

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 2-6-68			
Company Cities Service Oil Company				Connection			
Pool Undesignated				Formation Morrow		Unit	
Completion Date 2-6-68		Total Depth 10516		Plug Back TD 10,447		Elevation	
Csg. Size 5 1/2		Wt. 17 & 20		Set At 10,515		Perforations: From 10,240 To 10,349	
Tbg. Size 2 3/8		Wt. 4.7		Set At 10,148		Perforations: From Open To Ended	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single completion w/packer				Packer Set At 10,150		State CJ	
Producing Thru Tbg		Reservoir Temp. °F 160 @ 10,300		Mean Annual Temp. °F 60		Baro. Press. - P _g 13.2	
L 10,150		H 10,150		G _g .610		Prover Orifice	
				% CO ₂ .61		% N ₂ .2	
				% H ₂ S		Meter Run 4"	
						Taps 2 1/2"	

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
1	4"		2"	720	13	62	2522	67			1 hr
2	4"		2"	740	20	56	2180	68			1 hr
3	4"		2"	740	28	65	1913	73			1 hr
4	4"		2"	745	32	64	1551	73			1 hr
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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	97.61	733.2	0.9981	1.280	1.066	2633
2	19.81	122.71	753.2	1.004	1.280	1.075	3358
3	19.81	145.21	753.2	0.9952	1.280	1.067	3910
4	19.81	155.74	758.2	0.9962	1.280	1.068	4202
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NO.	P _t	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	1.09	522	1.45	0.880	293	
2	1.12	516	1.43	0.865	520 @ 600	
3	1.12	525	1.46	0.878		
4	1.13	524	1.46	0.877		
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NO.	P _t	P _w	P _r	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} =$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n =$
1	6360	2575.9	6635.2	2050.8	1.241	1.132
2	4787	2271.9	5161.5	3524.5		
3	3660	2034.0	4137.2	4548.8		
4	2406	1716.2	2945.3	5740.7		
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Absolute Open Flow 5,550 Mcfd @ 15.025				Angle of Slope 1.0°		Slope, n 5744	
Remarks: P _c was obtained from B.H.P.							
Approved By Commission:		Conducted By: J. Sexton		Calculated By: J. Sexton		Checked By:	