



ESSO AUSTRALIA RESOURCES LTD.  
**WELL COMPLETION LOG Scale - 1:200**  
**DOLPHIN A-3**

Gippsland Basin, Victoria, Concession: VIC/L15

**POST-DRILL LOCATION:** Latitude: 38° 29' 25.94"S  
 Longitude: 147° 22' 44.05"E  
 (Top of N-1.1) AMG X: 533043.93mE  
 AMG Y: 5739673.63mN

**COMPILED BY:** Sheryl M. Sazenis / Martin Turner

**ELEVATION:** G.L.: -37.8m  
 R.T.: 41.2m  
 Water Depth: 37.8m

**DRAFTED BY:** Miquel Anton

**DATES:** Spudded: 16/09/1997  
 Rig Released: 27/09/1997  
 I.P. Established: 01/10/1997  
 (Initial production)

**DRILLED BY:** Sante Fe Drilling-Parameswara

**TOTAL DEPTH:** 1373.0mMDRT

**PLUGGED BACK T.D.:** Not Plugged Back

**CLASSIFICATION:** Primary Development

**STATUS:** Oil Well

**SERVICE COMPANIES:**  
**DRILLING CONTRACTOR:** Santa Fe Drilling Operations Inc  
 Halliburton  
**SURVEYING/MWD:** Halliburton/Schlumberger  
**CORING:** Halliburton/Schlumberger  
**WIRELINE LOGGING:** Halliburton  
**CEMENTING:** Halliburton  
**CASING:** Weatherford

**WIRELINE LOGGING:** Halliburton  
**PRODUCTION TESTING:** ---  
**DIVERS:** ---  
**MUD LOGGING:** Halliburton  
**PRESSURE RECORDING:** Schlumberger  
**WELL VELOCITY SURVEY:** ---  
**MUD ENGINEERING:** Baroid

**LEGEND**

2.7m NOS  
 Ø = 17%  
 Sw = 32%

No Rec.  
 Rec.

PERFORATED INTERVAL

PLUG

←SST RECOVERED SIDE WALL CORE LITHOLOGY  
 SST - Sandstone CLST - Claystone  
 SLST - Siltstone LMST - Limestone  
 MST - Mudstone ML - Marl  
 SH - Shale COAL - Coal

← SIDE WALL CORE - NO RECOVERY

← FIT

←P2/11 MDT/RFT PRETEST RUN/SEAT NUMBER

←S11/2 MDT/RFT SAMPLE RUN/SAMPLE NUMBER

←P2/40 MDT VERTICAL/HORIZONTAL PERMEABILITY TEST

PACKER

BRIDGE PLUG

LOG ANALYSIS DATA  
 NS - Net Sand  
 NOS - Net Oil Sand  
 NGS - Net Gas Sand  
 Sw - Water Saturation

MUD DATA  
 Ø - Porosity  
 Snd - Sand  
 MW - Mud Weight  
 FV - Funnel Velocity  
 PV - Plastic Velocity  
 YP - Yield Point  
 Gel - Gel Strength  
 pH - Acidity/Alkalinity  
 WL - Water Loss  
 Cl - Chloride  
 Ca - Calcium  
 Sol - Solids  
 H2O - Water  
 Oil - Oil

SHOW OR STAIN  
 HYDROCARBON CUT  
 FLUORESCENCE  
 GAS SHOW  
 OIL PRODUCTION  
 GAS PRODUCTION  
 INTERPRETED OIL PRODUCTION  
 INTERPRETED GAS PRODUCTION  
 INTERPRETED WATER PRODUCTION  
 WATER PRODUCTION  
 CONDENSATE PRODUCTION  
 INTERPRETED CONDENSATE BEARING  
 DST WITH GAS RECOVERED  
 DST WITH OIL RECOVERED  
 SURVEY POINT  
 CASING SHOE  
 MUD

**LITHOLOGICAL SYMBOLS**

|  |                    |  |           |  |                     |  |               |
|--|--------------------|--|-----------|--|---------------------|--|---------------|
|  | Sandstone          |  | Dolomite  |  | Mica                |  | Pelecypods    |
|  | Siltstone          |  | Marl      |  | Chert               |  | Echinoids     |
|  | Mudstone           |  | Anhydrite |  | Carbonaceous Matter |  | Fish Remains  |
|  | Claystone          |  | Volcanics |  | Calcareous          |  | Plant Remains |
|  | Shale              |  | Basement  |  | Glauconite          |  | Spores        |
|  | Coal               |  | Granule   |  | Corals              |  | Leaves        |
|  | Limestone          |  | Oolites   |  | Bryozoans           |  | Foram         |
|  | Micritic Limestone |  | Dolomitic |  | Brachiopods         |  | Fossils       |
|  | Grain Limestone    |  | Pyrite    |  | Gastropods          |  |               |
|  | Skeletal Limestone |  |           |  | Cephalopods         |  |               |

**LOGGING AND SURVEYING**

|                                   |                  |                   |                  |
|-----------------------------------|------------------|-------------------|------------------|
| Log                               | Interval (mMDRT) | Survey            | Interval (mMDRT) |
| DLL-MSFL-CAL-SDL-DSN-NGRT-CSNG-SP | 1194.0 - 1369.0  | MWD (Directional) | 154.8 - 1373.5   |
| MDT-MRPO-MRSC-MRFA-MRFC-GR        | 1289.0 - 1338.8  |                   |                  |

