

Volumetrics Estimates for Bertha Barber #12

Eff. & Nom. Decline (Yrly)	$(1400-1176)/1400 = .16 = -\ln(1-.16) = 0.1744$
Expected Recovery (Mscf)	$((1400-100)/(365)/0.1744) = 2,653,670$

Expected Recovery (Mscf)	$((43560 \times 0.1 \times (1-0.2)) \times (1/0.0049-1/0.0637)) \times (160 \times 21) / 1000$
	2,205,764

Reservoir Pressure (PSIG)	3000	2800	2600	2400	250
Reservoir Temp (F)	120	120	120	120	120
Gas Density	0.63	0.63	0.63	0.63	0.63
Pseudoreduced Pressure	4.68	4.37	4.05	3.74	0.39
Pseudoreduced Temp	1.60	1.60	1.60	1.60	1.60
Z Factor (from Psuedo chart)	0.847	0.841	0.837	0.835	0.972
Gas FVF (Bg)	0.0046	0.0049	0.0053	0.0057	0.0637
Acres	160	160	160	160	
Net ft. of pay	21	21	21	21	
Avg. Porosity of Pay	0.10	0.10	0.10	0.10	
Interstitial Water Saturation	0.20	0.20	0.20	0.20	
Gas In Place (Mscf)	2,529,305	2,377,527	2,218,254	2,052,523	
Produced Volume (Mscf)	471,293	471,293	471,293	471,293	
% Recovered	19%	20%	21%	23%	
Acres	160	160	160	160	
Produced Volume Radius (Ft)	278	296	317	342	
160 Acre PU Radius (Ft)	1491	1491	1491	1491	