SAN JUAN 28 7 UNIT 226
N 36 28N 07W
30-039-20997
1110/S 1840/W
F

DRAINAGE RADIUS
Natani #17

R--radius of drainage in feet
Gr--Recovered Gas (mcf)   88712
Bg--Formation Volume Factor
A--Acres
Cs--Standard Atmospheric 14.7 psi @ 60 F   35.35
ϕ--Porosity (%)   12%
Ca-Coefficient, Cu Ft/Acre Ft   43560
h--Height of net pay in feet   38
Sw--Water saturation (%)   80%
Rf--Recovery factor (%)   86%
Z-- gas devation factor
T--Temperature R
P--static bottom hole pressure (psi)

$Bgi=Cs*P/Z*T$ 23.8047

Bgi--gas formation factor-initial
Cs   35.35
P   350
Z   0.945
T   550

$Rf=Bgi-Bga/Bgi$ 0.8585

Bga   3.3691

Bga--gas formation factor-abandonment
Cs   35.35
P   52
Z   0.992
T   550

$A=Gr*1000/Ca*\phi*h*(1-Sw)*Bgi*Rf$ 109.27 Acres

$A=\pi*R^2/43560$
$R^2=A*43560/\pi$
Radius=   **1231 feet**