

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 12-11-90	
Company Mitchell Energy Corporation				Connection None	
Pool Gem				Formation Morrow	
Completion Date 12-11-90		Total Depth 13,770'		Plug Back TD 13,691'	
Elevation 3575' GL		Farm or Lease Name Geronimo Fed			
Csq. Size 5 1/2	Wt. 17	d 4.892	Set At 13769	Perforations: From 13233' To 13382'	
Thq. Size 2 3/8	Wt. 4.7	d 1.995	Set At 13186	Perforations: From 13533' To 13624'	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single - Gas				Packer Set At 13138'	
Producing Thru TBG		Reservoir Temp. °F 187 @ 13,500		Mean Annual Temp. °F 60	
Baro. Press. - P _a 13.2		State New Mexico			
L 13430	H 13430	G _g .679	% CO ₂ .68	% N ₂ .45	% H ₂ S 0
Prover 0		Meter Run 4.026		Taps Flange	

FLOW 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							3752		PKR		44
1.	4.026 x 1.75			300	29.0	108	2966	60			1
2.	4.026 x 2.50			290	12.0	62	2614	60			1
3.	4.026 x 2.50			300	17.5	56	2451	60			1.25
4.	4.026 x 2.50			308	18.5	54	2404	60			1
5.											

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor F _{pv}	Rate of Flow Q, Mcfd
1	14.93	95.30	313.2	.9568	1.2136	1.0249	1693
2	32.64	60.32	303.2	.9981	1.2136	1.0326	2462
3	32.64	74.03	313.2	1.0039	1.2136	1.0352	3047
4	32.64	77.09	321.2	1.0058	1.2136	1.0367	3184
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.47	568	1.49	.952	18.00	46.4	.679	X X X X X	671	381
2.	.45	522	1.37	.938						
3.	.47	516	1.35	.933						
4.	.48	514	1.35	.931						
5.										

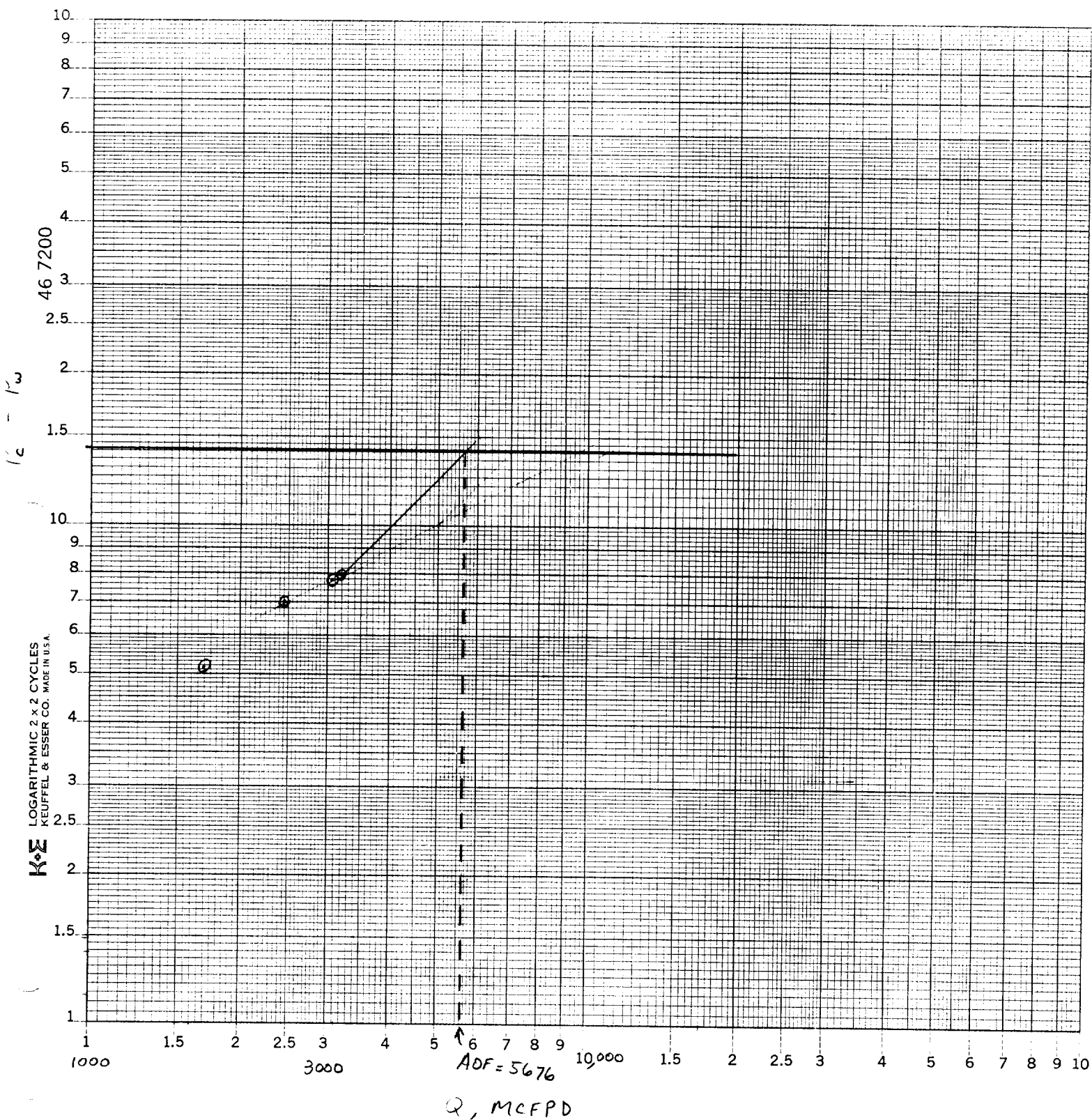
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} =$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n =$
1	8876	3004	9027	5150	1.7828	1.7828
2	6902	2675	7157	7019		
3	6072	2536	6430	7747		
4	5843	2495	6225	7952		
5						

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 5676$$

Absolute Open Flow 5676 Mcfd @ 15.025 Angle of Slope 45° Slope, n 1

Remarks: choke sizes 1st rate 12/64 2nd rate 14/64
3rd rate 15/64 4th rate 16/64

Approved By Division Conducted By: B. Stingley Calculated By: James Blount Checked By:



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DIN
JAN 18 1951
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