

# KANSAS CORPORATION COMMISSION

## ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

(See Instructions on Reverse Side)

Type Test:

- Open Flow **KIST**  
 Deliverability

Test Date:  
6/7/2013

API No. 15  
023-21254-0000

Company Rosewood Resources, Inc.		Lease Zwegardt		Well Number 12-19	
County Cheyenne	Location SWNW	Section 19	TWP 3S	RNG (E/W) 40W	Acres Attributed 80
Field Cherry Creek		Reservoir Niobrara		Gas Gathering Connection Branch Systems Inc.	
Completion Date 9/23/2010		Plug Back Total Depth 1470'		Packer Set at	
Casing Size 4 1/2"	Weight 10.5#	Internal Diameter 6.366	Set at 1509'	Perforations 1304'	To 1334'
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? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide		% Nitrogen	
Vertical Depth(H) 1550'		Pressure Taps Flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in 6-6 20 13 at 5:20 (AM) (PM) Taken 6-7 20 13 at 5:30 (AM) (PM)		Well on Line: Started 6-7 20 13 at 5:30 (AM) (PM) Taken 6-8 20 13 at 5:45 (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>1</sub> ) or (P <sub>c</sub> )		Tubing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>1</sub> ) or (P <sub>c</sub> )		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						213	227.4				
Flow						67	81.4			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>t</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>a</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>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 this the 21 day of November, 20 13.

KANSAS CORPORATION COMMISSION

*Garrett Matney*  
For Company

Witness (if any)

**DEC 26 2013**

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 Zweygardt 12-19 gas well on the grounds that said well:

(Check one)

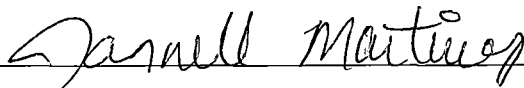
- is a coalbed methane producer
- is cycled on plunger lift due to water
- is a source of natural gas for injection into an oil reservoir undergoing ER
- is on vacuum at the present time; KCC approval Docket No. \_\_\_\_\_
- is not capable of producing at a daily rate in excess of 250 mcf/D

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



Title: Production Assistant

DEC 26 2013

CONSERVATION DIVISION  
WICHITA, KS

**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.

W2733  
 Zweygardt 12-19  
 St. Francis  
 St. Francis  
 Flow  
 June-13  
 FloBoss

DATE	Casing PSI	STATIC	MCF	HRS DOWN	REMARKS (Maximum length 110 characters)
6/1/2013	65	78		18	
6/2/2013	71	84		17	
6/3/2013	68	81		17	
6/4/2013	65	78		17	
6/5/2013	72	85		17	
6/6/2013	62	75		17	si for state test - cp 84
6/7/2013	135	148		0	24 reopened - cp 213
6/8/2013	68	81		28	
6/9/2013	71	84		19	
6/10/2013	94	107		19	2
6/11/2013	89	102		17	1
6/12/2013	85	98		17	
6/13/2013	69	82		17	
6/14/2013	69	82		18	
6/15/2013	73	86		18	
6/16/2013	74	87		18	
6/17/2013	70	83		18	
6/18/2013	65	78		17	
6/19/2013	61	74		17	
6/20/2013	65	78		17	
6/21/2013	71	84		17	
6/22/2013	84	97		17	
6/23/2013	90	103		17	
6/24/2013	86	99		17	
6/25/2013	90	103		17	
6/26/2013	88	101		17	
6/27/2013	82	95		17	
6/28/2013	65	78		17	
6/29/2013	65	78		17	
6/30/2013	64	77		16	
7/1/2013					

Total

512

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 WICHITA, KS

W2733  
 Zweygartd 12-19  
 St. Francis  
 St. Francis  
 Flow  
 July-13  
 FloBoss

DATE	Casing PSI	STATIC	MCF	HRS DOWN	REMARKS (Maximum length 110 characters)
7/1/2013	67	81		17	
7/2/2013	67	80		17	
7/3/2013	70	83		17	
7/4/2013	69	82		17	
7/5/2013	69	82		17	
7/6/2013	68	81		17	
7/7/2013	78	91		17	
7/8/2013	77	90		16	
7/9/2013	76	89		16	
7/10/2013	72	85		16	
7/11/2013	75	88		16	
7/12/2013	80	93		16	
7/13/2013	84	97		16	2.5
7/14/2013	86	99		16	
7/15/2013	69	82		16	
7/16/2013	66	79		16	
7/17/2013	63	76		15	
7/18/2013	90	103		15	
7/19/2013	81	94		15	
7/20/2013	83	96		15	
7/21/2013	84	97		15	
7/22/2013	80	93		15	
7/23/2013	77	90		15	
7/24/2013	84	97		15	
7/25/2013	87	100		15	
7/26/2013	77	90		15	
7/27/2013	68	81		15	
7/28/2013	70	83		15	
7/29/2013	68	81		15	
7/30/2013	93	106		15	3.5
7/31/2013	117	130		14	5.5

Total

487

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CONSERVATION DIVISION  
 WICHITA, KS

W2733  
 Zweygardt 12-19  
 St. Francis  
 St. Francis  
 Flow  
 August-13  
 FloBoss

DATE	Casing PSI	STATIC	MCF	HRS DOWN	REMARKS (Maximum length 110 characters)
8/1/2013	88	101		16	
8/2/2013	87	90		16	
8/3/2013	83	96		16	
8/4/2013	82	95		16	
8/5/2013	77	90		16	
8/6/2013	67	80		16	
8/7/2013	64	77		16	
8/8/2013	66	79		16	
8/9/2013	69	82		16	
8/10/2013	68	81		16	
8/11/2013	65	78		15	
8/12/2013	65	78		16	
8/13/2013	65	78		16	
8/14/2013	67	80		15	
8/15/2013	66	79		15	0.5
8/16/2013	76	89		15	
8/17/2013	75	88		15	
8/18/2013	76	89		15	
8/19/2013	77	90		15	1.5
8/20/2013	98	111		15	1
8/21/2013	94	107		15	
8/22/2013	98	111		15	5
8/23/2013	81	94		15	
8/24/2013	91	104		15	1
8/25/2013	95	108		15	1
8/26/2013	69	82		15	
8/27/2013	65	78		15	
8/28/2013	63	76		15	
8/29/2013	95	108		15	1
8/30/2013	94	107		15	
8/31/2013	95	108		15	

Total

477

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