

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

Form C-122
Revised 5-1-65

RECEIVED

6/5F
6-122

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 4-26-82		MAY - 7 1982	
Company Mesa Petroleum Co.		Connection UNCONNECTED		O. C. D.	
Pool PECOS SLOPE ABO		Formation ABO		Unit ARTESIA, OFFICE	
Completion Date 4-26-82		Total Depth 4100'		Plug Back TD 3841'	
		Elevation 4062'		Form or Lease Name BRADEN FEDERAL	
Csg. Size 4 1/2"	Wt. 10.5#	Set At 3889'	Perforations: From 3503' To 3553'		Well No. 1
Tub. Size 2 3/8"	Wt. 4.7#	Set At 3410'	Perforations: From OPEN ENDED To		Unit Sec. Twp. Rge. A 30 5S 24E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE			Packer Set At NONE		County CHAVES
Producing Thru TUBING		Reservoir Temp. °F 98° @ 4100'	Mean Annual Temp. °F 60	Baro. Press. - P _a 13.2	State NEW MEXICO
L	H	G _g .65	% CO ₂ 1	% N ₂ 1	% H ₂ S
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. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI							925		887		72 HR ST
1.	2" ORIFICE	1 1/4	10.5			50	735	70	760		1 HR
2.	WELL	1 1/4	13.5			56	695	73	740		1 HR
3.	TESTER	1 1/4	15.5			68	555	78	625		1 HR
4.		1 1/4	21			69	355	80	480		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	775	2" ORIFICE WELL		1.0098	.9608		752
2	903	TESTER		1.0039	.9608		871
3	984			.9924	.9608		937
4	1240			.9915	.9608		1181
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	900	P _c ²	810
NO.	P _w ²	P _w	P _c ² - P _w ²
1	773	598	212
2	753	567	243
3	638	407	403
4	493	243	567
5			

$$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.4286 \quad (2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1952$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1400$$

Partial ID
5-14-82
Comp. + BB

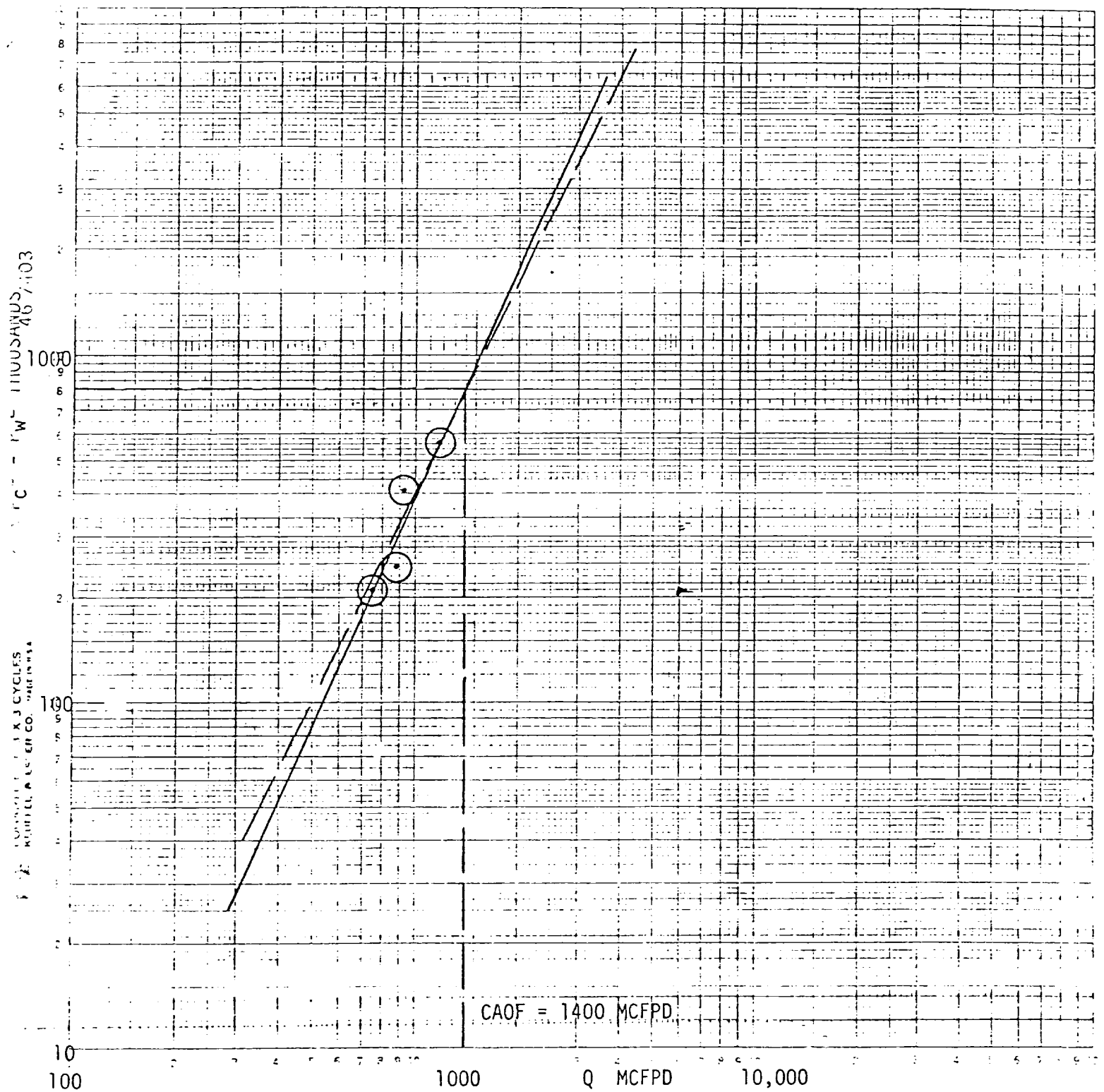
Absolute Open Flow 1400 Mcfd @ 15.025 Angle of Slope @ 63.5° Slope, n .5

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.

Conducted By:

Calculated By: *ell 5-4-82* Checked By:

MESA PETROLEUM CO.
BRADEN FEDERAL #1
CHAVES CO., NM
4-26-82



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