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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 Dusty Mac Resources						Lease or Unit Name Madera Fed. 25					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 11-09-93		Well No. 1			
Completion Date 11-9-93		Total Depth 15700		Plug Back TD 15400		Elevation GL 3198 KB 3229		Unit Ltr. - Sec. - TWP - Rge. 25 26S 34E			
Csg. Size 5 1/2	Wt. 23	d 	Set At 15700	Perforations: From: 15291 To: 15301				Country Lea			
Tbg. Size 3 1/2 2 7/8	Wt. 15.8 8.7	d 2.548 2.259	Set At 11552 3682	Perforations: From: 15291 To: 15301				Pool JABALINA, S.W.			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single						Packer Set At 15180		Formation ATOKA			
Producing Thru TBC		Reservoir Temp. °F 198 @ 15296		Mean Annual Temp. °F 60		Baro. Press - P _a 13.2		Connection			
L 15234	H 15234	G _g .6459	% CO ₂ .59	% N ₂ .42	% H ₂ S 	Prover		Meter Run 4.026		Taps FL6	

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						3441		0		72 Hrs
1.	4 X 2.250		201	7.00	66	3319		0		1 Hr
2.	4 X 2.250		201	27.00	70	3149		0		1 Hr
3.	4 X 2.250		201	71.00	70	2869		0		1 Hr
4.	4 X 2.250		401	88.00	58	2014		0		1 Hr
5.										

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	h _w P _m	Pressure P _m	Flow Temp. Factor Ft	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	25.64	38.72	214.2	.9943	1.244	1.020	1,253
2.	25.64	76.05	214.2	.9905	1.244	1.020	2,451
3.	25.64	123.32	214.2	.9905	1.244	1.020	3,974
4.	25.64	190.92	414.2	1.002	1.244	1.042	6,358
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	292.417	Mcf/bbl.
1.	.31	526	1.41	.961	A.P.I. Gravity of Liquid Hydrocarbons	47.0 @ 60°	Deg.
2.	.31	530	1.42	.962	Specific Gravity Separator Gas	.6459	XXXXXXXXXX
3.	.31	530	1.42	.962	Specific Gravity Flowing Fluid	XXXXXX	G MIX. = .657
4.	.61	518	1.39	.921	Critical Pressure	670	P.S.I.A. 670 P.S.I.A.
5.					Critical Temperature	372	R 375 R

P _c 3454.2		P _c ² 11931.5	
NO.	P _t ²	P _w	P _w ²
1.		3336.0	11129.2
2.		3177.4	10095.8
3.		2924.6	8553.2
4.		2169.1	4704.9
5.			

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.532$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 11,113$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2,797$

Absolute Open Flow	11,113	Mcf/d @ 15.025	Angle of Slope θ	51	Slope, n	.815
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Remarks: **WELL MADE 2.00 BBLS 47.0 CONDENSATE DURING TEST**

Approved By Division	Conducted By: FLO-TEST, INC.	Calculated By: B. Murry	Checked By: G. Williams
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