

# KANSAS CORPORATION COMMISSION ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

(See Instructions on Reverse Side)

- Open Flow  **OSI**  
 Deliverability

Test Date:  
8/14/2012

API No. 15  
023-20110 - 0000

Company Rosewood Resources, Inc.		Lease Rueb		Well Number 1-9	
County Cheyenne	Location <b>SE SE</b>	Section 9	TWP 3S	RNG (E/W) 42W	Acres Attributed 80
Field St. Francis		Reservoir Niobrara	Gas Gathering Connection Branch Systems Inc.		
Completion Date 7-24-1999		Plug Back Total Depth 1673'	Packer Set at		
Casing Size 4 1/2"	Weight 10.5#	Internal Diameter 4.052	Set at 1595'	Perforations 1560'	To 1590'
Tubing Size NONE	Weight	Internal Diameter	Set at	Perforations	To
Type Completion (Describe) Single (Conventional)	Type Fluid Production Dry Gas		Pump Unit or Traveling Plunger? <input checked="" type="checkbox"/> Yes / No Pumping Unit		
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide	% Nitrogen	Gas Gravity - G <sub>g</sub> .6	
Vertical Depth(H) 1590'		Pressure Taps Flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup:	Shut in 8-13	20 12	at 1:25	(AM) <input checked="" type="checkbox"/> (PM)	Taken 8-14
					20 12 at 1:40 (AM) <input checked="" type="checkbox"/> (PM)
Well on Line:	Started 8-14	20 12	at 1:40	(AM) <input checked="" type="checkbox"/> (PM)	Taken 8-15
					20 12 at 2:25 (AM) <input checked="" type="checkbox"/> (PM)

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### OBSERVED SURFACE DATA

Duration of Shut-in 24 Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one: Meter Prover Pressure psig (P <sub>m</sub> )	Pressure Differential in Inches H <sub>2</sub> O	Flowing Temperature t	Well Head Temperature t	Casing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>t</sub> ) or (P <sub>c</sub> )		Tubing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>t</sub> ) or (P <sub>c</sub> )		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						164	178.4				
Flow						28	42.4			24	0

### FLOW STREAM ATTRIBUTES

Plate Coefficient (F <sub>p</sub> ) (F <sub>p</sub> ) Mcfd	Circle one: Meter or Prover Pressure psia	Press Extension $\sqrt{P_m \times h}$	Gravity Factor F <sub>g</sub>	Flowing Temperature Factor F <sub>tt</sub>	Deviation Factor F <sub>pv</sub>	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G <sub>m</sub>
						14		

### (OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P<sub>a</sub>)<sup>2</sup> = 0.207  
(P<sub>d</sub>)<sup>2</sup> =

(P<sub>c</sub>)<sup>2</sup> = \_\_\_\_\_ : (P<sub>w</sub>)<sup>2</sup> = \_\_\_\_\_ : P<sub>d</sub> = \_\_\_\_\_ % (P<sub>c</sub> - 14.4) + 14.4 = \_\_\_\_\_ :

(P <sub>c</sub> ) <sup>2</sup> - (P <sub>a</sub> ) <sup>2</sup> or (P <sub>c</sub> ) <sup>2</sup> - (P <sub>d</sub> ) <sup>2</sup>	(P <sub>c</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup>	Choose formula 1 or 2: 1. P <sub>c</sub> <sup>2</sup> - P <sub>a</sub> <sup>2</sup> 2. P <sub>c</sub> <sup>2</sup> - P <sub>d</sub> <sup>2</sup> divided by: P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>	LOG of formula 1. or 2. and divide by: $\frac{P_c^2 - P_w^2}{P_c^2 - P_a^2}$	Backpressure Curve Slope = "n" ----- or ----- Assigned Standard Slope	n x LOG [ ]	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)

Open Flow Mcfd @ 14.65 psia Deliverability Mcfd @ 14.65 psia

The undersigned authority, on behalf of the Company, states that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct. Executed this the 19 day of December, 20 12.

Witness (if any)

*Januel Gevel*  
For Company

For Commission

Checked by

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Form G-2  
(Rev. 7/03)

JAN 03 2013

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I declare under penalty of perjury under the laws of the state of Kansas that I am authorized to request exempt status under Rule K.A.R. 82-3-304 on behalf of the operator Rosewood Resources, Inc. and that the foregoing pressure information and statements contained on this application form are true and correct to the best of my knowledge and belief based upon available production summaries and lease records of equipment installation and/or upon type of completion or upon use being made of the gas well herein named.


I hereby request a one-year exemption from open flow testing for the Rueb 1-9 gas well on the grounds that said well:

(Check one)

- is a coalbed methane producer
- is cycled on plunger lift due to water
- is a source of natural gas for injection into an oil reservoir undergoing ER
- is on vacuum at the present time; KCC approval Docket No. \_\_\_\_\_
- is not capable of producing at a daily rate in excess of 250 mcf/D

I further agree to supply to the best of my ability any and all supporting documents deemed by Commission staff as necessary to corroborate this claim for exemption from testing.

