Gas Gradient: $P = P_{SF}\left(EXP\left[\dfrac{0.018776(G)(X)}{(T)(Z)}\right]\right)$

$P = 100\ PSI\left(EXP\left[\dfrac{0.018776(.85)(6775'-1500')}{(540)(0.99)}\right]\right)$

$P = 100\ PSI(EXP[0.157])$

$P = 117\ PSI$

Oil Gradient: $(1500')(0.354\ PSI/FT) = 531\ PSI$

Bottom hole pressure estimate (Drinkard): 648 PSI

Blinebry

SICP: 40 PSI
Gas Gravity: 0.755
Oil Gravity: 43° API
Sonolog: 1377' above SN at 6178' (27% water)
Water Gravity (Gradient): 0.433 PSI/FT

Gas Gradient: $P = P_{SF}\left(EXP\left[\dfrac{0.018776(G)(X)}{(T)(Z)}\right]\right)$

$P = 40\ PSI\left(EXP\left[\dfrac{(0.018776)(0.755)(5990'-1377')}{(540)(0.99)}\right]\right)$

$P = 45\ PSI$

Oil Gradient: $P = (1377')(0.27)(0.35\ PSI/FT) +$
$(1377')(1-0.27)(0.35\ PSI/FT)$

$P = 482\ PSI$

Bottom hole pressure estimate (Blinebry): 527 PSI

8. Both zones to be commingled have common ownership.

9. Recommended oil and gas allotments are as follows:

	Oil	Gas
Blinebry	67%	29%
Drinkard	33%	71%

Based on estimated increase in production.