, hard.                                                                                |
|              | trace | FORAMS: round, grey.                                                                                                                         |
| 1045 - 1050m | 40    | SILTSTONE: pale brown to medium light grey, blocky to subfissile, very hard (pale brown) to moderately hard (medium light grey), calcareous. |
|              | 60    | MARL: medium grey to very light grey, blocky, soft to very soft, water sensitive, fluffy clays.                                              |
|              | trace | CALCITE: blocky, crystalline, white.                                                                                                         |
|              | trace | FORAMS                                                                                                                                       |
|              | trace | PYRITE: microcrystalline.                                                                                                                    |
| 1050 - 1055m | 30    | SILTSTONE: as above.                                                                                                                         |
|              | 70    | MARL: as above.                                                                                                                              |
| 1055 - 1060m | 30    | SILTSTONE: as above.                                                                                                                         |
|              | 70    | MARL: as above.                                                                                                                              |
| 1060 - 1065m | 10    | SILTSTONE: as above.                                                                                                                         |
|              | 90    | MARL: as above.                                                                                                                              |
|              | trace | FORAMS                                                                                                                                       |
| 1065 - 1070m | 10    | SILTSTONE: as above.                                                                                                                         |
|              | 90    | MARL: as above.                                                                                                                              |
|              | trace | FORAMS                                                                                                                                       |
| 1070 - 1075m | 60    | SILTSTONE: as above.                                                                                                                         |
|              | 40    | MARL: as above.                                                                                                                              |
|              | trace | CRYSTALLINE CARBONATE: coarse, white.                                                                                                        |
| 1075 - 1080m | 70    | SILTSTONE: as above.                                                                                                                         |
|              | 30    | MARL: as above.                                                                                                                              |
| 1080 - 1085m | 85    | SILTSTONE: as above.                                                                                                                         |
|              | 15    | MARL: as above.                                                                                                                              |
| 1085 - 1090m | 70    | SILTSTONE: as above.                                                                                                                         |
|              | 30    | MARL: as above.                                                                                                                              |
| 1090 - 1095m | 90    | SILTSTONE: as above.                                                                                                                         |
|              | 10    | MARL: as above.                                                                                                                              |
| 1095 - 1100  | 80    | SILTSTONE: as above.                                                                                                                         |
|              | 20    | MARL: as above.                                                                                                                              |

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| 1100 - 1105m | 80    | SILTSTONE: medium dark grey to medium light grey, occasionally pale brown, very hard (pale brown), angular and subfissile to firm, blocky (medium light grey), very fine dark carbonaceous flecks, calcareous. |
|              | 20    | MARL: light grey to very light grey, soft to very soft, calcareous, fluffy clays, water sensitive.                                                                                                             |
|              | trace | CRYSTALLINE CALCITE: white.                                                                                                                                                                                    |
| 1105 - 1110m | 60    | SILTSTONE: as above.                                                                                                                                                                                           |
|              | 40    | MARL: as above.                                                                                                                                                                                                |
| 1110 - 1115m | 60    | SILTSTONE: as above.                                                                                                                                                                                           |
|              | 40    | MARL: as above.                                                                                                                                                                                                |
| 1115 - 1120m | 60    | SILTSTONE: as above.                                                                                                                                                                                           |
|              | 40    | MARL: as above.                                                                                                                                                                                                |
| 1120 - 1125m | 60    | SILTSTONE: as above.                                                                                                                                                                                           |
|              | 40    | MARL: as above.                                                                                                                                                                                                |
| 1125 - 1130m | 70    | SILTSTONE: as above.                                                                                                                                                                                           |
|              | 30    | MARL: as above.                                                                                                                                                                                                |
|              | trace | FORAMS: grey, spherical.                                                                                                                                                                                       |
| 1130 - 1135m | 70    | SILTSTONE: as above.                                                                                                                                                                                           |
|              | 30    | MARL: as above.                                                                                                                                                                                                |
|              | trace | FORAMS                                                                                                                                                                                                         |
| 1135 - 1140m | 60    | SILTSTONE: as above.                                                                                                                                                                                           |
|              | 40    | MARL: as above.                                                                                                                                                                                                |
| 1140 - 1145m | 60    | SILTSTONE: as above.                                                                                                                                                                                           |
|              | 40    | MARL: as above.                                                                                                                                                                                                |
|              | trace | MICROPYRITE                                                                                                                                                                                                    |
| 1145 - 1150m | 80    | SILTSTONE: as above.                                                                                                                                                                                           |
|              | 20    | MARL: as above.                                                                                                                                                                                                |
|              | trace | FORAMS                                                                                                                                                                                                         |
| 1150 - 1155m | 60    | SILTSTONE: as above.                                                                                                                                                                                           |
|              | 40    | MARL: as above.                                                                                                                                                                                                |
|              | trace | MICROPYRITE                                                                                                                                                                                                    |
| 1155 - 1160m | 60    | SILTSTONE: as above.                                                                                                                                                                                           |
|              | 40    | MARL: as above.                                                                                                                                                                                                |
|              | trace | FORAMS                                                                                                                                                                                                         |
| 1160 - 1165m | 50    | SILTSTONE: as above.                                                                                                                                                                                           |
|              | 50    | MARL: as above.                                                                                                                                                                                                |
| 1165 - 1170m | 60    | SILTSTONE: medium dark grey to light grey, firm to soft, blocky to subfissile, calcareous, very fine carbonaceous flecks.                                                                                      |
|              | 40    | MARL: light grey to very light grey, soft to very soft, water sensitive, fluffy clays (gumbo).                                                                                                                 |
|              | trace | CARBONATE: coarse, crystalline, white.                                                                                                                                                                         |
| 1170 - 1175m | 60    | SILTSTONE: as above.                                                                                                                                                                                           |
|              | 40    | MARL: as above.                                                                                                                                                                                                |
|              | trace | CARBONATE: as above.                                                                                                                                                                                           |
|              | trace | FORAMS                                                                                                                                                                                                         |
| 1175 - 1180m | 50    | SILTSTONE: as above.                                                                                                                                                                                           |
|              | 50    | MARL: as above.                                                                                                                                                                                                |
|              | trace | FORAMS                                                                                                                                                                                                         |

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| 1180 - 1185m | 50    | SILTSTONE: as above.                                                                                                                |
|              | 50    | MARL: as above.                                                                                                                     |
|              | trace | FORAMS                                                                                                                              |
|              | trace | PYRITE: microcrystalline.                                                                                                           |
|              | trace | CARBONATE: as above.                                                                                                                |
| 1185 - 1190m | 60    | SILTSTONE: as above.                                                                                                                |
|              | 40    | MARL: as above.                                                                                                                     |
|              | trace | FORAMS                                                                                                                              |
|              | trace | PYRITE                                                                                                                              |
|              | trace | CARBONATE                                                                                                                           |
|              | trace | CORAL                                                                                                                               |
| 1190 - 1195m | 60    | SILTSTONE: as above.                                                                                                                |
|              | 40    | MARL: as above.                                                                                                                     |
|              | trace | FORAMS                                                                                                                              |
|              | trace | PYRITE: microcrystalline, common.                                                                                                   |
| 1195 - 1200  | 60    | SILTSTONE: as above.                                                                                                                |
|              | 40    | MARL: as above.                                                                                                                     |
|              | trace | FORAMS                                                                                                                              |
| 1200 - 1205m | 60    | SILTSTONE: as above.                                                                                                                |
|              | 40    | MARL: as above.                                                                                                                     |
|              | trace | FORAMS                                                                                                                              |
|              | trace | CRYSTALLINE CARBONATE                                                                                                               |
| 1205 - 1210m | 60    | SILTSTONE: as above.                                                                                                                |
|              | 40    | MARL: as above.                                                                                                                     |
|              | trace | FORAMS                                                                                                                              |
|              | trace | CRYSTALLINE CARBONATE                                                                                                               |
|              | trace | CORAL                                                                                                                               |
| 1210 - 1215m | 50    | SILTSTONE: as above, trace of dark grey material.                                                                                   |
|              | 50    | MARL: as above.                                                                                                                     |
|              | trace | FORAMS                                                                                                                              |
|              | trace | CORAL                                                                                                                               |
|              | trace | PYRITE: microcrystalline                                                                                                            |
| 1215 - 1220m | 50    | SILTSTONE: medium dark grey to light grey, firm to soft, blocky to subfissile, calcareous, scattered very fine carbonaceous flecks. |
|              | 50    | MARL: light to very light grey, soft to very soft, water sensitive clays.                                                           |
|              | trace | FORAMS                                                                                                                              |
|              | trace | PYRITE: microcrystalline.                                                                                                           |
| 1220 - 1225  | 50    | SILTSTONE: as above.                                                                                                                |
|              | 50    | MARL: as above.                                                                                                                     |
|              | trace | FORAMS                                                                                                                              |
|              | trace | PYRITE: microcrystalline, infilling some forams.                                                                                    |
|              | trace | CRYSTALLINE CARBONATE                                                                                                               |
| 1225 - 1230m | 60    | SILTSTONE: as above.                                                                                                                |
|              | 40    | MARL: as above.                                                                                                                     |
|              | trace | FORAMS                                                                                                                              |
|              | trace | PYRITE: microcrystalline.                                                                                                           |
|              | trace | CRYSTALLINE CARBONATE                                                                                                               |
|              | trace | CORAL                                                                                                                               |
| 1230 - 1235m | 60    | SILTSTONE: as above.                                                                                                                |
|              | 40    | MARL: as above.                                                                                                                     |
|              | trace | FORAMS                                                                                                                              |
|              | trace | PYRITE: microcrystalline.                                                                                                           |
|              | trace | CRYSTALLINE CARBONATE                                                                                                               |

|              |       |                                                                                                                                                       |
|--------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1235 - 1240m | 60    | SILTSTONE: medium to dark grey, occasionally medium brown, medium to firm, occasionally grades to a fine sandstone, angular to subrounded cuttings.   |
|              | 40    | MARL: white to light grey, very soft, carbonaceous flecking (gumbo).                                                                                  |
|              | trace | FORAMS                                                                                                                                                |
|              | trace | OSTRACODS                                                                                                                                             |
| 1240 - 1245m | 60    | SILTSTONE: as above.                                                                                                                                  |
|              | 40    | MARL: as above.                                                                                                                                       |
| 1245 - 1250m | 50    | SILTSTONE: as above.                                                                                                                                  |
|              | 50    | MARL: as above.                                                                                                                                       |
| 1250 - 1255m | 80    | SILTSTONE: as above.                                                                                                                                  |
|              | 20    | MARL: as above.                                                                                                                                       |
|              | trace | GLAUCONITE: angular blocks, dull green, soft.                                                                                                         |
|              | trace | FORAMS: large, dirty.                                                                                                                                 |
|              | trace | QUARTZ: clear, angular, hard, no HCl reaction, hot or cold.                                                                                           |
| 1255 - 1260m | 90    | SILTSTONE: as above.                                                                                                                                  |
|              | 10    | MARL: as above.                                                                                                                                       |
|              | trace | GLAUCONITE                                                                                                                                            |
|              | trace | PYRITE                                                                                                                                                |
|              | trace | FORAMS                                                                                                                                                |
|              | trace | CALCITE?                                                                                                                                              |
| 1260 - 1265m | 90    | SILTSTONE: as above.                                                                                                                                  |
|              | 10    | MARL: as above.                                                                                                                                       |
| 1265 - 1270m | 90    | SILTSTONE: as above.                                                                                                                                  |
|              | 10    | MARL: as above.                                                                                                                                       |
| 1270 - 1275m | 80    | SILTSTONE: as above.                                                                                                                                  |
|              | 20    | MARL: as above.                                                                                                                                       |
| 1275 - 1280m | 80    | SILTSTONE: as above.                                                                                                                                  |
|              | 20    | MARL: as above.                                                                                                                                       |
|              | trace | FORAMS                                                                                                                                                |
|              | trace | GLAUCONITE                                                                                                                                            |
| 1280 - 1285m | 90    | SILTSTONE: as above.                                                                                                                                  |
|              | 10    | MARL: as above.                                                                                                                                       |
|              | trace | FORAMS                                                                                                                                                |
|              | trace | PYRITE                                                                                                                                                |
|              | trace | GLAUCONITE                                                                                                                                            |
| 1285 - 1290m | 90    | SILTSTONE: medium to dark grey, firm to hard, subangular to subrounded cuttings, platy, some elongate, occasionally contain light grey coarse grains. |
|              | 10    | MARL: as above.                                                                                                                                       |
| 1290 - 1295m | 100   | SILTSTONE: as above.                                                                                                                                  |
| 1295 - 1300m | 100   | SILTSTONE: as above.                                                                                                                                  |
| 1300 - 1305m | 100   | SILTSTONE: as above.                                                                                                                                  |
|              | trace | GLAUCONITE: dark green, hard, egg shaped pellet, (1 only).                                                                                            |
| 1305 - 1310m | 100   | SILTSTONE: as above.                                                                                                                                  |
| 1310 - 1315m | 100   | SILTSTONE: as above.                                                                                                                                  |

|              |                                |                                                                                                                                                                                                                                                                |
|--------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1315 - 1320m | 100<br>trace                   | SILTSTONE: as above.<br>GLAUCONITE: one spherical pellet.                                                                                                                                                                                                      |
| 1320 - 1325m | 100<br>trace<br>trace          | SILTSTONE: as above.<br>MARL<br>FORAMS                                                                                                                                                                                                                         |
| 1325 - 1330m | 100                            | SILTSTONE: as above.                                                                                                                                                                                                                                           |
| 1330 - 1335m | 100                            | SILTSTONE: as above.                                                                                                                                                                                                                                           |
| 1335 - 1340m | 100<br><br>trace<br>trace      | SILTSTONE: medium grey, medium to firm,<br>calcareous, subangular to subrounded cuttings,<br>platy, elongate.<br>GLAUCONITE<br>FORAMS                                                                                                                          |
| 1340 - 1345m | 100<br>trace<br>trace          | SILTSTONE: as above.<br>GLAUCONITE<br>FORAMS                                                                                                                                                                                                                   |
| 1345 - 1350m | 100<br>trace<br>trace<br>trace | SILTSTONE: as above.<br>CALCITE<br>FORAMS<br>PYRITE                                                                                                                                                                                                            |
| 1350 - 1355m | 100<br>trace<br>trace          | SILTSTONE: as above.<br>FORAMS<br>GLAUCONITE                                                                                                                                                                                                                   |
| 1355 - 1360m | 100<br>trace<br>trace          | SILTSTONE: as above.<br>FORAMS<br>GLAUCONITE                                                                                                                                                                                                                   |
| 1360 - 1365m | 100<br>trace<br>trace          | SILTSTONE: as above.<br>FORAMS<br>GLAUCONITE                                                                                                                                                                                                                   |
| 1365 - 1370m | 100<br>trace<br>trace<br>trace | SILTSTONE: as above.<br>FORAMS<br>GLAUCONITE<br>SHELL MATERIAL                                                                                                                                                                                                 |
| 1370 - 1375m | 100<br>trace<br>trace<br>trace | SILTSTONE: as above.<br>PYRITE<br>FORAMS<br>SHELL MATERIAL                                                                                                                                                                                                     |
| 1375 - 1380m | 100<br>trace<br>trace          | SILTSTONE: as above.<br>PYRITE<br>FORAMS                                                                                                                                                                                                                       |
| 1380 - 1383m | 100                            | SILTSTONE: as above, grab sample                                                                                                                                                                                                                               |
| 1383 - 1385m | 100<br>trace<br>trace<br>trace | SILTSTONE: as above.<br>PYRITE<br>GLAUCONITE<br>SANDSTONE: fine                                                                                                                                                                                                |
| 1385 - 1390m | 100<br><br>trace<br><br>trace  | SILTSTONE: medium grey, firm, subangular to<br>subrounded cuttings, calcareous.<br>SANDSTONE: fine, white to light grey, hard,<br>subrounded cuttings, often contains glauconite<br>grains.<br>GLAUCONITE: in fine sandstone as well as in<br>discrete grains. |

