

GEMDAS LOGGING REPORT NO. 20

COMPANY AMOCO AUST. WELL TILANA No 1  
 DATE 29/9/85. TIME 05:00  
 DEPTH 7627' (2324.3m) LAST REPORT DEPTH 7227' (2203m)  
 RIG OPERATIONS WIPER TRIP  
 REPORT BY D. NEW REPORT RECEIVED BY J. GULLORY. (OPERATOR)  
SIGNED

## DRILLING REPORT

Bit No.: NBS# 12 Type: SMITH F3 Size: 12 1/4 Jets: 3x15  
 On Bit: Footage: 449 FT Hours: 22.7 HRS ROP: 19.6 FT/HR WOB: 30-40 RPM: 85  
 Pump Press: 2380 SPM: 121 Torque: 3-4.5 TBR: 113640 CP I: \$ 404 CP B: \$ 988

## HYDRAULICS REPORT

Mud Density In: 9.1 Mud Density Out: 9.2 ECD: 9.23 PV/YP: 20/18  
 Gels: \_\_\_\_\_ Salinity: \_\_\_\_\_ PPM Cl Solids: \_\_\_\_\_ %  
 Hole Volume: 1204 Annular Volume: 995 Tubing Volume: 126 BBL Displaced Volume: 83 BBL  
 Carbide Lag—Calculated Lag: 1725 HRS 20 BBL Flowrate: 618 GPM  
 Drillpipe Annular Vel (Max. Dia. Sec.): 46.4 FT/MIN Drillpipe Annular Vel (Open Hole): 121.1 FT/MIN  
 Drill Collar Annular Vel (Open Hole): 176 FT/MIN Critical Vel: 388 FT/MIN  
 Pressure Loss System: 1186 PSI Pressure Loss Bit: 1194 % Pressure Loss: 50%  
 Nozzel Vel: 383 FT/SEC Jet Impact Force: 1117 HHP: 430 HP

## PRESSURE PARAMETERS

Drilling Exponent: 0.8-1.9 Flowline Temperature: 45.5°C  
 Shale Density: \_\_\_\_\_ Shale Factor: \_\_\_\_\_  
 Background Gas: 0.1-0.5u Max. Formation Gas: 330u @ 7621 Trip Gas: \_\_\_\_\_ @ \_\_\_\_\_  
(0.002-0.01%) (6.6%) (2323m)  
 Other Gas: NIL  
 Fill: NIL Tight Hole: NIL  
 Cavings: Est %: UP TO 20% COAL Average Size: SMALL BLOCKY.

## ESTIMATED PORE AND FRACTURE PRESSURE

Kick Tolerance: 4.0 ppg Min. Estimated Fracture Pressure (Open Hole): 13 ppg  
 Estimated Pore Pressure: 8.7 Min. Estimated Pore Pressure (Open Hole): 8.7 @ SMOG  
 Max. Estimated Pore Pressure (Open Hole): 8.7 @ T.D. Estimated Fracture Pressure at TD: 15 ppg

Comments: DRILL 12 1/4" HOLE FLOW CHECK DRILLING BREAKS AT  
7548' (2300.6m) AND AT 7616' (2321m) C.R. AT 7557'  
(2303m). DRILL TO 2324m CR C.R. GAS INCREASES  
TO A MAX OF 330u (6.6%) (GAS FROM COALS).  
SURFACE HP = 858 HP AT BIT = 3.65 HP/SQ IN.  
1ST DRILL BREAK @ 7539' (2299m) - 7568' (2308m) - NO GAS  
2ND DRILL BREAK 7598' - 7627' (2316m - 2325m) MAX GAS  
33 330u 6.6% GAS FROM COAL  
C1 - C3 (TRACE L4)