



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

Form C-122  
 Revised 9-1-65

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special		Test Date 10/26/01	
Company Marathon Oil Company		Connection	
Pool Indian Basin Morrow		Formation Morrow	
Completion Date 10-15-01		Total Depth 11443'	Plug Back TD 10660'
Csg. Size 7		Wt. d	Set At
Tbg. Size 2.875		Wt. 6.5	d 2.441
Perforations: From 9866 To 9982		Elevation kb-3817'	
Perforations: From 10750 To 11443 MD		Well No. 30	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single		Packer Set At 9759	
Producing Thru Tubing		Reservoir Temp. °F 9770 @ 178	Mean Annual Temp. °F 60
Baro. Press. - P <sub>a</sub> 13.2		State NM	
L 9770	H 9770	G <sub>g</sub> 0.6014	% CO <sub>2</sub> 0.7809
% N <sub>2</sub> 0.2236		% H <sub>2</sub> S	Prover
Meter Run 4.026		Taps Flange	
FLOW DATA			
NO.	Prover Line Size	Orifice Size	Press. p.s.i.g.
SI			
1.	4.026	2.50	565
2.	4.026	2.50	577
3.	4.026	2.50	603
4.	4.026	2.50	642
5.			
TUBING DATA			
NO.	Press. p.s.i.g.	Temp. °F	Duration of Flow
	2461	62	63
1.	2450	72	1
2.	2409	75	1
3.	2365	76	1
4.	2222	76	1
5.			
CASING DATA			
NO.	Press. p.s.i.g.	Temp. °F	Duration of Flow
1.			
2.			
3.			
4.			
5.			
RATE OF FLOW CALCULATIONS			
NO.	Coefficient (24 Hour)	$\sqrt{h P_m}$	Pressure P <sub>m</sub>
1.	32.64	48.70	578.4
2.	32.64	96.53	589.8
3.	32.64	129.93	616.1
4.	32.64	208.06	654.9
5.			
NO.	P <sub>r</sub>	Temp. °R	T <sub>r</sub>
1.	0.86	571	1.60
2.	0.87	572	1.60
3.	0.91	561	1.57
4.	0.97	546	1.53
5.			
Gas Liquid Hydrocarbon Ratio <u>77.538</u>		Mcf/bbl.	
A.P.I. Gravity of Liquid Hydrocarbons <u>60.0</u>		Deg.	
Specific Gravity Separator Gas <u>.601</u>		XXXXXXXXXX	
Specific Gravity Flowing Fluid <u>XXXX</u>		0.636	
Critical Pressure <u>675</u> P.S.I.A.		674 P.S.I.A.	
Critical Temperature <u>357</u> R		368 R	
NO.	P <sub>t</sub> <sup>2</sup>	P <sub>w</sub>	P <sub>w</sub> <sup>2</sup>
1.	2407	5796	30
2.	2398	5750	76
3.	2388	5702	124
4.	2363	5585	241
5.			
P <sub>c</sub> 2413.7		P <sub>c</sub> <sup>2</sup> 5826	
(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 24.1333$		(2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 9.7182$	
AOF = Q $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 87049$			
Absolute Open Flow <u>87049</u> Mcfd @ 15.025		Angle of Slope $\theta$ <u>54.5</u>	Slope, n <u>0.7139</u>
Remarks: <u>Recorded bottomhole pressures with gauge #Z-3</u>			
Approved By Commission:		Conducted By: ARC Pressure Data, Inc.	Calculated By: Rod Dodson
			Checked By:

BHL

