Submit in duplicate to appropriate district office
See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Dep nent

Form C-122
Revised 4-1-91

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O. C. D.

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: 10-21-93	Well No.: 1	
Completion Date: 10-20-93		Total Depth: 14475'		Plug Back TD: 14475'			Elevation	Unit Ltr. - Sec. - TWP - Rge.: 24 22S 30E	
Csg. Size: 4½	Wt.: 13.50	d	Set At: 14475'	Perforations: From: 14086		To: 14110		County: EDDY	
Tbg. Size: 2 3/8"	Wt.: 4.7#	d	Set At: 14045	Perforations: From:		To:		Pool: La Medanos Morrow	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: single				Packer Set At: 13988'				Formation: MORROW	
Producing Thru: tbg.	Reservoir Temp. °F: 202		Mean Annual Temp. °F: 60°	Baro. Press - P_a: 13.2				Connection: AIR	
L: 13985'	H: 13985	Gg: .581	% CO_2: 1.14	% N_2: .17	% 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	4.026 X 2.0				4923.2				
1.	4.026 X 2.0	500	4	110	4433.2	69	PKR.		1 hr.
2.	4.026 X 2.0	500	13	98	3853.2	68			1 hr.
3.	4.026 X 2.0	530	27	97	3193.2	68			1 hr.
4.	4.026 X 2.0	550	48	92	2393.2	66			1 hr.
5.	4.026 X 2.0	550	68	88	1513.2	66			1 hr.

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.	19.81	45.31	513.2	.9551	1.312	1.031	1160
2.	19.81	81.68	513.2	.9653	1.312	1.031	2113
3.	19.81	121.11	543.2	.9662	1.312	1.033	3142
4.	19.81	164.42	563.2	.9706	1.312	1.034	4289
5.	19.81	195.70	563.2	.9741	1.312	1.034	5123

NO.	P_r	Temp. °R	T_r	Z
1.	.76	570	1.63	.941
2.	.76	558	1.60	.941
3.	.80	557	1.60	.938
4.	.83	552	1.58	.936
5.	.83	548	1.57	.936

Gas Liquid Hydrocarbon Ratio: Dry Gas Mcf/bbl.
A.P. I. Gravity of Liquid Hydrocarbons: Deg.
Specific Gravity Separator Gas: .581 XXXXXXXXX
Specific Gravity Flowing Fluid: Dry XXXXX
Critical Pressure: 676 P.S.I.A. P.S.I.A.
Critical Temperature: 349 R R

P_c 4932.3 P_c^2 24327.6

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.		4455.5	19851.5	4476.1
2.		3929.3	15439.4	8888.2
3.		3340.5	11158.9	13168.7
4.		2626.3	6897.5	17430.1
5.		1971.3	3886.0	20441.6

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.19$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.19$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 6097$

Post ID 2
1-28-94
comp & BK

Absolute Open Flow 6097 Mcfd @ 15.025 | Angle of Slope θ 45° | Slope, n 1.00

Remarks:

Approved By Division	Conducted By:	Calculated By:	Checked By:
	PRO WELL TESTERS	KS	KS