

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

Type Test:

- Open Flow  
 Deliverability

(See Instructions on Reverse Side)

Test Date:  
11/27/2006

API No. 15  
181-20428-00-00

Company <b>Rosewood Resources, Inc.</b>			Lease <b>C. G. Ihrig</b>		Well Number <b>21-21H</b>
County <b>Sherman</b>	Location <b>NENW</b>	Section <b>21</b>	TWP <b>7S</b>	RNG (E/W) <b>39W</b>	Acres Attributed <b>80</b>
Field <b>Goodland</b>		Reservoir <b>Niobrara</b>	Gas Gathering Connection <b>Branch Systems Inc.</b>		
Completion Date <b>9/4/2006</b>		Plug Back Total Depth <b>3218'</b>	Packer Set at		
Casing Size <b>4 1/2"</b>	Weight <b>10.5#</b>	Internal Diameter <b>4.000</b>	Set at <b>3218'</b>	Perforations <b>3147'</b>	To <b>3162'</b>
Tubing Size <b>NONE</b>	Weight	Internal Diameter	Set at	Perforations	To
Type Completion (Describe) <b>Single (Horizontal)</b>		Type Fluid Production <b>Dry Gas</b>	Pump Unit or Traveling Plunger? Yes / No <b>Flowing</b>		
Producing Thru (Annulus / Tubing) <b>Annulus</b>		% Carbon Dioxide	% Nitrogen	Gas Gravity - G <sub>g</sub> <b>.6</b>	
Vertical Depth(H) <b>3235'</b>		Pressure Taps <b>Flange</b>		(Meter Run) (Prover) Size <b>2"</b>	
Pressure Buildup: Shut in _____ 20 _____ at _____ (AM) (PM) Taken _____ 20 _____ at _____ (AM) (PM)					
Well on Line: Started <b>11-27</b> 20 <b>06</b> at <b>4:00</b> (AM) (PM) Taken <b>11-28</b> 20 <b>06</b> at <b>4:30</b> (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>l</sub> ) or (P <sub>c</sub> )		Tubing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>l</sub> ) or (P <sub>c</sub> )		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In						62	76.4				
Flow						46	60.4			24	0

### 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>tl</sub>	Deviation Factor F <sub>pv</sub>	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G <sub>m</sub>
						<b>40</b>		

### (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>o</sub> - 14.4) + 14.4 = \_\_\_\_\_ :

(P<sub>d</sub>)<sup>2</sup> = \_\_\_\_\_

(P <sub>c</sub> ) <sup>2</sup> - (P <sub>d</sub> ) <sup>2</sup> or (P <sub>c</sub> ) <sup>2</sup> - (P <sub>w</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: $\frac{P_c^2 - P_w^2}{P_c^2 - P_d^2}$	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 27 day of January, 2007

Witness (if any)

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**KANSAS CORPORATION COMMISSION**

For Company

For Commission

**FEB 02 2007**

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.

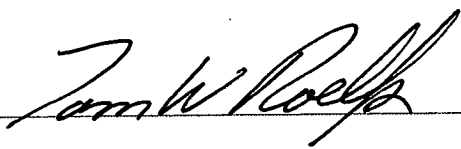
I hereby request a one-year exemption from open flow testing for the CS. Ihrig 21-21H gas well on the grounds that said well:

(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: 1/27/2007

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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CONSERVATION DIVISION  
 WICHITA, KS

Monthly Gauge Sheet

Well Name: C  
St. Inrig 21-21 H

Pumper: \_\_\_\_\_

Month 11/06

Day	Static	Diff	MCF	Wtr	TP	CP	SPM Cycle	Remarks
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								1st Gas 4:00p 51mcf 62#CP
28	68		30			55		
29	65		46			52		meter (C ARC)
30	64		25			51		
31								
Totals								

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Monthly Gauge Sheet

Well Name:

C  
K. Thrig 2-2-11

Pumper:

Month

12/06

Day	Static	Diff	MCF	Wtr	TP	CP	SPM Cycle	Remarks
1	64		42			51		
2	63		42			50		
3	62		40			49		
4	62		41			49		BP
5	61		41			48		
6	61		41			48		
7	61		41			48		
8	62		39			49		
9	61		39			48		
10	60		40			47		BP
11	59		40			46		
12	60		39			47		
13	59		39			46		BP
14	59		29			46		CD
15	58		40			45		
16	58		39			45		
17	61		38			48		opened to 75 mcf all the way
18	46		77			33		
19	46		78			33		BP
20	46		77			33		
21	46		75			33		
22	48		73			35		
23	48		69			35		
24	46		68			33		
25	41		65			28		
26	41		62			28		BP
27	39		67			26		
28	38		67			25		
29	38		67			25		
30	38		67			25		
31	38		65			25		
Totals								

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Monthly Gauge Sheet ✓

Well Name: G. Thrig 21-21 H

Pumper: \_\_\_\_\_ Month 1/07

Day	Static	Diff	MCF	Wtr	TP	CP	SPM Cycle	Remarks
1	38		65			25		
2	43		64			30		
3	37		63			24		
4	37		62			24		BP
5	37		60			24		
6	37		58			24		
7	37		58			24		
8	42		56			29		
9	37		63			24		
10	38		63			25		BP
11	34		60			21		
12	37		59			24		
13	37		58			24		
14	37		58			24		
15	37		57			24		
16	35		51			22		
17	30		58			17		
18	29		56			16		
19	29		57			16		
20	29		56			16		CO4
21	34		51			21		
22	29		52			16		
23	31		53			18		
24	32		56			19		
25	29		53			16		
26	34		52			21		BP KTR
27	32		55			19		
28	32		52			19		
29	28		50			15		
30								
31								

Totals

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