

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

Form C-122
Revised 9-1-65

RECEIVED

C/SF
C-122

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 4-16-82		APR 28 1982	
Company Mesa Petroleum Co. ✓				Connection UNCONNECTED		O. C. D. ARTESIA, OFFICE	
Pool PECOS SLOPE ABO				Formation ABO		Unit	
Completion Date 4-16-82		Total Depth 4214'		Plug Back TD 4161'		Elevation 4002.5'	
Csg. Size 4 1/2"		Wt. 10.5#		Set At 4210'		Perforations: From 3608' To 3806'	
Tng. Size 2 3/8"		Wt. 4.7#		Set At 3508'		Perforations: From OPEN ENDED To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At NONE		Farm or Lease Name STANCEL FED COM	
Producing Thru TUBING		Reservoir Temp. °F 102 @ 4214'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L		H		G _g .65		% CC 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							835		765		72 HR SI
1.	CHOKE	14/64		795		76	795	76	735		1 HR
2.	COEFF	18/64		660		78	660	78	705		1 HR
3.		21/64		620		80	620	80	675		1 HR
4.		24/64		565		80	565	80	640		1 HR
5.											

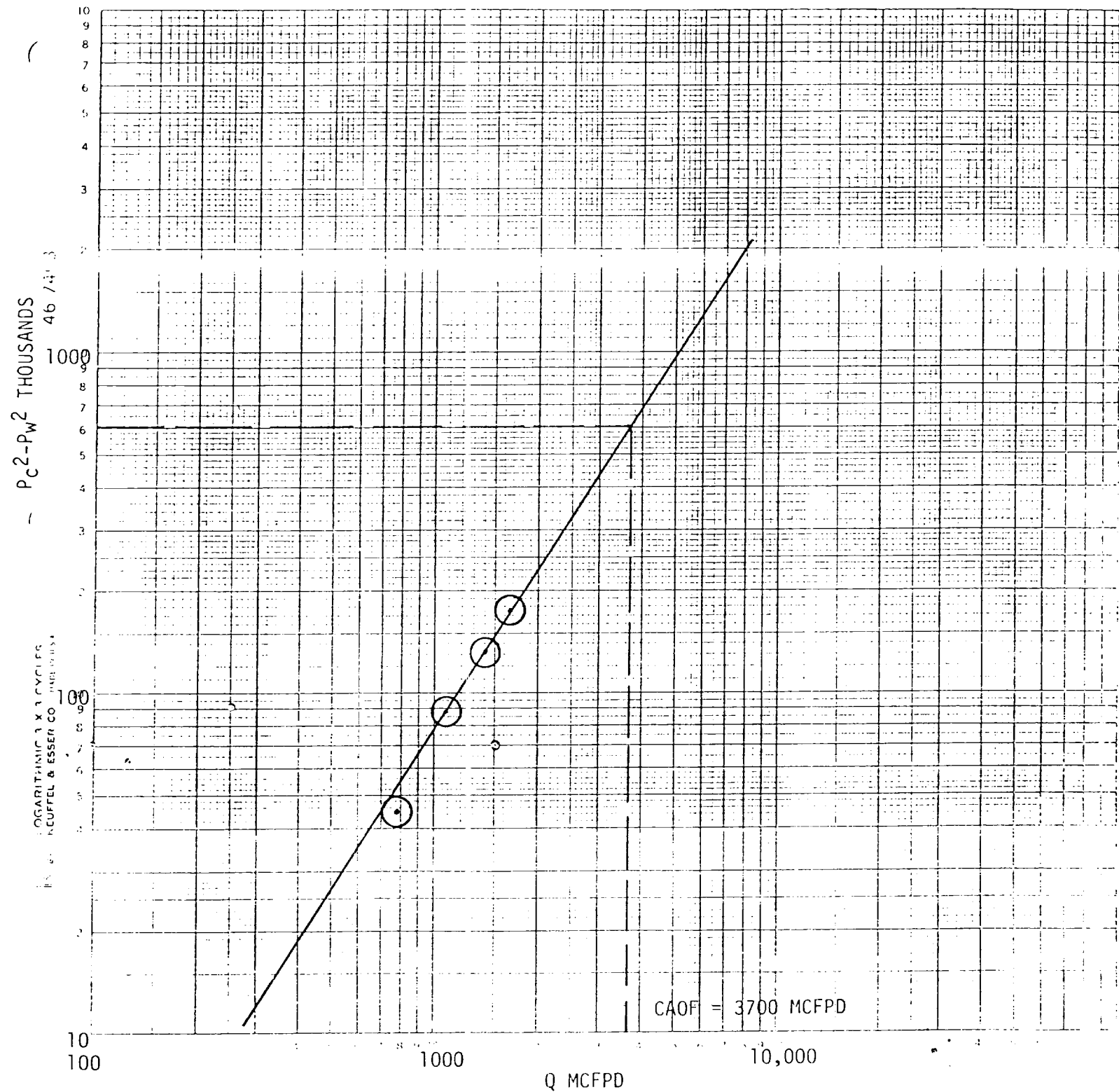
RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	.7924	CHOKE	803	.9850	1.240		777
2	1.3310	CHOKE	673	.9831	1.240		1092
3	1.8170	CHOKE	633	.9813	1.240		1400
4	2.3880	CHOKE	578	.9813	1.240		1679
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 778	P _c ² 605	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.3799$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.1802$
NO	P _t ²	P _w	P _w ²
1	748	560	45
2	718	516	89
3	688	473	132
4	653	426	179
5			

Absolute Open Flow 3700 Mcfd @ 15.025		Angle of Slope @ 57.4°	Slope, n .64
Remarks:			
Approved By Commission:		Conducted By: JAMES CRAIG	Calculated By: ELS 4-20-82 E. L. BUTTROSS, JR.
		Checked By:	

MESA PETROLEUM CO.
 UNCEL FED COM NO. 7
 CHAVES CO., NM
 4-16-82



$$N = 1/\text{SLOPE} = \frac{\text{LOG } Q_2 - \text{LOG } Q_1}{\text{CYCLE}} = \frac{\text{LOG } 5100 - \text{LOG } 1180}{\text{CYCLE}} = 3.71 - 3.07 = .64$$

$$\theta = 57.4^\circ$$