

# KANSAS CORPORATION COMMISSION

## ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

(See Instructions on Reverse Side)

Type Test:

Open Flow **ASE**  
 Deliverability

Test Date:  
8/10/2011

API No. 15  
023-20606-00 - ∞

Company Rosewood Resources, Inc.		Lease Miller		Well Number 2-13	
County Cheyenne	Location NW SW/4	Section 13	TWP 3S	RNG (E/W) 41W	Acres Attributed 80
Field Cherry Creek		Reservoir Niobrara		Gas Gathering Connection Branch Systems Inc.	
Completion Date 7/11/2005		Plug Back Total Depth 1464'		Packer Set at	
Casing Size 4 1/2"	Weight 10.5#	Internal Diameter 4.052	Set at 1464'	Perforations 1270'	To 1302'
Tubing Size <b>NONE 2 3/8"</b>	Weight	Internal Diameter	Set at <b>1342'</b>	Perforations	To
Type Completion (Describe) Single (Conventional)		Type Fluid Production Dry Gas		Pump Unit or Traveling Plunger? <input checked="" type="radio"/> No Pumping Unit	
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide		% Nitrogen	
Vertical Depth(H) 1302'		Pressure Taps Flange		Gas Gravity - G <sub>g</sub> .6 (Meter Run) (Prover) Size 2"	
Pressure Bulldup: Shut In <u>8-9</u> 20 <u>11</u> at <u>8:45</u> (AM)(PM) Taken <u>8-10</u> 20 <u>11</u> at <u>9:00</u> (AM)(PM)		Well on Line: Started <u>8-10</u> 20 <u>11</u> at <u>9:00</u> (AM)(PM) Taken <u>8-11</u> 20 <u>11</u> at <u>9:45</u> (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						53	67.4				
Flow						57	81.4			24	

### 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>ev</sub>	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G <sub>m</sub>
						31		

### (OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P<sub>e</sub>)<sup>2</sup> = \_\_\_\_\_ : (P<sub>w</sub>)<sup>2</sup> = \_\_\_\_\_ : P<sub>g</sub> = \_\_\_\_\_ % (P<sub>e</sub> - 14.4) + 14.4 = \_\_\_\_\_ : (P<sub>w</sub>)<sup>2</sup> = 0.207  
(P<sub>e</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>g</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>g</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: $\frac{P_e^2 - P_w^2}{P_e^2 - P_w^2}$	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)  
\_\_\_\_\_  
For Commission

\_\_\_\_\_  
*Arnold Geved*  
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 Miller 2-13 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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W358  
 Miller 2-13  
 St. Francis  
 St. Francis  
 None  
 August-11  
 FloBoss

DATE	Tubing Casing		STATIC MCF	SPM	CYCLE DOWN	HRS	Water BBLs	REMARKS (Maximum length 110 characters)
	PSI	PSI						
8/1/2011		59	72	35	6	8	13	
8/2/2011		58	71	35	6	8	14	
8/3/2011		59	72	35	6	8	16	3.5 min bt
8/4/2011		58	71	36	6	4	7	pu off water leak
8/5/2011		57	70	32	6	0	0	pu off water leak
8/6/2011		58	71	30	6	0	0	pu off water leak
8/7/2011		57	70	28	6	0	0	pu off water leak
8/8/2011		57	70	28	6	4	7	restart pu
8/9/2011		57	70	30	6	4	7	squeezed pu off 4 min bt, SI
8/10/2011		53	66	0	6	4	24	7 open well restart pu
8/11/2011		68	81	6	6	8	14	
8/12/2011		89	102	34	6	4	7	pu off high fp
8/13/2011		76	89	31	6	0	0	
8/14/2011		74	87	29	6	0	0	
8/15/2011		84	97	28	6	0	0	
8/16/2011		58	71	28	6	4	7	restart pu
8/17/2011		101	114	25	6	4	5	7 pu off hfp
8/18/2011		56	69	28	6	4	4	7 restart pu
8/19/2011		64	77	26	6	4	1	14
8/20/2011		57	71	28	6	4	15	
8/21/2011		57	71	28	6	4	17	
8/22/2011		56	69	29	6	4	8	3.75 min bt
8/23/2011		78	91	29	6	4	9	
8/24/2011		54	67	29	6	4	7	
8/25/2011		58	71	30	6	4	6	
8/26/2011		57	70	30	6	4	6	
8/27/2011		58	71	30	6	4	7	
8/28/2011		57	70	31	6	4	8	
8/29/2011		57	70	31	6	4	9	
8/30/2011		58	71	31	6	4	7	4 min bt
8/31/2011		58	71	31	6	4	6	

