

Well name: **Rifleman 6 "H" Federal #2**
 Operator: **Devon - SFS Operating, Inc.**
 String type: **Surface**
 Location: **Section 6, T22S, R26E, Eddy County, NM**

Design parameters:

Collapse

Mud weight: 8.800 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: 79 °F
 Temperature gradient: 0.80 °F/100ft
 Minimum section length: 500 ft
 Minimum Drift: 2.250 in

Burst

Max anticipated surface pressure: 286 psi
 Internal gradient: 0.000 psi/ft
 Calculated BHP 286 psi
 Annular backup: 8.80 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)

Tension is based on air weight.
 Neutral point: 435 ft

Non-directional string.

Re subsequent strings:

Next setting depth: 2,400 ft
 Next mud weight: 9.000 ppg
 Next setting BHP: 1,122 psi
 Fracture mud wt: 11.000 ppg
 Fracture depth: 500 ft
 Injection pressure 286 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	500	13.375	48.00	H-40	ST&C	500	500	12.59	6197

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	228	740	3.24	286	1730	6.05	24	322	13.42 J

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Remarks:

Collapse is based on a vertical depth of 500 ft, a mud weight of 8.8 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.