|                 |       |                                                                                                                                                                                          |
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| 1390 - 1391m    | 40    | SILTSTONE: as above.                                                                                                                                                                     |
|                 | 60    | SANDSTONE: tan brown, soft, medium to coarse quartz grains in a silty brown matrix, glauconite grains very common, sorting poor, very slight HCl reaction, predominantly non calcareous. |
|                 | trace | GLAUCONITE: increasing.                                                                                                                                                                  |
| 1391 - 1394     | 50    | SILTSTONE: as above.                                                                                                                                                                     |
|                 | 50    | SANDSTONE: as above.                                                                                                                                                                     |
|                 | trace | COARSE QUARTZ GRAINS: clear to dull brown, subrounded, hard, occasionally stained.                                                                                                       |
|                 | trace | GLAUCONITE: associated with fine sandstone or as discrete pellets.                                                                                                                       |
| 1394 - 1396m    | 40    | SILTSTONE: as above.                                                                                                                                                                     |
|                 | 60    | SANDSTONE: as above, slight dull yellow fluorescence on occasional grain, milky white crush cut.                                                                                         |
|                 | trace | COARSE QUARTZ GRAINS: clear to milky brown, subangular to subrounded, increasing amount.                                                                                                 |
|                 | trace | GLAUCONITE: as above, increasing amount.                                                                                                                                                 |
| 1396m           |       | REAMING                                                                                                                                                                                  |
|                 | 30    | SANDSTONE: quartz, clear to frosted, rare tan to brown, very coarse to very fine, very angular to rounded - occasional quartz grains showing yellow fluorescence.                        |
|                 | 70    | SILTSTONE: medium grey to light grey, firm to very hard, subrounded to angular cuttings, subfissile.                                                                                     |
|                 | trace | GLAUCONITE: green                                                                                                                                                                        |
|                 | trace | MICROPYRITE                                                                                                                                                                              |
|                 | trace | LITHIC FRAGMENTS                                                                                                                                                                         |
| 1396.6 - 1410.0 |       | Core No. 1                                                                                                                                                                               |
| 1396 - 1400     | 40    | SANDSTONE: quartz, as above, more rounded.                                                                                                                                               |
|                 | 60    | SILTSTONE: as above.                                                                                                                                                                     |
|                 | trace | GLAUCONITE                                                                                                                                                                               |
|                 | trace | MICROPYRITE                                                                                                                                                                              |
| 1400 - 1402m    | 20    | SANDSTONE: as above.                                                                                                                                                                     |
|                 | 80    | SILTSTONE: as above.                                                                                                                                                                     |
|                 | trace | GLAUCONITE                                                                                                                                                                               |
|                 | trace | MICROPYRITE                                                                                                                                                                              |
|                 | trace | LITHIC FRAGMENTS                                                                                                                                                                         |
| 1402 - 1404m    |       | GRAB SAMPLE                                                                                                                                                                              |
|                 | 50    | SANDSTONE: clear to frosty, coarse to very coarse, occasionally tan coloured sandstone, cut; 10% of sample - dull yellow fluorescence, medium grained, no cut.                           |
|                 | 50    | SILTSTONE: medium light to light grey, occasionally tan to pale brown, carbonaceous flecking.                                                                                            |
|                 | trace | PYRITE                                                                                                                                                                                   |
|                 | trace | GLAUCONITE                                                                                                                                                                               |
| 1404 - 1409m    |       | GRAB SAMPLE                                                                                                                                                                              |
|                 | 90    | SANDSTONE: as above, angular, subrounded, loose; 10% dull yellow fluorescence.                                                                                                           |
|                 | trace | SANDSTONE: pale brown, medium grained, cemented.                                                                                                                                         |
|                 | 10    | SILTSTONE: as above.                                                                                                                                                                     |
|                 | trace | GLAUCONITE                                                                                                                                                                               |
|                 | trace | PYRITE                                                                                                                                                                                   |

|                 |       |                                                                                                                                                                                                                                                          |
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| 1409 - 1410m    |       | GRAB SAMPLE                                                                                                                                                                                                                                              |
|                 | 80    | SANDSTONE: quartz, loose sand, medium to very coarse, clear to frosty, occasionally white, very angular to subrounded, fluorescence 15%, no cut.                                                                                                         |
|                 | trace | SANDSTONE: tan to pale brown, medium grained.                                                                                                                                                                                                            |
|                 | 20    | SILTSTONE: as above.                                                                                                                                                                                                                                     |
|                 | trace | PYRITE                                                                                                                                                                                                                                                   |
|                 | trace | GLAUCONITE                                                                                                                                                                                                                                               |
| 1410.0 - 1418.0 |       | Core No. 2                                                                                                                                                                                                                                               |
| 1410 - 1415m    |       | GRAB SAMPLE                                                                                                                                                                                                                                              |
|                 | 90    | SANDSTONE: quartzose, as above, 10% fluorescence, no cut.                                                                                                                                                                                                |
|                 | 10    | SILTSTONE: as above.                                                                                                                                                                                                                                     |
| 1415 - 1420m    |       | GRAB SAMPLE                                                                                                                                                                                                                                              |
|                 | 100   | SANDSTONE: as above.                                                                                                                                                                                                                                     |
|                 | trace | SILTSTONE                                                                                                                                                                                                                                                |
|                 | trace | GLAUCONITE                                                                                                                                                                                                                                               |
|                 | trace | PYRITE                                                                                                                                                                                                                                                   |
| 1420 - 1422     | 100   | SANDSTONE: quartzose, as above, 5% fluorescence, no cut.                                                                                                                                                                                                 |
|                 | trace | SILTSTONE: as above.                                                                                                                                                                                                                                     |
| 1422 - 1424     | 100   | SANDSTONE: as above, trace fluorescence, no cut.                                                                                                                                                                                                         |
|                 | trace | SILTSTONE: as above.                                                                                                                                                                                                                                     |
| 1424 - 1426m    | 100   | SANDSTONE: as above, trace fluorescence, no cut.                                                                                                                                                                                                         |
|                 | trace | SILTSTONE: as above.                                                                                                                                                                                                                                     |
|                 | trace | PYRITE                                                                                                                                                                                                                                                   |
| 1426 - 1430m    | 90    | SANDSTONE: quartzose, mainly clear, angular to subrounded, some milky to white, angular to subrounded, some grey, subangular to rounded, medium to very coarse grained, rare tan to pale brown, fine grained sandstone with trace glauconite (cavings?). |
|                 | 10    | SILTSTONE: medium light grey to medium grey, rare tan to pale brown, firm to very hard, blocky to subfissile.                                                                                                                                            |
|                 | trace | PYRITE: metallic dull yellow, very hard, up to very coarse sized agglomerates.                                                                                                                                                                           |
| 1430 - 1435m    | 100   | SANDSTONE: quartzose, as above.                                                                                                                                                                                                                          |
|                 | trace | SILTSTONE: calcareous, probably cavings.                                                                                                                                                                                                                 |
|                 | trace | PYRITE                                                                                                                                                                                                                                                   |
|                 | trace | GLAUCONITE                                                                                                                                                                                                                                               |
| 1435 - 1440m    | 100   | SANDSTONE: quartzose, as above.                                                                                                                                                                                                                          |
|                 | trace | SILTSTONE                                                                                                                                                                                                                                                |
|                 | trace | PYRITE                                                                                                                                                                                                                                                   |
|                 | trace | GLAUCONITE (cavings?)                                                                                                                                                                                                                                    |
| 1440 - 1445m    | 100   | SANDSTONE: quartzose, as above.                                                                                                                                                                                                                          |
|                 | trace | SILTSTONE                                                                                                                                                                                                                                                |
|                 | trace | PYRITE                                                                                                                                                                                                                                                   |
| 1445 - 1450m    | 100   | SANDSTONE: quartzose, as above.                                                                                                                                                                                                                          |
|                 | trace | SILTSTONE                                                                                                                                                                                                                                                |
|                 | trace | PYRITE                                                                                                                                                                                                                                                   |
| 1450 - 1455m    | 100   | SANDSTONE: quartzose, as above.                                                                                                                                                                                                                          |
|                 | trace | PYRITE                                                                                                                                                                                                                                                   |



|              |                                 |                                                                                                                                                                                                                                                                 |
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| 1455 - 1460m | 100<br>trace                    | SANDSTONE: quartzose, as above.<br>PYRITE                                                                                                                                                                                                                       |
| 1460 - 1465m | 100<br>trace                    | SANDSTONE: quartzose, as above.<br>PYRITE                                                                                                                                                                                                                       |
| 1465 - 1470m | 100<br>trace                    | SANDSTONE: quartzose, as above.<br>PYRITE                                                                                                                                                                                                                       |
| 1470 - 1475m | 80<br>20<br>trace               | SANDSTONE: quartzose, as above.<br>COAL: black, hard, brittle, angular.<br>SILTSTONE: dark brown to grey, hard, non calcareous.                                                                                                                                 |
| 1475 - 1478m | 60<br>40                        | SANDSTONE: quartzose, as above, no shows.<br>COAL: as above.                                                                                                                                                                                                    |
| 1478 - 1480m | 40<br><br>60<br>trace           | SANDSTONE: quartzose, clear to frosted, subangular to well rounded, medium to very coarse grained.<br>COAL: hard, black, brittle.<br>SILTSTONE: as above.                                                                                                       |
| 1480 - 1482m | 70<br>30                        | SANDSTONE: quartzose, as above.<br>COAL: as above.                                                                                                                                                                                                              |
| 1482 - 1485m | 80<br>10<br>10                  | SANDSTONE: quartzose, as above.<br>COAL: as above.<br>SILTSTONE: brown to grey, non calcareous, carbonaceous.                                                                                                                                                   |
| 1485 - 1490m | 90<br>10<br>trace<br><br>trace  | SANDSTONE: quartzose, as above.<br>COAL: as above.<br>SILTSTONE: brown, non calcareous, carbonaceous, grades to fine sandstone.<br>PYRITE                                                                                                                       |
| 1490 - 1495m | 80<br>10<br>10<br>trace         | SANDSTONE: quartzose, as above.<br>COAL: as above.<br>SILTSTONE: as above.<br>PYRITE: common                                                                                                                                                                    |
| 1495 - 1498m | 30<br>60<br>10                  | SANDSTONE: quartzose, as above.<br>COAL: as above.<br>SILTSTONE: brown to grey, firm to soft, carbonaceous, grades to fine sandstone.                                                                                                                           |
| 1498 - 1500m | 70<br>20<br>10<br>trace         | SANDSTONE: as above.<br>COAL: as above.<br>SILTSTONE: as above.<br>PYRITE                                                                                                                                                                                       |
| 1500 - 1505  | 70<br><br>10<br>20<br><br>trace | SANDSTONE: quartzose, clear to frosted, subangular to well rounded, medium to very coarse grained.<br>COAL: hard, black, brittle, blocky.<br>SILTSTONE: brown to grey, firm to soft, carbonaceous, grades to fine sandstone.<br>PYRITE: microcrystalline lumps. |
| 1505 - 1510m | 10<br>90<br>trace<br>trace      | SANDSTONE: quartzose, as above.<br>COAL: as above, some shaley coal.<br>SILTSTONE: as above.<br>PYRITE                                                                                                                                                          |

|                 |       |                                                                                      |
|-----------------|-------|--------------------------------------------------------------------------------------|
| 1510 - 1515m    | 20    | SANDSTONE: as above.                                                                 |
|                 | 80    | COAL: as above, some shaley coal.                                                    |
|                 | trace | SILTSTONE: as above.                                                                 |
| 1515 - 1520m    | 20    | SANDSTONE: as above.                                                                 |
|                 | 60    | COAL: as above.                                                                      |
|                 | 20    | SILTSTONE: as above.                                                                 |
|                 |       | 5% fluorescence overall, no cut, no crush cut.                                       |
| 1520 - 1525m    | trace | SANDSTONE: as above.                                                                 |
|                 | 90    | COAL: as above.                                                                      |
|                 | 10    | SILTSTONE: as above.                                                                 |
|                 |       | 5% fluorescence.                                                                     |
| 1525 - 1530m    | 10    | SANDSTONE: as above, some fine grained sandstone, clear, quartzose.                  |
|                 | 40    | COAL: as above.                                                                      |
|                 | 50    | SILTSTONE: as above.                                                                 |
|                 | trace | PYRITE                                                                               |
|                 |       | 5% fluorescence, no cut.                                                             |
| 1530 - 1535m    | 30    | SILTSTONE: brown/grey, soft, non calcareous, micaceous.                              |
|                 | 10    | COAL: as above.                                                                      |
|                 | 60    | SANDSTONE: as above, quartzose.                                                      |
| 1535 - 1540m    | 80    | SANDSTONE: as above.                                                                 |
|                 | 20    | COAL: as above.                                                                      |
|                 | trace | SILTSTONE                                                                            |
|                 | trace | PYRITE                                                                               |
| 1540 - 1545m    | 60    | SANDSTONE: as above.                                                                 |
|                 | 30    | COAL: as above.                                                                      |
|                 | 10    | SILTSTONE: as above.                                                                 |
| 1545.2 - 1558.2 |       | Core No. 3.                                                                          |
| 1558 - 1560m    | 40    | SANDSTONE: quartzose, white to clear, subangular to subrounded, loose quartz grains. |
|                 | 40    | SILTSTONE: grey to dark brown, grades to fine sandstone, carbonaceous, no shows.     |
|                 | 20    | COAL: black, brittle.                                                                |
| 1560 - 1565m    | 40    | SANDSTONE: quartzose, as above.                                                      |
|                 | 60    | SILTSTONE: as above.                                                                 |
|                 | trace | PYRITE                                                                               |
|                 | trace | COAL                                                                                 |
| 1565 - 1570m    | 60    | SANDSTONE: as above.                                                                 |
|                 | 40    | SILTSTONE: as above.                                                                 |
| 1570 - 1575m    | 30    | SANDSTONE: as above.                                                                 |
|                 | 70    | SILTSTONE: as above.                                                                 |
|                 | trace | PYRITE                                                                               |
| 1575 - 1580m    | 40    | SANDSTONE: as above.                                                                 |
|                 | 60    | SILTSTONE: as above.                                                                 |
| 1580 - 1585m    | 10    | SANDSTONE: as above.                                                                 |
|                 | 60    | SILTSTONE: as above.                                                                 |
|                 | 30    | COAL: black, hard, blocky.                                                           |
| 1585 - 1590m    | 5     | SANDSTONE: as above.                                                                 |
|                 | 85    | SILTSTONE: grading to mud.                                                           |
|                 | 10    | COAL: as above.                                                                      |
|                 | trace | PYRITE                                                                               |

