

Well name:	<b>RHC 34-4</b>
Operator:	<b>Devon-SFS Operating, Inc.</b>
String type:	<b>Production</b>
Location:	<b>BHL 1,980' FSL &amp; 2,310' FWL, Sec. 34, T21S, R24E</b>

**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? Yes  
Surface temperature: 75 °F  
Bottom hole temperature: 143 °F  
Temperature gradient: 0.80 °F/100ft  
Minimum section length: 1,000 ft

**Burst**

Max anticipated surface pressure: 3,974 psi  
Internal gradient: 0.000 psi/ft  
Calculated BHP 3,974 psi

Annular backup: 9.00 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)

**Directional Info - Build & Hold**

Kick-off point 6000 ft  
Departure at shoe: 620 ft  
Maximum dogleg: 1.5 °/100ft  
Inclination at shoe: 18.17 °

Tension is based on air weight.  
Neutral point: 7,369 ft

Estimated cost: 99,967 (\$)

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 (\$)
3	500	7	26.00	L-80	FL-4S	500	500	6.151	11530
2	6500	7	23.00	L-80	FL-4S	6989	7000	6.25	69927
1	1589	7	23.00	HCL-80	FL-4S	8500	8589	6.25	18510

  

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
3	234	4741	20.28	3974	7240	1.82	197	451	2.29 J
2	3267	3721	1.14	3740	6340	1.70	184	332	1.80 J
1	3974	5650	1.42	707	6340	8.97	34.8	349	10.04 J

Prepared W.M. Frank  
by: Devon Energy

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

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Oklahoma City, Oklahoma

**Remarks:**

Collapse is based on a vertical depth of 8500 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.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

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