

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special											
Company Manana Gas, Inc.						Connection					
Pool Bloomfield						Formation Chacra					
Completion Date 11/27/81				Total Depth 2992		Plug Back TD 2914		Elevation 5442 GL		Farm or Lease Name Phyllis Hartman	
Csg. Size 5 1/2"		Wt. 14#		Set At 3.500		2967		Perforations: From 2316 To 2319		Well No. 1	
Tub. Size 1 1/4"		Wt. 2.4#		Set At 1.380		2289		Perforations: From 2656 To 2660 2747 To 2756		Unit Sec. Twp. Rge. N 24 29 11	
Type Well - Single - Brodenhead - G.O. or G.O. Multiple Single						Packer Set At None			County San Juan		
Producing Thru Tubing		Reservoir Temp. °F #		Mean Annual Temp. °F		Baro. Press. - P _a			State New Mexico		
L		H		G _g		% CO ₂		% N ₂		% H ₂ S	
				est. .650						Prover	
										Meter Run	
										Taps	

FLOW DATA						TUBING DATA		CASING DATA		Duration
SI	Prover Line Size	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	Flow
1.	2"	.750			52	1081		1081		7 days
2.						22		121	52	3 Hrs.
3.										
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.	12.3650		34	1.0078	.9608	1.0000	407
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °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			

P _c 1093 P _c ² 1194649				
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1	1156	76	5779	1188870
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0049$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 408$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0036$

Absolute Open Flow 408		Mcf @ 15.025		Angle of Slope ϕ		Slope, n .75	
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Remarks: Dry Throughout Test							
1488 .103 44880 4623 1156 5779 76							
Approved By Division		Conducted By: C. R. Wagner		Calculated By: A. R. Kendrick		Checked By: <i>AK Kendrick</i>	