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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 Mattie James					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 3-28-94		Well No. 4			
Completion Date 3/17/94		Total Depth 3750		Plug Back TD 3690		Elevation 3562.7'		Unit Ltr. - Sec. - TWP - Rge. 10 - 22 - 36			
Csg. Size 4 1/2	Wt. 	d 	Set At 3750	Perforations: From: 3286 To: 3502				County Lea			
Tbg. Size 2-3/8	Wt. 4.7	d 1.995	Set At 3259	Perforations: From: To: 				Pool Jalmat			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single				Packer Set At None				Formation Tansill			
Producing Thru Tbg 		Reservoir Temp. °F 60		Mean Annual Temp. °F 60		Baro. Press - P _a 13.2		Connection Vented			
L 3259	H 3259	Gg .771	% CO ₂ 2.09	% N ₂ 2.54	% H ₂ S 	Prover 2"		Meter Run 		Taps 	

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						90		90		48 HOURS
1.	2 X	3/16	88		58	88		89		30 MIN.
2.	2 X	1/4	87		57	87		88		30 "
3.	2 X	1/2	69		60	69		83		30 "
4.	2 X	3/4	46		61	46		78		30 "
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.	.6082		101.2	1.002	1.139	1.003	71
2.	1.087		100.2	1.003	1.139	1.003	125
3.	4.279		82.2	1.000	1.139	1.004	402
4.	9.453		59.2	.9990	1.139	1.006	641
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio Dry Gas Mcf/bbl.
1.	.15	518	1.27	.995	A.P. I. Gravity of Liquid Hydrocarbons Dry Deg.
2.	.14	517	1.27	.994	Specific Gravity Separator Gas .771 XXXXXXXXXX
3.	.12	520	1.28	.993	Specific Gravity Flowing Fluid XXXXXX
4.	.08	521	1.28	.989	Critical Pressure *671 P.S.I.A. P.S.I.A.
5.					Critical Temperature *406 R R

$p_c = 103.2$ $p_c^2 = 10.6$					$1) \frac{p_c^2}{p_c^2 - p_w^2} = \frac{4.609}{\quad} \quad (2) \left[\frac{p_c^2}{p_c^2 - p_w^2} \right]^n = 3.962$	
NO.	p_t^2	p_w	p_w^2	$p_c^2 - p_w^2$	$AOF = Q \left[\frac{p_c^2}{p_c^2 - p_w^2} \right]^n = 2.540$	
1.	.15	102.2	10.4	0.2		
2.		101.2	10.2	0.4		
3.		96.2	9.3	1.3		
4.		91.2	8.3	2.3		
5.						

Absolute Open Flow 2,540 Mcfd @ 15.025	Angle of Slope θ 48	Slope, n .901
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Remarks: **NO FLUID PRODUCED DURING TEST**

* = CORRECTED TO 2.09% CO₂ AND 2.54% N₂

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