

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

Form C-122
Revised 9-1-65

JAN 1 1979

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 1-9--79	
Company MESA PETROLEUM COMPANY		Connection ARTESIAL OFFSHORE	
Pool UNDESIGNATED		Formation CISCO	
Completion Date 12-14-78		Total Depth 9428	
Plug Back TD 9396		Elevation	
Form or Lease Name BERRY FEDERAL COM.		Unit E	
Csq. Size 4 1/2	Wt. 11.6	Set At 9428	Perforations: From 7798 To 7898
Tbg. Size 2 3/8	Wt. 4.7	Set At 7750	Perforations: From To
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE GAS WELL		Packer Set At 7745	
Producing Thru T.B.G.		Baro. Press. - P _a 13.2	
Reservoir Temp. °F 152 @ 7750		Mean Annual Temp. °F 60	
State NEW MEXICO		County EDDY	
L 7750	H 7750	Gg .733	% CO ₂ .87
% N ₂ 2.79	% H ₂ S	Prover	Meter Run 4"
Taps FIG.			
FLOW DATA			
NO.	Prover Line Size	X	Orifice Size
	Press. p.s.i.g.	Diff. h _w	Temp. °F
SI			
1.	4	X	1.000
2.	4	X	1.000
3.	4	X	1.000
4.	4	X	1.000
5.			
TUBING DATA			
	Press. p.s.i.g.	Temp. °F	
	1520		
	1410		
	1300		
	1150		
	980		
CASING DATA			
	Press. p.s.i.g.	Temp. °F	
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, Mgd
1	4.753	41.17	484.2
2	4.753	62.62	490.2
3	4.753	88.83	493.2
4	4.753	126.52	500.2
5			
NO.	R _t	Temp. °R	T _r
			Z
1	.72	524	1.31
2	.73	540	1.35
3	.74	540	1.35
4	.75	546	1.36
5			
Gas Liquid Hydrocarbon Ratio 76.667 Mcf/bbl.			
A.P.I. Gravity of Liquid Hydrocarbons 52.1 @ 60 ° Deg.			
Specific Gravity Separator Gas .733 X X X X X X X X			
Specific Gravity Flowing Fluid X X X X X .772			
Critical Pressure 668 P.S.I.A. 666 P.S.I.A.			
Critical Temperature 401 R 415 R			
P _c 1533.2 P _c ² 2350.7			
NO.	P _c ²	P _w	P _w ²
			P _c ² - P _w ²
1		1423.7	2026.9
2		1314.4	1727.6
3		1166.0	1359.6
4		1000.1	1000.3
5			
(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.741$			
(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.648$			
AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.195$			
Absolute Open Flow 1,195		Mgd @ 15.025	Angle of Slope 48 °
			Slope, n .901
Remarks: WELL PRODUCED 1 BBL OF DISTILLATE DURING THE TEST			
Approved by Commission:		Conducted By:	Calculated By:
			Checked By: