

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

Design parameters:**Collapse**

Mud weight: 8.400 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: 80 °F
Temperature gradient: 0.80 °F/100ft
Minimum section length: 650 ft

Burst

Max anticipated surface pressure: 371 psi
Internal gradient: 0.000 psi/ft
Calculated BHP 371 psi

Annular backup: 8.40 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: 570 ft

Re subsequent strings:

Next setting depth: 4,550 ft
Next mud weight: 9.800 ppg
Next setting BHP: 2,316 psi
Fracture mud wt: 11.000 ppg
Fracture depth: 650 ft
Injection pressure 371 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	650	13.375	48.00	H-40	ST&C	650	650	12.59	8061

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	284	740	2.61	371	1730	4.66	31.2	322	10.32 J

Prepared TRR
by: Devon Energy

Date: September 21, 2000
Oklahoma City, Oklahoma

Remarks:

Collapse is based on a vertical depth of 650 ft, a mud weight of 8.4 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.