

Well name: **Shugart 25 Federal Com #1**
 Operator: **Devon SFS Operating, Inc.**
 String type: **Intermediate**
 Location: **Eddy County, NM**

Design parameters:**Collapse**

Mud weight: 9.000 ppg
 Design is based on evacuated pipe.

Minimum design factors:**Collapse:**

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
 Surface temperature: 75 °F
 Bottom hole temperature: 111 °F
 Temperature gradient: 0.80 °F/100ft
 Minimum section length: 650 ft

Burst

Max anticipated surface pressure: 2,127 psi
 Internal gradient: 0.000 psi/ft
 Calculated BHP: 2,127 psi
 Annular backup: 10.20 ppg

Tension:

8 Round STC: 1.80 (J)
 8 Round LTC: 1.80 (J)
 Buttress: 1.60 (J)
 Premium: 1.50 (J)
 Body yield: 1.60 (B)

Non-directional string.

Tension is based on air weight.
 Neutral point: 3,942 ft

Re subsequent strings:

Next setting depth: 12,500 ft
 Next mud weight: 8.000 ppg
 Next setting BHP: 5,195 psi
 Fracture mud wt: 9.000 ppg
 Fracture depth: 4,550 ft
 Injection pressure: 2,127 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	4550	8.625	32.00	J-55	ST&C	4550	4550	7.875	36306
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	2127	2530	1.19	2127	3930	1.85	145.6	372	2.55 J

Prepared by: TRR
 by: Devon Energy

Date: September 21, 2000
 Oklahoma City, Oklahoma

Remarks:

Collapse is based on a vertical depth of 4550 ft, a mud weight of 9 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.