

Rec. 2/4/79

**BASIC**

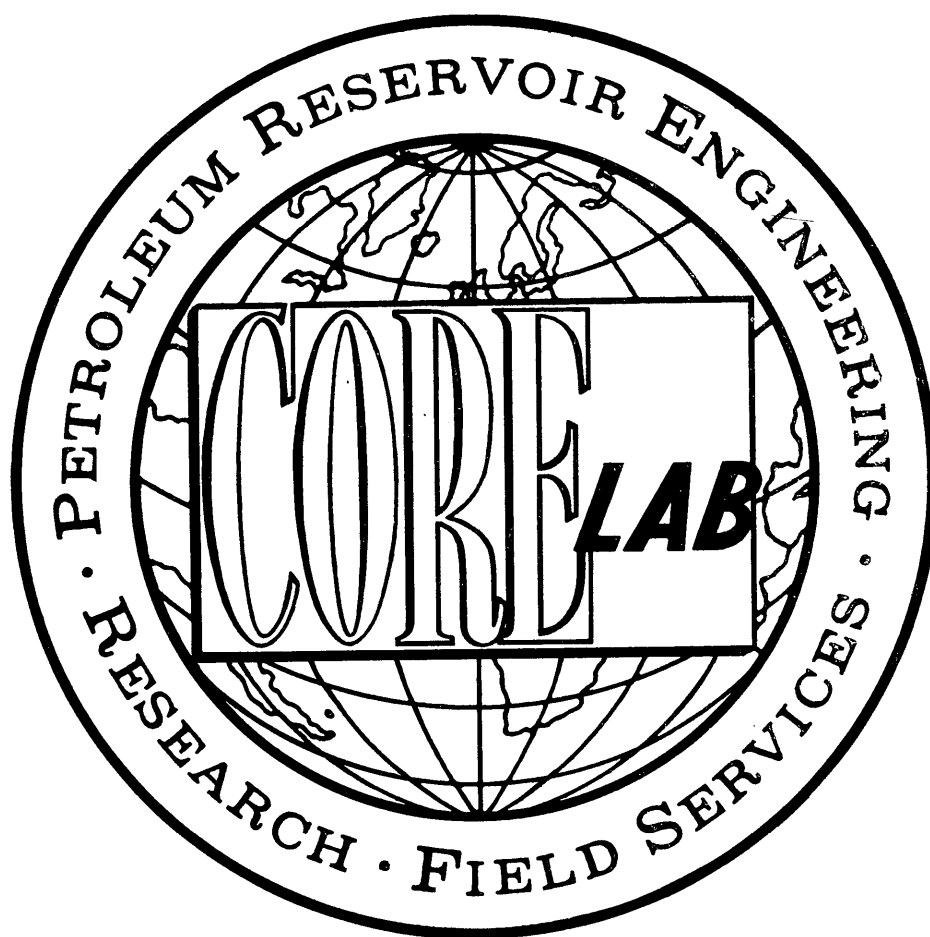
DEPT. NAT. RES & ENV



PE906358



ATTACHMENT TO WCL  
OF SWEEP-1 (W704)



W704

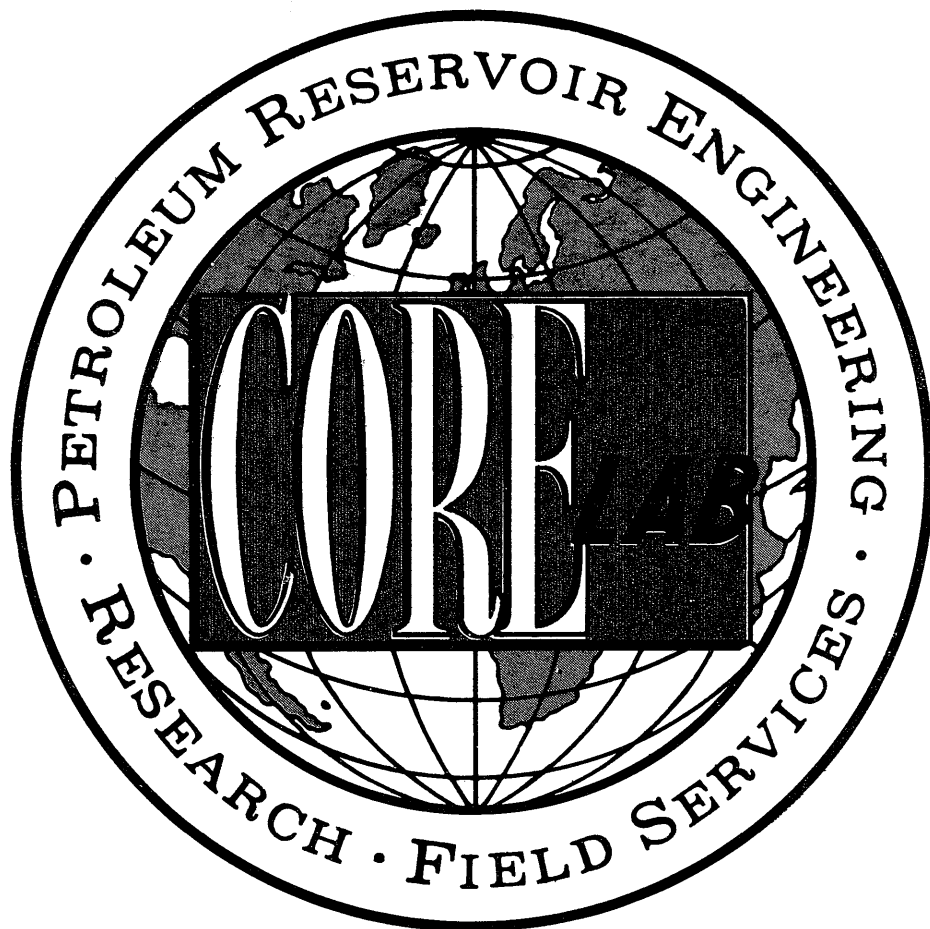
# EXTENDED SERVICE

ESSO EXPLORATION AUSTRALIA, LTD,

SWEEP NO. 1

EXTENDED SERVICE WELL REPORT

**OIL and GAS DIVISION**



**CORE LABORATORIES INTERNATIONAL LTD.**

24A, LIM TECK BOO ROAD. SINGAPORE 19.

TELEPHONE:2821222; CABLE: CORELAB; TELEX: RS21423.

LTD.

**CORE LABORATORIES INTERNATIONAL S.A.E.**  
*Petroleum Reservoir Engineering*  
SINGAPORE

REPLY TO:  
24-A, LIM TECK BOO ROAD,  
SINGAPORE 19.  
CABLE: CORELAB  
TELEPHONE: 811222  
TELEX: CORELAB RS 21423

27 th JULY 1978

ESSO AUSTRALIA , LTD .,  
P.O. BOX 372,  
SALE,  
VICTORIA. 3850.  
AUSTRALIA.

ATTENTION : L.D. ATTAWAY.

Dear Sir,

Enclosed with this well summary, for your inspection and reference, are all logs and relevant data (computer recorded, metre by metre) pertaining to the drilling of SWEEP #1. If you have any suggestions or queries on the presentation of this well summary and the data found within, do not hesitate to contact us.

CORE LABORATORIES appreciates being of assistance to ESSO AUSTRALIA during the entire drilling operations of SWEEP #1 and look forward to our continuing association on future exploratory work in AUSTRALIA.

Yours sincerely,

  
UNIT SUPERVISOR.

SWEEP NO. 1 was drilled by ESSO AUSTRALIA in the Gippsland Basin of Bass Strait. The Exploration well was drilled by ODECO's semi-submersible drilling rig - Ocean Endeavour. The well was spudded in a water depth of 68 metres on July 17 1978 and total depth of 90 metres was reached on July 26 1978.

Well location co-ordinates are:-

|            |                  |     |          |
|------------|------------------|-----|----------|
| Latitude:  | 38 <sup>0</sup>  | 03' | 27.7" S  |
| Longitude: | 148 <sup>0</sup> | 38' | 11.31" E |

A Core Laboratories Extended Services fully integrated computer unit was located on board the Ocean Endeavour to monitor all drilling parameters below the 508mm casing depth. All computer data found within this report is stored on magnetic tape and can be retrieved at any time at the request of the client.

The Core Laboratories well-site crew consisted of:-

|                 |   |             |
|-----------------|---|-------------|
| Unit Supervisor | - | K. Schiller |
| E.S. Engineer   | - | A. Pietsch  |
| E.S. Engineer   | - | R. Wigham   |
| Mud Loggers     | - | D. Anderson |
|                 |   | G. Holmes   |
|                 |   | P. Lane     |



## WELL SUMMARY

SWEEP NO. 1 was spudded on July 17 1978, in a water depth of 68m, (Kelly Bushing to mean sea level being 93m). A 660.4mm hole was then drilled to 238mm with returns to the sea floor.

508mm casing was set at 227m, followed by B.O.P. and marine riser emplacement and subsequent testing.

A 44.5mm hole was drilled from 238 - 618mm. The lithology over this interval was of predominantly detrital limestone interbedded with soft marl, and some minor skeletal limestone immediately below the 508mm casing shoe. Drilling rates ranged from 195 - 32mm/hour, with an average drill rate of 60 - 50m/hour through the interbedded detrital limestone/marl section. Background gas was zero to a trace throughout the interval 238 - 618m, and no connection gas was recorded. The mud weight over this section was of S.G. 1.04 to 1.08 and all drilling parameters indicated an overbalanced hole.

At 580m the flowline became blocked with cuttings. Such a situation could possibly have been avoided by regular "flushing" of the riser through the choke/kill line or by controlling the rate of penetration. Wireline logs run at 618m included the following:

|             |                |
|-------------|----------------|
| GR          | 95 - 606m      |
| FDC         | 227.5 - 606m   |
| ISF - SONIC | 227.5 - 613.5m |
| CST'S       |                |

340mm casing was set at 601m and drilling continued with a 311.15mm bit to 624. Here a P.I.T. produced a s.g. of 1.62 mud weight equivalent, with no leak off, and the mud weighted up to S.G. 1.34 in anticipation of possible shallow gas/oil pressure. Drilling with a 311.15mm bit continued. Lithology between 618 - 745mm



comprised of soft-sticky marl interbedded with rare detrital limestone and towards the base of the section grades to a firm mudstone. The drill rate ranged from 33-11m/hour, with an average of 18m/hour. Background gas over the interval averaged only a trace with a maximum of 1.5 wire units at 720m which corresponds to a faster drilling rate in the firmer mudstone. Trip gas of 4 units was recorded at 618m while no connection gas was observed throughout this section. All drilling variables indicated a well overbalanced hole.

The lithology from 745 - 775m was a interbedded composite of red-brown pyritic siltstone, mudstone, crystalline pyrite, glauconite nodules and very fine to fine grained sandstone with no hydrocarbon shows. A drilling break at 762m was circulated out after a negative flow check. Drilling rates over this interval ranged from 75 - 20m/hour and background gas was from 1 - 2 units, which is probably directly related to the increased drilling rate in these prospective reservoir 'cap rocks'.

The lithology from 775 - 900m was of predominantly medium to very coarse loose quartz sands at the top of the section which grade to fine to medium grained sandstones below, with rare interbeds of coal, claystone, dolomite and medium to coarse white feldspars. The loose sands and sandstones had no hydrocarbon shows. Rates of penetration through this section ranged from 160 - 10m/hour, while the faster rates generally corresponded to the loose quartz sands. Background gas was 1 - 2 units, with a peak of 8 units at 810m which reflects the fastest drilling rate of 160m/hour. No connection gas or trip gas were recorded during this interval and the relatively low gas observed while drilling the loose quartz sands suggests quite a high mud weight overbalance. All other drilling parameters also point to an overbalanced hole, and the subsequent electric logs show a high degree of 'washing out' in the hole especially in the loose sands.



The hole was conditioned prior to running the following Schlumberger wireline logs:

|                  |                            |
|------------------|----------------------------|
| ISF - Sonic-MSFL | 601 - 900.2m               |
| FDC - CNL - GR   | 601 - 900.2m               |
| HDT              | 601 - 900m                 |
| FIT'S (2)        | 801,795m                   |
| VELOCITY SURVEY  | 10 LEVELS                  |
| CST'S            | 600 - 900m REC. 51; Lost 9 |

FIT No. 1 at 801m was unsuccessful due to a blocked flow-line while FIT No. 2 at 795m failed to seat.

SWEEP NO. 1 reached a total depth of 900.0m at 00:10 hours on July 26 and was later plugged and abandoned.



CORE LABORATORIES EXTENDED SERVICE EQUIPMENT

A. MUDLOGGING

- 1 Hot Wire Gas Detector
- 1 Total FID Gas Chromatograph
- 1 FID Chromatograph
- 1 Carbon Dioxide Detector
- 1 Hydrogen Sulphide Detector
- 1 Cutting Gas Analyser
- 1 Shale Density Apparatus
- 1 Thermal Extractor (Steam Still)
- 1 U-V Light, Microscope and Other Geological Testing Equipment
- 6 Chart Recorders For All Drilling Parameters

B. CORE ANALYSING

- 1 Complete On-Site Core Analysis Equipment For Porosity, Permeability and Fluid Saturation Measurements.
- 1 Core Slabbing Saw

C. COMPUTER SYSTEM AND PERIPHERALS

- 2 Hewlett Packard 2100 Computers
- 2 Texas Instruments Keyboard-Send Receive Units
- 3 Computer Digital Displays
- 2 Hewlett Packard 7210A Plotters
- 4 Linc Tape Magnetic Recorders
- 1 Hewlett Packard HP65 Programmable Calculator





D. EXTERNAL SENSING APPARATUS INCLUDED

- 2 Mud Density Sensors
- 2 Mud Temperature Sensors
- 2 Mud Resistivity Sensors
- 1 Rotary Speed Sensor
- 1 Hookload Speed Sensor
- 1 Rotary Torque Sensor
- 1 Pump Pressure Sensor
- 1 Casing Pressure Sensor
- 1 Mud Flow Out Sensor
- 1 Gas Trap
- 1 Depth And Rate of Penetration Sensor
- 2 Pump Stroke Counters
- 3 Pit Level Sensors
- 1 Trip Tank Level Sensor
- 1 Six-Extension Intercom System



### RIG DESCRIPTION

The Ocean Endeavour is a self-propelled octagonal shaped semi-submersible drilling rig, constructed for Ocean Drilling and Exploration Company by Transfield (WA) Pty. Ltd., Perth, Western Australia.

The unit is 320' long, 266' wide with 7,000 HP twin screw diesel electric propulsion. The hull consists of four parallel pontoons, each measuring 28' in diameter. Four 12" diameter and eight 24" diameter stabilising columns are connected to the four pontoons. The tops of the columns which support the main deck of the rig are 120' from the base of the pontoons. The unit has capabilities of drilling at 70' draft in water depths up to 1,000'. The Ocean Endeavour is designed to withstand waves up to 110' with 15 seconds periods, simultaneously with 3 knot current and 100 knot winds and still remain within the American Bureau of Shipping allowable stress levels.

### RIG EQUIPMENT

- 1 Lee C. Moore 40' x 40' x 162' Cantilever Mast rated 1,400,000 API GNC.
- 1 Continental-Emsco C-3 Type 3 Drawworks grooved for 1.375" line, V-200 Parmac Hydromatic Brake, Emsco Catheads, Sandreel Assembly mounted on Drawworks, driven by three 1,000 HP DC Motors.
- 1 Continental-Emsco 37.5" Rotary Driven by 1,000 HP DC Motor with 2 speed transmission.
- 1 Continental-Emsco RA-60-6-1.375" Travelling Block, rated 650 ton.
- 1 Continental-Emsco 650 ton Swivel, L650.
- 1 Bryson-Jackson Hydrahook, rated 500 ton.
- 1 Lee C. Moore 6-60" Sheave Crown, 1-60" Fast Line Sheave.



