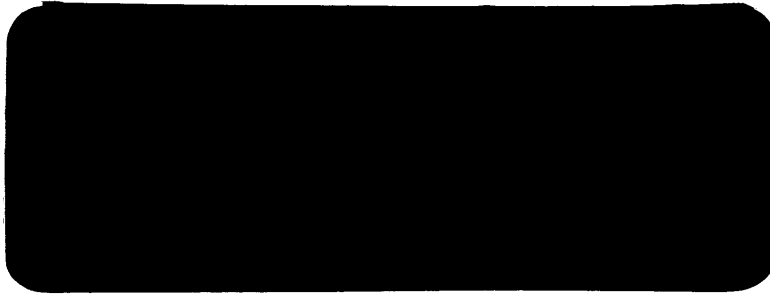


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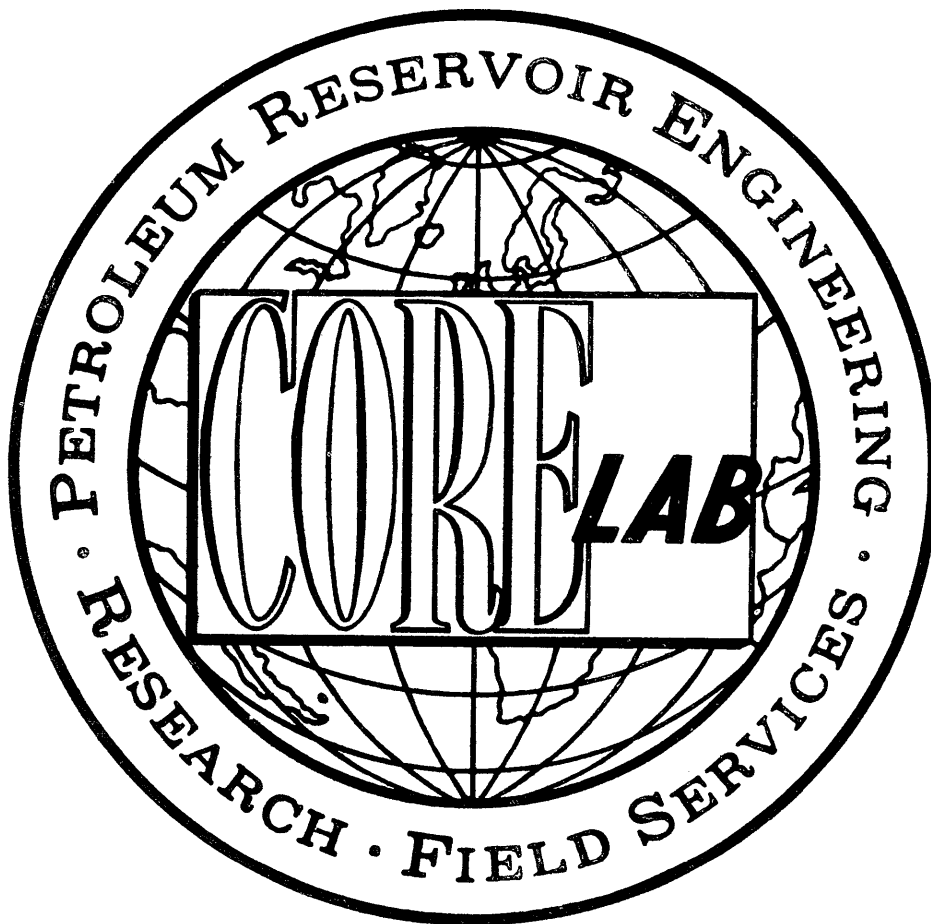


DEPT. NAT. RES & ENV



PE907031

ATTACHMENT TO WCR
FINAL WELL REPORT
SNAPPER - 6
(W925)



OIL and GAS DIVISION

FINAL WELL REPORT

19 MAR 1986

ESSO AUSTRALIA LIMITED

SNAPPER #6



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INTRODUCTION

Snapper #6 was drilled by ESSO AUSTRALIA LIMITED, in the Bass Strait, Australia.

Well co-ordinates were :

Latitude : 38°13' 55.871"S
Longitude : 148°00' 41.890"E

The well was drilled by South Seas Drilling Company's semi-submersible rig "Southern Cross", and monitored by Core Laboratories Extended Service Field Laboratory 2007.

Snapper #6 was spudded on 24th December, 1985 and reached a total depth of 3021 metres on 11th January, 1986, a total drilling time of 19 days. The main objectives of the well were to:

1. Test for potential oil columns beneath the intra-Latrobe gas sands discovered on Snapper #5.
2. To confirm lateral continuity of intra-Latrobe oil pools discovered on Snapper #5.
3. To further test and delineate the N-1 oil reservoir on the western flank of the field.

Elevations were :

Kelly bushings to mean sea level 21 metres
Water depth 55 metres
Kelly bushings to mean sea bed 76 metres

All depths used in this report and accompanying logs refer to depth below rotary kelly bushings (RKB).

Core Laboratories personnel involved in the logging of Snapper #6 were as follows :

T. Wyeth	-	Unit Supervisor
D. Shields	-	Pressure Engineer
D. Mackay	-	Well Logger
A. Bottos	-	Well Logger
M. Smith	-	Well Logger
R. Poltorak	-	Tritium Operator
J. Bagnall	-	Tritium Operator
A. Hoff	-	Tritium Operator
K. Krozian	-	Tritium Operator

2. RIG SPECIFICATIONS

RIG INFORMATION SHEET

COMPANY ESSO AUSTRALIA LIMITED

WELL SNAPPER #6

OWNER SOUTH SEAS DRILLING COMPANY
NAME AND NUMBER SOUTHERN CROSS (N^o 107)
TYPE SEMI-SUBMERSIBLE, TWIN HULLED
DERRICK, DRILL FLOOR & SUBSTRUCTURE DERRICK: LEE C MOORE, 152' HIGH X 40' AT BASE.
LOAD CAPACITY OF 1,000,000 lbs
DRAWWORKS OILWELL E-2000 DRIVEN BY 2 GE 752 ELECTRIC MOTORS
CROWN BLOCK LEE C MOORE 27458 C. CAPACITY 500 SHORT TONS
TRAVELING BLOCK OILWELL A 500
SWIVEL OILWELL PC 425
ELEVATORS BYRON JACKSON MODEL GG CAPACITY 350 TON
KELLY & KELLY SPINNER DRILLCO 5½" x 50' HEX KELLY
ROTARY TABLE OILWELL A 37½ SINGLE ELECTRIC MOTOR
ROTARY SLIPS VARCO DCS-L
MUD PUMPS TWO OILWELL A 1700PT. RATED AT 1600HP
MUD SYSTEM FOUR MUD TANKS HAVING A TOTAL CAPACITY OF 1200 BBL, AND ONE
PILL TANK HAVING A CAPACITY OF 105 BBL.
TWO MUD HOPPERS POWERED BY 2 MISSION 6 x 8" CENTRIFUGAL BY TWO
100HP ELECTRIC MOTORS.
DESANDER: 1 DEMCO 4 CONE 12" MODEL N^o 124
DESILTER: 1 DEMCO 4"-16H 16 CONE
DEGASSER: 1 SWACO MODEL N^o 36
SHALE SHAKERS: 2 BRANDT DUAL UNIT TANDEM - GHI DUAL UNIT
THREE SHAFFER L.W.S. 18 3/4" - 10,000 psi
TWO HYDRIL G.L. 18 3/4" - 5,000 psi
FOUR VALV CON ACCUMULATORS
CHOKES: 2 C.I.W. ABJ H2 2 1/16" - 10,000 psi, 1 SWACO SUPER
CHOKE 2" - 10,000 psi
DC: 6½" x 2 13/16" (4" IF TJ)
8" x 2 13/16" (6 5/8" H90 TJ)
9 3/4" x 3" (7 5/8" H90 YJ)
HWDP: 5" 50lb/ft GRADE G (6½") 4½" IF TJ)
DP : 5" 19½lb/ft GRADE G & E (6 3/8" OO 4½" IF TJ)
HALLIBURTON HT-400 UNIT
MARTIN DECKER: MUD VOLUME TOTALIZER
6 CHANNEL DRILLING RECORDER
4 PRESSURE GAUGES
FLOWSHOW INDICATOR
POWER SUPPLY 2 EMD MD 18 DIESEL ENGINES RATED AT 1950 HP EACH
1 EMD MD 13 DIESEL ENGINE RATED AT 1500 HP
DIRECTIONAL EQUIP. -
MISCELLANEOUS (E.G. RISER, COMPENSATION SYSTEM, PIPE RACKER, DP EQUIPMENT)
RISER: REGAN FC-7 TELESCOPIC 21" ID. PLUS FLOW DIVERTOR.
CASING POWER TONGS: ECKEL 13 3/8" (20,000 ft lbs), 20" (35,000 ft lbs)
CMT BULK TANKS: 3 x 1570 cu ft. RISER TENSIONER: 6 WESTERN GEAR, 50' STROKE, 80,000 lbs.
MUD BULK TANKS: 3 x 1570 cu ft. GUIDE LINE TENSIONERS: 4 WESTERN GEAR 16,000 lbs,
40' STROKE

3. WELL INFORMATION, PROGRESS AND HISTORY

WELL INFORMATION SHEET

COMPANY ESSO AUSTRALIA LTD.
 WELL SNAPPER #6
 Sheet No. 1

WELL NAME SNAPPER #6

OPERATOR ESSO AUSTRALIA LTD.
 PARTNERS BHP

RIG OWNER SOUTH SEAS DRILLING COMPANY
 NAME OR NUMBER SOUTHERN CROSS
 TYPE SEMI-SUBMERSIBLE

LOCATION LATITUDE (X) 38°13'55.871"S LONGITUDE (Y) 148°00'41.890"E
 FIELD SNAPPER AREA GIPPSLAND BASIN
 COUNTY BASS STRAIT STATE VICTORIA
 COUNTRY AUSTRALIA
 DESCRIPTION DELINEATION OF SNAPPER FIELD

DATUM Mean Water Depth 55 metres RKB to Water Level 21 metres

DATES SPUD 24th December 1985 TOTAL DEPTH 3021 metres

HOLE SIZES	Depth From	Depth To	Bit Size (Inches)	No. of Bits	No. of Reamers	Date From	Date To	Cased	Logged
	76	211	26	1	-	24/12/85	24/12/85	Y	N
	211	808	17½	1	-	26/12/85	27/12/85	Y	N
	808	3021	12½	5	-	29/12/85	11/01/86	N	Y

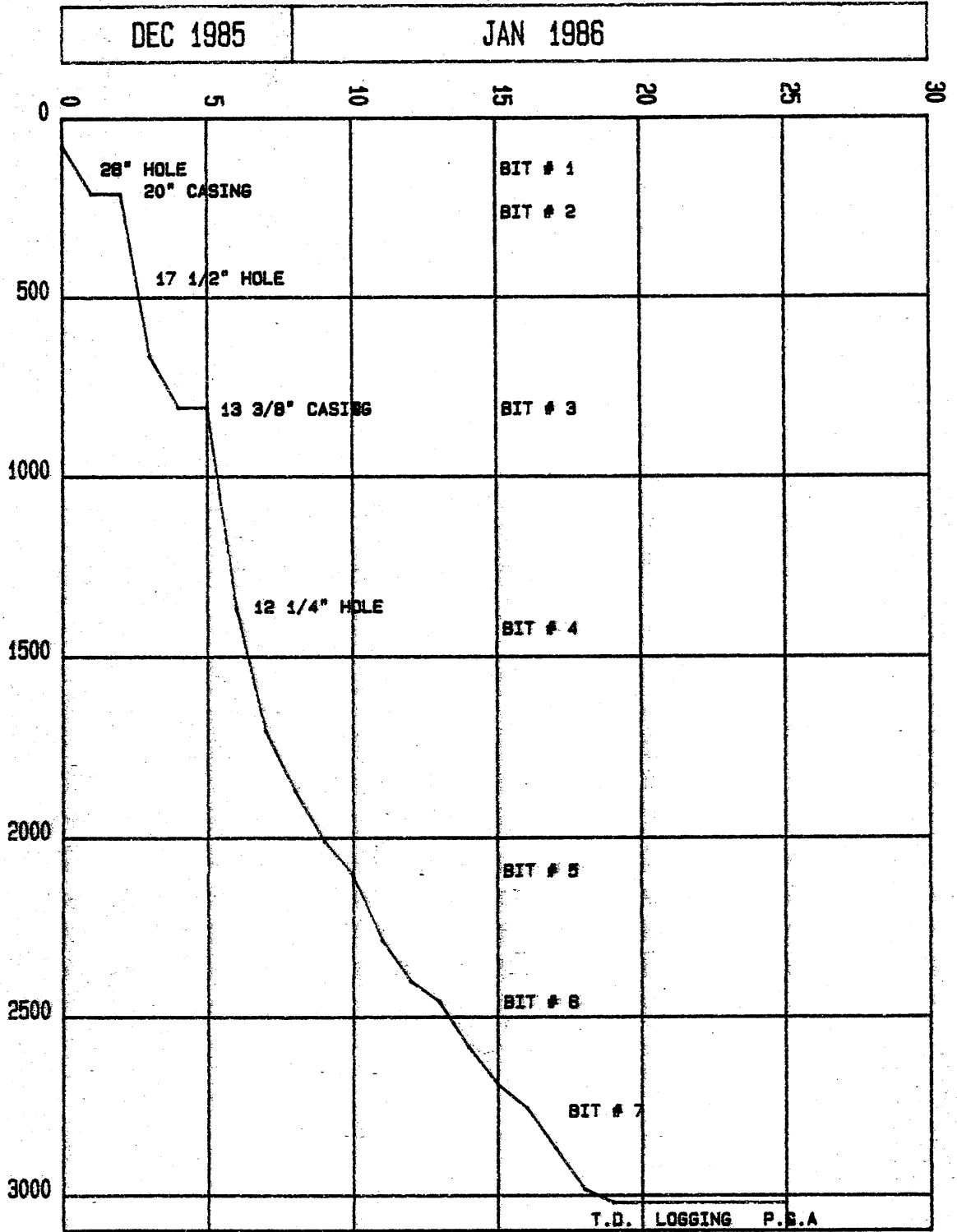
DRILLING FLUIDS	Depth From	Depth To	Weights	Type
	76	211	8.7 TO 8.9	Seawater
	211	808	9.0 TO 9.2	Seawater - Drill solids
	808	3021	9.4 TO 9.6	Seawater - Polymer Gel

WIRELINE LOGGING	Depth From	Depth To	Hole Size	Date Run	Logs Run
	765	194	17½	27/12/85	BHC - GR
	3005.5	1290	12½	11/1/86	LDTC - CNTH - AM
	3012.5	794.2	12½	11/1/86	DLTE - MSFL - SP - GR
	-	-	12½	11-12/1/86	RFT's
	-	-	12½	13/1/86	RFT's
	3003	794.2	12½	14/1/86	DDBHC - DIT - GR
	-	-	12½	14/1/86	WST
	-	-	12½	15/1/86	RFT's
	-	-	12½	15/1/86	CST's

RISER CASING & LINER	Depth From	Depth To	OD (Ins)	ID (Ins)	Weight	Grade	Thread	Date Run	Cement	Stages	Excess
	0	76	22	21			RISER				
	76	193	20	19.124	94	X52	JB BOX	24/12/85	"G"	1	1
	76	793	13 3/8	12.615	54.5	K55	BUTT	28/12/86	"G"	1	-

PROGRESS LOG
ESSO AUSTRALIA

SNAPPER # 6



WELL HISTORY
SNAPPER #6

24TH DEC 85 The rig was positioned and anchors set. Bit #1 was run and drilled the 26" hole to 211M where it was POOH and 20" casing run.

25TH DEC 85 The 20" casing was landed, shoe set at 193M, and cemented. The BOP's were run.

26TH DEC 85 After running and testing the BOP's and riser, Bit #2 was run and drilled the 17½" hole to 663M.

27TH DEC 85 The 17½" hole was drilled to 808M, a survey run (0°) and after a wiper trip, the bit was POOH. Schlumberger ran BHC/GR log then another wiper trip was made.

28TH DEC 85 After circulating to clean the hole the bit was POOH and the 13 3/8" casing run, the shoe set at 793M, and cemented. Bit #3 was run and started drilling the shoe.

29TH DEC 85 The 12½" hole was drilled to 814M then circulated to condition the mud. A P.I.T. gave a fracture gradient of 14.2 ppg. The 12½" hole was drilled from 814M to 1354M, into the top of the Latrobe formation. Here a flow check showed no flow; and circulating, gave a maximum gas of 1950 units. The hole was deepened to 1365M then the bit POOH.

30TH DEC 85 Bit #3 was pulled and Bit #4 RIH. The 12½" hole was drilled from 1365M to 1705M.

31ST DEC 85 Drilled the 12½" hole from 1705M to 1795M where a leaking kelly hose necessitated pulling out to the shoe for repairs. After running back to bottom the 12½" hole was drilled to 1869M.

1ST JAN 86 Drilled 12½" hole from 1869M to 2009M.

2ND JAN 86 Drilled 12½" hole from 2009M to 2107M where the AWU called a strike so a survey was run (misfire) and the bit pulled. At the shoe a P.I.T. gave a fracture gradient of 12.6 ppg. Then AWU returned to work and Bit #5 was RIH and the mud circulated.

3RD JAN 86 Another survey was run (1 3/4°) then the hole drilled from 2107M to 2285M.

4TH JAN 86 Drilled 12 $\frac{1}{4}$ " hole from 2285M to 2400M.

5TH JAN 86 Drilled 12 $\frac{1}{4}$ " hole from 2400M to 2431M where, after a survey (1°), the bit was pulled. Bit #6 was run and drilled from 2431M to 2448M where a sample was circulated up, then drilling continued to 2458M.

6TH JAN 86 Drilled 12 $\frac{1}{4}$ " hole from 2458M to 2583M, circulating bottoms-up at 2519 and 2583 metres.

7TH JAN 86 Drilled from 2583M to 2689M, circulated sample at 2689M.

8TH JAN 86 Drilled from 2689M to 2712M where the bit torqued up. A survey was run (1°) and the bit POOH. Bit #7 was run and drilled from 2712M to 2754M.

9TH JAN 86 Drilled from 2754M to 2868M, circulating the cuttings to surface at 2806 and 2842 metres.

10TH JAN 86 Drilled 12 $\frac{1}{4}$ " hole from 2868M to 2983M.

11TH JAN 86 Drilled 12 $\frac{1}{4}$ " hole from 2983M to 3021M; then did a wiper trip of 15 stands, RIH and circulated bottoms up, dropped a survey (4°) and POOH. Schlumberger then rigged up and ran DLL/LDT/CNL/MSFL/AMS/GR log; then ran RFT pretests.

12TH JAN 86 Schlumberger ran RFT pretests.

13TH JAN 86 First RFT samples to surface. Ran wiper trip then ran more RFT pretests. Second RFT samples to surface.

14TH JAN 86 Ran RFT's, ran DDBHC/GR/ISF and WST/GR. Ran RFT's until tight hole enforced a wiper trip.

15TH JAN 86 Ran wiper trip; ran RFT's; ran CST's. RIH to commence P and A.

16TH JAN 86 P and A.

4. LITHOLOGY AND CORE-O-GRAPHS

LITHOLOGICAL SUMMARY

All formation tops have been chosen entirely upon the examination of cuttings. (Depths are relative to RKB).

Gippsland Limestone (211 metres - 1333 metres)

- 211 - 570 M : Calcarenite with calcite intergrowths. Very fossiliferous, but decreasing with depth.
- 570 - 770 M : Interbedded calcarenite and calcilutite, grading occasionally to calcisiltite.
- 770 - 940 M : Predominantly calcilutite, interbedded with calcarenite. Trace amounts of dolomite were first noted at 860 M.
- 940 - 1333M : Interbedded Calcisiltite and calcilutite, grading to calcareous mudstone/argillaceous limestone.

Gas ranged from 3 - 31 units.

Latrobe Group (1333 metres - 3021 metres)

- 1333 - 1347M : TOP OF THE LATROBE
Medium grained sandstones interbedded with calcareous siltstones. Gas was extremely high in this interval, ranging from 1600 - 1950 units.
- 1347 - 1400M : COARSE CLASTICS
Loose, coarse (to very coarse) grained sandstones with occasional interbeds of calcareous siltstones and minor coals.
- 1400 - 1720M : Sandstones (medium grained) interbedded with siltstones and minor coals. The first major coal was found at 1465 metres, and the 'Upper Diversus' seismic marker (a 10 metre thick coal seam) came in at 1643 metres.
- 1720 - 1765M : Interbedded sandstones and siltstones.
- 1765 - 1850M : Predominantly sandstones with interbeds of siltstones and coals. The sandstone was very fine to fine grained.
- 1850 - 1915M : Interbedded sandstones, siltstones and coals. The sandstones were of two types:
(i) fine to very fine grained; and
(ii) loose, coarse to very coarse quartz grains.

1915 - T.D. : Interbedded sandstones, siltstones and coals. Two
(3021M) types of sandstone were encountered again:
(i) very fine to medium grained (and cemented with
silica); and occasionally
(ii) loose, medium to coarse quartz grains.

Indications of Hydrocarbons

1400 - 1420M : Trace to 10% bright yellow-white fluorescence, which
gave a slow diffuse white cut (sandstone).

2570 - 2590M : Trace to 10% blue-white fluorescence, which produced a
slow to instant diffuse to milky-white cut (sandstone).

2610 - 2955M : Fluorescence was observed in amounts varying from a
trace to 30%. It varied from bright yellow-white to
blue-white, to dull yellow and produced cuts ranging
from instant to streaming, milky blue-white to very
slow diffuse white crush cut (sandstone).

2990 - 3021M : Rare to trace amounts of dull yellow-white
fluorescence, giving a very slow, faint, diffuse, dully
milky-white cut (sandstone).

5. EXTENDED SERVICE PACKAGE

EXTENDED SERVICE INTRODUCTION

The Core Laboratories Extended Service Package includes sensors, recorders and computer facilities useful in the drilling operation, for the detection of abnormal formation pressure, and the optimization of drilling.

Presented graphically on Core Laboratories E.S. logs (discussed individually in the following section of this report) are the various functions necessary for well control, abnormal formation pressure detection and drilling optimization.

Other available services include electric log interpretation programs for the wellsite geologist, hydraulics (synthesis and analysis), well kill, cost per foot, bit nozzle selection, swab and surge created by pipe movement, and bit performance programs for the drilling engineer.

Core Laboratories E.S. logs include the following :

E.S. PRESSURE LOG

Information plotted on this log includes formation pore pressure, mud weight in and formation fracture pressure. This is plotted on linear graph paper at a vertical scale of 1:5000. The formation pore pressure and fracture pressure gradients are based on all available information. This is the conclusion log, therefore the information may be modified by results from formation drill stem tests, data from adjacent wells, kicks, R.F.T.'s, and formation breakdown tests.

CORE LAB DRILL DATA PLOT

This plot, which is drawn while drilling is in progress, is the primary tool by which formation overpressure is detected. Drawn on a 1:5000 scale it is particularly useful in that five plots are drawn side by side, and thus any trend can be readily recognised.

The main plot is that of the corrected "d" exponent, which is presented on a logarithmic scale. The "d" exponent was first developed by Jordan and Shirley in 1966 to assist in interpreting rate of penetration data by normalizing for rotary speed and weight-on-bit per inch of bit diameter.

The modified "dc" exponent was proposed by Rhen and McClendon to compensate for increases in mud weight. This involves multiplying the standard "d" exponent value by the inverse ratio of the mud weight. A multiple of 9 ppg was used for convenience to return the magnitude of the "dc" to a comparable value of it's uncorrected state. In this case, a multiplier of 10 ppg was used. The equation for "dc" is therefore :

$$dc = \frac{\text{Log} \left(\frac{ROP}{RPM \times 60} \right) \times 10}{\text{Log} \left(\frac{WOR \times 12}{\text{Bit diam} \times 1000} \right) \times MDI}$$

Deviations from the normal "dc"s trend may be interpreted as being due to a change in formation pore pressure. An equation derived by Eaton is used in an attempt to evaluate pore pressure from deviations in the "dc"s plot. This method of overpressure detection can be fairly accurate for homogeneous shales, but where the sand/silt/shale ratio varies a great deal, inaccuracies often occur.

The other main plots are a logarithmic rate of penetration, which complements the "dc"s plot and a linear plot of total mud gas.

Shale densities are also plotted on a linear scale in order to show up a decreasing density trend, and hence a possible transition into abnormally pressured shales. The points are determined by measuring the density of air-dried shale samples in an accurately calibrated liquid density column.

An interpreted lithology column is also included on the log, as is a plot of mud density in , to assist in interpretation. All relevant information, such as casing points, bit runs, etc. are also included.

E.S. GEO-PLOT LOG

This is plotted by the computer while drilling is in progress. At a later date this plot can be re-run on different scales to suit the client. The data is stored on magnetic tape during the drilling operations. Functions plotted on this log are : rate of penetration, corrected "d" exponent, break-even analysis, formation pore pressure, mud density in and formation fracture pressure. A Geo-plot is included in this report, at a scale of 1:5000.

E.S. FLOWLINE TEMPERATURE, FLOWLINE TEMPERATURE END-TO-END PLOTS

Flowline temperature and end-to-end plot of flowline temperature are the two main plots relating to the temperature of the returning drilling fluid. These are plotted on a vertical scale of 1:5000. The use of these plots as an indicator of the presence of over-pressure takes secondary role to the E.S. drill log. Continuous observation of flowline temperature may indicate an increase in geothermal gradient. Factors affecting temperature are noted on the log, such as new bit runs, changes in the circulation rates, circulating cuttings out and the addition of water and chemicals to the active mud system. Since the goal of the end-to-end plot is to provide a representation of the geothermal gradient, all surface changes which would cause artificial changes in the flowline temperature are disregarded.

ELECTRIC LOG PLOT

A plot of shale resistivity (ohm-metres squared/metre), sonic travel time (microseconds per foot), bulk density (gm/cc) and neutron porosity (%), may be made using data supplied by Schlumberger. Two-cycle semi-log paper is used, with a vertical scale of 1:10000. As far as possible only clean shale points are selected and plotted. The relatively compressed vertical scale makes deviations from the normal compaction trend easier to identify.

PROGRESS LOG

This is the traditional presentation of footage against elapsed time in days. It shows actual drilling time from spud to total depth.

DATA RECORDING

Data is recorded on tape while drilling, both as raw input numbers and computer calculated numbers. This data can be accessed later for use in interpretative programs or to review data. Comprehensive data lists are included in this report.

MUD DATA SHEETS

These are a record of the mud properties while drilling, and are derived from the mud engineer's daily report.

DRILLING PARAMETER PLOT

The drilling parameter plot shows : rate of penetration, weight-on-bit, rotary speed, pump pressure, hydraulic horsepower, impact force and jet velocity. This plot is drawn by the computer and is designed to aid the drilling engineer in drilling optimization. The scale chosen here is 1:5000.

HYDRAULIC ANALYSES

During drilling, routine hydraulic analyses are calculated by the computer, and these are made available to the drilling engineer. This report includes a sample hydraulics for each 100 metres.

GAS COMPOSITION ANALYSIS

For each significant gas show the chromatograph results are analysed using two techniques :-

1. Log plot
2. Triangulation plot

Both plots are included in this report.

GRAPHOLOG

This is plotted on the industry-standard form on a vertical scale of 1:500. Rate of penetration is plotted in metres per hour, together with mud gas chromatography results. Total gas is also plotted, and a percentage lithology log is drawn. A lithology description is presented in an abbreviated form. All relevant drilling data is included, as is bit and mud data.

MISCELLANEOUS

Various data collected from this well are also included in this report for reference. These include formation leak-off test data, R.F.T. and well test data where appropriate.

CORE LABORATORIES EQUIPMENT

Core Laboratories Field Laboratory 2007 monitoring equipment includes the following :

A. MUD LOGGING

1. T.H.M. total gas detector and recorder.
2. F.I.D. (Flame Ionization Detector) chromatograph and recorder.
3. Cuttings gas detector.
4. Gas trap and support equipment for the above.
5. Pit volume totalizer and recorder.
6. Digital depth counter.
7. Two integrated pump stroke counters.
8. Ultra-violet fluoroscope.
9. Binocular microscope.
10. Calcimeter.
11. Steam-still gas analyzer.

B. EXTENDED SERVICE PACKAGE

1. HEWLETT PACKARD 9825B desktop computer.
2. HEWLETT PACKARD 9872B plotter
3. HEWLETT PACKARD 2631A printer.
4. Two HEWLETT PACKARD 2621P visual display units, (one located in the client's office).
5. Hookload/weight-on-bit transducer and recorder.
6. Rotary speed sensor and recorder.
7. Stand-pipe pump pressure transducer and recorder.
8. Mud flow out sensor and recorder.
9. Mud temperature sensors and recorders (in and out).
10. Mud conductivity sensors and recorders (in and out).
11. Mud density sensors (in and out) and recorders.
12. Rotary torque sensor and recorder.
13. Shale density apparatus.
14. Hydrogen sulphide gas detector.
15. Carbon dioxide gas detector.
16. DATALOGGER computer, monitor and impact printer.
17. DIGITAL remote paging display (located in the client's office).
18. Casing pressure transducer and recorder.

All the above sensors and gas detectors have displays on the DATALOGGER monitors except the Cuttings gas detector and steam-still.

CORE LABORATORIES MONITORING EQUIPMENT

DEPTH

Depth registered every 0.1 metres and rate of penetration calculated each metre (or every 0.2m while coring); ROP displayed on the computer monitor and chart.

WEIGHT-ON-BIT

A DeLaval 0-5000 psi, solid state pressure transducer is connected to the rig's deadline anchor. The weight-on-bit is calculated in the Datalogger, and displayed (with hookload) on the computer monitor and recorder chart.

ROTARY SPEED

This is a proximity limit switch which pulses once for every revolution of the rotary drive shaft. The value is displayed on the computer monitor and a recorder chart.

PUMP PRESSURE

This is a DeLaval 0-5000 psi transducer mounted on the stand-pipe manifold. The pressure is displayed on the computer monitor and recorder chart.

CASING PRESSURE

This is a DeLaval 0-5000 psi transducer mounted on the choke manifold. The signal is displayed on the computer monitor and on a recorder chart.

PIT VOLUME

Four individual pits are displayed on the monitor. The pit volume total is calculated by the Datalogger and displayed on the monitor. The sensors are vertical floats triggering magnetic switches accurate to +/- 1 barrel.

In addition, a sensor is fitted to the rig's trip tank, so that hole fill-up during trips may be closely monitored. A recorder chart displays the levels of the active pits, the pit volume total, and the trip tank.

PUMP STROKES

These are the limit switch type, counting individual strokes. The pump rates per minute are displayed on the monitor.

ROTARY TORQUE

An American Aerospace Controls bi-directional current sensor is clamped over the power cable of the rotary table motor. Torque is displayed on the computer monitor and recorder chart.

MUD TEMPERATURE

This is a platinum probe resistance thermometer, and an electronics module calibrated 0-100 deg.C. Temperature in and out is displayed on the monitor and recorder.

MUD CONDUCTIVITY

A Balsbaugh electrode-less conductivity sensor contains two toroidally-wound coils and a thermistor enclosed in a donut-shaped housing. Current is induced into the mud by the primary coil and is sampled by the secondary coil, the amplitude of the current being directly proportional to the conductivity of the mud.

MUD DENSITY

Two density sensors (in and out) located in the possum belly and in the pit room, operate on a system of differential pressure. This function is displayed on both chart and monitor.

All the sensors are 12 to 36V DC powered with the exception of the air driven gas trap. Along with monitoring and maintaining the above equipment, Core Lab performed other duties...

CUTTINGS

Microscopic and ultra-violet inspection of cuttings samples at predetermined intervals. Samples were washed, dried, sacked and boxed where necessary. Geochemical samples were canned and boxed.

GAS

1. Flame Ionization Total Hydrocarbon gas detector.
The T.H.M. accurately determines hydrocarbon concentrations up to 100% saturation.
2. Flame Ionization Detector chromatograph.
The F.I.D. is capable of accurate determination of hydrocarbon concentration from C1 to C6+.
3. Cuttings gas detector (Wheatstone Bridge type).
An auxiliary system for total gas detection.
4. Hydrogen Sulphide detector.
Two sensors are located at the shale-shakers and in the pit room, linked to a TAC 404B H₂S monitor, to detect H₂S emanating from the drilling fluid.
5. Carbon Dioxide detector.
An Infra-red gas analyzer determines the percentage of CO₂ present in gas samples broken out of the mud by the gas trap.

SHALE DENSITY

Manual determination of shale density in an accurately calibrated variable density liquid column.

4. ESP PLOT DISCUSSIONS AND CONCLUSIONS

ESP PLOT DISCUSSION AND CONCLUSIONS
(with particular reference to Pore Pressure)

Throughout the drilling of Snapper #6, Core Laboratories' DL2007 monitored and processed drilling data to provide an estimate of formation pressure. The major parameters used and calculated while drilling were rate of penetration, gas levels, corrected 'd' exponent, mud temperature, mud density, mud conductivity and lithology.

The "Drill Data Plot" (see attached plots inside back cover) shows the rate of penetration, corrected 'd' exponent, lithology and mud density plotted against depth. The 'd' exponent plot indicates a normal pressure profile throughout most of the well with an indication of slight over-pressure below 2400M. However variable lithology and low porosity mask the effect on both 'd' exponent and gas curves. As no connection gas or increase in background gas was observed and the 'd' exponent curve was ill defined for most of the well it was not possible to predict the extent of the pressure increase except to show pore pressure was still well below the mud weight. The mud conductivity also remained constant throughout the lower section of the well indicating no influx of formation fluid to the mud system.

The Temperature Plot displays the mud flow line temperature in and out and their differential plotted against depth. The temperature gradient of Snapper #6 was 3.3 degrees Centigrade per 100 metres to around 2500M where a slight drop once again indicated the transition of a slightly overpressured zone. The bottom hole temperature was extrapolated to 127.8°C at 3021 metres from wireline logging data.

The Pressure Plot is a summary of the pressures found in the drilling and logging of Snapper #6. On this plot estimated pore pressure is plotted along with mud weight and fracture gradient against depth. The pore pressures were determined by Schlumberger RFT pretests and reached 8.9 ppg in the lower region of the well. The fracture gradient curve was based on information obtained from a pressure integrity test carried out after drilling out the 13 3/8" casing shoe (793 metres, 14.2 ppg).

As there is no available overburden gradient curve for the Gippsland Basin, the shape of the curve is based on that of the U.S. Gulf Coast Basin curve and offset to match local data.

7. B.H.T. ESTIMATION

CORE LAB

=====

STRAIGHT LINE LEAST SQUARES BEST FIT

1/TIME ON A LINEAR SCALE AGAINST
TEMP ON A LINEAR SCALE

ENTERED DATA:

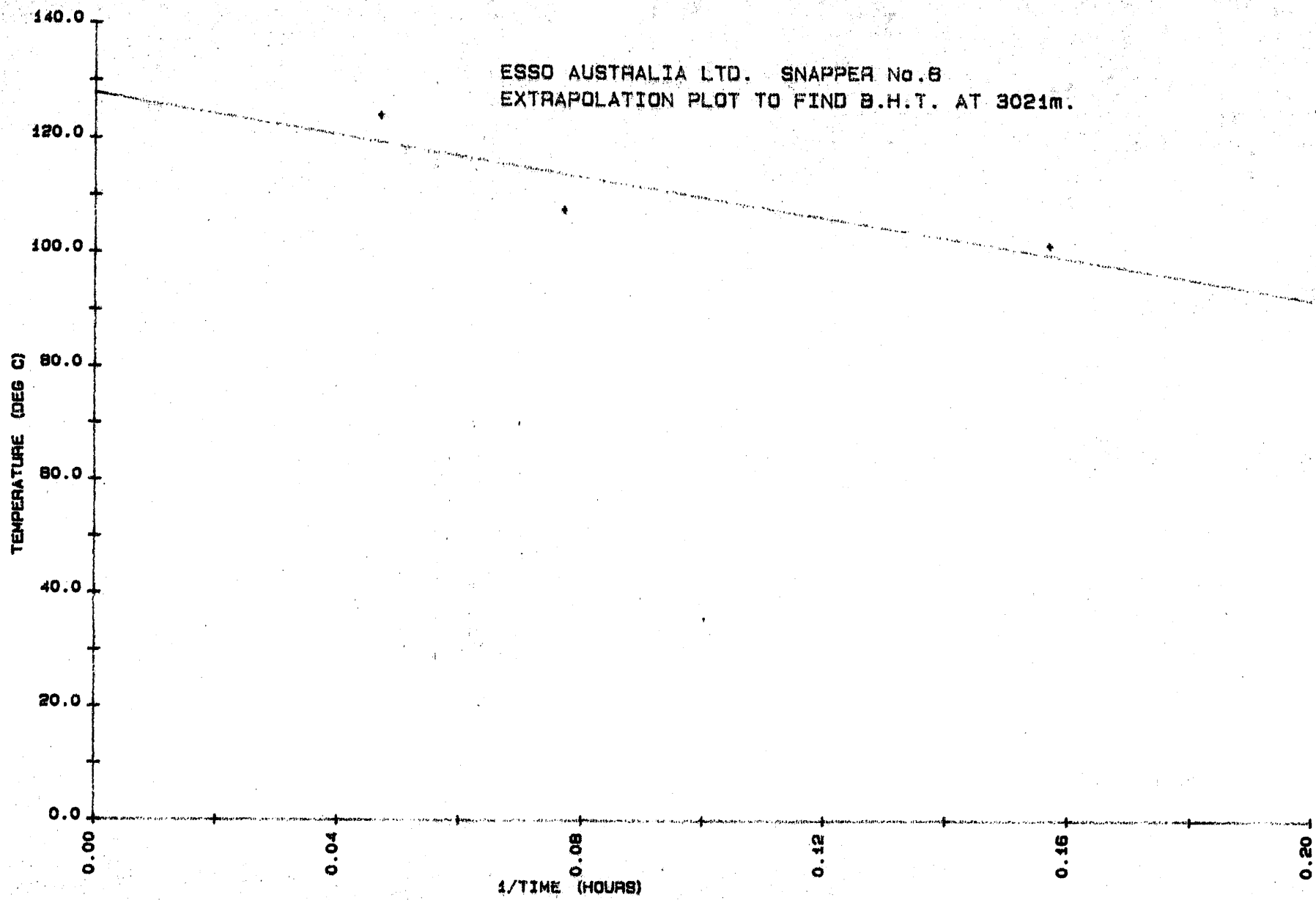
DATA SET #	1/TIME	TEMP
1	0.157	101.5
2	0.077	107.7
3	0.047	124.0

COEFFICIENT & CONSTANT:

$Y = m.X + c$ where $m = -1.7835052E 02$ and $c = 1.2777216E 02$

INTERPOLATED DATA:

1/TIME	TEMP
0.000	127.8



8. OVERBURDEN GRADIENT CALCULATIONS AND PLOT

OVERBURDEN GRADIENT CALCULATIONS

DEPTHmetres

BULK DENSITYgm/cc

OVERBURDEN PRESSURE INCREMENT. .psi

CUMULATIVE OVERBURDEN PRESSURE .psi

OVERBURDEN PRESSURE GRADIENT . .psi/ft

OVERBURDEN EQUIVALENT DENSITY. .Pounds per gallon

BULK DENSITY TAKEN FROM AVERAGED F.D.C. LOG, OR FROM SONIC
LOG FOR SECTIONS WHERE THE F.D.C. LOG IS NOT AVAILABLE.

OVERBURDEN GRADIENT CALCULATIONS

=====

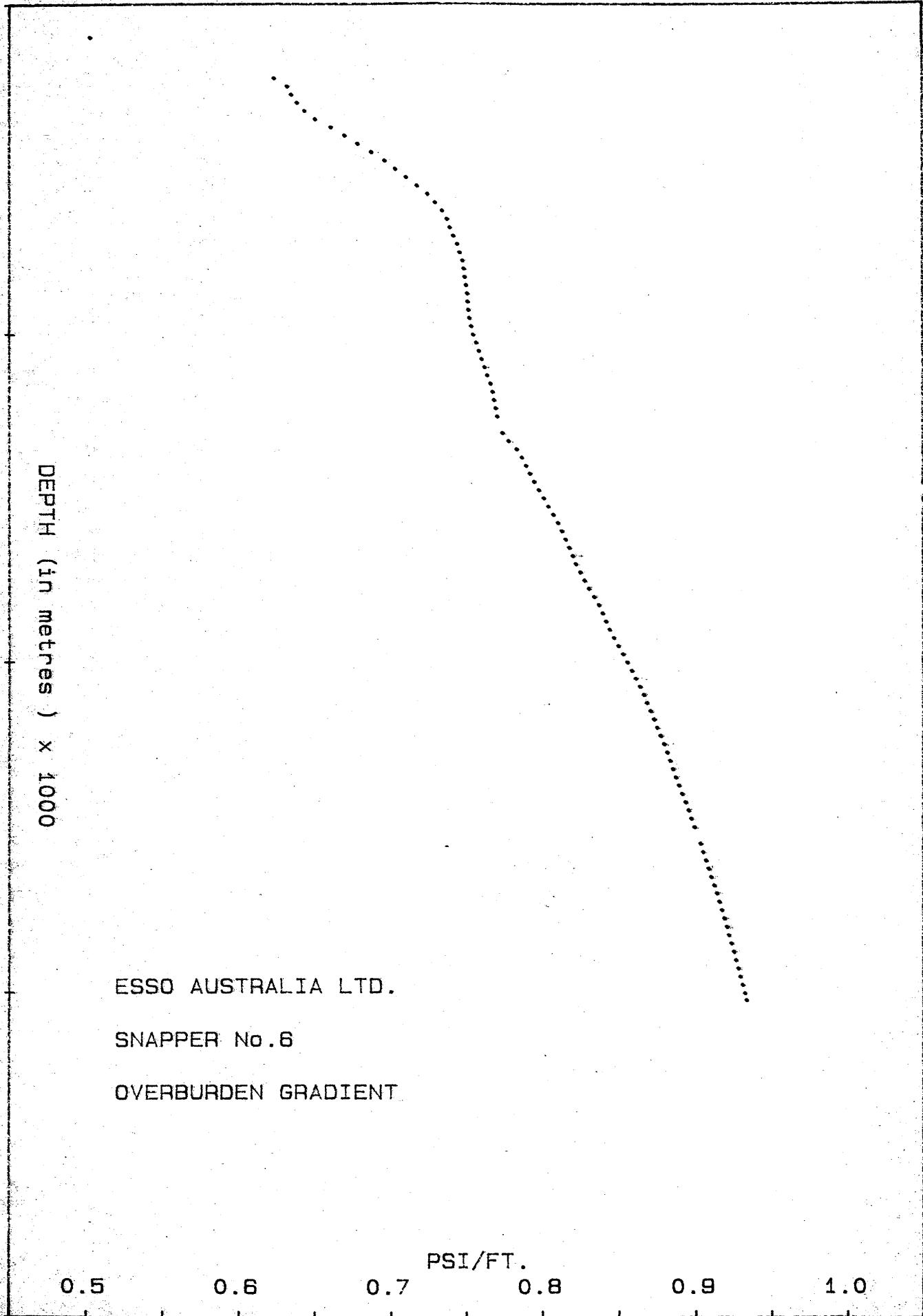
DEPTH from	DEPTH to	AVR. BULK DENSITY	O/BURDEN INC.	O/BURDEN CUMM.	O/BURDEN GRAD.	O/BURDEN GRAD.
metres	metres	gm/cc	psi	psi	psi/ft	ppg
0	76	1.02	110.12	110.12	0.442	8.49
76	100	1.60	54.55	164.68	0.502	9.65
100	225	1.66	294.77	459.45	0.622	11.97
225	250	1.64	58.24	517.69	0.631	12.14
250	275	1.53	54.34	572.03	0.634	12.19
275	300	1.57	55.76	627.79	0.638	12.27
300	325	1.62	57.53	685.33	0.643	12.36
325	350	1.71	60.73	746.06	0.650	12.49
350	375	1.86	66.06	812.11	0.660	12.69
375	400	1.86	66.06	878.17	0.669	12.87
400	425	1.88	66.77	944.94	0.678	13.03
425	450	1.93	68.54	1013.48	0.686	13.20
450	475	1.97	69.96	1083.45	0.695	13.37
475	500	1.93	68.54	1151.99	0.702	13.50
500	525	1.97	69.96	1221.96	0.709	13.64
525	550	2.01	71.39	1293.34	0.717	13.78
550	575	2.03	72.10	1365.44	0.724	13.92
575	600	1.95	69.25	1434.69	0.729	14.02
600	625	1.95	69.25	1503.95	0.733	14.10
625	650	1.88	66.77	1570.71	0.737	14.16
650	675	1.82	64.64	1635.35	0.738	14.20
675	700	1.86	66.06	1701.41	0.741	14.25
700	725	1.88	66.77	1768.18	0.743	14.30
725	750	1.82	64.64	1832.81	0.745	14.32
750	775	1.86	66.06	1898.87	0.747	14.36
775	800	1.79	63.57	1962.44	0.748	14.38
800	825	1.77	62.86	2025.31	0.748	14.39
825	850	1.80	63.93	2089.23	0.749	14.41
850	875	1.79	63.57	2152.80	0.750	14.42
875	900	1.75	62.15	2214.96	0.750	14.43
900	925	1.79	63.57	2278.53	0.751	14.44
925	950	1.79	63.57	2342.10	0.751	14.45
950	975	1.84	65.35	2407.45	0.753	14.47
975	1000	1.86	66.06	2473.51	0.754	14.50
1000	1025	1.93	68.54	2542.05	0.756	14.54
1025	1050	1.92	68.19	2610.24	0.758	14.57
1050	1075	1.93	68.54	2678.78	0.760	14.61
1075	1100	1.95	69.25	2748.04	0.761	14.64
1100	1125	1.95	69.25	2817.29	0.763	14.68
1125	1150	1.99	70.67	2887.96	0.765	14.72
1150	1175	1.92	68.19	2956.15	0.767	14.75
1175	1200	1.88	66.77	3022.92	0.768	14.77
1200	1225	1.88	66.77	3089.69	0.769	14.78
1225	1250	1.90	67.48	3157.17	0.770	14.80
1250	1275	1.97	69.96	3227.13	0.771	14.84

DEPTH from	DEPTH to	AVR. BULK DENSITY	O/BURDEN INC.	O/BURDEN CUMM.	O/BURDEN GRAD.	O/BURDEN GRAD.
metres	metres	gm/cc	psi	psi	psi/ft	ppg
1275	1300	2.00	71.03	3298.16	0.773	14.87
1300	1325	2.28	80.97	3379.14	0.777	14.95
1325	1350	2.44	86.66	3465.79	0.783	15.05
1350	1375	2.25	79.91	3545.70	0.786	15.12
1375	1400	2.16	76.71	3622.41	0.789	15.17
1400	1425	2.16	76.71	3699.13	0.791	15.22
1425	1450	2.20	78.13	3777.26	0.794	15.27
1450	1475	2.24	79.55	3856.81	0.797	15.33
1475	1500	2.29	81.33	3938.14	0.800	15.39
1500	1525	2.28	80.97	4019.12	0.803	15.45
1525	1550	2.30	81.68	4100.80	0.806	15.51
1550	1575	2.31	82.04	4182.84	0.809	15.57
1575	1600	2.25	79.91	4262.75	0.812	15.62
1600	1625	2.23	79.20	4341.95	0.814	15.66
1625	1650	2.24	79.55	4421.50	0.817	15.71
1650	1675	2.23	79.20	4500.70	0.819	15.75
1675	1700	2.22	78.84	4579.54	0.821	15.79
1700	1725	2.35	83.46	4663.00	0.824	15.84
1725	1750	2.35	83.46	4746.46	0.827	15.90
1750	1775	2.38	84.53	4830.99	0.830	15.95
1775	1800	2.48	88.08	4919.07	0.833	16.02
1800	1825	2.46	87.37	5006.43	0.836	16.08
1825	1850	2.37	84.17	5090.60	0.839	16.13
1850	1875	2.30	81.68	5172.29	0.841	16.17
1875	1900	2.35	83.46	5255.75	0.843	16.21
1900	1925	2.43	86.30	5342.05	0.846	16.27
1925	1950	2.48	88.08	5430.13	0.849	16.32
1950	1975	2.52	89.50	5519.63	0.852	16.38
1975	2000	2.50	88.79	5608.41	0.855	16.44
2000	2025	2.51	89.14	5697.56	0.858	16.49
2025	2050	2.48	88.08	5785.63	0.860	16.54
2050	2075	2.50	88.79	5874.42	0.863	16.59
2075	2100	2.46	87.37	5961.79	0.865	16.64
2100	2125	2.41	85.59	6047.38	0.867	16.68
2125	2150	2.46	87.37	6134.74	0.870	16.73
2150	2175	2.46	87.37	6222.11	0.872	16.77
2175	2200	2.45	87.01	6309.12	0.874	16.81
2200	2225	2.46	87.37	6396.49	0.876	16.85
2225	2250	2.50	88.79	6485.28	0.879	16.90
2250	2275	2.45	87.01	6572.29	0.881	16.93
2275	2300	2.41	85.59	6657.88	0.882	16.97
2300	2325	2.45	87.01	6744.89	0.884	17.00
2325	2350	2.45	87.01	6831.90	0.886	17.04
2350	2375	2.48	88.08	6919.98	0.888	17.08
2375	2400	2.52	89.50	7009.48	0.890	17.12
2400	2425	2.52	89.50	7098.98	0.892	17.16
2425	2450	2.53	89.85	7188.83	0.894	17.20
2450	2475	2.50	88.79	7277.62	0.896	17.24
2475	2500	2.51	89.14	7366.76	0.898	17.27
2500	2525	2.55	90.56	7457.32	0.900	17.31

DEPTH from	DEPTH to	AVR. BULK DENSITY	O/BURDEN INC.	O/BURDEN CUMM.	O/BURDEN GRAD.	O/BURDEN GRAD.
metres	metres	gm/cc	psi	psi	psi/ft	ppg
2525	2550	2.54	90.21	7547.53	0.902	17.35
2550	2575	2.51	89.14	7636.67	0.904	17.38
2575	2600	2.51	89.14	7725.82	0.906	17.42
2600	2625	2.50	88.79	7814.60	0.907	17.45
2625	2650	2.56	90.92	7905.52	0.909	17.49
2650	2675	2.56	90.92	7996.44	0.911	17.52
2675	2700	2.55	90.56	8087.00	0.913	17.56
2700	2725	2.52	89.50	8176.50	0.915	17.59
2725	2750	2.55	90.56	8267.06	0.916	17.62
2750	2775	2.49	88.43	8355.50	0.918	17.65
2775	2800	2.55	90.56	8446.06	0.919	17.68
2800	2825	2.54	90.21	8536.27	0.921	17.71
2825	2850	2.54	90.21	8626.48	0.923	17.74
2850	2875	2.54	90.21	8716.68	0.924	17.77
2875	2900	2.53	89.85	8806.54	0.926	17.80
2900	2925	2.57	91.27	8897.81	0.927	17.83
2925	2950	2.49	88.43	8986.24	0.928	17.86
2950	2975	2.58	91.63	9077.87	0.930	17.89
2975	3000	2.56	90.92	9168.79	0.932	17.91
3000	3021	2.51	74.88	9243.67	0.933	17.94

0
1
2
3
4

DEPTH (in metres) x 1000



ESSO AUSTRALIA LTD.
SNAPPER No.6
OVERBURDEN GRADIENT

PSI/FT.

0.5 0.6 0.7 0.8 0.9 1.0

9. GAS ANALYSES

GAS COMPOSITION ANALYSIS

The composition of entrained reservoir gas in the mud is significant in determining the origin and the value of a show. Two graphical methods are employed for processing the mud gas chromatography results. These techniques however are empirical and by no means definitive.

LOG PLOT

The ratios of C1/C2, C1/C3, C1/C4, C1/C5, and C1/C6 are plotted on three-cycle log paper for each hydrocarbon show. The plots can be evaluated by the following criteria :

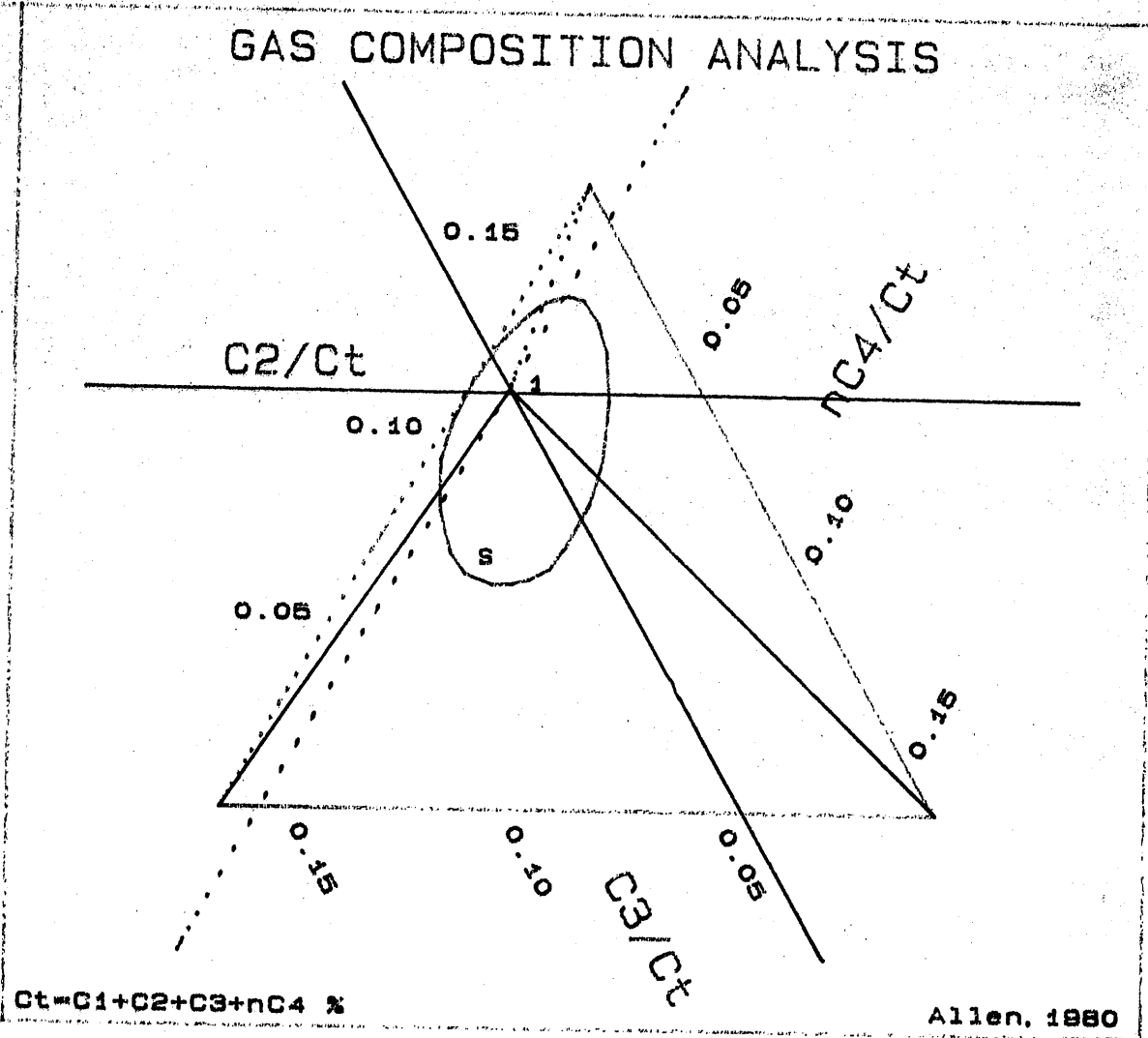
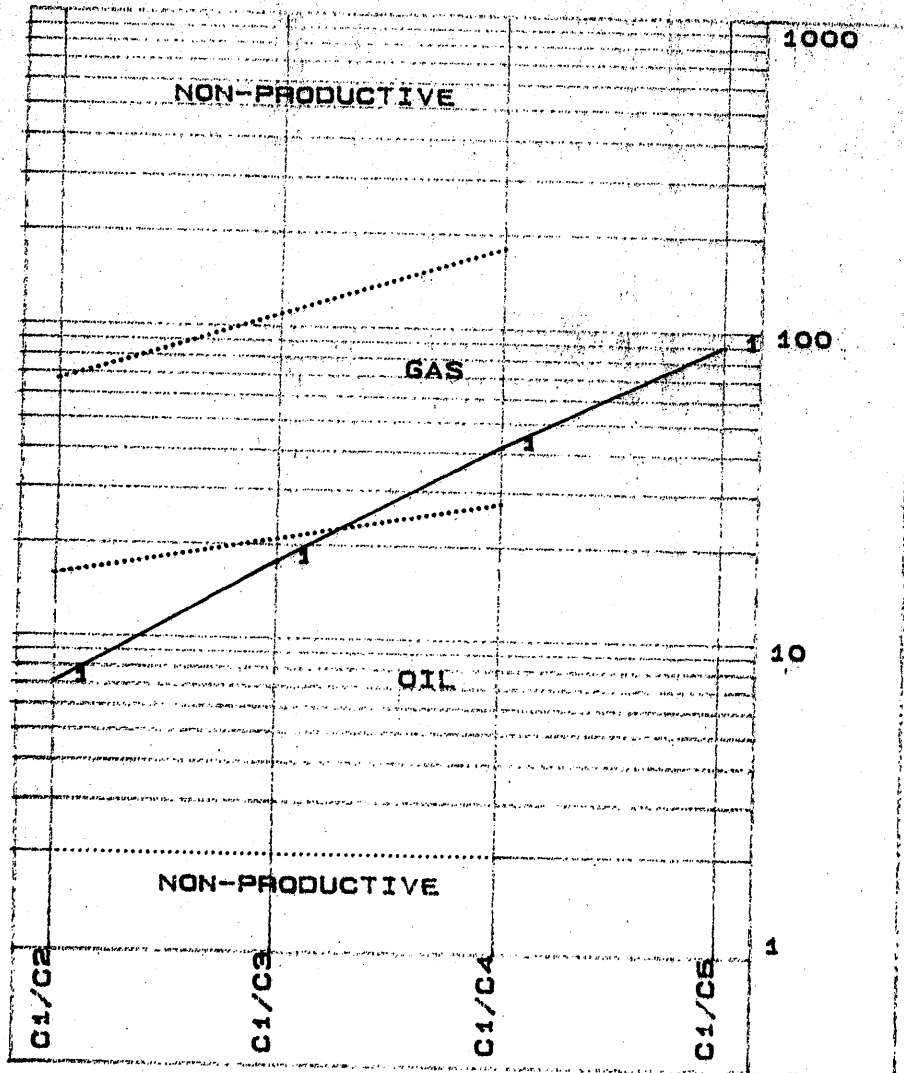
1. Productive dry gas zones may show only C1, but abnormally high shows of C1 are usually indicative of saltwater.
2. A ratio of C1/C2 between approximately 2 and 15 indicates oil and between 15 and 65, gas. If the C1/C2 ratio is below about 2, or above about 65, the zone is probably non-productive.

The actual values of the gas/oil/water limits will vary from area to area.
3. If the C1/C2 ratio is low in the oil section and the C1/C4 ratio is high in the gas section, the zone is probably non-productive.
4. If any ratio (with the exception of C1/C5, if oil is used in the mud) is lower than the preceding ratio, the zone is probably non-productive.
5. The ratios may not be definitive for low permeability zones; however, steep ratio plots may indicate a tight zone.

TRIANGULATION PLOT

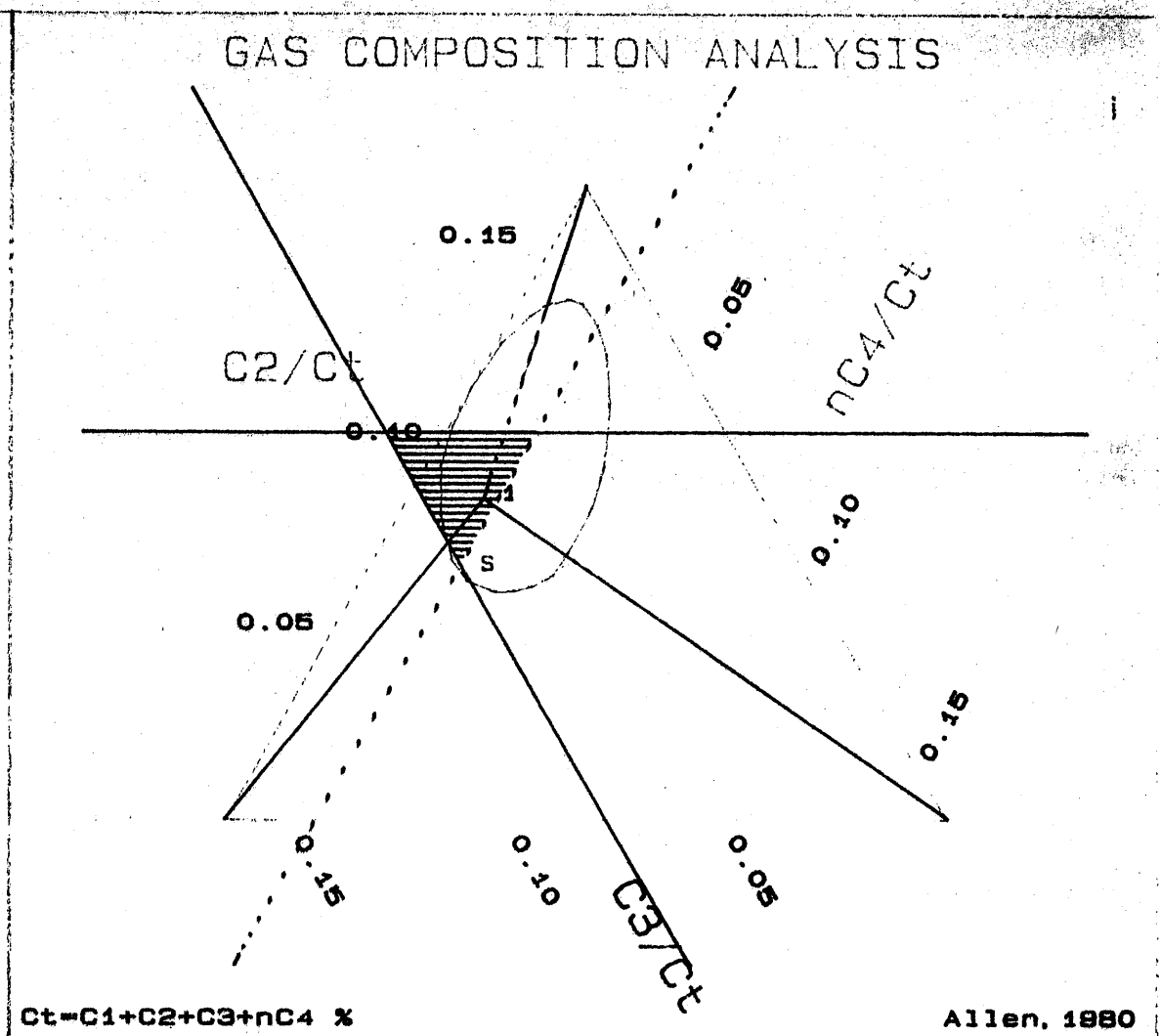
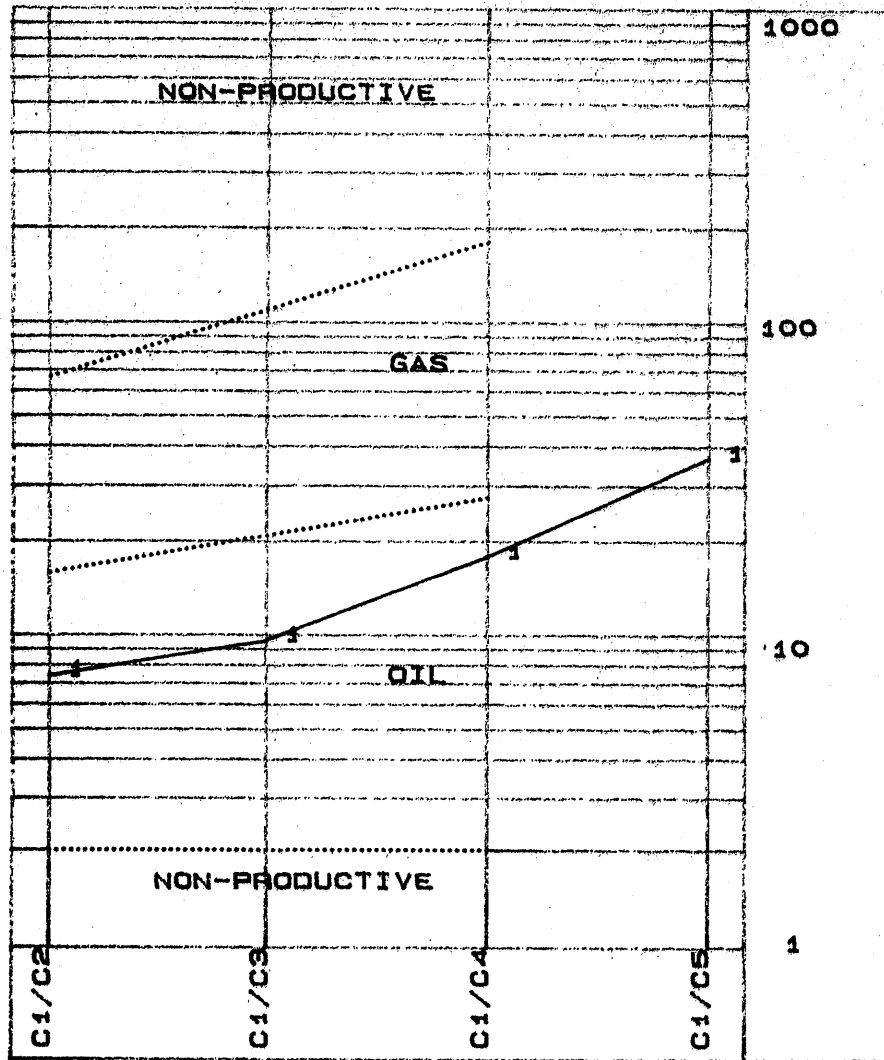
The triangulation diagram is obtained by tracing lines on three scales at 120 degrees to each other, corresponding respectively to the ratios of C2, C3 and normal C4 to the total gas (C1 to C4). The scales are arranged in such a way that if the apex of the triangle is upward, a gas zone is indicated, while if the apex points downward, an oil zone is suggested.

A large triangle plot represents dry gas or low GOR oil, while small triangles represent wet gases or high GOR oils. The homothetic centre of the plot should fall inside the top part of the triangle, otherwise the heavier hydrocarbon is abnormal and may indicate a dead show, (or coal gas).

