

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 8-4-82		AUG 11 1982	
Company MESA PETROLEUM CO. ✓			Connection UNCONNECTED		
Pool PECOS SLOPE ABO			Formation ABO		Unit O. C. D. ARTESIA, OFFICE
Completion Date 8-4-82		Total Depth 4250'		Plug Back TD 4182'	
Elevation 3786'		Farm or Lease Name BADGER COM			
Csg. Size 4 1/2"	Wt. 10.5#	d	Set At 4238'	Perforations: From 3733' To 3807'	
Tiq. Size 2 3/8"	Wt. 4.7#	d	Set At 3648'	Perforations: From OPEN ENDED To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At NONE	
Producing Thru TUBING		Reservoir Temp. °F 98° @ 4250'		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 ₂ S
Prover 2" ORIFICE WELL TESTER		Meter Run Taps			

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
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
1.	2" ORIFICE 3/4"			10.5		84	980	94	975		72 HRS
2.	WELL TESTER						60		100		1 HR
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	250	2" ORIFICE	.9777	.9608			235
2.		WELL TESTER					
3.							
4.							
5.							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.					Specific Gravity Separator Gas _____ X X X X X X X X
3.					Specific Gravity Flowing Fluid _____ X X X X X
4.					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5.					Critical Temperature _____ R _____ R

P _c 988	P _c ² 976			
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1		113	13	963
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0134$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0134$

ADP = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 240$

Absolute Open Flow 240	Mcf @ 15.025	Angle of Slope @ _____	Slope, n _____
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Remarks: Unable to run four flow rates due to low delivery of well. Assumed N=1 and based calculations on one point test

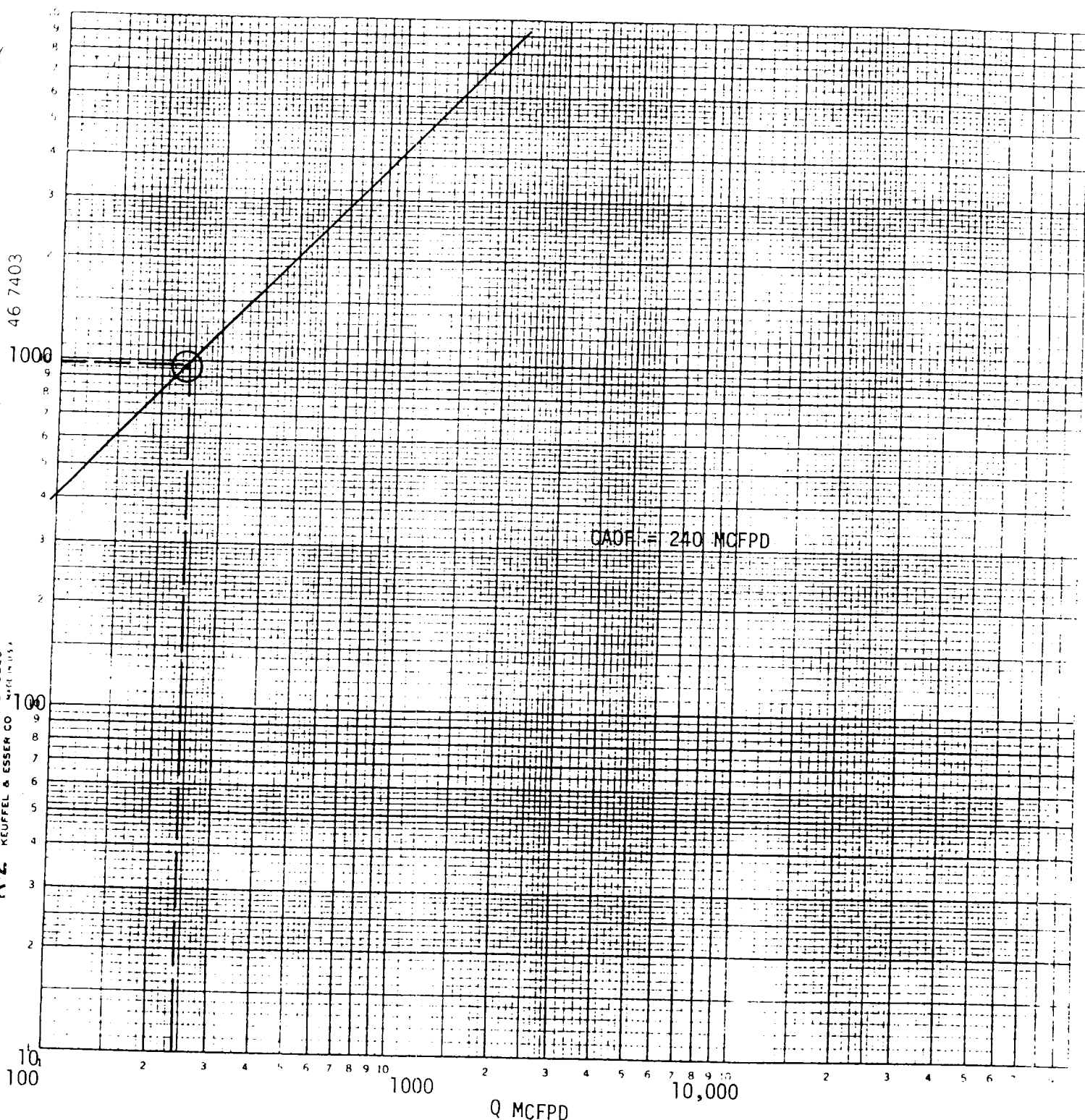
Approved By Commission:	Conducted By: JAMES CRAIG	Calculated By: E.L. BUTTROSS, JR.	Checked By:
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8-9-82

BADGER COM NO. 3
 CHAVES CO., NM
 8-4-82

$P_C^2 - P_W^2$ THOUSANDS
 46 7403

LOGARITHMIC 3 X 3 CYCLES
 KEUFFEL & ESSER CO. MADE IN U.S.A.



ASSUMED N = 1 AND $\theta = 45^\circ$