NEW EXICO OIL CONSERVATION COMMISSION
MULTIPOINT AN ONE POINT BACK PRESSURE TES OR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED
FEB 20 1981
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ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 2-3-81	
Company: Mesa Petroleum Co.		Connection: To be determined			Unit
Pool: Undeignated Abo		Formation: Abo			
Completion Date: 2-3-81	Total Depth: 4400'		Plug Back TD: 4165'	Elevation: 3894'	Farm or Lease Name: Coyote Federal
Csg. Size: 4 1/2 / Wt.: 10.5 / d: / Set At: 4358'			Perforations: From 3658 To 3842		Well No.: 1
Tbg. Size: 2 3/8 / Wt.: 4.7 / d: / Set At: 3726'			Perforations: From Open Ended		Unit: E/H Sec.: 5 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: 105@ 4400'	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
3726	3726	.65	----	3	--	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						980		980		72 hrs
1.	2" orifice	1	2	---	50	930	80	930		3/4 hr
2.	well tester	1	16	---	50	750	80	755		3/4 hr
3.		1 1/4	11	---	50	675	80	675		1/2 hr
4.		1 1/4	17	---	50	520	80	530		1/2 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	183	2" orifice well tester		1.0098	.9608	---	178
2.	592			1.0098	.9608	---	574
3.	797			1.0098	.9608	---	773
4.	1044			1.0098	.9608	---	1012
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 _____ XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX _____
Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
Critical Temperature _____ R _____ R

P_c 980 P_c^2 960

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		930	865	95
2		755	570	390
3		675	456	504
4		530	281	679
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 10.1052$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 7.4809$

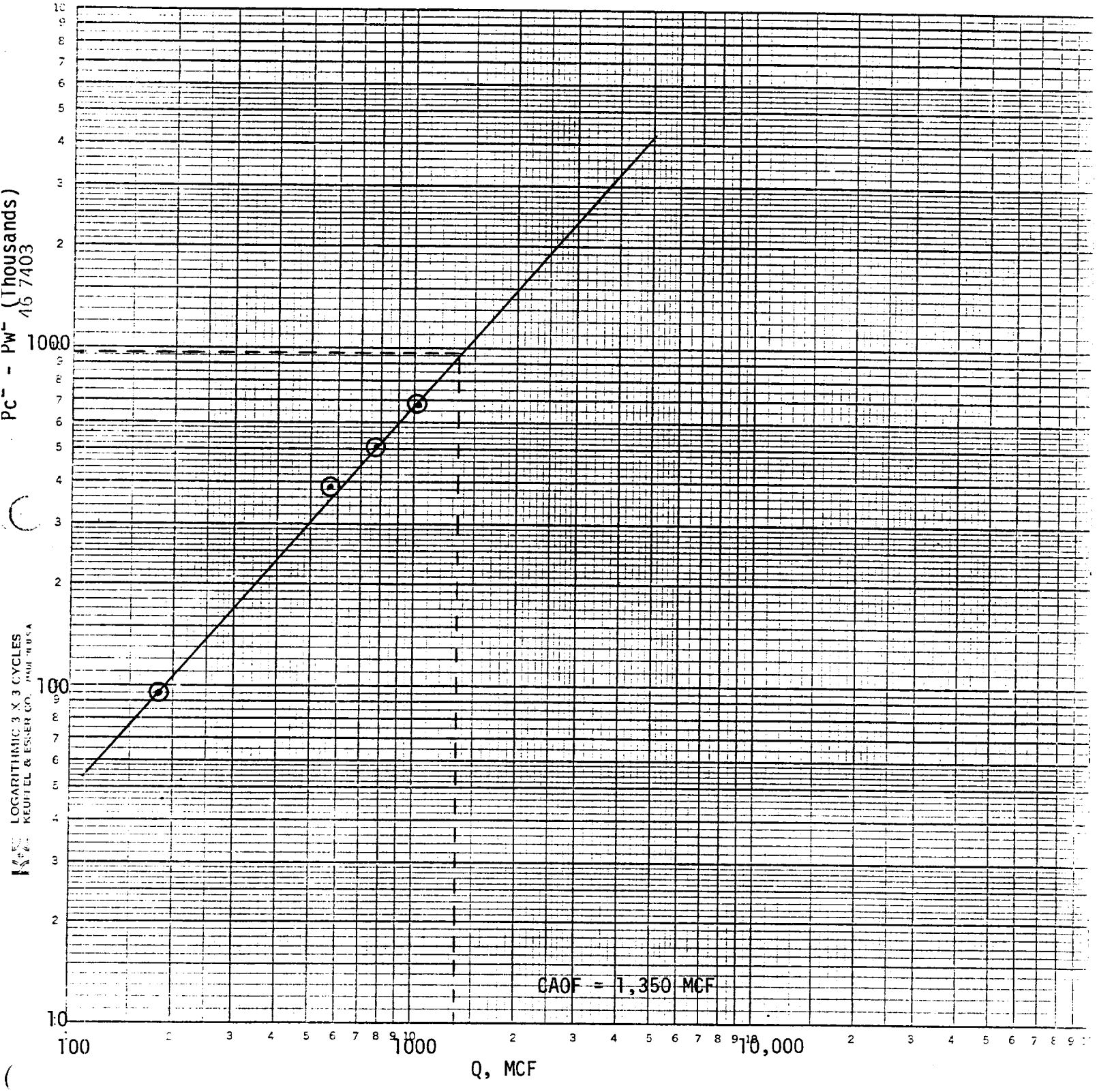
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1,350$

Absolute Open Flow 1,350 Mcfd @ 15.025 | Angle of Slope θ 49° | Slope, n .87

Remarks:

Approved By Commission:	Conducted By: E. L. BUTTROSS, JR.	Calculated By: E. L. BUTTROSS, JR.	Checked By:

Mesa Petroleum Co.
Coyote Federal #1
Sec 5, T7S, R25E
Chaves Co., New Mexico
2-3-81



$$N = 1/\text{slope} = \frac{\text{Log } Q_2 - \text{Log } Q_1}{\text{Cycle}} = \frac{\text{Log } 1400 - \text{Log } 190}{\text{Cycle}} = 3.14 - 2.27 = .87$$

$\theta = 49°$