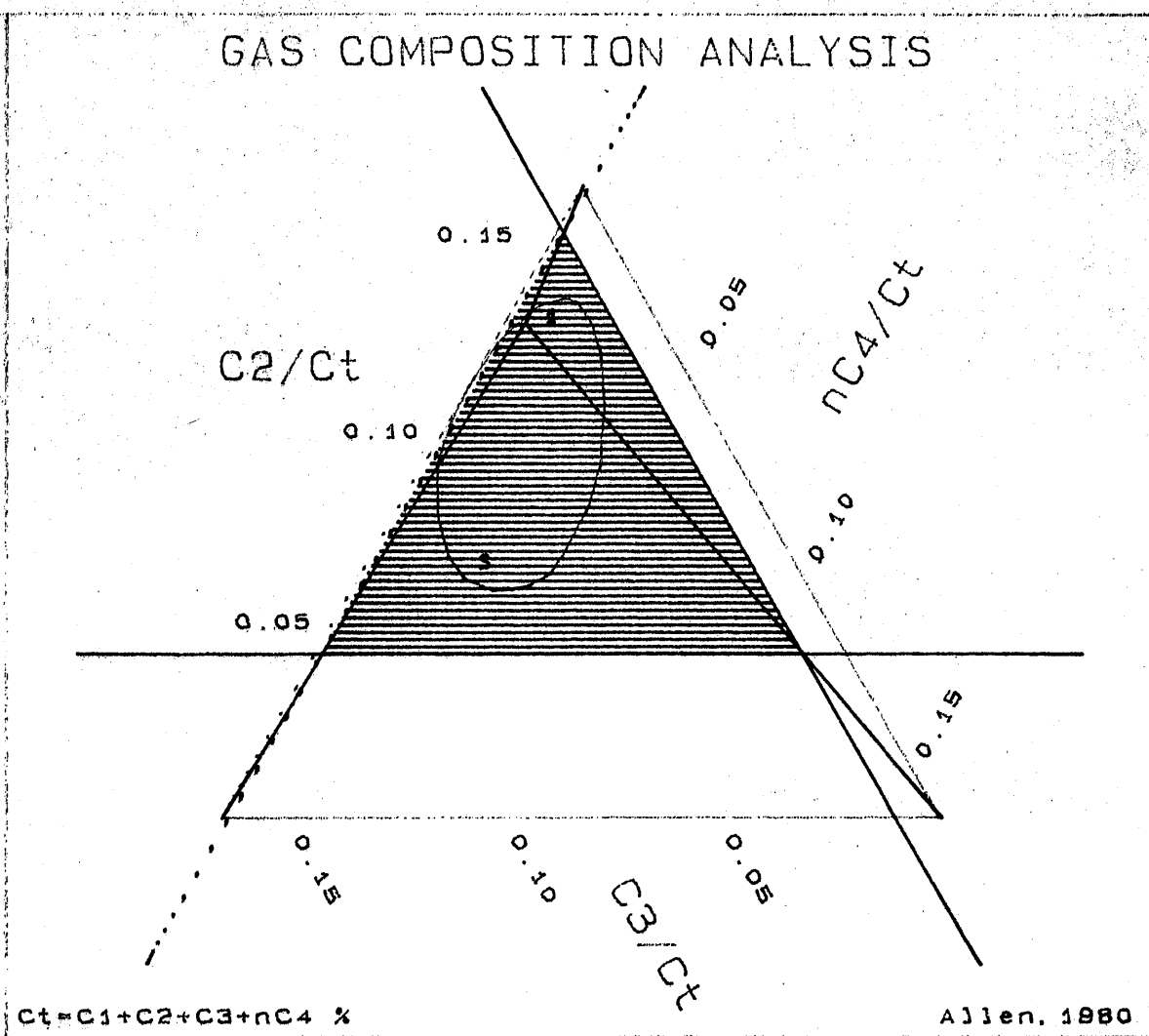
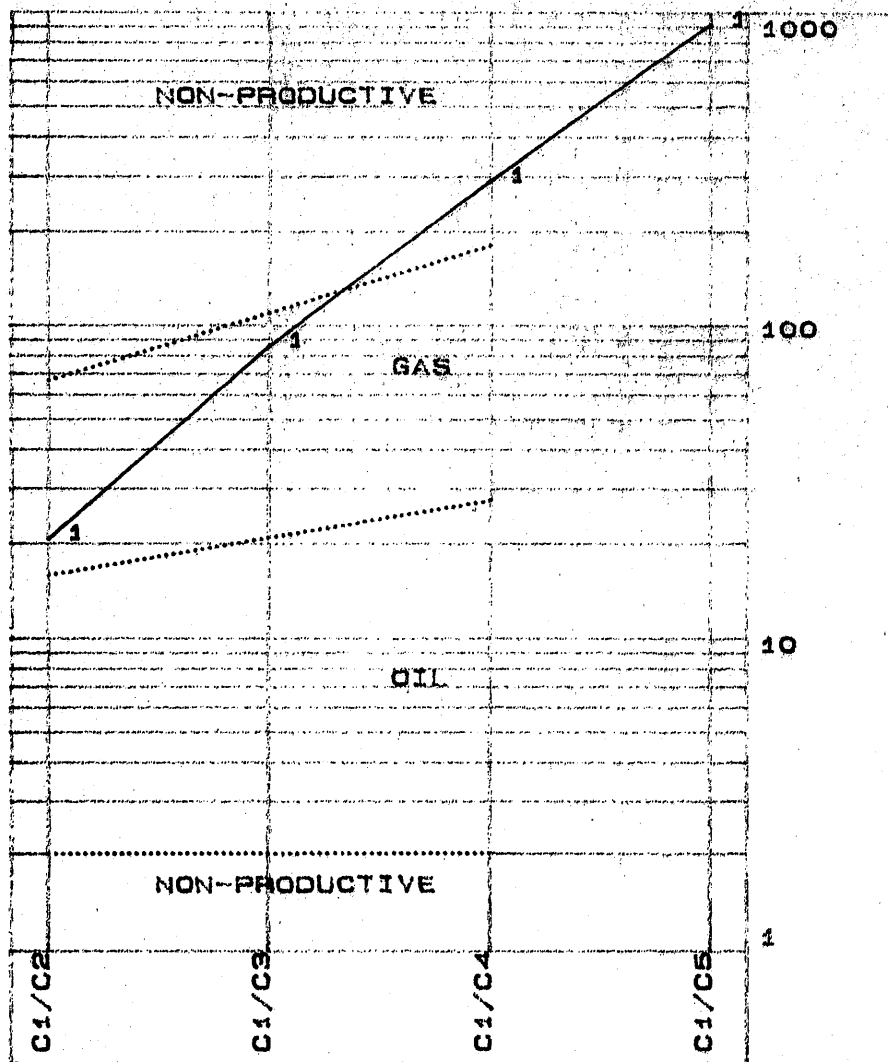


Allen, 1980

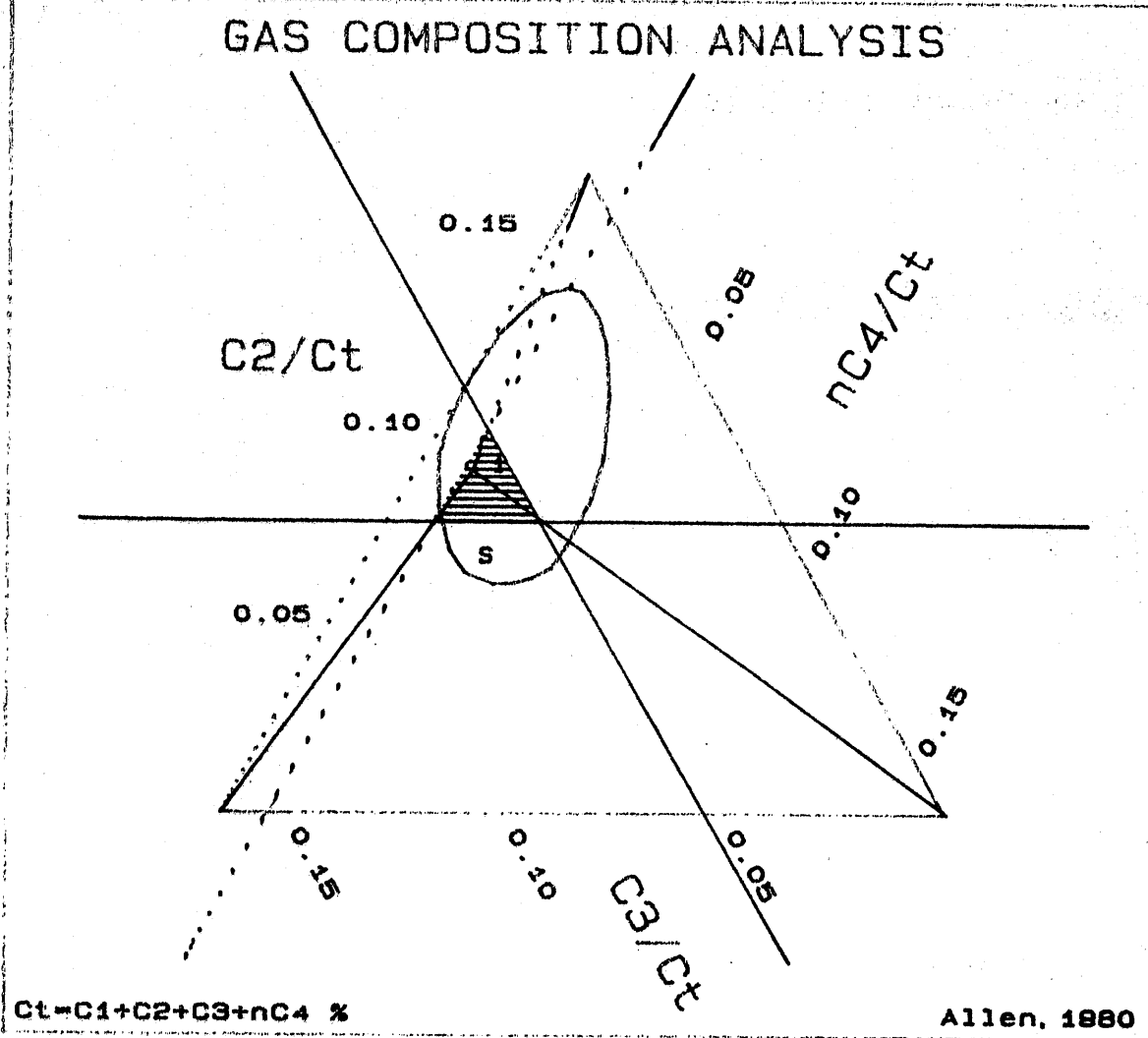
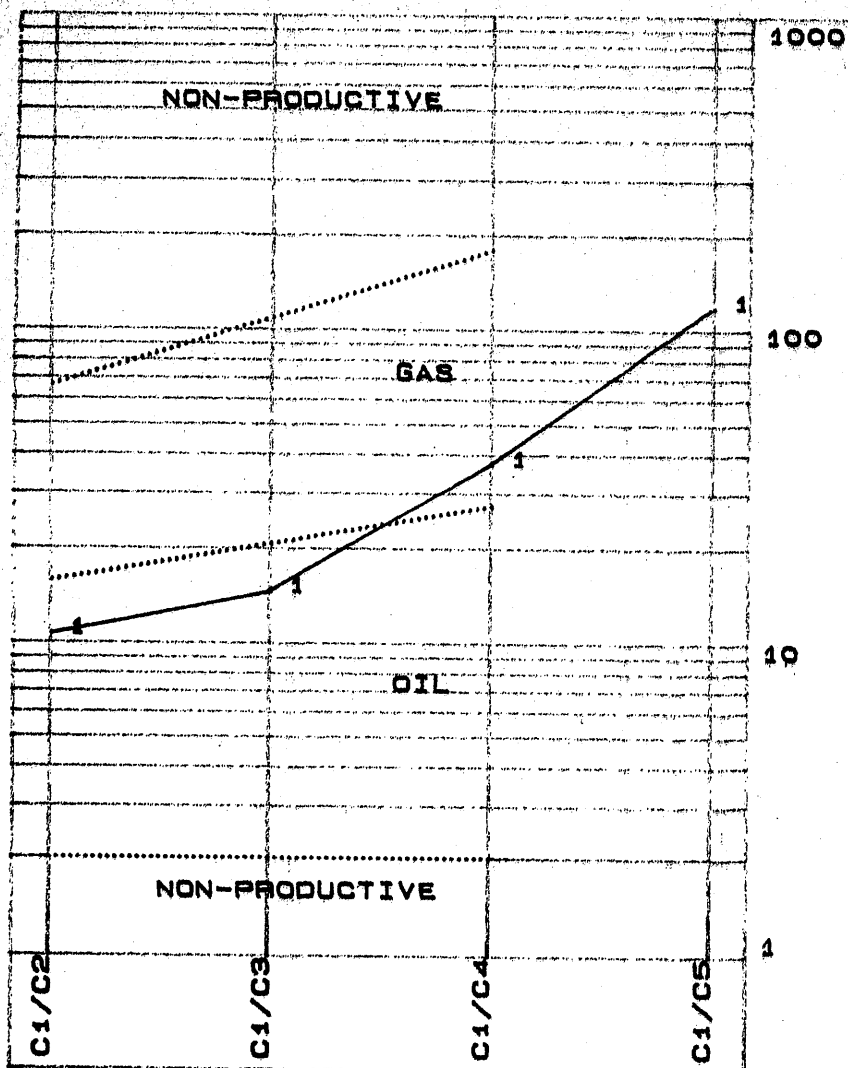
NO.	DEPTH	C1	C2	C3	iC4	nC4	C5	C6 %	Ct	C1/C2	C1/C3	C1/C4	C1/C5
1	1352	80.728	11.390	4.589	0.968	0.968	0.901	0.454	97.678	7	18	42	90



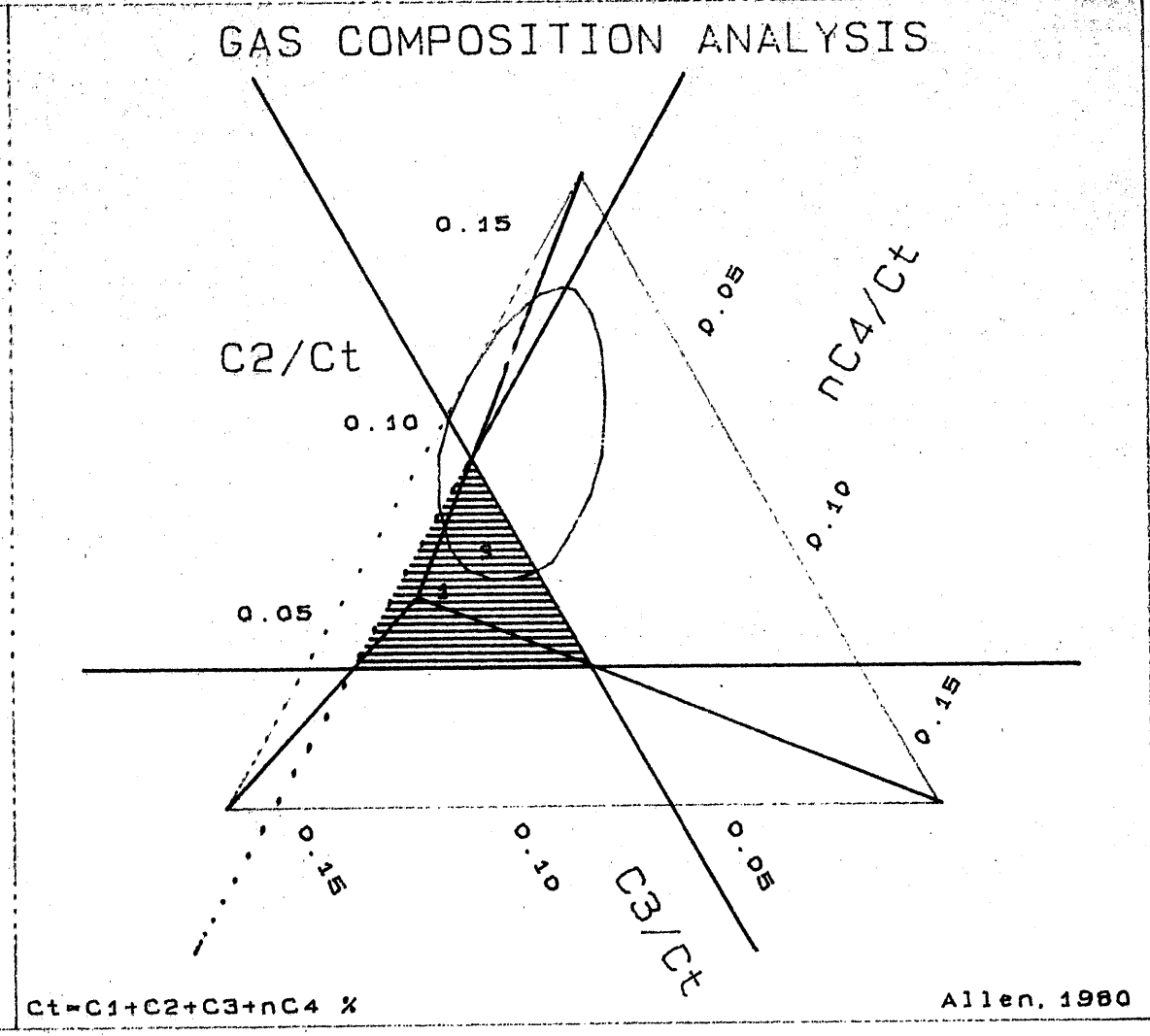
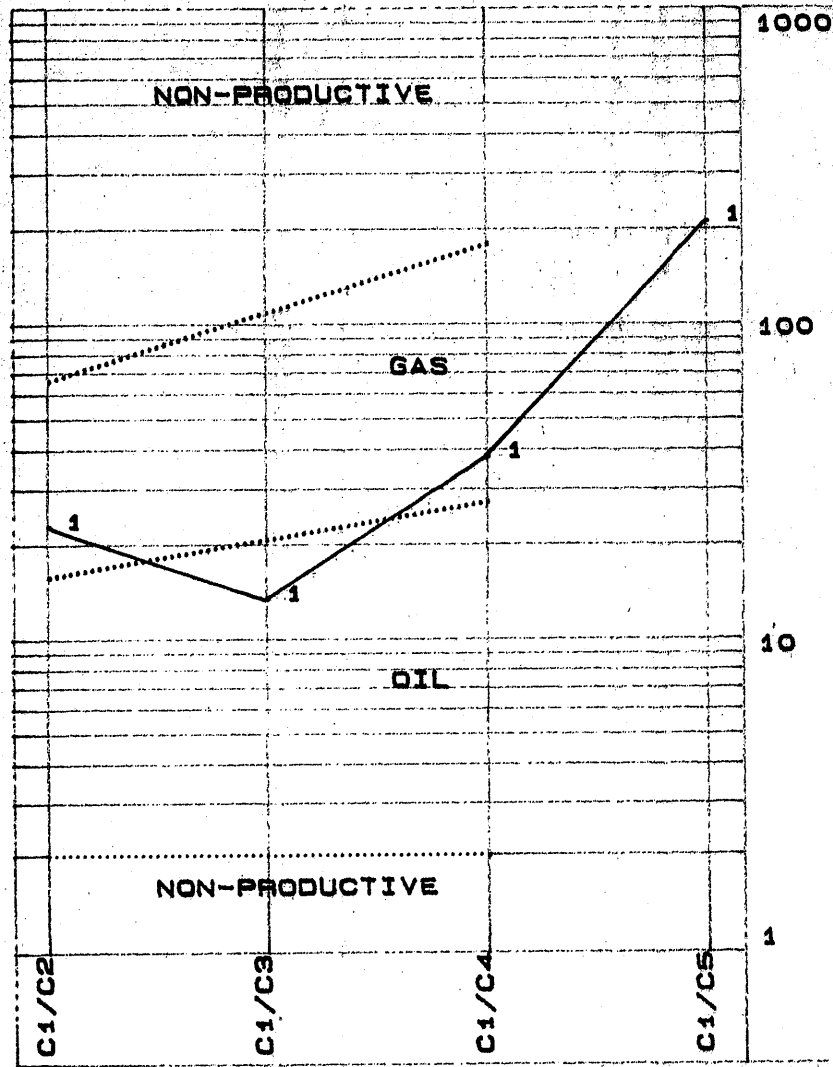
NO.	DEPTH	C1	C2	C3	nC4	C5	C6 %	Ct	C1/C2	C1/C3	C1/C4	C1/C5
1	1420	74.605	10.100	7.792	2.100	2.041	1.281	94.598	7	10	16	37



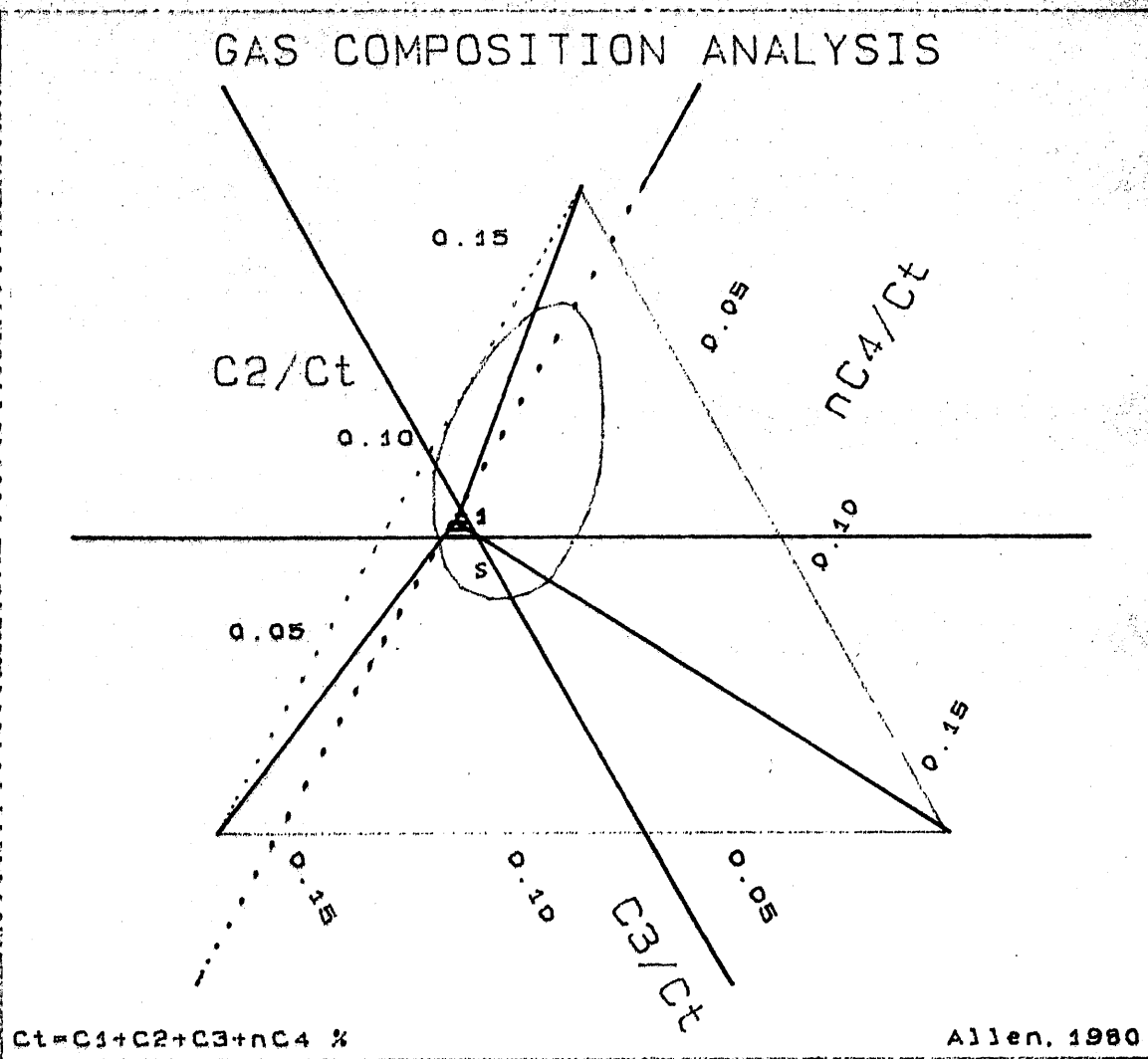
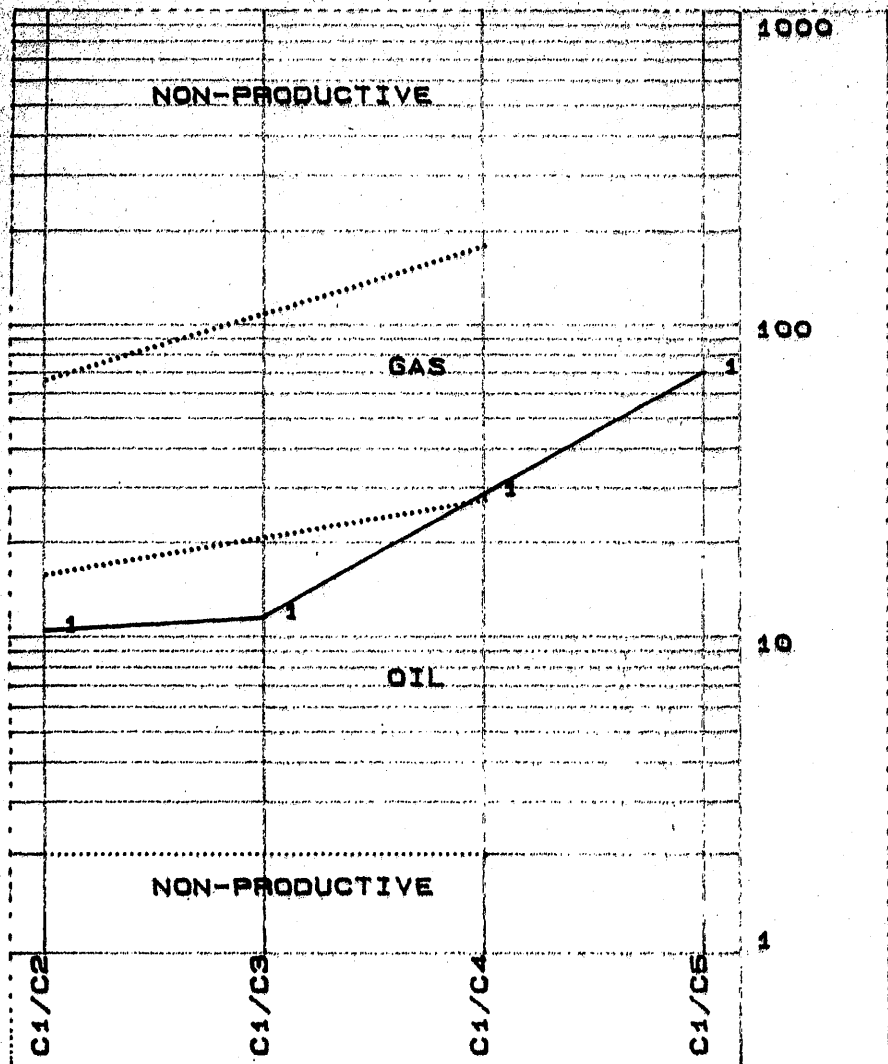
NO.	DEPTH	C1	C2	C3	nC4	C5	C6 %	Ct	C1/C2	C1/C3	C1/C4	C1/C5
1	2352	93.947	4.534	1.093	0.162	0.162	0.000	99.736	21	86	290	910



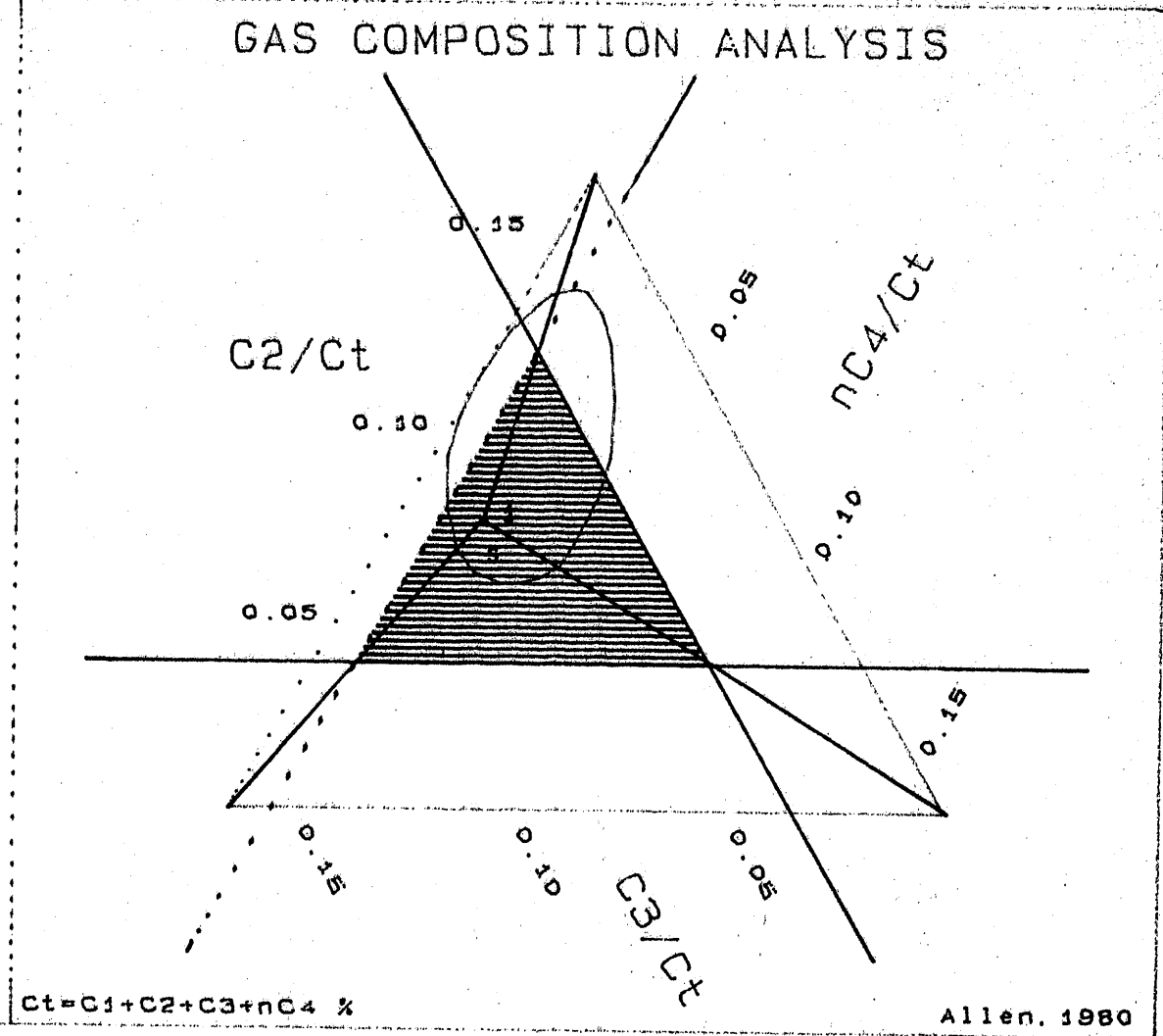
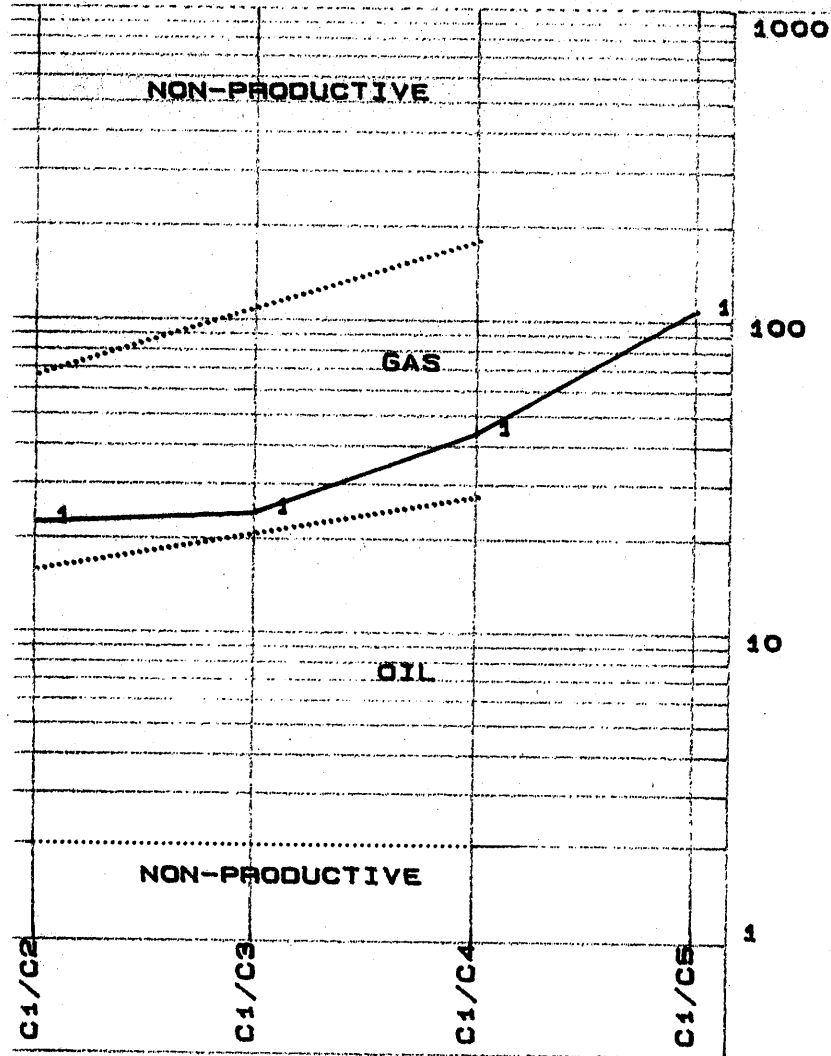
NO.	DEPTH	C1	C2	C3	nC4	C5	C6 %	Ct	C1/C2	C1/C3	C1/C4	C1/C5	
1	2836	83.228	7.827	5.694	1.122	1.122	0.707	0.301	97.870	11	15	37	118



NO. DEPTH	C1	C2	C3	nC4	C5	C6 %	Ct	C1/C2	C1/C3	C1/C4	C1/C5	
1 2772	86.793	3.818	6.515	1.148	1.148	0.412	0.167	98.274	23	13	38	211



NO.	DEPTH	C1	C2	C3	nC4	C5	C6 %	Ct	C1/C2	C1/C3	C1/C4	C1/C5
1	2946	80.672	7.703	7.003	1.418	1.418	0.630	98.796	10	12	28	70



Allen, 1980

O. DEPTH	C1	C2	C3	iC4	nC4	C5	C6 %	Ct	C1/C2	C1/C3	C1/C4	C1/C5
1 3012	89.166	3.984	3.679	1.016	1.016	0.827	0.312	97.848	22	24	44	108

SIDEWALL CORE GAS ANALYSIS DATA SHEET

SHEET NO. 1

COMPANY ESSO AUSTRALIA LTD.
WELL SNAPPER #6

LOGGING SUITE NO.

No.	DEPTH (M)	C1	C2	C3	C4	C5	C6	COMMENTS
		PPM	PPM	PPM	PPM	PPM	PPM	
3	2952.8	148	14	7	3			
7	2865.3	428	90	44	22	64	50	
11	2750	107	37	17	26	46	18	
14	2659	247	434	812	944	482	346	
15	2654	297	48	57	52	70	86	
16	2640.3	58	28	29	41	29	31	
20	2484.8	148	14	13	14	20	41	
22	2435.2	1345	208	40	5	4	5	
47	1413.5	33	11	6	3	2	3	
48	1412.5	196	118	96	51	39	40	
49	1411.5	544	2888	1812	3466	1613	922	
50	1410.5	560	3068	1812	847	627	490	
51	1410	231	1963	2266	3277	1165	922	
52	1407.7	527	1173	831	420	308	209	
53	1407	660	4602	5437	5034	1702	1152	

10. SAMPLES COLLECTED

SAMPLES COLLECTED ON SNAPPER #6

1. Oven dried cuttings: 3 sets of 10 boxes each over the interval
211 - 3021 metres

1 set to Esso
1 set to B.M.R.
1 set to V.D.I.T.R.
2. Air dried cuttings : 1 set over the interval 211 - 3021 metres.
3. Geochemical cans : 1 set over the interval 211 - 3021 metres.
4. Mud samples : 1 set over the interval 1364 - 3021 metres.
5. RFT samples : 11 containers of fluid samples.

11. CORELAB DATA SHEETS

COMPANY ESSO AUSTRALIA LTD.
WELL SNAPPER #6

BIT RECORD

Sheet No. 1

Ser No.	Bit No.	Make	Type	IADC Code	Size (Inches)	Jets	Depth In Metres	Hole Made (m)	Drill Time	On Bottom Hours	Turns K	Condition T B G	Remarks
1		Hughes	OSC 3AJ	111	26	18/18/18	76	135	6	Not Logged			Pulled to run 20" casing
2		Hughes	HTC R1	111	17½	20/20/20	211	597	21.75	15.5	11373	2-2-I	Pulled to run 13 3/8 casing
3		Hughes	HTC J1	116	12½	18/18/18	808	557	21.5	15.3	91466	5-5-I	Pulled due to formation ch.
4		Hughes	HTC J22	517	12½	18/18/16	1365	732	74.75	65.5	234818	4-4-I	Pulled due to indust. disp.
5		Hughes	HTC J22	517	12½	18/18/16	2107	224	55.5	52.4	169866	8-4-I	Pulled due to slow drilling
6		Hughes	HTC J22	517	12½	16/16/16	2431	281	54.25	48.0	144545	4-8-I	Pulled due to torque
7		Hughes	HTC J22	517	12½	16/16/16	2712	309	63.25	57.0	171045	4-5-I	Pulled at TD

COMPANY ESSO AUSTRALIA LTD.
WELL SNAPPER #6

BIT RECORD

Sheet No. 1

Ser No.	Bit No.	Make	Type	IADC Code	Size (Inches)	Cost A\$	Jets	Depth In (m)	Depth Out (m)	Hole Made m	Drill Time	On Bottom Hours	TurnsK	Avg ROP	Avg Cost/m	Condition T B G
1		Hughes	OSC 3AJ	111	26	-	18/18/18	76	211	135	6	Not Logged		Not Logged		-----
2		Hughes	HTC R1	111	17½	4978	20/20/20	211	808	597	21.75	15.2	111375	36.8	118	2-2-1
3		Hughes	HTC J1	116	12½	2566	18/18/18	808	1365	557	21.5	15.3	91466	36.4	124	5-5-I
4		Hughes	HTC J22	517	12½	8520	18/18/16	1365	2107	732	74.75	65.5	234818	11.2	358	4-4-I
5		Hughes	HTC J22	517	12½	8520	18/18/16	2107	2431	224	55.5	52.4	169866	4.3	702	8-4-I
6		Hughes	HTC J22	517	12½	8520	16/16/16	2431	2717	281	54.25	48.0	144545	5.9	784	4-8-I
7		Hughes	HTC J22	517	12½	8520	16/16/16	2712	3021	309	63.25	57.0	171045	5.4	793	4-5-I

MUD INFORMATION SHEETS

DEPTH Metres

MUD WEIGHT Pounds per gallon

FUNNEL VISCOSITY A.P.I. seconds

PLASTIC VISCOSITY. . . . Centipoise

YIELD POINT. Pounds/100 square feet

GEL : INITIAL/10 min . Pounds/100 square feet

FILTRATE A.P.I. c.c.

CAKE THICKNESS Thirty-seconds of an inch

SALINITY : Ca/Cl ppm

SOLIDS/SAND/OIL. . . . Percentage

MUD INFORMATION SHEET

COMPANY ESSO AUSTRALIA LTD.
WELL SNAPPER #6

Sheet No. 1

DEPTH	476	766	808	1356	1586	1807	1964
DATE	26/12/85	27/12/85	28/12/85	29/12/85	30/12/85	31/12/85	1/1/86
TIME	16:00	04:30	23:30	21:25	16:35	17:00	16:30
WEIGHT	9.4	9.2+	9.5	9.5	9.6	9.6+	9.6
FUNNEL VISCOSITY	30	35	41	36	37	41	45
V/YP	3/10	4/15	8/20	5/24	6/21	8/21	10/21
N/K	.3/2.01	.28/3.41	.36/6.94	.23/6.94	.29/4.44	.35/3.24	.40/2.51
CEL: INITIAL/10 MIN	4/5	3/7	5/8	9/15	8/13	10/15	10/20
PH	9.3	9.5	9.6	10.5	10.5	10.5	10.5
FILTRATE:API/API HTHP	-	-	-	8.8/24.5	8.5/23	8.5/21	8.0/19
CAKE	-	-	-	3	1	1	1
SALINITY (PPM)	21000	21000	20000	19000	19500	18000	17500
SAND	.1	TR	TR	.1	TR	.1	.2
SOLIDS	6	5	7	6	7	8	7
BARITUM (DPM)	-	-	-	-	-	-	-
					3182	3218	3236

REMARKS: DRILLED 12 3/8" HOLE 13 3/8" CASING ----- DRILLED 12 1/4" HOLE -----

DEPTH	2109	2225	2370	2458	2533	2638	2729
DATE	2/1/86	3/1/86	4/1/86	5/1/86	6/1/86	7/1/86	8/1/86
TIME	14:00	16:00	16:00	22:30	14:00	13:00	19:00
WEIGHT	9.9	9.6	9.6	9.6	9.5	9.5	9.5
FUNNEL VISCOSITY	46	46	42	45	43	39	36
V/YP	10/23	11/24	11/23	11/25	10/27	11/26	10/25
N/K	.38/3.05	.39/3.00	.40/2.73	.38/3.27	.34/4.30	.38/3.56	.36/3.65
CEL: INITIAL/10 MIN	13/20	13/25	11/21	14/25	19/26	25/34	20/32
PH	10.5	10.5	10.5	10.5	10.5	10.5	10.5
FILTRATE:API/API HTHP	8.8/22	8.5/22	8.2/21	8.2/22	8/20	8/20	9.5/21
CAKE	1	1	1	1	1	1	1
SALINITY (PPM)	17500	17000	17000	17000	18000	22000	22000
SAND	TR	.1	.1	.25	TR	TR	TR
SOLIDS	7	8	8	8	7	7	7
BARITUM (DPM)	3193	3244	3214	3172	3210	3115	3203

REMARKS: ----- DRILLED 12 1/4" HOLE -----

MUD INFORMATION SHEET

COMPANY ESSO AUSTRALIA LTD.
WELL SNAPPER #6

Sheet No. 2

DEPTH	2815	2929	3021	3021	3021	3021
DATE	9/1/86	10/1/86	11/1/86	12/1/86	13/1/86	14/1/86
TIME	20:00	13:00	9:30	01:00	16:00	13:00
WEIGHT	9.5	9.5	9.5	9.5	9.5	9.5
FUNNEL VISCOSITY	37	37	37	36	37	37
W/YP	10/23	9/20	8/21	8/20	9/24	9/24
N/K	.38/3.05	.39/2.55	.35/3.24	.36/2.92	.35/3.77	.35/3.77
REL: INITIAL/10 MIN	19/29	16/27	14/24	14/23	16/28	16/28
PH	10.5	10.5	10.5	10.3	10.0	9.7
FILTRATE:API/API HTHP	11/23	9/18	11/23	11/23	10/21	10/21
CAKE	1	1	1	1	1	1
SALINITY (PPM)	22000	23000	23000	23000	23000	23000
SAND	TR	TR	TR	TR	TR	TR
SOLIDS	7	7	7	7	7	7
WATER	-	-	-	-	-	-
BARITUM (DPM)	3290	3276	3202	3314	3178	3031

REMARKS:

DRILLED
12 1/4" HOLE

WIPER
TRIP

LOGGING

LOGGING

R.F.T. DATA

R.F.T. SAMPLING DATA SHEET

COMPANY ESSO AUSTRALIA LTD.
WELL SNAPPER #6

Sheet No. 1

RUN No.	2	2	3	3	6	6
SEAT No.	77	77	110	110	123	123
CHAMBER CAPACITY (lit)	45.4	10.4	45.4	10.4	45.4	10.4
DEPTH (metres)	2818	2818	2896	2846	1496.9	1406.9

RECOVERY VOLUMES

GAS (Cu Ft)	55		0.35	Not Measurable	21.5	18.8
OIL (cc)	750		Nil	Nil	5750	8000
WATER/FILTRATE (cc)	34000		9000	1750	Nil	Nil
OTHER (cc)	-		Nil	Nil	Mud	Nil
					21500	
SURFACE PRESSURE (PSI)	1400		100	Nil	400	1200

GAS COMPOSITION

		P				
C1 (PPM)	369152	R	169164	152248	442983	511539
C2 (PPM)	23076	E	24614	23890	24816	37450
C3 (PPM)	20874	S	10626	9715	13971	13971
C4 (PPM)	4834	E	1824	948	3740	3625
C5 (PPM)	840	R	201	358	700	756
C6 (PPM)	90	V	-	79	117	180
CO2 (%)	10	E	1.5	1	2	1.5
H2S (PPM)	1-	D	Nil	N/A	11	10

OIL PROPERTIES

DENSITY (°API at 60°)	52.2			42.5	41.1
COLOUR	Tan Brown			Dk Brown	Dk Brown
FLUORESCENCE	Bright Bluish White			Blue White	Blue White
POUR POINT (°C)				20.5	21.5

WATER PROPERTIES

RESISTIVITY (#m)	.212@21.5°C		.228	.248
Cl (frm resis) (PPM)	32000		30000	25000
Cl (frm titrat) (PPM)	22000		22000	22000
TRITIUM (DPM)	3016		3077	3087
TRITIUM (DRILLING)	3360		3227	3227

COMMENTS

SENT	VERY	VERY
SEALED	TIGHT	TIGHT
TO ESSO		
PRESERVED		

PORE PRESSURE DATA SHEET

COMPANY : ESSO AUSTRALIA LTD.

DATA FROM RFT'S

WELL : SNAPPER No.6

DEPTH (FROM RKB)	DEPTH (FROM MSL)	PORE PRESS	PORE PRESS GRADIENT E.M.W. (MSL)	PORE PRESS GRADIENT
METRES	TVD. METRES	PSIA	PPG	PSI/M
1369.0	1348.0	1966.70	8.488	1.448
1399.0	1378.0	1971.40	8.323	1.420
1402.0	1381.0	1971.90	8.307	1.417
1405.0	1384.0	1973.40	8.296	1.415
1407.0	1386.0	1975.40	8.292	1.415
1411.0	1390.0	1981.80	8.295	1.415
1418.0	1397.0	1981.80	8.254	1.408
1422.0	1401.0	2017.00	8.377	1.429
1438.0	1417.0	2016.40	8.280	1.413
1453.0	1432.0	2039.10	8.286	1.414
1717.0	1696.0	2412.00	8.285	1.414
1728.3	1707.3	2427.70	8.284	1.413
1731.5	1710.5	2432.70	8.286	1.414
1747.8	1726.8	2459.00	8.297	1.416
1768.1	1747.1	2481.60	8.277	1.412
1829.6	1808.6	2580.10	8.314	1.418
1856.0	1835.0	2610.80	8.293	1.415
1873.0	1852.0	2636.30	8.297	1.416
1899.0	1878.0	2712.50	8.420	1.437
1920.5	1899.5	2724.20	8.361	1.426
1941.8	1920.8	2773.30	8.418	1.436
1947.5	1926.5	2774.80	8.398	1.433
2008.0	1979.0	2838.90	8.365	1.427
2051.0	2030.0	2938.50	8.442	1.440
2101.5	2080.5	3009.90	8.439	1.440
2143.5	2122.5	3058.90	8.407	1.434
2251.0	2230.0	3218.60	8.422	1.437
2290.5	2269.5	3277.60	8.427	1.438
2342.5	2321.5	3342.70	8.403	1.434
2374.3	2353.3	3394.70	8.419	1.436
2392.5	2371.5	3405.20	8.380	1.430
2417.0	2396.0	3467.90	8.448	1.441
2435.0	2414.0	3484.70	8.426	1.437
2453.8	2432.8	3505.10	8.410	1.435
2484.8	2463.8	3549.40	8.409	1.435
2546.0	2525.0	3635.10	8.405	1.434
2557.5	2536.5	3652.70	8.407	1.434
2584.5	2563.5	3688.70	8.401	1.433
2598.0	2577.0	3708.70	8.402	1.433
2602.0	2581.0	3715.30	8.404	1.434

DEPTH (FROM RKB)	DEPTH (FROM MSL)	PORE PRESS	PORE PRESS GRADIENT E.M.W. (MSL)	PORE PRESS GRADIENT
METRES	TVD. METRES	PSIA	PPG	PSI/M
2654.5	2633.5	3800.50	8.426	1.438
2660.0	2639.0	3803.80	8.416	1.436
2691.5	2670.5	3877.10	8.478	1.446
2705.4	2684.4	3954.90	8.604	1.468
2818.0	2797.0	4138.90	8.643	1.475
2846.0	2825.0	4263.00	8.815	1.504
2854.5	2833.5	4336.30	8.940	1.525
2885.0	2864.0	4471.80	9.122	1.556
2890.5	2869.5	4435.30	9.030	1.541
2952.5	2931.5	4469.80	8.908	1.520
2974.0	2953.0	4778.00	9.455	1.613

APPENDICES

COMPUTER DATA LISTINGS

Data is fed to the computer while drilling is in progress, using the DRILL program and is stored on a tape at 10, 5, 1, or 0.2m intervals. This data is then available at a later date for use in other programs (for example KICK, SURGE, COST, OPTBIT, and HYDRL).

The data can also be accessed by the REPORT program, which allows the operator to list both raw and calculated data in various formats. Either detailed data or data averaged over any particular depth interval, may be listed.

In addition, the data may be plotted in various formats, at any scale the operator desires.

the following data lists have been made for this well :

- (a). Bit record and bit initialization data
- (b). Hydraulic analyses
- (c). Data list A
- (d). Data list B
- (e). Data list C
- (f). Data list D

COMPUTER PLOTS

Using the REPORT program, the following plots have been drawn for this well :

GEO PLOT - 1:5000 SCALE - 2m averages

Since all the data is stored on tape, further data lists or plots are available at any time on request.

(a). BIT RECORD AND BIT INITIALIZATION DATA

BIT SIZE Inches

BIT COST Australian dollars

JET SIZE Thirty-seconds of an inch

DEPTHS Metres

HOLE MADE. Metres

DRILLING TIME. Hours

AVERAGE ROP. Metres/hour

AVERAGE COST/METRE . . . Australian dollars

BIT CONDITION. Teeth

Bearings

Gauge Inches

WELL: SNAPPER No.6

BIT RECORD

BIT IADC No.	CODE MAKE & TYPE	SIZE	COST	NOZZLES	DEPTH IN	DEPTH OUT	BIT RUN	TOTAL HOURS	TRIP AROP	TRIP TIME	CCOST	TOTAL TURNS	CONDITION T B G
2	111 HTC R1	17.500	4978.00	20 20 20	211.0	808.0	597.0	15.47	38.6	2.5	118.27	111375	2 2 0.000
3	116 HTC J1	12.250	2566.00	18 18 18	808.2	1365.0	556.8	15.28	36.4	3.7	129.08	91466	5 5 0.000
4	517 HTC J22	12.250	8520.00	18 18 16	1365.0	2107.0	742.0	65.46	11.3	5.0	358.27	234818	4 4 0.000
5	517 HTC J22	12.250	8520.00	18 18 16	2107.0	2431.2	324.2	52.41	6.2	8.0	706.82	169866	8 4 0.125

WELL: SNAPPER #6

BIT RECORD

BIT IADC No.	CODE MAKE & TYPE	SIZE	COST	NOZZLES	DEPTH IN	DEPTH OUT	BIT RUN	TOTAL HOURS	TRIP AROP	TRIP TIME	CCOST	TOTAL TURNS	CONDITION T B G
6	517 HTC J22	12.250	8520.00	16 16 16	2431.0	2712.0	281.0	47.95	5.9	8.0	757.47	144545	4 8 0.125
7	517 HTC J22	12.250	8520.00	16 16 16	2712.0	3021.0	309.0	57.01	5.4	7.8	793.60	171045	4 5 0.125

BIT NUMBER: 2 IADC CODE 111 HTC R1

STARTING DEPTH, TVD.....	211.0	211.0	
BIT COST, RIG COST/HOUR.....	4978.00	3652.00	
TRIP TIME.....	2.5		
BIT DIAMETER.....	17.500		
NOZZLES.....	20	20	20
HW DRILL COLLAR LENGTH, OD, ID....	21.61	9.750	3.000
DRILL COLLAR LENGTH, OD, ID.....	66.22	8.000	2.813
HW DRILL PIPE LENGTH, OD, ID.....	82.75	5.000	3.125
DRILL PIPE OD, ID.....		5.000	4.276
CASING DEPTH, ID.....	193.00	19.124	
RISER LENGTH, ID.....	76.00	21.000	
PUMP VOLUMES 1 AND 2.....	0.119	0.119	
PORE PRESSURE CALC EXPONENT.....	1.20		
NORMAL PORE PRESSURE.....	8.3		
OVERBURDEN GRADIENT MODIFIER.....	0.00		
STRESS RATIO MODIFIER.....	0.14		
"d" EXPONENT CORRECTION FACTOR....	10.0		
CUTTINGS DIAMETER, DENSITY.....	2.0	2.20	

FINISHING DEPTH.....	808.0		
CUMULATIVE HOURS, TURNS.....	15.5	111375	
BIT CONDITION OUT.....	T 2	B 2	G 0.000

BIT NUMBER: 3 IADC CODE 116 HTC J1

STARTING DEPTH, TVD.....	808.2	808.2	
BIT COST, RIG COST/HOUR.....	2566.00	3652.00	
TRIP TIME.....	3.7		
BIT DIAMETER.....	12.250		
NOZZLES.....	18	18	18
DRILL COLLAR LENGTH, OD, ID.....	152.18	8.000	2.813
HW DRILL PIPE LENGTH, OD, ID.....	83.63	5.000	3.125
DRILL PIPE OD, ID.....		5.000	4.276
CASING DEPTH, ID.....	793.50	12.615	
RISER LENGTH, ID.....	76.00	19.124	
PUMP VOLUMES 1 AND 2.....	0.119	0.119	
PORE PRESSURE CALC EXPONENT.....	1.20		
NORMAL PORE PRESSURE.....	8.4		
OVERBURDEN GRADIENT MODIFIER.....	0.00		
STRESS RATIO MODIFIER.....	0.14		
"d" EXPONENT CORRECTION FACTOR....	10.0		
CUTTINGS DIAMETER, DENSITY.....	2.0	2.40	

FINISHING DEPTH.....	1365.0		
CUMULATIVE HOURS, TURNS.....	15.3	91466	
BIT CONDITION OUT.....	T 5	B 5	G 0.000

BIT NUMBER: 4 IADC CODE 517 HTC J22

STARTING DEPTH, TVD.....	1365.0	1365.0	
BIT COST, RIG COST/HOUR.....	8520.00	3652.00	
TRIP TIME.....	5.0		
BIT DIAMETER.....	12.250		
NOZZLES.....	18	18	16
DRILL COLLAR LENGTH, OD, ID.....	152.18	8.000	2.813
HW DRILL PIPE LENGTH, OD, ID.....	83.63	5.000	3.125
DRILL PIPE OD, ID.....		5.000	4.276
CASING DEPTH, ID.....	793.00	12.615	
RISER LENGTH, ID.....	76.00	21.000	
PUMP VOLUMES 1 AND 2.....	0.119	0.119	
PORE PRESSURE CALC EXPONENT.....	1.20		
NORMAL PORE PRESSURE.....	8.4		
OVERBURDEN GRADIENT MODIFIER.....	0.00		
STRESS RATIO MODIFIER.....	0.14		
"d" EXPONENT CORRECTION FACTOR....	10.0		
CUTTINGS DIAMETER, DENSITY.....	2.0	2.40	

FINISHING DEPTH.....	2107.0		
CUMULATIVE HOURS, TURNS.....	65.5	234818	
BIT CONDITION OUT.....	T 4	B 4	G 0.000

BIT NUMBER: 5 IADC CODE 517 HTC J22

STARTING DEPTH, TVD.....	2107.0	2107.0	
BIT COST, RIG COST/HOUR.....	8520.00	3652.00	
TRIP TIME.....	8.0		
BIT DIAMETER.....	12.250		
NOZZLES.....	18	18	16
DRILL COLLAR LENGTH, OD, ID.....	152.18	8.000	2.813
HW DRILL PIPE LENGTH, OD, ID.....	83.63	5.000	3.125
DRILL PIPE OD, ID.....		5.000	4.276
CASING DEPTH, ID.....	793.00	12.615	
RISER LENGTH, ID.....	76.00	21.000	
PUMP VOLUMES 1 AND 2.....	0.119	0.119	
PORE PRESSURE CALC EXPONENT.....	1.20		
NORMAL PORE PRESSURE.....	8.4		
OVERBURDEN GRADIENT MODIFIER.....	0.00		
STRESS RATIO MODIFIER.....	0.14		
"d" EXPONENT CORRECTION FACTOR....	10.0		
CUTTINGS DIAMETER, DENSITY.....	2.0	2.40	

FINISHING DEPTH.....	2431.2		
CUMULATIVE HOURS, TURNS.....	52.4	169866	
BIT CONDITION OUT.....	T 8	B 4	G 0.125

BIT NUMBER: 6 IADC CODE 517 HTC J22

STARTING DEPTH, TVD.....	2431.0	2431.0		
BIT COST, RIG COST/HOUR.....	8520.00	3652.00		
TRIP TIME.....	8.0			
BIT DIAMETER.....	12.250			
NOZZLES.....	16	16	16	
DRILL COLLAR LENGTH, OD, ID.....	153.06	8.000	2.813	
HW DRILL PIPE LENGTH, OD, ID.....	82.75	5.000	3.125	
DRILL PIPE OD, ID.....		5.000	4.276	
CASING DEPTH, ID.....	793.00	12.615		
RISER LENGTH, ID.....	76.00	21.000		
PUMP VOLUMES 1 AND 2.....	0.119	0.119		
PORE PRESSURE CALC EXPONENT.....	1.20			
NORMAL PORE PRESSURE.....	8.4			
OVERBURDEN GRADIENT MODIFIER.....	0.00			
STRESS RATIO MODIFIER.....	0.14			
"d" EXPONENT CORRECTION FACTOR....	10.0			
CUTTINGS DIAMETER, DENSITY.....	2.0	2.40		

FINISHING DEPTH.....	2712.0			
CUMULATIVE HOURS, TURNS.....	48.0	144545		
BIT CONDITION OUT.....	T 4	B 8	G 0.125	

BIT NUMBER: 7 IADC CODE 517 HTC J22

STARTING DEPTH, TVD.....	2712.0	2712.0		
BIT COST, RIG COST/HOUR.....	8520.00	3652.00		
TRIP TIME.....	7.8			
BIT DIAMETER.....	12.250			
NOZZLES.....	16	16	16	
DRILL COLLAR LENGTH, OD, ID.....	153.06	8.000	2.813	
HW DRILL PIPE LENGTH, OD, ID.....	82.75	5.000	3.125	
DRILL PIPE OD, ID.....		5.000	4.276	
CASING DEPTH, ID.....	793.00	12.615		
RISER LENGTH, ID.....	76.00	21.000		
PUMP VOLUMES 1 AND 2.....	0.119	0.119		
PORE PRESSURE CALC EXPONENT.....	1.20			
NORMAL PORE PRESSURE.....	8.4			
OVERBURDEN GRADIENT MODIFIER.....	0.00			
STRESS RATIO MODIFIER.....	0.14			
"d" EXPONENT CORRECTION FACTOR....	10.0			
CUTTINGS DIAMETER, DENSITY.....	2.0	2.40		

FINISHING DEPTH.....	3021.0			
CUMULATIVE HOURS, TURNS.....	57.0	171045		
BIT CONDITION OUT.....	T 4	B 5	G 0.125	

(b). HYDRAULIC ANALYSIS

Data listed from the tape every 100m for each bit run.

DEPTH. Metres

FLOW RATE. Rate of mud flow into the well,
in gallons per minute.

ANNULAR VOLUMES. . . . Barrels, Barrels/metre

ANNULAR VELOCITIES . . Metres/minute

CRITICAL VELOCITIES. . The annular velocity above which
the flow becomes turbulent

SLIP VELOCITY. The rate of slip of cuttings in the
annulus under laminar flow

ASCENT VELOCITY. . . . The rate of ascent of cuttings in
the annulus under laminar flow

PRESSURE UNITS Pounds per square inch

IMPACT FORCE The impact force at the bit,
in foot-pounds per second squared.

H.H.P. Hydraulic horsepower at the bit

JET VELOCITY The velocity of mud through the
bit nozzles, in metres per second.

