

**State of New Mexico  
Energy, Mineral and Natural Resources**

Submit in duplicate to  
appropriate district office  
See Rule 401 & Rule 1122

Form C-122  
Revised October, 1999

**Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505**

**MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL** *30-025-37012*

Operator <b>SAMSON RESOURCES COMPANY</b>					Lease or Unit Name <b>LEA FEDERAL UNIT</b>					
Type Test <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Annual <input type="checkbox"/> Special					Test date <b>3/13/2006</b>		Well No. <b>20</b>			
Completion Date: <b>12/19/2005</b>		Total Depth <b>13400</b>		Plug Back TD <b>13250</b>		Elevation: <b>3649 GL</b>		Unit Ltr.-Sec.-TWP-Rge. <b>B 14 20S 34E</b>		
Csg. Size <b>5.500</b>	Wt. <b>20</b>	d <b>4.778</b>	Set At <b>13398</b>	Perforations: From <b>12908</b> To <b>13199</b>			County <b>LEA</b>			
Tbg. Size <b>2.375</b>	Wt. <b>4.7</b>	d <b>1.995</b>	Set At <b>12850</b>	Perforations: From _____ To _____			Pool <b>LEA PENN (GAS) 80040</b>			
Type Well - Single - Bradenhead - G.G or G.O Multiple <b>SINGLE</b>					Packer Set At		Formation <b>MORROW</b>			
Prod. Thru <b>TUBING</b>		Reservoir Temp.F <b>245 @ 13,054</b>		Mean Annual Temp. F <b>60</b>		Baro, Press - Pa <b>13.20</b>		Connection <b>DOWNSTREAM</b>		
L <b>13054</b>	H <b>13054</b>	Gg <b>0.578</b>	%Co2 <b>0</b>	%N2 <b>0</b>	%H2s ppm <b>0</b>	Prover		Meter run <b>X</b>	Taps <b>F</b>	
FLOW DATA					TUBING DATA			CASING DATA		
NO.	Prover Line Size	Orifice Size	Press. p.s.i.g.	Diff. hw	Temp. F.	Press. p.s.i.g.	Temp. F.	Press. p.s.i.g.	Temp. F.	Duration Of Flow
Shut-in Pressure						<b>4000</b>	<b>60</b>			<b>24</b>
1	<b>3.068 X 1.625</b>		<b>417</b>	<b>134</b>	<b>86</b>	<b>1800</b>	<b>60</b>			<b>24</b>
2										
3										
4										
5										
<b>RATE OF FLOW CALCULATIONS</b>										
NO.	COEFFICIENT (24 HOUR)	hwPm	Pressure Pm	Flow Temp Factor Ft.	Gravity Factor Fg.	Super Compress Factor, Fpw	Rate of Flow (Q) Mcfd			
1	<b>13.24</b>	<b>240.10</b>	<b>430.20</b>	<b>0.9759</b>	<b>1.31533</b>	<b>1.02618</b>	<b>4186</b>			
2										
3										
4										
5										
NO.	Pr	Temp R	Tr	Z	GAS LIQUID HYDROCARBON RATIO <b>23</b> Mcf/bbl.					
1	<b>.639</b>	<b>546</b>	<b>1.563</b>	<b>.9475</b>	API GRAVITY OF LIQUID HYDROCARBONS <b>62</b> Deg.					
2					S. G. SEPARATOR GAS <b>0.578</b> <b>XXXXXXXXXXXX</b>					
3					S.G. FLOWING FLUID <b>XXXXXXXXXXXX</b> <b>0.690</b>					
4					CRITICAL PRESSURE <b>672.77</b> <b>668.96</b> P.S.I.A.					
5					CRITICAL TEMPERATURE <b>349.32</b> <b>386.28</b> R					
Pc <b>4013.2</b>		Pc2 <b>16105.8</b>								
NO.	Pw	Pw2	Pc2-Pw2	[1] $\frac{Pc2}{Pc2-Pw2} = \frac{1.326525}{1.326525}$			[2] $\frac{Pc2}{Pc2-Pw2} = \frac{1.326525}{1.326525}$			
1	<b>1991.1</b>	<b>3964.4</b>	<b>12141.3</b>	AOF = Q * $\frac{Pc2}{Pc2-Pw2} = \frac{5553}{1.326525}$						
2										
3										
4										
5										
Absolute Open Flow <b>5553</b> Mcfd@ <b>15.025</b>					Angle of Slope <b>45.00</b>		Slope n <b>1.00</b>			
Remarks: <b>WELL MADE 181 BBLs CONDENSATE AND 10 BBLs WATER DURING TEST. 18.5/64" CHOKE</b>										
Approved by Division:			Conducted by: <b>SAMSON RESOURCES COMPANY</b>			Calculated by: <b>COMPUTER</b>			Checked by:	

*7160-3901-9842-0439-6101*