

# KANSAS CORPORATION COMMISSION

## ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

- Open Flow **BST**  
 Deliverability

(See Instructions on Reverse Side)

Test Date:  
6/22/14

API No. 15  
023-20610-0000

Company Rosewood Resources, Inc.		Lease Zimbelman		Well Number 1-18	
County Cheyenne	Location SW SW/4	Section 18	TWP 3S	RNG (E/W) 40W	Acres Attributed 80
Field Cherry Creek		Reservoir Niobrara		Gas Gathering Connection Branch Systems Inc.	
Completion Date 7/1/2005		Plug Back Total Depth 1440'		Packer Set at	
Casing Size 4 1/2"	Weight 10.5#	Internal Diameter 4.052	Set at 1440'	Perforations 1248'	To 1282'
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) 1282'		Pressure Taps Flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in 6-7		20 14 at 8:40		(AM) (PM) Taken 6-11	
Well on Line: Started 6-22		20 14 at 8:55		(AM) (PM) Taken 6-23	
				20 14 at 8:55 (AM) (PM)	
				20 14 at 9:40 (AM) (PM)	

### OBSERVED SURFACE DATA

Duration of Shut-in 360 Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one: Meter Prover Pressure psig (P <sub>m</sub> )	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						222	236.4				
Flow						50	64.4			360	0

### 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>t</sub>	Deviation Factor F <sub>pv</sub>	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G <sub>m</sub>
						25		

### (OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P<sub>s</sub>)<sup>2</sup> = 0.207

(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>d</sub>)<sup>2</sup> = \_\_\_\_\_

(P <sub>c</sub> ) <sup>2</sup> - (P <sub>s</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>s</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" ----- 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 12 day of December, 20 14.

Received  
KANSAS CORPORATION COMMISSION

*Jamall Martiny*  
For Company

Witness (if any)

FEB 25 2015

For Company

For Commission

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 Zimbelman 1-18 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: 12/12/14

Received  
KANSAS CORPORATION COMMISSION

FEB 25 2015

CONSERVATION DIVISION  
WICHITA, KS

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

*Donnell Martiny*

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.

W379

Zimbelman 1-18

St. Francis

St. Francis

None

June-13<sup>4</sup>

FloBoss

DATE	Casing PSI	STATIC	MCF	HRS DOWN	REMARKS (Maximum length 110 characters)
6/1/2013	50	62		22	0
6/2/2013	55	68		20	0
6/3/2013	49	62		20	0
6/4/2013	65	78		20	0
6/5/2013	46	59		20	0
6/6/2013	47	60		20	0
6/7/2013	177	190		12	9
6/8/2013	189	202		0	24
6/9/2013	201	214		0	24
6/10/2013	213	226		0	24
6/11/2013	222	235		0	24
6/12/2013	227	240		0	24
6/13/2013	229	242		0	24
6/14/2013	230	243		0	24
6/15/2013	230	243		0	24
6/16/2013	231	244		0	24
6/17/2013	232	245		0	24
6/18/2013	231	244		0	24
6/19/2013	226	239		0	24
6/20/2013	224	237		0	24
6/21/2013	222	235		0	24
6/22/2013	222	235		0	24
6/23/2013	117	130		30	5
6/24/2013	106	119		33	0
6/25/2013	100	113		29	0
6/26/2013	90	103		27	0
6/27/2013	81	94		25	0
6/28/2013	50	63		25	0
6/29/2013	50	63		24	0 started pumping unit
6/30/2013	51	64		24	0
7/1/2013					0

Total

351

Received  
KANSAS CORPORATION COMMISSION

FEB 25 2015

CONSERVATION DIVISION  
WICHITA, KS

W379

Zimbelman 1-18

St. Francis

St. Francis

None

July-14

FloBoss

DATE	Casing PSI	STATIC	MCF	HRS DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
7/1/2014	51	64		25	0	9
7/2/2014	51	64		25	0	10
7/3/2014	51	64		26	0	11
7/4/2014	51	64		26	0	10
7/5/2014	52	65		26	0	9
7/6/2014	53	66		26	0	11
7/7/2014	53	66		24	0	10
7/8/2014	53	66		24	0	9
7/9/2014	55	68		24	0	10
7/10/2014	56	69		24	0	11
7/11/2014	58	71		24	0	10
7/12/2014	57	70		24	0	9
7/13/2014	59	72		24	0	10
7/14/2014	60	73		24	0	11
7/15/2014	48	61		25	0	10 6.5 min bt
7/16/2014	50	63		25	0	9
7/17/2014	51	64		25	0	10
7/18/2014	51	64		25	0	9
7/19/2014	47	60		25	0	11
7/20/2014	50	63		25	0	10
7/21/2014	132	145		25	0	9
7/22/2014	147	160		4	22	10
7/23/2014	75	88		25	7	11
7/24/2014	57	70		25	3	9
7/25/2014	49	62		23	4	10
7/26/2014	48	61		25	0	11
7/27/2014	49	62		25	0	10
7/28/2014	50	63		25	0	9
7/29/2014	49	62		25	0	10
7/30/2014	50	63		25	0	11
7/31/2014	50	63		25	0	11

Total

748

310

Received  
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CONSERVATION DIVISION  
WICHITA, KS

W379  
 Zimbelman 1-18  
 St. Francis  
 St. Francis  
 None  
 August-14  
 FloBoss

DATE	Casing PSI	STATIC	MCF	SPM	CYCLE	HRS DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
8/1/2014	50	63	25	9	9	9	0	10
8/2/2014	50	63	25	9	9	9	0	10
8/3/2014	50	63	25	9	9	9	0	10
8/4/2014	50	63	25	9	9	9	0	10
8/5/2014	51	64	25	9	9	9	0	10
8/6/2014	52	65	25	9	9	9	0	10
8/7/2014	64	77	25	9	9	9	0	10
8/8/2014	52	65	25	9	9	9	0	10
8/9/2014	54	67	25	9	9	9	0	10
8/10/2014	55	68	25	9	9	9	0	10
8/11/2014	55	68	25	9	9	9	0	10
8/12/2014	49	62	25	9	9	9	0	10
8/13/2014	51	64	25	9	9	9	0	10
8/14/2014	50	63	25	9	9	9	0	10
8/15/2014	56	69	24	9	9	9	3	10
8/16/2014	55	68	25	9	9	9	0	10
8/17/2014	55	68	25	9	9	9	0	10
8/18/2014	55	68	25	9	9	9	0	10 6.5 min BT
8/19/2014	63	76	25	9	9	9	2	10
8/20/2014	54	67	23	9	9	9	0	10
8/21/2014	52	65	25	9	9	9	0	10
8/22/2014	64	77	25	9	9	9	0	10
8/23/2014	49	62	25	9	9	9	0	10
8/24/2014	50	63	25	9	9	9	0	10
8/25/2014	76	81	25	9	9	9	0	10
8/26/2014	53	66	25	9	9	9	0	10
8/27/2014	54	67	25	9	9	9	0	10
8/28/2014	115	128	25	9	9	9	0	5
8/29/2014	48	61	23	9	9	9	5	5
8/30/2014	48	61	25	9	9	9	0	10
8/31/2014	63	76	25	9	9	9	0	10

Total

770

300

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