

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

Type Test:

(See instructions on Reverse Side)

Open Flow **ASL**  
Deliverability

Test Date:  
7/6/2012

API No. 15  
023-20362-01-00

Company: Rosewood Resources, Inc.      Lease: Bucholtz      Well Number: 1-15H  
County: Cheyenne      Location: SWNE      Section: 15      TWP: 3S      RNG (E/W): 41W      Acres Attributed: 80

Field: Cherry Creek      Reservoir: Niobrara      Gas Gathering Connection: Branch Systems Inc.

Completion Date: 3-4-2000      Plug Back Total Depth: 2449'      Packer Set at:

Casing Size: 7"      Weight: 20#      Internal Diameter: 6.456      Set at: 1289'      Perforations: OH      To:

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

Type Completion (Describe): Single (Horizontal)      Type Fluid Production: Dry Gas      Pump Unit or Traveling Plunger? **NO** / Pumping Unit

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

Vertical Depth(H): OH      Pressure Taps: Flange      (Meter Run) (Prover) Size: 2"

Pressure Buildup: Shut in 7-5 20 12 at 11:00 **(AM)** (PM) Taken 7-6 20 12 at 11:10 **(AM)** (PM)  
Well on Line: Started 7-6 20 12 at 11:10 **(AM)** (PM) Taken 7-7 20 12 at 12:00 **(AM)** (PM)

**RECEIVED**  
**JAN 03 2013**  
**KCC WICHITA**

### OBSERVED SURFACE DATA

Duration of Shut-in **24** Hours

Static / Dynamic Property	Orifice Size (inches)	Circle one: Meter 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>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						66	80.4				
Flow						47	61.4			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>q</sub> = % (P<sub>c</sub> - 14.4) + 14.4 = : (P<sub>q</sub>)<sup>2</sup> = 0.207  
(P<sub>q</sub>)<sup>2</sup> =

(P <sub>c</sub> ) <sup>2</sup> - (P <sub>q</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>q</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: P <sub>c</sub> <sup>2</sup> - P <sub>w</sub> <sup>2</sup>	Backpressure Curve Slope = "n" 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 **19** day of **December**, 20 **12**

Witness (if any)

For Commission

*Jannell Oliver*  
For Company

Checked by

## 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 1-15H 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: 12/19/12

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.

W343  
 Bucholtz 01-15H  
 St. Francis  
 St. Francis  
 Pumping Unit/Elec  
 July-12

RECEIVED  
 JAN 03 2013  
 KCC WICHITA

DATE	Tubing Casing		STATIC MCF	SPM	HRS CYCLE DOWN	Water BBLs	REMARKS (Maximum length 110 characters)
	PSI	PSI					
7/1/2012		57	70	1			
7/2/2012		51	64	2		3	
7/3/2012		67	80	1			
7/4/2012		47	60	2			
7/5/2012		47	60	3			cp 47 si for state test
7/6/2012		<del>60</del>	57	0		24	cp 66 opened
7/7/2012		47	60	2			
7/8/2012		49	62	2			
7/9/2012		47	60	2			
7/10/2012		45	58	2			
7/11/2012		45	58	2			
7/12/2012		45	58	2			
7/13/2012		45	58	2			
7/14/2012		44	57	2			
7/15/2012		45	58	2			
7/16/2012		57	70	1		1.5	
7/17/2012		44	57	2			
7/18/2012		44	57	2			
7/19/2012		53	66	1			
7/20/2012		53	66	2		0.5	
7/21/2012		53	66	1			
7/22/2012		53	66	2			
7/23/2012		53	66	2		0.5	
7/24/2012		49	62	2			
7/25/2012		63	76	0			
7/26/2012		44	57	1			
7/27/2012		64	77	1		5	
7/28/2012		57	70	1			
7/29/2012		54	67	2			
7/30/2012		54	67	2			
7/31/2012		54	67	2			

Total

51

0

RECEIVED

JAN 03 2013

KCC WICHITA

W343  
 Bucholtz 01-15H  
 St. Francis  
 St. Francis  
 Pumping Unit/Elec  
 August-12

DATE	Tubing PSI	Casing PSI	STATIC	MCF	SPM	HRS CYCLE DOWN	Water BLS	REMARKS (Maximum length 110 characters)
8/1/2012		43	56	2				
8/2/2012		50	63	2				
8/3/2012		43	56	2				
8/4/2012		47	60	2				
8/5/2012		47	60	2				
8/6/2012		47	60	2				
8/7/2012		56	69	1				
8/8/2012		56	69	2				
8/9/2012		56	69	2				
8/10/2012		66	79	1				
8/11/2012		56	69	2		1.5		
8/12/2012		47	60	2				
8/13/2012		46	59	3				
8/14/2012		46	59	2				
8/15/2012		56	69	2				
8/16/2012		47	60	2				
8/17/2012		47	60	2				
8/18/2012		47	60	2				
8/19/2012		47	60	2				
8/20/2012		47	60	2				
8/21/2012		47	60	2				
8/22/2012		46	59	2				
8/23/2012		47	60	2				
8/24/2012		52	65	2				
8/25/2012		52	65	2				
8/26/2012		51	64	2				
8/27/2012		59	72	2				
8/28/2012		59	72	2				
8/29/2012		47	60	2				
8/30/2012		49	62	2				
8/31/2012		49	62	2				

Total

61

0

W343  
 Bucholtz 01-15H  
 St. Francis  
 St. Francis  
 Pumping Unit/Elec  
 September-12

RECEIVED  
 JAN 03 2013  
 KCC WICHITA

DATE	Tubing Casing		STATIC MCF	SPM	HRS CYCLE DOWN	Water BLS	REMARKS (Maximum length 110 characters)
	PSI	PSI					
9/1/2012		49	62	2			
9/2/2012		49	62	2			
9/3/2012		49	62	2			
9/4/2012		49	62	2		1	
9/5/2012		71	84	1			
9/6/2012		48	61	2			
9/7/2012		150	163	0		19	
9/8/2012		163	166	0		24	
9/9/2012		168	171	0		24	
9/10/2012		168	171	0		24	
9/11/2012		168	171	0		24	
9/12/2012		110	123	0		10	
9/13/2012		96	109	0			
9/14/2012		96	109	2			
9/15/2012		74	87	2			
9/16/2012		74	87	3			
9/17/2012		74	87	3			
9/18/2012		71	84	2			
9/19/2012		77	90	2			
9/20/2012		60	73	2			
9/21/2012		61	74	2			
9/22/2012		61	74	2			
9/23/2012		62	75	2			
9/24/2012		62	75	2			
9/25/2012		62	75	2			
9/26/2012		54	67	3			
9/27/2012		61	74	2			
9/28/2012		52	65	3			
9/29/2012		50	63	2			
9/30/2012		50	63	2			
10/1/2012							

Total

49

0