

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

Type Test:

- Open Flow  SI  
 Deliverability

Test Date:  
9-26-2006

API No. 15  
023-20631-00 - 00

Company Rosewood Resources, Inc.		Lease Rudolph		Well Number 33-09	
County Cheyenne	Location NWSE/4	Section 9	TWP 3S	RNG (E/W) 41W	Acres Attributed 80
Field St. Francis		Reservoir Niobrara	Gas Gathering Connection Branch Systems Inc.		
Completion Date 10/21/2005		Plug Back Total Depth 1540'	Packer Set at		
Casing Size 2 7/8"	Weight 6.5#	Internal Diameter 2.441	Set at 1540'	Perforations 1421'	To 1453'
Tubing Size NONE	Weight	Internal Diameter	Set at	Perforations	To
Type Completion (Describe) Single (Vertical)		Type Fluid Production	Pump Unit or Traveling Plunger? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide	% Nitrogen	Gas Gravity - G <sub>g</sub> .6	
Vertical Depth(H) 1453'		Pressure Taps Flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in 9/26 20 06 at 11:15 (AM) (PM) Taken 9/27 20 06 at 4:00 (AM) (PM)		Well on Line: Started 9/27 20 06 at 4:00 (AM) (PM) Taken 9/28 20 06 at 12:15 (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>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						190	204.4				
Flow						4	18.4			24	0

### FLOW STREAM ATTRIBUTES

Plate Coefficient (F <sub>v</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>tt</sub>	Deviation Factor F <sub>pv</sub>	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G <sub>m</sub>
						20		

### (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>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: $\frac{P_c^2 - P_w^2}{P_c^2 - P_w^2}$	Backpressure Curve Slope = "n" or Assigned Standard Slope	n x LOG	Antilog	Open Flow Deliverability Equals R x Antilog (Mcfd)

Open Flow

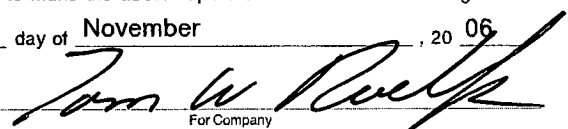
Mcfd @ 14.65 psia

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 November, 20 06

\_\_\_\_\_  
Witness (if any)  
\_\_\_\_\_  
For Commission

  
\_\_\_\_\_  
For Company  
\_\_\_\_\_  
Checked by

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**KCC WICHITA**

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.

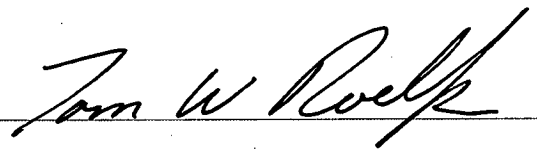
I hereby request a one-year exemption from open flow testing for the Rudolph 33-9 gas well on the grounds that said well:

(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: 11-28-2006

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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Monthly Gauge Sheet

Well Name: Rudolph 33-9

Pumper: V5

Month 8/06

Day	Static	Diff	MCF	Wtr	TP	CP	SPM Cycle	Remarks
1	38		2			25		
2	38		2			25		
3	38		2			25		
4	38		2			25		
5	38		2			25		
6	38		2			25		
7	39		2			26		
8	39		2			26		
9	38		2			25		
10	39		2			26		
11	38		2			25		
12	38		2			25		
13	38		2			25		
14	36		2			23		
15	36		2			23		
16	38		2			25		
17	39		2			26		
18	41		2			28		
19	40		2			27		
20	40		2			27		
21	40		2			27		
22	39		2			26		shut in (Wayne)
23	<del>39</del>		<del>2</del>			<del>26</del>		
24	<del>39</del>		<del>2</del>			<del>26</del>		Fract
25	<del>39</del>		<del>2</del>			<del>26</del>		
26			<del>2</del>			<del>26</del>		
27	..		<del>2</del>					
28			<del>2</del>					
29			<del>2</del>					
30			<del>2</del>					
31			<del>2</del>					
Totals								

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Monthly Gauge Sheet

SI

Well Name: Rudolph 33-9 ✓

Pumper: Velocity String

Month 9/06

Day	Static	Diff	MCF	Wtr	TP	CP	SPM Cycle	Remarks
1	110		0	0		97		
2	54		0	0		41		
3	32		0	0		19		
4	30		0	0		17		
5	154		0	0		141		
6	157		25	0		144		Flow 26 9:30AM First Gas CP 194
7	156		25	0		143		
8	154		25	0		141		
9	154		24	0		141		
10	158		24	0		145		
11	157		24	0		144		
12	155		24	0		142		
13	62		24	0		49		working at well
14	156		23	0		143		
15	154		22	0		141		
16	142		20	0		129		
17	146		21	0		133		
18	156		24	0		143		
19	155		24	0		142		
20	153		24	0		141		
21	150		24	0		137		
22	155		24	0		142		
23	153		24	0		140		
24	185		18	0		142		CD 9 hrs
25	135		23	0		122		
26	155		24	0		142		SI 11:15 CP 185
27	<del>157</del>		4	0				open 4:00 CP 190
28	158		16	0		143		
29	155		20	0		142		
30	153		18	0		140		
31								
Totals								

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