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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

CORRECTED

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator <u>Burlington Resources Oil and Gas Co.</u>						Lease or Unit Name <u>East Millman #3 fed com</u>					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date <u>6/1/98</u>		Well No. <u>1</u>			
Completion Date <u>5/28/98</u>		Total Depth <u>11,300</u>		Plug Back TD <u>11,070</u>		Elevation <u>3,375</u>		Unit Loc. - Sec. - TWP - Rge. <u>13 - 19S - 28E</u>			
Csg. Size <u>5 1/2</u>		Wt. <u>17</u>		d <u>4.892</u>		Set At <u>11,300</u>		Perforations: From: <u>10,687</u> To: <u>10,960</u>		County <u>Eddy</u>	
Tbg. Size <u>2 3/8</u>		Wt. <u>4.7</u>		d <u>1.995</u>		Set At <u>10,600</u>		Perforations: From: To:		Pool	
Type Well - Single - Bradenhead - G.G. or G.Q. Multiple <u>Single</u>						Packer Set At <u>10,602</u>		Formation <u>Morrow</u>			
Producing Thru <u>tbg</u>		Reservoir Temp. °F <u>60.0</u>		Mean Annual Temp. °F <u>60.0</u>		Baro. Press. - P <u>13.2</u>		Connection <u>air</u>			
L <u>10,617</u>		II <u>10,617</u>		Gg <u>.686</u>		% CO ₂ <u>2.357</u>		% N ₂ <u>1.23</u>		% H ₂ S <u>-0-</u>	
								Prover <u>-0-</u>		Meter Run <u>3.068</u>	
										Taps <u>flg</u>	

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
1.	3.068	X	1.000	200	8"	80°	3360	N/A	pkf	N/A	60min
2.	3.068	X	1.000	200	12"	80°	2980				60min
3.	3.068	X	1.500	200	15"	80°	2260				60min
4.	3.068	X	1.500	200	18"	80°	1720				60min
5.											

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	$\frac{h_w}{P_m}$	Pressure P _m	Flow Temp. Factor F _t	Gravity Factor F _g	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mcfd
1.	4.789	41.29	213.2	.9813	1.207	1.052	246
2.	4.789	50.58	213.2	.9813	1.207	1.052	301
3.	11.13	56.55	213.2	.9813	1.207	1.052	784
4.	11.13	61.94	213.2	.9813	1.207	1.052	858
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mc/Std
1.	.79	540	1.42	.904	N/A	
2.	.79	540	1.42	.904	N/A	
3.	.79	540	1.42	.904	N/A	
4.	.79	540	1.42	.904	N/A	
5.						

NO.	P _i ²	P _w	P _w ²	P _e ² - P _w ²
1.		4567.3	20859.9	3219.7
2.		4082.3	16665.3	7414.3
3.		3176.9	10092.6	13987.0
4.		2433.3	5920.9	18158.7
5.				

1) $\frac{P_e^2}{P_e^2 - P_w^2} = 1.326$

2) $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 1.280$

AOF = Q $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 1.098$

3) $\frac{P_e^2}{P_e^2 - P_w^2} = 1.326$

4) $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 1.280$

5) $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = 1.098$

Absolute Open Flow <u>1.098</u> Mcfd @ 15.025	Angle of Slope θ <u>48.8</u>	Slope, n <u>.874</u>
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Remarks: * No fluid made during test
* Calculated from known bottom hole pressures

Approved By Division	Conducted By: <u>Pro well Testing</u>	Calculated By: <u>MB</u>	Checked By: <u>BM</u>
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