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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 EXXON CO. U.S.A.						Lease or Unit Name AGGIE STATE					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date 12-15-94		Well No. 4			
Completion Date 11-22-94			Total Depth 3850		Plug Back TD 3275		Elevation		Unit Ltr. - Sec. - TWP - Rge. F 31-20S-37E		
Csg. Size 5 1/2		Wt. 17#		d 4.892		Set At 3740		Perforations: From: 2819 To: 3215		County Lea	
Tbg. Size 2-3/8"		Wt. 4.7		d 1.995		Set At 3755		Perforations: From: To:		Pool	
Type Well - Single - Bradenhead - G.G. or G.O. Multiple single						Packer Set At 2755		Formation QUEEN, YATES, 7 RIVERS			
Producing Thru TBG.		Reservoir Temp. °F 89°		Mean Annual Temp. °F 60°		Baro. Press - P. 13.2		Connection Pipeline			
L 2819		H 2819		Gg .719		% CO ₂ .61		% N ₂ 14.48		Prover 4.026	
										Taps FLG.	

FLOW DATA						TUBING DATA			CASING DATA		Duration of Flow
NO.	Prover Line Size	X	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							860				
1.	4.026 X		2.750	22.8	5.3	42	780		phr.		1 hr.
2.	4.026 X		2.750	24.01	10.2	40	690		"		1 hr.
3.	4.026 X		2.750	24.01	16.8	42	550		"		1 hr.
4.	4.026 X		2.750	24.01	20.3	50	440		"		1 hr.
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.	41.10	13.81	36.0	1.018	1.179	1.006	685
2.	41.10	19.48	37.21	1.020	1.179	1.006	969
3.	41.10	25.00	37.21	1.018	1.179	1.006	1241
4.	41.10	27.48	37.21	1.010	1.179	1.006	1353
5.							

NO.	P _r	Temp. °R	γ _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	.06	502	1.41	.989	DRY GAS	
2.	.06	500	1.40	.989	DRY	
3.	.06	502	1.41	.989	.719	XXXXXXXXXX
4.	.06	510	1.43	.989	DRY	XXXXXX
5.					*644	P.S.I.A. P.S.I.A.
					*356	R R

NO.	P _c	P _w	P _c ²	P _w ²	P _c ² - P _w ²
1.	629.2	796.3	634.2	128.3	
2.	494.5	710.4	504.6	257.8	
3.	317.2	578.1	334.2	428.3	
4.	205.4	475.4	226.0	536.5	
5.					

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 5.942$

2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 2.438$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1,670$

Absolute Open Flow	1,670	Mcf/d @ 15.025	Angle of Slope Θ	63.5	Slope, n	.500
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Remarks: **NO FLUID MADE DURING TEST**

*** CORRECTED TO 14 % N₂**

Approved By Division	Conducted By: PRO WELL TESTER	Calculated By: KS	Checked By: BM
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DEC 23 1994

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OFFICE