

WELL COMPLETION LOG Scales - 1:200, 1:500



EAST PILCHARD-1

Gippsland Basin, Victoria
Concession: VIC/L9

| | | | |
|---|---|--|---|
| POST-DRILL LOCATION: (Top of Latrobe) | Latitude: 38° 11' 54.184" S Longitude: 148° 33' 42.825" E AMG X: 5,771,005.83 North AMG Y: 636,764.56 East | COMPILED BY: | Andrew Hodgson / Sheryl Sazenis |
| ELEVATION: | G.L.: -91.3m R.T.: 25m Water Depth: 91.3m | DRAFTED BY: | Andrew Hodgson |
| DATES: | On location: 02/07/2001 Spudded: 03/07/2001 Reached TD: 01/08/2001 Rig Released: 13/08/2001 | DRILLED BY: | Ocean Bounty - MODU |
| SERVICE COMPANIES: | DRILLING CONTRACTOR: Diamond Offshore General Company LWD/MWD: Schlumberger Anadrill GYRO SURVEYING: ---- CORING: ---- WIRELINE LOGGING: Schlumberger CEMENTING: Halliburton CASING: Weatherford | TOTAL DEPTH: | 3138.0m MDRT Drillers 3140.0m MDRT Loggers |
| | | PLUGGED BACK T.D.: | |
| | | CLASSIFICATION: | Wildcat |
| | | STATUS: | Gas Discovery Well |
| | | PRODUCTION TESTING: ---- DIVERS: Stolt Comex Seaway MUD LOGGING: BHI PRESSURE RECORDING: ---- WELL VELOCITY SURVEY: Schlumberger MUD ENGINEERING: Baroid LINER: Baker Oil Tools | |

LEGEND

| | | |
|---|--|--|
| 2.7m NOS CORE PERFORATED INTERVAL PLUG ←SST RECOVERED SIDE WALL CORE LITHOLOGY ←MSCT RECOVERED MSCT ← FIT ←P2/11 MDT PRETEST SUITE/RUN/SEAT NUMBER ←S11/2 MDT SAMPLE SUITE/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 INTEPRETED CONDENSATE BEARING DSTG DST WITH GAS RECOVERED DSTO DST WITH OIL RECOVERED SURVEY POINT 13-3/8" 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 Suite #1 | Interval (mMDRT) | Survey | Interval (mMDRT) |
|---|---|--|--|
| RUN #1 PEX-HALS-DSI-HNGS-LEHQT | 2945m - 873m 2660m - 2600m Repeat Section 2915m - 1564m HNGS & Neutron very high resolution 2934m - 1564m HALS-DSI P & S in upper dipole mode 1564m - 873m PEX normal resolution, HALS-DSI in P & S mode GR run to Sea floor 91m | Anadrill MWD 116m - 2459.8m SDI - Multi shot Survey 2488m - 2771m Single shot survey | 116m - 2459.8m 2488m - 2771m 2937m |
| RUN #2 MDT-GR-LEHQT Pressure tests 1 sample | 1689.03m - 2926.5m 93 pretests and 1 sample. 11 tight and 6 lost seal. | | |
| RUN #3 FMI-HRLA-GR-LEHQT | 2947.5m - 2220m | FMI Inclinator | 2952.75m - 2220m |
| RUN #4 MDT-GR-LEHQT (samples only) | 2593m - 2641m Samples only (Run stopped pump failure) 5 Sample points, all ok, 7 samples, 4 ok, 2 empty, 1 filtrate | | |
| RUN #4A MDT-GR-LEHQT (samples, pre-tests, OFA) | 2602m - 2885.4m Samples, Pre-Tests and OFA 21 Sample points, 13 ok, 2 lost seal, 5 tight, 1 supercharged 8 samples, 3 OFA, 2 pretest. | | |
| RUN #5 MSCT-GR-LEHQT | 2450m - 2878.5m Cut 25 cores, recovered 20 cores. | | |

WELL DATA

| Date | 24/07/2001 - 25/07/2001 | 25/07/2001 - 26/07/2001 | 25/07/2001 - 26/07/2001 | 27/07/2001 |
|-----------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Run | 1 | 2 | 3 | 4 |
| Log | PEX-HALS-DSI-HNGS-LEHQT | MDT-GR-LEHQT | FMI-HRLA-GR-LEHQT | MDT-GR-LEHQT |
| Depth Driller | 2945m | 2945m | 2945m | 2945m |
| Depth Logger | 2947.5m | 2947.5m | 2947.5m | 2947.5m |
| Bottom Log Interval | 2945.2m | 2926.5m | 2947.5m | 2641m |
| Top Log Interval | 873.5m, GR to 91m. | 1689.03m | 2220m | 2593m |
| Casing Driller | 873m | 873m | 873m | 873m |
| Casing Logger | 873.5m | 873.5m | 873.5m | 873.5m |
| Casing Size | 13 3/8" | 13 3/8" | 13 3/8" | 13 3/8" |
| Casing Weight | 68 lb/ft | 68 lb/ft | 68 lb/ft | 68 lb/ft |
| Bit Size | 12 1/4" | 12 1/4" | 12 1/4" | 12 1/4" |
| Type of Fluid in Hole | Kcl/PHPA/Polymer/Glycol | Kcl/PHPA/Polymer/Glycol | Kcl/PHPA/Polymer/Glycol | Kcl/PHPA/Polymer/Glycol |
| Density | 10.15 ppg | 10.15 ppg | 10.15 ppg | 10.15 ppg |
| Rm @ Measured Temp. | 0.0932 @ 18.9°C | 0.0932 @ 18.9°C | 0.0932 @ 18.9°C | 0.0932 @ 18.9°C |
| Rmf @ Measured Temp. | 0.0761 @ 18.9°C | 0.0761 @ 18.9°C | 0.0761 @ 18.9°C | 0.0761 @ 18.9°C |
| Rmc @ Measured Temp. | 0.210 @ 18.9°C | 0.210 @ 18.9°C | 0.210 @ 18.9°C | 0.210 @ 18.9°C |
| Max. Recorded Temp. | 97.8°C | 108.9°C | 109.4°C | 93.3°C |
| Equipment / Location | unit 25, VEA-APG Sale |
| Recorded By | Francisco/Rohan | Francisco/Rohan | Francisco/Rohan | Francisco/Rohan |
| Witnessed By | Arnaldo Ribeiro/Mike Woodmansee | Arnaldo Ribeiro/Mike Woodmansee | Arnaldo Ribeiro/Mike Woodmansee | Arnaldo Ribeiro/Mike Woodmansee |

WELL DATA

| Date | 27/07/2001 - 28/07/2001 | 28/07/2001 - 29/07/2001 | | |
|-----------------------|---------------------------------|---------------------------------|--|--|
| Run | 4A | 5 | | |
| Log | MDT-GR-LEHQT | MSCT-GR-LEHQT | | |
| Depth Driller | 2945m | 2945m | | |
| Depth Logger | 2947.5m | 2947.5m | | |
| Bottom Log Interval | 2885m | 2878m | | |
| Top Log Interval | 2602m | 2450m | | |
| Casing Driller | 873m | 873m | | |
| Casing Logger | 873.5m | 873.5m | | |
| Casing Size | 13 3/8" | 13 3/8" | | |
| Casing Weight | 68 lb/ft | 68 lb/ft | | |
| Bit Size | 12 1/4" | 12 1/4" | | |
| Type of Fluid in Hole | Kcl/PHPA/Polymer/Glycol | Kcl/PHPA/Polymer/Glycol | | |
| Density | 10.15 ppg | 10.15 ppg | | |
| Rm @ Measured Temp. | 0.0932 @ 18.9°C | 0.0932 @ 18.9°C | | |
| Rmf @ Measured Temp. | 0.0761 @ 18.9°C | 0.0761 @ 18.9°C | | |
| Rmc @ Measured Temp. | 0.210 @ 18.9°C | 0.210 @ 18.9°C | | |
| Max. Recorded Temp. | 107.8°C | 110°C | | |
| Equipment / Location | unit 25, VEA-APG Sale | unit 25, VEA-APG Sale | | |
| Recorded By | Francisco/Rohan | Francisco/Rohan | | |
| Witnessed By | Arnaldo Ribeiro/Mike Woodmansee | Arnaldo Ribeiro/Mike Woodmansee | | |

