

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

(See Instructions on Reverse Side)

Type Test:

Open Flow **EST**  
 Deliverability

Test Date:  
8/19/2011

API No. 15  
023-20561-00 - 00

Company Rosewood Resources, Inc.		Lease Zimbelman		Well Number 1-24	
County Cheyenne	Location NESW	Section 24	TWP 3S	RNG (E/W) 41W	Acres Attributed 80
Field Cherry Creek		Reservoir Niobrara		Gas Gathering Connection Branch Systems Inc.	
Completion Date 9-10-2004		Plug Back Total Depth 1496'		Packer Set at	
Casing Size 4 1/2"	Weight 10.5#	Internal Diameter 4.052	Set at 1539'	Perforations 1326'	To 1364'
Tubing Size <b>NONE 2 3/8"</b>	Weight	Internal Diameter <b>1420'</b>	Set at	Perforations	To
Type Completion (Describe) Single (Conventional)		Type Fluid Production Dry Gas		Pump Unit or Traveling Plunger? <input checked="" type="radio"/> Yes / No Pumping Unit	
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide		% Nitrogen	
Vertical Depth(H) 1364'		Pressure Taps Flange		Gas Gravity - G <sub>g</sub> .6 (Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in <u>8-18</u> 20 <u>11</u> at <u>9:10</u> <input checked="" type="radio"/> (AM) (PM) Taken <u>8-19</u> 20 <u>11</u> at <u>9:25</u> <input checked="" type="radio"/> (AM) (PM)					
Well on Line: Started <u>8-19</u> 20 <u>11</u> at <u>9:25</u> <input checked="" type="radio"/> (AM) (PM) Taken <u>8-20</u> 20 <u>11</u> at <u>10:10</u> <input checked="" type="radio"/> (AM) (PM)					

### OBSERVED SURFACE DATA

Duration of Shut-In 24 Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one: Meter or 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>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						67	81.4				
Flow						62	76.4			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>sv</sub>	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G <sub>m</sub>
						48		

### (OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P<sub>o</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>o</sub>)<sup>2</sup> = 0.207 ; (P<sub>o</sub>)<sup>2</sup> = \_\_\_\_\_

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

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

Jannell Gerwe  
For Company

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

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

RECEIVED  
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.

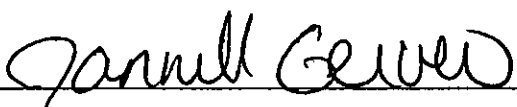
I hereby request a one-year exemption from open flow testing for the Zimbelman 1-24 gas well on the grounds that said well:

(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.

RECEIVED  
APR 24 2012  
KCC WICHITA

W380

Zimbelman-01-24

St. Francis

St. Francis

None

August-11

DATE	Tubing Casing		STATIC MCF	SPM	HRS	CYCLE DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
	PSI	PSI						
8/1/2011	62	76	50	6.5	6	0	9	
8/2/2011	62	76	50	6.5	6	0	10	
8/3/2011	62	75	50	6.5	6	0	8	
8/4/2011	63	76	50	6.5	6	0	8	5 min bt greased
8/5/2011	62	75	50	6.5	6	0	9	
8/6/2011	62	76	50	6.5	6	0	11	
8/7/2011	62	76	50	6.5	6	0	7	
8/8/2011	61	75	50	6.5	6	0	10	
8/9/2011	59	74	50	6.5	6	0	8	5 min bt
8/10/2011	59	73	50	6.5	6	0	9	
8/11/2011	80	87	46	6.5	3	0	3	pu off high fp
8/12/2011	91	99	39	6.5	0	0	0	
8/13/2011	80	93	48	6.5	0	0	0	
8/14/2011	87	100	40	6.5	0	0	0	
8/15/2011	87	101	42	6.5	0	0	0	
8/16/2011	63	79	50	6.5	3	0	4	restart pu
8/17/2011	110	97	22	6.5	3	5	4	pu off high fp
8/18/2011	62	91	40	6.5	0	4	0	pu off squeeze well SI
8/19/2011	67	83	0	6.5	3	24	4	reopen well restart pu
8/20/2011	62	76	52	6.5	6	0	8	
8/21/2011	61	74	49	6.5	6	0	6	
8/22/2011	60	74	46	6.5	6	0	9	5 min bt
8/23/2011	68	77	47	6.5	6	0	8	
8/24/2011	65	72	47	6.5	6	0	10	
8/25/2011	63	76	47	6.5	6	0	9	
8/26/2011	61	76	48	6.5	6	0	9	
8/27/2011	62	74	48	6.5	6	0	8	
8/28/2011	62	75	48	6.5	6	0	9	
8/29/2011	62	75	48	6.5	6	0	10	
8/30/2011	62	75	48	6.5	6	0	8	5.5 min bt
8/31/2011	62	75	48	6.5	6	0	8	

