

# KANSAS CORPORATION COMMISSION

## ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

- Open Flow  **SI**  
 Deliverability

(See Instructions on Reverse Side)

Test Date:  
5/11/2008

API No. 15  
023-20664-0000

Company Rosewood Resources, Inc.			Lease Hilt		Well Number 13-33
County Cheyenne	Location NWSW	Section 33	TWP 2S	RNG (E/W) 42W	Acres Attributed 80
Field Cherry Creek		Reservoir Niobrara	Gas Gathering Connection Branch Systems Inc.		
Completion Date 3/30/2006		Plug Back Total Depth 1777'	Packer Set at		
Casing Size 4 1/2"	Weight 10.5#	Internal Diameter 4.052	Set at 1777.49'	Perforations 1618'	To 1646'
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 checked="" type="checkbox"/> No flowing		
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide	% Nitrogen	Gas Gravity - G <sub>g</sub> .6	
Vertical Depth(H) 1646'	Pressure Taps Flange			(Meter Run) (Prover) Size 2"	
Pressure Buildup:	Shut in 5-11	20 08	at 2:00 (AM) <input checked="" type="checkbox"/> (PM)	Taken 5-12	20 08 at 3:15 (AM) <input checked="" type="checkbox"/> (PM)
Well on Line:	Started 5-12	20 08	at 3:15 (AM) <input checked="" type="checkbox"/> (PM)	Taken 5-13	20 08 at 3:30 (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 (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						77	91.4				
Flow						80	94.4				

### 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>
						26		

### (OPEN FLOW) (DELIVERABILITY) CALCULATIONS

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

(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 (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 11 day of December, 20 08

Witness (if any)

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*Wayne Malton*  
For Company

For Commission

**JAN 29 2009**

Checked by

CONSERVATION DIVISION  
WICHITA, KS

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 Hilt 13-33 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: 12/11/08

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CONSERVATION DIVISION  
WICHITA, KS

Signature: Wayne Inabon

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.

W437  
 Hilt 13-33  
 West St. Francis  
 St. Francis  
 None  
 May-08

DATE	Tubing Casing		STATIC	MCF	SPM	HRS CYCLE DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
	PSI	PSI						
5/1/2008			76	25	7	12	0	18
5/2/2008			76	25	7	12	0	19
5/3/2008			75	24	7	12	0	20
5/4/2008			75	19	0	0	0	0 belts broke
5/5/2008			75	17	0	0	0	0
5/6/2008			74	16	7	12	0	0 replaced belts
5/7/2008			77	20	7	12	0	22
5/8/2008			77	20	7	12	0	20 bucket test 5 min
5/9/2008			77	20	7	12	0	18
5/10/2008			77	24	7	12	0	19
5/11/2008			77	24	7	12	0	20
5/12/2008		60	78	24	0	0	0	20 shut in for test
5/13/2008		205	72	2	7	12	0	0 open
5/14/2008			70	35	7	12	0	0 belts broke trying shorter belts
5/15/2008			89	35	7	12	0	22
5/16/2008			82	31	7	12	0	20
5/17/2008			77	28	7	12	0	21
5/18/2008			76	28	7	12	0	22
5/19/2008			81	30	7	12	0	19
5/20/2008			81	30	7	12	0	20 bucket test 5 min greased
5/21/2008			80	29	7	12	0	19
5/22/2008			79	29	7	12	0	20
5/23/2008			81	21	7	12	0	21
5/24/2008			78	21	0	0	0	0 pump off
5/25/2008			77	19	0	0	0	0 bp pump off
5/26/2008			76	19	0	0	0	0 pump off
5/27/2008			77	3	0	0	0	0 pump off
5/28/2008			77	3	7	12	0	0 drained oil from gear box cleaned ou
5/29/2008			81	29	7	24	0	34
5/30/2008			82	30	7	24	0	33
5/31/2008			81	29	7	24	0	32

