NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

C/SF
C-122
USGS

RECEIVED
JAN 15 1982
O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special		Test Date: 12-29-81	
Company: MESA PETROLEUM CO.	Connection: UNCONNECTED		Unit
Pool: UNDESIGNATED ABO	Formation: ABO		
Completion Date: 12-29-81	Total Depth: 4850'	Plug Back TD: 4803'	Elevation: 3727'
Farm or Lease Name: ACME			
Csg. Size: 4 1/2 / Wt.: 10.5# / d: / Set At: 4850'	Perforations: From 4338 To 4682		Well No.: 8
Tbg. Size: 2 3/8 / Wt.: 4.7# / d: / Set At: 4196'	Perforations: From OPEN ENDED To		Unit: F / Sec.: 29 / Twp.: 8 / Rge.: 26
Type well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE	Packer Set At: NONE		County: CHAVES
Producing Thru: TUBING	Reservoir Temp. °F: 102 @ 4850	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: CHOKE / 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	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI							950		880		72 hr. SI
1.	CHOKE		15/64	910		62	910	62	840		1 hr.
2.	COEFF.		20/64	870		64	870	64	810		1 hr.
3.			24/64	670		66	570	66	680		1 hr.
4.			29/64	500		64	500	64	565		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	.9165	CHOKE	923	.9981	1.240		1047
2	1.645	CHOKE	883	.9962	1.240		1794
3	2.388	CHOKE	683	.9943	1.240		2010
4	3.460	CHOKE	513	.9962	1.240		2192
5							

NO.	P_t	Temp. °R	T_t	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 893 P_c^2 797

NO	P_t	P_w	P_w^2	$P_c^2 - P_w^2$
1		853	728	69
2		823	677	120
3		693	480	317
4		578	334	463
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.7214$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.3120$

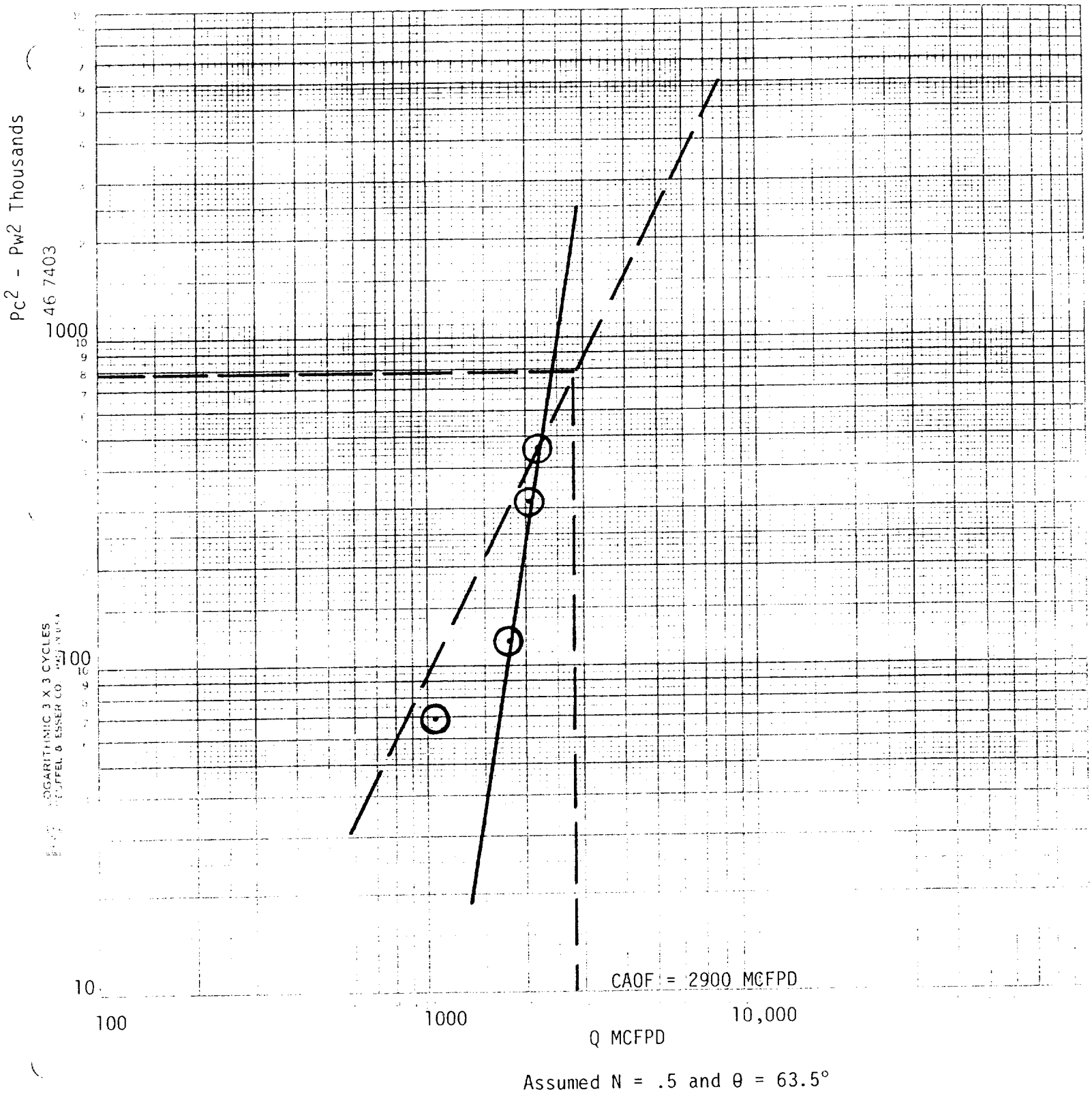
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2900$

Absolute Open Flow 2900 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:	Checked By:
	JAMES CRAIG	E.L. BUTTROSS, Jr. EB 1-5-82	

MESA PETROLEUM CO.
ACME #8
12-29-81



Assumed N = .5 and $\theta = 63.5°$