

O+G-NMOCD-Artesia
1-File
1-Engr BDB
1-Mr. L.R. Hall
Midland

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

RECEIVED BY
AUG 12 1984
O. C. D.
ARTESIA, OFFICE

C/SF
File
Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 7/31/84	
Company Getty Oil Company		Connection Transwestern Natural Gas	
Pool Pecos Slope <i>Abo</i>		Formation Abo	
Completion Date July, 1984 7-28-84		Total Depth 4200'	Plug Back 4155'
		Elevation 3712.5 GL	Farm or Lease Name Caudill Fed Com
Casing Size 4 1/2"	Wt. 10.5#	d 4.052"	Set At 4200'
Perforations: From 3838' To 4008'		Well No. 1	
Tubg. Size 2 3/8"	Wt. 4.7#	d 1.995"	Set At 3796'
Perforations: From - To -		Unit Sec. Twp. Rge. I 18 6S 26E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At 3796'	County Chaves
Producing Thru Tbg.	Reservoir Temp. °F 99° 3920'	Mean Annual Temp. °F 60	Baro. Press. - P _a 13.2
State NM			
L 3796'	H 3796'	G _g 0.7024	% CO ₂ 7.77
		% N ₂ 3.94	% H ₂ S -
Prover -		Meter Run 3"	Taps Flange

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							940		935		
1.	3"	x	1 1/8"	300	5	76	890	78	890	78	1/2 hr
2.	3"	x	1 1/8"	300	12	80	820	78	830	78	1 hr
3.	3"	x	1 1/8"	300	22	76	730	78	733	78	1 hr
4.	3"	x	1 1/8"	300	41	68	595	78	595	78	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	6.239	39.573	313.2	0.9850	1.193	1.025	297.4
2	6.239	61.306	313.2	0.9813	1.193	1.025	459.0
3	6.239	83.008	313.2	0.9850	1.193	1.025	623.8
4	6.239	113.319	313.2	0.9924	1.193	1.027	859.6
5							

NO.	R _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1	0.404	536	1.449	0.952	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	0.404	540	1.459	0.952	Specific Gravity Separator Gas _____ XXXXXXXXXX
3	0.416	536	1.449	0.951	Specific Gravity Flowing Fluid _____ XXXXXX
4	0.427	528	1.427	0.948	Critical Pressure _____ 700 _____ P.S.I.A. _____ P.S.I.A.
5					Critical Temperature _____ 370 _____ R _____ R

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1	-	903.2	815.8	92.8
2	-	843.2	711.0	197.6
3	-	743.2	552.3	356.3
4	-	608.2	369.9	538.7
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.687$

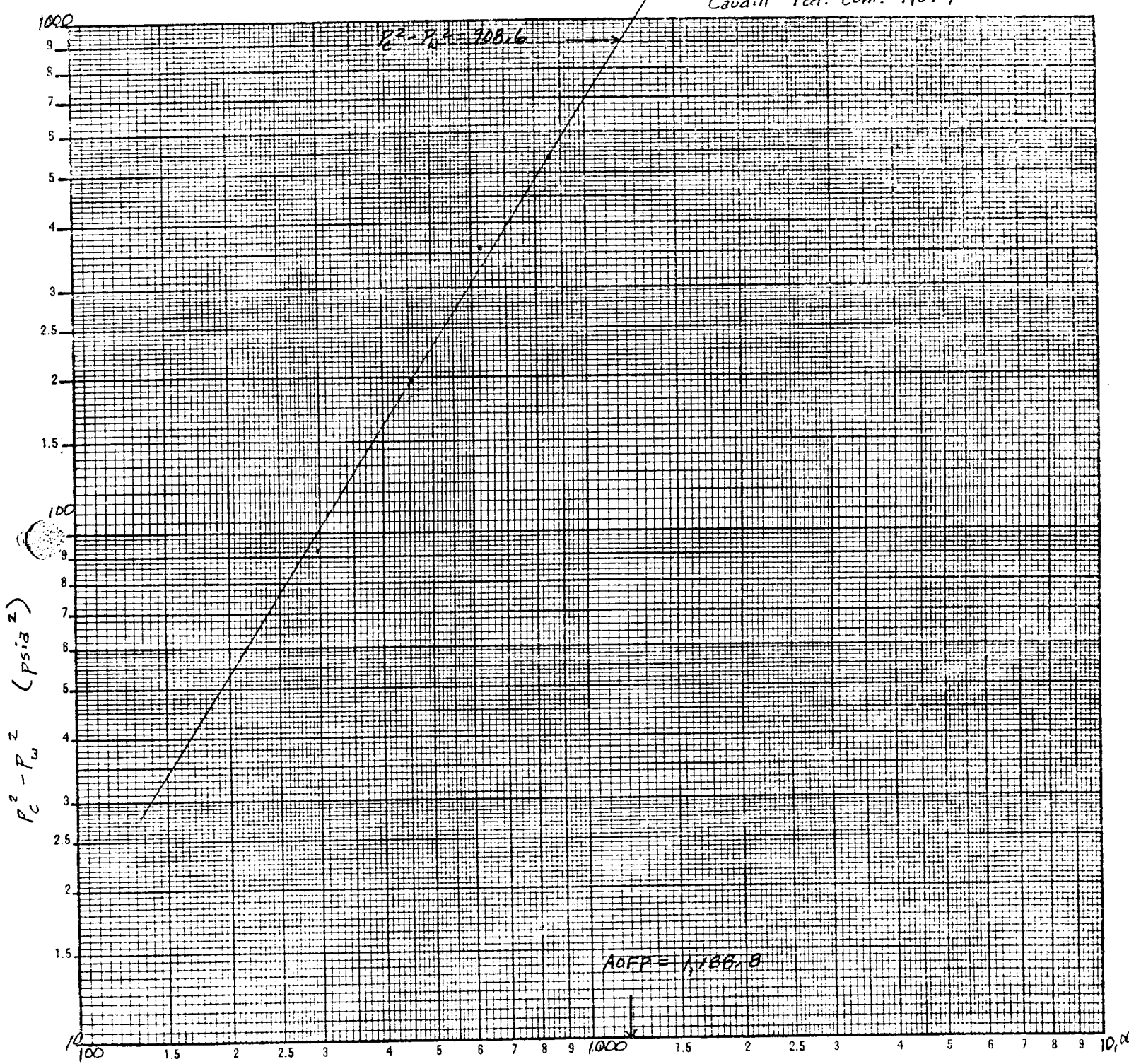
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1,188.8$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.383$

*Post ID-2
8-17-84
Camp & BK*

Absolute Open Flow 1,189	Mcfd @ 15.025	Angle of Slope @ -	Slope, n 0.620
Remarks: * x 1000			
Approved By Commission: _____			
Conducted By: Joe Tippy		Calculated By: Brad D. Burks	
		Checked By: Don J. Steinnerd	

Caudill Fed. Com. No. 1



Q (MGD)

$$\log Q_1 = 3.097$$

$$\log Q_2 = 2.477$$

$$n = 0.620$$