- 1 Koomey Accumulator, 320 gallon, 3,000 psi W.P., with electric Master and Remote Panels.
- 1 18.75" 5,000 PSI Cameron BOP system with 600' 22" Vetco Marine Riser.
- 4 Riser Tensioners, 80,000 lbs. units.
- 1 Motion Compensator, Rucker 400,000 lbs.
- 2 Continental-Emsco FA-1300 Triplex Pumps, 6.5" X 12", driven by 1,300 HP DC Motor, each supercharged with a 5" x 6" Mission Centrifugal Pump.
- 1 Sub-Sea Television System.
- 2 Mission 6x 8R, H30 Centrifugal Mud Mix Pumps with 10.5" Impellers and 100 HP AC Motors.
- 3 Brandt double screen shale shakers.
- 10,000' 5" O.D. 19.5 lbs/ft., Grade E Drill Pipe.
- 5,000' 5" O.D. 19.5 lbs/ft., G-105 Drill Pipe.
- 30 8" O.D. Drill Collars.
- 24 6.5" O.D. Spiral Drill Collars.
- 2 Favco Cranes with 120' Booms, rated 40 tons at 30' radius and 23 tons at 90' radius.
- 1 Halliburton HT 400 Cement Unit, Pioneer T-16-4 Desilter, Pioneer T-10-6 Desander, PIT-0-Graph and Swaco Degasser.
- 8 Clarke Chapman 1 Drum Electric Anchor Windlasses, each with one 1,000 HP DC Motors, rated 440,000 lbs. pull.
- 8 30,000 lbs. LWT Anchors with 3,600' of 3" Steel Link Anchor Chain.
- 1 International Electric Corporation Offshore Technology Corporation, Adaptive Oceanography Data Reporting System for monitoring and recording, with Hole Position Indicator Recorder and Riser Angle Indicator Recorder.



STORAGE CAPACITY

|                   |   |               |
|-------------------|---|---------------|
| Fuel              | - | 6,972 bbls.   |
| Drill Water       | - | 14,320 bbls.  |
| Potable Water     | - | 385 bbls.     |
| Dry Mud           | - | 140 s. tons   |
| Bulk Mud & Cement | - | 9,600 cu. ft. |
| Liquid Mud        | - | 1,344 bbls.   |



## DESCRIPTION OF LOGS

Core Laboratories Extended Service Package includes sensors, recorders and computer facilities useful in the prediction and measurement of abnormal formation pressures and in obtaining rapid, effective and safe drilling. In addition to plots of variables important for pressure detection and drilling optimisation there are available wireline log interpretation programs for the wellsite geologist, well bore hydraulics (synthesis and analysis), well kill, bit nozzle selection, swab and surge created by drill pipe movement, drill bit performance programmes for the wellsite drilling supervisors. As there are two computer systems on board, these programmes can be run while the main computer system is in the real-time drilling mode.

The E.S. Logs include the following:

### E.S. Drill Log - Scale 1:5000

Information plotted on this log includes rate of penetration, 'd' exponent corrected for mud weights, total mud gas as measured by the hot wire detector, shale density of drilled cuttings, casing depth, bit runs, dates and other relevant drilling information. Both rate of penetration and total gas are plotted on a linear scale and shale density on a semi-log scale. The 'd' exponent is the primary overpressure detection plot. Corrected 'd' exponent, 'dcs' is rate of penetration normalised for rotary speed, weight on bit per inch of diameter and mud weight. The modification of 'dcs' was first implemented by Rhem and McClendon, to compensate for increases in mud weight. This particular procedure involves multiplying the standard 'd' exponent value by the inverse ratio of the mud weight increase. A multiplier of nine (9) was originally used for convenience to return the



magnitude of the 'dcs' to a comparable value of its uncorrected state. In Core Lab's real-time drilling programmes a multiplier of ten (10) is used. An overlay is used on the 'dcs' to give a quantitative measurement of formation pore pressure. This method of pore pressure prediction is very accurate for homogenous shales but where the sandstone/siltstone ratio varies a great deal, inaccuracies may occur, consequently all other variables are considered in assigning a value to pore pressure.

#### E.S. Temperature Log

The three variables on the Core Laboratories E.S. temperature log are:-

1. Temperature differential between suction and flowline drilling fluids, is on the left of the E.S. log.
2. Flowline temperature is the middle plot.
3. The end to end normalised flowline temperature is on the right of the log.

The temperature differential plot or delta T plot emphasizes changes in flowline temperature caused by surface effects such as mud addition or cooling during trips. Accompanying the plot are notations identifying the causes for temperature irregularities. The flowline temperature plot illustrates the change in flowline temperature during a bit run. Each bit run is labelled and the temperatures are logged to correspond to mud circulated from the bottom as the foot was cut. There are also notations to explain accountable variations. The end to end normalised flowline temperature plot is the principle interpretive plot. The information from the other two plots are taken into account, normalised and plotted as one continuous bit run. The flowline temperature is normalised for an annular velocity of 100 ft./



minute and a hole of constant diameter. There is also a compensation for specific changes in temperature of the drilling fluid. This factor is obtained by the implications of changes in surface dissipation of heat. For example, if the flowline mud temperature at the surface is reduced by an established 30°F. then chemicals are added to the mud system, the temperature of the same quantity of mud is reduced only 15°F. for the same initial flowline temperature and the same pit volume then the specific heat has changed by a factor of two. In this manner the correction for chemicals added can be accounted for from bit run to bit run as long as initial conditions are kept constant, including the same initial suction pit temperature at the start of the bit run. Along with this plot are temperature from Schlumberger electric log runs, the time after circulation and depth. When two or more points are available, there is projected bottomhole temperature obtained using inverse time versus log temperature plots, when bottomhole temperature is the temperature corresponding to the logarithmic value at  $1/\text{Time} = 0$ .

#### E.S. Pressure Log

Information plotted on this log includes formation pore pressure, E.C.D. (equivalent circulating density) and formation fracture pressure. The formation pore pressure plotted on this log is estimated from all formation pressure indicators. This is a conclusion log, therefore plotted data may well be modified on results from formation breakdown tests (PIT Tests), FIT's or DST's. The E.S. pressure log is the best estimation of down-hole formation pressure conditions by the Core Lab wellsite E.S. Engineer, based upon all relevant well data processed throughout the well drilling operations. This log is plotted on linear graph paper at a vertical scale of 1:5,000 to coincide with all other E.S. logs.



### E.S. Geoplot 1

This log includes rate of penetration, corrected 'd' exponent, drilling correlative porosity, formation fracture pressure, pore pressure and equivalent circulating density. It is plotted by the computer, either during the actual drilling of the hole or after TD, from the drilling data stored on magnetic tape. Once again this log is plotted on a 1:5,000 vertical scale. The horizontal dashed lines indicate the initiation of a new bit run.

### E.S. Geoplot 2

This log is similar to the Geoplot 1 in that it is computer plotted. However the following variables are plotted:- weight on bit, rotary speed, pump pressure and mud density in.

### WELL LOG PARAMETERS

#### 1. Grapholog

Scale 1:500, containing drilling rate, hot wire total gas, chromatographic analysis, percentage strip lithology, lithology descriptions and remarks column, casing points, individual bit runs, dates, mud data, deviation surveys and core descriptions.

#### 2. E.S. Drill Log

Scale 1:5,000, containing rate of penetration, hot wire total gas, corrected 'd' exponent, shale density, bit runs, dates and casing points.





3. E.S. Temperature Log

Scale 1:5,000, containing flowline temperature, delta T:- flowline temperature minus suction temperature, end to end plot (dimensionless).

4. E.S. Pressure Log

Scale 1:5,000, containing formation pore pressure, equivalent circulating density, formation fracture gradient.

5. E.S. Geoplot 1

Scale 1:5,000, containing rate of penetration corrected 'd' exponent, drilling porosity, formation pore pressure, equivalent circulating density and formation fracture gradient.

6. E.S. Geoplot 2

Scale 1:5,000, containing weight on bit, rotary RPM, mud density in and pump pressure.



EXTENDED SERVICE PACKAGE

1. ONLINE REALTIME DRILLING PROGRAM

The following parameters are calculated and monitored whilst this program is in operation.

Depth  
Corrected D exponent  
Drilling porosity  
Pore Pressure  
Torque  
Bit life  
Pump pressure  
Mud flowrate in  
Mud density in  
Equivalent circulating density  
R.P.M. (Rotary)  
Cumulative bit turns  
Fracture gradient  
Mud density out  
Time of day  
Maximum Hookload  
Plastic viscosity  
Yield point  
Bit time for economics calculations  
Off bottom indicator  
Mud temperature in  
Mud temperature out  
Mud resistivity in  
Mud resistivity out  
Mud flowrate out  
Rate of penetration  
Current hookload  
Hydrostatic pressure



Casing pressure  
Annular pressure loss  
Trip margin  
Rock matrix strength  
Rock strength  
Cost per foot  
Bit life remaining  
Bearing life remaining  
String pressure loss  
Bit pressure loss  
Jet velocity  
Impact force at bit  
Hydraulic horsepower  
Pit level (suction)  
Pit level (Return)  
Gas (%)  
Annular volume  
Mud density at bit  
Overall pump efficiency  
Systems flow exponent  
String volume  
Mud flowrate in (At computed efficiency)  
Slipset indicator



## 2. ONLINE PLOTTING CAPABILITY

Standard plot of: Depth, rate of penetration, corrected D exponent, drilling porosity, pore pressure, equivalent circulating density, fracture gradient, (plot scaled to suit requirements).

Option to plot any of the following parameters on a plot scaled to suit client requirements, whilst in the real-time mode.

Rate of penetration  
Corrected d exponent  
Drilling porosity  
Pore pressure  
Effective circulating density  
Fracture gradient  
PIT volume (Total)  
Cost per unit depth  
Pump pressure  
Stroke rate pump one  
Stroke rate pump two  
Torque  
R.P.M. (Rotary)  
Mud in temperature  
Mud out temperature  
Mud density in  
Mud density out  
Weight on bit  
Rock strength  
Bit tooth height remaining  
Bearing life remaining  
String pressure loss  
Bit pressure loss



Jet velocity  
Impact force  
Hydraulic horsepower  
Rock matrix strength  
Pressure loss in the annulus  
Hookload  
Casing pressure  
Mud resistivity in  
Mud resistivity out  
Mud flowrate in  
Mud flowrate out  
Hydrostatic pressure  
Equivalent circulating density - pore pressure (differential)  
Fracture gradient - equivalent circulating density  
Mud temperature out - mud temperature in  
Mud density out - mud density in

3. ONLINE REALTIME COMPUTER PRINTOUTS (5 OPTIONS)

SELECTION 1: Depth, time, rate of penetration, weight on bit, rotary R.P.M., mud density in, equivalent circulation density, pore pressure, fracture gradient, drilling porosity, corrected d exponent.

SELECTION 2: Depth, time, computed rock strength, mud temperature in, mud temperature out, mud resistivity in, mud resistivity out, yeild point, plastic viscosity, mud volumn in, mud density in override value, number of records.

SELECTION 3: Depth, steps, cumulative hours, weight on bit, maximum hookload, current hookload, weight on bit override value, strokes per minute (1), strokes per minute (2), pump pressure, casing pressure, hydrostatic pressure.



SELECTION 4: Depth, rate of penetration, rotary, R.P.M. weight on bit, mud density in, strokes per minute (1), strokes per minute (2), mud volume in, pump pressure, plastic viscosity, yeild point, mud temperature in, mud temperature out, mud resistivity out.

SELECTION 5: (Wide carriage printer format): Depth, time, rate of penetration, weight on bit, rotary R.P.M., mud density in, mud density out, equivalent circulating density, mud temperature in, mud temperature out, pore pressure, fracture gradient, drilling porosity, corrected d exponent, cumulative hours, pump stroke (1), pump stroke rate (2), mud volume in, pump pressure, casing pressure, weight on bit override, mud density out override, computed rock strength, gas.

Additional support programs are available for use by wellsite engineers, geologists and the E.S. personnel.

These include:

The following log analysis programs.

- SHALY - Determination of porosity, volume of clays and saturations of fluids in the pore space and densities of the hydrocarbons.
- RWASW - Calculation of porosity, fluid saturations formation factor and apparent fluid resistivity.
- FCALC - Computation of formation factor from porosity.
- RATIO - Water saturation as calculated by the ratio method.
- SWCALC - Water saturation as calculated by the Archie formula.
- CNLFDC - Porosity as determined from the CNL and FDC logs.



- RWCALC - Calculation of formation water resistivity from RXO and RT values.
- SPRW - Calculation of formation water resistivity, effective water resistivity, salinity, formation temperature from the S.P. log.
- C PLOT - Program to cross plot resistivity and porosity data.
- POROS - Calculation of porosity and formation factor from acoustic or FDC logs.
- ND PLOT - The Neutron density cross plot program.
- SD PLOT - The sonic density cross plot program.
- DP PLOT - Program to calculate clay porosity values from sonic response and bulk density inputs.
- S LOG A - A four part similar model interpretation
- S LOG B - program designed to be utilized where the
- S LOG C - rock matrix is composed primarily of one mineral though may be clean or shaly. Model allows data entry bore hole corrections and preliminary calculations cross plots. Interpretation and data listing.
- CDM - Dip program for calculation of dip magnitude and Azimuth and the degree of orientation of the resistivity anisotrophy.
- HDT - Program for calculation of the dip magnitude and Azimuth.

HYDRAULICS SUPPORT PROGRAMS

- HYDRIL - Hole hydraulics program
- OPTBIT - Bit hydraulics optimization program
- SWAB - Swab and surge pressure calculations
- JET - Jet selection program



SUPPLEMENTAL PROGRAMS

- KICK - Well kill program
- REDUC - Reduction of hydrostatic head by gas cut mud
- COST - Bit economics program with break even analysis
- FIT - General curve FIT program
- LAG - Time and stroke lag computation program
- TRIP - Trip monitor program





MUD DATA

PARAMETER

|                      |       |                    |
|----------------------|-------|--------------------|
| Depth                | ..... | Metres             |
| Mud Weight           | ..... | Pounds/Gallon      |
| Funnel Viscosity     | ..... | A.P.I. Seconds     |
| Plastic Viscosity    | ..... | Centipoise         |
| Yield Point          | ..... | Pounds/100 Sq. Ft  |
| Gel: Initial/10 Min. | ..... | Pounds/100 Sq. Ft. |
| Filtrate             | ..... | CC                 |
| Cake Thickness       | ..... | 32nd's of a inch   |
| Salinity             | ..... | PPM                |
| Solid/Sand/Oil       | ..... | Percentage Volume  |





# MUD INFORMATION DATA SHEET

ESP

UNIT NO. FL-176

SHEET NO. 1

| COMPANY            |         | WELL      |         |         |         | LOCATION        |  |
|--------------------|---------|-----------|---------|---------|---------|-----------------|--|
| ESSO AUSTRALIA     |         | SWEEP - 1 |         |         |         | GIPPSLAND BASIN |  |
| DEPTH              | 340     | 446       | 618     | 660     | 838     | 900             |  |
| DATE               | 21/7/78 | 22/7/78   | 22/7/78 | 25/7/78 | 25/7/78 | 26/7/78         |  |
| TIME               | 2245    | 0330      | 1800    | 0500    | 1830    | 2400            |  |
| WEIGHT             | 1.04    | 1.07      | 1.08    | 1.34    | 1.34    | 1.32            |  |
| FUNNEL VISCOSITY   | 32      | 33        | 38      | 53      | 40      | 45              |  |
| PLASTIC VISCOSITY  | 6       | 7         | 6       | 18      | 13      | 14              |  |
| YIELD POINT        | 10      | 12        | 12      | 15      | 17      | 14              |  |
| GEL INITIAL/10 MIN | 5/12    | 5/11      | 3/8     | 5/14    | 3/9     | 3/10            |  |
| pH                 | 9.0     | 9.0       | 10.1    | 10.4    | 10.5    | 10.5            |  |
| FILTRATE           | -       | -         | 15.9    | 6.4     | 6.7     | 6.8             |  |
| CAKE               | 2/32    | 2/32      | 2/32    | 2/32    | 2/32    | 1/32            |  |
| SALINITY           | 18000   | 18000     | 7000    | 5000    | 4000    | 3600            |  |
| SOLIDS/SAND/OIL    | 5/tr/-  | 5.5/tr/-  | 6/tr/-  | 14/tr/- | 13/tr/- | 11/.25/-        |  |

REMARKS:

INCREASE MUD WEIGHT TO 1.34 S.G. AT 630 METRES.

|                    |  |  |  |  |  |  |
|--------------------|--|--|--|--|--|--|
| DEPTH              |  |  |  |  |  |  |
| DATE               |  |  |  |  |  |  |
| TIME               |  |  |  |  |  |  |
| WEIGHT             |  |  |  |  |  |  |
| FUNNEL VISCOSITY   |  |  |  |  |  |  |
| PLASTIC VISCOSITY  |  |  |  |  |  |  |
| YIELD POINT        |  |  |  |  |  |  |
| GEL INITIAL/10 MIN |  |  |  |  |  |  |
| pH                 |  |  |  |  |  |  |
| FILTRATE           |  |  |  |  |  |  |
| CAKE               |  |  |  |  |  |  |
| SALINITY           |  |  |  |  |  |  |
| SOLIDS/SAND/OIL    |  |  |  |  |  |  |

REMARKS:

COST PER METRE CHARTS

|           |    |    |                                   |
|-----------|----|----|-----------------------------------|
| INTERVAL  | .. | .. | METRES                            |
| METERAGE  | .. | .. | METRES                            |
| BIT SIZE  | .. | .. | MILLIMETRES                       |
| JET SIZE  | .. | .. | MILLIMETRES                       |
| CONDITION | .. | .. | TEETH/BEARING/GAUGE               |
| COST      | .. | .. | DOLLARS PER METER<br>(AUSTRALIAN) |

HOURS AND BIT TURNS ARE THE ACTUAL HOURS AND TURNS ON  
BOTTOM.







