

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

1-7-78
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Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 5-24-78		JUN - 6 1978	
Company Texas Oil & Gas Corporation						Connection Vented		O. C. C. ARTESIA, OFFICE	
Pool Cemetery Morrow						Formation Morrow		Unit	
Completion Date 5/17/78		Total Depth 9640'		Plug Back TD 9598'		Elevation 3604 Gr.		Farm or Lease Name Indian Hills State Com	
Csg. Size 4 1/2"	Wt.	d	Set At 9640	Perforations: From 9278 To 9534		Well No. 1			
Tbg. Size 2 3/8"	Wt.	d	Set At 9176	Perforations: From Open Ended To		Unit Sec. Twp. Rge. G 36 20S 24E			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 9176		County Eddy	
Producing Thru tbg		Reservoir Temp. °F		Mean Annual Temp. °F		Baro. Press. - P _a		State New Mexico	
L 9406	H	G _g .642	% CO ₂ 6.27	% N ₂ .92	% H ₂ S .01	Prover X	Meter Run	Taps	

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							2862	85			
1.	2"	X	1/16"	2756		87	2760	87			1 Hr.
2.	2"	X	3/32"	2621		89	2625	87			1 Hr.
3.	2"	X	1/8"	2407		90	2415	87			1 Hr.
4.	2"	X	3/16"	1766		91	1785	89			1 Hr.
5.											

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 Fpv	Rate of Flow Q, Mcfd
1	.06405		2769.2	.9750	1.248	1.129	244
2	.1410		2634.2	.9732	1.248	1.129	509
3	.2648		2420.2	.9723	1.248	1.129	878
4	.6082		1779.2	.9715	1.248	1.114	1462
5							

NO.	P _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
	1. 3.98	547	1.52	.784	A.P.I. Gravity of Liquid Hydrocarbons None Produced Deg.
	2. 3.79	549	1.53	.785	Specific Gravity Separator Gas .642 X X X X X X X X
	3. 3.48	550	1.53	.784	Specific Gravity Flowing Fluid X X X X X .642
	4. 2.56	551	1.53	.806	Critical Pressure 695 P.S.I.A. 695 P.S.I.A.
5.					Critical Temperature 359 °R 359 °R

P _f 3655.2	P _f ² 13,360	(1) $\frac{P_f^2}{P_f^2 - P_s^2} = \frac{13,360}{7,164}$	(2) $\left[\frac{P_f^2}{P_f^2 - P_s^2} \right]^n = \frac{1.563}{}$
NO.	P _s	P _s ²	P _f ² - P _s ²
1	3601.2	12,969	391
2	3423.2	11,718	1642
3	3134.2	9,823	3537
4	2489.2	6,196	7164
5			

Absolute Open Flow 2,286 Mcfd @ 15.025		Angle of Slope 54.5°	Slope, n .717
Remarks: _____			
Approved By Commission:	Conducted By: TOM HANSEN CO., INC.	Calculated By: Mr. Harrington	Checked By:

COMPANY Texas Oil & Gas Corp.

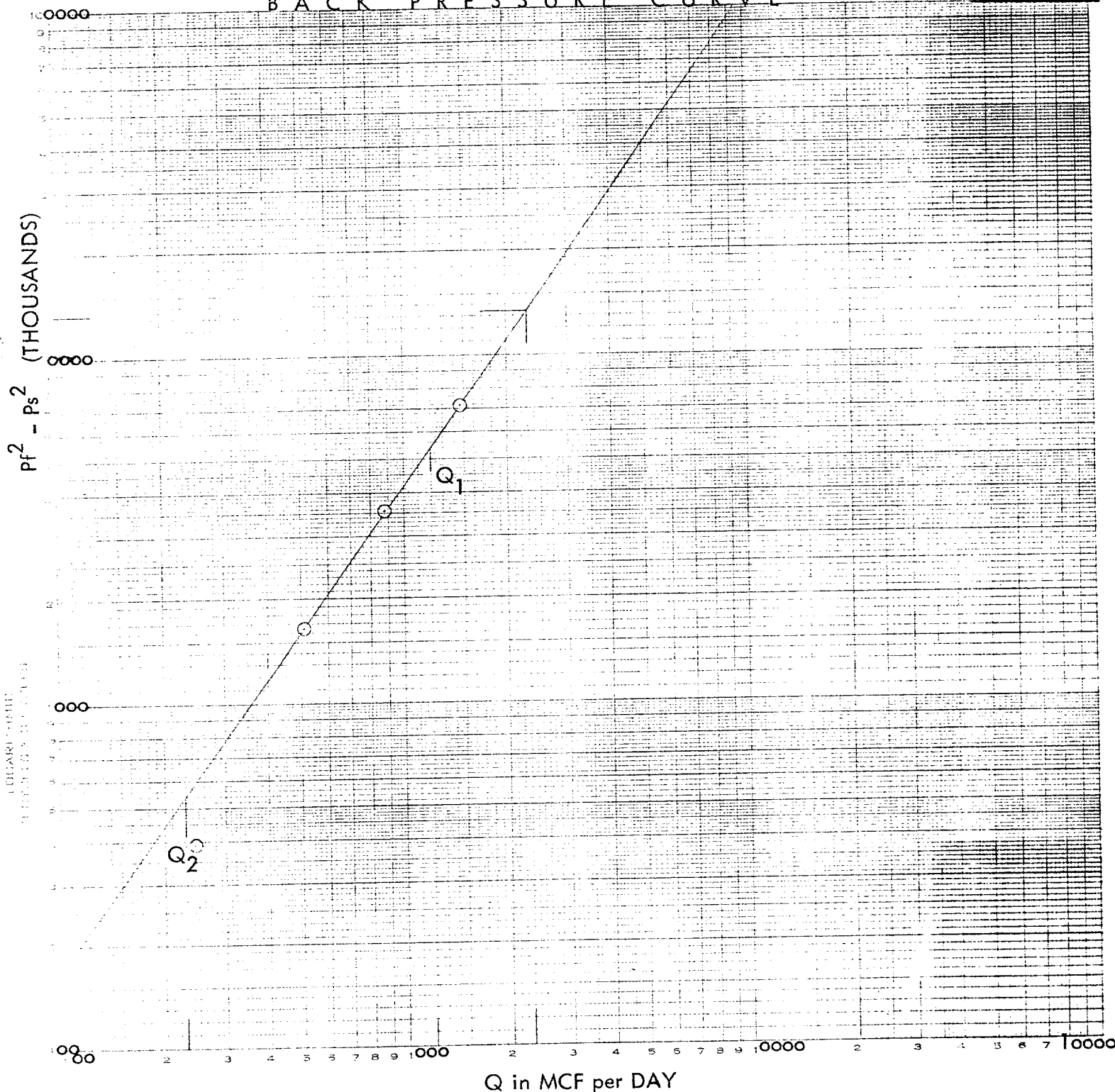
FIELD Cemetery (Morrow)

LEASE Indian Hills State Com WELL 1

COUNTY Eddy STATE New Mexico

DATE 5-24-78

BACK PRESSURE CURVE



$$\theta = 54.5^\circ$$

$$n = .717$$

$$\text{AOF} = 2,286 \text{ MCF/DAY}$$

$$Q_1 = 1,200; \text{Log } Q_1 = 3.07918$$

$$Q_2 = 230; \text{Log } Q_2 = 2.36173$$

$$.71745$$