

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

(See Instructions on Reverse Side)

Type Test:

- Open Flow  SI  
 Deliverability

Test Date:  
7/28/2009

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="checkbox"/> 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 7-27 20 09 at 8:40		(AM) (PM) Taken 7-28 20 09 at 8:55		(AM) (PM)	
Well on Line: Started 7-28 20 09 at 8:55		(AM) (PM) Taken 7-29 20 09 at 9:40		(AM) (PM)	

### OBSERVED SURFACE DATA

Duration of Shut-in 24 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>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	64.4				
Flow						133	147.4			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>pv</sub>	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G <sub>m</sub>
						46		

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

(P <sub>c</sub> ) <sup>2</sup> - (P <sub>o</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>d</sub> <sup>2</sup> 2. P <sub>c</sub> <sup>2</sup> - P <sub>w</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: $\left[ \frac{P_c^2 - P_w^2}{P_c^2 - P_w^2} \right]$	Backpressure Curve Slope = "n" ----- Assigned Standard Slope	n x LOG $\left[ \right]$	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 18 day of November, 20 09.

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

*Tom W. Raetz*  
For Company

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

NOV 30 2009

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.

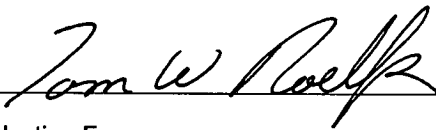
I hereby request a one-year exemption from open flow testing for the Zimbelman 1-18 gas well on the grounds that said well:

(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: 11/18/09

Signature:   
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.

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W379  
 Zimbelman 1-18  
 St. Francis  
 St. Francis  
 None  
 July-09  
 FloBoss

DATE	Tubing PSI	Casing PSI	STATIC	MCF	SPM	HRS CYCLE DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
7/1/2009			55	58	9	8	0	10
7/2/2009			55	58	9	8	0	9
7/3/2009			55	58	9	8	0	10
7/4/2009			55	56	9	8	0	9
7/5/2009			55	56	9	8	0	8
7/6/2009			56	58	9	8	0	9
7/7/2009			60	58	9	8	0	10
7/8/2009			132	55	9	8	6	11
7/9/2009			73	34	9	8	0	10
7/10/2009			50	55	9	8	0	9
7/11/2009			48	48	9	8	0	8
7/12/2009			49	46	9	8	0	9
7/13/2009			50	44	9	8	0	10
7/14/2009			50	43	0	0	0	0 pump off
7/15/2009			54	42	0	0	0	0
7/16/2009			48	41	0	0	0	0
7/17/2009			53	40	0	0	0	0
7/18/2009			49	40	0	0	0	0
7/19/2009			52	38	9	8	0	0 started pumping unit
7/20/2009			76	36	9	8	7	10
7/21/2009			72	44	9	8	0	10
7/22/2009			57	44	9	8	0	9
7/23/2009			53	44	9	8	0	8
7/24/2009			54	44	9	8	0	9
7/25/2009			53	44	9	8	0	10
7/26/2009			53	44	9	8	0	11
7/27/2009			51	43	9	8	4	10
7/28/2009		50	48	45	9	8	0	9 shut in for test
7/29/2009		133	61	3	9	8	0	8 open
7/30/2009			72	51	9	8	0	9
7/31/2009			59	54	9	8	0	10 bucket test 6 min

Total

1424

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 KCC WICHITA

W379  
 Zimbelman 1-18  
 St. Francis  
 St. Francis  
 None  
 August-09  
 FloBoss

DATE	Tubing PSI	Casing PSI	STATIC	MCF	SPM	CYCLE	HRS DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
8/1/2009			56	51	9	8	0	10	
8/2/2009			54	51	9	8	0	11	
8/3/2009			63	50	9	8	0	12	
8/4/2009			52	50	9	8	0	11	
8/5/2009			53	50	9	8	0	10	
8/6/2009			54	50	9	8	0	11	
8/7/2009			53	49	9	8	0	12	
8/8/2009			52	49	9	8	0	11	
8/9/2009			52	49	9	8	0	10	
8/10/2009			52	49	0	0	0	0	0 PU OFF
8/11/2009			48	48	0	0	0	0	
8/12/2009			47	49	0	0	0	0	
8/13/2009			46	48	0	0	0	0	
8/14/2009			48	49	0	0	0	0	
8/15/2009			49	49	0	0	0	0	
8/16/2009			47	49	0	0	0	0	
8/17/2009			124	44	0	0	0	0	
8/18/2009			125	42	0	0	0	0	
8/19/2009			125	40	0	0	0	0	
8/20/2009			48	41	9	8	0	0	0 started pump
8/21/2009			50	41	9	8	0	10	
8/22/2009			91	41	9	8	0	11	
8/23/2009			91	41	9	8	0	12	
8/24/2009			91	41	9	8	0	11	
8/25/2009			91	41	9	8	0	10	
8/26/2009			91	46	9	8	0	11	
8/27/2009			51	45	9	8	0	12	
8/28/2009			51	45	9	8	0	11	
8/29/2009			52	45	9	8	0	10	
8/30/2009			71	45	9	8	0	11	
8/31/2009			52	46	9	8	0	12	

Total

1434

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W379  
 Zimbelman 1-18  
 St. Francis  
 St. Francis  
 None  
 September-09  
 FloBoss

DATE	Tubing PSI	Casing PSI	STATIC	MCF	SPM	CYCLE	HRS DOWN	Water BBLs
9/1/2009			50	46			0	
9/2/2009			55	46			0	
9/3/2009			31	46			0	
9/4/2009			38	46			6	
9/5/2009			53	46			0	
9/6/2009			53	46			0	
9/7/2009			54	46			0	
9/8/2009			53	46			0	
9/9/2009			56	46			0	
9/10/2009			52	46			0	
9/11/2009			50	46			0	
9/12/2009			49	46			0	
9/13/2009			56	46			0	
9/14/2009			85	46			0	
9/15/2009			50	46			0	
9/16/2009			42	46			0	
9/17/2009			47	46			0	
9/18/2009			46	46			0	
9/19/2009			46	46			0	
9/20/2009			48	46			0	
9/21/2009			45	46			0	
9/22/2009			45	46			0	
9/23/2009			45	46			0	
9/24/2009			46	19			0	
9/25/2009			72	25			6	
9/26/2009			100	51			0	
9/27/2009			84	45			0	
9/28/2009			75	46			0	
9/29/2009			52	46			0	
9/30/2009			104	32			8	
10/1/2009							0	

Total

1322

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