

# KANSAS CORPORATION COMMISSION

## ONE POINT STABILIZED OPEN FLOW OR DELIVERABILITY TEST

Type Test:

(See Instructions on Reverse Side)

- Open Flow **AST**  
 Deliverability

Test Date:  
9/28/2011

API No. 15  
023-20429-01-00

Company Rosewood Resources		Lease Bucholtz		Well Number 2-15H	
County Cheyenne	Location NESE	Section 15	TWP 3S	RNG (E/W) 41W	Acres Attributed 80
Field Cherry Creek		Reservoir Niobrara		Gas Gathering Connection Branch Systems Inc.	
Completion Date 7-9-2001		Plug Back Total Depth 2803'		Packer Set at	
Casing Size 7"	Weight 20#	Internal Diameter 6.456	Set at 1579'	Perforations 1579' MD	To 2803'MD
Tubing Size <b>none</b> ? 2 3/8"	Weight	Internal Diameter	Set at 1740'	Perforations	To
Type Completion (Describe) Single (Horizontal)		Type Fluid Production Dry Gas		Pump Unit or Traveling Plunger? <b>Yes</b> / No Pumping Unit - <b>Pump inoperable</b>	
Producing Thru (Annulus / Tubing) Annulus		% Carbon Dioxide		% Nitrogen	Gas Gravity - G <sub>g</sub> .6
Vertical Depth(H) 1579'		Pressure Taps Flange		(Meter Run) (Prover) Size 2"	
Pressure Buildup: Shut in 9-27 20 11 at 10:55 (AM) (PM) Taken 9-28 20 11 at 11:05 (AM) (PM)					
Well on Line: Started 9-28 20 11 at 11:05 (AM) (PM) Taken 9-29 20 11 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 (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						74	88.4				
Flow						52	66.4			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>t</sub>	Deviation Factor F <sub>pv</sub>	Metered Flow R (Mcfd)	GOR (Cubic Feet/ Barrel)	Flowing Fluid Gravity G <sub>m</sub>
						2		

### (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>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 28 day of December, 20 11.

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

*Janull Oliver*  
\_\_\_\_\_  
For Company

**RECEIVED**  
\_\_\_\_\_  
Checked by

APR 24 2012

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 Bucholtz 2-15H 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: 12/28/11

Signature: *Janell Grew*  
 Title: Production Assistant

**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  
 APR 24 2012  
 KCC WICHITA

W344

Bucholtz 02-15H

St. Francis

St. Francis

Pumping Unit/Gas ?

September-11

DATE	Tubing Casing		STATIC	MCF	SPM	CYCL	HRS	DOWN	Water	REMARKS (Maximum length 110 characters)
	PSI	PSI								
9/1/2011	53	65	2	0	0	0	0	0	0	
9/2/2011	53	66	2	0	0	0	0	0	0	
9/3/2011	53	65	2	0	0	0	0	0	0	
9/4/2011	53	65	2	0	0	0	0	0	0	
9/5/2011	53	65	2	0	0	0	0	0	0	
9/6/2011	53	65	2	0	0	0	0	0	0	
9/7/2011	53	64	2	0	0	0	0	0	0	
9/8/2011	52	66	2	0	0	0	0	0	0	
9/9/2011	53	65	2	0	0	0	0	0	0	
9/10/2011	53	65	2	0	0	0	0	0	0	
9/11/2011	54	65	2	0	0	0	0	0	0	
9/12/2011	53	66	2	0	0	0	0	0	0	
9/13/2011	52	65	2	0	0	0	0	0	0	
9/14/2011	52	65	2	0	0	0	0	0	0	
9/15/2011	52	65	2	0	0	0	0	0	0	
9/16/2011	52	65	2	0	0	0	0	0	0	
9/17/2011	53	65	2	0	0	0	0	0	0	
9/18/2011	52	64	2	0	0	0	0	0	0	
9/19/2011	53	64	2	0	0	0	0	0	0	
9/20/2011	53	65	2	0	0	0	0	0	0	
9/21/2011	52	64	2	0	0	0	0	0	0	
9/22/2011	53	64	2	0	0	0	0	0	0	
9/23/2011	51	64	2	0	0	0	0	0	0	
9/24/2011	51	64	2	0	0	0	0	0	0	
9/25/2011	49	65	2	0	0	0	0	0	0	
9/26/2011	49	65	2	0	0	0	0	0	0	
9/27/2011	50	65	2	0	0	0	0	0	0	
9/28/2011	74	64	0	0	0	0	24	0	0	si for state test
9/29/2011	49	63	4	0	0	0	0	0	0	
9/30/2011	0	62	3	0	0	0	0	0	0	
10/1/2011	0	0	0	0	0	0	0	0	0	
Total			61					0		

← WHY NO H<sub>2</sub>O VOLUMES ?

