

N.M.O.C.D. COPY
 TW MEXICO OIL CONSERVATION COMMISSION
 MULTIPOIN. AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

File ✓
 C-122 File
 Form C-122
 Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date OCT 20 1980			
Company Tenneco				Connection Llano, Inc.			
Pool Catchlaw Draw Morrow				Formation Morrow			
Completion Date 8/20/80				Total Depth 10,835		Plug back TD 10,857	
Csg. Size 5 1/2				Set At 10,835		Perforations: From 10,688 To 10,736	
Trq. Size 2 3/8				Set At 10,651		Perforations: To	
Type Well - Single - Brodenhead - G.G. or G.O. Multiple Single				Packer Set At 10,651		County Eddy	
Producing Thru Tbg.		Reservoir Temp. °F 181 @ 10,651		Mean Annual Temp. °F 13.2		State New Mexico	
L 10,651		H 10,651		Gg .596		Prover 3	
				% CO ₂		% H ₂ S	
				.212		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	
1.	3	x	1.750	520	8	97	3366	74			1 hr
2.	3	x	1.750	520	18	89	3319	74			45 min
3.	3	x	1.750	520	42	68	3199	75			1 hr
4.	3	x	1.750	520	75	78	3047	75			1 hr
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, Mgd
1.	15.61	65.31	533.2	.9662	1.295	1.035	1320
2.	15.61	97.97	533.2	.9732	1.295	1.037	1999
3.	15.61	149.65	533.2	.9924	1.295	1.043	3131
4.	15.61	199.97	533.2	.9831	1.295	1.040	4133
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.	.79	557	1.57	.934			.596		672	354
2.	.79	549	1.55	.930						
3.	.79	528	1.49	.919						
4.	.79	538	1.52	.925						
5.										

* $P_r = 3458.8$ $P_r^2 = 11963.3$

NO.	P _r	P _w	P _w ²	P _r ² - P _w ²
1	*	3428.7	11756.0	207.3
2	*	3405.5	11597.4	365.9
3	*	3355.5	11259.4	703.9
4	*	3307.4	10905.8	1057.5
5				

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 11.313$

AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 22.582$

Absolute Open Flow	22,582	Mgd @ 15.025	Angle of Slope °	55	Slope, n	.700
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Remarks: * Calculated from known bottom hole pressures.

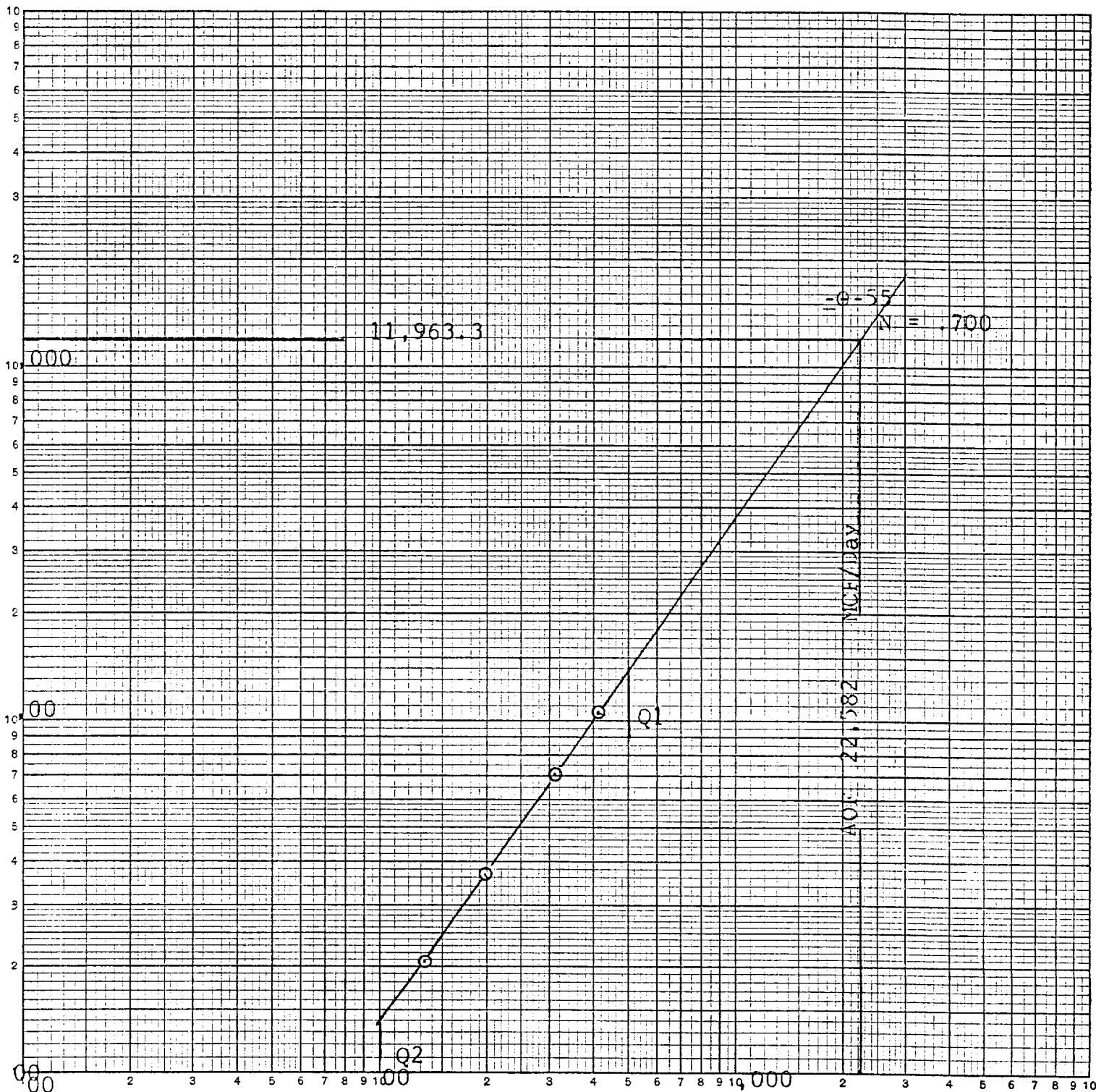
Approved By Commission:	Conducted By: B. R. Duke	Calculated By: Reggie Reston	Checked By: Mark Jacoby
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ABS(N) Q1 = 5022 = 3.0867
 Q2 = 1002 = 3.000867
 N = .700000

CAOF = 4133 $\frac{(11 \ 3.3) \ .700}{(1057.5)} = 22,582$ MCF/Day

PC2 - PW2 in thsnds

46 7400
 LOGARITHMIC
 3 X 3 CYCLES
 KEUFFEL & ESSER CO.



Q = MCF/Day