BIT DATA

| <u>VARIABLE</u>    |    |    | <u>UNITS</u>           |
|--------------------|----|----|------------------------|
| BIT INTERVAL       | .. | .. | METRES                 |
| SIZE               | .. | .. | MILLIMETRES            |
| JETS               | .. | .. | MILLIMETRES            |
| BIT RUN            | .. | .. | METRES                 |
| CONDITION          | .. | .. | TEETH/BEARING/GAUGE    |
| OD'S, ID'S         | .. | .. | MILLIMETRES            |
| LENGTH             | .. | .. | METRES                 |
| DEPTH              | .. | .. | METRES                 |
| WOB                | .. | .. | THOUSANDS OF POUNDS    |
| PUMP RATE          | .. | .. | STROKES PER MINUTE     |
| FLOW RATE          | .. | .. | GALLONS PER MINUTE     |
| PUMP PRESSURE      | .. | .. | POUNDS PER SQUARE INCH |
| MUD WEIGHT         | .. | .. | S.G.                   |
| PV                 | .. | .. | CENTIPOISE             |
| YP                 | .. | .. | POUNDS PER 100 SQ. FT. |
| TEMPERATURE        | .. | .. | CENTIGRADE             |
| PRESSURE DROPS (P) | .. | .. | POUNDS PER SQUARE INCH |
| JET VELOCITY       | .. | .. | METRES PER SECOND      |
| ANN. VELOCITIES    | .. | .. | METRES PER MINUTE      |
| ECD                | .. | .. | S.G.                   |





ESP

BIT RUN DATA SHEET.

UNIT NO. FL-176

RUN NO. 3

BIT NO. 3

|                                     |                  |                    |          |                             |          |                        |          |
|-------------------------------------|------------------|--------------------|----------|-----------------------------|----------|------------------------|----------|
| COMPANY<br>ESSO AUSTRALIA           |                  | WELL<br>SWEEP - 1  |          | LOCATION<br>GIPPSLAND BASIN |          | INTERVAL<br>618 - 900m |          |
| BIT                                 | MAKE<br>HTC      | TYPE<br>X3A        |          | BIT RUN<br>282m             |          | TOTAL REVS<br>69000    |          |
|                                     | SIZE<br>311.15mm | JETS<br>3 x 12.7mm |          | HOURS RUN<br>12             |          | CONDITION<br>8.8.½     |          |
| DRILL STRING & BOTTOM HOLE ASSEMBLY |                  |                    |          | OD                          | ID       |                        |          |
|                                     | DRILL PIPE       |                    |          | 127mm                       | 108.61mm | LENGTH                 |          |
|                                     | HW DRILL PIPE    |                    |          |                             |          |                        |          |
|                                     | DRILL COLLARS    |                    |          | 203.2mm                     | 76.2mm   | 146.24m                |          |
| CASING & LINER RISER                | OD               |                    | ID       | GRADE                       | SET AT   |                        |          |
|                                     | 339.85mm         |                    | 320.42mm |                             | 601m     |                        | HUNG AT. |
|                                     |                  |                    | 476.25mm |                             | L= 93m   |                        |          |
| DEPTH                               | 650              | 700                | 750      | 800                         | 850      |                        |          |
| WOB                                 | 23               | 20                 | 16       | 13                          | 27       |                        |          |
| RPM                                 | 85               | 99                 | 105      | 90                          | 90       |                        |          |
| PUMP RATE                           | 75/78            | 73/78              | 74/79    | 65/63                       | 77/75    |                        |          |
| FLOWRATE                            | 753              | 743                | 757      | 624                         | 740      |                        |          |
| PUMP PRESS                          | 2900             | 2600               | 2650     | 2120                        | 2580     |                        |          |
| MW S.G.                             | 1.34             | 1.34               | 1.34     | 1.34                        | 1.34     |                        |          |
| PV                                  | 18               | 18                 | 18       | 22                          | 22       |                        |          |
| YP                                  | 15               | 15                 | 15       | 16                          | 16       |                        |          |
| SAND %                              | tr               | tr                 | tr       | tr                          | tr       |                        |          |
| TEMP.OC                             | 33               | 36                 | 38       | 42                          | 39       |                        |          |
| Psurface                            | 76               | 74                 | 76       | 57                          | 78       |                        |          |
| Pstring                             | 570              | 579                | 614      | 480                         | 676      |                        |          |
| Pbit                                | 1689             | 1638               | 1681     | 1176                        | 1659     |                        |          |
| Pannulus                            | 13               | 13                 | 14       | 14                          | 16       |                        |          |
| Ptotal                              | 2348             | 2304               | 2385     | 1727                        | 2429     |                        |          |
| HHP                                 | 742              | 710                | 742      | 428                         | 716      |                        |          |
| IMPACTFORCE                         | 1791             | 1741               | 1797     | 1239                        | 1745     |                        |          |
| JET VEL                             | 124              | 123                | 124      | 103                         | 124      |                        |          |
| DC/OH                               | 65               | 64                 | 65       | 55                          | 65       |                        |          |
| DP/OH                               |                  |                    |          |                             | 45       |                        |          |
| DP/CSG                              | 42               | 42                 | 42       | 35                          | 41       |                        |          |
| ECD                                 | 11.3             | 11.3               | 11.3     | 11.3                        | 11.3     |                        |          |

REMARKS;

DRILLED OUT OF CASING. AT 627 METRES PERFORMED P.I.T. LEAK OFF TEST. NO FORMATION BREAKDOWN WITH 1.62 SG MUD WEIGHT EQUIVALENT.

DUMP A

|       |   |                                                                                                                                                                                                                                                     |
|-------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DEPTH | - | Well depth in metres                                                                                                                                                                                                                                |
| TIME  | - | Time of day in hours and minutes                                                                                                                                                                                                                    |
| ROP   | - | Rate of penetration in metres per hour                                                                                                                                                                                                              |
| WOB   | - | Weight on bit in thousands of pounds                                                                                                                                                                                                                |
| RPM   | - | Rotary speed in revolution per minute                                                                                                                                                                                                               |
| MID   | - | Mud density in, in pounds per gallon                                                                                                                                                                                                                |
| MDO   | - | Mud density out, in pounds per gallon                                                                                                                                                                                                               |
| ECD   | - | Equivalent circulating density of the drilling fluid at the bottom of the hole. The sum of the hydrostatic pressure and the annular pressure drop, measured in pounds per gallon.                                                                   |
| PP    | - | Pore pressure gradient, in pounds per gallon, is the pressure exerted by the fluids in the pore space of the formation. It is determined by analysing deviations from the trend line of the drilling porosity.                                      |
| FG    | - | Fracture gradient is the pressure required to fracture the formation, expressed in pounds per gallon. It is derived from the pore pressure, calculated by the program using the Matthews and Kelly equation and an appropriate metric stress curve. |
| POR   | - | Drilling porosity. This is the calculated porosity of the formation being drilled, derived from the general drilling equation. It is a function of the drilling variables: WOB, ROP, RPM, Toothwear, differential pressure and rock strength.       |
| DEXP  | - | Calculated 'd' exponent. The 'd' exponent is a function of WOB, ROP, RPM and hole size. A correction is made to the 'd' exponent for variations in mud density to give the corrected 'd' exponent.                                                  |





| DEPTH         | TIME  | ROP   | WOB | RPM | MDI | MDO | ECD | PP   | FG   | POR  | DEXP |
|---------------|-------|-------|-----|-----|-----|-----|-----|------|------|------|------|
| -----         |       |       |     |     |     |     |     |      |      |      |      |
| NEW BIT ID: 2 |       |       |     |     |     |     |     |      |      |      |      |
| -----         |       |       |     |     |     |     |     |      |      |      |      |
| 240.0         | 19:12 | 59.9  | 13  | 94  | 8.6 | 8.7 | 8.6 | 8.60 | 10.6 | 35.3 | .82  |
| 242.0         | 19:14 | 62.3  | 12  | 93  | 8.6 | 8.7 | 8.7 | 8.60 | 10.6 | 39.3 | .79  |
| 270.0         | 20: 8 | 112.2 | 12  | 95  | 8.6 | 8.7 | 8.8 | 8.60 | 10.8 | 49.9 | .64  |
| 274.0         | 20:19 | 113.9 | 13  | 97  | 8.6 | 8.7 | 8.8 | 8.60 | 10.9 | 47.4 | .66  |
| 276.0         | 20:19 | 154.3 | 10  | 101 | 8.6 | 8.7 | 8.9 | 8.60 | 10.9 | 56.7 | .57  |
| 278.0         | 20:20 | 114.0 | 12  | 100 | 8.6 | 8.7 | 8.9 | 8.60 | 10.9 | 51.2 | .65  |
| 294.0         | 20:51 | 121.0 | 15  | 100 | 8.6 | 8.7 | 8.8 | 8.60 | 11.0 | 43.9 | .67  |
| 300.0         | 20:56 | 162.0 | 15  | 118 | 8.6 | 8.7 | 8.9 | 8.60 | 11.0 | 46.6 | .64  |
| 304.0         | 20:59 | 195.7 | 17  | 135 | 8.6 | 8.7 | 9.0 | 8.60 | 11.1 | 46.8 | .64  |
| 308.0         | 21:24 | 191.8 | 15  | 135 | 8.6 | 8.7 | 8.7 | 8.60 | 11.1 | 44.8 | .64  |
| 86            |       |       |     |     |     |     |     |      |      |      |      |
| 310.0         | 21:24 | 187.0 | 17  | 135 | 8.6 | 8.7 | 8.7 | 8.60 | 11.1 | 42.1 | .67  |
| 320.0         | 22:23 | 137.1 | 13  | 135 | 8.6 | 8.7 | 8.7 | 8.60 | 11.1 | 44.0 | .71  |
| 330.0         | 22:23 | 66.5  | 15  | 135 | 8.6 | 8.7 | 8.7 | 8.60 | 11.2 | 33.0 | .90  |
| 340.0         | 22:38 | 86.1  | 17  | 135 | 8.6 | 8.7 | 8.8 | 8.60 | 11.2 | 33.3 | .86  |
| 350.0         | 22:55 | 89.8  | 16  | 135 | 8.6 | 8.7 | 8.9 | 8.60 | 11.3 | 36.7 | .84  |
| 360.0         | 23: 1 | 50.7  | 18  | 135 | 8.6 | 8.7 | 9.0 | 8.60 | 11.4 | 31.2 | .98  |
| 370.0         | 23:19 | 41.9  | 18  | 135 | 8.6 | 8.7 | 8.8 | 8.60 | 11.4 | 23.7 | 1.06 |
| 372.0         | 23:56 | 41.3  | 18  | 130 | 8.7 | 8.7 | 8.8 | 8.60 | 11.4 | 23.5 | 1.06 |
| 374.0         | 23:56 | 66.4  | 18  | 130 | 8.7 | 8.7 | 8.8 | 8.60 | 11.4 | 30.3 | .93  |
| 376.0         | 23:57 | 61.6  | 15  | 130 | 8.7 | 8.7 | 8.8 | 8.60 | 11.4 | 33.8 | .91  |
| 100           |       |       |     |     |     |     |     |      |      |      |      |
| 378.0         | 0:30  | 59.5  | 16  | 130 | 8.7 | 8.7 | 8.8 | 8.60 | 11.4 | 31.4 | .93  |
| 380.0         | 0:30  | 66.5  | 15  | 130 | 8.7 | 8.7 | 8.8 | 8.60 | 11.5 | 35.9 | .89  |
| 390.0         | 1: 9  | 32.1  | 17  | 130 | 8.7 | 8.7 | 8.8 | 8.60 | 11.5 | 24.6 | 1.09 |
| 400.0         | 2: 1  | 39.9  | 22  | 130 | 8.7 | 8.7 | 8.8 | 8.60 | 11.5 | 20.4 | 1.11 |
| 410.0         | 2:20  | 51.9  | 25  | 135 | 8.7 | 8.8 | 8.9 | 8.60 | 11.6 | 22.7 | 1.07 |
| 420.0         | 2:40  | 47.4  | 27  | 135 | 8.7 | 8.9 | 8.9 | 8.60 | 11.6 | 19.2 | 1.12 |
| 430.0         | 2:58  | 46.0  | 28  | 135 | 8.7 | 8.9 | 8.9 | 8.60 | 11.7 | 18.6 | 1.13 |
| 440.0         | 3: 8  | 64.0  | 23  | 135 | 8.7 | 8.9 | 9.0 | 8.60 | 11.7 | 28.8 | .98  |
| 450.0         | 5:50  | 78.7  | 23  | 135 | 8.7 | 8.9 | 8.8 | 8.60 | 11.8 | 27.8 | .95  |
| 460.0         | 6:10  | 87.8  | 24  | 135 | 9.0 | 8.9 | 9.3 | 8.60 | 11.8 | 36.1 | .87  |
| 116           |       |       |     |     |     |     |     |      |      |      |      |
| 470.0         | 6:27  | 72.8  | 25  | 135 | 8.8 | 8.9 | 9.0 | 8.60 | 11.8 | 29.5 | .96  |
| 480.0         | 6:47  | 61.9  | 22  | 135 | 8.8 | 8.9 | 9.0 | 8.60 | 11.9 | 28.9 | .98  |
| 490.0         | 7:40  | 66.2  | 22  | 142 | 8.8 | 8.9 | 8.9 | 8.60 | 11.9 | 28.8 | .99  |
| 500.0         | 7:50  | 58.3  | 22  | 142 | 8.8 | 8.9 | 9.1 | 8.60 | 12.0 | 30.8 | 1.00 |
| 510.0         | 7:51  | 50.0  | 22  | 142 | 8.8 | 8.9 | 9.1 | 8.60 | 12.0 | 30.5 | 1.03 |
| 520.0         | 8:19  | 54.7  | 22  | 142 | 8.8 | 8.9 | 8.9 | 8.60 | 12.0 | 29.0 | 1.03 |
| 530.0         | 8:41  | 48.3  | 22  | 142 | 8.8 | 8.9 | 8.9 | 8.60 | 12.1 | 27.6 | 1.07 |
| 540.0         | 8:59  | 50.1  | 22  | 135 | 8.8 | 8.9 | 9.0 | 8.60 | 12.1 | 28.7 | 1.04 |
| 550.0         | 9: 2  | 46.7  | 22  | 135 | 8.8 | 8.9 | 9.1 | 8.60 | 12.1 | 29.7 | 1.05 |
| 560.0         | 9:27  | 51.9  | 24  | 135 | 8.8 | 8.9 | 8.9 | 8.60 | 12.2 | 27.4 | 1.06 |
| 131           |       |       |     |     |     |     |     |      |      |      |      |
| 570.0         | 9:59  | 41.4  | 26  | 135 | 8.8 | 8.9 | 8.9 | 8.60 | 12.2 | 22.9 | 1.14 |
| 580.0         | 11:46 | 61.2  | 26  | 135 | 8.8 | 8.9 | 8.9 | 8.60 | 12.3 | 27.0 | 1.04 |
| 590.0         | 12: 1 | 63.8  | 26  | 130 | 8.8 | 8.9 | 9.0 | 8.60 | 12.3 | 29.2 | 1.00 |
| 600.0         | 12:41 | 40.6  | 26  | 130 | 8.8 | 8.9 | 8.9 | 8.60 | 12.3 | 23.3 | 1.14 |
| 610.0         | 0:15  | 38.5  | 31  | 130 | 8.8 | 8.9 | 8.9 | 8.60 | 12.4 | 18.6 | 1.21 |
| 618.0         | 0:26  | 45.0  | 30  | 130 | 8.8 | 8.9 | 9.0 | 8.60 | 12.4 | 22.8 | 1.14 |
| -----         |       |       |     |     |     |     |     |      |      |      |      |
| NEW BIT ID: 3 |       |       |     |     |     |     |     |      |      |      |      |
| -----         |       |       |     |     |     |     |     |      |      |      |      |
| 622.0         | 21:32 | 15.5  | 33  | 82  | 9.5 | 9.6 | 9.6 | 8.60 | 12.4 | 10.2 | 1.40 |

