

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

Form C-122
Revised 9-1-65

Type Test ☒ Initial ☐ Annual ☐ Special			Test Date 12-20-84		
Company Mobil Producing TX. & NM. Inc.			Connection Well SI - Negotiating for Contract		
Pool Undesignated			Formation Morrow		
Completion Date 12-7-84		Total Depth 14,840		Plug back To 14,318'	
				Elevation 3792.3 GR	
Casing Size 7" 26#			Set At 14,553		
Perforations: From 13,046' To 13,054'			Well No. 1		
Tubing Size 2-7/8" 6.5			Set At 12,947'		
Perforations: From 13,106' To 13,118'			Unit Sec. Twp. Rge. A 2 20S 34E		
Type Well - Single - Prodenhead - G.G. or G.O. Multiple Single				Packoff Set At 12,947'	
Producing Thru Tubing		Reservoir Temp. °F 168 @ 13,100'		Mean Annual Temp. °F 72	
				Buro. Press. - P _a 13.025	
L 12,947'		H 14,553'		G _g .69	
				% CO ₂ .47	
				% N ₂ 1.71	
				% H ₂ S None	
				Prover 4" Sep.	
				Meter Run 3.826	
				Temp. 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							4280	60			
1.	3.826	1.750		455	8	75	3480	60	0	-	1.0
2.	3.826	1.750		480	15	88	3120	60	0	-	1.0
3.	3.826	1.750		490	23	78	2940	68	0	-	1.0
4.	3.826	1.750		500	46	82	2500	68	0	-	1.0
5.											

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 _{sp}	Rate of Flow Q, Mscf/d
1	17.12	61.20	468.2	0.9859	1.200	1.051	1303
2	17.12	86.01	493.2	0.9741	1.200	1.049	1806
3	17.12	107.58	503.2	0.9831	1.200	1.052	2286
4	17.12	153.65	513.2	0.9795	1.200	1.054	3259
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1	0.6999	535	1.3789	0.906	16.973	53.3	.69		669	388
2	0.7372	548	1.4124	0.908						
3	0.7522	538	1.3866	0.903						
4	0.7671	542	1.3969	0.901						
5										

NO.	P _r ²	P _w ²	P _w ²	P _r ² - P _w ²
1		5447	29670	8696
2		5101	26020	12346
3		4783	22877	15489
4		4171	17397	20969
5				

(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.830$

ADP = 0 $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 5993$

(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.839$

Absolute Open Flow	5993	Mscf @ 15.025	Angle of Slope	45°	Slope, n	1.000
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Remarks: Well SI. Negotiating for gas sales contract

Approved By Commission:	Conducted By:	Calculated By:	Checked By:
<i>[Signature]</i>	B&D Well Testers	Mike Williamson	

RECEIVED

JAN 25 1985

C.O.D.
HOBBS OFFICE