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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 <u>EXXON OIL COMPANY USA</u>					Lease or Unit Name <u>N.M. STATE G</u>				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date <u>12-1-94</u>		Well No. <u>5</u>		
Completion Date <u>10-27-94</u>		Total Depth <u>3830</u>		Plug Back TD <u>3520</u>		Elevation		Unit Ltr. - Sec. - TWP - Rge. <u>E-23-21S-36E</u>	
Csg. Size <u>5 1/2</u>	Wt. <u>15.5</u>	d <u>1</u>	Set At <u>3830</u>	Perforations: From: <u>2978</u> To: <u>3475</u>			County <u>LEA</u>		
Tbg. Size <u>2-3/8</u>	Wt. <u>4.7</u>	d <u>1.995</u>	Set At <u>2901</u>	Perforations: From: To:			Pool <u>JALMAI Element</u>		
Type Well - Single - Bradenhead - G.G. or G.O. Multiple <u>SINGLE</u>				Packer Set At <u>2901</u>		Formation <u>VATES 7R</u>			
Producing Thru <u>tbg</u>		Reservoir Temp. °F <u>92° 2978</u>		Mean Annual Temp. °F <u>60</u>		Baro. Press - P. <u>13.2</u>		Connection <u>SALES LINE</u>	
L <u>2901</u>	H <u>2901</u>	Gg <u>.730</u>	% CO ₂ <u>5.92</u>	% N ₂ <u>5.16</u>	% H ₂ S	Prover	Meter Run <u>2.067</u>	Taps <u>LFG.</u>	

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 X .625		63	6.00	60	310	63	PKR.		24 hrs.
2.								"		24 hrs.
3.										
4.										
5.										

RATE OF FLOW CALCULATIONS

NO.	COEFFICIENT (24 HOUR)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor FL	Gravity Factor Fg	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	1.866	21.38	76.2	1.000	1.170	1.011	47
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	DRY GAS	Mcf/bbl.
1.	.11	520	1.37	.978	A.P. I. Gravity of Liquid Hydrocarbons	DRY	Deg.
2.					Specific Gravity Separator Gas	.730	XXXXXXXXXX
3.					Specific Gravity Flowing Fluid	N/A	XXXXXX
4.					Critical Pressure	*680	P.S.I.A. P.S.I.A.
5.					Critical Temperature	*378	R R

P_c 323.2 P_w 104.5

NO.	P_t^2	P_w	P_w^2	$P_c^2 - P_w^2$
1.	**	76.2	5.8	98.7
2.				
3.				
4.				
5.				

$$1) \frac{P_c^2}{P_c^2 - P_w^2} = 1.059 \quad (2) \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.059$$

$$AOF = Q \left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = .050$$

Absolute Open Flow <u>50</u>	Mcf @ 15.025	Angle of Slope θ <u>45°</u>	Slope, n <u>1.000</u>
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Remarks: NO FLUID PRODUCED DURING TEST - NO H₂S Detected ON DRAG Tube
* = CORRECTED TO 5.91% CO₂ & 5.16% N₂

Approved By Division	Conducted By: <u>PRO WELL TESTERS</u>	Calculated By: <u>BM</u>	Checked By: <u>BM</u>
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** FRICTION NIL IN TBG STRING.