| DEPTH | TIME  | ROP  | WOB | RPM | MDI  | MDO  | ECD  | PP   | FG   | PDR  | DEXP |
|-------|-------|------|-----|-----|------|------|------|------|------|------|------|
| 149   |       |      |     |     |      |      |      |      |      |      |      |
| 624.0 | 21:40 | 15.8 | 30  | 92  | 9.5  | 9.6  | 9.6  | 8.60 | 12.4 | 11.3 | 1.40 |
| 626.0 | 0: 0  | 17.0 | 20  | 78  | 11.2 | 11.2 | 11.3 | 8.60 | 12.4 | 44.0 | 1.01 |
| 628.0 | 1:57  | 15.2 | 20  | 105 | 11.2 | 11.2 | 11.3 | 8.60 | 12.4 | 40.0 | 1.10 |
| 630.0 | 2:21  | 9.3  | 20  | 67  | 11.2 | 11.2 | 11.3 | 8.60 | 12.4 | 38.7 | 1.11 |
| 632.0 | 2:40  | 12.6 | 21  | 67  | 11.2 | 11.2 | 11.4 | 8.60 | 12.4 | 41.3 | 1.05 |
| 634.0 | 2:50  | 14.5 | 21  | 71  | 11.2 | 11.2 | 11.4 | 8.60 | 12.4 | 41.1 | 1.05 |
| 636.0 | 2:56  | 21.5 | 23  | 73  | 11.2 | 11.2 | 11.4 | 8.60 | 12.5 | 45.0 | .97  |
| 640.0 | 3:12  | 17.8 | 24  | 71  | 11.2 | 11.2 | 11.4 | 8.60 | 12.5 | 42.4 | 1.01 |
| 642.0 | 3:22  | 12.1 | 21  | 64  | 11.2 | 11.2 | 11.4 | 8.60 | 12.5 | 41.6 | 1.05 |
| 644.0 | 3:29  | 19.0 | 23  | 66  | 11.2 | 11.2 | 11.4 | 8.60 | 12.5 | 44.2 | .97  |
| 166   |       |      |     |     |      |      |      |      |      |      |      |
| 646.0 | 3:36  | 17.1 | 22  | 83  | 11.2 | 11.2 | 11.4 | 8.60 | 12.5 | 41.1 | 1.04 |
| 648.0 | 3:42  | 23.0 | 23  | 86  | 11.2 | 11.2 | 11.4 | 8.60 | 12.5 | 42.8 | 1.01 |
| 650.0 | 3:56  | 21.7 | 23  | 81  | 11.2 | 11.2 | 11.4 | 8.60 | 12.5 | 43.3 | .99  |
| 652.0 | 4: 6  | 13.1 | 23  | 84  | 11.2 | 11.2 | 11.4 | 8.60 | 12.5 | 36.9 | 1.12 |
| 654.0 | 4:16  | 12.4 | 23  | 85  | 11.2 | 11.2 | 11.4 | 8.60 | 12.5 | 36.4 | 1.13 |
| 656.0 | 4:36  | 7.4  | 24  | 112 | 11.2 | 11.2 | 11.4 | 8.60 | 12.5 | 26.7 | 1.35 |
| 658.0 | 4:44  | 17.2 | 23  | 132 | 11.2 | 11.2 | 11.4 | 8.60 | 12.5 | 35.6 | 1.17 |
| 660.0 | 5: 2  | 34.8 | 24  | 128 | 11.2 | 11.2 | 11.4 | 8.60 | 12.5 | 42.3 | 1.02 |
| 662.0 | 5: 6  | 31.7 | 24  | 126 | 11.2 | 11.2 | 11.4 | 8.60 | 12.5 | 42.2 | 1.02 |
| 664.0 | 5: 9  | 36.9 | 24  | 127 | 11.2 | 11.2 | 11.4 | 8.60 | 12.5 | 44.4 | .98  |
| 185   |       |      |     |     |      |      |      |      |      |      |      |
| 666.0 | 5:14  | 26.3 | 25  | 124 | 11.2 | 11.2 | 11.4 | 8.60 | 12.5 | 39.9 | 1.07 |
| 670.0 | 5:29  | 22.0 | 24  | 88  | 11.2 | 11.2 | 11.4 | 8.60 | 12.6 | 42.8 | 1.00 |
| 672.0 | 5:35  | 18.7 | 25  | 123 | 11.2 | 11.2 | 11.4 | 8.60 | 12.6 | 36.5 | 1.14 |
| 674.0 | 5:39  | 29.2 | 25  | 128 | 11.2 | 11.2 | 11.4 | 8.60 | 12.6 | 40.9 | 1.05 |
| 676.0 | 5:53  | 14.4 | 23  | 85  | 11.2 | 11.2 | 11.4 | 8.60 | 12.6 | 37.9 | 1.10 |
| 678.0 | 6: 5  | 24.1 | 24  | 60  | 11.2 | 11.2 | 11.4 | 8.60 | 12.6 | 46.6 | .91  |
| 680.0 | 6:10  | 25.1 | 24  | 93  | 11.2 | 11.2 | 11.4 | 8.60 | 12.6 | 42.6 | 1.00 |
| 682.0 | 6:17  | 16.1 | 24  | 102 | 11.2 | 11.2 | 11.4 | 8.60 | 12.6 | 37.2 | 1.12 |
| 684.0 | 6:22  | 26.7 | 23  | 103 | 11.2 | 11.2 | 11.4 | 8.60 | 12.6 | 43.8 | .99  |
| 686.0 | 6:29  | 18.1 | 26  | 104 | 11.2 | 11.2 | 11.4 | 8.60 | 12.6 | 36.8 | 1.12 |
| 204   |       |      |     |     |      |      |      |      |      |      |      |
| 688.0 | 6:38  | 16.8 | 21  | 76  | 11.2 | 11.2 | 11.4 | 8.60 | 12.6 | 43.2 | 1.01 |
| 690.0 | 6:49  | 12.8 | 22  | 96  | 11.2 | 11.2 | 11.4 | 8.60 | 12.6 | 35.6 | 1.16 |
| 692.0 | 6:58  | 13.5 | 21  | 98  | 11.2 | 11.2 | 11.4 | 8.60 | 12.6 | 37.7 | 1.12 |
| 694.0 | 7: 7  | 13.0 | 21  | 98  | 11.2 | 11.2 | 11.4 | 8.60 | 12.6 | 37.4 | 1.13 |
| 696.0 | 7:14  | 18.4 | 22  | 98  | 11.2 | 11.2 | 11.4 | 8.60 | 12.6 | 39.9 | 1.07 |
| 698.0 | 7:28  | 26.3 | 19  | 93  | 11.2 | 11.2 | 11.4 | 8.60 | 12.7 | 47.8 | .93  |
| 700.0 | 7:33  | 22.9 | 20  | 99  | 11.2 | 11.2 | 11.4 | 8.60 | 12.7 | 44.7 | .99  |
| 702.0 | 7:40  | 16.9 | 21  | 99  | 11.2 | 11.2 | 11.4 | 8.60 | 12.7 | 40.8 | 1.06 |
| 704.0 | 7:45  | 22.6 | 20  | 99  | 11.2 | 11.2 | 11.4 | 8.60 | 12.7 | 45.1 | .98  |
| 708.0 | 8: 4  | 19.1 | 19  | 94  | 11.2 | 11.2 | 11.4 | 8.60 | 12.7 | 44.4 | 1.01 |
| 223   |       |      |     |     |      |      |      |      |      |      |      |
| 710.0 | 8:11  | 18.3 | 15  | 101 | 11.2 | 11.2 | 11.4 | 8.60 | 12.7 | 49.0 | .97  |
| 712.0 | 8:16  | 25.4 | 15  | 108 | 11.2 | 11.2 | 11.4 | 8.60 | 12.7 | 51.8 | .92  |
| 714.0 | 8:20  | 29.1 | 18  | 107 | 11.2 | 11.2 | 11.4 | 8.60 | 12.7 | 49.7 | .92  |
| 716.0 | 9:10  | 18.2 | 16  | 78  | 11.2 | 11.2 | 11.3 | 8.60 | 12.7 | 49.0 | .94  |
| 718.0 | 9:15  | 27.0 | 16  | 103 | 11.2 | 11.3 | 11.3 | 8.60 | 12.7 | 50.6 | .91  |
| 720.0 | 9:19  | 26.7 | 16  | 103 | 11.2 | 11.3 | 11.4 | 8.60 | 12.7 | 50.5 | .91  |
| 722.0 | 9:24  | 29.2 | 18  | 103 | 11.2 | 11.3 | 11.4 | 8.60 | 12.7 | 49.8 | .91  |
| 726.0 | 9:36  | 35.6 | 17  | 96  | 11.2 | 11.3 | 11.4 | 8.60 | 12.7 | 53.7 | .84  |
| 728.0 | 9:40  | 26.0 | 17  | 101 | 11.2 | 11.3 | 11.4 | 8.60 | 12.7 | 50.0 | .92  |
| 730.0 | 9:46  | 23.7 | 17  | 101 | 11.2 | 11.3 | 11.4 | 8.60 | 12.7 | 48.6 | .94  |
| 243   |       |      |     |     |      |      |      |      |      |      |      |

| DEPTH | TIME  | ROP   | WOB | RPM | MDI  | MDO  | ECD  | PP   | FG   | PDR  | DEXP |
|-------|-------|-------|-----|-----|------|------|------|------|------|------|------|
| 243   |       |       |     |     |      |      |      |      |      |      |      |
| 732.0 | 9:51  | 21.2  | 15  | 101 | 11.2 | 11.3 | 11.4 | 8.60 | 12.8 | 50.4 | .93  |
| 734.0 | 10: 3 | 10.2  | 15  | 102 | 11.2 | 11.3 | 11.4 | 8.60 | 12.8 | 41.2 | 1.10 |
| 738.0 | 10:22 | 16.8  | 14  | 91  | 11.2 | 11.3 | 11.3 | 8.60 | 12.8 | 48.7 | .96  |
| 740.0 | 10:30 | 16.0  | 14  | 94  | 11.2 | 11.3 | 11.3 | 8.60 | 12.8 | 48.6 | .97  |
| 742.0 | 10:35 | 23.8  | 15  | 93  | 11.2 | 11.3 | 11.3 | 8.60 | 12.8 | 52.1 | .89  |
| 744.0 | 10:43 | 14.7  | 15  | 93  | 11.2 | 11.3 | 11.3 | 8.60 | 12.8 | 45.8 | 1.01 |
| 746.0 | 11: 1 | 30.7  | 13  | 94  | 11.2 | 11.3 | 11.3 | 8.60 | 12.8 | 55.4 | .86  |
| 748.0 | 11: 7 | 18.2  | 14  | 102 | 11.2 | 11.3 | 11.3 | 8.60 | 12.8 | 48.6 | .97  |
| 750.0 | 11:12 | 23.1  | 15  | 105 | 11.2 | 11.3 | 11.3 | 8.60 | 12.8 | 49.7 | .94  |
| 752.0 | 11:17 | 26.3  | 16  | 105 | 11.2 | 11.3 | 11.4 | 8.60 | 12.8 | 49.7 | .92  |
| 263   |       |       |     |     |      |      |      |      |      |      |      |
| 754.0 | 11:22 | 24.1  | 13  | 107 | 11.2 | 11.3 | 11.4 | 8.60 | 12.8 | 53.1 | .90  |
| 756.0 | 11:36 | 34.3  | 17  | 98  | 11.2 | 11.3 | 11.4 | 8.60 | 12.8 | 52.5 | .86  |
| 758.0 | 11:40 | 26.9  | 14  | 102 | 11.2 | 11.3 | 11.4 | 8.60 | 12.8 | 53.6 | .88  |
| 760.0 | 11:45 | 25.6  | 15  | 92  | 11.2 | 11.3 | 11.4 | 8.60 | 12.8 | 52.2 | .88  |
| 762.0 | 11:49 | 33.7  | 14  | 92  | 11.2 | 11.3 | 11.4 | 8.60 | 12.8 | 57.4 | .80  |
| 764.0 | 12:22 | 32.3  | 18  | 85  | 11.2 | 11.3 | 11.3 | 8.60 | 12.8 | 50.8 | .87  |
| 766.0 | 12:40 | 13.5  | 20  | 98  | 11.2 | 11.3 | 11.3 | 8.60 | 12.9 | 38.6 | 1.11 |
| 768.0 | 12:51 | 10.8  | 17  | 101 | 11.2 | 11.3 | 11.3 | 8.60 | 12.9 | 38.6 | 1.13 |
| 772.0 | 13:25 | 111.8 | 16  | 100 | 11.2 | 11.3 | 11.3 | 8.60 | 12.9 | 63.9 | .64  |
| 774.0 | 13:33 | 172.0 | 16  | 87  | 11.2 | 11.3 | 11.4 | 8.60 | 12.9 | 72.0 | .48  |
| 283   |       |       |     |     |      |      |      |      |      |      |      |
| 778.0 | 13:35 | 113.9 | 16  | 101 | 11.2 | 11.3 | 11.4 | 8.60 | 12.9 | 66.0 | .61  |
| 780.0 | 13:36 | 169.7 | 16  | 102 | 11.2 | 11.3 | 11.4 | 8.60 | 12.9 | 71.0 | .51  |
| 782.0 | 14:14 | 135.2 | 17  | 102 | 11.2 | 11.3 | 11.3 | 8.60 | 12.9 | 66.2 | .57  |
| 784.0 | 14:24 | 92.8  | 18  | 59  | 11.2 | 11.3 | 11.3 | 8.60 | 12.9 | 66.0 | .54  |
| 786.0 | 14:27 | 34.4  | 14  | 105 | 11.2 | 11.3 | 11.4 | 8.60 | 12.9 | 56.3 | .84  |
| 788.0 | 15:13 | 19.7  | 15  | 101 | 11.2 | 11.3 | 11.4 | 8.60 | 12.9 | 49.0 | .95  |
| 790.0 | 15:14 | 67.2  | 15  | 98  | 11.2 | 11.3 | 11.3 | 8.60 | 12.9 | 61.3 | .69  |
| 794.0 | 15:26 | 65.1  | 16  | 92  | 11.2 | 11.3 | 11.4 | 8.60 | 12.9 | 60.5 | .70  |
| 796.0 | 15:30 | 41.8  | 16  | 95  | 11.2 | 11.3 | 11.4 | 8.60 | 12.9 | 53.8 | .83  |
| 798.0 | 15:31 | 178.8 | 14  | 110 | 11.2 | 11.3 | 11.4 | 8.60 | 12.9 | 73.1 | .50  |
| 303   |       |       |     |     |      |      |      |      |      |      |      |
| 800.0 | 16: 5 | 128.8 | 13  | 79  | 11.2 | 11.3 | 11.3 | 8.60 | 13.0 | 73.3 | .49  |
| 804.0 | 16:16 | 75.3  | 15  | 89  | 11.2 | 11.3 | 11.3 | 8.60 | 13.0 | 61.2 | .69  |
| 806.0 | 16:25 | 14.5  | 15  | 106 | 11.2 | 11.3 | 11.4 | 8.60 | 13.0 | 43.8 | 1.03 |
| 808.0 | 16:27 | 173.8 | 15  | 107 | 11.2 | 11.3 | 11.4 | 8.60 | 13.0 | 71.6 | .51  |
| 814.0 | 17:13 | 169.5 | 15  | 99  | 11.2 | 11.3 | 11.4 | 8.60 | 13.0 | 71.9 | .50  |
| 816.0 | 17:15 | 52.4  | 15  | 102 | 11.2 | 11.3 | 11.4 | 8.60 | 13.0 | 58.1 | .77  |
| 820.0 | 17:17 | 155.7 | 15  | 103 | 11.2 | 11.3 | 11.4 | 8.60 | 13.0 | 70.4 | .53  |
| 822.0 | 17:28 | 146.3 | 20  | 74  | 11.2 | 11.3 | 11.4 | 8.60 | 13.0 | 44.4 | .86  |
| 824.0 | 17:29 | 116.5 | 19  | 116 | 11.2 | 11.3 | 11.4 | 8.60 | 13.0 | 61.2 | .66  |
| 826.0 | 17:36 | 25.8  | 18  | 121 | 11.2 | 11.3 | 11.4 | 8.60 | 13.0 | 44.1 | 1.02 |
| 321   |       |       |     |     |      |      |      |      |      |      |      |
| 828.0 | 17:42 | 20.0  | 17  | 114 | 11.2 | 11.3 | 11.4 | 8.60 | 13.0 | 44.2 | 1.00 |
| 832.0 | 18: 7 | 54.8  | 16  | 96  | 11.2 | 11.3 | 11.4 | 8.60 | 13.0 | 56.6 | .77  |
| 834.0 | 0: 0  | 27.6  | 21  | 98  | 11.2 | 11.3 | 11.4 | 8.60 | 13.0 | 44.6 | .96  |
| 836.0 | 18:15 | 36.9  | 19  | 100 | 11.2 | 11.3 | 11.4 | 8.60 | 13.0 | 49.6 | .87  |
| 838.0 | 18:19 | 32.4  | 22  | 98  | 11.2 | 11.3 | 11.4 | 8.60 | 13.1 | 45.2 | .93  |
| 840.0 | 18:32 | 128.6 | 23  | 95  | 11.2 | 11.3 | 11.4 | 8.60 | 13.1 | 59.7 | .61  |
| 842.0 | 18:37 | 23.3  | 24  | 102 | 11.2 | 11.3 | 11.4 | 8.60 | 13.1 | 39.2 | 1.05 |
| 844.0 | 18:44 | 18.0  | 23  | 101 | 11.2 | 11.3 | 11.4 | 8.60 | 13.1 | 37.9 | 1.09 |
| 846.0 | 18:54 | 12.3  | 29  | 96  | 11.2 | 11.3 | 11.4 | 8.60 | 13.1 | 30.2 | 1.23 |
| 852.0 | 19:13 | 19.9  | 27  | 90  | 11.2 | 11.3 | 11.4 | 8.60 | 13.1 | 36.9 | 1.08 |

