

NE MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST, OR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

C/SF
C-122

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 4-3-82		APR 19 1982	
Company MESA PETROLEUM CO.		Connection UNCONNECTED		O.C.D.	
Pool PECOS SLOPE ABO		Formation ABO		Unit ARTESIA, OFFICE	
Completion Date 4-3-82		Total Depth 4082'		Elevation 3948'	
Csg. Size 4 1/2"		Set At 4070'		Perforations: From 3559' To 3812'	
Tub. Size 2 3/8"		Set At 3476'		Perforations: From OPEN-ENDED To	
Type Well - Single - Protienhead - G.O. or G.O. Multiple SINGLE		Factor Set At NONE		County CHAVES	
Producing Thru TUBING		Reservoir Temp. °F 100 @ 4082'		Mean Annual Temp. °F 60	
		Baro. Press. - P _a 13.2		State NEW MEXICO	
L		H		Prover CHOKE	
G _g .65		% CO ₂ 1		% H ₂ S 1	
				Meter Run Taps	

FLOW DATA				TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	Orifice Size	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	
					770		730	56 hr SI
1.	CHOKE	13/64	730	65	730	65	700	1 hr
2.	COEFF	18/64	665	68	665	68	650	1 hr
3.		23/64	578	69	578	69	585	1 hr
4.		26/64	495	62	495	62	523	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, Fpv	Rate of Flow Q, Mgd
1.	.6778	CHOKE	743	.9952	1.240		621
2.	1.3310	CHOKE	678	.9924	1.240		1110
3.	2.1890	CHOKE	591	.9915	1.240		1590
4.	2.7940	CHOKE	508	.9981	1.240		1757
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/Dbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons	_____ Deg.
2.					Specific Gravity Separator Gas	XXXXXXX
3.					Specific Gravity Flowing Fluid	XXXXX
4.					Critical Pressure	P.S.I.A. _____ R
5.					Critical Temperature	_____ R

NO.	P _t	P _w	P _w ²	P _t ² - P _w ²
1.	713	508	44	
2.	663	440	112	
3.	598	358	194	
4.	536	287	265	
5.				

(1) $\frac{P_t^2}{P_t^2 - P_w^2} = 12.5450$

ADP = Q $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 2900$

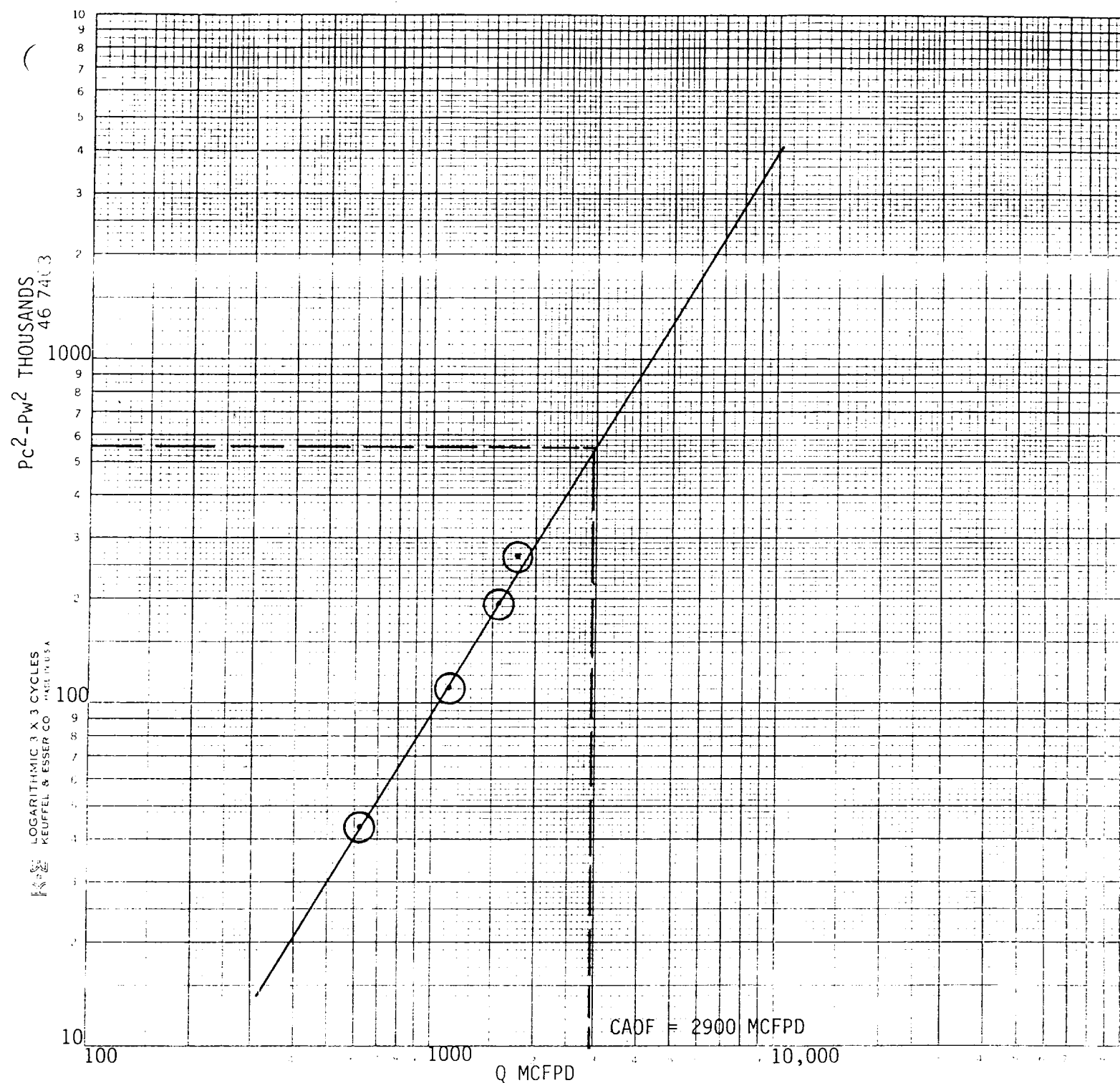
(2) $\left[\frac{P_t^2}{P_t^2 - P_w^2} \right]^n = 4.6782$

Absolute Open Flow	2900	Mcf @ 15.075	Angle of Slope	58.6°	Slope, n	.61
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Remarks:

Approved By Commission:	Conducted By: JAMES CRAIG	Calculated By: E.L. BUTTROSS, JR.	Checked By:
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MESA PETROLEUM COMPANY
CAMACK FEDERAL NO. 8
CHAVES CO., NEW MEXICO
4-3-82



$$N = 1/\text{SLOPE} = \frac{\text{LOG } Q_2 - \text{LOG } Q_1}{\text{CYCLE}} = \frac{\text{LOG } 4300 - \text{LOG } 1050}{\text{CYCLE}} = \frac{3.63 - 3.02}{\text{CYCLE}} = .61$$

$$Q = 58.6^\circ$$