

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 4-20-81	
Company El Paso Natural Gas Company		Connection El Paso Natural Gas Company	
Pool Undes.		Formation Pictured Cliffs	
Completion Date 3-28-81		Total Depth 5593	Plug Back TD 5573
		Elevation 6243 GR	Unit San Juan 28-7
Csg. Size 7.000	Wt. 20	d 6.456	Set At 3287
Perforations From To		Well No. #51A	
Tub. Size 1.660	Wt. 2.33	d 1.380	Set At 3020
Perforations From 2970 To 3040		Unit Sec. Twp. Rge. 0 24 28 7	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple G.G. Dual		Packer Set At 3108	County Rio Arriba
Producing Thru Csg.	Reservoir Temp. °F 8	Mean Annual Temp. °F	Baro. Press. - P _a 12
State New Mexico			
L	H	G _g 0.620	% 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							1035		1035		23 Days
1.	Choke	0.750		55		61	55				2 Hr.
2.											
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. Compres. Factor, F _{pv}	Rate of Flow Q, Mcf/d
1	12.365		67	.9990	.9837	1.008	821
2.							
3.							
4.							
5.							

NO.	P _i	Temp. °R	T _i	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure P _{sc} , P.S.I.A.	Critical Temperature T _{sc} , °R
1										
2.										
3.										
4.										
5.										

P _i 1047	P _w 1096204		
NO.	P _i	P _w	P _i ² - P _w ²
1		67	4489
2.			
3.			
4.			
5.			

(1) $\frac{P_c^2}{P_i^2 - P_w^2} = 1.0041$

LOG = 0 $\left[\frac{P_i^2}{P_i^2 - P_w^2} \right]^n = 824$

(2) $\left[\frac{P_c^2}{P_i^2 - P_w^2} \right]^n = 1.0035$

Absolute Open Flow 824	Mcf @ 15.025	Angle of Slope 0	Slope, n 0.85
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Remarks: Gas Vented - 144 MCF During Test-Well Blew Dry Gas

Approved by Division	Conducted by Norman Waggner	Calculated by R. F. Headrick	Checked by
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