

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 7-14-80		JUL 28 1980	
Company FRED POOL				Connection TO AIR		O. C. D.	
Pool Wildcat Abo				ABO		Unit ARTESIA, OFFICE	
Completion Date 7-10-80		Total Depth 5000 5328		Perforations: From 3706-26 To 3850-66		Farm or Lease Name CORN 24	
Csg. Size 4 1/2	Wt. 11.60	d 4.000	Set At 5000	Perforations: From OPEN To END		Well No. 2	
Thg. Size 2 3/8	Wt. 4.70	d 2.593	Set At 3650			Unit Sec. Twp. Rge. N 24 5S 24E	
Type Well - Single - Fractured - G.C. or G.O. Multiple SINGLE				Packer Set At NONE		County CHAVES	
Producing Thru TUBING		Reservoir Temp. °F 112 @ 3786		Mean Annual Temp. °F 60°		Baro. Press. - P _g 13.2	
State NEW MEXICO							
L 3786	H 3786	G _g .826	% CO ₂ 17.396	% N ₂ 8.087	% H ₂ S	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							992		990		
1.	2 X 1/8			917		89	917	87	915		1 HR.
2.	2 X 3/16			875		79	825	89	870		1 HR.
3.	2 X 1/4			735		78	735	92	739		1 HR.
4.	2 X 5/16			515		82	515	96	594		1 HR.
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	.2648		930.2	.9732	1.064	1.082	276
2	.6082		888.2	.9822	1.064	1.085	613
3	1.087		748.2	.9831	1.064	1.070	910
4	1.672		528.2	.9795	1.064	1.049	966
5							

NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	DRY	Mcf/bbl.
1	1.20	549	1.41	.854	A.P.L. Gravity of Liquid Hydrocarbons		Deg.
2	1.14	539	1.38	.849	Specific Gravity Separator Gas	.826	XXXXXXXXXX
3	.96	538	1.38	.873	Specific Gravity Flowing Fluid	XXXXXX	
4	.68	542	1.39	.909	Critical Pressure	776	P.S.I.A.
5					Critical Temperature	390	R F

F _c 1005.2	P _c ² 1010.4	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.614$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.148$
NO.	P _t ²	P _w	P _w ²
1	*	929.9	864.7
2	*	889.6	791.4
3	*	752.4	566.1
4	*	616.6	380.2
5			

Absolute Open Flow	1,317	Mcf/d @ 15.025	Angle of Slope @	63.5	Slope, n	500
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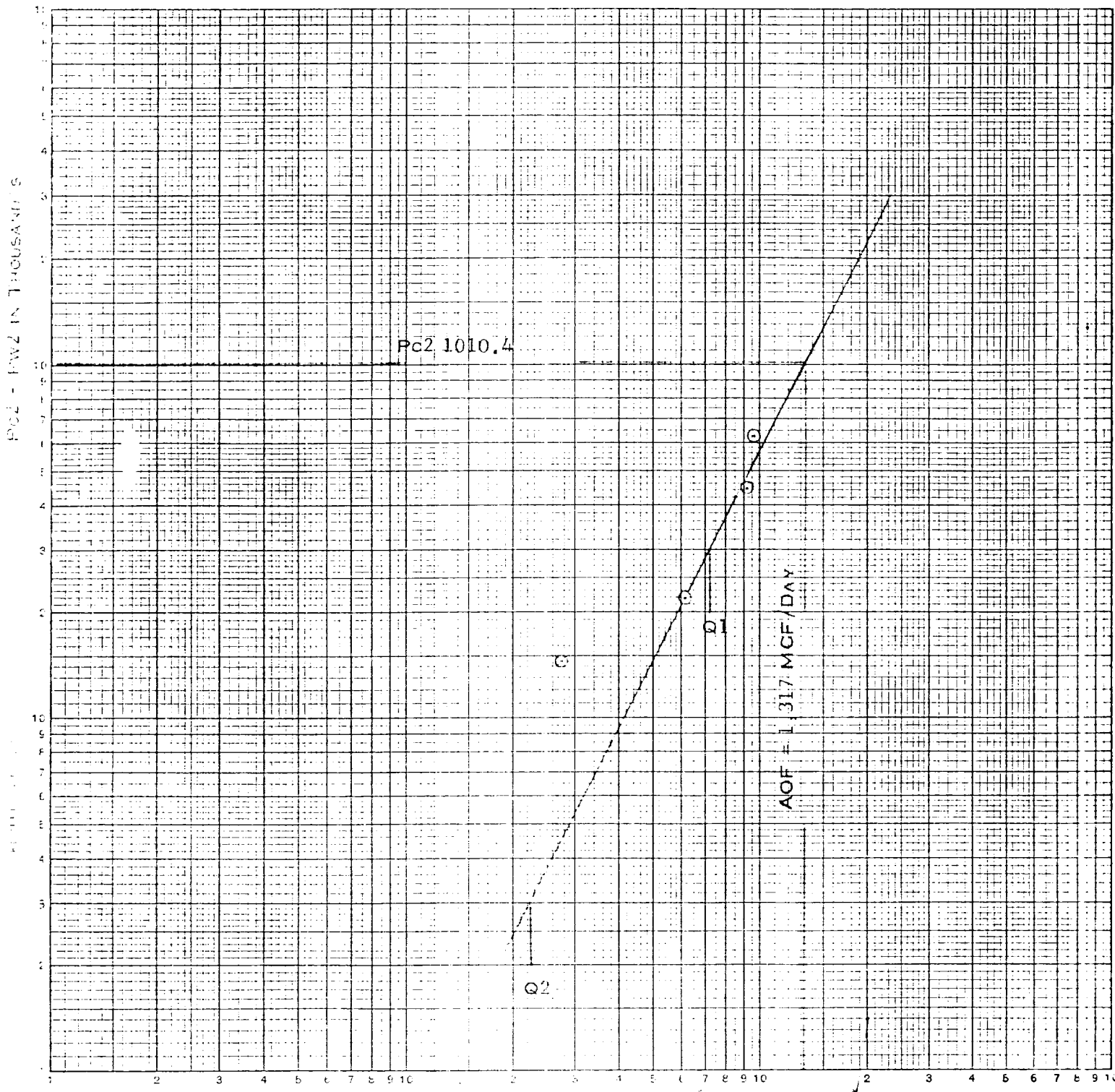
Remarks: *CALCULATED FROM KNOWN BOTTOM HOLE PRESSURES.
BOTTOM HOLE PRESSURES MEASURED WITH KUSTER GAUGE

Approved By Commission:	Conducted By: M.B.	Calculated By: R.R.	Checked By: J.W.W.
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J. W. CORN No. 24-2
 OPERATOR: FRE POOL

$$\begin{array}{rcl} \text{ABS (N) } Q1 & = & 713 = 2.853089 \\ Q2 & = & 225 = 2.353089 \\ \hline N & = & .500000 \end{array}$$

$$\text{CAOF} = 613 \frac{(1010.4)^{500}}{(219.0)} = 1,317 \text{ MCF/DAY}$$



Q = MCF/DAY