DENSITY UNITS. Pounds per gallon

HYDRAULICS AT DEPTH 300.0 SPM 1 102 SPM 2 99 FLOW RATE 1005

ANNULUS: VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE
HWDC/OH	0.673	15	36	LAMINAR	0	35	0.2
DC/OH	0.772	51	31	LAMINAR	0	31	0.4
HWDP/OH	0.896	17	27	LAMINAR	0	27	0.1
HWDP/CSG	1.085	69	22	LAMINAR	0	22	0.2
DP/CSG	1.085	58	22	LAMINAR	0	22	0.2
DP/RIS	1.325	101	18	LAMINAR	0	18	0.2
TOTAL VOLUME:	311			TOTAL PRESSURE DROP:			1.3

LAG: 13.0 MINUTES 1324 STROKES #1 AND 1285 STROKES #2

BIT: PRESSURE DROP	1009.4	HHP	592	IMPACT FORCE	1676
% SURFACE PRESSURE	47.3	HHP/area	2.46	JET VELOCITY	106

PRESSURE SURFACE	76.4	STRING	490.6	BIT	1009.4	ANNULUS	1.3
DROPS: TOTAL	1577.7	PUMP PRESSURE	2133.0	26.0 % DIFFERENCE			

NOT CIRCULATING:	MUD WEIGHT	9.2	HYDROSTATIC PRESSURE	470.9
CIRCULATING:	ECD	9.2	CIRCULATING PRESSURE	472.1
PULLING OUT:	TRIP MARGIN	0.0	ESTIMATED SWAB	2.5
	EFFECTIVE MUD WEIGHT	9.2	BOTTOM HOLE PRESSURE	468.3

HYDRAULICS AT DEPTH 400.0 SPM 1 101 SPM 2 99 FLOW RATE 1000

ANNULUS: VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE
HWDC/OH	0.673	15	35	LAMINAR	0	35	0.2
DC/OH	0.772	51	31	LAMINAR	0	31	0.4
HWDP/OH	0.896	74	27	LAMINAR	0	26	0.3
DP/OH	0.896	33	27	LAMINAR	0	26	0.2
DP/CSG	1.085	127	22	LAMINAR	0	22	0.4
DP/RIS	1.325	101	18	LAMINAR	0	18	0.2
TOTAL VOLUME:	400			TOTAL PRESSURE DROP:			1.7

LAG: 16.8 MINUTES 1698 STROKES #1 AND 1664 STROKES #2

BIT: PRESSURE DROP	999.4	HHP	583	IMPACT FORCE	1659
% SURFACE PRESSURE	46.0	HHP/area	2.42	JET VELOCITY	106

PRESSURE SURFACE	75.7	STRING	529.9	BIT	999.4	ANNULUS	1.7
DROPS: TOTAL	1606.7	PUMP PRESSURE	2174.0	26.1 % DIFFERENCE			

NOT CIRCULATING:	MUD WEIGHT	9.2	HYDROSTATIC PRESSURE	627.8
CIRCULATING:	ECD	9.2	CIRCULATING PRESSURE	629.5
PULLING OUT:	TRIP MARGIN	0.0	ESTIMATED SWAB	3.4
	EFFECTIVE MUD WEIGHT	9.2	BOTTOM HOLE PRESSURE	624.5

HYDRAULICS AT DEPTH 500.0 SPM 1 103 SPM 2 98 FLOW RATE 1005

ANNULUS: VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE
HWDC/OH	0.673	15	36	LAMINAR	0	35	0.2
DC/OH	0.772	51	31	LAMINAR	0	31	0.4
HWDP/OH	0.896	74	27	LAMINAR	0	27	0.3
DP/OH	0.896	122	27	LAMINAR	0	27	0.6
DP/CSG	1.085	127	22	LAMINAR	0	22	0.4
DP/RIS	1.325	101	18	LAMINAR	0	18	0.2
TOTAL VOLUME:	490						TOTAL PRESSURE DROP: 2.1

LAG: 20.5 MINUTES 2109 STROKES #1 AND 2007 STROKES #2

BIT: PRESSURE DROP	1009.4	HHP	592	IMPACT FORCE	1676
% SURFACE PRESSURE	45.5	HHP/area	2.46	JET VELOCITY	106

PRESSURE SURFACE	76.4	STRING	578.7	BIT	1009.4	ANNULUS	2.1
DROPS: TOTAL	1666.6	PUMP PRESSURE	2220.0	24.9 % DIFFERENCE			

NOT CIRCULATING:	MUD WEIGHT	9.2	HYDROSTATIC PRESSURE	784.8
CIRCULATING:	ECD	9.2	CIRCULATING PRESSURE	786.9
PULLING OUT:	TRIP MARGIN	0.0	ESTIMATED SWAB	4.2
	EFFECTIVE MUD WEIGHT	9.2	BOTTOM HOLE PRESSURE	780.6

HYDRAULICS AT DEPTH 600.0 SPM 1 101 SPM 2 100 FLOW RATE 1005

ANNULUS: VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE
HWDC/OH	0.673	15	36	LAMINAR	0	35	0.2
DC/OH	0.772	51	31	LAMINAR	0	31	0.4
HWDP/OH	0.896	74	27	LAMINAR	0	27	0.3
DP/OH	0.896	212	27	LAMINAR	0	27	1.0
DP/CSG	1.085	127	22	LAMINAR	0	22	0.4
DP/RIS	1.325	101	18	LAMINAR	0	18	0.2
TOTAL VOLUME:	579						TOTAL PRESSURE DROP: 2.5

LAG: 24.2 MINUTES 2446 STROKES #1 AND 2422 STROKES #2

BIT: PRESSURE DROP	1009.4	HHP	592	IMPACT FORCE	1676
% SURFACE PRESSURE	45.3	HHP/area	2.46	JET VELOCITY	106

PRESSURE SURFACE	76.4	STRING	622.7	BIT	1009.4	ANNULUS	2.5
DROPS: TOTAL	1711.0	PUMP PRESSURE	2230.0	23.3 % DIFFERENCE			

NOT CIRCULATING:	MUD WEIGHT	9.2	HYDROSTATIC PRESSURE	941.7
CIRCULATING:	ECD	9.2	CIRCULATING PRESSURE	944.2
PULLING OUT:	TRIP MARGIN	0.0	ESTIMATED SWAB	5.0
	EFFECTIVE MUD WEIGHT	9.2	BOTTOM HOLE PRESSURE	936.7

HYDRAULICS AT DEPTH 700.0 SPM 1 100 SPM 2 98 FLOW RATE 990

ANNULUS:	VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE
HWDC/OH	0.673	15	35	114	LAMINAR	0	35	0.3
DC/OH	0.772	51	31	113	LAMINAR	0	30	0.8
HWDP/OH	0.896	74	26	111	LAMINAR	0	26	0.6
DP/OH	0.896	301	26	111	LAMINAR	0	26	2.6
DP/CSG	1.085	127	22	110	LAMINAR	0	22	0.7
DP/RIS	1.325	101	18	110	LAMINAR	0	18	0.4
TOTAL VOLUME:		669	TOTAL PRESSURE DROP:					5.4

LAG: 28.4 MINUTES 2839 STROKES #1 AND 2782 STROKES #2

BIT: PRESSURE DROP	979.5	HHP	566	IMPACT FORCE	1626
% SURFACE PRESSURE	43.7	HHP/area	2.35	JET VELOCITY	105

PRESSURE SURFACE	78.7	STRING	687.3	BIT	979.5	ANNULUS	5.4
DROPS: TOTAL	1751.0	PUMP PRESSURE	2242.0	21.9 % DIFFERENCE			

NOT CIRCULATING:	MUD WEIGHT	9.2	HYDROSTATIC PRESSURE	1098.7
CIRCULATING:	ECD	9.2	CIRCULATING PRESSURE	1104.1
PULLING OUT:	TRIP MARGIN	0.1	ESTIMATED SWAB	10.8
	EFFECTIVE MUD WEIGHT	9.1	BOTTOM HOLE PRESSURE	1087.8

HYDRAULICS AT DEPTH 800.0 SPM 1 101 SPM 2 100 FLOW RATE 1005

ANNULUS:	VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE
HWDC/OH	0.673	15	36	113	LAMINAR	0	35	0.3
DC/OH	0.772	51	31	112	LAMINAR	0	31	0.8
HWDP/OH	0.896	74	27	111	LAMINAR	0	27	0.6
DP/OH	0.896	391	27	111	LAMINAR	0	27	3.4
DP/CSG	1.085	127	22	110	LAMINAR	0	22	0.7
DP/RIS	1.325	101	18	109	LAMINAR	0	18	0.4
TOTAL VOLUME:		759	TOTAL PRESSURE DROP:					6.2

LAG: 31.7 MINUTES 3203 STROKES #1 AND 3171 STROKES #2

BIT: PRESSURE DROP	1014.9	HHP	595	IMPACT FORCE	1685
% SURFACE PRESSURE	43.0	HHP/area	2.47	JET VELOCITY	106

PRESSURE SURFACE	81.2	STRING	756.1	BIT	1014.9	ANNULUS	6.2
DROPS: TOTAL	1858.4	PUMP PRESSURE	2362.0	21.3 % DIFFERENCE			

NOT CIRCULATING:	MUD WEIGHT	9.3	HYDROSTATIC PRESSURE	1262.5
CIRCULATING:	ECD	9.3	CIRCULATING PRESSURE	1268.7
PULLING OUT:	TRIP MARGIN	0.1	ESTIMATED SWAB	12.4
	EFFECTIVE MUD WEIGHT	9.2	BOTTOM HOLE PRESSURE	1250.0

HYDRAULICS AT DEPTH 900.0 SPM 1 100 SPM 2 98 FLOW RATE 990

ANNULUS:	VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE	
DC/OH	0.274	29	86	116	LAMINAR	1	85	4.8	
DC/CSG	0.303	14	78	115	LAMINAR	0	77	1.8	
HWDP/CSG	0.427	36	55	109	LAMINAR	0	55	1.5	
DP/CSG	0.427	251	55	109	LAMINAR	0	55	10.3	
DP/RIS	1.325	101	18	101	LAMINAR	0	18	0.3	
TOTAL VOLUME:		431					TOTAL PRESSURE DROP:		18.6

LAG: 18.3 MINUTES 1828 STROKES #1 AND 1792 STROKES #2

BIT: PRESSURE DROP	1525.4	HHP	881	IMPACT FORCE	2051
% SURFACE PRESSURE	54.3	HHP/area	7.47	JET VELOCITY	129

PRESSURE SURFACE	86.8	STRING	1091.7	BIT	1525.4	ANNULUS	18.6
DROPS: TOTAL	2722.5	PUMP PRESSURE	2808.0	3.0 % DIFFERENCE			

NOT CIRCULATING:	MUD WEIGHT	9.4	HYDROSTATIC PRESSURE	1443.3
CIRCULATING:	ECD	9.5	CIRCULATING PRESSURE	1461.9
PULLING OUT:	TRIP MARGIN	0.2	ESTIMATED SWAB	37.2
	EFFECTIVE MUD WEIGHT	9.2	BOTTOM HOLE PRESSURE	1406.1

HYDRAULICS AT DEPTH 1000.0 SPM 1 96 SPM 2 95 FLOW RATE 955

ANNULUS:	VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE	
DC/OH	0.274	42	83	125	LAMINAR	0	82	7.6	
HWDP/OH	0.398	22	57	119	LAMINAR	0	57	1.2	
HWDP/CSG	0.427	13	53	119	LAMINAR	0	53	0.6	
DP/CSG	0.427	294	53	119	LAMINAR	0	53	13.7	
DP/RIS	1.325	101	17	112	LAMINAR	0	17	0.4	
TOTAL VOLUME:		471					TOTAL PRESSURE DROP:		23.5

LAG: 20.7 MINUTES 1988 STROKES #1 AND 1967 STROKES #2

BIT: PRESSURE DROP	1419.5	HHP	791	IMPACT FORCE	1909
% SURFACE PRESSURE	52.3	HHP/area	6.71	JET VELOCITY	125

PRESSURE SURFACE	81.4	STRING	1070.1	BIT	1419.5	ANNULUS	23.5
DROPS: TOTAL	2594.5	PUMP PRESSURE	2712.0	4.3 % DIFFERENCE			

NOT CIRCULATING:	MUD WEIGHT	9.4	HYDROSTATIC PRESSURE	1603.7
CIRCULATING:	ECD	9.5	CIRCULATING PRESSURE	1627.2
PULLING OUT:	TRIP MARGIN	0.3	ESTIMATED SWAB	47.0
	EFFECTIVE MUD WEIGHT	9.1	BOTTOM HOLE PRESSURE	1556.7

HYDRAULICS AT DEPTH 1100.0 SPM 1 101 SPM 2 99 FLOW RATE 1000

ANNULUS: VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE
DC/OH	0.274	42	87	LAMINAR	0	86	8.6
HWDP/OH	0.398	33	60	LAMINAR	0	60	2.1
DP/OH	0.398	28	60	LAMINAR	0	60	1.8
DP/CSG	0.427	306	56	LAMINAR	0	56	16.6
DP/RIS	1.325	101	18	LAMINAR	0	18	0.5
TOTAL VOLUME:	510						TOTAL PRESSURE DROP: 29.5

LAG: 21.4 MINUTES 2166 STROKES #1 AND 2123 STROKES #2

BIT: PRESSURE DROP	1556.4	HHP	908	IMPACT FORCE	2093
% SURFACE PRESSURE	52.4	HHP/area	7.70	JET VELOCITY	131

PRESSURE SURFACE	88.4	STRING	1213.5	BIT	1556.4	ANNULUS	29.5
DROPS: TOTAL	2887.8	PUMP PRESSURE	2968.0			2.7 % DIFFERENCE	

NOT CIRCULATING:	MUD WEIGHT	9.4	HYDROSTATIC PRESSURE	1764.0
CIRCULATING:	ECD	9.6	CIRCULATING PRESSURE	1793.5
PULLING OUT:	TRIP MARGIN	0.3	ESTIMATED SWAB	59.0
	EFFECTIVE MUD WEIGHT	9.1	BOTTOM HOLE PRESSURE	1705.0

HYDRAULICS AT DEPTH 1200.0 SPM 1 99 SPM 2 100 FLOW RATE 995

ANNULUS: VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE
DC/OH	0.274	42	86	LAMINAR	0	86	9.5
HWDP/OH	0.398	33	59	LAMINAR	0	59	2.4
DP/OH	0.398	68	59	LAMINAR	0	59	5.0
DP/CSG	0.427	306	55	LAMINAR	0	55	19.3
DP/RIS	1.325	101	18	LAMINAR	0	18	0.6
TOTAL VOLUME:	550						TOTAL PRESSURE DROP: 36.9

LAG: 23.2 MINUTES 2300 STROKES #1 AND 2324 STROKES #2

BIT: PRESSURE DROP	1540.9	HHP	894	IMPACT FORCE	2072
% SURFACE PRESSURE	52.2	HHP/area	7.59	JET VELOCITY	130

PRESSURE SURFACE	84.5	STRING	1208.3	BIT	1540.9	ANNULUS	36.9
DROPS: TOTAL	2870.5	PUMP PRESSURE	2950.0			2.7 % DIFFERENCE	

NOT CIRCULATING:	MUD WEIGHT	9.4	HYDROSTATIC PRESSURE	1924.4
CIRCULATING:	ECD	9.6	CIRCULATING PRESSURE	1961.3
PULLING OUT:	TRIP MARGIN	0.4	ESTIMATED SWAB	73.7
	EFFECTIVE MUD WEIGHT	9.0	BOTTOM HOLE PRESSURE	1850.7

HYDRAULICS AT DEPTH 1300.0 SPM 1 97 SPM 2 97 FLOW RATE 970

ANNULUS: VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE
DC/OH	0.274	42	84	LAMINAR	0	84	10.3
HWDP/OH	0.398	33	58	LAMINAR	0	58	2.7
DP/OH	0.398	108	58	LAMINAR	0	58	8.7
DP/CSG	0.427	306	54	LAMINAR	0	54	21.4
DP/RIS	1.325	101	17	LAMINAR	0	17	0.7
TOTAL VOLUME:	590						TOTAL PRESSURE DROP: 43.8

LAG: 25.6 MINUTES 2479 STROKES #1 AND 2479 STROKES #2

BIT: PRESSURE DROP	1464.4	HHP	828	IMPACT FORCE	1969
% SURFACE PRESSURE	49.8	HHP/area	7.03	JET VELOCITY	127

PRESSURE SURFACE	80.7	STRING	1200.7	BIT	1464.4	ANNULUS	43.8
DROPS: TOTAL	2789.6	PUMP PRESSURE	2941.0			5.1 % DIFFERENCE	

NOT CIRCULATING:	MUD WEIGHT	9.4	HYDROSTATIC PRESSURE	2084.8
CIRCULATING:	ECD	9.6	CIRCULATING PRESSURE	2128.5
PULLING OUT:	TRIP MARGIN	0.4	ESTIMATED SWAB	87.5
	EFFECTIVE MUD WEIGHT	9.0	BOTTOM HOLE PRESSURE	1997.2

HYDRAULICS AT DEPTH 1400.0 SPM 1 88 SPM 2 87 FLOW RATE 875

ANNULUS: VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE
DC/OH	0.274	42	76	LAMINAR	0	76	8.8
HWDP/OH	0.398	33	52	LAMINAR	0	52	2.2
DP/OH	0.398	148	52	LAMINAR	0	52	9.9
DP/CSG	0.427	306	49	LAMINAR	0	49	17.7
DP/RIS	1.325	101	16	LAMINAR	0	16	0.6
TOTAL VOLUME:	630						TOTAL PRESSURE DROP: 39.2

LAG: 30.3 MINUTES 2662 STROKES #1 AND 2632 STROKES #2

BIT: PRESSURE DROP	1392.3	HHP	710	IMPACT FORCE	1741
% SURFACE PRESSURE	50.9	HHP/area	6.03	JET VELOCITY	123

PRESSURE SURFACE	67.6	STRING	1044.8	BIT	1392.3	ANNULUS	39.2
DROPS: TOTAL	2543.9	PUMP PRESSURE	2738.0			7.1 % DIFFERENCE	

NOT CIRCULATING:	MUD WEIGHT	9.5	HYDROSTATIC PRESSURE	2269.0
CIRCULATING:	ECD	9.7	CIRCULATING PRESSURE	2308.2
PULLING OUT:	TRIP MARGIN	0.3	ESTIMATED SWAB	78.3
	EFFECTIVE MUD WEIGHT	9.2	BOTTOM HOLE PRESSURE	2190.7

HYDRAULICS AT DEPTH 1500.0 SPM 1 90 SPM 2 88 FLOW RATE 890

ANNULUS: VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE
DC/OH	0.274	42	77	LAMINAR	0	77	8.8
HWDP/OH	0.398	33	53	LAMINAR	0	53	2.2
DP/OH	0.398	187	53	LAMINAR	0	53	12.6
DP/CSG	0.427	306	50	LAMINAR	0	49	17.8
DP/RIS	1.325	101	16	LAMINAR	0	16	0.6
TOTAL VOLUME:	670						TOTAL PRESSURE DROP: 42.0

LAG: 31.6 MINUTES 2846 STROKES #1 AND 2783 STROKES #2

BIT: PRESSURE DROP	1440.4	HHP	748	IMPACT FORCE	1801
% SURFACE PRESSURE	51.7	HHP/area	6.34	JET VELOCITY	125

PRESSURE SURFACE	69.7	STRING	1117.5	BIT	1440.4	ANNULUS	42.0
DROPS: TOTAL	2669.6	PUMP PRESSURE	2786.0			4.2 % DIFFERENCE	

NOT CIRCULATING:	MUD WEIGHT	9.5	HYDROSTATIC PRESSURE	2431.1
CIRCULATING:	ECD	9.7	CIRCULATING PRESSURE	2473.1
PULLING OUT:	TRIP MARGIN	0.3	ESTIMATED SWAB	84.0
	EFFECTIVE MUD WEIGHT	9.2	BOTTOM HOLE PRESSURE	2347.1

HYDRAULICS AT DEPTH 1600.0 SPM 1 91 SPM 2 87 FLOW RATE 890

ANNULUS: VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE
DC/OH	0.274	42	77	LAMINAR	0	77	9.2
HWDP/OH	0.398	33	53	LAMINAR	0	53	2.4
DP/OH	0.398	227	53	LAMINAR	0	53	16.2
DP/CSG	0.427	306	50	LAMINAR	0	49	18.8
DP/RIS	1.325	101	16	LAMINAR	0	16	0.6
TOTAL VOLUME:	710						TOTAL PRESSURE DROP: 47.2

LAG: 33.5 MINUTES 3049 STROKES #1 AND 2915 STROKES #2

BIT: PRESSURE DROP	1440.4	HHP	748	IMPACT FORCE	1801
% SURFACE PRESSURE	51.3	HHP/area	6.34	JET VELOCITY	125

PRESSURE SURFACE	69.7	STRING	1157.7	BIT	1440.4	ANNULUS	47.2
DROPS: TOTAL	2715.0	PUMP PRESSURE	2806.0			3.2 % DIFFERENCE	

NOT CIRCULATING:	MUD WEIGHT	9.5	HYDROSTATIC PRESSURE	2593.2
CIRCULATING:	ECD	9.7	CIRCULATING PRESSURE	2640.4
PULLING OUT:	TRIP MARGIN	0.3	ESTIMATED SWAB	94.5
	EFFECTIVE MUD WEIGHT	9.2	BOTTOM HOLE PRESSURE	2498.7

HYDRAULICS AT DEPTH 1700.0 SPM 1 90 SPM 2 89 FLOW RATE 895

ANNULUS:	VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE
DC/OH	0.274	42	78	144	LAMINAR	0	77	9.6
HWDP/OH	0.398	33	53	141	LAMINAR	0	53	2.4
DP/OH	0.398	267	53	141	LAMINAR	0	53	19.3
DP/CSG	0.427	306	50	141	LAMINAR	0	50	19.1
DP/RIS	1.325	101	16	136	LAMINAR	0	16	0.6
TOTAL VOLUME:		749			TOTAL PRESSURE DROP:			51.0

LAG: 35.2 MINUTES 3167 STROKES #1 AND 3131 STROKES #2

BIT: PRESSURE DROP	1456.7	HHP	760	IMPACT FORCE	1822
% SURFACE PRESSURE	50.5	HHP/area	6.45	JET VELOCITY	126

PRESSURE SURFACE	73.0	STRING	1254.9	BIT	1456.7	ANNULUS	51.0
DROPS: TOTAL	2835.6	PUMP PRESSURE	2886.0	1.7 % DIFFERENCE			

NOT CIRCULATING:	MUD WEIGHT	9.5	HYDROSTATIC PRESSURE	2755.2
CIRCULATING:	ECD	9.7	CIRCULATING PRESSURE	2806.3
PULLING OUT:	TRIP MARGIN	0.4	ESTIMATED SWAB	102.1
	EFFECTIVE MUD WEIGHT	9.1	BOTTOM HOLE PRESSURE	2653.2

HYDRAULICS AT DEPTH 1800.0 SPM 1 82 SPM 2 85 FLOW RATE 835

ANNULUS:	VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE
DC/OH	0.274	42	72	131	LAMINAR	0	72	8.1
HWDP/OH	0.398	33	50	125	LAMINAR	0	50	1.9
DP/OH	0.398	307	50	125	LAMINAR	0	50	17.6
DP/CSG	0.427	306	47	124	LAMINAR	0	46	15.0
DP/RIS	1.325	101	15	116	LAMINAR	0	15	0.4
TOTAL VOLUME:		789			TOTAL PRESSURE DROP:			43.1

LAG: 39.7 MINUTES 3257 STROKES #1 AND 3376 STROKES #2

BIT: PRESSURE DROP	1267.9	HHP	617	IMPACT FORCE	1586
% SURFACE PRESSURE	46.8	HHP/area	5.24	JET VELOCITY	117

PRESSURE SURFACE	66.5	STRING	1180.6	BIT	1267.9	ANNULUS	43.1
DROPS: TOTAL	2558.0	PUMP PRESSURE	2709.0	5.6 % DIFFERENCE			

NOT CIRCULATING:	MUD WEIGHT	9.5	HYDROSTATIC PRESSURE	2917.3
CIRCULATING:	ECD	9.6	CIRCULATING PRESSURE	2960.4
PULLING OUT:	TRIP MARGIN	0.3	ESTIMATED SWAB	86.1
	EFFECTIVE MUD WEIGHT	9.2	BOTTOM HOLE PRESSURE	2831.2

HYDRAULICS AT DEPTH 1900.0 SPM 1 88 SPM 2 87 FLOW RATE 875

ANNULUS: VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE
DC/OH	0.274	42	76	LAMINAR	0	76	8.6
HWDP/OH	0.398	33	52	LAMINAR	0	52	2.1
DP/OH	0.398	347	52	LAMINAR	0	52	21.5
DP/CSG	0.427	306	49	LAMINAR	0	49	16.2
DP/RIS	1.325	101	16	LAMINAR	0	16	0.4
TOTAL VOLUME:	829					TOTAL PRESSURE DROP:	48.9

LAG: 39.8 MINUTES 3504 STROKES #1 AND 3464 STROKES #2

BIT: PRESSURE DROP	1399.6	HHP	714	IMPACT FORCE	1750
% SURFACE PRESSURE	48.2	HHP/area	6.06	JET VELOCITY	123

PRESSURE SURFACE	72.6	STRING	1331.6	BIT	1399.6	ANNULUS	48.9
DROPS: TOTAL	2852.7	PUMP PRESSURE	2902.0			1.7 % DIFFERENCE	

NOT CIRCULATING:	MUD WEIGHT	9.6	HYDROSTATIC PRESSURE	3095.6
CIRCULATING:	ECD	9.7	CIRCULATING PRESSURE	3144.5
PULLING OUT:	TRIP MARGIN	0.3	ESTIMATED SWAR	97.8
	EFFECTIVE MUD WEIGHT	9.2	BOTTOM HOLE PRESSURE	2997.8

HYDRAULICS AT DEPTH 2000.0 SPM 1 87 SPM 2 83 FLOW RATE 850

ANNULUS: VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE
DC/OH	0.274	42	74	LAMINAR	0	73	9.3
HWDP/OH	0.398	33	51	LAMINAR	0	51	2.2
DP/OH	0.398	387	51	LAMINAR	0	51	25.0
DP/CSG	0.427	306	47	LAMINAR	0	47	16.9
DP/RIS	1.325	101	15	LAMINAR	0	15	0.4
TOTAL VOLUME:	869					TOTAL PRESSURE DROP:	53.7

LAG: 43.0 MINUTES 3737 STROKES #1 AND 3565 STROKES #2

BIT: PRESSURE DROP	1320.8	HHP	655	IMPACT FORCE	1652
% SURFACE PRESSURE	46.0	HHP/area	5.56	JET VELOCITY	120

PRESSURE SURFACE	72.5	STRING	1370.8	BIT	1320.8	ANNULUS	53.7
DROPS: TOTAL	2817.8	PUMP PRESSURE	2872.0			1.9 % DIFFERENCE	

NOT CIRCULATING:	MUD WEIGHT	9.6	HYDROSTATIC PRESSURE	3258.5
CIRCULATING:	ECD	9.7	CIRCULATING PRESSURE	3312.3
PULLING OUT:	TRIP MARGIN	0.3	ESTIMATED SWAR	107.5
	EFFECTIVE MUD WEIGHT	9.2	BOTTOM HOLE PRESSURE	3151.0

HYDRAULICS AT DEPTH 2100.0 SPM 1 83 SPM 2 83 FLOW RATE 830

ANNULUS: VOL/UNIT	VOL	V _{ann}	V _{crit}	FLOW TYPE	V _{slip}	V _{asc}	PRESSURE
DC/OH	0.274	42	72	LAMINAR	0	72	9.2
HWDP/OH	0.398	33	50	LAMINAR	0	49	2.1
DP/OH	0.398	427	50	LAMINAR	0	49	27.4
DP/CSG	0.427	306	46	LAMINAR	0	46	16.7
DP/RIS	1.325	101	15	LAMINAR	0	15	0.4
TOTAL VOLUME:	909						TOTAL PRESSURE DROP: 55.8

LAG: 46.0 MINUTES 3819 STROKES #1 AND 3819 STROKES #2

BIT: PRESSURE DROP	1259.3	HHP	610	IMPACT FORCE	1575
% SURFACE PRESSURE	44.7	HHP/area	5.17	JET VELOCITY	117

PRESSURE SURFACE	69.4	STRING	1353.3	BIT	1259.3	ANNULUS	55.8
DROPS: TOTAL	2738.0	PUMP PRESSURE	2820.0			2.9 % DIFFERENCE	

NOT CIRCULATING:	MUD WEIGHT	9.6	HYDROSTATIC PRESSURE	3421.4
CIRCULATING:	ECD	9.7	CIRCULATING PRESSURE	3477.3
PULLING OUT:	TRIP MARGIN	0.3	ESTIMATED SWAB	111.7
	EFFECTIVE MUD WEIGHT	9.2	BOTTOM HOLE PRESSURE	3309.8

HYDRAULICS AT DEPTH 2200.0 SPM 1 83 SPM 2 85 FLOW RATE 840

ANNULUS: VOL/UNIT	VOL	V _{ann}	V _{crit}	FLOW TYPE	V _{slip}	V _{asc}	PRESSURE
DC/OH	0.274	42	73	LAMINAR	0	73	9.2
HWDP/OH	0.398	33	50	LAMINAR	0	50	2.1
DP/OH	0.398	466	50	LAMINAR	0	50	29.2
DP/CSG	0.427	306	47	LAMINAR	0	47	16.3
DP/RIS	1.325	101	15	LAMINAR	0	15	0.4
TOTAL VOLUME:	949						TOTAL PRESSURE DROP: 57.2

LAG: 47.5 MINUTES 3939 STROKES #1 AND 4034 STROKES #2

BIT: PRESSURE DROP	1289.9	HHP	632	IMPACT FORCE	1613
% SURFACE PRESSURE	45.8	HHP/area	5.36	JET VELOCITY	118

PRESSURE SURFACE	72.5	STRING	1454.0	BIT	1289.9	ANNULUS	57.2
DROPS: TOTAL	2873.6	PUMP PRESSURE	2814.0			2.1 % DIFFERENCE	

NOT CIRCULATING:	MUD WEIGHT	9.6	HYDROSTATIC PRESSURE	3584.4
CIRCULATING:	ECD	9.7	CIRCULATING PRESSURE	3641.6
PULLING OUT:	TRIP MARGIN	0.3	ESTIMATED SWAB	114.5
	EFFECTIVE MUD WEIGHT	9.2	BOTTOM HOLE PRESSURE	3469.9

HYDRAULICS AT DEPTH 2300.0 GPM 1 84 GPM 2 84 FLOW RATE 840

ANNULUS: VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE
DC/OH	0.274	42	73	LAMINAR	0	73	10.0
HWDP/OH	0.398	33	50	LAMINAR	0	50	2.2
DP/OH	0.398	506	50	LAMINAR	0	50	33.7
DP/CSG	0.427	306	47	LAMINAR	0	47	17.2
DP/RIS	1.325	101	15	LAMINAR	0	15	0.4
TOTAL VOLUME:	989						TOTAL PRESSURE DROP: 63.5

LAG: 49.4 MINUTES 4153 STROKES #1 AND 4153 STROKES #2

BIT: PRESSURE DROP	1285.8	HHP	630	IMPACT FORCE	1608
% SURFACE PRESSURE	44.2	HHP/area	5.34	JET VELOCITY	118

PRESSURE SURFACE	75.0	STRING	1547.5	BIT	1285.8	ANNULUS	63.5
DROPS: TOTAL	2971.0	PUMP PRESSURE	2906.0			2.3 % DIFFERENCE	

NOT CIRCULATING:	MUD WEIGHT	9.5	HYDROSTATIC PRESSURE	3735.5
CIRCULATING:	ECD	9.7	CIRCULATING PRESSURE	3799.0
PULLING OUT:	TRIP MARGIN	0.3	ESTIMATED SWAB	127.0
	EFFECTIVE MUD WEIGHT	9.2	BOTTOM HOLE PRESSURE	3608.5

HYDRAULICS AT DEPTH 2400.0 GPM 1 82 GPM 2 84 FLOW RATE 830

ANNULUS: VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE
DC/OH	0.274	42	72	LAMINAR	0	72	8.8
HWDP/OH	0.398	33	50	LAMINAR	0	49	2.0
DP/OH	0.398	546	50	LAMINAR	0	49	32.2
DP/CSG	0.427	306	46	LAMINAR	0	46	15.3
DP/RIS	1.325	101	15	LAMINAR	0	15	0.4
TOTAL VOLUME:	1028						TOTAL PRESSURE DROP: 58.6

LAG: 52.1 MINUTES 4269 STROKES #1 AND 4373 STROKES #2

BIT: PRESSURE DROP	1255.4	HHP	608	IMPACT FORCE	1570
% SURFACE PRESSURE	21.5	HHP/area	5.16	JET VELOCITY	117

PRESSURE SURFACE	70.7	STRING	1501.0	BIT	1255.4	ANNULUS	58.6
DROPS: TOTAL	2885.8	PUMP PRESSURE	5841.0			50.6 % DIFFERENCE	

NOT CIRCULATING:	MUD WEIGHT	9.5	HYDROSTATIC PRESSURE	3897.9
CIRCULATING:	ECD	9.7	CIRCULATING PRESSURE	3956.6
PULLING OUT:	TRIP MARGIN	0.3	ESTIMATED SWAB	117.3
	EFFECTIVE MUD WEIGHT	9.2	BOTTOM HOLE PRESSURE	3780.6

HYDRAULICS AT DEPTH 2500.0 SPM 1 76 SPM 2 78 FLOW RATE 769

ANNULUS: VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE
DC/OH	0.274	42	67	LAMINAR	0	66	10.2
HWDP/OH	0.398	33	46	LAMINAR	0	46	2.3
DP/OH	0.398	586	46	LAMINAR	0	46	41.5
DP/CSG	0.427	306	43	LAMINAR	0	43	18.5
DP/RIS	1.325	101	14	LAMINAR	0	14	0.5
TOTAL VOLUME:	1068						TOTAL PRESSURE DROP: 73.0

LAG: 58.3 MINUTES 4426 STROKES #1 AND 4550 STROKES #2

BIT: PRESSURE DROP	1491.6	HHP	669	IMPACT FORCE	1585
% SURFACE PRESSURE	50.8	HHP/area	5.60	JET VELOCITY	127

PRESSURE SURFACE	61.6	STRING	1342.4	BIT	1491.6	ANNULUS	73.0
DROPS: TOTAL	2968.6	PUMP PRESSURE	2939.0			1.0 % DIFFERENCE	

NOT CIRCULATING:	MUD WEIGHT	9.5	HYDROSTATIC PRESSURE	4051.8
CIRCULATING:	ECD	9.7	CIRCULATING PRESSURE	4124.8
PULLING OUT:	TRIP MARGIN	0.3	ESTIMATED SWAB	146.0
	EFFECTIVE MUD WEIGHT	9.2	BOTTOM HOLE PRESSURE	3905.8

HYDRAULICS AT DEPTH 2600.0 SPM 1 77 SPM 2 78 FLOW RATE 775

ANNULUS: VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE
DC/OH	0.274	42	67	LAMINAR	0	67	9.3
HWDP/OH	0.398	33	46	LAMINAR	0	46	2.1
DP/OH	0.398	626	46	LAMINAR	0	46	39.2
DP/CSG	0.427	306	43	LAMINAR	0	43	16.2
DP/RIS	1.325	101	14	LAMINAR	0	14	0.4
TOTAL VOLUME:	1108						TOTAL PRESSURE DROP: 67.2

LAG: 60.1 MINUTES 4626 STROKES #1 AND 4686 STROKES #2

BIT: PRESSURE DROP	1513.3	HHP	684	IMPACT FORCE	1608
% SURFACE PRESSURE	51.8	HHP/area	5.80	JET VELOCITY	128

PRESSURE SURFACE	63.6	STRING	1422.8	BIT	1513.3	ANNULUS	67.2
DROPS: TOTAL	3066.9	PUMP PRESSURE	2924.0			4.9 % DIFFERENCE	

NOT CIRCULATING:	MUD WEIGHT	9.5	HYDROSTATIC PRESSURE	4213.9
CIRCULATING:	ECD	9.7	CIRCULATING PRESSURE	4281.0
PULLING OUT:	TRIP MARGIN	0.3	ESTIMATED SWAB	134.3
	EFFECTIVE MUD WEIGHT	9.2	BOTTOM HOLE PRESSURE	4079.6

HYDRAULICS AT DEPTH 2700.0 SPM 1 78 SPM 2 78 FLOW RATE 780

ANNULUS:	VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE
DC/OH	0.274	42	68	149	LAMINAR	0	67	10.2
HWDP/OH	0.398	33	47	140	LAMINAR	0	46	2.3
DP/OH	0.398	666	47	140	LAMINAR	0	46	46.2
DP/CSG	0.427	306	43	139	LAMINAR	0	43	18.1
DP/RIS	1.325	101	14	127	LAMINAR	0	14	0.5
TOTAL VOLUME:		1148			TOTAL PRESSURE DROP:		77.2	

LAG: 61.8 MINUTES 4823 STROKES #1 AND 4823 STROKES #2

BIT: PRESSURE DROP	1532.9	HHP	697	IMPACT FORCE	1629
% SURFACE PRESSURE	52.5	HHP/area	5.92	JET VELOCITY	129

PRESSURE SURFACE	64.4	STRING	1476.5	BIT	1532.9	ANNULUS	77.2
DROPS: TOTAL	3150.9	PUMP PRESSURE	2919.0	7.9 % DIFFERENCE			

NOT CIRCULATING:	MUD WEIGHT	9.5	HYDROSTATIC PRESSURE	4376.0
CIRCULATING:	ECD	9.7	CIRCULATING PRESSURE	4453.1
PULLING OUT:	TRIP MARGIN	0.3	ESTIMATED SWAB	154.3
	EFFECTIVE MUD WEIGHT	9.2	BOTTOM HOLE PRESSURE	4221.6

HYDRAULICS AT DEPTH 2800.0 SPM 1 76 SPM 2 77 FLOW RATE 764

ANNULUS:	VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE
DC/OH	0.274	42	66	139	LAMINAR	0	66	8.9
HWDP/OH	0.398	33	46	130	LAMINAR	0	46	2.0
DP/OH	0.398	706	46	130	LAMINAR	0	46	42.7
DP/CSG	0.427	306	43	129	LAMINAR	0	42	15.7
DP/RIS	1.325	101	14	117	LAMINAR	0	14	0.4
TOTAL VOLUME:		1188			TOTAL PRESSURE DROP:		69.7	

LAG: 65.3 MINUTES 4954 STROKES #1 AND 5027 STROKES #2

BIT: PRESSURE DROP	1472.2	HHP	656	IMPACT FORCE	1564
% SURFACE PRESSURE	50.5	HHP/area	5.57	JET VELOCITY	127

PRESSURE SURFACE	60.9	STRING	1432.0	BIT	1472.2	ANNULUS	69.7
DROPS: TOTAL	3034.8	PUMP PRESSURE	2714.0	4.1 % DIFFERENCE			

NOT CIRCULATING:	MUD WEIGHT	9.5	HYDROSTATIC PRESSURE	4538.0
CIRCULATING:	ECD	9.6	CIRCULATING PRESSURE	4607.7
PULLING OUT:	TRIP MARGIN	0.3	ESTIMATED SWAB	139.4
	EFFECTIVE MUD WEIGHT	9.2	BOTTOM HOLE PRESSURE	4398.7

HYDRAULICS AT DEPTH 2900.0 SPM 1 76 SPM 2 77 FLOW RATE 764

ANNULUS: VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE
DC/OH	0.274	42	66	LAMINAR	0	66	7.3
HWDP/OH	0.398	33	46	LAMINAR	0	45	1.6
DP/OH	0.398	746	46	LAMINAR	0	45	36.4
DP/CSG	0.427	306	43	LAMINAR	0	42	12.7
DP/RIS	1.325	101	14	LAMINAR	0	14	0.3
TOTAL VOLUME:	1228						TOTAL PRESSURE DROP: 58.3

LAG: 67.5 MINUTES 5120 STROKES #1 AND 5195 STROKES #2

BIT: PRESSURE DROP 1472.2 HHP 656 IMPACT FORCE 1564
 % SURFACE PRESSURE 50.9 HHP/area 5.57 JET VELOCITY 127

PRESSURE SURFACE 59.6 STRING 1436.5 BIT 1472.2 ANNULUS 58.3
 DROPS: TOTAL 3026.7 PUMP PRESSURE 2894.0 4.6 % DIFFERENCE

NOT CIRCULATING: MUD WEIGHT 9.5 HYDROSTATIC PRESSURE 4700.1
 CIRCULATING: ECD 9.6 CIRCULATING PRESSURE 4758.4
 PULLING OUT: TRIP MARGIN 0.2 ESTIMATED SWAB 116.5
 EFFECTIVE MUD WEIGHT 9.3 BOTTOM HOLE PRESSURE 4583.6

HYDRAULICS AT DEPTH 3000.0 SPM 1 76 SPM 2 76 FLOW RATE 761

ANNULUS: VOL/UNIT	VOL	Vann	Vcrit	FLOW TYPE	Vslip	Vasc	PRESSURE
DC/OH	0.274	42	66	LAMINAR	0	66	8.9
HWDP/OH	0.398	33	45	LAMINAR	0	45	2.0
DP/OH	0.398	785	45	LAMINAR	0	45	47.4
DP/CSG	0.427	306	42	LAMINAR	0	42	15.7
DP/RIS	1.325	101	14	LAMINAR	0	14	0.4
TOTAL VOLUME:	1267						TOTAL PRESSURE DROP: 74.4

LAG: 69.9 MINUTES 5307 STROKES #1 AND 5344 STROKES #2

BIT: PRESSURE DROP 1460.9 HHP 649 IMPACT FORCE 1552
 % SURFACE PRESSURE 50.5 HHP/area 5.50 JET VELOCITY 126

PRESSURE SURFACE 60.5 STRING 1491.8 BIT 1460.9 ANNULUS 74.4
 DROPS: TOTAL 3087.6 PUMP PRESSURE 2893.0 6.7 % DIFFERENCE

NOT CIRCULATING: MUD WEIGHT 9.5 HYDROSTATIC PRESSURE 4862.2
 CIRCULATING: ECD 9.6 CIRCULATING PRESSURE 4936.6
 PULLING OUT: TRIP MARGIN 0.3 ESTIMATED SWAB 148.8
 EFFECTIVE MUD WEIGHT 9.2 BOTTOM HOLE PRESSURE 4713.4

HYDRAULICS AT DEPTH 3021.0 SPM 1 76 SPM 2 76 FLOW RATE 761

ANNULUS:	VOL/UNIT	VOL	V _{ann}	V _{crit}	FLOW TYPE	V _{slip}	V _{asc}	PRESSURE
DC/OH	0.274	42	66	139	LAMINAR	0	66	8.9
HWDP/OH	0.398	33	45	130	LAMINAR	0	45	2.0
DP/OH	0.398	794	45	130	LAMINAR	0	45	47.9
DP/CSG	0.427	306	42	129	LAMINAR	0	42	15.7
DP/RIS	1.325	101	14	117	LAMINAR	0	14	0.4
TOTAL VOLUME:		1276	TOTAL PRESSURE DROP:					74.9

LAG: 70.4 MINUTES 5342 STROKES #1 AND 5379 STROKES #2

BIT: PRESSURE DROP	1460.9	HHP	649	IMPACT FORCE	1552
% SURFACE PRESSURE	50.6	HHP/area	5.50	JET VELOCITY	126

PRESSURE SURFACE	60.5	STRING	1499.2	BIT	1460.9	ANNULUS	74.9
DROPS: TOTAL	3095.5	PUMP PRESSURE	2889.3	7.1 % DIFFERENCE			

NOT CIRCULATING:	MUD WEIGHT	9.5	HYDROSTATIC PRESSURE	4896.2
CIRCULATING:	ECD	9.6	CIRCULATING PRESSURE	4971.1
PULLING OUT:	TRIP MARGIN	0.3	ESTIMATED SWAB	149.8
	EFFECTIVE MUD WEIGHT	9.2	BOTTOM HOLE PRESSURE	4746.4

(c). COMPUTER DATA LISTING : LIST A

INTERVAL All depth records (data not averaged)

DEPTH. Well depth, in metres

ROP. Rate of penetration, in metres/hour

WOB. Weight-on-bit, in thousands of pounds

RPM. Rotary speed, in revolutions per minute

MW Mud weight in, in pounds per gallon

'dc' Calculated 'd' exponent, corrected for variations in mud weight in, using a correction factor of 10 ppg.

HOURS. Cumulative bit hours. The number of hours that the bit has actually been on bottom, recorded in decimal hours.

URNS. Cumulative bit turns. The number of turns made by the bit, while actually on bottom

ICOST. Incremental cost per metre, calculated from the rate of penetration, in Australian dollars.

CCOST. Cumulative cost per metre, calculated from the drilling time, in A dollars.

PP Pore pressure gradient, in equivalent pounds per gallon. The pressure exerted by the fluid in the pore spaces of the formation.

FG Fracture gradient, in equivalent pounds per gallon. The pressure required to fracture the formation, calculated by the DRILL program using Eaton's equation.

It is dependent on the pore pressure, the overburden gradient and the matrix stress. this value may be modified by leak-off information.

BIT NUMBER	2	IADC CODE	111	INTERVAL	211.0-	808.0
HTC R1		SIZE	17.500	NOZZLES	20	20 20
COST	4978.00	TRIP TIME	2.5	BIT RUN		597.0
TOTAL HOURS	15.47	TOTAL TURNS	111375	CONDITION	T2 R2 G0.000	

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	TURNS	TCOST	CCOST	PP	FG
213.0	189.5	12.7	120	9.0	0.57	0.01	76	19	7073	8.3	12.4
214.0	211.8	14.9	120	9.0	0.57	0.02	110	17	4721	8.3	12.4
215.0	189.5	12.4	120	9.0	0.57	0.02	148	19	3546	8.3	12.4
216.0	189.5	13.2	120	9.0	0.58	0.03	186	19	2840	8.3	12.4
217.0	124.1	13.0	120	9.0	0.68	0.03	244	29	2372	8.3	12.4
218.0	120.0	10.9	120	9.0	0.66	0.04	304	30	2037	8.3	12.4
219.0	69.2	9.4	120	9.0	0.76	0.06	408	53	1789	8.3	12.4
220.0	116.1	11.0	120	9.0	0.67	0.07	470	31	1594	8.3	12.4
222.0	136.0	8.4	120	9.0	0.60	0.08	576	27	1309	8.3	12.4
224.0	163.0	8.7	120	9.0	0.56	0.09	664	22	1111	8.3	12.4
226.0	133.0	10.4	120	9.0	0.63	0.11	772	27.46	966.66	8.3	12.4
228.0	189.0	12.9	120	9.0	0.58	0.12	849	19.32	855.20	8.3	12.4
230.0	120.5	10.5	120	9.0	0.65	0.13	968	30.31	768.37	8.3	12.4
232.0	78.3	7.5	120	9.0	0.70	0.16	1152	46.66	699.64	8.3	12.4
233.0	180.0	9.1	120	9.0	0.55	0.17	1192	20.29	668.76	8.3	12.4
235.0	218.2	11.5	120	9.0	0.53	0.17	1258	16.74	614.42	8.3	12.5
236.0	200.0	11.7	120	9.0	0.55	0.18	1294	18.26	590.58	8.3	12.5
237.0	189.5	12.9	120	9.0	0.58	0.19	1332	19.27	568.60	8.3	12.5
238.0	225.0	14.7	120	9.0	0.55	0.19	1364	16.23	548.15	8.3	12.5
240.0	75.8	9.9	120	9.0	0.75	0.22	1554	48.19	513.67	8.3	12.5
241.0	163.6	8.7	120	9.0	0.56	0.22	1598	22.32	497.29	8.3	12.5
243.0	175.6	11.0	120	9.0	0.57	0.23	1680	20.80	467.51	8.3	12.5
244.0	189.5	12.3	120	9.0	0.57	0.24	1718	19.27	453.92	8.3	12.5
245.0	163.6	11.5	120	9.0	0.60	0.24	1762	22.32	441.23	8.3	12.5
246.0	133.3	10.4	120	9.0	0.63	0.25	1816	27.39	429.41	8.3	12.5
247.0	211.8	9.8	120	9.0	0.52	0.26	1850	17.25	417.96	8.3	12.5
248.0	200.0	11.1	120	9.0	0.55	0.26	1886	18.26	407.15	8.3	12.5
249.0	200.0	11.5	120	9.0	0.55	0.27	1922	18.26	396.92	8.3	12.5
250.0	61.0	7.9	120	9.0	0.76	0.28	2040	59.85	388.28	8.3	12.5
251.0	100.0	7.7	120	9.0	0.65	0.29	2112	74.52	379.48	8.3	12.5
252.0	59.0	8.4	120	9.0	0.78	0.31	2234	61.88	371.74	8.3	12.5
253.0	180.0	11.1	120	9.0	0.57	0.32	2274	20.29	363.37	8.3	12.5
254.0	94.7	9.9	120	9.0	0.70	0.33	2350	38.55	355.82	8.3	12.5
255.0	83.7	8.7	120	9.0	0.71	0.34	2436	43.62	348.72	8.3	12.5
256.0	189.5	11.4	120	9.0	0.56	0.34	2474	19.27	341.40	8.3	12.5
257.0	94.7	10.2	120	9.0	0.70	0.35	2550	38.55	334.82	8.3	12.5
258.0	62.1	7.7	120	9.0	0.76	0.37	2666	58.84	328.74	8.3	12.5
261.0	120.0	8.2	120	9.0	0.62	0.40	2846	30.43	311.03	8.3	12.6
262.0	163.6	8.9	120	9.0	0.57	0.40	2890	22.32	305.37	8.3	12.6
264.0	133.3	10.7	120	9.0	0.63	0.42	2998	27.39	294.88	8.3	12.6
265.0	189.5	10.0	120	9.0	0.55	0.42	3036	19.27	289.78	8.3	12.6
266.0	67.9	9.7	120	9.0	0.77	0.44	3142	53.77	285.49	8.3	12.6
267.0	138.5	10.5	120	9.0	0.62	0.44	3194	26.38	280.86	8.3	12.6

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	TURNS	ICOST	CCOST	PP	FG
268.0	180.0	11.1	120	9.0	0.57	0.45	3234	20.29	276.29	8.3	12.6
269.0	35.6	6.9	120	9.0	0.85	0.48	3436	102.46	273.29	8.3	12.6
271.0	130.9	9.2	120	9.0	0.62	0.49	3546	27.90	265.11	8.3	12.6
273.0	135.0	13.7	120	9.0	0.66	0.51	3653	27.05	257.43	8.3	12.6
274.0	128.6	11.6	120	9.0	0.65	0.52	3709	28.40	253.80	8.3	12.6
276.0	150.0	12.3	120	9.0	0.62	0.53	3805	24.35	246.74	8.3	12.6
280.0	229.1	12.9	120	9.0	0.53	0.55	3931	15.94	233.36	8.3	12.6
281.0	150.0	15.4	120	9.0	0.66	0.55	3979	24.35	230.37	8.3	12.6
282.0	163.6	13.6	120	9.0	0.62	0.56	4023	22.32	227.44	8.3	12.6
283.0	124.1	13.2	120	9.0	0.68	0.57	4081	29.42	224.69	8.3	12.6
284.0	189.5	13.3	120	9.0	0.58	0.57	4119	19.27	221.88	8.3	12.6
285.0	171.4	13.9	120	9.0	0.61	0.58	4161	21.30	219.17	8.3	12.6
286.0	105.9	11.9	120	9.0	0.70	0.59	4229	34.49	216.70	8.3	12.7
287.0	22.5	6.3	120	9.0	0.93	0.63	4549	162.31	215.99	8.3	12.7
289.0	163.6	12.6	120	9.0	0.61	0.64	4637	22.32	211.02	8.3	12.7
291.0	202.5	11.9	120	9.0	0.55	0.65	4708	18.03	206.20	8.3	12.7
292.0	171.4	11.5	120	9.0	0.59	0.66	4750	21.30	203.92	8.3	12.7
293.0	72.0	10.5	120	9.0	0.77	0.67	4850	50.72	202.05	8.3	12.7
294.0	53.7	9.2	120	9.0	0.81	0.69	4984	67.97	200.43	8.3	12.7
295.0	200.0	17.2	120	9.0	0.60	0.70	5020	18.26	198.26	8.3	12.7
296.0	200.0	19.9	120	9.0	0.62	0.70	5056	18.26	196.15	8.3	12.7
298.0	83.4	12.8	120	9.0	0.77	0.73	5228	43.79	192.64	8.3	12.7
300.0	187.3	13.3	120	9.0	0.58	0.74	5305	19.50	188.75	8.3	12.7
302.0	270.0	21.8	120	9.0	0.55	0.74	5359	13.53	184.90	8.3	12.7
304.0	232.3	19.7	120	9.0	0.58	0.75	5421	15.72	181.26	8.3	12.7
305.0	83.7	18.2	120	9.0	0.83	0.76	5507	43.62	179.80	8.3	12.7
306.0	23.1	12.4	120	9.0	1.06	0.81	5819	158.25	179.57	8.3	12.7
310.0	100.6	12.2	120	9.0	0.72	0.85	6105	36.31	173.78	8.3	12.7
311.0	83.7	12.8	120	9.0	0.77	0.86	6191	43.62	172.48	8.3	12.7
312.0	54.5	8.8	120	9.0	0.80	0.88	6323	66.95	171.44	8.3	12.7
313.0	28.8	8.1	120	9.0	0.93	0.91	6573	126.81	171.00	8.3	12.8
314.0	67.9	8.6	120	9.0	0.75	0.93	6679	53.77	169.86	8.3	12.8
315.0	31.6	8.8	120	9.0	0.92	0.96	6907	115.65	169.34	8.3	12.8
316.0	10.6	5.2	120	9.0	1.05	1.05	7589	345.93	171.02	8.3	12.8
317.0	124.1	22.6	120	9.0	0.77	1.06	7647	29.42	169.69	8.3	12.8
318.0	87.8	21.0	120	9.0	0.84	1.07	7729	41.59	168.49	8.3	12.8
319.0	76.6	18.2	120	9.0	0.85	1.09	7823	47.68	167.37	8.3	12.8
320.0	102.9	18.1	120	9.0	0.77	1.10	7893	35.51	166.16	8.3	12.8
321.0	31.9	18.1	120	9.0	1.07	1.13	8119	114.63	165.69	8.3	12.8
322.0	138.5	20.8	120	9.0	0.72	1.13	8171	26.38	164.44	8.3	12.8
323.0	92.3	20.2	120	9.0	0.82	1.15	8249	39.56	163.32	8.3	12.8
324.0	62.1	20.4	120	9.0	0.93	1.16	8365	58.84	162.40	8.3	12.8
325.0	144.0	20.8	120	9.0	0.71	1.17	8415	25.36	161.19	8.3	12.8
326.0	24.2	17.9	120	9.0	1.14	1.21	8713	151.15	161.11	8.3	12.8
327.0	18.9	14.5	120	9.0	1.15	1.26	9093	192.74	161.30	8.3	12.8
329.0	60.0	19.5	120	9.0	0.93	1.30	9333	60.87	159.68	8.3	12.8
331.0	42.0	19.2	120	9.0	1.02	1.34	9676	66.95	158.46	8.3	12.8
333.0	75.6	18.9	120	9.0	0.86	1.37	9866	48.31	156.66	8.3	12.8
335.0	105.0	20.2	120	9.0	0.79	1.39	10003	34.78	154.69	8.3	12.8
337.0	95.3	20.1	120	9.0	0.81	1.41	10154	38.32	152.85	8.3	12.8

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	URNS	ICOST	CCOST	PP	FG
338.0	36.0	19.4	120	9.0	1.06	1.44	10354	101.44	152.44	8.3	12.8
339.0	109.1	21.7	120	9.0	0.79	1.45	10420	33.48	151.51	8.3	12.8
340.0	80.0	20.1	120	9.0	0.86	1.46	10510	45.65	150.69	8.3	12.9
341.0	75.0	18.9	120	9.0	0.86	1.47	10606	48.69	149.91	8.3	12.9
342.0	56.2	19.6	120	9.0	0.94	1.49	10734	64.92	149.26	8.3	12.9
343.0	105.9	19.3	120	9.0	0.78	1.50	10802	34.49	148.39	8.3	12.9
344.0	49.3	20.9	120	9.0	0.99	1.52	10948	74.05	147.83	8.3	12.9
345.0	55.4	16.8	120	9.0	0.92	1.54	11078	65.94	147.22	8.3	12.9
346.0	69.2	21.0	120	9.0	0.91	1.55	11182	52.75	146.52	8.3	12.9
347.0	73.5	21.7	120	9.0	0.90	1.57	11280	49.71	145.81	8.3	12.9
348.0	90.0	23.7	120	9.0	0.86	1.58	11360	40.58	145.04	8.3	12.9
349.0	64.3	22.3	120	9.0	0.94	1.59	11472	56.81	144.40	8.3	12.9
350.0	85.7	25.5	120	9.0	0.89	1.61	11556	42.61	143.67	8.3	12.9
351.0	67.9	21.2	120	9.0	0.71	1.62	11662	53.77	143.02	8.3	12.9
352.0	94.7	22.5	120	9.0	0.84	1.63	11738	38.55	142.28	8.3	12.9
353.0	67.9	23.2	120	9.0	0.93	1.65	11844	53.77	141.66	8.3	12.9
354.0	61.0	20.8	120	9.0	0.94	1.66	11962	59.85	141.09	8.3	12.9
355.0	73.5	22.4	120	9.0	0.90	1.68	12060	49.71	140.45	8.3	12.9
356.0	97.3	21.4	120	9.0	0.82	1.69	12134	37.53	139.74	8.3	12.9
357.0	64.3	22.7	120	9.0	0.94	1.70	12246	56.81	139.18	8.3	12.9
358.0	43.9	19.8	120	9.0	1.01	1.72	12410	83.18	138.79	8.3	12.9
359.0	59.0	18.7	120	9.0	0.92	1.74	12532	61.88	138.28	8.3	12.9
360.0	63.2	21.7	120	9.0	0.94	1.76	12646	57.82	137.74	8.3	12.9
361.0	50.0	24.9	120	9.0	1.03	1.78	12790	73.04	137.30	8.3	12.9
362.0	60.0	22.8	120	9.0	0.96	1.79	12910	60.87	136.80	8.3	12.9
363.0	50.0	22.0	120	9.0	1.00	1.81	13054	73.04	136.38	8.3	12.9
364.0	43.9	19.3	120	9.0	1.00	1.84	13218	83.18	136.03	8.3	12.9
365.0	73.5	23.7	120	9.0	0.92	1.85	13316	49.71	135.47	8.3	12.9
366.0	66.7	20.4	120	9.0	0.91	1.86	13424	54.78	134.95	8.3	12.9
367.0	70.6	22.1	120	9.0	0.91	1.88	13526	51.74	134.42	8.3	12.9
368.0	78.3	21.8	120	9.0	0.88	1.89	13618	46.66	133.86	8.3	13.0
369.0	72.0	20.5	120	9.0	0.89	1.91	13718	50.72	133.33	8.3	13.0
370.0	49.3	19.6	120	9.0	0.98	1.93	13864	74.05	132.96	8.3	13.0
371.0	92.3	22.4	120	9.0	0.84	1.94	13942	39.56	132.37	8.3	13.0
372.0	81.8	21.3	120	9.0	0.86	1.95	14030	44.64	131.83	8.3	13.0
373.0	38.7	22.7	120	9.0	1.08	1.97	14216	94.34	131.60	8.3	13.0
374.0	65.5	22.7	120	9.0	0.94	1.99	14326	55.79	131.13	8.3	13.0
375.0	28.6	22.8	120	9.0	1.16	2.02	14578	127.82	131.11	8.3	13.0
376.0	41.4	20.7	120	9.0	1.04	2.05	14752	88.26	130.85	8.3	13.0
377.0	29.8	23.0	120	9.0	1.15	2.08	14994	122.75	130.80	8.3	13.0
378.0	94.7	22.6	120	9.0	0.84	2.09	15070	38.55	130.25	8.3	13.0
379.0	63.2	23.7	120	9.0	0.96	2.11	15184	57.82	129.82	8.3	13.0
380.0	69.2	22.9	120	9.0	0.92	2.12	15288	52.75	129.36	8.3	13.0
381.0	47.4	22.3	120	9.0	1.02	2.14	15440	77.10	129.06	8.3	13.0
382.0	75.0	20.7	120	9.0	0.88	2.16	15536	48.69	128.59	8.3	13.0
383.0	53.7	19.8	120	9.0	0.96	2.18	15670	67.97	128.23	8.3	13.0
385.0	65.3	22.0	120	9.0	0.93	2.21	15891	55.93	127.40	8.3	13.0
387.0	47.6	20.6	120	9.0	1.00	2.25	16173	76.65	126.83	8.3	13.0
388.0	46.8	19.8	120	9.0	0.99	2.27	16347	78.11	126.55	8.3	13.0
389.0	116.1	21.2	120	9.0	0.77	2.28	16409	31.45	126.02	8.3	13.0

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	URNS	ICOST	CCOST	PP	FG
390.0	32.1	23.1	120	9.0	1.13	2.31	16633	113.62	125.95	8.3	13.0
391.0	97.3	21.0	120	9.0	0.82	2.32	16707	37.53	125.46	8.3	13.0
392.0	76.6	21.0	120	9.0	0.88	2.33	16801	47.58	125.03	8.3	13.0
393.0	28.1	20.9	120	9.0	1.14	2.37	17057	129.85	125.05	8.3	13.0
394.0	90.0	24.1	120	9.0	0.86	2.38	17137	40.58	124.57	8.3	13.0
395.0	26.7	11.3	120	9.0	1.01	2.42	17407	136.95	124.66	8.3	13.0
396.0	94.7	14.0	120	9.0	0.75	2.43	17483	38.55	124.17	8.3	13.1
397.0	67.9	21.4	120	9.0	0.91	2.44	17589	53.77	123.82	8.3	13.1
398.0	128.6	20.7	120	9.0	0.74	2.45	17645	28.40	123.31	8.3	13.1
399.0	59.0	22.3	120	9.0	0.96	2.47	17767	61.88	122.98	8.3	13.1
400.0	48.6	22.6	120	9.0	1.02	2.49	17915	75.07	122.72	8.3	13.1
401.0	94.7	25.1	120	9.0	0.86	2.50	17991	38.55	122.28	8.3	13.1
402.0	52.2	23.1	120	9.0	1.00	2.52	18129	70.00	122.01	8.3	13.1
403.0	76.6	21.9	120	9.0	0.89	2.53	18223	47.68	121.67	8.3	13.1
405.0	120.0	20.5	120	9.0	0.76	2.55	18343	30.43	120.68	8.3	13.1
406.0	56.2	20.9	120	9.0	0.76	2.57	18471	64.92	120.37	8.3	13.1
407.0	61.0	18.1	120	9.0	0.91	2.58	18589	59.85	120.09	8.3	13.1
408.0	46.2	23.3	120	9.0	1.04	2.60	18745	79.13	119.88	8.3	13.1
409.0	60.0	21.2	120	9.0	0.95	2.62	18865	60.87	119.58	8.3	13.1
410.0	38.7	22.1	120	9.0	1.07	2.65	19051	94.34	119.45	8.3	13.1
411.0	90.0	21.7	120	9.0	0.84	2.66	19131	40.58	119.06	8.3	13.1
412.0	45.6	22.4	120	9.0	1.03	2.68	19289	80.14	118.87	8.3	13.1
413.0	54.5	21.6	120	9.0	0.97	2.70	19421	66.95	118.61	8.3	13.1
414.0	28.1	19.7	120	9.0	1.12	2.73	19677	129.85	118.66	8.3	13.1
415.0	43.4	17.0	120	9.0	0.98	2.76	19843	84.20	118.49	8.3	13.1
416.0	80.0	21.6	120	9.0	0.87	2.77	19933	45.65	118.14	8.3	13.1
417.0	50.0	21.6	120	9.0	1.00	2.79	20077	73.04	117.92	8.3	13.1
418.0	33.0	21.9	120	9.0	1.11	2.82	20295	110.57	117.80	8.3	13.1
419.0	26.3	24.3	120	9.0	1.20	2.86	20569	138.98	117.99	8.3	13.1
420.0	112.5	20.6	120	9.0	0.77	2.87	20633	32.46	117.58	8.3	13.1
421.0	45.6	21.2	120	9.0	1.02	2.89	20791	80.14	117.40	8.3	13.1
422.0	60.0	20.1	120	9.0	0.93	2.90	20911	60.87	117.13	8.3	13.1
423.0	20.8	22.4	120	9.0	1.24	2.95	21257	175.50	117.41	8.3	13.1
424.0	50.0	19.8	120	9.0	0.98	2.97	21401	73.04	117.20	8.3	13.1
425.0	34.0	20.7	120	9.0	1.09	3.00	21613	107.53	117.15	8.3	13.2
426.0	94.7	21.4	120	9.0	0.83	3.01	21689	38.55	116.79	8.3	13.2
427.0	81.8	19.6	120	9.0	0.85	3.02	21777	44.64	116.45	8.3	13.2
428.0	27.5	19.3	120	9.0	1.13	3.06	22039	132.89	116.53	8.3	13.2
429.0	120.0	21.0	120	9.0	0.76	3.07	22099	30.43	116.13	8.3	13.2
430.0	42.4	20.5	120	9.0	1.03	3.09	22269	86.23	116.00	8.3	13.2
431.0	120.0	21.3	120	9.0	0.76	3.10	22329	30.43	115.61	8.3	13.2
432.0	18.1	20.2	120	9.0	1.25	3.16	22727	201.87	116.00	8.3	13.2
433.0	112.5	20.2	120	9.0	0.77	3.17	22791	32.46	115.62	8.3	13.2
434.0	34.0	19.9	120	9.0	1.08	3.19	23003	107.53	115.59	8.3	13.2
435.0	75.0	21.7	120	9.0	0.89	3.21	23099	48.69	115.29	8.3	13.2
436.0	67.9	20.3	120	9.0	0.90	3.22	23205	53.77	115.01	8.3	13.2
437.0	54.5	25.6	120	9.0	1.02	3.24	23337	66.95	114.80	8.3	13.2
438.0	23.2	24.5	120	9.0	1.24	3.28	23647	157.24	114.99	8.3	13.2
439.0	90.0	22.7	120	9.0	0.85	3.30	23727	40.58	114.66	8.3	13.2
440.0	40.0	22.8	120	9.0	1.07	3.32	23907	91.30	114.56	8.3	13.2

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	TURNS	TCOST	CCOST	PP	FG
441.0	37.5	21.6	120	9.0	1.07	3.35	24099	97.39	114.49	8.3	13.2
442.0	22.0	22.2	120	9.0	1.22	3.39	24427	164.37	114.71	8.3	13.2
443.0	72.0	19.3	120	9.0	0.88	3.41	24527	50.72	114.43	8.3	13.2
444.0	78.3	16.1	120	9.0	0.82	3.42	24619	46.66	114.14	8.3	13.2
445.0	25.9	21.0	120	9.0	1.16	3.46	24897	141.01	114.26	8.3	13.2
446.0	51.4	21.4	120	9.0	0.99	3.48	25037	71.01	114.07	8.3	13.2
447.0	37.5	19.6	120	9.0	1.05	3.50	25229	97.39	114.00	8.3	13.2
448.0	35.6	21.0	120	9.0	1.08	3.53	25431	102.46	113.95	8.3	13.2
449.0	34.6	22.5	120	9.0	1.11	3.56	25639	105.50	113.92	8.3	13.2
450.0	40.4	22.9	120	9.0	1.07	3.59	25817	90.29	113.82	8.3	13.2
451.0	39.6	23.3	120	9.0	1.08	3.61	25999	92.31	113.73	8.3	13.2
452.0	32.7	23.0	120	9.0	1.13	3.64	26219	111.59	113.72	8.3	13.2
453.0	41.9	22.3	120	9.0	1.05	3.67	26391	87.24	113.61	8.3	13.2
454.0	31.6	22.0	120	9.0	1.12	3.70	26619	115.65	113.62	8.3	13.2
455.0	36.4	21.8	120	9.0	1.08	3.72	26817	100.43	113.57	8.3	13.3
456.0	50.0	22.2	120	9.0	1.00	3.74	26961	73.04	113.40	8.3	13.3
457.0	29.3	23.6	120	9.0	1.16	3.78	27207	124.78	113.45	8.3	13.3
458.0	26.3	22.6	120	9.0	1.18	3.82	27481	138.98	113.55	8.3	13.3
459.0	40.4	23.2	120	9.0	1.07	3.84	27659	70.29	113.46	8.3	13.3
460.0	29.8	23.8	120	9.0	1.16	3.88	27901	122.75	113.49	8.3	13.3
461.0	24.0	24.0	120	9.0	1.22	3.92	28201	152.17	113.65	8.3	13.3
462.0	16.6	18.7	120	9.0	1.25	3.98	28635	220.13	114.07	8.3	13.3
463.0	48.0	23.4	120	9.3	1.00	4.00	28785	76.08	113.92	8.3	13.3
464.0	21.8	23.6	120	9.3	1.21	4.04	29115	167.38	114.13	8.3	13.3
465.0	56.2	24.6	120	9.3	0.97	4.06	29243	64.92	113.94	8.3	13.3
466.0	30.8	24.6	120	9.3	1.13	4.07	29477	118.69	113.76	8.3	13.3
467.0	36.7	24.4	120	9.2	1.08	4.12	29673	99.42	113.90	8.3	13.3
468.0	38.7	21.2	120	9.3	1.03	4.15	29859	74.34	113.83	8.3	13.3
469.0	17.3	22.9	120	9.3	1.26	4.20	30275	211.00	114.20	8.3	13.3
470.0	34.0	20.6	120	9.3	1.06	4.23	30487	107.53	114.18	8.3	13.3
472.0	48.6	12.3	120	9.3	0.86	4.28	30783	75.07	113.88	8.3	13.3
473.0	21.6	23.8	120	9.2	1.21	4.32	31117	169.41	114.07	8.3	13.3
474.0	23.1	23.1	120	9.3	1.19	4.37	31429	158.25	114.26	8.3	13.3
475.0	28.1	22.8	120	9.2	1.13	4.40	31685	129.85	114.32	8.3	13.3
476.0	35.0	22.8	120	9.3	1.08	4.43	31891	104.49	114.28	8.3	13.3
477.0	20.5	23.6	120	9.2	1.23	4.48	32243	178.54	114.52	8.3	13.3
478.0	31.6	23.7	120	9.3	1.11	4.51	32471	115.65	114.52	8.3	13.3
479.0	17.6	23.0	120	9.3	1.26	4.57	32879	206.95	114.87	8.3	13.3
480.0	23.8	23.4	120	9.3	1.18	4.61	33181	153.18	115.01	8.3	13.3
481.0	26.3	19.2	120	9.2	1.11	4.65	33455	138.98	115.10	8.3	13.3
482.0	47.4	25.8	120	9.3	1.03	4.67	33607	77.10	114.96	8.3	13.3
483.0	56.2	23.3	120	9.3	0.96	4.69	33735	64.92	114.78	8.3	13.3
484.0	51.4	22.8	120	9.3	0.98	4.70	33875	71.01	114.62	8.3	13.3
485.0	29.5	23.4	120	9.2	1.13	4.74	34119	123.76	114.65	8.3	13.4
486.0	28.3	23.0	120	9.3	1.13	4.77	34373	128.83	114.70	8.3	13.4
487.0	23.8	21.5	120	9.3	1.16	4.82	34675	153.18	114.84	8.3	13.4
488.0	36.7	23.8	120	9.2	1.07	4.84	34871	99.42	114.79	8.3	13.4
489.0	36.7	21.7	120	9.2	1.05	4.87	35067	99.42	114.73	8.3	13.4
490.0	28.8	23.0	120	9.2	1.13	4.91	35317	126.81	114.77	8.3	13.4
491.0	35.3	24.4	120	9.3	1.09	4.93	35521	103.47	114.73	8.3	13.4

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	URNS	ICOST	CCOST	PP	FG
492.0	36.0	24.4	120	9.3	1.09	4.96	35721	101.44	114.69	8.3	13.4
493.0	40.9	24.3	120	9.3	1.05	4.99	35897	89.27	114.60	8.3	13.4
494.0	32.1	23.3	120	9.3	1.10	5.02	36121	113.62	114.59	8.3	13.4
495.0	34.3	23.4	120	9.3	1.09	5.05	36331	106.52	114.56	8.3	13.4
496.0	46.2	22.3	120	9.3	1.00	5.07	36487	79.13	114.44	8.3	13.4
497.0	29.3	23.5	120	9.3	1.13	5.10	36733	124.78	114.40	8.3	13.4
498.0	34.3	24.7	120	9.3	1.10	5.13	36943	106.52	114.45	8.3	13.4
499.0	29.8	21.8	120	9.3	1.11	5.16	37185	122.75	114.48	8.3	13.4
500.0	24.0	19.1	120	9.3	1.13	5.21	37485	152.17	114.61	8.3	13.4
501.0	31.9	21.2	120	9.2	1.08	5.24	37711	114.63	114.61	8.3	13.4
502.0	30.0	22.4	120	9.3	1.11	5.27	37951	121.73	114.63	8.3	13.4
503.0	27.7	23.7	120	9.3	1.15	5.31	38211	131.88	114.69	8.3	13.4
504.0	32.7	22.8	120	9.2	1.09	5.34	38431	111.59	114.68	8.3	13.4
505.0	36.7	21.4	120	9.2	1.05	5.36	38627	99.42	114.63	8.3	13.4
506.0	30.0	24.8	120	9.3	1.14	5.40	38867	121.73	114.65	8.3	13.4
507.0	42.9	24.5	120	9.3	1.04	5.42	39035	85.21	114.55	8.3	13.4
508.0	30.0	23.5	120	9.3	1.12	5.45	39275	121.73	114.58	8.3	13.4
512.0	49.7	24.1	120	9.3	1.00	5.54	39855	73.55	114.03	8.3	13.4
513.0	32.4	23.3	120	9.3	1.10	5.57	40077	112.60	114.03	8.3	13.4
514.0	33.3	24.2	120	9.3	1.10	5.60	40293	109.56	114.01	8.3	13.4
515.0	30.5	22.8	120	9.3	1.11	5.63	40529	119.70	114.03	8.3	13.5
516.0	34.3	25.1	120	9.3	1.11	5.66	40739	106.52	114.01	8.3	13.5
517.0	30.5	24.5	120	9.3	1.13	5.69	40975	119.70	114.02	8.3	13.5
518.0	24.8	24.1	120	9.3	1.18	5.73	41265	147.09	114.13	8.3	13.5
519.0	34.3	23.4	120	9.3	1.09	5.76	41475	106.52	114.11	8.3	13.5
521.0	32.4	20.4	120	9.3	1.07	5.82	41919	112.60	114.10	8.3	13.5
522.0	31.0	24.0	120	9.2	1.12	5.85	42151	117.68	114.11	8.3	13.5
523.0	22.8	23.3	120	9.2	1.19	5.90	42467	160.28	114.26	8.3	13.5
524.0	43.4	22.8	120	9.2	1.02	5.92	42633	84.20	114.16	8.3	13.5
525.0	52.2	22.3	120	9.3	0.97	5.94	42771	70.00	114.02	8.3	13.5
526.0	23.2	22.8	120	9.2	1.18	5.98	43081	157.24	114.16	8.3	13.5
527.0	49.3	22.8	120	9.3	0.99	6.00	43227	74.05	114.03	8.3	13.5
528.0	29.5	23.3	120	9.2	1.13	6.04	43471	123.76	114.06	8.3	13.5
529.0	26.9	22.4	120	9.2	1.14	6.07	43739	135.94	114.13	8.3	13.5
530.0	40.4	20.5	120	9.2	1.01	6.10	43917	90.29	114.06	8.3	13.5
531.0	32.4	21.5	120	9.3	1.08	6.13	44139	112.60	114.05	8.3	13.5
532.0	35.3	21.9	120	9.3	1.06	6.16	44343	103.47	114.02	8.3	13.5
533.0	34.0	21.3	120	9.3	1.07	6.19	44555	107.53	114.00	8.3	13.5
534.0	45.6	21.6	120	9.3	0.99	6.21	44713	80.14	113.89	8.3	13.5
535.0	18.2	22.8	120	9.3	1.25	6.27	45109	200.86	114.16	8.3	13.5
536.0	42.9	21.5	120	9.3	1.01	6.29	45277	85.21	114.07	8.3	13.5
537.0	33.0	22.8	120	9.3	1.09	6.32	45495	110.57	114.06	8.3	13.5
538.0	35.0	20.7	120	9.3	1.05	6.35	45701	104.49	114.07	8.3	13.5
540.0	27.7	15.9	120	9.3	1.05	6.42	46221	131.88	114.14	8.3	13.5
541.0	34.0	23.9	120	9.3	1.10	6.45	46433	107.53	114.12	8.3	13.5
542.0	40.9	22.3	120	9.3	1.03	6.47	46609	89.27	114.05	8.3	13.5
543.0	36.7	23.5	120	9.2	1.07	6.50	46805	99.42	114.00	8.3	13.5
544.0	50.7	22.8	120	9.2	0.98	6.52	46947	72.03	113.88	8.3	13.5
545.0	28.3	23.1	120	9.3	1.13	6.56	47201	128.83	113.92	8.3	13.5
546.0	42.4	24.9	120	9.3	1.05	6.58	47371	86.23	113.84	8.3	13.4

