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See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Department

CISF
Form C-122
Revised 4-1-91

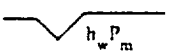
OIL CONSERVATION DIVISION

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

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator <u>Newbourne Oil Co. Newbourne Oil Co.</u>						Lease or Unit Name <u>Carlsbad 15 Fed</u>					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date <u>3/26/98</u>		Well No. <u>1</u>			
Completion Date		Total Depth <u>11200</u>		Plug Back TD <u>11,109</u>		Elevation		Unit Ltr. - Sec. - TWP - Rge. <u>15 21-S 26-E</u>			
Org. Size	Wt.	d	Set At	Perforations:				Country			
<u>5 1/2</u>	<u>17</u>	<u>4.892</u>	<u>11,197</u>	From: <u>10754</u> To: <u>10774</u>				<u>Eddy</u>			
Tbg. Size	Wt.	d	Set At	Perforations:				Pool			
<u>2 7/8</u>	<u>6.5</u>	<u>2.441</u>	<u>10,768</u>	From: To:				<u>Avalon Morrow</u>			
Type Well - Single - Bradenhead - G.G. or G.O. Multiple <u>Single</u>						Packer Set At <u>10768</u>		Formation			
Producing Thru <u>tbg</u>		Reservoir Temp. °F <u>186.9</u>		Mean Annual Temp. °F <u>60</u>		Baro. Press - P _a <u>13.2</u>		Connection <u>Sales</u>			
L <u>10768</u>	II <u>10768</u>	Gg <u>.594</u>	% CO ₂ <u>.975</u>	% N ₂ <u>.278</u>	% H ₂ S <u>0</u>	Prover <u>0</u>	Meter Run <u>6.065</u>		Taps <u>82g</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.	
SI							<u>3450</u>		<u>pkh</u>	
1.	<u>6.065 X 3</u>	<u>250</u>		<u>374</u>	<u>5.1</u>	<u>96</u>	<u>3420</u>	<u>78⁰</u>	<u>pkh</u>	<u>---</u>
2.	<u>6.065 X 3</u>	<u>250</u>		<u>394.7</u>	<u>18.1</u>	<u>83</u>	<u>3350</u>	<u>78⁰</u>	<u>pkh</u>	<u>-----</u>
3.	<u>6.065 X 3</u>	<u>250</u>		<u>420.6</u>	<u>38.5</u>	<u>85.9</u>	<u>3215</u>	<u>78⁰</u>	<u>pkh</u>	<u>-----</u>
4.	<u>6.065 X 3</u>	<u>250</u>		<u>415.3</u>	<u>64.1</u>	<u>84.2</u>	<u>3025</u>	<u>78⁰</u>	<u>pkh</u>	<u>-----</u>
5.										

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)		Pressure P _m	Flow Temp. Factor F _L	Gravity Factor F _g	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mcfd
1.							<u>3.020</u>
2.							<u>6.004</u>
3.		<u>READINGS FROM TOTAL FLOW METER</u>					<u>9.048</u>
4.							<u>12163</u>
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl
1.					<u>N/A</u>	
2.					<u>N/A</u>	
3.					<u>.594</u>	<u>XXXXXXXXXX</u>
4.					<u>N/A</u>	<u>N/A</u>
5.					<u>675</u>	<u>N/A</u>
					<u>350</u>	<u>N/A</u>

P _e <u>3435.9</u>		P _w <u>11,805.4</u>	
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NO.	P _i ²	P _w	P _w ²	P _e ² - P _w ²
1.		<u>3417.0</u>	<u>11,675.8</u>	<u>129.6</u>
2.		<u>3386.5</u>	<u>11,468.4</u>	<u>337.0</u>
3.		<u>3347.8</u>	<u>11,207.8</u>	<u>597.6</u>
4.		<u>3301.4</u>	<u>10,896.6</u>	<u>908.8</u>
5.				

1) $\frac{P_e^2}{P_e^2 - P_w^2} = \frac{12.99}{}$

AOF = Q $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = \frac{76018.7}{}$

(2) $\left[\frac{P_e^2}{P_e^2 - P_w^2} \right]^n = \frac{6.25}{}$

Absolute Open Flow <u>76018.7</u>	Mcf/d @ 15.025	Angle of Slope Θ <u>54.4</u>	Slope, n <u>.715</u>
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Remarks: *Calculated from known bottom hole pressures
*No fluid made during test.

Approved By Division	Conducted By: <u>Pro Well Testing</u>	Calculated By: <u>M. B.</u>	Checked By: <u>B. M.</u>
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