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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: GRUY PETROLEUM MANAGEMENT					Lease or Unit Name: RHODES STATE			
Type Test: [X] Initial [ ] Annual [ ] Special					Test Date: 8-24-98		Well No.: 5	
Completion Date: 8/15/98		Total Depth: 3400		Plug Back TD: 3110	Elevation:		Unit Ltr. - Sec. - TWP - Rge.	
Csg. Size: 5½	Wt.: 15.5	d: 4.950	Set At: 3409.5	Perforations: From: 2894 To: 3084			County: LEA	
Tbg. Size: 2-3/8	Wt.: 4.7	d: 1.995	Set At: 2950	Perforations: From: To:			Pool:	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: single				Packer Set At: no. packer			Formation: YATES	
Producing Thru: TBG	Reservoir Temp. °F: 84.1	Mean Annual Temp. °F: 60°		Baro. Press - P_a: 13.2			Connection: SALES	
L: 2950	H: 2950	Gg: .818	% CO_2: 9.352	% N_2: 1.282	% H_2S: -0-	Prover: -0-	Meter Run: 2.067	Taps: FLG

FLOW DATA / TUBING DATA / CASING DATA

NO.	Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Tubing Press. p.s.i.g.	Tubing Temp. °F	Casing Press. p.s.i.g.	Casing Temp. °F	Duration of Flow
SI					51	94°	51	94°	
1.	2.067 X .625	12.6	8"	96°	14	94°	14	94°	24 hrs.
2.									
3.									
4.									
5.									

RATE OF FLOW CALCULATIONS

NO.	COEFFICIENT (24 HOUR)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg.	Super Compress. Factor, Fpv.	Rate of Flow Q, Mcfd
1.	1.866	14.36	25.8	.9671	1.106	1.071	30.7
2.							
3.							
4.							
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	.88	556	1.35	.872
2.				
3.				
4.				
5.				

Gas Liquid Hydrocarbon Ratio: N/A Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: N/A Deg.
Specific Gravity Separator Gas: .818 XXXXXXXXX
Specific Gravity Flowing Fluid: N/A XXXXX
Critical Pressure: 627 P.S.I.A. P.S.I.A.
Critical Temperature: 409 R R

P_c 51.3 P_c^2 2.6

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.		32.1	1.03	1.57
2.				
3.				
4.				
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.65$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.65$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 50.65$

Absolute Open Flow: 50.65 Mcfd @ 15.025 | Angle of Slope θ: 45° | Slope, n: 1.000

Remarks: * CALCULATED FROM KNOWN BOTTOM HOLE PRESSURE
* NO FLUID MADE DURING TEST

Approved By Division	Conducted By:	Calculated By:	Checked By:
	PRO WELL TESTING	M.B.	B.M.