

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

Submit in duplicate to
appropriate district office
See Rule 401 & Rule 1122

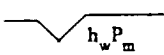
OIL CONSERVATION DIVISION

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 RHODES A				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 9/18/93		Well No. 3		
Completion Date 9/12/93		Total Depth 3234		Plug Back TD 3173		Elevation 2985		Unit Ltr. - Sec. - TWP - Rge. A 22 26 37	
Csg. Size 4 1/2	Wt. 11.6	d 	Set At 3234	Perforations: From: 2891 To: 3112			County LEA		
Tbg. Size 2 3/8	Wt. 4.7	d 1.995	Set At 2883	Perforations: From: To: 			Pool Rhodes JALMAT		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE					Packer Set At NONE		Formation YATES		
Producing Thru TBG		Reservoir Temp. °F 		Mean Annual Temp. °F 		Baro. Press - P _a 		Connection NONE	
L 2883	H 2883	Gg .690	% CO ₂ 3.07	% N ₂ 2.62	% H ₂ S 	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							467		489		24 HR
1.	2	X	.750	16		90	455		480		1 HR
2.	2	X	.750	32		88	449		474		1 HR
3.	2	X	.750	60		84	426		460		1 HR
4.	2	X	1.250	29		84	378		428		1 HR
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.	9.453		29.2	.9723	1.204	1.004	324
2.	9.453		45.2	.9741	1.204	1.006	504
3.	9.453		73.2	.9777	1.204	1.008	829
4.	27.63		42.2	.9777	1.204	1.006	1381
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio		Rate of Flow Q, Mcfd	
1.	.04	550	1.45	.993	A.P.I. Gravity of Liquid Hydrocarbons		324	
2.	.06	548	1.45	.989	Specific Gravity Separator Gas		504	
3.	.10	544	1.44	.985	Specific Gravity Flowing Fluid		829	
4.	.06	544	1.44	.989	Critical Pressure *678		1381	
5.					Critical Temperature *377			

NO.	P _i	P _w	P _w ²	P _c ² - P _w ²
1.	502.2	252.2	493.2	243.3
2.			487.2	237.4
3.			473.2	223.9
4.			441.2	194.7
5.				

$$1) \frac{P_c^2}{P_c^2 - P_w^2} = \frac{4.386}{P_c^2 - P_w^2} \quad (2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{3.026}{P_c^2 - P_w^2}$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{4.179}{P_c^2 - P_w^2}$$

Absolute Open Flow **4,179** Mcfd @ 15.025 Angle of Slope θ **53.2** Slope, n **.749**

Remarks: **NO FLUID PRODUCED DURING TEST. HOWEVER IF WELL IS LEFT ON A HIGH RATE IT WILL PRODUCE FLUID. * CORRECTED TO 3.07% CO2 & 2.62% N2. ** OIL IN STOCK TANK 33.4 API GR @ 60°**

Approved By Division _____ Conducted By: **JOHN WEST ENG. CO.** Calculated By: **BM** Checked By: **BM**