N MEXICO OIL CONSERVATION COMM ON

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

JAN 22 1982

O. C. D.
ARTESIA, OFFICE

C/SF

Type Test: [X] Initial [ ] Annual [ ] Special | Test Date: 12-22-81

Company: MESA PETROLEUM CO. ✓ | Connection: UNCONNECTED

Pool: UNDESIGNATED ABO | Formation: ABO | Unit:

Completion Date: 12-22-81 | Total Depth: 4450' | Plug Back TD: 4391' | Elevation: 3625' | Farm or Lease Name: CHARLOTTE FEDERAL

Csg. Size	Wt.	d	Set At	Perforations	Well No.
4½	10.5#		4449'	From 3717 To 4025	1

Tbg. Size	Wt.	d	Set At	Perforations	Unit	Sec.	Twp.	Rge.
2-3/8	4.7#		3624'	From OPEN ENDED To	D	30	7	26

Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE | Packer Set At: NONE | County: CHAVES

Producing Thru: TUBING | Reservoir Temp. °F: 101 @ 4450 | Mean Annual Temp. °F: 60 | Baro. Press. – P_a: 13.2 | State: NEW MEXICO

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
		.65	1	1		2" orifice well tester		

FLOW DATA

NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA Press. p.s.i.g.	TUBING DATA Temp. °F	CASING DATA Press. p.s.i.g.	CASING DATA Temp. °F	Duration of Flow
SI							875		845		72 hr. SI
1.	2" orifice		1¼	12		28	720	44	700		1 hr.
2.	well		1¼	16		30	595	45	585		1 hr.
3.	tester		1¼	19		30	450	45	445		1 hr.
4.			1¼	20		30	340	45	340		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, Mcfd
1	840	2" orifice well		1.0323	.9608		833
2	1004	tester		1.0302	.9608		994
3	1122			1.0302	.9608		1111
4.	1160			1.0302	.9608		1148
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 858 P_c^2 736

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		713	508	228
2		598	358	378
3		458	210	526
4		353	125	611
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.2046$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.0975$

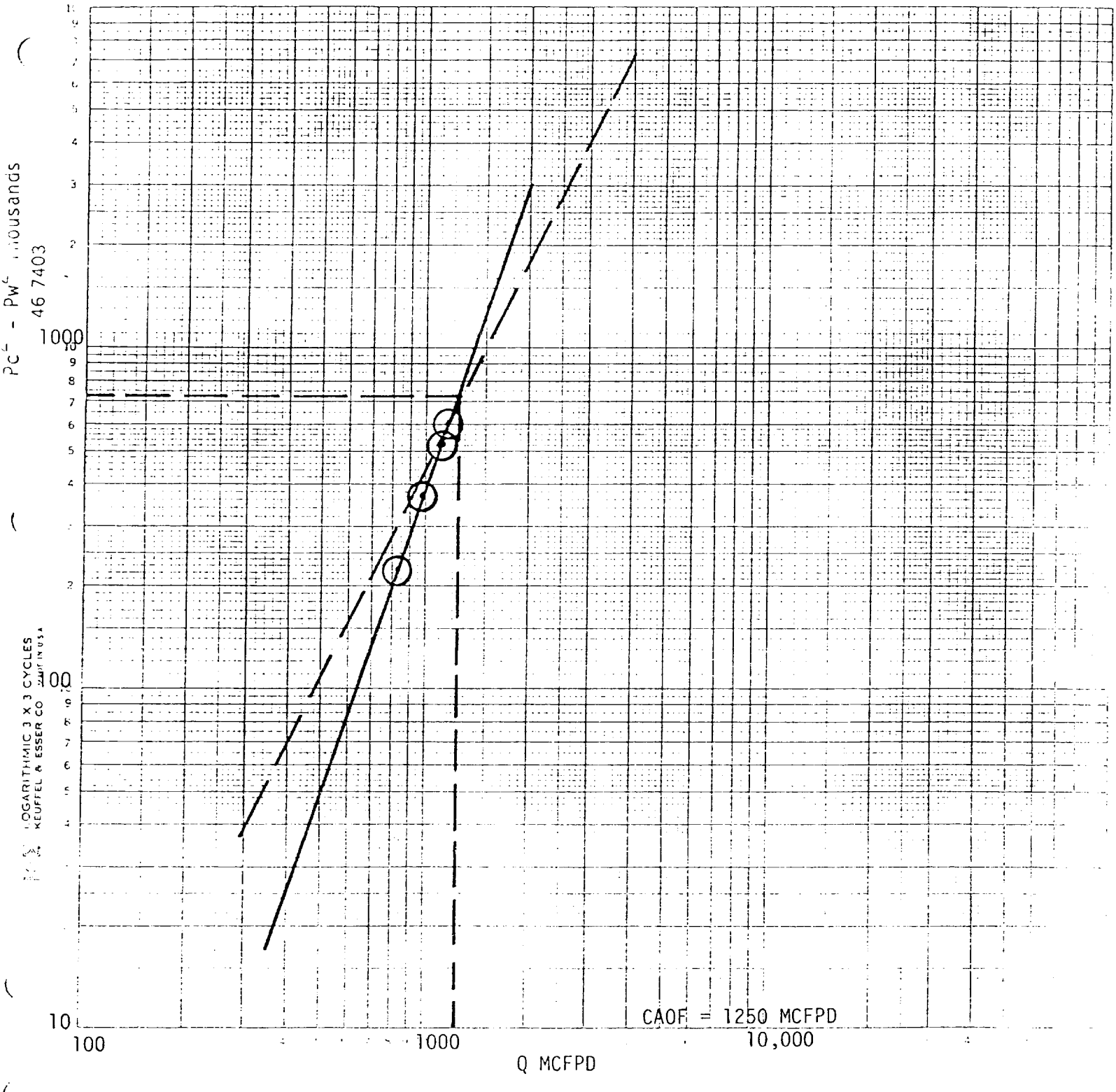
$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1250$

Absolute Open Flow 1250 Mcfd @ 15.025 | Angle of Slope θ 63.5° | Slope, n .5

Remarks: Plot of $Pc^2 - Pw^2$ vs. Q yielded a straight line with a θ greater than 63.5°. Drew 63.5° line through highest point.

Approved By Commission:	Conducted By:	Calculated By: EGB 1-5-82	Checked By:
	JAMES CRAIG	E. L. BUTTROSS, JR.	

CHARLOTTE FEDERAL #1
12-22-81



Assumed N = .5 and θ = 63.5°