

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

Type Test:

(See Instructions on Reverse Side)

- Open Flow **AST**  
 Deliverability

Test Date:  
9/7/2011

API No. 15  
023-20535-00 -00

Company Rosewood Resources, Inc.		Lease Ella Mae		Well Number 3-3	
County Cheyenne	Location SENW	Section 3	TWP 3S	RNG (E/W) 42W	Acres Attributed 80
Field Cherry Creek		Reservoir Niobrara		Gas Gathering Connection Branch Systems Inc.	
Completion Date 7-15-2004		Plug Back Total Depth 1741'		Packer Set at	
Casing Size 4 1/2"	Weight 10.5#	Internal Diameter 4.052	Set at 1746'	Perforations 1548'	To 1582'
Tubing Size <b>NONE</b> ? 2 3/8"	Weight	Internal Diameter	Set at 1615'	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 .6	
Vertical Depth(H) 1582'		Pressure Taps Flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in 9-6 20 11 at 11:35 (AM) (PM)		Taken 9-7 20 11 at 11:45 (AM) (PM)			
Well on Line: Started 9-7 20 11 at 11:45 (AM) (PM)		Taken 9-8 20 11 at 1:35 (AM) (PM)			

### 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>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						121	135.4				
Flow						40	54.4			24	0

### FLOW STREAM ATTRIBUTES

Plate Coefficient (F <sub>d</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>pv</sub>	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G <sub>m</sub>
						33		

### (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: $\frac{P_c^2 - P_w^2}{P_c^2 - P_a^2}$	Backpressure Curve Slope = "n" ----- Assigned Standard Slope	n x LOG $\left[ \frac{P_c^2 - P_w^2}{P_c^2 - P_a^2} \right]$	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

For Company

Checked by

*Small Curve*

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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.

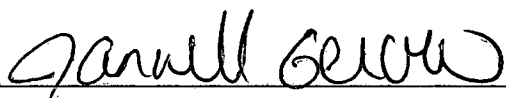
I hereby request a one-year exemption from open flow testing for the Eli Mae 3-3 gas well on the grounds that said well:

(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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Ella Mae 3-3

West St. Francis

St. Francis

Pumping Unit/Elec

September-11

DATE	Tubing Casing				HRS	Water	REMARKS (Maximum length 110 characters)	
	PSI	PSI	STATIC MCF	SPM				CYCLE DOWN
9/1/2011		38	51	27	6	12	16	
9/2/2011		37	50	27	6	12	17	
9/3/2011		37	50	28	6	12	18	
9/4/2011		37	50	28	6	12	17	
9/5/2011		37	50	27	6	12	16	
9/6/2011		32	45	28	6	6	17	shut well into do state test
9/7/2011		121	45	0	6	0	24	0 opened well didn't start pumping unit hp
9/8/2011		38	51	37	6	6		8 started pumping unit
9/9/2011		39	52	32	6	12	17	
9/10/2011		40	53	33	6	12	18	
9/11/2011		40	53	33	6	12	17	
9/12/2011		40	53	33	6	12	16	
9/13/2011		39	52	33	6	12	18	
9/14/2011		38	51	33	6	12	17	
9/15/2011		37	50	33	6	12	17	
9/16/2011		38	51	33	6	12	16	
9/17/2011		37	50	33	6	12	15	
9/18/2011		37	50	33	6	12	17	
9/19/2011		38	51	33	6	12	16	
9/20/2011		36	49	33	6	12	17	
9/21/2011		40	53	33	6	12	16	
9/22/2011		39	52	33	6	12	17	bucket test 5 min and greased
9/23/2011		39	52	33	6	12	16	
9/24/2011		38	51	33	6	12	15	
9/25/2011		38	51	33	6	12	16	
9/26/2011		39	52	33	6	12	17	
9/27/2011		40	53	33	6	12	17	bucket test 5 min
9/28/2011		41	54	33	6	12	16	
9/29/2011		39	52	33	6	12	15	
9/30/2011		38	51	33	6	12	16	
10/1/2011								

