

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

Form C-122
Revised 9-1-65

RECEIVED

C/SF C-122

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 3-16-82		MAY - 5 1982	
Company Yates Petroleum Corporation				Connection Transwestern Pipeline Co		O. C. D. ARTESIA, OFFICE	
Pool Boyd Morrow				Formation Morrow		Unit	
Completion Date 1-13-82		Total Depth 10000		Plug Back TD 8970 KB		Elevation 3636 ft.	
Casing Size 5 1/2"		Wt. 17#		d 4.892		Set At 9969	
Perforations: From 8650 To 8658KB		Well No. 2					
Tubing Size 2 3/8"		Wt. 4.7#		d 1.995		Set At 8607 KB	
Perforations: From To		Unit L		Sec. 11		Twp. 19s	
Type Well - Single - Dradhead - G.G. or G.O. Multiple single		Packer Set At 8607 KB		County Eddy			
Producing Thru Tubing		Reservoir Temp. °F 145 @ 8650		Mean Annual Temp. °F 62		Baro. Press. - P _a 13.2	
State New Mexico							
L 8644		H 8644		C _q 0.590		% CO ₂ 0.52	
				% N ₂ 0.49		% H ₂ S Nil	
Prover --		Meter Run 2"		Taps flanged			

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							2602	63			Days
1.	2.067	X	0.875	530	4	64	2425	69			18 hrs
2.	2.067	X	0.875	535	18	65	2002	71			24 hrs
3.	2.067	X	0.875	550	31	68	1630	72			24 hrs
4.	2.067	X	0.875	545	48	66	1093	72			24 hrs
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	3.729	42.58	543.2	0.9962	1.302	1.045	215
2	3.729	99.33	548.2	0.9952	1.302	1.045	502
3	3.729	132.13	563.2	0.9924	1.302	1.045	665
4	3.729	163.69	558.2	0.9943	1.302	1.045	826
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	0.805	524	1.484	0.9163	A.P.I. Gravity of Liquid Hydrocarbons	Deg.
2	0.812	525	1.487	0.9162	Specific Gravity Separator Gas	0.590
3	0.834	528	1.496	0.9168	Specific Gravity Flowing Fluid	0.590
4	0.827	526	1.490	0.9159	Critical Pressure	675 P.S.I.A.
5					Critical Temperature	353 °R

NO.	P _t ²	P _w ²	R _w ²	P _c ² - R _w ²	(1) $\frac{P_c^2}{P_c^2 - R_w^2} \times 1.2143$	(2) $\left[\frac{P_c^2}{P_c^2 - R_w^2} \right]^n \times 1.1492$
1			8972	1353		
2			6130	4195		
3			4054	6271		
4			1822	8503		
5						

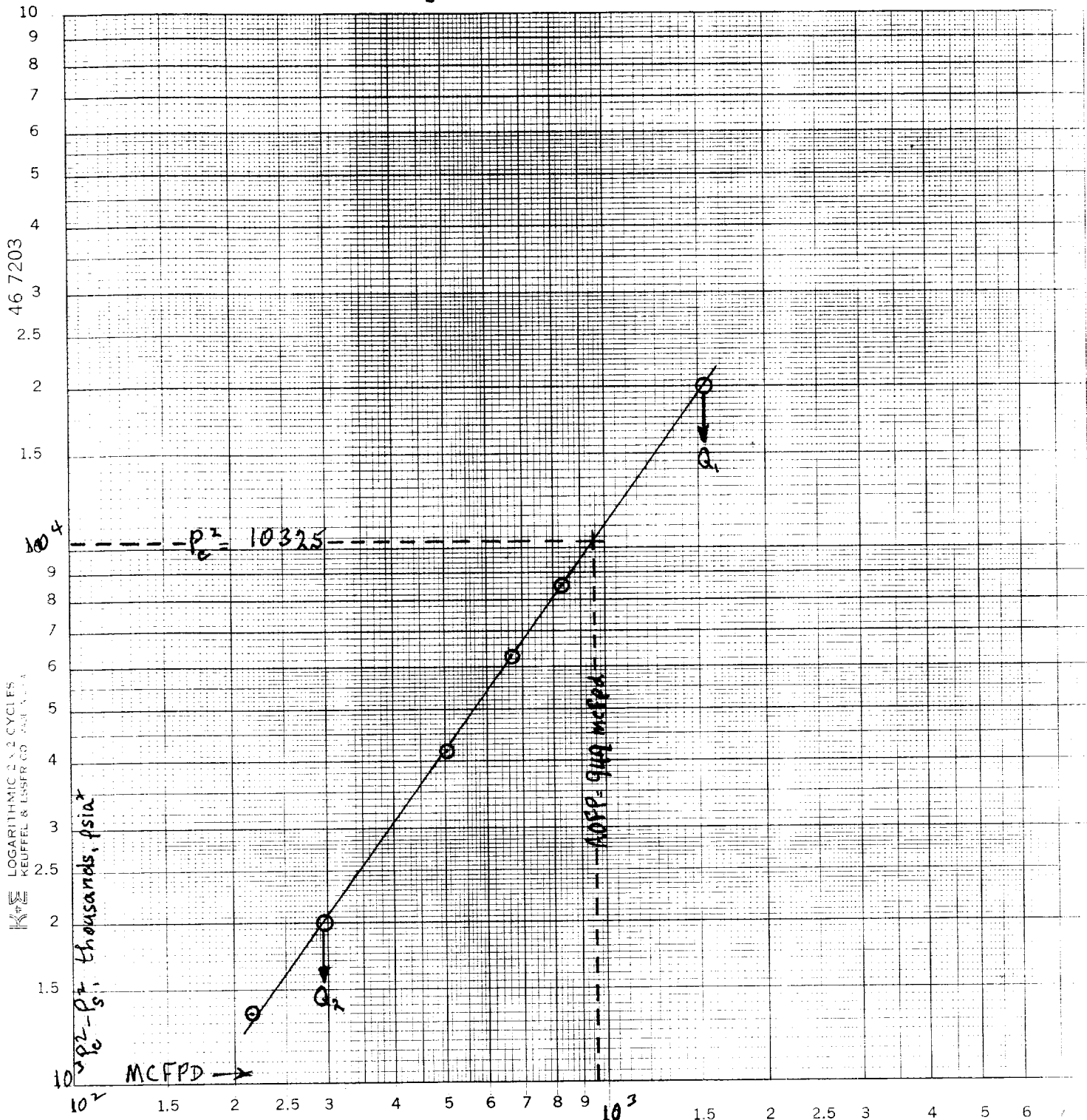
Absolute Open Flow		949 Mcfd @ 15.025	Angle of Slope	54.4 deg.	Slope, n	0.7163
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Remarks: Static pressures by Bennett Wireline, flowing pressures by DWT. Calculations worksheet C122D attached	
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Approved By Commission:	Conducted By: Danny Matthews	Calculated By: Eddie Mahfood	Checked By:
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YPC - Davis NC Com. No. 2

L-11-195-24E, Boyd Morrow, Eddy Co, N.M.



$$Q_1 = 1530 \text{ mcfpd}$$

$$\log Q_1 = 3.1847$$

$$Q_2 = 294 \text{ mcfpd}$$

$$\log Q_2 = 2.4684$$

$$n = 0.7163$$