NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
JUL 20 1982
OIL & GAS
U.S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 6-30-82	
Company: MESA PETROLEUM CO.		Connection: UNCONNECTED			
Pool: Undes. ~~PECOS SLOPE~~ ABO		Formation: ABO		Unit	
Completion Date: 6-30-82	Total Depth: 3150'	Plug Back TD: 3038'	Elevation: 4009'	Farm or Lease Name: CHINA FEDERAL	
Csg. Size: 4 1/2" / Wt.: 10.5# / d: / Set At: 3085'		Perforations: From 2857' To 2972'		Well No.: 11	
Tbg. Size: 2 3/8" / Wt.: 4.7# / d: / Set At: 2837'		Perforations: From OPEN ENDED		Unit: B / Sec.: 20 / Twp.: 7S / 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° @ 3150'	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: NEW MEXICO	
L: / H: / Gg: .65	% CO_2: 1	% N_2: 1	% H_2S:	Prover: 2" ORIFICE WELL TESTER	Meter Run: / Taps:

	FLOW DATA				TUBING DATA		CASING DATA		
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	Duration of Flow
SI					720		720		72 HRS SI
1.	2" ORIFICE 1¼"	7.5		80	255	88	275		1 HR
2.	WELL								
3.	TESTER								
4.									
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, Mcfd
1	637	2" ORIFICE		.9813	.9608		601
2		WELL TESTER					
3.							
4.							
5.							

NO.	P_t	Temp. °R	T_r	Z
1.				
2.				
3.				
4.				
5.				

Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
Specific Gravity Separator Gas _____ XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXX _____
Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
Critical Temperature _____ R _____ R

P_c 733 P_c^2 537

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		288	83	454
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1828$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.1828$

Posted FB-2 10-1-82 Comp. & BK.

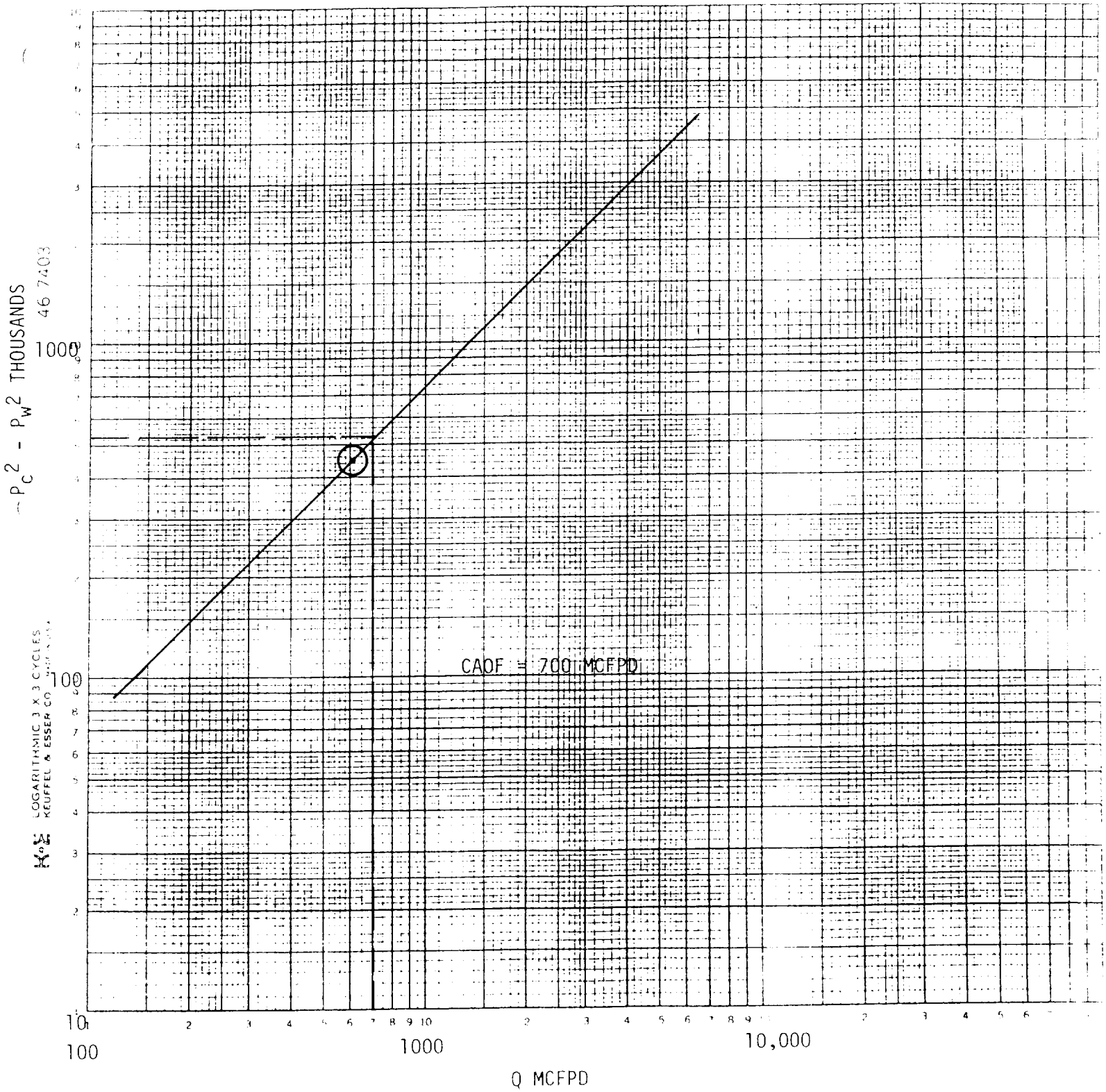
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 700$

Absolute Open Flow 700 Mcfd @ 15.025 | Angle of Slope θ 45° | Slope, n 1

Remarks: Unable to run four flow rates due to low delivery of well. Assumed N = 1 and based calculations on one point test.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	JAMES CRAIG	E.L. BUTTROSS, JR 7-15-82	

NA FEDERAL NO. 11
CHAVES COUNTY, NEW MEXICO
6-30-82



ASSUMED N = 1 AND $\theta = 45°$