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appropriate district office
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 Meridian Oil, Inc.					Lease or Unit Name Moberly Rhodes Waterflood				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 9-26-95		Well No. 2		
Completion Date 9/23/95		Total Depth 3850'		Plug Back TD 3088		Elevation		Unit Ltr. - Sec. - TWP - Rge. M 21 26 37	
Csg. Size 5 1/2	Wt. 15.5	d 	Set At 3850'	Perforations: From: 2940 To: 3061				Country Lea	
Tbg. Size 2-7/8	Wt. 6.5	d 2.441	Set At 2937'	Perforations: From: To: 				Pool Rhodes Yates Seven Rivers	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At None		Formation Upper Yates Gas		
Producing Thru 92°		Reservoir Temp. °F 92°		Mean Annual Temp. °F 		Baro. Press - P _a 13.2		Connection Vented	
L 2940	H 2940	Gg .800	% CO ₂ 16.52	% N ₂ 1.04	% H ₂ S .116	Prover 2"		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							308		310		24 Hours
1.	2"	X	1.000	6		59	280		288		1 Hour
2.	2"	X	1.000	8		62	260		272		1 Hour
3.	2"	X	1.000	9		70	175		270		1 Hour
4.	2"	X	1.000	10		76	120		270		1 Hour
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.	17.09		19.2	1.001	1.118	1.005	369
2.	17.09		21.2	.9981	1.118	1.005	406
3.	17.09		22.2	.9905	1.118	1.005	422
4.	17.09		23.2	.9850	1.118	1.004	438
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Dry Gas	Mcf/bbl
1.	.02	519	1.31	.990	A.P. L Gravity of Liquid Hydrocarbons	Dry	Deg.
2.	.02	522	1.32	.990	Specific Gravity Separator Gas	.800	XXXXXXXXXX
3.	.03	530	1.34	.990	Specific Gravity Flowing Fluid	XXXXX	
4.	.03	536	1.36	.992	Critical Pressure *734	PSIA	PSIA
5.					Critical Temperature *394	R	R

P _c 323.2 P _c ² 104.5					1) $\frac{P_c^2}{P_c^2 - P_w^2} = 7.573$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^a = 2.746$
NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²	AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^a = 1.013$	
1.		301.2	90.7	13.8		
2.		285.2	81.3	23.2		
3.		283.2	80.2	24.3		
4.		283.2	80.2	24.3		
5.						

Absolute Open Flow 1,013 Mcfd @ 15.025	Angle of Slope θ 63.5	Slope, n .499
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Remarks: **No fluid produced during test**
***Corrected to 16.52% CO₂ & 1.04% N₂**

Approved By Division	Conducted By: West-Test, Inc.	Calculated By: B.M.	Checked By: B.M.
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