

Well name: **Avalon 32-2**
 Operator: **Devon Energy Production Company L.P.**
 String type: **Production**
 Location: **Section 32, T20S, R27E**

Design parameters:**Collapse**

Mud weight: 7.000 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: 163 °F
 Temperature gradient: 0.80 °F/100ft
 Minimum section length: 450 ft

Burst

Max anticipated surface pressure: 4,000 psi
 Internal gradient: 0.000 psi/ft
 Calculated BHP 4,000 psi
 Annular backup: 9.60 ppg

Packer fluid details:
 Fluid density: 8.600 ppg
 Packer depth: 10,600 ft

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)
 Min. Overpull 25.0 kips
 Tension is based on air weight.
 Neutral point: 9,889 ft

Non-directional string.

Estimated cost: 53,147 (\$)

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	3500	5.5	17.00	L-80	LT&C	3500	3500	4.767	22176
2	5900	5.5	15.50	J-55	LT&C	9400	9400	4.825	20833
1	1600	5.5	17.00	L-80	LT&C	11000	11000	4.767	10138

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	1273	5534	4.35	4000	7740	1.93	178.1	338	1.90 J
2	3418	3903	1.14	3818	4810	1.26	118.7	217	1.83 J
1	4000	6290	1.57	3512	7740	2.20	27.2	338	12.43 J

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 Oklahoma City, Oklahoma

Remarks:

Collapse is based on a vertical depth of 11000 ft, a mud weight of 7 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.