

Well name:	Will 7 "A" Fee #1
Operator:	Devon Energy Production Company, L.P.
String type:	Intermediate
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: 95 °F
Temperature gradient: 0.80 °F/100ft
Minimum section length: 400 ft
Minimum Drift: 8.750 in

Burst

Max anticipated surface pressure: 1,429 psi
Internal gradient: 0.000 psi/ft
Calculated BHP 1,429 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: 2,189 ft

Re subsequent strings:

Next setting depth: 9,500 ft
Next mud weight: 9.600 ppg
Next setting BHP: 4,738 psi
Fracture mud wt: 11.000 ppg
Fracture depth: 2,500 ft
Injection pressure 1,429 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	2500	9.625	36.00	J-55	LT&C	2500	2500	8.796	20442

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	1091	2020	1.85	1429	3520	2.46	90	453	5.03 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 2500 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.