

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 10-22-81		NOV 05 1981			
Company MESA PETROLEUM CO. /				Connection UNCONNECTED							
Pool UNDESIGNATED ABO				Formation ABO				Unit O. C. D. ARTESIA, OFFICE			
Completion Date 10-22-81		Total Length 3700		Plug Back TD 3622		Elevation 3939		Farm or Lease Name NED STATE			
Csg. Size 4 1/2	Wt. 10.5#	Set At 3678	Perforations: From 2928 To 2939		Well No. 3						
Tub. Size 2 3/8	Wt. 4.7#	Set At 2834	Perforations: From OPEN ENDED		Unit Sec. Twp. Rng. L 8 9S 23E						
Type Well - Single - Protobend - G.G. or G.O. Multiple SINGLE						Packer Set At NONE		County CHAVES			
Producing Thru TUBING		Reservoir Temp. °F 101 3700		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2		State NEW MEXICO			
L 2834	H 2834	G _g .65	% CO ₂ 1	% N ₂ 1	% H ₂ S	Prover 2" ORIFICE WELL TESTER		Meter Run 800			

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	
5.							860		845		48 hr. SI
1.	2" ORIFICE	1 1/4	2.5			35	780	55	765		1 hr.
2.	WELL	1 1/4	6			35	660	60	655		1 hr.
3.	TESTER	1 1/4	10			41	520	64	515		1 hr.
4.		1 1/4	10.5			42	430	63	415		1 hr.

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	350	2" ORIFICE WELL		1.0249	.9608		345
2	561	TESTER		1.0249	.9608		552
3	753			1.0188	.9608		737
4	776			1.0178	.9608		759

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mol/Std.	A.P.L. Gravity of Liquid Hydrocarbons _____ Deg.
1					Specific Gravity Separator Gas _____	X X X X X X X X X
2					Specific Gravity Flowing Fluid _____	X X X X X
3					Critical Pressure _____ P.S.I.A.	P.S.I.A.
4					Critical Temperature _____ R	R

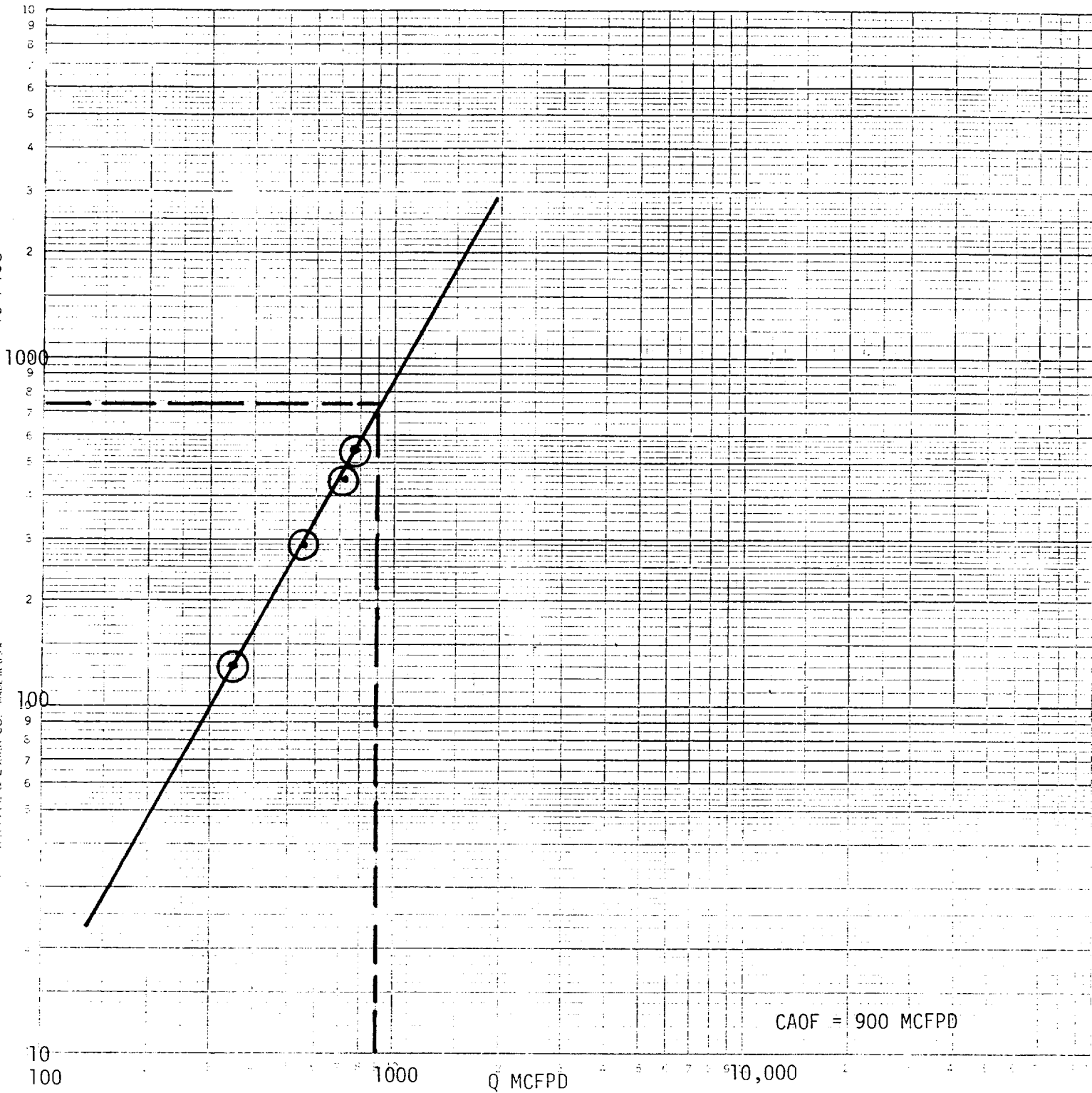
P _c 858	P _w 736	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.3309$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1871$
NO.	P _r	P _w	P _r ² - P _w ²
1	778	605	131
2	668	446	290
3	528	279	457
4	428	183	553

Absolute Open Flow 900 MGD @ 15.025		Angle of Slope 59°	Slope, n .60
Remarks:			
Approved By Commission:	Conducted By: JAMES CRAIG	Calculated By: 28 10-27-81 E.L. BUTTROSS, JR.	Checked By:

MESA PETROLEUM CO.
 NED STATE NO. 3
 SEC 8, T9S, R23E
 CHAVES COUNTY, NEW MEXICO
 10-22-81

Pc² - Pw² Thousands
 46 7403

WILLIAMS & CO. 3 X 3 CYCLES
 E. J. WILLIAMS & CO. MADE IN U.S.A.



$$n = 1/\text{slope} = \frac{\text{Log } Q_2 - \text{Log } Q_1}{\text{cycle}} = \frac{\text{Log } 1190 - \text{Log } 300}{\text{cycle}} = \frac{3.08 - 2.48}{\text{cycle}} = .60$$

$$\theta = 59^\circ$$