

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 9-2-77			
Company Texas Pacific Oil Co., Inc.				Connection					
Pool Jalmat				Formation Yates, Seven Rivers				Unit	
Completion Date 9-2-77		Total Depth 3700'		Plug Back TD 3638'		Elevation 3580' KB		Farm or Lease Name State "A" A/c-2	
Csg. Size 5 1/2"	Wt. 14#	d	Set At 3700'	Perforations: From 3183' To 3584'		Well No. 63			
Tbg. Size 2 3/8"	Wt. 4.7	d	Set At 3580'	Perforations: From To		Unit C	Sec. 9	Twp. 22-S	Rge. 36-E
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At		County Lea	
Producing Thru Tbg.		Reservoir Temp. °F 95 @ 3697'		Mean Annual Temp. °F 60°		Baro. Press. - P_a 13.2		State New Mexico	
L 3580	H 3580	G_g .709	% CO₂	% N₂	% H₂S	Prover 2"	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							170.6				SI 21hrs.
1.	2"		.5"	7.1		82°	164.5				1 hr.
2.	2"		.5"	24.6		83°	153.2				1 hr.
3.	2"		.75"	15.2		81°	137.5				1 hr.
4.	2"		.75"	32.5		81°	95.7				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 F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	4.279		20.3	.9795	1.188	1.0	101
2	4.279		37.8	.9786	1.188	1.0	188
3	9.453		28.4	.9804	1.188	1.0	313
4	9.453		45.7	.9804	1.188	1.0	503
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcf/bbl.
1.	.030	542	1.37	1.0	A.P.I. Gravity of Liquid Hydrocarbons	Dry Gas	Deq.
2.	.057	543	1.37	1.0	Specific Gravity Separator Gas	.709	XXXXXXX
3.	.043	541	1.37	1.0	Specific Gravity Flowing Fluid	XXXXX	
4.	.068	541	1.37	1.0	Critical Pressure	668	P.S.I.A.
5.					Critical Temperature	395	R

NO.	P _t ²	* P _w	P _w ²	P _e ² - P _w ²
1		194.2	37.71	2.37
2		184.2	33.93	6.15
3		169.2	28.63	11.45
4		137.2	18.82	21.26
5				

$P_e = 200.2$ $P_e^2 = 40.08$

$(1) \frac{P_e^2}{P_e^2 - P_w^2} = \frac{40.08}{21.26}$ $(2) \left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 1.662$

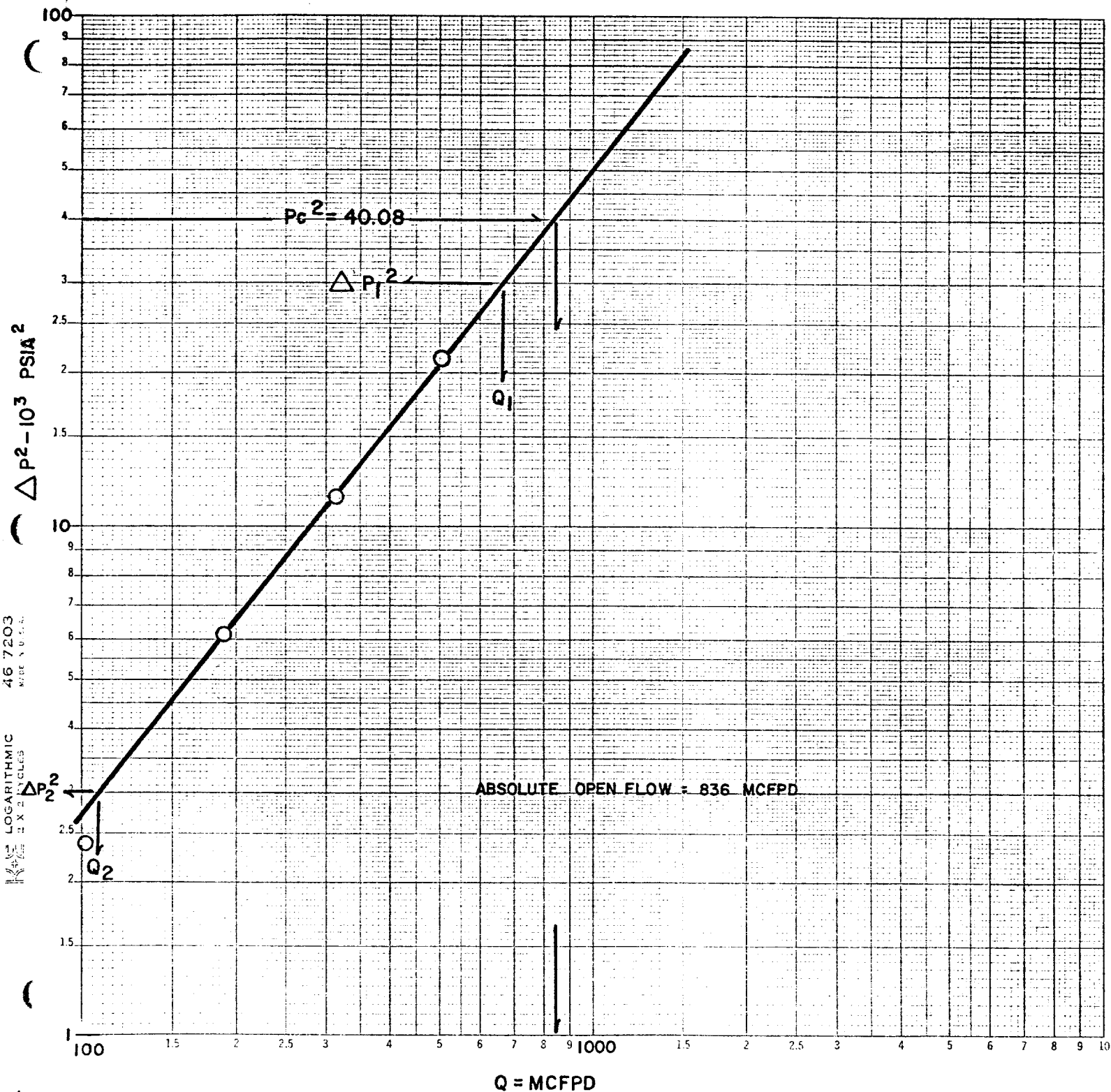
$AOF = Q \left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 836$

Absolute Open Flow 836 Mcfd @ 15.025	Angle of Slope θ 38.7°	Slope, n .801
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Remarks: *P_e and P_w's are bottom hole pressures @ 3546' using an Amerada bomb serial No. 40926 (0 - 2500).

Approved By Commission: [Signature]	Conducted By: Joe Dodd	Calculated By: Mel Schroeder	Checked By:
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TEXAS PACIFIC OIL COMPANY, INC.
 STATE "A" A/c-1 NO. 63
 UNIT C, SEC. 9, T-22-S, R-36-E
 SEPTEMBER 2, 1977



$\Delta P_1^2 = 30$
 $\Delta P_2^2 = 3$
 $Q_1 = 670$
 $Q_2 = 108$

LOG $Q_1 = 2.826075$
 LOG $Q_2 = 2.025306$
 $n = .800769 = .801$