

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 9-24-90	
Company TEXACO PRODUCING INC				Connection SALES		
Pool Bilbrey Morrow/Bilbrey Atoka				Formation MORROW		Unit F
Completion Date 9-19-90		Total Depth 14,915'		Plug Back TD 14,667		Elevation 3742
Farm or Lease Name Bilbrey 32 State Corn						Well No. 1
Csg. Size 5.0	Wt. 18.0	d 4.276	Set At 14,915	Perforations: From 14,394 To 14,498		
Thq. Size 2.375	Wt. 4.7	d 1.995	Set At 14,300	Perforations: From To		Unit Sec. Twp. Rge. F 32 21S 32E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple GG Single				Packer Set At 14,300		County LEA
Producing Thru TBG		Reservoir Temp. °F 221 • 14,915		Mean Annual Temp. °F 60		State NM
L 14,300	H 14,300	G _g .586	% CO ₂ 1.07	% N ₂ 0.31	% H ₂ S 0	Prover —
						Meter Run 3.068
						Taps FLG

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	
SI	3.068	2.000					4993	68	0	70	99
1.	3.068	2.000		70	16	66	4580	72	0	70	1
2.	3.068	2.000		120	24	54	4240	74	0	70	1
3.	3.068	2.000		504	12	44	3620	75	0	70	1
4.	3.068	2.000		710	13	56	2995	75	0	70	1
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor F _{pv}	Rate of Flow Q, Mcfd
1	21.23	37.99	90.2	.9943	1.306	1.010	1058
2	21.23	56.54	133.2	1.0058	1.306	1.011	1593
3	21.23	78.78	517.2	1.0157	1.306	1.047	2324
4	21.23	96.96	723.2	1.0039	1.306	1.060	2862
5.							

NO.	R	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	.200	526	1.51	.865	3639	
2	.200	514	1.47	.869	46.4	
3	.770	504	1.44	.877		
4	1.070	516	1.48	.890		
5.						

A.P.I. Gravity of Liquid Hydrocarbons					46.4		Deg.	
Specific Gravity Separator Gas					.586		X X X X X X X X	
Specific Gravity Flowing Fluid					X X X X X		.587	
Critical Pressure					676		P.S.I.A. 676	
Critical Temperature					349		R 353	

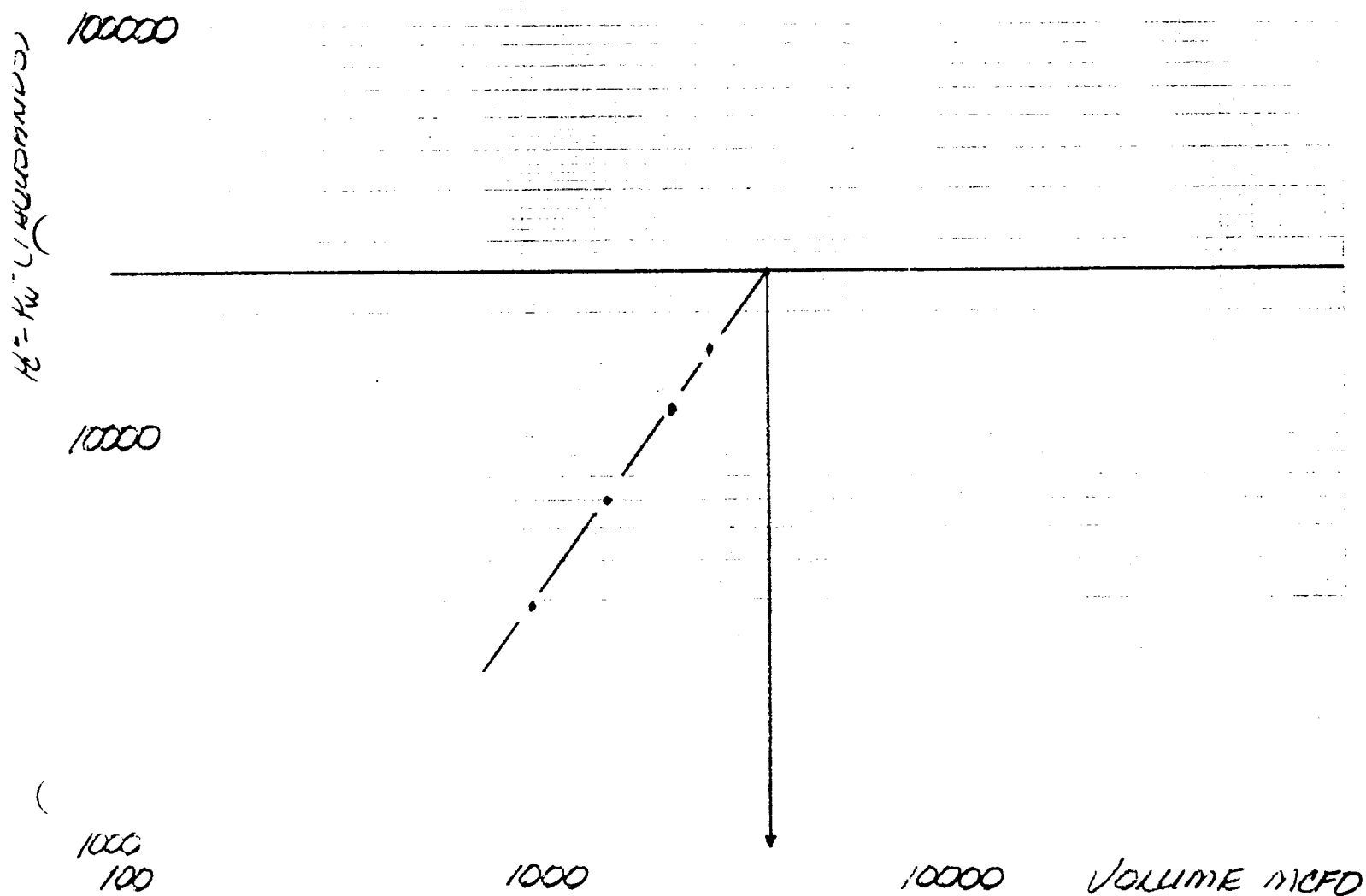
P _c 5006.2 P _c ² 25062					(1) $\frac{P_c^2}{P_c^2 - R^2} = \frac{25062}{3845}$		(2) $\left[\frac{P_c^2}{P_c^2 - R^2} \right]^n = 3.808$	
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²				
1	21217	4606	21217	3845				
2	18090	4253	18090	6972				
3	13200	3633	13200	11862				
4	7049	3008	9049	16013				
5								

Absolute Open Flow					4029		Mcf/d @ 15.025	
Angle of Slope					54.5		Slope, n 7133	

Remarks:			

Original Filed By Division	Conducted By	Calculated By	Checked By
DAVID L. BURRILL	J. E. Bryant/Truman	T. M. Morgan	

E OL PRESSURE CURVE
 BILBREY 32 ST. COM
 WELL # 1
 LEA COUNTY, NM



AOE: 4029
 $\theta : 54.5^\circ$
 $n : .7/33$