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State of New Mexico
Geology, 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 MILKY WAY STATE					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 3-4-94		Well No. 1			
Completion Date 3-3-94		Total Depth 6652		Plug Back TD 5350		Elevation		Unit Ltr. - Sec. - TWP - Rge. 17-18S-35E			
Csg. Size 5 1/2	Wt. 15.5	d 4.950	Set At 6652	Perforations: From: 4327 To: 4339		County LEA					
Tbg. Size 2-7/8	Wt. 6.5	d 2.441	Set At 4232	Perforations: From: To:		Pool West Reeves					
Type Well - Single - Bradenhead - G.G. or P.O. Multiple SINGLE						Packer Set At N/A		Formation QUEEN			
Producing Thru TBG		Reservoir Temp. °F 83		Mean Annual Temp. °F 60°		Baro. Press - P _a 13.2		Connection AIR			
L 4333	II 4333	Gg .760	% CO ₂	% N ₂ 27.78	% H ₂ S	Prover		Meter Run 2.067		Taps FLANGE	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	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	
SI										
1.		2.067 X 1.500	90	2	68	960		935		
2.		2.067 X 1.500	90	10	66	900		940		1 hr.
3.		2.067 X 1.500	90	50	64	815		865		1 hr.
4.		2.067 X 1.500	90	70	62	740		740		1 hr.
5.						500		530		1 hr.

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	$h_w P_m$	Pressure P _m	Flow Temp. Factor F _L	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	12.76	14.37	103.2	.9924	1.147	1.007	210
2.	12.76	32.13	103.2	.9943	1.147	1.007	471
3.	12.76	71.83	103.2	.9962	1.147	1.007	1055
4.	12.76	84.99	103.2	.9981	1.147	1.007	1250
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl
1.	.17	528	1.57	.986	DRY GAS	
2.	.17	526	1.56	.986	DRY GAS	
3.	.17	524	1.55	.986		
4.	.17	522	1.55	.986		
5.						

P_c **973.2** P_c² **947.1**

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1.		913.3	834.2	112.9
2.		829.0	687.2	259.9
3.		757.5	573.8	373.3
4.		522.3	272.8	674.3
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.405$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.405$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.756$

Absolute Open Flow 1,756 Mcfd @ 15.025	Angle of Slope θ 45°	Slope, n 1.000
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Remarks: **NO FLUID MADE DURING TEST.**

Approved By Division	Conducted By: PRO WELL TESTERS G.B	Calculated By: K.S.	Checked By: B.M.
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APR 13 1994

PROBATION
OFFICE