

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

Type Test:

- Open Flow **BSP**  
 Deliverability

(See Instructions on Reverse Side)

Test Date:  
9/7/2011

API No. 15  
023-20430-01 - **00**

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 type="checkbox"/> No <input checked="" type="checkbox"/>	
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide		% Nitrogen	
Vertical Depth(H) 1383' MD		Pressure Taps Flange		Gas Gravity - G <sub>g</sub> .6	
Pressure Buildup: Shut In 9-6 20 11 at 1:30 (AM) <input checked="" type="checkbox"/> (PM)		Taken 9-7 20 11 at 1:45 (AM) <input checked="" type="checkbox"/> (PM)			
Well on Line: Started 9-7 20 11 at 1:45 (AM) <input checked="" type="checkbox"/> (PM)		Taken 9-8 20 11 at 2:30 (AM) <input checked="" type="checkbox"/> (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>e</sub> )		Tubing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>t</sub> ) or (P <sub>e</sub> )		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						112	126.4				
Flow						45	59.4			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>
						4		

### (OPEN FLOW) (DELIVERABILITY) CALCULATIONS

(P<sub>e</sub>)<sup>2</sup> = \_\_\_\_\_ : (P<sub>w</sub>)<sup>2</sup> = \_\_\_\_\_ : P<sub>e</sub> = \_\_\_\_\_ % (P<sub>e</sub> - 14.4) + 14.4 = \_\_\_\_\_ : (P<sub>e</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>e</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>e</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

*Garnell Grew*  
\_\_\_\_\_  
For Company  
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KCC WICHITA

\_\_\_\_\_  
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: 12/28/11

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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Zweygartt-2-26H

West St. Francis

St. Francis

None

September-11

Chart Meter

DATE	Casing			HRS DOWN	REMARKS (Maximum length 110 characters)
	PSI	STATIC	MCF		
9/1/2011	70	58		4	
9/2/2011	70	58		4	
9/3/2011	70	58		4	
9/4/2011	70	58		4	
9/5/2011	70	58		4	
9/6/2011	70	58		4	shut well into do state test
9/7/2011	112	58		0	24 opened well
9/8/2011	70	58		4	
9/9/2011	70	58		4	
9/10/2011	70	58		4	
9/11/2011	70	58		4	
9/12/2011	68	56		4	
9/13/2011	65	63		4	
9/14/2011	105	93		4	
9/15/2011	110	98		4	
9/16/2011	105	93		4	
9/17/2011	85	73		4	
9/18/2011	75	63		4	
9/19/2011	75	63		4	
9/20/2011	70	58		4	
9/21/2011	70	58		4	
9/22/2011	75	63		4	
9/23/2011	88	75		4	
9/24/2011	97	84		3	
9/25/2011	97	84		3	
9/26/2011	97	84		3	
9/27/2011	97	84		4	
9/28/2011	98	85		4	
9/29/2011	98	85		4	
9/30/2011	98	85		4	
10/1/2011					

Total

113

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Zweygardt 2-26H

West St. Francis

St. Francis

None

October-11

Chart Meter

DATE	Casing			HRS DOWN	REMARKS (Maximum length 110 characters)
	PSI	STATIC	MCF		
10/1/2011	85	98	4		
10/2/2011	80	93	4		
10/3/2011	75	88	5		
10/4/2011	60	73	4		
10/5/2011	55	68	4		
10/6/2011	65	78	5		
10/7/2011	80	93	4		
10/8/2011	55	68	4		
10/9/2011	46	60	4		
10/10/2011	46	60	4		
10/11/2011	46	60	4		
10/12/2011	46	60	4		
10/13/2011	43	58	4		
10/14/2011	43	56	4		
10/15/2011	43	56	4		
10/16/2011	43	56	4		
10/17/2011	45	58	4		
10/18/2011	45	58	4		
10/19/2011	45	58	4		
10/20/2011	45	58	4		
10/21/2011	45	58	4		
10/22/2011	45	58	4		
10/23/2011	45	58	4		
10/24/2011	45	58	4		
10/25/2011	45	58	4		
10/26/2011	45	58	4		
10/27/2011	45	56	4		
10/28/2011	45	58	4		
10/29/2011	45	58	4		
10/30/2011	45	58	4		
10/31/2011	45	58	4		

Total

126

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Zweygart 2-26H

West St. Francis

St. Francis

None

November-11

Chart Meter

DATE	Casing			HRS DOWN	REMARKS (Maximum length 110 characters)
	PSI	STATIC	MCF		
11/1/2011	45	58		4	
11/2/2011	45	58		4	
11/3/2011	45	58		4	
11/4/2011	45	58		4	
11/5/2011	45	58		4	
11/6/2011	45	58		4	
11/7/2011	45	58		4	
11/8/2011	45	58		4	
11/9/2011	45	58		4	
11/10/2011	45	58		4	
11/11/2011	45	58		4	
11/12/2011	75	88		3	
11/13/2011	60	73		3	
11/14/2011	50	63		4	
11/15/2011	50	63		4	
11/16/2011	50	63		4	
11/17/2011	50	63		4	
11/18/2011	50	63		4	
11/19/2011	50	63		4	
11/20/2011	50	63		4	
11/21/2011	50	63		4	
11/22/2011	50	63		4	
11/23/2011	53	67		4	
11/24/2011	53	67		4	
11/25/2011	57	70		4	
11/26/2011	50	63		4	
11/27/2011	50	63		4	
11/28/2011	50	63		4	
11/29/2011	50	63		4	
11/30/2011	50	63		4	
12/1/2011	0	0		0	

Total

118

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