LOGGING AND SURVEYING

| Log Suite #2 | Interval (mMDRT) | Survey | Interval (mMDRT) |
|--|--|-------------|------------------|
| RUN #1 TLD-HGNS-HNGS | Repeat 3139m - 3078m 3139m - 2870m | Single shot | 3120m. |
| RUN #2 HALS-HGNS-DSI-LEHQT | Repeat 3139m - 3080m 3139m - 2870m | | |
| RUN #3 MDT-GR-LEHQT | 2825.5m - 2956.2m 17 pre-tests, 9 dry, 2 lost seal, 1 tight, 5 good. | | |
| RUN #4 DUAL-CSAT-VSP | 3140m - 146m Check shot at 1775m | | |
| RUN #5 MDT-GR-LEHQT (pressures and samples) | 2825.5m - 3125.5m 41 pre-tests, 13 good, 12 lost seal/supercharged, 12 tight, 8 samples taken from 4 depths 7 recovered | | |
| RUN #6 CST-GR | 3134m - 1650m Shot 60 cores shot, 54 recovered, 2 Empty, 4 miss fire | | |

WELL DATA

| Date | 2 Aug 2001 | 2 Aug 2001 | 2 Aug - 3 Aug 2001 | 3 Aug 2001 |
|-----------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Run | 1 | 2 | 3 | 4 |
| Log | TLD-HGNS-HNGS | HALS-HGNS-DSI-LEHQT | MDT-GR-LEHQT | DUAL-CSAT-VSP |
| Depth Driller | 3138m | 3138m | 3138m | 3138m |
| Depth Logger | 3140m | 3140m | 3140m | 3140m |
| Bottom Log Interval | 3139m | 3139m | 2956.2 | 3140m |
| Top Log Interval | 2870m. | 2870m. | 2825.5 | 146m |
| Casing Driller | 873m | 873m | 873m | 873m |
| Casing Logger | 873.5m | 873.5m | 873.5m | 873.5m |
| Casing Size | 13 3/8" | 13 3/8" | 13 3/8" | 13 3/8" |
| Casing Weight | 68 lb/ft | 68 lb/ft | 68 lb/ft | 68 lb/ft |
| Bit Size | 12 1/4" | 12 1/4" | 12 1/4" | 12 1/4" |
| Type of Fluid in Hole | Kcl/PHPA/Polymer/Glycol | Kcl/PHPA/Polymer/Glycol | Kcl/PHPA/Polymer/Glycol | Kcl/PHPA/Polymer/Glycol |
| Density | 10.15 ppg | 10.15 ppg | 10.15 ppg | 10.15 ppg |
| Rm @ Measured Temp. | 0.1020 @ 15.6°C | 0.1020 @ 15.6°C | 0.1020 @ 15.6°C | 0.1020 @ 15.6°C |
| Rmf @ Measured Temp. | 0.0883 @ 15.6°C | 0.0883 @ 15.6°C | 0.0883 @ 15.6°C | 0.0883 @ 15.6°C |
| Rmc @ Measured Temp. | 0.2055 @ 15.6°C | 0.2055 @ 15.6°C | 0.2055 @ 15.6°C | 0.2055 @ 15.6°C |
| Max. Recorded Temp. | 98.9°C | 103.3°C | 113.9°C | 103.3°C |
| Equipment / Location | unit 25, VEA-APG Sale |
| Recorded By | Francisco/Rohan | Francisco/Rohan | Francisco/Rohan | Francisco/Rohan |
| Witnessed By | Arnaldo Ribeiro/Mike Woodmansee | Arnaldo Ribeiro/Mike Woodmansee | Arnaldo Ribeiro/Mike Woodmansee | Arnaldo Ribeiro/Mike Woodmansee |