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	URNS	ICOST	CCOST	PP	FG
547.0	29.5	22.4	120	9.2	1.12	6.61	47615	123.76	113.87	8.3	13.6
548.0	24.3	23.6	120	9.3	1.18	6.65	47911	150.14	113.98	8.3	13.6
549.0	31.6	20.9	120	9.3	1.08	6.69	48139	115.65	113.98	8.3	13.6
550.0	20.0	19.7	120	9.3	1.18	6.74	48499	182.60	114.18	8.3	13.6
551.0	40.0	24.4	120	9.3	1.06	6.76	48679	91.30	114.12	8.3	13.6
552.0	38.3	22.5	120	9.3	1.05	6.79	48867	95.36	114.06	8.3	13.6
553.0	35.3	22.6	120	9.3	1.07	6.82	49071	103.47	114.03	8.3	13.6
554.0	32.1	23.5	120	9.3	1.11	6.85	49295	113.62	114.03	8.3	13.6
555.0	33.3	24.2	120	9.3	1.10	6.88	49511	109.56	114.02	8.3	13.6
556.0	32.7	23.4	120	9.2	1.10	6.91	49731	111.59	114.01	8.3	13.6
557.0	37.5	23.6	120	9.3	1.07	6.93	49923	97.39	113.96	8.3	13.6
558.0	39.1	23.2	120	9.2	1.05	6.96	50107	93.33	113.90	8.3	13.6
559.0	26.7	23.9	120	9.3	1.16	7.00	50377	136.95	113.97	8.3	13.6
560.0	30.5	22.2	120	9.3	1.11	7.03	50613	117.70	113.98	8.3	13.6
561.0	29.5	24.7	120	9.2	1.14	7.06	50857	123.76	114.01	8.3	13.6
562.0	27.9	22.9	120	9.3	1.14	7.10	51115	130.86	114.06	8.3	13.6
563.0	40.9	24.6	120	9.3	1.06	7.12	51291	89.27	113.99	8.3	13.6
564.0	41.4	24.0	120	9.3	1.05	7.15	51465	88.26	113.92	8.3	13.6
565.0	33.6	23.7	120	9.2	1.10	7.18	51679	108.55	113.90	8.3	13.6
566.0	23.4	24.7	120	9.3	1.20	7.22	51987	156.22	114.02	8.3	13.6
567.0	22.4	25.6	120	9.2	1.23	7.27	52309	163.33	114.16	8.3	13.6
568.0	24.3	23.4	120	9.3	1.18	7.31	52605	150.14	114.26	8.3	13.6
569.0	29.4	27.3	120	9.3	1.17	7.34	52850	124.27	114.29	8.3	13.6
570.0	31.9	23.8	120	9.2	1.11	7.37	53076	114.63	114.29	8.3	13.6
571.0	29.0	23.6	120	9.3	1.13	7.41	53324	125.79	114.32	8.3	13.6
572.0	39.1	24.1	120	9.2	1.06	7.43	53508	93.33	114.26	8.3	13.6
573.0	26.9	22.2	120	9.2	1.14	7.47	53776	135.94	114.32	8.3	13.6
574.0	29.8	24.0	120	9.3	1.13	7.50	54018	122.75	114.34	8.3	13.6
575.0	31.3	24.2	120	9.3	1.12	7.53	54248	116.66	114.35	8.3	13.6
576.0	37.9	23.4	120	9.2	1.06	7.56	54438	96.37	114.30	8.3	13.6
577.0	20.9	23.5	120	9.3	1.22	7.61	54782	174.48	114.47	8.3	13.6
579.0	34.1	20.3	120	9.2	1.05	7.67	55205	107.24	114.43	8.3	13.7
580.0	25.4	23.2	120	9.3	1.16	7.71	55489	144.85	114.51	8.3	13.7
581.0	26.7	22.7	120	9.3	1.15	7.74	55759	136.95	114.57	8.3	13.7
582.0	34.6	23.6	120	9.2	1.09	7.77	55967	105.50	114.54	8.3	13.7
583.0	28.1	23.6	120	9.2	1.14	7.81	56223	129.85	114.58	8.3	13.7
584.0	31.3	23.4	120	9.3	1.11	7.84	56453	116.66	114.59	8.3	13.7
585.0	32.1	23.1	120	9.3	1.10	7.87	56677	113.62	114.59	8.3	13.7
586.0	31.0	23.5	120	9.2	1.11	7.90	56909	117.68	114.60	8.3	13.7
587.0	37.1	23.0	120	9.3	1.06	7.93	57103	98.40	114.55	8.3	13.7
588.0	20.2	20.9	120	9.3	1.19	7.98	57459	180.57	114.73	8.3	13.7
589.0	24.7	22.4	120	9.2	1.16	8.02	57751	148.11	114.82	8.3	13.7
590.0	37.5	24.0	120	9.3	1.07	8.05	57943	97.39	114.77	8.3	13.7
591.0	39.1	23.6	120	9.2	1.06	8.07	58127	93.33	114.71	8.3	13.7
592.0	32.7	23.5	120	9.2	1.10	8.10	58347	111.59	114.71	8.3	13.7
593.0	33.6	23.1	120	9.2	1.07	8.13	58561	108.55	114.69	8.3	13.7
594.0	28.3	21.0	120	9.3	1.11	8.17	58815	128.83	114.73	8.3	13.7
595.0	35.6	22.1	120	9.2	1.06	8.20	59017	102.46	114.69	8.3	13.7
596.0	31.0	23.8	120	9.2	1.12	8.23	59249	117.68	114.70	8.3	13.7
597.0	31.9	22.9	120	9.2	1.10	8.26	59475	114.63	114.70	8.3	13.7

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	URNS	ICOST	CCOST	PP	FG
598.0	34.3	25.2	120	9.3	1.11	8.29	59685	106.52	114.68	8.3	13.7
599.0	24.2	24.4	120	9.2	1.19	8.33	59983	151.15	114.78	8.3	13.7
600.0	29.8	24.4	120	9.3	1.14	8.36	60225	122.75	114.80	8.3	13.7
601.0	33.6	23.4	120	9.2	1.09	8.39	60439	108.55	114.78	8.3	13.7
602.0	25.9	21.2	120	9.3	1.13	8.43	60717	141.01	114.85	8.3	13.7
603.0	18.4	24.3	120	9.3	1.26	8.49	61109	198.83	115.06	8.3	13.7
604.0	41.4	22.9	120	9.3	1.03	8.51	61283	88.26	114.99	8.3	13.7
605.0	30.8	23.9	120	9.3	1.12	8.54	61517	118.69	115.00	8.3	13.7
606.0	31.0	24.9	120	9.2	1.13	8.58	61749	117.68	115.01	8.3	13.7
608.0	28.0	25.4	120	9.3	1.16	8.65	62263	130.43	115.09	8.3	13.7
609.0	26.5	23.6	120	9.3	1.16	8.69	62535	137.96	115.14	8.3	13.7
610.0	27.1	24.6	120	9.3	1.16	8.72	62801	134.92	115.19	8.3	13.7
611.0	29.8	25.1	120	9.3	1.15	8.76	63043	122.75	115.21	8.3	13.8
612.0	33.0	24.7	120	9.3	1.11	8.79	63261	110.57	115.20	8.3	13.8
613.0	32.7	24.3	120	9.2	1.11	8.82	63481	111.59	115.19	8.3	13.8
614.0	30.5	24.1	120	9.3	1.13	8.85	63717	119.70	115.20	8.3	13.8
615.0	20.3	24.8	120	9.3	1.24	8.90	64071	179.56	115.36	8.3	13.8
616.0	26.5	25.2	120	9.3	1.18	8.94	64343	137.96	115.42	8.3	13.8
617.0	29.3	21.9	120	9.3	1.11	8.97	64589	124.78	115.44	8.3	13.8
618.0	34.0	24.6	120	9.3	1.10	9.00	64801	107.53	115.42	8.3	13.8
619.0	29.8	21.2	120	9.3	1.10	9.03	65043	122.75	115.44	8.3	13.8
620.0	33.0	25.1	120	9.3	1.12	9.06	65261	110.57	115.43	8.3	13.8
621.0	29.3	23.6	120	9.2	1.14	9.10	65507	124.78	115.45	8.3	13.8
622.0	30.5	23.8	120	9.2	1.13	9.13	65743	119.70	115.46	8.3	13.8
623.0	36.7	24.8	120	9.2	1.09	9.16	65939	99.42	115.42	8.3	13.8
624.0	34.0	24.4	120	9.2	1.11	9.19	66151	107.53	115.40	8.3	13.8
625.0	22.5	25.4	120	9.2	1.23	9.23	66471	162.31	115.52	8.3	13.8
626.0	33.0	23.7	120	9.2	1.11	9.26	66689	110.57	115.50	8.3	13.8
627.0	34.8	23.0	120	9.2	1.09	9.29	66896	104.83	115.48	8.3	13.8
628.0	32.7	20.9	120	9.2	1.08	9.32	67116	111.59	115.47	8.3	13.8
629.0	40.4	27.0	120	9.2	1.09	9.35	67294	90.29	115.41	8.3	13.8
630.0	31.3	24.8	120	9.2	1.13	9.38	67524	116.66	115.41	8.3	13.8
631.0	34.0	23.9	120	9.2	1.10	9.41	67736	107.53	115.39	8.3	13.8
632.0	26.5	22.3	120	9.2	1.15	9.45	68008	137.96	115.45	8.3	13.8
633.0	29.8	20.9	120	9.2	1.10	9.48	68250	122.75	115.46	8.3	13.8
634.0	23.8	20.2	120	9.2	1.15	9.52	68552	153.18	115.55	8.3	13.8
635.0	17.1	20.9	120	9.2	1.24	9.58	68972	213.03	115.78	8.3	13.8
637.0	24.2	26.9	120	9.2	1.23	9.66	69567	150.90	115.95	8.3	13.8
638.0	24.0	25.9	120	9.2	1.22	9.70	69867	152.17	116.03	8.3	13.8
639.0	27.5	25.3	120	9.2	1.17	9.74	70129	132.89	116.07	8.3	13.8
640.0	27.9	24.2	120	9.2	1.16	9.78	70387	130.86	116.11	8.3	13.8
641.0	29.3	24.5	120	9.2	1.15	9.81	70633	124.78	116.13	8.3	13.8
642.0	28.8	22.7	120	9.2	1.13	9.84	70883	126.81	116.15	8.3	13.8
643.0	30.3	26.3	120	9.2	1.16	9.88	71121	120.72	116.16	8.3	13.8
644.0	27.3	25.1	120	9.2	1.17	9.91	71385	133.91	116.20	8.3	13.9
645.0	27.3	26.0	120	9.2	1.18	9.95	71649	133.91	116.24	8.3	13.9
646.0	26.9	24.7	120	9.2	1.17	9.99	71917	135.94	116.29	8.3	13.9
647.0	27.1	26.3	120	9.2	1.19	10.03	72183	134.92	116.33	8.3	13.9
648.0	21.2	26.3	120	9.2	1.26	10.07	72523	172.46	116.46	8.3	13.9
649.0	25.2	25.7	120	9.2	1.20	10.11	72809	145.07	116.53	8.3	13.9

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	URNS	ICOST	CCOST	PP	FG
650.0	15.7	25.2	120	9.2	1.32	10.18	73267	232.31	116.79	8.3	13.9
651.0	23.8	25.5	120	9.2	1.21	10.22	73569	153.18	116.87	8.3	13.9
652.0	24.0	26.0	120	9.2	1.22	10.26	73869	152.17	116.95	8.3	13.9
653.0	23.8	28.2	120	9.2	1.25	10.30	74171	153.18	117.03	8.3	13.9
654.0	29.5	27.3	120	9.2	1.18	10.34	74415	123.76	117.05	8.3	13.9
655.0	28.8	27.4	120	9.2	1.18	10.37	74665	126.81	117.07	8.3	13.9
656.0	29.0	25.5	120	9.2	1.16	10.40	74913	125.79	117.09	8.3	13.9
657.0	34.3	27.6	120	9.2	1.14	10.43	75123	106.52	117.07	8.3	13.9
658.0	32.7	26.9	120	9.2	1.14	10.46	75343	111.59	117.06	8.3	13.9
659.0	31.6	27.7	120	9.2	1.16	10.50	75571	115.65	117.05	8.3	13.9
660.0	32.1	27.7	120	9.2	1.16	10.53	75795	113.62	117.04	8.3	13.9
661.0	30.0	27.0	120	9.2	1.17	10.56	76035	121.73	117.05	8.3	13.9
662.0	29.5	26.0	120	9.2	1.16	10.59	76279	123.76	117.07	8.3	13.9
663.0	32.7	27.2	120	9.2	1.15	10.62	76499	111.59	117.06	8.3	13.9
664.0	25.5	28.3	120	9.2	1.23	10.66	76781	143.04	117.11	8.3	13.9
665.0	23.2	28.0	120	9.2	1.25	10.71	77091	157.24	117.20	8.3	13.9
666.0	27.3	31.3	120	9.2	1.24	10.74	77355	133.91	117.24	8.3	13.9
667.0	31.0	29.0	120	9.2	1.18	10.78	77587	117.68	117.24	8.3	13.9
668.0	26.5	28.0	120	9.2	1.22	10.81	77859	137.96	117.29	8.3	13.9
669.0	28.5	30.0	120	9.2	1.22	10.85	78112	128.14	117.31	8.3	13.9
670.0	25.3	27.0	120	9.2	1.22	10.89	78396	144.35	117.37	8.3	13.9
671.0	29.2	30.2	120	9.2	1.21	10.92	78643	125.07	117.39	8.3	13.9
672.0	26.3	29.6	120	9.2	1.23	10.96	78917	138.86	117.43	8.3	13.9
673.0	27.5	29.8	120	9.2	1.22	11.00	79178	132.80	117.47	8.3	13.9
674.0	25.6	30.4	120	9.2	1.25	11.04	79468	142.66	117.52	8.3	13.9
675.0	28.0	31.1	120	9.2	1.23	11.07	79717	130.43	117.55	8.3	13.9
676.0	23.7	29.5	120	9.2	1.26	11.11	80021	154.20	117.63	8.3	13.9
677.0	37.1	29.7	120	9.2	1.14	11.14	80215	98.40	117.59	8.3	13.9
678.0	22.4	28.3	120	9.2	1.27	11.19	80537	163.33	117.68	8.3	14.0
679.0	31.6	28.6	120	9.2	1.17	11.22	80765	115.65	117.68	8.3	14.0
680.0	31.3	29.4	120	9.2	1.18	11.25	80995	116.66	117.68	8.3	14.0
681.0	27.7	30.2	120	9.2	1.23	11.29	81255	131.88	117.71	8.3	14.0
682.0	31.3	30.8	120	9.2	1.20	11.32	81485	116.66	117.70	8.3	14.0
683.0	29.5	30.4	120	9.2	1.21	11.35	81729	123.76	117.72	8.3	14.0
685.0	30.3	29.3	120	9.2	1.13	11.40	82105	95.36	117.62	8.3	14.0
686.0	32.7	31.3	120	9.2	1.19	11.43	82325	111.59	117.61	8.3	14.0
687.0	35.3	29.6	120	9.2	1.15	11.46	82529	103.47	117.58	8.3	14.0
688.0	35.3	30.1	120	9.2	1.16	11.49	82733	103.47	117.55	8.3	14.0
689.0	39.6	30.2	120	9.2	1.13	11.52	82915	92.31	117.50	8.3	14.0
690.0	43.9	30.3	120	9.2	1.10	11.54	83079	83.18	117.43	8.3	14.0
691.0	20.3	30.5	120	9.2	1.32	11.59	83433	179.56	117.56	8.3	14.0
692.0	26.1	30.8	120	9.2	1.25	11.63	83709	139.99	117.60	8.3	14.0
693.0	36.7	30.4	120	9.2	1.15	11.65	83905	99.42	117.57	8.3	14.0
694.0	35.0	30.4	120	9.2	1.16	11.68	84111	104.49	117.54	8.3	14.0
695.0	31.3	33.9	120	9.2	1.23	11.71	84341	116.66	117.54	8.3	14.0
696.0	30.5	30.8	120	9.2	1.21	11.75	84577	119.70	117.54	8.3	14.0
697.0	31.9	30.7	120	9.2	1.19	11.78	84803	114.63	117.53	8.3	14.0
698.0	26.3	31.0	120	9.2	1.25	11.82	85077	138.98	117.58	8.3	14.0
699.0	30.8	30.6	120	9.2	1.20	11.85	85311	118.69	117.58	8.3	14.0
700.0	31.0	30.5	120	9.2	1.20	11.88	85543	117.68	117.58	8.3	14.0

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	URNS	ICOST	CCOST	PP	FG
701.0	22.1	31.3	120	9.2	1.30	11.93	85869	165.35	117.68	8.3	14.0
702.0	25.9	30.5	120	9.2	1.25	11.96	86147	141.01	117.73	8.3	14.0
703.0	28.3	31.5	120	9.2	1.23	12.00	86401	128.83	117.75	8.3	14.0
705.0	17.1	23.7	120	9.2	1.28	12.12	87241	213.03	118.13	8.3	14.0
706.0	27.9	31.7	120	9.2	1.24	12.15	87499	130.86	118.16	8.3	14.0
707.0	42.4	30.3	120	9.2	1.11	12.18	87669	86.23	118.10	8.3	14.0
708.0	26.9	30.8	120	9.2	1.24	12.21	87937	135.94	118.13	8.3	14.0
709.0	36.7	30.6	120	9.2	1.15	12.24	88133	99.42	118.09	8.3	14.0
710.0	34.3	30.7	120	9.2	1.17	12.27	88343	106.52	118.07	8.3	14.0
711.0	35.6	31.4	120	9.2	1.17	12.30	88545	102.46	118.04	8.3	14.0
712.0	35.3	30.8	120	9.2	1.16	12.33	88749	103.47	118.01	8.3	14.0
713.0	37.1	32.0	120	9.2	1.16	12.35	88943	98.40	117.97	8.3	14.1
714.0	29.8	31.2	120	9.2	1.22	12.39	89185	122.75	117.98	8.3	14.1
715.0	24.0	29.3	120	9.2	1.26	12.43	89485	152.17	118.05	8.3	14.1
716.0	31.6	30.6	120	9.2	1.19	12.46	89713	115.65	118.04	8.3	14.1
717.0	32.1	30.6	120	9.2	1.19	12.49	89937	113.62	118.04	8.3	14.1
718.0	35.3	31.3	120	9.2	1.17	12.52	90141	103.47	118.01	8.3	14.1
719.0	31.3	29.6	120	9.2	1.19	12.55	90371	116.66	118.00	8.3	14.1
720.0	24.5	30.5	120	9.2	1.26	12.59	90665	149.12	118.07	8.3	14.1
721.0	26.3	31.2	120	9.2	1.25	12.63	90939	138.98	118.11	8.3	14.1
722.0	27.3	30.5	120	9.2	1.23	12.67	91203	133.91	118.14	8.3	14.1
723.0	31.6	33.2	120	9.2	1.22	12.70	91431	115.65	118.13	8.3	14.1
724.0	29.8	30.7	120	9.2	1.21	12.73	91673	122.75	118.14	8.3	14.1
725.0	29.5	28.2	120	9.2	1.19	12.77	91917	123.76	118.15	8.3	14.1
726.0	33.3	28.5	120	9.2	1.16	12.80	92133	109.56	118.14	8.3	14.1
727.0	29.8	27.8	120	9.2	1.18	12.83	92375	122.75	118.14	8.3	14.1
728.0	30.3	27.2	120	9.2	1.17	12.86	92613	120.72	118.15	8.3	14.1
729.0	26.5	26.9	120	9.2	1.20	12.90	92885	137.96	118.19	8.3	14.1
730.0	27.1	28.2	120	9.2	1.21	12.94	93151	134.92	118.22	8.3	14.1
731.0	30.8	29.2	120	9.2	1.19	12.97	93385	118.69	118.22	8.3	14.1
732.0	30.0	29.4	120	9.2	1.19	13.00	93625	121.73	118.23	8.3	14.1
733.0	31.9	28.6	120	9.2	1.17	13.03	93851	114.63	118.22	8.3	14.1
734.0	29.5	25.2	120	9.2	1.15	13.07	94095	123.76	118.23	8.3	14.1
735.0	30.5	29.1	120	9.2	1.19	13.10	94331	119.70	118.23	8.3	14.1
736.0	25.9	29.5	120	9.2	1.24	13.14	94609	141.01	118.28	8.3	14.1
737.0	25.9	28.9	120	9.2	1.23	13.18	94887	141.01	118.32	8.3	14.1
738.0	32.4	30.7	120	9.2	1.19	13.21	95109	112.60	118.31	8.3	14.1
739.0	37.9	29.7	120	9.2	1.13	13.24	95299	96.37	118.27	8.3	14.1
740.0	35.3	28.8	120	9.2	1.14	13.26	95503	103.47	118.24	8.3	14.1
741.0	43.4	30.1	120	9.2	1.10	13.29	95669	84.20	118.18	8.3	14.1
742.0	37.5	30.0	120	9.2	1.14	13.31	95861	97.39	118.14	8.3	14.1
743.0	33.3	29.6	120	9.2	1.17	13.34	96077	109.56	118.12	8.3	14.1
744.0	35.6	27.3	120	9.2	1.13	13.37	96279	102.46	118.09	8.3	14.1
745.0	38.3	29.1	120	9.2	1.12	13.40	96467	95.36	118.05	8.3	14.1
746.0	34.6	28.7	120	9.2	1.15	13.43	96675	105.50	118.03	8.3	14.1
747.0	29.8	28.5	120	9.2	1.19	13.46	96917	122.75	118.03	8.3	14.1
748.0	28.1	27.6	120	9.2	1.19	13.50	97173	129.85	118.06	8.3	14.2
749.0	28.1	29.1	120	9.2	1.21	13.53	97429	129.85	118.08	8.3	14.2
750.0	25.0	28.1	120	9.2	1.23	13.57	97717	146.08	118.13	8.3	14.2
751.0	31.9	29.2	120	9.2	1.18	13.60	97943	114.63	118.12	8.3	14.2

DEPTH	ROP	WOR	RPM	MW	"d"c	HOURS	TURNS	FCOST	CCOST	PP	FG
752.0	27.8	25.6	120	9.2	1.16	13.64	98185	122.75	118.13	8.3	14.2
753.0	23.8	26.3	120	9.2	1.22	13.68	98487	153.18	118.20	8.3	14.2
754.0	23.5	30.3	120	9.2	1.27	13.72	98793	155.21	118.26	8.3	14.2
755.0	25.9	30.3	120	9.2	1.25	13.76	99071	141.01	118.31	8.3	14.2
756.0	27.3	29.8	120	9.2	1.23	13.80	99335	133.71	118.34	8.3	14.2
757.0	33.3	28.5	120	9.2	1.16	13.83	99551	109.56	118.32	8.3	14.2
758.0	28.6	28.6	120	9.2	1.20	13.86	99803	127.82	118.34	8.3	14.2
759.0	34.3	30.1	120	9.2	1.16	13.89	100013	106.52	118.32	8.3	14.2
760.0	33.6	30.3	120	9.2	1.17	13.92	100227	108.55	118.30	8.3	14.2
761.0	40.0	29.5	120	9.2	1.12	13.95	100407	91.30	118.25	8.3	14.2
762.0	31.3	29.1	120	9.2	1.13	13.98	100637	116.66	118.25	8.3	14.2
763.0	37.5	28.8	120	9.2	1.13	14.00	100829	97.39	118.21	8.3	14.2
764.0	25.0	26.4	120	9.2	1.21	14.04	101117	146.08	118.26	8.3	14.2
765.0	29.0	27.0	120	9.2	1.18	14.08	101365	125.79	118.27	8.3	14.2
766.0	30.8	27.9	120	9.2	1.17	14.11	101599	118.69	118.27	8.3	14.2
767.0	25.5	30.5	120	9.2	1.25	14.15	101881	143.04	118.32	8.3	14.2
768.0	23.1	28.9	120	9.2	1.26	14.19	102193	158.25	118.39	8.3	14.2
769.0	27.1	27.8	120	9.2	1.21	14.23	102459	134.92	118.42	8.3	14.2
770.0	30.0	28.6	120	9.2	1.19	14.26	102699	121.73	118.42	8.3	14.2
771.0	32.7	29.7	120	9.2	1.17	14.29	102919	111.59	118.41	8.3	14.2
772.0	34.0	30.1	120	9.2	1.17	14.32	103131	107.53	118.39	8.3	14.2
773.0	30.5	28.3	120	9.2	1.18	14.36	103367	119.70	118.39	8.3	14.2
775.0	36.5	27.9	120	9.2	1.13	14.41	103761	100.00	118.33	8.3	14.2
776.0	38.7	30.0	120	9.2	1.13	14.44	103947	94.34	118.29	8.3	14.2
777.0	30.0	30.1	120	9.2	1.20	14.47	104187	121.73	118.29	8.3	14.2
778.0	25.2	28.1	120	9.2	1.23	14.51	104473	145.07	118.34	8.3	14.2
779.0	40.4	31.4	120	9.2	1.13	14.53	104651	90.29	118.29	8.3	14.2
780.0	25.4	30.4	120	9.2	1.25	14.57	104935	144.05	118.34	8.3	14.2
781.0	27.5	30.1	120	9.2	1.23	14.61	105197	132.89	118.36	8.3	14.2
782.0	28.8	30.6	120	9.2	1.22	14.65	105447	126.81	118.38	8.3	14.2
783.0	25.9	28.4	120	9.2	1.23	14.68	105725	141.01	118.42	8.3	14.2
784.0	30.3	29.0	120	9.2	1.19	14.72	105963	120.72	118.42	8.3	14.2
785.0	34.3	27.9	120	9.2	1.14	14.75	106173	106.52	118.40	8.3	14.3
786.0	27.7	30.2	120	9.2	1.23	14.78	106433	131.88	118.42	8.3	14.3
787.0	27.7	28.6	120	9.2	1.21	14.82	106693	131.30	118.45	8.3	14.3
788.0	25.9	25.9	120	9.2	1.20	14.86	106971	141.01	118.49	8.3	14.3
789.0	29.0	31.0	120	9.2	1.22	14.89	107219	125.79	118.50	8.3	14.3
790.0	26.7	27.7	120	9.2	1.21	14.93	107489	136.95	118.53	8.3	14.3
791.0	27.7	28.2	120	9.2	1.20	14.97	107749	131.88	118.55	8.3	14.3
792.0	38.3	29.7	120	9.2	1.12	14.99	107937	95.36	118.51	8.3	14.3
793.0	41.4	29.0	120	9.2	1.10	15.02	108111	86.26	118.46	8.3	14.3
794.0	32.4	29.0	120	9.2	1.17	15.05	108333	112.60	118.45	8.3	14.3
795.0	35.6	30.6	120	9.2	1.16	15.07	108535	102.46	118.42	8.3	14.3
796.0	38.3	30.0	120	9.2	1.13	15.10	108723	95.36	118.38	8.3	14.3
797.0	36.4	31.1	120	9.2	1.16	15.13	108921	100.43	118.35	8.3	14.3
798.0	37.5	30.6	120	9.2	1.14	15.15	109113	97.39	118.32	8.3	14.3
799.0	27.9	30.8	120	9.2	1.23	15.19	109371	130.86	118.34	8.3	14.3
800.0	25.0	29.2	120	9.2	1.24	15.23	109659	146.08	118.39	8.3	14.3
801.0	34.3	34.4	120	9.2	1.21	15.26	109869	106.52	118.37	8.3	14.3
802.0	37.9	33.4	120	9.2	1.17	15.29	110059	96.37	118.33	8.3	14.3

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	URNS	ICOST	CCOST	PP	FG
803.0	33.0	30.5	120	9.2	1.18	15.32	110277	110.57	118.32	8.3	14.3
804.0	33.0	28.6	120	9.2	1.16	15.35	110495	110.57	118.30	8.3	14.3
805.0	34.3	31.1	120	9.2	1.17	15.38	110705	106.52	118.28	8.3	14.3
806.0	36.7	31.3	120	9.2	1.16	15.40	110901	99.42	118.25	8.3	14.3
807.0	30.8	29.9	120	9.2	1.19	15.44	111135	118.69	118.25	8.3	14.3
808.0	30.0	29.5	120	9.2	1.20	15.47	111375	121.73	118.26	8.3	14.3

BIT NUMBER 3 IADC CODE 116 INTERVAL 808.2- 1365.0
 MTC J1 SIZE 12.250 NOZZLES 18 18 18
 COST 2566.00 TRIP TIME 3.7 BIT RUN 556.8
 TOTAL HOURS 15.28 TOTAL TURNS 91466 CONDITION T5 R5 G0.000

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	URNS	ICOST	CCOST	PP	FG
810.0	42.9	18.0	100	9.4	0.99	0.04	252	85	9018	8.3	14.3
811.0	24.8	26.6	100	9.3	1.26	0.08	494	147	5050	8.3	14.3
813.0	20.4	26.2	100	9.4	1.31	0.18	1081	179	3487	8.3	14.3
814.0	11.7	25.3	100	9.4	1.46	0.27	1596	313	2940	8.3	14.3
815.0	31.3	25.3	100	9.4	1.18	0.30	1788	117	2524	8.3	14.3
816.0	36.4	22.0	100	9.4	1.09	0.33	1953	100	2214	8.3	14.3
817.0	13.3	27.1	100	9.4	1.45	0.40	2404	275	1993	8.3	14.3
818.0	14.7	25.2	100	9.4	1.39	0.47	2812	249	1815	8.3	14.3
819.0	24.3	24.7	100	9.4	1.24	0.51	3059	150	1661	8.3	14.3
820.0	21.7	23.0	100	9.4	1.25	0.56	3336	168	1535	8.3	14.3
821.0	18.7	25.6	100	9.4	1.33	0.61	3657	196	1430	8.3	14.3
822.0	26.3	24.8	100	9.4	1.22	0.65	3886	139	1336	8.3	14.4
823.0	33.0	25.9	100	9.3	1.17	0.68	4067	111	1254	8.3	14.4
824.0	22.2	26.5	100	9.4	1.29	0.72	4337	164	1185	8.3	14.4
825.0	23.8	24.7	100	9.4	1.25	0.76	4589	153	1123	8.3	14.4
826.0	29.5	25.4	100	9.3	1.19	0.80	4792	124	1067	8.3	14.4
827.0	23.8	21.3	100	9.4	1.20	0.84	5044	153	1019	8.3	14.4
828.0	40.0	18.3	100	9.4	1.02	0.87	5194	91.30	971.71	8.3	14.4
829.0	32.7	19.3	100	9.4	1.09	0.90	5377	111.59	930.35	8.3	14.4
830.0	30.5	22.3	100	9.3	1.15	0.93	5574	119.70	893.17	8.3	14.4
831.0	32.4	19.8	100	9.3	1.09	0.96	5759	112.60	858.93	8.3	14.4
832.0	46.8	20.8	100	9.3	1.01	0.98	5887	78.11	826.13	8.3	14.4
833.0	51.4	23.6	100	9.3	1.01	1.00	6004	71.01	795.68	8.3	14.4
834.0	46.8	22.8	100	9.3	1.03	1.02	6132	78.11	767.87	8.3	14.4
835.0	45.0	22.5	100	9.4	1.04	1.04	6266	81.16	742.24	8.3	14.4
836.0	41.4	23.3	100	9.4	1.07	1.07	6411	88.26	718.72	8.3	14.4
837.0	49.3	25.5	100	9.3	1.05	1.09	6532	74.05	696.33	8.3	14.4
838.0	45.0	24.2	100	9.4	1.06	1.11	6666	81.16	675.69	8.3	14.4
839.0	35.6	20.7	100	9.4	1.08	1.14	6834	102.46	657.08	8.3	14.4
840.0	47.4	25.3	100	9.4	1.06	1.16	6961	77.10	638.84	8.3	14.4
841.0	33.3	25.1	100	9.4	1.16	1.19	7141	109.56	622.70	8.3	14.4
842.0	55.4	25.6	100	9.4	1.02	1.21	7249	65.94	606.23	8.3	14.4
843.0	57.1	24.5	100	9.4	0.99	1.23	7354	63.91	590.65	8.3	14.4
844.0	40.9	21.4	100	9.3	1.05	1.25	7501	89.27	576.64	8.3	14.4

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	URNS	ICOST	CCOST	PP	FG
845.0	50.0	26.1	100	9.4	1.05	1.27	7621	73.04	562.96	8.3	14.4
846.0	25.0	20.3	100	9.4	1.17	1.31	7861	146.08	551.93	8.3	14.4
847.0	37.5	24.4	100	9.4	1.11	1.34	8021	97.39	540.21	8.3	14.4
848.0	40.0	26.3	100	9.4	1.12	1.36	8171	91.30	528.93	8.3	14.4
849.0	43.4	25.8	100	9.4	1.09	1.38	8309	84.20	518.03	8.3	14.4
850.0	33.6	26.7	100	9.4	1.17	1.41	8487	108.55	508.24	8.3	14.4
851.0	31.9	26.5	100	9.3	1.19	1.45	8676	114.63	499.04	8.3	14.4
852.0	42.9	28.0	100	9.3	1.12	1.47	8816	85.21	489.59	8.3	14.4
853.0	27.7	27.9	100	9.4	1.25	1.51	9032	131.88	481.61	8.3	14.4
854.0	38.7	26.4	100	9.3	1.13	1.53	9187	94.34	473.15	8.3	14.4
855.0	31.3	22.0	100	9.4	1.13	1.56	9379	116.66	465.54	8.3	14.4
856.0	46.8	28.6	100	9.3	1.10	1.58	9507	78.11	457.43	8.3	14.4
857.0	39.6	27.4	100	9.3	1.13	1.61	9659	92.31	449.95	8.3	14.4
858.0	17.4	25.1	100	9.4	1.34	1.67	10004	209.99	445.13	8.3	14.4
859.0	50.0	28.6	100	9.4	1.08	1.69	10124	73.04	437.81	8.3	14.4
860.0	43.9	27.3	100	9.3	1.10	1.71	10261	83.18	430.96	8.3	14.5
861.0	48.0	27.1	100	9.3	1.07	1.73	10386	76.08	424.24	8.3	14.5
862.0	45.6	28.3	100	9.3	1.10	1.75	10517	80.14	417.84	8.3	14.5
863.0	46.8	26.2	100	9.3	1.07	1.77	10646	78.11	411.64	8.3	14.5
864.0	14.1	25.7	100	9.4	1.41	1.85	11072	259.70	408.92	8.3	14.5
865.0	43.9	25.6	100	9.3	1.08	1.87	11209	83.18	403.19	8.3	14.5
866.0	32.1	26.0	100	9.4	1.18	1.90	11396	113.62	398.18	8.3	14.5
867.0	32.1	23.6	100	9.4	1.15	1.93	11582	113.62	393.34	8.3	14.5
868.0	46.8	29.7	100	9.3	1.11	1.95	11711	78.11	388.06	8.3	14.5
869.0	23.4	29.1	100	9.3	1.31	1.99	11967	156.22	384.25	8.3	14.5
870.0	42.9	28.8	100	9.3	1.12	2.02	12107	85.21	379.41	8.3	14.5
871.0	46.8	28.3	100	9.3	1.09	2.04	12236	78.11	374.61	8.3	14.5
872.0	32.1	27.6	100	9.4	1.20	2.07	12422	113.62	370.52	8.3	14.5
873.0	31.6	29.8	100	9.4	1.23	2.10	12612	115.65	366.59	8.3	14.5
874.0	34.3	29.4	100	9.4	1.20	2.13	12787	106.52	362.64	8.3	14.5
875.0	25.4	28.1	100	9.4	1.27	2.17	13024	144.05	359.37	8.3	14.5
876.0	38.7	26.0	100	9.3	1.12	2.20	13179	94.34	355.46	8.3	14.5
877.0	45.6	30.5	100	9.3	1.12	2.22	13311	80.14	351.46	8.3	14.5
878.0	36.7	25.6	100	9.4	1.13	2.25	13474	99.42	347.84	8.3	14.5
879.0	47.4	32.2	100	9.4	1.13	2.27	13601	77.10	344.02	8.3	14.5
880.0	38.3	30.7	100	9.4	1.18	2.29	13757	95.36	340.56	8.3	14.5
881.0	39.6	26.2	100	9.3	1.12	2.32	13909	92.31	337.15	8.3	14.5
882.0	50.0	30.3	100	9.4	1.07	2.34	14029	73.04	333.57	8.3	14.5
883.0	43.4	30.1	100	9.4	1.14	2.36	14167	84.20	330.23	8.3	14.5
884.0	43.9	29.5	100	9.3	1.13	2.38	14304	83.18	326.98	8.3	14.5
885.0	38.7	30.1	100	9.3	1.17	2.41	14459	94.34	323.95	8.3	14.5
886.0	48.6	31.1	100	9.4	1.11	2.43	14582	75.07	320.75	8.3	14.5
887.0	43.9	30.3	100	9.3	1.13	2.45	14719	83.18	317.73	8.3	14.5
888.0	45.0	32.0	100	9.4	1.14	2.48	14852	81.16	314.77	8.3	14.5
889.0	48.0	32.0	100	9.3	1.12	2.50	14977	76.08	311.81	8.3	14.5
890.0	39.6	33.1	100	9.3	1.20	2.52	15129	92.31	309.13	8.3	14.5
891.0	28.6	32.2	100	9.4	1.29	2.56	15339	127.82	306.94	8.3	14.5
892.0	48.6	32.0	100	9.4	1.12	2.58	15462	75.07	304.17	8.3	14.5
893.0	50.0	33.2	100	9.4	1.12	2.60	15582	73.04	301.45	8.3	14.5
894.0	43.4	30.3	100	9.4	1.14	2.62	15721	84.20	298.92	8.3	14.5

DEPTH	ROP	WOB	RPM	MW	"d"e	HOURS	URNS	ICOST	CCOST	PP	FG
895.0	52.9	30.1	100	9.3	1.07	2.64	15834	68.98	296.27	8.3	14.5
896.0	50.0	28.3	100	9.4	1.07	2.66	15954	73.04	293.72	8.3	14.5
897.0	56.2	30.9	100	9.3	1.06	2.68	16061	64.92	291.15	8.3	14.5
898.0	42.4	25.8	100	9.4	1.09	2.70	16202	86.23	288.87	8.3	14.5
899.0	50.0	28.3	100	9.4	1.07	2.72	16322	73.04	286.49	8.3	14.6
900.0	45.6	30.3	100	9.3	1.12	2.74	16454	80.14	284.24	8.3	14.6
901.0	50.0	26.6	100	9.4	1.06	2.76	16574	73.04	281.97	8.3	14.6
902.0	25.9	25.9	100	9.4	1.24	2.80	16806	141.01	280.46	8.3	14.6
904.0	57.6	46.8	100	9.4	1.20	2.84	17014	63.40	275.93	8.3	14.6
905.0	38.3	25.4	100	9.4	1.12	2.86	17171	95.36	274.07	8.3	14.6
906.0	45.6	23.3	100	9.3	1.05	2.88	17302	80.14	272.08	8.3	14.6
907.0	55.4	27.6	100	9.4	1.04	2.90	17411	65.94	270.00	8.3	14.6
908.0	44.4	25.6	100	9.4	1.08	2.92	17546	82.17	268.11	8.3	14.6
909.0	48.0	31.1	100	9.3	1.11	2.95	17671	76.08	266.21	8.3	14.6
910.0	46.8	29.6	100	9.3	1.11	2.97	17799	78.11	264.36	8.3	14.6
911.0	59.0	33.9	100	9.4	1.08	2.98	17901	61.88	262.39	8.3	14.6
912.0	42.9	32.5	100	9.3	1.16	3.01	18041	85.21	260.69	8.3	14.6
913.0	37.5	28.3	100	9.4	1.16	3.03	18201	97.39	259.13	8.3	14.6
914.0	60.0	30.8	100	9.4	1.04	3.05	18301	60.87	257.25	8.3	14.6
915.0	50.0	28.9	100	9.4	1.08	3.07	18421	73.04	255.53	8.3	14.6
916.0	57.1	27.9	100	9.4	1.03	3.09	18526	63.91	253.75	8.3	14.6
917.0	43.4	29.5	100	9.4	1.13	3.11	18664	84.20	252.19	8.3	14.6
918.0	52.9	30.2	100	9.3	1.08	3.13	18777	68.98	250.52	8.3	14.6
919.0	43.9	28.5	100	9.3	1.11	3.15	18914	83.18	249.01	8.3	14.6
920.0	41.4	26.8	100	9.4	1.11	3.18	19059	88.26	247.58	8.3	14.6
921.0	43.4	29.4	100	9.4	1.13	3.20	19197	84.20	246.13	8.3	14.6
922.0	45.6	28.5	100	9.3	1.10	3.22	19329	80.14	244.67	8.3	14.6
924.0	45.0	23.1	100	9.4	1.05	3.27	19596	81.16	241.84	8.3	14.6
925.0	61.0	30.0	100	9.3	1.03	3.28	19694	59.85	240.29	8.3	14.6
926.0	38.7	30.1	100	9.3	1.17	3.31	19849	94.34	239.05	8.3	14.6
927.0	52.9	32.8	100	9.3	1.10	3.33	19962	68.98	237.62	8.3	14.6
928.0	58.1	33.4	100	9.4	1.08	3.34	20066	62.90	236.16	8.3	14.6
929.0	61.0	38.0	100	9.3	1.10	3.36	20164	59.85	234.70	8.3	14.6
930.0	50.7	33.5	100	9.4	1.12	3.38	20282	72.03	233.36	8.3	14.6
931.0	45.0	30.3	100	9.4	1.13	3.40	20416	81.16	232.12	8.3	14.6
932.0	45.0	29.4	100	9.4	1.12	3.42	20549	81.16	230.90	8.3	14.6
933.0	38.7	29.1	100	9.3	1.16	3.45	20704	94.34	229.81	8.3	14.6
934.0	33.0	26.4	100	9.3	1.17	3.48	20886	110.57	228.86	8.3	14.6
935.0	28.6	21.3	100	9.4	1.15	3.52	21096	127.82	228.06	8.3	14.6
936.0	47.4	28.6	100	9.4	1.09	3.54	21222	77.10	226.88	8.3	14.6
937.0	49.3	30.8	100	9.3	1.10	3.56	21344	74.05	225.70	8.3	14.6
938.0	53.7	28.2	100	9.4	1.05	3.58	21456	67.97	224.48	8.3	14.6
939.0	49.3	33.1	100	9.3	1.13	3.60	21577	74.05	223.33	8.3	14.7
940.0	48.0	34.4	100	9.3	1.15	3.62	21702	76.08	222.21	8.3	14.7
941.0	44.4	30.3	100	9.4	1.13	3.64	21837	82.17	221.16	8.3	14.7
942.0	45.6	31.1	100	9.3	1.13	3.66	21969	80.14	220.11	8.3	14.7
943.0	27.7	17.9	100	9.4	1.11	3.70	22186	131.88	219.45	8.3	14.7
944.0	53.7	30.1	100	9.4	1.07	3.72	22297	67.97	218.34	8.3	14.7
945.0	48.6	31.9	100	9.4	1.12	3.74	22421	75.07	217.29	8.3	14.7
946.0	48.0	30.0	100	9.3	1.10	3.76	22546	76.08	216.26	8.3	14.7

DEPTH	ROP	WOR	RPM	MW	"d"c	HOURS	TURNS	ICOST	CCOST	PP	FG
947.0	44.4	31.2	100	9.4	1.14	3.78	22681	82.17	215.30	8.3	14.7
948.0	54.5	32.6	100	9.3	1.09	3.80	22791	66.95	214.24	8.3	14.7
949.0	45.6	29.4	100	9.3	1.11	3.82	22922	80.14	213.26	8.3	14.7
950.0	46.8	29.8	100	9.3	1.11	3.84	23051	78.11	212.33	8.3	14.7
951.0	47.4	30.7	100	9.4	1.11	3.86	23177	77.10	211.38	8.3	14.7
952.0	41.4	35.8	100	9.4	1.21	3.89	23322	88.26	210.53	8.3	14.7
953.0	27.9	32.4	100	9.3	1.30	3.92	23537	130.86	209.98	8.3	14.7
954.0	58.1	38.6	100	9.4	1.05	3.94	23641	62.90	208.97	8.3	14.7
955.0	56.2	30.3	100	9.3	1.06	3.96	23747	64.92	207.99	8.3	14.7
956.0	48.0	32.7	100	9.3	1.13	3.98	23872	76.08	207.10	8.3	14.7
957.0	44.4	29.5	100	9.4	1.12	4.00	24007	82.17	206.26	8.3	14.7
958.0	53.7	30.2	100	9.4	1.07	4.02	24119	67.97	205.33	8.3	14.7
959.0	55.4	31.2	100	9.4	1.07	4.04	24227	65.94	204.41	8.3	14.7
960.0	43.4	30.4	100	9.4	1.14	4.06	24366	84.20	203.62	8.3	14.7
961.0	52.9	31.6	100	9.3	1.09	4.08	24479	68.98	202.74	8.3	14.7
963.0	44.1	25.2	100	9.3	1.08	4.13	24751	82.85	201.19	8.3	14.7
964.0	57.1	32.6	100	9.4	1.08	4.14	24856	63.91	200.31	8.3	14.7
965.0	41.9	31.7	100	9.3	1.16	4.17	25000	87.24	199.58	8.3	14.7
966.0	40.0	30.5	100	9.4	1.16	4.19	25150	91.30	198.90	8.3	14.7
967.0	57.1	32.3	100	9.4	1.07	4.21	25255	63.91	198.05	8.3	14.7
968.0	36.7	32.9	100	9.4	1.22	4.24	25418	99.42	197.43	8.3	14.7
969.0	34.0	32.6	100	9.4	1.24	4.27	25595	107.53	196.87	8.3	14.7
970.0	50.7	32.6	100	9.4	1.11	4.29	25713	72.03	196.10	8.3	14.7
971.0	37.1	31.2	100	9.3	1.19	4.31	25875	98.40	195.50	8.3	14.7
972.0	38.3	28.8	100	9.4	1.16	4.34	26031	95.36	194.89	8.3	14.7
973.0	35.3	29.3	100	9.3	1.19	4.37	26201	103.47	194.33	8.3	14.7
974.0	44.4	31.2	100	9.4	1.14	4.39	26336	82.17	193.66	8.3	14.7
975.0	52.2	32.4	100	9.4	1.10	4.41	26451	70.00	192.92	8.3	14.7
976.0	52.2	31.7	100	9.4	1.10	4.43	26566	70.00	192.18	8.3	14.7
977.0	50.7	32.1	100	9.4	1.11	4.45	26685	72.03	191.47	8.3	14.7
978.0	50.7	32.2	100	9.4	1.11	4.47	26803	72.03	190.77	8.3	14.7
979.0	48.0	33.1	100	9.3	1.14	4.49	26928	76.08	190.10	8.3	14.7
980.0	50.0	32.5	100	9.4	1.12	4.51	27048	73.04	189.42	8.3	14.7
981.0	55.4	33.2	100	9.4	1.09	4.53	27156	65.94	188.70	8.3	14.8
982.0	49.3	32.0	100	9.3	1.12	4.55	27278	74.05	188.04	8.3	14.8
983.0	41.4	32.9	100	9.4	1.18	4.57	27423	88.26	187.47	8.3	14.8
984.0	43.4	35.5	100	9.4	1.19	4.59	27561	84.20	186.88	8.3	14.8
985.0	55.4	34.0	100	9.4	1.10	4.61	27670	65.94	186.20	8.3	14.8
986.0	47.9	32.7	100	9.3	1.17	4.63	27810	85.21	185.63	8.3	14.8
987.0	16.4	34.8	100	9.3	1.49	4.70	28175	222.16	185.83	8.3	14.8
988.0	52.9	35.1	100	9.3	1.12	4.71	28288	68.98	185.19	8.3	14.8
989.0	47.4	34.3	100	9.4	1.15	4.74	28415	77.10	184.59	8.3	14.8
990.0	39.6	32.0	100	9.3	1.18	4.76	28566	92.31	184.08	8.3	14.8
991.0	48.6	35.0	100	9.4	1.15	4.78	28690	75.07	183.48	8.3	14.8
992.0	37.5	27.8	100	9.4	1.15	4.81	28850	97.39	183.01	8.3	14.8
993.0	44.4	31.7	100	9.4	1.15	4.83	28985	82.17	182.47	8.3	14.8
994.0	35.0	34.4	100	9.4	1.25	4.86	29156	104.49	182.05	8.3	14.8
995.0	34.6	32.2	100	9.3	1.23	4.89	29330	105.50	181.64	8.3	14.8
996.0	37.5	33.7	100	9.4	1.22	4.91	29490	97.39	181.19	8.3	14.8
997.0	43.9	31.9	100	9.3	1.15	4.94	29626	83.18	180.67	8.3	14.8

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	TURNS	ICOST	CCOST	PP	FG
998.0	31.3	33.4	100	9.4	1.27	4.97	29818	116.66	180.33	8.3	14.8
999.0	29.0	32.2	100	9.4	1.28	5.00	30025	125.79	180.05	8.3	14.8
1000.0	36.4	32.6	100	9.4	1.21	5.03	30190	100.43	179.63	8.3	14.8
1001.0	38.3	34.3	100	9.4	1.21	5.06	30346	95.36	179.20	8.3	14.8
1002.0	28.1	30.6	100	9.4	1.27	5.09	30560	129.85	178.94	8.3	14.8
1003.0	45.0	32.8	100	9.4	1.15	5.12	30693	81.16	178.44	8.3	14.8
1004.0	48.6	32.3	100	9.4	1.12	5.14	30816	75.07	177.91	8.3	14.8
1005.0	42.9	32.6	100	9.4	1.16	5.16	30956	85.21	177.44	8.3	14.8
1006.0	13.2	34.6	100	9.4	1.55	5.24	31411	276.94	177.94	8.3	14.8
1007.0	24.0	33.8	100	9.4	1.35	5.28	31661	152.17	177.81	8.3	14.8
1008.0	26.9	33.5	100	9.4	1.31	5.31	31885	135.94	177.60	8.3	14.8
1009.0	37.9	32.8	100	9.4	1.20	5.34	32043	96.37	177.20	8.3	14.8
1010.0	23.4	29.7	100	9.4	1.31	5.38	32300	156.22	177.10	8.3	14.8
1011.0	36.0	33.8	100	9.4	1.23	5.41	32466	101.44	176.72	8.3	14.8
1012.0	42.9	33.3	100	9.4	1.17	5.43	32606	85.21	176.27	8.3	14.8
1013.0	44.4	35.0	100	9.4	1.17	5.46	32741	82.17	175.81	8.3	14.8
1014.0	34.3	30.7	100	9.4	1.21	5.49	32916	106.52	175.48	8.3	14.8
1015.0	39.1	30.6	100	9.4	1.17	5.51	33070	93.33	175.06	8.3	14.8
1016.0	34.3	32.3	100	9.4	1.22	5.54	33245	106.52	174.75	8.3	14.8
1017.0	29.5	40.0	100	9.4	1.35	5.57	33448	123.76	174.51	8.3	14.8
1018.0	25.2	37.4	100	9.4	1.38	5.61	33686	145.07	174.37	8.3	14.8
1019.0	33.6	35.0	100	9.4	1.26	5.64	33865	108.55	174.05	8.3	14.8
1020.0	34.6	28.7	100	9.4	1.18	5.67	34038	105.50	173.73	8.3	14.8
1021.0	24.3	30.6	100	9.4	1.31	5.71	34285	150.14	173.62	8.3	14.8
1022.0	35.3	29.3	100	9.4	1.18	5.74	34455	103.47	173.29	8.3	14.8
1023.0	41.9	32.6	100	9.4	1.17	5.77	34598	87.24	172.89	8.3	14.9
1024.0	37.5	35.0	100	9.4	1.23	5.79	34758	97.39	172.54	8.3	14.9
1025.0	34.3	34.6	100	9.4	1.25	5.82	34933	106.52	172.24	8.3	14.9
1026.0	40.0	34.6	100	9.4	1.20	5.85	35083	91.30	171.86	8.3	14.9
1027.0	24.3	31.7	100	9.4	1.32	5.89	35330	150.14	171.77	8.3	14.9
1028.0	33.0	34.3	100	9.4	1.26	5.92	35511	110.57	171.49	8.3	14.9
1029.0	31.6	36.1	100	9.4	1.29	5.95	35701	115.65	171.23	8.3	14.9
1030.0	22.2	30.9	100	9.4	1.34	6.00	35971	164.34	171.20	8.3	14.9
1031.0	28.6	31.0	100	9.4	1.27	6.03	36181	127.82	171.01	8.3	14.9
1032.0	30.8	32.0	100	9.4	1.26	6.06	36376	118.69	170.77	8.3	14.9
1033.0	29.5	32.9	100	9.4	1.28	6.10	36580	123.76	170.57	8.3	14.9
1034.0	31.3	32.6	100	9.4	1.26	6.13	36771	116.66	170.33	8.3	14.9
1035.0	33.3	35.2	100	9.4	1.26	6.16	36951	109.56	170.06	8.3	14.9
1036.0	32.4	33.8	100	9.4	1.26	6.19	37136	112.60	169.81	8.3	14.9
1037.0	31.6	32.0	100	9.4	1.25	6.22	37326	115.65	169.57	8.3	14.9
1038.0	32.1	32.5	100	9.4	1.25	6.25	37513	113.62	169.33	8.3	14.9
1039.0	33.0	29.3	100	9.4	1.20	6.28	37695	110.57	169.07	8.3	14.9
1040.0	48.0	32.0	100	9.4	1.12	6.30	37820	76.08	168.67	8.3	14.9
1041.0	45.0	32.2	100	9.4	1.14	6.33	37953	81.16	168.29	8.3	14.9
1042.0	42.4	32.5	100	9.4	1.16	6.35	38095	86.23	167.94	8.3	14.9
1043.0	40.0	31.6	100	9.4	1.17	6.37	38245	91.30	167.62	8.3	14.9
1044.0	37.5	32.1	100	9.4	1.20	6.40	38405	97.39	167.32	8.3	14.9
1045.0	37.5	31.6	100	9.4	1.19	6.43	38565	97.39	167.02	8.3	14.9
1046.0	35.0	31.7	100	9.4	1.21	6.46	38736	104.49	166.76	8.3	14.9
1047.0	34.6	34.4	100	9.4	1.25	6.48	38910	105.50	166.50	8.3	14.9

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	URNS	ICOST	CCOST	PP	FG
1048.0	34.3	32.7	100	9.4	1.23	6.51	39085	106.52	166.25	8.3	14.9
1049.0	33.0	30.9	100	9.4	1.22	6.54	39266	110.57	166.02	8.3	14.9
1050.0	41.9	31.9	100	9.4	1.16	6.57	39410	87.24	165.70	8.3	14.9
1051.0	46.8	32.6	100	9.4	1.13	6.57	39538	78.11	165.34	8.3	14.9
1052.0	40.4	32.4	100	9.4	1.18	6.61	39686	90.29	165.03	8.3	14.9
1053.0	42.9	32.4	100	9.4	1.16	6.64	39826	85.21	164.70	8.3	14.9
1054.0	39.1	32.7	100	9.4	1.19	6.66	39980	93.33	164.41	8.3	14.9
1055.0	41.9	32.9	100	9.4	1.17	6.69	40123	87.24	164.10	8.3	14.9
1056.0	40.0	33.2	100	9.4	1.19	6.71	40273	91.30	163.81	8.3	14.9
1057.0	37.1	33.8	100	9.4	1.22	6.74	40435	96.40	163.54	8.3	14.9
1058.0	34.3	31.3	100	9.4	1.21	6.77	40610	106.52	163.31	8.3	14.9
1059.0	41.4	33.6	100	9.4	1.18	6.79	40755	88.26	163.02	8.3	14.9
1060.0	40.9	33.1	100	9.4	1.18	6.82	40901	89.27	162.72	8.3	14.9
1061.0	46.8	34.0	100	9.4	1.15	6.84	41030	78.11	162.39	8.3	14.9
1062.0	50.0	34.1	100	9.4	1.13	6.86	41150	73.04	162.04	8.3	14.9
1063.0	35.0	33.4	100	9.4	1.23	6.89	41321	104.49	161.81	8.3	14.9
1064.0	41.4	34.8	100	9.4	1.19	6.91	41466	88.26	161.52	8.3	14.9
1065.0	39.6	34.0	100	9.4	1.20	6.94	41618	92.31	161.25	8.3	14.9
1066.0	47.4	33.7	100	9.4	1.14	6.96	41745	77.10	160.93	8.3	14.9
1067.0	36.0	34.5	100	9.4	1.23	6.99	41911	101.44	160.70	8.3	15.0
1068.0	29.8	35.2	100	9.4	1.30	7.02	42113	122.75	160.55	8.3	15.0
1069.0	30.0	33.8	100	9.4	1.28	7.05	42313	121.73	160.40	8.3	15.0
1070.0	34.0	31.4	100	9.4	1.22	7.08	42490	107.53	160.20	8.3	15.0
1071.0	33.0	34.2	100	9.4	1.26	7.11	42671	110.57	160.01	8.3	15.0
1072.0	39.1	33.7	100	9.4	1.20	7.14	42825	93.33	159.76	8.3	15.0
1073.0	40.0	35.5	100	9.4	1.21	7.16	42975	91.30	159.50	8.3	15.0
1074.0	33.0	35.5	100	9.4	1.27	7.19	43156	110.57	159.32	8.3	15.0
1075.0	33.6	35.5	100	9.4	1.27	7.22	43335	108.55	159.13	8.3	15.0
1076.0	44.4	35.7	100	9.4	1.18	7.24	43470	82.17	158.84	8.3	15.0
1077.0	35.0	34.6	100	9.4	1.24	7.27	43641	104.49	158.64	8.3	15.0
1078.0	47.4	40.2	100	9.4	1.20	7.29	43768	77.10	158.33	8.3	15.0
1079.0	43.4	38.3	100	9.4	1.21	7.32	43906	84.20	158.06	8.3	15.0
1080.0	39.1	36.1	100	9.4	1.22	7.34	44060	93.33	157.82	8.3	15.0
1081.0	30.8	34.1	100	9.4	1.28	7.38	44255	118.69	157.68	8.3	15.0
1082.0	35.6	35.5	100	9.4	1.25	7.40	44423	102.46	157.48	8.3	15.0
1083.0	27.3	38.6	100	9.4	1.37	7.44	44643	133.91	157.39	8.3	15.0
1084.0	26.9	37.9	100	9.4	1.36	7.48	44866	135.94	157.31	8.3	15.0
1085.0	32.4	36.7	100	9.4	1.29	7.51	45051	112.60	157.15	8.3	15.0
1086.0	35.0	35.5	100	9.4	1.25	7.54	45223	104.49	156.96	8.3	15.0
1087.0	42.4	34.1	100	9.4	1.18	7.56	45365	86.23	156.71	8.3	15.0
1088.0	46.8	38.5	100	9.4	1.19	7.58	45493	78.11	156.43	8.3	15.0
1089.0	40.4	37.4	100	9.4	1.23	7.61	45641	90.29	156.19	8.3	15.0
1090.0	40.9	38.2	100	9.4	1.23	7.63	45788	89.27	155.95	8.3	15.0
1091.0	44.4	36.9	100	9.4	1.19	7.65	45923	82.17	155.69	8.3	15.0
1092.0	35.6	36.7	100	9.4	1.26	7.68	46091	102.46	155.51	8.3	15.0
1093.0	45.6	36.1	100	9.4	1.18	7.70	46223	80.14	155.24	8.3	15.0
1094.0	46.8	36.4	100	9.4	1.17	7.73	46351	78.11	154.97	8.3	15.0
1095.0	57.1	37.2	100	9.4	1.11	7.74	46456	63.91	154.65	8.3	15.0
1096.0	48.6	36.2	100	9.4	1.16	7.76	46580	75.07	154.38	8.3	15.0
1097.0	25.7	24.7	100	9.4	1.22	7.80	46813	142.02	154.33	8.3	15.0

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	TURNS	ICOST	CCOST	PP	FG
1098.0	52.2	37.9	100	9.4	1.15	7.82	46928	70.00	154.04	8.3	15.0
1099.0	61.0	38.1	100	9.4	1.10	7.84	47026	59.85	153.72	8.3	15.0
1100.0	43.4	35.6	100	9.4	1.19	7.86	47165	84.20	153.48	8.3	15.0
1101.0	44.4	37.3	100	9.4	1.19	7.88	47300	82.17	153.24	8.3	15.0
1102.0	38.7	34.1	100	9.4	1.21	7.91	47455	94.34	153.04	8.3	15.0
1103.0	42.9	35.6	100	9.4	1.19	7.93	47595	85.21	152.81	8.3	15.0
1104.0	42.4	38.3	100	9.4	1.22	7.96	47736	86.23	152.58	8.3	15.0
1105.0	49.3	36.2	100	9.4	1.15	7.98	47858	74.05	152.32	8.3	15.0
1106.0	53.7	37.8	100	9.4	1.14	7.99	47970	67.97	152.03	8.3	15.0
1107.0	72.0	26.1	100	9.4	0.94	8.01	48053	50.72	151.70	8.3	15.0
1108.0	46.8	36.0	100	9.4	1.17	8.03	48181	78.11	151.45	8.3	15.0
1109.0	41.4	35.6	100	9.4	1.20	8.05	48326	88.26	151.24	8.3	15.0
1110.0	43.4	38.5	100	9.4	1.21	8.08	48465	84.20	151.02	8.3	15.0
1111.0	38.7	38.1	100	9.4	1.25	8.10	48620	94.34	150.83	8.3	15.0
1112.0	35.6	36.6	100	9.4	1.26	8.13	48788	102.46	150.67	8.3	15.1
1113.0	44.4	38.8	100	9.4	1.21	8.15	48923	82.17	150.45	8.3	15.1
1114.0	48.6	36.3	100	9.4	1.16	8.17	49046	75.07	150.20	8.3	15.1
1115.0	46.8	38.6	100	9.4	1.19	8.20	49175	78.11	149.97	8.3	15.1
1116.0	46.8	36.8	100	9.4	1.17	8.22	49303	78.11	149.73	8.3	15.1
1117.0	31.3	32.4	100	9.4	1.25	8.25	49495	116.66	149.62	8.3	15.1
1118.0	50.7	36.5	100	9.4	1.15	8.27	49613	72.03	149.37	8.3	15.1
1119.0	37.5	34.3	100	9.4	1.22	8.30	49773	97.39	149.21	8.3	15.1
1120.0	50.7	33.9	100	9.4	1.12	8.32	49891	72.03	148.96	8.3	15.1
1121.0	45.0	36.4	100	9.4	1.18	8.34	50025	81.16	148.74	8.3	15.1
1122.0	46.8	36.4	100	9.4	1.17	8.36	50153	78.11	148.52	8.3	15.1
1123.0	48.0	35.4	100	9.4	1.15	8.38	50278	76.08	148.29	8.3	15.1
1124.0	42.9	35.5	100	9.4	1.19	8.40	50418	85.21	148.09	8.3	15.1
1125.0	43.4	36.0	100	9.4	1.19	8.43	50556	84.20	147.89	8.3	15.1
1126.0	34.0	33.3	100	9.4	1.24	8.46	50733	107.53	147.76	8.3	15.1
1127.0	50.7	37.0	100	9.4	1.15	8.48	50851	72.03	147.52	8.3	15.1
1128.0	54.5	36.1	100	9.4	1.12	8.49	50961	66.95	147.27	8.3	15.1
1129.0	38.3	37.9	100	9.4	1.25	8.52	51118	95.36	147.11	8.3	15.1
1130.0	46.2	38.3	100	9.4	1.19	8.54	51248	79.13	146.90	8.3	15.1
1131.0	36.4	38.5	100	9.4	1.27	8.57	51413	100.43	146.75	8.3	15.1
1132.0	42.4	38.0	100	9.4	1.22	8.59	51555	86.23	146.57	8.3	15.1
1133.0	34.3	39.6	100	9.4	1.30	8.62	51730	106.52	146.44	8.3	15.1
1134.0	40.9	35.8	100	9.4	1.21	8.65	51876	89.27	146.27	8.3	15.1
1135.0	43.9	35.4	100	9.4	1.18	8.67	52013	83.18	146.07	8.3	15.1
1136.0	32.7	39.4	100	9.4	1.32	8.70	52196	111.59	145.97	8.3	15.1
1137.0	24.5	37.3	100	9.4	1.39	8.74	52441	149.12	145.98	8.3	15.1
1138.0	40.0	38.3	100	9.4	1.24	8.77	52591	91.30	145.81	8.3	15.1
1139.0	40.4	33.9	100	9.4	1.19	8.79	52740	90.29	145.64	8.3	15.1
1140.0	51.4	36.8	100	9.4	1.14	8.81	52856	71.01	145.42	8.3	15.1
1141.0	50.0	39.4	100	9.4	1.18	8.83	52976	73.04	145.20	8.3	15.1
1142.0	49.3	39.2	100	9.4	1.18	8.85	53098	74.05	144.99	8.3	15.1
1143.0	47.3	38.7	100	9.4	1.17	8.87	53220	74.05	144.78	8.3	15.1
1144.0	44.4	35.9	100	9.4	1.18	8.89	53355	82.17	144.59	8.3	15.1
1145.0	47.4	38.6	100	9.4	1.19	8.91	53481	77.10	144.39	8.3	15.1
1146.0	40.0	32.2	100	9.4	1.18	8.94	53631	91.30	144.23	8.3	15.1
1147.0	28.3	36.8	100	9.4	1.33	8.97	53843	128.83	144.19	8.3	15.1

DEPTH	ROP	WOR	RPM	MW	"d"c	HOURS	URNS	ICOST	CCOST	PP	FG
1148.0	41.4	37.0	100	9.4	1.21	9.00	53988	88.26	144.02	8.3	15.1
1149.0	32.1	37.5	100	9.4	1.30	9.03	54175	113.62	143.93	8.3	15.1
1150.0	40.4	36.7	100	9.4	1.22	9.05	54323	90.29	143.78	8.3	15.1
1151.0	33.0	39.2	100	9.4	1.31	9.08	54505	110.57	143.68	8.3	15.1
1152.0	40.0	37.4	100	9.4	1.23	9.11	54655	91.30	143.53	8.3	15.1
1153.0	31.3	36.3	100	9.4	1.30	9.14	54846	116.66	143.45	8.3	15.1
1154.0	34.7	36.7	100	9.4	1.25	9.17	55010	99.42	143.32	8.3	15.1
1155.0	33.0	35.5	100	9.4	1.27	9.20	55191	110.57	143.23	8.3	15.1
1156.0	32.1	38.9	100	9.4	1.32	9.23	55378	113.62	143.14	8.3	15.1
1157.0	29.5	40.8	100	9.4	1.36	9.26	55581	123.76	143.09	8.3	15.1
1158.0	35.3	36.3	100	9.4	1.26	9.29	55751	103.47	142.97	8.3	15.2
1159.0	37.5	40.3	100	9.4	1.28	9.32	55911	97.39	142.84	8.3	15.2
1160.0	32.1	38.9	100	9.4	1.32	9.35	56098	113.62	142.76	8.3	15.2
1161.0	38.3	39.5	100	9.4	1.26	9.38	56255	95.36	142.63	8.3	15.2
1162.0	46.2	38.9	100	9.4	1.20	9.40	56385	79.13	142.45	8.3	15.2
1163.0	43.9	37.9	100	9.4	1.20	9.42	56521	83.18	142.28	8.3	15.2
1164.0	31.3	36.7	100	9.4	1.30	9.45	56713	116.66	142.21	8.3	15.2
1165.0	40.9	37.3	100	9.4	1.22	9.48	56860	89.27	142.06	8.3	15.2
1166.0	42.9	36.5	100	9.4	1.20	9.50	57000	85.21	141.90	8.3	15.2
1167.0	44.4	40.8	100	9.4	1.23	9.52	57135	82.17	141.73	8.3	15.2
1168.0	42.4	37.3	100	9.4	1.21	9.55	57276	86.23	141.58	8.3	15.2
1169.0	46.8	41.6	100	9.4	1.22	9.57	57405	78.11	141.40	8.3	15.2
1170.0	31.3	39.6	100	9.4	1.33	9.60	57596	116.66	141.34	8.3	15.2
1171.0	48.6	39.7	100	9.4	1.19	9.62	57720	75.07	141.15	8.3	15.2
1172.0	50.7	37.8	100	9.4	1.16	9.64	57838	72.03	140.96	8.3	15.2
1173.0	35.3	38.7	100	9.4	1.28	9.67	58008	103.47	140.86	8.3	15.2
1174.0	51.4	34.7	100	9.4	1.12	9.69	58125	71.01	140.67	8.3	15.2
1175.0	47.4	38.1	100	9.4	1.18	9.71	58251	77.10	140.50	8.3	15.2
1176.0	46.2	36.7	100	9.4	1.18	9.73	58381	79.13	140.33	8.3	15.2
1177.0	40.4	36.9	100	9.4	1.22	9.75	58530	90.29	140.19	8.3	15.2
1178.0	37.5	35.6	100	9.4	1.23	9.78	58690	97.39	140.08	8.3	15.2
1179.0	55.4	35.3	100	9.4	1.11	9.80	58798	65.94	139.88	8.3	15.2
1180.0	38.3	36.6	100	9.4	1.24	9.83	58955	95.36	139.76	8.3	15.2
1181.0	50.7	37.1	100	9.4	1.15	9.85	59073	72.03	139.58	8.3	15.2
1182.0	53.7	39.9	100	9.4	1.16	9.86	59185	67.97	139.38	8.3	15.2
1183.0	40.4	37.6	100	9.4	1.23	9.89	59333	90.29	139.25	8.3	15.2
1184.0	41.9	38.6	100	9.4	1.23	9.91	59476	87.24	139.12	8.3	15.2
1185.0	63.2	39.0	100	9.4	1.10	9.93	59571	57.82	138.90	8.3	15.2
1186.0	47.4	40.1	100	9.4	1.20	9.95	59698	77.10	138.74	8.3	15.2
1187.0	46.8	39.0	100	9.4	1.19	9.97	59826	78.11	138.58	8.3	15.2
1188.0	50.0	39.3	100	9.4	1.18	9.99	59946	73.04	138.40	8.3	15.2
1189.0	46.8	37.5	100	9.4	1.18	10.01	60075	78.11	138.25	8.3	15.2
1190.0	55.4	39.6	100	9.4	1.14	10.03	60183	65.94	138.06	8.3	15.2
1191.0	44.4	39.8	100	9.4	1.22	10.05	60318	82.17	137.91	8.3	15.2
1192.0	46.6	39.1	100	9.4	1.18	10.07	60441	75.07	137.75	8.3	15.2
1194.0	39.3	38.6	100	9.4	1.25	10.12	60747	92.99	137.51	8.3	15.2
1195.0	47.4	39.7	100	9.4	1.20	10.15	60873	77.10	137.36	8.3	15.2
1196.0	54.5	41.7	100	9.4	1.17	10.16	60983	66.95	137.18	8.3	15.2
1197.0	39.1	39.9	100	9.4	1.26	10.19	61137	93.33	137.06	8.3	15.2
1198.0	43.4	39.1	100	9.4	1.22	10.21	61275	84.20	136.93	8.3	15.2

