

GEMDAS LOGGING REPORT NO. 44

COMPANY AMOCO AUSTR. WELL TILANA No 1
 DATE 23/10/85 TIME _____
 DEPTH 3684m (12087') LAST REPORT DEPTH 3605.5m (11829')
 RIG OPERATIONS DRILL 12 1/4" HOLE THROUGH DOLORITE.
 REPORT BY D. NEW REPORT RECEIVED BY S. MAXWELL (OPERATOR)
SIGNED

DRILLING REPORT

Bit No.: N13H18 Type: SMITH F3 Size: ~~3 1/4~~ 12 1/4" Jets: 3x14
 On Bit: Footage: 747'(228') Hours: 6.9 HRS ROP: 3.7m/hr 12.1f/hr WOB: 40-47 RPM: 80-95
 Pump Press: 300 SPM: 117 Torque: 3-7.8 TBR: 318622 CP I: \$ 1250 CP B: \$ 1463

HYDRAULICS REPORT

Mud Density In: 9.8 Mud Density Out: 9.9 ECD: 9.94 PV/YP: 24/22
 Gels: _____ Salinity: _____ PPM Cl Solids: _____ %
 Hole Volume: 1834 Annular Volume: 1513 BBL Tubing Volume: 205 BBL Displaced Volume: 115 BBL
 Carbide Lag—Calculated Lag: 918 STHS (1109 BBL) Flowrate: 595 GPM
 Drillpipe Annular Vel (Max. Dia. Sec.): 44.7 FT/min Drillpipe Annular Vel (Open Hole): 116.6 FT/min
 Drill Collar Annular Vel (Open Hole): 169.5 FT/min Critical Vel: 419.6 FT/min
 Pressure Loss System: 1432 Pressure Loss Bit: 1568 psi % Pressure Loss: 52%
 Nozzel Vel: 423.3 FT/SEC Jet Impact Force: 1277.5 LBS HHP: 544 HP

PRESSURE PARAMETERS

Drilling Exponent: 1.5 - 2.1 AVE 1.75 Flowline Temperature: MAX 71 Now 65.0°C.
 Shale Density: 2 Shale Factor: _____
 Background Gas: 10 → 44 Max. Formation Gas: 174 @ 3612m Trip Gas: _____ @ _____
 Other Gas: NIL (0.2-0.08%) (0.34%)
 Fill: 1m ON CONNECTION Tight Hole: UP TO 80 LBS DRAG AND HIGH TORQUE ON
AT 3618m <10% CONNECTIONS AT 3618m, 3665m AND 3675m.
 Cavings: Est %: _____ Average Size: BLOCKY, SMALL.

ESTIMATED PORE AND FRACTURE PRESSURE

Kick Tolerance: 2.2 ppg Min. Estimated Fracture Pressure (Open Hole): 13 ppg EMW
 Estimated Pore Pressure: 8.7 Min. Estimated Pore Pressure (Open Hole): 8.7 @ 5MOB
 Max. Estimated Pore Pressure (Open Hole): 9.4 ppg @ 3670m Estimated Fracture Pressure at TD: 15.2 ppg

Comments: DRILL AHEAD. TIGHT HOLE ON CONNECTION AT 3617.9m
WITH UP TO 80 LBS DRAG. 1m FILL WHEN GET BACK TO
BOTTOM. FURTHER TIGHT HOLE ON CONNECTION AT 3665m WITH
UP TO 80 LBS DRAG AND HIGH TORQUE, PUMP HIGH VIS PILL WITH
NO GREAT INCREASE IN CUTTINGS ON BOTTOMS UP. MINOR
TIGHT HOLE ON CONNECTION AT 3674m. HOLE PROBLEMS
APPEAR TO BE DUE TO FRACTURED VOLCANICS CAULING.
 LITHOLOGY: VOLCANICS (DOLORITE BELOW 3651m)
 SURFACE HP: 1041 HP HP/ SQ FN AT BIT: 4.62 HP