

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

Type Test:

- Open Flow **KIST**  
 Deliverability

(See Instructions on Reverse Side)

Test Date:  
6/27/2012

API No. 15  
023-20630-0000

Company Rosewood Resources, Inc.		Lease R. Walter		Well Number 33-21	
County Cheyenne	Location NWSE/4	Section 21	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 1521'	Packer Set at		
Casing Size 2 7/8"	Weight 6.5#	Internal Diameter 2.441	Set at 1521'	Perforations 1385'	To 1417'
Tubing Size NONE	Weight	Internal Diameter	Set at	Perforations	To
Type Completion (Describe) Single (Conventional)		Type Fluid Production	Pump Unit or Traveling Plunger? Yes / <input checked="" type="checkbox"/> No flowing		
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide	% Nitrogen	Gas Gravity - G <sub>g</sub> .6	
Vertical Depth(H) 1417'		Pressure Taps Flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in 6-26 20 12 at 10:40		(AM) (PM)	Taken 6-27 20 12 at 10:55		(AM) (PM)
Well on Line: Started 6-27 20 12 at 10:55		(AM) (PM)	Taken 6-28 20 12 at 11:40		(AM) (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 (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>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						89	103.4				
Flow						66	80.4			24	0

### FLOW STREAM ATTRIBUTES

Plate Coefficient (F <sub>s</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 (Mcf/d)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G <sub>m</sub>
						4		

### (OPEN FLOW) (DELIVERABILITY) CALCULATIONS

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

(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>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: $P_c^2 - P_w^2$	Backpressure Curve Slope = "n" ----- or ----- Assigned Standard Slope	n x LOG [ ]	Antilog	Open Flow Deliverability Equals R x Antilog (Mcf/d)

Open Flow Mcf/d @ 14.65 psia Deliverability Mcf/d @ 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)

*Jannell Grew*  
\_\_\_\_\_  
For Company

\_\_\_\_\_  
For Commission

\_\_\_\_\_  
Checked by

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Form G-2  
(Rev. 7/03)

JAN 03 2013

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 R. Walter 33-21 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.

W365

R. Walter 33-21

St. Francis

St. Francis

None

June-12

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DATE	Casing			HRS DOWN	REMARKS (Maximum length 110 characters)
	PSI	STATIC	MCF		
6/1/2012	45	58		5	
6/2/2012	45	58		5	
6/3/2012	47	61		5	
6/4/2012	51	64		5	
6/5/2012	47	60		5	
6/6/2012	46	59		5	
6/7/2012	46	59		5	
6/8/2012	47	60		5	
6/9/2012	48	61		5	
6/10/2012	47	60		5	
6/11/2012	47	60		5	
6/12/2012	47	60		5	
6/13/2012	47	60		5	
6/14/2012	47	60		5	
6/15/2012	51	64		5	
6/16/2012	48	61		6	
6/17/2012	48	61		5	
6/18/2012	54	67		5	
6/19/2012	54	67		5	
6/20/2012	58	71		4	
6/21/2012	61	74		4	
6/22/2012	65	78		4	
6/23/2012	64	77		4	
6/24/2012	59	72		4	
6/25/2012	65	78		4	
6/26/2012	63	76		3	cp 65 si for state test
6/27/2012	<del>87</del>	72		0	24 cp 89 opened
6/28/2012	66	79		3	
6/29/2012	65	78		3	
6/30/2012	55	68		4	
7/1/2012					

Total

133

W365

R Walter 33-21

St. Francis

St. Francis

None

July-12

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DATE	Casing			HRS DOWN	REMARKS (Maximum length 110 characters)
	PSI	STATIC	MCF		
7/1/2012	55	68		4	
7/2/2012	48	62		4	3
7/3/2012	67	80		3	
7/4/2012	45	58		4	
7/5/2012	44	57		4	
7/6/2012	42	55		4	1
7/7/2012	48	61		4	
7/8/2012	50	63		4	
7/9/2012	50	63		4	
7/10/2012	51	64		5	
7/11/2012	45	59		5	
7/12/2012	45	59		5	
7/13/2012	54	67		5	
7/14/2012	54	67		5	
7/15/2012	54	67		5	
7/16/2012	61	74		4	1.5
7/17/2012	46	59		4	
7/18/2012	43	56		4	
7/19/2012	51	64		4	0.5
7/20/2012	53	66		4	
7/21/2012	55	68		4	
7/22/2012	48	61		4	
7/23/2012	47	60		4	0.5
7/24/2012	51	64		4	
7/25/2012	62	75		4	
7/26/2012	46	59		4	
7/27/2012	75	88		2	5
7/28/2012	57	70		3	
7/29/2012	47	60		3	
7/30/2012	44	57		4	
7/31/2012	44	57		4	

Total

125

W365  
 R. Walter 33-21  
 St. Francis  
 St. Francis  
 None  
 August-12

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DATE	Casing PSI	STATIC	MCF	HRS DOWN	REMARKS (Maximum length 110 characters)
8/1/2012	45	58		4	
8/2/2012	47	60		4	
8/3/2012	47	60		4	
8/4/2012	46	59		4	
8/5/2012	48	61		4	
8/6/2012	45	58		4	
8/7/2012	51	64		4	
8/8/2012	49	62		4	
8/9/2012	46	59		4	
8/10/2012	59	72		4	
8/11/2012	51	64		4	1.5
8/12/2012	44	58		5	
8/13/2012	44	57		5	
8/14/2012	43	56		5	
8/15/2012	58	71		5	
8/16/2012	44	57		4	
8/17/2012	43	56		5	
8/18/2012	45	58		5	
8/19/2012	45	58		4	
8/20/2012	45	58		5	
8/21/2012	44	57		5	
8/22/2012	44	57		5	
8/23/2012	44	57		5	
8/24/2012	48	61		4	
8/25/2012	48	61		4	
8/26/2012	45	58		4	
8/27/2012	45	58		4	
8/28/2012	45	58		5	
8/29/2012	47	60		4	
8/30/2012	47	60		4	
8/31/2012	47	60		4	

Total

135