NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT A' ONE POINT BACK PRESSURE TES FOR GAS WELL

fill 122 Form C-122 Revised 9-1-65

RECEIVED

JUN 2 1981

O. C. D.

ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special			Test Date: 5-5-81	
Company: Mesa Petroleum Co.	Connection: Unconnected			Unit
Pool: Undesignated Abo	Formation: Abo			
Completion Date: 5-5-81	Total Depth: 4350	Plug Back TD: 4292	Elevation: 4060	Farm or Lease Name: Jess Federal
Csg. Size: 4 1/2 / Wt.: 10.5# / d: / Set At: 4336		Perforations: From 3710 To 3745		Well No.: 1
Tbg. Size: 2 3/8 / Wt.: 4.7# / d: / Set At: 3600		Perforations: From Open Ended To		Unit: O / Sec.: 5 / Twp.: 6S / 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° @ 4350	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: New Mexico
L: 3600 / H: 3600 / Gg: .65	% CO_2: 4	% N_2: 1	% H_2S:	Prover: Choke / Meter Run: / Taps:

NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI					950		810		72 hr SI
1.	Choke 9/64	940		80	940	80	805		1/2 hr
2.	Coefficients 14/64	925		80	925	80	800		1 hr
3.	21/64	827		80	827	80	785		1 hr
4.	27/64	670		80	670	80	770		3/4 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	.3105	Choke	940	.9813	1.240		355
2.	.7924	Choke	925	.9813	1.240		891
3.	1.817	Choke	827	.9813	1.240		1828
4.	3.009	Choke	670	.9813	1.240		2453
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 810 P_c^2 656

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		805	648	8
2		800	640	16
3		785	616	40
4		770	593	63
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 41.0000$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 17.4519$

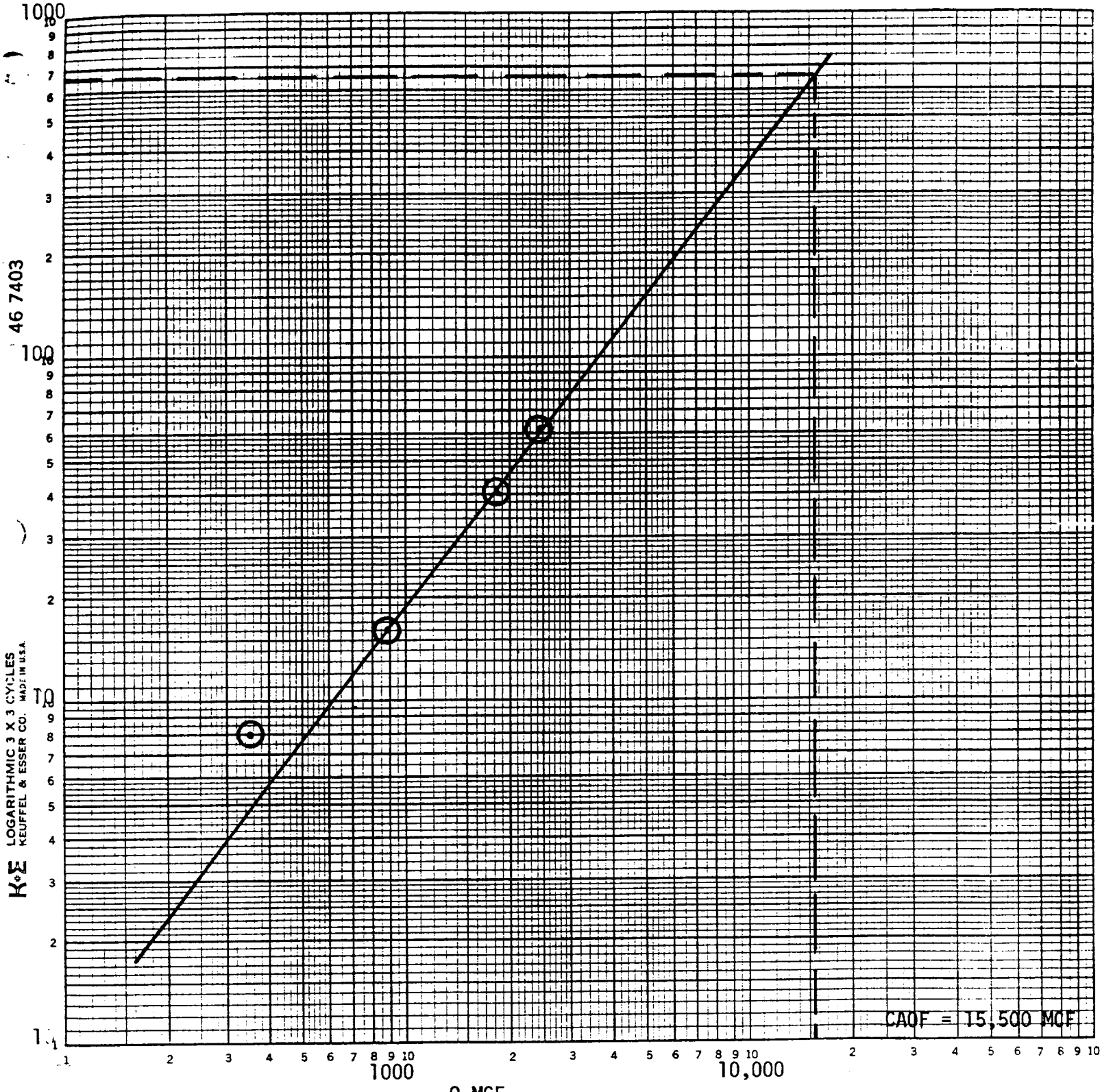
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 15,500$

Absolute Open Flow 15,500 Mcfd @ 15.025 Angle of Slope θ 52.4° Slope, n .77

Remarks: _____

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	James Craig	E. L. Buttross, Jr.	

Mesa Petroleum Co.
Jess Federal #1
Sec 5, T6S, R25E
Chaves Co., NM
5-5-81



$$n = 1/\text{slope} = \frac{\text{Log } Q_2 - \text{Log } Q_1}{\text{cycle}} = \frac{\text{Log } 3610 - \text{Log } 610}{\text{cycle}} = 3.56 - 2.79 = .77$$

$\theta = 52.4°$