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NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

c/sf File

Form C-122
Revised 9-1-65

JUL 2 1982
U.S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 7-3-82	
Company: MESA PETROLEUM CO. ✓			Connection: UNCONNECTED		
Pool: ~~PECOS SLOPE~~ Unref ABO			Formation: ABO		Unit
Completion Date: 7-3-82	Total Depth: 3200'		Plug Back TD: 3060'	Elevation: 4037'	Farm or Lease Name: MACHO FEDERAL
Csg. Size: 4 1/2" / Wt.: 10.5# / d: / Set At: 3100'			Perforations: From 2872' To 2904'		Well No.: 4
Tbg. Size: 2 3/8" / Wt.: 4.7# / d: / Set At: 2835'			Perforations: From OPEN ENDED To		Unit: K / Sec.: 8 / Twp.: 7S / Rge.: 23E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE			Packer Set At: NONE		County: CHAVES
Producing Thru: TUBING	Reservoir Temp. °F: 90° @ 3197'		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
		.65	1	1		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					957		957		72 HRS SI
1.	2" ORIFICE ½"	6		100	15	102	130		1 HR
2.	WELL								
3.	TESTER								
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	80	2" ORIFICE		.9636	.9608		74
2.		WELL TESTER					Packed IP 2 hrs 10-1-82 Comp + BR
3.							
4.							
5.							

NO.	P_t	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 _____ XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXX _____
Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
Critical Temperature _____ R _____ R

P_c 970 P_c^2 941

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		143	20	921
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0217$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.0217$

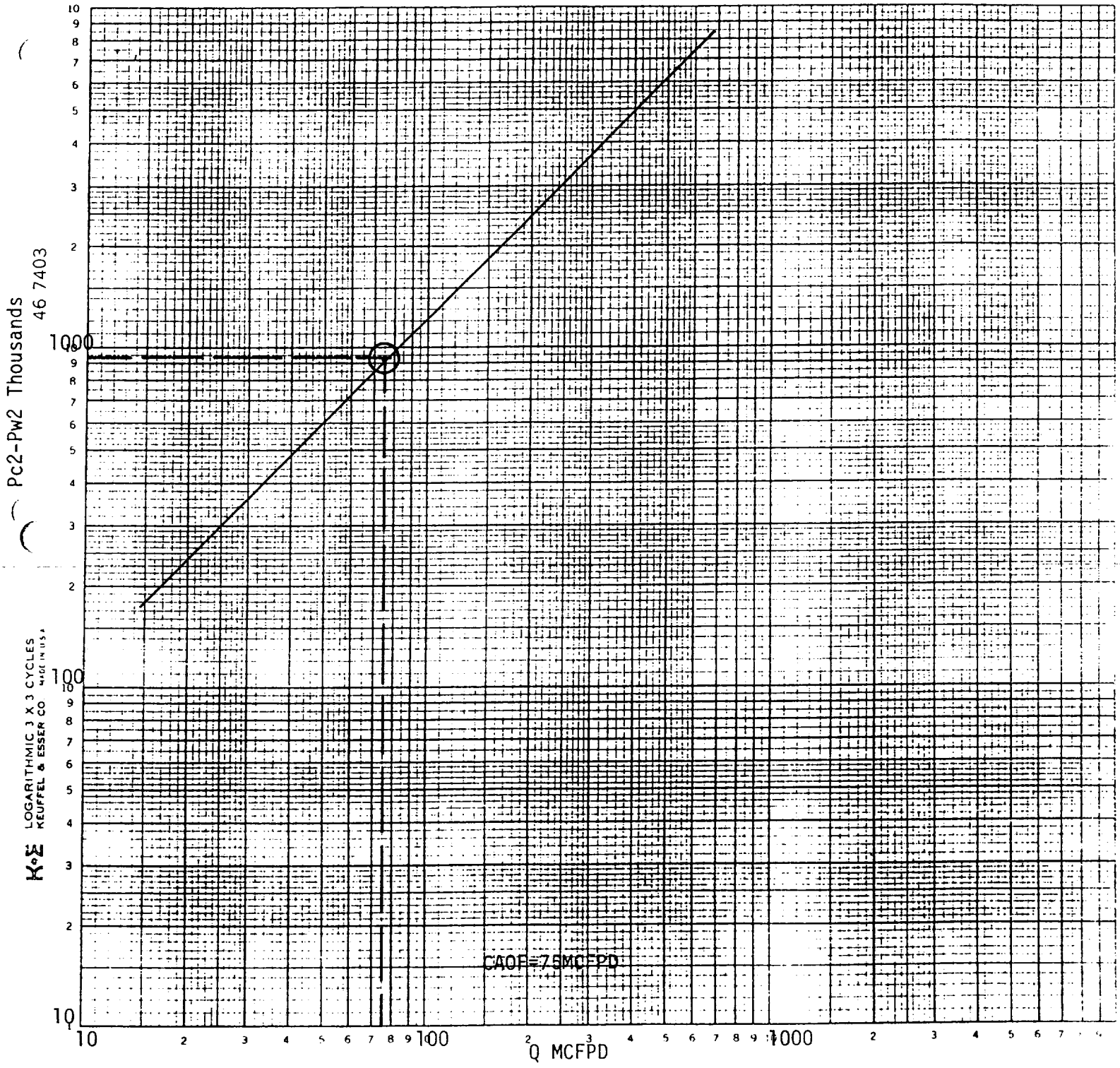
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 75$

Absolute Open Flow 75 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 7-23-82	

acho Federal #4
naves Co., NM
7-3-82



Assumed N=1 and θ=45°