

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 4-14-81		APR 21 1982	
Company MESA PETROLEUM CO. ✓					Connection UNCONNECTED		O. C. D.	
Pool <i>Focus Slope</i> UNDESIGNATED ABO					Formation ABO		Unit ARTESIA, OFFICE	
Completion Date 4-14-82		Total Depth 4150'		Plug Back TD 4062'		Elevation 3796'		Farm or Lease Name RIC
Csg. Size 4 1/2"	Wt. 10.5#	d	Set At 4129'	Perforations: From 3500' To 3668'		Well No. 5		
Thg. Size 2 3/8"	Wt. 4.7#	d	Set At 3595'	Perforations: From OPEN ENDED To		Unit Sec. Twp. Rge. M 20 6S 25E		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE					Packer Set At NONE		County CHAVES	
Producing Thru TUBING		Reservoir Temp. °F 101 @ 4150'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State NEW MEXICO
L	H	G _g .65	% CO ₂ 1	% N ₂ 1	% H ₂ S	Prover CHOKE	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							930		925		72 HR SI
1.	CHOKE	15/64"		840		84	840	84	855		1 HR
2.	COEFF.	17/64"		760		87	760	87	785		1 HR
3.		20/64"		625		87	625	87	670		1 HR
4.		23/64"		495		85	495	85	565		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 Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	.9165	CHOKE	853	.9777	1.240		948
2	1.187	CHOKE	773	.9750	1.240		1109
3	1.645	CHOKE	638	.9750	1.240		1269
4	2.180	CHOKE	508	.9768	1.240		1347
5.							

NO.	P _t	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

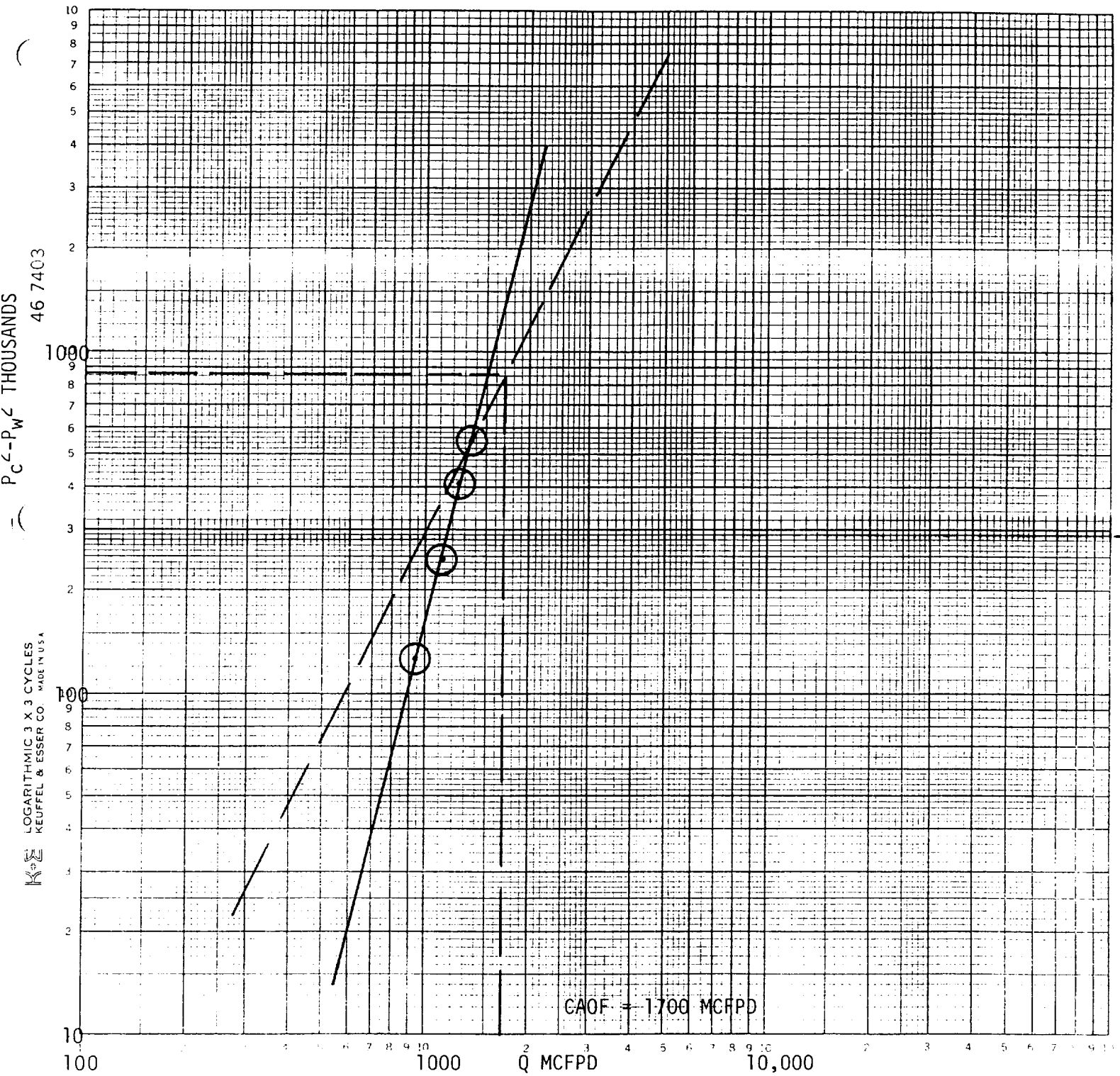
P _c 938	P _c ² 880	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.6117$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.2695$
NO.	P _t ²	P _w	P _w ²
1		868	753
2		798	637
3		683	466
4		578	334
5			

Absolute Open Flow 1700 _____ Mcfd @ 15.025		Angle of Slope θ 63.5°	Slope, n .5
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Remarks: PLOT OF P_c²-P_w² 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: 4-19-82
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M. A. PETROLEUM CO.
 RIC COM NO. 5
 CHAVES CO., NM
 4-14-82



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