

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Revised 9-1-63

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 4-27-82	
Company MESA PETROLEUM CO.			Connection EPNG		
Pool BLANCO MESAVERDE			Formation MESAVERDE		Unit
Completion Date 4-9-82		Total Depth 7615.		Plug Back TD 7516.	Elevation 6710.
Farm or Lease Name FEDERAL					
Csg. Size 5.500	Wt. 15.5	d 4.950	Set At 7557.	Perforations: From 5203. To 5246.	
Well No. 13E					
Thg. Size 1.250	Wt. 2.3	d 1.380	Set At 5174.	Perforations: From 5304. To 5353.	
Unit Sec. Twp. Rys. 21-26N-6W					
Type Well - Single - Bradenhead - G.G. or G.O. Multiple FLOWING				Packer Set At 7210.	
Producing Thru TUBING		Reservoir Temp. °F 58.0 5277.		Mean Annual Temp. °F 60.0	
				Baro. Press. - P _a 13.2	
State NM					
L 5277.	H 5277.	Gg 0.650	% CO ₂ 0.	% N ₂ 0.	% H ₂ S 0.
Prover 0.		Meter Run 0.		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	
SI							1055.	53.			168.0
1.	2.00 X 0.750			185.	0.	47.	185.	47.	0.	0.	3.0
2.											
3.											
4.											
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	10.94	0.	198.2	1.0127	1.2403	1.0223	2785.
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1	0.30	507.	1.36	0.957	A.P.I. Gravity of Liquid Hydrocarbons	0.
2.					Specific Gravity Separator Gas	0.650
3.					Specific Gravity Flowing Fluid	0.650
4.					Critical Pressure	670. P.S.I.A.
5.					Critical Temperature	374. R

P _c 1070.3 P _c ² 1146.					(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 5.9408$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3.8052$	
NO.	P ₁ ²	P _w	P _w ²	P _c ² - P _w ²				
1	39.	976.	953.	193.				
2								
3								
4								
5								

Absolute Open Flow					10599. Mcfd @ 15.025		Angle of Slope @ 53.1		Slope, 0.750	
Remarks:										
Approved By Commission:			Conducted By: <i>Charles James</i>			Calculated By: <i>John Benton</i>			Checked By: <i>Ernest Dixon</i>	