

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST F GAS WELL

Form C-122
Revised 9-1-65

C/SF
C-122

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 2-17-82		MAR 12 1982	
Company MESA PETROLEUM CO.		Connection UNCONNECTED		O. C. D.	
Pool <i>Pecos Slope</i> UNDESIGNATED ABO		Formation ABO		Unit ARTESIA, OFFICE	
Completion Date 2-17-82		Total Depth 4212'		Plug Back TD 3964'	
Casing Size 4 1/2"		Set At 4212'		Perforations: From 3660' To 3851'	
Tubing Size 2 3/8"		Set At 3551'		Perforations: From OPEN ENDED To	
Type Well - Single - Production - G.G. or G.O. Multiple SINGLE		Packer Set At NONE		Foreman or Lease Name FOREMAN FEDERAL	
Producing Thru TUBING		Reservoir Temp. °F 102 @ 4212		Mean Annual Temp. °F 60	
		Baro. Press. - P ₀ 13.2		State NEW MEXICO	
L		H		Cg	
				.65	
				% CO ₂ 1	
				% N ₂ 1	
				% H ₂ S	
				Prover CHOKE	
				Meter Run	
				Casing	

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.		Temp. °F
51							853		770		36 HR ST
1.	14/64"			812		54	812		740		1 HR
2.	18/64"			730		54	730		687		1 HR
3.	23/64"			545		58	545		625		1 HR
4.	27/64"			430		59	430		585		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, Mgd
1	.7924	CHOKE	825	1.006	1.24		815
2	1.331	CHOKE	743	1.006	1.24		1234
3	2.189	CHOKE	558	1.002	1.24		1524
4	3.009	CHOKE	443	1.001	1.24		1655
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.	Specific Gravity Separator Gas _____ X X X X X X X X X	Specific Gravity Flowing Fluid _____ X X X X X	Critical Pressure _____ P.S.I.A.	Critical Temperature _____ P.S.I.A.
1.										
2.										
3.										
4.										
5.										

NO.	P _r	P _w	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} =$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n =$
1	783	613	567	46	2.4039	1.5505
2		700	490	123		
3		638	407	206		
4		598	358	255		
5						

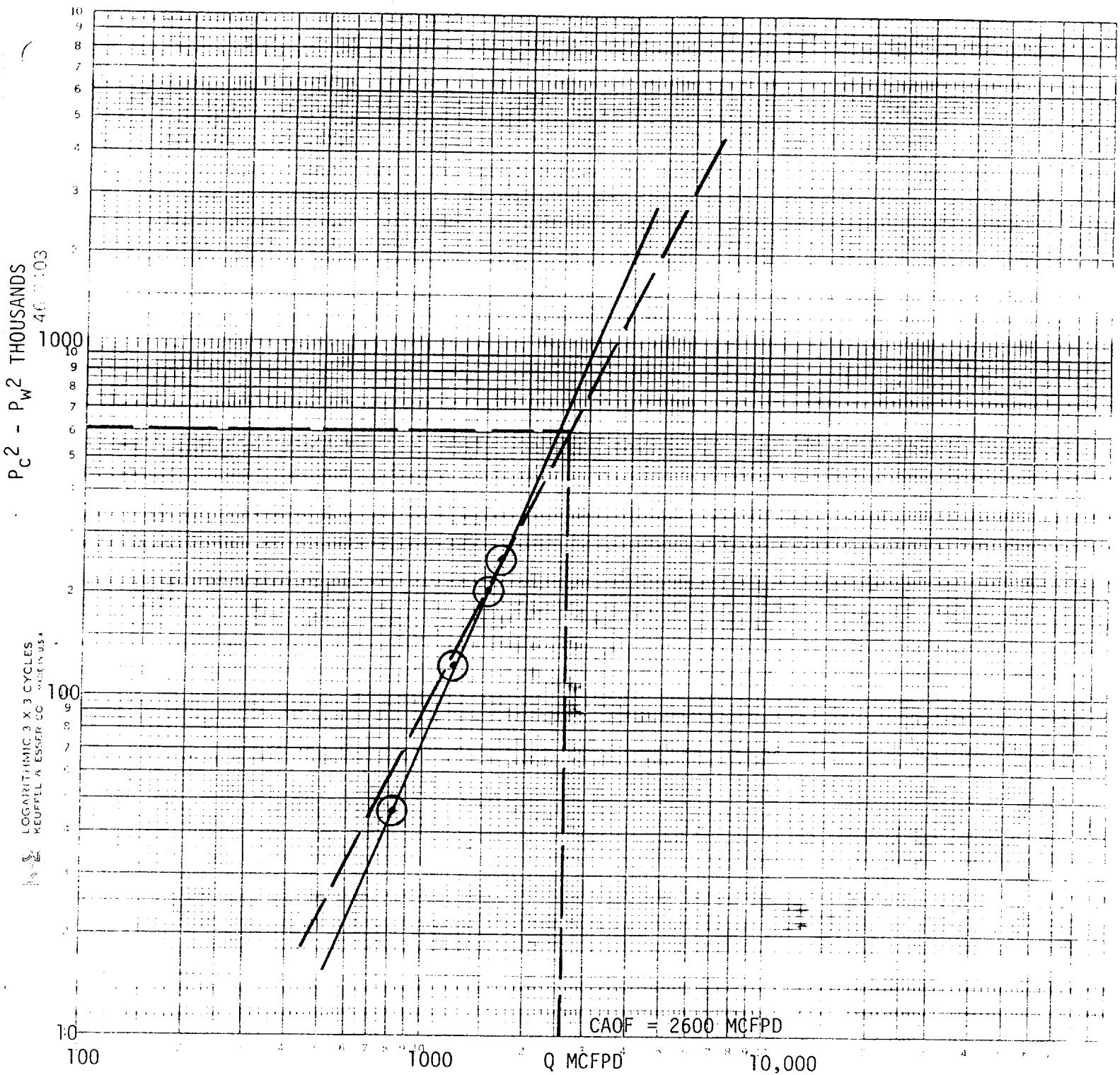
Absolute Open Flow 2600 Mgd @ 15.025 Angle of Slope 63.5° Slope, n .5

Remarks: PLOT OF P_r²-P_w² VS Q YIELDED A STRAIGHT LINE WITH A θ GREATER THAN 63.5°.
DREW 63.5° LINE THROUGH HIGHEST POINT.

Approved By Commission:	Conducted By: JAMES CRAIG	Calculated By: E. L. BUTTROSS, JR.	Checked By:
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*Posted ID-2
& Comp. Book
SI
3-19-82*

MES/ ETROLEUM CO.
 FOREMAN FEDERAL NO. 4
 CHAVES COUNTY, NM
 2-17-82



ASSUMED $N = .5$ AND $\theta = 63.5^\circ$