|              |       |                                                                                                    |
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| 1590 - 1595m | 5     | QUARTZ: occasionally very coarse, rounded grains.                                                  |
|              | 55    | SILTSTONE: grading to mud.                                                                         |
|              | 40    | COAL: as above.                                                                                    |
|              | trace | PYRITE                                                                                             |
| 1595 - 1600m | trace | SANDSTONE: quartzose, as above.                                                                    |
|              | 10    | SILTSTONE: carbonaceous.                                                                           |
|              | 90    | COAL: as above.                                                                                    |
| 1600 - 1605m | trace | SANDSTONE: as above.                                                                               |
|              | 20    | SILTSTONE: as above.                                                                               |
|              | 80    | COAL: as above.                                                                                    |
|              | trace | PYRITE                                                                                             |
| 1605 - 1610m | trace | SANDSTONE: as above.                                                                               |
|              | 90    | SILTSTONE: brown, very soft, grades to a mud.                                                      |
|              | 10    | COAL: as above.                                                                                    |
| 1610 - 1615m | 70    | SILTSTONE: muddy matrix.                                                                           |
|              | 30    | COAL: as above.                                                                                    |
|              | trace | SANDSTONE: very coarse quartz grains.                                                              |
| 1615 - 1620  | 50    | COAL: hard, black, shiney, angular.                                                                |
|              | 50    | SILTSTONE: as above.                                                                               |
| 1620 - 1625m | 90    | COAL: as above.                                                                                    |
|              | 10    | SILTSTONE: as above.                                                                               |
| 1625 - 1630m | 90    | SILTSTONE: as above.                                                                               |
|              | 10    | COAL: as above.                                                                                    |
| 1630 - 1632  | 80    | SILTSTONE: brown, soft to firm, carbonaceous, grades to a fine sandstone or mudstone.              |
| C.B.U.       | 20    | COAL: as above.                                                                                    |
| 1632 - 1635m | 10    | SANDSTONE: as above.                                                                               |
|              | 30    | COAL: as above.                                                                                    |
|              | 60    | SILTSTONE: as above.                                                                               |
| 1635 - 1640m | 50    | SANDSTONE: quartzose, as above.                                                                    |
|              | 50    | SILTSTONE: as above.                                                                               |
| 1640 - 1645m | 10    | SANDSTONE: quartzose, as above.                                                                    |
|              | 10    | SILTSTONE: as above.                                                                               |
|              | 80    | COAL: as above, some shaley coal.                                                                  |
| 1645 - 1650m | 70    | SANDSTONE: quartzose, as above.                                                                    |
|              | 20    | SILTSTONE: as above.                                                                               |
|              | 10    | COAL: as above.                                                                                    |
|              | trace | PYRITE                                                                                             |
| 1650 - 1655m | 90    | SANDSTONE: quartzose, frosted to clear, medium to coarse grained, subrounded to rounded, as above. |
|              | 10    | SILTSTONE: as above.                                                                               |
|              | trace | COAL                                                                                               |
| 1655 - 1660m | 40    | SANDSTONE: quartzose, as above.                                                                    |
|              | 50    | SILTSTONE: as above.                                                                               |
|              | 10    | COAL: as above.                                                                                    |
|              | trace | PYRITE                                                                                             |
| 1660 - 1665m | 10    | SANDSTONE: as above.                                                                               |
|              | 90    | SILTSTONE: as above.                                                                               |
|              | trace | COAL                                                                                               |
|              | trace | PYRITE                                                                                             |

|              |       |                                                                                                                              |
|--------------|-------|------------------------------------------------------------------------------------------------------------------------------|
| 1665 - 1670m | 100   | COAL                                                                                                                         |
| 1670 - 1675m | 5     | COAL: black, shiny, brittle, hard.                                                                                           |
|              | 95    | SILTSTONE: pale brown to light grey, very soft.                                                                              |
|              | trace | PYRITE                                                                                                                       |
|              | trace | SANDSTONE: quartzose                                                                                                         |
| 1675 - 1680m | 10    | SANDSTONE: quartzose, fine to coarse quartz grains, clear, white, frosty, subangular to subrounded, loose.                   |
|              | 90    | SILTSTONE: brown, soft to very soft, micaceous, carbonaceous, grades to a mudstone, sample very muddy.                       |
| 1680 - 1685m | 10    | SANDSTONE: as above.                                                                                                         |
|              | 90    | SILTSTONE: as above.                                                                                                         |
| 1685 - 1690m | 100   | SILTSTONE: as above.                                                                                                         |
|              | trace | SANDSTONE                                                                                                                    |
|              | trace | COAL                                                                                                                         |
| 1690 - 1695m | 100   | SILTSTONE: as above.                                                                                                         |
|              | trace | SANDSTONE                                                                                                                    |
|              | trace | COAL                                                                                                                         |
| 1695 - 1700m | 20    | SANDSTONE: as above.                                                                                                         |
|              | 80    | SILTSTONE: as above.                                                                                                         |
|              | trace | COAL                                                                                                                         |
| 1700 - 1705m | 100   | SILTSTONE: as above.                                                                                                         |
|              | trace | COAL                                                                                                                         |
|              | trace | SANDSTONE                                                                                                                    |
| 1705 - 1710m | 50    | SILTSTONE: as above.                                                                                                         |
|              | 50    | SANDSTONE: as above.                                                                                                         |
| 1710 - 1715m | 100   | SILTSTONE: grey to brown, soft to medium, subrounded cuttings, carbonaceous flecking to very carbonaceous, muddy.            |
|              | trace | COAL                                                                                                                         |
|              | trace | SANDSTONE: loose, clear to frosty, subangular to subrounded grains, coarse.                                                  |
| 1715 - 1720m | 60    | SILTSTONE: as above.                                                                                                         |
|              | 40    | SANDSTONE: as above.                                                                                                         |
|              | trace | COAL                                                                                                                         |
| 1720 - 1725m | 40    | SILTSTONE: as above.                                                                                                         |
|              | 60    | SANDSTONE: quartzose, predominantly clear, subangular to angular, medium to coarse loose grained quartz grains, well sorted. |
|              | trace | PYRITE                                                                                                                       |
|              | trace | SANDSTONE: fine                                                                                                              |
| 1725 - 1730m | 40    | SILTSTONE: as above.                                                                                                         |
|              | 60    | SANDSTONE: as above.                                                                                                         |
|              | trace | PYRITE                                                                                                                       |
| 1730 - 1735m | 50    | SANDSTONE: as above.                                                                                                         |
|              | 50    | SILTSTONE: as above.                                                                                                         |
|              | trace | PYRITE                                                                                                                       |
|              | trace | COAL                                                                                                                         |
| 1735 - 1738m | 20    | SANDSTONE: as above.                                                                                                         |
|              | 80    | SILTSTONE: as above.                                                                                                         |
|              | trace | PYRITE                                                                                                                       |
|              | trace | COAL                                                                                                                         |
|              | trace | MUDSTONE                                                                                                                     |

|              |       |                                                                                                                                                     |
|--------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 1738 - 1740m | 100   | SILTSTONE: light brown to pale brown, light grey to medium light grey, firm to soft, ranging to very fine sandstone otherwise blocky to subfissile. |
|              | trace | SANDSTONE: quartzose, as above.                                                                                                                     |
|              | trace | COAL                                                                                                                                                |
|              | trace | MUDSTONE                                                                                                                                            |
| 1740 - 1745m | 40    | SANDSTONE: quartzose, clear to frosty, fine to medium grained, angular to subrounded.                                                               |
|              | 60    | SILTSTONE: as above.                                                                                                                                |
|              | trace | COAL                                                                                                                                                |
|              | trace | PYRITE                                                                                                                                              |
|              | trace | MUDSTONE                                                                                                                                            |
| 1745 - 1750m | 10    | SANDSTONE: quartzose, as above.                                                                                                                     |
|              | 10    | COAL: as above.                                                                                                                                     |
|              | 80    | SILTSTONE: as above.                                                                                                                                |
|              | trace | MUDSTONE                                                                                                                                            |
| 1750 - 1755m | 40    | SANDSTONE: quartzose, as above.                                                                                                                     |
|              | 60    | SILTSTONE: as above.                                                                                                                                |
|              | trace | COAL                                                                                                                                                |
|              | trace | MUDSTONE                                                                                                                                            |
| 1755 - 1760m | 40    | SANDSTONE: as above.                                                                                                                                |
|              | 60    | SILTSTONE: as above, grading to very fine sandstone.                                                                                                |
|              | trace | COAL                                                                                                                                                |
|              | trace | MUDSTONE                                                                                                                                            |
| 1760 - 1765m | 40    | SANDSTONE: as above.                                                                                                                                |
|              | 60    | SILTSTONE: as above.                                                                                                                                |
|              | trace | PYRITE: coarse crystalline lumps                                                                                                                    |
| 1765 - 1770m | 10    | COAL                                                                                                                                                |
|              | 40    | SANDSTONE: rare very coarse grey grains.                                                                                                            |
|              | 50    | SILTSTONE: as above.                                                                                                                                |
|              | trace | PYRITE                                                                                                                                              |
| 1770 - 1775m | 40    | SANDSTONE: quartzose, clear to frosty, fine to coarse grained.                                                                                      |
|              | 60    | SILTSTONE: grading to fine sandstone, light grey to medium grey, carbonaceous, firm to soft, micaceous.                                             |
|              | trace | PYRITE                                                                                                                                              |
|              | trace | COAL                                                                                                                                                |
| 1775 - 1780m | 30    | SANDSTONE: quartzose, clear, frosty, angular to subangular, fine to coarse grained.                                                                 |
|              | 60    | SILTSTONE: grading to a fine sandstone, light grey to medium grey, carbonaceous, firm to soft, micaceous.                                           |
|              | trace | PYRITE                                                                                                                                              |
|              | trace | COAL                                                                                                                                                |
| 1780 - 1785m | 70    | SILTSTONE: as above, less muddy.                                                                                                                    |
|              | 30    | SANDSTONE: quartzose, as above.                                                                                                                     |
|              | trace | PYRITE                                                                                                                                              |
| 1785 - 1790m | 70    | SILTSTONE: as above.                                                                                                                                |
|              | 30    | SANDSTONE: as above.                                                                                                                                |
| 1790 - 1795m | 70    | SILTSTONE: as above.                                                                                                                                |
|              | 30    | SANDSTONE: as above.                                                                                                                                |
| 1795 - 1800m | 100   | SILTSTONE: as above.                                                                                                                                |
|              | trace | COAL                                                                                                                                                |
|              | trace | SANDSTONE: quartzose.                                                                                                                               |

|              |                                    |                                                                                                                                                                                                                                 |
|--------------|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1800 - 1805m | 80<br>10<br>10                     | SILTSTONE: as above.<br>SANDSTONE: as above.<br>COAL: as above.                                                                                                                                                                 |
| 1805 - 1810m | 100<br>trace                       | SILTSTONE: as above.<br>PYRITE                                                                                                                                                                                                  |
| 1810 - 1815m | 100<br>trace<br>trace<br>trace     | SILTSTONE: as above.<br>PYRITE<br>COAL<br>SANDSTONE: quartzose                                                                                                                                                                  |
| 1815 - 1820m | 60<br>40<br>trace                  | COAL<br>SILTSTONE: as above.<br>SANDSTONE: quartzose                                                                                                                                                                            |
| 1820 - 1825m | 100<br>trace<br>trace              | COAL<br>SILTSTONE<br>SANDSTONE: quartzose                                                                                                                                                                                       |
| 1825 - 1830m | 90<br>10<br>trace<br>trace         | SILTSTONE: as above.<br>COAL: as above.<br>SANDSTONE: quartzose.<br>PYRITE                                                                                                                                                      |
| 1830 - 1835m | 100<br>trace                       | SILTSTONE: as above.<br>SANDSTONE: quartzose.                                                                                                                                                                                   |
| 1835 - 1840m | 100<br>trace<br>trace<br>trace     | SILTSTONE: as above.<br>SANDSTONE: quartzose.<br>PYRITE<br>COAL                                                                                                                                                                 |
| 1840 - 1845m | 90<br><br>10<br><br>trace<br>trace | SANDSTONE: clear to white, medium to coarse grained, angular to subrounded, quartzose.<br>SILTSTONE: light grey to brown to medium dark grey, grading to very fine sandstone, micaceous, carbonaceous flecks.<br>PYRITE<br>COAL |
| 1845 - 1850m | 10<br>70<br>20                     | SANDSTONE: as above.<br>SILTSTONE: as above.<br>COAL                                                                                                                                                                            |
| 1850 - 1855m | 10<br>90<br>trace<br>trace         | SANDSTONE: quartzose, as above.<br>SILTSTONE: as above.<br>COAL<br>PYRITE                                                                                                                                                       |
| 1855 - 1860m | 70<br>30<br>trace                  | SILTSTONE: as above.<br>SANDSTONE: quartzose, as above.<br>PYRITE                                                                                                                                                               |
| 1860 - 1865m | 80<br>20                           | SANDSTONE: quartzose, as above.<br>SILTSTONE: as above.                                                                                                                                                                         |
| 1865 - 1870m | 70<br>30<br>trace<br>trace         | SANDSTONE: quartzose, as above.<br>SILTSTONE: as above.<br>PYRITE<br>COAL                                                                                                                                                       |
| 1870 - 1875m | 10<br>70<br>20<br>trace            | SANDSTONE: quartzose, as above.<br>SILTSTONE: as above.<br>COAL<br>PYRITE                                                                                                                                                       |