Total

1403

206

RECEIVED  
APR 24 2012  
KCC WICHITA

W380  
 Zimbéman:01:24  
 St. Francis  
 St. Francis  
 None  
 September-11

DATE	Tubing Casing				HRS	Water	REMARKS (Maximum length 110 characters)	
	PSI	PSI	STATIC MCF	SPM				CYCLE DOWN
9/1/2011		63	75	48	6.5	6	0	8
9/2/2011		62	76	48	6.5	6	0	9
9/3/2011		62	75	48	6.5	6	0	10
9/4/2011		62	75	48	6.5	6	0	9
9/5/2011		62	75	48	6.5	6	0	8
9/6/2011		61	75	48	6.5	6	0	7
9/7/2011		64	75	48	6.5	6	0	9 5 min bt
9/8/2011		63	75	48	6.5	6	0	7
9/9/2011		63	75	48	6.5	6	0	8
9/10/2011		62	75	48	6.5	6	0	9
9/11/2011		62	75	48	6.5	6	0	8
9/12/2011		63	75	48	6.5	6	0	9
9/13/2011		61	75	49	6.5	6	0	9 5 min bt
9/14/2011		62	75	48	6.5	6	0	8
9/15/2011		61	75	49	6.5	6	0	10
9/16/2011		62	75	48	6.5	6	0	11
9/17/2011		61	74	48	6.5	6	0	7
9/18/2011		61	74	48	6.5	6	0	9
9/19/2011		62	74	48	6.5	6	0	10
9/20/2011		61	74	48	6.5	6	0	8 5.5 min bt
9/21/2011		62	74	48	6.5	6	0	9
9/22/2011		61	74	49	6.5	6	0	7
9/23/2011		61	74	49	6.5	6	0	8
9/24/2011		62	74	48	6.5	6	0	7
9/25/2011		62	75	48	6.5	6	0	6
9/26/2011		62	74	48	6.5	6	0	6
9/27/2011		58	73	49	6.5	6	0	8 5.5 min bt
9/28/2011		63	71	49	6.5	6	0	7
9/29/2011		58	71	49	6.5	6	0	9
9/30/2011		59	72	48	6.5	6	0	6
10/1/2011		0	0	0	0	0	0	0

Total

1447

246

RECEIVED  
 APR 24 2012  
 KCC WICHITA

W380

Zimbelman 01-24

St. Francis

St. Francis

None

October-11

DATE	Tubing PSI	Casing PSI	STATIC	MCF	SPM	HRS CYCLE DOWN	Water BLS	REMARKS (Maximum length 110 characters)
10/1/2011		61	74	48	6.5	6	0	8
10/2/2011		63	76	48	6.5	6	0	10
10/3/2011		62	75	49	6.5	6	0	6
10/4/2011		62	75	49	6.5	6	0	9
10/5/2011		61	75	49	6.5	6	0	8 5.25 min bt
10/6/2011		60	74	48	6.5	6	0	10
10/7/2011		62	76	49	6.5	6	0	9
10/8/2011		62	75	49	6.5	6	0	8
10/9/2011		62	75	48	6.5	6	0	9
10/10/2011		62	78	46	6.5	6	0	8
10/11/2011		61	77	50	6.5	6	0	8 5.25 min bt greased
10/12/2011		61	73	49	6.5	6	0	7
10/13/2011		58	72	48	6.5	6	0	9
10/14/2011		58	72	49	6.5	6	0	6
10/15/2011		58	72	48	6.5	6	0	9
10/16/2011		59	73	48	6.5	6	0	10
10/17/2011		59	73	48	6.5	6	0	7
10/18/2011		62	75	47	6.5	6	0	8
10/19/2011		62	75	49	6.5	6	0	6
10/20/2011		61	74	49	6.5	6	0	9 5 min bt
10/21/2011		61	74	48	6.5	6	0	6
10/22/2011		62	75	48	6.5	6	0	5
10/23/2011		62	74	48	6.5	6	0	4
10/24/2011		61	74	48	6.5	6	0	9
10/25/2011		61	74	48	6.5	6	0	10
10/26/2011		61	74	48	6.5	6	0	8
10/27/2011		60	73	48	6.5	6	0	9 5 min bt
10/28/2011		60	73	48	6.5	6	0	7
10/29/2011		61	73	48	6.5	6	0	11
10/30/2011		60	73	48	6.5	6	0	10
10/31/2011		60	73	48	6.5	6	0	8

Total

1496

251

RECEIVED  
APR 24 2012  
KCC WICHITA