

GEMDAS LOGGING REPORT NO. 43

COMPANY AMOCO AUST. WELL TILANA No1
 DATE 22/10/85 TIME 05:00
 DEPTH 3605.5m (11829') LAST REPORT DEPTH 3538m (11607')
 RIG OPERATIONS DRILL 12 1/4" HOLE THROUGH VOLCANICS
 REPORT BY D. NEW. REPORT RECEIVED BY S. MAXWELL (OPERATOR)
SIGNED

DRILLING REPORT

Bit No.: NB#18 Type: SMITH F3 Size: 12 1/4 Jets: 3x14
 On Bit: Footage: 149m (489') Hours: 41.8 ROP: 3.6MHP 11.7FT/HR WOB: 45 RPM: 80-90
 Pump Press: 3010 SPM: 120 Torque: 3.5-7.5 TBR: 215300 CP I: \$ 1250 CP B: \$ 1561

HYDRAULICS REPORT

Mud Density In: 9.6 Mud Density Out: 9.6+ ECD: 9.74 PV/YP: 20/23
 Gels: _____ Salinity: _____ PPM Cl Solids: _____ %
 Hole Volume: 1796BBL Annular Volume: 1482BBL Tubing Volume: 200BBL Displaced Volume: 113BBL
 Carbide Lag—Calculated Lag: 167BBL (141STWS) Flowrate: 606 GPM
 Drillpipe Annular Vel (Max. Dia. Sec.): 45.5 FT/min Drillpipe Annular Vel (Open Hole): 118.9 FT/min
 Drill Collar Annular Vel (Open Hole): 172.7 FT/min Critical Vel: 429 FT/min
 Pressure Loss System: 1414PSI Pressure Loss Bit: 1596PSI % Pressure Loss: 53%
 Nozzel Vel: 431.5 FT/SEC Jet Impact Force: 1300 LBS HHP: 564.6 HP

PRESSURE PARAMETERS

Drilling Exponent: 1.4-2.1 AUG 1.8 Flowline Temperature: 71.5° C (MAX)
 Shale Density: _____ Shale Factor: _____
 Background Gas: 25cc (0.5%) Max. Formation Gas: 160 @ 3553m Trip Gas: - @ -
 Other Gas: CONNECTION GAS AT 3542m (16cc), 3551m (18cc), 3561m (44cc) AND 3571m (30cc)
 Fill: NIL Tight Hole: NIL
 Cavings: Est %: UP TO 80% COAL Average Size: BLOCKY-PLATT < 1cm sq.

ESTIMATED PORE AND FRACTURE PRESSURE

Kick Tolerance: 2.3 ppg Min. Estimated Fracture Pressure (Open Hole): 13 ppg
 Estimated Pore Pressure: 8.7 AT 3600m Min. Estimated Pore Pressure (Open Hole): 8.7 @ 3506
 Max. Estimated Pore Pressure (Open Hole): 9.4 ppg @ 3570m Estimated Fracture Pressure at TD: 15 ppg

Comments: DRILL 12 1/4" HOLE WITH NB#18, OCCASIONAL HIGH TORQUE. AT 3530m GET INCREASED GAS AND ROP DUE TO COALS. ESTIMATED PORE PRESSURE INCREASED TO 9.3-9.4 ppg EMW BETWEEN 3530m AND 3572m. TMON RETURNED TO NORMAL.

SURFACE HP = 1064 HP/SQ IN AT BIT = 4.79.

LITHOLOGY: VOLCANICS WITH INTERBEDDED COALS SILTSTONE AND SANDSTONE.

CORRECTED ANNULUS = 1649BBL (1396STWS); CORRECTED HOLE = 1963BBL