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appropriate district office
See Rule 401 & Rule 1122

OIL CONSERVATION DIVISION

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

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Operator <i>Penwell Energy</i>						Lease or Unit Name <i>Rifleman 32 St Com</i>					
Type Test ☒ Initial ☐ Annual ☐ Special						Test Date <i>7-4-97</i>					
Completion Date <i>10/6/96</i>		Total Depth <i>10,088</i>		Plug Back TD <i>10,004</i>		Elevation <i>3280</i>		Unit Ltr. - Sec. - TWP - Rge. <i>32 21-S 26-E</i>			
Csg. Size <i>5 1/2</i>	Wt. <i>17</i>	d <i>4.892</i>	Set At <i>10,000</i>	Perforations: From: <i>9729</i> To: <i>9767</i>		County <i>Eddy</i>					
Tbg. Size <i>2 3/8</i>	Wt. <i>4.7</i>	d <i>1.995</i>	Set At <i>9725</i>	Perforations: From: To:		Pool <i>Happy Valley Strawn</i>					
Type Well - Single - Bradenhead - G.G. or G.O. Multiple <i>Single</i>						Packer Set At <i>9692</i>					
Producing Thru <i>Tbg</i>		Reservoir Temp. °F <i>171.2</i>		Mean Annual Temp. °F <i>60</i>		Baro. Press - P _a <i>13.2</i>		Connection <i>Sales</i>			
L <i>9725</i>	H <i>9725</i>	Gg <i>.670</i>	% CO ₂ <i>1.00</i>	% N ₂ <i>.90</i>	% H ₂ S <i>0</i>	Prover <i>0</i>		Meter Run <i>4.026</i>		Taps <i>F/G</i>	

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						<i>435</i>		<i>PKR</i>		
1.	<i>4.026 X .500</i>		<i>375</i>	<i>4.5"</i>	<i>64°</i>	<i>59</i>	<i>74°</i>			<i>24hrs</i>
2.										
3.										
4.										
5.										

RATE OF FLOW CALCULATIONS							
NO.	COEFFICIENT (24 HOUR)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1.	<i>1.182</i>	<i>41.79</i>	<i>388.2</i>	<i>.9868</i>	<i>1.222</i>	<i>1.056</i>	<i>62</i>
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio	Mcf/bbl.
1.	<i>.77</i>	<i>524</i>	<i>1.38</i>	<i>.896</i>	<i>N/A</i>	
2.					<i>N/A</i>	
3.					<i>.70</i>	<i>XXXXXXXXXX</i>
4.					<i>N/A</i>	<i>XXXXXX</i>
5.					<i>672</i>	<i>P.S.I.A.</i>
					<i>378</i>	<i>R</i>

NO.	P _i	P _w	P _w ²	P _c ² - P _w ²
1.	<i>15.2</i>	<i>73.2</i>	<i>5.4</i>	<i>195.5</i>
2.				
3.				
4.				
5.				

1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.027$

2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.027$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = .064$

$P_c = 448.2$ $P_w = 200.9$

Absolute Open Flow <i>.064</i> Mcfd @ 15.025	Angle of Slope Θ <i>45°</i>	Slope, n <i>1.000</i>
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Remarks:

Approved By Division	Conducted By: <i>Pro Well Testers</i>	Calculated By: <i>MB</i>	Checked By: <i>BM</i>
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