

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

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SEP 18 2009

KCC WICHITA

Type Test:

Open Flow  **OSI**  
 Deliverability

(See Instructions on Reverse Side)

Test Date:  
5/14/2008

API No. 15  
023-20430-0100

Company Rosewood Resources, Inc.		Lease Zweygardt		Well Number 2-26H	
County Cheyenne	Location SENE	Section 26	TWP 3S	RNG (E/W) 42W	Acres Attributed 80
Field Cherry Creek		Reservoir Niobrara	Gas Gathering Connection Branch Systems Inc.		
Completion Date 7-16-2001		Plug Back Total Depth 2626' MD	Packer Set at		
Casing Size 7"	Weight 23#	Internal Diameter 6.366	Set at 1780'	Perforations 1534' MD	To 1383' MD
Tubing Size NONE	Weight	Internal Diameter	Set at	Perforations	To
Type Completion (Describe) Single (Horizontal)		Type Fluid Production Dry Gas	Pump Unit or Traveling Plunger? Yes / <input checked="" type="radio"/> No		
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide	% Nitrogen	Gas Gravity - G <sub>g</sub> .6	
Vertical Depth(H) 1383' MD		Pressure Taps Flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in 5-14 20 08 at 4:15 (AM) <input checked="" type="radio"/> (PM)		Taken 5-15 20 08 at 5:00 (AM) <input checked="" type="radio"/> (PM)			
Well on Line: Started 5-15 20 08 at 5:00 (AM) <input checked="" type="radio"/> (PM)		Taken 5-16 20 08 at 5:45 (AM) <input checked="" type="radio"/> (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>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						90	104.4				
Flow						135	149.4			24	0

### FLOW STREAM ATTRIBUTES

Plate Coefficient (F <sub>b</sub> ) (F <sub>a</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 (Mcf/d)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G <sub>m</sub>
						4		

### (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: $\frac{P_c^2 - P_w^2}{P_c^2 - P_a^2}$	Backpressure Curve Slope = "n" ----- or ----- 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. Executed this the 12 day of December, 20 08

Witness (if any)

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KANSAS CORPORATION COMMISSION

*Wayne Mahan*  
For Company

For Commission

**JAN 29 2009**

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 Zweygardt 2-26H 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: 12/12/08

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Signature: *Wayne Mabe*  
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.

W387  
 Zweygardt 2-26H  
 West St. Francis  
 St. Francis  
 None  
 May-08

DATE	STATIC	MCF	HRS DOWN	REMARKS (Maximum length 110 characters)
5/1/2008	118		4	0
5/2/2008	118		4	0
5/3/2008	118		4	0
5/4/2008	118		4	0
5/5/2008	118		4	0
5/6/2008	118		4	0
5/7/2008	116		4	0
5/8/2008	116		4	0
5/9/2008	113		4	0
5/10/2008	113		4	0
5/11/2008	108		4	0
5/12/2008	111		4	0
5/13/2008	111		4	0
5/14/2008	108		4	0
5/15/2008	111		4	0 90 cpi shut in for test
5/16/2008	48		3	0 open cp 135
5/17/2008	113		4	0
5/18/2008	113		4	0
5/19/2008	113		4	0
5/20/2008	111		4	0
5/21/2008	111		4	0
5/22/2008	108		4	0
5/23/2008	108		4	0
5/24/2008	103		4	0
5/25/2008	108		4	0
5/26/2008	108		4	0
5/27/2008	108		4	0
5/28/2008	105		4	0
5/29/2008	108		4	0
5/30/2008	108		0	0
5/31/2008	108		0	0

Total

115

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W387  
 Zwegardt 2-26H  
 West St. Francis  
 St. Francis  
 None  
 June-08

DATE	STATIC	MCF	HRS DOWN	REMARKS (Maximum length 110 characters)
6/1/2008		108	4	0
6/2/2008		113	4	0
6/3/2008		116	4	0
6/4/2008		113	4	0
6/5/2008		116	4	0
6/6/2008		113	4	0
6/7/2008		113	4	0
6/8/2008		113	4	0
6/9/2008		113	4	0
6/10/2008		116	4	0
6/11/2008		123	4	0
6/12/2008		128	4	0
6/13/2008		123	4	0
6/14/2008		111	4	0
6/15/2008		113	4	0
6/16/2008		108	4	0
6/17/2008		108	4	0
6/18/2008		103	4	0
6/19/2008		108	4	0
6/20/2008		108	4	0
6/21/2008		105	4	0
6/22/2008		105	4	0
6/23/2008		105	4	0
6/24/2008		113	4	0
6/25/2008		113	4	0
6/26/2008		108	4	0
6/27/2008		108	4	0
6/28/2008		113	4	0
6/29/2008		105	4	0
6/30/2008		105	4	0
7/1/2008				0

Total

120

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W387  
 Zweygardt 2-26H  
 West St. Francis  
 St. Francis  
 None  
 July-08

DATE	STATIC	MCF	HRS DOWN	REMARKS (Maximum length 110 characters)
7/1/2008	128		4	0
7/2/2008	128		4	0
7/3/2008	128		4	0
7/4/2008	128		4	0
7/5/2008	128		4	0
7/6/2008	128		4	0
7/7/2008	125		4	0
7/8/2008	125		4	0
7/9/2008	125		4	0
7/10/2008	125		4	0
7/11/2008	118		4	0
7/12/2008	123		4	0
7/13/2008	118		4	0
7/14/2008	118		4	0
7/15/2008	118		4	0
7/16/2008	118		4	0
7/17/2008	126		4	0
7/18/2008	126		4	0
7/19/2008	126		4	0
7/20/2008	126		4	0
7/21/2008	126		4	0
7/22/2008	118		4	0
7/23/2008	118		4	0
7/24/2008	115		4	0
7/25/2008	115		4	0
7/26/2008	115		4	0
7/27/2008	123		4	0
7/28/2008	123		4	0
7/29/2008	118		4	0
7/30/2008	118		4	0
7/31/2008	115		4	0

Total 124

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