NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

c/SF

Form C-122
Revised 9-1-65

RECEIVED
JUN 2 1982
O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 5-18-82	
Company: MESA PETROLEUM CO.		Connection: UNCONNECTED			Unit
Pool: ~~WEST PECOS SLOPE~~ Undes. ABO		Formation: ABO			
Completion Date: 5-18-82	Total Depth: 3400'	Plug Back TD: 3348'	Elevation: 3978.5'		Farm or Lease Name: ROUND TOP STATE
Csg. Size: 4 1/2" / Wt.: 10.5# / d: / Set At: 3392'		Perforations: From 2925' To 2956'			Well No.: 6
Tbg. Size: 2 3/8" / Wt.: 4.7# / d: / Set At: 2942'		Perforations: From OPEN ENDED To			Unit: L / Sec.: 10 / 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: 100° @ 3400'	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" CRITICAL FLOW PROVER / 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					835		840		56 HR SI
1.	2" X 1"	21		41	750	80	765		1 HR
2.	2" X 1"	34		46	665	86	685		1 HR
3.	2" X 1"	44		54	550	89	590		1 HR
4.	2" X 1"	46		59	440	88	530		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	17.09	FLOW PROVER	34	1.019	1.24		734
2.	17.09	"	47	1.014	1.24		1010
3.	17.09	"	57	1.006	1.24		1215
4.	17.09	"	59	1.001	1.24		1252
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 853 P_c^2 728

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		778	605	123
2		698	487	241
3		603	364	364
4		543	295	433
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.6813$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.2966$

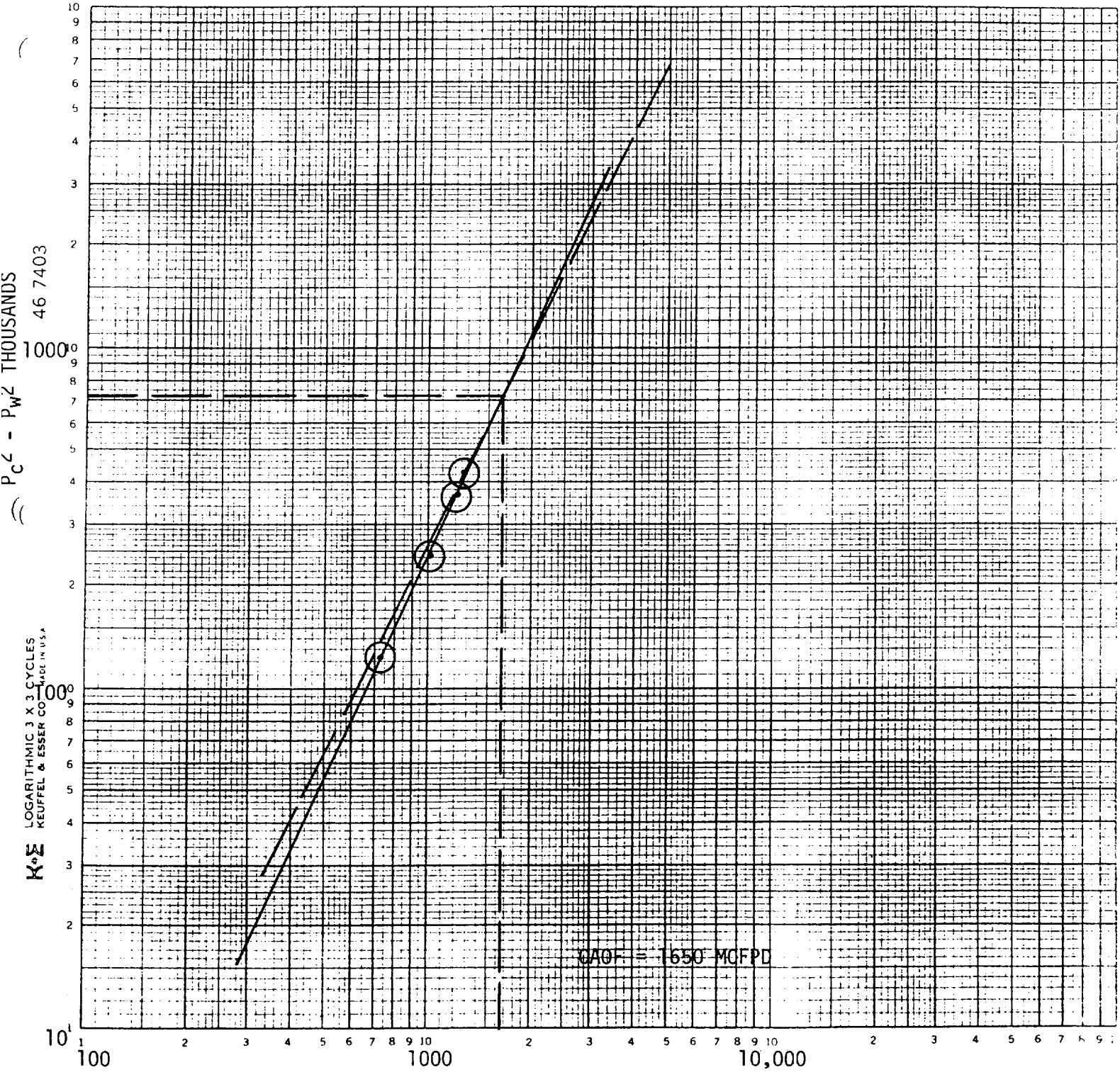
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1650$

Absolute Open Flow 1650 Mcfd @ 15.025 Angle of Slope θ 63.5° Slope, n .5

Remarks: PLOT OF $P_c^2 - P_w^2$ 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. ELB 5-27-82	

MESA PETROLEUM CO.
ROUND TOP STATE NO. 6
CHAVES CO., NM
5-18-82



ASSUMED n = .5 AND θ = 63.5°