NE MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
JAN 4 1982
O. C. D.
ARTESIA, OFFICE

C/SF

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 12-1-81	
Company: Mesa Petroleum Co.		Connection: UNCONNECTED		Unit	
Pool: ~~UNDESIGNATED ABO~~ Pecos Slope-Abo Gas		Formation: ABO			
Completion Date: 12-1-81	Total Depth: 4163	Plug Back TD: 4073	Elevation: 3766	Farm or Lease Name: RIC	
Csg. Size: 4½" / Wt.: 10.5# / d: / Set At: 4150		Perforations: From 3501' To 3637'		Well No.: 4	
Tbg. Size: 2 3/8" / Wt.: 4.7# / d: / Set At: 3397		Perforations: From Open ended To		Unit: O / Sec.: 29 / Twp.: 6S / Rge.: 25E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: None		County: Chaves	
Producing Thru: Tubing	Reservoir Temp. °F: 102 @ 4163	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: New Mexico	

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
3397	3397	.65	1	1		Choke		

	FLOW DATA					TUBING DATA		CASING DATA		
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	Duration of Flow
SI						965		860		72hr SI
1.	Choke	14/64	910		54	910	54	825		1 hr.
2.	COEFF	19/64	830		58	830	58	765		1 hr.
3.		23/64	710		60	710	60	685		1 hr.
4.		28/64	520		60	520	60	605		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	.7924	Choke	923	1.006	1.240		912
2.	1.484	Choke	843	1.002	1.240		1554
3.	2.189	Choke	723	1.000	1.240		1962
4.	3.231	Choke	533	1.000	1.240		2135
5.							

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

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas _____ XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX _____
Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
Critical Temperature _____ R _____ R

P_c 873 P_c^2 762

NO	P_t	P_w	P_w^2	$P_c^2 - P_w^2$
1		838	702	60
2		778	605	157
3		698	487	275
4		618	382	380
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.0052$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.461$

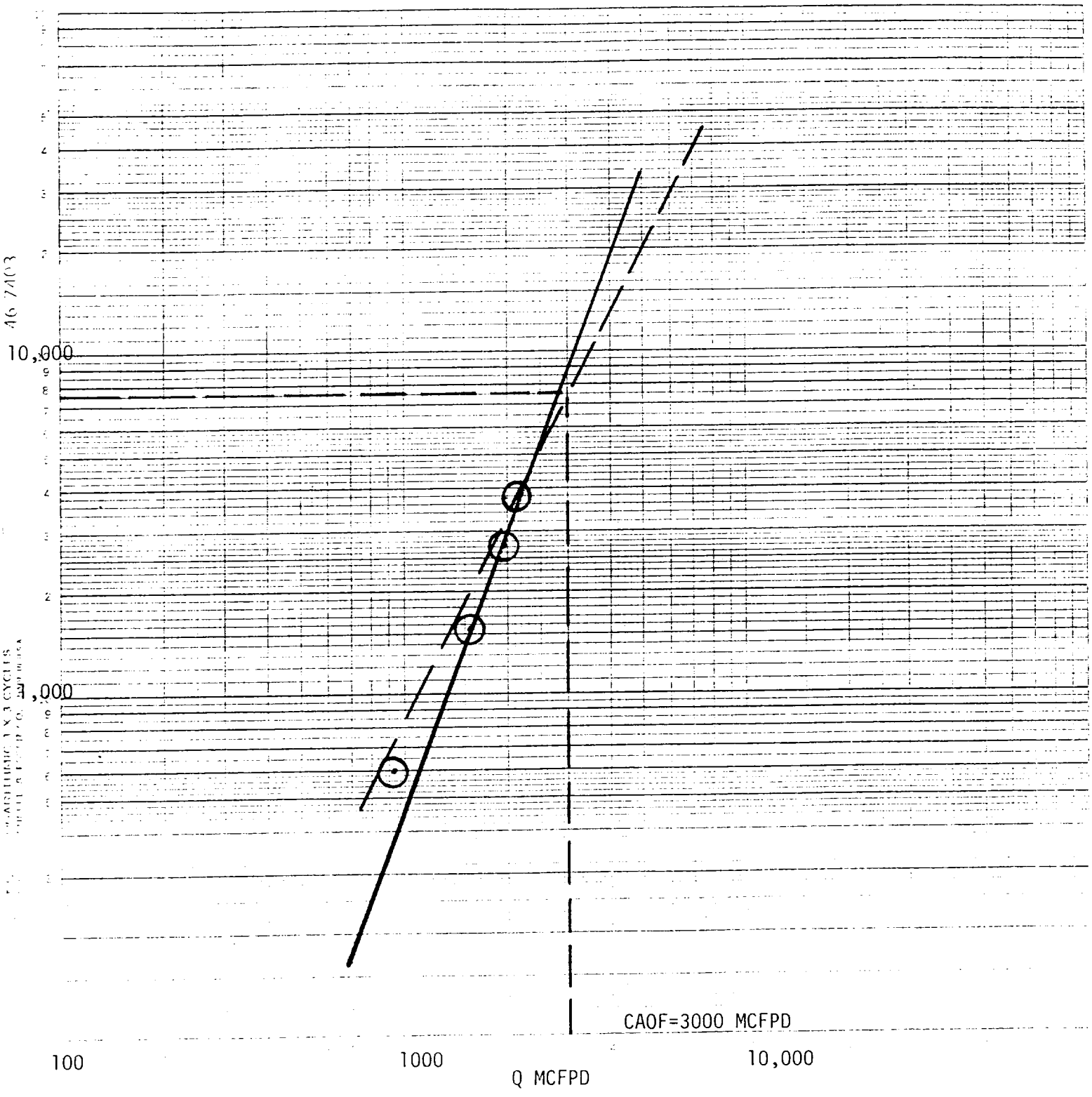
$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 3000$

Absolute Open Flow 3000 Mcfd @ 15.025 Angle of Slope θ 63.5° Slope, n .5

Remarks: Plot of $Pc^2 - Pw^2$ vs. θ yielded a straight line with a θ greater than 63.5° line through point

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	James Craig	E.L. Buttross, Jr.	

Kic No. 4
Sec 29, T6S, R25E
Chaves Co., NM
12-1-81



Assumed N=.5 and θ = 63.5°