

15F

OIL CONSERVATION DIVISION

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

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		Well No. 1			
Completion Date 4/18/96		Total Depth 12,820'		Plug Back TD 12,237'		Elevation 3042'		Unit Ltr. - Sec. - TWP - Rge. M 23 26 30			
Csg. Size 4 1/2	Wt. 12.7	d 3.819	Set At 12,819	Perforations: From: 11,996 To: 12,189				County EDDY			
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 11,860	Perforations: From: OPEN To: END				Pool WOLFCAMP ROSS DRAW			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE						Packer Set At 11,860		Formation UPPER WOLFCAMP			
Producing Thru TUBING		Reservoir Temp. °F 210		Mean Annual Temp. °F 60		Baro. Press - P _a 13.2		Connection SID RICHARDSON			
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.	Temp. °F	
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 F _t	Gravity Factor F _g	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	A.P. I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	.24	510	1.35	.965	73.947 Mcf/bbl.	58.7 @ 60 Deg.	.666	XXXXXXX	670 P.S.I.A.	378 R
2.								XXXXXX		
3.										
4.										
5.										

NO.	P _i	P _s	P _s ²	$\frac{P_i^2 - P_s^2}{P_s^2 - P_w^2}$	1) $\frac{P_c^2}{P_c^2 - P_w^2} = 8.550$	2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.000$
1.	45,741	8,575	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
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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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