

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

OIL CONSERVATION DIVISION

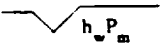
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator Marathon Oil Co					Lease or Unit Name Federal "C" 35				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date 2-20-1997		Well No. 1		
Completion Date 2-16-1997		Total Depth 10115		Plug Back TD 9200		Elevation GL: 3961		Unit Ltr. - Sec. - TWP - Rge. F 35 T21S, R23E	
Csg. Size 4 1/2 Lin		Wt. d 2.441		Set At		Perforations: From: 8350 To: 8364		County Eddy	
Tbg. Size 2 7/8		Wt. d 6.5		Set At		Perforations: From: 8350 To: 8364		Pool Indian Basin/Upper P	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple Single					Packer Set At 8248				
Producing Thru Tubing		Reservoir Temp. °F 159@8350		Mean Annual Temp. °F		Baro. Press - P _a 13.2		Connection	
L 8350	H 8350	Gg .6194	% CO ₂ 0	% N ₂ 1	% H ₂ S 0	Prover		Meter Run 3.068	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						2665		Packer		24
1.	3.068	X 2.250	116.4	5.3	93	2548	74			1
2.	3.068	X 2.250	114.6	10.2	80	2461	74			1
3.	3.068	X 2.250	112.8	37.8	58	2085	74			1
4.	3.068	X 2.250	127.4	60.8	60	1680	74			1
5.										

RATE OF FLOW CALCULATIONS

NO.	COEFFICIENT (24 HOUR)		Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor Fg.	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	28.78	26.21	129.6	.9697	1.271	1.010	.939
2.	28.78	36.10	127.8	.9813	1.271	1.010	1.309
3.	28.78	69.01	126.0	1.0019	1.271	1.012	2.560
4.	28.78	92.46	140.6	1.0000	1.271	1.012	3.422
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	N.A.	Mcf/bbl.
1.	.19	553	1.53	.9805	A.P. I. Gravity of Liquid Hydrocarbons	N.A.	Deg
2.	.19	540	1.49	.9798	Specific Gravity Separator Gas	.6194	XXXXXXXXXX
3.	.19	518	1.43	.9760	Specific Gravity Flowing Fluid	XXXXXX	.6194
4.	.21	520	1.44	.9760	Critical Pressure	670 P.S.I.A.	670 P.S.I.A.
5.					Critical Temperature	362 R	362 R

P _c	2678.2	P _c ²	7172.0		1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.70602$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.4318$
NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²	$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n$	
1.	6559.7	2562.7	6567.4	605.4		
2.	6121.7	2476.8	6134.5	1038.3		
3.	4402.4	2114.5	4471.1	2701.7		
4.	2866.9	722.9	2968.4	4204.4		
5.						

Absolute Open Flow **4900** Mcfd @ 15.025 Angle of Slope Θ **56.1** Slope, n **.672**

Remarks:

Approved By Division

Conducted By: **Bruce Elliott** | Calculated By: **Dan Fleeman** | Checked By:
Metering & Testing | Metering & Testing

915-332-5992