STATE OF NEW MEXICO
ENERGY and MINERALS DEPARTMENT

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

Form C-122
Revised 10-1-78

Well File

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 9/14/81	
Company: Exxon Company USA		Connection: None			
Pool: San Simon Ranch		Formation: Morrow		Unit	
Completion Date: 9/5/81	Total Depth: 13325'	Plug Back TD: 13234'	Elevation: 3658'	Farm or Lease Name: New Mexico DA State	
Csg. Size: 5" / Wt.: 18" / d: 4.151 / Set At: 10498'		Perforations: From 13028' To 13048'		Well No.: 1	
Tbg. Size: 2 7/8" / Wt.: 6.5 / d: 2.441 / Set At: 12800'		Perforations: From Open Ended To		Unit: N / Sec.: 31 / Twp.: 21s / Rge.: 35e	
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: Single		Packer Set At: 12800'		County: Lea	
Producing Thru: Tbg	Reservoir Temp. °F: 184 @ 12875	Mean Annual Temp. °F: 60°	Baro. Press. – P_a: 13.2	State: New Mexico	

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
13038'	–	0.6708	0.550	0.745	–	–	2.900	F

	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. DW	Temp. °F	Press. p.s.i.g.	Temp. °F	Duration of Flow
SI						5300				92.0 hrs
1.	2.90	8/64 1.75	490	9	84	5054	60	PACKER		0.75 hr
2.	2.90	10/64 1.75	520	18	100	4890	60			0.75 hr
3.	2.90	12/64 1.75	560	34	99	4600	60			1.00 hr
4.	2.90	14/64 1.75	595	54	92	4310	60			0.75 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	15.87	67.30	503.2	.9777	1.222	1.046	1334.75
2.	15.87	97.97	533.2	.9636	1.222	1.044	1911.34
3	15.87	139.60	573.2	.9645	1.222	1.047	2733.89
4.	15.87	181.23	608.2	.9706	1.222	1.054	3595.50
5.							

NO.	P_t	Temp. °R	T_r	Z
1	0.75	544	1.44	.914
2.	0.79	560	1.48	.917
3.	0.85	559	1.48	.912
4.	0.91	552	1.46	.900
5				

Gas Liquid Hydrocarbon Ratio: 12.967 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: 52.8 Deg.
Specific Gravity Separator Gas: 0.6708 XXXXXXXXX
Specific Gravity Flowing Fluid: XXXXX
Critical Pressure: 672 P.S.I.A. – P.S.I.A.
Critical Temperature: 378 R – R

P_c 7450.2 P_c^2 55505.5

NO	P_t^2	P_w*	P_w^2	$P_c^2 - P_w^2$
1		7192.2	51727.7	3777.8
2		7035.2	49494.0	6011.5
3		6748.2	45538.2	9967.3
4		6441.2	41489.1	14016.4
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.96$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.74$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 9852$

Absolute Open Flow: 9852 Mcfd @ 15.025
Angle of Slope θ: 53°53'
Slope, n: 0.731

Remarks: * BOTTOM HOLE PRESSURE @ (-9380) 13038' USED FOR PRESSURE CALCULATIONS.
PRODUCED 25.0 BD in 3.25 Hours = 184.62 BD/D

Approved By Division	Conducted By:	Calculated By:	Checked By:
	JARREL WELL TESTING, INC	B.R. Duke	PE # 2208 Joe A. Coleman