

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

DEC 10 1982
OIL CON. COM.
DIST. 3

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 12-7-82			
Company Southland Royalty Company				Connection El Paso Natural Gas Company			
Pool Basin				Formation Dakota		Unit	
Completion Date 11-20-82		Total Depth 6120'		Plug Back TD 6076'		Elevation 5545' GR	
Farm or Lease Name Hagood							
Csq. Size 4.500	Wt. 10.5#	d 4.052	Set At 6120'	Perforations: From To		Well No. 5E	
Tbg. Size 2.375	Wt. 4.7#	d 1.995	Set At 5985'	Perforations: From 5887' To 5989'		Unit Sec. Twp. Rge. A 29 29N 13W	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At -----		County San Juan	
Producing Thru Tubing		Reservoir Temp. °F #		Mean Annual Temp. °F		Baro. Press. - P _g 12.2	
State New Mexico							
L	H	Gg .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	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							685		1302		
1.	2"	X	3/4"				260		645		1 hr
2.							180		640		2 hrs
3.							157		509		3 hrs
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	12.365		169.2	1.0000	.9258	1.0000	1937
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.			
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.			
2.					Specific Gravity Separator Gas _____ X X X X X X X X			
3.					Specific Gravity Flowing Fluid _____ X X X X X			
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.			
5.					Critical Temperature _____ R _____ R			

NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.1866$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.1369$
1		521.2	271649.4	145547.2		
2						
3						
4						
5						

AOFP = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2202$

Absolute Open Flow	2202	Mcfd @ 15.025	Angle of Slope θ	Slope, n .75
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Remarks: _____

Approved By Division	Conducted By: Leroy Castleman	Calculated By: James Smith	Checked By: R. E. Fielder
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