

Volumetric Calculation

Targa Midstream Services, LP
Monument AGI #1
30-025-40002
S36 T19S R36E

Sensitivity Case 1

CALCULATION ASSUMES RADIAL FLOW & HOMOGENEOUS INJECTION ZONE

Injection Volume	6400 bpd	(from applicant 5000bwpd + 3.38mmcfpd)
Days	365 days	
Years	30 years	
Cumulative Injection Volume	70,080,000 bbls	(bpd x days x years)
Cumulative Injection Volume	393,471,168 cu ft	(5.6146 cu ft/bbl)
Reservoir Porosity Thickness	100 ft	sensitivity case
Average Reservoir Porosity	0.12	sensitivity case
Reservoir Porosity Feet	12 poro-ft	(thick x poro)
Cumulative Injection Plume Area (sq-ft)	32,789,264 sq ft	(cu ft/poro-ft)
Cumulative Injection Plume Area (ac)	753 ac	(sq ft/43560 sqft/ac)
Cumulative Injection Plume Radius (ft)	3231 ft	(sq rt(sq ft/3.14))

with 100% Safety Factor

Cumulative Injection Plume Area (sq-ft)	65,578,528 sq ft	(2 x cu ft/poro-ft)
Cumulative Injection Plume Area (ac)	1505 ac	(sq ft/43560 sqft/ac)
Cumulative Injection Plume Radius (ft)	4570 ft	(sq rt(sq ft/3.14))

3.38mmcfpd estimated at equivalent 1400bpd

Prepared By
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Momentum

Oil Conservation Commission
Case No. 4
Exhibit No. 4