STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION
P. O. BOX 2088
ANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 26-Jul-90	
Company: Santa Fe Energy			Connection: N/A		
Pool: Bilbrey Morrow			Formation: Morrow		Unit
Completion Date	Total Depth		Plug Back TD	Elevation	Farm or Lease Name: Bilbrey 21 Fed Com
Csg. Size / Wt. / d / Set At			Perforations: From 14253 To 14339		Well No.: 1
Tbg. Size / Wt. / d / Set At			Perforations: From To		Unit: Sec. 21, Twp. 21S, Rge. 32E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single			Packer Set At		County: Lea
Producing Thru: Tubing	Reservoir Temp. °F: 199 @ 14016		Mean Annual Temp. °F	Baro. Press. – P_a: 13.2	State: New Mexico

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
		0.596	0.81	0.23	--		3.068	Flange

NO.	FLOW DATA: Prover Line Size	X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	CASING DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI						4817	N/A	PKR	N/A	
1.	3.068	1.000	770.05	4.0	78	4100	N/A	PKR	N/A	1
2.	3.068	1.000	752.43	7.84	78	3517	N/A	PKR	N/A	1
3.	3.068	1.000	743.70	10.9	83	2917	N/A	PKR	N/A	1
4.	3.068	1.000	743.70	16.41	83	2244	N/A	PKR	N/A	1
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	4.789	55.97	783.25	0.9831	1.295	1.059	361
2.	4.789	77.48	765.63	0.9831	1.295	1.058	500
3.	4.789	90.83	756.90	0.9786	1.295	1.055	582
4.	4.789	111.45	756.90	0.9786	1.295	1.055	714
5.							

NO.	P_t	Temp. °R	T_r	Z
1	1.159	538	1.511	0.891
2.	1.133	538	1.511	0.893
3.	1.120	543	1.525	0.898
4.	1.120	543	1.525	0.898
5.				

Gas Liquid Hydrocarbon Ratio: Dry Gas Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: Dry Deg.
Specific Gravity Separator Gas: 0.596 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 676 P.S.I.A. ____ P.S.I.A.
Critical Temperature: 356 R ____ R

P_c 6193 P_c^2 38353

NO	P_t^2	P_f	P_f^2	$P_c^2 - P_f^2$
1		5379	28934	9419
2		4718	22260	16093
3		4198	17623	20730
4		3613	13054	25299
5				

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

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

* See AOF Plot

Absolute Open Flow: 914.9 Mcfd @ 15.025 | Angle of Slope: 55.927 | Slope, n: 0.676

Remarks: Sandface pressure recorded at 14016 ft. with instrument #35047 (Amerada)

Approved By Division	Conducted By:	Calculated By:	Checked By:
	Schlumberger	[signature]	D.K.