

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

Form C-122
Revised 9-1-65

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Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 3-27-74		APR 9 1974	
Company Champlin Petroleum Company				Connection None		O. C. C.	
Pool Undeveloped				Formation Strawn		Unit ARTESIA, OFFICE	
Completion Date 3-22-74		Total Depth 12,100		Plug Back TD 11,910		Elevation 3095 G. L.	
Farm or Lease Name Pecos-Federal				Well No. 1			
Csg. Size 5" 7"	Wt. 23# 29#	d 4.044 6.184	Set At 12,098 11,297	Perforations: From 10,580 To 10,608		Unit Sec. Twp. Rge. C 1 - 22S - 27E	
Tbg. Size 2-7/8"	Wt. 6.5	d 2.441	Set At 11,204	Perforations: From To		County Eddy	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Dual Gas				Packer Set At 10,415 PBR @ 11,193		State New Mexico	
Producing Thru Tbg.		Reservoir Temp. °F 182 @		Mean Annual Temp. °F 60 (E)		Baro. Press. - P _a 13.2	
L 10,594	H 10,594	G _g .669	% CO ₂	% N ₂	% H ₂ S	Prover	Meter Run 4" 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.	Temp. °F	
1.	4" x 1.250"			375	7.0"	89	4977	60			91 hr.
2.	4" x 1.250"			382	26.0	96	4629	73			1
3.	4" x 1.250"			600	30.0	99	4142	75			1
4.	4" x 1.250"			600	56.0	93	3892	76			1
5.							3077	80			1

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.	7.469	52.13	388.2	0.9732	1.223	1.036	480
2.	7.469	101.37	395.2	0.9671	1.223	1.035	927
3.	7.469	135.63	613.2	0.9645	1.223	1.053	1258
4.	7.469	185.31	613.2	0.9697	1.223	1.056	1733
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	22	Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons	54.7	Deg.
2.					Specific Gravity Separator Gas	0.669	X X X X X X X X
3.					Specific Gravity Flowing Fluid	X X X X X	0.800
4.					Critical Pressure	669	P.S.I.A. 665
5.					Critical Temperature	381	R 424

P _c **3610.7 P _c ² 13037.2				
NO.	P _i ²	P _w **	P _w ²	P _c ² - P _w ²
1		3330.1	11089.6	1947.6
2		2922.8	8542.8	4494.4
3		2719.1	7393.5	5643.7
4		2099.1	4406.2	8631.0
5				

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U.S. GEOLOGICAL SURVEY
ARTESIA, NEW MEXICO

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.511$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2490$

Absolute Open Flow 2490 Mcfd @ 15.025		Angle of Slope @		Slope, n 0.878
Remarks: * Bottom-hole bomb readings. ** P _c & P _w calculated by time-share program using stepwise procedure.				
Approved By Commission:	Conducted By: T. J. Ragan	Calculated By: J. K. Adair, Jr.	Checked By: W. B. Johnston	