Total

927

471

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Ella Mae 3-3

West St. Francis

St. Francis

Pumping Unit/Elec

October-11

DATE	Tubing Casing		STATIC	MCF	SPM	CYCLE	HRS	DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
	PSI	PSI								
10/1/2011		39	51	33	6	12	0	16		
10/2/2011		38	51	32	6	12	0	17		
10/3/2011		38	51	32	6	12	0	16		
10/4/2011		37	51	32	6	12	0	15		
10/5/2011		37	51	32	6	12	0	16		
10/6/2011		40	54	32	6	12	0	17	bucket test 5 min	
10/7/2011		43	53	32	6	12	0	16		
10/8/2011		43	52	32	6	12	0	15		
10/9/2011		39	52	32	6	12	0	16		
10/10/2011		39	51	32	6	12	0	17		
10/11/2011		37	74	31	6	12	0	15		
10/12/2011		37	56	32	6	12	0	16	bucket test 5.5 min	
10/13/2011		40	51	32	6	12	0	15		
10/14/2011		38	51	32	6	12	0	16		
10/15/2011		37	51	32	6	12	0	17		
10/16/2011		38	52	32	6	12	0	14		
10/17/2011		38	51	32	6	12	0	14		
10/18/2011		41	51	31	6	12	0	15		
10/19/2011		43	52	31	6	12	0	16	bucket test 5.5 min	
10/20/2011		39	51	31	6	12	0	15		
10/21/2011		41	51	31	6	12	0	14		
10/22/2011		41	51	31	6	12	0	15		
10/23/2011		39	50	31	6	12	0	16		
10/24/2011		39	51	31	6	12	0	15		
10/25/2011		39	50	31	6	12	0	16	bucket test 5.5 min	
10/26/2011		37	52	31	6	12	0	15		
10/27/2011		38	51	31	6	12	0	14		
10/28/2011		38	50	31	6	12	0	16		
10/29/2011		38	50	31	6	12	0	17		
10/30/2011		37	50	31	6	12	0	17		
10/31/2011		34	50	31	6	12	0	16		

Total

978

485

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Ella Mae 3-3

West St. Francis

St. Francis

Pumping Unit/Elec

November-11

DATE	Tubing Casing		STATIC	MCF	SPM	CYCLE	HRS	DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
	PSI	PSI								
11/1/2011		49	64	31	6	12	0	14		
11/2/2011		47	51	31	6	12	0	15		
11/3/2011		35	49	32	6	12	0	16	bucket test 5.5 min	
11/4/2011		37	48	32	6	12	0	15		
11/5/2011		37	49	31	6	12	0	14		
11/6/2011		36	49	31	6	12	0	17		
11/7/2011		37	50	31	6	12	0	16		
11/8/2011		37	56	31	6	12	0	15		
11/9/2011		37	50	31	6	12	0	16	bucket test 5.5 min	
11/10/2011		34	49	31	6	12	0	15		
11/11/2011		36	48	31	6	12	0	16		
11/12/2011		34	48	31	6	12	0	17		
11/13/2011		34	48	31	6	12	0	14		
11/14/2011		35	48	31	6	12	0	16		
11/15/2011		38	54	31	6	12	0	14		
11/16/2011		35	51	31	6	12	0	15		
11/17/2011		35	50	36	6	12	0	16	bucket test 5.5 min	
11/18/2011		33	49	33	6	12	0	16		
11/19/2011		33	48	31	6	12	0	17		
11/20/2011		33	49	31	6	12	0	16		
11/21/2011		36	50	33	6	12	0	15		
11/22/2011		36	50	32	6	12	0	16	bucket test 5.5 min	
11/23/2011		35	50	31	6	12	0	15		
11/24/2011		35	50	31	6	12	0	16		
11/25/2011		34	50	31	6	12	0	15		
11/26/2011		35	50	31	6	12	0	16		
11/27/2011		37	49	30	6	12	0	15		
11/28/2011		35	50	32	6	12	0	14		
11/29/2011		35	49	31	6	12	0	15		
11/30/2011		34	49	31	6	12	0	16		
12/1/2011		0	0	0	0	0	0	0		

Total

942

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