

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

RECEIVED

FEB 11 1977

Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 8-27-76	
Company Morris Antweil				Connection None		B. C. C. ARTESIA, OFFICE	
Pool Burton Flat				Formation Morrow		Unit N	
Completion Date 8-20-76		Total Depth 11434		Plug Back TD 11382		Elevation	
Csg. Size 5 1/2		Wt. 17#		Set At 11434		Perforations: From 11259 To 11339	
Tbg. Size 2 3/8		Wt. 4.7		Set At 11207		Perforations: From open To end	
Type Well - Single - Brdenhead - G.G. or G.O. Multiple Single				Packer Set At 11207		Farm or Lease Name Mesa Macho	
Producing Thru Tbg.		Reservoir Temp. °F 179 @ 11299 (EST)		Mean Annual Temp. °F 13.2		Baro. Press. - P _a New Mexico	
L 11207		H 11207		G _g .589		% CO ₂	
				% N ₂		% H ₂ S	
				Prover O.C.T.		Meter Run Positive Chokes	
						Taps	

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	6" OCT	Positive	Chokes				3581				72 hr.
1.	1/4			3218		78	3218				1 hr.
2.	5/16			2887		80	2887				1 hr.
3.	3/8			2460		82	2460				1 hr.
4.	1/2			1769		75	1769				1 hr.
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	1.112		3231.2	.9831	1.303	1.117	5.141
2	1.771		2900.2	.9813	1.303	1.129	7.15
3	2.591		2473.2	.9795	1.303	1.107	9.054
4	4.722		1782.2	.9859	1.303	1.126	12.173
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcfd/bbl.
1.	4.81	538	1.54	.802	Dry	
2.	4.32	540	1.54	.784	A.P.I. Gravity of Liquid Hydrocarbons	Deg.
3.	3.68	542	1.55	.816	Specific Gravity Separator Gas	.589
4.	2.65	535	1.53	.789	Specific Gravity Flowing Fluid	X X X X X X X X
5.					Critical Pressure	672
					Critical Temperature	350

NO.	P _i ²	P _w	P _w ²	P _i ² - P _w ²	(1) $\frac{P_i^2}{P_i^2 - P_w^2} = 2.589$	(2) $\left[\frac{P_i^2}{P_i^2 - P_w^2} \right]^n = 2.020$
1		3371.3	11365.7	1552.6		
2		3205.7	10276.5	2641.8		
3		2968.1	8809.6	4108.7		
4		2815.9	7929.3	4989.0		
5						

Absolute Open Flow				24.587	Mcfd @ 15.025	Angle of Slope θ	53.5	Slope, n	739
Remarks: No fluid made during test.									

Approved By Commission:	Conducted By: Rick Pagan	Calculated By: Joe B. Murray	Checked By:
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