

GEMDAS LOGGING REPORT NO. 45

COMPANY AMOCO AUST WELL TILAMA No1  
 DATE 24/10/85. TIME 05:00  
 DEPTH 3707m (12162') LAST REPORT DEPTH 3684m (12087')  
 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#19 Type: SMITH F2 Size: 12 1/4" Jets: 3x14  
 On Bit: Footage: 42 Hours: 4.9 ROP: 8.6 FT/HR 2.6 M/HR WOB: 40-45 RPM: 85-90  
 Pump Press: 3020 SPM: 121 Torque: 4-7 TBR: 25000 CP I: \$ 2050 CP B: \$ 4600

## HYDRAULICS REPORT

Mud Density In: 9.85 Mud Density Out: 9.9 ECD: 10.0 PV/YP: 23/24  
 Gels: \_\_\_\_\_ Salinity: \_\_\_\_\_ PPM Cl Solids: \_\_\_\_\_ %  
 Hole Volume: 1844 BBL Annular Volume: 1522 BBL Tubing Volume: 206 BBL Displaced Volume: 116 BBL  
 Carbide Lag—Calculated Lag: 109 BBL (923 STKS) Flowrate: 600 gpm.  
 Drillpipe Annular Vel (Max. Dia. Sec.): 45.1 FT/min Drillpipe Annular Vel (Open Hole): 117.8 FT/min  
 Drill Collar Annular Vel (Open Hole): 171.1 FT/min Critical Vel: 448.  
 Pressure Loss System: 1461 Pressure Loss Bit: 1609 psi % Pressure Loss: 53%  
 Nozzel Vel: 427.5 FT/SEC Jet Impact Force: 1311.5 LBS HHP: 564 HP.

## PRESSURE PARAMETERS

Drilling Exponent: 1.5-1.9 1.8 AVG. Flowline Temperature: 62 MAX AFTER TRIP.  
 Shale Density: \_\_\_\_\_ Shale Factor: \_\_\_\_\_  
 Background Gas: 4-Su Max. Formation Gas: 6u @ 3689m Trip Gas: 6Su @ 3694.3  
(0.09-0.1%) (0.12%) (1.3%) (12120')  
 Other Gas: NIL  
 Fill: NONE Tight Hole: NONE ON TRIP  
 Cavings: Est %: MINOR (410%) Average Size: SMALL, BLOCKY

## ESTIMATED PORE AND FRACTURE PRESSURE

Kick Tolerance: 2.2 ppg Min. Estimated Fracture Pressure (Open Hole): 13 ppg EMUW  
 Estimated Pore Pressure: 8.7 ppg EMUW Min. Estimated Pore Pressure (Open Hole): 8.7 @ SHOE  
 Max. Estimated Pore Pressure (Open Hole): 9.4 ppg @ 3670m Estimated Fracture Pressure at TD: 15.2 ppg

Comments: DRILL 12 1/4" HOLE TO 3694.3m (12120') CIRCULATE  
BOTTOMS UP PROP SCRUBBY (DOU=1 1/4 DEG.) POOM - NO  
HOLE PROBLEMS RIM WITH NB#19. CUT AND SLIP LINE AT  
SHOE RIM ROOM/WASH 66' TO BOTTOM DRILL AHEAD.  
SURFACE HP = 1058.9 HP HP SR AT BIT = 4.79.  
NB#18 DRILLED 780' (237.7m) IN 64.3 HRS ON BOTTOM  
AT AN AVERAGE ROP OF 12.1 FT/HR (3.7m/HR)  
CORRECTED <sup>ANNULAR</sup> VOL: 1631 BBL (13908 STKS)  
" HOLE " 1953 BBL (16536 STKS)