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ESP 1010

ESSD SWEEP #1

PAGE 4 - A

| DEPTH | TIME  | ROP  | WOB | RPM | MDI  | MDO  | ECD  | PP   | FG   | PDR  | DEXP |
|-------|-------|------|-----|-----|------|------|------|------|------|------|------|
| 341   |       |      |     |     |      |      |      |      |      |      |      |
| 854.0 | 19:18 | 22.4 | 27  | 95  | 11.2 | 11.3 | 11.4 | 8.60 | 13.1 | 37.9 | 1.06 |
| 856.0 | 19:26 | 17.4 | 26  | 97  | 11.2 | 11.3 | 11.4 | 8.60 | 13.1 | 35.2 | 1.13 |
| 858.0 | 19:33 | 18.1 | 23  | 96  | 11.2 | 11.3 | 11.4 | 8.60 | 13.1 | 38.2 | 1.08 |
| 860.0 | 19:47 | 22.6 | 23  | 97  | 11.2 | 11.3 | 11.4 | 8.60 | 13.1 | 40.7 | 1.02 |
| 862.0 | 20:32 | 17.3 | 22  | 97  | 11.2 | 11.3 | 11.4 | 8.60 | 13.1 | 38.8 | 1.07 |
| 864.0 | 20:39 | 17.5 | 20  | 100 | 11.2 | 11.3 | 11.4 | 8.60 | 13.1 | 40.7 | 1.05 |
| 866.0 | 20:53 | 9.3  | 21  | 102 | 11.2 | 11.3 | 11.4 | 8.60 | 13.1 | 32.1 | 1.23 |
| 868.0 | 21: 5 | 9.9  | 21  | 102 | 11.2 | 11.3 | 11.4 | 8.60 | 13.1 | 33.6 | 1.20 |
| 870.0 | 21:16 | 17.2 | 22  | 103 | 11.2 | 11.3 | 11.4 | 8.60 | 13.1 | 38.3 | 1.09 |
| 872.0 | 21:24 | 15.4 | 22  | 105 | 11.2 | 11.3 | 11.4 | 8.60 | 13.1 | 37.0 | 1.12 |
| 359   |       |      |     |     |      |      |      |      |      |      |      |
| 874.0 | 21:35 | 11.2 | 22  | 109 | 11.2 | 11.3 | 11.4 | 8.60 | 13.1 | 33.4 | 1.20 |
| 876.0 | 21:43 | 18.4 | 22  | 108 | 11.2 | 11.3 | 11.4 | 8.60 | 13.2 | 37.8 | 1.10 |
| 878.0 | 21:55 | 25.2 | 22  | 111 | 11.2 | 11.3 | 11.4 | 8.60 | 13.2 | 36.7 | 1.13 |
| 880.0 | 22: 6 | 26.0 | 22  | 86  | 11.2 | 11.3 | 11.4 | 8.60 | 13.2 | 44.3 | .95  |
| 882.0 | 22: 9 | 36.1 | 21  | 108 | 11.2 | 11.3 | 11.4 | 8.60 | 13.2 | 46.0 | .93  |
| 884.0 | 22:15 | 25.8 | 21  | 106 | 11.2 | 11.3 | 11.4 | 8.60 | 13.2 | 42.0 | 1.02 |
| 886.0 | 22:31 | 8.1  | 21  | 111 | 11.2 | 11.3 | 11.4 | 8.60 | 13.2 | 30.6 | 1.26 |
| 888.0 | 22:40 | 13.2 | 21  | 115 | 11.2 | 11.3 | 11.4 | 8.60 | 13.2 | 35.4 | 1.16 |
| 890.0 | 23: 1 | 10.0 | 21  | 115 | 11.2 | 11.3 | 11.4 | 8.60 | 13.2 | 32.5 | 1.23 |
| 892.0 | 23:16 | 8.0  | 23  | 116 | 11.2 | 11.3 | 11.4 | 8.60 | 13.2 | 28.3 | 1.31 |
| 378   |       |      |     |     |      |      |      |      |      |      |      |
| 894.0 | 23:43 | 4.6  | 23  | 116 | 11.2 | 11.3 | 11.4 | 8.60 | 13.2 | 22.4 | 1.44 |
| 896.0 | 23:50 | 16.4 | 23  | 110 | 11.2 | 11.3 | 11.4 | 8.60 | 13.2 | 36.2 | 1.13 |
| 900.0 | 0:10  | 33.8 | 26  | 116 | 11.2 | 11.3 | 11.4 | 8.60 | 13.2 | 38.8 | 1.06 |

DUMP B

- RS - Calculated rock matrix strength. A dimensionless number derived from previous field data which relates to the strength of the rock.
- MTI - The mud temperature in, in degrees centigrade.
- MTO - Mud temperature out, in degrees centigrade.
- MRO - The mud resistivity out, in ohm-metres.
- YPM - The yield point of the mud in lbs/100 sq. ft.
- PVM - The Plastic viscosity of the mud in centipoise.
- MVI - The mud flow rate in gallons per minute, computed from the pump rate and pump output.
- MDOV - The mud density override setting.



| DEPTH | TIME  | RS   | MTI | MTD | MRI         | MRO | YPM | PVM | MVI  | MDOV | RECDS |
|-------|-------|------|-----|-----|-------------|-----|-----|-----|------|------|-------|
| ----- |       |      |     |     |             |     |     |     |      |      |       |
|       |       |      |     |     | NEW BIT ID: |     | 2   |     |      |      |       |
| ----- |       |      |     |     |             |     |     |     |      |      |       |
| 240.0 | 19:12 | 2.23 | 14  | 13  | .00         | .31 | 13  | 8   | 1010 | .0   | 1     |
| 242.0 | 19:14 | 2.10 | 14  | 13  | .00         | .31 | 13  | 8   | 1010 | .0   | 2     |
| 270.0 | 20: 8 | 1.74 | 14  | 15  | .00         | .31 | 13  | 8   | 1048 | .0   | 4     |
| 274.0 | 20:19 | 1.83 | 15  | 16  | .00         | .31 | 13  | 8   | 1000 | .0   | 2     |
| 276.0 | 20:19 | 1.51 | 15  | 16  | .00         | .31 | 13  | 8   | 1055 | .0   | 1     |
| 278.0 | 20:20 | 1.70 | 15  | 15  | .00         | .31 | 13  | 8   | 1060 | .0   | 2     |
| 294.0 | 20:51 | 1.97 | 15  | 17  | .00         | .31 | 13  | 8   | 949  | .0   | 2     |
| 300.0 | 20:56 | 1.87 | 15  | 17  | .00         | .31 | 13  | 8   | 1012 | .0   | 2     |
| 304.0 | 20:59 | 1.87 | 15  | 18  | .00         | .31 | 13  | 8   | 958  | .0   | 1     |
| 308.0 | 21:24 | 1.94 | 15  | 18  | .00         | .32 | 13  | 8   | 958  | .0   | 1     |
| 86    |       |      |     |     |             |     |     |     |      |      |       |
| 310.0 | 21:24 | 2.04 | 15  | 19  | .00         | .37 | 13  | 8   | 1087 | .0   | 1     |
| 320.0 | 22:23 | 1.98 | 16  | 20  | .00         | .35 | 13  | 8   | 1028 | .0   | 2     |
| 330.0 | 22:23 | 2.37 | 15  | 21  | .00         | .32 | 13  | 8   | 1064 | .0   | 2     |
| 340.0 | 22:38 | 2.37 | 15  | 21  | .00         | .32 | 13  | 8   | 1022 | .0   | 2     |
| 350.0 | 22:55 | 2.26 | 13  | 21  | .00         | .33 | 13  | 8   | 1037 | .0   | 1     |
| 360.0 | 23: 1 | 2.46 | 17  | 22  | .00         | .33 | 13  | 8   | 1096 | .0   | 1     |
| 370.0 | 23:19 | 2.73 | 17  | 22  | .00         | .34 | 13  | 8   | 1079 | .0   | 2     |
| 372.0 | 23:56 | 2.74 | 16  | 23  | .00         | .34 | 13  | 8   | 988  | .0   | 1     |
| 374.0 | 23:56 | 2.50 | 16  | 24  | .00         | .34 | 13  | 8   | 1013 | .0   | 1     |
| 376.0 | 23:57 | 2.38 | 16  | 24  | .00         | .34 | 13  | 8   | 1013 | .0   | 1     |
| 100   |       |      |     |     |             |     |     |     |      |      |       |
| 378.0 | 0:30  | 2.47 | 16  | 25  | .00         | .34 | 13  | 8   | 1028 | .0   | 1     |
| 380.0 | 0:30  | 2.30 | 16  | 25  | .00         | .35 | 13  | 8   | 1121 | .0   | 1     |
| 390.0 | 1: 9  | 2.72 | 16  | 26  | .00         | .35 | 13  | 8   | 1107 | .0   | 1     |
| 400.0 | 2: 1  | 2.88 | 16  | 28  | .00         | .35 | 13  | 8   | 1143 | .0   | 2     |
| 410.0 | 2:20  | 2.80 | 16  | 29  | .00         | .34 | 13  | 8   | 1133 | .0   | 1     |
| 420.0 | 2:40  | 2.94 | 17  | 29  | .00         | .32 | 13  | 8   | 1097 | .0   | 2     |
| 430.0 | 2:58  | 2.97 | 24  | 29  | .00         | .31 | 13  | 8   | 1138 | .0   | 2     |
| 440.0 | 3: 8  | 2.60 | 26  | 29  | .00         | .31 | 13  | 8   | 1068 | .0   | 2     |
| 450.0 | 5:50  | 2.65 | 26  | 27  | .00         | .31 | 13  | 8   | 1119 | .0   | 2     |
| 460.0 | 6:10  | 2.35 | 23  | 27  | .00         | .31 | 13  | 8   | 1002 | .0   | 2     |
| 116   |       |      |     |     |             |     |     |     |      |      |       |
| 470.0 | 6:27  | 2.60 | 25  | 26  | .00         | .31 | 13  | 8   | 1072 | .0   | 2     |
| 480.0 | 6:47  | 2.63 | 25  | 26  | .00         | .31 | 13  | 8   | 1078 | .0   | 2     |
| 490.0 | 7:40  | 2.64 | 25  | 26  | .00         | .31 | 13  | 8   | 1103 | .0   | 1     |
| 500.0 | 7:50  | 2.57 | 27  | 28  | .00         | .32 | 13  | 8   | 1408 | .0   | 1     |
| 510.0 | 7:51  | 2.59 | 27  | 28  | .00         | .33 | 13  | 8   | 1415 | .0   | 1     |
| 520.0 | 8:19  | 2.66 | 27  | 28  | .00         | .38 | 13  | 8   | 1415 | .0   | 1     |
| 530.0 | 8:41  | 2.72 | 27  | 28  | .00         | .32 | 13  | 8   | 1402 | .0   | 1     |
| 540.0 | 8:59  | 2.68 | 29  | 29  | .00         | .31 | 13  | 8   | 1373 | .0   | 2     |
| 550.0 | 9: 2  | 2.65 | 29  | 29  | .00         | .31 | 13  | 8   | 1388 | .0   | 2     |
| 560.0 | 9:27  | 2.75 | 29  | 28  | .00         | .32 | 13  | 8   | 1397 | .0   | 2     |
| 131   |       |      |     |     |             |     |     |     |      |      |       |
| 570.0 | 9:59  | 2.92 | 29  | 29  | .00         | .32 | 13  | 8   | 1412 | .0   | 2     |
| 580.0 | 11:46 | 2.78 | 28  | 28  | .00         | .31 | 13  | 8   | 1383 | .0   | 2     |
| 590.0 | 12: 1 | 2.70 | 28  | 29  | .00         | .31 | 13  | 8   | 1395 | .0   | 2     |
| 600.0 | 12:41 | 2.93 | 28  | 29  | .00         | .32 | 13  | 8   | 1341 | .0   | 2     |
| 610.0 | 0:15  | 3.12 | 28  | 29  | .00         | .00 | 13  | 8   | 1408 | .0   | 2     |
| 618.0 | 0:26  | 2.97 | 28  | 29  | .00         | .00 | 13  | 8   | 1398 | .0   | 2     |
| ----- |       |      |     |     |             |     |     |     |      |      |       |
|       |       |      |     |     | NEW BIT ID: |     | 3   |     |      |      |       |
| ----- |       |      |     |     |             |     |     |     |      |      |       |
| 622.0 | 21:32 | 3.45 | 34  | 31  | .00         | .31 | 12  | 16  | 619  | .0   | 2     |

