

NE' EXICO OIL CONSERVATION COMMS' V
MULTIPOINT AND ONE POINT BACK PRESSURE TEST, OR GAS WELL

5F
122
yates
Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 6-26-79		RECEIVED AUG 15 1979	
Company Yates Petroleum Corp. ✓				Connection El Paso Natural Gas Company					
Pool Angell Ranch Morrow				Formation Morrow				Unit NM 02295 D. C. C. ARTERIA, OFFICE	
Completion Date 11-28-78		Total Depth 11150' KB		Plug Back TD 10850' KB		Elevation 3433' KB		Farm or Lease Name Reddy-Trigg "JV" Fed	
Csg. Size 4-1/2"	Wt. 11.6#	d 4.000	Set At 11001' KB	Perforations: From 10782 To 10790'				Well No. 1	
Thq. Size 2-3/8"	Wt. 4.7#	d 1.995	Set At 10739' KB	Perforations: To				Unit Sec. Twp. Rge. #H 35 19S 27E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 10739' KB		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 164 @ 10786		Mean Annual Temp. °F 62		Baro. Press. - P _a 13.2		State New Mexico	
L 10779	H 10779	G _g .7045	% CO ₂ 0.59	% N ₂ 0.40	% H ₂ S Nil	Prover	Meter Run 4"	Taps 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
SI							3230	70			Days
1.	4.026	x	1.000	534	9	75	2911	71			1 hour
2.				534	19	75	2604	73			1 hour
3.				535	36	75	2086	74			1 hour
4.				535	54	75	1471	75			1 hour
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	4.753	70.18	547.2	.9859	1.276	1.0456	439
2.	4.753	101.96	547.2	.9859	1.276	1.0456	637
3.	4.753	142.48	548.2	.9859	1.276	1.0456	878
4.	4.753	172.05	548.2	.9859	1.276	1.0456	1075
5.							

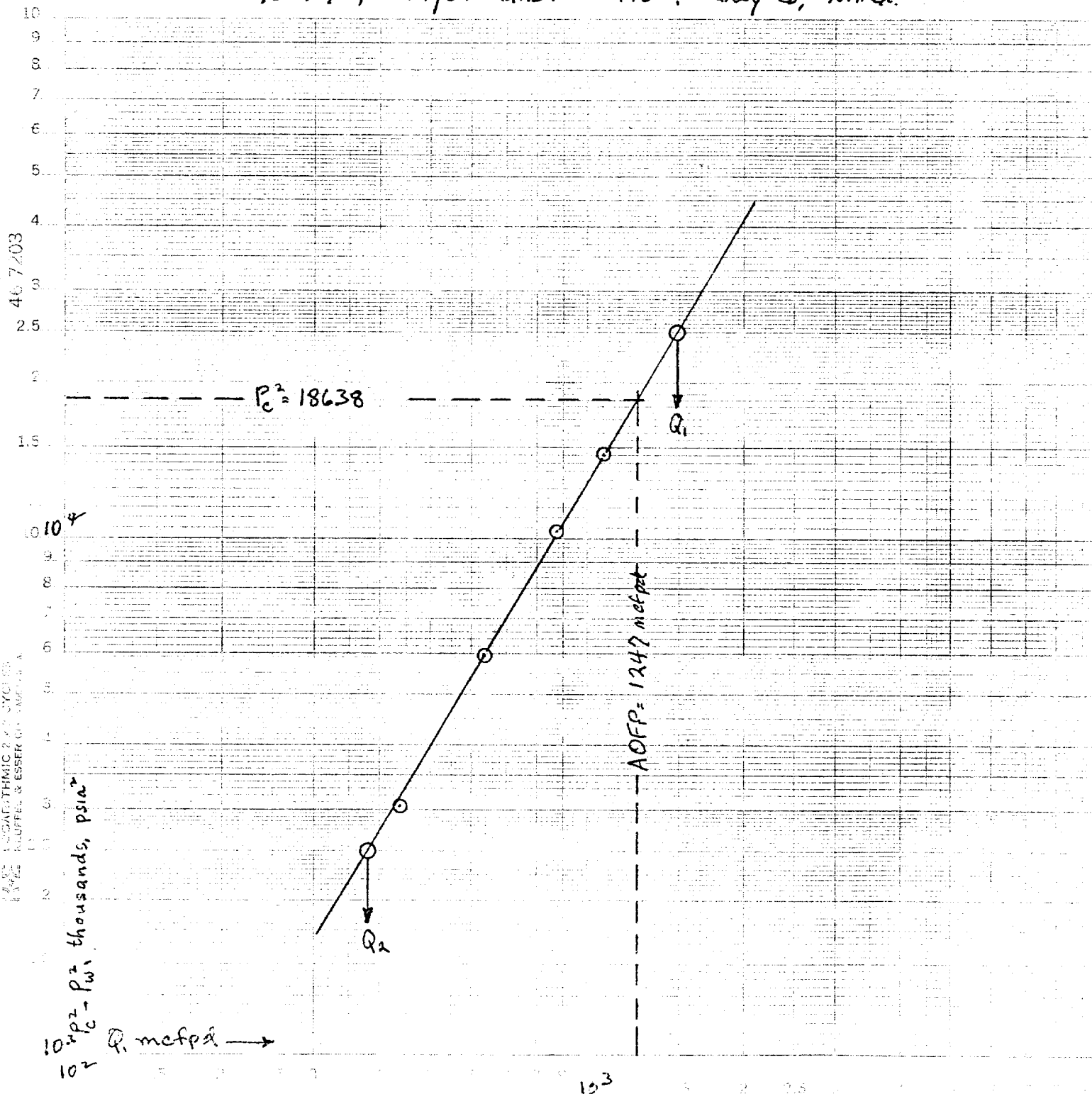
NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	0.813	535	1.480	.9147	90.6 Mcf/bbl.	53 Deg.	0.614	XXXXXX	673 P.S.I.A.	361.5 R
2.	0.813	535	1.480	.9147				XXXXX	678 P.S.I.A.	390 R
3.	0.809	535	1.480	.9147						
4.	0.809	535	1.480	.9147						
5.										

P _c 4317.2 P _c ² 18638				(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.2855$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.1603$	
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²			
1			15600	3038			
2			12709	5929			
3			8339	10299			
4			4139	14499			
5							

Absolute Open Flow 1247 Mcfd @ 15.025				Angle of Slope @ 59.38 deg		Slope, n .5919	
Remarks: Static pressures by Bennett Wireline, flowing pressures by DWT. Calculations worksheet C-122D attached.							
Approved By Commission:		Conducted By: Don Weaver		Calculated By: Eddie Mahfood		Checked By:	

YPC- Reddy-Trigg "JV" Federal No.1

K-35-19s-27E, Angell Ranch Morrow, El Paso Co, N.Mex.



$$Q_1 = 1485 \text{ mcfpd}$$

$$\log Q_1 = 3.1717$$

$$Q_2 = 380 \text{ mcfpd}$$

$$\log Q_2 = 2.5798$$

$$n = 0.5919$$