

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test: ☒ Initial ☐ Annual ☐ Special				Test Date: 8-28-81		SEP 17 1981	
Company: Mesa Petroleum Co.				Connection: UNCONNECTED			
Pool: UNDESIGNATED ABO				Formation: ABO		Unit: O.C.D. ARTESIA, OFFICE	
Completion Date: 8-28-81		Total Depth: 4350'		Plug Back TD: 4281'		Elevation: 3843'	
Csg. Size: 4 1/2"	Wt.: 10.5#	Set At: 4350'	Perforations: From 3668' To 3870'		Farm or Lease Name: COMER		
Tbg. Size: 2 3/8"	Wt.: 4.7#	Set At: 3550'	Perforations: From OPEN-ENDED To		Well No.: 3		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: SINGLE				Packer Set At: NONE		County: CHAVES	
Producing Thru: TUBING		Reservoir Temp. °F: 104° @ 4350'		Mean Annual Temp. °F: 60		Baro. Press. - P _a : 13.2	
L: 4350'		H: 4350'	G _g : .65	% CO ₂ : 1	% N ₂ : 2	% H ₂ S: 2"	Prover: ORIFICE WELL TESTER
METER RUN: 2" ORIFICE WELL TESTER							

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							965		902		72 HR SI
1.	2" ORIFICE	1 1/4	12	-	73	855	80	835			1 HR
2.	WELL	1 1/4	26	-	75	750	80	735			1 HR
3.	TESTER	1 1/4	44	-	80	540	80	545			1 HR
4.		1 1/4	46		80°	400	80	455			1/2 HR
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	840	2" ORIFICE WELL		.9877	.9608		797
2	1463	TESTER		.9859	.9608		1386
3	2127			.9813	.9608		2005
4	2200			.9813	.9608		2074
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2					Specific Gravity Separator Gas _____ X X X X X X X X
3					Specific Gravity Flowing Fluid _____ X X X X X
4					Critical Pressure _____ P.S.I.A. _____ P.S.I.A.
5					Critical Temperature _____ R _____ R

F _c 915 P _c ² 837					$(1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.5912$		$(2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.2911$	
NO.	P _r ²	P _w	P _w ²	P _c ² - P _w ²	$ACF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2600$			
1		848	719	118				
2		748	560	277				
3		558	311	526				
4		468	219	618				
5								

Absolute Open Flow: 2600 Mcfd @ 15.025		Angle of Slope θ : 61.2°		Slope, n: .55	
Remarks: _____					
Approved By Commission: _____		Conducted By: JAMES CRAIG		Calculated By: E. L. BUTTROSS, JR.	
				Checked By: _____	