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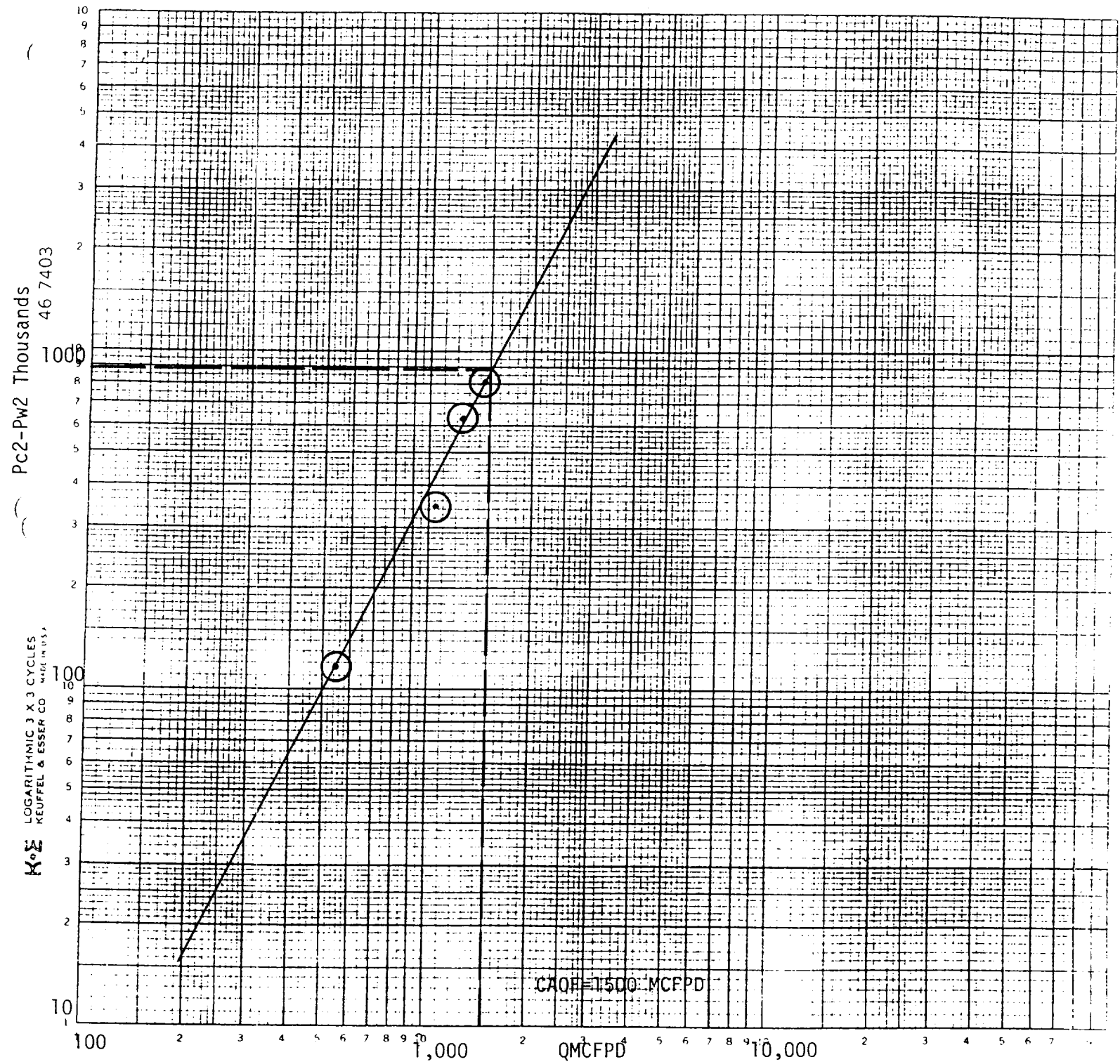
SEP 29 1982

457
File Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 7-14-82	
Company MESA PETROLEUM CO. ✓		Connection O. C. D. ARTESIA OFFICE UNCONNECTED	
Pool PECOS SLOPE ABO		Formation ABO	
Completion Date 7-14-82	Total Depth 3126'	Plug Back TD 2973'	Elevation 4052'
Csg. Size 4 1/2"	Wt. 10.5#	Set At 3040'	Perforations: From 2792' To 2920'
Tq. Size 2 3/8"	Wt. 4.7#	Set At 2810'	Perforations: From OPEN ENDED
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE		Packor Set At NONE	Well No. 3
Producing Thru TUBING	Reservoir Temp. °F 92° @ 3126'	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
COUNTY CHAVES			
STATE NEW MEXICO			
FLOW DATA			
NO.	Prover Line Size	X	Orifice Size
1.	2" x 1"		
2.	2" x 1"		
3.	2" x 1"		
4.	2" x 1"		
5.			
TUBING DATA			
	Press. p.s.i.g.	Temp. °F	
1.	935		
2.	860	87	
3.	700	86	
4.	345	87	
5.	225	87	
CASING DATA			
	Press. p.s.i.g.	Temp. °F	
1.	935		
2.	870		
3.	728		
4.	490		
5.	300		
RATE OF FLOW CALCULATIONS			
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m
1.	17.09	FLOW PROVER	26
2.	17.09	FLOW PROVER	49
3.	17.09	FLOW PROVER	59
4.	17.09	FLOW PROVER	68
5.			
NO.	P _t	Temp. °R	T _r
1.			
2.			
3.			
4.			
5.			
Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.			
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.			
Specific Gravity Separator Gas _____			
Specific Gravity Flowing Fluid _____ X X X X X			
Critical Pressure _____ P.S.I.A.			
Critical Temperature _____ R			
P _c 948 P _c ² 899			
NO.	P _t ²	P _w	P _w ²
1.		883	780
2.		741	549
3.		503	253
4.		313	98
5.			
(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1223$			
(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.061$			
ADP = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.500$			
Absolute Open Flow 1,500 Mcf @ 15.025 Angle of Slope 63° Slope, n .51			
Remarks: Plot of P _c ² - P _w ² vs Q yield a straight line with a 0 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:	

Posted FD-2
10-1-82
Camp. & BK

rol Federal #3
Chaves Co. NM
7-14-82



$$N=1/\text{slope}=\frac{\text{Log } Q2 - \text{Log } Q1}{\text{Cycle}}=\frac{\text{Log } 1600 - \text{Log } 500}{\text{Cycle}}=3.20-2.69=.51$$

$$\theta=63^{\circ}$$