RECEIVED  
APR 24 2012  
KCC WICHITA

W344

Bucholtz 02-15H

St. Francis

St. Francis

Pumping Unit/Gas

October-11

DATE	Tubing PSI	Casing PSI	STATIC	MCF	SPM	HRS CYCLE	Water DOWN	BBLs	REMARKS (Maximum length 110 characters)
10/1/2011		51	64	2	0	0	0	0	
10/2/2011		52	66	2	0	0	0	0	
10/3/2011		52	66	2	0	0	0	0	
10/4/2011		52	65	2	0	0	0	0	
10/5/2011		51	65	2	0	0	0	0	
10/6/2011		52	64	3	0	0	0	0	
10/7/2011		55	66	2	0	0	0	0	
10/8/2011		55	65	2	0	0	0	0	
10/9/2011		53	65	2	0	0	0	0	
10/10/2011		52	65	2	0	0	0	0	
10/11/2011		51	67	2	0	0	0	0	
10/12/2011		51	65	3	0	0	0	0	
10/13/2011		51	62	3	0	0	0	0	
10/14/2011		49	63	2	0	0	0	0	
10/15/2011		49	63	2	0	0	0	0	
10/16/2011		49	63	2	0	0	0	0	
10/17/2011		50	63	2	0	0	0	0	
10/18/2011		49	63	2	0	0	0	0	
10/19/2011		49	66	2	0	0	0	0	
10/20/2011		49	65	2	0	0	0	0	
10/21/2011		51	64	2	0	0	0	0	
10/22/2011		51	65	2	0	0	0	0	
10/23/2011		52	65	2	0	0	0	0	
10/24/2011		52	64	2	0	0	0	0	
10/25/2011		51	65	2	0	0	0	0	
10/26/2011		51	64	2	0	0	0	0	
10/27/2011		51	64	2	0	0	0	0	
10/28/2011		52	64	2	0	0	0	0	
10/29/2011		51	64	2	0	0	0	0	
10/30/2011		51	64	2	0	0	0	0	
10/31/2011		52	63	2	0	0	0	0	

Total

65

0

RECEIVED  
APR 24 2012  
KCC WICHITA

W344

Bucholtz 02-15H

St. Francis

St. Francis

Pumping Unit/Gas

November-11

DATE	Tubing Casing		STATIC MCF	SPM	HRS CYCLE DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
	PSI	PSI					
11/1/2011	51	63	2	0	0	0	
11/2/2011	50	63	2	0	0	0	
11/3/2011	50	63	1	0	0	0	
11/4/2011	50	63	2	0	0	0	
11/5/2011	50	63	2	0	0	0	
11/6/2011	50	63	2	0	0	0	
11/7/2011	58	63	2	0	0	0	
11/8/2011	50	64	2	0	0	0	
11/9/2011	50	63	2	0	0	0	
11/10/2011	50	63	2	0	0	0	
11/11/2011	50	63	3	0	0	0	
11/12/2011	50	62	2	0	0	0	
11/13/2011	50	62	2	0	0	0	
11/14/2011	47	63	2	0	0	0	
11/15/2011	50	61	2	0	0	0	
11/16/2011	47	61	2	0	0	0	
11/17/2011	47	62	1	0	0	0	
11/18/2011	50	62	2	0	0	0	
11/19/2011	47	62	2	0	0	0	
11/20/2011	47	61	1	0	0	0	
11/21/2011	48	62	1	0	0	0	
11/22/2011	49	62	2	0	0	0	
11/23/2011	50	62	2	0	0	0	
11/24/2011	50	62	2	0	0	0	
11/25/2011	49	62	2	0	0	0	
11/26/2011	49	62	2	0	0	0	
11/27/2011	49	62	1	0	0	0	
11/28/2011	49	62	2	0	0	0	
11/29/2011	49	62	3	0	0	0	
11/30/2011	50	62	2	0	0	0	
12/1/2011	0	0	0	0	0	0	

Total

57

0

RECEIVED  
APR 24 2012  
KCC WICHITA