$$P_{sfs} = (513.2 \text{ psia})\, e^{\frac{0.131}{0.91}} = 592.7 \text{ psia}$$

$$P_{sfs} = 592.7 \text{ psia @ } 5{,}570'$$

Common datum assumed to be @ 6376' ∴ Blinebry zone SBHP needs to be adjusted 806'.

$$\text{BHT @ } 6376' = 74°F + 6376' \left(\frac{0.4°F}{100'}\right) = 100°F$$

$$\bar{T} = \frac{96°F + 100°F}{2} + 460°R = 558°F$$

$$C = \frac{(0.700)\ (806')}{(53.34)\ (558\ R)} = 0.019$$

Assume P @ 6376' = 650 psia $\quad \bar{P} = \frac{650 \text{ psia} + 592.7 \text{ psia}}{2} = 621.4 \text{ psia}$

$$\bar{Z} = 0.890$$

$$P \text{ @ } 6376' = (592.7 \text{ psia})\, e^{\frac{0.019}{0.890}} = 605.5 \text{ psia}$$

$$\bar{P} = \frac{605.5 \text{ psia} + 592.7 \text{ psia}}{2} = 599.1 \text{ psia}$$

$$\bar{Z} = 0.890$$

$$P \text{ @ } 6376' = (592.7 \text{ psia})\, e^{\frac{0.019}{0.890}} = 599.1 \text{ psia}$$

P @ 6376' = 599.1 psia adjusted to common datum of 6268'

Drinkard Zone SBHP = 502.1 psia @ 6376'
Blinebry Zone SBHP = 599.1 psia @ 6376'

50% of high press. zone (Blinebry) = 299.6 psia

Since low press. zone (502.1 psia) is greater than 50% of high press. zone (599.1 psia) no cross flow problem should exist.