

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

(See Instructions on Reverse Side)

Type Test:

- Open Flow  
 Deliverability

Test Date:  
10/5/2010

API No. 15  
181-20562-00-00

Company: Rosewood Resources, Inc.      Lease: Homestead      Well Number: 21-05

County: Sherman      Location: NENW      Section: 5      TWP: 7S      RNG (E/W): 39W      Acres Attributed: 80

Field: Goodland      Reservoir: Niobrara      Gas Gathering Connection: Branch Systems Inc.

Completion Date: 8/25/2010      Plug Back Total Depth: 1281'      Packer Set at:

Casing Size: 4 1/2"      Weight: 10.5#      Internal Diameter: 4.000      Set at: 1317'      Perforations: 1114'      To: 1138'

Tubing Size: NONE      Weight:      Internal Diameter:      Set at:      Perforations:      To:

Type Completion (Describe): Single (VERTICLE)      Type Fluid Production: Dry Gas      Pump Unit or Traveling Plunger?: Yes  No

Producing Thru (Annulus / Tubing): Annulus      % Carbon Dioxide:      % Nitrogen:      Gas Gravity - G<sub>g</sub>: .6

Vertical Depth(H): 1320'      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 10-4 20 10 at 11:50 (AM) (PM) Taken 10-5 20 10 at 11:55 (AM) (PM)

### OBSERVED SURFACE DATA

Duration of Shut-in 24 Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one: Meter or 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											
Flow						38	52.4			24	0

### FLOW STREAM ATTRIBUTES

Plate Coefficient (F <sub>s</sub> ) (F <sub>d</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>
						19		

### (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>a</sub> =      %      (P<sub>c</sub> - 14.4) + 14.4 =      ;

(P<sub>a</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>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>a</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: $\frac{P_c^2 - P_w^2}{P_c^2 - P_a^2}$	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 20 day of December, 20 10

Witness (if any)

For Commission

*Wagner Inaba*  
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 Homestead 21-05 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: 12/20/10

Signature: 

Title: Assistant 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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W2744

Homestead 21-65

North Goodland

Goodland

None

October-10

FloBoss

DATE	Casing PSI	STATIC	MCF	HRS DOWN	REMARKS (Maximum length 110 characters)
10/1/2010					blowing to pit
10/2/2010					blowing to pit
10/3/2010	33				blowing to pit
10/4/2010	33				blowing to pit
10/5/2010	39	52		0	flowing 21, 17 for the month
10/6/2010	42	55		21	
10/7/2010	42	55		22	2
10/8/2010	43	56		22	
10/9/2010	42	55		22	
10/10/2010	42	55		22	
10/11/2010	42	55		22	
10/12/2010	42	55		22	opened to 29
10/13/2010	39	52		25	6
10/14/2010	39	52		27	
10/15/2010	39	52		27	
10/16/2010	38	51		26	
10/17/2010	37	50		26	
10/18/2010	37	50		26	
10/19/2010	36	49		26	
10/20/2010	37	50		26	
10/21/2010	37	50		26	
10/22/2010	36	49		26	
10/23/2010	35	48		25	
10/24/2010	34	47		25	
10/25/2010	34	47		24	
10/26/2010	34	47		24	3 opened to 30
10/27/2010	32	45		28	
10/28/2010	31	44		28	bp
10/29/2010	30	43		28	
10/30/2010	30	43		27	
10/31/2010	30	43		27	

Total

650

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W444

Homestead 21-05

North Goodland

Goodland

None

November-10

FloBoss

DATE	Casing PSI	STATIC	MCF	HRS DOWN	REMARKS (Maximum length 110 characters)
11/1/2010	29	42		27	0
11/2/2010	28	41		27	0
11/3/2010	28	41		24	4
11/4/2010	28	41		26	0
11/5/2010	28	41		26	0
11/6/2010	27	40		26	0
11/7/2010	27	40		26	0
11/8/2010	27	40		26	0
11/9/2010	27	40		25	0
11/10/2010	26	39		25	0
11/11/2010	25	38		24	0 bp
11/12/2010	25	38		24	0
11/13/2010	25	38		23	0
11/14/2010	25	38		23	0
11/15/2010	25	38		22	0
11/16/2010	25	38		22	0
11/17/2010	24	37		24	0
11/18/2010	24	37		22	0
11/19/2010	24	37		23	0
11/20/2010	23	36		23	0
11/21/2010	24	37		23	0
11/22/2010	24	37		20	0
11/23/2010	24	37		22	0
11/24/2010	23	36		22	0
11/25/2010	23	36		23	0
11/26/2010	23	36		20	0
11/27/2010	23	36		20	0
11/28/2010	23	36		21	0
11/29/2010	22	35		22	0
11/30/2010	22	35		20	0
12/1/2010					0

Total

701

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Homestead 21-05

North Goodland

Goodland

None

December-10

FloBoss

DATE	Casing PSI	STATIC	MCF	HRS DOWN	REMARKS (Maximum length 110 characters)
12/1/2010	21	34		20	0
12/2/2010	21	34		20	0
12/3/2010	21	34		20	0
12/4/2010	21	34		20	0
12/5/2010	22	35		20	0
12/6/2010	21	34		20	0
12/7/2010	20	33		20	0
12/8/2010	23	36		20	0 cd
12/9/2010	22	35		12	6 bp
12/10/2010	21	34		19	3
12/11/2010	21	34		21	0
12/12/2010	20	33		19	0
12/13/2010	20	33		19	0
12/14/2010	20	33		19	0
12/15/2010	20	33		19	0
12/16/2010	19	32		19	0
12/17/2010	19	32		20	0
12/18/2010	20	33		19	0
12/19/2010	20	33		16	0
12/20/2010	19	32		19	0
12/21/2010	19	32		19	0 bp, meth
12/22/2010	19	32		19	0
12/23/2010	19	32		19	0
12/24/2010	20	33		16	0
12/25/2010	19	32		19	0
12/26/2010	18	31		19	0
12/27/2010	18	31		19	0
12/28/2010	18	31		19	0
12/29/2010	18	31		19	0
12/30/2010	18	31		19	0
12/31/2010	18	31		19	0

Total

587

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