

DEVON ENERGY

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

Design Parameters:

Mud weight (9.00 ppg) : 0.468 psi/ft
 Shut in surface pressure : 629 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 : 1.60 (J)
 Body Yield : 1.50 (B)
 Overpull : 0 lbs.

Length (feet)			Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost
1	1,500	8-5/8"	24.00	J-55	ST&C	1,500	7.972		
	Collapse Load Strgth S.F. (psi) (psi)			Burst Load (psi)	Min Int Strgth (psi)	Yield S.F.	Tension Load Strgth S.F. (kips) (kips)		
1	701	1370	1.954	779	2950	3.79	36.00	244	6.78 J

Prepared by : E. BUTTROSS, Oklahoma City, OK

Date :

Remarks :

Minimum segment length for the 1,500 foot well is 1,500 feet.

Surface/Intermediate string:

Next string will set at 1,500 ft. with 10.00 ppg mud (pore pressure of 779

psi.) The frac gradient of 1.000 at the casing seat results in an injection

pressure of 1,500 psi. Effective BHP (for burst) is 779 psi.

The minimum specified drift diameter is 7.875 in.

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)