

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 10-22-87	
Company MERIDIAN OIL, INC.				Connection EL PASO NATURAL GAS COMPANY	
Pool BASIN				Formation DAKOTA	
Completion Date 10-02-87		Total Depth 8051'		Plug Back TD 8043'	
Elevation		Farm or Lease Name SAN JUAN UNIT 29-7			
Csg. Size 4.5000	Wt. 10.5#	d 4.0520	Set At 8051.2	Perforations: From 7826' To 8028'	
Thg. Size 1.9900	Wt. 2.9#	d 1.6100	Set At 8006.5	Perforations: From To	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE				Packer Set At NONE	
Producing Thru TUBING		Reservoir Temp. °F ρ		Mean Annual Temp. °F 12.2	
Baro. Press. - P _g 12.2		State NEW MEXICO			
L	H	Cg .700	% CO ₂	% N ₂	% H ₂ S
Prover		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							2325		2412		
1.	2" X 3/4"						270		1550	40°	1 HR.
2.							189		1420	49°	2 HRS.
3.							168		1180	51°	3 HRS.
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 _{sp}	Rate of Flow Q, Mcfd
1	12.365		180.2	1.0000	.9258	1.0000	2063
2							
3							
4							
5							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1					1012.71987	
2						
3						
4						
5						

NO.	P _r ²	P _w	P _w ²	P _r ² - P _w ²	(1) $\frac{P_r^2}{P_r^2 - P_w^2} = 1.3190$	(2) $\left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 1.2308$
1		1192.2	1421340.8	445540.8		
2						
3						
4						
5						

$AOF = Q \left[\frac{P_r^2}{P_r^2 - P_w^2} \right]^n = 2539$			
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Absolute Open Flow 2539 Mcfd @ 15.025	Angle of Slope φ	Slope, n .75
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Remarks: **misted throughout test.**

Approved By Division	Conducted By: BARRY A. WIELAND	Calculated By: SCOTT LINDSAY	Checked By:
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