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See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator ME-TEX OIL & GAS, INC.						Lease or Unit Name J.L. BARR					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 9-27-93		Well No. 4			
Completion Date 9-27-93		Total Depth 3970		Plug Back TD 3941		Elevation KB3703		Unit Ltr. - Sec. - TWP - Rge. D 24-19-36			
Csg. Size 5½	Wt. 15#	d 	Set At 3970	Perforations: From: 3605 To: 3800				Country LEA			
Tbg. Size 2-3/8	Wt. 4.7	d 1.995	Set At 3855	Perforations: From: To: 				Pool EVIMONT Edmont			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE						Packer Set At NONE		Formation PENROSE-QUEEN			
Producing Thru CSG		Reservoir Temp. °F 110°@3605		Mean Annual Temp. °F 60		Baro. Press - P _a 13.2		Connection VENTED			
L 3605	H 3605	Gg .907	% CO ₂ 21.75	% N ₂ .16	% H ₂ S 	Prover 2"	Meter Run 		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							PUMP		112		72 HRS
1.	2 X .250			7		77	"		111		1 HR
2.	2 X .300			12		78	"		94		1 HR
3.	2 X .500			14		80	"		72		1 HR
4.	2 X .500			10		82	"		39		1 HR
5.											

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)		Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg.	Super Compress. Factor, F _{pv} .	Rate of Flow Q, Mcfd
1.	1.087		20.2	.9840	1.050	1.001	23
2.	4.279		25.2	.9831	1.050	1.001	111
3.	4.279		27.2	.9813	1.050	1.001	120
4.	4.279		23.2	.9795	1.050	1.001	102
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	.02	537	1.27	.999	DRY GAS	
2.	.03	538	1.27	.998	A.P. I Gravity of Liquid Hydrocarbons DRY	Deg.
3.	.03	540	1.28	.998	Specific Gravity Separator Gas .904	XXXXXXXXXX
4.	.03	542	1.28	.998	Specific Gravity Flowing Fluid XXXXX	
5.					Critical Pressure *754 P.S.I.A.	P.S.I.A.
					Critical Temperature *421 R	R

p_c **125.2** p_c^2 **15.7**

NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1.		124.2	15.4	0.2
2.		108.3	11.7	3.9
3.		86.8	7.5	8.1
4.		54.1	2.9	12.7
5.				

$$1) \frac{P_c^2}{P_c^2 - P_w^2} = 78.50 \qquad (2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 8.860$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = .204$$

Absolute Open Flow 204 Mcfd @ 15.025	Angle of Slope θ 63.5	Slope, n .500
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Remarks: ***CORRECTED TO 21.75% CO2**

Approved By Division	Conducted By: JOHN WEST ENGINEERING	Calculated By: B.M.	Checked By: B.M.
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