

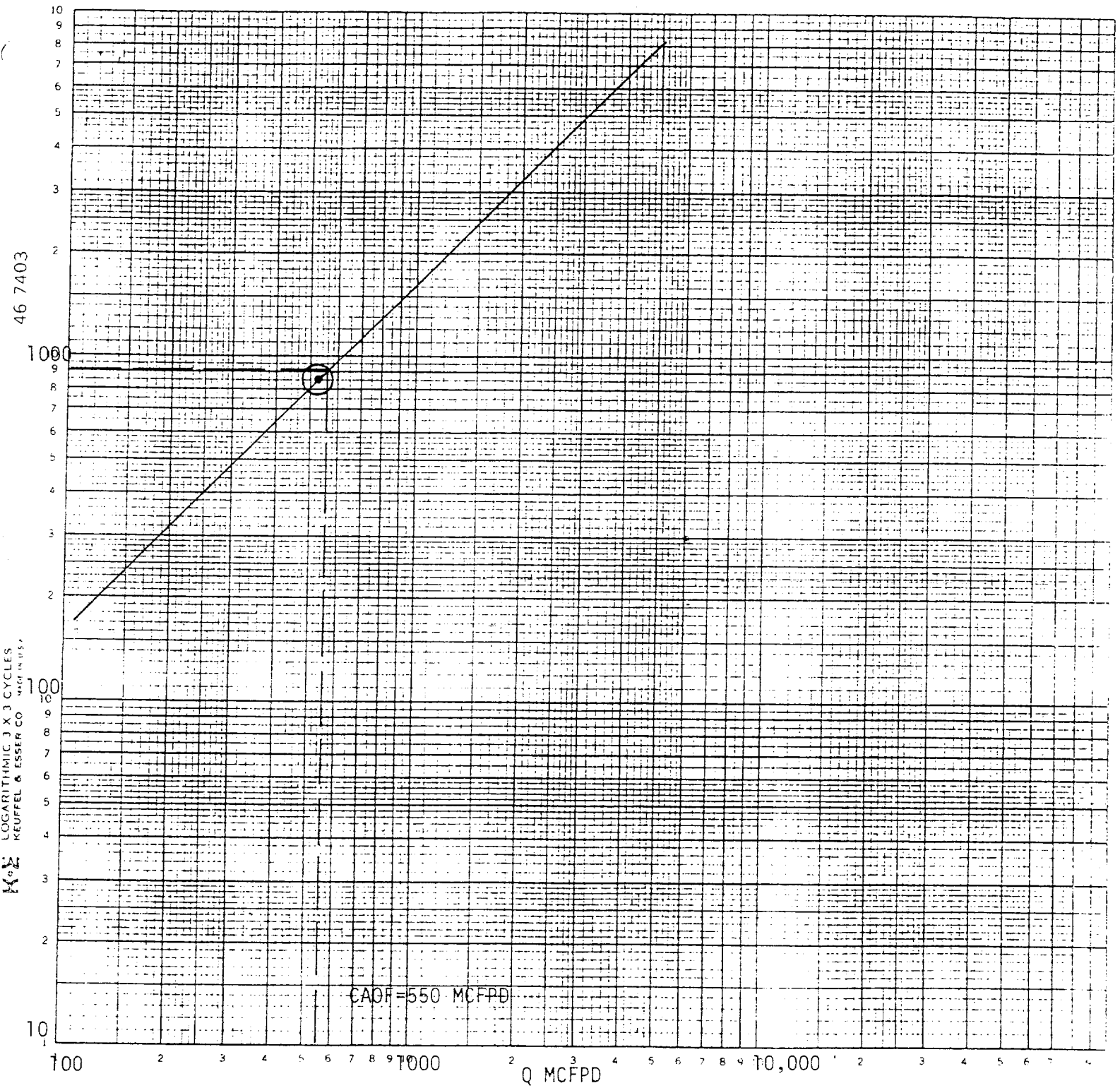
NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 7-21-82		AUG 11 1982	
Company MESA PETROLEUM CO. ✓				Connection UNCONNECTED			
Pool UNDESIGNATED ABO				Formation ABO		Unit O. C. D. ARTESIA, OFFICE	
Completion Date 7-21-82		Total Depth 3200'		Plug Back TD 2952'		Elevation 3946'	
Csg. Size 4 1/2"	Wt. 10.5#	Set At 2999'	Perforations: From 2776' To 2886'		Well No. 1		
Tub. Size 2 3/8"	Wt. 4.7#	Set At 2842'	Perforations: From OPEN ENDED		Unit Sec. Twp. Page E 21 7S 23E		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At NONE		County CHAVES	
Producing Thru TUBING		Reservoir Temp. °F 95° @ 3200'		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
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" x .5"			112		80	1 HR
2.							
3.							
4.							
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, Mscf
1	4.279	FLOW PROVER	125	.9813	1.24		525
2.							
3.							
4.							
5.							
NO.	P ₁	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcl/bbl.		
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		
$P_c = 953$ $P_c^2 = 908$					$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.0558$ $(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0558$		
NO.	P ₁ ²	P _w	P _w ²	P _c ² - P _w ²	$ADP = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 550$		
1		218	48	860			
2							
3							
4							
Absolute Open Flow _____ 550 _____ Mscf @ 15.025					Angle of Slope θ _____ 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: <u>EAB 8-4-82</u> E.L. BUTTROSS, JR.		Checked By:	

Mesa Petroleum Co.
Iris State #1
Chaves Co., NM
7-21-82



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