DEPTH	ROP	WOB	RPM	MW	'd" c	HOURS	TURNS	TCOST	CCOST	PP	FG
1251.0	38.7	38.0	100	9.4	1.25	11.43	68579	94.34	130.50	8.3	15.3
1252.0	52.9	33.4	100	9.4	1.10	11.45	68692	68.98	130.44	8.3	15.3
1253.0	41.9	39.3	100	9.4	1.23	11.47	68836	87.24	130.34	8.3	15.3
1254.0	41.9	37.8	100	9.4	1.22	11.50	68979	37.24	130.25	8.3	15.3
1255.0	31.3	40.8	100	9.4	1.34	11.53	69171	116.66	130.22	8.3	15.4
1256.0	38.3	40.8	100	9.4	1.28	11.55	69327	75.36	130.14	8.3	15.4
1257.0	27.5	38.4	100	9.4	1.36	11.59	69546	132.89	130.14	8.3	15.4
1258.0	31.9	39.6	100	9.4	1.33	11.62	69734	114.63	130.11	8.3	15.4
1259.0	28.3	40.2	100	9.4	1.37	11.66	69946	128.83	130.11	8.3	15.4
1260.0	35.0	40.4	100	9.4	1.30	11.69	70117	104.49	130.05	8.3	15.4
1261.0	34.0	39.1	100	9.4	1.30	11.72	70294	107.53	130.00	8.3	15.4
1262.0	41.1	34.9	100	9.4	1.20	11.74	70440	88.76	129.91	8.3	15.4
1263.0	25.4	35.0	100	9.4	1.35	11.78	70676	144.05	129.94	8.3	15.4
1264.0	27.3	37.8	100	9.4	1.36	11.82	70896	133.91	129.95	8.3	15.4
1265.0	30.5	39.1	100	9.4	1.33	11.85	71093	119.70	129.93	8.3	15.4
1266.0	26.9	39.9	100	9.4	1.39	11.89	71316	135.94	129.94	8.3	15.4
1267.0	41.9	40.1	100	9.4	1.24	11.91	71460	87.24	129.85	8.3	15.4
1268.0	26.5	39.9	100	9.4	1.39	11.95	71686	137.96	129.86	8.3	15.4
1269.0	27.3	33.9	100	9.4	1.31	11.98	71906	133.91	129.87	8.3	15.4
1270.0	28.8	34.0	100	9.4	1.30	12.02	72115	126.81	129.87	8.3	15.4
1271.0	39.1	32.9	100	9.4	1.19	12.04	72268	93.33	129.79	8.3	15.4
1272.0	37.9	37.2	100	9.4	1.24	12.07	72426	96.37	129.72	8.3	15.4
1273.0	38.3	38.6	102	9.4	1.26	12.10	72586	95.36	129.64	8.3	15.4
1274.0	36.4	38.6	120	9.4	1.33	12.12	72784	100.43	129.58	8.3	15.4
1275.0	32.7	39.8	120	9.4	1.38	12.16	73004	111.59	129.54	8.3	15.4
1276.0	37.5	39.5	120	9.4	1.33	12.18	73196	97.39	129.47	8.3	15.4
1277.0	47.4	38.4	120	9.4	1.24	12.20	73348	77.10	129.36	8.3	15.4
1278.0	40.0	38.0	120	9.4	1.29	12.23	73528	91.30	129.28	8.3	15.4
1279.0	40.0	39.5	120	9.4	1.31	12.25	73708	91.30	129.20	8.3	15.4
1280.0	50.0	38.9	120	9.4	1.23	12.27	73852	73.04	129.08	8.3	15.4
1281.0	35.3	36.3	120	9.4	1.32	12.30	74056	103.47	129.02	8.3	15.4
1282.0	41.9	40.8	120	9.4	1.31	12.33	74228	87.24	128.94	8.3	15.4
1283.0	41.9	39.7	120	9.4	1.30	12.35	74400	87.24	128.85	8.3	15.4
1284.0	35.3	39.5	120	9.4	1.35	12.38	74604	103.47	128.80	8.3	15.4
1285.0	35.6	38.7	120	9.4	1.34	12.41	74806	102.46	128.74	8.3	15.4
1286.0	43.9	38.9	120	9.4	1.27	12.43	74970	83.18	128.64	8.3	15.4
1287.0	42.9	40.2	120	9.4	1.29	12.45	75138	85.21	128.55	8.3	15.4
1288.0	31.9	39.3	120	9.4	1.38	12.48	75364	114.63	128.53	8.3	15.4
1289.0	48.0	40.4	120	9.4	1.26	12.50	75514	76.08	128.42	8.3	15.4
1291.0	32.7	39.8	120	9.4	1.38	12.56	75954	111.59	128.35	8.3	15.4
1292.0	39.1	39.5	120	9.4	1.32	12.59	76138	93.33	128.27	8.3	15.4
1293.0	35.3	38.1	113	9.4	1.32	12.62	76330	103.47	128.22	8.3	15.4
1294.0	30.3	40.3	110	9.4	1.38	12.65	76548	120.72	128.21	8.3	15.4
1295.0	42.9	39.2	110	9.4	1.26	12.68	76702	85.21	128.12	8.3	15.4
1296.0	50.0	41.9	110	9.4	1.23	12.70	76834	73.04	128.01	8.3	15.4
1297.0	40.9	41.1	110	9.4	1.29	12.72	76995	87.27	127.93	8.3	15.4
1298.0	44.4	39.1	110	9.4	1.24	12.74	77144	82.17	127.83	8.3	15.4
1299.0	40.9	37.5	110	9.4	1.25	12.77	77305	89.27	127.75	8.3	15.4
1300.0	62.6	21.5	110	9.4	0.96	12.78	77410	58.33	127.61	8.3	15.4
1301.0	62.1	39.5	110	9.4	1.14	12.80	77517	58.84	127.47	8.3	15.4

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	TURNS	ICOST	CCOST	PP	FG
1302.0	34.6	41.6	104	9.4	1.33	12.83	77697	105.50	127.43	8.3	15.4
1303.0	41.9	40.7	100	9.4	1.25	12.85	77841	87.24	127.35	8.3	15.4
1304.0	47.4	38.7	100	9.4	1.19	12.87	77967	77.10	127.25	8.3	15.4
1305.0	43.9	38.2	100	9.4	1.21	12.90	78104	83.18	127.16	8.3	15.5
1306.0	49.3	40.2	100	9.4	1.19	12.92	78226	74.05	127.05	8.3	15.5
1307.0	35.6	39.6	100	9.4	1.29	12.94	78394	107.46	127.00	8.3	15.5
1308.0	43.4	40.1	100	9.4	1.23	12.97	78532	84.20	126.92	8.3	15.5
1309.0	57.1	40.2	100	9.4	1.14	12.98	78637	63.91	126.79	8.3	15.5
1310.0	40.4	36.4	100	9.4	1.22	13.01	78786	90.29	126.72	8.3	15.5
1311.0	34.6	41.0	100	9.4	1.31	13.04	78959	105.50	126.68	8.3	15.5
1312.0	42.9	40.5	100	9.4	1.24	13.06	79099	85.21	126.59	8.3	15.5
1313.0	48.6	41.2	100	9.4	1.20	13.08	79222	75.07	126.49	8.3	15.5
1314.0	48.0	39.8	100	9.4	1.19	13.10	79347	76.08	126.39	8.3	15.5
1315.0	38.3	40.1	100	9.4	1.27	13.13	79504	95.36	126.33	8.3	15.5
1316.0	36.4	40.6	100	9.4	1.29	13.16	79669	100.43	126.28	8.3	15.5
1317.0	36.4	40.1	100	9.4	1.29	13.18	79834	100.43	126.23	8.3	15.5
1318.0	43.4	40.7	100	9.4	1.23	13.21	79972	84.20	126.15	8.3	15.5
1319.0	40.0	40.6	100	9.4	1.26	13.23	80122	91.30	126.08	8.3	15.5
1320.0	24.7	41.6	100	9.4	1.43	13.27	80366	148.11	126.12	8.3	15.5
1321.0	24.0	40.2	100	9.4	1.43	13.31	80616	152.17	126.17	8.3	15.5
1322.0	28.6	41.9	100	9.4	1.39	13.35	80826	127.82	126.18	8.3	15.5
1323.0	23.8	39.9	100	9.4	1.42	13.39	81077	153.18	126.23	8.3	15.5
1324.0	15.7	39.0	100	9.4	1.55	13.45	81459	232.31	126.43	8.3	15.5
1325.0	18.6	38.7	100	9.4	1.49	13.51	81782	196.80	126.57	8.3	15.5
1326.0	18.9	41.6	100	9.4	1.52	13.56	82099	192.74	126.70	8.3	15.5
1327.0	15.0	41.0	100	9.4	1.59	13.63	82499	243.47	126.92	8.3	15.5
1328.0	8.5	39.0	100	9.4	1.75	13.75	83207	431.14	127.51	8.3	15.5
1329.0	16.3	37.1	100	9.4	1.52	13.81	83576	224.19	127.69	8.3	15.5
1330.0	13.7	36.4	100	9.4	1.56	13.88	84012	265.78	127.96	8.3	15.5
1331.0	17.6	38.0	100	9.4	1.50	13.94	84352	206.95	128.11	8.3	15.5
1332.0	25.9	38.3	100	9.4	1.38	13.98	84584	141.01	128.13	8.3	15.5
1333.0	36.4	39.1	100	9.4	1.28	14.00	84749	100.43	128.08	8.3	15.5
1334.0	81.8	34.1	100	9.4	0.97	14.02	84822	44.64	127.92	8.3	15.5
1335.0	94.7	30.7	100	9.4	0.90	14.03	84886	38.55	127.75	8.3	15.5
1336.0	112.5	36.0	100	9.4	0.89	14.03	84939	32.46	127.57	8.3	15.5
1337.0	66.7	30.9	106	9.4	1.03	14.05	85035	54.78	127.43	8.3	15.5
1339.0	77.1	33.2	115	9.4	1.03	14.08	85214	47.34	127.13	8.3	15.5
1340.0	81.8	36.3	115	9.4	1.04	14.09	85298	44.64	126.98	8.3	15.5
1341.0	65.5	32.4	115	9.4	1.07	14.10	85403	55.79	126.84	8.3	15.5
1342.0	54.5	36.4	115	9.4	1.17	14.12	85530	66.95	126.73	8.3	15.5
1343.0	78.3	33.6	115	9.4	1.03	14.13	85618	46.66	126.58	8.3	15.5
1344.0	85.7	36.9	115	9.4	1.03	14.15	85699	42.61	126.43	8.3	15.5
1345.0	42.9	37.2	115	9.4	1.25	14.17	85860	85.21	126.35	8.3	15.5
1346.0	21.6	38.9	115	9.4	1.49	14.22	86180	169.41	126.43	8.3	15.5
1347.0	100.0	38.6	115	9.4	0.99	14.23	86249	36.52	126.26	8.3	15.5
1348.0	85.7	36.0	115	9.4	1.02	14.24	86329	42.61	126.11	8.3	15.5
1349.0	52.2	33.5	115	9.4	1.15	14.26	86461	70.00	126.00	8.3	15.5
1350.0	67.9	34.9	115	9.4	1.08	14.27	86563	53.77	125.87	8.3	15.5
1351.0	69.2	29.5	115	9.4	1.02	14.29	86663	52.75	125.73	8.3	15.5
1352.0	144.0	34.9	115	9.4	0.85	14.29	86711	25.36	125.55	8.3	15.5

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	TURNS	ICOST	CCOST	PP	FG
1354.0	276.9	25.1	115	9.4	0.58	14.30	86760	13.19	125.14	8.3	15.5
1355.0	83.7	12.1	115	9.4	0.77	14.31	86843	43.62	124.99	8.3	15.5
1356.0	138.5	25.3	115	9.4	0.78	14.32	86893	26.38	124.81	8.3	15.5
1357.0	90.0	21.9	115	9.4	0.87	14.33	86769	40.58	124.66	8.3	15.5
1358.0	116.1	28.5	115	9.4	0.86	14.34	87029	31.45	124.49	8.3	15.6
1359.0	102.9	34.1	115	9.4	0.94	14.35	87096	35.51	124.33	8.3	15.6
1360.0	50.7	36.4	115	9.4	1.19	14.37	87232	72.03	124.23	8.3	15.6
1361.0	29.0	39.0	115	9.4	1.40	14.40	87470	125.79	124.23	8.3	15.6
1362.0	48.6	39.1	115	9.4	1.23	14.42	87611	75.07	124.14	8.3	15.6
1364.0	43.4	6.5	115	9.4	0.82	14.47	87930	84.20	124.00	8.3	15.6
1365.0	43.8	34.3	115	9.4	1.21	14.49	88087	83.38	123.93	8.3	15.6

BIT NUMBER	4	IADC CODE	517	INTERVAL	1365.0- 2107.0
HTC J22		SIZE	12.250	NOZZLES	18 18 16
COST	8520.00	TRIP TIME	5.0	BIT RUN	742.0
TOTAL HOURS	65.46	TOTAL TURNS	234818	CONDITION	T4 B4 G0.000

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	TURNS	ICOST	CCOST	PP	FG
1366.0	154.3	16.0	70	9.5	0.54	0.01	27	24	26804	8.3	15.6
1367.0	138.5	21.8	70	9.5	0.61	0.01	58	26	13415	8.3	15.6
1368.0	20.1	8.9	70	9.5	0.92	0.06	266	181	9004	8.3	15.6
1369.0	50.0	10.8	70	9.5	0.75	0.09	350	73	6771	8.3	15.6
1370.0	37.1	12.6	70	9.5	0.85	0.11	463	98	5437	8.3	15.6
1371.0	51.4	9.9	70	9.5	0.73	0.13	545	71	4542	8.3	15.6
1373.0	120.0	5.0	70	9.5	0.47	0.15	615	30	3414	8.3	15.6
1374.0	43.9	8.6	70	9.5	0.74	0.17	711	83	3044	8.3	15.6
1375.0	128.6	16.7	70	9.5	0.59	0.18	743	28	2743	8.3	15.6
1376.0	124.1	18.1	70	9.5	0.61	0.17	777	29	2496	8.3	15.6
1377.0	180.0	21.4	70	9.5	0.53	0.19	800	20	2290	8.3	15.6
1378.0	36.4	18.6	70	9.5	0.94	0.22	916	100	2121	8.3	15.6
1379.0	109.1	10.1	70	9.5	0.56	0.23	954	33	1972	8.3	15.6
1380.0	189.5	13.5	70	9.5	0.47	0.23	977	19	1842	8.3	15.6
1381.0	189.5	18.5	70	9.5	0.50	0.24	999	19	1728	8.3	15.6
1382.0	61.0	25.3	70	9.5	0.57	0.25	1068	60	1630	8.3	15.6
1383.0	62.1	21.0	70	9.5	0.82	0.27	1135	59	1543	8.3	15.6
1384.0	120.0	25.0	70	9.5	0.67	0.28	1170	30	1463	8.3	15.6
1386.0	92.0	26.0	70	9.5	0.76	0.30	1262	40	1327	8.3	15.6
1388.0	75.0	20.0	70	9.5	0.76	0.33	1374	49	1216	8.3	15.6
1390.0	100.0	26.0	70	9.5	0.73	0.35	1458	37	1122	8.3	15.6
1392.0	57.0	22.0	70	9.5	0.85	0.38	1605	64	1044	8.3	15.6
1394.0	116.0	23.5	70	9.5	0.67	0.46	1677	31.48	973.74	8.3	15.6
1396.0	73.6	24.8	70	9.5	0.81	0.43	1791	49.50	914.12	8.3	15.6
1398.0	27.7	29.1	70	9.5	1.13	0.50	2095	131.88	866.71	8.3	15.6
1399.0	87.8	17.9	70	9.5	0.70	0.51	2143	41.59	842.44	8.3	15.6
1400.0	76.6	21.3	70	9.5	0.77	0.52	2197	47.68	819.73	8.3	15.6
1401.0	67.9	16.9	70	9.5	0.75	0.54	2259	53.77	798.46	8.3	15.6
1402.0	100.0	29.1	70	9.5	0.75	0.55	2301	36.52	777.86	8.3	15.6

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	TURNS	LCOST	CCOST	PP	FG
1403.0	54.5	21.6	70	9.5	0.86	0.57	2378	66.95	759.16	8.3	15.6
1404.0	102.9	19.0	70	9.5	0.67	0.58	2419	35.51	740.60	8.3	15.6
1405.0	105.9	24.6	70	9.5	0.70	0.59	2459	34.49	722.95	8.3	15.6
1406.0	120.0	22.3	70	9.5	0.65	0.59	2494	30.43	706.06	8.3	15.6
1407.0	21.8	34.5	70	9.5	1.27	0.64	2686	167.38	693.23	8.3	15.6
1408.0	14.6	35.6	70	9.5	1.40	0.71	2974	250.57	682.94	8.3	15.6
1409.0	13.2	33.4	70	9.5	1.41	0.78	3293	276.94	673.71	8.3	15.6
1410.0	29.8	30.7	70	9.5	1.13	0.82	3434	122.75	661.47	8.3	15.6
1411.0	27.1	28.5	70	9.5	1.13	0.85	3589	134.92	650.02	8.3	15.6
1412.0	92.3	29.4	70	9.5	0.78	0.87	3635	39.56	637.03	8.3	15.7
1413.0	112.5	22.0	70	9.5	0.67	0.87	3672	32.46	624.44	8.3	15.7
1414.0	138.5	21.5	70	9.5	0.61	0.88	3702	26.38	612.23	8.3	15.7
1416.0	100.8	14.8	70	9.5	0.63	0.90	3786	36.23	589.64	8.3	15.7
1417.0	87.8	20.7	70	9.5	0.72	0.91	3834	41.59	579.10	8.3	15.7
1418.0	53.7	21.7	70	9.5	0.87	0.93	3912	67.97	569.46	8.3	15.7
1419.0	65.5	16.7	70	9.5	0.76	0.95	3976	55.79	559.95	8.3	15.7
1420.0	133.3	17.5	70	9.5	0.59	0.95	4007	27.39	550.26	8.3	15.7
1421.0	116.1	20.5	70	9.5	0.65	0.96	4044	31.45	541.00	8.3	15.7
1422.0	128.6	18.3	70	9.5	0.60	0.97	4076	28.40	532.01	8.3	15.7
1423.0	138.5	17.7	70	9.5	0.58	0.98	4107	26.38	523.29	8.3	15.7
1424.0	156.5	18.5	70	9.5	0.55	0.98	4133	23.33	514.82	8.3	15.7
1425.0	124.1	15.7	70	9.5	0.59	0.99	4167	29.42	506.73	8.3	15.7
1426.0	62.1	13.9	70	9.5	0.74	1.01	4235	58.84	499.38	8.3	15.7
1427.0	16.1	24.1	70	9.5	1.23	1.07	4495	226.22	494.98	8.3	15.7
1428.0	14.7	24.3	70	9.5	1.26	1.14	4781	248.54	491.07	8.3	15.7
1429.0	17.4	24.8	70	9.5	1.22	1.20	5022	209.99	486.67	8.3	15.7
1430.0	34.6	21.4	70	9.5	0.98	1.22	5144	105.50	480.81	8.3	15.7
1431.0	33.3	24.3	70	9.5	1.03	1.25	5270	109.56	475.18	8.3	15.7
1432.0	9.8	28.6	70	9.5	1.44	1.36	5700	374.33	473.68	8.3	15.7
1433.0	6.6	35.2	70	9.5	1.65	1.51	6340	555.92	474.89	8.3	15.7
1434.0	14.9	33.6	70	9.5	1.37	1.58	6622	245.50	471.56	8.3	15.7
1436.0	25.1	33.4	70	9.5	1.21	1.66	6956	145.40	462.38	8.3	15.7
1437.0	46.8	30.4	70	9.5	0.99	1.68	7046	78.11	457.04	8.3	15.7
1438.0	67.9	30.9	70	9.5	0.88	1.69	7108	53.77	451.52	8.3	15.7
1439.0	37.1	30.6	70	9.5	1.06	1.72	7221	98.40	446.74	8.3	15.7
1440.0	9.6	34.7	70	9.5	1.52	1.82	7658	379.40	445.85	8.3	15.7
1441.0	14.7	34.2	70	9.5	1.38	1.89	7943	248.54	443.25	8.3	15.7
1442.0	133.3	27.7	70	9.5	0.66	1.90	7975	27.39	437.85	8.3	15.7
1443.0	20.6	31.2	70	9.5	1.25	1.95	8179	177.53	434.51	8.3	15.7
1444.0	16.7	31.7	70	9.5	1.32	2.01	8431	219.12	431.78	8.3	15.7
1445.0	19.6	31.9	70	9.5	1.27	2.06	8646	186.66	428.72	8.3	15.7
1446.0	7.6	33.9	70	9.5	1.59	2.19	9200	481.86	429.38	8.3	15.7
1447.0	22.2	32.9	70	9.5	1.24	2.24	9389	164.34	426.14	8.3	15.7
1448.0	17.6	29.9	70	9.5	1.28	2.29	9628	207.96	423.52	8.3	15.7
1449.0	32.1	24.6	70	9.5	1.04	2.32	9759	113.62	419.83	8.3	15.7
1450.0	23.2	34.8	70	9.5	1.25	2.37	9940	157.24	416.74	8.3	15.7
1451.0	39.1	32.1	70	9.5	1.06	2.39	10047	93.33	412.98	8.3	15.7
1452.0	52.2	34.9	70	9.5	1.00	2.41	10127	70.00	409.03	8.3	15.7
1453.0	11.9	27.0	70	9.5	1.36	2.50	10481	307.38	407.88	8.3	15.7
1454.0	34.6	19.7	70	9.5	0.96	2.52	10602	105.50	404.48	8.3	15.7

DEPTH	ROP	WOB	RPM	MW	"d" c	HOURS	URNS	ICOST	CCOST	PP	FG
1455.0	12.6	35.1	70	9.5	1.44	2.60	10935	269.12	403.20	8.3	15.7
1456.0	17.5	33.9	70	9.5	1.33	2.66	11175	208.98	401.07	8.3	15.7
1457.0	16.3	31.1	70	9.5	1.32	2.72	11433	224.19	399.14	8.3	15.7
1458.0	17.1	35.1	70	9.5	1.35	2.78	11679	214.05	397.15	8.3	15.7
1459.0	37.1	34.8	70	9.5	1.10	2.81	11792	98.40	393.97	8.3	15.7
1460.0	10.2	35.2	70	9.5	1.51	2.91	12203	357.08	393.59	8.3	15.7
1461.0	14.8	33.9	70	9.5	1.38	2.97	12488	247.52	392.06	8.3	15.7
1462.0	13.4	34.4	70	9.5	1.42	3.05	12801	272.89	390.84	8.3	15.7
1463.0	12.4	35.8	70	9.5	1.46	3.13	13140	294.19	389.85	8.3	15.7
1464.0	56.2	30.5	70	9.5	0.94	3.15	13214	64.92	386.57	8.3	15.7
1465.0	72.0	23.5	70	9.5	0.80	3.16	13273	50.72	383.21	8.3	15.7
1466.0	75.0	29.2	70	9.5	0.84	3.17	13329	48.69	379.90	8.3	15.7
1467.0	50.7	34.3	70	9.5	1.00	3.19	13412	72.03	376.88	8.3	15.8
1468.0	73.5	32.9	70	9.5	0.88	3.21	13469	49.71	373.70	8.3	15.8
1469.0	63.2	34.0	70	9.5	0.93	3.22	13535	57.82	370.67	8.3	15.8
1470.0	53.7	31.8	70	9.5	0.96	3.24	13613	67.97	367.78	8.3	15.8
1471.0	14.0	36.1	70	9.5	1.42	3.31	13913	260.71	366.77	8.3	15.8
1472.0	7.6	37.1	70	9.5	1.62	3.44	14469	482.88	367.06	8.3	15.8
1473.0	34.6	34.2	70	9.5	1.12	3.47	14590	105.50	365.43	8.3	15.8
1474.0	47.4	33.2	70	9.5	1.01	3.49	14679	77.10	362.78	8.3	15.8
1475.0	52.9	27.3	70	9.5	0.92	3.51	14758	68.98	360.11	8.3	15.8
1476.0	63.2	31.4	70	9.5	0.91	3.53	14824	57.82	357.39	8.3	15.8
1477.0	48.0	34.2	70	9.5	1.01	3.55	14912	76.08	354.88	8.3	15.8
1478.0	66.7	32.5	70	9.5	0.90	3.57	14975	54.78	352.22	8.3	15.8
1479.0	66.7	29.7	70	9.5	0.88	3.58	15038	54.78	349.61	8.3	15.8
1480.0	73.5	31.6	70	9.5	0.86	3.59	15095	49.71	347.00	8.3	15.8
1481.0	23.8	30.8	70	9.5	1.19	3.64	15271	153.18	345.33	8.3	15.8
1482.0	18.8	34.9	70	9.5	1.31	3.69	15495	194.77	344.05	8.3	15.8
1483.0	16.3	37.4	70	9.5	1.39	3.75	15753	224.19	343.03	8.3	15.8
1484.0	14.0	37.2	70	9.5	1.43	3.82	16054	261.73	342.35	8.3	15.8
1485.0	7.4	37.7	70	9.5	1.64	3.96	16625	496.06	343.63	8.3	15.8
1486.0	8.7	36.5	70	9.5	1.57	4.07	17110	422.01	344.28	8.3	15.8
1487.0	22.0	32.2	70	9.5	1.23	4.12	17301	166.37	342.82	8.3	15.8
1488.0	48.0	27.8	70	9.5	0.96	4.14	17389	76.08	340.65	8.3	15.8
1489.0	83.7	25.7	70	9.5	0.78	4.15	17439	43.62	338.25	8.3	15.8
1493.0	102.9	15.3	70	9.5	0.63	4.19	17602	35.51	328.79	8.3	15.8
1494.0	138.5	22.2	70	9.5	0.61	4.20	17633	26.38	326.45	8.3	15.8
1495.0	97.3	32.6	70	9.5	0.78	4.21	17676	37.53	324.23	8.3	15.8
1496.0	14.3	21.8	70	9.5	1.22	4.28	17969	254.63	323.70	8.3	15.8
1497.0	45.0	27.0	70	9.5	0.97	4.30	18062	81.16	321.86	8.3	15.8
1498.0	11.4	22.0	70	9.5	1.29	4.39	18429	319.55	321.84	8.3	15.8
1499.0	30.3	23.5	70	9.5	1.04	4.42	18568	120.72	320.34	8.3	15.8
1500.0	21.8	24.5	70	9.5	1.15	4.47	18761	167.30	319.21	8.3	15.8
1501.0	24.2	22.7	70	9.5	1.09	4.51	18935	151.15	317.97	8.3	15.8
1502.0	56.2	18.9	70	9.5	0.82	4.53	19009	64.92	316.12	8.3	15.8
1503.0	42.9	17.7	70	9.5	0.88	4.55	19107	85.21	314.45	8.3	15.8
1504.0	69.2	29.0	70	9.5	0.86	4.56	19168	52.75	312.57	8.3	15.8
1505.0	81.8	29.3	70	9.5	0.81	4.58	19219	44.64	310.65	8.3	15.8
1506.0	64.3	30.0	70	9.5	0.89	4.59	19285	56.81	308.85	8.3	15.8
1507.0	60.0	27.4	70	9.5	0.89	4.61	19355	60.87	307.11	8.3	15.8

DEPTH	ROP	WOB	RPM	MW	"d" c	HOURS	URNS	ICOST	CCOST	PP	FG
1508.0	67.9	22.3	70	9.5	0.81	4.62	19416	53.77	305.34	8.3	15.8
1509.0	163.6	33.1	70	9.5	0.63	4.63	19442	22.32	303.37	8.3	15.8
1510.0	66.7	26.5	70	9.5	0.85	4.64	19505	54.78	301.66	8.3	15.8
1511.0	46.2	17.5	70	9.5	0.86	4.67	19596	79.13	300.13	8.3	15.8
1512.0	14.0	34.4	70	9.5	1.40	4.74	19897	261.73	299.87	8.3	15.8
1513.0	10.5	35.7	76	9.5	1.53	4.83	20331	347.95	300.20	8.3	15.8
1514.0	10.3	35.1	80	9.5	1.54	4.93	20798	355.06	300.56	8.3	15.8
1515.0	10.5	33.7	80	9.5	1.52	5.03	21256	348.97	300.89	8.3	15.8
1516.0	14.6	34.9	80	9.5	1.43	5.09	21584	249.55	300.55	8.3	15.8
1517.0	120.0	34.7	80	9.5	0.78	5.10	21624	30.43	298.77	8.3	15.8
1518.0	171.4	29.8	80	9.5	0.64	5.11	21652	21.30	296.96	8.3	15.8
1519.0	76.6	19.0	80	9.5	0.78	5.12	21715	47.68	295.34	8.3	15.8
1520.0	10.6	10.5	80	9.5	1.13	5.22	22170	345.93	295.66	8.3	15.8
1521.0	120.0	12.1	80	9.5	0.59	5.22	22210	30.43	293.96	8.3	15.8
1522.0	171.4	18.2	80	9.5	0.56	5.23	22238	21.30	292.23	8.3	15.8
1523.0	24.5	25.1	80	9.5	1.16	5.27	22434	149.12	291.32	8.3	15.8
1524.0	97.3	24.6	80	9.5	0.76	5.28	22483	37.53	289.72	8.3	15.8
1525.0	17.6	15.2	80	9.5	1.10	5.34	22755	206.95	289.21	8.3	15.9
1526.0	30.0	16.7	80	9.5	0.99	5.37	22915	121.73	288.17	8.3	15.9
1527.0	44.4	24.9	80	9.5	0.99	5.39	23023	82.17	286.90	8.3	15.9
1528.0	33.6	33.7	80	9.5	1.16	5.42	23166	108.55	285.80	8.3	15.9
1529.0	35.6	30.8	80	9.5	1.11	5.45	23300	102.46	284.68	8.3	15.9
1530.0	31.6	28.2	80	9.5	1.12	5.48	23452	115.65	283.66	8.3	15.9
1531.0	37.9	24.6	80	9.5	1.03	5.51	23579	96.37	282.53	8.3	15.9
1532.0	26.9	26.1	80	9.5	1.14	5.55	23758	135.94	281.65	8.3	15.9
1533.0	48.6	24.5	80	9.5	0.96	5.57	23856	75.07	280.42	8.3	15.9
1534.0	48.0	32.8	80	9.5	1.04	5.59	23956	76.08	279.21	8.3	15.9
1535.0	43.9	29.4	80	9.5	1.04	5.61	24066	83.18	278.06	8.3	15.9
1536.0	37.9	31.2	80	9.5	1.10	5.64	24192	96.37	277.00	8.3	15.9
1537.0	31.6	30.3	80	9.5	1.14	5.67	24344	115.65	276.06	8.3	15.9
1538.0	16.5	31.9	80	9.5	1.36	5.73	24635	221.15	275.74	8.3	15.9
1539.0	14.0	29.6	80	9.5	1.38	5.80	24978	260.71	275.66	8.3	15.9
1540.0	22.5	29.1	80	9.5	1.23	5.85	25191	162.31	275.01	8.3	15.9
1541.0	42.4	37.0	80	9.5	1.12	5.87	25304	86.23	273.94	8.3	15.9
1542.0	28.6	32.7	80	9.5	1.20	5.90	25472	127.82	273.11	8.3	15.9
1543.0	34.3	31.6	80	9.5	1.13	5.93	25612	106.52	272.17	8.3	15.9
1544.0	32.1	31.9	80	9.5	1.16	5.96	25762	113.62	271.29	8.3	15.9
1545.0	19.6	33.5	80	9.5	1.32	6.02	26007	186.66	270.82	8.3	15.9
1546.0	48.0	28.9	80	9.5	1.01	6.04	26107	76.08	269.74	8.3	15.9
1547.0	53.7	27.6	80	9.5	0.96	6.05	26196	67.97	268.63	8.3	15.9
1548.0	53.7	22.4	80	9.5	0.91	6.07	26286	67.97	267.54	8.3	15.9
1549.0	18.4	30.9	80	9.5	1.31	6.13	26547	198.83	267.16	8.3	15.9
1551.0	48.5	35.1	80	9.5	1.06	6.17	26745	75.36	265.10	8.3	15.9
1552.0	67.5	17.8	80	9.5	0.80	6.18	26816	54.10	263.97	8.3	15.9
1553.0	24.7	23.5	80	9.5	1.14	6.22	27011	148.11	263.36	8.3	15.9
1554.0	30.5	32.7	80	9.5	1.18	6.26	27168	119.70	262.60	8.3	15.9
1555.0	11.7	32.0	80	9.5	1.47	6.34	27580	313.46	262.86	8.3	15.9
1556.0	11.4	35.0	80	9.5	1.51	6.43	28000	319.55	263.16	8.3	15.9
1557.0	35.6	31.2	80	9.5	1.12	6.46	28135	102.46	262.32	8.3	15.9
1558.0	36.7	31.9	80	9.5	1.12	6.49	28265	99.42	261.48	8.3	15.9

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	TURNS	ICOST	CCOST	PP	FG
1559.0	40.0	27.6	80	9.5	1.05	6.51	28385	91.30	240.60	8.3	15.9
1560.0	54.0	28.0	80	9.5	0.96	6.53	28474	67.63	259.61	8.3	15.9
1561.0	7.4	29.2	80	9.5	1.56	6.67	29126	496.06	260.82	8.3	15.9
1562.0	10.7	17.1	80	9.5	1.26	6.76	29577	342.88	261.24	8.3	15.9
1563.0	14.3	16.4	80	9.5	1.17	6.83	29912	254.63	261.20	8.3	15.9
1564.0	31.3	14.4	80	9.5	0.95	6.86	30065	116.66	260.43	8.3	15.9
1565.0	16.5	19.6	80	9.5	1.19	6.92	30356	221.15	260.28	8.3	15.9
1566.0	11.4	16.8	80	9.5	1.24	7.01	30777	320.56	260.58	8.3	15.9
1567.0	21.8	26.1	80	9.5	1.20	7.05	30997	167.38	260.12	8.3	15.9
1568.0	14.3	27.2	80	9.5	1.34	7.12	31333	255.64	260.10	8.3	15.9
1569.0	17.5	26.2	80	9.5	1.27	7.18	31608	208.98	259.85	8.3	15.9
1570.0	36.0	24.0	80	9.5	1.04	7.21	31741	101.44	259.07	8.3	15.9
1571.0	33.3	30.9	80	9.5	1.13	7.24	31885	109.56	258.35	8.3	15.9
1572.0	21.4	34.4	80	9.5	1.31	7.29	32109	170.43	257.92	8.3	15.9
1573.0	66.7	30.8	80	9.5	0.93	7.30	32181	54.78	256.95	8.3	15.9
1574.0	36.0	34.7	80	9.5	1.15	7.33	32314	101.44	256.20	8.3	15.9
1575.0	70.6	33.6	80	9.5	0.93	7.34	32382	51.74	255.23	8.3	15.9
1576.0	36.7	34.2	80	9.5	1.14	7.37	32513	99.42	254.49	8.3	15.9
1577.0	26.3	34.7	80	9.5	1.25	7.41	32696	138.98	253.95	8.3	15.9
1578.0	41.4	38.9	80	9.5	1.14	7.43	32812	88.26	253.17	8.3	15.9
1579.0	32.1	23.4	80	9.5	1.06	7.46	32961	113.62	252.52	8.3	15.9
1580.0	54.5	20.1	80	9.5	0.88	7.48	33049	66.95	251.65	8.3	15.9
1581.0	24.2	40.3	80	9.5	1.33	7.52	33248	151.15	251.19	8.3	15.9
1582.0	16.0	25.7	80	9.5	1.29	7.59	33548	228.25	251.08	8.3	15.9
1583.0	124.1	18.5	80	9.5	0.64	7.59	33586	29.42	250.06	8.3	15.9
1584.0	116.1	25.5	80	9.5	0.72	7.60	33628	31.45	249.07	8.3	15.9
1585.0	97.3	35.3	80	9.5	0.84	7.61	33677	37.53	248.10	8.3	16.0
1586.0	105.9	27.0	80	9.5	0.76	7.62	33722	34.49	247.14	8.3	16.0
1587.0	9.5	14.2	80	9.5	1.23	7.73	34225	382.45	247.75	8.3	16.0
1588.0	23.4	16.6	80	9.5	1.05	7.77	34430	156.22	247.34	8.3	16.0
1589.0	17.9	19.4	80	9.5	1.16	7.83	34698	203.90	247.14	8.3	16.0
1590.0	20.7	16.9	80	9.5	1.09	7.87	34930	176.51	246.83	8.3	16.0
1591.0	75.0	30.6	80	9.5	0.89	7.89	34994	48.69	245.95	8.3	16.0
1592.0	31.9	26.2	80	9.5	1.09	7.92	35145	114.63	245.37	8.3	16.0
1593.0	29.8	24.2	80	9.5	1.09	7.95	35306	122.75	244.84	8.3	16.0
1594.0	27.7	8.0	80	9.5	0.86	7.99	35480	131.88	244.34	8.3	16.0
1595.0	33.0	13.9	80	9.5	0.92	8.02	35625	110.57	243.76	8.3	16.0
1596.0	35.6	12.4	80	9.5	0.88	8.05	35760	102.46	243.15	8.3	16.0
1597.0	54.5	14.0	80	9.5	0.80	8.07	35848	66.95	242.39	8.3	16.0
1598.0	360.0	8.0	80	9.5	0.30	8.07	35861	10.14	241.39	8.3	16.0
1599.0	102.9	19.5	80	9.5	0.70	8.08	35908	35.51	240.51	8.3	16.0
1600.0	92.3	33.3	80	9.5	0.85	8.09	35960	39.56	239.66	8.3	16.0
1601.0	10.8	18.1	80	9.5	1.28	8.18	36404	337.81	240.07	8.3	16.0
1602.0	8.4	31.4	80	9.5	1.55	8.30	36976	435.20	240.90	8.3	16.0
1603.0	2.6	39.6	80	9.5	2.04	8.69	38824	1406	246	8.3	16.0
1604.0	9.1	41.0	80	9.5	1.66	8.80	39353	402.73	246.45	8.3	16.0
1605.0	76.6	35.4	80	9.5	0.92	8.81	39416	47.68	245.62	8.3	16.0
1606.0	69.2	34.0	80	9.5	0.94	8.82	39485	52.75	244.82	8.3	16.0
1607.0	98.2	18.3	80	9.5	0.70	8.83	39534	37.20	243.96	8.3	16.0
1608.0	75.0	32.2	80	9.5	0.90	8.85	39598	48.69	243.16	8.3	16.0

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	URNS	ICOST	CCOST	PP	FG
1609.0	37.9	33.9	80	9.5	1.12	8.87	39725	96.37	242.56	8.3	16.0
1610.0	100.0	28.9	80	9.5	0.79	8.88	39773	36.52	241.72	8.3	16.0
1611.0	90.0	26.0	80	9.5	0.80	8.89	39826	40.58	240.90	8.3	16.0
1612.0	97.3	26.5	80	9.5	0.78	8.90	39875	37.53	240.08	8.3	16.0
1613.0	58.1	31.3	80	9.5	0.97	8.92	39958	62.90	239.36	8.3	16.0
1614.0	78.3	22.1	80	9.5	0.80	8.93	40019	46.66	238.59	8.3	16.0
1615.0	11.6	13.1	80	9.5	1.16	9.02	40434	315.49	238.90	8.3	16.0
1616.0	81.8	18.4	80	9.5	0.75	9.03	40493	44.64	238.12	8.3	16.0
1617.0	60.0	31.9	80	9.5	0.97	9.05	40573	60.87	237.42	8.3	16.0
1618.0	47.4	34.7	80	9.5	1.06	9.07	40674	77.10	236.78	8.3	16.0
1619.0	100.0	29.8	80	9.5	0.80	9.08	40722	36.52	236.00	8.3	16.0
1620.0	27.9	30.2	71	9.5	1.14	9.12	40874	130.86	235.58	8.3	16.0
1621.0	54.0	34.7	70	9.5	0.98	9.14	40951	67.63	234.93	8.3	16.0
1622.0	27.5	34.4	70	9.5	1.19	9.17	41104	132.87	234.53	8.3	16.0
1623.0	15.7	35.2	70	9.5	1.37	9.24	41371	237.31	234.52	8.3	16.0
1624.0	32.4	36.0	70	9.5	1.15	9.27	41501	112.60	234.05	8.3	16.0
1625.0	14.2	36.7	70	9.5	1.42	9.34	41797	257.67	234.14	8.3	16.0
1626.0	58.1	32.4	70	9.5	0.94	9.35	41869	62.90	233.49	8.3	16.0
1627.0	144.0	28.1	70	9.5	0.64	9.36	41899	25.36	232.69	8.3	16.0
1628.0	50.7	34.3	70	9.5	1.00	9.38	41981	77.03	232.08	8.3	16.0
1629.0	36.4	33.6	70	9.5	1.09	9.41	42097	100.43	231.58	8.3	16.0
1630.0	31.9	35.0	70	9.5	1.15	9.44	42229	114.63	231.14	8.3	16.0
1631.0	50.7	32.8	70	9.5	0.98	9.46	42312	72.03	230.54	8.3	16.0
1632.0	44.4	25.6	70	9.5	0.96	9.48	42406	82.17	229.99	8.3	16.0
1633.0	43.4	39.1	70	9.5	1.09	9.50	42503	84.20	229.44	8.3	16.0
1634.0	32.4	37.9	70	9.5	1.17	9.54	42632	112.60	229.01	8.3	16.0
1635.0	53.7	38.6	70	9.5	1.01	9.55	42711	67.97	228.41	8.3	16.0
1637.0	60.0	21.8	70	9.5	0.83	9.59	42851	60.87	227.18	8.3	16.0
1638.0	100.0	33.5	70	9.5	0.78	9.60	42893	36.52	226.48	8.3	16.0
1639.0	40.4	38.0	70	9.5	1.10	9.62	42996	90.29	225.98	8.3	16.0
1640.0	34.3	32.3	70	9.5	1.10	9.65	43119	106.52	225.55	8.3	16.0
1641.0	10.7	30.1	70	9.5	1.42	9.75	43513	342.88	225.98	8.3	16.0
1642.0	28.3	23.3	70	9.5	1.06	9.78	43661	128.83	225.62	8.3	16.0
1643.0	43.4	21.6	70	9.5	0.92	9.80	43758	84.20	225.12	8.3	16.0
1644.0	20.2	23.2	70	9.5	1.15	9.85	43966	180.57	224.96	8.3	16.0
1645.0	18.9	16.9	70	9.5	1.08	9.91	44188	192.74	224.84	8.3	16.0
1646.0	28.8	19.9	70	9.5	1.01	9.94	44333	126.81	224.49	8.3	16.0
1647.0	58.1	18.2	70	9.5	0.80	9.96	44406	62.90	223.97	8.3	16.1
1648.0	46.8	21.4	70	9.5	0.90	9.98	44496	78.11	223.40	8.3	16.1
1649.0	20.8	15.5	70	9.5	1.03	10.03	44697	175.50	223.24	8.3	16.1
1650.0	13.6	14.7	70	9.5	1.12	10.10	45007	268.83	223.40	8.3	16.1
1651.0	11.4	14.6	70	9.5	1.17	10.19	45375	320.56	223.74	8.3	16.1
1652.0	31.9	22.3	70	9.5	1.01	10.22	45507	114.63	223.36	8.3	16.1
1653.0	4.9	33.9	70	9.5	1.72	10.43	46373	752.72	225.19	8.3	16.1
1654.0	3.9	37.6	70	9.5	1.84	10.68	47453	939.38	227.66	8.3	16.1
1655.0	7.6	44.9	70	9.5	1.77	10.82	48007	481.86	228.54	8.3	16.1
1656.0	20.0	32.1	70	9.5	1.26	10.87	48217	182.60	228.38	8.3	16.1
1657.0	32.1	46.0	70	9.5	1.25	10.90	48348	113.62	227.99	8.3	16.1
1658.0	64.3	39.5	70	9.5	0.96	10.91	48413	56.81	227.41	8.3	16.1
1659.0	69.2	33.3	70	9.5	0.89	10.93	48474	52.75	226.01	8.3	16.1

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	TURNS	TCOST	CCOST	PP	FG
1660.0	33.0	35.1	70	9.5	1.14	10.96	48601	110.57	226.42	8.3	16.1
1661.0	46.8	26.2	70	9.5	0.95	10.98	48691	78.11	225.92	8.3	16.1
1662.0	56.2	27.5	70	9.5	0.91	11.00	48766	64.92	225.37	8.3	16.1
1663.0	66.7	29.0	70	9.5	0.87	11.01	48829	54.78	224.60	8.3	16.1
1664.0	83.7	37.4	70	9.5	0.86	11.02	48879	43.62	224.20	8.3	16.1
1665.0	80.0	35.7	70	9.5	0.87	11.04	48931	45.65	223.60	8.3	16.1
1667.0	26.1	34.8	70	9.5	1.21	11.11	49253	139.77	223.65	8.3	16.1
1668.0	63.5	38.4	70	9.5	0.96	11.13	49319	57.49	222.50	8.3	16.1
1669.0	90.0	36.3	70	9.5	0.83	11.14	49366	40.58	221.90	8.3	16.1
1670.0	37.5	28.5	70	9.5	1.03	11.17	49478	97.39	221.49	8.3	16.1
1671.0	54.5	29.6	70	9.5	0.93	11.18	49555	66.95	220.99	8.3	16.1
1672.0	49.3	29.4	70	9.5	0.96	11.20	49640	74.05	220.51	8.3	16.1
1673.0	9.3	32.6	70	9.5	1.50	11.31	50094	394.62	221.07	8.3	16.1
1674.0	5.7	37.3	70	9.5	1.72	11.49	50837	646.20	222.45	8.3	16.1
1675.0	11.5	46.0	70	9.5	1.59	11.58	51203	318.54	222.76	8.3	16.1
1676.0	26.9	36.9	70	9.5	1.22	11.61	51359	135.94	222.48	8.3	16.1
1677.0	40.0	31.7	70	9.5	1.05	11.64	51464	91.30	222.06	8.3	16.1
1678.0	67.9	26.8	70	9.5	0.85	11.65	51526	53.77	221.52	8.3	16.1
1679.0	25.9	17.5	70	9.5	1.01	11.69	51688	141.01	221.27	8.3	16.1
1680.0	87.8	25.1	70	9.5	0.74	11.70	51736	41.59	220.76	8.3	16.1
1681.0	76.6	24.7	70	9.5	0.79	11.72	51791	47.68	220.15	8.3	16.1
1682.0	5.0	42.8	70	9.5	1.83	11.91	52626	726.34	221.75	8.3	16.1
1683.0	4.9	39.8	70	9.5	1.80	12.12	53483	744.60	223.39	8.3	16.1
1684.0	5.5	33.4	70	9.5	1.67	12.30	54245	662.43	224.77	8.3	16.1
1685.0	7.3	33.7	70	9.5	1.59	12.44	54816	497.08	225.62	8.3	16.1
1686.0	6.1	40.7	70	9.5	1.74	12.60	55510	603.59	226.79	8.3	16.1
1687.0	21.4	36.1	70	9.5	1.28	12.65	55706	170.43	226.62	8.3	16.1
1688.0	20.2	31.6	70	9.5	1.25	12.70	55914	180.57	226.48	8.3	16.1
1689.0	39.1	30.5	70	9.5	1.04	12.72	56021	93.33	226.07	8.3	16.1
1690.0	50.0	28.6	70	9.5	0.95	12.74	56105	73.04	225.60	8.3	16.1
1691.0	30.3	32.8	70	9.5	1.14	12.78	56244	120.72	225.27	8.3	16.1
1692.0	56.2	28.2	70	9.5	0.91	12.79	56319	64.92	224.78	8.3	16.1
1693.0	69.2	25.6	70	9.5	0.83	12.81	56380	52.75	224.28	8.3	16.1
1694.0	59.0	23.5	70	9.5	0.86	12.83	56451	61.88	223.76	8.3	16.1
1695.0	62.6	35.9	70	9.5	0.95	12.84	56518	53.33	223.26	8.3	16.1
1696.0	45.0	33.3	70	9.5	1.03	12.86	56611	81.16	222.83	8.3	16.1
1697.0	39.1	38.4	70	9.5	1.11	12.89	56718	93.33	222.44	8.3	16.1
1698.0	54.5	31.9	70	9.5	0.95	12.91	56795	66.95	221.98	8.3	16.1
1699.0	92.3	29.0	70	9.5	0.77	12.92	56841	39.56	221.43	8.3	16.1
1700.0	35.3	26.0	70	9.5	1.03	12.95	56960	103.47	221.08	8.3	16.1
1701.0	6.1	38.1	70	9.5	1.70	13.11	57648	593.52	222.20	8.3	16.1
1702.0	7.0	36.8	70	9.5	1.64	13.25	58249	522.44	223.09	8.3	16.1
1703.0	11.3	38.0	70	9.5	1.51	13.34	58820	322.59	223.39	8.3	16.1
1704.0	36.0	32.1	70	9.5	1.08	13.37	58737	101.44	223.03	8.3	16.1
1705.0	32.4	29.3	70	9.5	1.09	13.40	58866	112.60	222.70	8.3	16.1
1706.0	8.6	31.8	70	9.5	1.51	13.52	59356	426.07	223.30	8.3	16.1
1707.0	15.5	38.2	70	9.5	1.41	13.58	59628	236.37	223.34	8.3	16.1
1708.0	10.9	39.4	70	9.5	1.54	13.67	60014	335.78	223.67	8.3	16.1
1709.0	8.0	37.2	70	9.5	1.61	13.80	60539	456.50	224.34	8.3	16.1
1710.0	18.7	35.5	70	9.5	1.32	13.85	60764	195.79	224.26	8.3	16.1

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	TURNS	ICOST	CCOST	PP	FG
1711.0	26.1	36.7	70	9.5	1.23	13.89	60925	139.99	224.02	8.3	16.2
1712.0	18.2	35.0	70	9.5	1.32	13.95	61156	200.84	223.95	8.3	16.2
1713.0	23.8	32.5	70	9.5	1.21	13.99	61333	153.18	223.75	8.3	16.2
1714.0	17.1	35.8	70	9.5	1.35	14.05	61579	214.05	223.72	8.3	16.2
1715.0	14.9	39.2	70	9.5	1.43	14.11	61861	245.50	223.78	8.3	16.2
1716.0	11.4	40.4	70	9.5	1.53	14.20	62231	321.58	224.06	8.3	16.2
1717.0	20.6	37.7	70	9.5	1.31	14.25	62435	177.53	223.93	8.3	16.2
1718.0	17.6	38.5	70	9.6	1.36	14.31	62674	207.96	223.88	8.3	16.2
1719.0	13.1	39.6	70	9.6	1.46	14.38	62995	270.97	224.04	8.3	16.2
1720.0	7.7	40.0	70	9.6	1.64	14.51	63539	472.73	224.74	8.3	16.2
1721.0	7.9	40.5	70	9.6	1.64	14.64	64073	464.62	225.41	8.3	16.2
1722.0	9.4	41.1	70	9.6	1.59	14.75	64521	369.55	225.87	8.3	16.2
1724.0	6.3	37.7	70	9.6	1.68	15.07	65863	583.31	227.86	8.3	16.2
1725.0	9.0	39.4	70	9.6	1.58	15.18	66327	403.75	228.35	8.3	16.2
1726.0	11.8	40.0	70	9.6	1.50	15.26	66682	308.39	228.57	8.3	16.2
1727.0	24.3	37.6	70	9.6	1.25	15.30	66854	150.14	228.36	8.3	16.2
1728.0	16.4	39.1	70	9.6	1.39	15.36	67111	223.18	228.34	8.3	16.2
1729.0	7.1	40.2	70	9.6	1.67	15.50	67699	511.28	229.12	8.3	16.2
1730.0	22.4	42.9	70	9.6	1.33	15.55	67887	163.33	228.94	8.3	16.2
1731.0	12.5	39.2	70	9.6	1.47	15.63	68223	292.16	229.11	8.3	16.2
1732.0	4.4	43.7	70	9.6	1.87	15.85	69171	824.74	230.73	8.3	16.2
1733.0	5.6	41.7	70	9.6	1.76	16.03	69920	651.27	231.88	8.3	16.2
1734.0	7.6	39.3	70	9.6	1.64	16.16	70475	481.86	232.55	8.3	16.2
1735.0	12.5	38.8	70	9.6	1.47	16.24	70811	292.16	232.72	8.3	16.2
1736.0	19.7	39.3	70	9.6	1.33	16.30	71024	185.64	232.59	8.3	16.2
1737.0	7.5	39.0	70	9.6	1.63	16.43	71582	484.90	233.27	8.3	16.2
1738.0	13.1	38.4	70	9.6	1.45	16.50	71903	278.97	233.39	8.3	16.2
1739.0	9.9	35.7	70	9.6	1.51	16.61	72327	369.26	233.75	8.3	16.2
1740.0	7.1	41.5	70	9.6	1.68	16.75	72918	513.31	234.50	8.3	16.2
1741.0	6.5	40.5	70	9.6	1.70	16.90	73559	557.94	235.36	8.3	16.2
1742.0	4.9	40.3	70	9.6	1.79	17.10	74411	740.54	236.70	8.3	16.2
1743.0	10.1	36.7	64	9.6	1.48	17.20	74789	362.16	237.03	8.3	16.2
1744.0	10.7	37.3	50	9.6	1.39	17.29	75063	333.75	237.29	8.3	16.2
1745.0	22.5	36.1	50	9.6	1.15	17.34	75197	162.31	237.09	8.3	16.2
1746.0	10.2	37.1	50	9.6	1.41	17.43	75490	357.08	237.40	8.3	16.2
1747.0	9.5	37.8	50	9.6	1.44	17.54	75806	384.47	237.79	8.3	16.2
1748.0	12.4	36.5	50	9.6	1.34	17.62	76048	295.20	237.94	8.3	16.2
1749.0	8.6	41.2	50	9.6	1.51	17.74	76397	425.05	238.43	8.3	16.2
1750.0	11.3	41.3	50	9.6	1.42	17.83	76663	323.61	238.65	8.3	16.2
1751.0	9.6	38.3	50	9.6	1.44	17.93	76975	379.40	239.01	8.3	16.2
1753.0	8.4	36.9	50	9.6	1.47	18.17	77692	436.21	240.03	8.3	16.2
1754.0	10.3	38.8	50	9.6	1.43	18.27	77984	356.07	240.33	8.3	16.2
1755.0	13.7	37.0	50	9.6	1.31	18.34	78202	265.78	240.39	8.3	16.2
1756.0	10.9	37.5	50	9.6	1.39	18.43	78477	333.75	240.63	8.3	16.2
1757.0	5.8	38.0	50	9.6	1.60	18.60	78995	630.98	241.63	8.3	16.2
1758.0	6.2	40.4	50	9.6	1.61	18.76	79481	591.42	242.52	8.3	16.2
1759.0	9.7	42.0	50	9.6	1.48	18.87	79792	378.39	242.86	8.3	16.2
1760.0	13.7	39.6	50	9.6	1.34	18.94	80010	265.78	242.92	8.3	16.2
1761.0	19.7	38.3	50	9.6	1.21	18.99	80162	185.64	242.77	8.3	16.2
1762.0	16.7	34.3	50	9.6	1.23	19.05	80342	219.12	242.72	8.3	16.2

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	TURNS	ICOST	CCOST	PP	FG
1763.0	37.1	38.4	50	9.6	1.01	19.08	80423	98.40	242.35	8.3	16.2
1764.0	26.1	38.5	50	9.6	1.13	19.12	80538	139.99	242.10	8.3	16.2
1765.0	18.9	39.9	55	9.6	1.27	19.17	80712	192.74	241.97	8.3	16.2
1766.0	26.5	38.4	65	9.6	1.20	19.21	80859	137.96	241.71	8.3	16.2
1767.0	12.2	41.8	65	9.6	1.49	19.29	81180	300.28	241.86	8.3	16.2
1768.0	11.0	41.0	65	9.6	1.51	19.38	81535	332.74	242.08	8.3	16.2
1769.0	5.0	40.8	65	9.6	1.76	19.58	82308	723.30	243.28	8.3	16.2
1770.0	5.2	40.4	65	9.6	1.75	19.77	83060	704.02	244.41	8.3	16.2
1771.0	3.0	40.7	64	9.6	1.93	20.11	84354	1223	247	8.3	16.2
1772.0	4.7	40.3	55	9.6	1.73	20.32	85060	781.12	248.14	8.3	16.2
1773.0	6.6	39.1	55	9.6	1.60	20.47	85556	549.83	248.88	8.3	16.2
1774.0	6.0	38.7	55	9.6	1.62	20.64	86104	605.62	249.75	8.3	16.2
1775.0	5.4	40.1	55	9.6	1.68	20.82	86713	674.61	250.79	8.3	16.2
1776.0	5.9	39.5	55	9.6	1.64	20.99	87274	620.84	251.69	8.3	16.2
1777.0	14.0	39.2	55	9.6	1.36	21.06	87510	240.71	251.71	8.3	16.3
1778.0	22.9	37.9	55	9.6	1.19	21.11	87654	159.27	251.48	8.3	16.3
1779.0	13.8	41.6	55	9.6	1.39	21.18	87893	264.77	251.52	8.3	16.3
1780.0	9.7	39.0	55	9.6	1.48	21.28	88233	376.36	251.82	8.3	16.3
1781.0	19.1	36.9	55	9.6	1.24	21.33	88405	190.72	251.67	8.3	16.3
1782.0	7.2	38.7	55	9.6	1.57	21.47	88861	504.18	252.28	8.3	16.3
1783.0	8.4	39.9	55	9.6	1.53	21.59	89252	433.17	252.71	8.3	16.3
1784.0	5.9	42.3	55	9.6	1.68	21.76	89814	621.85	253.59	8.3	16.3
1785.0	5.4	39.6	55	9.6	1.67	21.95	90420	670.55	254.58	8.3	16.3
1786.0	5.4	40.5	55	9.6	1.68	22.13	91033	678.66	255.59	8.3	16.3
1787.0	5.2	40.1	55	9.6	1.69	22.33	91673	708.08	256.66	8.3	16.3
1788.0	7.0	39.5	55	9.6	1.59	22.47	92146	523.45	257.29	8.3	16.3
1789.0	36.0	39.0	55	9.6	1.06	22.50	92238	101.44	256.92	8.3	16.3
1790.0	11.7	39.1	55	9.6	1.42	22.58	92520	312.45	257.06	8.3	16.3
1791.0	5.6	39.5	55	9.6	1.66	22.76	93105	647.22	257.97	8.3	16.3
1792.0	5.2	40.3	55	9.6	1.69	22.95	93746	709.10	259.03	8.3	16.3
1793.0	4.5	39.7	55	9.6	1.73	23.17	94476	808.51	260.31	8.3	16.3
1794.0	4.6	39.9	55	9.6	1.73	23.39	95201	801.41	261.57	8.3	16.3
1795.0	6.0	39.2	55	9.6	1.63	23.56	95752	609.68	262.30	8.3	16.3
1796.0	1.2	27.2	55	9.6	1.93	24.40	98533	3078	269	8.3	16.3
1797.0	10.2	39.6	55	9.6	1.47	24.50	98857	359.11	269.12	8.3	16.3
1798.0	18.2	40.1	55	9.6	1.29	24.56	99039	200.86	268.97	8.3	16.3
1799.0	11.8	39.8	55	9.6	1.42	24.64	99317	308.39	269.04	8.3	16.3
1800.0	4.6	42.2	55	9.6	1.76	24.86	100042	801.41	270.28	8.3	16.3
1801.0	6.2	41.2	55	9.6	1.65	25.02	100575	590.07	271.01	8.3	16.3
1802.0	6.0	43.3	55	9.6	1.68	25.19	101123	606.64	271.78	8.3	16.3
1803.0	5.7	42.3	55	9.6	1.69	25.36	101703	642.14	272.63	8.3	16.3
1804.0	4.5	42.2	55	9.6	1.76	25.59	102438	813.58	273.86	8.3	16.3
1805.0	5.0	42.2	55	9.6	1.73	25.79	103099	731.41	274.90	8.3	16.3
1806.0	5.5	41.9	55	9.6	1.70	25.97	103703	668.52	275.79	8.3	16.3
1807.0	6.9	35.3	55	9.6	1.54	26.11	104178	525.48	276.36	8.3	16.3
1808.0	6.4	38.3	55	9.6	1.60	26.27	104696	573.16	277.03	8.3	16.3
1809.0	10.0	43.0	55	9.6	1.51	26.37	105025	364.19	277.22	8.3	16.3
1810.0	9.6	42.3	55	9.6	1.53	26.48	105370	381.43	277.46	8.3	16.3
1811.0	13.8	41.1	55	9.6	1.40	26.55	105608	263.76	277.43	8.3	16.3
1812.0	9.7	42.1	55	9.6	1.52	26.65	105947	375.34	277.65	8.3	16.3

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	TURNS	ICOST	CCOST	PP	FG
1813.0	14.5	42.4	55	9.6	1.40	26.72	106175	251.58	277.59	8.3	16.3
1814.0	17.4	41.8	55	9.6	1.33	26.78	106364	209.99	277.44	8.3	16.3
1815.0	34.0	41.0	55	9.6	1.10	26.81	106462	107.53	277.06	8.3	16.3
1816.0	8.4	44.3	55	9.6	1.60	26.93	106855	435.20	277.41	8.3	16.3
1817.0	7.0	43.1	55	9.6	1.64	27.07	107328	523.45	277.95	8.3	16.3
1818.0	5.7	43.2	55	9.6	1.72	27.25	107911	645.19	278.77	8.3	16.3
1819.0	8.6	44.1	55	9.6	1.59	27.36	108296	426.07	279.09	8.3	16.3
1820.0	5.2	43.1	55	9.6	1.74	27.56	108934	706.05	280.03	8.3	16.3
1821.0	8.4	38.9	55	9.6	1.53	27.67	109328	436.21	280.37	8.3	16.3
1822.0	18.4	28.3	55	9.6	1.17	27.73	109508	198.83	280.19	8.3	16.3
1823.0	5.0	40.9	63	9.6	1.77	27.93	110264	731.41	281.18	8.3	16.3
1824.0	7.0	41.2	55	9.6	1.62	28.07	110738	524.47	281.71	8.3	16.3
1825.0	15.9	40.2	55	9.6	1.34	28.14	110945	229.26	281.59	8.3	16.3
1826.0	15.2	38.7	55	9.6	1.34	28.20	111162	240.42	281.50	8.3	16.3
1827.0	17.3	39.7	55	9.6	1.31	28.26	111353	211.00	281.35	8.3	16.3
1828.0	20.1	36.9	55	9.6	1.23	28.31	111517	181.59	281.14	8.3	16.3
1829.0	12.9	40.6	55	9.6	1.42	28.39	111774	284.04	281.14	8.3	16.3
1831.0	22.4	37.3	55	9.6	1.20	28.48	112069	163.33	280.64	8.3	16.3
1832.0	9.2	35.9	55	9.6	1.47	28.59	112429	398.68	280.89	8.3	16.3
1833.0	11.4	36.5	55	9.6	1.41	28.67	112720	321.58	280.98	8.3	16.3
1834.0	13.0	36.2	55	9.6	1.36	28.75	112973	279.99	280.97	8.3	16.3
1835.0	21.4	36.6	55	9.6	1.21	28.80	113127	170.43	280.74	8.3	16.3
1836.0	14.8	36.2	55	9.6	1.32	28.86	113349	246.51	280.67	8.3	16.3
1837.0	6.8	38.6	55	9.6	1.60	29.01	113832	533.60	281.20	8.3	16.3
1838.0	27.3	43.8	55	9.6	1.20	29.05	113953	133.91	280.89	8.3	16.3
1839.0	25.4	39.9	55	9.6	1.19	29.09	114083	144.05	280.60	8.3	16.3
1840.0	5.4	42.5	55	9.6	1.72	29.27	114693	675.62	281.43	8.3	16.3
1841.0	4.9	46.6	55	9.6	1.81	29.48	115373	751.70	282.42	8.3	16.3
1842.0	4.5	43.9	55	9.6	1.80	29.70	116188	813.58	283.54	8.3	16.3
1843.0	4.3	42.6	55	9.6	1.80	29.93	116872	846.05	284.71	8.3	16.3
1844.0	4.9	41.7	55	9.6	1.74	30.14	117544	743.59	285.67	8.3	16.3
1845.0	6.5	43.1	55	9.6	1.67	30.29	118051	560.99	286.24	8.3	16.4
1846.0	4.5	43.3	55	9.6	1.79	30.51	118783	309.53	287.33	8.3	16.4
1847.0	9.0	42.9	55	9.6	1.56	30.62	119151	407.81	287.58	8.3	16.4
1848.0	26.5	37.6	55	9.6	1.15	30.66	119276	137.96	287.27	8.3	16.4
1849.0	36.7	35.2	55	9.6	1.03	30.69	119366	99.42	286.88	8.3	16.4
1850.0	45.6	44.1	55	9.6	1.03	30.71	119438	80.14	286.46	8.3	16.4
1851.0	52.2	41.5	55	9.6	0.97	30.73	119501	70.00	286.01	8.3	16.4
1852.0	49.3	39.8	55	9.6	0.97	30.75	119568	74.05	285.58	8.3	16.4
1853.0	22.9	44.0	55	9.6	1.26	30.79	119712	159.27	285.32	8.3	16.4
1854.0	42.9	40.3	55	9.6	1.02	30.82	119789	85.21	284.91	8.3	16.4
1855.0	52.9	38.7	55	9.6	0.94	30.83	119851	68.98	284.47	8.3	16.4
1856.0	75.0	41.3	55	9.6	0.85	30.85	119895	48.69	283.99	8.3	16.4
1857.0	48.0	41.7	55	9.6	1.00	30.87	119964	74.08	283.57	8.3	16.4
1859.0	26.7	46.4	55	9.6	1.23	30.94	120212	136.95	282.97	8.3	16.4
1860.0	21.8	42.4	55	9.6	1.26	30.99	120363	147.38	282.74	8.3	16.4
1861.0	4.3	41.8	55	9.6	1.79	31.22	121132	651.12	283.88	8.3	16.4
1862.0	7.5	39.6	55	9.6	1.57	31.36	121570	484.90	284.29	8.3	16.4
1863.0	15.7	38.9	55	9.6	1.33	31.42	121780	232.31	284.18	8.3	16.4
1864.0	11.1	40.4	55	9.6	1.45	31.51	122078	329.69	284.28	8.3	16.4

