

# KANSAS CORPORATION COMMISSION

## ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

(See Instructions on Reverse Side)

Type Test:

Open Flow **ASC**

Deliverability

Test Date:  
9/7/2011

API No. 15  
023-20683-00 - **00**

Company Rosewood Resources, Inc.		Lease Ella Mae		Well Number 32-04	
County Cheyenne	Location SWNE	Section 4	TWP 3S	RNG (E/W) 42W	Acres Attributed
Field Cherry Creek		Reservoir Niobrara		Gas Gathering Connection Branch Systems Inc.	
Completion Date 2/14/2007		Plug Back Total Depth 1867'		Packer Set at	
Casing Size 4 1/2"	Weight 10.5#	Internal Diameter	Set at 1867'	Perforations 1604'	To 1632'
Tubing Size <b>NONE</b> 2 3/8"	Weight	Internal Diameter	Set at 1656'	Perforations	To
Type Completion (Describe) Single (Conventional)		Type Fluid Production Dry Gas		Pump Unit or Traveling Plunger? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide		% Nitrogen	
Vertical Depth(H) 1874'		Pressure Taps Flange		Gas Gravity - G <sub>g</sub> .6 (Meter Run) (Prover) Size 2"	
Pressure Buildup:	Shut in 9-6	20 11	at 1:10	(AM) <input checked="" type="checkbox"/> (PM)	Taken 9-7
Well on Line:	Started 9-7	20 11	at 1:25	(AM) <input checked="" type="checkbox"/> (PM)	Taken 9-8

### 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>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						105	119.4				
Flow						32	46.4			24	0

### FLOW STREAM ATTRIBUTES

Plate Coefficient (F <sub>s</sub> ) (F <sub>v</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>
						11		

### (OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P<sub>s</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>s</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>s</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 28 day of December, 20 11.

Witness (if any)

For Commission

*Jannell Grew*  
For Company

Checked by

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APR 24 2012

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 Ella Mae 32-04 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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W2425  
 Ella Mae 32-04  
 West St. Francis  
 St. Francis  
 None  
 September-11

DATE	Tubing Casing		STATIC MCF	SPM	CYCLE	HRS DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
	PSI	PSI						
9/1/2011		32	45	11	7.5	8	13	
9/2/2011		34	47	11	7.5	8	14	
9/3/2011		32	45	11	7.5	8	13	
9/4/2011		33	46	11	7.5	8	12	
9/5/2011		33	46	11	7.5	8	13	
9/6/2011		31	44	11	7.5	8	14	shut well into do state test
9/7/2011	105		41	0	7.5	0	24	0 opened well didn't start pumping unit hp
9/8/2011		33	46	10	7.5	8	4	started pumping unit
9/9/2011		34	47	11	7.5	8	14	bucket test 4 min
9/10/2011		32	45	11	7.5	8	13	
9/11/2011		32	45	11	7.5	8	12	
9/12/2011		32	45	11	7.5	8	13	
9/13/2011		32	45	11	7.5	8	12	
9/14/2011		32	45	11	7.5	8	13	
9/15/2011		30	43	11	7.5	8	14	
9/16/2011		31	44	11	7.5	8	15	
9/17/2011		30	43	11	7.5	8	16	
9/18/2011		31	44	11	7.5	8	17	
9/19/2011		31	44	11	7.5	8	14	
9/20/2011		29	42	11	7.5	8	15	
9/21/2011		29	42	11	7.5	8	16	
9/22/2011		29	42	11	7.5	8	14	bucket test 4 min and greased
9/23/2011		32	45	11	7.5	8	13	
9/24/2011		31	44	11	7.5	8	12	
9/25/2011		31	44	11	7.5	8	13	
9/26/2011		32	45	11	7.5	8	14	
9/27/2011		32	45	11	7.5	8	14	bucket test 4 min
9/28/2011		33	46	11	7.5	8	13	
9/29/2011		33	46	11	7.5	8	12	
9/30/2011		32	45	11	7.5	8	13	
10/1/2011								

Total

318

385

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W2425  
 Ella Mae 32-04  
 West St. Francis  
 St. Francis  
 None  
 October-11

