

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

Form C-122
Revised 9-1-

RECEIVED

DATE: 7-29-81		AUG 17 1981	
[X] Initial [] Annual		O. C. D.	
FRED POOL JR.		ABO	
WILDCAT		MARTESIA, OFFICE	
Completed Date: 7-20-81	Test Depth: 3525	Log Mark To: 3484	Flow Rate: 4103 KB
Well No. 1	Form or Lease Name: M & M FEDERAL		
Top Size: 4 1/2	Wt. 10.5	Set At: 3484	Perforations: From 3002 To 3022
Top Size: 2 3/8	Wt. 4.7	Set At: 2937	Perforations: From OPEN To
Type Well - Single - F. or G.G. or G.O. Multiple		Packer Set At: 2937	County: CHAVES
Producing Thru: TUBING	Reservoir Temp. °F: 104 & 3013	Mean Annual Temp. °F: 60	State: NEW MEXICO
L: 3013	H: 3013	Gg: .6441	% CO ₂ : .112
		% N ₂ : 15.048	% 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	BHP	Temp. °F	of Flow
1	4"	X	1.25	400	4.2	98	978	76	1056	104	122 HR
2	4"	X	1.25	400	12.0	98	950	72	1031		1 HR
3	4"	X	1.25	405	23.0	86	910	70	1003		1 HR
4	4"	X	1.25	410	52.5	81	870	68	965		1 HR
5							809	66	898		

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, Mcfd
1	7.6610	41.66	413.2	.9653	1.2461	1.0201	392
2	7.6610	70.42	413.2	.9653	1.2461	1.0201	662
3	7.6610	98.07	418.2	.9759	1.2461	1.0228	934
4	7.6610	149.06	423.2	.9804	1.2461	1.0238	1428
5							

NO.	F _t	Temp. °F	T _r	Z	Gas Liquid Hydrocarbon	Meq/bbl
1	.64	558	1.70	.961	A.P.I. Gravity of Gas	Dec
2	.64	558	1.70	.961	Specific Gravity of Gas	Dec
3	.65	546	1.66	.956	Specific Gravity of Gas	Dec
4	.66	541	1.65	.954	Critical Pressure	P.S.I.A.
5					Critical Temperature	R

1069.2	1143.2	3.6524	2.5456
NO.	P ₁	P ₂	$\left[\frac{P_1^2}{P_2^2 - P_1^2} \right]^n$
1	1044.2	1090.4	53
2	1016.2	1032.7	111
3	978.2	956.9	186
4	911.2	830.3	313
5			

3635.1	54.2	.721	
NO.	P ₁	P ₂	Slope, n
1	1044.2	1090.4	
2	1016.2	1032.7	
3	978.2	956.9	
4	911.2	830.3	
5			

BOTTOM HOLE PRESSURES RECORDED WITH AMERADA PRESSURE ELEMENT			
Approved By: DON BENNETT	Calculated By: WOHLFORD & JENKINS	Checked By:	