

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

(See Instructions on Reverse Side)

Type Test:

Open Flow  **SI**  
 Deliverability

Test Date:  
5/13/2008

API No. 15  
023-20636-0000

Company: Rosewood Resources, Inc.      Lease: Ella Mae      Well Number: 22-04

County: Cheyenne      Location: SENW/4      Section: 4      TWP: 3S      RNG (E/W): 42W      Acres Attributed: \_\_\_\_\_

Field: Cherry Creek      Reservoir: Niobrara      Gas Gathering Connection: Branch Systems Inc.

Completion Date: 10/21/2005      Plug Back Total Depth: 1775'      Packer Set at: \_\_\_\_\_

Casing Size: 2 7/8"      Weight: 6.5#      Internal Diameter: 1775'      Set at: 1775'      Perforations: 1598'      To: 1632'

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  No  flowing

Producing Thru (Annulus / Tubing): Annulus      % Carbon Dioxide: \_\_\_\_\_      % Nitrogen: \_\_\_\_\_      Gas Gravity - G<sub>g</sub>: .6

Vertical Depth(H): 1632'      Pressure Taps: Flange      (Meter Run) (Prover) Size: 2"

Pressure Buildup: Shut in 5-13 20 08 at 12:30 (AM) (PM) Taken 5-14 20 08 at 1:00 (AM) (PM)

Well on Line: Started 5-14 20 08 at 1:00 (AM) (PM) Taken 5-15 20 08 at 1:45 (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						50	54.4				
Flow						260	274.4			24	0

### FLOW STREAM ATTRIBUTES

Plate Coefficient (F <sub>s</sub> ) (F <sub>a</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>
						4		

### (OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(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>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: $\frac{P_c^2 - P_a^2}{P_c^2 - P_w^2}$	Backpressure Curve Slope = "n" ----- or ----- Assigned Standard Slope	n x LOG [ ]	Antilog	Open Flow Deliverability Equals R x Antilog (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 10 day of December, 20 08

Witness (if any) \_\_\_\_\_ For Company *Trahn*

For Commission \_\_\_\_\_ Checked by \_\_\_\_\_

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WICHITA, KS

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 22-4 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: 12/10/08

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Signature: Wayne Graham  
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.

W434  
 Ella Mae 22-04  
 West St. Francis  
 St. Francis  
 None  
 May-08

DATE	Tubing PSI	Casing PSI	STATIC	MCF	HRS DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
5/1/2008			73		4	0	
5/2/2008			72		4	0	
5/3/2008			72		4	0	
5/4/2008			72		4	0	
5/5/2008			73		4	0	
5/6/2008			73		4	0	
5/7/2008			75		4	0	
5/8/2008			75		4	0	
5/9/2008			75		4	0	
5/10/2008			75		4	0	
5/11/2008			74		4	0	
5/12/2008			73		4	0	
5/13/2008			71		4	0	
5/14/2008		50	69		4	0	shut in for test
5/15/2008		260	76		0	0	open
5/16/2008			79		7	0	
5/17/2008			75		4	0	
5/18/2008			78		4	0	
5/19/2008			77		4	0	
5/20/2008			77		4	0	
5/21/2008			77		4	0	
5/22/2008		65	77		4	0	
5/23/2008			78		4	0	
5/24/2008			77		4	0	
5/25/2008			75		4	0	
5/26/2008			76		4	0	
5/27/2008			76		4	0	
5/28/2008			75		4	0	
5/29/2008			77		4	0	
5/30/2008			78		4	0	
5/31/2008			77		4	0	

Total

123

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W434

Ella Mae 22-04

West St. Francis

St. Francis

None

June-08

DATE	Tubing PSI	Casing PSI	STATIC	MCF	HRS DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
6/1/2008			77		4	0	
6/2/2008			77		4	0	
6/3/2008			77		4	0	
6/4/2008			76		4	0	
6/5/2008			76		4	0	
6/6/2008		60	75		4	0	
6/7/2008			78		4	0	
6/8/2008			76		4	0	
6/9/2008			75		4	0	
6/10/2008			76		4	0	
6/11/2008			79		4	0	
6/12/2008		65	78		4	0	
6/13/2008			78		4	0	
6/14/2008			79		4	0	
6/15/2008			79		4	0	
6/16/2008			78		4	0	
6/17/2008			76		4	0	
6/18/2008			77		4	0	
6/19/2008		60	76		4	0	
6/20/2008			76		4	0	
6/21/2008			76		4	0	
6/22/2008			75		4	0	
6/23/2008			77		4	0	
6/24/2008		60	76		4	0	
6/25/2008			76		4	0	
6/26/2008			76		4	0	
6/27/2008			75		4	0	
6/28/2008			75		4	0	
6/29/2008			75		4	0	
6/30/2008			75		4	0	
7/1/2008						0	

Total

120

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W434  
 Ella Mae 22-04  
 West St. Francis  
 St. Francis  
 None  
 July-08

DATE	Tubing PSI	Casing PSI	STATIC MCF	HRS DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
7/1/2008			75	4	0	
7/2/2008		65	79	4	0	
7/3/2008			77	4	0	
7/4/2008			77	4	0	
7/5/2008			82	4	0	
7/6/2008			85	4	0	
7/7/2008		70	83	4	0	
7/8/2008			81	4	0	
7/9/2008			78	4	0	
7/10/2008			81	4	0	
7/11/2008			90	4	0	
7/12/2008			83	4	0	
7/13/2008			80	4	0	
7/14/2008		100	112	4	11	
7/15/2008			121	0	0	
7/16/2008			101	6	0	
7/17/2008			85	4	0	
7/18/2008			117	4	0	
7/19/2008			67	4	3	
7/20/2008			74	4	0	
7/21/2008		65	78	4	0	
7/22/2008			81	4	0	
7/23/2008			82	4	0	
7/24/2008			87	4	4	
7/25/2008			87	4	0	
7/26/2008			81	4	0	
7/27/2008			63	4	0	
7/28/2008			71	4	0	
7/29/2008		67	80	4	0	
7/30/2008			168	4	0	
7/31/2008			82	3	5	

Total

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