NE IEXICO OIL CONSERVATION COMMS N

Form C-122
Revised 9-1-65

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 12-30-82	
Company: BTA OIL PRODUCERS		Connection: PHILLIPS PETROLEUM COMPANY			Unit
Pool: Antelope Ridge		Formation: Atoka			
Completion Date: 10-16-82 connection 12-22-82	Total Depth: 13,650	Plug Back TD: 13,563	Elevation: 3422' KB	Farm or Lease Name: Maddox Federal, 8016 JV-P	
Csg. Size: 7-5/8" / Wt.: 39 / d: 6.625 / Set At: 11,394' 13,078'		Perforations: From 12,332' To 12,356'		Well No.: 1	
Tbg. Size: 3 ½" / Wt.: 10.3 / d: 2.922 / Set At: 12,195'		Perforations: From To		Unit: N / Sec.: 35 / Twp.: 22S / Rge.: 34E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 12,195'		County: Lea	
Producing Thru: tbg	Reservoir Temp. °F: 190 @ 12,344'	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: New Mexico	
L: 12,195 / H: 12,344	Gg: 0.657	% CO_2: 0.2	% N_2: 1.24	% H_2S: 0	Prover: / Meter Run: X / Taps: FT

NO.	FLOW DATA: Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI									
1.	4.026 x 2.500	240	2.2	63	6841	60	Pkr.	60	1 hr.
2.	4.026 x 2.500	270	8.0	64	6307	60	pkr.	60	1 hr.
3.	4.026 x 2.500	295	17.0	64	5875	60	pkr.	60	1 hr.
4.	4.026 x 2.500	305	27.5	63	5300	60	pkr.	60	1 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, Fpv	Rate of Flow Q, Mcfd
1	32.64	23.60	253.2	0.9971	1.234	1.023	970
2.	32.64	47.60	283.2	0.9962	1.234	1.031	1969
3.	32.64	72.38	308.2	0.9962	1.234	1.030	2994
4.	32.64	93.54	318.2	0.9971	1.234	1.030	3869
5.							

NO.	P_t	Temp. °R	T_r	Z
1.				
2.				
3.				
4.				
5.				

Gas Liquid Hydrocarbon Ratio	13.615 Mcf/bbl.	
A.P.I. Gravity of Liquid Hydrocarbons	54 Deg.	
Specific Gravity Separator Gas	0.657	xxxxxxxxx
Specific Gravity Flowing Fluid	xxxxx	0.86
Critical Pressure	674 P.S.I.A.	664 P.S.I.A.
Critical Temperature	374 R	444 R

P_c 7238.2 P_c^2 52391

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	46980		46989	5402
2	39942		39976	12415
3	34671		34745	17646
4	28230		28334	24047
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{52931}{24047}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.076$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 7,957$

Absolute Open Flow 7,957 Mcfd @ 15.025 Angle of Slope θ 47.2 Slope, n 0.926

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	J. LOUGHMILLER	O. V. Kirby	