

DEVON ENERGY

Operator: DEVON	Well Name: MESCALERO RIDGE UNIT
Project ID:	Location: LEA CO., NM

Design Parameters:

Mud weight (10.00 ppg) : 0.519 psi/ft
 Shut in surface pressure : 2643 psi
 Internal gradient (burst) : 0.100 psi/ft
 Annular gradient (burst) : 0.000 psi/ft
 Tensile load is determined using air weight
 Service rating is "Sweet"

Design Factors:

Collapse : 1.125
 Burst : 1.00
 8 Round : 1.80 (J)
 Buttress : 9.90 (J)
 Body Yield : 1.50 (B)
 Overpull : 0 lbs.

Length (feet)		Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost	
1 6,300		5-1/2"	15.50	J-55	ST&C	6,300	4.825		
	Collapse			Burst Load (psi)	Min Int Strgth (psi)	Yield S.F.	Tension		
	Load (psi)	Strgth (psi)	S.F.				Load (kips)	Strgth (kips)	S.F.
1	3273	4040	1.234	3273	4810	1.47	97.65	202	2.07 J

Prepared by : E. BUTTROSS, Oklahoma City, OK

Date : 06-03-1995

Remarks :

Minimum segment length for the 6,300 foot well is 6,300 feet.

The mud gradient and bottom hole pressures (for burst) are 0.519 psi/ft and 3,273 psi, respectively.

NOTE: The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser. Costs for this design are based on a 1990 pricing model. (Version 1.0G)