

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 12-9-81		JAN 4 1982			
Company Mesa Petroleum Co. ✓				Connection Unconnected				O. C. D.	
Pool Undesignated ABO				Formation ABO				Unit ARTESIA, OFFICE	
Completion Date 12-9-81		Total Depth 4850		Plug Back TD 4783'		Elevation 3668'		Farm or Lease Name Acme	
Csg. Size 4 1/2	Wt. 10.5#	d	Set At 3850'	Perforations: From 4197 To 4616		Well No. 7			
Tbg. Size 2 3/8	Wt. 4.7#	d	Set At 4162'	Perforations: From open ended To		Unit Sec. Twp. Rge. G 30 8S 26E			
Type Well - Single - Bradenhead - G.C. or G.O. Multiple single				Packer Set At none		County Chaves			
Producing Thru tubing		Reservoir Temp. °F 103°@4850		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							955		915		24 hr SI
1.	2" ORIFICE	1	1 1/4	11		20	820	40	795		1 hr
2.	WELL	1	1 1/4	18		30	540	51	525		1 hr
3.	TESTER	1	1 1/4	18.5		44	310	58	365		1 hr
4.		1	1 1/4	19		48	230	64	345		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	797	2" ORIFICE WELL		1.0408	.9608		797
2	1083	TESTER		1.0302	.9608		1072
3	1102			1.0157	.9608		1075
4	1122			1.0117	.9608		1090
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

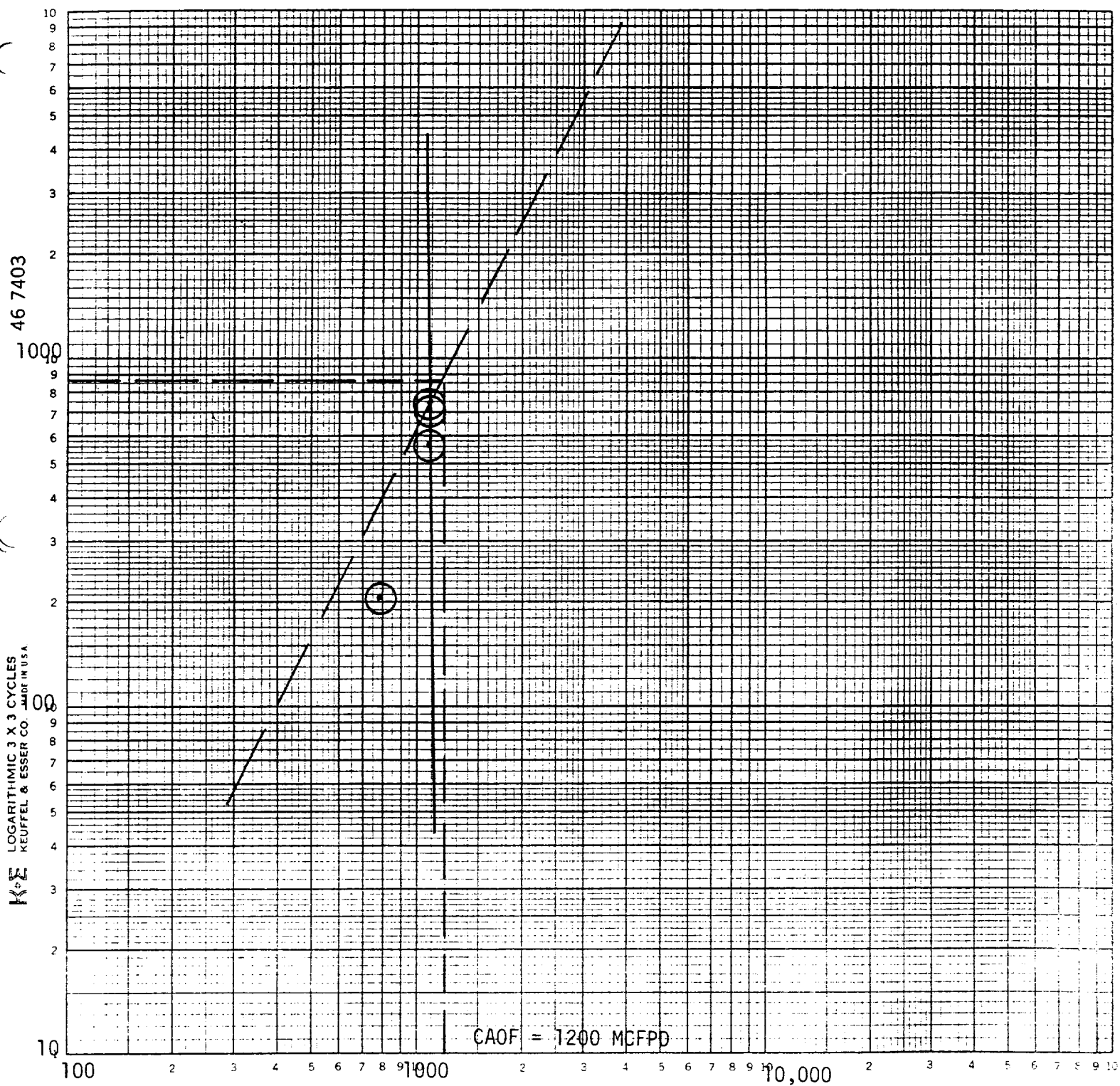
P _c 928	P _c ² 861	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1746$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0838$	
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²
1		808	653	208
2		538	289	572
3		378	143	718
4		358	128	733
5				

Absolute Oper. Flow 1200 Mcfd @ 15.025		Angle of Slope @ 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:
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12-9-81



Assumed $N = .5$ and $\theta = 63.5^\circ$