

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 12-7-73	
Company El Paso Natural Gas Co.			Connection None			
Pool Rhodes			Formation Yates		Unit	
Completion Date 12-7-73		Total Depth 3270		Plug Back TD ---	Elevation 2998.6 Gr.	
Csg. Size 4 1/2	Wt. 10.5	d	Set At 3270	Perforations: From To		
Tbg. Size 2 3/8	Wt. 4.7	d	Set At 2854	Perforations: From 2939 To 3155		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At		
Producing Thru Tbg.		Reservoir Temp. °F @		Mean Annual Temp. °F		
L		H		State New Mexico		
Gg		% CO ₂		% H ₂ S		
.650 (Assumed)				Positive Chokes		

FLOW DATA							TUBING DATA		CASING DATA		Duration
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	of Flow
SI							477		477		16Hr.
1.		1/8		472		53	472	53	472	53	30 M
2.		3/16		469		50	460	50	470	50	30 M
3.		1/4		441		53	441	53	458	53	45 M
4.		5/16		403		56	403	56	443	56	45 M
5.		3/8		295		57	295	57	439	57	1 H

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	.2618		485.2	1.007	1.240	1.057	168
2	.6101		482.2	1.010	1.240	1.057	389
3	1.112		454.2	1.007	1.240	1.054	665
4	1.771		416.2	1.004	1.240	1.041	955
5	2.591		308.2	1.003	1.240	1.030	1023

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.	.72	513	1.37	.895	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.	.72	510	1.36	.895	Specific Gravity Separator Gas .650
3.	.68	513	1.37	.901	Specific Gravity Flowing Fluid X X X X X
4.	.62	516	1.38	.922	Critical Pressure 670 P.S.I.A.
5.	.46	517	1.38	.942	Critical Temperature 375 R

NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 6.712$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 5.908$
1		485.2	235.4	11.9	ACF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 6.044$	
2		483.2	233.5	6.8		
3		471.2	222.0	18.3		
4		456.2	208.1	32.2		
5		452.2	204.5	35.8		

Absolute Open Flow 6.044 Mcfd @ 15.025 Angle of Slope θ 47 Slope, n .933

Remarks: Started making a large amount of acid water and oil mixture on third and fourth rates.

Approved By (Commission): <i>[Signature]</i>	Conducted By: Randy Kiker Rick Thorne	Calculated By: Randy Kiker	Checked By:
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