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: MITCHELL ENERGY				Lease or Unit Name: APACHE 24 FEDERAL	
Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 11-15-94	Well No.: 1
Completion Date: 11-8-94	Total Depth: 14525	Plug Back TD: 14475' 13980'		Elevation:	Unit Ltr. - Sec. - TWP - Rge.: 24 22S 30E
Csg. Size: 4½ / Wt.: 13.5 / d: 3.920 / Set At:		Perforations: From: 13074 To: 13083			County: EDDY
Tbg. Size: 2 3/8 / Wt.: 4.7 / d: 1.995 / Set At: 12900		Perforations: From: To:			Pool:
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: single		Packer Set At: 12900'			Formation: ATOKA BANK
Producing Thru: TBG.	Reservoir Temp. °F: 198	Mean Annual Temp. °F: 60	Baro, Press - P_a: 13.2		Connection:
L: 13078.5	H: 13078.5	Gg: .597	% CO_2: .58	% N_2: .91	% 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					2452				
1.							PKR		45 min
2.	4.026 X 1.625	410	31	52	580				45 min
3.	4.026 X 1.625	410	22	52	720				45 min
4.	4.026 X 1.625	410	12	52	1020				45 min
5.	4.026 X 1.625	410	3	50	1440				45 min

NOV 28 '94 ARTESIA, O.

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.							
2.	12.79	114.54	423.2	1.008	1.294	1.038	1983
3.	12.79	96.49	423.2	1.008	1.294	1.038	1671
4.	12.79	71.26	423.2	1.008	1.294	1.038	1234
5.	12.79	35.63	423.2	1.010	1.294	1.038	618

NO.	P_r	Temp. °R	T_r	Z
1.				
2.	.63	512	1.45	.928
3.	.63	512	1.45	.928
4.	.63	512	1.45	.928
5.	.63	510	1.44	.928

Gas Liquid Hydrocarbon Ratio: DRY GAS Mcf/bbl.
A.P. I. Gravity of Liquid Hydrocarbons: DRY Deg.
Specific Gravity Separator Gas: .597 XXXXXXXXX
Specific Gravity Flowing Fluid: DRY XXXXX
Critical Pressure: 672 P.S.I.A. P.S.I.A.
Critical Temperature: 354 R R

P_c 2465.20 P_c^2 6077.2

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.				
2.	351.9	713.6	509.2	5568.0
3.	537.6	804.8	647.7	5429.5
4.	1067.5	1061.0	1125.7	4951.6
5.	2111.8	1458.0	2125.9	3951.3

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.091$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.091$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2,164$

Absolute Open Flow: 2,164 Mcfd @ 15.025 Angle of Slope θ: 45° Slope, n: 1.000

Remarks: 3.4 BBLS WATER MADE DURING TEST

Approved By Division	Conducted By:	Calculated By:	Checked By:
	PRO WELL TESTER	KS.	BM