

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 RECEIVED AUG 01 '94	
Company Mallon Oil Company				Connection		
Pool S. Carlsbad				Formation Strawn		Unit
Completion Date 7-5-94		Total Depth 12,735		Plug Back To 11,822		Farm or Lease Name Mobil 12 Federal
Cas. Size 7"	Wt. 29#	d 6.184	Set At 11,850	Perforations: From 10,382 To 10,422		Well No. 1
Tub. Size 2-3/8"	Wt. 4.7#	d 1.995	Set At 10,315	Perforations: From Open To Ended		Unit Sec. Twp. Rge. B 12 23S 26E
Type Well - Single - Bradenhead - G.G. 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
L 10,315	H 10,315	Gg 0.621	% CO ₂ 0.45	% N ₂ 0.97	% H ₂ S 0.0	Provar 2"
MOTOR RUN			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	
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 _{pv}	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	Mcf/bbl.
1	5.70	540	1.44	0.821	109.1	
2	5.33	540	1.44	0.800		
3	4.50	530	1.42	0.747		
4	3.61	528	1.41	0.718		
5						

NO.	P _r	P _w	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.45$ (2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.304$ AOF = Q $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 5,412$
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	

Absolute Open Flow		5,412	Mcf/d @ 15.025	Angle of Slope	0.71
Remarks:					
Approved By Commission: Conducted By: Calculated By: Checked By:					