| DEPTH | TIME  | RS   | MTI | MTD | MRI | MRO | YPM | PVM | MVI | MDOV | RECDS |
|-------|-------|------|-----|-----|-----|-----|-----|-----|-----|------|-------|
| 149   |       |      |     |     |     |     |     |     |     |      |       |
| 624.0 | 21:40 | 3.42 | 33  | 31  | .00 | .31 | 12  | 16  | 620 | .0   | 2     |
| 626.0 | 0: 0  | 2.16 | 33  | 31  | .00 | .31 | 20  | 16  | 864 | .0   | 1     |
| 628.0 | 1:57  | 2.31 | 30  | 30  | .00 | .34 | 20  | 16  | 864 | .0   | 1     |
| 630.0 | 2:21  | 2.36 | 31  | 31  | .00 | .33 | 20  | 16  | 864 | .0   | 2     |
| 632.0 | 2:40  | 2.27 | 32  | 31  | .00 | .38 | 20  | 16  | 871 | .0   | 2     |
| 634.0 | 2:50  | 2.27 | 32  | 32  | .00 | .44 | 20  | 16  | 876 | .0   | 2     |
| 636.0 | 2:56  | 2.12 | 33  | 32  | .00 | .45 | 20  | 16  | 876 | .0   | 2     |
| 640.0 | 3:12  | 2.23 | 33  | 33  | .00 | .45 | 20  | 16  | 869 | .0   | 1     |
| 642.0 | 3:22  | 2.26 | 33  | 32  | .00 | .46 | 20  | 16  | 865 | .0   | 2     |
| 644.0 | 3:29  | 2.16 | 33  | 33  | .00 | .46 | 16  | 20  | 852 | .0   | 2     |
| 166   |       |      |     |     |     |     |     |     |     |      |       |
| 646.0 | 3:36  | 2.28 | 33  | 33  | .00 | .46 | 16  | 20  | 852 | .0   | 2     |
| 648.0 | 3:42  | 2.22 | 34  | 33  | .00 | .47 | 16  | 20  | 852 | .0   | 2     |
| 650.0 | 3:56  | 2.20 | 34  | 33  | .00 | .47 | 16  | 20  | 855 | .0   | 1     |
| 652.0 | 4: 6  | 2.45 | 34  | 33  | .00 | .48 | 16  | 20  | 841 | .0   | 2     |
| 654.0 | 4:16  | 2.47 | 34  | 34  | .00 | .48 | 16  | 20  | 838 | .0   | 2     |
| 656.0 | 4:36  | 2.85 | 34  | 34  | .00 | .48 | 16  | 20  | 840 | .0   | 2     |
| 658.0 | 4:44  | 2.50 | 35  | 34  | .00 | .47 | 16  | 20  | 844 | .0   | 2     |
| 660.0 | 5: 2  | 2.24 | 35  | 35  | .00 | .49 | 16  | 20  | 845 | .0   | 2     |
| 662.0 | 5: 6  | 2.25 | 35  | 35  | .00 | .49 | 16  | 20  | 845 | .0   | 2     |
| 664.0 | 5: 9  | 2.16 | 35  | 35  | .00 | .49 | 16  | 20  | 845 | .0   | 2     |
| 185   |       |      |     |     |     |     |     |     |     |      |       |
| 666.0 | 5:14  | 2.34 | 35  | 35  | .00 | .49 | 16  | 20  | 840 | .0   | 2     |
| 670.0 | 5:29  | 2.23 | 35  | 35  | .00 | .49 | 16  | 20  | 831 | .0   | 2     |
| 672.0 | 5:35  | 2.48 | 35  | 35  | .00 | .50 | 16  | 20  | 833 | .0   | 2     |
| 674.0 | 5:39  | 2.31 | 35  | 35  | .00 | .50 | 16  | 20  | 831 | .0   | 2     |
| 676.0 | 5:53  | 2.42 | 35  | 35  | .00 | .50 | 16  | 20  | 831 | .0   | 2     |
| 678.0 | 6: 5  | 2.09 | 35  | 35  | .00 | .50 | 16  | 20  | 826 | .0   | 1     |
| 680.0 | 6:10  | 2.24 | 35  | 35  | .00 | .50 | 16  | 20  | 829 | .0   | 2     |
| 682.0 | 6:17  | 2.46 | 35  | 35  | .00 | .50 | 16  | 20  | 834 | .0   | 2     |
| 684.0 | 6:22  | 2.20 | 35  | 35  | .00 | .50 | 16  | 20  | 839 | .0   | 2     |
| 686.0 | 6:29  | 2.47 | 35  | 35  | .00 | .50 | 16  | 20  | 839 | .0   | 2     |
| 204   |       |      |     |     |     |     |     |     |     |      |       |
| 688.0 | 6:38  | 2.22 | 35  | 35  | .00 | .50 | 16  | 20  | 844 | .0   | 1     |
| 690.0 | 6:49  | 2.52 | 35  | 35  | .00 | .50 | 16  | 20  | 814 | .0   | 2     |
| 692.0 | 6:58  | 2.44 | 36  | 36  | .00 | .50 | 16  | 20  | 780 | .0   | 2     |
| 694.0 | 7: 7  | 2.45 | 36  | 36  | .00 | .50 | 16  | 20  | 801 | .0   | 2     |
| 696.0 | 7:14  | 2.36 | 36  | 36  | .00 | .50 | 16  | 20  | 801 | .0   | 2     |
| 698.0 | 7:28  | 2.05 | 36  | 36  | .00 | .50 | 16  | 20  | 795 | .0   | 1     |
| 700.0 | 7:33  | 2.17 | 36  | 36  | .00 | .50 | 16  | 20  | 801 | .0   | 2     |
| 702.0 | 7:40  | 2.33 | 36  | 36  | .00 | .50 | 16  | 20  | 807 | .0   | 2     |
| 704.0 | 7:45  | 2.16 | 36  | 36  | .00 | .50 | 16  | 20  | 807 | .0   | 2     |
| 708.0 | 8: 4  | 2.19 | 36  | 36  | .00 | .50 | 16  | 20  | 803 | .0   | 3     |
| 223   |       |      |     |     |     |     |     |     |     |      |       |
| 710.0 | 8:11  | 2.01 | 36  | 36  | .00 | .50 | 16  | 20  | 802 | .0   | 2     |
| 712.0 | 8:16  | 1.90 | 37  | 36  | .00 | .50 | 16  | 20  | 802 | .0   | 2     |
| 714.0 | 8:20  | 1.99 | 37  | 36  | .00 | .50 | 16  | 20  | 802 | .0   | 2     |
| 716.0 | 9:10  | 2.01 | 38  | 38  | .00 | .50 | 16  | 20  | 834 | .0   | 2     |
| 718.0 | 9:15  | 1.95 | 38  | 37  | .00 | .50 | 16  | 20  | 788 | .0   | 2     |
| 720.0 | 9:19  | 1.95 | 37  | 38  | .00 | .50 | 16  | 20  | 790 | .0   | 2     |
| 722.0 | 9:24  | 1.99 | 38  | 38  | .00 | .50 | 16  | 20  | 791 | .0   | 2     |
| 726.0 | 9:36  | 1.83 | 38  | 38  | .00 | .50 | 16  | 20  | 791 | .0   | 2     |
| 728.0 | 9:40  | 1.98 | 38  | 38  | .00 | .50 | 16  | 20  | 779 | .0   | 2     |
| 730.0 | 9:46  | 2.03 | 37  | 38  | .00 | .50 | 16  | 20  | 781 | .0   | 2     |
| 243   |       |      |     |     |     |     |     |     |     |      |       |

| DEPTH | TIME  | RS   | MTI | MTD | MRI | MRO | YPM | PVM | MVI | MDOV | RECDS |
|-------|-------|------|-----|-----|-----|-----|-----|-----|-----|------|-------|
| 243   |       |      |     |     |     |     |     |     |     |      |       |
| 732.0 | 9:51  | 1.96 | 37  | 38  | .00 | .50 | 16  | 20  | 781 | .0   | 2     |
| 734.0 | 10: 3 | 2.33 | 38  | 38  | .00 | .50 | 16  | 20  | 782 | .0   | 2     |
| 738.0 | 10:22 | 2.04 | 38  | 38  | .00 | .50 | 16  | 20  | 791 | .0   | 2     |
| 740.0 | 10:30 | 2.04 | 38  | 38  | .00 | .50 | 16  | 20  | 798 | .0   | 2     |
| 742.0 | 10:35 | 1.90 | 38  | 38  | .00 | .50 | 16  | 20  | 798 | .0   | 2     |
| 744.0 | 10:43 | 2.16 | 38  | 38  | .00 | .50 | 16  | 20  | 798 | .0   | 2     |
| 746.0 | 11: 1 | 1.77 | 38  | 38  | .00 | .50 | 16  | 23  | 794 | .0   | 2     |
| 748.0 | 11: 7 | 2.05 | 38  | 38  | .00 | .50 | 16  | 23  | 795 | .0   | 2     |
| 750.0 | 11:12 | 2.00 | 38  | 38  | .00 | .50 | 16  | 23  | 795 | .0   | 2     |
| 752.0 | 11:17 | 2.00 | 38  | 38  | .00 | .50 | 16  | 23  | 795 | .0   | 2     |
| 263   |       |      |     |     |     |     |     |     |     |      |       |
| 754.0 | 11:22 | 1.87 | 38  | 38  | .00 | .50 | 16  | 23  | 795 | .0   | 2     |
| 756.0 | 11:36 | 1.90 | 38  | 38  | .00 | .50 | 16  | 23  | 799 | .0   | 2     |
| 758.0 | 11:40 | 1.85 | 38  | 39  | .00 | .51 | 16  | 23  | 792 | .0   | 2     |
| 760.0 | 11:45 | 1.91 | 39  | 39  | .00 | .50 | 16  | 23  | 767 | .0   | 2     |
| 762.0 | 11:49 | 1.70 | 39  | 39  | .00 | .50 | 16  | 23  | 767 | .0   | 2     |
| 764.0 | 12:22 | 1.97 | 40  | 40  | .00 | .51 | 16  | 23  | 773 | .0   | 2     |
| 766.0 | 12:40 | 2.45 | 40  | 39  | .00 | .51 | 16  | 23  | 805 | .0   | 2     |
| 768.0 | 12:51 | 2.46 | 39  | 39  | .00 | .51 | 16  | 23  | 804 | .0   | 2     |
| 772.0 | 13:25 | 1.45 | 40  | 39  | .00 | .51 | 16  | 23  | 798 | .0   | 3     |
| 774.0 | 13:33 | 1.12 | 40  | 41  | .00 | .51 | 16  | 23  | 813 | .0   | 1     |
| 283   |       |      |     |     |     |     |     |     |     |      |       |
| 778.0 | 13:35 | 1.36 | 40  | 41  | .00 | .51 | 16  | 23  | 821 | .0   | 3     |
| 780.0 | 13:36 | 1.16 | 40  | 41  | .00 | .51 | 16  | 23  | 824 | .0   | 2     |
| 782.0 | 14:14 | 1.36 | 42  | 42  | .00 | .50 | 16  | 23  | 790 | .0   | 2     |
| 784.0 | 14:24 | 1.36 | 43  | 42  | .00 | .50 | 16  | 23  | 781 | .0   | 1     |
| 786.0 | 14:27 | 1.76 | 42  | 42  | .00 | .50 | 16  | 23  | 812 | .0   | 2     |
| 788.0 | 15:13 | 2.05 | 42  | 42  | .00 | .50 | 16  | 23  | 807 | .0   | 2     |
| 790.0 | 15:14 | 1.56 | 41  | 42  | .00 | .50 | 16  | 22  | 740 | .0   | 2     |
| 794.0 | 15:26 | 1.59 | 41  | 42  | .00 | .50 | 16  | 22  | 752 | .0   | 2     |
| 796.0 | 15:30 | 1.86 | 41  | 41  | .00 | .50 | 16  | 22  | 765 | .0   | 2     |
| 798.0 | 15:31 | 1.08 | 41  | 42  | .00 | .50 | 16  | 22  | 762 | .0   | 2     |
| 303   |       |      |     |     |     |     |     |     |     |      |       |
| 800.0 | 16: 5 | 1.08 | 41  | 42  | .00 | .50 | 16  | 22  | 706 | .0   | 1     |
| 804.0 | 16:16 | 1.57 | 41  | 41  | .00 | .51 | 16  | 22  | 697 | .0   | 2     |
| 806.0 | 16:25 | 2.27 | 41  | 41  | .00 | .52 | 16  | 22  | 665 | .0   | 2     |
| 808.0 | 16:27 | 1.15 | 41  | 41  | .00 | .52 | 16  | 22  | 793 | .0   | 2     |
| 814.0 | 17:13 | 1.14 | 41  | 41  | .00 | .42 | 16  | 22  | 811 | .0   | 2     |
| 816.0 | 17:15 | 1.70 | 41  | 41  | .00 | .32 | 16  | 22  | 813 | .0   | 2     |
| 820.0 | 17:17 | 1.20 | 41  | 41  | .00 | .32 | 16  | 22  | 816 | .0   | 2     |
| 822.0 | 17:28 | 2.25 | 41  | 41  | .00 | .32 | 16  | 22  | 813 | .0   | 1     |
| 824.0 | 17:29 | 1.57 | 41  | 41  | .00 | .32 | 16  | 22  | 807 | .0   | 2     |
| 826.0 | 17:36 | 2.27 | 40  | 41  | .00 | .32 | 16  | 22  | 786 | .0   | 2     |
| 321   |       |      |     |     |     |     |     |     |     |      |       |
| 828.0 | 17:42 | 2.27 | 40  | 41  | .00 | .32 | 16  | 22  | 651 | .0   | 2     |
| 832.0 | 18: 7 | 1.77 | 40  | 41  | .00 | .32 | 16  | 22  | 729 | .0   | 2     |
| 834.0 | 0: 0  | 2.25 | 40  | 41  | .00 | .32 | 16  | 22  | 785 | .0   | 2     |
| 836.0 | 18:15 | 2.05 | 39  | 41  | .00 | .32 | 16  | 22  | 763 | .0   | 2     |
| 838.0 | 18:19 | 2.23 | 39  | 40  | .00 | .33 | 16  | 22  | 742 | .0   | 2     |
| 840.0 | 18:32 | 1.64 | 39  | 39  | .00 | .33 | 16  | 22  | 750 | .0   | 2     |
| 842.0 | 18:37 | 2.48 | 39  | 38  | .00 | .33 | 16  | 22  | 775 | .0   | 2     |
| 844.0 | 18:44 | 2.53 | 39  | 39  | .00 | .33 | 16  | 22  | 777 | .0   | 2     |
| 846.0 | 18:54 | 2.85 | 39  | 39  | .00 | .33 | 16  | 22  | 780 | .0   | 2     |
| 852.0 | 19:13 | 2.58 | 39  | 39  | .00 | .40 | 16  | 22  | 780 | .0   | 2     |
| 341   |       |      |     |     |     |     |     |     |     |      |       |



ESP 1010

ESSD SWEEP #1

PAGE 4 - B

| EPTH  | TIME  | RS   | MTI | MTD | MRI | MRO | YPM | PVM | MVI | MDOV | RECIS |
|-------|-------|------|-----|-----|-----|-----|-----|-----|-----|------|-------|
| 341   |       |      |     |     |     |     |     |     |     |      |       |
| 854.0 | 19:18 | 2.54 | 39  | 39  | .00 | .46 | 16  | 22  | 772 | .0   | 2     |
| 856.0 | 19:26 | 2.65 | 39  | 39  | .00 | .45 | 16  | 22  | 773 | .0   | 2     |
| 858.0 | 19:33 | 2.53 | 39  | 39  | .00 | .46 | 16  | 22  | 768 | .0   | 2     |
| 860.0 | 19:47 | 2.43 | 39  | 39  | .00 | .48 | 16  | 22  | 771 | .0   | 1     |
| 862.0 | 20:32 | 2.51 | 41  | 40  | .00 | .44 | 16  | 22  | 770 | .0   | 2     |
| 864.0 | 20:39 | 2.43 | 41  | 41  | .00 | .44 | 16  | 22  | 769 | .0   | 2     |
| 866.0 | 20:53 | 2.79 | 41  | 41  | .00 | .47 | 16  | 22  | 770 | .0   | 2     |
| 868.0 | 21: 5 | 2.73 | 41  | 41  | .00 | .46 | 16  | 22  | 785 | .0   | 2     |
| 870.0 | 21:16 | 2.53 | 41  | 41  | .00 | .44 | 16  | 22  | 790 | .0   | 1     |
| 872.0 | 21:24 | 2.59 | 40  | 41  | .00 | .43 | 16  | 22  | 798 | .0   | 2     |
| 359   |       |      |     |     |     |     |     |     |     |      |       |
| 874.0 | 21:35 | 2.74 | 40  | 42  | .00 | .45 | 16  | 22  | 800 | .0   | 2     |
| 876.0 | 21:43 | 2.56 | 41  | 42  | .00 | .47 | 16  | 22  | 803 | .0   | 2     |
| 878.0 | 21:55 | 2.61 | 41  | 43  | .00 | .46 | 16  | 22  | 795 | .0   | 2     |
| 880.0 | 22: 6 | 2.29 | 42  | 43  | .00 | .47 | 16  | 22  | 787 | .0   | 1     |
| 882.0 | 22: 9 | 2.23 | 43  | 44  | .00 | .48 | 16  | 22  | 758 | .0   | 2     |
| 884.0 | 22:15 | 2.39 | 43  | 44  | .00 | .48 | 16  | 22  | 758 | .0   | 2     |
| 886.0 | 22:31 | 2.86 | 44  | 44  | .00 | .47 | 16  | 22  | 758 | .0   | 2     |
| 888.0 | 22:40 | 2.66 | 44  | 44  | .00 | .46 | 16  | 22  | 758 | .0   | 2     |
| 890.0 | 23: 1 | 2.79 | 44  | 45  | .00 | .46 | 16  | 22  | 766 | .0   | 2     |
| 892.0 | 23:16 | 2.96 | 43  | 45  | .00 | .48 | 16  | 22  | 769 | .0   | 2     |
| 378   |       |      |     |     |     |     |     |     |     |      |       |
| 894.0 | 23:43 | 3.21 | 43  | 45  | .00 | .48 | 16  | 22  | 759 | .0   | 2     |
| 896.0 | 23:50 | 2.64 | 43  | 45  | .00 | .50 | 16  | 22  | 769 | .0   | 2     |
| 900.0 | 0:10  | 2.53 | 43  | 45  | .00 | .50 | 16  | 22  | 790 | .0   | 2     |

DUMP C

- DEPTH - Well depth in metres.
- STEP - Depth increment in metres.
- CHRS - Cumulative bit hours. The number of hours that the bit has actually been 'on bottom' as opposed to in the hole, recorded in decimal hours.
- WOB - Weight on bit in thousands of pounds.
- HKLDX - Maximum hookload. This is the total weight of the string. The value for maximum hookload picked up by the computer is the average value of the total weight of the string over a 5 second interval beginning after the rotary table has made five revolutions after the slips have been pulled. This value is then fixed in the computer memory until the next time the slips are set, when a new value is taken.
- HKLD - Current hookload. This is the weight of the string when 'on bottom' i.e. whilst actually drilling. The difference between the maximum hookload is the computer calculated weight on bit.
- BWOV - The weight on the bit setting. This is used in the event of a hookload sensor malfunction to enable the operator to inform the computer of the WOB in use.
- SPM1 - Stroke rate/minute for pump number 1.
- SPM2 - Stroke rate/minute for pump number 2.
- PMPR - The pump pressure, psi.
- PCSG - Casing pressure. This is the pressure exerted on the casing after the well has been shut in following a 'kick'
- HSP - Hydrostatic pressure. This is the pressure exerted by the column of mud in the hole, measured in psi.