Date: 12/19/12

Signature:   
Title: Production Assistant

**Instructions:** If a gas well meets one of the eligibility criteria set out in KCC regulation K.A.R. 82-3-304, the operator may complete the statement provided above in order to claim exempt status for the gas well.

At some point during the current calendar year, wellhead shut-in pressure shall have been measured after a minimum of 24 hours shut-in/buildup time and shall be reported on the front side of this form under **OBSERVED SURFACE DATA**. Shut-in pressure shall thereafter be reported yearly in the same manner for so long as the gas well continues to meet the eligibility criterion or until the claim of eligibility for exemption **IS** denied.

The G-2 form conveying the newest shut-in pressure reading shall be filed with the Wichita office no later than December 31 of the year for which it's intended to acquire exempt status for the subject well. The form must be signed and dated on the front side as though it was a verified report of annual test results.

W368  
 Rueb 1-9  
 West St. Francis  
 St. Francis  
 Pumping Unit/Elec  
 August-12  
 Chart Meter

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DATE	Casing PSI	STATIC MCF	SPM	HRS CYCLE DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
8/1/2012	25	38	15			
8/2/2012	25	38	15			
8/3/2012	25	38	14			
8/4/2012	23	36	14			
8/5/2012	23	36	14			
8/6/2012	25	38	14			
8/7/2012	25	38	14			
8/8/2012	25	38	14			
8/9/2012	25	38	14			
8/10/2012	25	38	14			
8/11/2012	25	38	14			
8/12/2012	26	39	14			
8/13/2012	26	39	14			
8/14/2012	164	38	0	24		shut well into for state test psi 26 open well psi 164
8/15/2012	28	40	16			
8/16/2012	25	38	14			
8/17/2012	25	38	14			
8/18/2012	25	38	14			
8/19/2012	25	38	14			
8/20/2012	25	38	14			
8/21/2012	25	38	14			
8/22/2012	25	38	14			
8/23/2012	25	38	14			
8/24/2012	25	38	14			
8/25/2012	25	38	14			
8/26/2012	25	38	14			
8/27/2012	25	38	14			
8/28/2012	25	38	14			
8/29/2012	25	38	14			
8/30/2012	25	38	14			
8/31/2012	25	38	13			

Total

423

0

W368  
 Rueb 1-9  
 West St. Francis  
 St. Francis  
 Pumping Unit/Elec  
 September-12  
 Chart Meter

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DATE	Casing PSI	STATIC	MCF	HRS DOWN	REMARKS (Maximum length 110 characters)
9/1/2012	25	38		14	
9/2/2012	25	38		14	
9/3/2012	25	38		14	
9/4/2012	25	38		14	
9/5/2012	25	38		14	
9/6/2012	25	38		14	
9/7/2012	25	38		14	
9/8/2012	25	38		14	
9/9/2012	25	38		14	
9/10/2012	25	38		14	
9/11/2012	27	40		14	
9/12/2012	25	38		13	
9/13/2012	25	38		13	
9/14/2012	25	38		13	
9/15/2012	24	37		12	
9/16/2012	25	38		13	
9/17/2012	25	38		13	
9/18/2012	25	38		13	
9/19/2012	25	38		13	
9/20/2012	25	38		13	
9/21/2012	25	38		13	
9/22/2012	25	38		13	
9/23/2012	25	38		13	
9/24/2012	25	38		13	
9/25/2012	25	38		13	
9/26/2012	24	37		13	
9/27/2012	25	38		13	
9/28/2012	24	37		13	
9/29/2012	25	38		13	
9/30/2012	25	38		13	
10/1/2012					

Total 400

W368  
 Rueb 1-9  
 West St. Francis  
 St. Francis  
 Pumping Unit/Elec  
 October-12  
 Chart Meter

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DATE	Casing		HRS DOWN	REMARKS (Maximum length 110 characters)
	PSI	STATIC MCF		
10/1/2012	25	38	13	
10/2/2012	25	38	12	
10/3/2012	100	113	9	Bittercreek Compressor was down
10/4/2012	40	53	13	
10/5/2012	30	43	12	
10/6/2012	25	38	13	
10/7/2012	25	38	12	
10/8/2012	25	38	12	
10/9/2012	30	43	12	
10/10/2012	30	43	12	
10/11/2012	25	38	13	
10/12/2012	27	40	14	
10/13/2012	28	41	16	
10/14/2012	27	40	11	
10/15/2012	28	41	11	
10/16/2012	27	40	11	
10/17/2012	27	40	11	
10/18/2012	28	41	11	
10/19/2012	28	41	11	treated well
10/20/2012	27	40	11	
10/21/2012	30	43	12	
10/22/2012	30	43	12	
10/23/2012	30	43	12	
10/24/2012	25	38	12	
10/25/2012	25	38	12	
10/26/2012	25	38	11	
10/27/2012	25	38	11	
10/28/2012	25	38	11	
10/29/2012	25	38	11	
10/30/2012	30	43	12	
10/31/2012	26	39	12	

Total

368