

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: 8-27-81	SEP 23 1981	
Company: Mesa Petroleum Co.		Connection: UNCONNECTED		Unit: O. C. D.
Pool: UNDESIGNATED ABO		Formation: ABO		Unit: ARTESIA, OFFICE
Completion Date: 8-27-81	Total Depth: 3582'	Plug Back TD: 3497'	Elevation: 4100'	Farm or Lease Name: ROCK FEDERAL
Csg. Size: 4 1/2"	Wt.: 10.5#	Set At: 3582'	Perforations: From 2805' To 3471'	Well No.: 3
Tub. Size: 2 3/8"	Wt.: 4.7#	Set At: 2766'	Perforations: From OPEN-ENDED To	Unit: J Sec. 6 Twp. 8S Rge. 23E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: SINGLE			Packer Set At: NONE	County: CHAVES
Producing Thru TUBING	Reservoir Temp. °F: 95° @ 3582	Mean Annual Temp. °F: 60	Baro. Press. - P _c : 13.2	State: NEW MEXICO
L: 3077	H: 3077	G _g : .6	% CO ₂ : .65	% N ₂ : % H ₂ S: Prover: Meter Run: Taps:
2" ORIFICE WELL TESTER				

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							935		935		72 HR SI
1.	2" ORIFICE		1"	3		60	800	74	885		1 HR
2.	WELL		1"	16		62	770	75	770		1 HR
3.	TESTER		1"	22		65	450	75	540		1 HR
4.			1"	25		68	305	76	390		1 HR

RATE OF FLOW CALCULATIONS							
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
1	227	2" ORIFICE		1.000	.9608		218
2	592	WELL TESTER		.9981	.9608		568
3	775			.9952	.9608		741
4	841			.9924	.9608		802

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

NO.	P _c	P _w	P _w ²	P _c ² - P _w ²	$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.2198$ $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1045$ $ACF = 0 \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 900$
1	948	898	806	93	
2		783	613	286	
3		553	306	593	
4		403	162	737	

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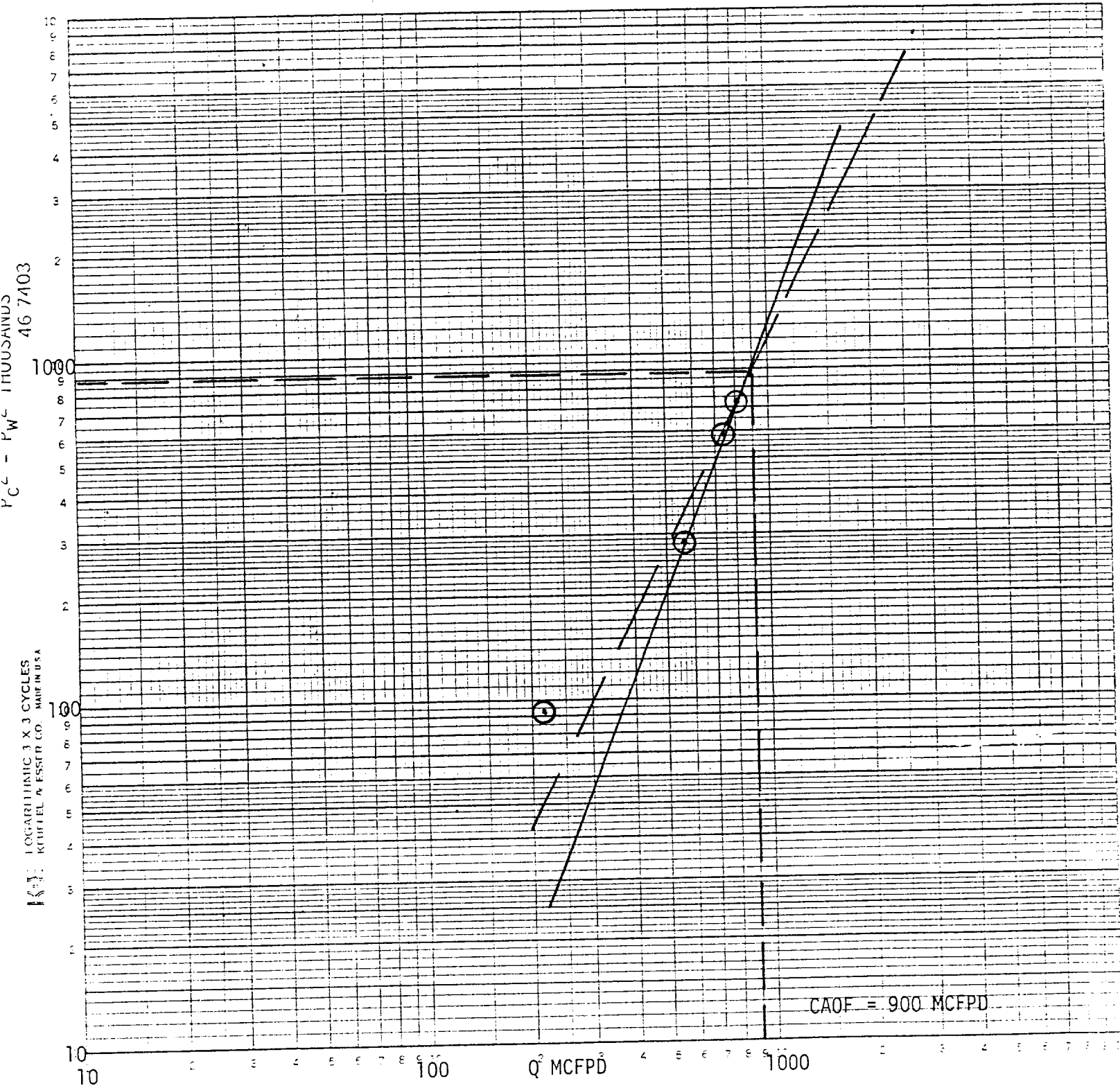
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MESA PETROLEUM CO.
 ROC FEDERAL NO. 3
 SEC 3, T8S, R23E
 CHAVES CO., NM
 8-27-81



ASSUMED $\theta = 63.5^\circ$ AND $n = .5$. ACTUAL θ GREATER THAN 63.5°