**WELL DATA**

|                       |                          |                            |  |
|-----------------------|--------------------------|----------------------------|--|
| Date                  | 22/09/97                 | 23/09/97                   |  |
| Run                   | 1                        | 2                          |  |
| Log                   | DLL-CAL-FWST-NGRT-SP     | MDT-MRPO-MRSC-MRFA-MRFC-GR |  |
| Depth Driller         | 1373m MDRT               | 1373m MDRT                 |  |
| Depth Logger          | 1373m MDRT               | 1373m MDRT                 |  |
| Bottom Log Interval   | 1369m MDRT               | 1338.8m MDRT               |  |
| Top Log Interval      | 1194m MDRT               | 1289.0m MDRT               |  |
| Casing Driller        | 877.5m MDRT              | 877.5m MDRT                |  |
| Casing Logger         |                          |                            |  |
| Casing Size           | 13.375"                  | 13.375"                    |  |
| Casing Weight         | 81.0lb/ft                | 81.0lb/ft                  |  |
| Bit Size              | 12.25"                   | 12.25"                     |  |
| Type of Fluid in Hole | KCL/PHPA/Polymer/Glycol  | KCL/PHPA/Polymer/Glycol    |  |
| Density               | 9.8ppg                   | 9.8ppg                     |  |
| Rm @ Measured Temp.   | 0.182ohmm @ 15.9°C       | 0.182ohmm @ 15.9°C         |  |
| Rmf @ Measured Temp.  | 0.160ohmm @ 16.4°C       | 0.160ohmm @ 16.4°C         |  |
| Rmc @ Measured Temp.  | 0.218ohmm @ 18.7°C       | 0.218ohmm @ 18.7°C         |  |
| Max. Recorded Temp.   | 63.3°C @ 1370m MDRT      | 63.0°C @ 1289.0m MDRT      |  |
| Equipment / Location  | 10598/SALE (Halliburton) | (Schlumberger)             |  |
| Recorded By           | P. HAMIL, G. Varghese    | Fharid                     |  |
| Witnessed By          | M. TURNER                | M. TURNER                  |  |

**CORES**

| From (mMDRT) | To (mMDRT) | Rec % |
|--------------|------------|-------|
| ---          | ---        | ---   |

**PERFORATIONS**

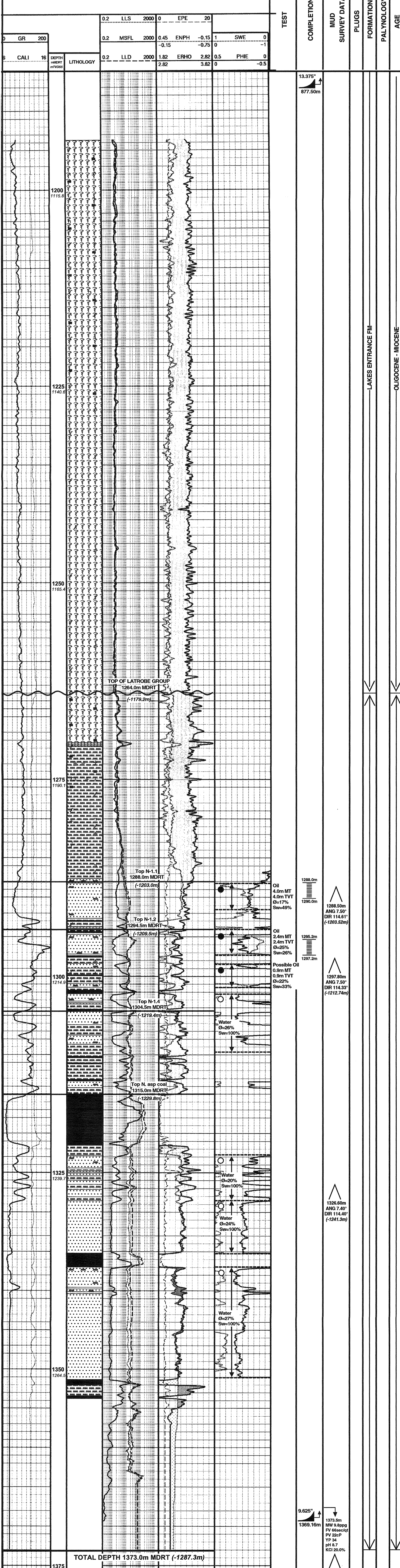
| From (mMDRT) | To (mMDRT) | Shots/ft |
|--------------|------------|----------|
| 1288.0       | 1290.9     | 12       |
| 1295.2       | 1297.2     | 12       |

**CASING**

| Size         | Set @ (mMDRT) | Sx Cmt | Formation           |
|--------------|---------------|--------|---------------------|
| 13.375"      | 877.5         | 1870   | Gippsland Limestone |
| 9.625"       | 1369.16       | 327    | Latrobe             |
| 5.5"(tubing) | 1298.98       | ---    | ---                 |

**PLUGS**

| From (mMDRT) | To (mMDRT) | Sx Cmt |
|--------------|------------|--------|
| ---          | ---        | ---    |



|      |                            |   |
|------|----------------------------|---|
| GR   | Gamma Ray                  | INITIAL BOPD RATE<br>10,000 BOPD at 27% Water Cut |
| CALI | Caliper                    |   |
| MSFL | Medium Resistivity         |   |
| LLD  | Shallow Resistivity        |   |
| EPE  | Deep Resistivity           |   |
| ENPH | Photoelectric Cross        |   |
| ERHO | Neutron Porosity           |   |
| SWE  | Bulk Density               |   |
| PHIE | Effective Water Saturation |   |
|      | Effective Porosity         |   |