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State of New Mexico
Energy, Minerals and Natural Resources Depa.

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Form C-122
Revised 4-1-91

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

JUL - 2 1996

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELLS

OIL CON. DIV.

Operator MITCHELL ENERGY						Lease or Unit Name APACHE DISTRICT 2					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 5/22/96		Well No. 1			
Completion Date 5/20/96		Total Depth 14525		Plug Back TD 12900		Elevation		Unit Ltr. - Sec. - TWP - Rge. 24 22S-30E			
Csg. Size 4 1/2	Wt. 13.5	d 3.920	Set At 14525	Perforations: From: 12686 To: 12701		Country EDDV		Pool N. Las Madras Str.			
Tbg. Size 2-3/8	Wt. 4.7	d 1.995	Set At 12556	Perforations: From: To:		Formation STRAWN		Connection AIR			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple single						Packer Set At 12556		Meter Run 4.026			
Producing Thru TBG		Reservoir Temp. °F 185		Mean Annual Temp. °F 60		Baro. Press - P _a 13.2		Taps FLG.			
L 12556	H 12556	Gg .665	% CO ₂ .22	% N ₂ .79	% H ₂ S -0-	Prover -0-					

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						5700		pkc.		24 hr.
1.	4.026 X 2.250		80	6	120	5415	84	"		60 min
2.	4.026 X 2.250		80	13	112	5140	85	"		60 min
3.	4.026 X 2.250		90	29	103	4610	86	"		60 min
4.	4.026 X 2.250		110	39	94	4260	89	"		60 min
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, F _{pv}	Rate of Flow Q, Mcfd
1.	25.64	23.64	93.2	.9469	1.226	1.007	108
2.	25.64	34.80	93.2	.9535	1.226	1.007	1050
3.	25.64	54.70	103.2	.9610	1.226	1.009	1667
4.	25.64	69.31	123.2	.9688	1.226	1.010	2131
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	.138	580	1.55	.986	N/A	
2.	.138	572	1.52	.986	N/A	
3.	.153	563	1.50	.983	.665	XXXXXXXXXX
4.	.183	554	1.48	.980	673	XXXXXX
5.					374	P.S.I.A. P.S.I.A. R

P_c **5732.5** P_e **32861.5**

NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1.	29465.4	5539.8	30689.4	2172.1
2.	26555.5	5342.3	28540.2	4123.2
3.	21373.9	4797.8	22961.3	9900.2
4.	21838.8	4445.0	19758.0	13103.5
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.507$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.730$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 3687.3$

Absolute Open Flow	3687.3	Mcf/d @ 15.025	Angle of Slope θ	59.18	Slope, n	.5966
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Remarks:

Approved By Division	Conducted By: PRO WELL TESTER	Calculated By: MB	Checked By: BM
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