|              |       |                                                                                                                                                             |
|--------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1875 - 1880m | 100   | SILTSTONE: predominantly grey, occasionally brown, predominantly non carbonaceous, grades to carbonaceous, firm, micaceous.                                 |
|              | trace | PYRITE                                                                                                                                                      |
|              | trace | SANDSTONE: quartzose                                                                                                                                        |
| 1880 - 1883m | 100   | SILTSTONE: as above.                                                                                                                                        |
|              | trace | PYRITE                                                                                                                                                      |
|              | trace | SANDSTONE: quartzose.                                                                                                                                       |
|              | trace | COAL                                                                                                                                                        |
| 1883 - 1885m | 100   | SILTSTONE: as above.                                                                                                                                        |
|              | trace | COAL                                                                                                                                                        |
| 1885 - 1890m | 70    | SILTSTONE: grey, firm to hard, occasionally carbonaceous, micaceous.                                                                                        |
|              | 20    | SANDSTONE: fine to moderately coarse grained, subangular to angular, loose, well sorted, quartzose grains, no shows.                                        |
|              | 10    | COAL                                                                                                                                                        |
| 1890 - 1895m | 100   | SILTSTONE: as above.                                                                                                                                        |
|              | trace | SANDSTONE: quartzose                                                                                                                                        |
|              | trace | PYRITE                                                                                                                                                      |
| 1895 - 1900m | 100   | SILTSTONE: as above.                                                                                                                                        |
|              | trace | PYRITE                                                                                                                                                      |
|              | trace | SANDSTONE: quartzose.                                                                                                                                       |
| 1900 - 1905m | 80    | SILTSTONE: as above.                                                                                                                                        |
|              | 20    | SANDSTONE: quartzose, as above.                                                                                                                             |
| 1905 - 1910m | 40    | SILTSTONE: grey to dark grey, firm to hard, occasionally soft, occasionally very carbonaceous, micaceous.                                                   |
|              | 60    | SANDSTONE: clear to white, medium to coarse grains, loose, well sorted, subangular to angular, quartzose grains.                                            |
|              | trace | PYRITE                                                                                                                                                      |
| 1910 - 1915m | 60    | COAL                                                                                                                                                        |
|              | 30    | SANDSTONE: as above.                                                                                                                                        |
|              | 10    | SILTSTONE: as above.                                                                                                                                        |
| 1915 - 1920m | 40    | SANDSTONE: as above.                                                                                                                                        |
|              | 60    | SILTSTONE: muddy, as above.                                                                                                                                 |
|              | trace | COAL                                                                                                                                                        |
| 1924m        |       | GRAB SAMPLE                                                                                                                                                 |
|              | 20    | SANDSTONE: as above.                                                                                                                                        |
|              | 30    | SILTSTONE: as above.                                                                                                                                        |
|              | 50    | COAL                                                                                                                                                        |
| 1924 - 1925m | 60    | SANDSTONE: clear to white, medium to very coarse grained, angular to well rounded.                                                                          |
|              | 20    | SILTSTONE: very light grey to medium dark grey, soft to moderately hard, blocky to subfissile, grading to shale, occasionally very carbonaceous, micaceous. |
|              | 20    | COAL: black, blocky, brittle, hard.                                                                                                                         |
|              | trace | PYRITE: coarse grained biotite.                                                                                                                             |
| 1925 - 1930m | 10    | SANDSTONE: as above.                                                                                                                                        |
|              | 10    | SILTSTONE: as above.                                                                                                                                        |
|              | 80    | COAL: as above.                                                                                                                                             |
|              | trace | PYRITE                                                                                                                                                      |

|              |                                |                                                                                                                                                                                                                                                                                                                                                                 |
|--------------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1930 - 1935m | 70<br>20<br>10                 | SANDSTONE: as above, no shows.<br>SILTSTONE: as above.<br>COAL: as above.                                                                                                                                                                                                                                                                                       |
| 1935 - 1940m | 80<br>20<br>trace              | SANDSTONE: as above.<br>SILTSTONE: as above.<br>COAL                                                                                                                                                                                                                                                                                                            |
| 1940 - 1945m | 70<br>20<br>10<br>trace        | SANDSTONE: as above.<br>SILTSTONE: as above.<br>COAL: as above.<br>PYRITE                                                                                                                                                                                                                                                                                       |
| 1945 - 1950m | 60<br>40<br>trace              | SANDSTONE: as above.<br>SILTSTONE: as above.<br>PYRITE                                                                                                                                                                                                                                                                                                          |
| 1950 - 1955m | 60<br>40<br><br>trace<br>trace | SANDSTONE: as above.<br>SILTSTONE: as above, very carbonaceous, very micaceous, grading to a very fine sandstone.<br>COAL<br>PYRITE                                                                                                                                                                                                                             |
| 1955 - 1960m | 70<br><br>30<br><br><br>trace  | SANDSTONE: clear to white, coarse to very coarse, subangular to subrounded, quartzose.<br>SILTSTONE: very light grey to dark grey, blocky to subfissile, soft to moderately hard, micaceous, occasionally very carbonaceous grading to a very fine quartzose sandstone, fine carbonaceous laminae in some cuttings.<br>PYRITE: microcrystalline coarse grained. |
| 1960 - 1965m | 50<br>50<br>trace              | SANDSTONE: as above.<br>SILTSTONE: as above.<br>PYRITE                                                                                                                                                                                                                                                                                                          |
| 1965 - 1970m | 60<br>40<br>trace              | SANDSTONE: as above.<br>SILTSTONE: as above.<br>PYRITE                                                                                                                                                                                                                                                                                                          |
| 1970 - 1975m | 60<br>40<br>trace              | SANDSTONE: as above.<br>SILTSTONE: as above.<br>PYRITE                                                                                                                                                                                                                                                                                                          |
| 1975 - 1980m | 80<br>20<br>trace              | SANDSTONE: as above.<br>SILTSTONE: as above.<br>PYRITE                                                                                                                                                                                                                                                                                                          |
| 1980 - 1985m | 80<br>20<br>trace              | SANDSTONE: as above.<br>SILTSTONE: as above.<br>PYRITE                                                                                                                                                                                                                                                                                                          |
| 1985 - 1990m | 60<br>40<br><br>trace<br>trace | SANDSTONE: as above.<br>SILTSTONE: as above, mainly carbonaceous, dark grey.<br>PYRITE: amount increasing.<br>COAL                                                                                                                                                                                                                                              |
| 1990 - 1995m | 50<br><br>50<br>trace          | SANDSTONE: as above, some aggregates of quartz grains cemented by pyrite.<br>SILTSTONE: as above.<br>PYRITE                                                                                                                                                                                                                                                     |
| 1995 - 2000m | 70<br>30<br>trace<br>trace     | SANDSTONE: as above.<br>SILTSTONE: as above, less carbonaceous.<br>PYRITE<br>COAL                                                                                                                                                                                                                                                                               |



|              |                            |                                                                                                                                                                                                                                                                                                                 |
|--------------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2000 - 2005m | 20<br>80<br>trace          | SANDSTONE: as above.<br>SILTSTONE: as above, mainly light grey, soft.<br>PYRITE                                                                                                                                                                                                                                 |
| 2005 - 2010m | 10<br>90<br>trace          | SANDSTONE: as above.<br>SILTSTONE: as above, high mud/clay content.<br>PYRITE                                                                                                                                                                                                                                   |
| 2010 - 2015m | 70<br>30<br>trace          | SANDSTONE: as above.<br>SILTSTONE: as above.<br>PYRITE                                                                                                                                                                                                                                                          |
| 2015 - 2020m | 80<br>20<br>trace<br>trace | SANDSTONE: as above, medium grained.<br>SILTSTONE: as above.<br>COAL<br>MICA                                                                                                                                                                                                                                    |
| 2020 - 2025m | 80<br>20<br>trace          | SANDSTONE: as above.<br>SILTSTONE: as above.<br>PYRITE                                                                                                                                                                                                                                                          |
| 2025 - 2030m | 95<br>5<br>trace<br>trace  | SANDSTONE: as above.<br>SILTSTONE: as above.<br>PYRITE<br>COAL                                                                                                                                                                                                                                                  |
| 2030 - 2035m | 100<br><br>trace<br>trace  | SANDSTONE: clean, predominantly clear to white, coarse to very coarse, subangular to subrounded, quartzose, occasionally associated with pyrite.<br>SILTSTONE: very light grey to medium dark grey, soft to firm, carbonaceous in parts.<br>PYRITE: coarse to very coarse grained, microcrystalline aggregates. |
| 2035 - 2040m | 95<br>5<br>trace           | SANDSTONE: as above.<br>SILTSTONE: as above.<br>PYRITE                                                                                                                                                                                                                                                          |
| 2040 - 2045m | 95<br>5<br>trace           | SANDSTONE: as above.<br>SILTSTONE: as above.<br>PYRITE: associated with quartz.                                                                                                                                                                                                                                 |
| 2045 - 2050m | 100<br>trace<br>trace      | SANDSTONE: as above.<br>SILTSTONE: as above.<br>PYRITE: as above.                                                                                                                                                                                                                                               |
| 2050 - 2055m | 100<br>trace<br>trace      | SANDSTONE: as above.<br>SILTSTONE: as above.<br>PYRITE: as above.                                                                                                                                                                                                                                               |
| 2055 - 2060m | 80<br>20<br><br>trace      | SANDSTONE: as above.<br>SILTSTONE: as above, grading towards very fine sandstone.<br>PYRITE                                                                                                                                                                                                                     |
| 2060 - 2065m | 80<br>20<br>trace<br>trace | SANDSTONE: as above.<br>SILTSTONE: as above.<br>PYRITE<br>COAL                                                                                                                                                                                                                                                  |
| 2065 - 2070m | 80<br>20<br>trace          | SANDSTONE: as above.<br>SILTSTONE: as above.<br>PYRITE                                                                                                                                                                                                                                                          |

|                |       |                                                                                                                                                                                                                                                                             |
|----------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2070 - 2075m   | 60    | SANDSTONE: clear to white, medium to very coarse grained, angular to subrounded quartz grains.                                                                                                                                                                              |
|                | 15    | SILTSTONE: very light grey to medium dark grey, soft to moderately hard, occasionally very carbonaceous, blocky to subfissile, grading to very fine sandstone.                                                                                                              |
|                | 25    | COAL: black, shiny, blocky to subfissile.                                                                                                                                                                                                                                   |
|                | trace | PYRITE: coarse grained microcrystalline.                                                                                                                                                                                                                                    |
|                | trace | Dull yellow fluorescence, no cut.                                                                                                                                                                                                                                           |
| 2075 - 2080m   | 70    | SANDSTONE: as above.                                                                                                                                                                                                                                                        |
|                | 20    | SILTSTONE: as above.                                                                                                                                                                                                                                                        |
|                | 10    | COAL: as above.                                                                                                                                                                                                                                                             |
|                | trace | PYRITE                                                                                                                                                                                                                                                                      |
| 2081.5m        |       | GRAB SAMPLE                                                                                                                                                                                                                                                                 |
|                | 100   | COAL                                                                                                                                                                                                                                                                        |
|                | trace | SANDSTONE: as above.                                                                                                                                                                                                                                                        |
| 2081.5 - 2085m | 60    | SANDSTONE: as above.                                                                                                                                                                                                                                                        |
|                | 20    | SILTSTONE: as above.                                                                                                                                                                                                                                                        |
|                | 20    | COAL: as above.                                                                                                                                                                                                                                                             |
|                | trace | PYRITE: fairly common.                                                                                                                                                                                                                                                      |
| 2085 - 2090m   | 60    | SANDSTONE: as above.                                                                                                                                                                                                                                                        |
|                | 40    | SILTSTONE: as above.                                                                                                                                                                                                                                                        |
|                | trace | PYRITE                                                                                                                                                                                                                                                                      |
|                | trace | COAL                                                                                                                                                                                                                                                                        |
| 2090 - 2095m   | 70    | SANDSTONE: as above.                                                                                                                                                                                                                                                        |
|                | 30    | SILTSTONE: as above.                                                                                                                                                                                                                                                        |
|                | trace | PYRITE                                                                                                                                                                                                                                                                      |
| 2095 - 2100m   | 60    | SANDSTONE: as above.                                                                                                                                                                                                                                                        |
|                | 40    | SILTSTONE: as above.                                                                                                                                                                                                                                                        |
|                | trace | PYRITE                                                                                                                                                                                                                                                                      |
| 2100 - 2105    | 60    | SILTSTONE: grey to dark grey, firm to hard, subrounded to subangular cuttings, very carbonaceous in part, micaceous, grades to a fine sandstone.                                                                                                                            |
|                | 40    | SANDSTONE: clear to frosty, quartzose grains, in part loose, very coarse grained, rounded to subangular loose quartz grains; in part well cemented, medium to coarse grained, subangular to angular quartz sandstone, hard, dull yellow fluorescence, no cut, no crush cut. |
|                | trace | PYRITE                                                                                                                                                                                                                                                                      |
|                | trace | COAL                                                                                                                                                                                                                                                                        |
| 2105 - 2110    | 50    | SILTSTONE: as above.                                                                                                                                                                                                                                                        |
|                | 50    | SANDSTONE: as above.                                                                                                                                                                                                                                                        |
|                | trace | PYRITE                                                                                                                                                                                                                                                                      |
|                | trace | COAL                                                                                                                                                                                                                                                                        |
| 2110 - 2115m   | 70    | SILTSTONE: as above.                                                                                                                                                                                                                                                        |
|                | 20    | SANDSTONE: as above.                                                                                                                                                                                                                                                        |
|                | 10    | COAL: as above.                                                                                                                                                                                                                                                             |
| 2115 - 2120m   | 80    | SILTSTONE: as above.                                                                                                                                                                                                                                                        |
|                | 20    | SANDSTONE: as above.                                                                                                                                                                                                                                                        |
|                | trace | PYRITE                                                                                                                                                                                                                                                                      |
| 2120 - 2125m   | 40    | SILTSTONE: as above.                                                                                                                                                                                                                                                        |
|                | 60    | SANDSTONE: as above, 10% dull yellow - green fluorescence, no cut.                                                                                                                                                                                                          |

