

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

(See Instructions on Reverse Side)

Type Test:

Open Flow **AST**  
 Deliverability

Test Date:  
9/28/2011

API No. 15  
023-20630-00 -00

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 <input type="checkbox"/>	
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide		% Nitrogen	
Vertical Depth(H) 1417'		Pressure Taps Flange		Gas Gravity - G <sub>g</sub> .6	
Pressure Buildup: Shut In 9-27 20 11 at 10:40 (AM) (PM) Taken 9-28 20 11 at 10:55 (AM) (PM)					
Well on Line: Started 9-28 20 11 at 10:55 (AM) (PM) Taken 9-29 20 11 at 11:40 (AM) (PM)					

### OBSERVED SURFACE DATA

Duration of Shut-in 24 Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one: Meter or 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>i</sub> ) or (P <sub>e</sub> )		Tubing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>i</sub> ) or (P <sub>e</sub> )		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-in						99	113.4				
Flow						53	67.4			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>t</sub>	Deviation Factor F <sub>dv</sub>	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G <sub>m</sub>
						10		

### (OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P<sub>e</sub>)<sup>2</sup> = \_\_\_\_\_ : (P<sub>w</sub>)<sup>2</sup> = \_\_\_\_\_ : P<sub>d</sub> = \_\_\_\_\_ % (P<sub>e</sub> - 14.4) + 14.4 = \_\_\_\_\_ : (P<sub>e</sub>)<sup>2</sup> = 0.207  
(P<sub>d</sub>)<sup>2</sup> = \_\_\_\_\_

(P <sub>e</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup> or (P <sub>e</sub> ) <sup>2</sup> - (P <sub>d</sub> ) <sup>2</sup>	(P <sub>e</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup>	Choose formula 1 or 2: 1. P <sub>e</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> 2. P <sub>e</sub> <sup>2</sup> - P <sub>d</sub> <sup>2</sup> divided by: P <sub>e</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>	LOG of formula 1. or 2. and divide by: $\frac{P_e^2 - P_w^2}{P_e^2 - P_d^2}$	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 28 day of December, 20 11.

\_\_\_\_\_  
Witness (if any)

*Samuel Geis*  
\_\_\_\_\_  
For Company

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

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

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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: 12/28/11

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.

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W365

R. Walter 33-21

St. Francis

St. Francis

None

September-11

DATE	Casing			HRS DOWN	REMARKS (Maximum length 110 characters)
	PSI	STATIC	MCF		
9/1/2011	55	68	10	0	
9/2/2011	54	68	10	0	
9/3/2011	54	68	10	0	
9/4/2011	55	68	10	0	
9/5/2011	55	67	10	0	
9/6/2011	54	67	10	0	
9/7/2011	55	67	10	0	
9/8/2011	55	68	10	0	
9/9/2011	55	68	10	0	
9/10/2011	54	67	10	0	
9/11/2011	53	67	10	0	
9/12/2011	55	68	10	0	
9/13/2011	54	67	10	0	
9/14/2011	53	67	10	0	
9/15/2011	53	67	10	0	
9/16/2011	54	66	10	0	
9/17/2011	54	67	10	0	
9/18/2011	53	66	10	0	
9/19/2011	54	66	10	0	
9/20/2011	53	67	10	0	
9/21/2011	54	66	10	0	
9/22/2011	53	66	10	0	
9/23/2011	54	66	10	0	
9/24/2011	53	66	10	0	
9/25/2011	54	67	10	0	
9/26/2011	54	67	10	0	
9/27/2011	53	66	10	0	
9/28/2011	99	66	0	24	si for state test
9/29/2011	51	66	9	0	
9/30/2011	52	65	10	0	
10/1/2011	0	0	0	0	

Total

289

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R. Walter 33-21

St. Francis

St. Francis

None

October-11

DATE	Casing			HRS DOWN	REMARKS (Maximum length 110 characters)
	PSI	STATIC	MCF		
10/1/2011	53	66	10	0	
10/2/2011	54	67	10	0	
10/3/2011	54	67	10	0	
10/4/2011	54	67	10	0	
10/5/2011	54	67	10	0	
10/6/2011	53	66	10	0	
10/7/2011	55	68	10	0	
10/8/2011	54	67	10	0	
10/9/2011	54	67	10	0	
10/10/2011	55	67	10	0	
10/11/2011	56	72	9	0	
10/12/2011	53	67	10	0	
10/13/2011	51	65	10	0	
10/14/2011	51	66	10	0	
10/15/2011	52	65	10	0	
10/16/2011	52	66	10	0	
10/17/2011	52	65	10	0	
10/18/2011	52	65	10	0	
10/19/2011	52	69	10	0	
10/20/2011	53	67	10	0	
10/21/2011	54	66	10	0	
10/22/2011	54	66	10	0	
10/23/2011	54	66	10	0	
10/24/2011	54	66	10	0	
10/25/2011	53	66	10	0	
10/26/2011	52	66	10	0	
10/27/2011	68	66	10	0	
10/28/2011	66	66	10	0	
10/29/2011	52	66	10	0	
10/30/2011	53	66	10	0	
10/31/2011	52	65	10	0	

Total

309

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W365

R/Walter 33-21

St. Francis

St. Francis

None

November-11

DATE	Casing			HRS DOWN	REMARKS (Maximum length 110 characters)
	PSI	STATIC	MCF		
11/1/2011	53	65	10	0	
11/2/2011	52	65	10	0	
11/3/2011	53	65	10	0	
11/4/2011	52	65	10	0	
11/5/2011	52	65	10	0	
11/6/2011	52	65	10	0	
11/7/2011	57	65	10	0	
11/8/2011	52	67	9	0	
11/9/2011	57	65	10	0	
11/10/2011	61	65	9	0	
11/11/2011	52	65	10	0	
11/12/2011	51	65	10	0	
11/13/2011	52	65	10	0	
11/14/2011	52	65	10	0	
11/15/2011	50	63	10	0	
11/16/2011	56	63	10	0	
11/17/2011	65	64	9	0	
11/18/2011	51	64	10	0	
11/19/2011	50	64	9	0	
11/20/2011	49	65	9	0	
11/21/2011	51	64	9	0	
11/22/2011	52	64	9	0	
11/23/2011	53	64	9	0	
11/24/2011	53	64	9	0	
11/25/2011	52	64	9	0	
11/26/2011	52	64	9	0	
11/27/2011	51	64	9	0	
11/28/2011	51	64	9	0	
11/29/2011	51	64	9	0	
11/30/2011	51	64	9	0	
12/1/2011	0	0	0	0	

Total

285

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