Total

709

459

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CONSERVATION DIVISION  
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W437  
 Hilt 13-33  
 West St. Francis  
 St. Francis  
 None  
 June-08

DATE	Tubing Casing		STATIC MCF	SPM	CYCLE	HRS DOWN	Water	REMARKS
	PSI	PSI						
6/1/2008			82	29	7	24	0	20 put on auto
6/2/2008			80	29	7	12	0	21
6/3/2008			81	28	7	12	0	20
6/4/2008			79	27	7	12	0	20 bucket test 5 min
6/5/2008			79	27	7	12	0	21
6/6/2008			78	27	7	12	0	19
6/7/2008			81	27	7	12	0	20
6/8/2008			79	27	7	12	0	21
6/9/2008			79	27	7	12	0	22
6/10/2008			79	27	7	12	0	21
6/11/2008			83	27	7	12	0	20 bucket test 5 min
6/12/2008			81	27	7	12	0	21
6/13/2008			83	27	7	12	0	21
6/14/2008			83	27	7	12	0	19
6/15/2008			85	27	7	12	0	20
6/16/2008			81	26	7	12	0	19
6/17/2008			79	27	7	12	0	21
6/18/2008			80	26	7	12	0	20
6/19/2008			79	26	7	12	0	20 bucket test 5 min
6/20/2008			79	26	7	12	0	19
6/21/2008			79	26	7	12	0	20
6/22/2008			78	26	7	12	0	21
6/23/2008			80	26	7	12	0	22
6/24/2008			80	26	7	12	0	21
6/25/2008			80	26	7	12	0	20
6/26/2008			80	26	7	12	0	20
6/27/2008			78	26	7	12	0	21
6/28/2008			78	26	7	12	0	20
6/29/2008			78	26	7	12	0	20
6/30/2008			78	26	7	12	0	20
7/1/2008							0	

Total

801

610

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CONSERVATION DIVISION  
 WICHITA, KS

W437  
 Hilt 13-33  
 West St. Francis  
 St. Francis  
 None  
 July-08

DATE	Tubing Casing		STATIC MCF	SPM	CYCLE	HRS DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
	PSI	PSI						
7/1/2008			79	25	7	12	0	18
7/2/2008			83	25	7	12	0	19
7/3/2008			80	25	7	12	0	20 bucket test 5 min
7/4/2008			80	25	7	12	0	21
7/5/2008			85	25	7	12	0	20
7/6/2008			88	25	7	12	0	19
7/7/2008			88	25	7	12	0	20
7/8/2008			84	25	7	12	0	21
7/9/2008			81	25	7	12	0	20 bucket test 5 min
7/10/2008			87	25	7	12	0	19
7/11/2008			91	25	7	12	0	18
7/12/2008			87	25	7	12	0	19
7/13/2008			82	25	7	12	0	21
7/14/2008			101	25	7	12	11	18 PU off HFP
7/15/2008			122	21	0	0	0	0
7/16/2008			103	18	0	0	0	0 pu off hfp greased
7/17/2008			87	17	0	0	0	0 pu off hfp
7/18/2008			117	16	0	0	0	0 pu off hfp
7/19/2008			69	15	7	12	3	0 started pumping unit
7/20/2008			76	18	7	12	0	20
7/21/2008			80	21	7	12	0	19
7/22/2008			84	21	7	12	0	21 bucket test 4 min
7/23/2008			85	23	7	12	0	20
7/24/2008			89	23	0	0	4	19 pump off hfp
7/25/2008			88	18	0	0	0	0 PU off HFP
7/26/2008			78	21	0	0	0	0
7/27/2008			65	15	7	12	0	19 restart pump
7/28/2008			76	18	7	12	0	18
7/29/2008			83	19	7	12	0	17
7/30/2008			169	22	0	0	0	18 pump off hfp
7/31/2008			84	22	7	12	5	0 restart pump

Total

678

444

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