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: Santa Fe Energy				Lease or Unit Name: Gaucho 21 Fed	
Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 12/22/98	Well No.: 1
Completion Date: 11/25/98	Total Depth: 13447	Plug Back TD: 13295	Elevation:	Unit Ltr. - Sec. - TWP. - Rge.: 21 22-S 34 E	
Csg. Size: 7"/ 4 1/2"	Wt.: 26.6 / 13.5	d: 6.276 / 3.920	Set At: 11,880 / 13445-11657	Perforations: From: 12970' To: 12984'	County: Lea
Tbg. Size: 2 3/8	Wt.: 4.7	d: 1.995	Set At: 12865'	Perforations: From: To:	Pool:
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: Single			Packer Set At: 12843		Formation:
Producing Thru: tbg	Reservoir Temp. °F: 171.0	Mean Annual Temp. °F: 60°	Baro. Press - P_a: 13.2		Connection: Sales
L: 12865	H: 12865	Gg: .590	% CO_2: .349	% N_2: .455	% H_2S:	Prover: 0	Meter Run: 3.068	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					4240		pkr		
1.	4.026 X 1.000	822	5.0	46°	3930		pkr		60 min
2.	4.026 X 1.000	839	14.6	57°	3619		pkr		60 min
3.	4.026 X 1.000	834	22.9	65°	3267		pkr		60 min
4.	4.026 X 1.000	839	45.4	53°	2784		pkr		60 min
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.							440
2.							751
3.			TOTAL FLOW METER				945
4.							1356
5.							

NO.	P_r	Temp. °R	T_r	Z
1.				
2.				
3.	TOTAL FLOW METER			
4.				
5.				

Gas Liquid Hydrocarbon Ratio: N/A Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: N/A Deg.
Specific Gravity Separator Gas: .590 XXXXXXXXX
Specific Gravity Flowing Fluid: N/A XXXXX
Critical Pressure: 675 P.S.I.A. P.S.I.A.
Critical Temperature: 350 R R

P_c 6352.9 P_c^2 40359.3

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.		5921.5	35064.1	5295.2
2.		5521.1	30482.5	9876.8
3.		5169.3	26721.6	13637.7
4.		4464.0	19927.2	20432.1
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.97$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.75$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.373$

Absolute Open Flow: 2.373 Mcfd @ 15.025 | Angle of Slope θ: 50.30 | Slope, n: .8301

Remarks: *Calculated from Known Bottom Hole Pressures

* No liquid made during test

Approved By Division	Conducted By:	Calculated By:	Checked By:
	ProWell Testing	M.B.	B.M.