

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 2-18-89		FEB 22 1989	
Company Mallon Oil Company		Connection Pending		OIL CON. D.	
Pool Undesignated		Formation Mesaverde		Unit	
Completion Date 2-01-89		Total Depth 8277'		Plug Back TD 6750'	
Elevation 7469'		Farm or Lease Name Davis-Feel Comm.		Well No. 3-15	
Csg. Size 5 1/2"		Wt. 17 #/ft		Set At 8277'	
Perforations: From 5433' To 5798'		Well No. 3-15		Unit 0	
Thq. Size 2 7/8"		Wt. 6.5 #/ft		Set At 5625'	
Perforations: From To		Unit 0		Sec. Twp. Rge. 3 25N 2W	
Type Well - Single - Drdhead - G.C. or G.O. Multiple Single		Packer Set At None		County Rio Arriba	
Producing Thru T6g.		Reservoir Temp. °F 136.5 @ 5550'		Mean Annual Temp. °F 60°	
Baro. Press. - P ₀ 12.2		State New Mexico			
L 5825'		H 5550'		G _g 0.6784	
% CO ₂ 0.345		% N ₂ 0.274		% H ₂ S 0.0	
Prover		Meter Run 2"		Taps Flange	

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI	2"		1.5"	0	0	60	1640	60	1650	60	0
1.				542.73	53.29	60	1200	60	1340	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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcd
1	16.436	170.065	554.93	1.00	1.214	1.061	2,795.114
2.							
3.							
4.							
5.							

NO.	P ₁	Temp. °R	T ₁	Z	Gas Liquid Hydrocarbon Ratio	Mcl/bbl.
1	0.8138	520	1.34545	0.8892	34.904	
2.					A.P.I. Gravity of Liquid Hydrocarbons 39.9° @ 60°F	Deq.
3.					Specific Gravity Separator Gas 0.6784	XXXXXXXXXX
4.					Specific Gravity Flowing Fluid XXXXX	
5.					Critical Pressure P.S.I.A.	P.S.I.A.
					Critical Temperature R	R

NO.	P ₁ ²	P _w	P _w ² /1000	P _e ² - P _w ²	(1) $\frac{P_e^2}{P_e^2 - P_w^2} = 3.0451$	(2) $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 2.3052$
1	1440.00	1352.2	1828.48	894.055		
2						
3						
4						
5						

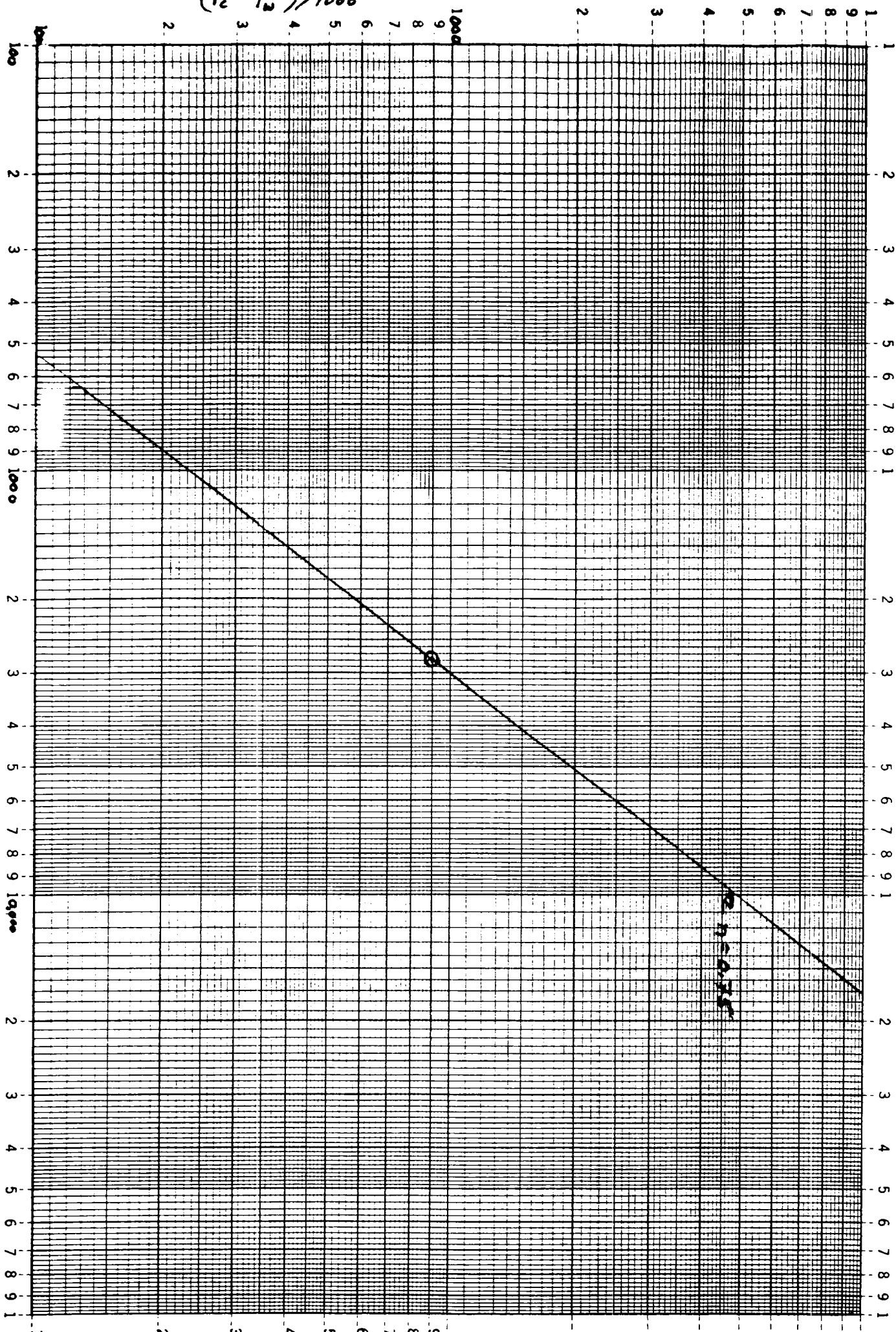
$$AOF = Q \left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 6,443.21$$

Absolute Open Flow	6,443.21	Mcd @ 12.2	Angle of Slope @ 36.87°	Slope, n .75
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Remarks: Test Conducted after 3.5 day SI following an 8 HR flow test, following a 15 day shut-in following 12 day clean-up flow.

Approved By Division	Conducted By: B. Tunne II	Calculated By: J. Cox	Checked By:
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Davis-Fed #3-45 Single Pt. AOFPT, Single Point Test, 2-18-89



Q, MCFD