|              |       |            |                                                                                                                                                                                                        |
|--------------|-------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2125 - 2130m | 40    | SILTSTONE: | as above.                                                                                                                                                                                              |
|              | 60    | SANDSTONE: | as above, 10% dull yellow - green<br>fluorescence, no cut.                                                                                                                                             |
|              | trace | COAL       |                                                                                                                                                                                                        |
| 2130 - 2135m | 10    | SANDSTONE: | as above.                                                                                                                                                                                              |
|              | 90    | SILTSTONE: | as above.                                                                                                                                                                                              |
| 2135 - 2140m | 40    | SANDSTONE: | as above.                                                                                                                                                                                              |
|              | 60    | SILTSTONE: | as above.                                                                                                                                                                                              |
|              | trace | PYRITE     |                                                                                                                                                                                                        |
|              | trace | COAL       |                                                                                                                                                                                                        |
| 2140 - 2145m | 40    | SANDSTONE: | as above.                                                                                                                                                                                              |
|              | 40    | SILTSTONE: | as above.                                                                                                                                                                                              |
|              | 20    | COAL:      | as above.                                                                                                                                                                                              |
|              | trace | PYRITE     |                                                                                                                                                                                                        |
| 2145 - 2150m | 10    | SANDSTONE: | as above.                                                                                                                                                                                              |
|              | 80    | SILTSTONE: | as above, muddy.                                                                                                                                                                                       |
|              | 10    | COAL:      | as above.                                                                                                                                                                                              |
|              | trace | PYRITE     |                                                                                                                                                                                                        |
| 2150 - 2155m | 70    | SILTSTONE: | very light grey to medium grey,<br>very soft to firm, blocky, grading to fine<br>quartzose sandstone, carbonaceous in part.                                                                            |
|              | 30    | SANDSTONE: | quartzose, rare very well rounded,<br>white grains, predominantly fine to medium<br>grained, clear to white, subangular to<br>subrounded, occasional fine well cemented,<br>moderately hard sandstone. |
|              | trace | COAL       |                                                                                                                                                                                                        |
|              | trace | PYRITE     |                                                                                                                                                                                                        |
|              | trace | MICA       |                                                                                                                                                                                                        |
| 2155 - 2160m | 50    | SILTSTONE: | as above.                                                                                                                                                                                              |
|              | 40    | SANDSTONE: | as above.                                                                                                                                                                                              |
|              | 10    | COAL       |                                                                                                                                                                                                        |
| 2160 - 2165m | 80    | SANDSTONE: | as above, trace of dull grey -<br>yellow fluorescence, no cut.                                                                                                                                         |
|              | 20    | SILTSTONE: | as above.                                                                                                                                                                                              |
|              | trace | COAL       |                                                                                                                                                                                                        |
|              | trace | PYRITE     |                                                                                                                                                                                                        |
| 2165 - 2170m | 70    | SANDSTONE: | as above, trace of dull yellow -<br>grey fluorescence, no cut.                                                                                                                                         |
|              | 30    | SILTSTONE: | as above.                                                                                                                                                                                              |
|              | trace | PYRITE     |                                                                                                                                                                                                        |
|              | trace | COAL       |                                                                                                                                                                                                        |
| 2170 - 2175m | 50    | SILTSTONE: | as above.                                                                                                                                                                                              |
|              | 50    | SANDSTONE: | as above.                                                                                                                                                                                              |
|              | trace | PYRITE     |                                                                                                                                                                                                        |
|              | trace | COAL       |                                                                                                                                                                                                        |
| 2175 - 2180m | 20    | SANDSTONE: | as above.                                                                                                                                                                                              |
|              | 80    | SILTSTONE: | as above, muddy.                                                                                                                                                                                       |
|              | trace | PYRITE     |                                                                                                                                                                                                        |
| 2180 - 2185m | 60    | SANDSTONE: | as above.                                                                                                                                                                                              |
|              | 40    | SILTSTONE: | as above.                                                                                                                                                                                              |
|              | trace | PYRITE     |                                                                                                                                                                                                        |
| 2185 - 2190m | 50    | SANDSTONE: | as above.                                                                                                                                                                                              |
|              | 50    | SILTSTONE: | as above.                                                                                                                                                                                              |
|              | trace | PYRITE     |                                                                                                                                                                                                        |
|              | trace | COAL       |                                                                                                                                                                                                        |

|              |       |                                                                                                                 |                                                                                                                                                                                                                                                                                 |
|--------------|-------|-----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2190 - 2195m | 50    | SANDSTONE:                                                                                                      | as above.                                                                                                                                                                                                                                                                       |
|              | 50    | SILTSTONE:                                                                                                      | as above.                                                                                                                                                                                                                                                                       |
|              | trace | PYRITE                                                                                                          |                                                                                                                                                                                                                                                                                 |
|              | trace | COAL                                                                                                            |                                                                                                                                                                                                                                                                                 |
| 2195 - 2200  | 10    | SANDSTONE:                                                                                                      | as above.                                                                                                                                                                                                                                                                       |
|              | 90    | SILTSTONE:                                                                                                      | as above.                                                                                                                                                                                                                                                                       |
|              | trace | PYRITE                                                                                                          |                                                                                                                                                                                                                                                                                 |
|              | trace | COAL                                                                                                            |                                                                                                                                                                                                                                                                                 |
| 2200 - 2205m | 10    | SANDSTONE:                                                                                                      | as above.                                                                                                                                                                                                                                                                       |
|              | 90    | SILTSTONE:                                                                                                      | as above.                                                                                                                                                                                                                                                                       |
|              | trace | PYRITE                                                                                                          |                                                                                                                                                                                                                                                                                 |
| 2205 - 2210m | 40    | SANDSTONE:                                                                                                      | as above, 15% dull yellow<br>fluorescence, no cut, crush cut. One grain<br>gives cut (probably a caving).                                                                                                                                                                       |
|              | 60    | SILTSTONE:                                                                                                      | as above.                                                                                                                                                                                                                                                                       |
|              | trace | PYRITE                                                                                                          |                                                                                                                                                                                                                                                                                 |
| 2210 - 2215m | 40    | SANDSTONE:                                                                                                      | predominantly loose grains, clear<br>to white, medium to very coarse grained,<br>subangular to subrounded, occasional very fine,<br>loosely cemented quartz grains.                                                                                                             |
|              | 60    | SILTSTONE:                                                                                                      | very light grey to medium dark<br>grey, blocky, dark carbonaceous flecking,<br>quartzose, grading to very fine sandstone.                                                                                                                                                       |
|              | trace | COAL                                                                                                            |                                                                                                                                                                                                                                                                                 |
|              | trace | PYRITE                                                                                                          |                                                                                                                                                                                                                                                                                 |
|              |       | Fluorescence, 15%, dull, yellow, associated with<br>very fine loosely cemented quartz, no cut, no<br>crush cut. |                                                                                                                                                                                                                                                                                 |
| 2215 - 2220m | 20    | SANDSTONE:                                                                                                      | as above.                                                                                                                                                                                                                                                                       |
|              | 30    | SILTSTONE:                                                                                                      | as above.                                                                                                                                                                                                                                                                       |
|              | 50    | COAL:                                                                                                           | black, brittle, blocky.                                                                                                                                                                                                                                                         |
|              | trace | PYRITE                                                                                                          |                                                                                                                                                                                                                                                                                 |
|              | trace | Fluorescence, dull, yellow, no cut.                                                                             |                                                                                                                                                                                                                                                                                 |
| 2220 - 2225m | 80    | SANDSTONE:                                                                                                      | as above.                                                                                                                                                                                                                                                                       |
|              | 15    | SILTSTONE:                                                                                                      | as above.                                                                                                                                                                                                                                                                       |
|              | 5     | COAL:                                                                                                           | as above.                                                                                                                                                                                                                                                                       |
| 2225 - 2230m | 80    | SANDSTONE:                                                                                                      | as above.                                                                                                                                                                                                                                                                       |
|              | 20    | SILTSTONE:                                                                                                      | as above.                                                                                                                                                                                                                                                                       |
|              | trace | PYRITE                                                                                                          |                                                                                                                                                                                                                                                                                 |
| 2230 - 2235m | 90    | SANDSTONE:                                                                                                      | as above.                                                                                                                                                                                                                                                                       |
|              | 10    | SILTSTONE:                                                                                                      | as above.                                                                                                                                                                                                                                                                       |
|              | trace | PYRITE                                                                                                          |                                                                                                                                                                                                                                                                                 |
| 2235 - 2240m | 50    | SANDSTONE:                                                                                                      | as above.                                                                                                                                                                                                                                                                       |
|              | 50    | SILTSTONE:                                                                                                      | predominantly dark grey, very<br>carbonaceous, blocky, otherwise as above.                                                                                                                                                                                                      |
|              | trace | COAL                                                                                                            |                                                                                                                                                                                                                                                                                 |
|              | trace | PYRITE                                                                                                          |                                                                                                                                                                                                                                                                                 |
| 2240 - 2245m | 30    | SILTSTONE:                                                                                                      | firm to hard, grey to dark grey<br>brown, very carbonaceous in part, subangular to<br>angular cuttings.                                                                                                                                                                         |
|              | 70    | SANDSTONE:                                                                                                      | predominantly clear to white,<br>coarse to very coarse, subangular to angular,<br>loose, poorly sorted quartz grains; also clear,<br>subangular medium quartz grains in a white to<br>light brown matrix. Dull yellow to white<br>fluorescence, slow reaction to HCl, dolomite? |

|              |       |                                                                                                                                                                                                                                             |
|--------------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2245 - 2250m | 90    | SANDSTONE: subequal amounts of loose coarse quartz grains and dolomitic sandstone.                                                                                                                                                          |
|              | 10    | SILTSTONE: as above.                                                                                                                                                                                                                        |
| 2250 - 2255m | 90    | SANDSTONE: as above, approximately 30% dolomite cemented grains.                                                                                                                                                                            |
|              | 10    | SILTSTONE: as above.                                                                                                                                                                                                                        |
|              | trace | PYRITE                                                                                                                                                                                                                                      |
| 2255 - 2260m | 70    | SANDSTONE: as above, most of sandstone is dolomite cemented aggregates (50% total).                                                                                                                                                         |
|              | 30    | SILTSTONE: as above.                                                                                                                                                                                                                        |
|              | trace | PYRITE                                                                                                                                                                                                                                      |
| 2260 - 2265m | 80    | SANDSTONE: as above, 50% fluorescence (total sample) ie. dolomitic cement.                                                                                                                                                                  |
|              | 20    | SILTSTONE: as above.                                                                                                                                                                                                                        |
|              | trace | PYRITE                                                                                                                                                                                                                                      |
| 2265 - 2270m | 60    | SANDSTONE: predominantly white to clear, medium to very coarse grained, angular to subrounded, loose quartz; common fine to medium grained, white to clear cemented quartz grains (20%), dolomitic(?) cement, angular to subangular grains. |
|              | 15    | SILTSTONE: very light grey to medium dark grey, blocky, occasionally very carbonaceous.                                                                                                                                                     |
|              | 25    | COAL: black, shiny, blocky.                                                                                                                                                                                                                 |
| 2270 - 2275m | 50    | SANDSTONE: as above, 10% dull yellow-white fluorescence (dolomitic).                                                                                                                                                                        |
|              | 40    | SILTSTONE: as above.                                                                                                                                                                                                                        |
|              | 10    | COAL: as above.                                                                                                                                                                                                                             |
|              | trace | PYRITE                                                                                                                                                                                                                                      |
| 2275 - 2280m | 50    | SANDSTONE: as above, 10% dull yellow-white fluorescence (dolomitic).                                                                                                                                                                        |
|              | 30    | SILTSTONE: as above.                                                                                                                                                                                                                        |
|              | 20    | COAL: as above.                                                                                                                                                                                                                             |
|              | trace | PYRITE                                                                                                                                                                                                                                      |
| 2280 - 2285m | 20    | SANDSTONE: as above.                                                                                                                                                                                                                        |
|              | 80    | SILTSTONE: as above.                                                                                                                                                                                                                        |
|              | trace | PYRITE                                                                                                                                                                                                                                      |
|              | trace | COAL                                                                                                                                                                                                                                        |
| 2285 - 2290m | 70    | SILTSTONE: as above.                                                                                                                                                                                                                        |
|              | 30    | SANDSTONE: as above.                                                                                                                                                                                                                        |
|              | trace | PYRITE                                                                                                                                                                                                                                      |
|              | trace | COAL                                                                                                                                                                                                                                        |
| 2290 - 2295m | 90    | SILTSTONE: as above.                                                                                                                                                                                                                        |
|              | 10    | SANDSTONE: as above.                                                                                                                                                                                                                        |
| 2295 - 2300m | 60    | SILTSTONE: as above.                                                                                                                                                                                                                        |
|              | 40    | SANDSTONE: as above.                                                                                                                                                                                                                        |
|              | trace | COAL                                                                                                                                                                                                                                        |
|              | trace | PYRITE                                                                                                                                                                                                                                      |
| 2300 - 2305m | 70    | SILTSTONE: as above.                                                                                                                                                                                                                        |
|              | 10    | SANDSTONE: as above.                                                                                                                                                                                                                        |
|              | 20    | COAL: as above.                                                                                                                                                                                                                             |
| 2305 - 2310m | 70    | SILTSTONE: as above.                                                                                                                                                                                                                        |
|              | 20    | SANDSTONE: as above.                                                                                                                                                                                                                        |
|              | 10    | COAL: as above.                                                                                                                                                                                                                             |
|              | trace | PYRITE                                                                                                                                                                                                                                      |

2310 - 2315m 50

SILTSTONE: light grey to dark brown, firm to hard, in part very carbonaceous, blocky cuttings, grades to a fine sandstone.

50

SANDSTONE: in part white, clear, grey, subangular to angular, coarse loose quartz grains; in part white, hard, medium to coarse grained, angular to subangular quartz grains in a dolomitic matrix (20% of sample).

2315 - 2320m 70

SILTSTONE: as above.

