

Well name: **Old Ranch Knoll 8-6**
 Operator: **Devon-SFS Operating, Inc.**
 String type: **Surface**
 Location: **BHL: 1905' FNL & 660' FEL Sec. 8, T22S, R24E**

Design parameters:

Collapse

Mud weight: 8.500 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: 89 °F
 Temperature gradient: 0.80 °F/100ft
 Minimum section length: 1,000 ft
 Minimum Drift: 8.750 In

Burst

Max anticipated surface pressure: 1,029 psi
 Internal gradient: 0.000 psi/ft
 Calculated BHP: 1,029 psi
 Annular backup: 8.50 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: 1,575 ft

Re subsequent strings:

Next setting depth: 8,500 ft
 Next mud weight: 9.000 ppg
 Next setting BHP: 3,974 psi
 Fracture mud wt: 11,000 ppg
 Fracture depth: 1,800 ft
 Injection pressure: 1,029 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	1800	9.625	32.30	H-40	ST&C	1800	1800	8.876	14884
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	795	1370	1.72	1029	2270	2.21	58.1	254	4.37 J

Prepared by: W. M. Frank
 by: Devon Energy

Phone: (405) 552-4595
 FAX: (405) 552-4621

Date: January 15, 2002
 Oklahoma City, Oklahoma

Remarks:

Collapse is based on a vertical depth of 1800 ft, a mud weight of 8.5 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.