

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 3-18-81	
Company El Paso Natural Gas Company				Connection El Paso Natural Gas Company	
Pool Blanco				Formation Mesa Verde	
Completion Date 3-11-81		Total Depth 5645		Plug Back TD 5627	
				Elevation 6343 GL	
Farm or Lease Name Sunray D					
Csg. Size 7.000		Wt. 20		d 6.456	
				Set At 3291	
Perforations: From *5142		To 5553		Well No. #2R (MV)	
Thq. Size 2.375		Wt. 4.7		d 1.995	
				Set At 5526	
Perforations: From		To		Unit A	
				Sec. 21	
				Twp. 30	
				Rge. 10	
Type Well - Single - Brdenhead - G.G. or G.O. Multiple G. G. Dual				Packer Set At 3157	
County San Juan				State New Mexico	
Producing Thru Tbg.		Reservoir Temp. °F #		Mean Annual Temp. °F	
				Baro. Press. - P _g 12	
L		H		Prover	
		Gg 0.650		Meter Run	
		% CO ₂		Taps	
		% N ₂			
		% H ₂ S			

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							519				7 Days
1.	Choke		0.750	146		59					3 Hours
2.											
3.											
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		158	1.0010	0.9608	1.014	1905
2.							
3.							
4.							
5.							

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

NO.	P _r ²	P _w ²	P _w ²	P _r ² - P _w ²
1	24964	314	98596	183365
2				
3				
4				
5				

P _c 551 P _c ² 281961		(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.5377$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.3809$	
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2631$					

Absolute Open Flow 2631		Mcf/d @ 15.025		Angle of Slope @		Slope, n 0.75	
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Remarks: * 4.500" Liner from 3145 to 5645 Vented 261 MCF Gas During The Test.	
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Approved by Division	Conducted By: Bobby Easterling	Calculated By: H. E. McAnally	Checked By:
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