30

SANDSTONE: as above.

trace

PYRITE

trace

COAL

\*\*\*\*\*

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|              |       |                                                                                                                                                     |
|--------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 1738 - 1740m | 100   | SILTSTONE: light brown to pale brown, light grey to medium light grey, firm to soft, ranging to very fine sandstone otherwise blocky to subfissile. |
|              | trace | SANDSTONE: quartzose, as above.                                                                                                                     |
|              | trace | COAL                                                                                                                                                |
|              | trace | MUDSTONE                                                                                                                                            |
| 1740 - 1745m | 40    | SANDSTONE: quartzose, clear to frosty, fine to medium grained, angular to subrounded.                                                               |
|              | 60    | SILTSTONE: as above.                                                                                                                                |
|              | trace | COAL                                                                                                                                                |
|              | trace | PYRITE                                                                                                                                              |
|              | trace | MUDSTONE                                                                                                                                            |
| 1745 - 1750m | 10    | SANDSTONE: quartzose, as above.                                                                                                                     |
|              | 10    | COAL: as above.                                                                                                                                     |
|              | 80    | SILTSTONE: as above.                                                                                                                                |
|              | trace | MUDSTONE                                                                                                                                            |
| 1750 - 1755m | 40    | SANDSTONE: quartzose, as above.                                                                                                                     |
|              | 60    | SILTSTONE: as above.                                                                                                                                |
|              | trace | COAL                                                                                                                                                |
|              | trace | MUDSTONE                                                                                                                                            |
| 1755 - 1760m | 40    | SANDSTONE: as above.                                                                                                                                |
|              | 60    | SILTSTONE: as above, grading to very fine sandstone.                                                                                                |
|              | trace | COAL                                                                                                                                                |
|              | trace | MUDSTONE                                                                                                                                            |
| 1760 - 1765m | 40    | SANDSTONE: as above.                                                                                                                                |
|              | 60    | SILTSTONE: as above.                                                                                                                                |
|              | trace | PYRITE: coarse crystalline lumps                                                                                                                    |
| 1765 - 1770m | 10    | COAL                                                                                                                                                |
|              | 40    | SANDSTONE: rare very coarse grey grains.                                                                                                            |
|              | 50    | SILTSTONE: as above.                                                                                                                                |
|              | trace | PYRITE                                                                                                                                              |
| 1770 - 1775m | 40    | SANDSTONE: quartzose, clear to frosty, fine to coarse grained.                                                                                      |
|              | 60    | SILTSTONE: grading to fine sandstone, light grey to medium grey, carbonaceous, firm to soft, micaceous.                                             |
|              | trace | PYRITE                                                                                                                                              |
|              | trace | COAL                                                                                                                                                |
| 1775 - 1780m | 30    | SANDSTONE: quartzose, clear, frosty, angular to subangular, fine to coarse grained.                                                                 |
|              | 60    | SILTSTONE: grading to a fine sandstone, light grey to medium grey, carbonaceous, firm to soft, micaceous.                                           |
|              | trace | PYRITE                                                                                                                                              |
|              | trace | COAL                                                                                                                                                |
| 1780 - 1785m | 70    | SILTSTONE: as above, less muddy.                                                                                                                    |
|              | 30    | SANDSTONE: quartzose, as above.                                                                                                                     |
|              | trace | PYRITE                                                                                                                                              |
| 1785 - 1790m | 70    | SILTSTONE: as above.                                                                                                                                |
|              | 30    | SANDSTONE: as above.                                                                                                                                |
| 1790 - 1795m | 70    | SILTSTONE: as above.                                                                                                                                |
|              | 30    | SANDSTONE: as above.                                                                                                                                |
| 1795 - 1800m | 100   | SILTSTONE: as above.                                                                                                                                |
|              | trace | COAL                                                                                                                                                |
|              | trace | SANDSTONE: quartzose.                                                                                                                               |

Appendix 2



APPENDIX 2

CORE DESCRIPTIONS

**ESSO AUSTRALIA LTD.**  
**CORE DESCRIPTION**

Core No. ONE (Page 1)

Well KAHAWAI-1

Interval Cored 1396.6-1410.0m, Cut 13.4m, Recovered 6.37m, (.47.5%) Fm. LATROBE

Bit Type C-22, Bit Size 8-15/32 in., Desc by L. FINLAYSON, Date 3.6.82

| Depth & Coring Rate (m/hr) | Graphic | Shows | Interval (m) | Descriptive Lithology                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------|---------|-------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 100 50 0                   |         |       | 1396         | 1396.6-1396.96 SANDSTONE: light brown with dark green patches, soft to medium, fine to medium grain size, well sorted, mica rich. About 15% glauconite, dark green, shiny, subangular to subrounded, occasional large well rounded quartz grain, non calcareous, moderate porosity. Fluorescence: 80% bright yellow to white, cut: instant bright milky white, residue: clear, milky white fluorescence. |
|                            |         |       | 1397         | 1396.96-1397.44 SILTSTONE: dark grey and black, hard, very fine grain size, micaceous, very carbonaceous with subangular to angular coal lumps, non calcareous; no fluorescence, no cut.                                                                                                                                                                                                                 |
|                            |         |       | 1398         | 1397.44-1400.15 SANDSTONE: light to medium brown, firm, very fine grained, well sorted, micaceous, carbonaceous, non calcareous; no fluorescence, no cut. (Sandstone body at about 1399 with patchy yellow fluorescence).                                                                                                                                                                                |
|                            |         |       | 1399         | 1400.15-1401.84 SILTSTONE: light grey, firm to hard, micromicaceous, slightly carbonaceous in part, trace yellow pinpoint fluorescence. (Claystone body at 1400.15, light grey, soft, smooth.)                                                                                                                                                                                                           |
|                            |         |       | 1400         | 1401.84-1402.11 MUDSTONE: medium to dark grey, hard, very fine grained, shiny broken surfaces, no fluorescence.                                                                                                                                                                                                                                                                                          |
|                            |         |       | 1401         | 1402.11-1402.47 SILTSTONE: medium grey, firm, micaceous, non calcareous, trace pinpoint yellow fluorescence.                                                                                                                                                                                                                                                                                             |
|                            |         |       | 1402         | 1402.47-1402.92 SANDSTONE: grey, very soft, subangular to subrounded, coarse quartz grains in a silty matrix, good visible porosity; fluorescence-bright yellow - white, approx. 50%, cut: instant milky white cut; residue: clear, milky white fluorescence.                                                                                                                                            |
|                            |         |       | 1403         |                                                                                                                                                                                                                                                                                                                                                                                                          |
|                            |         |       | 1404         |                                                                                                                                                                                                                                                                                                                                                                                                          |
|                            |         |       | 1405         |                                                                                                                                                                                                                                                                                                                                                                                                          |

RPM: approx. 75, MW: 10.1

CORE DESCRIPTION

Core No. ONE (Page 2)

Well KAHAWAI-1

Interval Cored 1396.6-1410.0 m, Cut 13.4 m, Recovered 6.37 m, (47.5%) Fm. LATROBE

Bit Type C-22 Bit Size 8-15/32 in. Desc by L. FINLAYSON Date 3.6.82

| Depth & Coring Rate (m/hr) | Graphic | Shows | interval (m) | Descriptive Lithology |
|----------------------------|---------|-------|--------------|-----------------------|
| 100 50 0                   |         |       | 1406         |                       |
|                            |         |       | 1407         |                       |
|                            |         |       | 1408         |                       |
|                            |         |       | 1409         |                       |
|                            |         |       | 1410         |                       |
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**ESSO AUSTRALIA LTD.**  
**CORE DESCRIPTION**

Core No. TWO

Well KAHAWAI - 1

Interval Cored 1410.0-1418.0 m, Cut 8.0 m, Recovered - m, (0%) Fm. LATROBE

Bit Type C-22 Bit Size 8-15/32 in. Desc by L.FINLAYSON Date 3/6/82

| Depth & Coring Rate (m/hr) | Graphic | Shows | Interval (m)                                                                                                | Descriptive Lithology                                                                    |
|----------------------------|---------|-------|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
|                            |         |       | <p>1410</p> <p>1411</p> <p>1412</p> <p>1413</p> <p>1414</p> <p>1415</p> <p>1416</p> <p>1417</p> <p>1418</p> | <p>Diamonds 80% worn, Bit in gauge. Core Catcher appears O.K. Face of bit worn flat.</p> |



ESSO AUSTRALIA LTD.  
**CORE DESCRIPTION**

Core No. THREE (Page 1)

Well KAHAWAI 1

Interval Cored 1545.20-1558.20 m, Cut 13.00 m, Recovered 10.95 m, (84.2%) Fm. Latrobe  
 Bit Type C-22 Bit Size 8-15/32 in. Desc by L. FINLAYSON Date 5-6-82

| Depth &<br>Coring Rate<br>(m/hr) | Graphic | Shows | Interval (m) | Descriptive Lithology                                                                                                                                               |
|----------------------------------|---------|-------|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                  |         |       | 1545         | 1545.2-1545.72 SILTSTONE: light to dark grey/black, firm, very carbonaceous in part, micromicaceous, non calcareous, no fluorescence.                               |
|                                  |         |       | 1546         | 1545.72-1547.04 SANDSTONE: light grey, fine to medium quartz grains, well sorted, soft, micaceous, moderate porosity, no fluorescence.                              |
|                                  |         |       | 1547         | 1547.04-1548.00 SILTSTONE: light grey, firm to hard, slightly to very carbonaceous, micaceous, non calcareous, grades to a fine grained sandstone, no fluorescence. |
|                                  |         |       | 1548         | 1548.00-1548.58 SHALE: black, hard, very carbonaceous, no fluorescence.                                                                                             |
|                                  |         |       | 1549         | 1548.58-1549.23 COAL: soft to firm, black, shiny, brittle, conchoidal fracture, trace pyrite associated with coal.                                                  |
|                                  |         |       | 1550         | 1549.23-1550.99 SILTSTONE: medium grey, firm, slightly carbonaceous to very carbonaceous, micaceous, non calcareous, grades to a fine sandstone - no fluorescence.  |
|                                  |         |       | 1551         | 1550.99-1551.85 SANDSTONE: medium to dark grey, soft, fine to coarse, subangular to subrounded quartzose sandstone, carbonaceous flecks, no fluorescence.           |
|                                  |         |       | 1552         | 1551.85-1555.94 SILTSTONE: dark grey, firm to hard, carbonaceous, micaceous, grades in part to a fine sandstone.                                                    |
|                                  |         |       | 1553         | 1555.94-1556.16 COAL: black, dull to shiny, hard, brittle.                                                                                                          |
|                                  |         |       | 1554         | WOB: 15, RPM: 90-95, MV-10.1                                                                                                                                        |
|                                  |         |       |              |                                                                                                                                                                     |
|                                  |         |       |              |                                                                                                                                                                     |
|                                  |         |       |              |                                                                                                                                                                     |
|                                  |         |       |              |                                                                                                                                                                     |

Appendix 3

APPENDIX 3

SIDEWALL DESCRIPTIONS



## KAHAWAI-1

## Sidewall Core Descriptions

| <u>No.</u> | <u>Depth</u> | <u>Lithology</u>        | <u>Description</u>                                                                                              |
|------------|--------------|-------------------------|-----------------------------------------------------------------------------------------------------------------|
| 1          | 2307.5       | Siltstone               | Very light grey, silt sized grains, well sorted, soft, quartzose.                                               |
| 2          | 2294.2       | Sandstone               | Medium grey, very fine grained, subrounded, well sorted, unconsolidated, quartzose, carbonaceous, silty.        |
| 3          | 2284.2       | Siltstone/<br>Sandstone | Medium grey, silty, well sorted, friable, quartzose, carbonaceous, silty.                                       |
| 4          | 2271.4       | Sandstone               | Medium grey, very fine grained, subrounded, well sorted, friable, quartzose, carbonaceous, silty.               |
| 5          | 2251.3       | Sandstone               | Medium light grey, very fine grained, subrounded, well sorted, friable, quartzose, carbonaceous.                |
| 6          | 2238.8       |                         | No Recovery                                                                                                     |
| 7          | 2220.4       | Sandstone               | Medium grey, very fine grained, subrounded, well sorted, friable, quartzose, carbonaceous.                      |
| 8          | 2191.6       | Siltstone/<br>Sandstone | Medium grey, very fine grained to silty, moderately sorted, friable, quartzose, carbonaceous.                   |
| 9          | 2181.2       | Sandstone               | Medium grey, very fine grained, subrounded, well sorted, unconsolidated, quartzose, carbonaceous.               |
| 10         | 2163.7       | Sandstone               | Light grey, very fine grained, subrounded, well sorted, friable, quartzose, pyritic, micaceous.                 |
| 11         | 2144.0       | Sandstone               | Medium dark grey, very fine grained, subrounded, well sorted, friable, quartzose, carbonaceous.                 |
| 12         | 2120.4       | Sandstone/<br>Coal      | Medium dark grey, very fine grained, subrounded, well sorted, friable, quartzose, carbonaceous.                 |
| 13         | 2096.1       | Siltstone               | Medium light grey, silty to very fine grained, subrounded, well sorted, friable, quartzose, carbonaceous.       |
| 14         | 2084.0       | Sandstone               | Medium grey, very fine grained, subrounded, well sorted, friable, quartzose, carbonaceous, micaceous.           |
| 15         | 2065.6       | Sandstone               | Medium grey, very fine grained, subrounded, well sorted, friable, quartzose, carbonaceous.                      |
| 16         | 2053.0       | Siltstone/<br>Sandstone | Medium dark grey, silty to very fine grained subrounded, well sorted, soft to friable, quartzose, carbonaceous. |

|    |        |           |                                                                                                             |
|----|--------|-----------|-------------------------------------------------------------------------------------------------------------|
| 17 | 2041.0 | Sandstone | Medium light grey, very fine grained, subrounded, well sorted, friable, quartzose, micaceous, carbonaceous. |
| 18 | 2027.6 | Sandstone | Light grey, very fine grained, subrounded, well sorted, friable, quartzose.                                 |
| 19 | 2005.1 | Sandstone | Light grey, very fine grained, subrounded, well sorted, friable, quartzose, carbonaceous.                   |
| 20 | 1997.6 | Sandstone | Medium grey, very fine grained, subrounded, well sorted, friable, quartzose, carbonaceous.                  |
| 21 | 1966.9 | Sandstone | Medium light grey, very fine grained, subrounded, well sorted, friable, quartzose, carbonaceous.            |
| 22 | 1960.3 | Siltstone | Grey, very fine grained, friable, quartzose, carbonaceous.                                                  |
| 23 | 1938.5 | Siltstone | Dark grey, very fine grained, friable, quartzose, carbonaceous.                                             |
| 24 | 1932.7 | Siltstone | Dark grey, very fine grained, friable, quartzose, very carbonaceous.                                        |
| 25 | 1918.3 | Siltstone | Light grey, very fine grained, friable, quartzose.                                                          |
| 26 | 1908.7 | Siltstone | Grey, very fine grained, friable, quartzose, carbonaceous.                                                  |
| 27 | 1895.6 | Claystone | Light grey, very fine grained, firm, carbonaceous.                                                          |
| 28 | 1871.3 | Claystone | Light grey, very fine grained, soft, carbonaceous.                                                          |
| 29 | 1856.5 | Siltstone | Dark grey, firm, very carbonaceous.                                                                         |
| 30 | 1850.0 | Siltstone | Light grey, friable, quartzose.                                                                             |
| 31 | 1833.1 | Siltstone | Light grey, friable, quartzose.                                                                             |
| 32 | 1820.0 | Siltstone | Dark grey, friable, quartzose, carbonaceous.                                                                |
| 33 | 1808.4 | Siltstone | Dark grey, friable, quartzose, carbonaceous.                                                                |
| 34 | 1791.3 | Siltstone | Grey, friable, quartzose, carbonaceous.                                                                     |
| 35 | 1775.2 | Sandstone | Grey, very fine grained, subrounded, well sorted, soft, quartzose, very carbonaceous.                       |
| 36 | 1757.6 | Sandstone | Light grey, medium grained, subangular to subrounded, well sorted, soft, quartzose.                         |
| 37 | 1749.2 | Sandstone | Grey, very fine grained, subrounded, well sorted, soft, quartzose.                                          |
| 38 | 1738.3 | Siltstone | Dark grey, friable, quartzose, carbonaceous.                                                                |
| 39 | 1701.1 | Siltstone | Light grey, medium grained, subrounded, well sorted, soft, quartzose.                                       |
| 40 | 1687.8 | Sandstone | Very light grey, medium grained, subrounded, well sorted, soft, quartzose, carbonaceous.                    |

