

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 9-17-82			
Company Mesa Petroleum Co.				Connection unconnected		OCT 20 1982	
Pool Pecos Slope ABO				Formation ABO		Unit O. C. D. ARTESIA, OFFICE	
Completion Date 9-17-82		Total Depth 4800'		Plug Back TD 4714'		Elevation 3732'	
Form or Lease Name Acme Com							
Csq. Size 4 1/2	Wt. 10.5#	d	Set At 4761'	Perforations: From 4553' To 4639'		Well No. 12	
Tbg. Size 2-3/8	Wt. 4.7#	d	Set At 4616'	Perforations: From open ended To		Unit Sec. Twp. Rge. 0 20 8S 26E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At None		County Chaves	
Producing Thru Tubing		Reservoir Temp. °F 103° @ 4800'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
State New Mexico							
L	H	Gg .65	% CO ₂ 1	% N ₂ 1	% 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							940		940		48 hr. SI
1.	2" Orifice Well			18		56	120	46	180		1 hr.
2.	Tester										
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (14 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, Mcfd
1	638	2" Orifice Well		1.0039	.9608		615
2.		Tester					
3							
4.							
5.							

NO.	P _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

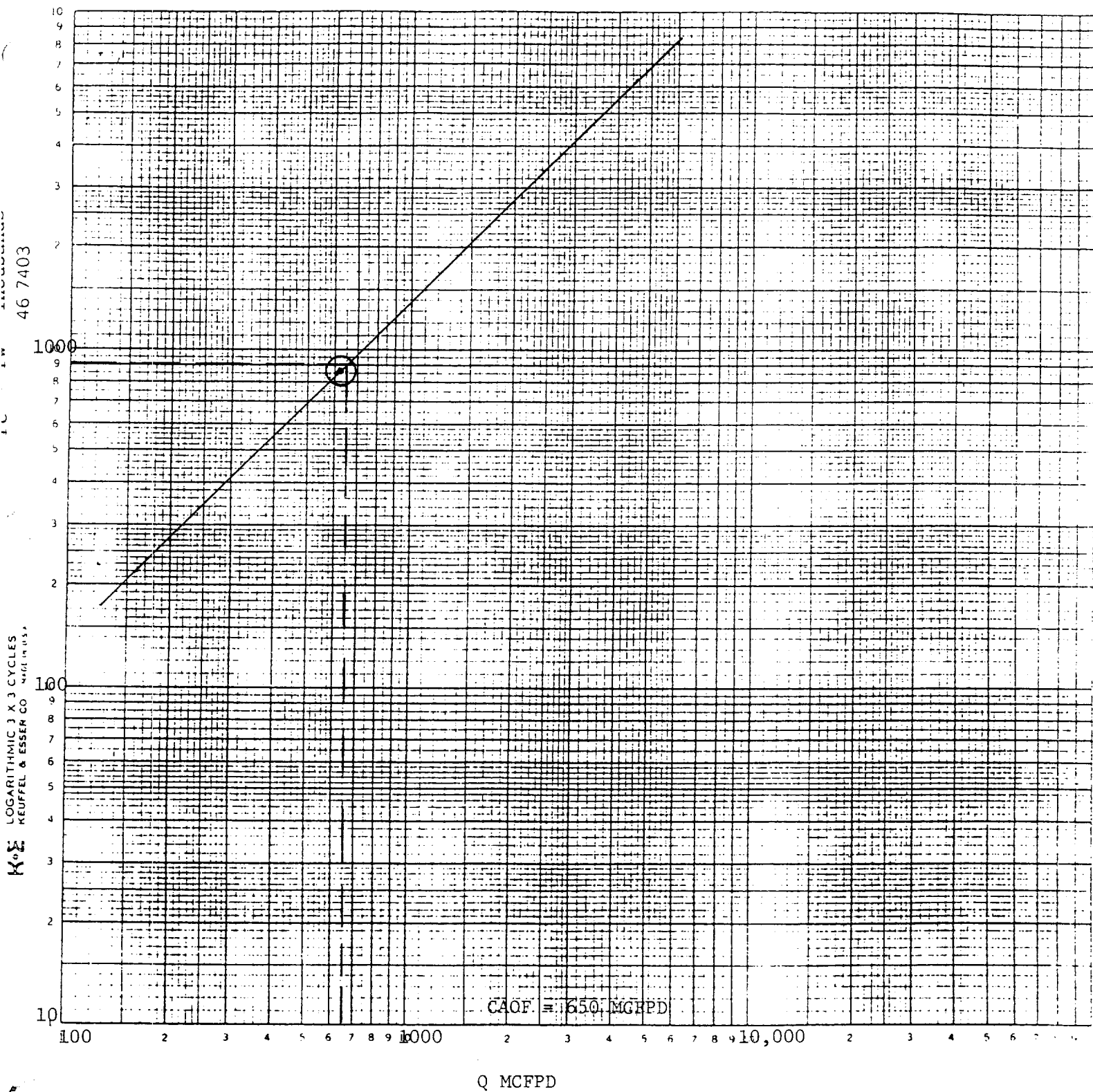
NO.	P _r	P _w	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.0424$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.0424$
1		193	37	871		
2						
3						
4						
5						

Absolute Open Flow 650 Mcfd @ 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 Division	Conducted By:	Calculated By: James Craig	Checked By: E.L. Buttross, Jr.
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MESA PETROLEUM CO.
 Acme Com No. 12
 Chaves County, New Mexico
 9-17-82



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