NEW ME CO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
SEP 22 1981
O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 9-4-81	
Company: Mesa Petroleum Co.	Connection: UNCONNECTED			
Pool: UNDESIGNATED ABO	Formation: ABO			Unit: J
Completion Date: 9-4-81	Total Depth: 3350'	Plug Back TD: 3251'	Elevation: 3973'	Farm or Lease Name: BARN FEDERAL
Csg. Size: 4 1/2" / Wt.: 10.5# / d: / Set At: 3316'	Perforations: From 2703' To 3223'			Well No.: 4
Tbg. Size: 2 3/8" / Wt.: 4.7# / d: / Set At: 2600	Perforations: From OPEN-ENDED To			Unit: J / Sec.: 13 / Twp.: 8S / Rge.: 22E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE	Packer Set At: NONE			County: CHAVES
Producing Thru: TUBING	Reservoir Temp. °F: 95° @ 3350'	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
2600	2600	.65	1	2		2" ORIFICE WELL TESTER		

	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					920		910		72 HR SI
1.	2" ORIFICE 1 1/4	2	-	53	340	78	350		1 HR
2.	WELL TESTER								
3.									
4.									
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	311	2" ORIFICE		1.0068	.9608	-	301
2.		WELL TESTER					
3.							
4.							
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 923 P_c^2 852

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		363	132	720
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1833$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.1833$

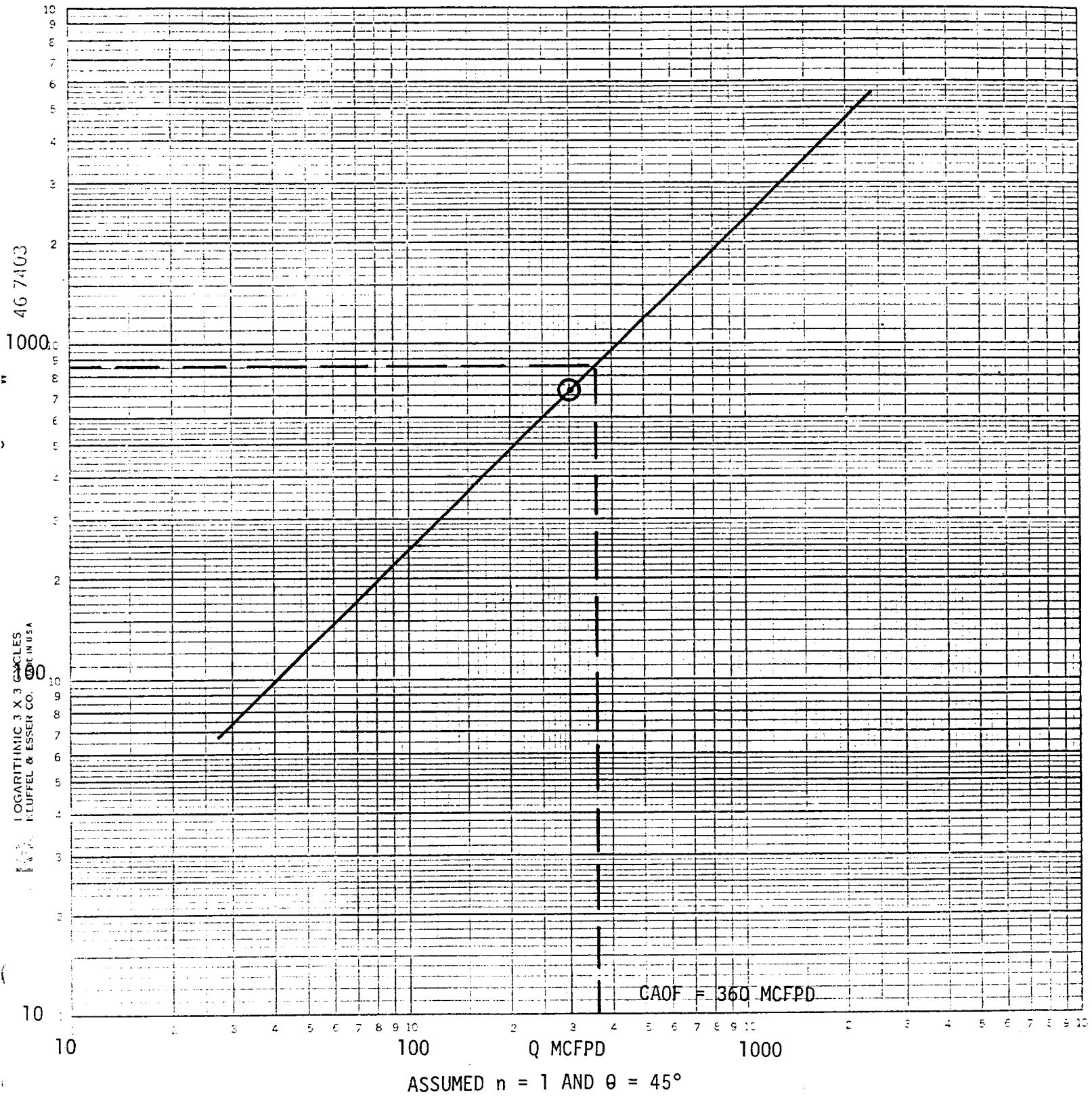
$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 360$

Absolute Open Flow 360 Mcfd @ 15.025 | Angle of Slope θ 45° | Slope, n 1

Remarks: UNABLE TO RUN FOUR FLOW RATES DUE TO LOW DELIVERY OF WELL. ASSUMED n = 1 AND BASED CALCULATIONS ON ONE POINT TEST.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	JAMES CRAIG	E. L. BUTTROSS, JR	

MESA PETROLEUM CO.
BARN FEDERAL NO. 4
SEC , T8S, R22E
CHAVES COUNTY, NEW MEXICO
9-4-81



ASSUMED n = 1 AND θ = 45°