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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 <u>Meridian Oil, Inc.</u>						Lease or Unit Name <u>Rhodes "A"</u>					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date <u>6-8-95</u>		Well No. <u>4</u>			
Completion Date <u>6-6-95</u>		Total Depth <u>3250</u>		Plug Back TD <u>3220'</u>		Elevation <u>2986'</u>		Unit Ltr. - Sec. - TWP - Rge. <u>I 22 26 37</u>			
Csg. Size <u>4 1/2</u>	Wt. <u>11.6</u>	d <u>4.00</u>	Set At <u>3250</u>	Perforations: From: <u>2936</u> To: <u>3157</u>				County <u>Lea</u>			
Tbg. Size <u>2-3/8</u>	Wt. <u>4.7</u>	d <u>1.995</u>	Set At <u>2911</u>	Perforations: From: <u></u> To: <u></u>				Pool <u>Rhodes Gas</u>			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple <u>Single</u>						Packer Set At <u>None</u>		Formation <u>Yates 7 River</u>			
Producing Thru Tbg <u></u>		Reservoir Temp. °F <u>60°</u>		Mean Annual Temp. °F <u>60°</u>		Baro. Press - P _a <u>13.2</u>		Connection <u>Vented</u>			
L <u>2911</u>	H <u>2911</u>	Gg <u>.759</u>	% CO ₂ <u>.78</u>	% N ₂ <u>1.67</u>	% H ₂ S <u></u>	Prover <u>2"</u>	Meter Run <u></u>		Taps <u></u>		

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							721		736		24 Hours
1.	2	x	1.500	15		48	685		720		30 Min.
2.	2	x	1.500	25		48	648		710		" "
3.	2	x	1.500	35		46	600		695		" "
4.	2	x	1.500	48		50	523		679		" "
5.	2	x	1.500	60		57	441		663		" "

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor F _L	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	42.11		28.2	1.012	1.148	1.005	1.387
2.	42.11		38.2	1.012	1.148	1.005	1.878
3.	42.11		48.2	1.014	1.148	1.006	2.377
4.	42.11		61.2	1.010	1.148	1.005	3.003
5.	42.11		73.2	1.000	1.148	1.012	3.581

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	.04	508	1.24	.990	Dry Gas	
2.	.05	508	1.24	.990	A.P. L Gravity of Liquid Hydrocarbons Dry	Deg.
3.	.07	506	1.24	.988	Specific Gravity Separator Gas .759	XXXXXXXXXX
4.	.09	510	1.25	.990	Specific Gravity Flowing Fluid XXXXX	
5.	.10	517	1.26	.976	Critical Pressure 667 P.S.I.A.	P.S.I.A.
					Critical Temperature 408 R	R

p_c 749.2 p_c² 561.3

NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1.		733.2	537.6	23.7
2.		723.2	523.0	38.3
3.		708.2	501.5	59.8
4.		692.2	479.1	82.2
5.		676.2	457.2	104.1

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 5.392$

2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^a = 2.889$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^a = 10.345$

Absolute Open Flow <u>10,345</u> Mcfd @ 15.025	Angle of Slope θ <u>58.0</u>	Slope, n <u>.6296</u>
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Remarks: NO FLUID PRODUCED DURING TEST

Approved By Division	Conducted By: <u>WEST-TEST, INC.</u>	Calculated By: <u>B.M.</u>	Checked By: <u>B.M.</u>
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