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	URNS	ICOST	CCOST	PP	FG
1865.0	15.3	40.6	55	9.6	1.35	31.58	122294	239.41	284.19	8.3	16.4
1866.0	4.3	42.0	55	9.6	1.78	31.81	123057	844.02	285.39	8.3	16.4
1867.0	4.5	41.3	55	9.6	1.76	32.03	123795	816.63	286.36	8.3	16.4
1868.0	3.6	41.5	55	9.6	1.83	32.30	124700	1002	288	8.3	16.4
1869.0	4.9	39.1	55	9.6	1.70	32.51	125372	743.59	288.69	8.3	16.4
1870.0	5.4	39.4	55	7.6	1.68	32.69	125988	681.71	289.47	8.3	16.4
1871.0	32.7	37.3	55	9.6	1.08	32.73	126089	111.59	289.11	8.3	16.4
1872.0	11.0	36.4	55	9.6	1.41	32.82	126388	330.71	289.20	8.3	16.4
1873.0	17.3	28.8	55	9.6	1.19	32.87	126578	211.00	289.04	8.4	16.4
1874.0	29.3	24.4	55	9.6	0.99	32.91	126691	124.78	288.72	8.4	16.4
1875.0	50.7	38.6	55	9.6	0.95	32.93	126756	72.03	288.30	8.4	16.4
1876.0	13.0	38.9	55	9.6	1.39	33.00	127009	279.99	288.28	8.4	16.4
1877.0	6.7	40.2	55	9.6	1.61	33.15	127502	545.77	288.78	8.4	16.4
1878.0	6.8	38.2	55	9.6	1.59	33.30	127989	538.67	289.27	8.4	16.4
1879.0	8.7	38.6	58	9.6	1.53	33.42	128393	422.61	289.53	8.4	16.4
1880.0	6.9	40.8	60	9.6	1.64	33.56	128918	532.53	290.00	8.4	16.4
1881.0	6.4	39.9	60	9.6	1.65	33.72	129479	569.10	290.54	8.4	16.4
1882.0	14.9	39.3	60	9.6	1.38	33.79	129721	245.50	290.45	8.4	16.4
1883.0	9.8	39.4	60	9.6	1.51	33.89	130087	371.29	290.61	8.4	16.4
1884.0	7.7	40.3	60	9.6	1.60	34.02	130557	476.79	290.97	8.4	16.4
1885.0	6.3	40.5	60	9.6	1.67	34.18	131129	580.26	291.52	8.4	16.4
1886.0	10.3	39.5	60	9.6	1.50	34.27	131479	355.06	291.65	8.4	16.4
1887.0	11.3	39.2	60	7.6	1.46	34.36	131797	322.59	291.71	8.4	16.4
1888.0	9.4	38.4	60	9.6	1.51	34.47	132181	389.55	291.89	8.4	16.4
1889.0	28.3	38.8	60	9.6	1.16	34.50	132308	128.83	291.58	8.4	16.4
1890.0	16.5	38.3	60	9.6	1.33	34.56	132526	221.15	291.45	8.4	16.4
1891.0	7.2	40.4	60	9.6	1.62	34.70	133027	508.24	291.86	8.4	16.4
1892.0	8.2	40.1	60	9.6	1.58	34.83	133468	447.37	292.15	8.4	16.4
1893.0	6.2	40.0	60	9.6	1.66	34.99	134049	589.39	292.72	8.4	16.4
1894.0	5.9	40.1	60	9.6	1.68	35.16	134655	614.75	293.33	8.4	16.4
1895.0	16.6	40.1	60	9.6	1.35	35.22	134872	220.13	293.19	8.4	16.4
1896.0	17.6	35.4	60	9.6	1.28	35.27	135076	206.95	293.03	8.4	16.4
1897.0	21.6	39.1	60	9.6	1.25	35.32	135243	169.41	292.79	8.4	16.4
1898.0	23.2	37.9	60	9.6	1.22	35.36	135398	157.24	292.54	8.4	16.4
1899.0	30.5	38.8	60	9.6	1.14	35.40	135516	119.70	292.22	8.4	16.4
1900.0	29.3	39.3	60	9.6	1.16	35.43	135639	124.78	291.90	8.4	16.4
1901.0	23.4	39.6	60	9.6	1.23	35.47	135793	156.22	291.65	8.4	16.4
1902.0	13.8	40.4	60	9.6	1.41	35.54	136054	264.77	291.60	8.4	16.4
1903.0	6.6	40.1	60	9.6	1.65	35.70	136601	554.90	292.09	8.4	16.4
1904.0	5.3	39.9	60	9.6	1.71	35.88	137278	686.78	292.82	8.4	16.4
1905.0	5.2	39.5	60	9.6	1.71	36.08	137967	698.95	293.57	8.4	16.4
1907.0	4.4	39.4	60	9.6	1.77	36.53	139599	827.79	295.54	8.4	16.5
1908.0	5.5	40.0	60	9.6	1.70	36.71	140248	658.37	296.21	8.4	16.5
1909.0	5.3	39.6	60	9.6	1.71	36.90	140923	684.75	296.93	8.4	16.5
1910.0	12.6	38.9	60	9.6	1.42	36.98	141209	290.13	296.91	8.4	16.5
1911.0	4.0	40.7	60	9.6	1.82	37.23	142120	924.16	298.06	8.4	16.5
1912.0	4.2	40.1	60	9.6	1.79	37.47	142983	875.47	299.12	8.4	16.5
1913.0	4.1	40.8	60	9.6	1.81	37.71	143856	885.61	300.19	8.4	16.5
1914.0	3.9	41.6	60	9.6	1.84	37.97	144790	947.49	301.37	8.4	16.5
1915.0	3.7	39.9	60	9.6	1.83	38.24	145771	995.17	302.63	8.4	16.5

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	TURNS	LCOST	CCOST	PP	FG
1916.0	11.1	38.0	60	9.6	1.45	38.33	146095	328.68	302.68	8.4	16.5
1917.0	37.5	37.4	60	9.6	1.06	38.36	146191	97.39	302.39	8.4	16.5
1918.0	37.1	37.6	60	9.6	1.07	38.39	146288	98.40	301.94	8.4	16.5
1919.0	6.8	39.3	60	9.6	1.62	38.53	146814	533.60	302.35	8.4	16.5
1920.0	3.5	39.4	60	9.6	1.84	38.82	147836	1037	304	8.4	16.5
1921.0	3.6	40.2	60	9.6	1.84	39.09	148830	1008	305	8.4	16.5
1922.0	5.1	38.1	60	9.6	1.70	39.29	149540	770.26	305.69	8.4	16.5
1923.0	4.4	39.3	60	9.6	1.77	39.52	150365	836.92	306.64	8.4	16.5
1924.0	4.7	40.0	60	9.6	1.75	39.73	151128	774.02	307.48	8.4	16.5
1926.0	3.6	40.1	60	9.6	1.84	40.29	153153	1027	310	8.4	16.5
1927.0	4.0	40.3	60	9.6	1.81	40.54	154042	901.84	311.10	8.4	16.5
1928.0	4.0	40.1	60	9.6	1.81	40.79	154946	917.06	312.17	8.4	16.5
1929.0	4.0	39.8	60	9.6	1.81	41.05	155857	924.16	313.24	8.4	16.5
1930.0	4.1	39.8	60	9.6	1.80	41.29	156743	898.80	314.29	8.4	16.5
1931.0	4.2	39.2	60	9.6	1.78	41.53	157602	871.41	315.28	8.4	16.5
1932.0	4.6	39.8	60	9.6	1.76	41.75	158377	786.19	316.11	8.4	16.5
1933.0	5.9	39.7	60	9.6	1.68	41.91	158986	617.80	316.64	8.4	16.5
1934.0	7.8	49.2	60	9.6	1.70	42.04	159448	468.67	316.91	8.4	16.5
1936.0	10.8	49.4	60	9.6	1.59	42.23	160115	338.15	316.98	8.4	16.5
1937.0	7.7	46.2	60	9.6	1.67	42.36	160581	472.73	317.25	8.4	16.5
1938.0	6.4	47.6	60	9.6	1.75	42.51	161141	568.09	317.69	8.4	16.5
1939.0	8.4	47.7	60	9.6	1.66	42.63	161572	437.23	317.90	8.4	16.5
1940.0	24.8	49.1	60	9.6	1.30	42.67	161717	147.09	317.60	8.4	16.5
1941.0	21.1	44.4	60	9.6	1.31	42.72	161888	173.47	317.35	8.4	16.5
1942.0	27.9	49.0	60	9.6	1.26	42.76	162017	130.86	317.03	8.4	16.5
1943.0	14.8	48.0	60	9.6	1.47	42.82	162261	247.52	316.91	8.4	16.5
1944.0	8.4	47.9	60	9.6	1.66	42.94	162692	437.23	317.12	8.4	16.5
1946.0	11.8	39.1	60	9.6	1.45	43.11	163301	308.84	317.09	8.4	16.5
1947.0	5.0	43.5	60	9.6	1.78	43.31	164018	727.36	317.79	8.4	16.5
1948.0	5.1	48.9	51	9.6	1.79	43.51	164623	719.24	318.48	8.4	16.5
1949.0	5.3	48.8	50	9.6	1.77	43.70	165193	693.88	319.13	8.4	16.5
1950.0	5.8	49.2	50	9.6	1.74	43.87	165713	632.00	319.66	8.4	16.5
1951.0	5.0	49.7	50	9.6	1.79	44.07	166308	724.31	320.35	8.4	16.5
1952.0	4.3	50.1	50	9.6	1.85	44.30	167003	846.05	321.25	8.4	16.5
1953.0	3.9	50.5	50	9.6	1.90	44.56	167781	947.49	322.31	8.4	16.5
1954.0	5.5	51.0	50	9.6	1.78	44.74	168327	664.46	322.89	8.4	16.5
1955.0	5.3	49.9	50	9.6	1.78	44.93	168891	686.78	323.51	8.4	16.5
1956.0	3.6	49.4	50	9.6	1.90	45.21	169721	1010	325	8.4	16.5
1957.0	5.1	51.2	50	9.6	1.81	45.40	170310	716.87	325.33	8.4	16.5
1958.0	6.0	50.0	50	9.6	1.74	45.57	170811	609.68	325.81	8.4	16.5
1959.0	4.8	49.7	50	9.6	1.81	45.78	171431	754.75	326.54	8.4	16.5
1960.0	4.4	49.6	50	9.6	1.84	46.01	172114	831.84	327.38	8.4	16.5
1961.0	4.5	48.2	50	9.6	1.82	46.23	172787	819.67	328.21	8.4	16.5
1962.0	5.2	48.5	50	9.6	1.77	46.42	173361	697.94	328.83	8.4	16.5
1963.0	3.6	48.6	50	9.6	1.89	46.70	174195	1015	330	8.4	16.5
1964.0	4.6	48.3	50	9.6	1.81	46.92	174846	792.28	330.75	8.4	16.5
1965.0	8.4	49.7	50	9.6	1.62	47.04	175201	433.17	330.92	8.4	16.5
1966.0	6.5	49.9	50	9.6	1.72	47.19	175666	565.05	331.31	8.4	16.5
1967.0	6.6	49.5	50	9.6	1.71	47.34	176121	554.90	331.68	8.4	16.5
1968.0	5.9	48.4	50	9.6	1.73	47.51	176631	620.84	332.16	8.4	16.5

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	URNS	ICOST	CCOST	PP	FG
1969.0	4.7	49.8	50	9.6	1.83	47.72	177271	778.08	332.90	8.4	16.5
1970.0	13.2	49.0	50	9.6	1.46	47.80	177497	275.93	332.81	8.4	16.5
1971.0	10.7	47.9	50	9.6	1.52	47.89	177779	342.88	332.82	8.4	16.5
1972.0	7.1	48.7	50	9.6	1.67	48.04	178204	517.37	333.13	8.4	16.5
1973.0	10.6	48.9	50	9.6	1.54	48.13	178488	345.93	333.15	8.4	16.5
1974.0	5.9	48.9	50	9.6	1.74	48.30	178996	618.81	333.62	8.4	16.5
1975.0	5.4	49.9	50	9.6	1.78	48.49	179555	679.68	334.18	8.4	16.5
1976.0	5.7	49.9	50	9.6	1.76	48.66	180081	641.13	334.69	8.4	16.5
1977.0	4.3	52.4	50	9.6	1.89	48.89	180775	844.02	335.52	8.4	16.5
1978.0	3.9	50.1	50	9.6	1.90	49.15	181551	944.45	336.51	8.4	16.5
1979.0	4.5	48.9	50	9.6	1.83	49.37	182221	815.61	337.29	8.4	16.5
1980.0	5.3	49.4	50	9.6	1.78	49.56	182781	682.72	337.85	8.4	16.6
1981.0	4.9	49.3	50	9.6	1.81	49.77	183396	748.66	338.52	8.4	16.6
1982.0	5.4	48.6	50	9.6	1.77	49.95	183952	676.63	339.07	8.4	16.6
1983.0	6.5	49.7	50	9.6	1.71	50.11	184413	560.99	339.43	8.4	16.6
1984.0	9.8	46.9	50	9.6	1.54	50.21	184720	373.32	339.48	8.4	16.6
1985.0	5.2	51.2	50	9.6	1.81	50.40	185301	708.08	340.08	8.4	16.6
1986.0	5.5	50.0	50	9.6	1.78	50.58	185851	668.52	340.61	8.4	16.6
1987.0	9.3	49.7	50	9.6	1.59	50.69	186173	392.59	340.69	8.4	16.6
1988.0	4.3	49.0	50	9.6	1.85	50.92	186870	848.08	341.50	8.4	16.6
1989.0	4.4	50.4	50	9.6	1.86	51.15	187559	838.95	342.30	8.4	16.6
1990.0	7.1	48.9	50	9.6	1.67	51.29	187979	511.28	342.57	8.4	16.6
1991.0	14.1	46.5	50	9.6	1.41	51.37	188191	258.68	342.44	8.4	16.6
1992.0	6.2	50.1	50	9.6	1.73	51.53	188672	585.33	342.82	8.4	16.6
1993.0	4.8	51.0	50	9.6	1.84	51.74	189303	767.93	343.50	8.4	16.6
1994.0	4.6	50.2	50	9.6	1.84	51.95	189950	787.21	344.21	8.4	16.6
1995.0	4.9	50.5	50	9.6	1.82	52.15	190560	742.57	344.84	8.4	16.6
1996.0	8.8	51.8	50	9.6	1.63	52.27	190901	415.92	344.95	8.4	16.6
1997.0	23.4	44.1	50	9.6	1.22	52.31	191030	156.22	344.65	8.4	16.6
1998.0	34.6	44.2	50	9.6	1.69	52.34	191116	105.50	344.28	8.4	16.6
1999.0	26.9	46.8	50	9.6	1.20	52.38	191228	135.94	343.95	8.4	16.6
2000.0	9.5	53.1	50	9.6	1.62	52.48	191545	385.49	344.01	8.4	16.6
2001.0	5.1	50.9	50	9.6	1.81	52.68	192128	710.11	344.59	8.4	16.6
2002.0	5.9	48.0	50	9.6	1.73	52.85	192637	619.83	345.02	8.4	16.6
2003.0	5.3	49.9	50	9.6	1.78	53.04	193201	686.78	345.56	8.4	16.6
2004.0	5.7	50.8	50	9.6	1.77	53.21	193731	645.19	346.02	8.4	16.6
2005.0	5.0	50.3	50	9.6	1.81	53.41	194328	726.34	346.62	8.4	16.6
2006.0	5.2	50.0	50	9.6	1.80	53.60	194906	703.01	347.17	8.4	16.6
2007.0	7.2	49.8	50	9.6	1.68	53.74	195320	504.18	347.42	8.4	16.6
2008.0	6.9	50.0	50	9.6	1.69	53.89	195752	526.50	347.70	8.4	16.6
2009.0	5.3	50.0	50	9.6	1.79	54.07	196320	690.84	348.23	8.4	16.6
2010.0	4.2	48.7	50	9.6	1.85	54.31	197033	868.36	349.04	8.4	16.6
2011.0	11.4	47.9	50	9.6	1.50	54.40	197296	319.55	348.99	8.4	16.6
2012.0	6.7	49.7	50	9.6	1.70	54.55	197741	542.73	349.29	8.4	16.6
2013.0	4.8	50.2	50	9.6	1.82	54.76	198364	757.77	349.92	8.4	16.6
2014.0	5.5	49.8	50	9.6	1.77	54.94	198905	658.37	350.40	8.4	16.6
2015.0	4.6	49.7	50	9.6	1.83	55.15	199552	788.22	351.07	8.4	16.6
2016.0	13.1	48.4	50	9.6	1.46	55.23	199781	277.96	350.96	8.4	16.6
2017.0	11.8	36.2	50	9.6	1.36	55.31	200035	309.41	350.89	8.4	16.6
2018.0	10.0	43.3	50	9.6	1.50	55.41	200334	364.19	350.91	8.4	16.6

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	TURNS	ICOST	CCOST	PP	FG
2019.0	7.0	48.4	50	9.6	1.67	55.55	200760	518.38	351.17	8.4	16.6
2020.0	15.8	48.5	50	9.6	1.37	55.62	200950	231.29	350.97	8.4	16.6
2021.0	12.7	47.9	50	9.6	1.45	55.70	201186	288.10	350.89	8.4	16.6
2022.0	8.7	49.2	50	9.6	1.61	55.81	201532	420.99	351.00	8.4	16.6
2023.0	11.9	48.9	50	9.6	1.50	55.90	201785	367.38	350.93	8.4	16.6
2024.0	5.5	49.8	50	9.6	1.77	56.08	202333	667.50	351.41	8.4	16.6
2025.0	7.3	49.9	50	9.6	1.68	56.22	202744	500.12	351.64	8.4	16.6
2026.0	11.1	49.8	50	9.6	1.53	56.31	203015	329.69	351.60	8.4	16.6
2027.0	6.2	50.0	50	9.6	1.73	56.47	203498	598.38	351.96	8.4	16.6
2028.0	15.2	49.2	50	9.6	1.42	56.53	203696	240.42	351.79	8.4	16.6
2029.0	8.8	49.5	50	9.6	1.61	56.65	204036	414.91	351.89	8.4	16.6
2030.0	6.9	50.0	50	9.6	1.70	56.79	204474	532.58	352.16	8.4	16.6
2031.0	5.0	50.8	50	9.6	1.82	56.99	205071	727.36	352.72	8.4	16.6
2032.0	5.4	50.0	50	9.6	1.78	57.18	205624	672.58	353.20	8.4	16.6
2033.0	8.8	48.8	50	9.6	1.60	57.29	205965	414.91	353.30	8.4	16.6
2034.0	4.8	49.5	50	9.6	1.82	57.50	206592	763.88	353.91	8.4	16.6
2035.0	4.4	50.7	50	9.6	1.86	57.72	207270	824.74	354.61	8.4	16.6
2036.0	8.6	50.5	50	9.6	1.63	57.84	207619	425.05	354.72	8.4	16.6
2037.0	15.7	48.8	50	9.6	1.40	57.90	207810	232.31	354.54	8.4	16.6
2038.0	9.2	50.0	50	9.6	1.60	58.01	208137	398.68	354.60	8.4	16.6
2039.0	11.7	48.6	50	9.6	1.50	58.10	208395	313.46	354.54	8.4	16.6
2040.0	10.3	49.8	50	9.6	1.55	58.20	208685	353.03	354.54	8.4	16.6
2041.0	8.3	49.0	58	9.6	1.67	58.32	209099	438.24	354.66	8.4	16.6
2042.0	9.9	48.2	60	9.6	1.61	58.42	209462	368.24	354.68	8.4	16.6
2043.0	6.0	50.0	60	9.6	1.81	58.58	210059	605.62	355.05	8.4	16.6
2044.0	6.0	49.6	60	9.6	1.80	58.75	210661	610.70	355.43	8.4	16.6
2045.0	6.1	49.4	60	9.6	1.79	58.91	211248	595.48	355.78	8.4	16.6
2046.0	23.8	43.2	60	9.6	1.27	58.96	211399	153.18	355.48	8.4	16.6
2047.0	18.4	46.8	60	9.6	1.39	59.01	211595	198.83	355.25	8.4	16.6
2048.0	21.3	49.2	60	9.6	1.36	59.06	211764	171.44	354.98	8.4	16.6
2049.0	12.5	47.8	60	9.6	1.53	59.14	212053	293.17	354.89	8.4	16.6
2050.0	6.5	48.6	60	9.6	1.76	59.29	212605	559.97	355.19	8.4	16.6
2051.0	6.3	49.1	60	9.6	1.78	59.45	213178	581.28	355.52	8.4	16.6
2052.0	7.4	49.7	60	9.6	1.73	59.58	213664	493.02	355.72	8.4	16.6
2053.0	9.6	49.4	60	9.6	1.64	59.69	214038	377.40	355.76	8.4	16.6
2054.0	7.9	49.8	60	9.6	1.71	59.82	214495	463.60	355.91	8.4	16.6
2055.0	7.3	49.7	60	9.6	1.73	59.95	214985	497.08	356.12	8.4	16.6
2056.0	11.7	40.4	60	9.6	1.47	60.04	215294	313.46	356.06	8.4	16.7
2057.0	10.7	49.9	60	9.6	1.61	60.13	215630	340.85	356.04	8.4	16.7
2058.0	15.6	49.5	60	9.6	1.47	60.19	215861	234.34	355.86	8.4	16.7
2059.0	18.8	48.2	60	9.6	1.39	60.25	216052	193.76	355.63	8.4	16.7
2060.0	15.0	48.6	60	9.6	1.48	60.31	216292	243.47	355.46	8.4	16.7
2061.0	11.4	49.5	60	9.6	1.58	60.40	216607	317.55	355.41	8.4	16.7
2062.0	14.7	50.1	60	9.6	1.50	60.47	216852	248.54	355.26	8.4	16.7
2063.0	11.6	48.6	60	9.6	1.56	60.56	217162	314.40	355.20	8.4	16.7
2064.0	17.8	49.8	60	9.6	1.43	60.61	217364	204.92	354.99	8.4	16.7
2065.0	10.5	49.2	60	9.6	1.61	60.71	217708	348.97	354.98	8.4	16.7
2066.0	24.3	49.7	60	9.6	1.32	60.75	217856	150.14	354.69	8.4	16.7
2067.0	6.5	50.7	60	9.6	1.79	60.90	218408	559.97	354.98	8.4	16.7
2068.0	9.7	49.5	60	9.6	1.64	61.01	218781	378.39	355.01	8.4	16.7

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	TURNS	ICOST	CCOST	PP	FG
2069.0	10.7	49.1	60	9.6	1.60	61.10	219118	341.87	354.99	8.4	16.7
2070.0	7.7	51.2	60	9.6	1.73	61.23	219585	473.75	355.16	8.4	16.7
2071.0	7.6	50.6	60	9.6	1.73	61.36	220056	477.80	355.33	8.4	16.7
2072.0	8.3	49.9	60	9.6	1.70	61.48	220491	441.28	355.46	8.4	16.7
2073.0	11.1	49.1	60	9.6	1.58	61.57	220815	328.68	355.42	8.4	16.7
2074.0	9.2	47.8	60	9.6	1.66	61.68	221205	395.63	355.48	8.4	16.7
2075.0	7.4	50.0	60	9.6	1.74	61.81	221691	493.02	355.67	8.4	16.7
2076.0	7.9	48.7	60	9.6	1.70	61.94	222144	459.54	355.82	8.4	16.7
2077.0	12.5	48.7	60	9.6	1.54	62.02	222433	293.17	355.73	8.4	16.7
2080.0	5.3	50.1	60	9.5	1.65	62.59	224477	691.27	357.13	8.4	16.7
2081.0	7.2	49.9	60	9.6	1.74	62.73	224976	506.21	357.34	8.4	16.7
2082.0	6.2	48.3	60	9.6	1.77	62.89	225553	585.33	357.66	8.4	16.7
2083.0	10.1	49.4	60	9.6	1.62	62.99	225908	360.13	357.64	8.4	16.7
2084.0	5.7	50.1	60	9.6	1.83	63.16	226542	643.16	358.06	8.4	16.7
2085.0	5.8	49.9	60	9.6	1.82	63.34	227168	635.04	358.45	8.4	16.7
2086.0	12.5	51.8	60	9.6	1.57	63.42	227455	291.15	358.35	8.4	16.7
2087.0	17.6	49.2	60	9.6	1.43	63.47	227660	207.96	358.14	8.4	16.7
2088.0	8.4	49.9	60	9.6	1.69	63.59	228090	436.21	358.25	8.4	16.7
2089.0	7.5	51.1	60	9.6	1.74	63.72	228569	485.92	358.43	8.4	16.7
2090.0	8.7	53.3	60	9.6	1.72	63.84	228985	422.01	358.52	8.4	16.7
2091.0	18.6	50.7	60	9.6	1.42	63.89	229179	196.80	358.29	8.4	16.7
2092.0	18.8	50.3	60	9.6	1.42	63.95	229371	194.77	358.07	8.4	16.7
2093.0	9.4	52.5	60	9.6	1.68	64.05	229753	387.52	358.11	8.4	16.7
2094.0	5.6	52.6	60	9.6	1.86	64.23	230395	651.27	358.51	8.4	16.7
2095.0	6.8	53.1	60	9.6	1.80	64.38	230921	533.60	358.75	8.4	16.7
2096.0	6.4	52.2	60	9.6	1.81	64.53	231485	572.15	359.04	8.4	16.7
2097.0	16.7	51.7	60	9.6	1.47	64.59	231700	218.11	358.85	8.4	16.7
2098.0	17.6	56.4	60	9.6	1.49	64.65	231905	207.96	358.64	8.4	16.7
2099.0	13.8	52.2	60	9.6	1.54	64.72	232165	263.76	358.52	8.4	16.7
2100.0	18.4	50.3	60	9.6	1.42	64.78	232361	198.83	358.30	8.4	16.7
2101.0	15.9	51.0	60	9.6	1.48	64.84	232587	229.26	358.12	8.4	16.7
2102.0	11.3	50.6	60	9.6	1.60	64.93	232907	324.62	358.08	8.4	16.7
2103.0	10.6	53.3	60	9.6	1.65	65.02	233247	344.91	358.06	8.4	16.7
2104.0	10.0	51.4	60	9.6	1.65	65.12	233606	364.19	358.07	8.4	16.7
2105.0	8.6	51.9	60	9.5	1.70	65.24	234025	424.38	358.16	8.4	16.7
2106.0	7.6	52.7	60	9.6	1.76	65.37	234501	482.88	358.33	8.4	16.7
2107.0	8.3	52.1	60	9.6	1.72	65.49	234935	440.00	358.44	8.4	16.7

BIT NUMBER	5	IADC CODE	517	INTERVAL	2107.0- 2431.2
HTC J22		SIZE	12.250	NOZZLES	18 18 16
COST	8520.00	TRIP TIME	8.0	BIT RUN	324.2
TOTAL HOURS	52.41	TOTAL TURNS	169866	CONDITION	TS B4 60.125

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	TURNS	ICOST	CCOST	PP	FG
2109.0	4.7	50.6	50	9.6	1.84	0.43	1283	781	19649	8.4	16.7
2110.0	5.2	47.7	52	9.6	1.80	0.62	1879	702	13333	8.4	16.7
2111.0	15.9	48.4	58	9.6	1.44	0.68	2098	230	10058	8.4	16.7

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	TURNS	ICOST	CCOST	PP	FG
2112.0	6.4	50.1	58	9.6	1.68	0.80	2512	434	8133	8.4	16.7
2113.0	7.5	51.1	58	9.6	1.73	0.94	2976	487	6059	8.4	16.7
2114.0	10.5	50.0	58	9.6	1.60	1.03	3308	349	5929	8.4	16.7
2115.0	14.0	47.2	58	9.6	1.47	1.10	3557	261	5220	8.4	16.7
2116.0	20.1	49.0	58	9.6	1.37	1.15	3730	182	4660	8.4	16.7
2117.0	16.4	45.5	58	9.6	1.40	1.21	3942	223	4217	8.4	16.7
2118.0	15.4	39.7	58	9.6	1.37	1.28	4169	237	3855	8.4	16.7
2119.0	10.8	49.1	58	9.6	1.58	1.37	4489	337	3562	8.4	16.7
2120.0	6.3	49.5	58	9.6	1.77	1.53	5043	581	3332	8.4	16.7
2121.0	11.9	46.5	58	9.6	1.52	1.61	5335	306	3116	8.4	16.7
2122.0	9.7	47.2	58	9.6	1.60	1.72	5696	378	2734	8.4	16.7
2123.0	13.8	43.2	58	9.6	1.44	1.79	5948	265	2767	8.4	16.7
2124.0	4.6	46.4	58	9.6	1.84	2.01	6701	790	2651	8.4	16.7
2125.0	7.5	46.1	52	9.6	1.64	2.14	7122	488	2531	8.4	16.7
2126.0	6.7	46.7	50	9.6	1.67	2.29	7570	545	2426	8.4	16.7
2127.0	15.1	47.2	50	9.6	1.40	2.35	7768	241	2317	8.4	16.7
2128.0	19.4	45.7	50	9.6	1.30	2.41	7923	189	2215	8.4	16.7
2129.0	11.1	49.3	50	9.6	1.52	2.50	8194	330	2130	8.4	16.7
2130.0	5.5	47.2	50	9.6	1.74	2.68	8736	660	2066	8.4	16.7
2131.0	8.3	47.8	50	9.6	1.61	2.80	9100	442	1998	8.4	16.7
2132.0	6.4	47.6	50	9.5	1.70	2.96	9570	573	1941	8.4	16.7
2133.0	5.6	47.1	50	9.6	1.74	3.14	10109	656	1892	8.4	16.7
2134.0	10.4	47.3	50	9.6	1.53	3.23	10398	352	1835	8.4	16.7
2136.0	12.7	46.4	50	9.6	1.45	3.39	10870	287	1728	8.4	16.8
2137.0	10.7	47.6	50	9.6	1.52	3.48	11150	341	1682	8.4	16.8
2139.0	5.9	48.8	50	9.6	1.74	3.82	12163	617	1615	8.4	16.8
2140.0	7.9	48.9	50	9.6	1.64	3.95	12545	465	1580	8.4	16.8
2141.0	22.8	48.6	50	9.6	1.27	3.99	12677	160	1539	8.4	16.8
2142.0	12.4	48.3	50	9.6	1.48	4.07	12918	294	1503	8.4	16.8
2143.0	6.6	48.6	50	9.6	1.70	4.22	13373	553	1477	8.4	16.8
2144.0	5.9	48.6	50	9.6	1.73	4.39	13879	617	1453	8.4	16.8
2145.0	15.1	45.3	50	9.6	1.38	4.46	14078	242	1422	8.4	16.8
2146.0	15.6	43.7	50	9.6	1.35	4.52	14271	234	1391	8.4	16.8
2148.0	3.1	48.8	50	9.6	1.96	5.17	16204	1177	1381	8.4	16.8
2149.0	11.4	48.1	50	9.6	1.50	5.25	16468	321	1355	8.4	16.8
2150.0	11.5	45.2	50	9.6	1.47	5.34	16728	317	1331	8.4	16.8
2151.0	6.6	48.6	50	9.6	1.69	5.49	17179	550	1313	8.4	16.8
2152.0	7.9	48.7	50	9.6	1.63	5.62	17558	461	1295	8.4	16.8
2153.0	7.4	48.9	50	9.6	1.66	5.75	17965	496	1277	8.4	16.8
2154.0	9.6	46.4	50	9.6	1.54	5.86	18278	381	1258	8.4	16.8
2155.0	10.3	47.8	50	9.6	1.53	5.96	18569	354	1239	8.4	16.8
2156.0	6.5	49.3	50	9.6	1.71	6.11	19028	558	1225	8.4	16.8
2157.0	6.5	49.1	50	9.6	1.71	6.26	19493	566	1212	8.4	16.8
2158.0	6.2	50.2	50	9.6	1.74	6.43	19980	593	1200	8.4	16.8
2159.0	10.7	47.1	50	9.6	1.51	6.52	20261	342	1184	8.4	16.8
2160.0	10.7	47.8	50	9.6	1.52	6.61	20542	342	1168	8.4	16.8
2161.0	6.7	48.4	50	9.6	1.69	6.76	20988	543	1156	8.4	16.8
2162.0	12.0	49.1	50	9.6	1.49	6.84	21238	304	1141	8.4	16.8
2163.0	14.6	47.9	50	9.6	1.42	6.91	21443	251	1125	8.4	16.8
2164.0	17.3	45.6	50	9.6	1.30	6.97	21599	190	1108	8.4	16.8

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	TURNS	TCOST	CCOST	PP	FG
2165.0	7.8	46.8	50	9.6	1.62	7.09	21986	471	1097	8.4	16.8
2166.0	8.5	48.5	50	9.6	1.61	7.21	22341	432	1086	8.4	16.8
2168.0	6.3	47.7	50	9.6	1.73	7.53	23296	581	1069	8.4	16.8
2169.0	5.4	48.7	50	9.6	1.77	7.72	23853	679	1063	8.4	16.8
2170.0	9.9	47.9	50	9.6	1.55	7.82	24157	370	1052	8.4	16.8
2171.0	6.6	47.8	50	9.6	1.69	7.97	24610	551	1044	8.4	16.8
2172.0	15.1	48.5	50	9.6	1.41	8.03	24808	241	1032	8.4	16.8
2173.0	8.8	48.5	50	9.6	1.60	8.15	25151	417	1023	8.4	16.8
2174.0	5.9	49.6	50	9.6	1.75	8.32	25659	619	1017	8.4	16.8
2175.0	7.3	48.8	50	9.6	1.66	8.46	26072	502	1009	8.4	16.8
2176.0	8.8	50.4	50	9.6	1.62	8.57	26412	415	1000	8.4	16.8
2177.0	10.6	48.9	50	9.6	1.54	8.66	26696	344.91	991.10	8.4	16.8
2178.0	11.3	48.8	50	9.6	1.51	8.75	26961	322.59	981.68	8.4	16.8
2179.0	10.8	49.7	50	9.6	1.54	8.84	27237	336.80	972.73	8.4	16.8
2180.0	9.7	47.6	50	9.6	1.55	8.95	27547	376.36	964.56	8.4	16.8
2181.0	10.6	46.7	50	9.6	1.51	9.04	27829	343.90	956.17	8.4	16.8
2182.0	5.0	48.8	50	9.6	1.79	9.24	28430	731.41	953.17	8.4	16.8
2183.0	3.3	48.5	50	9.6	1.94	9.55	29352	1122	955	8.4	16.8
2184.0	9.2	49.8	50	9.6	1.60	9.66	29678	397.66	948.15	8.4	16.8
2185.0	7.8	50.6	50	9.6	1.66	9.79	30065	470.70	942.03	8.4	16.8
2186.0	7.6	49.2	50	9.6	1.65	9.92	30458	478.82	936.17	8.4	16.8
2187.0	10.0	48.6	50	9.6	1.55	10.02	30758	365.20	929.03	8.4	16.8
2188.0	10.5	48.7	50	9.6	1.54	10.11	31044	347.95	921.86	8.4	16.8
2189.0	26.1	46.9	50	9.6	1.21	10.15	31159	139.99	912.32	8.4	16.8
2190.0	32.7	46.8	50	9.6	1.13	10.18	31251	111.59	902.67	8.4	16.8
2191.0	11.1	49.1	50	9.6	1.52	10.27	31521	328.68	895.84	8.4	16.8
2192.0	9.3	48.0	50	9.6	1.57	10.38	31843	392.59	889.92	8.4	16.8
2193.0	10.2	48.2	50	9.6	1.54	10.48	32137	358.10	883.74	8.4	16.8
2194.0	18.3	48.0	50	9.6	1.34	10.53	32302	192.85	875.87	8.4	16.8
2195.0	11.5	48.0	50	9.6	1.50	10.62	32563	316.54	869.54	8.4	16.8
2196.0	9.8	48.8	50	9.6	1.56	10.72	32870	373.32	863.97	8.4	16.8
2197.0	12.7	48.5	50	9.6	1.47	10.80	33106	287.09	857.56	8.4	16.8
2198.0	17.2	44.2	50	9.6	1.33	10.86	33280	212.02	850.46	8.4	16.8
2199.0	15.3	45.7	50	9.6	1.38	10.92	33477	239.41	843.82	8.4	16.8
2200.0	11.3	45.9	50	9.6	1.48	11.01	33743	324.62	838.24	8.4	16.8
2201.0	8.3	47.6	50	9.6	1.61	11.13	34106	441.28	834.01	8.4	16.8
2202.0	11.5	45.5	50	9.6	1.47	11.22	34367	317.52	828.58	8.4	16.8
2203.0	19.8	41.8	50	9.6	1.26	11.27	34518	184.63	821.87	8.4	16.8
2204.0	13.2	44.8	50	9.6	1.42	11.35	34746	276.94	816.25	8.4	16.8
2205.0	16.4	45.9	50	9.6	1.36	11.41	34928	222.16	810.19	8.4	16.8
2206.0	13.9	46.6	50	9.6	1.42	11.48	35144	262.74	804.66	8.4	16.8
2207.0	7.4	46.7	50	9.6	1.63	11.61	35548	492.01	801.53	8.4	16.8
2208.0	7.5	47.3	52	9.6	1.65	11.75	35959	483.89	798.39	8.4	16.8
2209.0	9.2	48.9	55	9.5	1.62	11.86	36319	399.01	794.47	8.4	16.8
2210.0	19.1	48.6	55	9.6	1.58	11.96	36647	363.17	790.29	8.4	16.8
2211.0	10.5	48.6	55	9.6	1.57	12.05	36963	348.97	786.04	8.4	16.8
2212.0	6.7	50.2	55	9.6	1.74	12.20	37453	542.73	783.72	8.4	16.8
2213.0	8.1	49.2	55	9.6	1.66	12.32	37860	450.41	780.58	8.4	16.8
2214.0	14.2	49.8	55	9.6	1.48	12.39	38093	257.67	775.69	8.4	16.8
2215.0	8.1	50.1	55	9.6	1.67	12.52	38500	450.41	772.68	8.4	16.8

DEPTH	ROP	WOB	RPM	MW	d"c	HOURS	TURNS	ICOST	CCOST	PP	FG
2216.0	6.2	50.1	55	9.6	1.67	12.64	38903	445.36	769.69	8.4	16.9
2217.0	6.2	50.8	55	9.6	1.78	12.80	39436	590.07	768.05	8.4	16.9
2218.0	4.6	51.3	55	9.6	1.89	13.02	40161	802.43	768.36	8.4	16.9
2219.0	7.7	51.1	55	9.6	1.70	13.15	40590	473.75	765.73	8.4	16.9
2220.0	9.6	49.3	55	9.6	1.61	13.25	40932	379.40	762.32	8.4	16.9
2221.0	14.8	48.7	55	9.6	1.45	13.32	41155	246.51	757.79	8.4	16.9
2222.0	8.8	49.3	55	9.6	1.64	13.44	41529	413.89	754.80	8.4	16.9
2223.0	12.0	49.9	55	9.6	1.54	13.52	41804	304.33	750.92	8.4	16.9
2224.0	7.1	50.0	55	9.6	1.72	13.66	42272	517.37	748.92	8.4	16.9
2225.0	8.4	49.8	55	9.6	1.66	13.78	42663	433.17	746.24	8.4	16.9
2226.0	6.2	50.2	55	9.6	1.77	13.94	43195	588.38	744.92	8.4	16.9
2227.0	5.3	49.4	55	9.6	1.81	14.13	43813	684.75	744.42	8.4	16.9
2228.0	8.0	51.9	55	9.6	1.70	14.25	44228	458.53	742.05	8.4	16.9
2229.0	5.5	51.4	55	9.6	1.83	14.44	44831	667.50	741.44	8.4	16.9
2230.0	5.7	49.9	55	9.6	1.80	14.61	45413	644.17	740.65	8.4	16.9
2231.0	5.0	50.0	55	9.6	1.84	14.81	46074	731.41	740.58	8.4	16.9
2232.0	7.4	50.1	55	9.6	1.71	14.95	46520	494.03	738.61	8.4	16.9
2233.0	16.1	48.4	55	9.6	1.42	15.01	46726	227.24	734.55	8.4	16.9
2234.0	9.3	52.1	55	9.6	1.65	15.12	47081	393.60	731.86	8.4	16.9
2235.0	6.4	53.1	55	9.6	1.79	15.27	47595	568.09	730.58	8.4	16.9
2236.0	8.5	52.1	55	9.6	1.68	15.39	47983	430.12	728.25	8.4	16.9
2237.0	8.5	49.7	55	9.6	1.65	15.51	48372	430.12	725.96	8.4	16.9
2238.0	7.4	49.1	55	9.6	1.70	15.64	48819	495.05	724.20	8.4	16.9
2239.0	6.1	49.2	55	9.6	1.76	15.81	49363	601.57	723.27	8.4	16.9
2240.0	6.0	49.8	55	9.6	1.78	15.98	49918	613.74	722.45	8.4	16.9
2241.0	11.0	50.5	55	9.6	1.57	16.07	50218	332.74	719.54	8.4	16.9
2242.0	10.6	50.1	55	9.6	1.58	16.16	50530	344.91	716.76	8.4	16.9
2243.0	9.8	49.7	55	9.6	1.61	16.27	50868	374.33	714.24	8.4	16.9
2244.0	16.3	49.4	55	9.6	1.43	16.33	51071	224.19	710.67	8.4	16.9
2245.0	15.4	49.2	55	9.6	1.44	16.39	51285	237.38	707.24	8.4	16.9
2246.0	9.0	49.9	55	9.6	1.64	16.50	51653	406.79	705.08	8.4	16.9
2247.0	10.6	51.6	55	9.6	1.60	16.60	51964	344.91	702.50	8.4	16.9
2248.0	9.6	51.0	55	9.6	1.63	16.70	52308	380.42	700.22	8.4	16.9
2249.0	14.4	48.6	55	9.6	1.46	16.77	52537	253.61	697.07	8.4	16.9
2250.0	15.8	49.9	55	9.6	1.44	16.83	52746	231.29	693.82	8.4	16.9
2251.0	8.6	49.6	55	9.6	1.65	16.95	53131	426.07	691.96	8.4	16.9
2252.0	6.1	52.4	55	9.6	1.80	17.12	53672	598.52	691.31	8.4	16.9
2253.0	6.6	51.0	55	9.6	1.76	17.27	54175	555.92	690.39	8.4	16.9
2254.0	7.0	51.3	55	9.6	1.74	17.41	54643	518.38	689.22	8.4	16.9
2255.0	6.4	52.8	55	9.6	1.79	17.56	55155	562.07	688.39	8.4	16.9
2256.0	9.0	51.3	55	9.6	1.65	17.68	55524	407.81	686.51	8.4	16.9
2257.0	10.7	51.3	55	9.6	1.59	17.77	55834	342.88	684.22	8.4	16.9
2258.0	6.1	52.9	55	9.6	1.81	17.94	56379	603.59	683.68	8.4	16.9
2259.0	4.7	54.3	55	9.6	1.91	18.15	57079	775.04	684.28	8.4	16.9
2260.0	9.8	51.3	55	9.6	1.62	18.25	57418	374.33	682.26	8.4	16.9
2261.0	12.0	49.9	55	9.6	1.54	18.33	57694	305.35	679.81	8.4	16.9
2262.0	11.8	52.1	55	9.6	1.57	18.42	57974	310.42	677.43	8.4	16.9
2263.0	7.0	52.8	55	9.6	1.75	18.56	58443	519.40	676.41	8.4	16.9
2264.0	9.0	52.5	55	9.6	1.66	18.67	58810	405.78	674.69	8.4	16.9
2265.0	7.9	50.3	55	9.6	1.68	18.80	59226	460.56	673.33	8.4	16.9

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	TURNS	ICOST	CCOST	PP	FG
2266.0	11.1	51.2	55	9.6	1.57	18.89	59522	327.67	671.16	8.4	16.9
2267.0	6.0	49.6	55	9.6	1.78	19.06	60077	613.74	670.30	8.4	16.9
2268.0	7.3	47.9	55	9.6	1.69	19.19	60531	502.15	669.75	8.4	16.9
2269.0	5.6	48.7	55	9.6	1.79	19.37	61119	651.27	669.64	8.4	16.9
2270.0	8.1	50.2	55	9.6	1.68	19.49	61525	449.40	668.29	8.4	16.9
2271.0	6.6	48.4	55	9.6	1.73	19.65	62025	552.87	667.59	8.4	16.9
2272.0	6.5	49.2	55	9.6	1.74	19.80	62534	563.02	666.95	8.4	16.9
2273.0	13.1	50.5	55	9.6	1.51	19.88	62785	277.96	664.61	8.4	16.9
2274.0	18.9	47.8	55	9.6	1.36	19.93	62959	192.74	661.78	8.4	16.9
2275.0	11.0	46.8	55	9.6	1.55	20.02	63259	331.72	659.82	8.4	16.9
2276.0	7.0	48.7	55	9.6	1.71	20.16	63728	519.40	658.99	8.4	16.9
2277.0	9.6	50.6	55	9.6	1.62	20.27	64072	380.42	657.35	8.4	16.9
2278.0	13.2	49.4	55	9.6	1.50	20.34	64322	276.94	655.12	8.4	16.9
2279.0	10.0	50.3	55	9.6	1.60	20.44	64651	364.19	653.43	8.4	16.9
2280.0	9.2	51.3	55	9.6	1.65	20.55	65011	398.68	651.96	8.4	16.9
2281.0	5.8	50.9	55	9.6	1.80	20.72	65583	633.01	651.85	8.4	16.9
2282.0	5.7	48.8	55	9.6	1.78	20.90	66167	646.20	651.82	8.4	16.9
2283.0	12.3	47.4	55	9.6	1.50	20.98	66436	297.23	649.80	8.4	16.9
2284.0	4.8	49.4	55	9.6	1.65	21.19	67127	764.89	650.45	8.4	16.9
2285.0	7.3	48.7	55	9.6	1.69	21.33	67578	499.11	649.60	8.4	16.9
2286.0	9.5	49.0	55	9.6	1.61	21.43	67925	384.47	648.12	8.4	16.9
2287.0	9.2	48.2	55	9.6	1.61	21.54	68284	396.65	646.73	8.4	16.9
2288.0	15.4	45.1	55	9.6	1.40	21.61	68498	237.38	644.46	8.4	16.9
2289.0	16.4	45.5	55	9.6	1.39	21.67	68699	222.16	642.14	8.4	16.9
2290.0	6.1	49.0	55	9.6	1.76	21.83	69237	595.48	641.89	8.4	16.9
2291.0	3.1	48.4	55	9.6	1.99	22.15	70301	1177	645	8.4	16.9
2292.0	7.4	48.8	55	9.6	1.67	22.29	70745	492.01	643.97	8.4	16.9
2293.0	15.4	47.7	55	9.6	1.43	22.35	70960	237.38	641.78	8.4	16.9
2294.0	7.9	48.3	55	9.6	1.66	22.48	71378	462.59	640.83	8.4	16.9
2295.0	6.5	47.7	55	9.6	1.72	22.63	71884	559.97	640.40	8.4	16.9
2296.0	13.0	48.4	55	9.6	1.49	22.71	72138	281.00	638.49	8.4	16.9
2297.0	7.5	49.3	55	9.6	1.69	22.84	72579	488.96	637.71	8.4	16.9
2298.0	4.6	48.8	55	9.6	1.86	23.06	73302	799.38	638.55	8.4	16.9
2299.0	7.5	49.7	55	9.6	1.70	23.20	73744	489.98	637.78	8.4	17.0
2300.0	8.7	48.7	55	9.6	1.63	23.31	74122	417.95	636.64	8.4	17.0
2300.1	9.0	49.9	55	9.6	1.64	23.32	74159	405.78	636.52	8.4	17.0
2303.0	5.2	49.7	55	9.6	1.82	23.88	76006	705.04	637.53	8.4	17.0
2304.0	4.6	48.8	55	9.6	1.85	24.10	76723	793.30	638.33	8.4	17.0
2305.0	4.5	48.4	55	9.6	1.86	24.32	77463	818.66	639.24	8.4	17.0
2306.0	7.4	48.7	55	9.6	1.69	24.46	77908	493.02	638.58	8.4	17.0
2307.0	9.7	49.1	55	9.6	1.60	24.56	78250	378.39	637.20	8.4	17.0
2308.0	14.9	48.5	55	9.6	1.45	24.63	78472	245.58	635.25	8.4	17.0
2309.0	9.8	50.0	55	9.6	1.61	24.73	78808	371.29	633.95	8.4	17.0
2310.0	8.4	49.8	55	9.6	1.65	24.85	79202	436.21	632.97	8.4	17.0
2311.0	13.2	48.8	55	9.6	1.49	24.93	79451	275.93	631.22	8.4	17.0
2312.0	10.9	49.4	55	9.6	1.56	25.02	79754	334.77	629.77	8.4	17.0
2313.0	12.7	48.0	55	9.6	1.50	25.10	80014	288.10	628.12	8.4	17.0
2314.0	11.7	46.6	55	9.6	1.51	25.18	80295	311.43	626.59	8.4	17.0
2315.0	8.1	49.7	55	9.6	1.67	25.31	80702	450.41	625.74	8.4	17.0
2316.0	9.0	49.5	55	9.6	1.63	25.42	81068	404.76	624.68	8.4	17.0

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	URNS	ICOST	CCOST	FP	FG
2317.0	8.6	50.0	55	9.6	1.65	25.53	81452	425.05	623.73	8.4	17.0
2318.0	4.8	49.7	55	9.6	1.85	25.74	82141	761.85	624.39	8.4	17.0
2319.0	4.5	49.6	55	9.6	1.88	25.97	82680	818.66	625.30	8.4	17.0
2320.0	4.9	50.5	55	9.6	1.85	26.17	83553	744.60	625.86	8.4	17.0
2321.0	4.4	51.1	55	9.6	1.90	26.40	84301	827.79	626.81	8.4	17.0
2322.0	4.3	49.8	55	9.6	1.89	26.63	85063	343.00	627.81	8.4	17.0
2323.0	5.9	48.8	55	9.6	1.77	26.80	85619	615.77	627.76	8.4	17.0
2324.0	7.6	49.8	55	9.6	1.69	26.93	86052	478.82	627.07	8.4	17.0
2325.0	7.4	48.9	55	9.6	1.69	27.06	86499	495.05	626.46	8.4	17.0
2326.0	6.0	50.0	55	9.6	1.78	27.23	87052	611.71	626.40	8.4	17.0
2327.0	4.9	50.2	55	9.6	1.85	27.43	87720	739.53	626.91	8.4	17.0
2328.0	6.4	49.9	55	9.6	1.75	27.59	88235	569.10	626.65	8.4	17.0
2329.0	5.1	50.1	55	9.6	1.83	27.78	88677	711.13	627.63	8.4	17.0
2330.0	9.5	49.3	55	9.6	1.61	27.89	89226	385.49	625.95	8.4	17.0
2331.0	9.9	50.4	55	9.6	1.61	27.99	89560	370.27	624.81	8.4	17.0
2332.0	6.6	50.1	55	9.6	1.75	28.14	90061	553.89	624.49	8.4	17.0
2333.0	8.2	49.7	55	9.6	1.67	28.26	90465	447.37	623.71	8.4	17.0
2334.0	3.8	50.6	55	9.6	1.94	28.53	91327	953.58	625.16	8.4	17.0
2335.0	5.3	50.2	55	9.6	1.82	28.71	91950	689.82	625.44	8.4	17.0
2336.0	6.1	50.5	55	9.6	1.78	28.88	92490	597.51	625.32	8.4	17.0
2337.0	8.3	49.7	55	9.6	1.66	29.00	92887	439.25	624.51	8.4	17.0
2338.0	10.2	49.6	55	9.6	1.59	29.10	93211	359.11	623.36	8.4	17.0
2339.0	12.5	49.6	55	9.6	1.52	29.18	93476	293.17	621.94	8.4	17.0
2340.0	18.4	48.8	55	9.6	1.38	29.23	93656	198.83	620.12	8.4	17.0
2341.0	20.8	46.4	55	9.6	1.31	29.28	93814	175.50	618.22	8.4	17.0
2342.0	17.5	49.6	55	9.6	1.40	29.34	94003	208.98	616.48	8.4	17.0
2343.0	14.0	48.3	55	9.6	1.47	29.41	94239	260.71	614.97	8.4	17.0
2344.0	15.6	47.9	55	9.6	1.43	29.47	94451	234.34	613.37	8.4	17.0
2345.0	15.5	48.8	55	9.6	1.44	29.54	94664	236.37	611.78	8.4	17.0
2346.0	18.3	48.5	55	9.6	1.38	29.59	94845	199.85	610.06	8.4	17.0
2347.0	5.0	48.8	55	9.6	1.83	29.79	95503	728.37	610.55	8.4	17.0
2348.0	5.9	49.5	55	9.6	1.78	29.96	96062	618.81	610.59	8.4	17.0
2349.0	3.6	49.9	55	9.6	1.96	30.24	96988	1025	612	8.4	17.0
2350.0	2.5	48.6	55	9.6	2.06	30.64	98308	1461	616	8.4	17.0
2351.0	2.5	49.2	55	9.6	2.07	31.04	99611	1447	619	8.4	17.0
2352.0	3.4	49.8	55	9.6	1.97	31.33	100583	1076	621	8.4	17.0
2353.0	6.0	48.5	55	9.6	1.76	31.50	101132	607.65	620.99	8.4	17.0
2354.0	5.7	49.9	55	9.6	1.79	31.67	101711	640.11	621.06	8.4	17.0
2355.0	12.9	49.3	55	9.6	1.51	31.75	101966	283.03	619.70	8.4	17.0
2356.0	8.4	45.4	55	9.6	1.61	31.87	102359	434.18	618.96	8.4	17.0
2357.0	3.9	54.0	55	9.6	1.98	32.13	103207	938.36	620.23	8.4	17.0
2358.0	2.8	51.0	55	9.6	2.65	32.48	104378	1296	623	8.4	17.0
2359.0	2.9	49.3	55	9.6	2.02	32.83	105529	1274	626	8.4	17.0
2360.0	6.8	46.5	55	9.6	1.69	32.98	106014	536.64	625.16	8.4	17.0
2361.0	7.5	47.5	55	9.6	1.67	33.11	106453	485.92	624.61	8.4	17.0
2362.0	3.1	49.1	55	9.6	1.99	33.43	107509	1169	627	8.4	17.0
2363.0	2.0	50.5	55	9.6	2.17	33.94	109193	1864	632	8.4	17.0
2364.0	2.8	51.6	55	9.6	2.07	34.30	110391	1325	634	8.4	17.0
2365.0	2.9	50.5	55	9.6	2.04	34.65	111529	1260	637	8.4	17.0
2366.0	3.7	49.8	55	9.6	1.95	34.92	112426	997.14	638.08	8.4	17.0

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	URNS	LCOST	CCOST	PP	FG
2367.0	2.6	50.5	55	9.6	2.07	35.30	113672	1379	641	8.4	17.0
2368.0	2.6	48.8	55	9.6	2.05	35.68	114934	1396	644	8.4	17.0
2369.0	7.6	40.1	55	9.6	1.58	35.81	115370	482.88	643.20	8.4	17.0
2370.0	12.2	42.3	55	9.6	1.45	35.89	115641	300.28	641.90	8.4	17.0
2371.0	5.6	47.4	55	9.6	1.77	36.07	116229	650.26	641.93	8.4	17.0
2372.0	15.9	49.5	55	9.6	1.44	36.13	116437	230.28	640.38	8.4	17.0
2373.0	5.5	51.2	55	9.6	1.82	36.32	117041	668.52	640.48	8.4	17.0
2374.0	2.4	50.3	55	9.6	2.10	36.73	118398	1501	644	8.4	17.0
2375.0	1.7	49.7	55	9.6	2.20	37.30	120294	2099	649	8.4	17.0
2376.0	3.4	51.3	55	9.6	2.00	37.60	121278	1038	651	8.4	17.0
2377.0	3.8	53.2	55	9.6	1.97	37.86	122140	954.59	651.90	8.4	17.0
2378.0	3.4	54.8	55	9.6	2.03	38.15	123103	1065	653	8.4	17.0
2379.0	4.1	54.2	55	9.6	1.96	38.40	123911	894.74	654.31	8.4	17.0
2380.0	4.6	49.4	55	9.6	1.86	38.62	124634	799.38	654.84	8.4	17.0
2381.0	4.3	48.3	55	9.6	1.88	38.85	125407	856.19	655.57	8.4	17.0
2382.0	4.3	48.6	55	9.6	1.87	39.08	126168	841.99	656.25	8.4	17.0
2383.0	7.2	47.9	55	9.6	1.69	39.22	126627	508.24	655.72	8.4	17.0
2384.0	4.3	45.7	55	9.6	1.84	39.45	127387	846.97	656.38	8.4	17.0
2385.0	3.8	46.3	55	9.6	1.89	39.72	128258	763.72	657.49	8.4	17.1
2386.0	4.5	43.5	55	9.6	1.79	39.94	128987	806.48	658.02	8.4	17.1
2387.0	11.7	38.3	55	9.6	1.42	40.02	129270	313.46	656.79	8.4	17.1
2388.0	4.7	39.8	55	9.6	1.73	40.24	129971	776.05	657.22	8.4	17.1
2389.0	7.0	39.5	55	9.6	1.60	40.38	130441	519.40	656.73	8.4	17.1
2390.0	8.8	39.1	55	9.6	1.52	40.49	130814	412.88	655.87	8.4	17.1
2391.0	7.0	39.6	55	9.6	1.60	40.63	131286	522.44	655.40	8.4	17.1
2392.0	3.1	41.1	55	9.6	1.89	40.96	132365	1194	657	8.4	17.1
2393.0	3.0	45.5	55	9.6	1.95	41.29	133457	1200	659	8.4	17.1
2394.0	2.5	51.1	55	9.6	2.10	41.70	134800	1487	662	8.4	17.1
2395.0	2.8	50.0	55	9.6	2.04	42.06	135984	1310	664	8.4	17.1
2396.0	4.5	50.0	55	9.6	1.88	42.28	136722	816.63	664.87	8.4	17.1
2397.0	5.4	49.4	55	9.6	1.81	42.47	137333	676.63	664.91	8.4	17.1
2398.0	2.9	50.3	55	9.6	2.03	42.81	138463	1250	667	8.4	17.1
2399.0	3.0	49.6	55	9.6	2.02	43.15	139573	1228	669	8.4	17.1
2400.0	2.2	50.7	55	9.6	2.14	43.60	141071	1659	672	8.4	17.1
2401.0	4.1	49.2	55	9.6	1.90	43.84	141870	883.58	672.94	8.4	17.1
2402.0	5.1	48.7	55	9.6	1.82	44.04	142520	719.24	673.16	8.4	17.1
2403.0	5.5	49.1	55	9.6	1.80	44.22	143123	667.50	673.08	8.4	17.1
2404.0	4.1	49.9	55	9.6	1.91	44.46	143927	889.67	673.81	8.4	17.1
2405.0	5.5	49.3	55	9.6	1.80	44.65	144523	659.39	673.76	8.4	17.1
2406.0	10.0	48.7	55	9.6	1.59	44.75	144852	364.19	672.73	8.4	17.1
2407.0	2.3	50.2	55	9.6	2.11	45.18	146273	1573	676	8.4	17.1
2408.0	3.0	49.7	55	9.6	2.01	45.51	147363	1206	677	8.4	17.1
2409.0	4.8	50.5	55	9.6	1.92	45.76	148187	911.99	678.27	8.4	17.1
2410.0	5.1	49.2	55	9.6	1.82	45.95	148835	716.20	678.39	8.4	17.1
2411.0	5.0	48.7	55	9.6	1.83	46.15	149499	735.47	678.59	8.4	17.1
2412.0	3.8	49.3	55	9.6	1.92	46.41	150357	949.52	679.47	8.4	17.1
2413.0	2.7	49.6	55	9.6	2.05	46.79	151597	1373	682	8.4	17.1
2414.0	7.3	49.8	55	9.6	1.71	46.93	152050	501.14	681.15	8.4	17.1
2415.0	8.2	48.8	55	9.6	1.65	47.05	152451	443.31	680.37	8.4	17.1
2416.0	6.8	47.9	55	9.6	1.71	47.19	152935	535.63	679.91	8.4	17.1

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	URNS	ICOST	CCOST	PP	FG
2417.0	4.2	49.3	55	9.6	1.89	47.43	153720	869.38	680.52	8.4	17.1
2419.0	3.6	49.1	55	9.6	1.94	47.98	155542	1008	683	8.4	17.1
2420.0	4.2	50.4	55	9.6	1.91	48.22	156327	869.38	683.21	8.4	17.1
2421.0	5.4	49.1	55	9.6	1.80	48.41	156933	670.55	683.17	8.4	17.1
2422.0	6.9	49.4	55	9.6	1.72	48.55	157414	532.58	682.69	8.4	17.1
2423.0	8.8	49.4	55	9.6	1.64	48.67	157790	415.92	681.65	8.4	17.1
2424.0	5.3	48.7	55	9.6	1.80	48.85	158407	682.72	681.85	8.4	17.1
2425.0	3.1	50.6	55	9.6	2.02	49.18	159483	1191	683	8.4	17.1
2426.0	2.1	50.1	55	9.6	2.14	49.65	161026	1707	687	8.4	17.1
2427.0	3.1	49.9	55	9.6	2.01	49.77	162106	1195	688	8.4	17.1
2428.0	2.1	50.1	55	9.6	2.14	50.45	163675	1737	692	8.4	17.1
2429.0	3.3	50.6	55	9.6	2.00	50.76	164693	1123	693	8.4	17.1
2430.0	1.7	49.3	55	9.6	2.20	51.33	166594	2107	697	8.4	17.1
2431.0	1.6	49.5	55	9.6	2.23	51.96	168655	2281	702	8.4	17.1
2431.2	4.7	46.1	55	9.6	1.81	52.00	168796	776.95	702.17	8.4	17.1

BIT NUMBER	6	JADC CODE	517	INTERVAL	2431.0- 2712.0
HTC J22		SIZE	12.250	NOZZLES	16 16 16
COST	8520.00	TRIP TIME	8.0	BIT RUN	281.0
TOTAL HOURS	47.95	TOTAL TURNS	144545	CONDITION	T4 B8 G0.125

DEPTH	ROP	WOB	RPM	MW	THICK	HOURS	TURNS	ICOST	CCOST	PP	FG
2432.0	6.0	14.9	50	9.5	1.25	0.17	499	607	30343	8.4	17.1
2433.0	13.4	20.7	50	9.5	1.14	0.24	723	273	19308	8.4	17.1
2434.0	11.4	47.7	50	9.5	1.50	0.33	985	320	12977	8.4	17.1
2435.0	7.0	46.1	50	9.5	1.57	0.44	1317	404	9335	8.4	17.1
2436.0	10.4	44.1	50	9.5	1.50	0.54	1606	352	7978	8.4	17.1
2437.0	11.1	48.2	50	9.5	1.52	0.63	1977	330	6479	8.4	17.1
2438.0	7.9	50.6	50	9.5	1.66	0.75	2255	461	5783	8.4	17.1
2439.0	4.0	48.9	50	9.5	1.87	1.00	2998	904	5173	8.4	17.1
2440.0	4.9	52.5	50	9.5	1.85	1.20	3614	750	4682	8.4	17.1
2441.0	4.0	43.8	50	9.5	1.81	1.45	4362	911	4305	8.4	17.1
2442.0	10.7	41.8	50	9.5	1.46	1.55	4644	343	3944	8.4	17.1
2443.0	3.5	46.8	50	9.5	1.90	1.84	5506	1050	3703	8.4	17.1
2444.0	3.6	48.9	50	9.5	1.91	2.11	6330	1002	3495	8.4	17.1
2445.0	4.5	50.7	50	9.5	1.86	2.33	6997	813	3304	8.4	17.1
2446.0	8.1	49.5	50	9.5	1.64	2.46	7370	453	3114	8.4	17.1
2447.0	13.7	49.1	50	9.5	1.45	2.53	7539	267	2936	8.4	17.1
2448.0	15.9	48.6	50	9.5	1.40	2.59	7778	230	2777	8.4	17.1
2449.0	17.9	49.1	50	9.5	1.36	2.65	7945	204	2634	8.4	17.1
2450.0	15.4	49.9	50	9.5	1.42	2.71	8140	237	2508	8.4	17.1
2451.0	13.0	48.9	50	9.5	1.47	2.79	8371	281	2396	8.4	17.1
2452.0	7.8	50.1	57	9.5	1.71	2.92	8813	470	2305	8.4	17.1
2453.0	8.1	50.6	47	9.5	1.63	3.04	9160	453	2220	8.4	17.1
2454.0	6.0	50.4	51	9.5	1.76	3.21	9670	611	2150	8.4	17.1
2455.0	5.1	51.5	50	9.5	1.83	3.41	10265	720	2091	8.4	17.1
2456.0	14.2	50.0	50	9.5	1.45	3.48	10478	258	2018	8.4	17.1
2457.0	5.9	50.9	48	9.5	1.75	3.65	10965	622	1964	8.4	17.1
2458.0	5.5	50.1	50	9.5	1.78	3.83	11506	659	1916	8.4	17.1
2459.0	5.4	48.9	50	9.5	1.77	4.01	12059	673	1871	8.4	17.1
2460.0	5.6	49.7	50	9.5	1.77	4.19	12597	654	1829	8.4	17.1
2461.0	10.4	49.8	50	9.5	1.56	4.29	12886	351	1780	8.4	17.1
2462.0	8.4	49.8	50	9.5	1.63	4.41	13245	435	1737	8.4	17.1
2463.0	7.6	49.4	50	9.5	1.66	4.54	13638	478	1697	8.4	17.1
2464.0	6.4	50.5	50	9.5	1.74	4.70	14110	573	1663	8.4	17.1
2465.0	6.5	50.0	50	9.5	1.72	4.85	14572	563	1631	8.4	17.1
2466.0	5.4	50.4	49	9.5	1.78	5.03	15114	673	1603	8.4	17.1
2467.0	11.5	49.1	48	9.5	1.50	5.12	15363	319	1568	8.4	17.1
2468.0	8.6	49.5	50	9.5	1.62	5.24	15711	426	1537	8.4	17.1
2469.0	6.2	48.7	50	9.5	1.72	5.40	16194	591	1512	8.4	17.1
2470.0	10.2	49.1	49	9.5	1.55	5.50	16485	358	1482	8.4	17.1
2471.0	9.8	49.3	49	9.5	1.56	5.60	16785	371	1455	8.4	17.1
2472.0	12.0	49.4	49	9.5	1.50	5.68	17032	304	1427	8.4	17.1
2473.0	9.6	48.9	50	9.5	1.57	5.79	17343	381	1402	8.4	17.1
2474.0	5.7	50.3	50	9.5	1.77	5.96	17864	640	1384	8.4	17.2

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	TURNS	ICOST	CCOST	PP	FG
2475.0	7.6	50.3	50	9.5	1.67	6.09	18254	478	1363	8.4	17.2
2477.0	5.9	49.9	50	9.5	1.75	6.43	19267	619	1331	8.4	17.2
2478.0	4.7	50.3	50	9.5	1.84	6.65	19910	785	1319	8.4	17.2
2479.0	6.3	50.2	50	9.5	1.73	6.80	20382	576	1304	8.4	17.2
2480.0	8.9	50.3	50	9.5	1.62	6.92	20718	410	1286	8.4	17.2
2481.0	12.9	49.4	50	9.5	1.48	6.99	20950	283	1266	8.4	17.2
2482.0	14.2	48.7	50	9.5	1.44	7.07	21161	258	1246	8.4	17.2
2483.0	12.0	49.5	50	9.5	1.50	7.15	21408	303	1228	8.4	17.2
2484.0	5.5	50.5	50	9.5	1.79	7.33	21959	669	1217	8.4	17.2
2485.0	9.9	50.3	50	9.5	1.58	7.43	22261	370	1201	8.4	17.2
2486.0	40.0	45.6	49	9.5	1.05	7.46	22336	91	1181	8.4	17.2
2487.0	8.6	50.6	50	9.5	1.63	7.57	22681	424	1168	8.4	17.2
2488.0	3.8	50.5	50	9.5	1.91	7.83	23456	951	1164	8.4	17.2
2489.0	3.6	50.6	50	9.5	1.94	8.12	24297	1027	1162	8.4	17.2
2490.0	3.9	50.3	50	9.5	1.91	8.37	25075	947	1158	8.4	17.2
2491.0	9.3	49.8	50	9.5	1.59	8.48	25396	392	1145	8.4	17.2
2492.0	25.4	48.9	50	9.5	1.24	8.52	25514	144	1129	8.4	17.2
2493.0	17.2	49.7	50	9.5	1.38	8.58	25688	212	1114	8.4	17.2
2494.0	9.6	50.3	50	9.5	1.59	8.68	25999	380	1102	8.4	17.2
2495.0	6.3	50.5	50	9.5	1.74	8.84	26472	575	1094	8.4	17.2
2496.0	6.0	49.0	51	9.5	1.74	9.01	26978	606	1087	8.4	17.2
2497.0	11.1	49.3	52	9.5	1.54	9.10	27260	328	1075	8.4	17.2
2498.0	8.4	49.1	53	9.5	1.64	9.22	27637	436	1066	8.4	17.2
2499.0	4.4	50.3	53	9.5	1.88	9.45	28362	838	1062	8.4	17.2
2500.0	3.9	50.1	53	9.5	1.92	9.70	29165	928	1060	8.4	17.2
2501.0	3.9	49.9	52	9.5	1.91	9.96	29962	940	1059	8.4	17.2
2502.0	5.2	49.7	49	9.5	1.79	10.15	30531	703	1054	8.4	17.2
2503.0	5.6	49.6	49	9.5	1.76	10.33	31058	650	1048	8.4	17.2
2504.0	5.8	49.3	49	9.5	1.75	10.50	31564	626	1042	8.4	17.2
2505.0	5.4	49.7	49	9.5	1.77	10.68	32106	679	1037	8.4	17.2
2506.0	6.0	49.4	50	9.5	1.75	10.85	32611	613	1032	8.4	17.2
2507.0	5.5	49.7	50	9.5	1.78	11.04	33160	668	1027	8.4	17.2
2508.0	7.2	49.0	50	9.5	1.68	11.17	33579	509	1020	8.4	17.2
2509.0	7.7	48.4	50	9.5	1.65	11.30	33968	474	1013	8.4	17.2
2510.0	6.4	49.3	50	9.5	1.72	11.46	34434	567	1007	8.4	17.2
2511.0	6.4	49.2	50	9.5	1.72	11.62	34902	569	1002	8.4	17.2
2512.0	5.3	48.6	50	9.5	1.78	11.80	35466	685.76	998.05	8.4	17.2
2513.0	4.2	48.9	50	9.5	1.86	12.04	36175	862.28	996.40	8.4	17.2
2514.0	4.0	50.4	50	9.5	1.90	12.29	36929	914.01	995.41	8.4	17.2
2515.0	3.9	49.7	49	9.5	1.89	12.55	37690	941.40	994.76	8.4	17.2
2516.0	4.5	49.0	51	9.5	1.84	12.77	38363	808.51	992.57	8.4	17.2
2517.0	24.8	45.1	51	9.5	1.22	12.81	38486	147.09	982.74	8.4	17.2
2518.0	33.6	46.1	51	9.5	1.12	12.84	38576	108.55	972.69	8.4	17.2
2519.0	17.4	47.5	51	9.5	1.36	12.90	38751	209.99	964.02	8.4	17.2
2520.0	20.7	45.9	44	9.5	1.24	12.94	38879	176.51	955.18	8.4	17.2
2521.0	9.5	48.6	51	9.5	1.58	13.05	39199	382.45	948.81	8.4	17.2
2522.0	3.4	49.6	51	9.5	1.95	13.34	40089	1062	950	8.4	17.2
2523.0	4.1	49.0	51	9.5	1.88	13.59	40842	897.78	949.49	8.4	17.2
2524.0	3.7	49.4	51	9.5	1.91	13.85	41660	974.88	949.76	8.4	17.2
2525.0	3.4	49.4	50	9.5	1.94	14.15	42549	1077	951	8.4	17.2

