OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test			Test Date	
[X] Initial	[ ] Annual	[ ] Special	3-20-89	

Company	Connection		Unit
SANTA FE ENERGY	AIR		
Pool	**Formation**		**Unit**
WILDCAT	MORROW		

Completion Date	Total Depth	Plug Back TD	Elevation	Farm or Lease Name
3-17-89	14834	14720	3681	BILBREY "28" FED

Csg. Size	Wt.	d	Set At	Perforations	Well No.
4.5	13.5	3.920	14826	From 14629 To 14639	1

Tbg. Size	Wt.	d	Set At	Perforations:	Unit	Sec.	Twp.	Rge.
2.375	4.7	1.995	13766	From To		28	21S	32E

Type Well – Single – Bradenhead – G.G. or G.O. Multiple	Packer Set At	County
SINGLE-GAS	13766	LEA

Producing Thru	Reservoir Temp. °F	Mean Annual Temp. °F	Baro. Press. – P_a	State
TUBING	223@14634	60	13.2	NEW MEXICO

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
14634	14634	.611	.82	.10	0	0	4.026	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	BHP DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					4542	60	6163	223	72
1.	4.026 X 2.000	320	2	60	4350	60	5863	223	1
2.	4.026 X 2.000	320	4	60	4100	60	5605	223	1
3.	4.026 X 2.000	330	13	60	3720	60	5149	223	1
4.	4.026 X 2.000	330	19	60	3420	60	4873	223	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	19.81	25.81	333.2	1.000	1.2793	1.0297	674
2.	19.81	36.51	333.2	1.000	1.2793	1.0297	953
3	19.81	66.80	343.2	1.000	1.2793	1.0306	1745
4.	19.81	80.75	343.2	1.000	1.2793	1.0306	2110
5.							

NO.	P_t	Temp. °R	T_r	Z
1	.49	520	1.44	.943
2.	.49	520	1.44	.943
3.	.51	520	1.44	.941
4.	.51	520	1.44	.941
5				

Gas Liquid Hydrocarbon Ratio 0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 0 Deg.
Specific Gravity Separator Gas .611 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX .611
Critical Pressure 675 P.S.I.A. 675 P.S.I.A.
Critical Temperature 360 R 360 R

P_c 4673.4 P_c^2 21841

NO	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1	34527	4416	19503	2338
2	31560	4197	17616	4225
3	26648	3817	14567	7274
4	23878	3591	12892	8949
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.4406$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.4406$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 5150$

Absolute Open Flow 5150 Mcfd @ 15.025 Angle of Slope θ 45° Slope, n 1.000

Remarks: CHOKE SIZES 1ST RATE 6/64 2ND RATE 7/64 3RD RATE 8.5/64
4TH RATE 10/64

JUL 17 1989

Approved By Division	Conducted By:	Calculated By:	Checked By:
ORIGINAL SIGNED BY JERRY SEXTON	BENNETT & CATHEY	MATT LEE	