

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

Form C-122
Revised 9-1-63

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 2-25-67	
Company Cities Service Oil Company				Connection None			
Foot Undesignated				Formation NORWAY		Unit Big Eddy Unit	
Completion Date 2-24-67		Total Depth 12,913		Blue Back TD 12,870		Elevation 3387 DF	
Csg. Size 5 1/2		Wt. 23-20-17		d 4.67		Perforations: From 12,695 To 12,800	
Tbg. Size 2 3/8		Wt. 4.7		d 1.995		Perforations: From Open To ended	
Type Well - Single - Brdhead - G.G. or G.O. Multiple Single						Packer Set At 12550	
Producing Thru Tubing		Reservoir Temp. °F 174 @ 12,700		Mean Annual Temp. °F 50		Surf. Press. - P _g 13.2	
L 12,550		H 12,550		G _g 0.85		Prover 0.60	
						Meter Run -	
						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 _g	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.		Temp. °F
SI							3767	60			5 hr
1.	4"		1.25	630	80	58	3769	64	Pkr	-	1 hr
2.	4"		2.00	600	117	58	3052	64	Pkr	-	1 hr
3.	4"		2.00	630	34	48	3720	66	Pkr	-	1 hr
4.	4"		2.00	630	45	48	2485	66	Pkr	-	1 hr
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _g	Flow Temp. Factor P _g	Gravity Factor F _g	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mcfd
1	7.561	226.83	643.2	0.8562	1.216	1.057	2196.0
2	21.08	107.94	513.2	1.001	1.216	1.059	2936.0
3	21.08	147.88	313.2	1.012	1.216	1.065	4085.2
4	21.08	170.12	613.2	1.012	1.216	1.065	4699.8
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NO.	R	Temp. °R	T _r	Z	Gas-Liquid Hydrocarbon Ratio	App. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	.954	524	1.45	0.809	50	55.3	.617	XXXXXX	674	361
2	.910	514	1.42	0.857				XXXXXX	672	381
3	.954	508	1.47	0.883						
4	.954	508	1.47	0.883						
5										

NO.	P ₁ ²	P ₂ ²	R ₁ ²	R ₂ ²	$\frac{P_1^2 - P_2^2}{R_1^2 - R_2^2} = 2.0499$	$\left[\frac{P_1^2}{R_1^2 - R_2^2} \right]^n = 1.955$
1		3215	10,350	5,074.9		
2		3118.2	9,723	4,153.9		
3	3725.2		8,074.9	5,001.9		
4		2649.0	7,017.9	6,859.9		
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Absolute Open Flow 9188 Mcfd @ 13.025		Angle of Slope θ		Slope, n 934	
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Remarks: 1. The surface temp. of the S.L. tubing could not be obtained.
2. The friction of gas in the casing was not significant so L & H was considered the same. A LHP was taken & used instead of the P_c taken by the

Approved By Commission	Conducted By Sexton	Calculated By Sexton	Checked By Lead wt. tester.
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