

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

SF
file
Form C-122
Revised 9-1-65
C-132

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 2-29-80		MAR 14 1980	
Company FRED POOL <i>Dr/g. Co.</i>				Description TO AIR		O. C. D.	
Well Wildcat <i>W-</i>				ABO		Unit ARTESIA, OFFICE	
Completion Date 2-29-80		Total Depth 4500 <i>4475</i>		Elevation 4460		Elevation 3904 GL	
Casing Size 4 3/8		Set At 9.50		Perforations: From 3822 To 3860		Well No. <i>24</i>	
Tubing Size 2 3/8		Set At 4.70		Perforations: From OPEN To END		Unit Sec. Twp. Rge. <i>0</i> 24 5S 24E	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At NONE		County CHAVES	
Producing Thru TUBING		Reservoir Temp. °F 112 @ 3822		Mean Annual Temp. °F 60		State NEW MEXICO	
L 3822		H 3822		G ₁ .884		% CO ₂ 27.67	
				% N ₂ 4.906		% H ₂ S 2"	
				Prover 2"		Meter Run Taps	

FLOW DATA							TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Time Free	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							985	70	980		24 HRS.
1.	2 x 1/8			935.2		71	922		950		1 HR.
2.	2 x 3/16			901.2		73	888		900		1 HR.
3.	2 x 1/4			841.2		73	828		830		1 HR.
4.	2 x 5/16			713.2		58	700		710		1 HR.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{F_w P_m}$	Pressure P _m	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	.2648		935.2	.9896	1.064	1.088	284
2	.6082		901.2	.9877	1.064	1.081	623
3	1.087		841.2	.9877	1.064	1.081	1039
4	1.672		713.2	1.002	1.064	1.071	1362
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1	1.21	531	1.39	.845	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2	1.16	533	1.40	.855	Specific Gravity Separator Gas _____ 884
3	1.09	533	1.40	.855	Specific Gravity Flowing Fluid _____ X X X X X
4	.92	518	1.36	.871	Critical Pressure 774 P.S.I.A.
5					Critical Temperature 381 R

NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²	$\frac{P_c^2}{P_c^2 - P_w^2} = 3.491$	$\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.112$
1		963.2	927.8	68.6		
2		913.2	833.9	162.5		
3		843.2	711.0	285.4		
4		723.2	523.0	473.4		
5						

Absolute Open Flow 3,233 Mcfd @ 15.025		Angle of Slope θ 47.750		Slope, n .908	
Remarks:					
Approved By Commission: _____ Conducted By: M. B. _____ Calculated By: R. R. _____ Checked By: J. W. W. _____					

FRED POOL

J.W. CORN 24-1

$$\text{ABS (N)} = Q1 = 7500 = 3.875027$$

$$Q2 = 927 = 2.967027$$

$$N = .908000$$

$$\text{CAOF} = 1039 \frac{(996.4)^{.908}}{(285.4)} = 3,233 \text{ MCF / DAY}$$

