

# KANSAS CORPORATION COMMISSION

## ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

- Open Flow **ASL**  
 Deliverability

(See Instructions on Reverse Side)

Test Date:  
6/21/2013

API No. 15  
023-20659-0000

Company Rosewood Resources, Inc.		Lease Miller		Well Number 24-13	
County Cheyenne	Location SESW	Section 13	TWP 3S	RNG (E/W) 41W	Acres Attributed 80
Field Cherry Creek		Reservoir Niobrara		Gas Gathering Connection Branch Systems Inc.	
Completion Date 3/11/2006		Plug Back Total Depth 1347'		Packer Set at	
Casing Size 4 1/2"	Weight 10.5#	Internal Diameter 4.052	Set at 1350'	Perforations 1234'	To 1270'
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? <input checked="" type="radio"/> Yes / No Pumping Unit	
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide		% Nitrogen	
Vertical Depth(H) 1270'		Pressure Taps Flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in 6-20 20 13 at 8:35		(AM) (PM) Taken 6-21 20 13 at 8:50		(AM) (PM)	
Well on Line: Started 6-21 20 13 at 8:50		(AM) (PM) Taken 6-22 20 13 at 9:35		(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>t</sub> ) or (P <sub>c</sub> )		Tubing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>t</sub> ) or (P <sub>c</sub> )		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						178	192.4				
Flow						54	68.4			24	

### FLOW STREAM ATTRIBUTES

Plate Coefficient (F <sub>b</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>tt</sub>	Deviation Factor F <sub>pv</sub>	Metered Flow R (Mcf/d)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G <sub>m</sub>
						17		

### (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: $P_c^2 - P_w^2$	Backpressure Curve Slope = "n" ----- Assigned Standard Slope	n x LOG [ ]	Antilog	Open Flow Deliverability Equals R x Antilog (Mcf/d)

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.

RECEIVED  
KANSAS CORPORATION COMMISSION  
21 day of November, 2013

*Arnold Matney*  
For Company

Witness (if any) \_\_\_\_\_  
For Commission \_\_\_\_\_

DEC 26 2013  
CONSERVATION DIVISION  
WICHITA, KS

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

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 24-13 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: 11/21/13

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WICHITA, KS

Signature: *Jannul Martiney*

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.

W370  
 Miller 24-13  
 St. Francis  
 St. Francis  
 None  
 June-13  
 FloBoss

DATE	Casing PSI	STATIC MCF	SPM	HRS CYCLE DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
6/1/2013	43	56	16	6.5	13.5	19
6/2/2013	48	61	15	6.5	13.5	20
6/3/2013	46	59	16	6.5	13.5	21
6/4/2013	44	57	16	6.5	13.5	19
6/5/2013	50	63	16	6.5	13.5	18
6/6/2013	56	69	16	6.5	13.5	18 5.25 min bt
6/7/2013	53	66	16	6.5	13.5	19
6/8/2013	49	62	16	6.5	13.5	20
6/9/2013	52	65	16	6.5	13.5	17
6/10/2013	84	97	16	6.5	13.5	2 19
6/11/2013	73	86	16	6.5	7	1 9 pu off hfp
6/12/2013	71	84	16	6.5	0	0
6/13/2013	53	66	16	6.5	7	9 restart pu
6/14/2013	53	66	15	6.5	13.5	19
6/15/2013	58	71	15	6.5	13.5	18
6/16/2013	59	72	15	6.5	13.5	17
6/17/2013	54	67	15	6.5	7	9 pu off
6/18/2013	48	61	15	6.5	0	0
6/19/2013	45	58	15	6.5	0	0
6/20/2013	52	65	15	6.5	7	9 si for state test - cp 52
6/21/2013	60	73	0	6.5	7	24 9 reopened - cp 178 restart pu
6/22/2013	77	90	24	6.5	13.5	18 5.25 min bt greased
6/23/2013	78	91	20	6.5	7	9 pu off hfp
6/24/2013	75	88	19	6.5	0	0
6/25/2013	79	92	19	6.5	0	0
6/26/2013	77	90	18	6.5	0	0
6/27/2013	65	78	18	6.5	13.5	10 restart pu
6/28/2013	49	62	18	6.5	13.5	15
6/29/2013	49	62	18	6.5	13.5	18
6/30/2013	48	61	18	6.5	13.5	17
7/1/2013						

