STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

,L CONSERVATION DIVISIO,

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

a/SF
F/E

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED
APR 18 1983
O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 4-12-83	
Company: MESA PETROLEUM CO.		Connection: UNCONNECTED			
Pool: WEST PECOS SLOPE, ABO		Formation: ABO			
Completion Date: 4-10-83	Total Depth: 3200'	Plug Back TD: 3144'	Elevation: 4058'	Farm or Lease Name: MEC Com	
Csg. Size: 4 1/2 / Wt.: 10.5# / d: / Set At: 3200		Perforations: From 2742 To 2891		Well No.: 1	
Tbg. Size: 2 3/8 / Wt.: 4.7# / d: / Set At: 2889		Perforations: From OPEN ENDED To		Unit: M / Sec.: 6 / 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° @ 3161	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					870		870		72 hr SI
1.	2" X 1"	34		30	840	68	845		1 hr
2.	2" X 1"	63		30	785	70	815		1 hr
3.	2" X 1"	100		40	700	71	765		1 hr
4.	2" X 1"	123		46	605	71	720		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	47	1.030	1.24		1025
2.	17.09	FLOW PROVER	76	1.030	1.24		1658
3	17.09	FLOW PROVER	113	1.020	1.24		2443
4.	17.09	FLOW PROVER	136	1.014	1.24		2922
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 883 P_c^2 780

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		858	736	44
2		828	686	94
3		778	605	175
4		733	537	243
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.2099$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.0368$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 6,000$

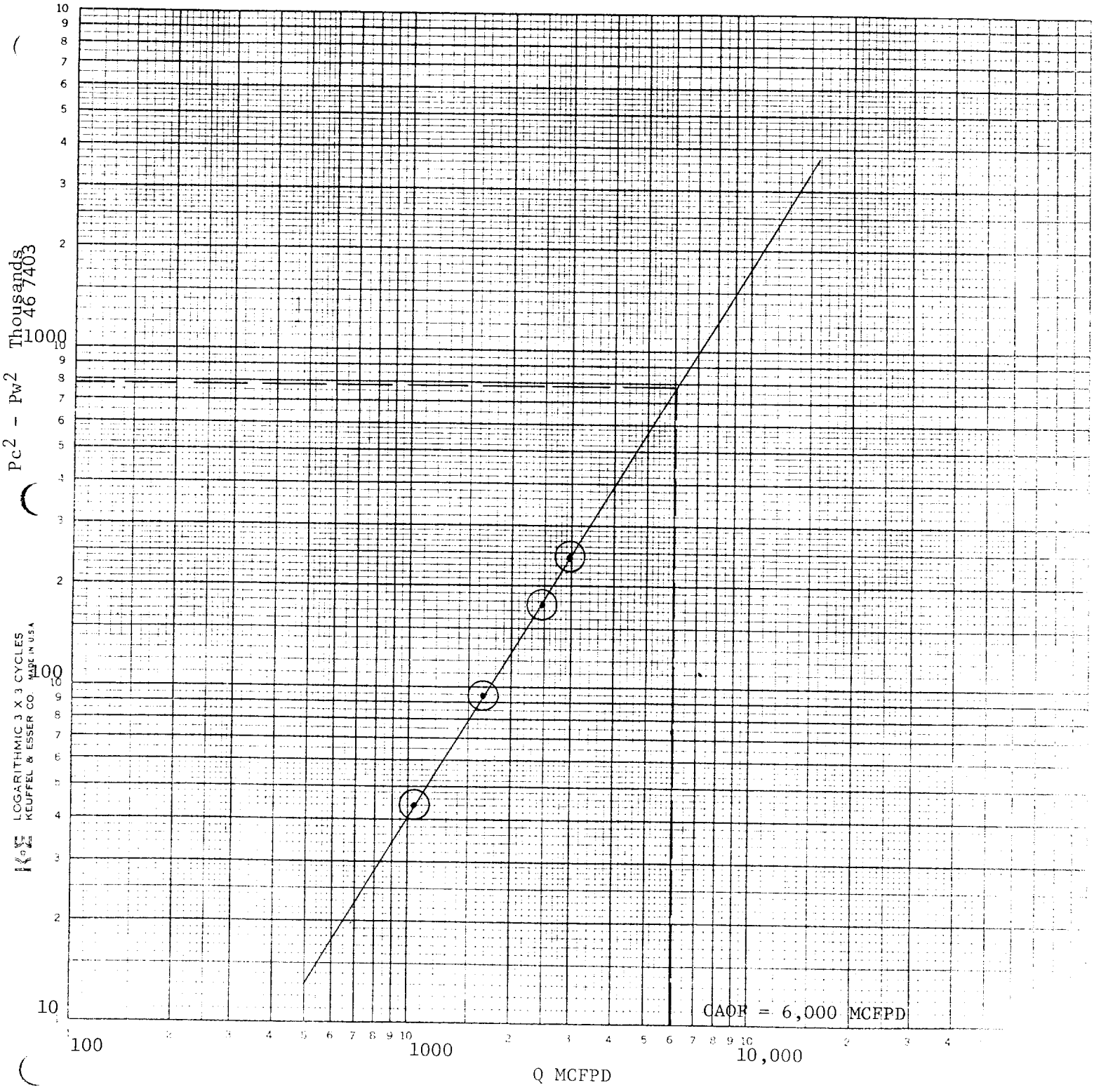
Test TD-3144 4-22-83 Comp BK

Absolute Open Flow 6,000 Mcfd @ 15.025 | Angle of Slope θ 58.6° | Slope, n .61

Remarks: _____

Approved By Division	Conducted By:	Calculated By:	Checked By:
	JAMES CRAIG	E. L. BUTTROSS, JR.	

MESA PETROLEUM CO.
MEC Com No. 1
CHAVES CO., NM
4-12-83



$$N = 1/\text{Slope} = \frac{\text{Log } Q_2 - \text{Log } Q_1}{\text{Cycle}} = \frac{\text{Log } 7000 - \text{Log } 1750}{\text{Cycle}} = 3.85 - 3.24 = .61$$

$\theta = 58.6°$