

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

Note: Well Name Did Not Change

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator EXXON USA						Lease or Unit Name NEW MEXICO ST. B					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 8-22-94		Well No. 2			
Completion Date 6-21-94		Total Depth 3914		Plug Back TD 3830		Elevation		Unit Ltr. Sec. TWP - Rge. F 29-27-36			
Csg. Size 7"	Wt. 24	d	Set At 3865	Perforations: From: 3180 To: 3780		County LEA					
Tbg. Size 2 7/8	Wt. 6.5	d 2.441	Set At 3125	Perforations: From: OPEN To: END		Pool EUMONT					
Type Well - Single - Bradenhead - G.G. or F.O. Multiple SINGLE						Packer Set At 3125		Formation QUEEN (YSR)			
Producing Thru TBG.		Reservoir Temp. °F 105.2 @ 3125		Mean Annual Temp. °F 60		Baro. Press - P _a 13.2		Connection			
L 3125	II 3125	Gg .738	% CO ₂ 4.67	% N ₂ 1.30	% H ₂ S	Prover		Meter Run 4.026		Taps FLG.	

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						188		PKR.		12 hr.
1.	4 X 2.000		30.4	4.00	92	179		"		1 hr.
2.	4 X 2.000		35.8	11.56	104	167		"		"
3.	4 X 2.000		41.6	16.81	100	157		"		"
4.	4 X 2.000		43.1	28.09	112	138		"		"
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.	19.81	13.21	43.6	.9706	1.164	1.009	298
2.	19.81	23.80	49.0	.9602	1.164	1.009	532
3.	19.81	30.35	54.8	.9636	1.164	1.008	680
4.	19.81	39.77	56.3	.9535	1.164	1.008	981
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	DRY GAS	Mcf/bbl.
1.	.06	552	1.41	.982	A.P. I. Gravity of Liquid Hydrocarbons DRY Deg.		
2.	.07	564	1.44	.983	Specific Gravity Separator Gas .738 XXXXXXXXXXXX		
3.	.08	560	1.43	.984	Specific Gravity Flowing Fluid XXXXXX		
4.	.08	572	1.46	.984	Critical Pressure *684 P.S.I.A. P.S.I.A.		
5.					Critical Temperature *391 R R		

NO.	P _i ²	P _w	P _w ²	P _c ² - P _w ²
1.		193.3	37.4	3.1
2.		183.9	33.8	6.7
3.		176.6	31.2	9.3
4.		165.8	27.5	13.0
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 3.115$

2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.715$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.664$

201.2 P_c^2 **40.5**

Absolute Open Flow 2,664 Mcfd @ 15.025		Angle of Slope θ 49	Slope, n .879
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Remarks: **NO FLUID PRODUCED DURING TEST**

*** CORRECTED TO 4.67% CO₂ & 1.30 N₂**

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