VOLUMETRIC CALCULATION

$Gp = 43{,}560 * \emptyset * h * A * (1 - Sw) * (Bgi - Bga)$

Gp = Gas production or reserves, SCF
Ø = porosity, fraction
h = net pay, feet
A = Drainage area, acres
Sw = water saturation, fraction
Bgi = Initial gas formation volume factor, SCF/CF
Bga = Abandonment gas formation volume factor, SCF/CF

$Bg = 35.35\ P\ /zT$

P = Pressure, psi
z = Gas deviation factor
T = Reservoir temperature, °R

$(Bgi - Bga)/\ Bgi$ = Recovery factor