

OIL CONSERVATION DIVISION
P.O. BOX 2088
SANTA FE, NEW MEXICO 87501

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

Form C-122
Revised 4-1-91

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Meridian Oil, Inc.					Lease or Unit Name VAUGHN				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 06-13-94		Well No. 31E		
Completion Date 06-03-94		Total Depth 7,201		TVD MD		Plug Back TD 5,350		Elevation 6,389	
Csg. Size 5.000		Wt. 11		d 4.154		Set At 5,350		Perforations: From 4,825 To 5,134	
Tbg. Size 2.375		Wt. 4.7		d 1.995		Set At 5,205		Perforations: From	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple SINGLE					Packer Set At				
Prod Thru Tubing		Resv Temp °F		Mean Ann T °F		Baro. Press. Pd 12.20		Connection	
L		H		Gg 0.700		% CO2 0.000		% N2 0.000	
FLOW DATA					TUBING DATA			CASING DATA	
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.
SI	2		0.750				720		1120
1.							85	71	500
2.							87	71	412
3.							117	71	386
4.									
5.									
RATE OF FLOW CALCULATIONS									
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure Pm	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd		
1.	11.000		129.2	0.9896	1.1952	1.0000	1,680.96		
2.									
3.									
4.									
5.									
NO.	Pr	Temp. °R	Tr	Z	Gas Liquid Hydrocarbon Ratio				
1.					API Gravity of Liquid Hydrocarbons				
2.					Specific Gravity Separator Gas				
3.					Specific Gravity Flowing Fluid				
4.					Critical Pressure				
5.					Critical Temperature				
Pc 1132.20					Pc2 #####				
NO.	Pt2	Pw	Pw2	Pc2 - Pw2					
1.		398.20	158,563.24	#####					
2.									
3.									
4.									
5.									
					$(1) \frac{Pc2}{Pc2 - Pw2} = 1.1412$ $(2) \left[\frac{Pc2}{Pc2 - Pw2} \right]^n = 1.1041$ $AOF = Q \left[\frac{Pc2}{Pc2 - Pw2} \right]^n = 1,855.95$				
Absolute Open Flow 1,856 Mcfd @ 15.025					Angle of Slope			Slope, n 0.75	
Remarks:									
Approved By Division									
Conducted By: CHRIS NEUENSWANDER									
Calculated By: TANYA ATCITY									
Checked By: LARRY BYARS									