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See Rule 401 & Rule 1122

State of New Mexico
Energy, Minerals and Natural Resources Dept

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>Mewbourne Mewbourne Oil Co.</u>					Lease or Unit Name <u>Ochillo Hills com Ocotillo Hills Com.</u>				
Type Test ☒ Initial ☐ Annual ☐ Special					Test Date <u>2-25-98</u>		Well No. <u>1</u>		
Completion Date		Total Depth		Plug Back TD		Elevation		Unit Ltr. - Sec. - TWP - Rge. <u>F 21 21-S 26-E</u>	
Csg. Size <u>5 1/2</u>	Wt. <u>17</u>	d <u>4.892</u>	Set At	Perforations: From: <u>9764</u> To: <u>9774</u>			County <u>Eddy</u>		
Tbg. Size <u>2 7/8</u>	Wt. <u>6.5</u>	d <u>2.441</u>	Set At	Perforations: From: To:			Pool <u>Avalon Strawn</u>		
Type Well - Single - Bradenhead - G.G. or G.Q. Multiple <u>Single</u>					Packer Set At <u>9705</u>		Formation		
Producing Thru <u>Tbg</u>		Reservoir Temp. °F <u>60</u>		Mean Annual Temp. °F <u>60</u>		Baro. Press. - P. <u>13.2</u>		Connection <u>Sales</u>	
L <u>9705</u>	II <u>9705</u>	Gg <u>.688</u>	% CO ₂ <u>1.810</u>	% N ₂ <u>1.321</u>	% H ₂ S <u>0</u>	Prover <u>0</u>	Meter Run <u>3.068</u>		Taps <u>F/G</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.	
SI						<u>2315</u>	<u>52°</u>	<u>PKR</u>	<u>60°</u>
1.	<u>3.068 X 2.125</u>		<u>260</u>	<u>2"</u>	<u>67°</u>	<u>2242</u>	<u>54°</u>		
2.	<u>3.068 X 2.125</u>		<u>260</u>	<u>17"</u>	<u>64°</u>	<u>2143</u>	<u>54°</u>		<u>60 min</u>
3.	<u>3.068 X 2.125</u>		<u>260</u>	<u>13"</u>	<u>63°</u>	<u>2042</u>	<u>54°</u>		<u>60 min</u>
4.	<u>3.068 X 2.125</u>		<u>260</u>	<u>23"</u>	<u>62°</u>	<u>1978</u>	<u>54°</u>		<u>60 min</u>
5.									

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	$\frac{h_w P_m}{P_c}$	Pressure P _m	Flow Temp. Factor Ft	Gravity Factor Fg	Super Compress. Factor, F _{sp}	Rate of Flow Q, Mcfd
1.	<u>24.76</u>	<u>23.37</u>	<u>273.2</u>	<u>.9933</u>	<u>1.206</u>	<u>1.059</u>	<u>734</u>
2.	<u>24.76</u>	<u>43.73</u>	<u>273.2</u>	<u>.9962</u>	<u>1.206</u>	<u>1.059</u>	<u>1377</u>
3.	<u>24.76</u>	<u>59.59</u>	<u>273.2</u>	<u>.9971</u>	<u>1.206</u>	<u>1.054</u>	<u>1870</u>
4.	<u>24.76</u>	<u>79.26</u>	<u>273.2</u>	<u>.9981</u>	<u>1.206</u>	<u>1.054</u>	<u>2490</u>
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	A.P.I. Gravity of Liquid Hydrocarbons	Specific Gravity Separator Gas	Specific Gravity Flowing Fluid	Critical Pressure	Critical Temperature
1.	<u>.78</u>	<u>527</u>	<u>1.37</u>	<u>.892</u>	<u>23.4</u>	<u>62.6</u>	<u>.688</u>	<u>N/A</u>	<u>674</u>	<u>380</u>
2.	<u>.78</u>	<u>524</u>	<u>1.37</u>	<u>.892</u>						
3.	<u>.77</u>	<u>523</u>	<u>1.37</u>	<u>.900</u>						
4.	<u>.77</u>	<u>522</u>	<u>1.37</u>	<u>.900</u>						
5.										

P_c 2480.2 P_c² 6161.3

NO.	P _t ²	P _w	P _w ²	P _c ² - P _w ²
1.		<u>2419.5</u>	<u>5853.9</u>	<u>307.4</u>
2.		<u>2340.3</u>	<u>5477.0</u>	<u>684.3</u>
3.		<u>2246.6</u>	<u>5047.2</u>	<u>1114.10</u>
4.		<u>2151.6</u>	<u>4629.4</u>	<u>1531.9</u>
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = \frac{4.02}{}$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{7096.5}{}$

(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = \frac{2.85}{}$

Absolute Open Flow <u>7096.5</u> Mcfd @ 15.025	Angle of Slope θ <u>52.9</u>	Slope, n <u>.753</u>
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Remarks: *Well made 11.5 BBL'S of 62.6 API Gravity Condensate

*Calculated from known bottom hole pressures

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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