

Well name: **Campana 2 "M" State #1**
 Operator: **Devon Energy Production Company, L.P.**
 String type: **Production**
 Location: **Section 2, T24S, R26E, Eddy County, NM**

Design parameters:

Collapse

Mud weight: 6.500 ppg
 Design is based on evacuated pipe.

Minimum design factors:

Collapse:

Design factor 1.125

Environment:

H2S considered? No
 Surface temperature: 75 °F
 Bottom hole temperature: 171 °F
 Temperature gradient: 0.80 °F/100ft
 Minimum section length: 450 ft

Surface pressure: 1,210 psi

Burst:

Design factor 1.00

Burst

Max anticipated surface pressure: 4,052 psi
 Internal gradient: 0.000 psi/ft
 Calculated BHP 4,052 psi

Annular backup: 9.60 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.

Packer fluid details:
 Fluid density: 8.600 ppg
 Packer depth: 11,500 ft

Tension is based on air weight.
 Neutral point: 10,817 ft

Estimated cost: 67,857 (\$)

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 (\$)
4	1000	5.5	17.00	L-80	Buttress	1000	1000	4.767	6778
3	3000	5.5	17.00	L-80	LT&C	4000	4000	4.767	19008
2	3500	5.5	17.00	J-55	LT&C	7500	7500	4.767	13560
1	4500	5.5	17.00	L-80	LT&C	12000	12000	4.767	28511

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
4	1548	4831	3.12	4052	7740	1.91	204	397	1.95 B
3	2561	5376	2.10	4000	7740	1.94	187	338	1.81 J
2	3742	4369	1.17	3844	5320	1.38	136	247	1.82 J
1	5262	6290	1.20	3662	7740	2.11	76.5	338	4.42 J

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 Oklahoma City, Oklahoma

Remarks:

Collapse is based on a vertical depth of 12000 ft, a mud weight of 6.5 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.

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