



# GEMDAS LOGGING REPORT NO. 7

COMPANY AMOCO AUSTR. WELL TILANA - 1  
 DATE 16th SEPT '85 TIME 0500 hrs.  
 DEPTH 1661.7m (5452') LAST REPORT DEPTH 1661.7m (5452')  
 RIG OPERATIONS CONTINUE OPENING 12 1/4" TO 17 1/2" @ 1416.6m (4648')  
 REPORT BY J. STRAUTINS REPORT RECEIVED BY J. GUILLORY (OPERATOR)

## DRILLING REPORT

Bit No.: NB5 Type: SMITH SDSH Size: 17 1/2" Jets: 12, 3x15  
 On Bit: Footage: 3276' Hours: 20.3 ROP: 5-200 ft/hr. WOB: 10-40 RPM: 84-130  
 Pump Press: 1830 psi SPM: 142 Torque: 0.9-3 TBR: 145,000 CP I: \$ 336 CP B: \$ 103

## HYDRAULICS REPORT

Mud Density In: 8.9 ppg Mud Density Out: 8.9 ppg ECD: 9.1 ppg PV/YP: 9/18  
 Gels: 5/22 Salinity: 10,000 PPM Cl Solids: 6 %  
 Hole Volume: 1424 bbl Annular Volume: 1293 bbl Tubing Volume: 73 bbl Displaced Volume: 58 bbl  
 Carbide Lag—Calculated Lag: Assumed in-gauge for volumes Flowrate: 726 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: 319 ft/min  
 Pressure Loss System: 742 psi Pressure Loss Bit: 1088 psi % Pressure Loss: 59 %  
 Nozzel Vel: 370 ft/sec. Jet Impact Force: 1235 lbs HHP: 460 hp

## PRESSURE PARAMETERS

Drilling Exponent: n/a Flowline Temperature: 47°C  
 Shale Density: - Shale Factor: -  
 Background Gas: 5 Max. Formation Gas: 20 @ 4040' Trip Gas: - @ -  
 Other Gas: -  
 Fill: - Tight Hole: -  
 Cavings: Est %: - Average Size: -

## ESTIMATED PORE AND FRACTURE PRESSURE

Kick Tolerance: 1.5 / 10.7 ppg Min. Estimated Fracture Pressure (Open Hole): 15.3 ppg csg shoe  
 Estimated Pore Pressure: 8.7 ppg Min. Estimated Pore Pressure (Open Hole): 8.7 ppg @ csg shoe  
 Max. Estimated Pore Pressure (Open Hole): 8.7 ppg @ TD. Estimated Fracture Pressure at TD: 19.5 ppg

Comments: CONTINUE OPENING 12 1/4" HOLE TO 17 1/2" FROM 3015 - 4648'. VERY VARIABLE TORQUE (HIGH WITH VOLCANICS)

NOTE: SOLIDS CONTROL EQPT. LOSSES 10-15 BBL/HR.	Total cumulative loss
NOTE: MUD LOSSES 4350 - 4380'	25 bbls/hr 25 bbls
4380 - 4430'	20 bbls/hr 45
4410 - 4510'	6 bbls/hr 55
4510 - 4555'	15 bbls/hr 97
4555 - 4637'	10 bbls/hr 133 bbls / 10 hrs.
4637 - 4648'	STEADY.