NEW MEXICO OIL CONSERVATION COMMISSION

MULTIPOINT AN. ONE POINT BACK PRESSURE TEST OR GAS WELL

Form C-122
Revised 9-1-65

RECEIVED

JUL 1 1981

O. C. D.
ARTESIA, OFFICE

C/SF

Type Test: [X] Initial [ ] Annual [ ] Special		Test Date: 6-22-81	
Company: MESA PETROLEUM COMPANY	Connection: UNCONNECTED		Unit
Pool: UNDESIGNATED ABO	Formation: ABO		
Completion Date: 6-22-81	Total Depth: 3525	Plug Back TD: 3480	Elevation: 4067
Farm or Lease Name: SALT FEDERAL			
Csg. Size: 4 1/2 / Wt.: 10.5 / d: / Set At: 3520	Perforations: From 2930' To 3046'		Well No.: 2
Tbg. Size: 2 3/8 / Wt.: 4.7 / d: / Set At: 2807	Perforations: From OPEN ENDED To		Unit: J / Sec.: 8 / Twp.: 8S / 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: 95 @ 3525	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2
State: NEW MEXICO			
L: 2807 / H: 2807 / Gg: / % CO_2: 1 / % N_2: 3 / % H_2S:	Prover: 2" ORIFICE WELL TESTER	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					875		875		68 HR. SI
1.	2" ORIFICE 1 1/4	.5	-	90	820	90	820		1 HR.
2.	WELL 1 1/4	1	-	90	770	90	770		1 HR.
3.	TESTER 1 1/4	2.5	-	90	725	90	725		1 HR.
4.	1 1/4	6.5	-	90	620	90	620		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	153	2" ORIFICE		.9723	.9608	-	143
2.	218	WELL		.9723	.9608	-	204
3.	350	TESTER		.9723	.9608	-	327
4.	587			.9723	.9608	-	548
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 _____ XXXXXXXXX

Specific Gravity Flowing Fluid XXXXX _____

Critical Pressure _____ P.S.I.A. _____ P.S.I.A.

Critical Temperature _____ R _____ R

P_c 875 P_c^2 766

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		820	672	94
2		770	593	173
3		725	526	240
4		620	384	382
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.0052$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.9367$

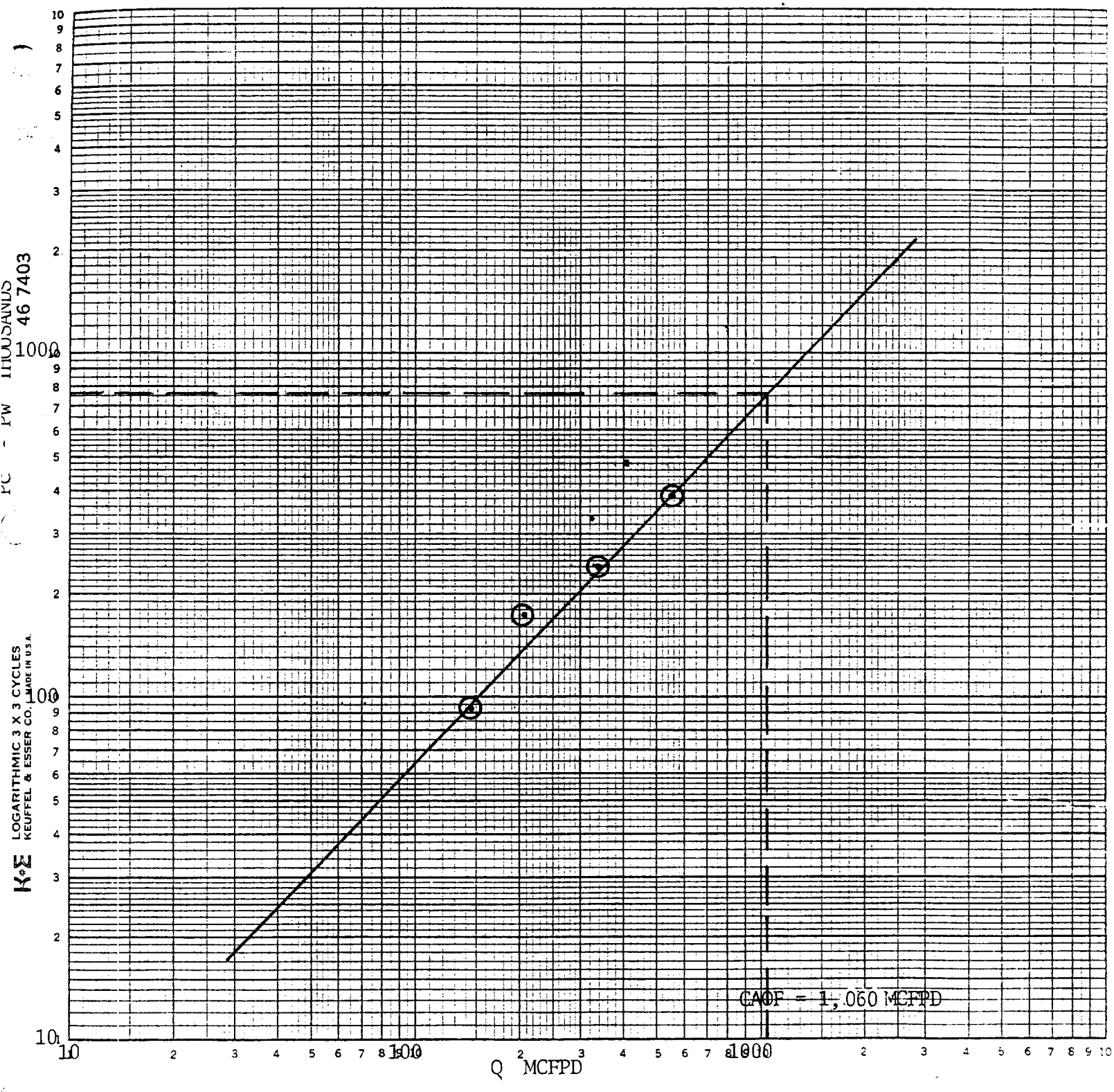
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1,060$

Absolute Open Flow 1,060 Mcfd @ 15.025 Angle of Slope θ 46.5 ° Slope, n .95

Remarks: _____

Approved By Commission: | Conducted By: | Calculated By: EAB | Checked By:

MESA PETROLEUM CORPORATION
SALT FEDERAL NO. 2
SEC. 8, T8S, R23E
CHAVES COUNTY, NEW MEXICO
6-22-81



$$n = 1/\text{slope} = \frac{\text{Log } Q_2 - \text{Log } Q_1}{\text{cycle}} = \frac{\text{Log } 1350 - \text{Log } 150}{\text{cycle}} = 3.13 - 2.18 = .95$$

$\theta = 46.5^\circ$