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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 7/5/94			
Company Mallon Oil Company				Connection			
Pool S. Carlsbad				Formation Strawn		Unit	
Completion Date 7-5-94		Total Depth 12,735		Plug (Bar. L.) 11,822		Elevation 3,257 RKB	
Form or Lease Name Mobil 12 Federal				Well No. 1			
Cas. Size 7"	Wt. 29#	d 6.184	Set At 11,850	Perforations: From 10,382 To 10,422			
Tub. Size 2-3/8"	Wt. 4.7#	d 1.995	Set At 10,315	Perforations: From Open To Ended			
Type Well - Single - Bradenhead - G.O. or G.O. Multiple Multiple				Packer Set At 10,300		County Eddy	
Producing Thru Tubing		Reservoir Temp. °F 181 @ 10400		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
State NM							
L 10,315	H 10,315	G _g 0.621	% CO ₂ 0.45	% N ₂ 0.97	% H ₂ S 0.0	Provar 2"	Meter Run Taps

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow	
NO.	Provar Line Size	X	Critical 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							3,800	80			
1.	2"		0.0625	3,800		80	3,800	80			2 hours
2.	2"		0.1250	3,550		80	3,550	80			2 "
3.	2"		0.1875	3,000		70	3,000	70			2 "
4.	2"		0.250	2,400		68	2,400	68			2 "
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, Mcfd
1	0.06405		3,813	0.9813	1.233	1.104	326
2	0.2648		3,563	0.9813	1.233	1.118	1,276
3	0.6082		3,013	0.9905	1.233	1.157	2,589
4	1.087		2,413	0.9924	1.233	1.180	3,787
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio 109.1 Mcf/bbl.
1	5.70	540	1.44	0.821	A.P.I. Gravity of Liquid Hydrocarbons 55 Deg.
2	5.33	540	1.44	0.800	Specific Gravity Separator Gas 0.621
3	4.50	530	1.42	0.747	Specific Gravity Flowing Fluid XXXXX 0.658
4	3.61	528	1.41	0.718	Critical Pressure P.S.I.A. 669
5					Critical Temperature °R 374

NO.	P _r ²	P _w ²	P _r ² - P _w ²	(1) $\frac{P_c^2}{P_r^2 - P_w^2} = 1.45$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.304$
1	3,813	14,539	0		
2	3,557	12,652	1,887		
3	3,047	9,284	5,255		
4	2,479	6,145	8,394		
5					

Absolute Open Flow 5,412 Mcfd @ 15.025		Angle of Slope °	Slope, n 0.71
Remarks:			