NEW MEXICO OIL CONSERVATION COMMSSION

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test: ☑ Initial ☐ Annual ☐ Special			Test Date: 12-18-75		
Company: Mobil Oil Corp.	Connection:				
Pool: Blanco Mesa Verde	Formation: Mesa Verde			Unit:	
Completion Date: 10-21-75	Total Depth: 6250'	Plug Back TD: 6216'	Elevation: 7272' G.L.	Farm or Lease Name: Jicarilla G	
Csg. Size: 5½" / Wt.: 15.5 lb/ft. / d: 4.950" / Set At: 6250		Perforations: From 5669 To 6188		Well No.: 7A	
Tbg. Size: 1¼" / Wt.: 1.72 lb/ft. / d: 1.049" / Set At: 6200		Perforations: From — To —		Unit: D / Sec.: 36 / Twp.: 27N / Rge.: 3W	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: None		County: Rio Arriba	
Producing Thru: tubing	Reservoir Temp. °F: 154 @ 6216'	Mean Annual Temp. °F: 60	Baro. Press. – P_a: 12.0	State: New Mexico	
L: 6200	H: 6200	Gg: 0.688	% CO_2: —	% N_2: —	% H_2S: —
Prover: 3/4"	Meter Run: 2"	Taps: —			

FLOW DATA

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							691	60	1137	60	
1.	2"	x	.75"	—	—	79	123	60	960	60	3 hr.
2.											
3.											
4.											
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	9.453	—	61	0.9822	1.206	1.014	693
2.							
3.							
4.							
5.							

NO.	P_t	Temp. °R	T_r	Z
1.	1202	539	1.389	.972
2.				
3.				
4.				
5.				

Gas Liquid Hydrocarbon Ratio 10.828 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 47.3 Deg.
Specific Gravity Separator Gas .686 XXXXXXXXXX
Specific Gravity Flowing Fluid XXXXX
Critical Pressure 669 P.S.I.A. — P.S.I.A.
Critical Temperature 388 R — R

P_c 1149 P_c^2 1320.2

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1		972	944.8	375.4
2				
3				
4				
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.517$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.568$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1,779.7$

Absolute Open Flow 1779.7 Mcfd @ 15.025 Angle of Slope θ 51° Slope, n .75

Remarks: P_c = 9 day shut-in casing pressure - dead weight. — P_w - casing pressure at end of 3 hour flow test. - dead weight.

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
	David Kluse	David Kluse	J. C. Gordon Jr.

COUNTY: Rio Arriba STATE: New Mexico

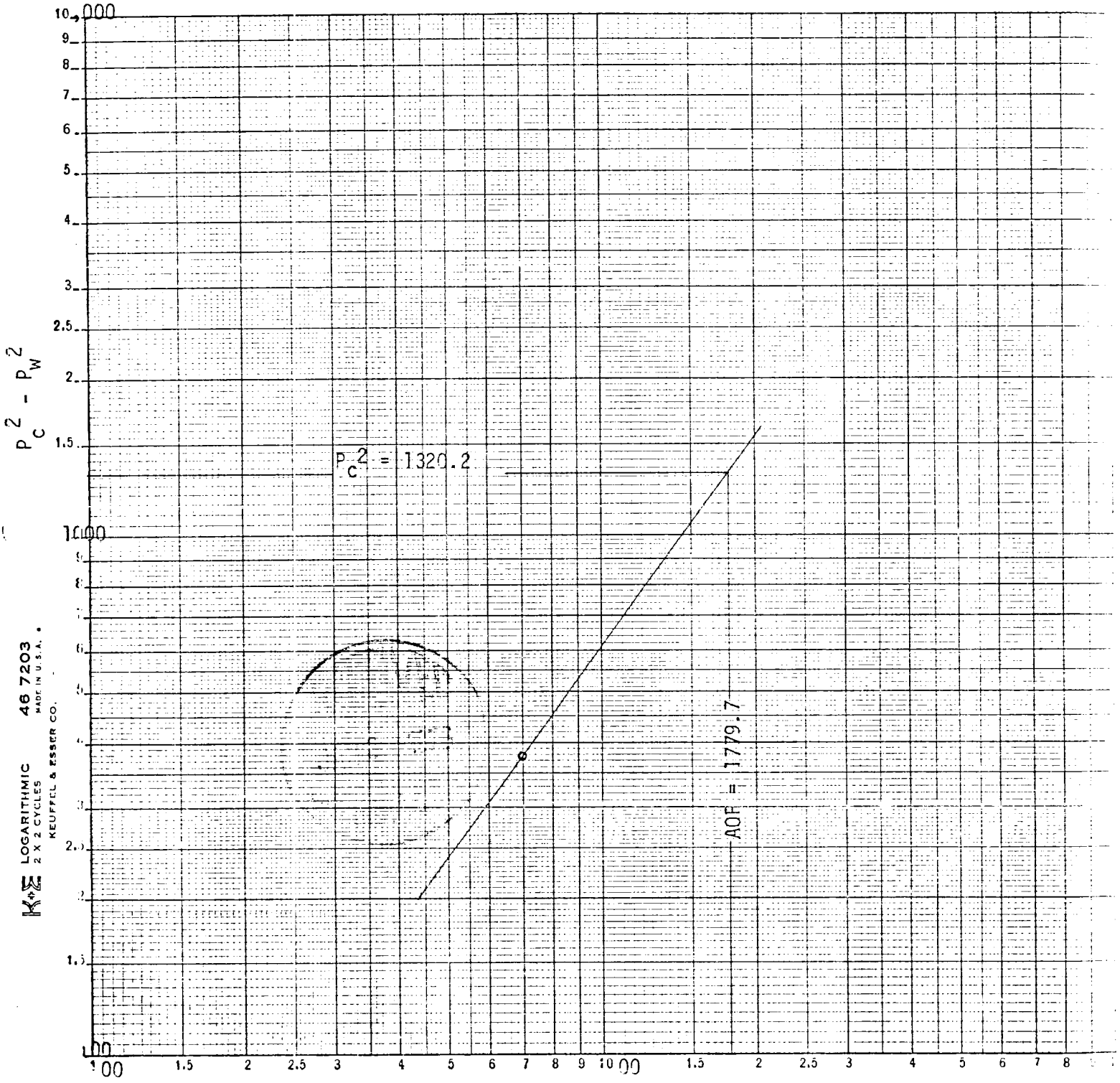
OPERATOR: Mobil Oil Corporation

LEASE: Jicarilla "G" WELL NO.: 7A

FIELD: Blanco Mesa Verde VOLUME: 1,779.7 MCF/PD

DATE: January 6, 1976

GAS WELL
BACK PRESSURE CURVE



Q - $MC_{F/PD}$

$\theta = 51°$

$n = .75$