NE MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

C/SF - C122

OCT - 1 1981

O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 9-24-81	
Company: Mesa Petroleum Co.		Connection: UNCONNECTED			Unit:
Pool: Undesignated-Abo		Formation: ABO			
Completion Date: 9-24-81	Total Depth: 4370	Plug Back TD: 4324	Elevation: 3672	Farm or Lease Name: MEADOWS COM	
Csg. Size: 4 1/2 / Wt.: 10.5# / d: / Set At: 4364		Perforations: From 3805 To 3923 3928		Well No.: 1	
Tbg. Size: 2 3/8 / Wt.: 4.7# / d: / Set At: 3683		Perforations: From OPEN ENDED To		Unit: B / Sec.: 13 / Twp.: 7S / Rge.: 25E	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE		Packer Set At: NONE		County: CHAVES	
Producing Thru: TUBING	Reservoir Temp. °F: 104° 4370	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
4370	4370	.65	1	1		2" Orifice well tester		

	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					870		830		48 hr. SI
1.	2" orifice 1¼	10	-	68	780	76	745		1 hr.
2.	Well Tester 1¼	26	-	69	630	79	615		1 hr.
3.	1¼	29	-	72	480	79	480		1 hr.
4.	1¼	30	-	72	540	79	390		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	753	2" orifice well		.9924	.9608		718
2.	1463	Tester		.9915	.9608		1394
3.	1578			.9887	.9608		1499
4.	1610			.9887	.9608		1529
5.							

NO.	P_r	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 _____ XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX _____
Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
Critical Temperature _____ R _____ R

P_c 843 P_c^2 711

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		758	575	136
2		628	394	317
3		493	243	468
4		403	162	549
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.2951$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.1558$

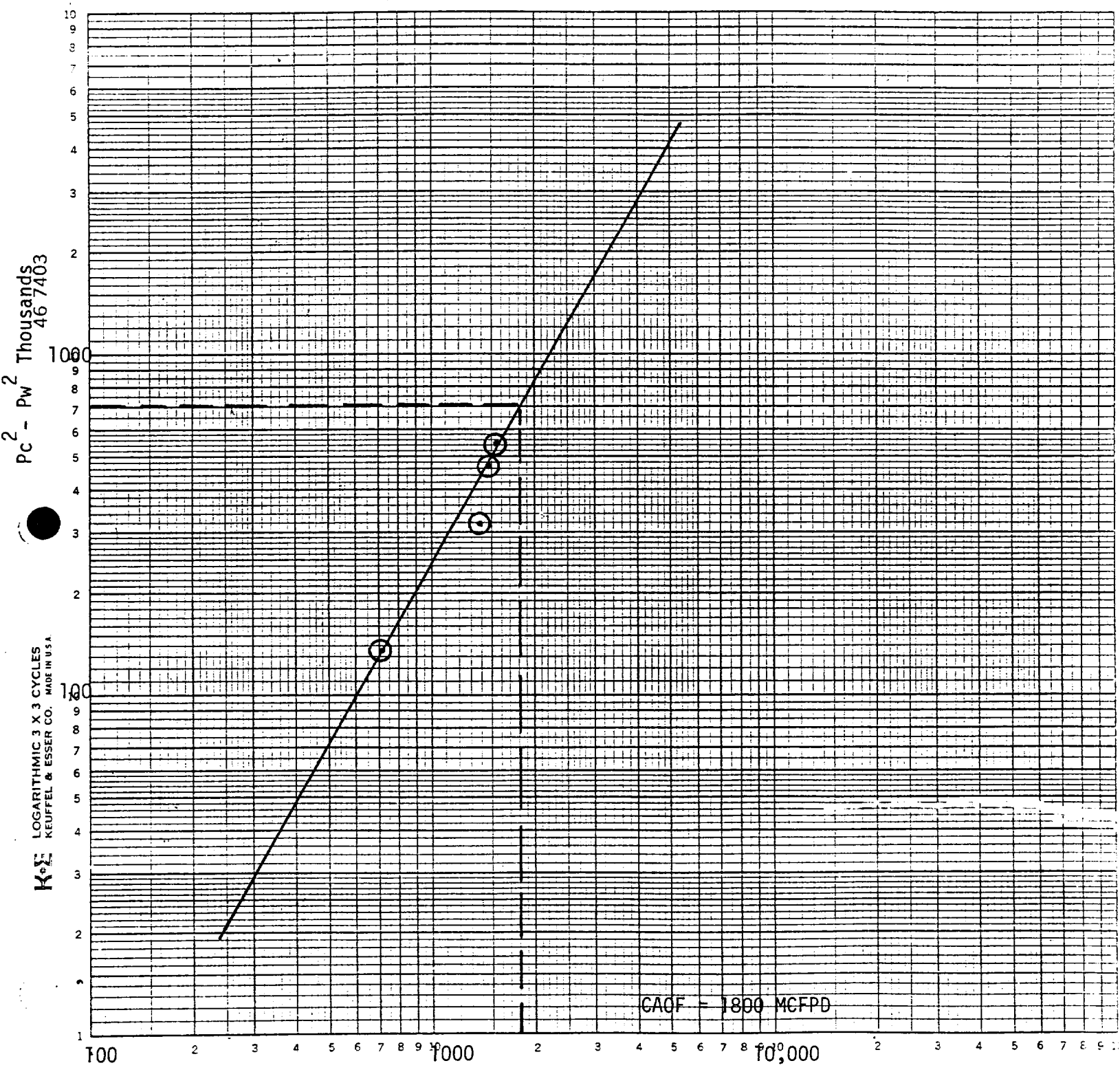
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1800$

Absolute Open Flow 1800 Mcfd @ 15.025 | Angle of Slope θ 60.8° | Slope, n .56

Remarks:

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	Mike Lynch	E.L. Buttross, Jr.	

MESA PETROLEUM CO
MOWS COM.NO 1
SEC 13, T7S, R25E
CHAVES CO., NEW MEXICO
9-24-81



$$n = 1/\text{slope} = \frac{\text{Log } Q_2 - \text{Log } Q_1}{\text{cycle}} = \frac{\text{Log } 2200 - \text{Log } 600}{\text{cycle}} = 3.34 - 2.78 = .56$$

$\theta = 60.8°$