

DEVON ENERGY

Operator: DEVON ENERGY CORP	Well Name: EAST SHUGART UNIT
Project ID:	Location:

Design Parameters:

Mud weight (10.10 ppg) : 0.525 psi/ft
 Shut in surface pressure : 1911 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	4,500	5-1/2"	15.50	J-55	ST&C	4,500	4.825		
	Load (psi)	Collapse Strgth (psi)	S.F.	Burst Load (psi)	Min Int Strgth (psi)	Yield S.F.	Tension Load (kips)	Strgth (kips)	S.F.
1	2361	4040	1.711	2361	4810	2.04	69.75	202	2.90 J

Prepared by : , Oklahoma City, OK
 Date : 08-09-1993
 Remarks :

Minimum segment length for the 4,500 foot well is 1,500 feet.

The mud gradient and bottom hole pressures (for burst) are 0.525 psi/ft and 2,361 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)