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	TURNS	LCOST	CCOST	PP	FG
2526.0	4.5	49.2	53	9.5	1.85	14.37	43242	803.44	949.57	8.4	17.2
2527.0	4.9	50.0	52	9.5	1.83	14.57	43877	740.54	947.39	8.4	17.2
2528.0	3.7	49.8	52	9.5	1.93	14.84	44716	976.91	947.69	8.4	17.2
2529.0	3.4	50.1	51	9.5	1.96	15.14	45615	1083	949	8.4	17.2
2530.0	4.7	49.1	51	9.5	1.83	15.35	46257	773.01	947.30	8.4	17.2
2531.0	4.3	49.8	51	9.5	1.87	15.58	46966	854.16	946.37	8.4	17.2
2532.0	5.6	50.4	51	9.5	1.79	15.76	47512	657.36	943.51	8.4	17.2
2533.0	4.4	51.5	51	9.5	1.88	15.99	48203	829.82	942.39	8.4	17.2
2534.0	3.9	50.3	51	9.5	1.91	16.24	48975	927.20	942.24	8.4	17.2
2535.0	2.7	51.1	50	9.5	2.05	16.62	50107	1378	946	8.4	17.2
2536.0	4.3	51.8	51	9.5	1.90	16.85	50824	849.09	945.50	8.4	17.2
2537.0	4.8	51.2	50	9.5	1.84	17.06	51451	762.86	943.78	8.4	17.2
2538.0	4.9	51.8	55	9.5	1.88	17.27	52126	747.65	941.95	8.4	17.2
2539.0	6.1	51.5	51	9.5	1.77	17.43	52624	594.46	938.73	8.4	17.2
2540.0	8.6	50.9	52	9.5	1.65	17.54	52986	427.08	934.04	8.4	17.2
2541.0	11.1	50.7	51	9.5	1.55	17.63	53264	328.68	928.53	8.4	17.2
2542.0	15.3	50.8	51	9.5	1.44	17.70	53465	239.41	922.32	8.4	17.2
2543.0	18.8	52.0	51	9.5	1.38	17.75	53628	194.77	915.83	8.4	17.2
2544.0	17.3	53.4	47	9.5	1.39	17.81	53791	211.00	909.59	8.4	17.2
2545.0	24.2	50.1	50	9.5	1.27	17.85	53917	151.15	902.94	8.4	17.2
2546.0	18.3	48.1	51	9.5	1.35	17.91	54083	199.85	896.82	8.4	17.2
2547.0	18.4	48.2	51	9.5	1.35	17.96	54249	198.83	890.81	8.4	17.2
2548.0	19.5	47.5	51	9.5	1.32	18.01	54406	187.67	884.80	8.4	17.2
2549.0	19.6	48.2	51	9.5	1.33	18.06	54562	186.66	878.88	8.4	17.2
2550.0	15.9	48.4	51	9.5	1.40	18.13	54754	229.26	873.42	8.4	17.2
2551.0	25.4	48.4	50	9.5	1.24	18.17	54873	144.05	867.34	8.4	17.2
2552.0	11.0	48.9	52	9.5	1.54	18.26	55155	331.72	862.92	8.4	17.2
2553.0	18.7	49.7	51	9.5	1.36	18.31	55318	195.79	857.45	8.4	17.2
2554.0	10.7	45.5	60	9.5	1.56	18.40	55654	339.84	853.24	8.4	17.2
2555.0	17.0	48.5	56	9.5	1.41	18.46	55850	215.06	848.09	8.4	17.2
2556.0	7.9	52.1	50	9.5	1.68	18.59	56228	459.54	844.99	8.4	17.2
2557.0	10.2	51.1	50	9.5	1.58	18.69	56521	357.08	841.11	8.4	17.2
2558.0	3.6	51.3	50	9.5	1.94	18.96	57353	1012	842	8.4	17.2
2559.0	3.1	51.3	50	9.5	1.99	19.28	58310	1166	845	8.4	17.2
2560.0	3.3	49.7	50	9.5	1.96	19.59	59232	1122	847	8.4	17.2
2561.0	3.4	50.7	50	9.5	1.96	19.89	60117	1077	849	8.4	17.2
2563.0	3.7	50.6	50	9.5	1.93	20.43	61742	989.08	851.03	8.4	17.2
2564.0	3.3	50.8	50	9.5	1.97	20.73	62651	1107	853	8.4	17.3
2565.0	3.4	50.0	50	9.5	1.95	21.02	63534	1074	855	8.4	17.3
2566.0	3.3	50.4	52	9.5	1.97	21.33	64467	1099	856	8.4	17.3
2567.0	3.1	50.3	51	9.5	2.00	21.65	65465	1191	859	8.4	17.3
2568.0	3.2	50.4	51	9.5	1.98	21.96	66419	1139	861	8.4	17.3
2569.0	3.9	51.5	51	9.5	1.93	22.22	67209	942.42	861.51	8.4	17.3
2570.0	11.2	50.6	51	9.5	1.55	22.31	67481	326.65	857.66	8.4	17.3
2571.0	8.4	49.8	51	9.5	1.64	22.43	67846	435.20	854.64	8.4	17.3
2572.0	3.6	50.0	51	9.5	1.94	22.71	68707	1028	856	8.4	17.3
2573.0	3.3	49.7	50	9.5	1.96	23.02	69638	1123	858	8.4	17.3
2574.0	5.1	50.1	51	9.5	1.82	23.21	70241	713.15	856.74	8.4	17.3
2575.0	4.2	50.1	54	9.5	1.91	23.45	71019	877.49	856.88	8.4	17.3
2576.0	3.7	50.4	53	9.5	1.94	23.72	71870	983.00	857.75	8.4	17.3

DEPTH	ROP	WOB	RPM	MW	"d" c	HOURS	URNS	ICOST	CCOST	PP	FG
2577.0	3.4	51.0	50	9.5	1.96	24.02	72753	1075	859	8.4	17.3
2578.0	3.2	51.5	50	9.5	1.99	24.33	73694	1145	861	8.4	17.3
2579.0	4.6	49.6	50	9.5	1.84	24.55	74345	792.28	860.72	8.4	17.3
2580.0	3.4	50.9	50	9.5	1.96	24.84	75221	1067	862	8.4	17.3
2581.0	6.0	50.9	50	9.5	1.76	25.01	75719	605.62	860.40	8.4	17.3
2582.0	12.7	45.8	50	9.5	1.45	25.09	75956	268.10	856.61	8.4	17.3
2583.0	14.4	48.3	50	9.5	1.43	25.15	76164	253.61	852.64	8.4	17.3
2584.0	15.3	49.6	50	9.5	1.42	25.22	76361	239.41	848.63	8.4	17.3
2585.0	6.1	51.9	50	9.5	1.77	25.38	76851	596.49	847.00	8.4	17.3
2586.0	3.4	52.4	50	9.5	1.98	25.68	77726	1065	848	8.4	17.3
2587.0	4.0	51.1	50	9.5	1.90	25.92	78472	908.94	848.79	8.4	17.3
2588.0	3.8	50.6	50	7.5	1.92	26.19	79265	964.74	849.53	8.4	17.3
2589.0	3.0	51.1	50	9.5	2.00	26.52	80255	1205	852	8.4	17.3
2590.0	3.6	51.4	50	9.5	1.94	26.79	81081	1005	853	8.4	17.3
2591.0	5.0	51.0	50	9.5	1.82	26.99	81678	727.36	851.96	8.4	17.3
2592.0	16.2	52.3	50	9.5	1.43	27.05	81863	225.21	848.07	8.4	17.3
2593.0	14.3	51.6	50	9.5	1.46	27.12	82072	254.63	844.41	8.4	17.3
2594.0	11.5	50.4	50	9.5	1.53	27.21	82332	316.51	841.17	8.4	17.3
2595.0	17.1	51.3	50	9.5	1.40	27.27	82508	214.05	837.35	8.4	17.3
2596.0	11.9	50.6	50	9.5	1.52	27.35	82761	307.38	834.13	8.4	17.3
2597.0	14.3	52.1	50	9.5	1.47	27.42	82970	254.63	830.64	8.4	17.3
2598.0	14.3	51.9	50	9.5	1.47	27.49	83179	254.63	827.19	8.4	17.3
2599.0	16.6	51.7	50	9.5	1.41	27.55	83360	220.13	823.58	8.4	17.3
2600.0	11.6	51.8	50	9.5	1.54	27.64	83618	314.48	820.57	8.4	17.3
2601.0	10.9	51.9	50	9.5	1.56	27.73	83894	335.78	817.72	8.4	17.3
2602.0	3.4	51.6	50	9.5	1.97	28.02	84773	1070	819	8.4	17.3
2603.0	4.3	50.9	50	9.5	1.88	28.26	85468	846.05	819.35	8.4	17.3
2604.0	4.2	51.4	50	9.5	1.89	28.50	86188	876.48	819.68	8.4	17.3
2605.0	4.4	51.5	50	9.5	1.88	28.72	86871	831.54	819.75	8.4	17.3
2606.0	3.5	51.7	50	9.5	1.96	29.01	87732	1048	821	8.4	17.3
2607.0	4.1	52.2	50	9.5	1.91	29.25	88456	880.54	821.39	8.4	17.3
2608.0	4.2	52.2	50	9.5	1.90	29.49	89172	872.42	821.68	8.4	17.3
2609.0	4.8	52.2	50	9.5	1.85	29.70	89795	757.79	821.32	8.4	17.3
2611.0	7.0	51.8	50	9.5	1.72	29.98	90653	522.44	818.00	8.4	17.3
2612.0	6.3	51.5	50	9.5	1.75	30.14	91129	579.25	816.68	8.4	17.3
2613.0	8.4	52.0	50	9.5	1.66	30.26	91486	435.20	814.50	8.4	17.3
2614.0	7.8	51.9	50	9.5	1.68	30.39	91871	468.67	812.69	8.4	17.3
2615.0	5.7	51.6	50	9.5	1.79	30.57	92401	644.17	811.78	8.4	17.3
2616.0	3.9	51.9	50	9.5	1.93	30.83	93179	947.47	812.51	8.4	17.3
2617.0	3.1	52.3	50	9.5	2.01	31.14	94132	1161	814	8.4	17.3
2618.0	3.6	52.5	50	9.5	1.96	31.42	94957	1004	815	8.4	17.3
2619.0	4.4	51.8	50	9.5	1.88	31.65	95637	827.79	815.46	8.4	17.3
2620.0	4.5	49.8	50	9.5	1.85	31.87	96306	814.60	815.46	8.4	17.3
2621.0	4.2	49.8	50	9.5	1.87	32.11	97020	868.36	815.74	8.4	17.3
2622.0	4.3	50.0	50	9.5	1.86	32.34	97713	844.02	815.89	8.4	17.3
2623.0	3.8	50.2	50	9.5	1.91	32.60	98493	949.52	816.58	8.4	17.3
2624.0	4.1	50.9	50	9.5	1.90	32.84	99230	896.77	817.00	8.4	17.3
2625.0	4.6	51.6	50	9.5	1.87	33.06	99887	800.40	816.91	8.4	17.3
2626.0	5.3	51.0	50	9.5	1.80	33.25	100451	686.78	816.24	8.4	17.3
2627.0	4.7	51.0	50	9.5	1.85	33.46	101091	778.08	816.05	8.4	17.3

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	URNS	ICOST	CCOST	PP	FG
2628.0	4.4	51.7	50	9.5	1.88	33.69	101778	836.92	816.16	8.4	17.3
2629.0	6.5	51.2	50	9.5	1.74	33.85	102238	559.97	814.86	8.4	17.3
2630.0	8.6	52.4	50	9.5	1.65	33.96	102588	426.07	812.91	8.4	17.3
2631.0	5.0	48.3	50	9.5	1.79	34.16	103188	730.40	812.50	8.4	17.3
2632.0	5.2	49.6	50	9.5	1.80	34.36	103765	702.00	811.95	8.4	17.3
2633.0	3.4	49.9	50	9.5	1.96	34.65	104659	1088	813	8.4	17.3
2634.0	4.0	50.2	50	9.5	1.90	34.90	105406	909.96	813.79	8.4	17.3
2635.0	4.8	50.4	50	9.5	1.84	35.11	106031	760.83	813.53	8.4	17.3
2636.0	7.7	50.8	50	9.5	1.68	35.24	106421	473.75	811.87	8.4	17.3
2637.0	10.2	50.3	50	9.5	1.57	35.34	106716	359.11	809.68	8.4	17.3
2638.0	15.6	49.5	50	9.5	1.42	35.40	106908	234.34	806.90	8.4	17.3
2639.0	15.1	48.1	50	9.5	1.41	35.47	107107	242.45	804.18	8.4	17.3
2640.0	4.4	50.3	50	9.5	1.86	35.70	107785	824.74	804.28	8.4	17.3
2641.0	4.3	50.7	50	9.5	1.88	35.93	108486	854.16	804.52	8.4	17.3
2642.0	4.2	51.1	50	9.5	1.89	36.17	109201	870.39	804.83	8.4	17.3
2643.0	4.4	51.2	50	9.5	1.88	36.39	109884	830.83	804.95	8.4	17.3
2644.0	3.4	51.0	50	9.5	1.96	36.69	110762	1069	806	8.4	17.3
2645.0	3.8	50.9	50	9.5	1.92	36.95	111546	954.59	806.89	8.4	17.3
2646.0	4.9	50.5	50	9.5	1.83	37.15	112155	740.54	806.58	8.4	17.3
2647.0	6.5	49.5	50	9.5	1.72	37.30	112613	557.94	805.43	8.4	17.3
2648.0	10.1	49.5	50	9.5	1.57	37.40	112910	361.14	803.38	8.4	17.3
2649.0	6.2	49.9	50	9.5	1.74	37.56	113391	586.35	802.38	8.4	17.3
2650.0	15.5	48.7	50	9.5	1.41	37.63	113585	235.35	799.80	8.4	17.3
2651.0	23.4	48.1	50	9.5	1.26	37.67	113713	156.22	796.87	8.4	17.3
2652.0	10.8	48.9	50	9.5	1.54	37.76	113990	336.80	794.79	8.4	17.3
2653.0	2.9	50.2	50	9.5	2.01	38.11	115017	1251	797	8.4	17.3
2654.0	5.9	49.6	50	9.5	1.76	38.28	115529	622.87	796.06	8.4	17.3
2655.0	9.6	50.1	50	9.5	1.59	38.38	115841	379.40	794.20	8.4	17.3
2656.0	14.6	49.1	50	9.5	1.43	38.45	116046	249.55	791.78	8.4	17.3
2657.0	14.7	49.3	50	9.5	1.43	38.52	116250	248.54	789.38	8.4	17.4
2658.0	5.4	50.8	50	9.5	1.80	38.70	116810	681.71	788.90	8.4	17.4
2659.0	3.3	50.1	50	9.5	1.96	39.01	117716	1104	790	8.4	17.4
2660.0	4.1	50.7	50	9.5	1.90	39.25	118456	900.83	790.77	8.4	17.4
2661.0	9.7	50.3	50	9.5	1.59	39.36	118766	377.37	788.97	8.4	17.4
2662.0	6.5	50.5	50	9.5	1.73	39.51	119226	559.97	787.98	8.4	17.4
2663.0	3.3	50.0	50	9.5	1.96	39.81	120132	1103	789	8.4	17.4
2664.0	3.6	49.6	50	9.5	1.93	40.09	120966	1014	790	8.4	17.4
2665.0	7.2	50.7	50	9.5	1.70	40.23	121382	507.22	789.09	8.4	17.4
2666.0	5.4	50.2	50	9.5	1.80	40.41	121942	681.71	788.63	8.4	17.4
2667.0	4.0	50.2	50	9.5	1.90	40.66	122689	908.94	789.14	8.4	17.4
2669.0	3.5	49.5	50	9.5	1.94	41.23	124401	1042	791	8.4	17.4
2670.0	3.9	51.0	50	9.5	1.92	41.49	125169	934.30	791.87	8.4	17.4
2671.0	3.5	50.4	50	9.5	1.95	41.77	126022	1039	793	8.4	17.4
2672.0	3.7	50.5	50	9.5	1.93	42.04	126831	984.01	793.69	8.4	17.4
2673.0	3.8	51.0	50	9.5	1.93	42.31	127621	961.69	794.39	8.4	17.4
2674.0	3.6	50.6	50	9.5	1.94	42.59	128463	1026	795	8.4	17.4
2675.0	3.9	51.3	50	9.5	1.92	42.84	129224	926.19	795.87	8.4	17.4
2676.0	3.3	51.3	50	9.5	1.98	43.14	130124	1096	797	8.4	17.4
2677.0	3.3	50.4	50	9.5	1.97	43.44	131031	1104	798	8.4	17.4
2678.0	3.1	50.8	50	9.5	1.99	43.77	131997	1177	800	8.4	17.4

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	URNS	ICOST	CCOST	PP	FG
2679.0	2.7	50.6	50	9.5	2.04	44.13	133090	1330	802	8.4	17.4
2680.0	3.8	50.3	50	9.5	1.91	44.39	133871	951.55	802.61	8.4	17.4
2681.0	6.7	49.2	50	9.5	1.71	44.54	134319	544.76	801.58	8.4	17.4
2682.0	3.7	49.7	50	9.5	1.92	44.81	135126	983.00	802.31	8.4	17.4
2683.0	3.8	51.9	50	9.5	1.93	45.07	135906	949.52	802.89	8.4	17.4
2684.0	4.8	52.0	50	9.5	1.86	45.28	136531	760.83	802.72	8.4	17.4
2685.0	6.8	51.1	50	9.5	1.72	45.43	136975	539.68	801.69	8.4	17.4
2686.0	10.8	50.2	50	9.5	1.55	45.52	137253	339.11	799.87	8.4	17.4
2687.0	10.8	49.1	50	9.5	1.54	45.61	137532	338.82	798.07	8.4	17.4
2688.0	12.9	48.5	50	9.5	1.47	45.69	137765	284.04	796.07	8.4	17.4
2689.0	11.0	50.4	50	9.5	1.55	45.78	138038	331.72	794.27	8.4	17.4
2690.0	6.1	50.7	50	9.5	1.76	45.94	138531	600.55	793.52	8.4	17.4
2691.0	10.3	50.6	50	9.5	1.57	46.04	138821	353.03	791.83	8.5	17.4
2692.0	8.7	51.0	50	9.5	1.64	46.16	139167	420.99	790.41	8.5	17.4
2693.0	4.4	50.8	50	9.5	1.87	46.38	139848	829.82	790.56	8.5	17.4
2694.0	3.5	50.8	50	9.5	1.95	46.67	140698	1035	791	8.5	17.4
2695.0	4.4	51.1	50	9.5	1.88	46.90	141386	836.92	791.66	8.5	17.4
2696.0	3.6	50.5	50	9.5	1.94	47.17	142220	1015	793	8.5	17.4
2697.0	4.2	50.4	50	9.5	1.88	47.41	142934	869.38	792.79	8.5	17.4
2698.0	6.3	49.9	50	9.5	1.74	47.57	143412	581.28	792.00	8.5	17.4
2699.0	6.7	49.1	50	9.5	1.71	47.72	143859	544.76	791.08	8.5	17.4
2700.0	4.4	50.4	50	9.5	1.87	47.95	144545	834.89	791.24	8.5	17.4
2701.0	10.9	50.3	50	9.5	1.55	48.04	144820	334.77	789.55	8.5	17.4
2702.0	15.9	50.8	50	9.5	1.42	48.10	145008	229.26	787.48	8.5	17.4
2703.0	12.6	50.9	50	9.5	1.50	48.18	145247	290.13	785.66	8.5	17.4
2704.0	11.0	49.3	50	9.5	1.54	48.27	145519	331.72	783.99	8.5	17.4
2705.0	4.0	50.9	50	9.5	1.91	48.52	146270	914.45	784.47	8.5	17.4
2707.0	7.0	49.3	50	9.5	1.69	48.81	147130	523.45	782.58	8.5	17.4
2708.0	2.6	50.3	50	9.5	2.05	49.20	148285	1406	705	8.5	17.4
2709.0	4.2	50.4	50	9.5	1.89	49.43	149004	874.45	785.15	8.5	17.4
2710.0	5.6	51.4	50	9.5	1.79	49.61	149539	651.27	784.67	8.5	17.4

BIT NUMBER	7	IADC CODE	517	INTERVAL	2712.0- 3021.0
HTC J22		SIZE	12.250	NOZZLES	16 16 16
COST	8520.00	TRIP TIME	7.8	BIT RUN	309.0
TOTAL HOURS	57.01	TOTAL TURNS	171045	CONDITION	T4 B5 G0.125

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	URNS	ICOST	CCOST	PP	FG
2713.0	3.5	47.3	50	9.5	1.91	0.28	838	1041	38802	8.6	17.4
2714.0	4.6	49.2	50	9.5	1.84	0.50	1497	801	19610	8.6	17.4
2715.0	2.8	49.3	50	9.5	2.01	0.85	2553	1286	13461	8.6	17.4
2716.0	3.8	50.0	50	9.5	1.91	1.12	3345	964	10321	8.6	17.4
2717.0	3.6	49.0	50	9.5	1.92	1.39	4177	1012	8452	8.6	17.4
2718.0	3.7	49.4	50	9.5	1.92	1.66	4990	990	7204	8.6	17.4
2719.0	4.8	49.1	50	9.5	1.82	1.87	5612	757	6280	8.6	17.4
2720.0	5.9	48.2	50	9.5	1.74	2.04	6122	621	5571	8.6	17.4
2721.0	5.1	49.0	50	9.5	1.80	2.24	6707	712	5030	8.6	17.4

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	URNS	ICOST	CCOST	PP	FG
2722.0	4.0	49.5	50	9.5	1.89	2.48	7448	903	4617	8.6	17.4
2723.0	4.9	49.4	50	9.5	1.81	2.69	3055	739	4263	8.6	17.4
2724.0	4.2	49.6	50	9.5	1.87	2.92	8763	862	3979	8.6	17.4
2725.0	6.2	49.2	50	9.5	1.73	3.08	9246	587	3718	8.6	17.4
2726.0	6.3	49.6	50	9.5	1.73	3.24	9723	581	3494	8.6	17.4
2727.0	7.6	48.3	50	9.5	1.65	3.37	10118	480	3293	8.6	17.4
2728.0	5.1	49.1	50	9.5	1.80	3.57	10706	716	3131	8.6	17.4
2729.0	6.4	48.4	50	9.5	1.71	3.73	11175	571	2981	8.6	17.4
2730.0	4.6	49.4	50	9.5	1.64	3.94	11825	791	2859	8.6	17.4
2731.0	5.2	50.6	50	9.5	1.81	4.14	12406	707	2745	8.6	17.4
2732.0	5.3	50.3	50	9.5	1.80	4.32	12973	691	2643	8.6	17.4
2733.0	4.3	49.3	50	9.5	1.86	4.56	13676	855	2557	8.6	17.4
2734.0	5.2	48.7	50	9.5	1.79	4.75	14249	698	2473	8.6	17.4
2735.0	4.7	49.6	50	9.5	1.84	4.96	14891	781	2399	8.6	17.4
2736.0	7.1	49.3	50	9.5	1.69	5.10	15314	515	2321	8.6	17.4
2737.0	4.4	49.9	50	9.5	1.86	5.33	15994	828	2261	8.6	17.4
2738.0	5.8	49.0	50	9.5	1.75	5.50	16509	627	2198	8.6	17.5
2739.0	4.7	50.2	50	9.5	1.84	5.72	17150	780	2145	8.6	17.5
2740.0	3.8	50.2	50	9.5	1.92	5.98	17947	970	2103	8.6	17.5
2741.0	6.4	50.2	50	9.5	1.73	6.14	18413	568	2050	8.6	17.5
2742.0	4.6	50.6	50	9.5	1.85	6.35	19064	792	2008	8.6	17.5
2743.0	4.4	50.8	50	9.5	1.87	6.58	19743	826	1970	8.6	17.5
2744.0	5.6	50.1	50	9.5	1.78	6.76	20282	656	1929	8.6	17.5
2745.0	8.2	49.6	50	9.5	1.64	6.88	20649	447	1884	8.6	17.5
2746.0	11.9	48.6	50	9.5	1.50	6.97	20901	306	1838	8.6	17.5
2747.0	17.7	48.2	50	9.5	1.36	7.02	21070	206	1791	8.6	17.5
2748.0	10.0	48.0	50	9.5	1.55	7.12	21369	364	1752	8.6	17.5
2749.0	5.0	48.5	50	9.5	1.80	7.32	21967	727	1724	8.6	17.5
2750.0	4.9	48.3	50	9.5	1.80	7.53	22578	744	1698	8.6	17.5
2751.0	5.1	48.8	50	9.5	1.80	7.72	23169	720	1673	8.6	17.5
2752.0	4.6	51.2	50	9.5	1.86	7.94	23828	801	1651	8.6	17.5
2753.0	4.4	49.4	50	9.5	1.85	8.17	24510	831	1631	8.6	17.5
2754.0	3.9	50.0	50	9.5	1.91	8.43	25281	938	1615	8.6	17.5
2755.0	3.5	50.5	50	9.5	1.95	8.71	26142	1048	1601	8.6	17.5
2756.0	4.9	50.5	50	9.5	1.83	8.92	26759	752	1582	8.6	17.5
2757.0	4.1	50.4	50	9.5	1.89	9.16	27487	886	1567	8.6	17.5
2758.0	5.4	51.0	50	9.5	1.80	9.35	28041	675	1547	8.6	17.5
2759.0	5.5	50.9	50	9.5	1.80	9.53	28587	665	1528	8.6	17.5
2760.0	4.3	51.5	50	9.5	1.69	9.76	29278	841	1514	8.6	17.5
2761.0	5.3	51.2	50	9.5	1.81	9.95	29846	691	1497	8.6	17.5
2762.0	5.0	49.9	50	9.5	1.82	10.15	30443	727	1482	8.6	17.5
2763.0	4.2	50.6	50	9.5	1.89	10.39	31164	877	1470	8.6	17.5
2764.0	3.8	50.8	50	9.5	1.92	10.65	31949	956	1460	8.6	17.5
2765.0	4.2	51.0	50	9.5	1.89	10.89	32656	860	1449	8.6	17.5
2766.0	4.4	52.1	50	9.5	1.89	11.11	33340	833	1437	8.6	17.5
2767.0	4.7	51.4	50	9.5	1.85	11.32	33973	771	1425	8.6	17.5
2768.0	9.0	50.3	50	9.5	1.62	11.44	34308	408	1407	8.6	17.5
2769.0	14.6	50.0	50	9.5	1.44	11.50	34514	250	1387	8.6	17.5
2770.0	18.0	50.3	50	9.5	1.37	11.56	34680	203	1366	8.6	17.5
2771.0	22.3	50.7	50	9.5	1.30	11.60	34815	164	1346	8.6	17.5

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	URNS	ICOST	CCOST	PP	FG
2772.0	29.3	40.7	50	9.5	1.12	11.64	34917	125	1326	8.6	17.5
2773.0	17.4	52.2	50	9.5	1.40	11.70	35090	210	1307	8.6	17.5
2775.0	12.7	51.7	50	9.5	1.51	11.85	35562	288	1275	8.6	17.5
2776.0	4.2	52.0	50	9.5	1.90	12.09	36276	870	1269	8.6	17.5
2777.0	5.1	50.8	50	9.5	1.82	12.29	36865	716	1260	8.6	17.5
2778.0	4.7	51.5	50	9.5	1.86	12.50	37503	777	1253	8.6	17.5
2779.0	4.9	51.3	50	9.5	1.84	12.71	38115	745	1245	8.6	17.5
2780.0	4.7	52.4	50	9.5	1.87	12.92	38754	777	1238	8.6	17.5
2781.0	4.3	53.0	50	9.5	1.91	13.15	39451	849	1233	8.6	17.5
2782.0	5.3	52.3	50	9.5	1.82	13.34	40017	689	1225	8.6	17.5

BIT NUMBER	7	IADC CODE	517	INTERVAL	2782.0- 3021.0
HTC J22		SIZE	12.250	NOZZLES	16 16 16
COST	8520.00	TRIP TIME	7.8	BIT RUN	239.0
TOTAL HOURS	57.01	TOTAL TURNS	171045	CONDITION	T4 B5 G0.125

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	URNS	ICOST	CCOST	PP	FG
2783.0	4.3	52.4	50	9.5	1.90	13.57	40734	852	1219	8.6	17.5
2784.0	4.8	51.0	50	9.5	1.84	13.78	41359	761	1213	8.6	17.5
2785.0	5.6	51.9	50	9.5	1.80	13.96	41894	651	1205	8.6	17.5
2786.0	4.1	51.8	50	9.5	1.91	14.20	42622	887	1201	8.6	17.5
2787.0	4.9	52.0	50	9.5	1.85	14.41	43236	747	1195	8.6	17.5
2788.0	4.3	51.9	50	9.5	1.89	14.64	43928	843	1190	8.6	17.5
2789.0	4.9	52.1	50	9.5	1.85	14.84	44544	750	1185	8.6	17.5
2790.0	4.3	52.1	50	9.5	1.90	15.08	45248	857	1180	8.6	17.5
2791.0	4.2	51.8	50	9.5	1.90	15.32	45962	869	1176	8.6	17.5
2792.0	4.7	51.9	50	9.5	1.87	15.53	46607	785	1172	8.6	17.5
2793.0	5.1	51.6	50	9.5	1.83	15.73	47197	718	1166	8.6	17.5
2794.0	4.8	51.3	50	9.5	1.85	15.94	47826	765	1161	8.6	17.5
2795.0	4.8	52.4	50	9.5	1.86	16.14	48445	754	1156	8.6	17.5
2796.0	7.7	51.6	50	9.5	1.68	16.27	48833	473	1148	8.6	17.5
2797.0	5.0	52.0	50	9.5	1.84	16.47	49432	729	1143	8.6	17.5
2798.0	4.3	52.1	50	9.5	1.90	16.70	50127	846	1140	8.6	17.5
2799.0	4.9	52.2	50	9.5	1.85	16.91	50735	740	1135	8.6	17.5
2800.0	5.3	51.5	50	9.5	1.81	17.09	51298	686	1130	8.6	17.5
2801.0	5.3	51.9	50	9.5	1.82	17.28	51861	686	1125	8.6	17.5
2802.0	5.5	52.5	50	9.5	1.81	17.46	52402	658	1120	8.6	17.5
2804.0	13.6	52.2	50	9.5	1.49	17.61	52843	268	1101	8.8	17.5
2805.0	14.3	52.1	50	9.5	1.47	17.68	53053	256	1092	8.8	17.5
2806.0	17.7	52.6	50	9.5	1.40	17.74	53222	206	1083	8.8	17.5
2807.0	11.3	51.0	50	9.5	1.54	17.82	53487	323	1075	8.8	17.5
2808.0	17.4	51.1	50	9.5	1.39	17.88	53659	210	1066	8.8	17.5
2809.0	14.8	50.5	50	9.5	1.44	17.95	53863	248	1057	8.8	17.5
2810.0	6.8	51.1	50	9.5	1.72	18.10	54307	541	1052	8.8	17.5
2811.0	7.7	50.8	50	9.5	1.67	18.23	54497	475	1046	8.8	17.5
2812.0	5.5	49.0	50	9.5	1.77	18.41	55244	665	1042	8.8	17.5
2813.0	6.2	51.7	50	9.5	1.76	18.57	55729	591	1038	8.8	17.5

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	URNS	ICOST	CCOST	PP	FG
2814.0	11.4	51.2	50	9.5	1.54	18.66	55994	322	1031	8.8	17.5
2815.0	15.5	49.7	50	9.5	1.42	18.77	56188	236	1023	8.8	17.5
2816.0	12.0	50.2	50	9.5	1.51	18.81	56437	303	1016	8.8	17.5
2817.0	9.0	51.5	50	9.5	1.63	18.97	56771	407	1010	8.6	17.5
2818.0	5.4	51.4	50	9.5	1.80	19.10	57322	671	1007	8.6	17.5
2819.0	5.5	51.2	50	9.5	1.80	19.29	57869	666	1004	8.6	17.5
2820.0	11.7	50.7	50	9.5	1.53	19.37	58125	311.43	997.65	8.6	17.5
2821.0	11.1	48.9	50	9.5	1.53	19.46	58394	327.67	991.51	8.6	17.5
2822.0	5.5	49.3	50	9.5	1.78	19.64	58941	665.48	988.54	8.6	17.5
2823.0	9.8	50.7	50	9.5	1.59	19.74	59249	374.33	983.01	8.6	17.5
2824.0	5.5	51.4	50	9.5	1.80	19.93	59789	653.37	980.11	8.6	17.5
2825.0	4.7	52.0	50	9.5	1.67	20.14	60434	784.17	978.38	8.6	17.5
2826.0	4.0	51.9	50	9.5	1.92	20.39	61180	908.94	977.77	8.6	17.5
2827.0	4.6	51.2	50	9.5	1.86	20.61	61832	793.30	976.16	8.6	17.5
2828.0	5.2	51.2	50	9.5	1.82	20.80	62414	708.42	973.85	8.6	17.5
2829.0	6.6	50.7	50	9.5	1.73	20.95	62871	556.93	970.29	8.6	17.5
2830.0	3.9	50.8	50	9.5	1.91	21.21	63639	934.30	969.99	8.6	17.5
2831.0	4.2	51.4	50	9.5	1.89	21.44	64347	862.28	969.08	8.6	17.5
2832.0	9.4	49.1	50	9.5	1.59	21.55	64666	387.52	964.23	8.6	17.5
2833.0	5.5	48.9	50	9.5	1.77	21.73	65211	664.46	961.76	8.6	17.5
2834.0	4.2	50.3	50	9.5	1.88	21.97	65920	862.28	960.94	8.6	17.5
2835.0	5.9	50.1	50	9.5	1.76	22.14	66431	622.87	958.19	8.6	17.6
2836.0	5.4	50.1	50	9.5	1.79	22.32	66988	677.65	955.93	8.6	17.6
2837.0	4.4	50.9	50	9.5	1.87	22.55	67671	830.83	954.93	8.6	17.6
2838.0	3.6	51.8	50	9.5	1.96	22.83	68509	1021	955	8.6	17.6
2839.0	7.2	50.1	50	9.5	1.69	22.97	68925	506.21	951.91	8.6	17.6
2840.0	13.5	48.9	50	9.5	1.46	23.04	69147	270.86	946.59	8.8	17.6
2841.0	20.3	48.7	50	9.5	1.32	23.09	69295	179.56	940.65	8.8	17.6
2842.0	14.2	48.7	50	9.5	1.44	23.16	69506	257.67	935.39	8.8	17.6
2843.0	14.0	49.1	50	9.5	1.45	23.24	69721	260.71	930.24	8.8	17.6
2844.0	8.9	50.3	50	9.5	1.62	23.35	70056	408.82	926.29	8.8	17.6
2845.0	4.4	50.2	50	9.5	1.86	23.57	70731	820.69	925.50	8.8	17.6
2846.0	4.0	50.1	50	9.5	1.89	23.87	71473	903.87	925.34	8.8	17.6
2847.0	4.3	50.5	50	9.5	1.89	24.05	72170	848.08	924.76	8.8	17.6
2848.0	4.7	49.8	50	9.5	1.84	24.26	72809	778.08	923.69	8.8	17.6
2849.0	4.6	49.9	50	9.5	1.85	24.48	73466	800.40	922.77	8.8	17.6
2850.0	16.8	49.0	50	9.5	1.54	24.58	73745	338.82	918.55	8.8	17.6
2851.0	6.5	50.5	50	9.5	1.73	24.73	74206	562.00	915.99	8.8	17.6
2852.0	6.2	50.7	50	9.5	1.75	24.89	74691	590.41	913.66	8.8	17.6
2853.0	8.8	49.6	50	9.5	1.62	25.01	75034	416.94	910.14	8.8	17.6
2854.0	4.9	49.7	50	9.5	1.82	25.21	75647	746.63	908.99	8.8	17.6
2855.0	4.3	49.5	50	9.5	1.86	25.44	76341	845.03	908.54	8.9	17.6
2856.0	4.9	50.6	50	9.5	1.83	25.65	76957	749.67	907.44	8.9	17.6
2857.0	3.4	51.1	50	9.5	1.97	25.94	77845	1080	909	8.9	17.6
2858.0	4.4	49.8	50	9.5	1.86	26.17	78524	826.77	908.07	8.9	17.6
2859.0	13.6	49.4	50	9.5	1.46	26.24	78744	267.81	903.72	8.9	17.6
2860.0	11.6	48.4	50	9.5	1.51	26.33	79007	314.48	899.73	8.9	17.6
2861.0	32.7	48.5	50	9.5	1.15	26.36	79094	111.59	894.44	8.9	17.6
2862.0	15.3	47.6	50	9.5	1.40	26.43	79290	239.39	890.07	8.9	17.6
2863.0	8.1	50.0	50	9.5	1.65	26.55	79658	448.38	887.15	8.9	17.6

DEPTH	ROP	MOB	RPM	MW	"d"r	HOURS	URNS	ICOST	CCOST	PP	FG
2864.0	5.7	50.1	50	9.5	1.77	26.72	80180	635.72	885.49	8.9	17.6
2865.0	4.1	50.0	50	9.5	1.88	26.96	80904	881.55	885.47	8.9	17.6
2866.0	4.3	50.6	50	9.5	1.88	27.20	81601	848.08	885.22	8.7	17.6
2867.0	5.4	50.2	50	9.5	1.79	27.38	82153	671.56	803.84	8.7	17.6
2868.0	4.1	51.3	50	9.5	1.90	27.62	82884	889.67	883.88	8.7	17.6
2869.0	4.3	51.8	50	9.5	1.89	27.86	83584	853.15	883.69	8.7	17.6
2870.0	5.1	51.7	50	9.5	1.83	28.05	84176	720.26	882.65	8.7	17.6
2871.0	5.5	52.8	50	9.5	1.82	28.23	84718	659.39	891.25	8.7	17.6
2872.0	7.2	52.1	50	9.5	1.71	28.37	85133	505.19	878.90	8.7	17.6
2873.0	8.9	52.0	50	9.5	1.64	28.49	85469	409.84	875.98	8.7	17.6
2874.0	5.8	52.0	50	9.5	1.79	28.66	85985	627.94	874.45	8.7	17.6
2875.0	6.8	52.6	50	9.5	1.74	28.80	86429	539.68	872.40	8.7	17.6
2876.0	5.7	51.5	50	9.5	1.79	28.98	86959	645.19	871.01	8.7	17.6
2877.0	4.2	51.7	50	9.5	1.90	29.22	87668	863.29	870.97	8.7	17.6
2878.0	4.2	51.9	50	9.5	1.91	29.46	88389	877.49	871.01	9.0	17.6
2879.0	5.6	51.7	50	9.5	1.80	29.64	88926	654.32	869.71	9.0	17.6
2880.0	11.4	51.0	50	9.5	1.54	29.73	89190	321.58	866.45	9.0	17.6
2881.0	11.2	50.8	50	9.5	1.54	29.81	89458	325.64	863.25	9.0	17.6
2882.0	11.0	50.7	50	9.5	1.55	29.91	89730	331.72	860.12	9.0	17.6
2883.0	9.3	51.7	50	9.5	1.62	30.01	90054	393.60	857.39	9.0	17.6
2884.0	7.4	51.8	50	9.5	1.70	30.15	90460	495.05	855.28	9.0	17.6
2885.0	8.2	52.0	50	9.5	1.67	30.27	90828	447.37	852.93	9.0	17.6
2886.0	10.5	51.8	50	9.5	1.58	30.37	91113	346.94	850.02	9.0	17.6
2887.0	4.3	53.1	50	9.5	1.91	30.60	91808	846.05	850.00	9.0	17.6
2888.0	4.0	52.7	50	9.5	1.92	30.84	92549	901.84	850.29	9.0	17.6
2889.0	6.9	51.8	50	9.5	1.72	30.99	92983	528.53	848.47	8.9	17.6
2890.0	6.4	53.4	50	9.5	1.77	31.15	93452	571.13	846.91	8.9	17.6
2891.0	7.8	52.8	50	9.5	1.69	31.27	93835	466.64	844.79	8.9	17.6
2892.0	5.0	51.8	50	9.5	1.84	31.48	94441	737.50	844.19	8.9	17.6
2893.0	3.9	52.9	50	9.5	1.94	31.73	95203	927.20	844.65	8.9	17.6
2894.0	4.1	52.8	50	9.5	1.92	31.97	95938	894.74	844.93	8.9	17.6
2895.0	4.3	53.0	50	9.5	1.91	32.21	96635	849.09	844.95	8.9	17.6
2896.0	5.1	53.3	50	9.5	1.85	32.40	97219	711.13	844.22	8.9	17.6
2897.0	5.3	51.6	50	9.5	1.82	32.59	97785	688.81	843.38	8.9	17.6
2898.0	4.1	51.9	50	9.5	1.91	32.83	98511	883.58	843.60	8.9	17.6
2900.0	5.4	50.7	50	9.5	1.80	33.20	99628	679.68	841.86	8.9	17.6
2902.0	5.4	51.2	50	9.5	1.81	33.58	100744	679.68	840.15	8.9	17.6
2903.0	4.6	51.8	50	9.5	1.87	33.80	101399	797.35	839.92	8.9	17.6
2904.0	4.4	51.9	50	9.5	1.89	34.02	102081	829.82	839.87	8.9	17.6
2905.0	5.1	52.4	50	9.5	1.84	34.22	102673	720.26	839.25	8.9	17.6
2906.0	7.3	52.6	50	9.5	1.72	34.36	103084	501.14	837.51	8.9	17.6
2907.0	5.9	51.8	50	9.5	1.78	34.53	103592	617.80	836.38	8.9	17.6
2908.0	4.6	51.5	50	9.5	1.86	34.74	104239	788.22	836.14	8.9	17.6
2909.0	4.3	51.4	50	9.5	1.89	34.98	104943	856.19	836.24	8.9	17.6
2910.0	5.8	51.7	50	9.5	1.78	35.15	105456	624.90	835.17	8.9	17.6
2911.0	4.0	51.4	50	9.5	1.91	35.40	106207	914.01	835.57	8.9	17.6
2912.0	4.0	51.7	50	9.5	1.92	35.65	106963	920.10	835.99	8.9	17.6
2913.0	6.1	50.8	50	9.5	1.76	35.81	107452	595.48	834.79	8.9	17.6
2914.0	4.4	51.4	50	9.5	1.88	36.04	108132	827.79	834.76	8.9	17.6
2915.0	4.2	51.4	50	9.5	1.89	36.28	108842	864.31	834.90	8.9	17.6

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	URNS	ICOST	CCOST	PP	FG
2916.0	3.5	51.1	50	9.5	1.96	36.56	109701	1046	836	8.9	17.6
2917.0	3.8	51.9	50	9.5	1.93	36.82	110483	951.55	836.50	8.9	17.7
2918.0	4.9	51.5	50	9.5	1.84	37.03	111090	739.53	836.03	8.9	17.7
2919.0	4.5	51.5	50	9.5	1.88	37.25	111761	816.63	835.94	8.9	17.7
2920.0	3.4	52.3	50	9.5	1.99	37.55	112656	1090	837	8.9	17.7
2921.0	3.9	52.4	50	9.5	1.93	37.80	113419	929.23	837.60	8.9	17.7
2922.0	4.2	51.3	50	9.5	1.90	38.04	114137	873.44	837.77	8.9	17.7
2923.0	4.0	50.9	50	9.5	1.90	38.29	114878	901.84	838.07	8.9	17.7
2924.0	5.1	51.2	50	9.5	1.82	38.48	115465	715.18	837.49	8.9	17.7
2925.0	4.4	50.5	50	9.5	1.87	38.71	116146	828.80	837.45	8.9	17.7
2926.0	10.5	48.0	50	9.5	1.54	38.81	116432	347.95	835.16	8.9	17.7
2927.0	10.8	48.9	50	9.5	1.54	38.90	116709	337.81	832.85	8.9	17.7
2928.0	7.5	48.7	50	9.5	1.67	39.03	117112	489.98	831.26	8.9	17.7
2929.0	6.0	48.6	50	9.5	1.74	39.20	117614	611.71	830.25	8.9	17.7
2930.0	5.1	49.0	50	9.5	1.80	39.40	118203	716.20	829.73	8.9	17.7
2931.0	5.6	49.0	50	9.5	1.76	39.57	118735	648.23	828.90	8.9	17.7
2932.0	5.1	49.8	50	9.5	1.81	39.77	119323	715.18	828.38	8.9	17.7
2933.0	7.9	49.2	50	9.5	1.65	39.90	119704	464.62	826.74	8.9	17.7
2934.0	13.7	48.6	50	9.5	1.45	39.97	119923	265.78	824.21	8.9	17.7
2935.0	8.0	48.6	50	9.5	1.64	40.09	120297	455.49	822.56	8.9	17.7
2936.0	5.6	48.6	50	9.5	1.76	40.27	120836	656.35	821.81	8.9	17.7
2937.0	7.9	48.1	50	9.5	1.64	40.40	121217	463.60	820.22	8.9	17.7
2938.0	10.3	49.3	50	9.5	1.56	40.50	121509	355.06	818.16	8.9	17.7
2939.0	4.3	49.6	50	9.5	1.87	40.73	122206	849.09	818.30	8.9	17.7
2940.0	5.0	48.7	50	9.5	1.80	40.93	122809	734.46	817.93	8.9	17.7
2941.0	4.4	50.1	50	9.5	1.87	41.16	123495	834.89	818.01	8.9	17.7
2942.0	6.5	49.0	50	9.5	1.72	41.31	123959	564.03	816.90	8.9	17.7
2943.0	5.8	49.1	50	9.5	1.76	41.49	124479	633.01	816.11	8.9	17.7
2944.0	4.6	50.3	50	9.5	1.85	41.71	125133	796.34	816.02	8.9	17.7
2945.0	5.7	50.1	50	9.5	1.77	41.88	125660	642.14	815.27	8.9	17.7
2946.0	8.3	49.1	50	9.5	1.63	42.00	126021	439.25	813.67	8.9	17.7
2947.0	7.9	48.5	50	9.5	1.64	42.13	126402	463.60	812.18	8.9	17.7
2948.0	8.3	49.0	50	9.5	1.63	42.25	126762	438.24	810.59	8.9	17.7
2949.0	12.3	47.9	50	9.5	1.48	42.33	127005	296.22	808.42	8.9	17.7
2950.0	10.8	49.0	50	9.5	1.54	42.42	127282	336.80	806.44	8.9	17.7
2951.0	6.1	48.9	50	9.5	1.74	42.59	127777	602.58	805.59	8.9	17.7
2952.0	5.3	49.1	50	9.5	1.79	42.78	128346	692.87	805.12	8.9	17.7
2953.0	4.7	49.3	50	9.5	1.83	42.99	128979	769.96	804.97	8.9	17.7
2954.0	3.6	50.0	50	9.5	1.93	43.27	129812	1014	806	8.9	17.7
2955.0	5.9	50.7	50	9.5	1.77	43.44	130324	623.88	805.09	8.9	17.7
2956.0	3.1	50.9	50	9.5	1.99	43.76	131286	1171	807	8.9	17.7
2957.0	3.9	49.4	50	9.5	1.90	44.02	132059	941.40	807.14	8.9	17.7
2958.0	6.0	49.5	50	9.5	1.75	44.18	132562	611.71	804.34	8.9	17.7
2959.0	3.6	50.1	50	9.5	1.93	44.46	133391	1009	807	8.9	17.7
2960.0	3.3	50.0	50	9.5	1.96	44.76	134294	1099	808	8.9	17.7
2961.0	3.8	50.1	50	9.5	1.92	45.02	135089	967.78	808.98	8.9	17.7
2962.0	3.6	50.8	50	9.5	1.94	45.30	135926	1020	810	8.9	17.7
2963.0	3.3	50.6	50	9.5	1.97	45.61	136844	1118	811	8.9	17.7
2964.0	4.8	50.1	50	9.5	1.83	45.82	137472	763.88	810.86	8.9	17.7
2965.0	6.3	50.5	50	9.5	1.74	45.98	137947	578.23	809.94	8.9	17.7

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	TURNS	LCOST	CCOST	PP	FG
2966.0	3.6	51.2	50	9.5	1.95	46.26	138787	1023	811	8.9	17.7
2967.0	5.7	50.1	50	9.5	1.77	46.43	139314	641.64	810.12	8.9	17.7
2968.0	4.5	51.0	50	9.5	1.87	46.66	139984	814.94	810.14	8.9	17.7
2969.0	8.9	51.2	50	9.5	1.63	46.77	140320	409.84	808.58	8.7	17.7
2970.0	21.2	48.9	50	9.5	1.30	46.82	140462	172.46	806.11	8.9	17.7
2971.0	20.7	48.0	50	9.5	1.30	46.86	140607	176.51	803.68	8.9	17.7
2972.0	3.8	49.7	50	9.5	1.91	47.13	141406	972.85	804.33	8.9	17.7
2973.0	5.6	49.3	50	9.5	1.77	47.31	141942	652.29	803.75	8.9	17.7
2974.0	4.9	50.3	50	9.5	1.83	47.51	142555	746.63	803.53	8.9	17.7
2975.0	3.9	50.9	50	9.5	1.92	47.77	143334	948.51	804.08	8.9	17.7
2976.0	4.1	51.2	50	9.5	1.91	48.02	144074	899.81	804.45	8.9	17.7
2977.0	3.6	50.0	50	9.5	1.93	48.29	144899	1004	805	8.9	17.7
2978.0	5.9	49.9	50	9.5	1.76	48.46	145409	620.84	804.51	8.9	17.7
2979.0	5.5	50.6	50	9.5	1.79	48.65	145953	662.77	803.98	8.7	17.7
2980.0	5.1	50.6	50	9.5	1.82	48.84	146540	714.17	803.64	8.9	17.7
2981.0	4.3	51.0	50	9.5	1.88	49.07	147232	843.00	803.79	8.9	17.7
2982.0	3.3	51.7	50	9.5	1.98	49.38	148140	1105	805	8.9	17.7
2983.0	3.8	50.9	50	9.5	1.93	49.64	148934	966.77	805.50	8.9	17.7
2984.0	4.6	51.3	50	9.5	1.86	49.86	149583	790.25	805.44	8.9	17.7
2985.0	4.7	51.5	50	9.5	1.85	50.07	150215	768.95	805.31	8.9	17.7
2986.0	4.2	51.1	50	9.5	1.89	50.30	150925	864.31	805.53	8.9	17.7
2987.0	4.0	51.6	50	9.5	1.91	50.55	151665	901.84	805.88	8.9	17.7
2988.0	4.5	51.1	50	9.5	1.87	50.77	152336	816.63	805.92	8.9	17.7
2989.0	3.6	51.6	50	9.5	1.95	51.05	153166	1010	807	8.9	17.7
2990.0	4.2	51.9	50	9.5	1.90	51.29	153875	862.28	806.85	8.9	17.7
2991.0	5.7	51.9	50	9.5	1.79	51.46	154400	640.11	806.26	8.9	17.7
2992.0	5.1	52.4	50	9.5	1.84	51.66	154989	716.20	805.93	8.9	17.7
2993.0	3.4	52.2	50	9.5	1.98	51.95	155868	1070	807	8.9	17.7
2994.0	3.9	52.2	50	9.5	1.93	52.21	156635	933.29	807.32	8.9	17.7
2995.0	3.4	53.0	50	9.5	1.99	52.50	157505	1059	808	8.9	17.7
2996.0	5.8	53.0	50	9.5	1.80	52.67	158024	632.00	807.59	8.9	17.7
2997.0	5.7	52.9	50	9.5	1.80	52.84	158547	637.07	806.99	8.9	17.7
2998.0	8.2	51.7	50	9.5	1.66	52.97	158914	446.36	805.73	8.9	17.7
2999.0	4.6	51.9	50	9.5	1.87	53.19	159572	801.41	805.72	8.9	17.7
3000.0	4.1	51.9	50	9.5	1.91	53.43	160312	900.83	806.05	8.9	17.7
3001.0	4.4	52.1	50	9.5	1.89	53.66	161001	838.95	806.16	8.9	17.7
3002.0	4.7	51.8	50	9.5	1.86	53.87	161634	769.96	806.04	8.9	17.7
3003.0	7.2	51.9	50	9.5	1.71	54.01	162053	510.27	805.02	8.9	17.7
3004.0	5.5	52.5	50	9.5	1.81	54.19	162594	658.37	804.52	8.9	17.7
3005.0	7.3	52.1	50	9.5	1.71	54.33	163005	500.27	803.48	8.9	17.7
3007.0	6.4	51.4	50	9.5	1.75	54.64	163936	566.82	801.88	8.9	17.7
3008.0	7.0	51.8	50	9.5	1.72	54.78	164366	523.45	800.93	8.9	17.7
3009.0	4.5	52.5	50	9.5	1.89	55.01	165035	814.60	800.98	8.9	17.7
3010.0	5.5	52.7	50	9.5	1.82	55.19	165581	664.46	800.52	8.9	17.7
3011.0	7.8	52.2	50	9.5	1.69	55.32	165965	467.66	799.41	8.9	17.7
3012.0	10.5	51.7	50	9.5	1.58	55.41	166251	347.95	797.90	8.9	17.7
3013.0	7.2	51.6	50	9.5	1.71	55.55	166668	568.24	796.94	8.9	17.7
3014.0	9.1	50.0	50	9.5	1.61	55.66	166997	399.69	795.63	8.9	17.7
3015.0	9.3	50.5	50	9.5	1.61	55.77	167319	392.59	794.30	8.9	17.7
3016.0	5.3	50.8	50	9.5	1.81	55.96	167885	688.81	793.95	8.9	17.7

DEPTH	ROP	WOB	RPM	MW	"d"c	HOURS	TURNS	ICOST	CCOST	PP	FG
3017.0	7.9	50.7	50	9.5	1.66	56.08	168264	461.57	792.86	8.9	17.7
3018.0	4.3	51.4	50	9.5	1.88	56.31	168954	839.96	793.01	8.9	17.7
3019.0	4.3	52.0	50	9.5	1.89	56.54	169648	844.02	793.18	8.9	17.8
3020.0	4.7	52.6	50	9.5	1.87	56.76	170283	774.02	793.12	8.9	17.8
3021.0	3.9	52.2	50	9.5	1.93	57.01	171045	927.20	793.55	8.9	17.8

(d). COMPUTER DATA LISTING : LIST B

INTERVAL 10m averages.

DEPTH. Well depth, in metres.

ROP. Rate of penetration, in metres per hour.

BIT RUN. Depth interval drilled by the bit, in metres.

HOURS. Cumulative bit hours. The number of hours that the bit has actually been 'on bottom', recorded in decimal hours.

URNS. Cumulative bit turns. The number of turns made by the bit, while actually 'on bottom'.

TOTAL COST Cumulative bit cost, in A dollars.

ICOST. Incremental cost per metre, calculated from the drilling time, in A dollars.

CCOST. Cumulative cost per metre, calculated from the drilling time, in A dollars.

IC ICOST minus CCOST, expressed as a positive or negative sign. When the bit becomes worn, (and therefore uneconomic), this should change from negative to positive.

BIT NUMBER	2	IADC CODE	111	INTERVAL	211.0-808.0
HTC R1		SIZE	17.500	NOZZLES	20 20 20
COST	4978.00	TRIP TIME	2.5	BIT RUN	597.0
TOTAL HOURS	15.47	TOTAL TURNS	111375	CONDITION	T2 B2 G0.000

DEPTH	ROP	BIT RUN	HOURS	TURNS	TOTAL COST	TCOST	CCOST	I-C
220.0	137.9	9.0	0.07	470	14346.39	26.49	1594.04	-
230.0	144.5	19.0	0.13	968	14599.09	25.27	768.37	-
240.0	122.9	29.0	0.22	1554	14896.32	29.72	513.67	-
250.0	148.1	39.0	0.28	2040	15142.83	24.65	388.28	-
280.0	114.3	69.0	0.55	3931	16101.67	31.96	233.36	-
300.0	104.8	89.0	0.74	5305	16798.93	34.86	188.75	-
310.0	90.0	99.0	0.85	6105	17204.53	40.56	173.78	-
320.0	40.3	109.0	1.10	7893	18111.44	90.69	166.16	-
340.0	55.0	129.0	1.46	10510	19439.14	66.38	150.69	-
350.0	68.8	139.0	1.61	11556	19969.69	53.06	143.67	-
360.0	66.1	149.0	1.76	12646	20522.57	55.29	137.74	-
370.0	59.1	159.0	1.93	13864	21140.36	61.78	132.96	-
380.0	50.6	169.0	2.12	15288	21862.65	72.23	129.36	-
390.0	53.5	179.0	2.31	16633	22544.73	68.21	125.95	-
400.0	56.2	189.0	2.49	17915	23194.99	65.03	122.72	-
410.0	63.4	199.0	2.65	19051	23771.19	57.62	119.45	-
420.0	45.5	209.0	2.87	20633	24573.62	80.24	117.58	-
430.0	44.0	219.0	3.09	22269	25403.44	82.98	116.00	-
440.0	44.0	229.0	3.32	23907	26234.27	83.08	114.56	-
450.0	37.7	239.0	3.59	25817	27203.06	96.88	113.82	-
460.0	34.5	249.0	3.88	27901	28260.11	105.71	113.49	-
470.0	27.8	259.0	4.23	30487	29571.79	131.17	114.18	+
480.0	26.7	269.0	4.61	33181	30938.24	136.65	115.01	+
490.0	33.7	279.0	4.91	35317	32021.67	108.34	114.77	-
500.0	33.2	289.0	5.21	37485	33121.33	109.97	114.61	-
530.0	33.6	319.0	6.10	43917	36383.78	108.75	114.06	-
540.0	31.3	329.0	6.42	46221	37552.42	116.86	114.14	+
550.0	31.6	339.0	6.74	48499	38707.87	115.55	114.18	+
560.0	34.1	349.0	7.03	50613	39780.14	107.23	113.98	-
570.0	29.2	359.0	7.37	53076	41029.43	124.93	114.29	+
580.0	29.8	369.0	7.71	55489	42253.29	132.39	114.51	+
590.0	29.3	379.0	8.05	57943	43498.01	124.47	114.77	+
600.0	31.6	389.0	8.36	60225	44655.49	115.75	114.80	+
610.0	27.9	399.0	8.72	62801	45962.24	130.67	115.19	+
620.0	29.3	409.0	9.06	65261	47210.01	124.78	115.43	+
630.0	31.8	419.0	9.38	67524	48357.68	114.77	115.41	-
640.0	25.1	429.0	9.78	70387	49809.86	145.22	116.11	+
650.0	25.0	439.0	10.18	73267	51270.66	146.08	116.79	+
660.0	28.5	449.0	10.53	75795	52552.92	128.23	117.04	+
670.0	27.7	459.0	10.89	78396	53872.31	131.94	117.37	+
680.0	27.7	469.0	11.25	80995	55190.35	131.80	117.68	+
690.0	34.5	479.0	11.54	83079	56247.40	105.71	117.43	-
700.0	29.2	489.0	11.88	85543	57497.20	124.98	117.58	+

DEPTH	ROP	BIT RUN	HOURS	URNS	TOTAL COST	ICOST	CCOST	I-C
710.0	25.7	499.0	12.27	88343	58917.42	142.02	118.07	+
720.0	31.0	509.0	12.59	90665	60095.19	117.78	118.07	-
730.0	29.0	519.0	12.94	93151	61356.15	126.10	118.22	+
740.0	30.6	529.0	13.26	95503	62549.13	119.30	118.24	+
750.0	32.5	539.0	13.57	97717	63672.12	112.30	118.13	-
760.0	28.7	549.0	13.92	100227	64945.25	127.31	118.30	+
770.0	29.1	559.0	14.26	102699	66199.10	125.39	118.42	+
780.0	32.2	569.0	14.57	104935	67333.40	113.43	118.34	-
790.0	28.2	579.0	14.93	107489	68628.84	129.54	118.53	+
800.0	33.2	589.0	15.23	109659	69729.52	110.07	118.39	-
808.0	33.6	597.0	15.47	111375	70599.91	108.80	118.26	-

BIT NUMBER	3	IADC CODE	116	INTERVAL	808.2-1365.0
HTC J1		SIZE	12.250	NOZZLES	18 18 18
COST	2566.00	TRIP TIME	3.7	BIT RUN	556.8
TOTAL HOURS	15.28	TOTAL TURNS	91466	CONDITION	T5 B5 G0.000

DEPTH	ROP	BIT RUN	HOURS	URNS	TOTAL COST	ICOST	CCOST	I-C
810.0	42.9	1.8	0.04	252	16231.78	85.21	9017.66	-
820.0	19.5	11.8	0.56	3336	18108.69	187.69	1534.63	-
830.0	26.8	21.8	0.93	5574	19471.08	136.24	893.17	-
840.0	43.3	31.8	1.16	6961	20315.10	84.40	638.84	-
850.0	39.3	41.8	1.41	8487	21244.33	92.92	508.24	-
860.0	33.8	51.8	1.71	10261	22323.70	107.94	430.96	-
870.0	32.5	61.8	2.02	12107	23447.71	112.40	379.41	-
880.0	36.4	71.8	2.29	13757	24452.01	100.43	340.56	-
890.0	43.7	81.8	2.52	15129	25286.89	83.49	309.13	-
900.0	45.3	91.8	2.74	16454	26093.38	80.65	284.24	-
910.0	44.6	101.8	2.97	17799	26912.03	81.87	264.36	-
920.0	47.6	111.8	3.18	19059	27678.95	76.69	247.58	-
930.0	49.0	121.8	3.38	20282	28423.56	74.46	233.36	-
940.0	42.3	131.8	3.62	21702	29287.86	86.43	222.21	-
950.0	44.5	141.8	3.84	23051	30108.55	82.07	212.33	-
960.0	45.6	151.8	4.06	24366	30908.95	80.04	203.62	-
970.0	44.5	161.8	4.29	25713	31728.95	82.00	196.10	-
980.0	44.9	171.8	4.51	27048	32541.52	81.26	189.42	-
990.0	39.5	181.8	4.76	28566	33465.68	92.42	184.08	-
1000.0	37.0	191.8	5.03	30190	34453.75	98.81	179.63	-
1010.0	28.4	201.8	5.38	32300	35738.04	128.43	177.10	-
1020.0	34.5	211.8	5.67	34038	36796.10	105.81	173.73	-
1030.0	31.0	221.8	6.00	35971	37972.86	117.68	171.20	-
1040.0	32.5	231.8	6.30	37820	39097.88	112.50	168.67	-
1050.0	37.7	241.8	6.57	39410	40065.66	96.78	165.70	-
1060.0	40.2	251.8	6.82	40901	40973.59	90.79	162.72	-
1070.0	37.8	261.8	7.08	42490	41940.35	96.68	160.20	-
1080.0	38.2	271.8	7.34	44060	42895.96	95.56	157.82	-
1090.0	34.7	281.8	7.63	45788	43947.94	105.20	155.95	-

DEPTH	ROP	BIT RUN	HOURS	URNS	TOTAL COST	ICOST	CCOST	I-C
1100.0	43.6	291.8	7.86	47165	44785.87	83.79	153.48	-
1110.0	46.2	301.8	8.08	48465	45577.14	79.13	151.02	-
1120.0	42.1	311.8	8.32	49891	46445.50	86.84	148.96	-
1130.0	44.2	321.8	8.54	51248	47271.26	82.58	146.90	-
1140.0	37.3	331.8	8.81	52856	48250.20	77.89	145.42	-
1150.0	40.9	341.8	9.05	54323	49142.91	89.27	143.78	-
1160.0	33.8	351.8	9.35	56098	50223.29	100.04	142.76	-
1170.0	40.0	361.8	9.60	57596	51135.28	91.20	141.34	-
1180.0	44.2	371.8	9.83	58955	51962.05	82.68	139.76	-
1190.0	48.8	381.8	10.03	60183	52709.69	74.76	138.06	-
1200.0	42.4	391.8	10.27	61598	53571.30	86.16	136.73	-
1210.0	49.8	401.8	10.47	62803	54304.74	73.34	135.15	-
1220.0	44.7	411.8	10.69	64146	55121.71	81.70	133.86	-
1230.0	45.8	421.8	10.91	65456	55919.06	79.74	132.57	-
1240.0	41.1	431.8	11.15	66916	56807.71	88.87	131.56	-
1250.0	39.8	441.8	11.40	68424	57725.78	91.81	130.66	-
1260.0	35.4	451.8	11.69	70117	58756.46	103.07	130.05	-
1270.0	30.0	461.8	12.02	72115	59972.27	121.58	129.87	-
1280.0	39.4	471.8	12.27	73852	60899.47	92.72	129.08	-
1300.0	39.2	491.8	12.78	77410	62760.47	93.05	127.61	-
1310.0	44.2	501.8	13.01	78786	63587.24	82.68	126.72	-
1320.0	38.0	511.8	13.27	80366	64548.94	96.17	126.12	-
1330.0	16.5	521.8	13.88	84012	66768.54	221.96	127.96	+
1340.0	48.2	531.8	14.09	85298	67526.67	75.81	126.98	-
1350.0	54.5	541.8	14.27	86563	68196.20	66.95	125.87	-
1360.0	103.2	551.8	14.37	87232	68550.24	35.40	124.23	-
1365.0	40.3	556.8	14.49	88087	69002.88	90.53	123.93	-

RIT NUMBER	4	IADC CODE	517	INTERVAL	1365.0-2107.0
HTC J22		SIZE	12.250	NOZZLES	18 18 16
COST	8520.00	TRIP TIME	5.0	BIT RUN	742.0
TOTAL HOURS	65.46	TOTAL TURNS	234818	CONDITION	T4 B4 G0.000