EPTH STEP CHRS WOB HKLDX HKLD BWOV SPM1 SPM2 PMPR PCSG HSP  
64

NEW BIT ID: 2

|       |      |    |    |     |     |   |      |       |      |   |     |
|-------|------|----|----|-----|-----|---|------|-------|------|---|-----|
| 240.0 | .0   | .0 | 13 | 178 | 165 | 0 | 97.8 | 103.5 | 1320 | 0 | 352 |
| 242.0 | 2.0  | .1 | 12 | 178 | 168 | 0 | 97.8 | 102.7 | 1320 | 0 | 357 |
| 270.0 | 28.0 | .2 | 12 | 331 | 168 | 0 | 98.0 | 111.2 | 1429 | 0 | 392 |
| 274.0 | 4.0  | .4 | 13 | 181 | 167 | 0 | 99.1 | 109.6 | 1315 | 0 | 411 |
| 276.0 | 2.0  | .4 | 10 | 181 | 170 | 0 | 99.7 | 108.6 | 1453 | 0 | 415 |
| 278.0 | 2.0  | .4 | 12 | 181 | 169 | 0 | 99.3 | 108.6 | 1466 | 0 | 419 |
| 294.0 | 16.0 | .5 | 15 | 182 | 166 | 0 | 93.6 | 102.8 | 1196 | 0 | 441 |
| 300.0 | 6.0  | .5 | 15 | 181 | 166 | 0 | 93.3 | 102.8 | 1350 | 0 | 447 |
| 304.0 | 4.0  | .6 | 17 | 181 | 175 | 0 | 94.8 | 102.3 | 1216 | 0 | 463 |
| 308.0 | 4.0  | .6 | 15 | 184 | 169 | 0 | 93.8 | 99.7  | 1219 | 0 | 455 |

86

|       |      |     |    |     |     |   |       |       |      |   |     |
|-------|------|-----|----|-----|-----|---|-------|-------|------|---|-----|
| 310.0 | 2.0  | .6  | 17 | 184 | 168 | 0 | 99.3  | 111.2 | 1552 | 0 | 459 |
| 320.0 | 10.0 | .7  | 13 | 185 | 172 | 0 | 98.9  | 108.6 | 1403 | 0 | 470 |
| 330.0 | 10.0 | .8  | 15 | 185 | 164 | 0 | 98.7  | 105.6 | 1495 | 0 | 484 |
| 340.0 | 10.0 | .9  | 17 | 189 | 170 | 0 | 100.2 | 103.0 | 1394 | 0 | 504 |
| 350.0 | 10.0 | 1.1 | 16 | 187 | 172 | 0 | 101.8 | 103.0 | 1437 | 0 | 527 |
| 360.0 | 10.0 | 1.3 | 18 | 187 | 169 | 0 | 100.9 | 110.3 | 1597 | 0 | 553 |
| 370.0 | 10.0 | 1.4 | 18 | 186 | 167 | 0 | 100.8 | 110.6 | 1557 | 0 | 548 |
| 372.0 | 2.0  | 1.5 | 18 | 184 | 161 | 0 | 100.4 | 110.8 | 1335 | 0 | 553 |
| 374.0 | 2.0  | 1.6 | 18 | 184 | 166 | 0 | 91.0  | 103.9 | 1401 | 0 | 557 |
| 376.0 | 2.0  | 1.6 | 15 | 184 | 169 | 0 | 91.4  | 106.7 | 1403 | 0 | 562 |

100

|       |      |     |    |     |     |   |       |       |      |   |     |
|-------|------|-----|----|-----|-----|---|-------|-------|------|---|-----|
| 378.0 | 2.0  | 1.6 | 16 | 181 | 168 | 0 | 96.4  | 105.6 | 1443 | 0 | 562 |
| 380.0 | 2.0  | 1.7 | 15 | 181 | 166 | 0 | 104.5 | 114.9 | 1692 | 0 | 567 |
| 390.0 | 10.0 | 2.0 | 17 | 181 | 165 | 0 | 104.8 | 113.1 | 1661 | 0 | 584 |
| 400.0 | 10.0 | 2.2 | 22 | 181 | 159 | 0 | 104.3 | 114.1 | 1771 | 0 | 594 |
| 410.0 | 10.0 | 2.4 | 25 | 191 | 162 | 0 | 103.2 | 117.6 | 1745 | 0 | 621 |
| 420.0 | 10.0 | 2.6 | 27 | 183 | 159 | 0 | 100.8 | 113.2 | 1648 | 0 | 629 |
| 430.0 | 10.0 | 2.8 | 28 | 188 | 159 | 0 | 102.7 | 115.5 | 1773 | 0 | 646 |
| 440.0 | 10.0 | 3.0 | 23 | 192 | 156 | 0 | 101.6 | 113.9 | 1577 | 0 | 670 |
| 450.0 | 10.0 | 3.1 | 23 | 183 | 145 | 0 | 98.0  | 107.9 | 1728 | 0 | 668 |
| 460.0 | 10.0 | 3.2 | 24 | 179 | 148 | 0 | 100.1 | 112.2 | 1488 | 0 | 724 |

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|       |      |     |    |     |     |   |       |       |      |   |     |
|-------|------|-----|----|-----|-----|---|-------|-------|------|---|-----|
| 470.0 | 10.0 | 3.4 | 25 | 193 | 154 | 0 | 104.1 | 110.2 | 1619 | 0 | 718 |
| 480.0 | 10.0 | 3.5 | 22 | 182 | 165 | 0 | 98.0  | 107.5 | 1638 | 0 | 726 |
| 490.0 | 10.0 | 3.7 | 22 | 188 | 164 | 0 | 102.7 | 106.5 | 1719 | 0 | 740 |
| 500.0 | 10.0 | 3.9 | 22 | 185 | 162 | 0 | 80.5  | 113.0 | 2722 | 0 | 768 |
| 510.0 | 10.0 | 4.1 | 22 | 185 | 167 | 0 | 97.8  | 104.8 | 2759 | 0 | 791 |
| 520.0 | 10.0 | 4.3 | 22 | 186 | 163 | 0 | 99.2  | 107.4 | 2762 | 0 | 789 |
| 530.0 | 10.0 | 4.5 | 22 | 171 | 160 | 0 | 105.5 | 102.9 | 2725 | 0 | 804 |
| 540.0 | 10.0 | 4.6 | 22 | 196 | 155 | 0 | 96.4  | 111.6 | 2627 | 0 | 819 |
| 550.0 | 10.0 | 4.8 | 22 | 186 | 162 | 0 | 92.3  | 108.3 | 2690 | 0 | 844 |
| 560.0 | 10.0 | 5.0 | 24 | 188 | 161 | 0 | 96.1  | 108.7 | 2727 | 0 | 846 |

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|       |      |     |    |     |     |   |       |       |      |   |     |
|-------|------|-----|----|-----|-----|---|-------|-------|------|---|-----|
| 570.0 | 10.0 | 5.3 | 26 | 189 | 167 | 0 | 76.6  | 109.6 | 2786 | 0 | 860 |
| 580.0 | 10.0 | 5.4 | 26 | 190 | 167 | 0 | 96.6  | 104.1 | 2690 | 0 | 871 |
| 590.0 | 10.0 | 5.6 | 26 | 201 | 164 | 0 | 99.1  | 107.2 | 2743 | 0 | 897 |
| 600.0 | 10.0 | 5.8 | 26 | 197 | 162 | 0 | 99.5  | 107.1 | 2559 | 0 | 906 |
| 610.0 | 10.0 | 6.1 | 31 | 0   | 0   | 0 | 102.5 | 106.0 | 2800 | 0 | 916 |
| 618.0 | 8.0  | 6.3 | 30 | 0   | 0   | 0 | 102.0 | 107.0 | 2775 | 0 | 944 |

NEW BIT ID: 3

|       |     |    |    |     |     |   |      |      |      |   |      |
|-------|-----|----|----|-----|-----|---|------|------|------|---|------|
| 622.0 | 4.0 | .2 | 33 | 194 | 160 | 0 | 37.3 | 36.2 | 1332 | 0 | 1007 |
|-------|-----|----|----|-----|-----|---|------|------|------|---|------|

| DEPTH | STEP | CHRS | WOB | HKLDX | HKLD | BWDV | SPM1 | SPM2 | PMFR | PCSG | HSP  |
|-------|------|------|-----|-------|------|------|------|------|------|------|------|
| 149   |      |      |     |       |      |      |      |      |      |      |      |
| 624.0 | 2.0  | .4   | 30  | 194   | 164  | 0    | 38.8 | 35.8 | 1338 | 0    | 1013 |
| 626.0 | 2.0  | .5   | 20  | 194   | 166  | 0    | 71.0 | 77.0 | 2870 | 0    | 1195 |
| 628.0 | 2.0  | .6   | 20  | 182   | 170  | 0    | 71.1 | 77.2 | 2870 | 0    | 1199 |
| 630.0 | 2.0  | .8   | 20  | 184   | 165  | 0    | 71.1 | 76.7 | 2870 | 0    | 1202 |
| 632.0 | 2.0  | 1.0  | 21  | 188   | 166  | 0    | 73.4 | 80.4 | 2921 | 0    | 1205 |
| 634.0 | 2.0  | 1.1  | 21  | 189   | 171  | 0    | 73.7 | 80.8 | 2956 | 0    | 1212 |
| 636.0 | 2.0  | 1.2  | 23  | 189   | 166  | 0    | 73.9 | 80.7 | 2954 | 0    | 1219 |
| 640.0 | 4.0  | 1.5  | 24  | 189   | 165  | 0    | 73.9 | 80.9 | 2918 | 0    | 1228 |
| 642.0 | 2.0  | 1.6  | 21  | 189   | 168  | 0    | 73.6 | 78.2 | 2890 | 0    | 1231 |
| 644.0 | 2.0  | 1.8  | 23  | 189   | 166  | 0    | 75.0 | 78.0 | 2913 | 0    | 1235 |
| 166   |      |      |     |       |      |      |      |      |      |      |      |
| 646.0 | 2.0  | 1.9  | 22  | 189   | 167  | 0    | 75.2 | 78.0 | 2910 | 0    | 1239 |
| 648.0 | 2.0  | 2.0  | 23  | 189   | 166  | 0    | 75.2 | 77.3 | 2919 | 0    | 1242 |
| 650.0 | 2.0  | 2.1  | 23  | 190   | 166  | 0    | 75.1 | 78.2 | 2931 | 0    | 1247 |
| 652.0 | 2.0  | 2.2  | 23  | 190   | 167  | 0    | 79.3 | 77.0 | 2843 | 0    | 1250 |
| 654.0 | 2.0  | 2.4  | 23  | 190   | 167  | 0    | 73.8 | 75.5 | 2821 | 0    | 1254 |
| 656.0 | 2.0  | 2.7  | 24  | 190   | 166  | 0    | 78.1 | 77.1 | 2841 | 0    | 1258 |
| 658.0 | 2.0  | 2.9  | 23  | 190   | 167  | 0    | 74.5 | 76.8 | 2862 | 0    | 1262 |
| 660.0 | 2.0  | 2.9  | 24  | 189   | 160  | 0    | 74.4 | 77.3 | 2872 | 0    | 1266 |
| 662.0 | 2.0  | 3.0  | 24  | 189   | 159  | 0    | 72.6 | 77.8 | 2877 | 0    | 1271 |
| 664.0 | 2.0  | 3.1  | 24  | 189   | 159  | 0    | 72.3 | 77.8 | 2879 | 0    | 1276 |
| 185   |      |      |     |       |      |      |      |      |      |      |      |
| 666.0 | 2.0  | 3.1  | 25  | 189   | 164  | 0    | 72.3 | 78.0 | 2847 | 0    | 1281 |
| 670.0 | 4.0  | 3.3  | 24  | 189   | 165  | 0    | 72.3 | 76.7 | 2787 | 0    | 1287 |
| 672.0 | 2.0  | 3.4  | 25  | 189   | 161  | 0    | 72.6 | 78.5 | 2797 | 0    | 1290 |
| 674.0 | 2.0  | 3.5  | 25  | 189   | 160  | 0    | 70.3 | 77.4 | 2778 | 0    | 1293 |
| 676.0 | 2.0  | 3.6  | 23  | 189   | 163  | 0    | 70.6 | 77.3 | 2792 | 0    | 1297 |
| 678.0 | 2.0  | 3.7  | 24  | 189   | 165  | 0    | 72.9 | 74.4 | 2761 | 0    | 1302 |
| 680.0 | 2.0  | 3.8  | 24  | 189   | 165  | 0    | 85.7 | 74.0 | 2776 | 0    | 1305 |
| 682.0 | 2.0  | 3.9  | 24  | 189   | 165  | 0    | 73.0 | 76.5 | 2815 | 0    | 1309 |
| 684.0 | 2.0  | 4.0  | 23  | 189   | 166  | 0    | 73.3 | 77.8 | 2848 | 0    | 1313 |
| 686.0 | 2.0  | 4.1  | 26  | 189   | 163  | 0    | 73.9 | 77.8 | 2838 | 0    | 1317 |
| 204   |      |      |     |       |      |      |      |      |      |      |      |
| 688.0 | 2.0  | 4.3  | 21  | 189   | 168  | 0    | 73.8 | 82.1 | 2876 | 0    | 1321 |
| 690.0 | 2.0  | 4.4  | 22  | 189   | 167  | 0    | 71.6 | 82.9 | 2693 | 0    | 1324 |
| 692.0 | 2.0  | 4.6  | 21  | 189   | 168  | 0    | 70.4 | 74.6 | 2477 | 0    | 1328 |
| 694.0 | 2.0  | 4.7  | 21  | 189   | 168  | 0    | 75.6 | 76.0 | 2610 | 0    | 1332 |
| 696.0 | 2.0  | 4.8  | 22  | 189   | 167  | 0    | 75.4 | 75.4 | 2613 | 0    | 1336 |
| 698.0 | 2.0  | 4.9  | 19  | 189   | 170  | 0    | 74.9 | 75.7 | 2576 | 0    | 1340 |
| 700.0 | 2.0  | 5.0  | 20  | 189   | 169  | 0    | 73.3 | 78.0 | 2609 | 0    | 1343 |
| 702.0 | 2.0  | 5.1  | 21  | 189   | 168  | 0    | 74.9 | 79.1 | 2653 | 0    | 1347 |
| 704.0 | 2.0  | 5.2  | 20  | 190   | 170  | 0    | 73.4 | 79.5 | 2649 | 0    | 1351 |
| 708.0 | 4.0  | 5.4  | 19  | 190   | 171  | 0    | 73.7 | 78.4 | 2626 | 0    | 1357 |
| 223   |      |      |     |       |      |      |      |      |      |      |      |
| 710.0 | 2.0  | 5.5  | 15  | 190   | 175  | 0    | 74.6 | 77.2 | 2628 | 0    | 1363 |
| 712.0 | 2.0  | 5.6  | 15  | 190   | 175  | 0    | 81.1 | 77.9 | 2631 | 0    | 1366 |
| 714.0 | 2.0  | 5.7  | 18  | 190   | 172  | 0    | 75.6 | 77.9 | 2634 | 0    | 1370 |
| 716.0 | 2.0  | 5.8  | 16  | 191   | 176  | 0    | 75.7 | 82.1 | 2830 | 0    | 1366 |
| 718.0 | 2.0  | 5.9  | 16  | 191   | 174  | 0    | 75.7 | 75.8 | 2547 | 0    | 1372 |
| 720.0 | 2.0  | 6.0  | 16  | 191   | 178  | 0    | 75.7 | 75.7 | 2559 | 0    | 1379 |
| 722.0 | 2.0  | 6.0  | 18  | 191   | 173  | 0    | 75.7 | 74.9 | 2559 | 0    | 1385 |
| 726.0 | 4.0  | 6.1  | 17  | 191   | 174  | 0    | 75.7 | 67.3 | 2569 | 0    | 1394 |
| 728.0 | 2.0  | 6.2  | 17  | 191   | 174  | 0    | 75.7 | 74.9 | 2493 | 0    | 1400 |
| 730.0 | 2.0  | 6.3  | 17  | 191   | 174  | 0    | 75.7 | 74.1 | 2504 | 0    | 1404 |
| 243   |      |      |     |       |      |      |      |      |      |      |      |