Total

484

376

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CONSERVATION DIVISION  
 WICHITA, KS

W370  
 Miller 24-13  
 St. Francis  
 St. Francis  
 None  
 July-13  
 FloBoss

DATE	Casing			SPM	HRS CYCLEDOWN	Water BBLs	REMARKS (Maximum length 110 characters)
	PSI	STATIC	MCF				
7/1/2013	51	64	18	6.5	13.5	18	
7/2/2013	53	66	17	6.5	13.5	17	
7/3/2013	52	65	17	6.5	13.5	19	5 min bt
7/4/2013	54	67	17	6.5	13.5	16	
7/5/2013	54	67	17	6.5	13.5	18	
7/6/2013	54	67	17	6.5	13.5	19	
7/7/2013	66	79	17	6.5	13.5	16	
7/8/2013	64	77	17	6.5	13.5	15	
7/9/2013	61	74	17	6.5	13.5	14	
7/10/2013	59	72	17	6.5	13.5	20	
7/11/2013	62	75	17	6.5	13.5	18	
7/12/2013	69	82	16	6.5	6	9	shut pu off hfp and treated well
7/13/2013	71	84	14	6.5	0	2.5	0
7/14/2013	75	88	15	6.5	0	0	
7/15/2013	54	67	15	6.5	6	9	restart pu
7/16/2013	51	64	15	6.5	13.5	18	
7/17/2013	47	60	15	6.5	13.5	18	
7/18/2013	78	91	15	6.5	6	9	pu off hfp
7/19/2013	70	83	15	6.5	0	0	
7/20/2013	71	84	15	6.5	0	0	
7/21/2013	73	86	15	6.5	0	0	
7/22/2013	68	81	15	6.5	0	0	
7/23/2013	65	78	15	6.5	6	9	restart pu
7/24/2013	73	86	15	6.5	13.5	18	5.5 min bt
7/25/2013	75	88	15	6.5	6	9	pu off hfp
7/26/2013	63	76	15	6.5	6	9	restart pu
7/27/2013	51	64	15	6.5	13.5	18	
7/28/2013	53	66	15	6.5	13.5	19	
7/29/2013	51	64	15	6.5	13.5	18	
7/30/2013	94	107	15	6.5	6	3.5	9 pu off hfp
7/31/2013	117	130	11	6.5	0	5.5	0

Total

484

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CONSERVATION DIVISION  
 WICHITA KS

W370  
 Miller 24-13  
 St. Francis  
 St. Francis  
 None  
 August-13  
 FloBoss

DATE	Casing			SPM	HRS CYCLE DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
	PSI	STATIC	MCF				
8/1/2013	74	87	14	6.5			
8/2/2013	74	87	14	6.5			
8/3/2013	70	83	15	6.5			
8/4/2013	71	84	15	6.5			
8/5/2013	61	74	15	6.5			
8/6/2013	52	65	15	6.5	7		9 restart pu
8/7/2013	46	59	15	6.5	13.5	18	
8/8/2013	50	63	15	6.5	13.5	19	
8/9/2013	53	66	15	6.5	13.5	19	
8/10/2013	51	74	15	6.5	13.5	20	
8/11/2013	48	61	15	6.5	13.5	19	
8/12/2013	48	61	15	6.5	13.5	19	
8/13/2013	48	61	15	6.5	13.5	20	
8/14/2013	49	62	15	6.5	13.5	17	
8/15/2013	49	62	15	6.5	13.5	0.5	19 5 min bt greased
8/16/2013	60	73	15	6.5	13.5	17	
8/17/2013	61	74	15	6.5	13.5	18	
8/18/2013	61	74	15	6.5	13.5	16	
8/19/2013	63	76	15	6.5	7	1.5	9
8/20/2013	87	100	15	6.5	0	1	0
8/21/2013	83	96	15	6.5	0		0
8/22/2013	86	99	15	6.5	0	5	0
8/23/2013	68	81	15	6.5	0		0
8/24/2013	80	93	15	6.5	0	1	0
8/25/2013	85	98	15	6.5	0	1	0
8/26/2013	51	64	15	6.5	7		9 started pumping unit
8/27/2013	48	61	15	6.5	13.5	19	
8/28/2013	46	59	15	6.5	13.5	18	
8/29/2013	87	100	15	6.5	7		8 pu off hfp
8/30/2013	83	96	15	6.5	0		0
8/31/2013	84	97	15	6.5	0		0

Total

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