

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

Form C-122
Revised 9-1-65

RECEIVED

JUN 4 1982

Type of Test ☒ Initial ☐ Annual ☐ Special				Test Date 4-20-82		JUN 4 1982	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Company		O. C. D. ARTESIA, NEW MEXICO	
Pool Pecos Slope Abo				Formation Abo		Unit LG 272	
Completion Date 1-29-82		Total Length 4300'		Plug Back To 4273'		Elevation 3779.5' GR	
Casing Size 4-1/2"		Set At 4290		Perforations From 3706 To 4087		Well No. 3	
Tubing Size 2-3/8"		Set At 4040		Perforations From - To -		Unit Sect. Twp. Rge. P 16 5S 25E	
Type well - Single - Provenhead - G.G. or G.O. Multiple Single				Packer Set At None		County Chaves	
Producing Thru tubing		Reservoir Temp. °F 98° @ 4294		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2	
L 4040		H 4040		G _g .640		Prover ---	
% CO ₂ 0.33		% N ₂ 5.70		% H ₂ S 0		Meter Run 2"	
Flange							

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.	2.067 x 1.000			330	13	60	950	60			24 hrs
2.	2.067 x 1.000			345	42	62	845	64			24 hrs
3.	2.067 x 1.000			350	61	64	795	66			24 hrs
4.	2.067 x 1.000			435	68	54	735	62			24 hrs

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, F _{pv}	Rate of Flow Q, Mgd
1.	4.946	66.8	343.2	1.000	1.250	1.033	426.6
2.	4.946	122.7	358.2	.9981	1.250	1.033	782
3.	4.946	148.8	363.2	.9962	1.250	1.033	947
4.	4.946	175.6	448.2	.9962	1.250	1.043	1128

NO.	P _t	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.	.5192	520	1.448	.938			.640		661	359
2.	.5419	522	1.454	.938						
3.	.5495	524	1.4596	.938						
4.	.6781	514	1.4318	.920						

NO.	P _t ²	P _w ²	P _w ²	P _c ² - P _w ²
1.	927.8	964.7	930.2	133.2
2.	736.5	863.0	744.9	318.5
3.	653.2	815.8	665.6	397.8
4.	559.8	759.9	577.5	485.9

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.189$

AND $Q = \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2030$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.80$

Absolute Open Flow	2030	Mgd @ 15.025	Angle of Slope θ	Slope, n = .75
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Remarks:

Approved By Commission:	Conducted By: David Weaver	Calculated By: Scott Yates	Checked By: Ray Stall
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DATE 6-3-54

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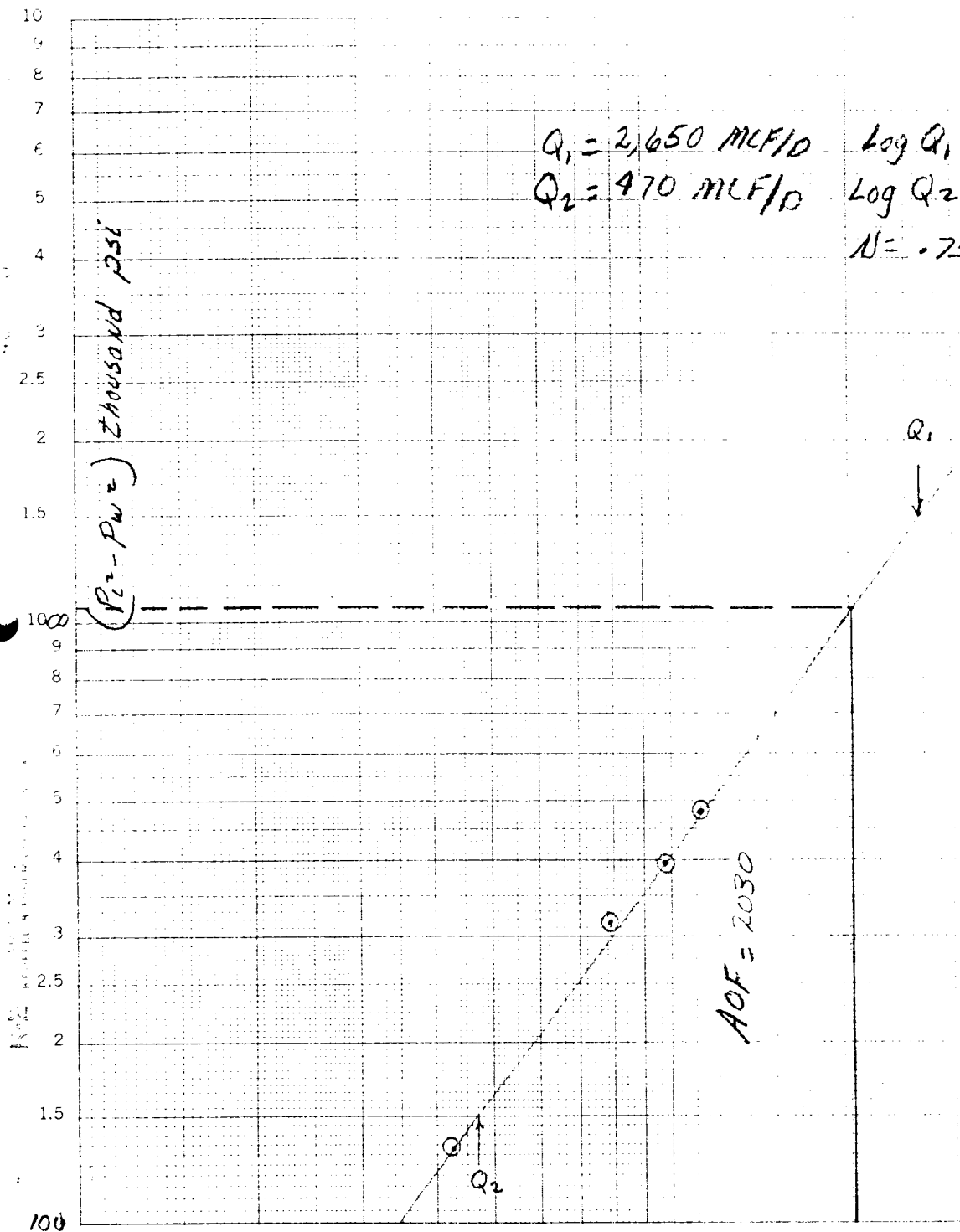
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[illegible]

$Q_1 = 2,650 \text{ MCF/D}$ $\log Q_1 = 3.42$
 $Q_2 = 470 \text{ MCF/D}$ $\log Q_2 = 2.67$
 $N = .75$



$Q_2 = 150$
 $Q_1 = 1,500$

$1000 \text{ } Q \text{ MCF/D}$