Characteristics of Reservoir Depletion / Build Up

Key Parameters: $C_r$, Aquifer, $Q_o$ (including leakage, if any)

Assumptions:
- $C_r$: $12 \times 10^6$ psia$^{-1}$ [μsips]
- Aquifer: $3.8$ reservoir oil volume
- $Q_o$: $35$ mbd

Sensitivities:
- $C_r$: $-200$ psia, $+100$ psia [6, 18 μsips]
- Aquifer: $-800$ psia, $+100$ psia [None, 14x]
- $Q_o$: $-350$ psia [60 mbd]

Final M56E Pressure: $9,350$ (lowest sensitivity) - $11,350 - 11,600$ psia

S.I. Bottomhole (and hence tubing head) pressure will start at $1,500 - 3,000$ psia below this (but 90% of this difference will disappear in 6 hours)