Total

881

232

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 KCC WICHITA

W358

Miller 2-13

St. Francis

St. Francis

None

September-11

FloBoss

DATE	Tubing Casing		STATIC MCF	SPM	CYCLE	HRS DOWN	Water BLS	REMARKS (Maximum length 110 characters)
	PSI	PSI						
9/1/2011	58	71	32	6	4		6	
9/2/2011	58	71	32	6	4		7	
9/3/2011	58	71	32	6	4		8	
9/4/2011	58	71	32	6	4		6	
9/5/2011	57	70	33	6	4		7	
9/6/2011	57	70	33	6	4		6	4.75 min bt
9/7/2011	58	71	33	6	2		3	pu off water leak
9/8/2011	57	70	29	6	2		3	restart pu
9/9/2011	58	71	30	6	4		7	
9/10/2011	57	70	32	6	4		8	
9/11/2011	58	71	32	6	4		7	
9/12/2011	58	71	33	6	4		6	
9/13/2011	58	71	33	6	4		7	4 min bt
9/14/2011	58	71	33	6	4		9	
9/15/2011	57	70	33	6	4		5	
9/16/2011	57	70	33	6	4		7	
9/17/2011	57	70	33	6	4		8	
9/18/2011	57	70	33	6	4		6	
9/19/2011	58	71	33	6	4		8	
9/20/2011	57	70	33	6	4		7	4 min bt
9/21/2011	58	71	34	6	4		6	
9/22/2011	58	71	34	6	4		8	
9/23/2011	57	70	34	6	4		7	
9/24/2011	58	71	34	6	4		6	
9/25/2011	57	70	34	6	2		4	shut pumping unit off
9/26/2011	57	70	30	6	2		5	started pu
9/27/2011	54	67	30	6	4		7	
9/28/2011	61	74	33	6	4		8	3.75 min bt
9/29/2011	55	68	32	6	4		7	
9/30/2011	54	67	32	6	4		9	
10/1/2011								

Total

974

198

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APR 24 2012  
KCC WICHITA

W358  
 Miller-2-13  
 St. Francis  
 St. Francis  
 None  
 October-11  
 FloBoss

DATE	Tubing	Casing				HRS	Water	REMARKS Maximum length 110 characters
	PSI	PSI	STATIC	MCF	SPM	CYCLE DOWN	BLS	
10/1/2011		59	72	33	6	10	19	
10/2/2011		59	72	33	6	10	17	
10/3/2011		58	71	33	6	10	18	
10/4/2011		57	70	33	6	10	19	3.75 min bt
10/5/2011		56	69	33	6	10	20	
10/6/2011		58	71	33	6	10	17	
10/7/2011		59	72	34	6	10	18	
10/8/2011		57	70	34	6	10	19	
10/9/2011		58	71	34	6	10	20	
10/10/2011		58	71	34	6	10	18	4 min bt greased
10/11/2011		57	70	34	6	10	21	
10/12/2011		55	68	34	6	10	19	
10/13/2011		60	73	34	6	10	18	
10/14/2011		56	69	34	6	10	17	
10/15/2011		57	70	34	6	10	19	
10/16/2011		56	69	34	6	10	16	
10/17/2011		56	69	34	6	10	18	
10/18/2011		59	72	34	6	10	19	
10/19/2011		59	72	34	6	10	20	
10/20/2011		56	69	34	6	10	17	3.25 min bt
10/21/2011		57	70	35	6	10	16	
10/22/2011		57	70	34	6	10	18	
10/23/2011		57	70	34	6	10	17	
10/24/2011		57	70	35	6	10	20	
10/25/2011		57	70	34	6	10	24	3 min bt
10/26/2011		56	69	34	6	10	23	
10/27/2011		56	69	34	6	10	21	
10/28/2011		56	69	34	6	10	24	
10/29/2011		56	69	34	6	10	23	
10/30/2011		56	69	35	6	10	22	
10/31/2011		56	69	35	6	10	23	

Total

1052

600

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