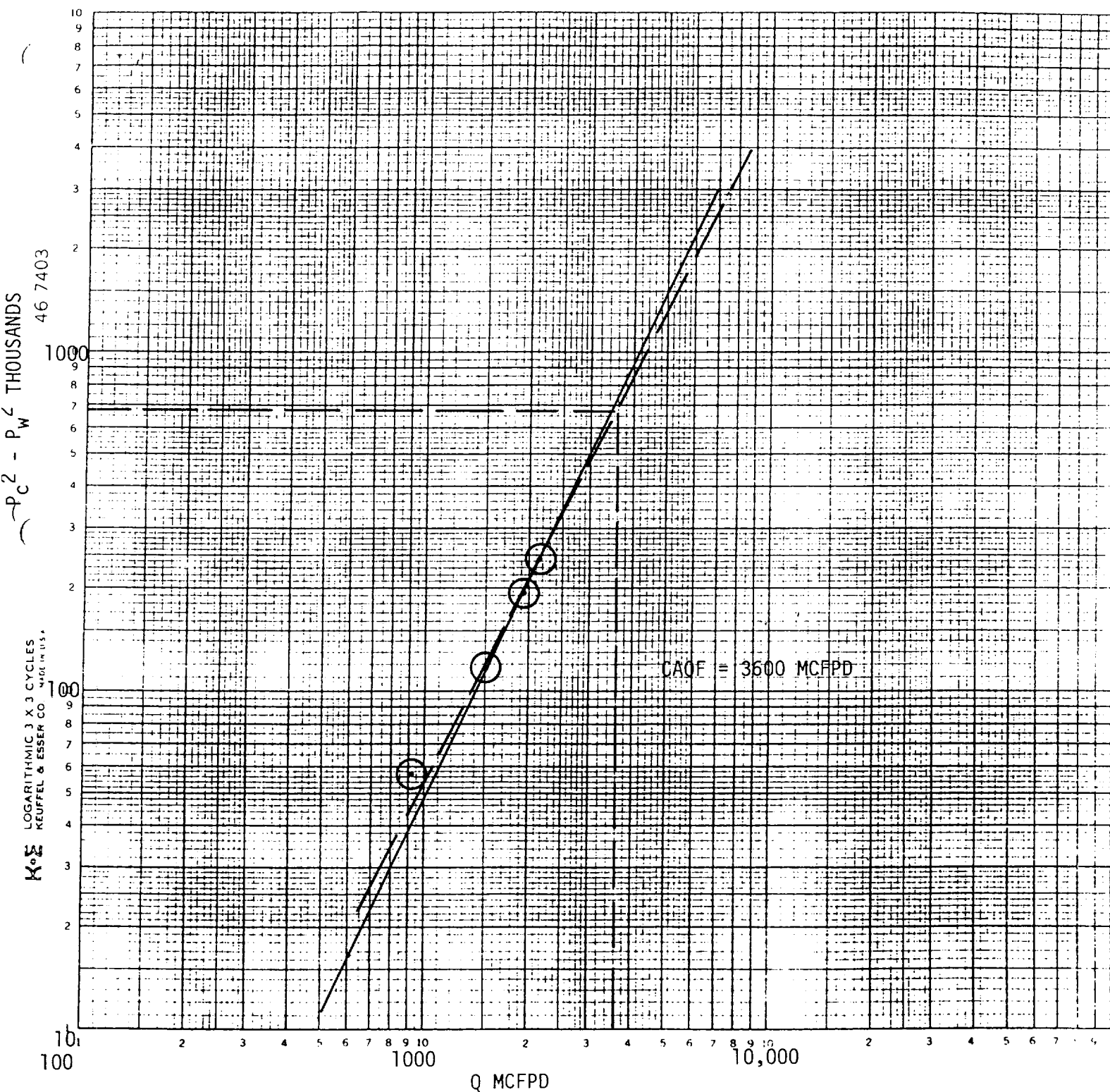


SEP 29 1982

Type Test ☒ Initial ☐ Annual ☐ Special		O. C. D. ARTESIA OFFICE		Test Date 7-7-82		JUL 20 1982	
Company MESA PETROLEUM CO.		Connection UNCONNECTED					
Pool UNDESIGNATED ABO		Formation ABO		Unit U.S. GEOLOGICAL SURVEY ROSWELL, NEW MEXICO			
Completion Date 7-7-82		Total Depth 3400'		Plug Back TD 3165'		Elevation 4176'	
Csg. Size 4 1/2"		Wt. 10.5#		Set At 3198'		Perforations: From 2887' To 3004'	
Trq. Size 2 3/8"		Wt. 4.7#		Set At 2820'		Perforations: From OPEN ENDED	
Type Well - Single - Prodenhead - G.G. or G.O. Multiple SINGLE				Packer Set At NONE		County CHAVES	
Producing Thru TUBING		Reservoir Temp. °F 95° @ 3400'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L		H		G _g .65		% CO ₂ 1	
				% N ₂ 1		% H ₂ S	
				Prover 2" CRITICAL FLOW PROVER		Meter Run Taps	
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.
1.	2" x 1"			29		42	770
2.	2" x 1"			58		44	700
3.	2" x 1"			77		48	600
4.	2" x 1"			88		50	490
5.							
RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor F _{pv}	Rate of Flow Q, Mcfd
1	17.09	FLOW PROVER	42	1.018	1.24		906
2	17.09	FLOW PROVER	71	1.016	1.24		1529
3	17.09	FLOW PROVER	90	1.012	1.24		1930
4	17.09	FLOW PROVER	101	1.010	1.24		2162
5							
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.		
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.		
2.					Specific Gravity Separator Gas _____ X X X X X X X X		
3.					Specific Gravity Flowing Fluid _____ X X X X X		
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.		
5.					Critical Temperature _____ R _____ R		
$P_c = 828$ $P_w^2 = 686$ $(1) \frac{P_c^2}{P_c^2 - P_w^2} = 2.7886$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.6699$							
NO.	F _t ²	P _w	P _w ²	P _c ² - P _w ²	$ADP = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3,600$ <i>Posted FD-2 10-1-82 Campy BK</i>		
1		793	629	57			
2		753	567	119			
3		703	494	192			
4		663	440	246			
Absolute Open Flow 3,600 Mcfd @ 15.025					Angle of Slope θ 63.5°		Slope, n .5
Remarks: Plot of P _c ² - P _w ² vs Q yield 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:	

CHINA F. L. NO. 2
CHAVES COUNTY, NEW MEXICO
7-7-82



ASSUMED $N = 1$ AND $\theta = 63.5^\circ$