

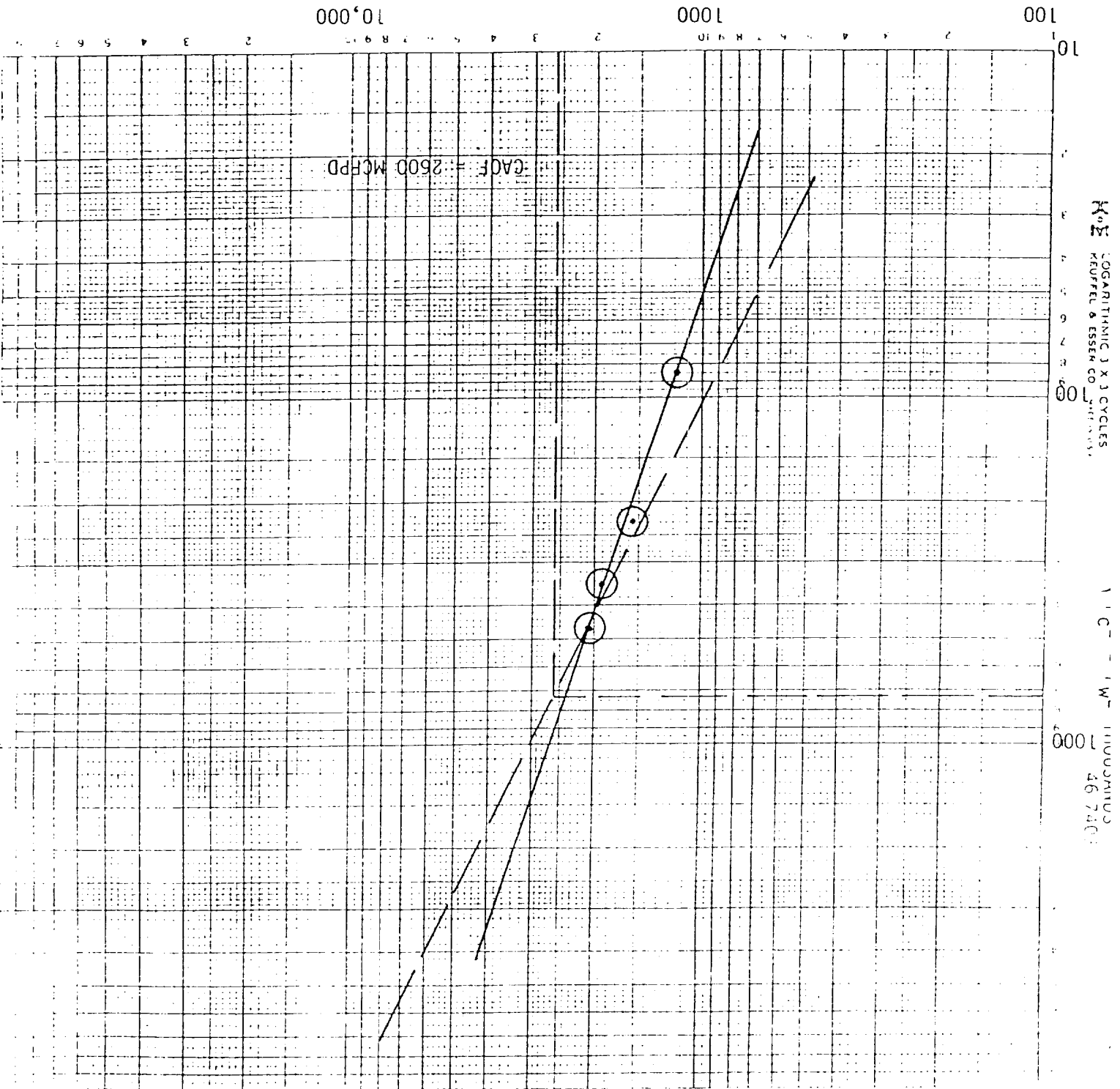
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JUN 2 1982

Type Test ☐ Initial ☐ Annual ☐ Special				Test Date 5-16-82		O. C. D.	
Company MESA PETROLEUM CO. ✓				Connection UNCONNECTED		ARTESIA, OFFICE	
Pool PECOS SLOPE ABO				Formation ABO		Unit	
Completion Date 5-16-82		Total Depth 4406'		Flow Line TD 4361'		Elevation 3573'	
Casing Size 4 1/2"		Set At 4406'		Perforations From 3717' To 3986'		Well No. 5	
Tubing Size 2 3/8"		Set At 3630'		Perforations From OPEN ENDED To		Unit Sec. Twp. Rge. E 29 7S 26E	
Type Well - Single - Brokenhead - G.O. or G.O. Multiple SINGLE				Factor Set At NONE		County CHAVES	
Producing thru TUBING		Reservoir Temp. °F 97° @ 4406'		Mean Annual Temp. °F 60		State NEW MEXICO	
L		H		Gg		Prover	
				.65		2" CRITICAL FLOW PROVER	
FLOW DATA				TUBING DATA		CASING DATA	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Duration of Flow
5.							
1.	2" X 1"			41		32	72 HR SI
2.	2" X 1"			60		40	1 HR
3.	2" X 1"			75		40	1 HR
4.	2" X 1"			81		42	1 HR
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. Compens. Factor F _{pv}	Rate of Flow Q, Mgd
1.	17.09	FLOW PROVER	54	1.028	1.240		1176
2.	17.09	"	73	1.020	1.240		1578
3.	17.09	"	88	1.020	1.240		1902
4.	17.09	"	94	1.018	1.240		2028
5.							
NO.	η	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/Sbl.		
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 859		P _c ² 738					
NO.	P _c ²	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.5702$			
1.		808	653	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.2531$			
2.		713	508				
3.		628	394				
4.		518	268	ACF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2600$			
5.							
Absolute Open Flow 2600				Mold @ 15.025		Angle of Slope @ 63.5°	
Slope, n 5							
Remarks: PLOT OF P _c ² - P _w ² 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:	

Posted 10-2
6-11-82
Comp & BK

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



MESA PETROLEUM CO.
CHARLOTTE FED COM NO. 5
CHAVES CO., NM
5-16-82