DATE	Tubing Casing				HRS	Water	REMARKS (Maximum length 110 characters)	
	PSI	PSI	STATIC MCF	SPM				CYCLE DOWN
10/1/2011		32	44	11	7.5	8	0	14
10/2/2011		32	44	11	7.5	8	0	13
10/3/2011		32	44	11	7.5	8	0	12
10/4/2011		31	44	11	7.5	8	0	13
10/5/2011		31	44	11	7.5	8	0	14
10/6/2011		33	48	11	7.5	8	0	14 bucket test 4 min
10/7/2011		37	47	11	7.5	8	0	13
10/8/2011		37	45	11	7.5	8	0	12
10/9/2011		32	45	11	7.5	8	0	13
10/10/2011		32	45	11	7.5	8	0	14
10/11/2011		51	72	10	7.5	8	0	13
10/12/2011		32	46	11	7.5	12	0	21 bucket test 4 min
10/13/2011		33	44	11	7.5	12	0	20
10/14/2011		32	45	11	7.5	12	0	19
10/15/2011		31	45	11	7.5	8	0	22
10/16/2011		33	46	11	7.5	8	0	18
10/17/2011		32	45	11	7.5	8	0	18
10/18/2011		36	45	11	7.5	8	0	19
10/19/2011		34	46	11	7.5	8	0	20
10/20/2011		33	45	11	7.5	8	0	21 bucket test 4 min
10/21/2011		32	44	11	7.5	8	0	20
10/22/2011		32	44	11	7.5	8	0	19
10/23/2011		32	44	11	7.5	8	0	20
10/24/2011		31	45	11	7.5	8	0	21
10/25/2011		32	44	11	7.5	8	0	21 bucket test 4 min
10/26/2011		31	46	11	7.5	8	0	20
10/27/2011		32	45	12	7.5	8	0	19
10/28/2011		32	44	11	7.5	8	0	21
10/29/2011		32	44	11	7.5	8	0	22
10/30/2011		31	43	11	7.5	8	0	21
10/31/2011		29	43	11	7.5	8	0	21

Total

341

548

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 KCC WICHITA

W2425  
 Ella Mae 32-04  
 West St. Francis  
 St. Francis  
 None  
 November-11

DATE	Tubing Casing					HRS	Water	REMARKS (Maximum length 110 characters)
	PSI	PSI	STATIC	MCF	SPM			
11/1/2011		46	62	10	7.5	8	0	19
11/2/2011		44	42	11	7.5	8	0	20
11/3/2011		29	43	12	7.5	8	0	21 bucket test 4 min
11/4/2011		30	42	11	7.5	8	0	22
11/5/2011		30	43	10	7.5	8	0	21
11/6/2011		31	42	10	7.5	8	0	23
11/7/2011		30	43	10	7.5	8	0	22
11/8/2011		30	47	11	7.5	8	0	21
11/9/2011		31	44	11	7.5	8	0	21 bucket test 4 min
11/10/2011		28	43	12	7.5	8	0	22
11/11/2011		29	41	10	7.5	8	0	23
11/12/2011		29	41	10	7.5	8	0	20
11/13/2011		29	41	10	7.5	8	0	19
11/14/2011		29	41	10	7.5	8	0	21
11/15/2011		33	52	10	7.5	8	0	18
11/16/2011		29	42	11	7.5	8	0	19
11/17/2011		28	42	10	7.5	8	0	21 bucket test 4 min
11/18/2011		28	42	10	7.5	8	0	21
11/19/2011		28	42	10	7.5	8	0	23
11/20/2011		28	43	11	7.5	8	0	22
11/21/2011		30	43	11	7.5	8	0	21
11/22/2011		30	44	12	7.5	8	0	21 bucket test 4 min
11/23/2011		29	44	10	7.5	8	0	19
11/24/2011		29	44	10	7.5	8	0	20
11/25/2011		28	43	10	7.5	8	0	19
11/26/2011		29	43	10	7.5	8	0	20
11/27/2011		30	43	10	7.5	8	0	19
11/28/2011		29	43	10	7.5	8	0	18
11/29/2011		29	43	10	7.5	8	0	19
11/30/2011		28	43	10	7.5	8	0	20
12/1/2011		0	0	0	0	0	0	0

Total

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