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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

JUN - 3 1996

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator MERIDIAN OIL INC.				Lease or Unit Name EL PASO 23 Federal			
Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 4/23/96			
Completion Date 4/18/96		Total Depth 12,820'		Plug Back TD 12,237'		Elevation 3042'	
Csg. Size 4 1/2	Wt. 12.7	d 3.819	Set At 12,819	Perforations: From: 11,996 To: 12,189		Unit Ltr. - Sec. - TWP - Rge. M 23 26 30	
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 11,860	Perforations: From: OPEN To: END		County EDDY	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At 11,860		Pool WOLFCAMP	
Producing Thru TUBING		Reservoir Temp. °F 210		Mean Annual Temp. °F 60		Baro. Press - P _a 13.2	
L 11,905		H 11,905		Gg .666		% CO ₂ .20	
				% N ₂ .51		% H ₂ S	
				Prover		Meter Run 4.026	
						Taps FIG	

FLOW DATA					TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	
SI						7370			
1.	4.026 x 2.500		147	7.29	50	6750	77		24
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, F _{pv}	Rate of Flow Q, Mcfd
1.	32.64	34.17	160.2	1.010	1.225	1.018	1,405
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	.24	510	1.35	.965	73,947	
2.					A.P. I Gravity of Liquid Hydrocarbons 58.7 @ 60	Deg.
3.					Specific Gravity Separator Gas .666	XXXXXXXXXX
4.					Specific Gravity Flowing Fluid XXXXX	
5.					Critical Pressure 670 P.S.I.A.	P.S.I.A.
					Critical Temperature 378 R	R

P _F 9125.2		P _F ² 83,269		1) $\frac{P_c^2}{P_c^2 - P_w^2} = 8.550$		(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.000$	
NO.	P _i ²	P _s	P _s ²	P _F ² - P _s ²			
1.	45,741	18,575	73,530	9,739			
2.							
3.							
4.							
5.							

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 12.013$$

Absolute Open Flow 12,013 Mcfd @ 15.025 Angle of Slope θ 45 Slope, n 1.000

Remarks: 19 BBL. cond. during TEST; TEST calculated from known BHP; bomb set @ 11,905; TEST calculations & procedure; permission by Ted Gum/OCC, Artesia, NM

Approved By Division	Conducted By: T. POLLY/R. KING	Calculated By: REGGIE RESTON	Checked By:
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