

**MEXICO OIL CONSERVATION COMM ON
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL**

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

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 11-13-73			
Company Phillips Petroleum Company				Connection Not connected					
Pool Cabin Lake Morrow				Formation Morrow				Unit	
Completion Date 10-13-73		Total Depth 13,800'		Plug Back TD 13,700'		Elevation 3196' Gr		Farm or Lease Name James-C	
Csg. Size 5-1/2"	Wt. 20	d 5	Set At 13,792'	Perforations: From 13,124' To 13,569'				Well No. 1	
Tqg. Size 2-7/8"	Wt. 6.5	d 2.44	Set At 13,030'	Perforations: From To				Unit Sec. Twp. Rge. L 35 21-S 30-E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 13,030'		County Eddy	
Producing Thru tubing		Reservoir Temp. °F 193 @ 13,800'		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2		State New Mexico	
L 13030	H 13030	Gg .599	% CO ₂ 1.0	% N ₂ .79	% H ₂ S ---	METER RUN OWT--3"		Taps	

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. HG	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							4400	58	Packer		2 wks.
1.	3.00	x 2.00		8		-8	2669	68			1 hr.
2.	3.00	x 2.00		11		47	961	71			1 hr.
3.	3.00	x 2.00		7		78	433	76			1 hr.
4.	3.00	x 2.00		8		79	246	79			1 hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure HG P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	1150			1.0408*	1.000	1.018	1218
2	1369			1.0127	1.000	1.013	1404
3	1070			.9831	1.000	1.011	1063
4	1150			.9822	1.000	1.011	1142
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio --- Mcf/bbl.	
1	.2	452	1.26	.965	A.P.I. Gravity of Liquid Hydrocarbons --- Deg.	
2	.2	507	1.42	.975	Specific Gravity Separator Gas .599 X X X X X X X X	
3	.2	538	1.50	.979	Specific Gravity Flowing Fluid X X X X X	
4	.2	539	1.50	.979	Critical Pressure 671 P.S.I.A. P.S.I.A.	
5					Critical Temperature 358 R R	

P _c 4413.2 P _c ² 19476				
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²
1	7194	2686.4	7217	12259
2	949	987.5	975	18501
3	199	463.5	215	19261
4	67	293.4	86	19390
5				

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{19476}{12259}$$

$$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1535$$

Absolute Open Flow 1535 Mcfd @ 15.025		Angle of Slope 63.5	Slope, n .500
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Remarks: * 20° used. Produced 11 BW on 3rd rate and 15 BW on 4th rate. Calculations made by electronic calculator.

Approved By Commission:	Conducted By: D. E. Simpson	Calculated By: D. E. Simpson	Checked By: <i>[Signature]</i>
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