

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

Form C-122
 Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 12/30/88	
Company PHILLIPS PETROLEUM CO.		Formation NONE	
Pool SOUTH SHOEBAR FIELD		Unit ATOKA	
Completion Date 12/19/88	Total Depth 12,569	Plug Back TD 12,550	Elevation STATE 22
Csg. Size 5 1/2	Wt. 17#	d 4.892"	Set At 12,569
Tbg. Size 2 7/8	Wt. 6.5	d 2.441"	Set At 11868
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE		Packer Set At 11868	
Producing Thru TBG.	Reservoir Temp. °F 206°	Mean Annual Temp. °F 60	Baro. Press. - P _a N.M.
L 12005	H 12005	G _a .643	% CO ₂ .37
		% N ₂ .98	% H ₂ S 0
		Prover 4.026	Meter Run FLG.

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							1170		PKR.		24 HRS.
1.	4X1.000			270	4.00	66	931		PKR.		1 HR.
2.	4X1.000			310	8.00	72	735		PKR.		1 HR.
3.	4X1.000			315	14.00	78	560		PKR.		1 HR.
4.	4X1.000			315	17.00	78	425		PKR.		1 HR.
5.	4X1.000			315	19.00	80	342		PKR.		1 HR.

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor FL	Gravity Factor F _g	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mcfd
1	4.753	33.66	283.2	.9943	1.247	1.028	204
2	4.753	50.85	323.2	.9887	1.247	1.032	308
3	4.753	67.78	328.2	.9831	1.247	1.030	407
4	4.753	74.70	328.2	.9831	1.247	1.030	448
5	4.753	78.97	328.2	.9813	1.247	1.030	473

NO.	R ₁	Temp. °R	T ₁	Z	Gas Liquid Hydrocarbon Ratio	NO FLUID PRODUCED	Mcft/bbl.
1.	.42	526	1.41	.947	A.P.I. Gravity of Liquid Hydrocarbons	N/A	Deq.
2.	.48	532	1.43	.939	Specific Gravity Separator Gas	.643	XXXXXXXXXX
3.	.49	538	1.45	.943	Specific Gravity Flowing Fluid	XXXXXX	
4.	.49	538	1.45	.943	Critical Pressure	670	P.S.I.A.
5.	.49	540	1.45	.943	Critical Temperature	372	R

NO.	P ₁ ²	P _w	R ₁ ²	P _e ² - R ₁ ²
1		1136.6	1291.9	530.1
2		989.5	791.1	1030.9
3		813.1	661.3	1160.7
4		644.4	482.2	1339.8
5		616.9	380.6	1441.4

$$(1) \frac{P_e^2}{R_e^2 - R_1^2} = 1.264$$

$$AOF = Q \left[\frac{R_e^2}{R_e^2 - R_1^2} \right]^n = .576$$

$$(2) \left[\frac{R_e^2}{R_e^2 - R_1^2} \right]^n = 1.217$$

Absolute Open Flow	576	Mcfd @ 15.025	Angle of Slope @	50	Slope, n	.839
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Remarks: BHP MEASURED WITH AMERADA GUAGE NO FLUID PRESSURE DURING TEST.

FEB 14 1989

Approved By Commission
JERRY SEXTON
 DISTRICT 1 SUPERVISOR

Conducted By
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