



329367

GEMDAS LOGGING REPORT NO. 2

COMPANY Amoco AUSTRALIA WELL TILANA - 1
 DATE 11th SEP 185 TIME 0500 hrs.
 DEPTH 1070.4m (3512') LAST REPORT DEPTH 465.7m (1528')
 RIG OPERATIONS DRILLING AHEAD THROUGH CLAYSTONE.
 REPORT BY J. STRAUTINS REPORT RECEIVED BY S. MAXWELL (OPERATOR)
SIGNED

DRILLING REPORT

Bit No.: NB 3 Type: SMITH SDT Size: 12 1/4" Jets: 15, 15, 18.
 On Bit: Footage: 652.2(2140') Hours: 13.7 ROP: 65-120 ft/hr. WOB: 17-20 klb RPM: 100
 Pump Press: 2400 psi SPM: 150 Torque: 1.5-2.2 kftlb TBR: 75,000 CP I: \$ 136 CP B: \$ 115

HYDRAULICS REPORT

Mud Density In: 8.6 ppq Mud Density Out: 8.8 ppq ECD: 9.0 ppq PV/YP: 8/18
 Gels: 12/22 Salinity: 11,500 PPM Cl Solids: 4 %
 Hole Volume: bbbl Annular Volume: bbbl Tubing Volume: 52 bbl Displaced Volume: 52 bbl
 Carbide Lag—Calculated Lag: +300 stks 13" avg. hole. Flowrate: 764 gpm.
 Drillpipe Annular Vel (Max. Dia. Sec.): 57 ft/min Drillpipe Annular Vel (Open Hole): 150 ft/min
 Drill Collar Annular Vel (Open Hole): 217 ft/min Critical Vel: 381 ft/min
 Pressure Loss System: 1060 psi Pressure Loss Bit: 1340 psi % Pressure Loss: 68
 Nozzel Vel: 413 ft/sec Jet Impact Force: 1436 lbs HHP: 597 hp

PRESSURE PARAMETERS

Drilling Exponent: 1.01 @ 88 ft/hr. Flowline Temperature: 33°C (91°F).
 Shale Density: - Shale Factor: -
 Background Gas: 3-40 Max. Formation Gas: 5 @ 3199' (975m). Trip Gas: - @ -
 Other Gas: -
 Fill: - Tight Hole: -
 Cavings: Est %: <20% Average Size: 3x3x4 mm³

ESTIMATED PORE AND FRACTURE PRESSURE

Kick Tolerance: 2.6/11.2 Min. Estimated Fracture Pressure (Open Hole): 15.3 PPG @ SHOE.
 Estimated Pore Pressure: 8.7 PPG Min. Estimated Pore Pressure (Open Hole): 8.7 PPG @ -
 Max. Estimated Pore Pressure (Open Hole): 8.7 PPG @ TD Estimated Fracture Pressure at TD: 17 PPG.

Comments: DRILL 465.7 - 586.1 m (1528 - 1923 ft). Take survey (3/4°).
DRILL 586.1 - 734.2 m (1923 - 2409 ft). Pump hi-vis pill. Survey (1/2°)
DRILL 734.2 - 891.8 m (2409 - 2926 ft). Survey (1/2°).
DRILL 891.8 - 1049.2 m (2926 - 3442 ft). Survey
DRILL AHEAD.

LITHOLOGY 465.7 - 800 (1528 - 2607') Calcarenite
800 - (2607 -) Claystone, minor Calcarenite.