

Well name: **Will 7 "A" Fee #1**
 Operator: **Devon Energy Production Company, L.P.**
 String type: **Surface**
 Location: **Sec. 7, T23S, R28E, Eddy Co. 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: 78 °F
 Temperature gradient: 0.80 °F/100ft
 Minimum section length: 400 ft
 Minimum Drift: 2.250 in

Burst

Max anticipated surface pressure: 229 psi
 Internal gradient: 0.000 psi/ft
 Calculated BHP 229 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)

Tension is based on air weight.
 Neutral point: 351 ft

Non-directional string.

Re subsequent strings:

Next setting depth: 2,500 ft
 Next mud weight: 8.400 ppg
 Next setting BHP: 1,091 psi
 Fracture mud wt: 11.000 ppg
 Fracture depth: 400 ft
 Injection pressure 229 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	400	13.375	48.00	H-40	ST&C	400	400	12.59	4958
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	174	740	4.24	229	1730	7.57	19.2	322	16.78 J

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 Oklahoma City, Oklahoma

Remarks:

Collapse is based on a vertical depth of 400 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.

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