DEPTH	ROP	BIT RUN	HOURS	URNS	TOTAL COST	ICOST	CCOST	I-C
1370.0	45.3	5.0	0.11	463	27182.82	80.56	5436.56	-
1380.0	81.8	15.0	0.23	977	27629.17	44.64	1841.94	-
1400.0	76.1	35.0	0.50	2081	28589.27	40.00	816.84	-
1410.0	34.0	45.0	0.79	3317	29664.58	107.53	659.21	-
1420.0	73.3	55.0	0.93	3891	30163.11	49.85	548.42	-
1430.0	37.0	65.0	1.20	5027	31151.18	98.81	479.25	-
1440.0	16.7	75.0	1.80	7541	33336.97	218.58	444.49	-
1450.0	18.4	85.0	2.34	9823	35321.22	198.43	415.54	-
1460.0	18.6	95.0	2.88	12086	37289.24	196.80	392.52	-
1470.0	29.8	105.0	3.21	13497	38515.70	122.65	366.82	-
1480.0	28.3	115.0	3.57	14978	39804.05	128.83	346.12	-
1500.0	22.9	135.0	4.44	18644	42991.43	159.37	318.46	-
1510.0	56.4	145.0	4.62	19388	43638.65	64.72	300.96	-

DEPTH	ROP	BIT RUN	HOURS	TURNS	TOTAL COST	ICOST	CCOST	I-C
1520.0	17.5	155.0	5.19	22053	45726.38	208.77	295.01	-
1530.0	37.4	165.0	5.46	23336	46702.27	97.59	283.04	-
1540.0	27.6	175.0	5.82	25074	48025.11	132.28	274.43	-
1560.0	29.2	195.0	6.50	28358	50523.25	124.91	259.09	-
1570.0	14.7	205.0	7.18	31624	53008.64	248.54	258.58	-
1580.0	36.7	215.0	7.45	32932	54003.81	99.52	251.18	-
1590.0	25.5	225.0	7.85	34814	55435.19	143.14	246.38	-
1600.0	46.6	235.0	8.06	35843	56218.34	78.32	239.23	-
1610.0	12.6	245.0	8.86	39656	59119.31	290.10	241.30	+
1620.0	42.8	255.0	9.09	40757	59972.46	85.31	235.19	-
1630.0	31.0	265.0	9.41	42112	61150.91	117.84	230.76	-
1640.0	47.2	275.0	9.62	43002	61924.93	77.40	225.18	-
1650.0	22.2	285.0	10.07	44890	63566.30	164.14	223.04	-
1660.0	11.7	295.0	10.93	48484	66691.80	312.55	226.07	+
1670.0	47.9	305.0	11.14	49361	67453.88	76.21	221.16	-
1680.0	18.6	315.0	11.68	51620	69417.84	196.40	220.37	-
1690.0	9.6	325.0	12.72	55989	73216.93	379.91	225.28	+
1700.0	49.1	335.0	12.92	56843	73960.01	74.31	220.78	-
1710.0	11.0	345.0	13.82	60648	77268.12	330.81	223.97	+
1720.0	15.1	355.0	14.49	63422	79680.47	241.23	224.45	+
1730.0	9.7	365.0	15.52	67770	83461.30	378.08	228.66	+
1740.0	8.3	375.0	16.72	72801	87835.59	437.43	234.23	+
1750.0	9.3	385.0	17.80	76547	91777.72	394.21	238.38	+
1760.0	9.0	395.0	18.91	79893	95851.73	407.40	242.66	+
1770.0	12.0	405.0	19.74	82943	98885.93	303.42	244.16	+
1780.0	6.6	415.0	21.25	88116	104402.48	551.65	251.57	+
1790.0	7.7	425.0	22.55	92404	109147.03	474.46	256.82	+
1800.0	4.4	435.0	24.83	99925	117470.55	832.35	270.05	+
1810.0	6.2	445.0	26.45	105253	123367.18	589.66	277.23	+
1820.0	9.3	455.0	27.53	108817	127311.34	394.42	279.81	+
1840.0	11.7	475.0	29.24	114577	133579.59	313.41	281.22	+
1850.0	7.0	485.0	30.68	119321	138830.36	525.08	286.25	+
1860.0	35.7	495.0	30.96	120246	139853.93	102.36	282.53	-
1870.0	5.9	505.0	32.67	125871	146079.07	622.51	289.27	+
1880.0	11.5	515.0	33.53	128802	149248.19	316.91	289.80	+
1890.0	10.0	525.0	34.54	132410	152908.31	366.01	291.25	+
1900.0	11.6	535.0	35.40	135523	156066.27	315.80	291.71	+
1910.0	6.5	545.0	36.95	141093	161716.73	565.05	296.73	+
1920.0	5.4	555.0	38.79	147720	168439.45	672.27	303.49	+
1930.0	4.0	565.0	41.26	156627	177475.11	903.57	314.12	+
1940.0	7.2	575.0	42.65	161600	182520.62	504.55	317.43	+
1950.0	8.3	585.0	43.84	165596	186899.86	437.92	319.49	+
1960.0	4.7	595.0	45.98	171997	194692.49	779.26	327.21	+
1970.0	5.6	605.0	47.77	177381	201245.80	655.33	332.64	+
1980.0	5.7	615.0	49.53	182665	207678.39	643.26	337.69	+
1990.0	5.8	625.0	51.27	187862	214005.48	632.71	342.41	+
2000.0	8.4	635.0	52.46	191428	218346.29	434.08	343.85	+
2010.0	5.5	645.0	54.28	196916	225027.42	668.11	348.88	+
2020.0	7.7	655.0	55.59	200833	229795.31	476.79	350.83	+
2030.0	8.5	665.0	56.76	204357	234085.39	429.01	352.01	+

DEPTH	ROP	BIT RUN	HOURS	TURNS	TOTAL COST	ICOST	CCOST	I-C
2040.0	7.1	675.0	58.17	208568	239211.38	512.60	354.39	+
2050.0	9.1	685.0	59.26	212488	243206.26	399.49	355.05	+
2060.0	9.8	695.0	60.29	216175	246946.52	374.03	355.32	+
2070.0	10.9	705.0	61.20	219468	250287.08	334.06	355.02	-
2080.0	7.4	715.0	62.56	224361	255250.04	496.30	356.99	+
2090.0	8.0	725.0	63.81	228869	259823.15	457.31	358.38	+
2100.0	10.7	735.0	64.75	232245	263247.92	342.48	358.16	-
2107.0	9.8	742.0	65.46	234818	265858.15	372.89	358.30	+

BIT NUMBER	5	IADC CODE	517	INTERVAL	2107.0-2431.2
HTC J22		SIZE	12.250	NOZZLES	18 18 16
COST	8520.00	TRIP TIME	8.0	BIT RUN	324.2
TOTAL HOURS	52.41	TOTAL TURNS	169866	CONDITION	T8 B4 G0.125

DEPTH	ROP	BIT RUN	HOURS	TURNS	TOTAL COST	ICOST	CCOST	I-C
2110.0	4.8	3.0	0.62	1879	40000.24	754.75	13333	-
2120.0	11.0	13.0	1.53	5043	43321.53	332.13	3332.43	-
2130.0	8.7	23.0	2.68	8736	47514.23	419.27	2065.84	-
2140.0	7.9	33.0	3.95	12545	52150.92	463.67	1580.33	-
2150.0	7.2	43.0	5.34	16728	57242.41	509.15	1331.22	-
2160.0	7.9	53.0	6.61	20542	61885.53	464.31	1167.65	-
2170.0	8.3	63.0	7.82	24157	66286.91	440.14	1052.17	-
2180.0	8.9	73.0	8.95	27547	70412.66	412.57	964.56	-
2190.0	8.1	83.0	10.18	31251	74921.86	450.92	902.67	-
2200.0	12.0	93.0	11.01	33743	77956.07	303.42	838.24	-
2210.0	10.6	103.0	11.96	36647	81399.43	344.34	790.29	-
2220.0	7.7	113.0	13.25	40932	86141.62	474.22	762.32	-
2230.0	7.4	123.0	14.61	45413	91100.22	495.86	740.65	-
2240.0	7.3	133.0	15.98	49918	96085.20	498.50	722.45	-
2250.0	11.7	143.0	16.83	52746	99215.78	313.06	693.82	-
2260.0	7.1	153.0	18.25	57418	104385.39	516.96	682.26	-
2270.0	8.0	163.0	19.49	61525	108931.11	454.57	668.29	-
2280.0	9.5	173.0	20.55	65011	112789.04	385.79	651.96	-
2290.0	7.8	183.0	21.83	69237	117465.63	467.66	641.89	-
2300.0	6.8	193.0	23.31	74122	122871.61	540.60	636.64	-
2310.0	6.5	203.0	24.85	79282	128493.15	562.15	632.97	-
2320.0	7.6	213.0	26.17	83553	133308.72	481.56	625.86	-
2330.0	5.8	223.0	27.89	89226	139586.10	627.74	625.95	+
2340.0	7.4	233.0	29.23	93656	144488.91	490.28	620.12	-
2350.0	7.1	243.0	30.64	98308	149637.22	514.83	615.79	-
2360.0	4.3	253.0	32.98	106014	158165.65	852.84	625.16	+
2370.0	3.4	263.0	35.89	115641	168819.35	1065.37	641.90	+
2380.0	3.7	273.0	38.62	124634	178771.05	995.17	654.84	+
2390.0	5.3	283.0	40.49	130814	185610.43	683.94	655.87	+
2400.0	3.2	293.0	43.60	141071	196962.06	1135.16	672.23	+
2410.0	4.3	303.0	45.95	148835	205553.39	859.13	678.39	+
2420.0	4.4	313.0	48.22	156327	213845.13	829.17	683.21	+

DEPTH	ROP	BIT RUN	HOURS	URNS	TOTAL COST	ICOST	CCOST	I-C
2430.0	3.2	323.0	51.33	166594	225206.90	1136.18	697.23	+
2431.2	1.8	324.2	52.00	168796	227643.60	2030.58	702.17	+

BIT NUMBER	6	IADC CODE	517	INTERVAL	2431.0-2712.0
HTC J22		SIZE	12.250	NOZZLES	16 16 16
COST	8520.00	TRIP TIME	8.0	BIT RUN	281.0
TOTAL HOURS	47.95	TOTAL TURNS	144545	CONDITION	T4 B8 G0.125

DEPTH	ROP	BIT RUN	HOURS	TURNS	TOTAL COST	ICOST	CCOST	I-C
2440.0	7.5	9.0	1.20	3614	42135.21	488.80	4681.69	-
2450.0	6.6	19.0	2.71	8140	47645.67	551.05	2507.67	-
2460.0	6.8	29.0	4.19	12597	53046.58	540.09	1829.19	-
2470.0	7.7	39.0	5.50	16485	57813.45	476.69	1482.40	-
2480.0	7.0	49.0	6.92	20718	62997.26	518.38	1285.66	-
2490.0	6.9	59.0	8.37	25075	68320.05	532.28	1157.97	-
2500.0	7.5	69.0	9.70	29165	73158.95	483.89	1060.27	-
2510.0	5.7	79.0	11.46	34434	79587.49	642.85	1007.44	-
2520.0	6.7	89.0	12.94	38879	85010.71	542.32	955.18	-
2530.0	4.2	99.0	15.35	46257	93782.61	877.19	947.30	-
2540.0	4.5	109.0	17.54	52986	101809.91	802.73	934.04	-
2550.0	17.2	119.0	18.13	54754	103937.20	212.73	873.42	-
2560.0	6.8	129.0	19.59	59232	109280.27	534.31	847.13	-
2570.0	3.7	139.0	22.31	67481	119214.73	993.45	857.66	+
2580.0	4.0	149.0	24.84	75221	128454.29	923.96	862.11	+
2590.0	5.1	159.0	26.79	81081	135586.85	713.26	852.75	-
2600.0	11.8	169.0	27.64	83618	138675.83	308.90	820.57	-
2620.0	4.7	189.0	31.87	96306	154121.76	772.30	815.46	-
2630.0	4.8	199.0	33.96	102588	161768.64	764.69	812.91	-
2640.0	5.8	209.0	35.70	107785	168094.72	632.61	804.28	-
2650.0	5.2	219.0	37.63	113585	175155.25	706.05	799.80	-
2660.0	6.2	229.0	39.25	118456	181085.70	593.04	790.77	-
2670.0	4.5	239.0	41.49	125169	189257.05	817.13	791.87	+
2680.0	3.4	249.0	44.39	133871	199850.89	1059.38	802.61	+
2690.0	6.4	259.0	45.94	138531	205522.94	567.20	793.52	-
2700.0	5.0	269.0	47.95	144545	212844.18	732.12	791.24	-
2710.0	6.0	279.0	49.61	149539	218923.17	607.90	784.67	-

BIT NUMBER	7	IADC CODE	517	INTERVAL	2712.0-3021.0
HTC J22		SIZE	12.250	NOZZLES	16 16 16
COST	8520.00	TRIP TIME	7.8	BIT RUN	309.0
TOTAL HOURS	57.01	TOTAL TURNS	171045	CONDITION	T4 B5 G0.125

DEPTH	ROP	BIT RUN	HOURS	TURNS	TOTAL COST	ICOST	CCOST	I-C
2720.0	3.9	8.0	2.04	6122	44457.84	933.87	5571.16	-
2730.0	5.3	18.0	3.94	11825	51400.70	694.29	2858.77	-
2740.0	4.9	28.0	5.98	17947	58852.81	745.21	2103.39	-
2750.0	6.5	38.0	7.53	22578	64490.08	563.73	1698.00	-
2760.0	4.5	48.0	9.76	29278	72646.97	815.69	1514.11	-
2770.0	5.6	58.0	11.56	34680	79223.19	657.62	1366.39	-

DEPTH	ROP	BIT RUN	HOURS	TURNS	TOTAL COST	ICOST	CCOST	I-C
2780.0	7.4	68.0	12.92	38754	84181.55	495.84	1238.33	-

BIT NUMBER	7	IADC CODE	517	INTERVAL	2782.0-3021.0
HTC J22		SIZE	12.250	NOZZLES	16 16 16
COST	8520.00	TRIP TIME	7.8	BIT RUN	239.0
TOTAL HOURS	57.01	TOTAL TURNS	171045	CONDITION	T4 R5 G0.125

DEPTH	ROP	BIT RUN	HOURS	TURNS	TOTAL COST	ICOST	CCOST	I-C
2790.0	4.6	78.0	15.08	45248	92070.66	788.57	1180.39	-
2800.0	5.0	88.0	17.09	51298	99435.53	736.49	1129.95	-
2810.0	10.0	98.0	18.10	54307	103098.25	366.27	1052.02	-
2820.0	7.9	108.0	19.37	58125	107746.43	464.82	997.65	-
2830.0	5.4	118.0	21.21	63639	114458.34	671.19	969.99	-
2840.0	5.4	128.0	23.04	69147	121163.81	670.55	946.59	-
2850.0	6.5	138.0	24.58	73745	126760.50	559.67	918.55	-
2860.0	5.7	148.0	26.33	79002	133160.63	640.01	899.73	-
2870.0	5.8	158.0	28.05	84176	139458.98	629.83	882.65	-
2880.0	6.0	168.0	29.73	89190	145562.89	610.39	866.45	-
2890.0	7.0	178.0	31.15	93452	150750.76	518.79	846.91	-
2900.0	4.9	188.0	33.20	99628	158268.81	751.80	841.86	-
2910.0	5.1	198.0	35.15	105456	165363.84	709.50	835.17	-
2920.0	4.2	208.0	37.55	112656	174128.64	876.48	837.16	+
2930.0	5.4	218.0	39.40	118203	180880.78	675.21	829.73	-
2940.0	6.5	228.0	40.93	122809	186488.63	560.78	817.93	-
2950.0	6.7	238.0	42.42	127282	191933.15	544.45	806.44	-
2960.0	4.3	248.0	44.76	134294	200468.69	653.55	808.34	+
2970.0	4.9	258.0	46.82	140462	207977.43	750.87	806.11	-
2980.0	4.9	268.0	48.84	146540	215376.12	739.87	803.64	-
2990.0	4.1	278.0	51.29	153875	224305.26	892.91	806.85	+
3000.0	4.7	288.0	53.43	160312	232141.84	783.66	806.05	-
3010.0	5.7	298.0	55.19	165581	238555.82	641.40	800.52	-
3020.0	6.4	308.0	56.76	170283	244280.33	572.45	793.12	-
3021.0	3.9	309.0	57.01	171045	245207.53	927.20	793.55	+

(e). COMPUTER DATA LISTING : LIST C

INTERVAL 10m averages.

DEPTH. well depth, in metres.

FLOW RATE. Mud flow into the well, in gallons per
minute.

PSP. Pump pressure, in pounds per square
inch.

PBIT Bit pressure drop, in pounds per
square inch.

XPSP Percentage of surface pressure dropped
at the bit.

H.H.P. Bit hydraulic horsepower

HHP/SQ IN. Bit hydraulic horsepower per square inch
of bit diameter.

IMPACT FORCE Bit impact force, in foot-pounds per
second squared.

JET VELOCITY Mud velocity through the bit nozzles, in
metres per second.

BIT NUMBER	2	IADC CODE	111	INTERVAL	211.0-808.0
HTC R1		SIZE	17.500	NOZZLES	20 20 20
COST	4978.00	TRIP TIME	2.5	BIT RUN	597.0
TOTAL HOURS	15.47	TOTAL TURNS	111375	CONDITION	T2 B2 G0.000

DEPTH	FLOW RATE	PSP	PBIT	XPSP	HHP	HHP/ sq in	IMPACT FORCE	JET VELOCITY
220.0	997	1971.1	971.8	49.3	565	2.35	1613	106
230.0	500	1910.0	244.4	12.8	71	0.30	406	53
240.0	970	1921.2	920.6	47.9	521	2.17	1528	103
250.0	996	2009.0	970.7	48.3	564	2.35	1611	106
280.0	1004	2058.3	986.7	47.9	578	2.40	1638	106
300.0	1005	2090.0	987.5	47.2	579	2.41	1639	106
310.0	1015	2132.8	1009.0	47.3	598	2.49	1675	108
320.0	1006	2129.8	990.1	46.5	581	2.42	1644	107
340.0	1009	2148.4	995.4	46.3	586	2.44	1652	107
350.0	965	2005.6	910.3	45.4	512	2.13	1511	102
360.0	989	2103.2	956.6	45.5	552	2.29	1588	105
370.0	1015	2195.5	1008.2	45.9	597	2.48	1674	108
380.0	996	2144.6	971.1	45.3	564	2.35	1612	106
390.0	1005	2188.4	988.3	45.2	580	2.41	1641	107
400.0	1000	2173.5	979.1	45.0	571	2.38	1625	106
410.0	996	2161.7	970.4	44.9	564	2.34	1611	106
420.0	1004	2192.4	987.0	45.0	578	2.40	1639	106
430.0	998	2176.6	975.1	44.8	568	2.36	1619	106
440.0	1002	2193.1	981.9	44.8	574	2.39	1630	106
450.0	1004	2206.9	987.0	44.7	578	2.40	1639	106
460.0	1003	2214.2	984.8	44.5	576	2.40	1635	106
470.0	546	1035.5	300.3	29.0	96	0.40	499	58
480.0	537	1070.3	290.0	27.1	91	0.38	481	57
490.0	1005	2224.4	1015.4	45.7	595	2.40	1686	106
500.0	1002	2220.2	1009.6	45.5	590	2.45	1676	106
530.0	1013	2250.4	1032.0	45.9	610	2.54	1713	107
540.0	1028	2314.2	1062.3	45.9	637	2.65	1764	109
550.0	995	2195.3	995.5	45.3	578	2.40	1653	105
560.0	993	2187.4	992.6	45.4	575	2.39	1648	105
570.0	1011	2250.5	1027.9	45.7	606	2.52	1706	107
580.0	999	2214.0	1004.1	45.4	585	2.43	1667	106
590.0	1006	2243.7	1018.0	45.4	598	2.48	1690	107
600.0	1003	2229.9	1011.0	45.3	591	2.46	1678	106
610.0	996	2220.0	998.1	45.0	580	2.41	1657	106
620.0	998	2227.2	1000.9	44.9	583	2.42	1662	106
630.0	1000	2234.1	1000.9	44.8	584	2.43	1662	106
640.0	1006	2266.9	1013.0	44.7	595	2.47	1682	107
650.0	1002	2249.2	1004.1	44.6	587	2.44	1667	106
660.0	1001	2251.5	1002.0	44.5	585	2.43	1664	106
670.0	1005	2265.0	1009.4	44.6	592	2.46	1676	106
680.0	1006	2280.8	1011.8	44.4	594	2.47	1680	107
690.0	993	2241.6	986.5	44.0	572	2.38	1638	105
700.0	990	2242.4	979.9	43.7	566	2.35	1627	105

DEPTH	FLOW RATE	PSP	PBIT	ZPSP	HHP	HHP/sqin	IMPACT FORCE	JET VELOCITY
710.0	1007	2317.3	1013.6	43.7	595	2.48	1683	107
720.0	1008	2323.8	1015.9	43.7	597	2.48	1686	107
730.0	1014	2358.2	1027.5	43.6	608	2.53	1706	107
740.0	995	2295.8	990.4	43.1	575	2.39	1644	105
750.0	1000	2330.2	1000.8	42.9	584	2.43	1661	106
760.0	1001	2338.4	1002.6	42.9	586	2.43	1664	106
770.0	1003	2347.1	1006.4	42.9	589	2.45	1671	106
780.0	1003	2350.9	1007.2	42.8	590	2.45	1672	106
790.0	1007	2333.3	1014.8	43.5	596	2.48	1685	107
800.0	1007	2361.7	1013.4	42.9	595	2.47	1682	107
808.0	1002	2366.6	1003.3	42.4	586	2.44	1666	106

BIT NUMBER	3	IADC CODE	116	INTERVAL	808.2-1365.0
HTC JJ		SIZE	12.250	NOZZLES	18 18 18
COST	2566.00	TRIP TIME	3.7	BIT RUN	556.8
TOTAL HOURS	15.28	TOTAL TURNS	91466	CONDITION	T5 B5 G0.000

DEPTH	FLOW RATE	PSP	PBIT	ZPSP	HHP	HHP/sqin	IMPACT FORCE	JET VELOCITY
810.0	550	1269.6	468.6	36.9	150	1.28	630	72
820.0	987	2717.1	1508.0	55.5	868	7.36	2028	129
830.0	987	2723.9	1509.7	55.4	869	7.38	2030	129
840.0	994	2767.6	1530.1	55.3	887	7.53	2057	130
850.0	986	2751.0	1507.7	54.8	868	7.36	2027	129
860.0	993	2778.4	1528.6	55.0	886	7.52	2055	130
870.0	993	2807.1	1529.0	54.5	886	7.52	2056	130
880.0	995	2813.1	1532.7	54.5	889	7.55	2061	130
890.0	989	2796.4	1514.4	54.2	874	7.41	2036	129
900.0	989	2807.6	1514.2	53.9	873	7.41	2036	129
910.0	983	2782.2	1495.9	53.8	858	7.28	2012	129
920.0	983	2802.4	1498.3	53.5	860	7.29	2015	129
930.0	983	2817.2	1497.2	53.1	859	7.29	2013	129
940.0	990	2848.7	1518.6	53.3	877	7.44	2042	130
950.0	987	2842.9	1510.2	53.1	870	7.38	2031	129
960.0	984	2826.6	1498.8	53.0	860	7.30	2015	129
970.0	982	2829.6	1493.0	52.8	855	7.25	2008	128
980.0	987	2860.9	1508.4	52.7	868	7.37	2028	129
990.0	964	2767.0	1438.5	52.0	809	6.86	1934	126
1000.0	951	2711.8	1409.4	52.0	782	6.64	1895	124
1010.0	954	2725.8	1417.3	52.0	789	6.69	1906	125
1020.0	963	2774.0	1444.6	52.1	812	6.89	1943	126
1030.0	1084	1568.7	1031.2	116.7	1158	9.83	2462	142
1040.0	952	2735.6	1412.9	51.6	785	6.66	1900	125
1050.0	956	2750.9	1422.3	51.7	793	6.73	1913	125
1060.0	960	2788.7	1436.8	51.5	805	6.83	1932	126
1070.0	967	2807.3	1455.4	51.8	821	6.96	1957	126
1080.0	988	2908.9	1521.2	52.3	877	7.44	2046	129
1090.0	998	2949.9	1552.0	52.6	904	7.67	2087	131

DEPTH	FLOW RATE	PSP	PBIT	%PSP	HHP	HHP/sqin	IMPACT FORCE	JET VELOCITY
1100.0	997	2967.8	1548.2	52.2	901	7.64	2082	130
1110.0	995	2955.1	1540.8	52.1	894	7.59	2072	130
1120.0	994	2924.2	1538.9	52.6	892	7.57	2069	130
1130.0	995	2924.7	1541.4	52.7	895	7.59	2073	130
1140.0	998	2943.9	1552.8	52.7	905	7.67	2088	131
1150.0	992	2902.9	1531.9	52.8	886	7.52	2060	130
1160.0	999	2926.8	1554.4	53.1	906	7.69	2090	131
1170.0	997	2917.3	1547.4	53.0	900	7.63	2081	130
1180.0	997	2935.9	1549.2	52.8	901	7.65	2083	130
1190.0	997	2938.3	1549.3	52.7	901	7.65	2083	130
1200.0	995	2949.7	1541.5	52.3	895	7.59	2073	130
1210.0	998	2960.5	1551.5	52.4	903	7.66	2086	131
1220.0	988	2922.5	1521.9	52.1	878	7.45	2047	129
1230.0	995	2963.5	1542.4	52.0	895	7.60	2074	130
1240.0	989	2941.7	1523.5	51.8	879	7.46	2049	129
1250.0	982	2906.4	1503.0	51.7	861	7.31	2021	129
1260.0	985	2939.1	1511.0	51.4	868	7.37	2032	129
1270.0	988	2964.0	1521.2	51.3	877	7.44	2046	129
1280.0	968	2893.3	1460.3	50.5	825	7.00	1964	127
1300.0	951	2823.0	1407.9	49.9	781	6.63	1893	124
1310.0	961	2889.7	1438.7	49.8	807	6.84	1935	126
1320.0	965	2898.4	1450.4	50.0	817	6.93	1950	126
1330.0	969	2917.4	1464.0	50.2	828	7.03	1969	127
1340.0	968	2917.6	1460.6	50.1	825	7.00	1964	127
1350.0	971	2939.5	1468.5	50.0	832	7.06	1975	127
1360.0	955	2835.6	1420.5	50.1	791	6.72	1910	125
1365.0	866	2689.1	1167.6	43.4	590	5.00	1570	113

BIT NUMBER	4	IADC CODE	517	INTERVAL	1365.0-2107.0
HTC J22		SI7F	12.250	NOZZLES	18 18 16
COST	8520.00	TRIP TIME	5.0	BIT RUN	742.0
TOTAL HOURS	65.46	TOTAL TURNS	234918	CONDITION	T4 B4 G0.000

DEPTH	FLOW RATE	PSP	PBIT	%PSP	HHP	HHP/sqin	IMPACT FORCE	JET VELOCITY
1370.0	872	2759.9	1383.7	50.1	704	5.97	1730	123
1380.0	866	2738.5	1365.5	49.9	690	5.86	1708	122
1390.0	876	2751.0	1376.4	50.0	698	5.93	1721	122
1400.0	871	2737.7	1379.4	50.4	701	5.94	1725	122
1410.0	870	2723.2	1376.8	50.6	699	5.93	1722	122
1420.0	878	2776.3	1403.1	50.5	719	6.10	1755	124
1430.0	868	2710.2	1372.0	50.6	695	5.90	1716	122
1440.0	866	2662.7	1364.5	51.2	689	5.85	1707	122
1450.0	877	2713.2	1399.1	51.6	716	6.07	1750	123
1460.0	904	2838.4	1487.4	52.4	785	6.66	1860	127
1470.0	897	2793.0	1465.5	52.5	767	6.51	1833	126
1480.0	898	2811.0	1470.9	52.3	770	6.54	1840	126
1500.0	891	2786.4	1450.5	52.1	754	6.40	1814	125

DEPTH	FLOW RATE	PSP	PBIT	XPSP	HHP	HHP/ sqin	IMPACT FORCE	JET VELOCITY
1510.0	895	2807.8	1462.5	52.1	764	6.43	1829	126
1520.0	597	1463.5	649.8	44.4	226	1.92	813	84
1530.0	590	1456.0	635.9	43.7	219	1.86	795	83
1540.0	591	1458.9	638.2	43.7	220	1.87	798	83
1560.0	901	2823.9	1481.7	52.5	779	6.61	1853	127
1570.0	893	2798.9	1457.5	52.1	760	6.45	1823	126
1580.0	901	2830.7	1482.7	52.4	779	6.61	1854	127
1590.0	894	2813.0	1461.7	52.0	763	6.47	1828	126
1600.0	892	2806.3	1455.6	51.9	758	6.43	1820	126
1610.0	893	2794.1	1456.1	52.1	758	6.43	1821	126
1620.0	898	2811.6	1475.1	52.5	773	6.56	1845	126
1630.0	894	2821.7	1459.4	51.7	761	6.46	1825	126
1640.0	894	2826.7	1461.0	51.7	762	6.47	1827	126
1650.0	894	2815.9	1460.6	51.9	762	6.46	1827	126
1660.0	887	2792.9	1438.4	51.5	745	6.32	1799	125
1670.0	895	2861.6	1464.1	51.2	765	6.49	1831	126
1680.0	893	2845.9	1457.6	51.2	759	6.44	1823	126
1690.0	894	2870.6	1461.3	50.9	762	6.47	1828	126
1700.0	893	2886.4	1457.2	50.5	759	6.44	1822	126
1710.0	589	1511.1	633.7	41.9	218	1.85	793	83
1720.0	585	1501.8	630.3	42.0	215	1.82	788	82
1730.0	588	1516.9	637.2	42.0	218	1.85	797	83
1740.0	897	2919.4	1482.8	50.8	776	6.58	1854	126
1750.0	872	2799.4	1401.7	50.1	713	6.05	1753	123
1760.0	873	2810.7	1405.6	50.0	716	6.07	1758	123
1770.0	878	2859.2	1421.4	49.7	728	6.18	1778	123
1780.0	871	2836.5	1400.9	49.4	712	6.04	1752	123
1790.0	873	2849.4	1406.8	49.4	717	6.08	1759	123
1800.0	834	2709.3	1282.6	47.3	624	5.29	1604	117
1810.0	854	2798.8	1332.9	47.6	664	5.63	1667	120
1820.0	862	2824.9	1358.2	48.1	683	5.79	1699	121
1840.0	866	2843.6	1373.3	48.3	694	5.89	1717	122
1850.0	871	2863.7	1387.9	48.5	705	5.98	1736	123
1860.0	864	2840.3	1366.6	48.1	689	5.85	1709	122
1870.0	869	2869.2	1389.5	48.4	705	5.98	1738	122
1880.0	873	2894.5	1400.2	48.4	713	6.05	1751	123
1890.0	877	2885.2	1413.2	49.0	723	6.13	1767	123
1900.0	873	2902.1	1401.0	48.3	713	6.05	1752	123
1910.0	866	2843.1	1380.1	48.5	698	5.92	1726	122
1920.0	871	2906.7	1393.9	48.0	708	6.01	1743	122
1930.0	859	2852.5	1355.5	47.5	679	5.76	1695	121
1940.0	868	2906.0	1384.3	47.6	701	5.95	1731	122
1950.0	773	2445.4	1098.9	44.9	496	4.21	1374	109
1960.0	573	1554.7	602.8	38.8	201	1.71	754	81
1970.0	850	2833.4	1321.2	46.6	655	5.56	1652	120
1980.0	853	2844.2	1330.2	46.8	662	5.61	1664	120
1990.0	685	2054.7	858.3	41.8	343	2.91	1073	96
2000.0	853	2872.0	1331.5	46.4	663	5.62	1665	120
2010.0	845	2828.7	1307.7	46.2	645	5.47	1636	119
2020.0	848	2840.1	1314.9	46.3	650	5.52	1644	119

DEPTH	FLOW RATE	PSP	PBIT	%PSP	HHP	HHP/ sqin	IMPACT FORCE	JET VELOCITY
2030.0	852	2871.2	1327.1	46.2	659	5.60	1660	120
2040.0	846	2844.8	1308.4	46.0	646	5.40	1636	119
2050.0	834	2828.8	1274.0	45.0	620	5.26	1593	117
2060.0	847	2869.3	1312.2	45.7	648	5.50	1641	119
2070.0	741	2339.4	1004.4	42.9	434	3.68	1256	104
2080.0	848	2894.9	1314.7	45.4	650	5.52	1644	119
2090.0	833	2824.0	1268.4	44.9	616	5.23	1586	117
2100.0	832	2820.0	1265.9	44.9	614	5.21	1583	117
2107.0	835	2823.0	1274.6	45.1	621	5.27	1594	117

BIT NUMBER	5	IADC CODE	517	INTERVAL	2107.0-2431.2
HTC J22		SIZE	12.250	NOZZLES	18 18 16
COST	8520.00	TRIP TIME	8.0	BIT RUN	324.2
TOTAL HOURS	52.41	TOTAL TURNS	169866	CONDITION	T8 B4 G0.125

DEPTH	FLOW RATE	PSP	PBIT	%PSP	HHP	HHP/ sqin	IMPACT FORCE	JET VELOCITY
2110.0	845	2888.3	1305.6	45.2	643	5.46	1633	119
2120.0	588	1681.6	631.9	37.6	217	1.84	790	83
2130.0	563	1615.7	580.0	35.9	191	1.62	725	79
2140.0	847	2867.7	1311.9	45.7	648	5.50	1641	119
2150.0	684	2915.1	856.4	29.4	342	2.90	1071	96
2160.0	850	2866.8	1321.4	46.1	655	5.56	1653	120
2170.0	849	2881.3	1320.0	45.8	654	5.55	1651	119
2180.0	854	2925.5	1335.3	45.6	666	5.65	1670	120
2190.0	850	2917.1	1322.3	45.3	656	5.57	1654	120
2200.0	841	2814.0	1294.1	46.0	635	5.39	1618	118
2210.0	856	2810.6	1340.5	47.7	669	5.68	1676	120
2220.0	857	2803.2	1344.4	48.0	672	5.70	1681	121
2230.0	848	2870.4	1315.6	45.8	651	5.52	1645	119
2240.0	845	2867.0	1305.6	45.5	643	5.46	1633	119
2250.0	589	1704.1	634.8	37.3	218	1.85	794	83
2260.0	552	1966.0	557.6	28.4	180	1.52	697	78
2270.0	564	1615.8	581.3	36.0	191	1.62	727	79
2280.0	814	2832.0	1213.3	42.8	576	4.89	1517	115
2290.0	842	2906.3	1297.2	44.6	637	5.41	1622	118
2300.0	840	2906.1	1291.7	44.4	633	5.37	1615	118
2310.0	849	2884.0	1319.2	45.7	654	5.55	1650	119
2320.0	836	2875.8	1280.0	44.5	625	5.30	1601	118
2330.0	839	2900.2	1287.9	44.4	630	5.35	1611	118
2340.0	831	2849.2	1264.7	44.4	614	5.21	1582	117
2350.0	829	2829.0	1256.8	44.4	608	5.16	1572	117
2360.0	831	2800.3	1263.1	45.1	612	5.20	1580	117
2370.0	661	1992.4	799.4	40.1	308	2.62	1000	93
2380.0	832	2825.2	1266.9	44.8	615	5.22	1584	117
2390.0	833	2832.7	1269.3	44.8	617	5.23	1587	117
2400.0	832	2835.7	1266.9	44.7	615	5.22	1584	117
2410.0	832	2843.8	1265.5	44.5	614	5.21	1583	117

DEPTH	FLOW RATE	PSP	PBIT	%PSP	HHP	HHP/ sqin	IMPACT FORCE	JET VELOCITY
2420.0	831	2843.5	1262.2	44.4	612	5.19	1579	117
2430.0	571	1623.4	597.1	36.8	199	1.69	747	80
2431.2	562	1573.7	578.0	36.7	190	1.61	723	79

BIT NUMBER	6	IADC CODE	517	INTERVAL	2431.0-2712.0
HTC J22		SIZE	12.250	NOZZLES	16 16 16
COST	8520.00	TRIP TIME	8.0	BIT RUN	281.0
TOTAL HOURS	47.95	TOTAL TURNS	144545	CONDITION	T4 B8 G0.125

DEPTH	FLOW RATE	PSP	PRIT	XPSP	HHP	HHP/sqin	IMPACT FORCE	JET VELOCITY
2440.0	753	2910.1	1431.3	49.2	629	5.33	1521	125
2450.0	710	2901.5	1274.4	43.9	528	4.48	1354	118
2460.0	768	2931.9	1491.1	50.9	668	5.67	1584	127
2470.0	540	1726.1	736.7	42.7	232	1.97	783	89
2480.0	773	2952.8	1509.1	51.1	680	5.77	1603	128
2490.0	775	2960.8	1519.0	51.3	687	5.83	1614	128
2500.0	772	2939.0	1505.0	51.2	678	5.75	1599	128
2510.0	773	2948.2	1509.6	51.2	681	5.78	1604	128
2520.0	768	2926.5	1490.6	50.9	668	5.67	1584	127
2530.0	779	2962.2	1533.6	51.8	697	5.91	1629	129
2540.0	780	2950.3	1537.0	52.1	699	5.93	1633	129
2550.0	779	2937.2	1533.2	52.2	697	5.91	1629	129
2560.0	781	2938.3	1541.4	52.5	702	5.96	1638	129
2570.0	777	2906.0	1524.8	52.5	691	5.86	1620	129
2580.0	777	2910.2	1524.1	52.4	691	5.86	1619	129
2590.0	777	2919.0	1525.0	52.2	691	5.86	1620	129
2600.0	776	2924.0	1520.1	52.0	688	5.84	1615	128
2620.0	778	2941.1	1529.8	52.0	694	5.89	1625	129
2630.0	770	2941.2	1497.0	50.9	672	5.70	1591	127
2640.0	770	2922.2	1493.8	51.1	671	5.69	1587	127
2650.0	770	2889.8	1494.3	51.7	671	5.69	1588	127
2660.0	775	2937.9	1516.4	51.6	686	5.82	1611	128
2670.0	776	2902.4	1517.9	52.3	687	5.83	1613	128
2680.0	779	2902.8	1530.6	52.7	696	5.90	1626	129
2690.0	783	2900.9	1546.2	53.3	706	5.99	1643	130
2700.0	541	1722.8	738.7	42.9	233	1.98	785	90
2710.0	783	2968.4	1544.4	52.0	705	5.98	1641	130

BIT NUMBER	7	IADC CODE	517	INTERVAL	2712.0-3021.0
HTC J22		SIZE	12.250	NOZZLES	16 16 16
COST	8520.00	TRIP TIME	7.8	BIT RUN	309.0
TOTAL HOURS	57.01	TOTAL TURNS	171045	CONDITION	T4 B5 G0.125

DEPTH	FLOW RATE	PSP	PRIT	XPSP	HHP	HHP/sqin	IMPACT FORCE	JET VELOCITY
2720.0	758	2896.9	1447.5	50.0	640	5.43	1538	125
2730.0	760	2882.6	1457.4	50.6	646	5.48	1548	126
2740.0	768	2911.5	1486.4	51.1	666	5.65	1579	127
2750.0	767	2880.2	1481.5	51.4	663	5.62	1574	127
2760.0	770	2874.4	1494.6	52.0	671	5.70	1588	127
2770.0	770	2875.0	1493.8	52.0	671	5.69	1587	127

DEPTH	FLOW RATE	PSP	PBIT	ZPSP	HHP	HHP/ sqin	IMPACT FORCE	JET VELOCITY
2780.0	770	2884.0	1493.8	51.8	671	5.67	1587	127

BIT NUMBER	7	IADC CODE	517	INTERVAL	2782.0-3021.0
HTC J22		SIZE	12.250	NOZZLES	16 16 16
COST	8520.00	TRIP TIME	7.8	BIT RUN	239.0
TOTAL HOURS	57.01	TOTAL TURNS	171045	CONDITION	T4 B5 G0.125

DEPTH	FLOW RATE	PSP	PBIT	ZPSP	HHP	HHP/ sqin	IMPACT FORCE	JET VELOCITY
2790.0	767	2907.1	1484.3	51.1	664	5.64	1577	127
2800.0	767	2913.1	1482.6	50.9	663	5.63	1575	127
2810.0	766	2928.1	1480.5	50.6	662	5.62	1573	127
2820.0	766	2925.8	1478.3	50.5	660	5.60	1571	127
2830.0	766	2913.3	1480.7	50.8	662	5.62	1573	127
2840.0	766	2909.5	1477.7	50.8	660	5.60	1570	127
2850.0	763	2888.8	1466.4	50.8	652	5.54	1558	126
2860.0	767	2912.7	1483.2	50.9	664	5.63	1576	127
2870.0	767	2911.2	1483.5	51.0	664	5.63	1576	127
2880.0	770	2922.6	1493.8	51.1	671	5.67	1587	127
2890.0	760	2881.8	1457.1	50.6	646	5.48	1548	126
2900.0	537	1743.1	727.5	41.7	228	1.93	773	89
2910.0	536	1751.8	723.4	41.3	226	1.92	769	89
2920.0	756	2947.1	1440.6	48.9	635	5.39	1531	125
2930.0	756	2909.6	1439.6	49.5	635	5.38	1530	125
2940.0	758	2911.1	1447.8	49.7	640	5.43	1538	125
2950.0	759	2930.8	1452.8	49.6	643	5.46	1544	126
2960.0	757	2911.4	1446.4	49.7	639	5.42	1537	125
2970.0	757	2912.5	1446.7	49.7	639	5.42	1537	125
2980.0	765	2945.7	1476.1	50.1	659	5.59	1568	127
2990.0	758	2872.5	1448.8	50.4	641	5.44	1539	126
3000.0	758	2880.3	1447.8	50.3	640	5.43	1538	125
3010.0	758	2883.9	1448.5	50.2	641	5.43	1539	125
3020.0	761	2891.5	1460.8	50.5	649	5.50	1552	126
3021.0	761	2889.3	1460.9	50.6	649	5.50	1552	126

(F) COMPUTER DATA LISTING : LIST D

INTERVAL 10m averages.

DEPTH Well depth, in metres.

SPM1 Stroke rate per minute, for Pump no.1

SPM2 Stroke rate per minute, for Pump no.2.

FLOW RATE Mud flow rate into the well, in gallons
per minute.

ANNULAR VELOCITIES : (in metres per minute)

DC/OH - Between drill collars and the open hole.

DC/CSG - Between drill collars and casing.

HW/OH - Between heavyweight drill pipe and the open hole.

HW/CSG - Between heavyweight drill pipe and casing.

DP/OH - Between drill pipe and open hole.

DP/CSG - Between drill pipe and casing.

DP/RIS - Between drill pipe and riser.

BIT NUMBER	2	IADC CODE	111	INTERVAL	211.0-808.0
HTC R1		SIZE	17.500	NOZZLES	20 20 20
COST	4978.00	TRIP TIME	2.5	BIT RUN	597.0
TOTAL HOURS	15.47	TOTAL TURNS	111375	CONDITION	T2 B2 G0.000

DEPTH	SPM1	SPM2	FLOW RATE	DC/ OH	DC/ CSG	HW/ OH	HW/ CSG	DP/ OH	DP/ CSG	DP/ RIS
220.0	104	96	997	31	25	0	22	0	0	18
230.0	4	96	500	15	12	0	11	0	0	9
240.0	100	94	970	30	24	0	21	0	0	17
250.0	101	98	996	31	25	0	22	0	22	18
280.0	101	100	1004	31	25	0	22	0	22	18
300.0	102	99	1005	31	0	27	22	0	22	18
310.0	103	101	1015	31	0	27	22	0	22	18
320.0	102	99	1006	31	0	27	22	0	22	18
340.0	102	100	1009	31	0	27	22	0	22	18
350.0	101	92	965	30	0	26	21	0	21	17
360.0	100	98	989	31	0	26	22	0	22	18
370.0	103	100	1015	31	0	27	0	27	22	18
380.0	100	99	996	31	0	26	0	26	22	18
390.0	101	100	1005	31	0	27	0	27	22	18
400.0	101	99	1000	31	0	27	0	27	22	18
410.0	101	99	996	31	0	26	0	26	22	18
420.0	102	99	1004	31	0	27	0	27	22	18
430.0	101	99	998	31	0	27	0	27	22	18
440.0	100	100	1002	31	0	27	0	27	22	18
450.0	102	99	1004	31	0	27	0	27	22	18
460.0	102	99	1003	31	0	27	0	27	22	18
470.0	109	0	546	17	0	15	0	15	12	10
480.0	107	0	537	17	0	14	0	14	12	10
490.0	101	100	1005	31	0	27	0	27	22	18
500.0	103	98	1002	31	0	27	0	27	22	18
530.0	102	100	1013	31	0	27	0	27	22	18
540.0	105	101	1028	32	0	27	0	27	23	18
550.0	99	100	995	31	0	26	0	26	22	18
560.0	104	95	993	31	0	26	0	26	22	18
570.0	102	101	1011	31	0	27	0	27	22	18
580.0	101	99	999	31	0	27	0	27	22	18
590.0	101	101	1006	31	0	27	0	27	22	18
600.0	101	100	1003	31	0	27	0	27	22	18
610.0	100	99	996	31	0	26	0	26	22	18
620.0	99	100	998	31	0	27	0	27	22	18
630.0	101	99	1000	31	0	27	0	27	22	18
640.0	102	99	1006	31	0	27	0	27	22	18
650.0	102	99	1002	31	0	27	0	27	22	18
660.0	101	99	1001	31	0	27	0	27	22	18
670.0	101	100	1005	31	0	27	0	27	22	18
680.0	102	99	1006	31	0	27	0	27	22	18
690.0	101	98	993	31	0	26	0	26	22	18
700.0	100	98	990	31	0	26	0	26	22	18

DEPTH	SPM1	SPM2	FLOW RATE	DC/ OH	DC/ CSG	HW/ OH	HW/ CSG	DP/ OH	DP/ CSG	DP/ RIS
710.0	103	99	1007	31	0	27	0	27	22	18
720.0	101	100	1008	31	0	27	0	27	22	18
730.0	103	100	1014	31	0	27	0	27	22	18
740.0	101	98	995	31	0	26	0	26	22	18
750.0	101	99	1000	31	0	27	0	27	22	18
760.0	102	98	1001	31	0	27	0	27	22	18
770.0	102	99	1003	31	0	27	0	27	22	18
780.0	102	99	1003	31	0	27	0	27	22	18
790.0	101	100	1007	31	0	27	0	27	22	18
800.0	101	100	1007	31	0	27	0	27	22	18
808.0	103	98	1002	31	0	27	0	27	22	18

BIT NUMBER	3	IADC CODE	116	INTERVAL	808.2-1365.0
HTC J1		SIZE	12.250	NOZZLES	18 18 18
COST	2566.00	TRIP TIME	3.7	BIT RUN	556.8
TOTAL HOURS	15.28	TOTAL TURNS	91466	CONDITION	T5 B5 G0.000

DEPTH	SPM1	SPM2	FLOW RATE	DC/ OH	DC/ CSG	HW/ OH	HW/ CSG	DP/ OH	DP/ CSG	DP/ RIS
810.0	110	0	550	48	43	0	31	0	31	12
820.0	100	98	987	86	78	0	55	0	55	22
830.0	100	98	987	86	78	0	55	0	55	22
840.0	100	99	994	86	78	0	55	0	55	22
850.0	100	98	986	86	77	0	55	0	55	22
860.0	101	98	993	86	78	0	55	0	55	22
870.0	101	98	993	86	78	0	55	0	55	22
880.0	101	98	995	86	78	0	55	0	55	22
890.0	100	98	989	86	78	0	55	0	55	22
900.0	100	98	989	86	78	0	55	0	55	22
910.0	98	98	983	85	77	0	55	0	55	22
920.0	99	98	983	85	77	0	55	0	55	22
930.0	99	98	983	85	77	0	55	0	55	22
940.0	101	98	990	86	78	0	55	0	55	22
950.0	100	97	987	86	0	59	55	0	55	22
960.0	100	97	984	85	0	59	55	0	55	22
970.0	99	98	982	85	0	59	55	0	55	22
980.0	100	97	987	86	0	59	55	0	55	22
990.0	96	97	964	84	0	58	54	0	54	21
1000.0	96	95	951	83	0	57	53	0	53	21
1010.0	96	95	954	83	0	57	53	0	53	21
1020.0	97	95	963	84	0	58	54	0	54	21
1030.0	111	106	1084	94	0	65	0	65	60	24
1040.0	96	95	952	83	0	57	0	57	53	21
1050.0	96	95	956	83	0	57	0	57	53	21
1060.0	96	96	960	83	0	57	0	57	54	21
1070.0	96	97	967	84	0	58	0	58	54	21
1080.0	100	98	988	86	0	59	0	59	55	22
1090.0	101	99	998	87	0	60	0	60	56	22

DEPTH	SPM1	SPM2	FLOW RATE	DC/ OH	DC/ CSG	HW/ OH	HW/ CSG	DP/ OH	DP/ CSG	DP/ RIS
1100.0	101	99	997	87	0	60	0	60	56	22
1110.0	100	99	995	86	0	59	0	59	55	22
1120.0	99	100	994	86	0	59	0	59	55	22
1130.0	101	98	995	86	0	59	0	59	55	22
1140.0	100	100	998	87	0	60	0	60	56	22
1150.0	100	99	992	86	0	59	0	59	55	22
1160.0	100	100	999	87	0	60	0	60	56	22
1170.0	99	101	997	87	0	60	0	60	56	22
1180.0	101	99	997	87	0	60	0	60	56	22
1190.0	100	100	997	87	0	60	0	60	56	22
1200.0	99	100	995	86	0	59	0	59	55	22
1210.0	100	100	998	87	0	60	0	60	56	22
1220.0	99	98	988	86	0	59	0	59	55	22
1230.0	101	99	995	86	0	59	0	59	55	22
1240.0	99	99	989	86	0	59	0	59	55	22
1250.0	100	97	982	85	0	59	0	59	55	22
1260.0	98	99	985	86	0	59	0	59	55	22
1270.0	99	99	988	86	0	59	0	59	55	22
1280.0	97	97	968	84	0	58	0	58	54	21
1300.0	97	93	951	83	0	57	0	57	53	21
1310.0	96	96	961	83	0	57	0	57	54	21
1320.0	96	97	965	84	0	58	0	58	54	21
1330.0	97	97	969	84	0	58	0	58	54	21
1340.0	99	95	968	84	0	58	0	58	54	21
1350.0	100	94	971	84	0	58	0	58	54	21
1360.0	97	94	955	83	0	57	0	57	53	21
1365.0	87	86	866	75	0	52	0	52	48	19

BIT NUMBER 4 IADC CODE 517 INTERVAL 1365.0-2107.0
 HTC J22 SIZE 12.250 NOZZLES 18 18 16
 COST 8520.00 TRIP TIME 5.0 BIT RUN 742.0
 TOTAL HOURS 65.46 TOTAL TURNS 234818 CONDITION T4 B4 G0.000

DEPTH	SPM1	SPM2	FLOW RATE	DC/ OH	DC/ CSG	HW/ OH	HW/ CSG	DP/ OH	DP/ CSG	DP/ RIS
1370.0	90	84	872	76	0	52	0	52	49	16
1380.0	86	87	866	75	0	52	0	52	48	16
1400.0	88	87	871	76	0	52	0	52	49	16
1410.0	87	87	870	76	0	52	0	52	48	16
1420.0	88	88	878	76	0	52	0	52	49	16
1430.0	87	86	868	75	0	52	0	52	48	16
1440.0	87	87	866	75	0	52	0	52	48	16
1450.0	88	88	877	76	0	52	0	52	49	16
1460.0	91	90	904	79	0	54	0	54	50	16
1470.0	91	89	897	78	0	54	0	54	50	16
1480.0	91	89	898	78	0	54	0	54	50	16
1500.0	90	88	891	77	0	53	0	53	50	16
1510.0	91	88	895	78	0	53	0	53	50	16

DEPTH	SPM1	SPM2	FLOW RATE	DC/ OH	DC/ CSG	HW/ OH	HW/ CSG	DP/ OH	DP/ CSG	DP/ RIS
1520.0	119	0	597	52	0	36	0	36	33	11
1530.0	118	0	590	51	0	35	0	35	33	11
1540.0	117	1	591	51	0	35	0	35	33	11
1560.0	90	90	901	78	0	54	0	54	50	16
1570.0	91	88	893	78	0	53	0	53	50	16
1580.0	92	88	901	78	0	54	0	54	50	16
1590.0	92	87	894	78	0	53	0	53	50	16
1600.0	91	87	892	78	0	53	0	53	50	16
1610.0	91	88	893	78	0	53	0	53	50	16
1620.0	92	88	898	78	0	54	0	54	50	16
1630.0	91	87	894	78	0	53	0	53	50	16
1640.0	92	87	894	78	0	53	0	53	50	16
1650.0	91	88	894	78	0	53	0	53	50	16
1660.0	90	88	887	77	0	53	0	53	49	16
1670.0	92	87	895	78	0	53	0	53	50	16
1680.0	91	88	893	78	0	53	0	53	50	16
1690.0	92	87	894	78	0	53	0	53	50	16
1700.0	90	89	893	78	0	53	0	53	50	16
1710.0	118	0	589	51	0	35	0	35	33	11
1720.0	117	0	585	51	0	35	0	35	33	11
1730.0	118	0	588	51	0	35	0	35	33	11
1740.0	90	90	897	78	0	54	0	54	50	16
1750.0	87	87	872	76	0	52	0	52	49	16
1760.0	88	87	873	76	0	52	0	52	49	16
1770.0	88	88	878	76	0	52	0	52	49	16
1780.0	87	87	871	76	0	52	0	52	49	16
1790.0	87	87	873	76	0	52	0	52	49	16
1800.0	82	85	834	72	0	50	0	50	46	15
1810.0	85	85	854	74	0	51	0	51	48	15
1820.0	87	85	862	75	0	51	0	51	48	15
1840.0	88	85	866	75	0	52	0	52	48	16
1850.0	88	86	871	76	0	52	0	52	49	16
1860.0	87	86	864	75	0	52	0	52	48	16
1870.0	87	87	869	75	0	52	0	52	48	16
1880.0	87	87	873	76	0	52	0	52	49	16
1890.0	88	87	877	76	0	52	0	52	49	16
1900.0	88	87	873	76	0	52	0	52	49	16
1910.0	87	87	866	75	0	52	0	52	48	16
1920.0	88	86	871	76	0	52	0	52	49	16
1930.0	86	85	859	75	0	51	0	51	48	15
1940.0	87	87	868	75	0	52	0	52	48	16
1950.0	82	73	773	67	0	46	0	46	43	14
1960.0	0	115	573	50	0	34	0	34	32	10
1970.0	86	84	850	74	0	51	0	51	47	15
1980.0	86	84	853	74	0	51	0	51	48	15
1990.0	105	32	685	59	0	41	0	41	38	12
2000.0	87	83	853	74	0	51	0	51	48	15
2010.0	84	85	845	73	0	51	0	51	47	15
2020.0	85	85	848	74	0	51	0	51	47	15
2030.0	86	85	852	74	0	51	0	51	47	15

DEPTH	SPM1	SPM2	FLOW RATE	DC/ OH	DC/ CSG	HW/ OH	HW/ CSG	DP/ OH	DP/ CSG	DP/ RIS
2040.0	85	85	846	73	0	51	0	51	47	15
2050.0	84	83	834	72	0	50	0	50	46	15
2060.0	85	85	847	74	0	51	0	51	47	15
2070.0	74	74	741	64	0	44	0	44	41	13
2080.0	86	84	848	74	0	51	0	51	47	15
2090.0	83	83	833	72	0	50	0	50	46	15
2100.0	83	83	832	72	0	50	0	50	46	15
2107.0	83	84	835	72	0	50	0	50	47	15

BIT NUMBER	5	IADC CODE	517	INTERVAL	2107.0-2431.2
HTC J22		SIZE	12.250	NOZZLES	18 18 16
COST	8520.00	TRIP TIME	8.0	BIT RUN	324.2
TOTAL HOURS	52.41	TOTAL TURNS	169866	CONDITION	T8 B4 G0.125

DEPTH	SPM1	SPM2	FLOW RATE	DC/ OH	DC/ CSG	HW/ OH	HW/ CSG	DP/ OH	DP/ CSG	DP/ RIS
2110.0	85	84	845	73	0	50	0	50	47	15
2120.0	118	0	588	51	0	35	0	35	33	11
2130.0	113	0	563	49	0	34	0	34	31	10
2140.0	85	85	847	74	0	51	0	51	47	15
2150.0	86	51	684	59	0	41	0	41	38	12
2160.0	85	85	850	74	0	51	0	51	47	15
2170.0	85	85	849	74	0	51	0	51	47	15
2180.0	86	85	854	74	0	51	0	51	48	15
2190.0	85	85	850	74	0	51	0	51	47	15
2200.0	83	85	841	73	0	50	0	50	47	15
2210.0	86	85	856	74	0	51	0	51	48	15
2220.0	86	86	857	74	0	51	0	51	48	15
2230.0	85	85	848	74	0	51	0	51	47	15
2240.0	83	86	845	73	0	50	0	50	47	15
2250.0	118	0	589	51	0	35	0	35	33	11
2260.0	110	0	552	48	0	33	0	33	31	10
2270.0	113	0	564	49	0	34	0	34	31	10
2280.0	83	80	814	71	0	49	0	49	45	15
2290.0	84	84	842	73	0	50	0	50	47	15
2300.0	84	84	840	73	0	50	0	50	47	15
2310.0	84	86	849	74	0	51	0	51	47	15
2320.0	84	84	836	73	0	50	0	50	47	15
2330.0	83	84	839	73	0	50	0	50	47	15
2340.0	83	84	831	72	0	50	0	50	46	15
2350.0	83	83	829	72	0	50	0	50	46	15
2360.0	83	83	831	72	0	50	0	50	46	15
2370.0	107	25	661	57	0	40	0	40	37	12
2380.0	83	83	832	72	0	50	0	50	46	15
2390.0	83	83	833	72	0	50	0	50	46	15
2400.0	83	83	832	72	0	50	0	50	46	15
2410.0	83	84	832	72	0	50	0	50	46	15
2420.0	82	84	831	72	0	50	0	50	46	15

DEPTH	SPM1	SPM2	FLOW RATE	DC/ OH	DC/ CSG	HW/ OH	HW/ CSG	DP/ OH	DP/ CSG	DP/ RIS
2430.0	109	5	571	50	0	34	0	34	32	10
2431.2	112	0	562	49	0	34	0	34	31	10

BIT NUMBER	6	IADC CODE	517	INTERVAL	2431.0-2712.0
HTC J22		SIZE	12.250	NOZZLES	16 16 16
COST	8520.00	TRIP TIME	8.0	BIT RUN	281.0
TOTAL HOURS	47.95	TOTAL TURNS	144545	CONDITION	T4 B8 G0.125

DEPTH	SPM1	SPM2	FLOW RATE	DC/ OH	DC/ CSG	HW/ OH	HW/ CSG	DP/ OH	DP/ CSG	DP/ RIS
2440.0	77	74	753	65	0	45	0	45	42	14
2450.0	78	64	710	62	0	42	0	42	40	13
2460.0	76	77	768	67	0	46	0	46	43	14
2470.0	108	0	540	47	0	32	0	32	30	10
2480.0	77	78	773	67	0	46	0	46	43	14
2490.0	77	78	775	67	0	46	0	46	43	14
2500.0	76	78	772	67	0	46	0	46	43	14
2510.0	77	78	773	67	0	46	0	46	43	14
2520.0	77	76	768	67	0	46	0	46	43	14
2530.0	77	78	779	68	0	47	0	47	43	14
2540.0	77	79	780	68	0	47	0	47	43	14
2550.0	78	78	779	68	0	47	0	47	43	14
2560.0	78	79	781	68	0	47	0	47	44	14
2570.0	77	78	777	67	0	46	0	46	43	14
2580.0	77	78	777	67	0	46	0	46	43	14
2590.0	77	78	777	67	0	46	0	46	43	14
2600.0	77	78	776	67	0	46	0	46	43	14
2620.0	77	78	778	68	0	46	0	46	43	14
2630.0	76	78	770	67	0	46	0	46	43	14
2640.0	76	78	770	67	0	46	0	46	43	14
2650.0	76	78	770	67	0	46	0	46	43	14
2660.0	77	78	775	67	0	46	0	46	43	14
2670.0	77	78	776	67	0	46	0	46	43	14
2680.0	77	78	779	68	0	47	0	47	43	14
2690.0	77	79	783	68	0	47	0	47	44	14
2700.0	108	0	541	47	0	32	0	32	30	10
2710.0	78	78	783	68	0	47	0	47	44	14

BIT NUMBER	7	IADC CODE	517	INTERVAL	2712.0-3021.0
HTC J22		SIZE	12.250	NOZZLES	16 16 16
COST	8520.00	TRIP TIME	7.8	BIT RUN	309.0
TOTAL HOURS	57.01	TOTAL TURNS	171845	CONDITION	T4 B5 G0.125

DEPTH	SPM1	SPM2	FLOW RATE	DC/ OH	DC/ CSG	HW/ OH	HW/ CSG	DP/ OH	DP/ CSG	DP/ RIS
2720.0	75	77	758	66	0	45	0	45	42	14
2730.0	75	77	760	66	0	45	0	45	42	14
2740.0	77	77	768	67	0	46	0	46	43	14
2750.0	76	77	767	67	0	46	0	46	43	14
2760.0	77	77	770	67	0	46	0	46	43	14
2770.0	77	77	770	67	0	46	0	46	43	14

DEPTH	SPM1	SPM2	FLOW RATE	DC/ OH	DC/ CSG	HW/ OH	HW/ CSG	DP/ OH	DP/ CSG	DP/ RIS
2780.0	77	77	770	67	0	46	0	46	43	14

BIT NUMBER	7	IADC CODE	517	INTERVAL	2782.0-3021.0
HTC J22		SIZE	12.250	NOZZLES	16 16 16
COST	0.00	TRIP TIME	0.0	BIT RUN	239.0
TOTAL HOURS	57.01	TOTAL TURNS	171045	CONDITION	T4 B5 G0.125

DEPTH	SPM1	SPM2	FLOW RATE	DC/ OH	DC/ CSG	HW/ OH	HW/ CSG	DP/ OH	DP/ CSG	DP/ RIS
2790.0	77	77	767	67	0	46	0	46	43	14
2800.0	76	77	767	67	0	46	0	46	43	14
2810.0	76	77	766	67	0	46	0	46	43	14
2820.0	76	77	766	66	0	46	0	46	43	14
2830.0	76	77	766	67	0	46	0	46	43	14
2840.0	76	77	766	66	0	46	0	46	43	14
2850.0	76	76	763	66	0	46	0	46	42	14
2860.0	76	78	767	67	0	46	0	46	43	14
2870.0	76	77	767	67	0	46	0	46	43	14
2880.0	76	78	770	67	0	46	0	46	43	14
2890.0	76	76	760	66	0	45	0	45	42	14
2900.0	107	0	537	47	0	32	0	32	30	10
2910.0	107	0	536	47	0	32	0	32	30	10
2920.0	75	76	756	66	0	45	0	45	42	14
2930.0	75	76	756	66	0	45	0	45	42	14
2940.0	76	76	758	66	0	45	0	45	42	14
2950.0	76	76	759	66	0	45	0	45	42	14
2960.0	76	76	757	66	0	45	0	45	42	14
2970.0	76	76	757	66	0	45	0	45	42	14
2980.0	76	77	765	66	0	46	0	46	43	14
2990.0	76	76	758	66	0	45	0	45	42	14
3000.0	76	76	758	66	0	45	0	45	42	14
3010.0	75	76	758	66	0	45	0	45	42	14
3020.0	76	76	761	66	0	45	0	45	42	14
3021.0	76	76	761	66	0	45	0	45	42	14

PE604561

This is an enclosure indicator page.
The enclosure PE604561 is enclosed within the
container PE907031 at this location in this
document.

The enclosure PE604561 has the following characteristics:

ITEM_BARCODE = PE604561
CONTAINER_BARCODE = PE907031
NAME = Drill Data Plot
BASIN = GIPPSLAND
PERMIT = VIC/L10
TYPE = WELL
SUBTYPE = WELL_LOG
DESCRIPTION = Drill Data Plot (enclosure from Final
Well Report--attachment to WCR) for
Snapper-6
REMARKS =
DATE_CREATED = 11/01/88
DATE_RECEIVED = 19/03/86
W_NO = W925
WELL_NAME = SNAPPER-6
CONTRACTOR = CORE LABORATORIES
CLIENT_OP_CO = ESSO AUSTRALIA LTD

(Inserted by DNRE - Vic Govt Mines Dept)

PE604562

This is an enclosure indicator page.
The enclosure PE604562 is enclosed within the
container PE907031 at this location in this
document.

The enclosure PE604562 has the following characteristics:

ITEM_BARCODE = PE604562
CONTAINER_BARCODE = PE907031
NAME = Temperature Plot
BASIN = GIPPSLAND
PERMIT = VIC/L10
TYPE = WELL
SUBTYPE = WELL_LOG
DESCRIPTION = Temperature Plot (enclosure from Final
Well Report--attachment to WCR) for
Snapper-6
REMARKS =
DATE_CREATED = 11/01/88
DATE_RECEIVED = 19/03/86
W_NO = W925
WELL_NAME = SNAPPER-6
CONTRACTOR = CORE LABORATORIES
CLIENT_OP_CO = ESSO AUSTRALIA LTD

(Inserted by DNRE - Vic Govt Mines Dept)

PE604563

This is an enclosure indicator page.
The enclosure PE604563 is enclosed within the
container PE907031 at this location in this
document.

The enclosure PE604563 has the following characteristics:

ITEM_BARCODE = PE604563
CONTAINER_BARCODE = PE907031
 NAME = Pressure Plot
 BASIN = GIPPSLAND
 PERMIT = VIC/L10
 TYPE = WELL
 SUBTYPE = WELL_LOG
DESCRIPTION = Pressure Plot (enclosure from Final
Well Report--attachment to WCR) for
Snapper-6
REMARKS =
DATE_CREATED = 11/01/88
DATE_RECEIVED = 19/03/86
 W_NO = W925
 WELL_NAME = SNAPPER-6
CONTRACTOR = CORE LABORATORIES
CLIENT_OP_CO = ESSO AUSTRALIA LTD

(Inserted by DNRE - Vic Govt Mines Dept)

PE604564

This is an enclosure indicator page.
The enclosure PE604564 is enclosed within the
container PE907031 at this location in this
document.

The enclosure PE604564 has the following characteristics:

- ITEM_BARCODE = PE604564
- CONTAINER_BARCODE = PE907031
- NAME = Geo-Plot
- BASIN = GIPPSLAND
- PERMIT = VIC/L10
- TYPE = WELL
- SUBTYPE = WELL_LOG
- DESCRIPTION = Geo-Plot (enclosure from Final Well
Report--attachment to WCR) for
Snapper-6
- REMARKS =
- DATE_CREATED = 11/01/88
- DATE_RECEIVED = 19/03/86
- W_NO = W925
- WELL_NAME = SNAPPER-6
- CONTRACTOR = CORE LABORATORIES
- CLIENT_OP_CO = ESSO AUSTRALIA LTD

(Inserted by DNRE - Vic Govt Mines Dept)

PE604565

This is an enclosure indicator page.
The enclosure PE604565 is enclosed within the
container PE907031 at this location in this
document.

The enclosure PE604565 has the following characteristics:

ITEM_BARCODE = PE604565
CONTAINER_BARCODE = PE907031
 NAME = Tritium Plot
 BASIN = GIPPSLAND
 PERMIT = VIC/L10
 TYPE = WELL
 SUBTYPE = WELL_LOG
DESCRIPTION = Tritium Plot (enclosure from Final Well
 Report--attachment to WCR) for
 Snapper-6
REMARKS =
DATE_CREATED = 11/01/88
DATE_RECEIVED = 19/03/86
 W_NO = W925
 WELL_NAME = SNAPPER-6
CONTRACTOR = CORE LABORATORIES
CLIENT_OP_CO = ESSO AUSTRALIA LTD

(Inserted by DNRE - Vic Govt Mines Dept)

PE604566

This is an enclosure indicator page.
The enclosure PE604566 is enclosed within the
container PE907031 at this location in this
document.

The enclosure PE604566 has the following characteristics:

- ITEM_BARCODE = PE604566
- CONTAINER_BARCODE = PE907031
 - NAME = Grapholog/Mud Log
 - BASIN = GIPPSLAND
 - PERMIT = VIC/L10
 - TYPE = WELL
 - SUBTYPE = MUD_LOG
- DESCRIPTION = Grapholog/Mud Log (enclosure from Final
Well Report--attachment to WCR) for
Snapper-6
- REMARKS =
- DATE_CREATED = 11/01/88
- DATE_RECEIVED = 19/03/86
- W_NO = W925
- WELL_NAME = SNAPPER-6
- CONTRACTOR = CORE LABORATORIES
- CLIENT_OP_CO = ESSO AUSTRALIA LTD

(Inserted by DNRE - Vic Govt Mines Dept)