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Sec Rule 401 & Rule 1122

State of New Mexico
Geology, 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 Meridian Oil Company						Lease or Unit Name Rhodes G S U					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 10-18-91		Well No. 28			
Completion Date 09-27-91		Total Depth 3160		Plug Back TD 3155		Elevation		Unit Ltr. - Sec. - TWP - Rge. 8 26-S 37-E			
Csg. Size 4 1/2	Wt. 11.6	d 3.920	Set At 3160	Perforations: From: 2939 To: 3131				County Lea			
Tbg. Size 2 3/8"	Wt. 4.7	d 1.995	Set At 2872	Perforations: From: To:				Pool Rhodes-Yates-7Rvrs			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At None				Formation Yates			
Producing Thru casing 103 @ 2939		Reservoir Temp. °F 60		Baro. Press - P _a 13.2				Connection Vented			
L 2872	H 2872	Gg .733	% CO ₂ 5.76	% N ₂ 1.74	% H ₂ S	Prover		Meter Run 2.067	Taps flange		

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						60		168		72 hrs.
1.	2 X	.750	16	12.00	60	19		22		24 hrs.
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.	2.709	18.72	29.2	1.000	1.168	1.004	60
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	DRY GAS	Mcf/bbl.
1.	.04	520	1.33	.992	A.P. I. Gravity of Liquid Hydrocarbons	DRY	Deg.
2.					Specific Gravity Separator Gas	.733	XXXXXXXXXX
3.					Specific Gravity Flowing Fluid	N/A	XXXXXX
4.					Critical Pressure	*688	P.S.I.A. P.S.I.A.
5.					Critical Temperature	*389	R R

$P_c = 181.2$ $P_c^2 = 32.8$				
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1.		29.3	.9	32.0
2.				
3.				
4.				
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.027$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = .062$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.027$

Absolute Open Flow	62	Mcf/d @ 15.025	Angle of Slope θ	45	Slope, n	1.000
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Remarks: * = corrected to 5.76% CO₂ & 1.74% N₂

NO FLUID PRODUCED DURING TEST

Approved By Division	Conducted By: Pro Well Testers	Calculated By: BM	Checked By: BM
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