

**NEW MEXICO OIL CONSERVATION COMMISSION ON
MULTIPOINT AND ONE POINT BACK PRESSURE TESTS FOR GAS WELL**

Form C-122
Revised 9-1-65

45F
File

RECEIVED

Type Test ☒ Initial ☐ Annual ☐ Special		Test Date 11- 25 -88	
Company MERIDIAN OIL INC.		Connection TO ATMOSPHERE	
Pool N. GRAYBURG ATOKA		Formation ATOKA	
Completion Date 11-15-88	Total Depth 11441.	Plug Back TD 10550.	Elevation 3547.
Unit O.C.D.		Form or Lease Name LEONARD STATE	
Core Size 7.000	Wt. 32.0	Perforations From 10342. To 10360.	Well No. # 1
Tbg. Size 7.875	Wt. 6.4	Perforations From 0. To 0.	Unit E 22 175 29E
Type Well - Single - Rodenthead - G.G. or G.O. Multiple SINGLE		Packer Set At 10228.	County EDDY
Producing Zone TBG	Reservoir Temp. °F 205.0 10350.	Well Head Temp. °F 60.0	State N.M.
L 10350.	H 10350.	G _g .652	Prover .0
		S.G. 1.14	Motor Size 4.0
		% N ₂ 1.11	Taps FLANGE
		% H ₂ S .00	

FLOW DATA				TUBING DATA				CABLE DATA			
NO.	Pressure Line Size	X	Outside Size	Pressure p.s.i.g.	Depth ft.	Temp. °F	Pressure p.s.i.g.	Temp. °F	Pressure p.s.i.g.	Temp. °F	Distance of Flow
SI							2120.	60.			72.0
1.	4.03 X 2.000		210.	2.0	60.	2020.	70.	0.	0.		1/2
2.	4.03 X 2.000		210.	4.0	60.	1950.	70.	0.	0.		1/2
3.	4.03 X 2.000		210.	8.0	60.	1835.	70.	0.	0.		1/2
4.	4.03 X 2.000		210.	14.5	60.	1625.	70.	0.	0.		1/2
5.											

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{P_R}$	Pressure P _R	Flow Temp. Factor F _L	Gravity Factor F _g	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mcfd
1	19.81	21.13	223.2	1.0000	1.2384	1.0221	530.
2	19.81	29.88	223.2	1.0000	1.2384	1.0221	749.
3	19.81	42.26	223.2	1.0000	1.2384	1.0221	1060.
4	19.81	56.89	223.2	1.0000	1.2384	1.0221	1427.
5							

NO.	R	Temp. °R	T _g	Z	Gas Liquid Hydrocarbon Ratio 153.5	Mcf/Std.
1.	.33	520.	1.40	.957	A.P.L. Gravity of Liquid Hydrocarbon 57.500	Dec.
2.	.33	520.	1.40	.957	Specific Gravity Separator Gas .652	XXXXXXX
3.	.33	520.	1.40	.957	Specific Gravity Flowing Fluid XXXXX	.669
4.	.33	520.	1.40	.957	Wellhead Pressure 669.	668. P.S.I.A.
5.					Critical Temperature 371.	377. °R

NO.	P ₁ ²	P ₂ ²	P ₃ ²	P ₄ ²	P ₅ ²	Q
1						
2		2024.	4096.	455.		
3		1955.	3822.	729.		
4		1842.	3395.	1156.		
5		1637.	2679.	1871.		

(1) $\frac{P_c^2}{P_1^2 - P_2^2} = 2.4321$

ACF = Q $\left[\frac{P_1^2}{P_2^2 - P_1^2} \right]^n = 2622.$

(2) $\left[\frac{P_1^2}{P_2^2 - P_1^2} \right]^n = 1.8381$

Post ID-3
1-6-89
P & A Morrow
comp - ATOKA

Absolute Open Flow 2622.	Mcf @ 15.025	Angle of Slope 55.6	Slope, n .685
Remarks:			
Approved By Commission:			
Conducted By <i>Bennett & Cathey</i>		Checked By <i>Bill G. Rea</i>	