C/S F

MULTIPOINT [X] ONE POINT BACK PRESSURE TEST FOR GAS WELL File Form C-122 Revised 9-1-

RECEIVED
SEP 29 1982
O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special — Test Date: 6-17-82

Company: MESA PETROLEUM CO. ✓	Connection: UNCONNECTED		Unit
Pool: WEST PECOS SLOPE ABO	Formation: ABO		
Completion Date: 6-17-82	Total Depth: 3200'	Plug Back TD: 3102'	Elevation: 4199'
Farm or Lease Name: CAROL FEDERAL			
Csg. Size: 4 1/2" / Wt.: 10.5# / d: / Set At: 3146'	Perforations: From 3011' To 3028'		Well No.: 1
Tbg. Size: 2 3/8" / Wt.: 4.7# / d: / Set At: 3023'	Perforations: From OPEN ENDED To		Unit: A / Sec.: 13 / Twp.: 7S / Rge.: 22E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE	Packer Set At: NONE		County: CHAVES
Producing Thru: TUBING	Reservoir Temp. °F: 94° @ 3156'	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		

NO.	FLOW DATA: Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					730		730		35 HRS SI
1.	2" ORIFICE	16.5		80	345	86	405		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	604	2" ORIFICE		.9813	.9608		569
2.		WELL TESTER					
3.							
4.							
5.							

NO.	P_t	Temp. °R	T_f	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 743 P_c^2 552

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		418	175	377
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.4642$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.4642$

$AOF = Q\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 850$

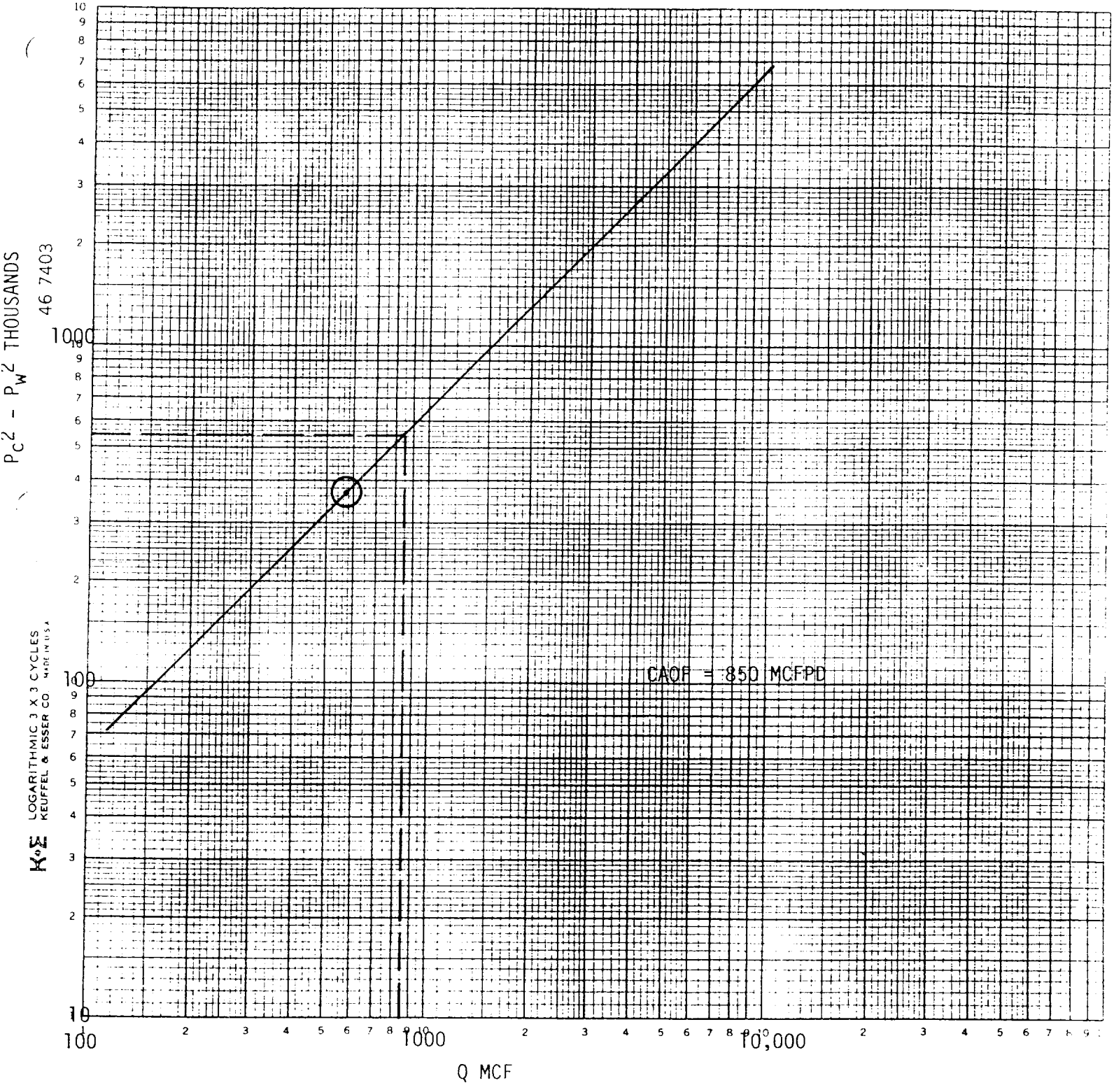
Posted FO-2
10-1-82
Comp + BK

Absolute Open Flow 850 Mcfd @ 15.025 — Angle of Slope θ 45° — Slope, n 1

Remarks: Plot of 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 Eg 6-28-82	

CAROL FEDERAL NO. 1
CHAVES CO., NM
6-17-82



ASSUMED N = 1 AND θ = 45°