

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☐ Initial ☐ Annual ☒ Special				Test Date 1-9-74		JAN 16 1974	
Company El Paso Natural Gas Company				Connection El Paso Natural Gas Company		O.C.C.	
Pool Rocky Arroyo <i>Atoka</i>				Formation Atoka		Unit ARTESIA, OFFSHORE	
Completion Date 4-23-73		Total Depth 9456		Plug Back TD		Elevation	
Farm or Lease Name Patterson				Well No. 1			
Csq. Size 5 1/2	Wt. 17#	d	Set At 9456	Perforations: From 9030 To 9042		Unit Sec. Twp. Rge. H 30 22 22	
Tbg. Size 2 3/8	Wt. 4.7#	d	Set At 8933	Perforations: From open To ended		County Eddy	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 8900		State New Mexico	
Producing Thru Tbg. L		Reservoir Temp. *F 154 @ 9030		Mean Annual Temp. *F		Baro. Press. - P _g 13.2	
H 8933		Gg 589		% CO ₂	% N ₂	% H ₂ S	Prover 4" Flg.

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							1100				48 Hrs.
1.	4.026	x	2.00	394	4"	54°	1001	43			1 Hr.
2.	4.026	x	2.00	400	9"	77°	924	47			1 Hr.
3.	4.026	x	2.00	405	14"	80°	826	50			1 Hr.
4.	4.026	x	2.00	420	21"	86°	650	55			1 Hr.
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	19.81	40.36	407.2	1.006	1.303	1.034	1084
2	19.81	60.98	413.2	.9840	1.303	1.030	1595
3	19.81	76.52	418.2	.9813	1.303	1.030	1996
4	19.81	95.38	433.2	.9759	1.303	1.030	2475
5.							

NO.	P _t	Temp. *R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1	.61	514	1.47	.935	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	.61	537	1.53	.942	Specific Gravity Separator Gas .589 X X X X X X X X
3	.62	540	1.54	.943	Specific Gravity Flowing Fluid X X X X X
4	.65	546	1.56	.943	Critical Pressure 672 P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature 350 R _____ R

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.983$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.491$
1			1060.7	178.5		
2			948.5	290.7		
3			815.4	423.8		
4			614.3	624.9		
5						

Absolute Open Flow 3689 Mcfd @ 15.025				Angle of Slope θ 59.75	Slope, n .583
Remarks: No fluid made during test.					
Approved By Commission:		Conducted By: Randy Kiker		Calculated By: Randy Kiker	
				Checked By:	