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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 Meridian Oil, Inc.						Lease or Unit Name Brownlee					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 3-26-94		Well No. 2			
Completion Date 3/21/94		Total Depth 3700		Plug Back TD 3656		Elevation 3531'		Unit Ltr. - Sec. - TWP - Rge. 25 - 21 - 36			
Csg. Size 4 1/2	Wt. 11.6	d	Set At 3700	Perforations: From: 3434 To: 3576				County Lea			
Tbg. Size 2-3/8	Wt. 4.7	d	Set At 3372.15	Perforations: From: To:				Pool Eumont			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At None		Formation Queens			
Producing Thru Tbg		Reservoir Temp. °F 105 @ 3400'		Mean Annual Temp. °F 60		Baro. Press - P _a 13.2		Connection Vented			
L 3372.15	H 3372.15	Gg .849	% CO ₂ 17.28	% N ₂ .51	% H ₂ S .56	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							161		160		24 HOURS
1.	2"	X	1/8	52		68	157		157		30 MIN.
2.	2"	X	1/8	60		65	112		113		1 HOUR
3.	2"	X	1/8	80		68	87		88		90 MIN.
4.	2"	X	1/4	35		61	45		46		1 HOUR
5.											

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)		Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg.	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	.2648		65.2	.9924	1.085	1.003	19
2.	.2648		73.2	.9952	1.085	1.003	21
3.	.2648		93.2	.9924	1.085	1.009	27
4.	1.087		48.2	.9990	1.085	1.004	57
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio DRY GAS Mcf/bbl.		
1.	.08	528	1.29	.995	A.P. I. Gravity of Liquid Hydrocarbons DRY Deg.		
2.	.09	525	1.28	.994	Specific Gravity Separator Gas .849 XXXXXXXXXX		
3.	.12	528	1.29	.984	Specific Gravity Flowing Fluid XXXXXX		
4.	.06	521	1.27	.993	Critical Pressure * 738 P.S.I.A. P.S.I.A.		
5.					Critical Temperature *409 R R		

NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.131$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.131$ AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = .064$
1.		170.2	29.0	1.3	
2.		126.2	15.9	14.4	
3.		101.2	10.2	20.1	
4.		59.2	3.5	26.8	
5.					

Absolute Open Flow 64 Mcfd @ 15.025	Angle of Slope θ 45	Slope, n 1.000
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Remarks: NO FLUID PRODUCED DURING TEST * = CORRECTED TO 17.28% CO2

Approved By Division	Conducted By: WEST-TEST, INC.	Calculated By: B.M.	Checked By: B.M.
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