

Well name: **Jones Canyon 4-7**  
 Operator: **Devon-SFS Operating Inc.**  
 String type: **Production**  
 Location: **BHL 660' FNL & 660' FEL, Sec. 4, T22S, R24E**

**Design parameters:****Collapse**

Mud weight: 9.000 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: 143 °F  
 Temperature gradient: 0.80 °F/100ft  
 Minimum section length: 1,000 ft

**Burst**

Max anticipated surface pressure: 3,974 psi  
 Internal gradient: 0.000 psi/ft  
 Calculated BHP: 3,974 psi  
 Annular backup: 9.00 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)

**Directional Info - Build & Hold**

Kick-off point: 5700 ft  
 Departure at shoe: 1139 ft  
 Maximum dogleg: 1.5 °/100ft  
 Inclination at shoe: 36.44 °

Tension is based on air weight.  
 Neutral point: 7,407 ft

Estimated cost: 63,630 (\$)

| 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       | 1000                | 7         | 23.00                   | L-80   | LT&C       | 1000                 | 1000                | 6.25                | 8969           |
| 2       | 4700                | 7         | 23.00                   | J-55   | LT&C       | 5700                 | 5700                | 6.25                | 24661          |
| 1       | 3090                | 7         | 23.00                   | HCL-80 | LT&C       | 8500                 | 8790                | 6.25                | 30000          |

  

| Run Seq | Collapse Load (psi) | Collapse Strength (psi) | Collapse Design Factor | Burst Load (psi) | Burst Strength (psi) | Burst Design Factor | Tension Load (klps) | Tension Strength (klps) | Tension Design Factor |
|---------|---------------------|-------------------------|------------------------|------------------|----------------------|---------------------|---------------------|-------------------------|-----------------------|
| 3       | 468                 | 3315                    | 7.09                   | 3974             | 6340                 | 1.60                | 195.5               | 435                     | 2.22 J                |
| 2       | 2665                | 3073                    | 1.15                   | 3507             | 4360                 | 1.24                | 172.5               | 313                     | 1.81 J                |
| 1       | 3974                | 5650                    | 1.42                   | 1309             | 6340                 | 4.84                | 64.4                | 485                     | 7.53 J                |

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 Oklahoma City, Oklahoma

**Remarks:**

Collapse is based on a vertical depth of 8500 ft, a mud weight of 9 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.

Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a

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