

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

Type Test:

- Open Flow  **SI**  
 Deliverability

Test Date:  
5/23/2008

API No. 15  
023-20627-0000

Company Rosewood Resources, Inc.		Lease Isernhagen		Well Number 21-26	
County Cheyenne	Location NENW/4	Section 26	TWP 3S	RNG (E/W) 41W	Acres Attributed 80
Field St. Francis		Reservoir Niobrara		Gas Gathering Connection Branch Systems Inc.	
Completion Date 10/22/2005		Plug Back Total Depth 1513'		Packer Set at	
Casing Size 2 7/8"	Weight 6.5#	Internal Diameter 2.441	Set at 1513'	Perforations 1381'	To 1413'
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? Yes / <input checked="" type="checkbox"/> No	
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide		% Nitrogen	
Vertical Depth(H) 1413'		Pressure Taps Flange		Gas Gravity - G <sub>g</sub> .6	
Pressure Buildup: Shut in 5-23 20 08 at 1:00 (AM) <input checked="" type="checkbox"/> (PM)		Taken 5-24 20 08 at 1:15 (AM) <input checked="" type="checkbox"/> (PM)			
Well on Line: Started 5-24 20 08 at 1:15 (AM) <input checked="" type="checkbox"/> (PM)		Taken 5-25 20 08 at 2:00 (AM) <input checked="" type="checkbox"/> (PM)			

### OBSERVED SURFACE DATA

Duration of Shut-in 24 Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one: Meter or Prover Pressure psig (Pm)	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>i</sub> ) or (P <sub>c</sub> )		Tubing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>i</sub> ) or (P <sub>c</sub> )		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						80	94.4				
Flow						220	234.4			24	0

### FLOW STREAM ATTRIBUTES

Plate Coefficient (F <sub>b</sub> ) (F <sub>c</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>t</sub>	Deviation Factor F <sub>pv</sub>	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G <sub>m</sub>
						15		

### (OPEN FLOW) (DELIVERABILITY) CALCULATIONS

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

(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: P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>	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 12 day of December, 20 08

**RECEIVED**  
KANSAS CORPORATION COMMISSION *Wayne Mahon*  
\_\_\_\_\_  
Witness (if any) For Company

**JAN 29 2009**  
\_\_\_\_\_  
For Commission Checked by

CONSERVATION DIVISION  
WICHITA, KS

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**SEP 18 2009**

**KCC WICHITA**

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 Isernhagen 21-26 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: 12/12/08

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JAN 29 2009

CONSERVATION DIVISION  
WICHITA, KS

Signature: *Wayne Mason*

Title: Production Foreman

**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.

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W360  
 Isernhagen 21-26  
 St. Francis  
 St. Francis  
 None  
 May-08

DATE	Casing PSI	STATIC	MCF	HRS DOWN	REMARKS (Maximum length 110 characters)
5/1/2008		86	19	0	
5/2/2008	72	85	19	0	
5/3/2008		85	19	0	
5/4/2008		85	20	0	
5/5/2008		85	19	0	
5/6/2008		85	19	0	
5/7/2008	72	85	19	0	
5/8/2008		84	19	0	
5/9/2008		85	19	0	
5/10/2008		84	19	0	
5/11/2008		83	19	0	
5/12/2008		84	19	0	
5/13/2008		84	19	0	
5/14/2008	70	84	19	0	
5/15/2008		86	19	0	
5/16/2008		84	19	0	
5/17/2008		83	19	0	
5/18/2008		84	19	0	
5/19/2008		82	19	0	
5/20/2008		83	19	0	
5/21/2008		79	19	0	
5/22/2008		79	19	0	
5/23/2008		79	19	0	
5/24/2008	80	94	19	0	shut in for test
5/25/2008	220	66	5	0	open bp
5/26/2008		92	27	0	
5/27/2008		89	22	0	
5/28/2008		86	21	0	
5/29/2008		86	20	0	
5/30/2008		86	20	0	
5/31/2008		100	28	0	

Total

600

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W360  
 Isernhagen 21-26  
 St. Francis  
 St. Francis  
 None  
 June-08

DATE	Casing PSI	STATIC	MCF	HRS DOWN	REMARKS (Maximum length 110 characters)
6/1/2008		97		27	0
6/2/2008		93		25	0
6/3/2008		93		25	0
6/4/2008		79		14	0
6/5/2008		78		16	0
6/6/2008		77		15	0
6/7/2008		79		15	0
6/8/2008		78		15	0
6/9/2008		79		15	0
6/10/2008		82		15	0
6/11/2008		85		15	0
6/12/2008		83		15	0
6/13/2008		85		15	0
6/14/2008		83		15	0
6/15/2008		87		15	0
6/16/2008		83		15	0
6/17/2008		83		15	0
6/18/2008		81		15	0
6/19/2008		80		15	0
6/20/2008		80		15	0
6/21/2008		81		15	0
6/22/2008		81		15	0
6/23/2008		82		15	0
6/24/2008		80		15	0
6/25/2008		80		15	0
6/26/2008		80		15	0
6/27/2008		81		15	0
6/28/2008		80		15	0
6/29/2008		80		15	0
6/30/2008		80		15	0
7/1/2008					0

Total

482

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W360  
 Isernhagen 21-26  
 St. Francis  
 St. Francis  
 None  
 July-08

DATE	Casing PSI	STATIC	MCF	HRS DOWN	REMARKS (Maximum length 110 characters)
7/1/2008		80	15	0	
7/2/2008		84	15	0	
7/3/2008	65	79	15	0	
7/4/2008		79	15	0	
7/5/2008		88	15	0	
7/6/2008		90	15	0	
7/7/2008		88	15	0	
7/8/2008		83	15	0	
7/9/2008		80	15	0	
7/10/2008	68	81	15	0	
7/11/2008		84	15	0	0 SI to build pressure
7/12/2008		71	3	24	
7/13/2008		71	3	24	
7/14/2008		173	0	24	
7/15/2008		113	0	24	
7/16/2008		92	0	24	
7/17/2008	65	76	0	24	
7/18/2008		100	0	24	brought on line 5:00 pm
7/19/2008		96	40	3	
7/20/2008		102	59	0	
7/21/2008		101	56	0	
7/22/2008		103	54	0	
7/23/2008		83	57	0	
7/24/2008	90	104	60	0	
7/25/2008		101	56	0	
7/26/2008		76	59	0	
7/27/2008		78	56	0	
7/28/2008		81	57	0	
7/29/2008		74	59	0	
7/30/2008		148	57	0	
7/31/2008	65	79	50	5	

Total

891

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