|    |        |           |                                                                                                                                                  |
|----|--------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| 41 | 1671.8 | Siltstone | Grey, friable, quartzose, carbonaceous.                                                                                                          |
| 42 | 1663.9 | Mudstone  | Grey, firm, carbonaceous.                                                                                                                        |
| 43 | 1639.8 | Mudstone  | Grey, firm, carbonaceous.                                                                                                                        |
| 44 | 1626.4 | Sandstone | White to grey, very fine grained, subrounded to subangular, well sorted, firm, quartzose, carbonaceous.                                          |
| 45 | 1611.2 | Siltstone | Dark grey, firm, carbonaceous.                                                                                                                   |
| 46 | 1604.2 | Coal      | Black, soft, carbonaceous.                                                                                                                       |
| 47 | 1596.1 | Siltstone | Grey, firm, carbonaceous, pyritic.                                                                                                               |
| 48 | 1585.3 | Sandstone | Light grey, very fine grained, subrounded to subangular, well sorted, silty, quartzose, carbonaceous.                                            |
| 49 | 1577.6 | Siltstone | Dark grey, firm, carbonaceous.                                                                                                                   |
| 50 | 1572.2 | Siltstone | Dark grey, firm, carbonaceous.                                                                                                                   |
| 51 | 1528.5 | Sandstone | White to grey, fine grained, subangular to subrounded, well sorted, soft, clayey.                                                                |
| 52 | 1520.3 | Sandstone | White to grey, fine grained, subrounded, well sorted, soft, quartzose, carbonaceous.                                                             |
| 53 | 1498.7 | Siltstone | Grey to brown, soft, quartzose, slightly carbonaceous.                                                                                           |
| 54 | 1486.9 | Sandstone | White to grey, fine grained, subangular to subrounded, well sorted, soft, quartzose, carbonaceous.                                               |
| 55 | 1472.1 | Siltstone | Grey, firm, carbonaceous.                                                                                                                        |
| 56 | 1468.8 | Sandstone | White, fine grained, subangular, well sorted, soft, quartzose, carbonaceous.                                                                     |
| 57 | 1455.8 |           | No Recovery                                                                                                                                      |
| 58 | 1426.2 | Siltstone | Grey, friable, quartzose, carbonaceous.                                                                                                          |
| 59 | 1413.6 | Sandstone | Grey, very coarse, subangular, moderately sorted, soft, quartzose, 100% even dull yellow fluorescence, dull yellow cut.                          |
| 60 | 1411.0 | Sandstone | Grey, very coarse, subangular, moderately sorted, soft, quartzose, black staining, 100% even dull yellow fluorescence, dull yellow to white cut. |
| 61 | 1408.0 | Sandstone | Light grey, very silty, subangular, poorly sorted, soft, quartzose, 100% even bright white fluorescence, bright white cut.                       |
| 62 | 1405.0 | Sandstone | Light grey, very coarse grained, subangular, poorly sorted, soft, quartzose, 40% spotty bright white to black fluorescence, bright white cut.    |
| 63 | 1396.1 | Sandstone | Dark grey, fine grained, subrounded, moderately sorted, firm, slightly calcareous, quartzose, trace glauconite.                                  |

|    |        |           |                                                                                                                                                                                       |
|----|--------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 64 | 1395.0 | Sandstone | Light brown, very fine grained, subrounded, well sorted, soft, quartzose, glauconitic, 60% spotty dull yellow fluorescence, bright white to blue cut, occasional loose quartz grains. |
| 65 | 1394.0 | Sandstone | Light brown, fine grained, subrounded, well sorted, soft, quartzose, glauconitic.                                                                                                     |
| 66 | 1393.0 | Sandstone | Light brown, fine grained, subrounded, well sorted, soft, quartzose, glauconitic.                                                                                                     |
| 67 | 1392.1 | Siltstone | Dark grey, very fine grained, firm, micaceous, glauconitic.                                                                                                                           |
| 68 | 1391.2 | Siltstone | Grey to brown, very fine grained, soft.                                                                                                                                               |
| 69 | 1389.9 | Siltstone | Dark grey, soft, very calcareous.                                                                                                                                                     |
| 70 | 1389.0 | Sandstone | Grey, very fine grained, soft, glauconitic, very calcareous.                                                                                                                          |
| 71 | 1388.1 | Siltstone | Grey, very fine grained, firm, very calcareous, glauconitic.                                                                                                                          |
| 72 | 1387.0 | Mudstone  | Grey, very fine grained, firm, very calcareous, glauconitic.                                                                                                                          |
| 73 | 1386.0 | Siltstone | Grey, very fine grained, firm, very calcareous, glauconitic.                                                                                                                          |
| 74 | 1384.0 |           | No Recovery                                                                                                                                                                           |
| 75 | 1382.1 | Siltstone | Grey, firm, quartzose, very calcareous.                                                                                                                                               |
| 76 | 1379.2 | Siltstone | Grey, firm, very calcareous, quartzose.                                                                                                                                               |
| 77 | 1376.2 | Siltstone | Grey, friable, quartzose, very calcareous.                                                                                                                                            |
| 78 | 1373.0 |           | No Recovery                                                                                                                                                                           |
| 79 | 1369.0 | Mudstone  | Grey, firm, very calcareous, clayey.                                                                                                                                                  |
| 80 | 1365.0 |           | No Recovery                                                                                                                                                                           |
| 81 | 1361.3 | Siltstone | Grey, firm, very calcareous, clayey.                                                                                                                                                  |
| 82 | 1357.0 | Mudstone  | Grey, firm, very calcareous, clayey.                                                                                                                                                  |
| 83 | 1352.0 | Claystone | Grey, firm, very calcareous.                                                                                                                                                          |
| 84 | 1339.9 | Mudstone  | Grey, friable, very calcareous, clayey.                                                                                                                                               |
| 85 | 1324.9 |           | Misfired                                                                                                                                                                              |
| 86 | 1310.0 |           | Misfired                                                                                                                                                                              |
| 87 | 1289.9 |           | Misfired                                                                                                                                                                              |
| 88 | 1269.9 |           | Misfired                                                                                                                                                                              |
| 89 | 1250.1 |           | Misfired                                                                                                                                                                              |
| 90 | 1230.0 |           | Misfired                                                                                                                                                                              |
| 91 | 1210.1 |           | Misfired                                                                                                                                                                              |

|     |        |           |                                                                          |
|-----|--------|-----------|--------------------------------------------------------------------------|
| 92  | 1190.0 |           | Misfired                                                                 |
| 93  | 1170.0 |           | Misfired                                                                 |
| 94  | 1149.9 |           | Misfired                                                                 |
| 95  | 1130.0 |           | Misfired                                                                 |
| 96  | 1110.1 |           | Misfired                                                                 |
| 97  | 1090.0 |           | Misfired                                                                 |
| 98  | 1070.0 |           | Misfired                                                                 |
| 99  | 1050.0 |           | Misfired                                                                 |
| 100 | 1024.8 |           | Misfired                                                                 |
| 101 | 1000.0 |           | Misfired                                                                 |
| 102 | 950.1  |           | Misfired                                                                 |
| 103 | 1719.5 | Sandstone | Light grey, fine grained, subrounded, well sorted, friable, quartzose.   |
| 104 | 1680.5 | Siltstone | Dark grey, silty, firm, quartzose, carbonaceous.                         |
| 105 | 1531.0 | Sandstone | Grey, fine grained, moderately sorted, friable, quartzose, carbonaceous. |
| 106 | 1508.0 | Siltstone | Dark grey, silty, firm, quartzose, carbonaceous, coaly.                  |
| 107 | 1495.2 | Siltstone | Dark grey, silty, firm, quartzose, carbonaceous.                         |
| 108 | 1455.5 |           | No Recovery                                                              |
| 109 | 1424.6 | Siltstone | Dark grey, silty, firm, quartzose, mica, carbonaceous.                   |
| 110 | 1392.0 | Sandstone | Brown, very fine grained, friable, quartzose, glauconitic.               |
| 111 | 1383.9 | Siltstone | Grey, silty, soft, very calcareous.                                      |
| 112 | 1379.1 | Mudstone  | Grey, mudstone, firm, very calcareous.                                   |
| 113 | 1373.0 | Siltstone | Medium grey, silty, firm, very calcareous.                               |
| 114 | 1361.1 | Siltstone | Medium grey, silty, firm, very calcareous.                               |
| 115 | 1324.9 | Mudstone  | Medium grey, silty, firm, very calcareous.                               |
| 116 | 1310.0 |           | No Recovery                                                              |
| 117 | 1290.3 |           | No Recovery                                                              |
| 118 | 1270.3 | Siltstone | Medium grey, silty, firm, very calcareous.                               |
| 119 | 1250.2 | Siltstone | Medium grey, firm, silty, very calcareous.                               |
| 120 | 1230.4 | Siltstone | Medium grey, silty, firm, very calcareous.                               |
| 121 | 1210.1 | Siltstone | Medium grey, silty, firm, very calcareous.                               |
| 122 | 1190.2 |           | No Recovery                                                              |

|     |        |           |                                                                        |
|-----|--------|-----------|------------------------------------------------------------------------|
| 123 | 1169.9 | Siltstone | Medium grey, silty, firm, very calcareous, trace pyrite.               |
| 124 | 1150.3 | Siltstone | Medium grey, silty, firm, very calcareous.                             |
| 125 | 1130.0 | Siltstone | Medium grey, silty, firm, very calcareous, pyritic.                    |
| 126 | 1110.0 | Siltstone | Medium grey, silty, firm, very calcareous.                             |
| 127 | 1090.2 | Siltstone | Medium grey, silty, firm, very calcareous.                             |
| 128 | 1070.1 | Sandstone | Light grey, very fine grained, friable, very calcareous, trace quartz. |
| 129 | 1050.0 | Siltstone | Medium grey, silty, firm, very calcareous.                             |
| 130 | 1025.0 | Siltstone | Medium grey, silty, firm, very calcareous.                             |
| 131 | 999.6  | Siltstone | Medium grey, silty, firm, very calcareous.                             |
| 132 | 950.0  | Siltstone | Medium grey, silty, firm, very calcareous.                             |

\*\*\*\*\*

Appendix 4

APPENDIX 4

VELOCITY SURVEY REPORT



MARINE VELOCITY SURVEY

Well ..... KAHAWAI -1 .....  
Basin ..... GIPPSLAND .....

INTRODUCTION

Esso Personnel ..... Brett Hardiman .....  
Contractor ..... Velocity Data Pty Ltd .....

Supplied (1) Instruments.  
(2) Personnel

Seismic Observer... J. Larsen, T. Poole  
Marine Shooter ... M. O'Driscoll  
Navigation..... N/A.....

(3) Licenced Shooting Boat

Name..... N/A .....  
Date Loaded.....  
Date Released.....  
Agent.....

(4) Seismic Source

Gas Gun  
Gas Pressures..... 25 sec fill .....  
Oxygen..... 90 ..... psi  
Propane..... 45 ..... psi

Personnel and Instruments

assembled at ... Longford ..... Date 12/6/82  
Boarded (rig) .. Southern Cross ..... Date 12/6/82  
Date of survey .13/6/82 .....  
Casing Depth .20" @ 199m .....  
13 3/8" @ 791km RKB .....  
T.D. when shot .2320 m RKB .....  
water depth ..... 59.5 ..... metres

SURVEY PROCEDURE

Weather: Wind ..... High .....  
Swell ..... Moderate - high .....  
Sea ..... Moderate .....  
Rig Movement ..... Moderate-high .....  
Rig Noise ..... Low-moderate .....

Hydrophones: Number.....Two.....  
 Depth below sea level ...9.14.....metres  
 Position ..One at top of gun and one in.....  
 moonpool  
 Gas Gun: number of shots per level .....2 to 3.....  
 gun depth .....12.2.....metres  
 Well phone positioning:  
 No of depths .....12.....  
 Time: first shot .....1518.....  
 last shot .....1754.....  
 Total rig time .....3 hrs 30 mins.....

RESULTS

Quality of results (good .....16.....  
 (fair .....10.....  
 (poor .....-.....  
 (not used .....1.....

Comparison of Interval Times with Sonic Log

/ / average .....21.2.....microsec/metre  
 / / max .....42.0.....microsec/metre

CONCLUSION

Reliability of T-D curve .....Average.....

COMMENTS

Microsec/m error between Sonic log and check shot between depths of 750m RKB and 950 m RKB, has a poor tie due to being shot in casing.

No major problems occurred during the shooting of this survey, and is of generally good standard.

Shot No. 11 not used due to very poor breaks.

