

N 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 6-8-83			
Company BTA OIL PRODUCERS				Connection PHILLIPS PETROLEUM COMPANY					
Pool Undesignated				Formation Morrow				Unit	
Completion Date 4-20-83		Total Depth 13,650'		Plug Back TD 13,382'		Elevation 3437' KB		Farm or Lease Name Maddox Fed. B, 8016 JV-P	
Csq. Size 7-3/4x9-5/8	Wt. various	d various	Set At various	Perforations: From 12,926' To 13,294'		Well No. 1			
Tbg. Size 2-7/8	Wt. 6.5	d 2.441	Set At 12,758'	Perforations: From 12,926' To 13,293'		Unit F		Sec. 35	Twp. 22
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 12,758		County Lea	
Producing Thru Tbg		Reservoir Temp. °F 180 @ 13,000		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico	
L 12,758'	H 13,284'	Gg 0.655	% CO ₂ 0.23	% N ₂ 1.29	% H ₂ S 0	Prover	Meter Run x	Taps F	

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.	
SI							4638			
1.	4.026	x 2.000		360	1	70	4534	60	Pkr.	60
2.	4.026	x 2.000		360	5	71	4221	60	Pkr.	60
3.	4.026	x 2.000		375	11	75	3759	60	Pkr.	60
4.	4.026	x 2.000		375	17	74	3390	60	Pkr.	60
5.										

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	19.81		373.2	0.9905	1.236	1.0358	486
2	19.81		373.2	0.9896	1.236	1.0358	1084
3	19.81		388.2	0.9859	1.236	1.0370	1636
4	19.81		388.2	0.9868	1.236	1.0370	2036
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	0.56		1.42	0.932	29.96 Mcf/bbl.	50	0.655	XXXXXX	669 P.S.I.A.	374 °R
2	0.56		1.42	0.932				0.756	666 P.S.I.A.	406 °R
3	0.58		1.43	0.930						
4	0.58		1.43	0.930						
5										

NO.	P _c	P _c ²	P _w	P _w ²	P _c ² - P _w ²
1	4651.2	21,634			
2	20,557		20,561		803
3	17,928		17,947		3687
4	14,229		14,271		7363
5	11,582		11,642		9992

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{21634}{7363}$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2953$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1,805$

Absolute Open Flow	2953 Mcfd @ 15.025	Angle of Slope θ	61°	Slope, n	0.548
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Remarks:

Approved By Commission:	Conducted By:	Calculated By: <i>C. V. Savage</i>	Checked By: <i>C. V. Savage</i>
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