

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

SF / file
Form C-122 Revised 9-1-66
C-122 file

RECEIVED

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special		Test Date 10-2-81	Company MESA PETROLEUM CO. /		Connection UNCONNECTED	Date DEC 15 1981	
Pool UNDESIGNATED ABO		Formation ABO	Completion Date 10-2-81		Total Depth 3315'	Plug Back TD 3260'	Elevation 3950'
Csg. Size 4 1/2"	Wt. 10.5#	d	Set At 3315'	Perforations: From 2654'	To 2762'	Well No. 1	
Trq. Size 2 3/8"	Wt. 4.7#	d	Set At 2550'	Perforations: From OPEN ENDED	To	Unit G 24	Sec. Twp. Rge. 8S 22E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At NONE		County CHAVES	
Producing Thru TUBING		Reservoir Temp. *F 100 @ 3300	Mean Annual Temp. *F 60	Baro. Press. - P _a 13.2		State NEW MEXICO	
L 2550	H 2550	G _g .65	% CO ₂ 1	% N ₂ 1	% H ₂ S	Prover 2" ORIFICE WELL TESTER	Meter Run Feet

NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. *F	TUBING DATA		CASING DATA		Duration of Flow
							Press. p.s.i.g.	Temp. *F	Press. p.s.i.g.	Temp. *F	
1.	2" ORIFICE		1 1/4	8	-	60	850	695	75	715	72 HR SI
2.	WELL		1 1/4	12	-	52	590	590	75	610	1 HR
3.	TESTER		1 1/4	13	-	53	470	470	74	485	1 HR
4.			1 1/4	14	-	56	380	380	75	395	1 HR
5.											

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
2	840	TESTER		1.0078	.9608		813
3	882			1.0068	.9608		853
4	924			1.0039	.9608		891
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 ²	P _w	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.2785$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.1307$
1		728	530	232		
2		623	388	374		
3		498	248	514		
4		408	166	596		
5						

AOIF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1000$

*Paul J. ...
12-15-81
SI*

Absolute Open Flow 1000 Mcfd @ 15.025 Angle of Slope θ 63.5° Slope, n .5

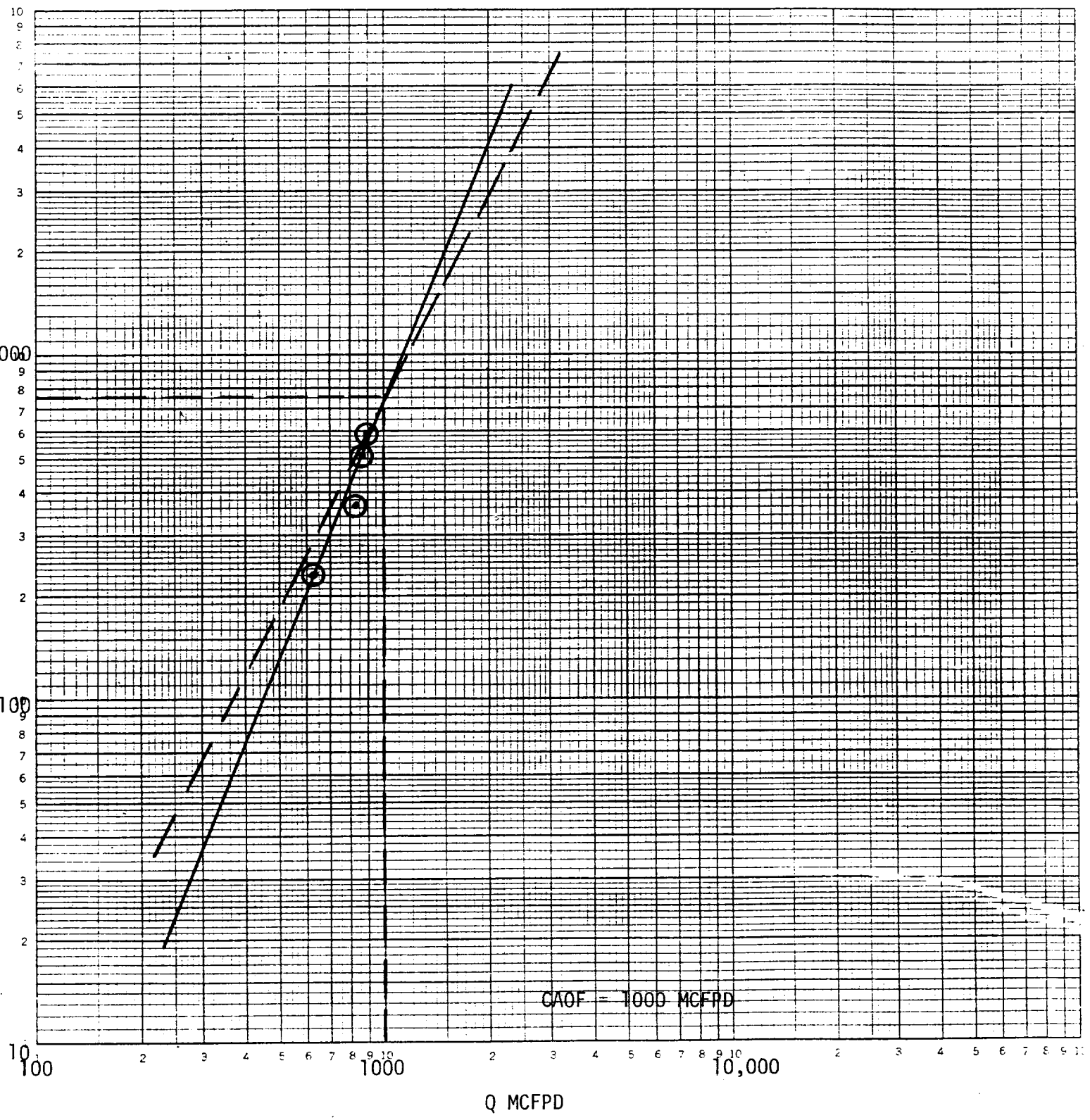
Remarks: PLOT OF P_c²-P_w² vs Q YIELDED A STRAIGHT LINE WITH A θ GREATER THAN 63.5°. ASSUMED N = .5 AND DREW 63.5° LINE THROUGH HIGHEST POINT.

Approved By Commission:	Conducted By: JAMES CRAIG	Calculated By: E. L. BUTTROSS, JR.	Checked By:
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NDY FEDERAL NO. 1
 SLC 24, T8S, R22E
 CHAVES COUNTY, NEW MEXICO
 10-2-81

P_{CL} - P_{WL} THOUSANDS
 467403

LOGARITHMIC 3 X 3 CYCLES
 KEUFFEL & ESSER CO. MADE IN U.S.A.



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