

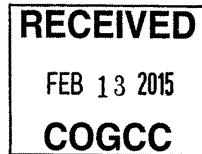
Doc # 2618425

SG 922-32D (API# 05-045-22654)							
STAGE	Top Perf (ft-MD)	Bottom (ft-MD)	TVD (ft)	Hydrostatic (psi)	ISDP (psi)	Frac Gradient (psi/ft)	BHP (psi)
2	5117	5234	5,117	2219	1923	0.81	4142
1	5253	5386	5,253	2278	1257	0.67	3535

8.34 weight of 1 gal water
0.052 conversion factor

3/2/2016:

Operator requested that COGCC use Maximum Surface Injection Pressure data from WPX SG #922-32D (API: 045-22654) for their WPX #SG 924-29D (API: 045-23023) well. Injection zones for the two wells are about one half mile (2640 ft.) apart.



Determine effective FG to be applied at the topmost injection perforation.
Calculate effective BHP of top most perf by reducing the lowest BHP by the hydrostatic pressure difference between the top perfs of the stages.

	ISDP
Hydrostatic pressure at top perf (Stage 2):	2219
Lowest BHP occurred Stage 1:	3535
Effective BHP at top perf (Stage 2) =	3476
Effective (Stage 2) FG =	0.68
Max surface injection pressure =	1257

★ RPK

QC

Stage 1 BHP	4142
Stage 1 Calc @ Effective Stage 2 BHP	3535
3535 < 4142 therefore measured Stage 1 BHP not exceeded	