

GEMDAS LOGGING REPORT NO. 30

COMPANY AMOCO AVST. WELL Tilana No.1
 DATE 9 October '85 TIME 0500
 DEPTH 3058m / 10033 ft LAST REPORT DEPTH 2990.1m; 9810ft.
 RIG OPERATIONS Drilling 12.25" hole section.
 REPORT BY Gary Hodac REPORT RECEIVED BY J. Guillary (OPERATOR)

DRILLING REPORT

Bit No.: 15 Type: Smith F2 Size: 12.25" Jets: 14, 14, 14
 On Bit: Footage: 251m/822ft Hours: 65.7 ROP: 4 m/hr; 13 ft/hr WOB: 44 klb RPM: 88
 Pump Press: 2930 psi SPM: 124 Torque: 3.3-3.7 TBR: 347,000 CP I: \$ 1150 CP B: \$ 1397

HYDRAULICS REPORT

Mud Density In: 9.3 ppg Mud Density Out: 9.3 ppg ECD: 9.4 ppg PV/YP: 25/22
 Gels: 6/12 Salinity: 2500 PPM Cl Solids: 6 %
 Hole Volume: 1534 bbl Annular Volume: 1265 bbl Tubing Volume: 169 bbl Displaced Volume: 100 bbl
 Carbide Lag—Calculated Lag: 320 strokes at 287m. Flowrate: 613 gpm
 Drillpipe Annular Vel (Max. Dia. Sec.): 46 ft/min Drillpipe Annular Vel (Open Hole): 120 ft/min
 Drill Collar Annular Vel (Open Hole): 175 " Critical Vel: 438 "
 Pressure Loss System: Calc. 3030 psi Pressure Loss Bit: 1580 psi % Pressure Loss: 54
 Nozzle Vel: 436 ft/sec Jet Impact Force: 1287 lbs HHP: 565

PRESSURE PARAMETERS

Drilling Exponent: 1.75 at 4.4 m/hr Flowline Temperature: 59°C; Max. 65°C.
 Shale Density: _____ Shale Factor: _____
 Background Gas: 5-7u Max. Formation Gas: 24u @ 3039m Trip Gas: _____ @ _____
 Other Gas: Nil - no connection gas.
 Fill: _____ Tight Hole: _____
 Cavings: Est %: Minor Average Size: Small

ESTIMATED PORE AND FRACTURE PRESSURE

Kick Tolerance: 12.2 ppg / 2.9 ppg Min. Estimated Fracture Pressure (Open Hole): 13.0 ppg
 Estimated Pore Pressure: 8.7 ppg Min. Estimated Pore Pressure (Open Hole): 8.7 ppg @ _____
 Max. Estimated Pore Pressure (Open Hole): 8.7 ppg @ _____ Estimated Fracture Pressure at TD: 13.6 ppg

Comments: Circulate returns at 2990m; no shows. Max. gas 7u;
Flow check at 3002.5m - no flow, max. gas 10u;
" " " 3015m - circulate returns, max. gas 24u;
" " " 3039m - " " at 3041m; Max gas 24u;
All flow checks were negative;
Lithology: dominantly fine sand, minor coal, claystone, siltstone.
Corrected Hole Volume: _____ bbls / Corrected Annulus Vel: _____
Surface HHP _____ HHP/sqin of bit: