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				Lease or Unit Name: Rhodes 23 Federal Com.	
Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 9-5-97	Well No.: 1
Completion Date: 9-4-97	Total Depth: 3265	Plug Back TD: 3242		Elevation: 2984	Unit Ltr. - Sec. - TWP - Rge.: M 23-26S-37E
Csg. Size: 4½ / Wt.: 11.6 / d: 4.000 / Set At: 3265	Perforations: From: 2894 To: 3104				County: Lea
Tbg. Size: 2-3/8 / Wt.: 4.7 / d: 1.995 / Set At: 2893	Perforations: From: Open Ended To:				Pool: Rhodes Gas
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: Single		Packer Set At: None			Formation: Yates-Seven Rivers
Producing Thru: Tubing	Reservoir Temp. °F: 82	Mean Annual Temp. °F: 60	Baro. Press - P_a: 13.2		Connection: To Air
L: 2893	H: 2893	Gg: 0.678	% CO_2: 2.22	% N_2: 1.49	% H_2S: Positive Choke 6" Nipple

FLOW DATA					TUBING DATA		CASING DATA		
NO.	Prover Line Size	X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI						219	63	220	63	70 Hrs
1.	8/64	0.2618				207	62	204	62	1 Hr.
2.	12/64	0.6101				190	62	193	62	1 Hr.
3.	16/64	1.112				180	61	181	61	1 Hr.
4.	20/64	1.771				158	63	169	63	1 Hr.
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.	0.2618		220.2	0.99811	1.214	1.022	71.39
2.	0.6101		203.2	0.99811	1.214	1.020	153.07
3.	1.112		193.2	0.9990	1.214	1.020	265.76
4.	1.771		171.2	0.9971	1.214	1.017	373.25
5.							

NO.	P_r	Temp. °R	T_r	Z
1.	.33	522	1.39	0.957
2.	.31	522	1.39	0.961
3.	.29	521	1.39	0.962
4.	.25	523	1.39	0.967
5.				

Gas Liquid Hydrocarbon Ratio: Dry Gas Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Dry Gas De
Specific Gravity Separator Gas: 0.678 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: *676 P.S.I.A. P.S.I.
Critical Temperature: *376 R

P_c 233.2 P_c^2 54.38

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.		217.2	47.18	7.21
2.		206.2	42.52	11.86
3.		194.2	37.71	16.67
4.		182.2	33.20	21.19
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2}$ = 2.566 (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 2.566

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 957.87

Absolute Open Flow: 958 Mcfd @ 15.025 | Angle of Slope θ: 45° | Slope, n: 1.000

Remarks: *Corrected to 2.22% CO^2 and 1.49% N^2

Approved By Division	Conducted By:	Calculated By:	Checked By:
	MCT	TR	TR