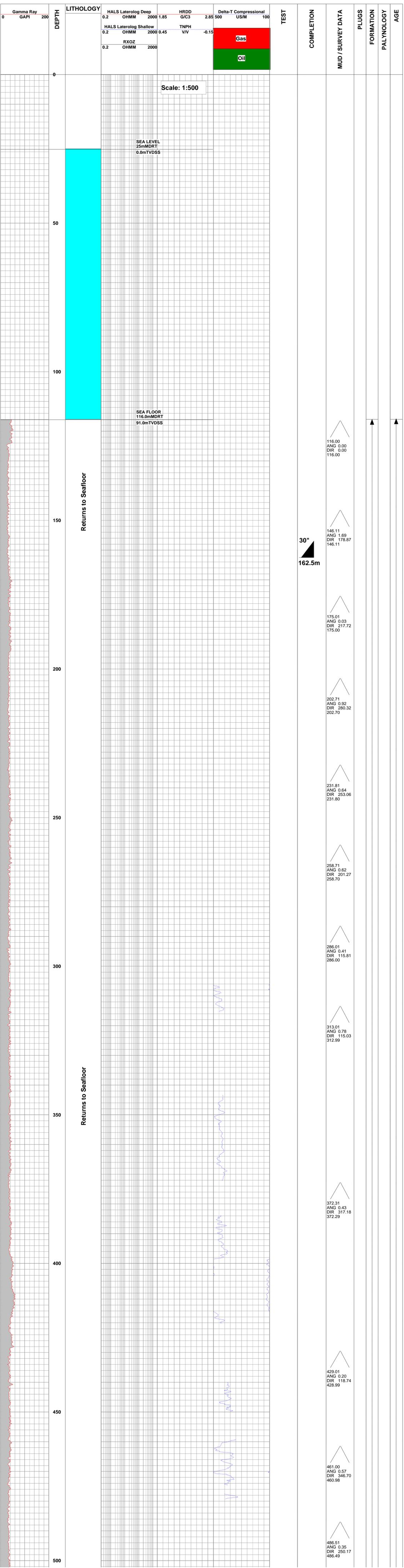
WELL DATA

| Date | 4 Aug 2001 | 5 Aug 2001 | | |
|-----------------------|-------------------------|-------------------------|--|--|
| Run | 5 | 6 | | |
| Log | MDT-GR-LEHQT | CST-GR | | |
| Depth Driller | 3138m | 3138m | | |
| Depth Logger | 3140m | 3140m | | |
| Bottom Log Interval | 3125.5m | 3134m | | |
| Top Log Interval | 2825.5m. | 1650m. | | |
| Casing Driller | 873m | 873m | | |
| Casing Logger | 873.5m | 873.5m | | |
| Casing Size | 13 3/8" | 13 3/8" | | |
| Casing Weight | 68 lb/ft | 68 lb/ft | | |
| Bit Size | 12 1/4" | 12 1/4" | | |
| Type of Fluid in Hole | Kcl/PHPA/Polymer/Glycol | Kcl/PHPA/Polymer/Glycol | | |
| Density | 10.15 ppg | 10.15 ppg | | |
| Rm @ Measured Temp. | 0.1020 @ 15.6°C | 0.1020 @ 15.6°C | | |
| Rmf @ Measured Temp. | 0.0883 @ 15.6°C | 0.0883 @ 15.6°C | | |
| Rmc @ Measured Temp. | 0.2055 @ 15.6°C | 0.2055 @ 15.6°C | | |
| Max. Recorded Temp. | 122.5°C | N/A | | |

| | | | | |
|----------------------|-----------------------|-----------------------|--|--|
| Equipment / Location | unit 25, VEA-APG Sale | Unit 25, VEA-APG Sale | | |
| Recorded By | Francisco/Rohan | Francisco/Rohan | | |
| Witnessed By | Mike Woodmansee | Mike Woodmansee | | |

