



GEMDAS LOGGING REPORT NO. 42

COMPANY AMOCO AUST WELL TILANA No1
 DATE 21/10/85 TIME 05:00
 DEPTH 3538m (11607') LAST REPORT DEPTH 3463.5m (11363')
 RIG OPERATIONS DRILL 12 1/4" HOLE THROUGH VOLCANICS AND BASALT
 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: 81m/267' Hours: 20.4 ROP: 3.9m/hr 13.1m/hr MOB: 45-47 RPM: 90
 Pump Press: 3000 SPM: 117 Torque: 3.1-7.8 TBR: 104150 CP I: \$ 2100 CP B: \$ 1554

HYDRAULICS REPORT

Mud Density In: 9.6 Mud Density Out: 9.6+ ECD: 9.8 PV/YP: 30/28
 Gels: _____ Salinity: _____ PPM Cl Solids: _____ %
 Hole Volume: 1763 BBL Annular Volume: 1454 BBL Tubing Volume: 196 BBL Displaced Volume: 112 BBL
 Carbide Lag—Calculated Lag: 13845ths 164 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: 503.7 FT/min
 Pressure Loss System: 1649 psi Pressure Loss Bit: 1541 psi % Pressure Loss: 51%
 Nozzel Vel: 423 FT/sec Jet Impact Force: 1255.8 LBS HHP: 535 HP.

PRESSURE PARAMETERS

Drilling Exponent: 1.4 - 2.1 AUG ~ 1.85 Flowline Temperature: 69°F
 Shale Density: _____ Shale Factor: _____
 Background Gas: 2-4u Max. Formation Gas: 56u @ 3474m Trip Gas: _____ @ _____
(0.04-0.08%) (1.12%) (11398')
 Other Gas: NIL
 Fill: NIL Tight Hole: FRACTURED (WEATHERED?) BASALT CAUSING HIGH TORQUE
 Cavings: Est %: MINOR (<5%) Average Size: OCCASIONALLY UP TO 2cm AND SPLINTERY.

ESTIMATED PORE AND FRACTURE PRESSURE

Kick Tolerance: 2.30 ppg. Min. Estimated Fracture Pressure (Open Hole): 13 ppg
 Estimated Pore Pressure: 8.7 ppg Min. Estimated Pore Pressure (Open Hole): 8.7 @ SM05
 Max. Estimated Pore Pressure (Open Hole): 8.7 ppg @ T-D Estimated Fracture Pressure at TD: 15 ppg.

Comments: DRILL 12 1/4" HOLE. FRACTURED (?) BASALT OCCASIONALLY CAUSING HIGH TORQUE.

SURFACE HP = 1041.4
HP SQ IN = 4.54

LITHOLOGY: VOLCANICS (BASALT) WITH OCCASIONAL MINOR SILTSTONE/COAL "INTERBEDS".

CORRECTED HOLE VOL: 1926 BBL CORRECTED ANNULAR VOL: 1618 BBL