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

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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 25 FEDERAL		
Type Test: [X] Initial [ ] Annual [ ] Special							Test Date: 10-27-93	Well No.: 2	
Completion Date: 10-26-93		Total Depth: 14568		Plug Back TD: 14480			Elevation:	Unit Ltr. - Sec. - TWP - Rge.: 25 22S 30E	
Csg. Size: 4 ½"	Wt.: 13.5	d: 3.920	Set At: 14565	Perforations: From: 14113		To: 14132		County: EDDY	
Tbg. Size: 2 3/8"	Wt.: 4.7	d: 1.995	Set At: 14133'	Perforations: From:		To:		Pool: Los Medanos Morrow	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple: single				Packer Set At: 14033				Formation: MORROW	
Producing Thru: TBG	Reservoir Temp. °F	Mean Annual Temp. °F: 60°		Baro. Press - P_a: 13.2				Connection: AIR	
L: 14030	H: 14030	Gg: .588	% CO_2: 1.19	% N_2: .16	% H_2S:	Prover:		Meter Run: 4.026	Taps: 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.	TUBING DATA: Temp. °F	CASING DATA: Press. p.s.i.g.	CASING DATA: Temp. °F	Duration of Flow
SI	4.026 X 2.50				5433.2				
1.	4.026 X 2.50	500	5	120	5213.2	49	Pkr.		1 hr.
2.	4.026 X 2.50	500	11	100	4993.2	50	"		1 hr
3.	4.026 X 2.50	550	18	86	4673.2	50	"		1 hr.
4.	4.026 X 2.50	630	27	72	4383.2	50	"		1 hr.
5.	4.026 X 2.50	600	44	58	3953.2	50	"		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.	32.64	50.66	513.2	.9469	1.304	1.031	2105
2.	32.64	75.14	513.2	.9636	1.304	1.031	3177
3.	32.64	100.69	563.2	.9759	1.304	1.034	4325
4.	32.64	131.78	643.2	.9887	1.304	1.051	5828
5.	32.64	164.26	613.2	1.002	1.304	1.048	7342

NO.	P_r	Temp. °R	T_r	Z
1.	.76	580	1.64	.941
2.	.76	560	1.59	.941
3.	.83	546	1.55	.936
4.	.95	532	1.51	.906
5.	.91	518	1.47	.910

Gas Liquid Hydrocarbon Ratio: DRY GAS Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons: DRY Deg.
Specific Gravity Separator Gas: .588 XXXXXXXXX
Specific Gravity Flowing Fluid: DRY XXXXX
Critical Pressure: 676 P.S.I.A. P.S.I.A.
Critical Temperature: 353 R R

P_c 5413.0 P_c^2 29300.57

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.		5238.1	27437.69	1862.88
2.		5064.4	25648.15	3652.42
3.		4844.5	23469.18	5831.39
4.		4642.9	21556.52	7744.05
5.		4384.0	19219.46	10081.11

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.907$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 2.800$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 20,558$

Absolute Open Flow: 20,558 Mcfd @ 15.025 | Angle of Slope θ: 46° | Slope, n: .965

Remarks:

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