

NEW MEXICO OIL CONSERVATION COM. ISSION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

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

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 3-27-80		APR 14 1980	
Company CITIES SERVICE COMPANY				Connection To AIR		O. C. D. ARTESIA, OFFICE	
Pool Winchester BURTON FLAT Morrow				Formation Morrow WOLF CAMP		Unit	
Completion Date 3-17-80		Total Depth 11,329		Plug Back TD 11,276		Elevation 3285 KB	
Csg. Size 5 1/2		Wt. 17.00		Set At 4,892		Perforations: From 11,214 To 11,237	
Tbg. Size 2 7/8		Wt. 6.40		Set At 2,875		Perforations: From OPEN To END	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 11,100		County EDDY	
Producing Thru TUBING		Reservoir Temp. °F 186° @ 11,233		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2	
L 11,233		H 11,233		Gg .601		% CO ₂ .537	
				% N ₂ .357		% H ₂ S	
				Prover		Meter Run 4"	
						Taps FLANGE	
FLOW DATA				TUBING DATA		CASING DATA	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.
SI							
1.	4 X 2.00			610	6"	75	3393
2.	4 X 2.00			620	13	80	3393
3.	4 X 2.00			650	26	75	3223
4.	4 X 2.00			660	52	75	3000
5.	4 X 2.00			660	78	65	2780
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.	19.81	61.15	623.2	.9859	1.290	1.051	1619
2.	19.81	90.73	633.2	.9813	1.290	1.049	2387
3.	19.81	131.31	663.2	.9859	1.290	1.054	3487
4.	19.81	187.10	673.2	.9859	1.290	1.055	4973
5.	19.81	229.15	673.2	.9952	1.290	1.058	6166
NO.	R _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.		
1.	.93	535	1.49	.906	A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.		
2.	.94	540	1.51	.909	Specific Gravity Separator Gas .601 XXXXXXXXXX		
3.	.99	535	1.49	.900	Specific Gravity Flowing Fluid XXXXX		
4.	1.00	535.1	1.49	.899	Critical Pressure 671 P.S.I.A. _____ P.S.I.A.		
5.	1.00	525	1.47	.894	Critical Temperature 358 _____ R _____ R		
* P _c 3688.6 P _c ² 13605.8							
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.015$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.331$		
1		3537.8	12516.0	1089.8	ACF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 14,374$		
2		3533.0	12482.1	1123.7			
3		3390.8	11497.5	2108.3			
4		3197.8	10225.9	3379.9			
5		3015.4	9092.6	4513.2			
Absolute Open Flow 14,374 Mcfd @ 15.025				Angle of Slope θ 52.5		Slope, n .767	
Remarks: BOTTOM HOLE PRESSURES MEASURES WITH KUSTER GAUGE. *CALCULATED FROM KNOWN BOTTOM HOLE PRESSURE.							
Approved By Commission:		Conducted By: MB		Calculated By: RR		Checked By: JWW	

Posted Book
ID 2-18-80
IH-SI