

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

Form C-122
 Revised 9-1-65

122 file

Type Test ☐ Initial ☐ Annual ☒ Special				Test Date 4-12-73		RECEIVED APR 26 1973	
Company Phillips Petroleum				Connection El Paso Natural Gas Company			
Pool So. Carlisbad (Narrow)---Gas				Formation Narrow		Unit O.C.C.	
Completion Date 1-24-73		Total Depth 12,000		Plug Back TD 11,902		Elevation 3303.8' BW	
Csg. Size 5-1/2"		Wt. 170, 204		Set At 11,984		Perforations: From 11,415 To 11,824	
Tbg. Size 2-7/8"		Wt. 6.5		Set At 11,300		Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Multiple (G.G.)				Packer Set At		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 181 11,976		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L 11,300		H 11,300		G _q .589		% CO ₂ ---	
				% N ₂ ---		% H ₂ S ---	
				Prover ---		Meter Run ---	
						Taps Flange	

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.	
1.	4	X	2.50	548	62.4	72	3864	58	5621	58
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.	32.64	187.13	561.2	.9887	1.292	1.045	8153
2.							
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.84	532	1.49	.915	297	60	.589	X X X X X X X X	672	354
2.										
3.										
4.										
5.										

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1.	789	1242.7	1544	13,489	15,033	1.083
2.						
3.						
4.						
5.						

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$ 8830				"n" established by multi-point back-pressure test, dated 1-31-73.	
--	--	--	--	---	--

Absolute Open Flow 8830 Mcfd @ 15.025		Angle of Slope θ 53.5		Slope, n .740"	
Remarks: Calculations made by electronic calculator.					

Approved By Commission:	Conducted By:	Calculated By: D. E. Simpson	Checked By:
-------------------------	---------------	-------------------------------------	-------------