0586Q:3-4

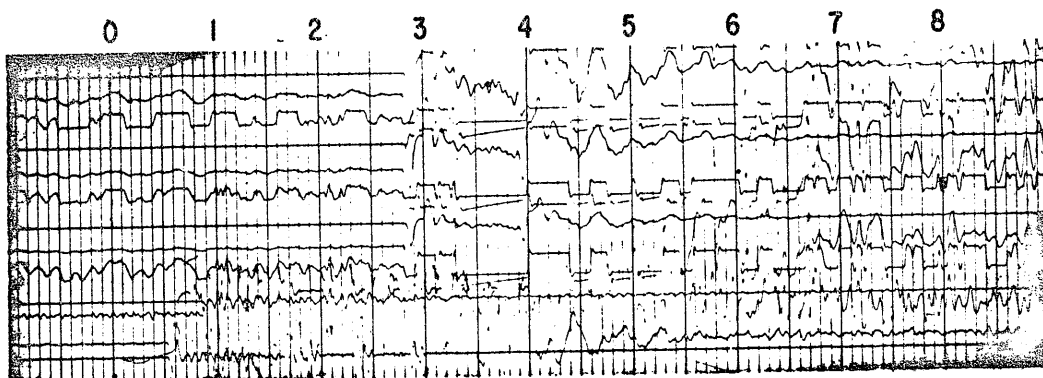


# KAHAWAI - 1

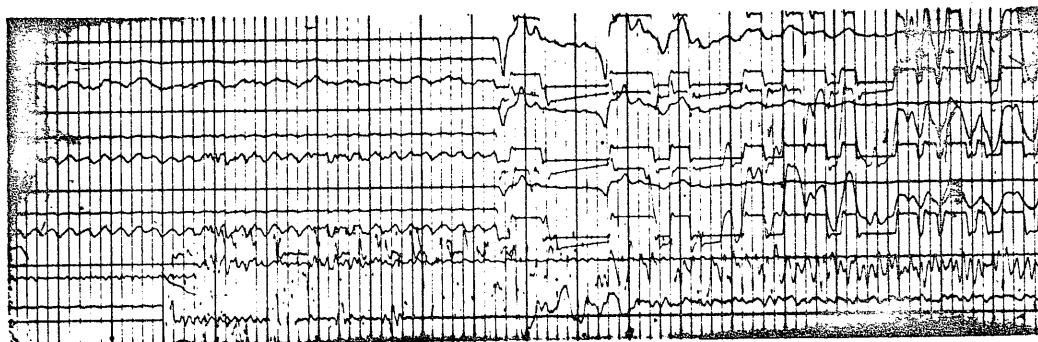
## WELL VELOCITY RECORD

13/6/82

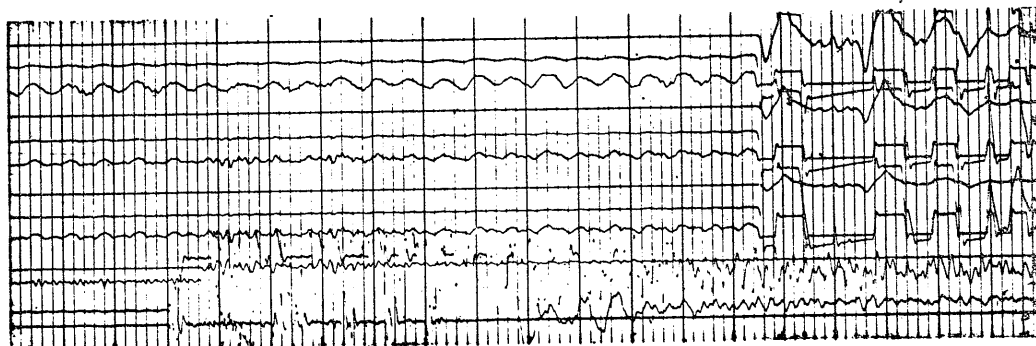
Rec. No. 27  
500m RKB.



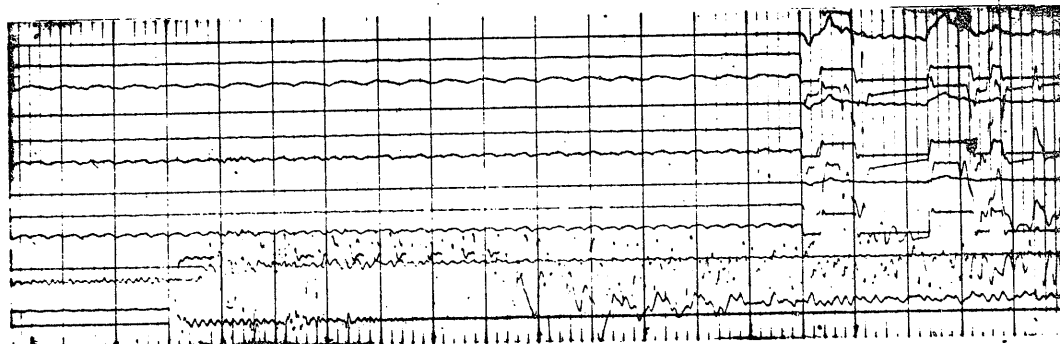
Rec. No. 25  
750m RKB.



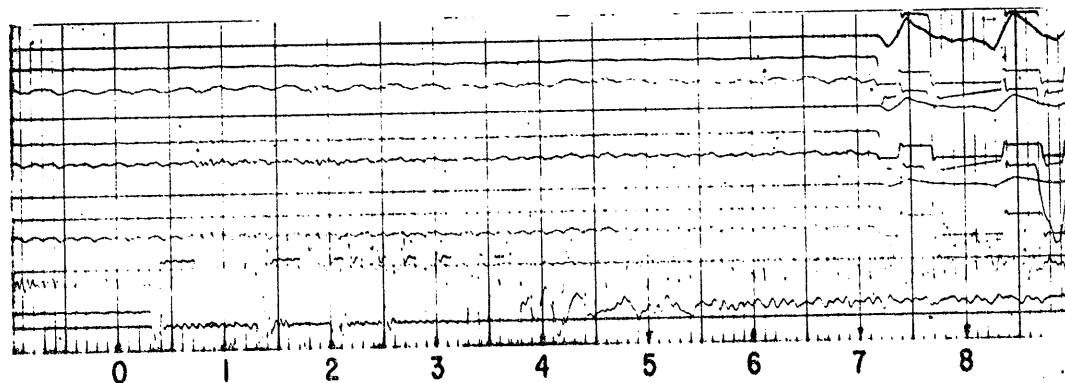
Rec. No. 21  
1395m RKB.



Rec. No. 1  
1477m RKB.



Rec. No. 14  
1740m RKB.



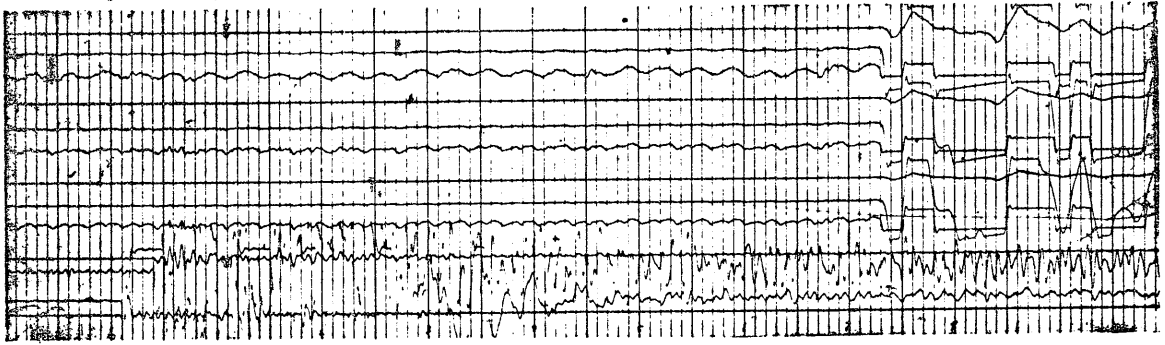
# KAHAWAI-1

## WELL VELOCITY RECORD

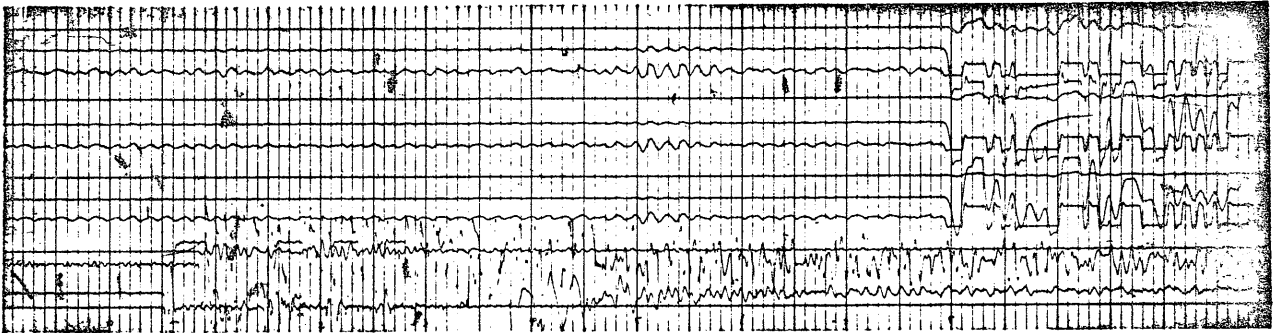
13/6/82

0 1 2 3 4 5 6 7 8 9 10

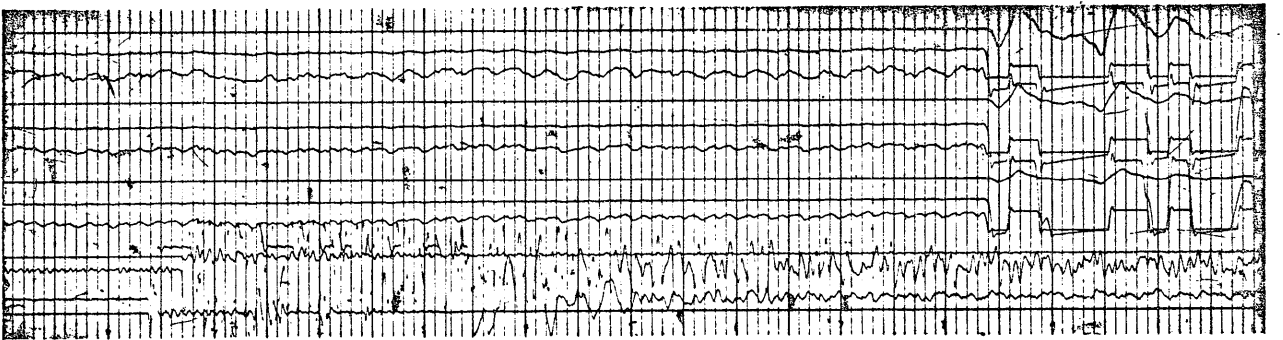
Rec. No. 12  
1850m RKB.



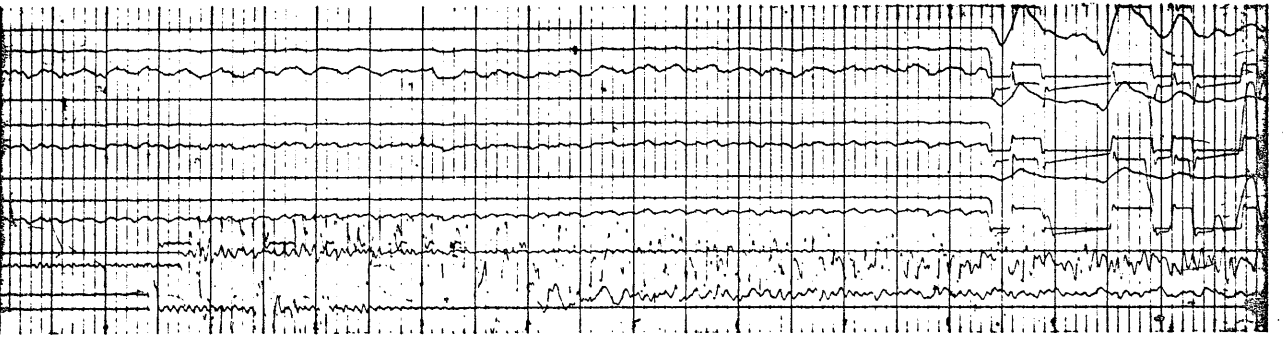
Rec. No. 4  
1915m RKB.



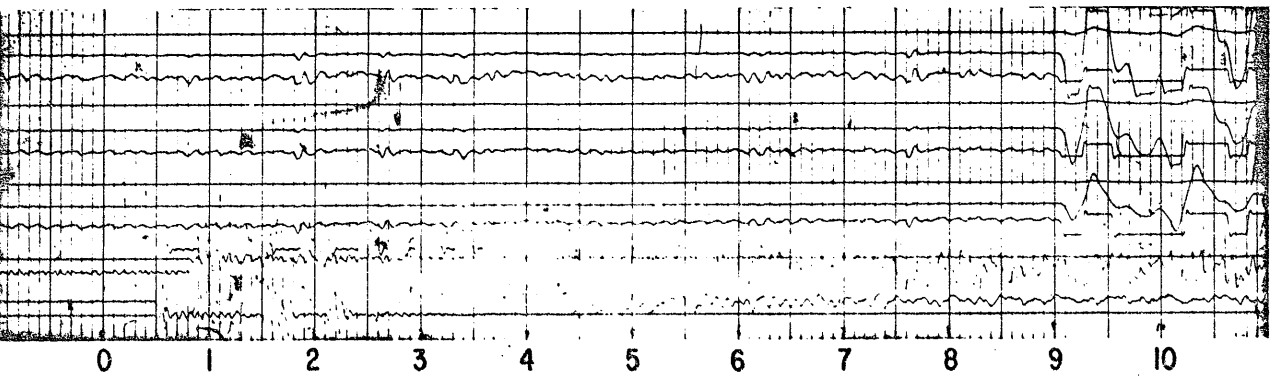
Rec. No. 7  
2100m RKB.



Rec. No. 8  
2100m RKB.



Rec. No. 6  
2315m RKB.





PE902653

This is an enclosure indicator page.  
The enclosure PE902653 is enclosed within the  
container PE902651 at this location in this  
document.

The enclosure PE902653 has the following characteristics:

ITEM\_BARCODE = PE902653  
CONTAINER\_BARCODE = PE902651  
    NAME = Sonic Calibration Curve  
    BASIN = GIPPSLAND  
    PERMIT =  
    TYPE = WELL  
    SUBTYPE = VELOCITY\_CHART  
DESCRIPTION = Sonic Calibration Curve (enclosure from  
                  WCR vol.1) for Kahawai-1  
REMARKS =  
DATE\_CREATED = 13/06/1982  
DATE\_RECEIVED = 21/12/1982  
    W\_NO = W776  
    WELL\_NAME = Kahawi-1  
CONTRACTOR = ESSO  
CLIENT\_OP\_CO = ESSO

(Inserted by DNRE - Vic Govt Mines Dept)

PE902652

This is an enclosure indicator page.  
The enclosure PE902652 is enclosed within the  
container PE902651 at this location in this  
document.

The enclosure PE902652 has the following characteristics:

ITEM\_BARCODE = PE902652  
CONTAINER\_BARCODE = PE902651  
NAME = Time Depth Curve  
BASIN = GIPPSLAND  
PERMIT =  
TYPE = WELL  
SUBTYPE = VELOCITY\_CHART  
DESCRIPTION = Time Depth Curve(enclosure from WCR  
vol.1) for Kahawai-1  
REMARKS =  
DATE\_CREATED = 13/06/1982  
DATE\_RECEIVED = 21/12/1982  
W\_NO = W776  
WELL\_NAME = Kahawi-1  
CONTRACTOR = ESSO  
CLIENT\_OP\_CO = ESSO

(Inserted by DNRE - Vic Govt Mines Dept)