

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

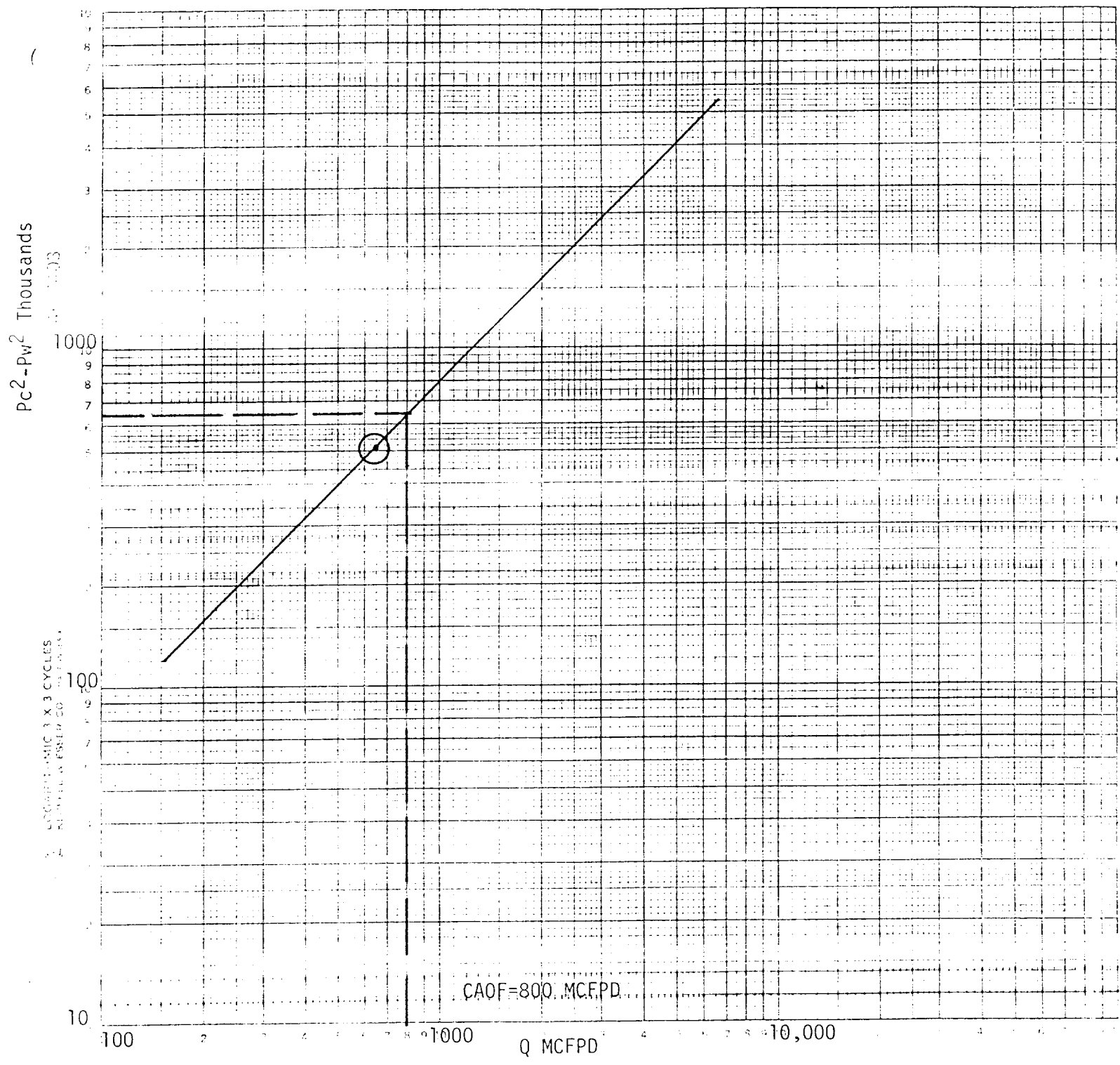
Form C-122
Revised 9-1-65

C/SF C-122

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 1-29-82		FEB 24 1982	
Company MESA PETROLEUM CO. /				Connection Unconnected			
Pool Undesignated ABO				Formation ABO		Unit O. C. D. ARTESIA, OFFICE	
Completion Date 1-29-82		Total Length 4150'		Plug Back To 4069'		Elevation 3691' GR	
Csg. Size 4 1/2"		Wt. 10.5#		Set At 4140'		Perforations: From 3735 To 3878	
Tub. Size 2 3/8"		Wt. 4.7#		Set At 3625'		Perforations: From open ended To	
Type Well - Single - Packerhead - G.G. or G.O. Multiple single				Packer Set At none		County Chaves	
Producing Thru tubing		Reservoir Temp. °F 102.0a 4150		Mean Annual Temp. °F 60		State New Mexico	
L		H		G _g		Prover	
				.65		2" ORIFICE WELL TESTER	
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
1.	2" ORIFICE 1 1/4			8		48	72 hr. SI
2.	WELL						1 hr.
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	661	2" ORIFICE WELL		1.0117	.9608		643
2		TESTER					
3							
4							
5							
NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcft/cub. ft.		
1					A.P.L. 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	803	P _c ²	645				
NO.	P _c ²	P _w ²	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.2747$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.2747$		
1		373	139	506			
2							
3					ADP = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 800$		
4							
5							
Absolute Open Flow 800				Mcfd @ 15,025		Angle of Slope α 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 Corporation:		Conducted By:		Calculated By: 282-1-82		Checked By:	
		James Craig		E.L. Buttross, Jr.			

USA Petroleum Co.
Alkali Federal #9
Chaves Co., NM
1-29-82



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