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

State of New Mexico
Energy Minerals and Natural Resources

Form C-122
Revised October, 1999

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87504

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator: Gruy Petroleum Management Company					Lease or Unit Name: Magnum 16 State		
Type Test: [X] Initial [ ] Annual [ ] Special					Test Date: 3-27-01	Well No.: 2	
Completion Date		Total Depth: 11555		Plug Back TD: 11533	Elevation	Unit Ltr. - Sec. - TWP - Rge.: H 16 19 29	
Csg. Size: 5½	Wt.: 17#	d	Set At	Perforations: From: 11147 To: 11478		County: Eddy	
Tbg. Size: 2 3/8	Wt.: 4.7	d: 1.995	Set At	Perforations: From: To:		Pool	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple				Packer Set At		Formation	
Producing Thru: TBG	Reservoir Temp. °F: 185.5011147		Mean Annual Temp. °F: 60	Baro. Press - P_a: 13.2		Connection	
L: 11147	H: 11147	Gg: .676	%CO_2: 4.433	%N_2: .409	%H_2S	Prover:	Meter Run: 4.026	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	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration Of Flow
SI					2745		PKR		48 HRS
1.	4.026	153	6.60	59	680		PKR		4 HRS
2.	4.026	163	15.70	58	380		PKR		1 HR
3.	4.026	162	18.20	58	290		PKR		1 HR
4.	4.026	175	23.00	57	246		PKR		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, F pv.	Rate of Flow Q, Mcfd
1.							544
2.	GAS MEASURED BY TOTAL FLOW METER						880
3.							940
4.							1103
5.							

No.	P_r	Temp. °R	T_r	Z
1.				
2.		N/A		
3.				
4.				
5.				

Gas Liquid Hydrocarbon Ratio 30.4 Mcf/bbl.
A. P. I. Gravity of Liquid Hydrocarbons 58.6 @ 60 Deg.
Specific Gravity Separator Gas .676 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX GMIX=.768
Critical Pressure 669 P.S.I.A. 667 P.S.I.A.
Critical Temperature 375 R. 411 R

P_c _____ P_c^2 _____

No.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.		701.4	492.0	7115.7
2.		432.7	187.2	7420.5
3.		360.5	130.0	7477.7
4.		346.3	119.9	7487.7
5.				

(1) $\frac{P_c^2}{P_c^2 - P_w^2}$ = 1.016 (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 1.016

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n$ = 1.121

Absolute Open Flow 1,121 Mcfd @ 15.025 Angle of Slope θ: 45 Slope, n: 1.000

Remarks: WELL PRODUCED 7 BBL 58.6 API GR. CONDENSATE

Approved By Division	Conducted By:	Calculated By:	Checked By:
	SIGNAL WIRELINE	BM	BM