

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 6-21-82	
Company Southland Royalty Company		Connection Southern Union Gathering	
Pool Basin		Formation Dakota	
Completion Date 6-8-82	Total Depth 7244'	Plug Back TD 7210'	Elevation 6058' GL
Farm or Lease Name Grenier		Well No. 15-E	
Csg. Size 7.000	Wt. 23#	d 6.366	Set At 4796
4.500	11.6* 10.5*	4.000 4.052	4592-7244'
Tbg size 2.375	4.7#	1.995	7200'
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At ---	
Producing Thru Tubing		Baro. Press. - P _g 12.2	
Reservoir Temp. °F #		Mean Annual Temp. °F	
L	H	G _g .700	% CO ₂ % N ₂ % H ₂ S
Prover		Meter Run Taps	
FLOW DATA TUBING DATA CASING DATA Duration of Flow			
NO.	Prover Line Size	X	Orifice Size
SI			
1.	2"	X	3/4"
2.			
3.			
4.			
5.			
RATE OF FLOW CALCULATIONS			
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m
1	12.365		109.2
2.			
3.			
4.			
5.			
NO.	P _t	Temp. °R	T _t
1.			
2.			
3.			
4.			
5.			
Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.			
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.			
Specific Gravity Separator Gas _____ X X X X X X X X			
Specific Gravity Flowing Fluid _____ X X X X X			
Critical Pressure _____ P.S.I.A. P.S.I.A.			
Critical Temperature _____ R R			
P _c 1783.2 P _c ² 3179802.2			
NO.	P _t ²	P _w	P _w ²
1		590.2	348336.0
2			
3			
4			
5			
(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1230$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0909$			
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1364$			
Absolute Open Flow 1364 Mcfd @ 15.025 Angle of Slope θ _____ Slope, n .75			
Remarks: _____			
Approved By Division Conducted By: Larry Bannowsky Calculated By: James Smith Checked By: C. C. Parsons			