| DEPTH | STEP | CHRS | WOB | HKLDX | HKLD | BWDV | SPM1 | SPM2 | PMPR | PCSG | HSP  |
|-------|------|------|-----|-------|------|------|------|------|------|------|------|
| 243   |      |      |     |       |      |      |      |      |      |      |      |
| 732.0 | 2.0  | 6.4  | 15  | 191   | 176  | 0    | 75.7 | 74.2 | 2507 | 0    | 1408 |
| 734.0 | 2.0  | 6.6  | 15  | 191   | 176  | 0    | 75.7 | 73.9 | 2515 | 0    | 1408 |
| 738.0 | 4.0  | 6.8  | 14  | 192   | 177  | 0    | 75.8 | 75.3 | 2576 | 0    | 1411 |
| 740.0 | 2.0  | 6.9  | 14  | 193   | 179  | 0    | 76.1 | 77.7 | 2615 | 0    | 1415 |
| 742.0 | 2.0  | 7.0  | 15  | 193   | 178  | 0    | 76.2 | 77.6 | 2624 | 0    | 1419 |
| 744.0 | 2.0  | 7.1  | 15  | 193   | 178  | 0    | 76.3 | 76.3 | 2623 | 0    | 1423 |
| 746.0 | 2.0  | 7.3  | 13  | 193   | 180  | 0    | 76.6 | 76.1 | 2635 | 0    | 1427 |
| 748.0 | 2.0  | 7.4  | 14  | 193   | 179  | 0    | 73.7 | 79.7 | 2644 | 0    | 1430 |
| 750.0 | 2.0  | 7.5  | 15  | 193   | 178  | 0    | 73.7 | 79.3 | 2653 | 0    | 1434 |
| 752.0 | 2.0  | 7.5  | 16  | 193   | 177  | 0    | 74.8 | 79.5 | 2655 | 0    | 1439 |
| 263   |      |      |     |       |      |      |      |      |      |      |      |
| 754.0 | 2.0  | 7.6  | 13  | 193   | 180  | 0    | 74.3 | 79.9 | 2658 | 0    | 1445 |
| 756.0 | 2.0  | 7.7  | 17  | 193   | 176  | 0    | 72.8 | 81.8 | 2677 | 0    | 1448 |
| 758.0 | 2.0  | 7.8  | 14  | 195   | 180  | 0    | 72.6 | 80.9 | 2633 | 0    | 1452 |
| 760.0 | 2.0  | 7.8  | 15  | 195   | 180  | 0    | 74.0 | 72.9 | 2480 | 0    | 1458 |
| 762.0 | 2.0  | 7.9  | 14  | 195   | 181  | 0    | 73.7 | 72.4 | 2485 | 0    | 1463 |
| 764.0 | 2.0  | 8.0  | 18  | 195   | 177  | 0    | 70.4 | 69.8 | 2518 | 0    | 1459 |
| 766.0 | 2.0  | 8.1  | 20  | 195   | 175  | 0    | 72.1 | 80.0 | 2717 | 0    | 1464 |
| 768.0 | 2.0  | 8.3  | 17  | 195   | 178  | 0    | 69.4 | 78.0 | 2712 | 0    | 1467 |
| 772.0 | 4.0  | 8.4  | 16  | 195   | 183  | 0    | 68.1 | 78.8 | 2676 | 0    | 1473 |
| 774.0 | 2.0  | 8.4  | 16  | 195   | 179  | 0    | 67.8 | 84.5 | 2767 | 0    | 1482 |
| 283   |      |      |     |       |      |      |      |      |      |      |      |
| 778.0 | 4.0  | 8.4  | 16  | 195   | 187  | 0    | 68.2 | 84.0 | 2827 | 0    | 1490 |
| 780.0 | 2.0  | 8.4  | 16  | 195   | 180  | 0    | 68.6 | 84.0 | 2842 | 0    | 1499 |
| 782.0 | 2.0  | 8.4  | 17  | 195   | 180  | 0    | 69.9 | 76.3 | 2630 | 0    | 1493 |
| 784.0 | 2.0  | 8.5  | 18  | 195   | 177  | 0    | 70.6 | 70.2 | 2572 | 0    | 1500 |
| 786.0 | 2.0  | 8.5  | 14  | 195   | 181  | 0    | 75.0 | 73.6 | 2768 | 0    | 1505 |
| 788.0 | 2.0  | 8.6  | 15  | 195   | 184  | 0    | 75.1 | 73.8 | 2733 | 0    | 1507 |
| 790.0 | 2.0  | 8.6  | 15  | 195   | 183  | 0    | 71.3 | 63.5 | 2313 | 0    | 1510 |
| 794.0 | 4.0  | 8.7  | 16  | 195   | 179  | 0    | 70.0 | 67.8 | 2388 | 0    | 1519 |
| 796.0 | 2.0  | 8.8  | 16  | 195   | 178  | 0    | 67.6 | 72.0 | 2460 | 0    | 1528 |
| 798.0 | 2.0  | 8.8  | 14  | 195   | 190  | 0    | 67.8 | 73.7 | 2451 | 0    | 1534 |
| 303   |      |      |     |       |      |      |      |      |      |      |      |
| 800.0 | 2.0  | 8.8  | 13  | 195   | 182  | 0    | 65.3 | 63.3 | 2122 | 0    | 1528 |
| 804.0 | 4.0  | 8.8  | 15  | 195   | 183  | 0    | 63.9 | 64.4 | 2078 | 0    | 1539 |
| 806.0 | 2.0  | 9.0  | 15  | 195   | 185  | 0    | 57.8 | 61.8 | 1898 | 0    | 1545 |
| 808.0 | 2.0  | 9.0  | 15  | 195   | 186  | 0    | 72.3 | 73.2 | 2651 | 0    | 1552 |
| 814.0 | 6.0  | 9.0  | 15  | 195   | 185  | 0    | 73.8 | 76.2 | 2768 | 0    | 1556 |
| 816.0 | 2.0  | 9.1  | 15  | 195   | 184  | 0    | 76.6 | 73.4 | 2786 | 0    | 1561 |
| 820.0 | 4.0  | 9.1  | 15  | 202   | 187  | 0    | 77.3 | 73.6 | 2809 | 0    | 1574 |
| 822.0 | 2.0  | 9.1  | 20  | 202   | 190  | 0    | 75.3 | 74.5 | 2785 | 0    | 1580 |
| 824.0 | 2.0  | 9.1  | 19  | 202   | 185  | 0    | 74.2 | 75.2 | 2755 | 0    | 1585 |
| 826.0 | 2.0  | 9.2  | 18  | 206   | 199  | 0    | 73.6 | 74.3 | 2614 | 0    | 1589 |
| 321   |      |      |     |       |      |      |      |      |      |      |      |
| 828.0 | 2.0  | 9.3  | 17  | 210   | 193  | 0    | 57.8 | 59.2 | 1834 | 0    | 1588 |
| 832.0 | 4.0  | 9.4  | 16  | 212   | 195  | 0    | 64.5 | 68.1 | 2291 | 0    | 1593 |
| 834.0 | 2.0  | 9.5  | 21  | 212   | 191  | 0    | 72.4 | 73.5 | 2612 | 0    | 1596 |
| 836.0 | 2.0  | 9.5  | 19  | 212   | 193  | 0    | 75.7 | 72.4 | 2475 | 0    | 1601 |
| 838.0 | 2.0  | 9.6  | 22  | 212   | 190  | 0    | 70.5 | 73.9 | 2353 | 0    | 1607 |
| 840.0 | 2.0  | 9.6  | 23  | 212   | 189  | 0    | 71.1 | 74.3 | 2400 | 0    | 1612 |
| 842.0 | 2.0  | 9.7  | 24  | 212   | 188  | 0    | 75.6 | 75.5 | 2554 | 0    | 1614 |
| 844.0 | 2.0  | 9.8  | 23  | 212   | 189  | 0    | 76.4 | 76.1 | 2570 | 0    | 1617 |
| 846.0 | 2.0  | 10.0 | 29  | 212   | 183  | 0    | 76.9 | 75.6 | 2588 | 0    | 1622 |
| 852.0 | 6.0  | 10.2 | 27  | 212   | 185  | 0    | 77.1 | 75.3 | 2584 | 0    | 1629 |

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ESP 1010

ESSD SWEEP #1

PAGE 4 - C

| DEPTH | STEP | CHRS | WOB | HKLDX | HKLD | BWDV | SPM1 | SPM2 | PMPR | PCSG | HSP  |
|-------|------|------|-----|-------|------|------|------|------|------|------|------|
|       | 341  |      |     |       |      |      |      |      |      |      |      |
| 854.0 | 2.0  | 10.4 | 27  | 212   | 185  | 0    | 74.3 | 76.0 | 2543 | 0    | 1635 |
| 856.0 | 2.0  | 10.5 | 26  | 212   | 182  | 0    | 74.7 | 76.4 | 2550 | 0    | 1639 |
| 858.0 | 2.0  | 10.6 | 23  | 212   | 178  | 0    | 74.5 | 76.2 | 2516 | 0    | 1642 |
| 860.0 | 2.0  | 10.7 | 23  | 212   | 184  | 0    | 73.8 | 75.8 | 2537 | 0    | 1647 |
| 862.0 | 2.0  | 10.8 | 22  | 220   | 185  | 0    | 73.5 | 78.1 | 2527 | 0    | 1650 |
| 864.0 | 2.0  | 10.9 | 20  | 200   | 181  | 0    | 78.0 | 71.7 | 2520 | 0    | 1654 |
| 866.0 | 2.0  | 11.1 | 21  | 200   | 179  | 0    | 78.0 | 72.4 | 2533 | 0    | 1658 |
| 868.0 | 2.0  | 11.3 | 21  | 200   | 176  | 0    | 77.6 | 76.7 | 2631 | 0    | 1662 |
| 870.0 | 2.0  | 11.5 | 22  | 200   | 171  | 0    | 78.0 | 76.7 | 2661 | 0    | 1666 |
| 872.0 | 2.0  | 11.6 | 22  | 200   | 162  | 0    | 80.2 | 76.9 | 2719 | 0    | 1669 |
|       | 359  |      |     |       |      |      |      |      |      |      |      |
| 874.0 | 2.0  | 11.7 | 22  | 200   | 163  | 0    | 80.3 | 77.3 | 2738 | 0    | 1673 |
| 876.0 | 2.0  | 11.9 | 22  | 200   | 166  | 0    | 80.4 | 77.9 | 2747 | 0    | 1677 |
| 878.0 | 2.0  | 12.1 | 22  | 200   | 159  | 0    | 78.1 | 78.1 | 2708 | 0    | 1682 |
| 880.0 | 2.0  | 12.2 | 22  | 200   | 163  | 0    | 77.9 | 80.9 | 2652 | 0    | 1686 |
| 882.0 | 2.0  | 12.3 | 21  | 200   | 165  | 0    | 71.3 | 76.2 | 2470 | 0    | 1690 |
| 884.0 | 2.0  | 12.3 | 21  | 190   | 162  | 0    | 71.6 | 76.4 | 2473 | 0    | 1696 |
| 886.0 | 2.0  | 12.5 | 21  | 190   | 155  | 0    | 71.8 | 76.1 | 2475 | 0    | 1699 |
| 888.0 | 2.0  | 12.7 | 21  | 190   | 150  | 0    | 70.9 | 76.4 | 2469 | 0    | 1701 |
| 890.0 | 2.0  | 12.9 | 21  | 190   | 152  | 0    | 71.1 | 78.1 | 2524 | 0    | 1705 |
| 892.0 | 2.0  | 13.2 | 23  | 186   | 152  | 0    | 71.8 | 78.2 | 2538 | 0    | 1709 |
|       | 378  |      |     |       |      |      |      |      |      |      |      |
| 894.0 | 2.0  | 13.5 | 23  | 182   | 153  | 0    | 73.1 | 76.3 | 2483 | 0    | 1712 |
| 896.0 | 2.0  | 13.8 | 23  | 182   | 154  | 0    | 75.7 | 75.1 | 2543 | 0    | 1716 |
| 900.0 | 4.0  | 13.9 | 26  | 182   | 156  | 0    | 82.3 | 81.5 | 2675 | 0    | 1724 |

PE603668

This is an enclosure indicator page.  
The enclosure PE603668 is enclosed within the  
container PE906358 at this location in this  
document.

The enclosure PE603668 has the following characteristics:

ITEM\_BARCODE = PE603668  
CONTAINER\_BARCODE = PE906358  
NAME = Drill Log  
BASIN = GIPPSLAND  
PERMIT = VIC/P1  
TYPE = WELL  
SUBTYPE = WELL\_LOG  
DESCRIPTION = Drill Log for Sweep-1  
REMARKS =  
DATE\_CREATED = 27/07/78  
DATE\_RECEIVED = 2/04/79  
W\_NO = W704  
WELL\_NAME = SWEEP-1  
CONTRACTOR = CORE LABORATORIES  
CLIENT\_OP\_CO = ESSO AUSTRALIA LIMITED

(Inserted by DNRE - Vic Govt Mines Dept)

PE603669

This is an enclosure indicator page.  
The enclosure PE603669 is enclosed within the  
container PE906358 at this location in this  
document.

The enclosure PE603669 has the following characteristics:

- ITEM\_BARCODE = PE603669
- CONTAINER\_BARCODE = PE906358
- NAME = Temperature Log
- BASIN = GIPPSLAND
- PERMIT = VIC/P1
- TYPE = WELL
- SUBTYPE = WELL LOG
- DESCRIPTION = Temperature Log for Sweep-1
- REMARKS =
- DATE\_CREATED = 27/07/78
- DATE\_RECEIVED = 2/04/79
- W\_NO = W704
- WELL\_NAME = SWEEP-1
- CONTRACTOR = CORE LABORATORIES
- CLIENT\_OP\_CO = ESSO AUSTRALIA LIMITED

(Inserted by DNRE - Vic Govt Mines Dept)



PE603753

This is an enclosure indicator page.  
The enclosure PE603753 is enclosed within the  
container PE906358 at this location in this  
document.

The enclosure PE603753 has the following characteristics:

- ITEM\_BARCODE = PE603753
- CONTAINER\_BARCODE = PE906358
- NAME = Pressure Log
- BASIN = GIPPSLAND
- PERMIT = VIC/P1
- TYPE = WELL
- SUBTYPE = WELL LOG
- DESCRIPTION = Pressure Log for Sweep-1
- REMARKS =
- DATE\_CREATED = 27/07/78
- DATE\_RECEIVED = 2/04/79
- W\_NO = W704
- WELL\_NAME = SWEEP-1
- CONTRACTOR = CORE LABORATORIES
- CLIENT\_OP\_CO = ESSO AUSTRALIA LIMITED

(Inserted by DNRE - Vic Govt Mines Dept)

PE603670

This is an enclosure indicator page.  
The enclosure PE603670 is enclosed within the  
container PE906358 at this location in this  
document.

The enclosure PE603670 has the following characteristics:

- ITEM\_BARCODE = PE603670
- CONTAINER\_BARCODE = PE906358
- NAME = Geoplot
- BASIN = GIPPSLAND
- PERMIT = VIC/P1
- TYPE = WELL
- SUBTYPE = WELL\_ LOG
- DESCRIPTION = Geoplot for Sweep-1,plot 2 of 2
- REMARKS =
- DATE\_CREATED = 27/07/78
- DATE\_RECEIVED = 2/04/79
- W\_NO = W704
- WELL\_NAME = SWEEP-1
- CONTRACTOR = CORE LABORATORIES
- CLIENT\_OP\_CO = ESSO AUSTRALIA LIMITED

(Inserted by DNRE - Vic Govt Mines Dept)

PE603671

This is an enclosure indicator page.  
The enclosure PE603671 is enclosed within the  
container PE906358 at this location in this  
document.

The enclosure PE603671 has the following characteristics:

- ITEM\_BARCODE = PE603671
- CONTAINER\_BARCODE = PE906358
- NAME = Geoplot
- BASIN = GIPPSLAND
- PERMIT = VIC/P1
- TYPE = WELL
- SUBTYPE = WELL LOG
- DESCRIPTION = Geoplot for Sweep-1,plot 1 of 2
- REMARKS =
- DATE\_CREATED = 27/07/78
- DATE\_RECEIVED = 2/04/79
- W\_NO = W704
- WELL\_NAME = SWEEP-1
- CONTRACTOR = CORE LABORATORIES
- CLIENT\_OP\_CO = ESSO AUSTRALIA LIMITED

(Inserted by DNRE - Vic Govt Mines Dept)

PE601416

This is an enclosure indicator page.  
The enclosure PE601416 is enclosed within the  
container PE906358 at this location in this  
document.

The enclosure PE601416 has the following characteristics:

ITEM\_BARCODE = PE601416  
CONTAINER\_BARCODE = PE906358  
    NAME = Grapholog  
    BASIN = GIPPSLAND  
    PERMIT = VIC/P1  
    TYPE = WELL  
    SUBTYPE = MUD\_ LOG  
    DESCRIPTION = Grapholog for Sweep-1  
    REMARKS =  
    DATE\_CREATED = 27/07/78  
    DATE\_RECEIVED = 2/04/79  
    W\_NO = W704  
    WELL\_NAME = SWEEP-1  
    CONTRACTOR = CORE LABORATORIES  
    CLIENT\_OP\_CO = ESSO AUSTRALIA LIMITED

(Inserted by DNRE - Vic Govt Mines Dept)