

NE MEXICO OIL CONSERVATION COMMS N
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

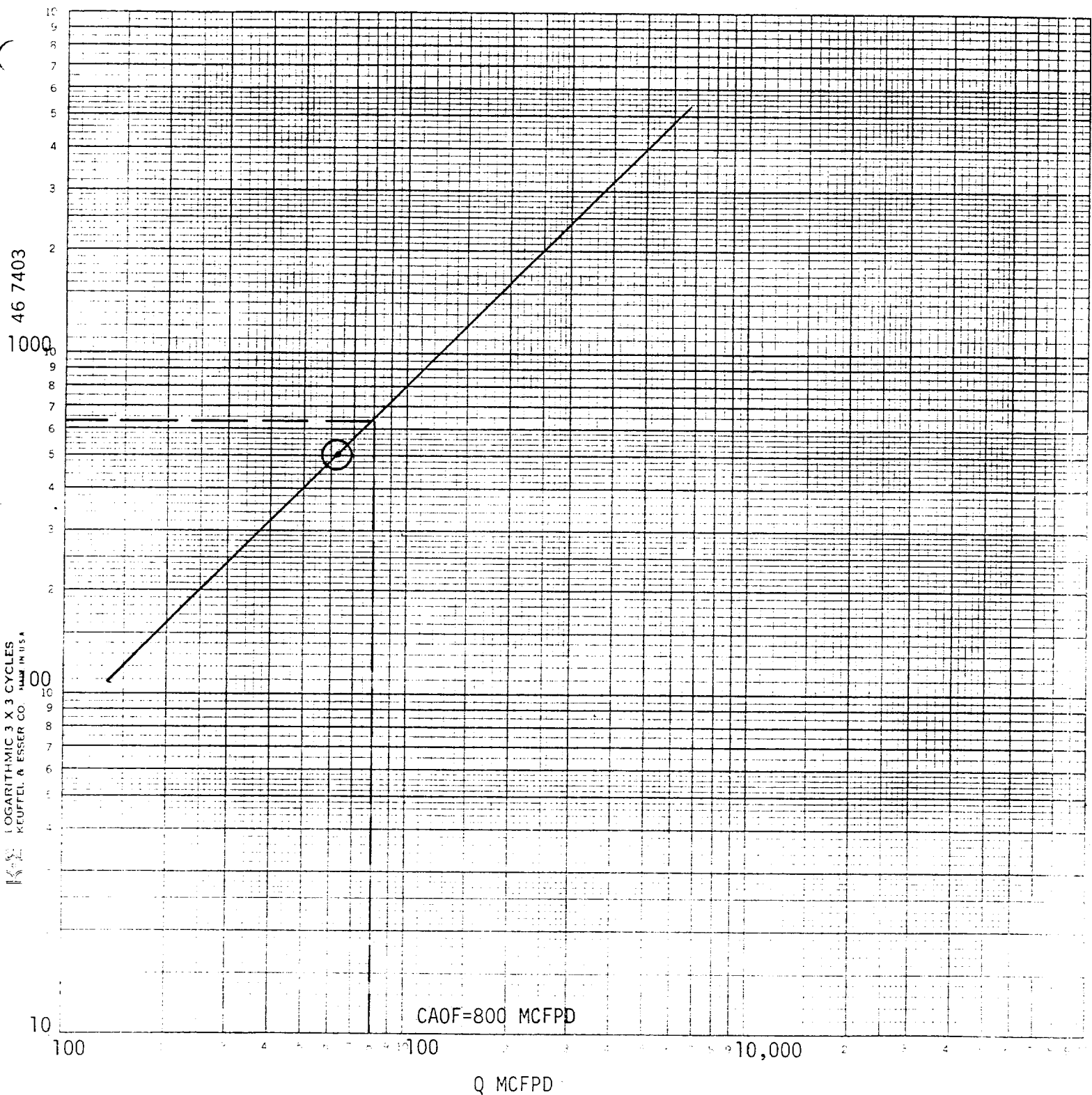
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 12-6-81		RECEIVED			
Company Mesa Petroleum Co.				Connection Unconnected				JAN 4 1982		
Pool Undesignated ABO				Formation ABO				Unit O. C. D.		
Completion Date 12-6-81				Total Depth 4906		Plug Back TD 4852'		Elevation 3763'		
Csg. Size 4 1/2				Wt. 10.5#		Set At 4900'		Perforations: From 4443 To 4638.5		
Tbg. Size 2 3/8				Wt. 4.7#		Set At 4316'		Perforations: From open ended To		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple single						Packer Set At none		County Chaves		
Producing Thru tubing		Reservoir Temp. °F 102 @ 4906		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State New Mexico		
L	H	G _g	% CO ₂	% N ₂	% H ₂ S	Prover 2" ORIFICE WELL TESTER		Meter Run Taps		
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
SI							870		780	
1.	2" ORIFICE		3/4	42		65	270	75	345	
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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd			
1	658	2" ORIFICE WELL		.9952	.9608		629			
2.		TESTER								
3.										
4.										
5.										
NO.	F _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					
F _c 793 F _c ² 629										
NO.	F _c ²	F _w	R _w ²	F _c ² - R _w ²	(1) $\frac{F_c^2}{F_c^2 - R_w^2} = 1.2555$ (2) $\left[\frac{F_c^2}{F_c^2 - R_w^2} \right]^n = 1.2555$					
1		358	128	501						
2										
3										
4					ACF = C $\left[\frac{F_c^2}{F_c^2 - R_w^2} \right]^n = 800$					
5										
Absolute Open Flow 800					Mcf/d @ 15.025		Angle of Slope @ 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: James Craig			Calculated By: E.L. Buttross, Jr.			Checked By:	

Mesa Petroleum Co.

cme No. 9

Chaves Co., NM

12-6-81



Assumed $N=1$ and $\theta=45^\circ$