NE MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 2-17-82	
Company: MESA PETROLEUM CO.		Connection: UNCONNECTED			
Pool: WILDCAT		Formation: MORROW			Unit
Completion Date: 2-17-82	Total Depth: 15,860'	Plug Back TD: 15,773'	Elevation: 3,581'		Farm or Lease Name: JACKSON UNIT
Csg. Size: 5" Liner / Tbg. Size: 2 7/8" / 2 3/8"	Wt.: 18# / 6.5# / 4.7#	d: 2.441 / 1.995	Set At: 12182 - 15858' / 0 - 11977 / 11977-15291	Perforations: From 15,430' To 15,528' / From OPEN ENDED To	Well No.: 1
					Unit: G; Sec.: 22; Twp.: 24S; Rge.: 33E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE			Packer Set At: 15,291		County: LEA
Producing Thru: TUBING	Reservoir Temp. °F: 200 @ 15,860	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2		State: NEW MEXICO
L: 15,291	H: 15,291	Gg: .59	% CO_2: .8	% N_2: .5	% H_2S:	Prover:	Meter Run: 3"	Taps: FLANGE

NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA Press. p.s.i.g.	TUBING DATA Temp. °F	CASING DATA Press. p.s.i.g.	CASING DATA Temp. °F	Duration of Flow
SI					5770				96 HRS SI
1.	3" X 1.75"	655	35.5	66	3360	56			1 HR
2.	3" X 1.75"	735	37	67	2715	60			1 HR
3.	3" X 1.75"	735	45	68	2210	60			1 HR
4.	3" X 1.75"	735	49	72	1810	62			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	15.61	154.0166	668.2	.9943	1.302	1.048	3261
2	15.61	166.3833	748.2	.9933	1.302	1.060	3560
3	15.61	183.4911	748.2	.9924	1.302	1.060	3923
4	15.61	191.4727	748.2	.9887	1.302	1.058	4070
5							

NO.	P_t	Temp. °R	T_t	Z
1	.9899	526	1.500	.910
2	1.1084	527	1.510	.890
3	1.1084	528	1.508	.890
4	1.1084	532	1.520	.894
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 675 P.S.I.A. _____ P.S.I.A.
Critical Temperature 350 R _____ R

P_c 5783.2 P_c^2 33445

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	11378	3457	11951	21494
2	7443	2850	8122	25323
3	4943	2402	5770	27675
4	3324	2053	4215	29230
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.1442$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.1048$

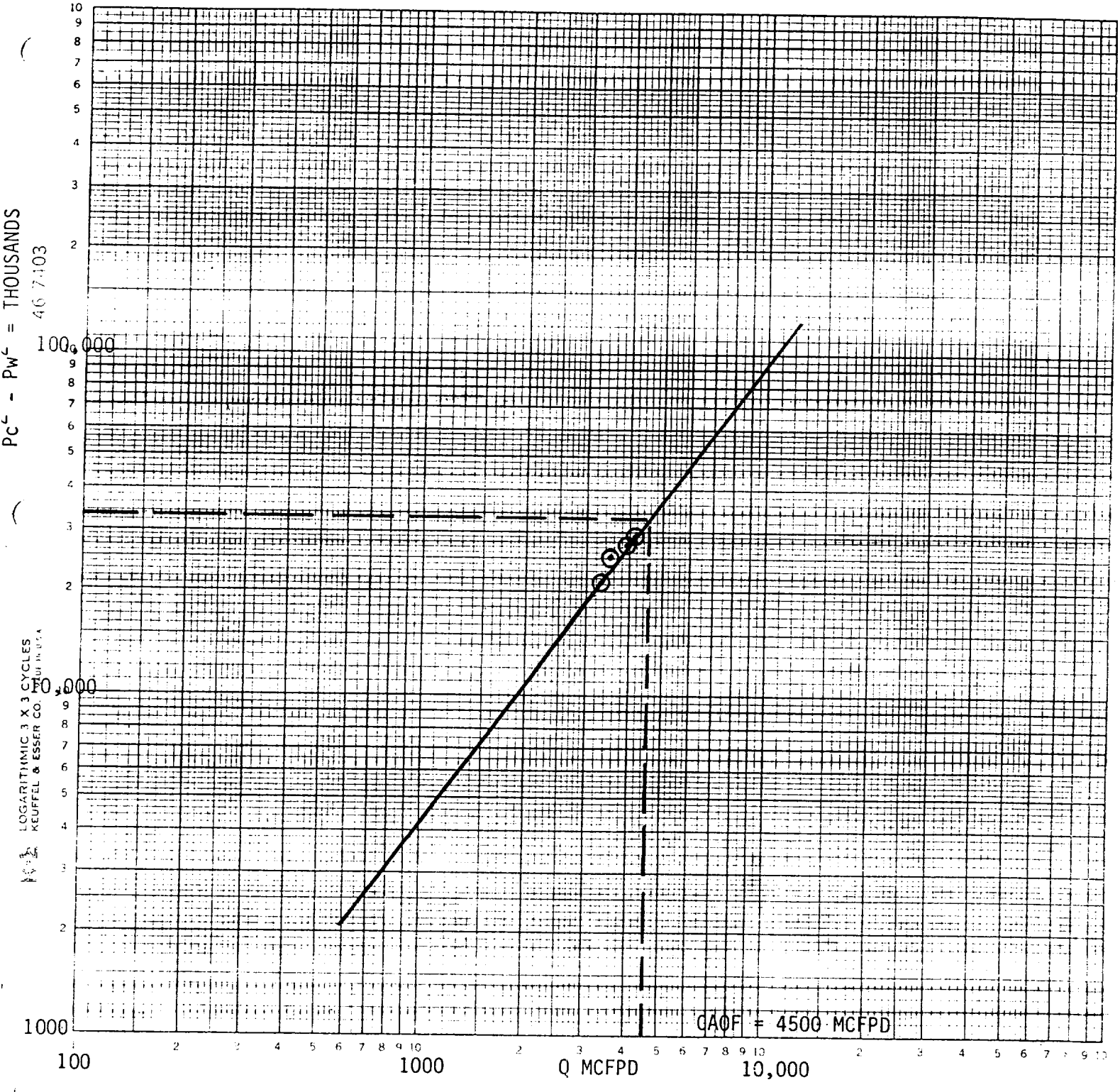
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 4,500$

Absolute Open Flow 4,500 Mcfd @ 15.025 | Angle of Slope θ 53.5° | Slope, n .74

Remarks: _____

Approved By Commission:	Conducted By:	Calculated By: 2-19-82	Checked By:
	E. L. BUTTROSS, JR.	E. L. BUTTROSS, JR.	

MESA PETROLEUM CO.
JACKSON UNIT #1
LEA COUNTY, NEW MEXICO
FEBRUARY 17, 1982



$$N = 1/SLOPE = \frac{LOG\ Q2 - LOG\ Q1}{CYCLE} = \frac{LOG\ 10{,}500 - LOG\ 1{,}900}{CYCLE} = 4.021 - 3.28 = .74$$

$$\emptyset = 53.5°$$