

GEMDAS LOGGING REPORT NO. 8

COMPANY AMOCO AUSTRALIA WELL TILANA-1
 DATE 17th SEPT 1985 TIME 0500hrs
 DEPTH 1661.7m (5452') LAST REPORT DEPTH 1661.7m (5452')
 RIG OPERATIONS MAKE-UP CASING RUNNING TOOLS
 REPORT BY J. STRAUTINS REPORT RECEIVED BY J. SULLORY (OPERATOR)
SIGNED

DRILLING REPORT

Bit No.: NB 5 Type: SMITH SDSHC Size: 17 1/2" Jets: 12, 3 X 15
 On Bit: Footage: 4080' Hours: 30.2 ROP: 135 ft/hr avg WOB: 5-35 RPM: 85-130
 Pump Press: 2830 psi SPM: 142 Torque: 2-8 kftlb TBR: 219,800 CP I: \$ 500 CP B: \$ 128

HYDRAULICS REPORT

Mud Density In: 9.1 ppG Mud Density Out: 9.2 ppG ECD: 9.3 ppG PV/YP: 12/26
 Gels: 7/32 Salinity: 9800 PPM Cl Solids: 7 %
 Hole Volume: 1679 bbl Annular Volume: 1526 bbl Tubing Volume: 89 bbl Displaced Volume: 64 bbl
 Carbide Lag—Calculated Lag: +4800 stks min. Flowrate: 720 gpm
 Drillpipe Annular Vel (Max. Dia. Sec.): 54 ft/min Drillpipe Annular Vel (Open Hole): 63 ft/min
 Drill Collar Annular Vel (Open Hole): 82 ft/min Critical Vel: 398 ft/min
 Pressure Loss System: 1020 psi Pressure Loss Bit: 1111 psi % Pressure Loss: 52 %
 Nozzel Vel: 367 ft/sec Jet Impact Force: 1261 lbs HHP: 467 hp

PRESSURE PARAMETERS

Drilling Exponent: - Flowline Temperature: 48°C
 Shale Density: - Shale Factor: -
 Background Gas: 5-7 u Max. Formation Gas: 33 u @ 5130' Trip Gas: - @ -
 Other Gas: Gas steadily increased (from 5100') to max @ 5130'
 Fill: - Tight Hole: 1900-3677' (579-1120m); 3677-5360'
 Cavings: Est %: ~20% Average Size: 3x4x4mm³ (1120-1634m)

ESTIMATED PORE AND FRACTURE PRESSURE

Kick Tolerance: 1.5/10.6 ppG 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 @ shoe
 Max. Estimated Pore Pressure (Open Hole): 8.7 ppG @ TD Estimated Fracture Pressure at TD: 19.5 ppG

Comments: OPEN HOLE FROM 4648-5452'. CARBIDE IN AT TD. CIRCULATE THEORETICAL DOWN 750 STKS. THEOR. ANNULUS 12923 STKS. TOTAL 13674 PUMP 19163 STKS WITH NO CARBIDE DETECTED. MINIMUM AVERAGE HOLE SIZE IS 21.7". DROP MULTI-SHOT SURVEY & POOH. M/U CASINGS TOOLS.

ONEPULL 30-80 klb ON STANDS 2-19 (5360'-3677')

" 10-50 klb ON STANDS 20-38 (3677'-1900')

NOTE: MUD LOSSES WHILE DRILLING 4648-5452' STEADY AT ~10 BBL/HR PROBABLY DUE TO SOLIDS CONTROL EQUIPMENT.