

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

Copy 4.5 1-
Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 12-7-73		1973	
Company Mobil Oil Corp.				Connection Llano Inc & Transwestern				O. C. C. ARTESIA, OFFICE	
Pool South Carlsbad				Formation Morrow				Unit 320	
Completion Date 10-3-73		Total Depth 12050		Plug Back TD 12046		Elevation 3259 K.B.		Farm or Lease Name Federal "PP"	
Csg. Size 7"	Wt. 26 #/ft	d 6.276	Set At	Perforations: From 11544 To 11563		Well No. #1			
Tub. Size 2 3/8"	Wt. 4.6 #/ft	d 1.995	Set At 11540	Perforations: From To		Unit Sec. Twp. Rge. F 24 23S 26E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 11522		County Eddy	
Producing Thru tubing		Reservoir Temp. °F 180° 12050		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State New Mexico	
L 11540	H 11553	G _g 0.576	% CO ₂ 1.13	% N ₂ 0.19	% H ₂ S —	Prover —	Meter Run 4" - Llano	Taps 4" - T.W. Flange.	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	of Flow
SI							3697		—	—	48 Hr
1.	4 X 1.750			700	10	70°	3683	70°	—	—	24 Hr
2.	4 X 1.750			580	37	74°	3536	70°	—	—	24 Hr
3.	4 X 1.750			443	14	78°	3439	70°	—	—	24 Hr
4.	4 X 1.750			310	36	74°	3321	70°	—	—	24 Hr
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	14.93	84.45	713.2	0.9905	1.318	1.054	173.5
2	14.93	148.15	593.2	0.9850	1.318	1.042	299.2
3	14.93	115.82	454.2	0.9831	1.318	1.043	437.3
4	14.93	154.51	323.2	0.9868	1.318	1.049	607.5
5.							

NO.	P _r	Temp. °R	T _r	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.	1.06	530	1.52	.901					676	349
2.	.878	536	1.54	.921						
3.	1.82	538	1.54	.922						
4	1.22	534	1.53	.908						
5.										

NO.	P _r ²	P _w	P _r ²	P _r ² - P _w ²
1	13662	3710	13770	4.47
2	12597	3543	12913	852.6
3	11918	3528	12588	1177.6
4	10460	3425	11731	2034.6
5				

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 6.7657$

AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 28848$

(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 4.747$

Absolute Open Flow	28848	Mcfd @ 15.025	Angle of Slope @	50° 50'	Slope, n	0.8147
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Remarks: CAOF was established on P_rs #2 and #4 for a minimum value. Rebut not taken because of wide margin between results of this test and the 7-8 mmcd maximum allowable for the pool

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	W. S. B. J. F. E. C.	W. S. B. J. F. E. C.	A. R. ALAMEDDINE