Volumetric Calculation

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

CALCULATION ASSUMES RADIAL FLOW & HOMOGENEOUS INJECTION ZONE

Injection Volume	6400	bpd	(from applicant 5000bwpd + 3.38mmcfpd)
Days		days	
	300	uays	·
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	300	ft	(from applicant)
Average Reservoir Porosity	0.06		(from applicant)
Reservoir Porosity Feet	18	poro-ft	(thick x poro)
Cumulative Injection Plume Area (sq-ft)	21,859,509	sq ft	(cu ft/poro-ft)
Cumulative Injection Plume Area (ac)	502	ac	(sq ft/43560 sqft/ac)
Cumulative Injection Plume Radius (ft)	2638	ft	(sq rt(sq ft/3.14))

with 100% Safety Factor

Cumulative Injection Plume Area (sq-ft)	43,719,019	sq ft	(2 x cu ft/poro-ft)
Cumulative Injection Plume Area (ac)	1004	ac	(sq ft/43560 sqft/ac)
Cumulative Injection Plume Radius (ft)	3731	ft	(sq_rt(sq_ft/3.14))

3.38mmcfpd estimated at equivalent 1400bpd

Prepared By James E Smith & Associates, Inc. 9/15/2011

Momentum E

Oil Conservation Commission

Case No. _____Exhibit No.