

W MEXICO OIL CONSERVATION COM SION
MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

SF/file
C-122 file
Form C-122
Revised 9-1-87

RECEIVED

DEC 15 1981

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 10-1-81		DEC 15 1981	
Company MESA PETROLEUM CO.				Connection UNCONNECTED		O. C. D. ARTESIA, OFFICE	
Pool UNDESIGNATED ABO				Formation ABO		Unit	
Completion Date 10-1-81		Total Depth 3500'		Plug Back TD 3425'		Elevation 3896'	
Csg. Size 4 1/2"		Wt. 10.5#		Set At 3501'		Perforations: From 2962' To 2995'	
Tq. Size 2 3/8"		Wt. 4.7#		Set At 2864'		Perforations: From OPEN ENDED To	
Type Well - Single - Prodenhead - G.G. or G.O. Multiple SINGLE				Packer Set At NONE		County CHAVES	
Producing Thru TUBING		Reservoir Temp. °F 100 @ 3500'		Mean Annual Temp. °F 60		Baro. Press. - P _a 13.2	
L 2864		H 2864		G _g .65		% CO ₂ 1	
				% N ₂ 1		% H ₂ S	
Prover 2" ORIFICE WELL TESTER				Meter Run		Turns	

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" ORIFICE	3/4	6	-	58	250	66	510			72 HR SI
2.	WELL										1 HR
3.	TESTER										
4.											
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, Mcld
1.	181	2" ORIFICE		1.0019	.9608		174
2.		WELL TESTER					
3.							
4.							
5.							

NO.	P _t	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

P _c 883	P _c ² 780			
NO.	F _t ²	F _w	P _w ²	P _c ² - P _w ²
1.		523	274	506
2.				
3.				
4.				
5.				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.5415$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 270$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.5415$

Absolute Open Flow 270	Mcid @ 15.025	Angle of Slope @ 45°	Slope, n 1
------------------------	---------------	----------------------	------------

Remarks: UNABLE TO RUN FOUR FLOW RATES DUE TO LOW DELIVERY OF WELL. ASSUMED N = 1 AND BASED CALCULATIONS ON ONE POINT TEST.

Approved By Commission:	Conducted By: JAMES CRAIG	Calculated By: E. L. BUTTROSS, JR.	Checked By:
-------------------------	------------------------------	---------------------------------------	-------------