| CORES | | | PERFORATIONS | | |
|--------------|------------|-------|--------------|------------|----------|
| From (mMDRT) | To (mMDRT) | Rec % | From (mMDRT) | To (mMDRT) | Shots/ft |
| | | | | | |
| | | | | | |

| CASING | | | | PLUGS | | |
|---------|---------------|--------|---------------------|-------------------|------------|--------|
| Size | Set @ (mMDRT) | Sx Cmt | Formation | From (mMDRT) | To (mMDRT) | Sx Cmt |
| 30" | 162.5 | 1020 | Gippsland Limestone | 826 | 890 | 73 |
| 13 3/8" | 873 | 2097 | Gippsland Limestone | (suspension plug) | | |
| 9 5/8" | 3126.2 | 1472 | Golden Beach Group | | | |



550

600

650

700

750

800

850

900

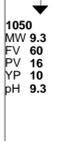
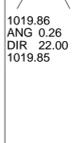
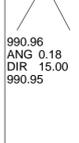
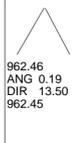
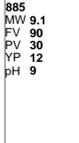
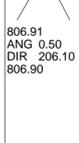
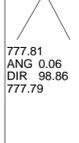
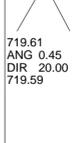
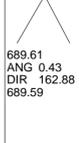
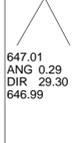
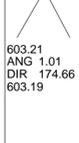
950

1000

1050

Returns to Seafloor

Returns to Seafloor

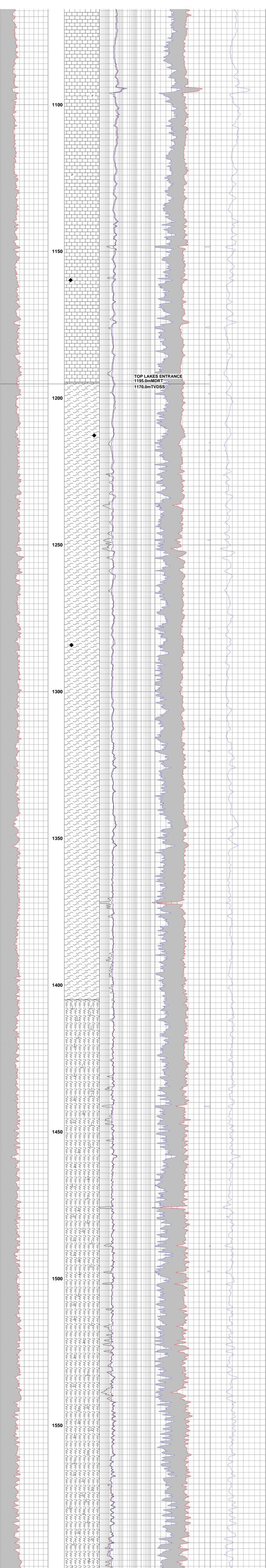


13 3/8"
873m

Plug #1: 826m - 890m

GIPLSLAND LIMESTONE

MIOCENE - RECENT



1136.76
ANG 0.35
DIR 18.10
1136.75

1217.60
ANG 0.35
DIR 18.10
1217.59

1236.46
ANG 0.41
DIR 18.10
1236.44

1277.46
ANG 0.50
DIR 34.40
1277.44

1335.36
ANG 0.58
DIR 31.10
1335.34

1376.86
ANG 0.58
DIR 32.30
1376.84

1394.76
ANG 0.61
DIR 38.10
1394.74

1411.66
ANG 0.66
DIR 32.50
1411.64

1431.06
ANG 0.73
DIR 37.90
1431.04

1455
MW 9.6
FV 55
PV 17
YP 12
pH 9.4

1543.26
ANG 0.90
DIR 36.60
1543.23

LAKES ENTRANCE FM

OLIGOCENE - MIOCENE