

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

Form C-122
Revised 9-1-65

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 5/24/79	JUN 5 1979	
Company MESA PETROLEUM COMPANY ✓		Connection AIR		Unit O.C.C. ARTESIA, OFFICE
Pool <i>Fenaco Draw morrow</i> UNDESIGNATED		Formation MORROW		
Completion Date 5/11/79	Total Depth 8935	Plug back TD 8845	Elevation 3680 GR	Part or Lease Name RIO STATE
Csg. Size 4 1/2	Wt. 11.6/10.5	Set At 8935	Perforations: From 8732 To 8767	Well No. # 1
Tub. Size 2 3/8	Wt. 4.6	Set At 8701	Perforations: From To	Unit Sec. Twp. Fgts. K 36 18 24
Type well - Single - Protthead - G.G. or G.O. Multiple SINGLE			Packer Set At 8701	County EDDY
Producing Thru TBG.	Reservoir Temp. °F 161 @ 8701	Mean Annual Temp. °F 60°	Baro. Press. - P _a 13.2	State NEW MEXICO
L 8701	H 8701	Gg .595	% CO ₂ .53	% N ₂ .39
			% H ₂ S	Prover
				Meter Run 4"
				FLG.

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
5!							2620				72 HR.
1.	4	X	1.500	555	8.0	102	2487				1 HR.
2.	4	X	1.500	545	14.0	123	2315				1 HR.
3.	4	X	1.500	555	28.0	108	2020				1 HR.
4.	4	X	1.500	566	56.0	80	1270				1 HR.
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, Mhd
1	10.84	67.42	568.2	.9619	1.296	1.038	946
2	10.84	87.61	548.2	.9444	1.296	1.031	1198
3	10.84	126.13	568.2	.9568	1.296	1.035	1755
4	10.84	180.10	579.2	.9813	1.296	1.044	2592
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.85	562	1.57	.929	DRY		.595		671	358
2.	.82	583	1.63	.941						
3.	.85	568	1.59	.933						
4.	.86	540	1.51	.917						
5.										

NO.	P _r	P _w	P _r ²	P _w ²	P _r ² - P _w ²
1	2633.2	2504.8	6933.7	6274.0	659.7
2		2335.8		5456.0	1477.7
3		2051.8		4209.9	2723.8
4		1348.5		1818.5	5115.2
5					

$$(1) \frac{P_r^2}{P_r^2 - P_w^2} = 1.356$$

$$AQF = Q \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 3.130$$

$$(2) \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.208$$

Absolute Open Flow	3,130	Mhd @ 15.025	Angle of Slope α	58.25°	Slope, n	.620
Remarks:						
Approved by Commission:		Conducted By: JOHN R. DAVIS		Calculated By: LARRY C. DAVIS		Checked By: