



GEMDAS LOGGING REPORT NO. 29

COMPANY Amoco Aust. WELL Tilana No.1
 DATE 8 October 1985 TIME 0500 Hrs
 DEPTH 2990.1m; 9810 ft LAST REPORT DEPTH 9618 ft; 2931.5m
 RIG OPERATIONS Circulating returns from drillbreak.
 REPORT BY Gary Hodge REPORT RECEIVED BY J. Guillory (OPERATOR)

DRILLING REPORT

Bit No.: 15 Type: SMITH F2 Size: 12.25" Jets: 3+14
 On Bit: Footage: 183m, 600' Hours: 47.1 ROP: 4.1m/hr; 13.4 WOB: 42-44 RPM: 85-90
 Pump Press: 2900 psi SPM: 123 Torque: 2.8-3.8 TBR: 250,000 CP I: \$ 342 CP B: \$ 1405

HYDRAULICS REPORT

Mud Density In: 9.3 ppg Mud Density Out: 9.3-9.4 ppg ECD: 9.4 ppg PV/YP: 26/19
 Gels: 5/12 Salinity: 2800 PPM Cl Solids: 6 %
 Hole Volume: 1502 bbl Annular Volume: 1239 bbl Tubing Volume: 165 bbl Displaced Volume: 99 bbl
 Carbide Lag—Calculated Lag: 320 stks at 2871m. Flowrate: 612 gpm
 Drillpipe Annular Vel (Max. Dia. Sec.): 46 ft/min Drillpipe Annular Vel (Open Hole): 120 ft/min
 Drill Collar Annular Vel (Open Hole): 174 " Critical Vel: 405 "
 Pressure Loss System: Calc: 3030 psi Pressure Loss Bit: 1575 psi % Pressure Loss: 54
 Nozzel Vel: 435 ft/sec Jet Impact Force: 1283 lbs HHP: 562

PRESSURE PARAMETERS

Drilling Exponent: 1.84 at 2.9m/hr; 1.36 at 15.2m/hr Flowline Temperature: 58°C
 Shale Density: 2.4 Shale Factor: 4-6
 Background Gas: 3-4 v Max. Formation Gas: 7 v @ 2964 Trip Gas: Nil @
 Other Gas: Nil, no connection gas;
 Fill: - Tight Hole: -
 Cavings: Est %: Minor, \approx 5% Average Size: Small;

ESTIMATED PORE AND FRACTURE PRESSURE

Kick Tolerance: 12.3 ppg / 3.0 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: 14 ppg

Comments: Drill ahead in claystones, siltstones, minor coal and sandstones;
Drill break at 2963m; circulate returns at 2964.2m;
" " " 2988m; " " " 2990m;
slow checks negative.

Corrected Hole Vol: 1541 bbls / Corrected Annulus Vol: 1278
Surface HHP: 1035 / Bit HHP per area: 4.77 /sq in of bit.