



## GEMDAS LOGGING REPORT NO. 15

COMPANY AMOCO MUST WELL TILANA No1  
 DATE 24/9/85 TIME 05:00 HRS  
 DEPTH 5850' (1783m) LAST REPORT DEPTH 5461' (1664.5m)  
 RIG OPERATIONS DRILLING 12 1/4" HOLE  
 REPORT BY D. NEW REPORT RECEIVED BY J. GUILLORY (OPERATOR)  
 SIGNED

## DRILLING REPORT

Bit No.: NB39 Type: SMITH SDGH Size: 12 1/4" Jets: 3 x 15  
 On Bit: Footage: 331' Hours: 7.0 ROP: 47.3 (AVG) WOB: 20443 RPM: 100  
 Pump Press: 2000 SPM: 120 Torque: 1.5-2.5 TBR: 38000 CP I: \$ 360 CP B: \$ 442

## HYDRAULICS REPORT

Mud Density In: 9.0 Mud Density Out: 9.2 ECD: 9.2 PV/YP: 14/12  
 Gels: \_\_\_\_\_ Salinity: \_\_\_\_\_ PPM Cl Solids: \_\_\_\_\_ %  
 Hole Volume: 922 BBL Annular Volume: 764 BBL Tubing Volume: 96 BBL Displaced Volume: 62 BBL  
 Carbide Lag—Calculated Lag: IN GAUGE Flowrate: 618 GPM  
 Drillpipe Annular Vel (Max. Dia. Sec.): 46<sup>46</sup> FT/MIN Drillpipe Annular Vel (Open Hole): 121 FT/MIN  
 Drill Collar Annular Vel (Open Hole): 176 FT/MIN Critical Vel: 290 FT/MIN  
 Pressure Loss System: 821 psi Pressure Loss Bit: 1179 % Pressure Loss: 60  
 Nozzel Vel: 383 FT/SEC Jet Impact Force: 1103 LBS HHP: 425.2 HP.

## PRESSURE PARAMETERS

Drilling Exponent: 0.8-1.35 Avg 1.2 Flowline Temperature: 37.8°C  
 Shale Density: \_\_\_\_\_ Shale Factor: \_\_\_\_\_  
 Background Gas: 1.24 Max. Formation Gas: 114 (122%) @ 5613' (1712m) Trip Gas: 0 @ \_\_\_\_\_  
 Other Gas: NIL  
 Fill: NIL Tight Hole: NIL  
 Cavings: Est %: MINOR Average Size: SMALL, EQUANT

## ESTIMATED PORE AND FRACTURE PRESSURE

Kick Tolerance: 5 ppg Min. Estimated Fracture Pressure (Open Hole): 13 ppg (S/S)  
 Estimated Pore Pressure: 8.7 ppg Min. Estimated Pore Pressure (Open Hole): 8.7 @ SHOES  
 Max. Estimated Pore Pressure (Open Hole): 8.7 ppg @ \_\_\_\_\_ Estimated Fracture Pressure at TD: 146

Comments: RIM AND CUT CORE No1 5461-5519' (1664.5-1682.2m)  
REC 33' (57%) POOH WITH CORE BARREL. RIM WITH NB39  
SMITH SDGH REAM RAT HOLE CIRCULATE BOTTOMS UP  
DRILL AHEAD FROM 5519' (1682.2m)

NOTE: CARBIDE DATA INDICATES IN GAUGE HOLE.

PRESSURE TRENDS NORMAL

SURFACE HP = 721 HP.

HP/SQ" = 3.61 HP/SQW.