

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

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

RECEIVED

SEP 27 1974

Type Test: ☒ Initial ☐ Annual ☐ Special					Test Date: 9-16-74		O.C.C. ARTESIA, OFFICE		
Company: MOBIL OIL CORPORATION					Connection: LLANO INC.				
Pool: BURTON FLAT					Formation: MORROW		Unit: 298.91		
Completion Date: 12-18-73		Total Depth: 11600'		Plug Back TD: 11599		Elevation: 3203 KB		Farm or Lease Name: FED H COMM.	
Csg. Size: 5 1/2"	Wt.: 17 1/4	d: 4.892"	Set At: 11600'	Perforations: From 11272' To 11290'		Well No.: 1			
Tbg. Size: 2 7/8"	Wt.: 4.7 1/4	d: 1.995"	Set At: 11269'	Perforations: From - To O.E.		Unit Sec. Twp. Rge.: I, 4, 21S, 27E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: SINGLE					Packer Set At: 11256'		County: EDDY		
Producing Thru: TUBING		Reservoir Temp. °F: 181 @ 11599'		Mean Annual Temp. °F: 60°		Baro. Press. - P _a : 13.2		State: NEW MEXICO	
L: 11269	H: 11272	G _g : 0.6126	% CO ₂ : 0.87	% N ₂ : 2.25	% 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
SI							3825		2120	-	152 DAYS
1.	4 X 1.250			725	48	75°	2560	60	2120	-	24 HRS
2.	4 X 2.000			728	11.5	63°	2200	60	2120	-	24 HRS
3.	4 X 2.000			723	18	69°	1750	60	2120	-	24 HRS
4.	4 X 2.000			718	25	60°	1180	60	2120	-	24 HRS
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	7.469	188.24	738.2	.9859	1.277	1.058	1873
2	19.81	92.33	741.2	.9971	1.277	1.064	2478
3	19.81	115.12	736.2	.9915	1.277	1.060	3061
4	19.81	135.20	731.2	1.0000	1.277	1.064	3639
5.							

NO.	P _t	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	1.10	535	1.50	0.893			0.6126		670	355
2	1.11	523	1.47	0.883						
3	1.10	529	1.49	0.890						
4	1.09	520	1.46	0.883						
5.										

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1	6621	2594	6729	8003
2	4898	2254	5079	9652
3	3109	1840	3324	11347
4	1424	1353	1829	12922
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.141$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 4337$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.192$

Absolute Open Flow: 4337 Mcfd @ 15.025	Angle of Slope: 37.019	Slope, n: 1.326
Remarks:		
Approved By Commission:	Conducted By: A.R. ALAMEDDINE	Calculated By: K.W. LEWIS
		Checked By: A.R. ALAMEDDINE