

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

RECEIVED

Form C-122
Revised 9-1-65

DEC 26 1972

Type Test ☐ Initial ☐ Annual ☒ Special				Test Date 12-7-72		O.C.C. NM 0245500, OFFICE	
Company Phillips Petroleum Company				Connection El Paso Natural Gas Company			
Pool Carlsbad, South (Canyon) Gas				Formation Canyon		Unit	
Completion Date 8-1-72		Total Depth 12041		Plug Back TD 11970		Elevation 3217' G.S. 3237' D.S.	
Farm or Lease Name Drag "B"		Well No. 1		Perforations: From 10280 To 10300		Unit Sec. Twp. Rge. K 18 23-S 27-E	
Csg. Size ** 5-1/2	Wt. 17#, 20#	d 3.434	Set At 12,040	Perforations: From -- To --			
Tbg. Size 2-7/8	Wt. 6.5	d --	Set At 11383				
Type Well - Single - Bradenhead - G.G. or G.O. Multiple				Packer Set At		County Eddy	
Producing Thru ** annulus		Reservoir Temp. °F 178 @ 12041		Mean Annual Temp. °F 60		Baro. Press. - P _g 13.2	
State New Mexico							
L 10280	H 10280	G _g .649	% CO ₂ .4	% N ₂ .7	% H ₂ S --	Prover --	Meter Run 6
						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.		Temp. °F
SI							Morrow		2100		24 hrs.
1.	6.065	x	2.50	504.1	39.7	60	zone		1200	60	24 hrs.
2.							producing				
3.							thru				
4.							tubing				
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	30.31	141.46	517.3	1.00	1.216	1.062	5537
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	.77	520	1.35	.887	110	57	.649	X X X X X X X X	670	375
2							X X X X X			
3										
4										
5										

NO.	P _t ²	P _w	P _w ²	P _t ² - P _w ²
1	1471.8	1235.2	1525.7	
2				
3				
4				
5				

(1) $\frac{P_t^2}{P_t^2 - P_w^2} = \frac{4465.6}{1471.8 - 1525.7} = 1.519$

(2) $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 1.519$

* "n" established by
Multipoint Back-Pressure
test dated 8-7-72

AOF = Q $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 8.411$

Absolute Open Flow	8411	Mcfd @ 15.025	Angle of Slope °	55.6	Slope, n	.683*
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Remarks: Calculations made by Electronic Calculator. Program based on New Mexico Manual for Back-Pressure testing of gas wells.

Approved By Commission:	Conducted By:	Calculated By: D.E. Simpson	Checked By: W.J. Mueller
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