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STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED
DEC 9 1982
O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 12-4-82	
Company: Mesa Petroleum Co.		Connection: Unconnected			
Pool: Undesignated ABO		Formation: ABO		Unit	
Completion Date: 12-4-82	Total Depth: 3100'	Plug Back TD: 3052'	Elevation: 4022'	Farm or Lease Name: Haley Com	
Csg. Size: 4 1/2 / Wt.: 10.5# / d: / Set At: 3059'		Perforations: From 2775 To 2892		Well No.: 1	
Tbg. Size: 2 3/8 / Wt.: 4.7# / d: / Set At: 2842'		Perforations: From open ended To		Unit: F / Sec.: 7 / 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: 97 @ 3100'	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:			

NO.	FLOW DATA: Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					800		795		72 hr. SI
1.	2" X 1"	22		36	758	53	763		1 hr.
2.	2" X 1"	51		38	703	57	722		1 hr.
3.	2" X 1"	74		46	590	60	660		1 hr.
4.	2" X 1"	76		52	435	62	550		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	35	1.024	1.24		759
2.	17.09	Flow Prover	64	1.022	1.24		1386
3.	17.09	Flow Prover	87	1.014	1.24		1869
4.	17.09	Flow Prover	89	1.008	1.24		1901
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 808 P_c^2 653

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		776	602	51
2		735	540	113
3		673	452	201
4		563	317	336
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.9434$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.3941$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2,700$

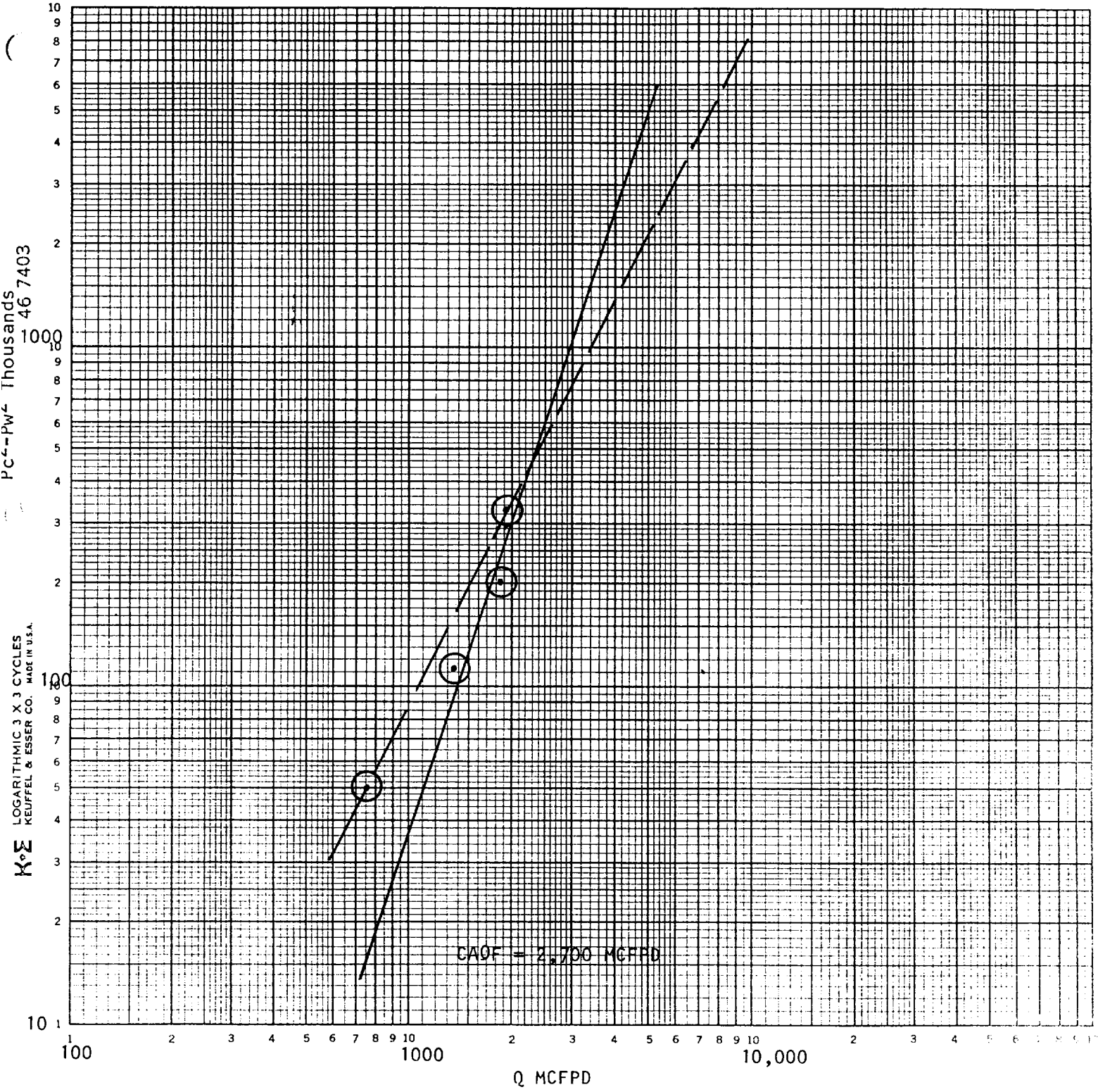
Post ID-2
12-17-82
Comp & BK

Absolute Open Flow 2,700 Mcfd @ 15.025 | Angle of Slope θ 63.5° | Slope, n .5

Remarks: Plot of $Pc^2 - Pw^2$ vs Q yielded a straight line with a θ greater than 63.5°. Drew 63.5° line through highest point.

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

Mesa Petroleum Co.
Haley Com #1
Chaves Co., NM
12-4-82



Assumed N = .5 and $\theta = 63.5^{\circ}$