

NEW MEXICO OIL CONSERVATION COMMISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date Oct. 14, 1968	
Company Sinclair Oil Corporation		Connection Southern Union	
Pool Undesignated		Formation Yates	
Completion Date 10/1/68	Total Depth 4100	Plug Back TD 4052	Elevation 3710 GR
Farm or Lease Name Mescalero Ridge Unit MA			Well No. 32
Csg. Size 4 1/2	Wt. 9.5#	Set At 4094	Perforations: From 3848 To 3854
Tbg. Size 2 3/8	Wt. 3.7#	Set At 3763	Perforations: From Open To ended
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At 3763	County Lea
Producing Thru Tbg.	Reservoir Temp. °F @	Mean Annual Temp. °F 60	Baro. Press. - P _a 13.2
State New Mexico			
L 3763	H 3763	G _g .756	% CO ₂ % N ₂ % H ₂ S Prover Meter Run Taps X FLG

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
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	
SI							1253		Choke		72
1.	4	X	1.50	505	6.0	88	1174	70	10/64		1
2.	4	X	1.50	510	13.0	86	1110	70	14/64		1
3.	4	X	1.50	512	25.0	85	1013	70	18/64		1
4.	4	X	1.50	516	52.0	85	797	70	26/64		1
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, Mcfd
1	10.84	55.76	518.2	.9741	1.150	1.064	720
2	10.84	82.47	523.2	.9759	1.150	1.064	1067
3	10.84	114.6	525.2	.9768	1.150	1.065	1486
4	10.84	165.9	529.2	.9768	1.150	1.065	2151
5							

NO.	P _t	Temp. °R	T _t	Z	Gas Liquid Hydrocarbon Ratio TSTM Mcf/bbl.	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
1	0.78	548	1.34	.883	Specific Gravity Separator Gas .756 X X X X X X X X	
2	0.78	546	1.34	.883	Specific Gravity Flowing Fluid X X X X X	
3	0.79	545	1.34	.882	Critical Pressure 667 P.S.I.A. _____ P.S.I.A.	
4	0.79	545	1.34	.882	Critical Temperature 408 °R _____ °R	
5						

★ P_c **1430.2** P_c² **2045.5**

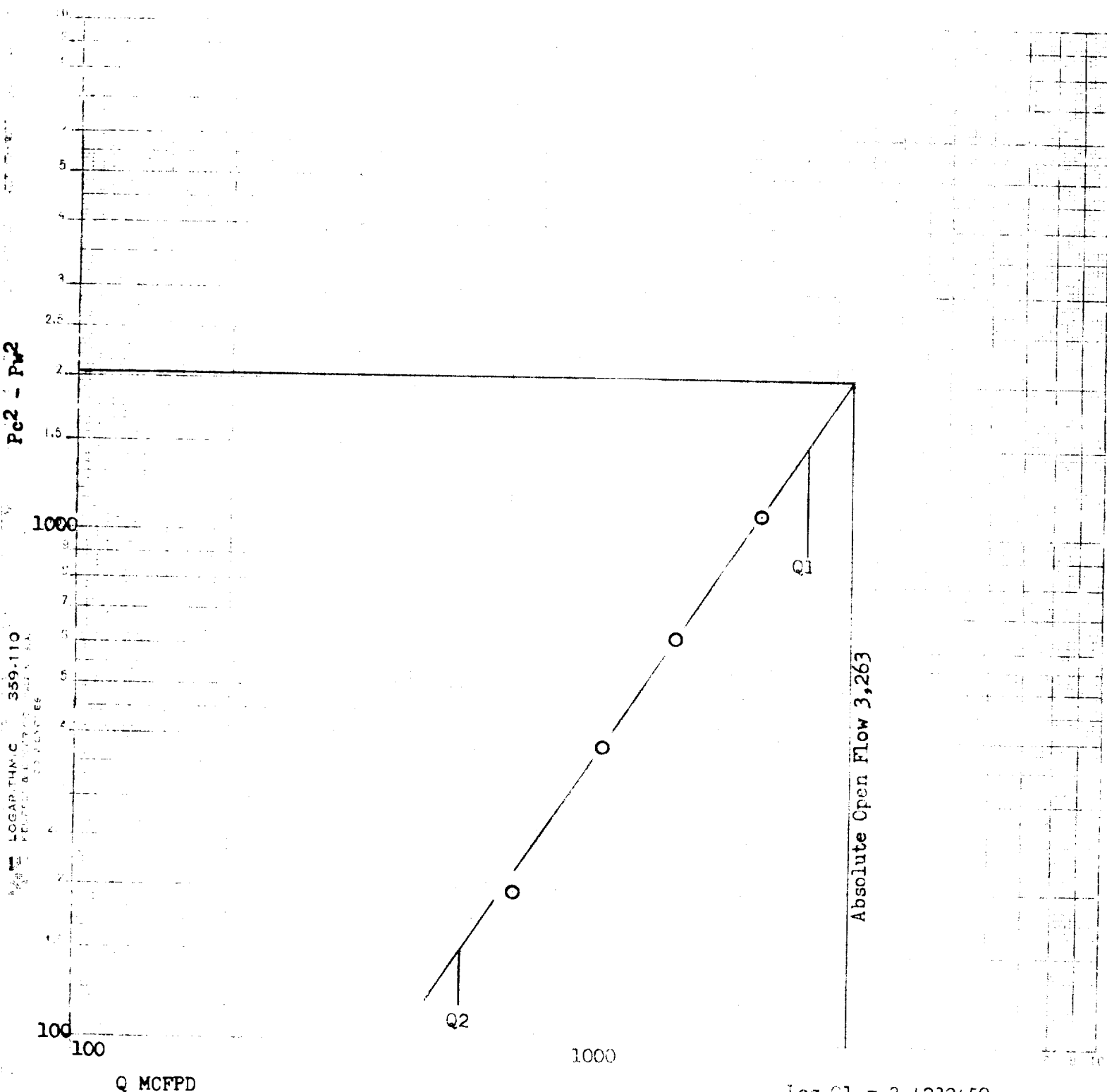
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1		1359.2	1847.4	198.1
2		1288.2	1659.5	386.0
3		1187.2	1409.4	636.1
4		973.2	947.1	1098.4
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = \underline{\underline{1.862}}$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \underline{\underline{1.517}}$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \underline{\underline{3263}}$

Absolute Open Flow 3263 Mcfd @ 15.025	Angle of Slope θ _____	Slope, n 0.67
Remarks: ★ From BHP gauge corrected to 3851 ft.		
Approved By Commission: <i>[Signature]</i>	Conducted By: <i>[Signature]</i>	Calculated By: <i>[Signature]</i>
Checked By: _____		

Sinclair Oil Corporation
 Mescalero Ridge Unit, MA No. 32
 Unit D, Sec. 28, T19S, R34E, S.C.C.
 Lea County, New Mexico
 October 7, 1968 15 PM '68



Log Q1 = 3.4232459
 Log Q2 = 2.7558749
 n = 0.6673710