

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

Form C-122
Revised 9-1-63

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 6-8-76		JUN 23 1976	
Company Cities Service Oil Company				Connection El Paso Natural Gas Company		O. C. C.	
Pool Burton Flat <i>Morrow</i>				Formation Upper Morrow		Unit ARTESIA, OFFICE	
Completion Date 6-8-76		Total Depth 11,431'		Plug Back TD 11,220'		Elevation 3232.5' gr.	
Csg. Size 5 1/2"		Wt. 17#		Set At 11,431'		Perforations: From 11,101' to 11,131'	
Tub. Size 2 7/8"		Wt. 6.5#		Set At 11,886'		Perforations: From Open to Ended	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At 10,886'		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 187° @ 11,122'		Mean Annual Temp. °F 60°		Baro. Press. - P _a 13.2	
L 11122		H 11122		Gg 0.6233		% CO ₂ 0.897	
				% N ₂ 2.765		% H ₂ S -0-	
				Prover -----		Meter Run 4"	
						Taps Flange	

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							2927.0		Packer		
1.	4" X 1.50"			7.10	2.40	70	2850.0	73			60 Min.
2.	4" X 1.50"			7.10	3.80	67	2782.0	72			60 Min.
3.	4" X 1.50"			7.10	5.30	66	2655.0	72			60 Min.
4.	4" X 1.50"			7.10	7.00	61	2500.0	72			60 Min.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	L - 10 $\sqrt{h_w P_m}$ Meter Factor	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	10.84	3.162	504.1	.9905	1.267	1.041	763
2	10.84	3.162	504.1	.9933	1.267	1.041	1212
3	10.84	3.162	504.1	.9943	1.267	1.041	1691
4	10.84	3.162	504.1	.9990	1.267	1.044	2251
5							

NO.	P _f	Temp. °R	T _f	Z	Gas Liquid Hydrocarbon Ratio TSTM	Mcf/bbl.
1.	0.73	530	1.48	.923	A.P.I. Gravity of Liquid Hydrocarbons	Deq.
2.	0.73	527	1.47	.922	Specific Gravity Separator Gas 0.6233	X X X X X X X X
3.	0.73	526	1.47	.922	Specific Gravity Flowing Fluid	X X X X X
4.	0.73	521	1.45	.918	Critical Pressure 687 P.S.I.A.	P.S.I.A.
5.					Critical Temperature 359 R	R

P _f 3938.2 P _s 15509				$(1) \frac{P_f^2}{P_f^2 - P_s^2} = 5.872$		$(2) \left[\frac{P_f^2}{P_f^2 - P_s^2} \right]^n = 3.477$	
NO.	P _f ²	P _s	P _s ²	P _f ² - P _s ²			
1	8198	3856.2	14870	639.0			
2	7813	3796.2	14411	1098.0			
3	7119	3707.2	13743	1766.0			
4	6316	3587.2	12868	2641.0			
5							

$AOF = Q \left[\frac{P_f^2}{P_f^2 - P_s^2} \right]^n = 7827$				Absolute Open Flow 7827 Mcfd @ 15.025		Angle of Slope θ 54.9°		Slope, n 0.704	
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Remarks: 100" - 1000# L-10 meter range & chart Bottom hole pressures measured with amerada gauge @ 11,122 feet			
Approved By Commission:	Conducted By: D. Tyson & G. Parker	Calculated By: R. West	Checked By: J.W.W.