

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

Form C-122  
 Revised 9-1-65

CISF

Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special		Test Date 11/11/96									
Company Mallon Oil Co.		Connection El Paso    JAN 27 1997									
Pool Carlsbad S.		Formation Morrow									
Completion Date 11/12/96		Total Depth 11862	Plug Back To 11819								
Casing Size 5-1/2"		Wt. 20	Elevation 3354 GR								
Tubing Size 2-7/8"		Wt. 6.5	Farm or Lease Name Black River 10 Fed Con								
Type Well - Single - Bradenheca - G.C. or G.O. Multiple Single		Perforations: From 11340 To 11430	Well No. 1								
Producing Thru Tubing		Reservoir Temp. °F 201 @ 11385	Mean Annual Temp. °F 60								
Baro. Press. - P <sub>a</sub> 13.2		Unit E	Sec. 10								
L 11231		H 11231	Twp. 24S								
G <sub>g</sub> 0.579		% CO <sub>2</sub> 1.12	Rge. 26E								
% N <sub>2</sub> 0.29		% H <sub>2</sub> S 0.0	County Eddy								
Provor Flange		Meter Run X	State NM								
Taps Flange		Type Well - Single - Bradenheca - G.C. or G.O. Multiple Single									
<b>FLOW DATA</b>											
NO.	Provor 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.	Temp. °F	Duration of Flow
1	4.026		2.5	168	8.4	69	2550	72	PKR		0.75
2	4.026		2.5	194	16.0	74	2500	80			0.75
3	4.026		2.75	212	18.1	89	2435	85			0.75
4	4.026		2.75	240	24.0	95	2390	86			0.75
5	4.026		2.75	292	41.0	96	2200	86			0.75
<b>RATE OF FLOW CALCULATIONS</b>											
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P <sub>m</sub>	Flow Temp. Factor Ft.	Gravity Factor F <sub>g</sub>	Super Compress. Factor, F <sub>pv</sub>	Rate of Flow Q, Mcfd				
1	32.64	39.0	181.2	.9915	1.314	1.029	1707				
2	32.64	57.6	207.2	.9868	1.314	1.067	2600				
3	41.10	63.8	225.2	.9732	1.314	1.067	3582				
4	41.10	78.0	253.2	.9680	1.314	1.068	4355				
5	41.10	111.9	305.2	.9671	1.314	1.071	6761				
NO.	F <sub>r</sub>	Temp. °R	T <sub>r</sub>	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature	
1	.2680	529	1.533	.945	0		XXXXXX	0.579	676	345	
2	.3065	534	1.548	.879			XXXXX				
3	.3331	549	1.591	.878							
4	.3746	555	1.609	.876							
5	.4515	556	1.612	.871							
$F_c = 2600 \quad P_c^2 = 6760000$											
NO	P <sub>1</sub> <sup>2</sup>	P <sub>w</sub>	P <sub>w</sub> <sup>2</sup>	P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 4.861$	(2) $\left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.885$					
1	6569994	2570	660393	156069							
2	6316174	2529	6397007	362993							
3	5993683	2479	6147485	612515							
4	5775370	2450	6003884	756116							
5	4898254	2317	5369341	1390659							
$AOF = Q \left[ \frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 18.0$					Absolute Open Flow <u>18060</u> Mcfd @ 15.025    Angle of Slope $\phi$ _____    Slope, n <u>.67</u>						
Remarks _____											
Calculated By _____					Checked By _____						