

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

Type Test:

- Open Flow  
 Deliverability

Test Date:  
5/24/2006

API No. 15  
023-20666-00∞

Company Rosewood Resources, Inc.		Lease Heim		Well Number 31-33	
County Cheyenne	Location NENE	Section 33	TWP 2S	RNG (E/W) 42W	Acres Attributed 80
Field Cherry Creek		Reservoir Niobrara	Gas Gathering Connection Branch Systems Inc.		
Completion Date 3/29/2006		Plug Back Total Depth 1799'	Packer Set at		
Casing Size 4 1/2"	Weight 10.5#	Internal Diameter 4.052	Set at 1799.86'	Perforations 1616'	To 1648'
Tubing Size NONE	Weight	Internal Diameter	Set at	Perforations	To
Type Completion (Describe) Single (Vertical)		Type Fluid Production Dry Gas	Pump Unit or Traveling Plunger? Yes / <input checked="" type="radio"/> No flowing		
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide	% Nitrogen	Gas Gravity - G <sub>g</sub> .6	
Vertical Depth(H) 1614'		Pressure Taps Flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in _____ 20 _____ at _____ (AM) (PM) Taken _____ 20 _____ at _____ (AM) (PM)					
Well on Line: Started 4-24 20 06 at 12:00 (AM) <input checked="" type="radio"/> (PM) Taken 4-25 20 06 at 1:30 (AM) <input checked="" type="radio"/> (PM)					

### OBSERVED SURFACE DATA

Duration of Shut-in 24 Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one: Meter or 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>t</sub> ) or (P <sub>o</sub> )		Tubing Wellhead Pressure (P <sub>w</sub> ) or (P <sub>t</sub> ) or (P <sub>o</sub> )		Duration (Hours)	Liquid Produced (Barrels)
						psig	psia	psig	psia		
Shut-In											
Flow						<u>287</u>	301.65				

### 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>tt</sub>	Deviation Factor F <sub>pv</sub>	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G <sub>m</sub>
						36		

### (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>o</sub> ) <sup>2</sup> - (P <sub>a</sub> ) <sup>2</sup> or (P <sub>o</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup>	(P <sub>o</sub> ) <sup>2</sup> - (P <sub>w</sub> ) <sup>2</sup>	Choose formula 1 or 2: 1. P <sub>o</sub> <sup>2</sup> - P <sub>a</sub> <sup>2</sup> 2. P <sub>o</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup> divided by: P <sub>o</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>	LOG of formula 1, or 2, and divide by: $\left[ \frac{P_o^2 - P_w^2}{P_o^2 - P_w^2} \right]$	Backpressure Curve Slope = "n" ----- or ----- Assigned Standard Slope	n x LOG $\left[ \right]$	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 25 day of August, 20 06.

\_\_\_\_\_  
Witness (if any)

\_\_\_\_\_  
For Commission

  
For Company

\_\_\_\_\_  
Checked by

RECEIVED  
SEP 07 2006  
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.

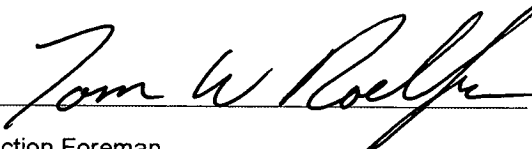
I hereby request a one-year exemption from open flow testing for the Heim 31-33 gas well on the grounds that said well:

(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: 8/25/2006

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.

RECEIVED  
SEP 07 2006  
KCC WICHITA

Monthly Gauge Sheet

Well Name:

Heim 31-33

Pumper:

Month

4/06

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						305		
23						318		
24			0			<del>318</del> 318		318 @ 40nd @ 12P
25	290		432	SCP		287		No flow opened valve at
26	193		36			285		noon Flow started at 85
27	159		<del>354</del>			280		set at 40 m.c.f.
28	161		45			275		
29	154		47			275		
30	150		45			275		
31								
Totals								

RECEIVED  
 SEP 07 2006  
 KCC WICHITA

Well Name: Heim 31-33

Pumper: \_\_\_\_\_ Month 5/06

Day	Static	Diff	MCF	Wtr	TP	CP	SPM Cycle	Remarks
1	159		43		146	275		
2	158		42			280		
3	160		42			275		
4	161		42			280		
5	161		43		<del>146</del>	<del>275</del> 290		
6	162		43			290		
7	160		42			287		
8	164		42			290		
9	160		39			280		
10	159		42			280		
11	160		42			280		
12	160		41			285		
13	158		41			288		
14	158		40			285		CO 3hrs
15	159		36			290		
16	159		39			280		
17	159		41			280		
18	159		42			280		
19	148		41			285		
20	152		42			285		
21	150		41			283		
22	148		41			280		
23	159		42			278		CO 1 1/2 hr
24	159		41			278		
25	157		42			280		opened to 54 MCF
26	156		42			275		
27	156		53			273		
28	158		54			283		
29	157		54			260		
30	157		55			260		
31	158		56			270		
Totals								

RECEIVED  
 SEP 07 2006  
 KCC WICHITA

Well Name: Heim 31-33

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

Month 6/06

Day	Static	Diff	MCF	Wtr	TP	CP	SPM Cycle	Remarks
1	157		56			270		
2	156		56			270		
3	156		57			265		
4	157		57			270		
5	156		51			270		CP 2 hrs
6	157		53			265		
7	157		54			265		
8	157		54			265		
9	156		54			265		CO 1 hr
10	157		53			275		
11	156		54			268		
12	157		54			270		
13	156		54			265		
14	155		54			265		
15	157		54			262		
16	157		55			265		
17	155		54			262		CD
18	156		55			265		
19	156		55			275		
20	156		55			270		
21	156		54			260		
22	157		53			255		
23	157		53			257		
24	156		53			257		
25	156		53			255		
26	156		56			247		
27	155		54			258		
28	152		52			258		
29	157		50			258		
30	156		49			258		
31								
Totals								

RECEIVED  
 SEP 07 2006  
 KCC WICHITA