

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 9-18-81				
Company Southland Royalty Company				Connection El Paso Natural Gas Company					
Pool Blanco				Formation Mesa Verde				Unit	
Completion Date 12-23-80		Total Depth 8200'		Plug Back TD 8148'		Elevation 7127' GR		Farm or Lease Name Johnson	
Csq. Size 5.500	Wt. 17# 15.5#	d 4.892 4.950	Set At 8191'	Perforations: From To			Well No.		
Tbg. Size 1.900	Wt. 2.76#	d 1.610	Set At 5883'	Perforations: From 5856' To 5886'			Unit I	Sec. 7	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Multiple - G.G.				Packer Set At 5981'		County Rio Arriba			
Producing Thru Tubing		Reservoir Temp. °F 8		Mean Annual Temp. °F		Baro. Press. - P _a 12.2		State New Mexico	
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	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							1265		1265		
1.	2"	X	3/4"				90		440		1 hr
2.							45		275		2 hrs
3.							34		232		3 hrs
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	12.365		46.2	1.0000	.9258	1.0000	529
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/lbl.			
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			

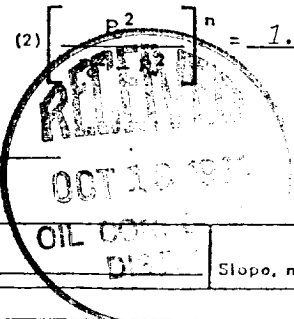
NO	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1		244.2	59633.6	1571606.2
2				
3				
4				
5				

P_c 1277.2 P_c² 1631239.8

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0379$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0283$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 544$



Absolute Open Flow 544 Mcfd @ 15.025		Angle of Slope 75	
Remarks:			

Approved By Division	Conducted By: Dwayne Horton	Calculated By: James Smith	Checked By: L. O. Van Ryan
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